



RADIO TEST REPORT

FCC ID : 2AYRA-03795
Equipment : Linksys Velop Micro-Mesh 6
Brand Name : LINKSYS
Model Name : LN1200, LN1210, LN1215
Applicant : Linksys USA, Inc.
121 Theory, Irvine, CA. 92617, USA
Standard : 47 CFR FCC Part 15.407

The product was received on Aug. 09, 2023, and testing was started from Aug. 14, 2023 and completed on Oct. 12, 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

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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/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

Disclaimer:

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

Reviewed by: Sam Chen
Report Producer: Lavender Zeng



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		5500-5700	100-140 [11]
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		5510-5670	102-134 [5]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5610	106-122 [2]
5725-5850		5775	155 [1]
5150-5350	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5725		5570	114 [1]

For Non-beamforming mode:

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	802.11ac VHT20	20	2TX
5.15-5.25GHz	802.11ax HEW20	20	2TX
5.15-5.25GHz	802.11n HT40	40	2TX
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ax HEW40	40	2TX
5.15-5.25GHz	802.11ac VHT80	80	2TX
5.15-5.25GHz	802.11ax HEW80	80	2TX
5.15-5.35GHz	802.11ac VHT160	160	2TX
5.15-5.35GHz	802.11ax HEW160	160	2TX
5.25-5.35GHz	802.11a	20	2TX
5.25-5.35GHz	802.11n HT20	20	2TX
5.25-5.35GHz	802.11ac VHT20	20	2TX
5.25-5.35GHz	802.11ax HEW20	20	2TX



Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11n HT40	40	2TX
5.25-5.35GHz	802.11ac VHT40	40	2TX
5.25-5.35GHz	802.11ax HEW40	40	2TX
5.25-5.35GHz	802.11ac VHT80	80	2TX
5.25-5.35GHz	802.11ax HEW80	80	2TX
5.47-5.725GHz	802.11a	20	2TX
5.47-5.725GHz	802.11n HT20	20	2TX
5.47-5.725GHz	802.11ac VHT20	20	2TX
5.47-5.725GHz	802.11ax HEW20	20	2TX
5.47-5.725GHz	802.11n HT40	40	2TX
5.47-5.725GHz	802.11ac VHT40	40	2TX
5.47-5.725GHz	802.11ax HEW40	40	2TX
5.47-5.725GHz	802.11ac VHT80	80	2TX
5.47-5.725GHz	802.11ax HEW80	80	2TX
5.47-5.725GHz	802.11ac VHT160	160	2TX
5.47-5.725GHz	802.11ax HEW160	160	2TX
5.725-5.85GHz	802.11a	20	2TX
5.725-5.85GHz	802.11n HT20	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11ax HEW20	20	2TX
5.725-5.85GHz	802.11n HT40	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ax HEW40	40	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11ax HEW80	80	2TX

For Beamforming mode:

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11n HT20-BF	20	2TX
5.15-5.25GHz	802.11ac VHT20-BF	20	2TX
5.15-5.25GHz	802.11ax HEW20-BF	20	2TX
5.15-5.25GHz	802.11n HT40-BF	40	2TX
5.15-5.25GHz	802.11ac VHT40-BF	40	2TX
5.15-5.25GHz	802.11ax HEW40-BF	40	2TX
5.15-5.25GHz	802.11ac VHT80-BF	80	2TX
5.15-5.25GHz	802.11ax HEW80-BF	80	2TX
5.15-5.35GHz	802.11ac VHT160-BF	160	2TX
5.15-5.35GHz	802.11ax HEW160-BF	160	2TX
5.25-5.35GHz	802.11n HT20-BF	20	2TX
5.25-5.35GHz	802.11ac VHT20-BF	20	2TX
5.25-5.35GHz	802.11ax HEW20-BF	20	2TX



Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11n HT40-BF	40	2TX
5.25-5.35GHz	802.11ac VHT40-BF	40	2TX
5.25-5.35GHz	802.11ax HEW40-BF	40	2TX
5.25-5.35GHz	802.11ac VHT80-BF	80	2TX
5.25-5.35GHz	802.11ax HEW80-BF	80	2TX
5.47-5.725GHz	802.11n HT20-BF	20	2TX
5.47-5.725GHz	802.11ac VHT20-BF	20	2TX
5.47-5.725GHz	802.11ax HEW20-BF	20	2TX
5.47-5.725GHz	802.11n HT40-BF	40	2TX
5.47-5.725GHz	802.11ac VHT40-BF	40	2TX
5.47-5.725GHz	802.11ax HEW40-BF	40	2TX
5.47-5.725GHz	802.11ac VHT80-BF	80	2TX
5.47-5.725GHz	802.11ax HEW80-BF	80	2TX
5.47-5.725GHz	802.11ac VHT160-BF	160	2TX
5.47-5.725GHz	802.11ax HEW160-BF	160	2TX
5.725-5.85GHz	802.11n HT20-BF	20	2TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX
5.725-5.85GHz	802.11n HT40-BF	40	2TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX
5.725-5.85GHz	802.11ac VHT80-BF	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.	Port			Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	2.4GHz	5GHz	Bluetooth					
1	2	1	-	Galtronics	02102140-07935C1	PCB Antenna	U.FL	Note 1
2	1	2	-	Galtronics	02102140-07935C2	PCB Antenna	U.FL	
3	-	-	1	Gemtek	WRTQ-387AX	Printed Antenna	N/A	

Note 1:

Ant.	Gain (dBi)					
	2.4GHz	5GHz UNII 1	5GHz UNII 2A	5GHz UNII 2C	5GHz UNII 3	Bluetooth
1	3.35	4.90	4.90	4.92	4.92	-
2	3.72	4.70	4.70	4.79	4.79	-
3	-	-	-	-	-	2.82

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 :

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

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

$g_{j,k}=(Nss1(g1,1) + Nss1(g1,2))^2$

$DG = 10 \log[(Nss1(g1,1) + Nss1(g1,2))^2 / N_{ANT}] => 10 \log[(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}]$

Where ;

2.4G G1= 3.35 dBi ; G2= 3.72 dBi ;DG= 6.55dBi

5G UNII-1 G1= 4.9 dBi ; G2= 4.7 dBi ;DG= 7.81dBi

5G UNII-2A G1= 4.9 dBi ; G2= 4.7 dBi ;DG= 7.81dBi

5G UNII-2C G1= 4.92 dBi ; G2= 4.79 dBi ;DG= 7.87dBi

5G UNII-3 G1= 4.92 dBi ; G2= 4.79 dBi ;DG= 7.87dBi



Note 4: **For 2.4GHz function:**

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

Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.

For 5GHz function:

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

Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.

For Bluetooth function:

For Bluetooth mode (1TX/1RX):

Only Port 1 can be use as transmit and receive antenna.

1.1.3 Mode Test Duty Cycle

For Non-beamforming mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a_Nss 1,(6D)	0.991	0.04	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW20_Nss 1,(M0)	0.967	0.15	5.128m	300
802.11ax HEW40_Nss 1,(M0)	0.951	0.22	5.293m	300
802.11ax HEW80_Nss 1,(M0)	0.985	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW160_Nss 1,(M0)	0.981	0.08	n/a (DC>=0.98)	n/a (DC>=0.98)

For Beamforming mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF_Nss 1,(M0)	0.913	0.4	1.757m	1k
802.11ax HEW40-BF_Nss 1,(M0)	0.895	0.48	1.757m	1k
802.11ax HEW80-BF_Nss 1,(M0)	0.913	0.4	1.681m	1k
802.11ax HEW160-BF_Nss 1,(M0)	0.923	0.35	1.881m	1k

Note:

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



1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
	The product has beamforming function for n/VHT/ax 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	Non-beamforming mode: QSPR 5.0-00202 Beamforming mode: TeraTerm 4.75			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	Description
LN1200	All the models are identical, the difference model served as marketing strategy.
LN1210	
LN1215	

Note 1: From the above models, model: LN1200 was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.



1.2 Applicable Standards

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

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

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Nyle Chang	24.2-25.3 / 57-69	Aug. 14, 2023 ~ Sep. 26, 2023
Radiated (Below 1GHz)	03CH01-CB	Mark Hsu	22.4-23.5 / 55-58	Aug. 15, 2023 ~ Oct. 12, 2023
Radiated (Radiated Emission Co-location)	03CH04-CB	Mark Hsu	22-23 / 56-59	Aug. 15, 2023 ~ Oct. 12, 2023
Radiated (Above 1GHz)	03CH02-CB	Mark Hsu	21-22 / 55-58	Aug. 15, 2023 ~ Oct. 12, 2023
	03CH06-CB		22.7-23.8 / 56-59	
AC Conduction	CO01-CB	Elvin Yeh	22~23 / 55~56	Sep. 28, 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))

Parameter	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

For Non-beamforming mode:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	20
5200MHz	21
5240MHz	21
5260MHz	17.5
5300MHz	18
5320MHz	18
5500MHz	17.5
5580MHz	17.5
5700MHz	18
5745MHz	21
5785MHz	21
5825MHz	21
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	19.5
5200MHz	20.5
5240MHz	21
5260MHz	18
5300MHz	18
5320MHz	18
5500MHz	18.5
5580MHz	18
5700MHz	18.5
5745MHz	21
5785MHz	21
5825MHz	21
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	17
5230MHz	20.5
5270MHz	20.5
5310MHz	19.5
5510MHz	19
5550MHz	20.5
5670MHz	20
5755MHz	21



Mode	Power Setting
5795MHz	21
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	18.5
5290MHz	19.5
5530MHz	18.5
5610MHz	20
5775MHz	21
802.11ax HEW160_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	18
5250MHz Straddle 5.25-5.35GHz	18
5570MHz	18

For Beamforming mode:

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	22
5200MHz	24
5240MHz	26
5260MHz	21
5300MHz	21
5320MHz	21
5500MHz	21
5580MHz	21
5700MHz	21
5745MHz	27
5785MHz	27
5825MHz	27
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	22
5230MHz	24
5270MHz	22
5310MHz	22
5510MHz	22
5550MHz	22
5670MHz	22
5755MHz	26
5795MHz	26
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	20
5290MHz	20
5530MHz	22



Mode	Power Setting
5610MHz	22
5775MHz	23
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	17
5250MHz Straddle 5.25-5.35GHz	17
5570MHz	17

Note:

- ♦ Evaluated HEW20/HEW40/HEW80/HEW160 mode only, due to similar modulation. The power setting of HT20/HT40/VHT20/VHT40/VHT80/VHT160 mode are the same or lower than HEW20/HEW40/HEW80/HEW160.



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 + Adapter 1
2	EUT + Adapter 2
3	EUT + Adapter 3
For operating mode 1 is the worst case and it was record in this test report.	

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	CTX
Afer evaluating, "Z axis" generated the worst test result, so the measurement will follow this same test configuration.	
1	EUT in Z axis + WLAN 2.4GHz + Adapter 1
2	EUT in Z axis + WLAN 2.4GHz + Adapter 2
3	EUT in Z axis + WLAN 2.4GHz + Adapter 3
Mode 1 ha been evaluated to be the worst case between Mode 1~3, thus measurement for Mode 4~5 will follow this same test mode.	
4	EUT in Z axis + WLAN 5GHz + Adapter 1
5	EUT in Z axis + Bluetooth + Adapter 1
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
Afer evaluating, "Z axis" generated the worst test result, so the measurement will follow this same test configuration.	
1	EUT in Z 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, "Z axis" generated the worst test result, so the measurement will follow this same test configuration.	
1	EUT in Z axis + WLAN 2.4GHz + WLAN 5GHz
Refer to Appendix F for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	Bluetooth + WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA380908 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

During the test, the following programs under WIN 10 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by WLAN module and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.



2.4 Accessories

Accessories			
Power	Brand	Model	Rating
Adapter 1 (Fixed plug)	Ktec	KSA-18W-050300VU	Input: 100-240V ~ 50/60Hz, 0.5A Output: 5.0V, 3.0A
Adapter 2 (Fixed plug)	MOSO	MSA-C3000IC5.0-18P-US	Input: 100-240V ~ 50/60Hz, 0.7A max. Output: 5.0V, 3A
Adapter 3 (Removable plug)	Ktec	KSA-18W-050300D5	Input: 100-240V ~ 50/60Hz, 0.5A Output: 5.0V, 3.0A, 15.0W
Others			
Plug*1 (for Adapter 3 use)			

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Device AP	LINKSYS	ELM	N/A
B	Device NB	DELL	E6430	N/A
C	2.4G NB	DELL	E6430	N/A
D	5G NB	DELL	E6430	N/A
E	Smart phone	Samsung	Galaxy J2	N/A

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

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	Test Fixture	Linksys	ESK-B21-7400R	N/A
C	Test Fixture	Linksys	N/A	N/A

For Radiated (above 1GHz) (Beamforming mode):

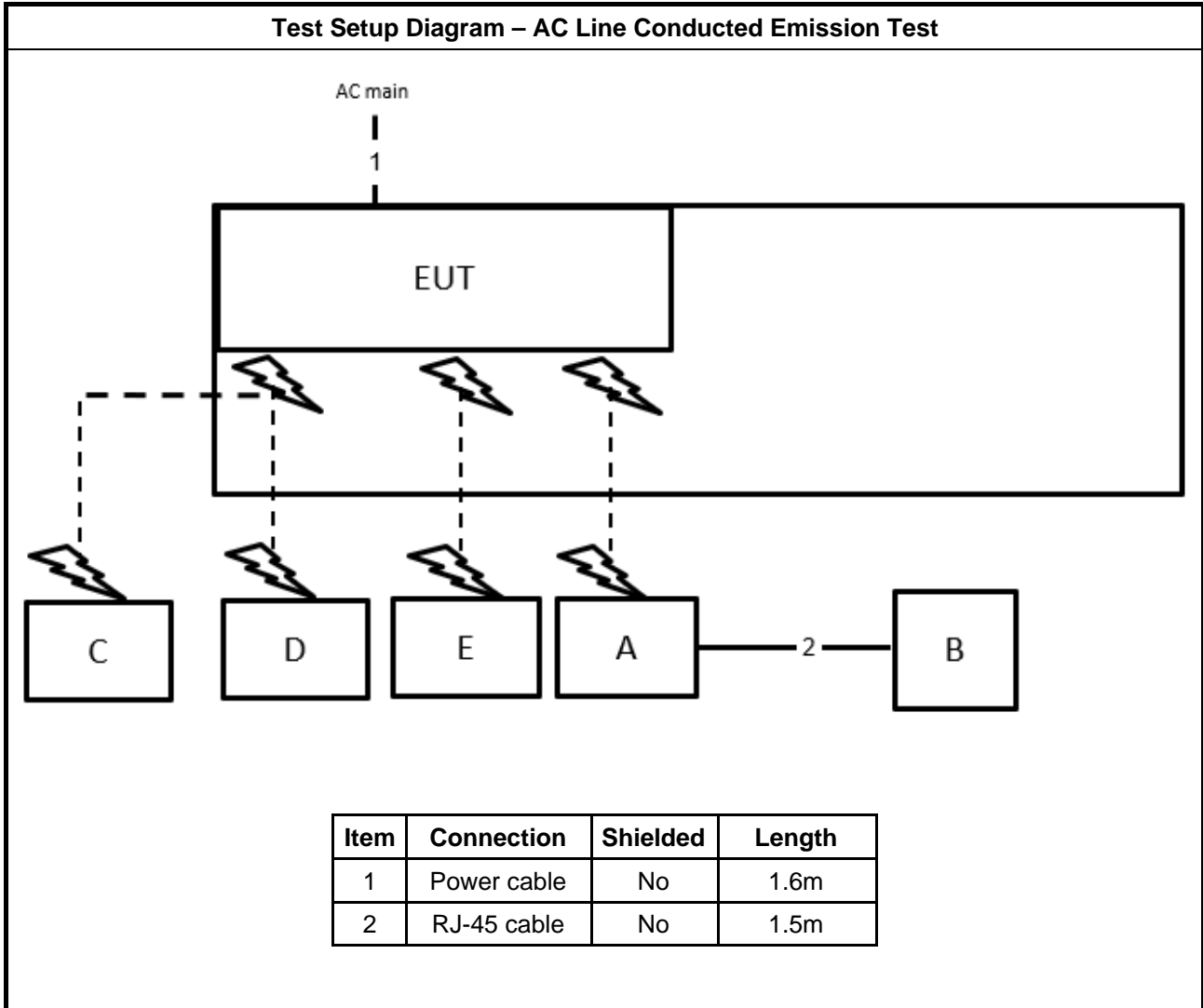
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	Test Fixture	Linksys	ESK-B21-7400R	N/A
C	Test Fixture	Linksys	N/A	N/A
D	WLAN module	Intel	AX210NGW	PD9AX210NG
E	NB	DELL	E6230	N/A



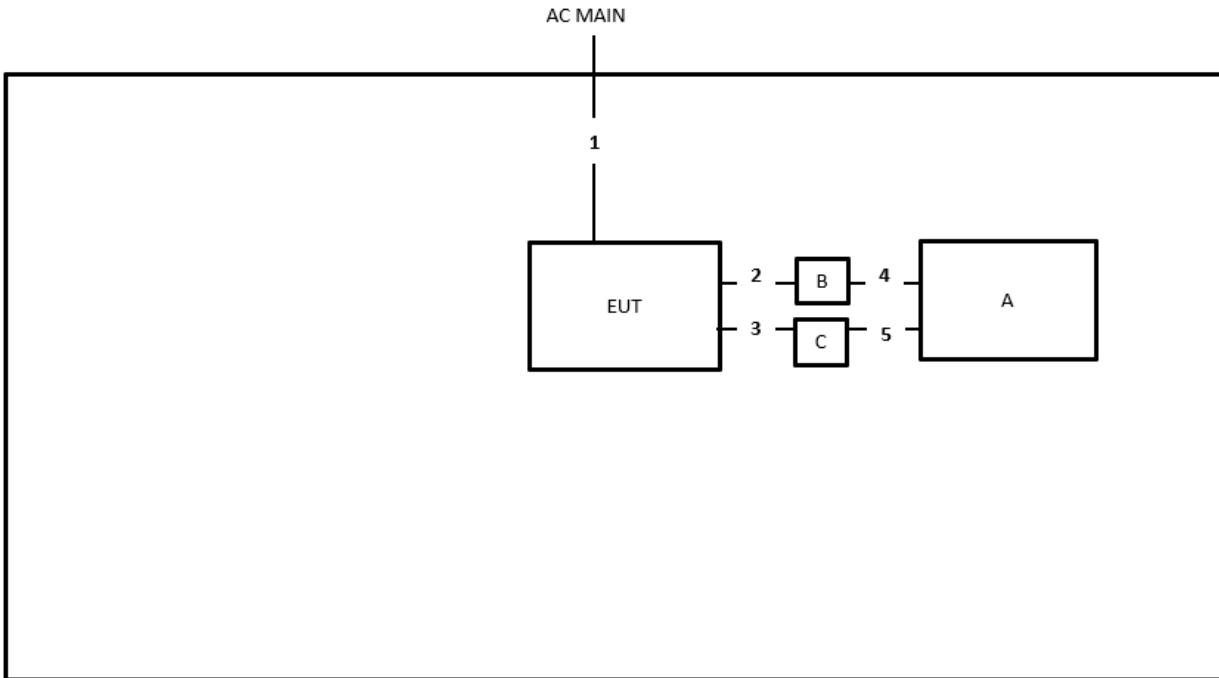
For RF Conducted (Beamforming mode):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	NB	DELL	E4300	N/A
C	WLAN module	Intel	AX210NGW	PD9AX210NG
D	Test Fixture	Linksys	ESK-B21-7400R	N/A
E	Test Fixture	Linksys	N/A	N/A

2.6 Test Setup Diagram

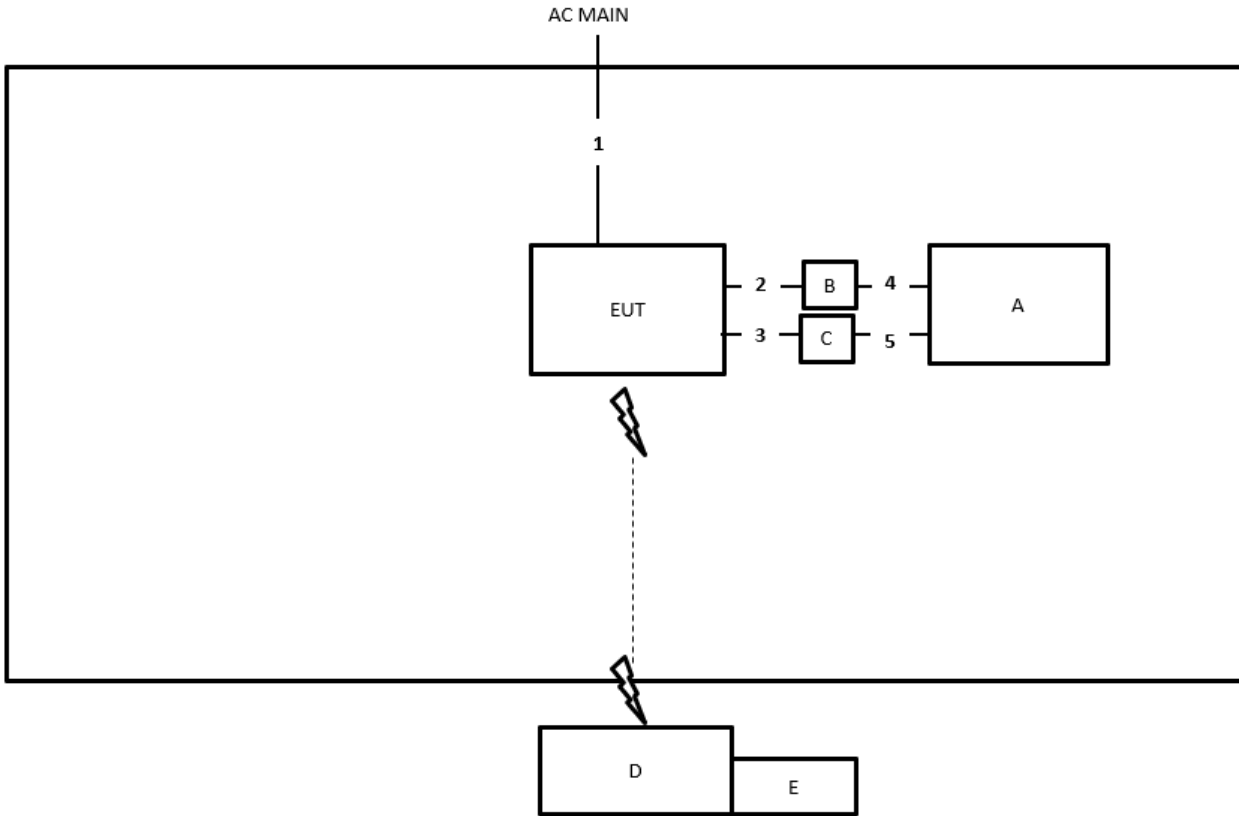


Test Setup Diagram - Radiated Test < 1GHz and Radiated Test > 1GHz (Non-beamforming mode)



Item	Connection	Shielded	Length
1	Power cable	No	1.6m
2	Console cable	No	0.03m
3	Console cable	No	0.03m
4	RJ-45 cable	No	1m
5	USB cable	Yes	1m

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



Item	Connection	Shielded	Length
1	Power cable	No	1.6m
2	Console cable	No	0.03m
3	Console cable	No	0.03m
4	RJ-45 cable	No	1m
5	USB cable	Yes	1m



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.

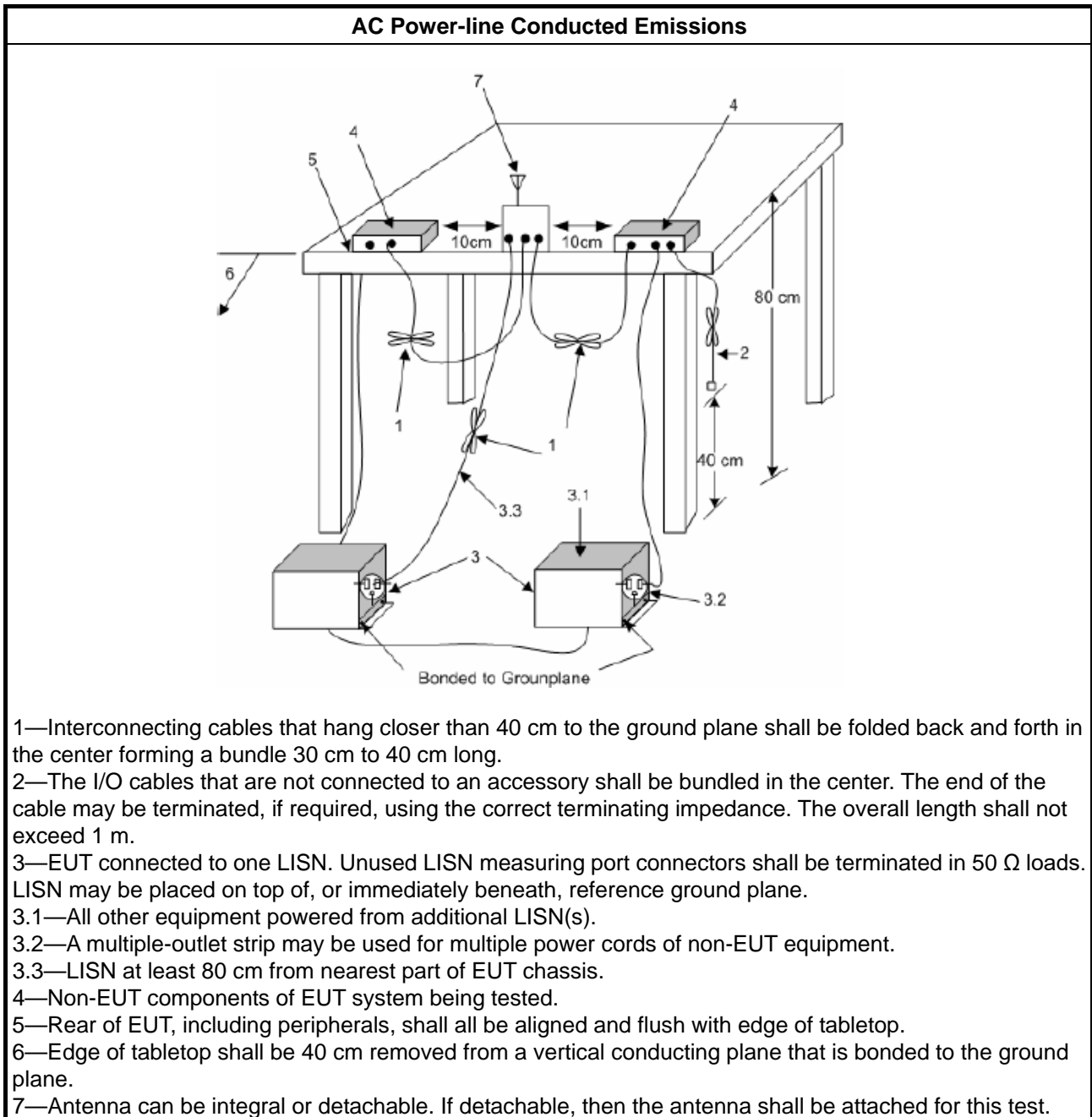
3.1.2 Measuring Instruments

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.

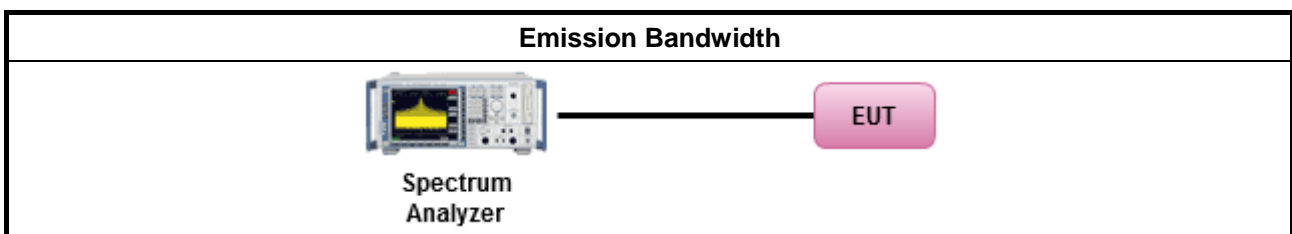
3.2.2 Measuring Instruments

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:	
<input type="checkbox"/>	<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:	
<input type="checkbox"/>	<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:	
<input type="checkbox"/>	<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

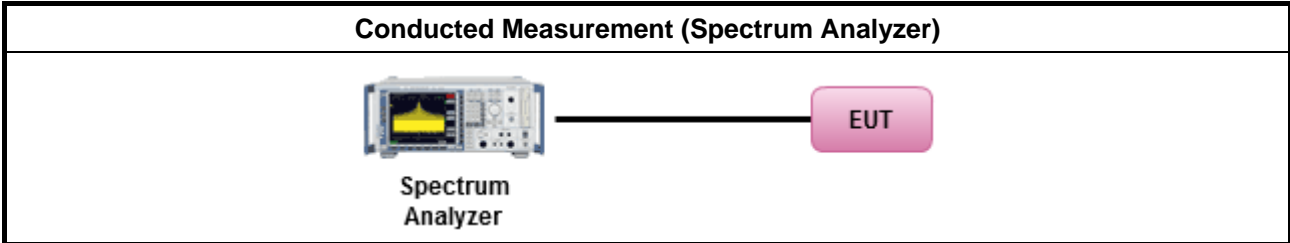
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

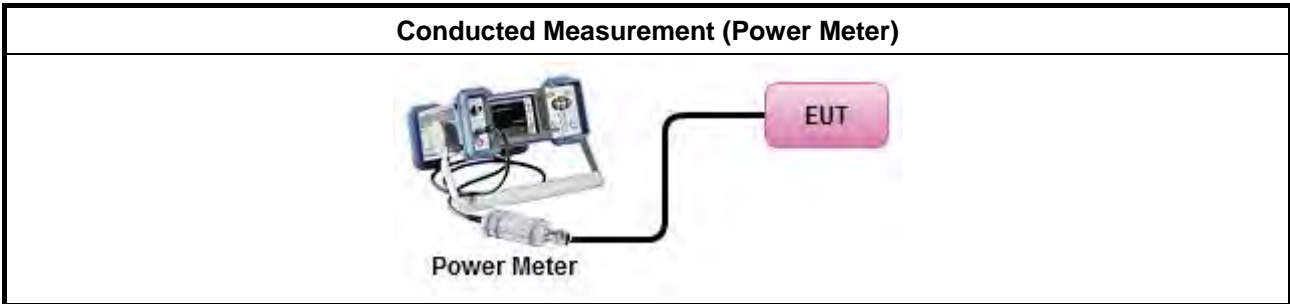
Test Method	
	Average over on/off periods with duty factor
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband 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 test:



For other test:



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.
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.	

3.4.2 Measuring Instruments

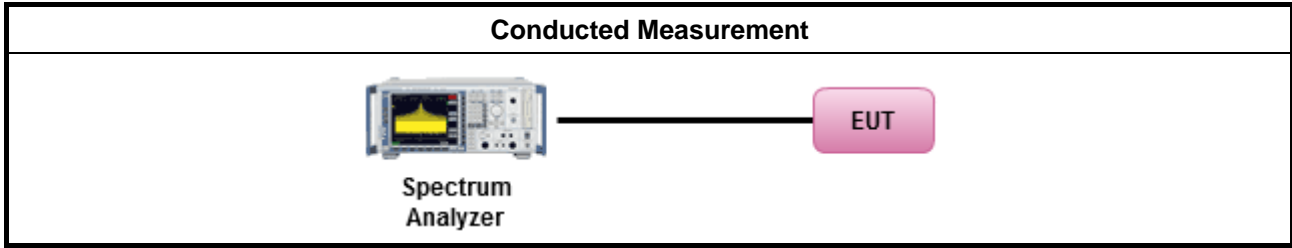
Refer a test equipment and calibration data table in this test report.



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, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth [duty cycle ≥ 98% or external video / power trigger]
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).
	<input type="checkbox"/> Refer as FCC KDB 789033 D02, clause E Method SA-1 Alt. (RMS detection with slow sweep speed) duty cycle < 98% and average over on/off periods with duty factor
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
	<input type="checkbox"/> Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<input checked="" type="checkbox"/> For conducted measurement.	
<ul style="list-style-type: none"> ▪ 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.
	<ul style="list-style-type: none"> ▪ 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).

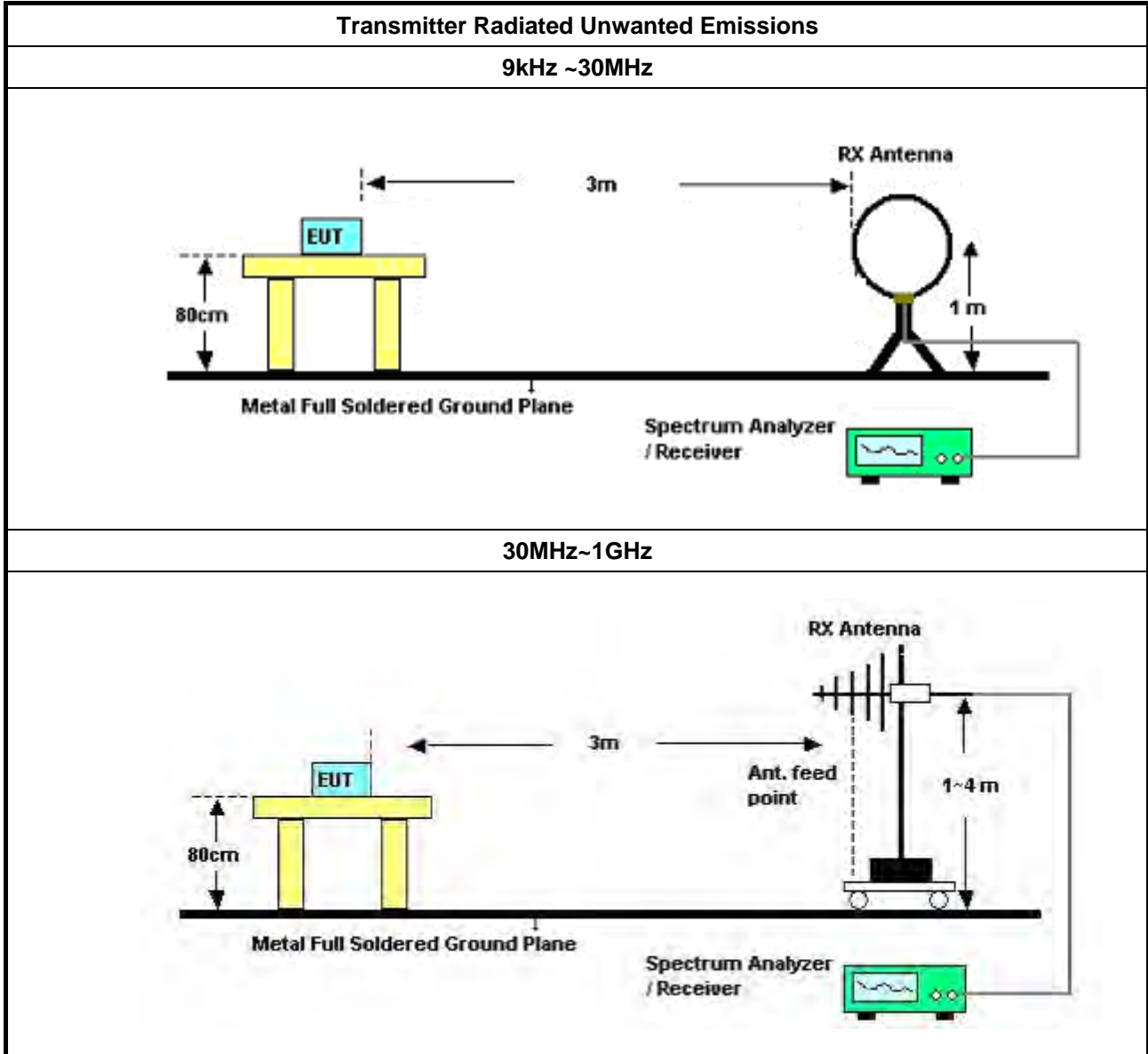
3.5.2 Measuring Instruments

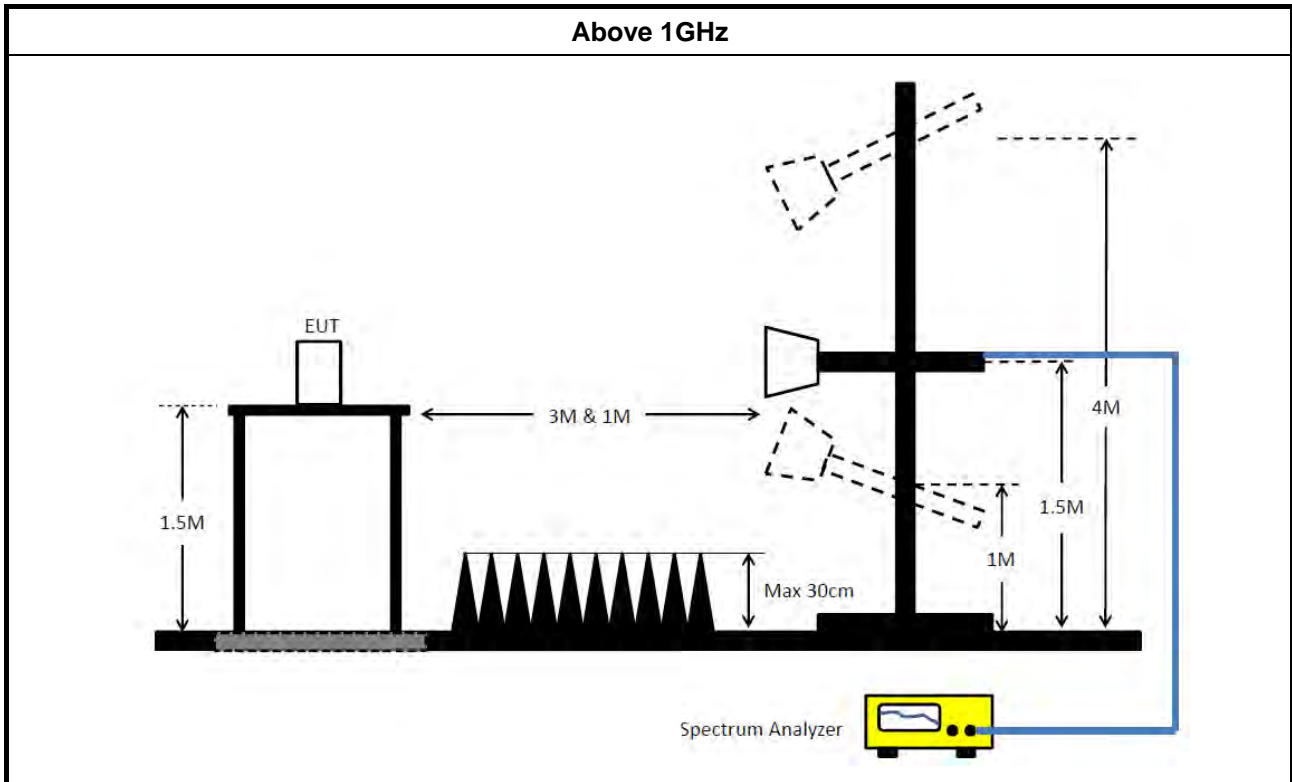
Refer a test equipment and calibration data table in this test report.

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.
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands.
<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.
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	<ul style="list-style-type: none"> ▪ 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-50-16-2	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)
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)
Pre-Amplifier	SGH	SGH0301	20230109-2	10M~1GHz	Jun. 23, 2023	Jun. 22, 2024	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. 13, 2023	Jun. 12, 2024	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-low	Woken	RG402	Low Cable-16+17	30 MHz ~ 1 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 23, 2023	Feb. 22, 2024	Radiation (03CH04-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1370	1GHz~18GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH04-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 28, 2023	Jun. 27, 2024	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH04-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 21, 2023	Mar. 20, 2024	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz	Mar. 25, 2023	Mar. 24, 2024	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 18, 2023	Apr. 17, 2024	Radiation (03CH02-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 28, 2023	Jun. 27, 2024	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH02-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Dec. 05, 2022	Dec. 04, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 05, 2023	May 04, 2024	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Jul. 31, 2023	Jul. 30, 2024	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 28, 2023	Jun. 27, 2024	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	Aug. 01, 2023	Jul. 31, 2024	Radiation (03CH06-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 21, 2022	Dec. 20, 2023	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+68	1GHz~18GHz	Aug. 15, 2023	Aug. 14, 2024	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 30, 2022	Dec. 29, 2023	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1531344	300MHz~40GHz	Aug. 01, 2023	Jul. 31, 2024	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1728002	300MHz~40GHz	Aug. 01, 2023	Jul. 31, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-11	30MHz ~18 GHz	Feb. 14, 2023	Feb. 13, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-12	30MHz ~18 GHz	Feb. 14, 2023	Feb. 13, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-13	30MHz ~18 GHz	Feb. 14, 2023	Feb. 13, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 GHz ~26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

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

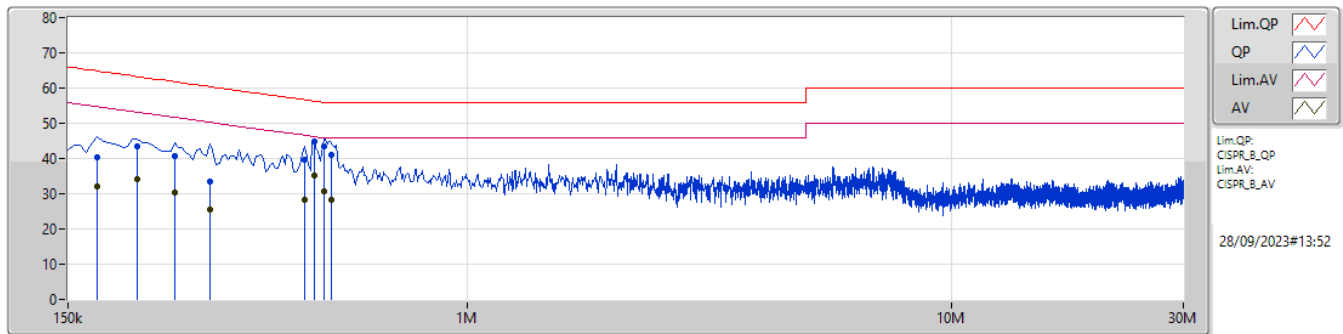
N.C.R means Non-Calibration required.



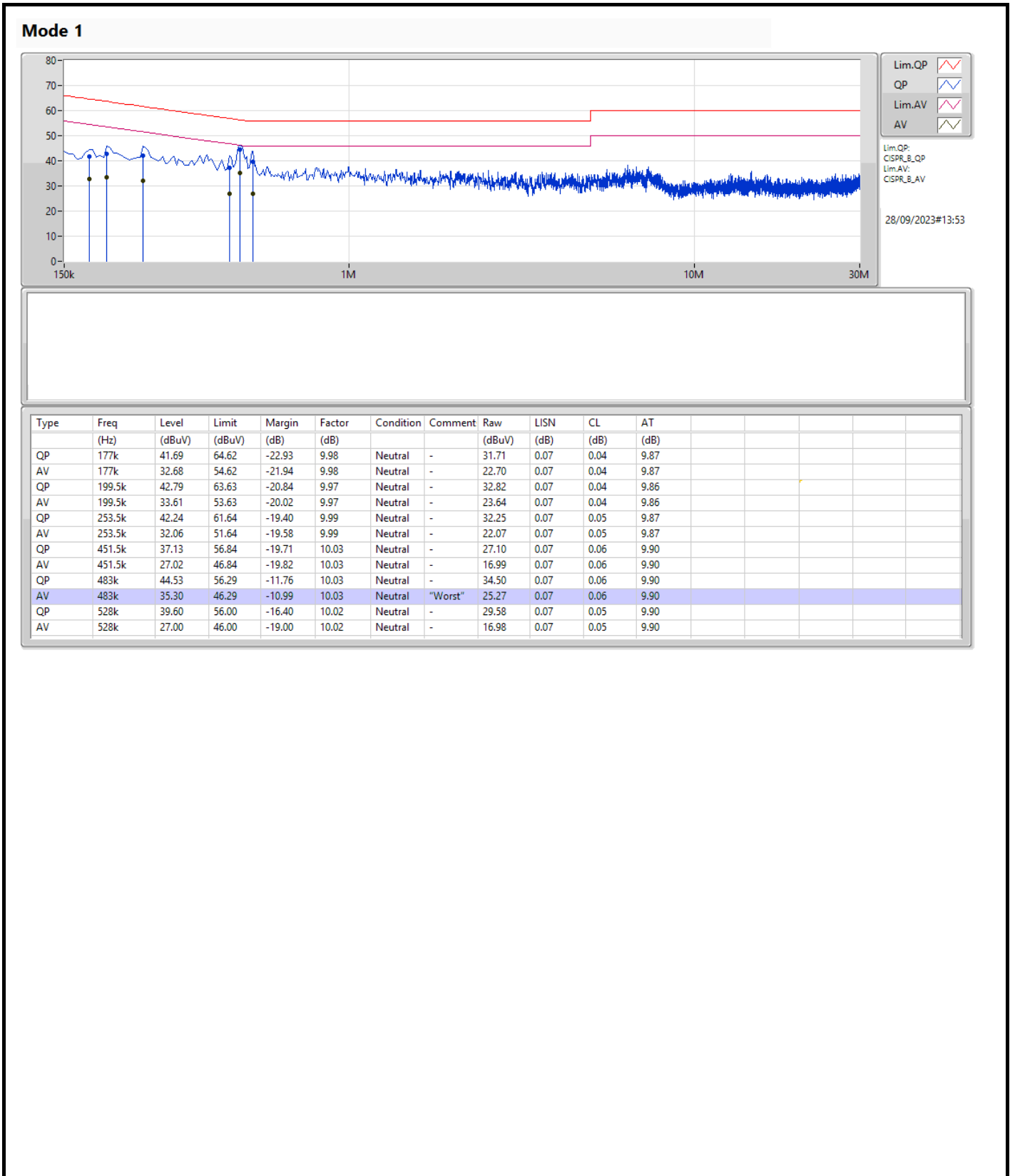
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	483k	35.30	46.29	-10.99	Neutral

Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	172.5k	40.50	64.83	-24.33	10.00	Line	-	30.50	0.09	0.04	9.87
AV	172.5k	32.06	54.83	-22.77	10.00	Line	-	22.06	0.09	0.04	9.87
QP	208.5k	43.57	63.27	-19.70	9.98	Line	-	33.59	0.08	0.04	9.86
AV	208.5k	34.19	53.27	-19.08	9.98	Line	-	24.21	0.08	0.04	9.86
QP	249k	40.59	61.79	-21.20	10.00	Line	-	30.59	0.08	0.05	9.87
AV	249k	30.28	51.79	-21.51	10.00	Line	-	20.28	0.08	0.05	9.87
QP	294k	33.31	60.42	-27.11	10.02	Line	-	23.29	0.09	0.05	9.88
AV	294k	25.53	50.42	-24.89	10.02	Line	-	15.51	0.09	0.05	9.88
QP	460.5k	39.75	56.69	-16.94	10.05	Line	-	29.70	0.09	0.06	9.90
AV	460.5k	28.30	46.69	-18.39	10.05	Line	-	18.25	0.09	0.06	9.90
QP	483k	44.71	56.29	-11.58	10.05	Line	-	34.66	0.09	0.06	9.90
AV	483k	35.26	46.29	-11.03	10.05	Line	"Worst"	25.21	0.09	0.06	9.90
QP	505.5k	43.50	56.00	-12.50	10.05	Line	-	33.45	0.10	0.05	9.90
AV	505.5k	30.75	46.00	-15.25	10.05	Line	-	20.70	0.10	0.05	9.90
QP	523.5k	40.87	56.00	-15.13	10.05	Line	-	30.82	0.10	0.05	9.90
AV	523.5k	28.17	46.00	-17.83	10.05	Line	-	18.12	0.10	0.05	9.90





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	19.8M	16.36M	16M4D1D	18.205M	16.294M
802.11ax HEW20_Nss1,(MCS0)_2TX	20.9M	18.916M	18M9D1D	19.965M	18.766M
802.11ax HEW40_Nss1,(MCS0)_2TX	39.6M	37.631M	37M6D1D	38.94M	37.431M
802.11ax HEW80_Nss1,(MCS0)_2TX	80.08M	76.662M	76M7D1D	79.42M	76.462M
802.11ax HEW160_Nss1,(MCS0)_2TX	79.68M	77.321M	77M3D1D	79.6M	77.161M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.14M	16.338M	16M3D1D	18.26M	16.272M
802.11ax HEW20_Nss1,(MCS0)_2TX	20.24M	18.866M	18M9D1D	19.965M	18.716M
802.11ax HEW40_Nss1,(MCS0)_2TX	39.71M	37.481M	37M5D1D	38.94M	37.431M
802.11ax HEW80_Nss1,(MCS0)_2TX	78.98M	76.662M	76M7D1D	78.54M	76.562M
802.11ax HEW160_Nss1,(MCS0)_2TX	80.72M	77.321M	77M3D1D	79.28M	77.241M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.47M	16.338M	16M3D1D	18.04M	16.25M
802.11ax HEW20_Nss1,(MCS0)_2TX	20.35M	18.866M	18M9D1D	19.635M	18.766M
802.11ax HEW40_Nss1,(MCS0)_2TX	39.93M	37.681M	37M7D1D	38.94M	37.481M
802.11ax HEW80_Nss1,(MCS0)_2TX	78.98M	76.762M	76M8D1D	78.76M	76.562M
802.11ax HEW160_Nss1,(MCS0)_2TX	159.28M	154.923M	155MD1D	158.84M	154.923M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.335M	16.492M	16M5D1D	15.345M	16.272M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.975M	18.941M	18M9D1D	18.095M	18.841M
802.11ax HEW40_Nss1,(MCS0)_2TX	36.63M	37.781M	37M8D1D	27.06M	37.581M
802.11ax HEW80_Nss1,(MCS0)_2TX	71.28M	77.061M	77M1D1D	60.5M	76.862M

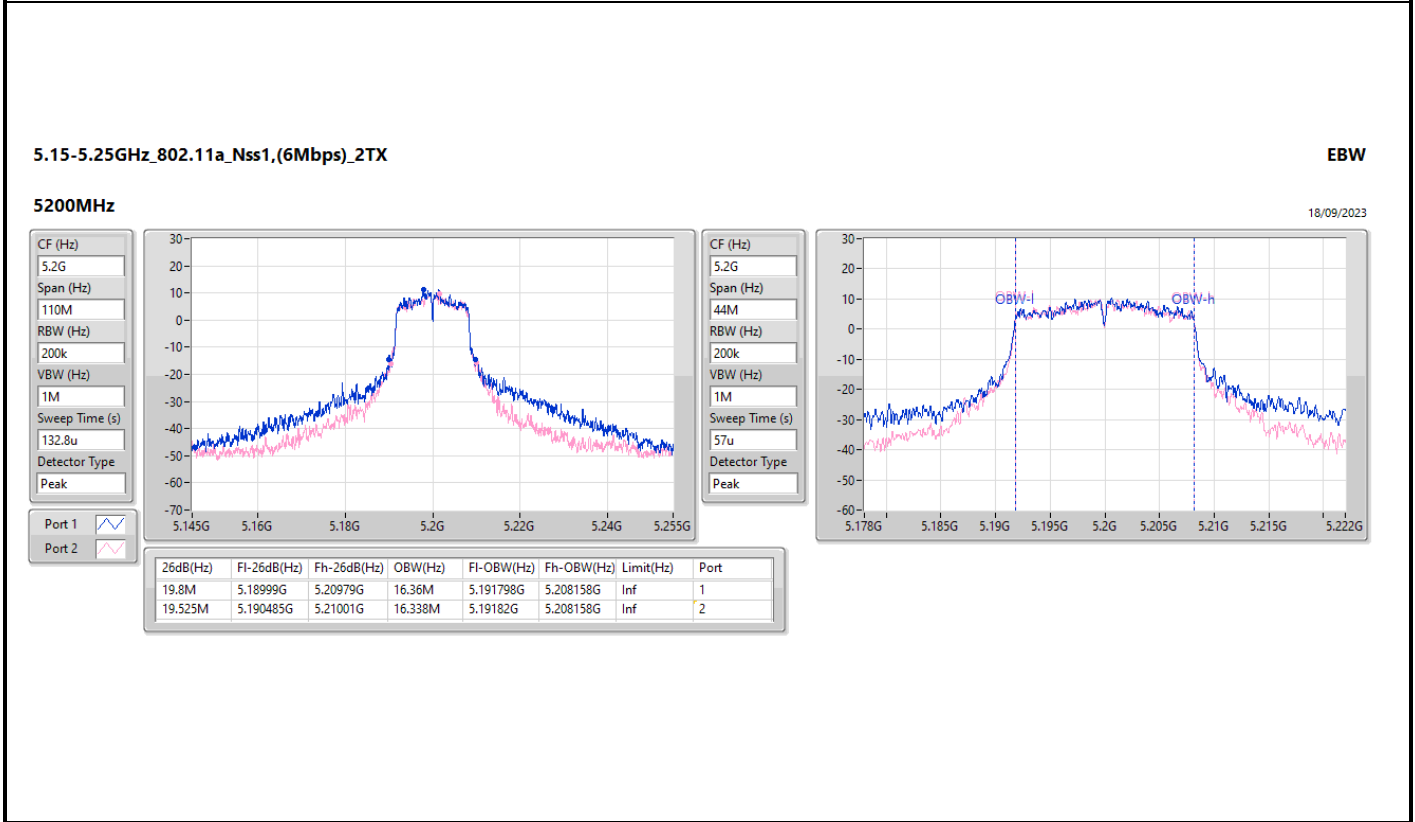
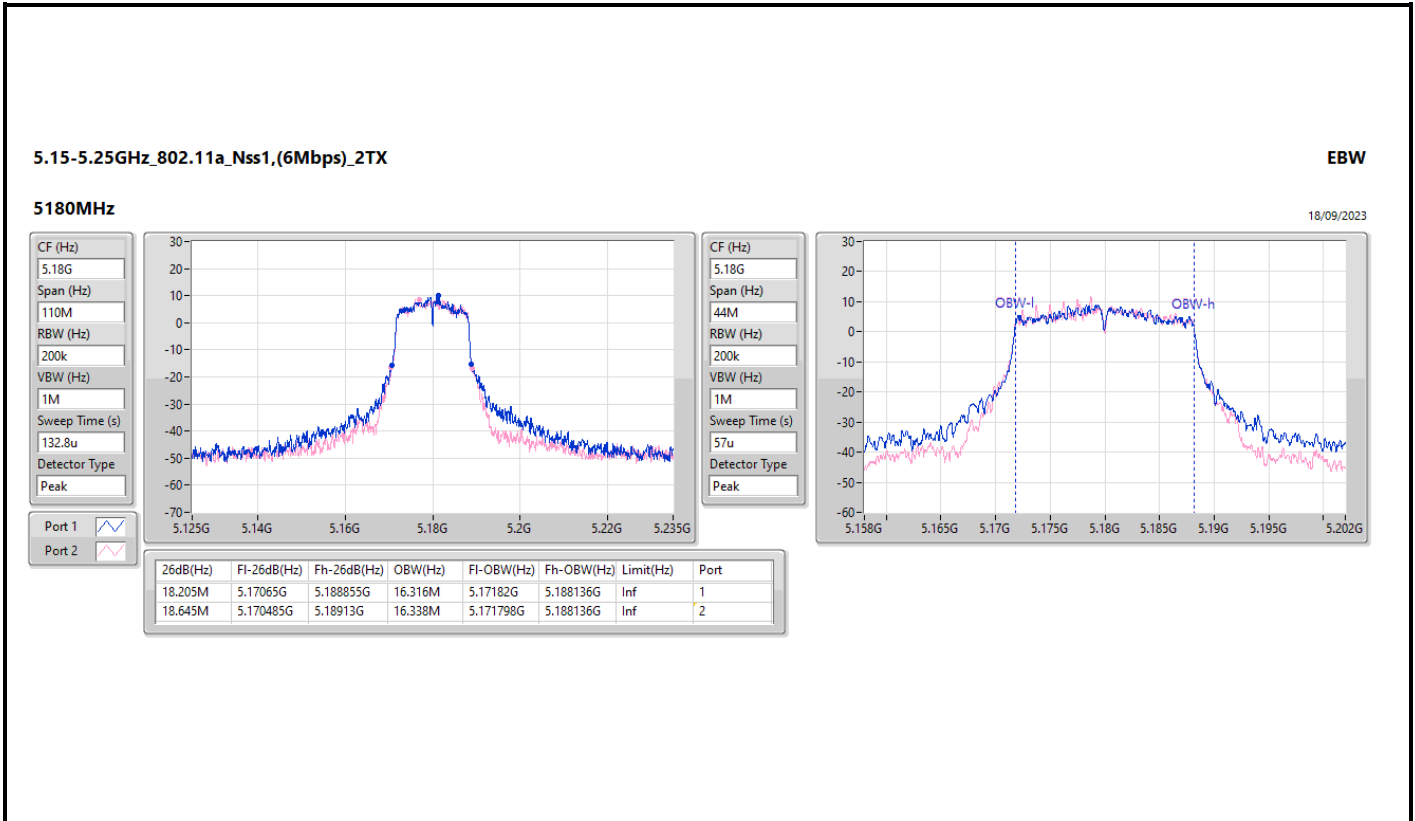
Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
 Max-OBW = Maximum 99% occupied bandwidth;
 Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
 Min-OBW = Minimum 99% occupied bandwidth



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	18.205M	16.316M	18.645M	16.338M
5200MHz	Pass	Inf	19.8M	16.36M	19.525M	16.338M
5240MHz	Pass	Inf	18.425M	16.294M	19.36M	16.294M
5260MHz	Pass	Inf	18.7M	16.272M	19.14M	16.272M
5300MHz	Pass	Inf	18.26M	16.338M	19.03M	16.294M
5320MHz	Pass	Inf	18.7M	16.316M	18.645M	16.338M
5500MHz	Pass	Inf	18.04M	16.294M	18.315M	16.316M
5580MHz	Pass	Inf	18.48M	16.338M	19.47M	16.25M
5700MHz	Pass	Inf	18.37M	16.294M	18.59M	16.294M
5745MHz	Pass	500k	16.335M	16.272M	16.06M	16.294M
5785MHz	Pass	500k	16.28M	16.492M	15.345M	16.294M
5825MHz	Pass	500k	15.4M	16.382M	16.06M	16.36M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	20.295M	18.816M	20.13M	18.866M
5200MHz	Pass	Inf	19.965M	18.766M	20.405M	18.866M
5240MHz	Pass	Inf	20.9M	18.866M	20.24M	18.916M
5260MHz	Pass	Inf	20.075M	18.816M	20.24M	18.766M
5300MHz	Pass	Inf	20.185M	18.741M	19.965M	18.866M
5320MHz	Pass	Inf	20.185M	18.791M	20.13M	18.716M
5500MHz	Pass	Inf	19.635M	18.791M	20.02M	18.866M
5580MHz	Pass	Inf	20.24M	18.816M	20.35M	18.841M
5700MHz	Pass	Inf	20.295M	18.766M	19.855M	18.816M
5745MHz	Pass	500k	18.48M	18.941M	18.48M	18.891M
5785MHz	Pass	500k	18.37M	18.916M	18.7M	18.841M
5825MHz	Pass	500k	18.095M	18.941M	18.975M	18.916M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	38.94M	37.631M	39.05M	37.481M
5230MHz	Pass	Inf	39.6M	37.431M	39.27M	37.581M
5270MHz	Pass	Inf	39.71M	37.481M	39.16M	37.431M
5310MHz	Pass	Inf	38.94M	37.431M	39.16M	37.481M
5510MHz	Pass	Inf	39.16M	37.531M	39.93M	37.481M
5550MHz	Pass	Inf	39.49M	37.581M	39.6M	37.681M
5670MHz	Pass	Inf	39.05M	37.531M	38.94M	37.631M
5755MHz	Pass	500k	34.54M	37.781M	36.63M	37.581M
5795MHz	Pass	500k	27.06M	37.731M	34.32M	37.681M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	80.08M	76.462M	79.42M	76.662M
5290MHz	Pass	Inf	78.54M	76.562M	78.98M	76.662M
5530MHz	Pass	Inf	78.98M	76.562M	78.76M	76.562M
5610MHz	Pass	Inf	78.98M	76.762M	78.98M	76.762M
5775MHz	Pass	500k	60.5M	77.061M	71.28M	76.862M
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	79.68M	77.321M	79.6M	77.161M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	79.28M	77.321M	80.72M	77.241M
5570MHz	Pass	Inf	159.28M	154.923M	158.84M	154.923M

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

5240MHz

18/09/2023

CF (Hz)
5.24G

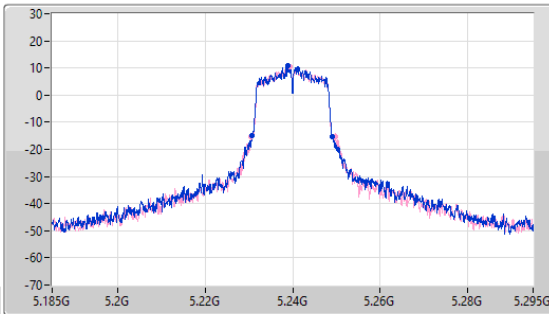
Span (Hz)
110M

RBW (Hz)
200k

VBW (Hz)
1M

Sweep Time (s)
132.8u

Detector Type
Peak



CF (Hz)
5.24G

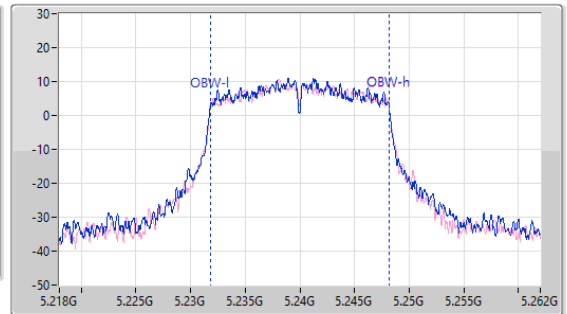
Span (Hz)
44M

RBW (Hz)
200k

VBW (Hz)
1M

Sweep Time (s)
57u

Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.425M	5.23076G	5.249185G	16.294M	5.231842G	5.248136G	Inf	1
19.36M	5.23054G	5.2499G	16.294M	5.231842G	5.248136G	Inf	2

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

EBW

5260MHz

18/09/2023

CF (Hz)
5.26G

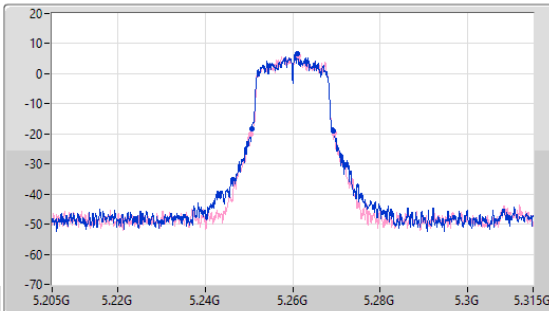
Span (Hz)
110M

RBW (Hz)
200k

VBW (Hz)
1M

Sweep Time (s)
132.8u

Detector Type
Peak



CF (Hz)
5.26G

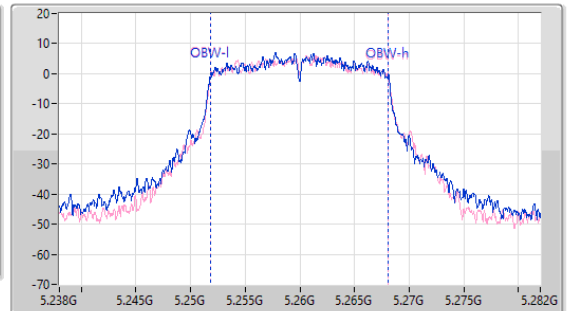
Span (Hz)
44M

RBW (Hz)
200k

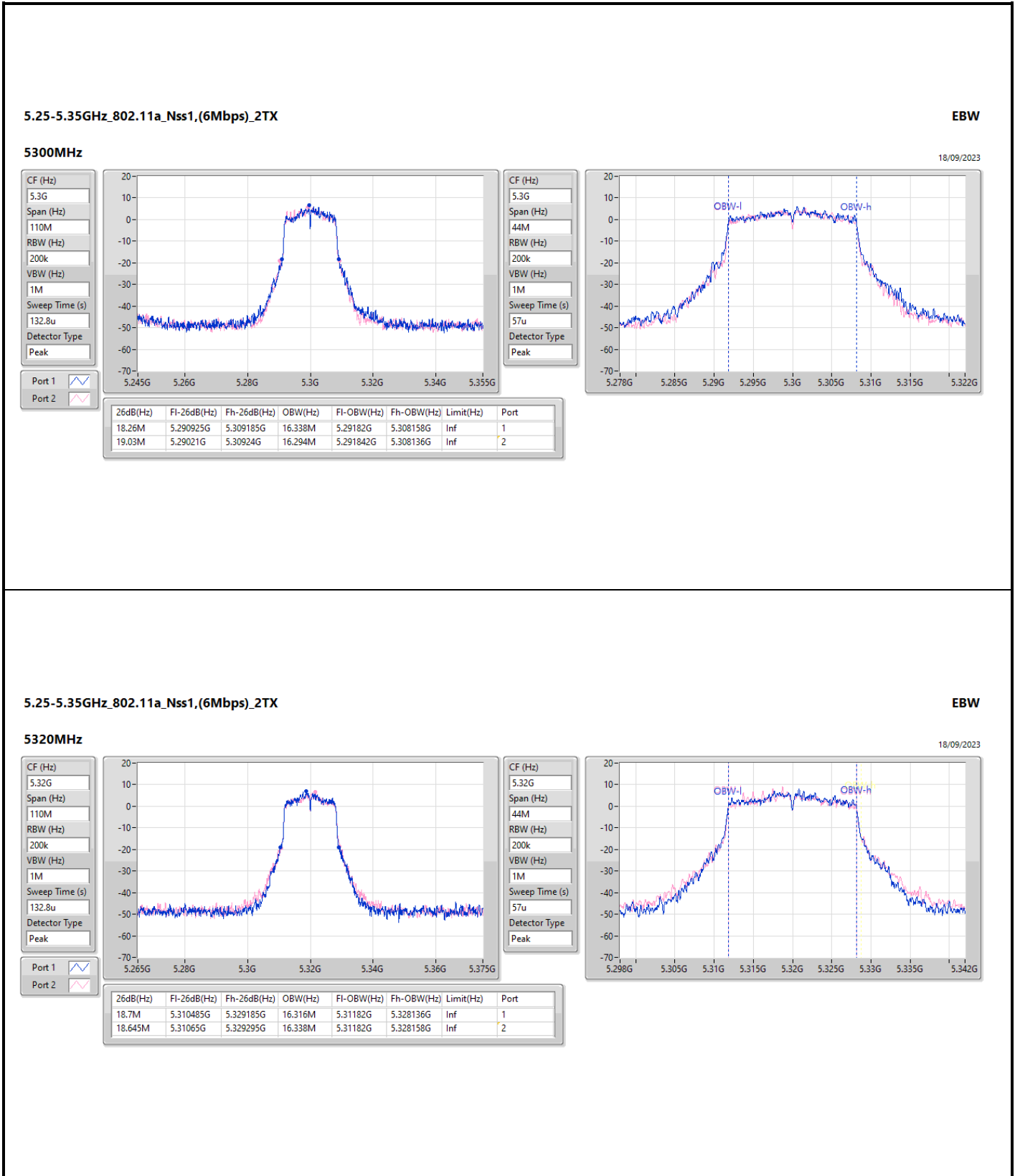
VBW (Hz)
1M

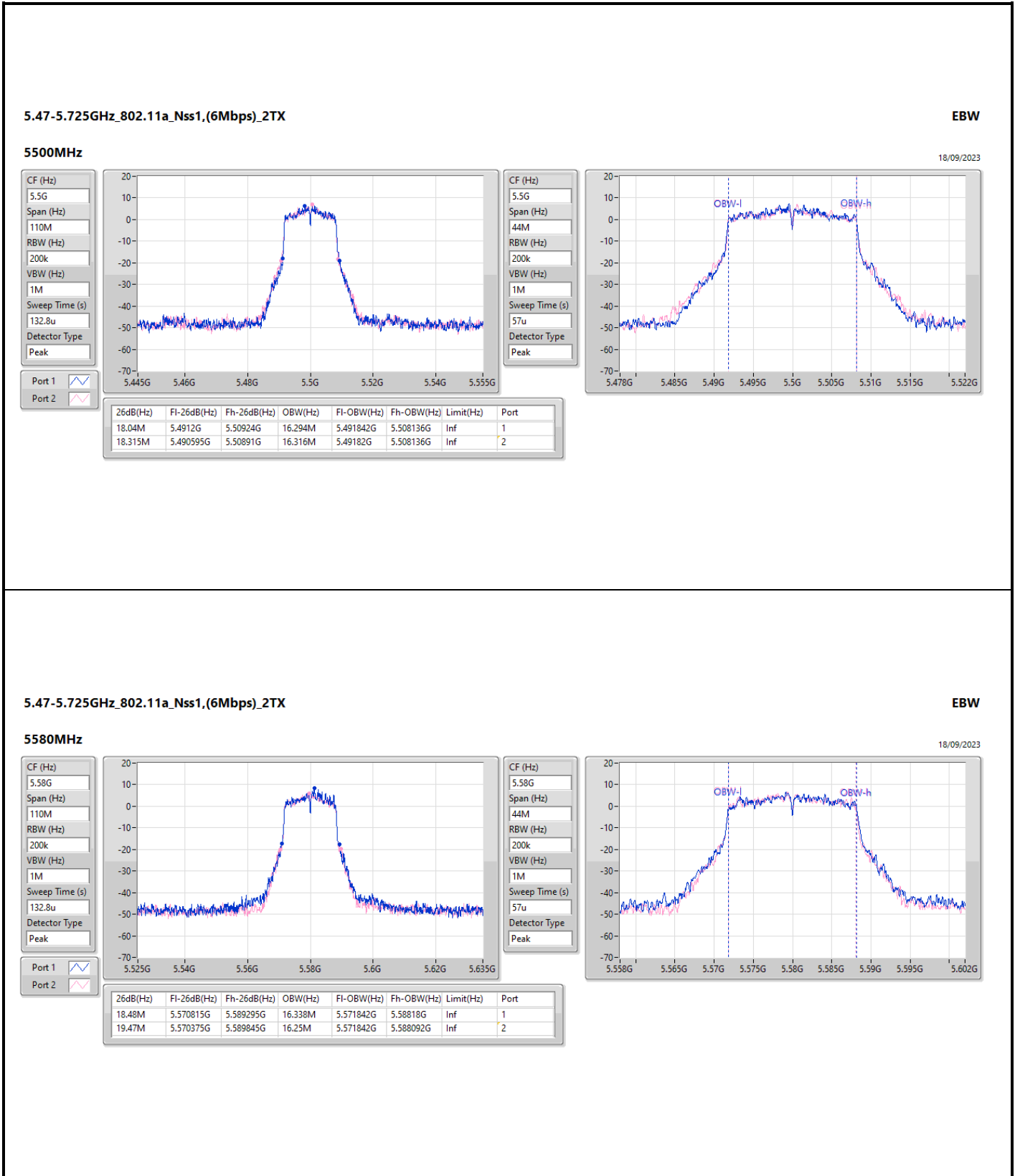
Sweep Time (s)
57u

Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.7M	5.250705G	5.269405G	16.272M	5.25182G	5.268092G	Inf	1
19.14M	5.250485G	5.269625G	16.272M	5.251842G	5.268114G	Inf	2



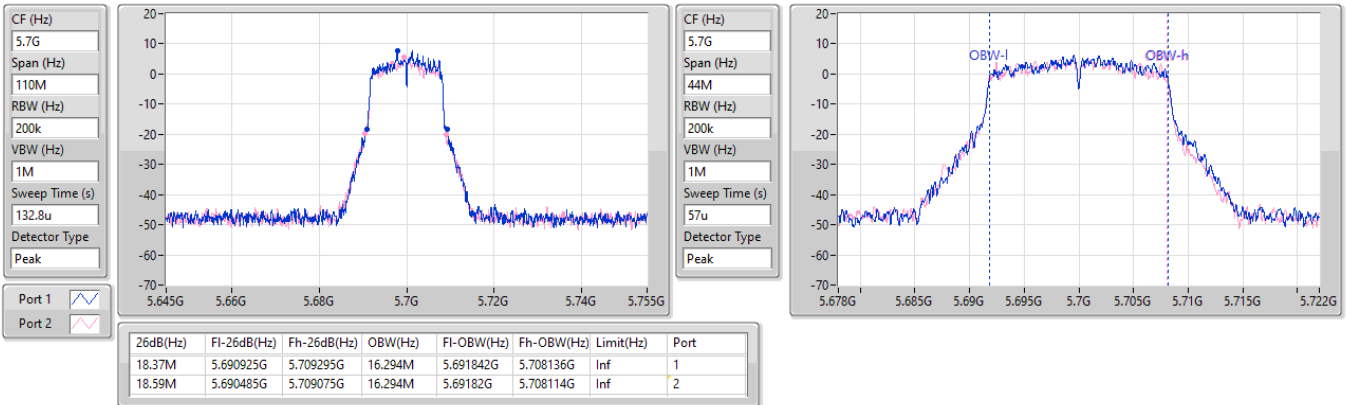


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5700MHz

18/09/2023

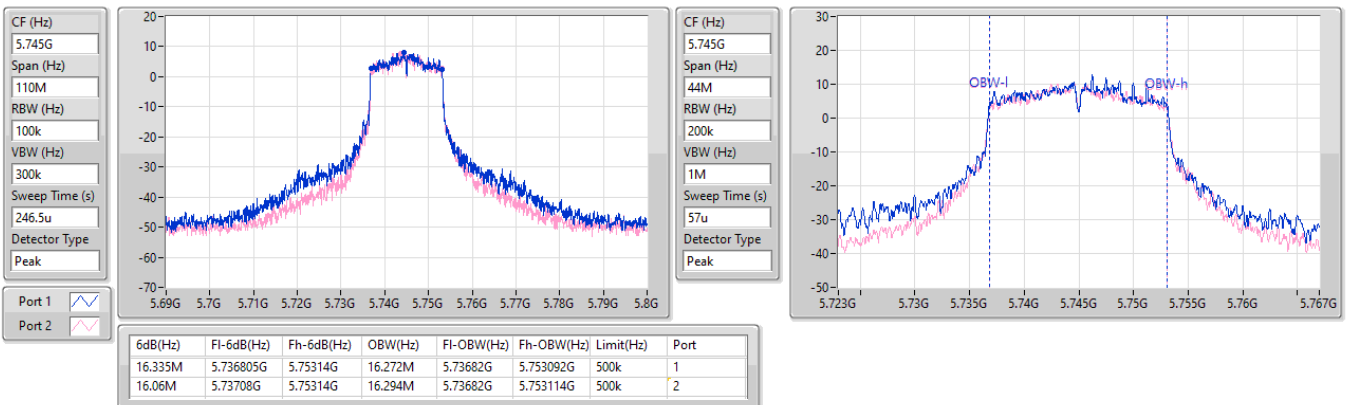


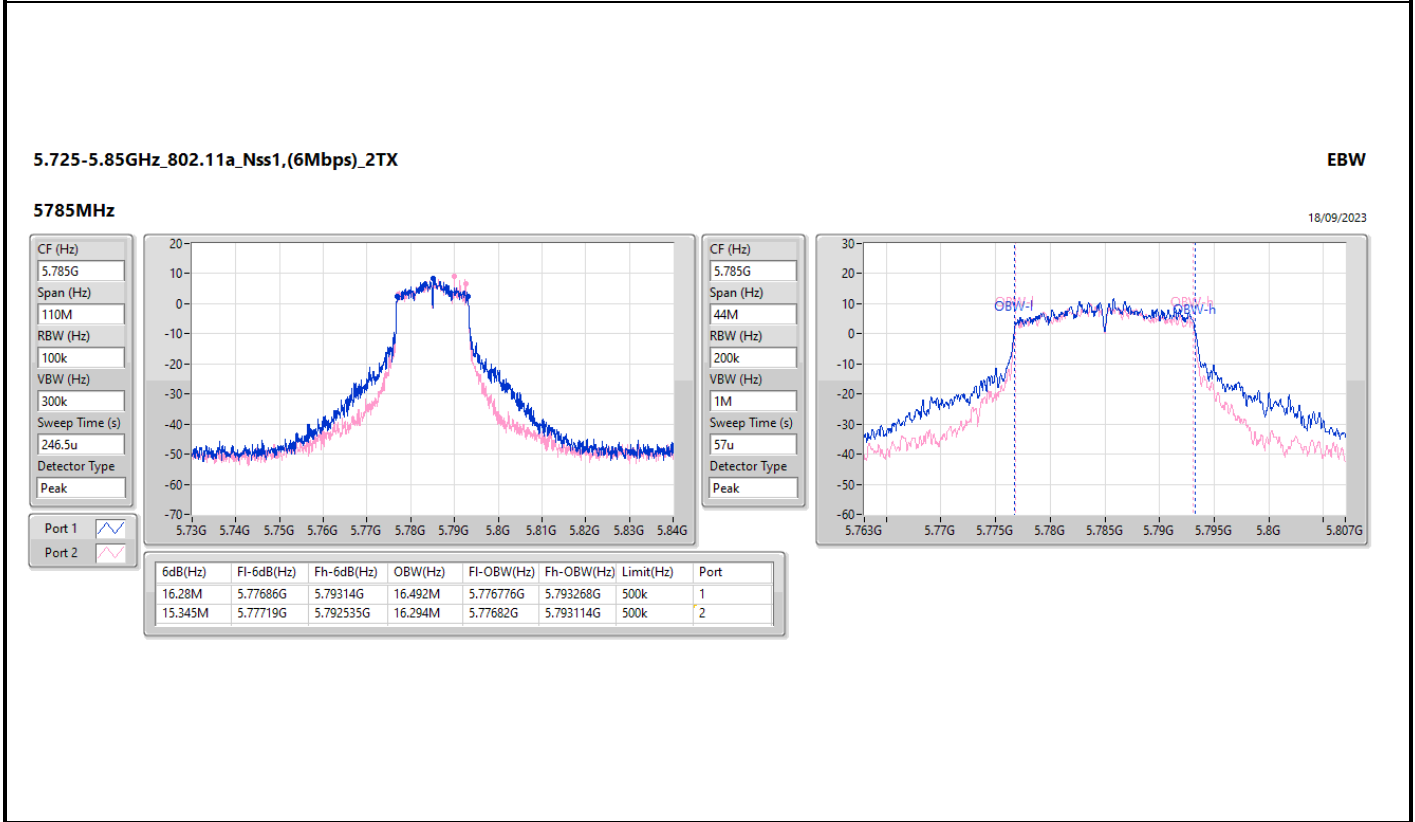
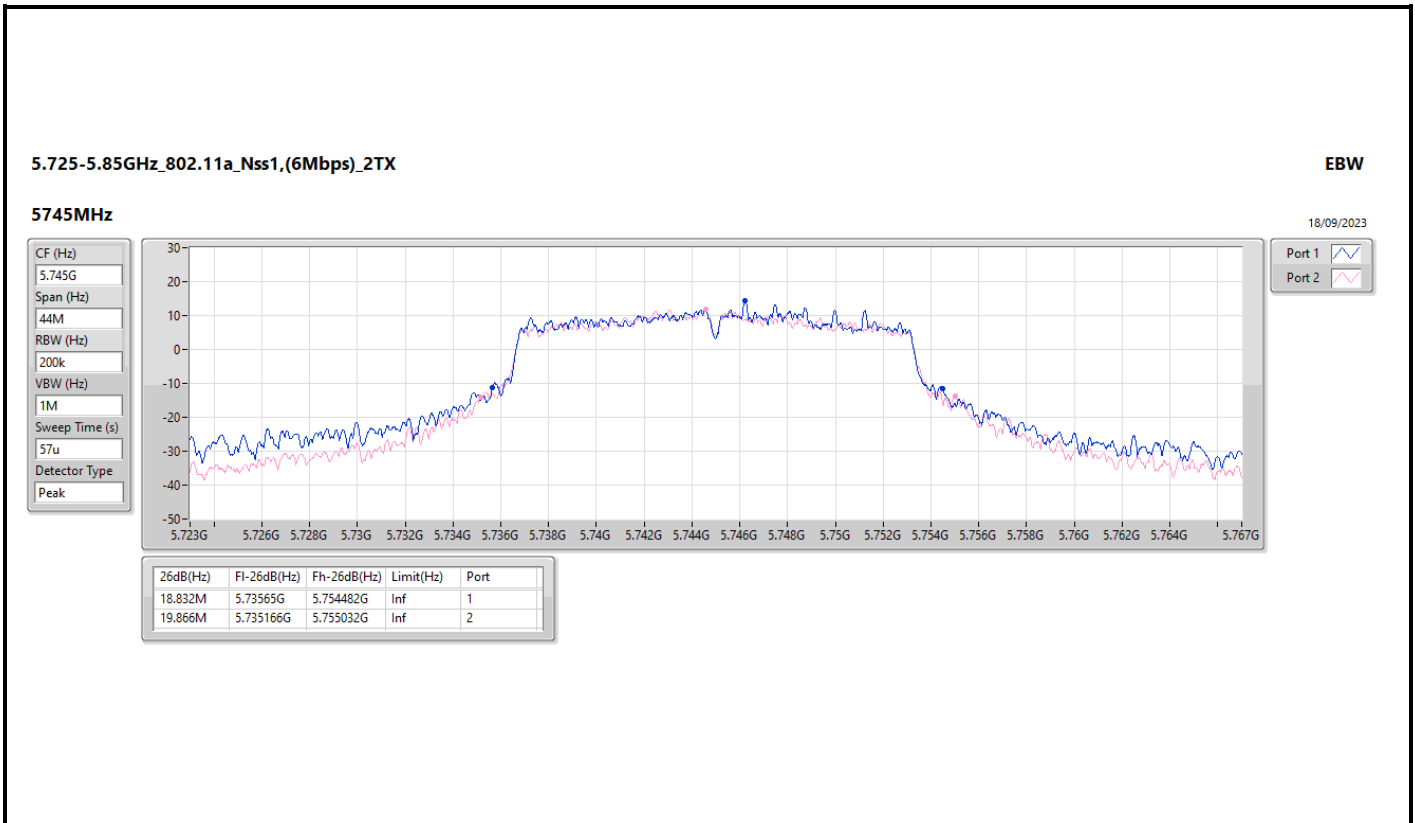
5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

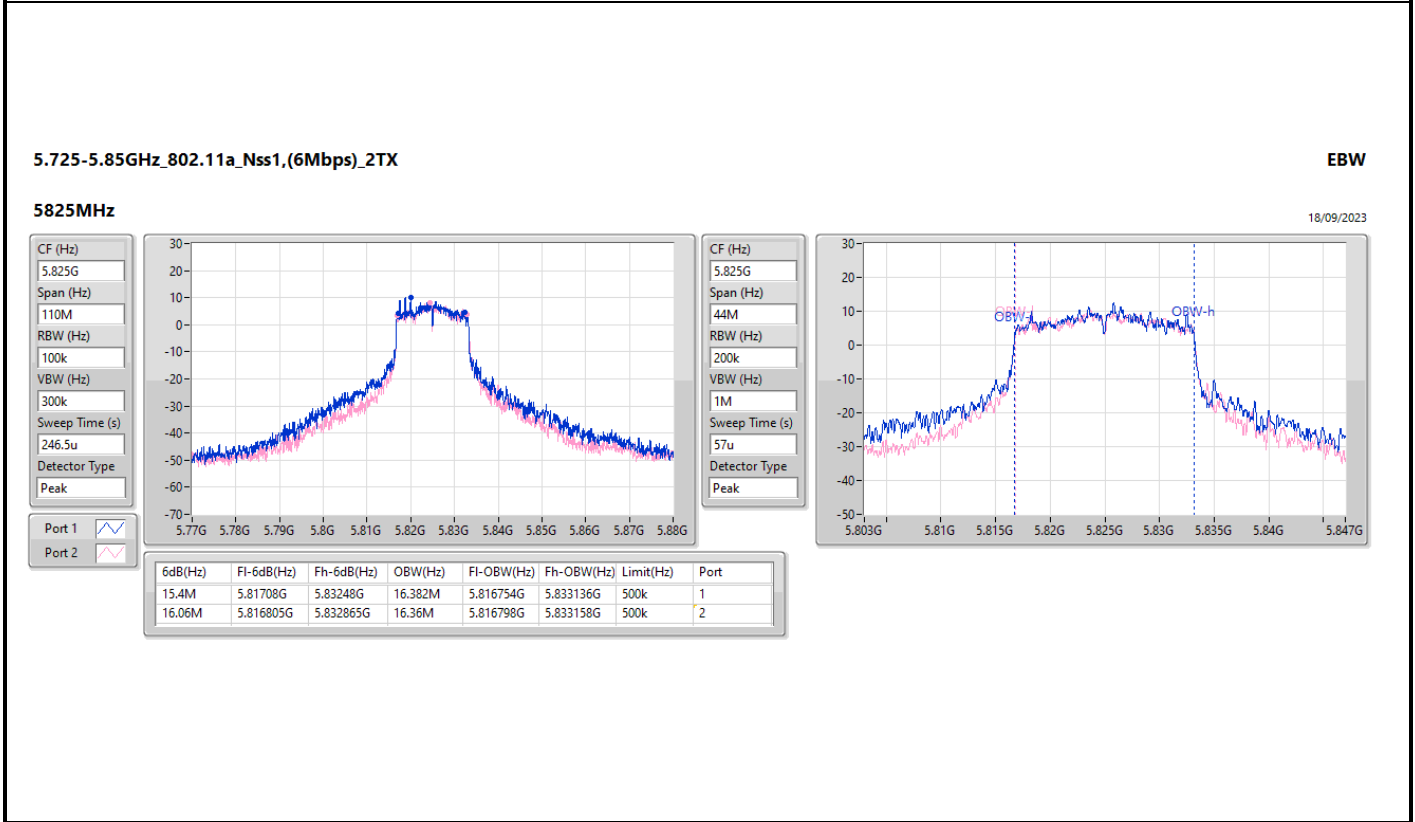
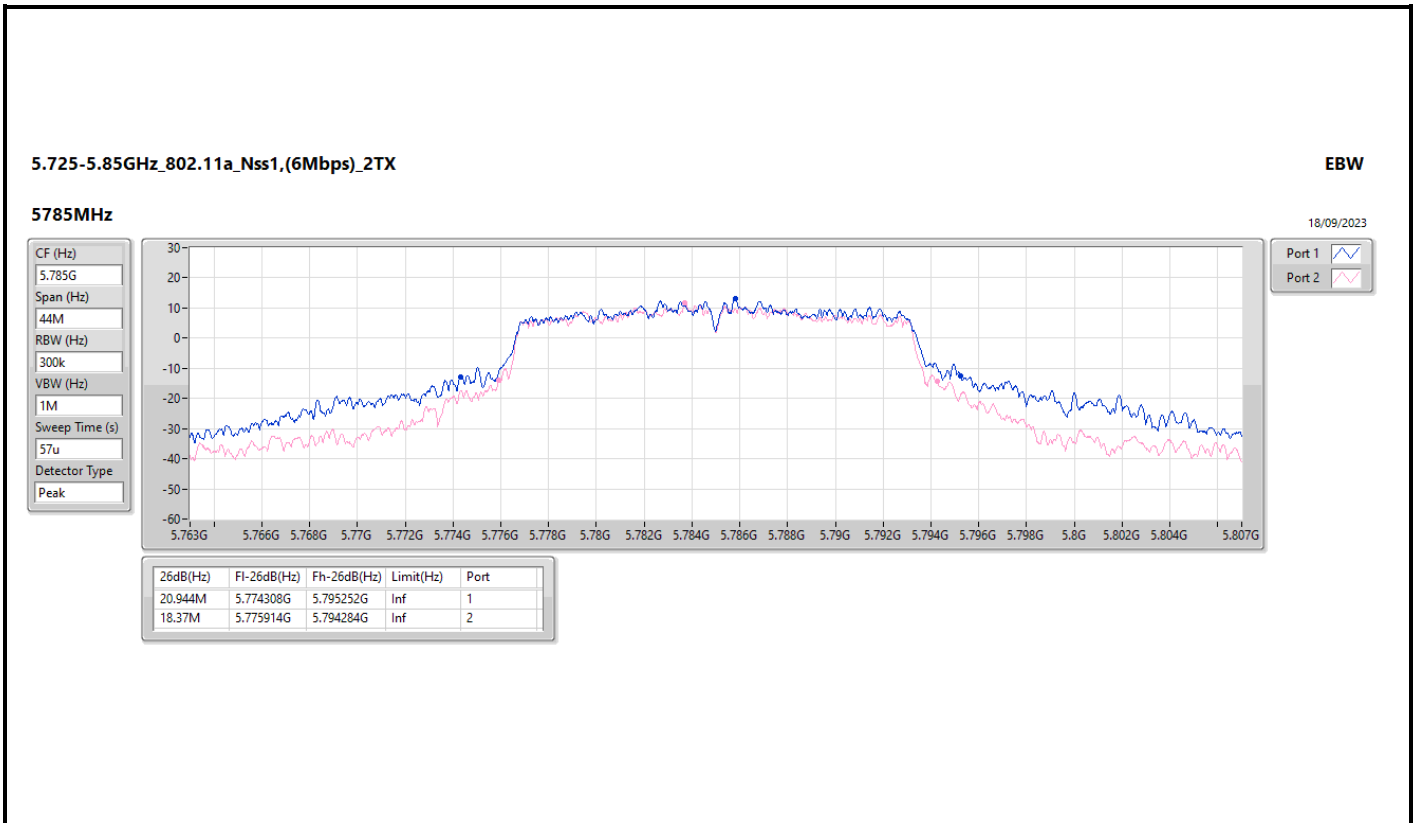
EBW

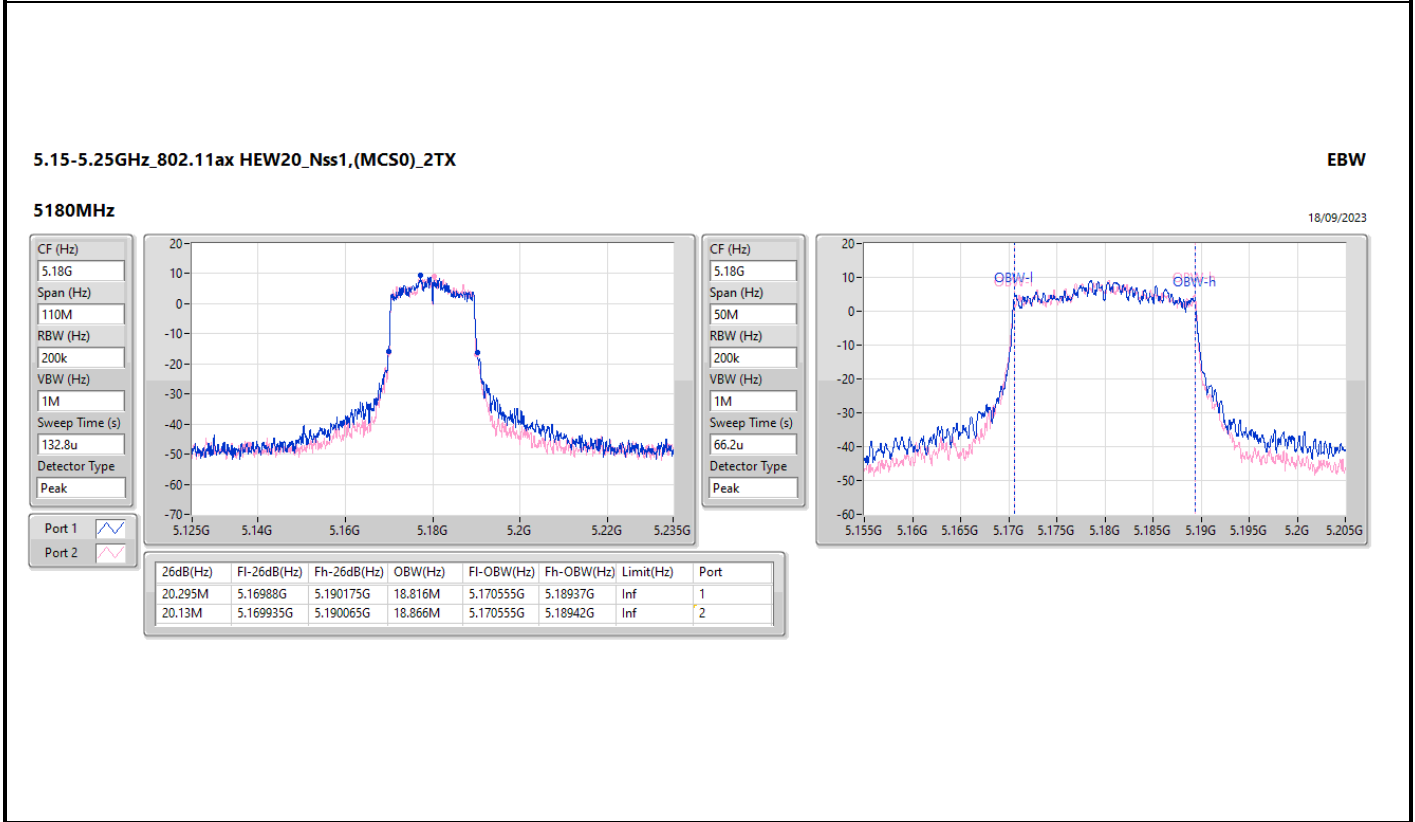
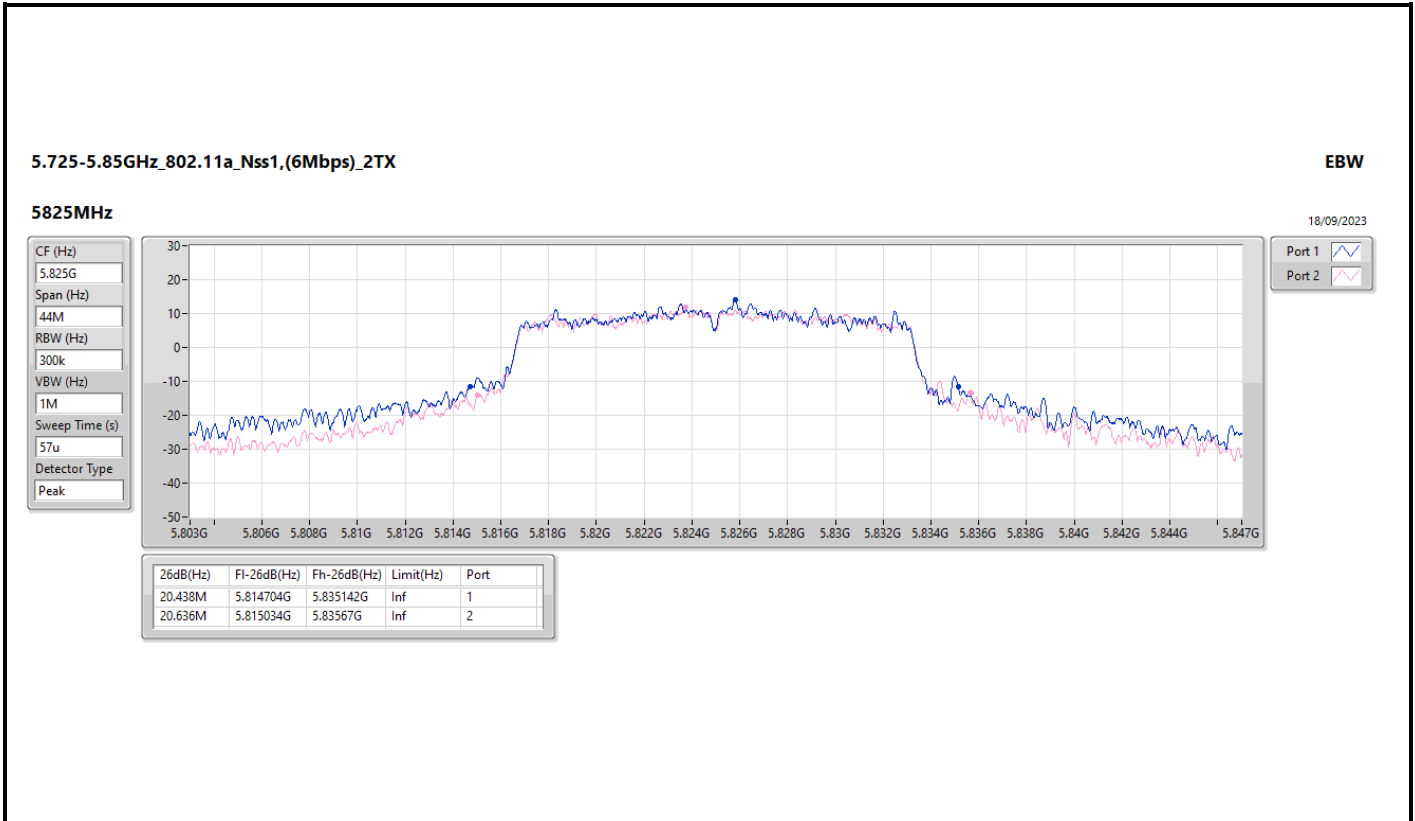
5745MHz

18/09/2023







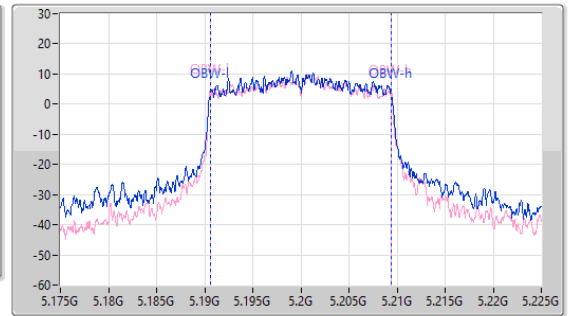
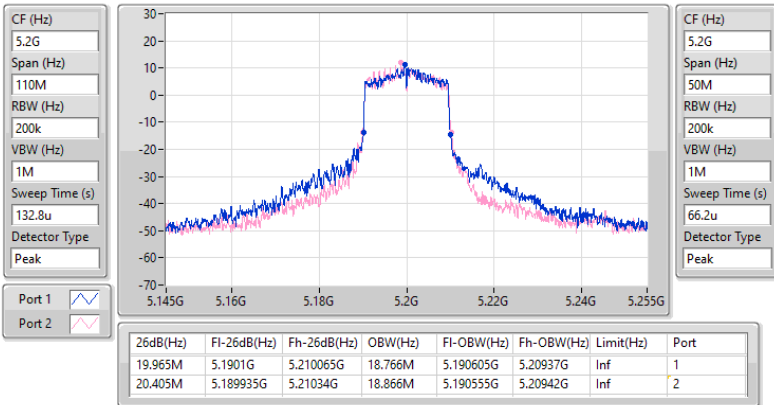


5.15-5.25GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX

EBW

5200MHz

18/09/2023

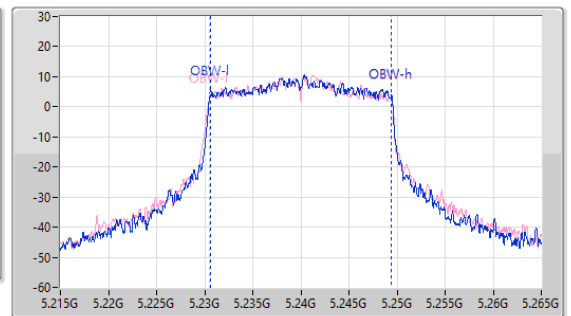
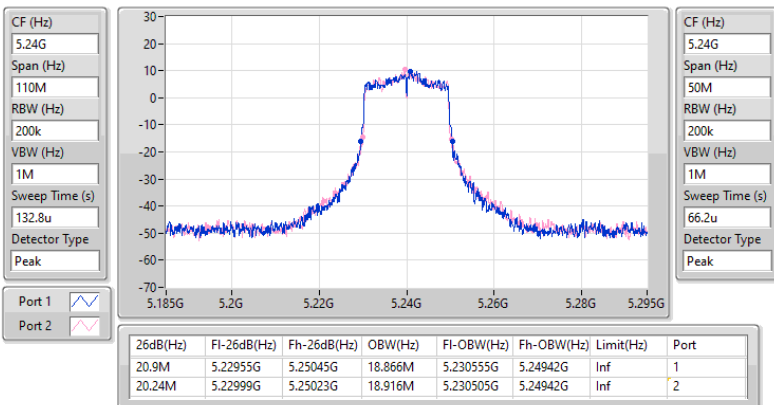


5.15-5.25GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX

EBW

5240MHz

18/09/2023

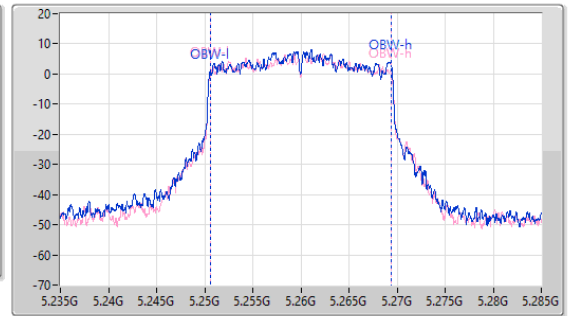
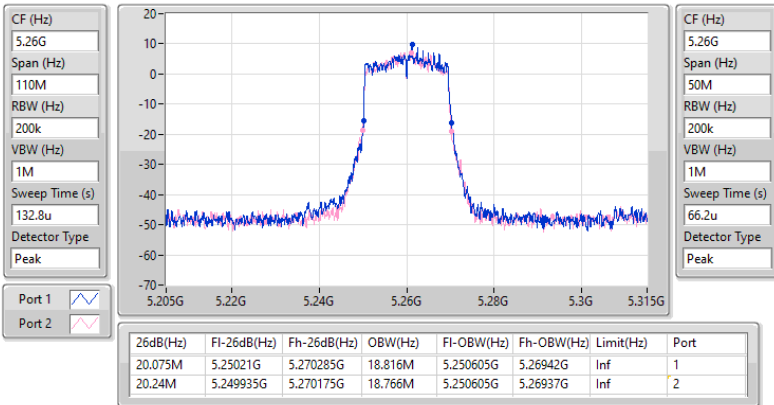


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX

EBW

5260MHz

18/09/2023

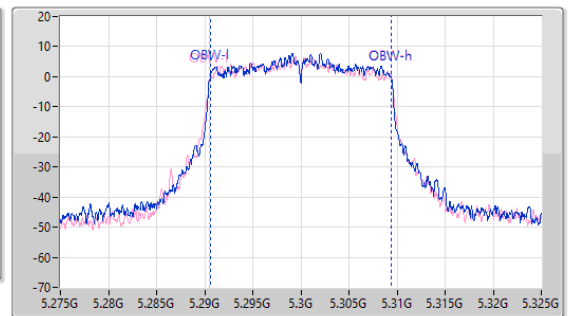
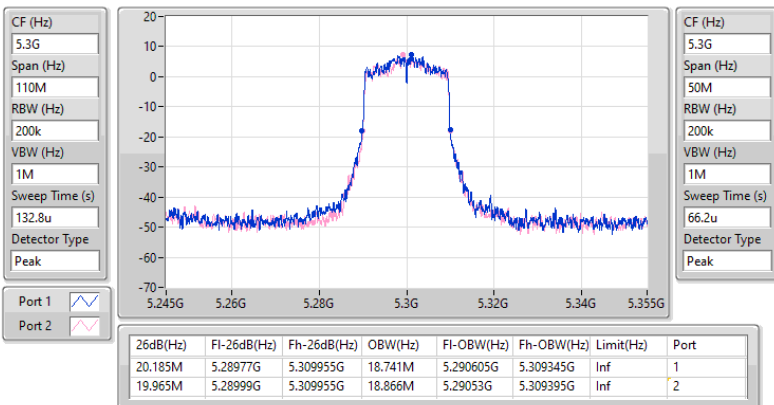


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX

EBW

5300MHz

18/09/2023

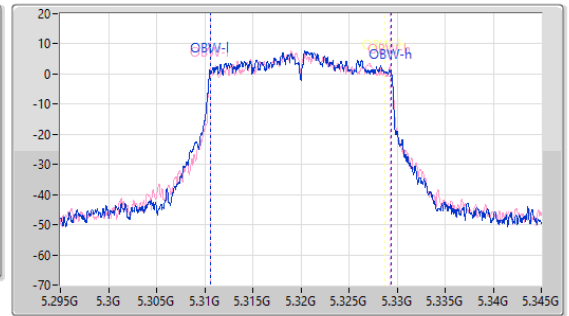
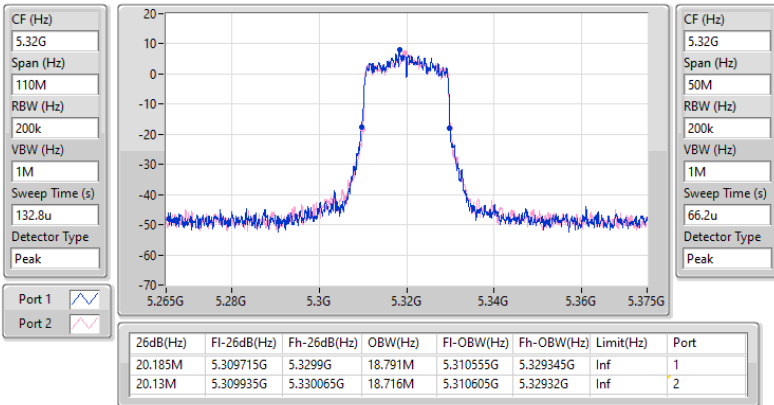


5.25-5.35GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5320MHz

18/09/2023

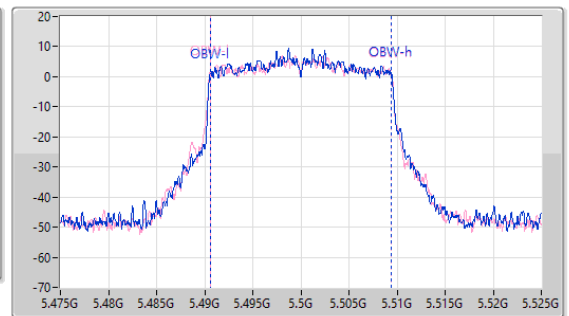
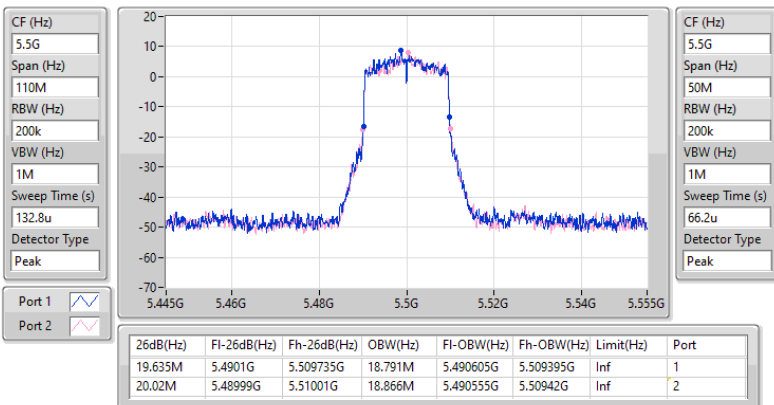


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5500MHz

18/09/2023

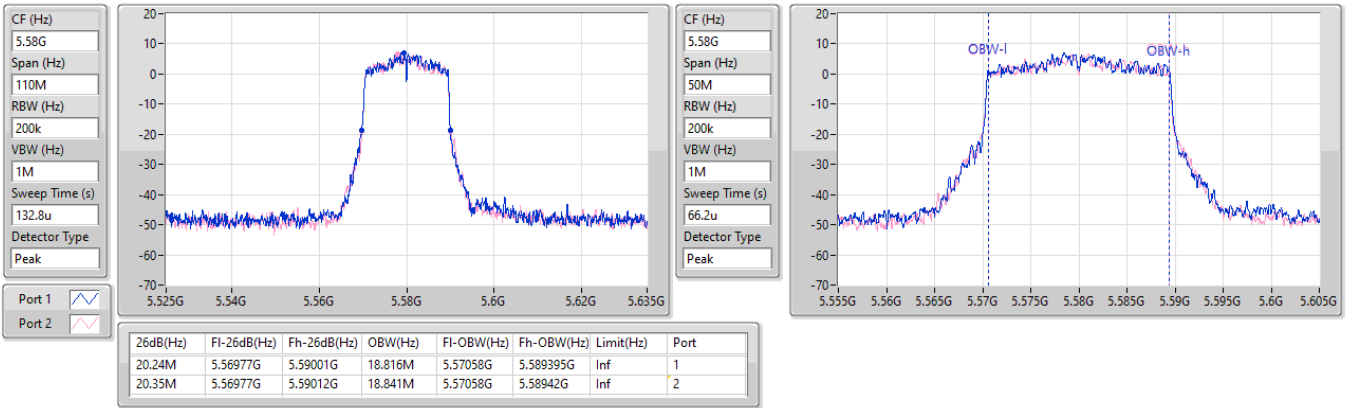


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5580MHz

18/09/2023

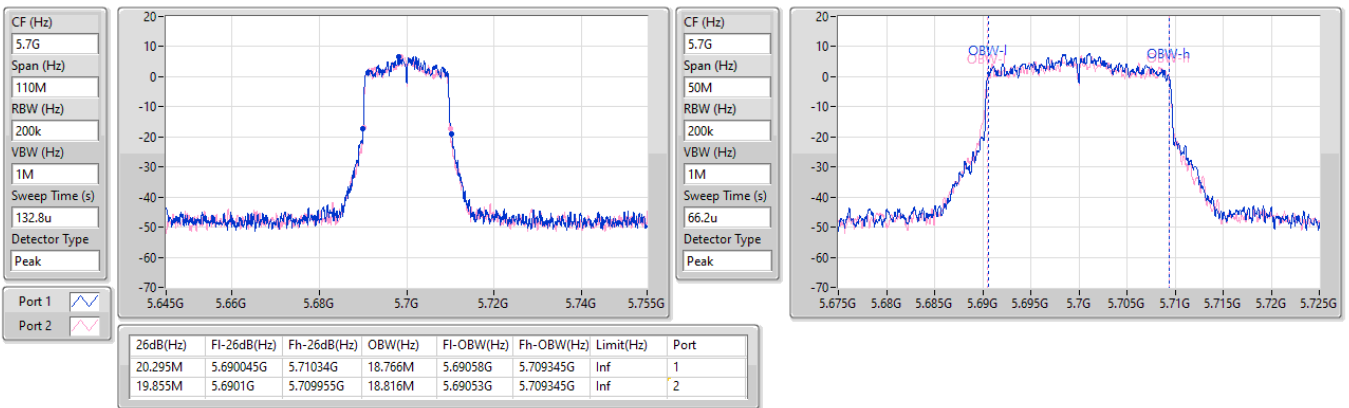


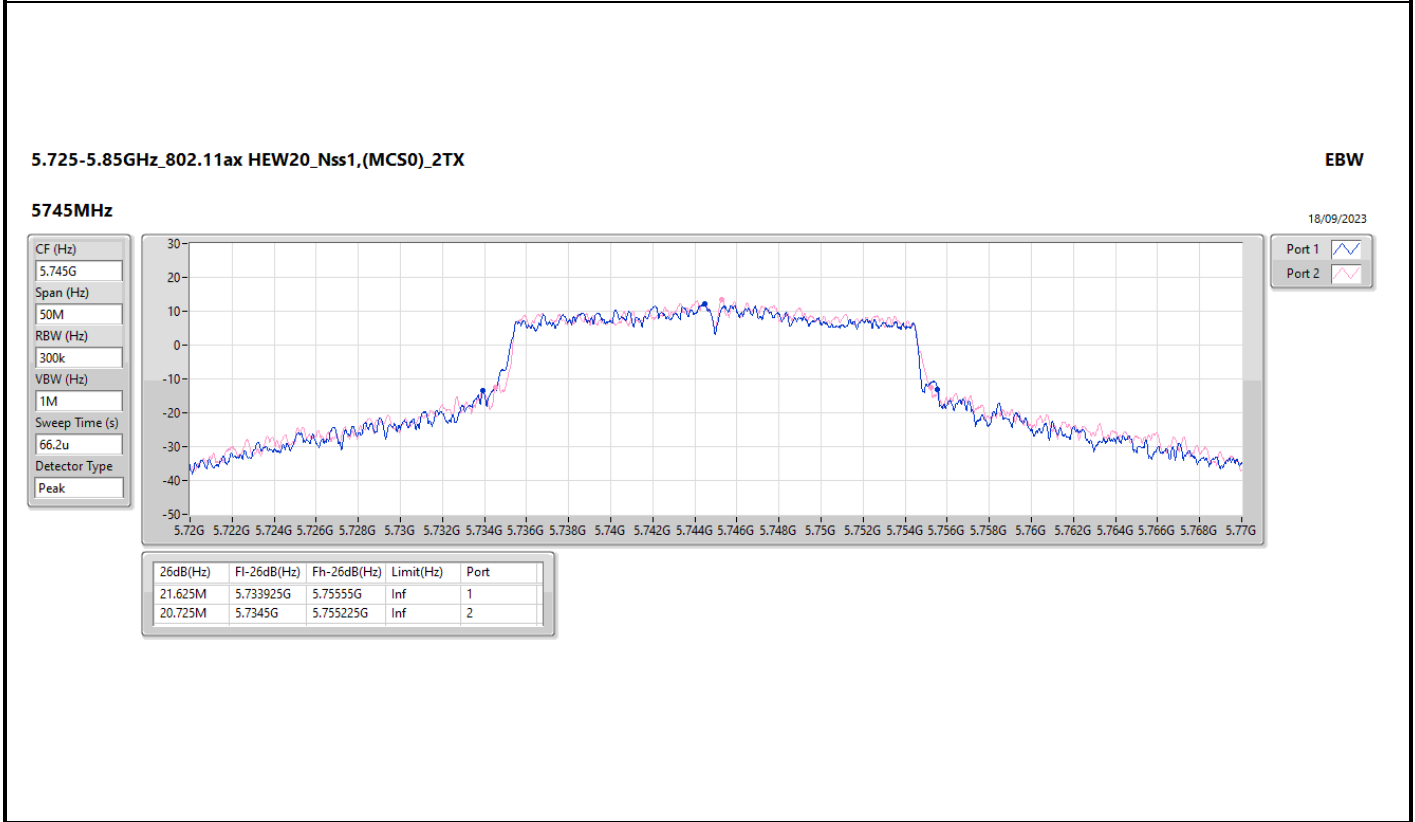
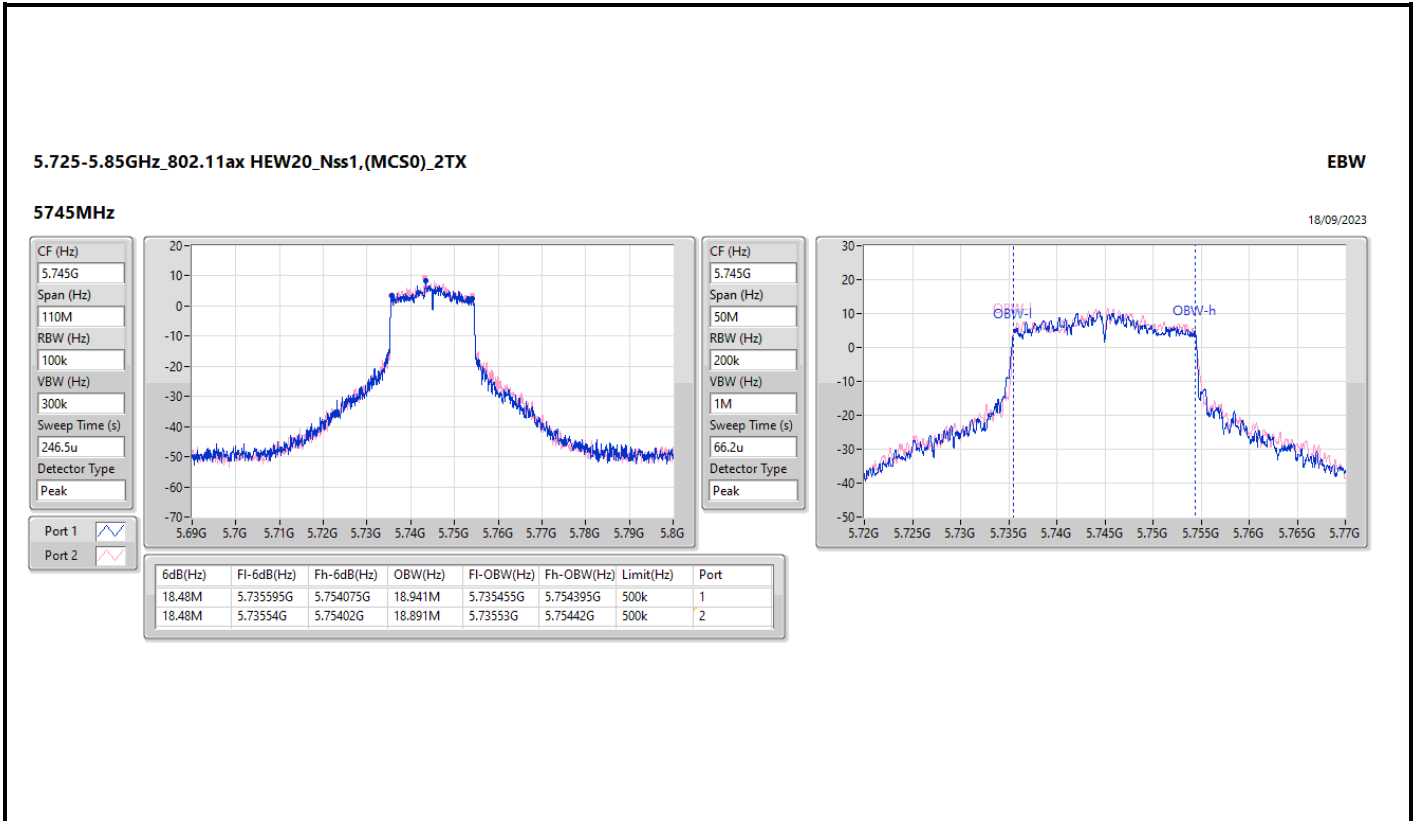
5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

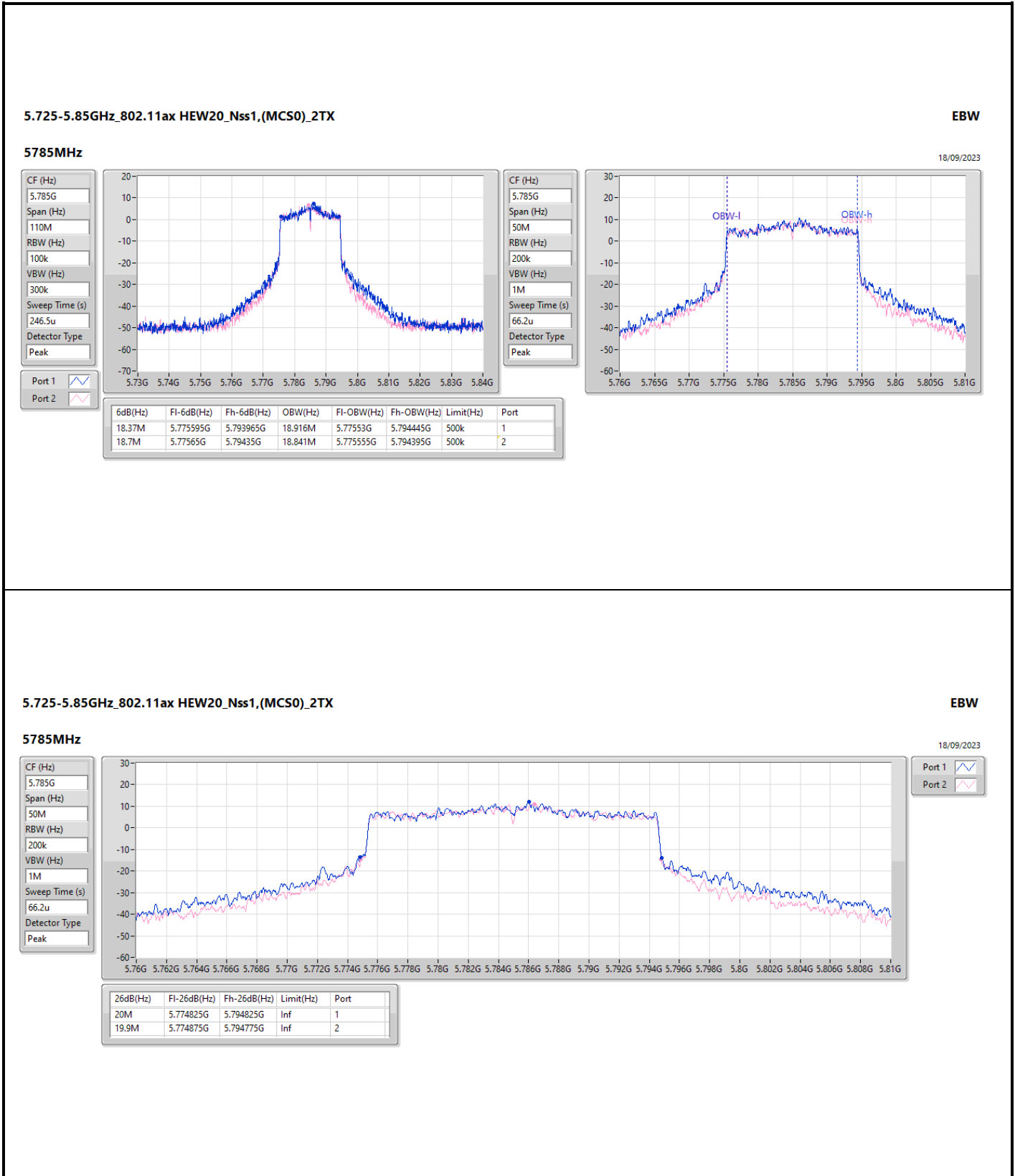
EBW

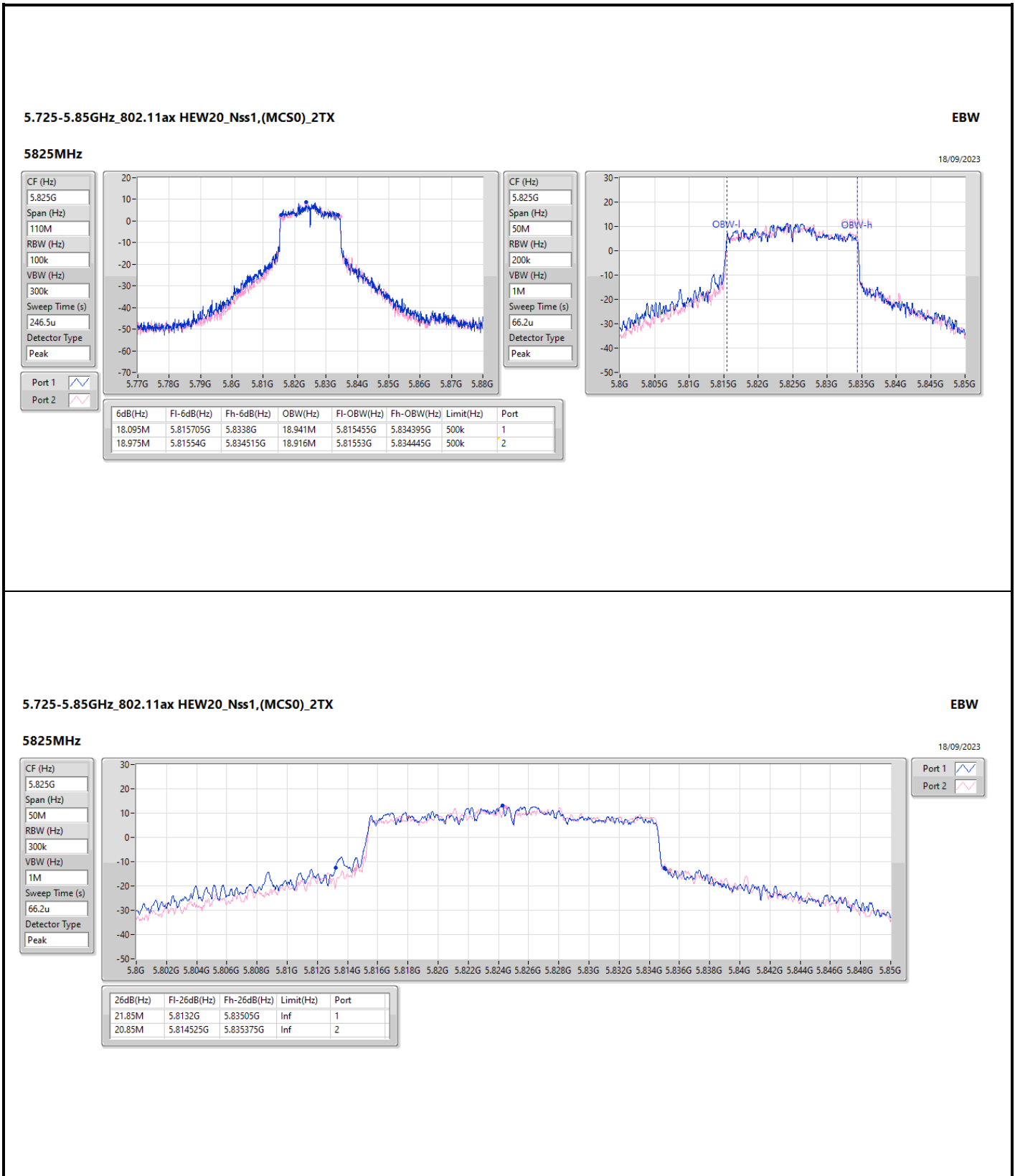
5700MHz

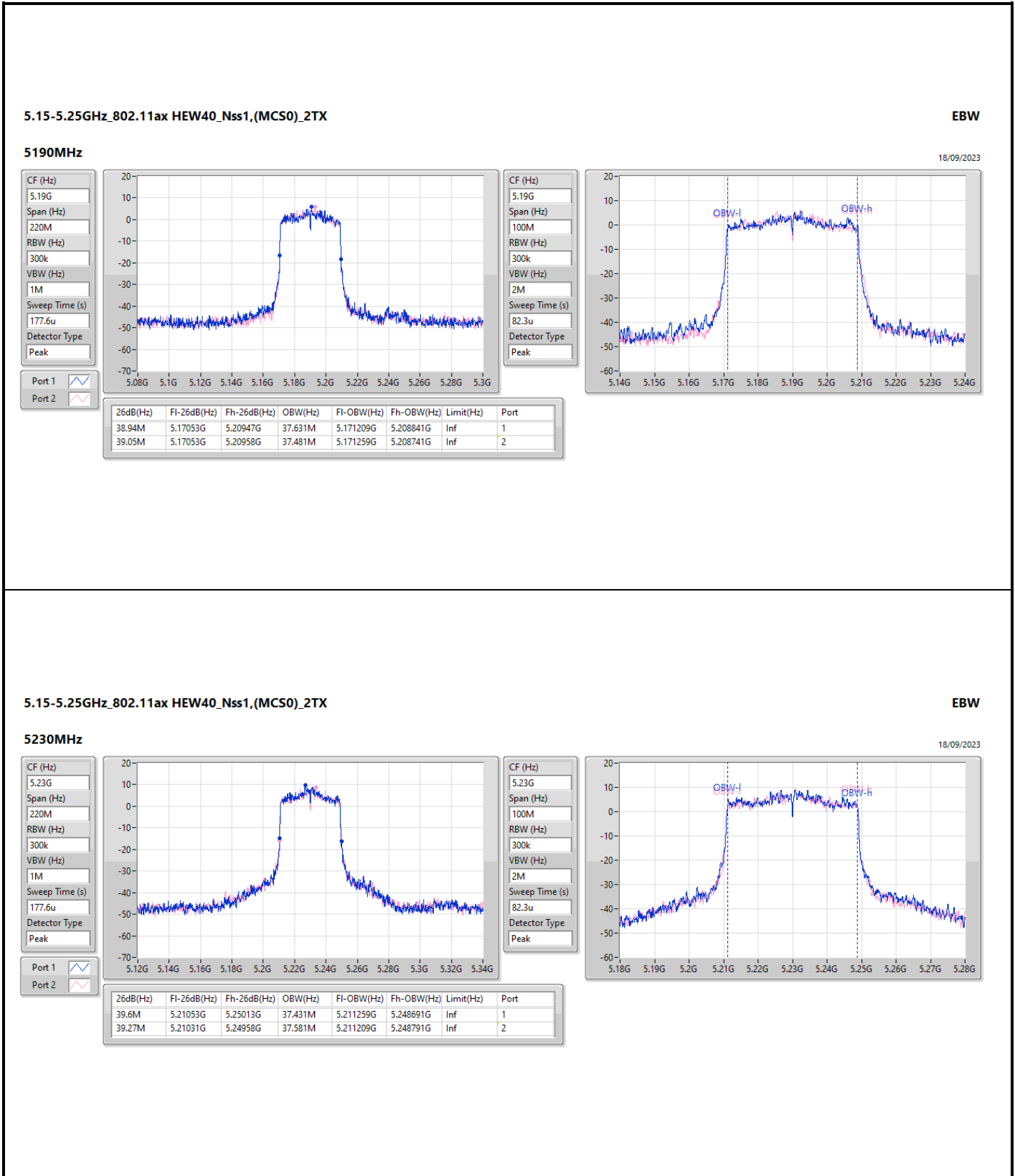
18/09/2023

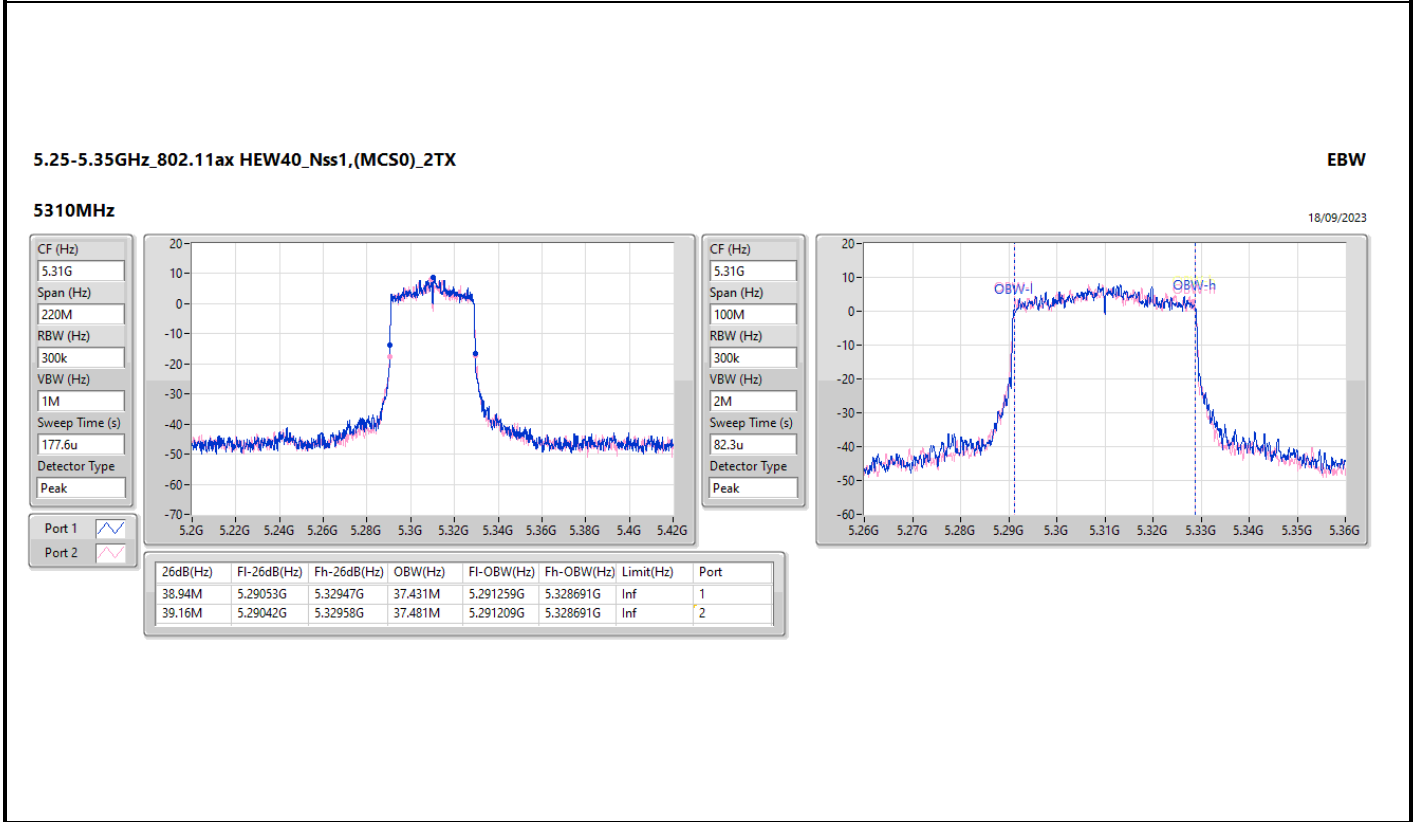
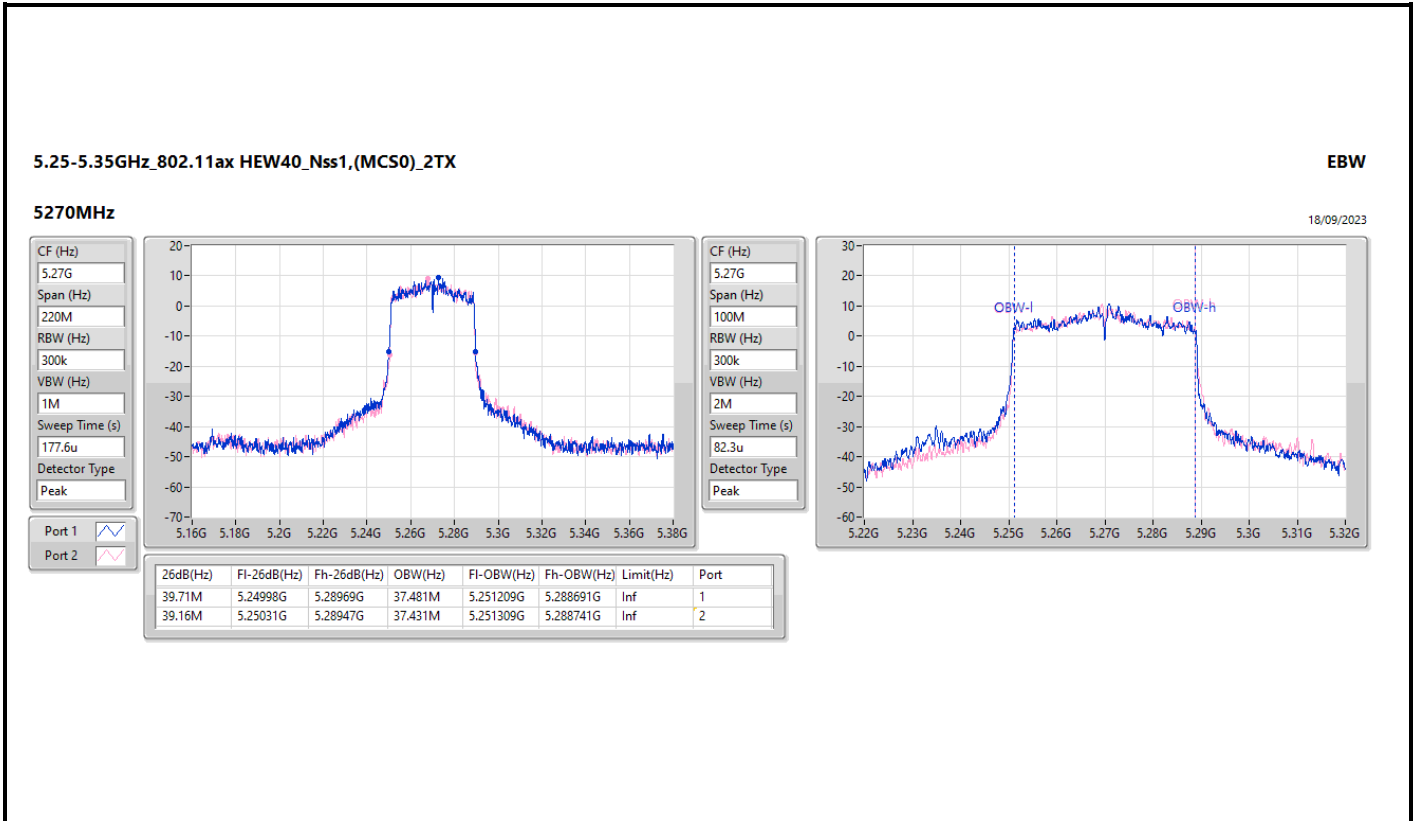


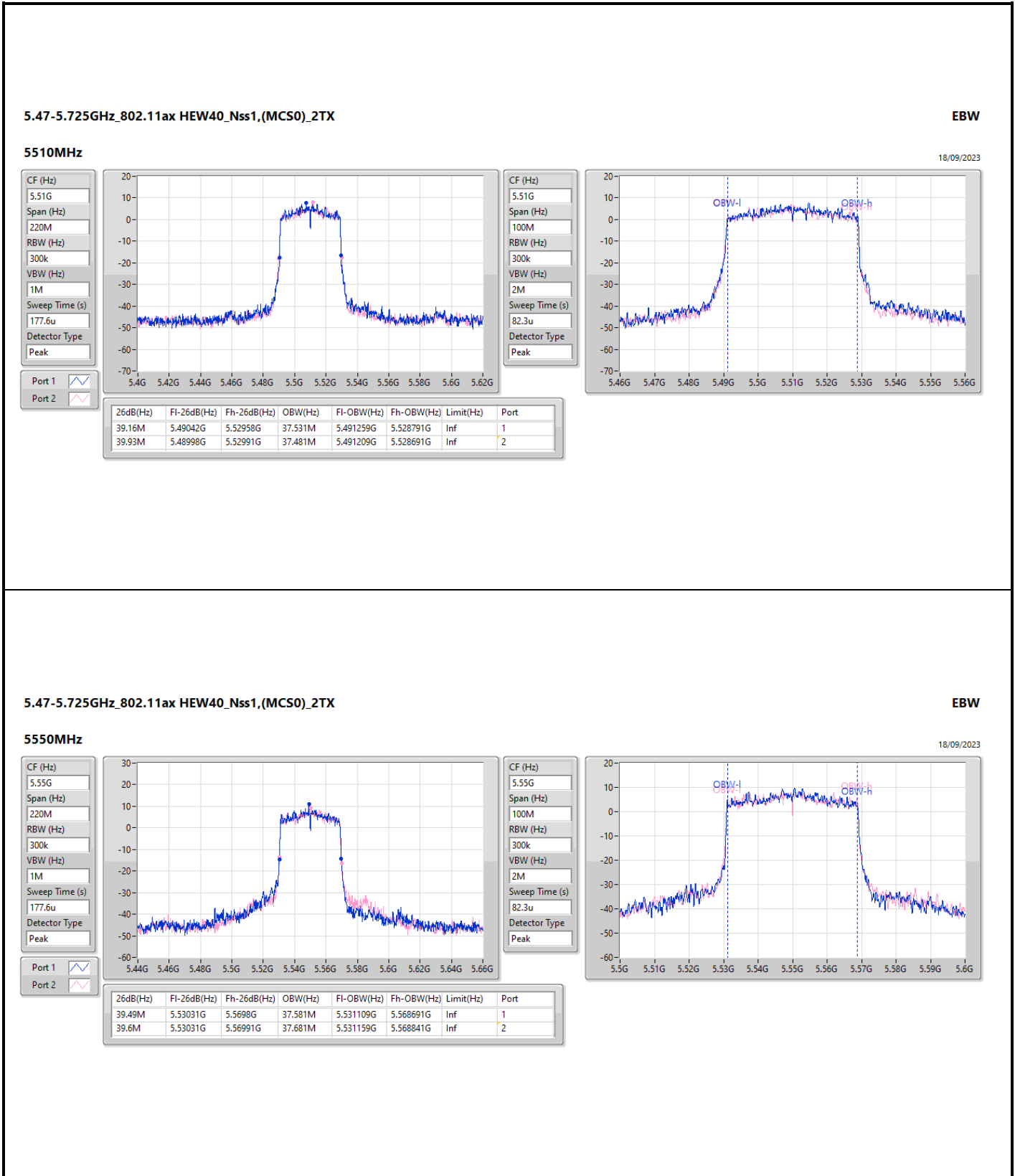










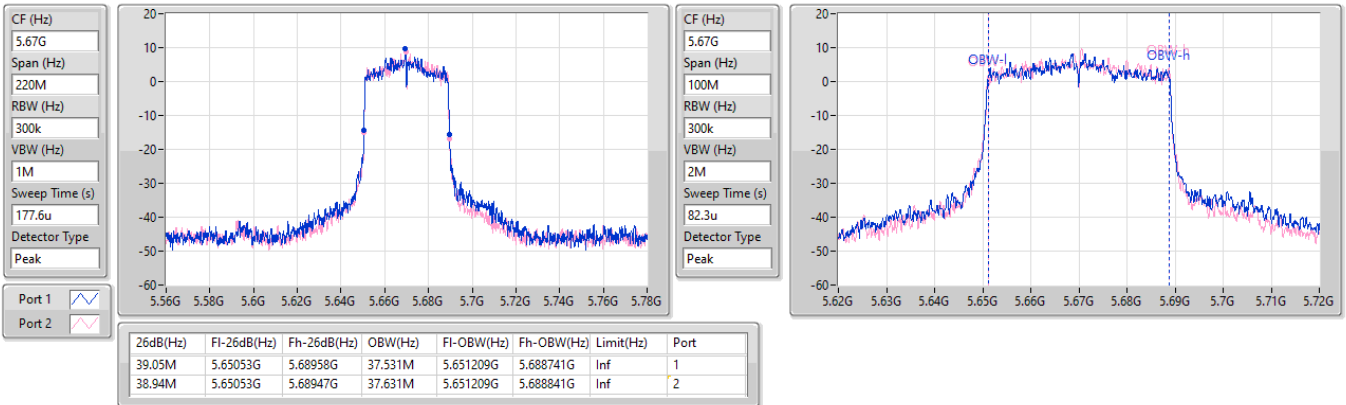


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5670MHz

18/09/2023

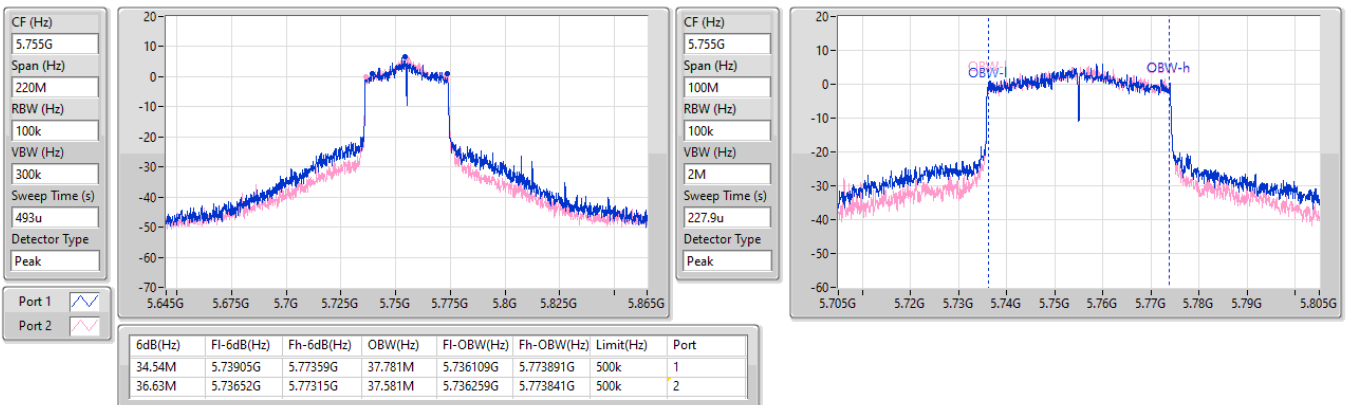


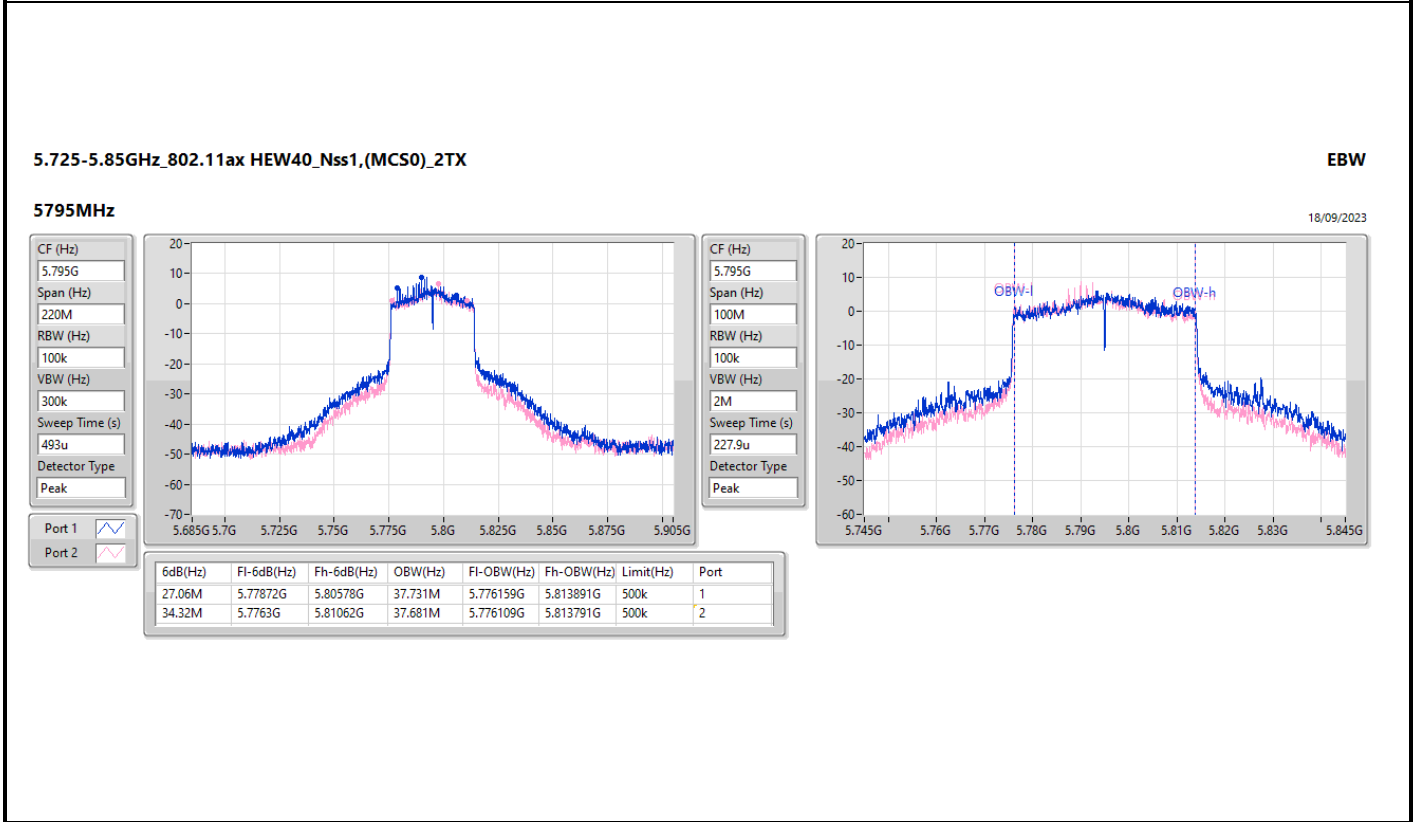
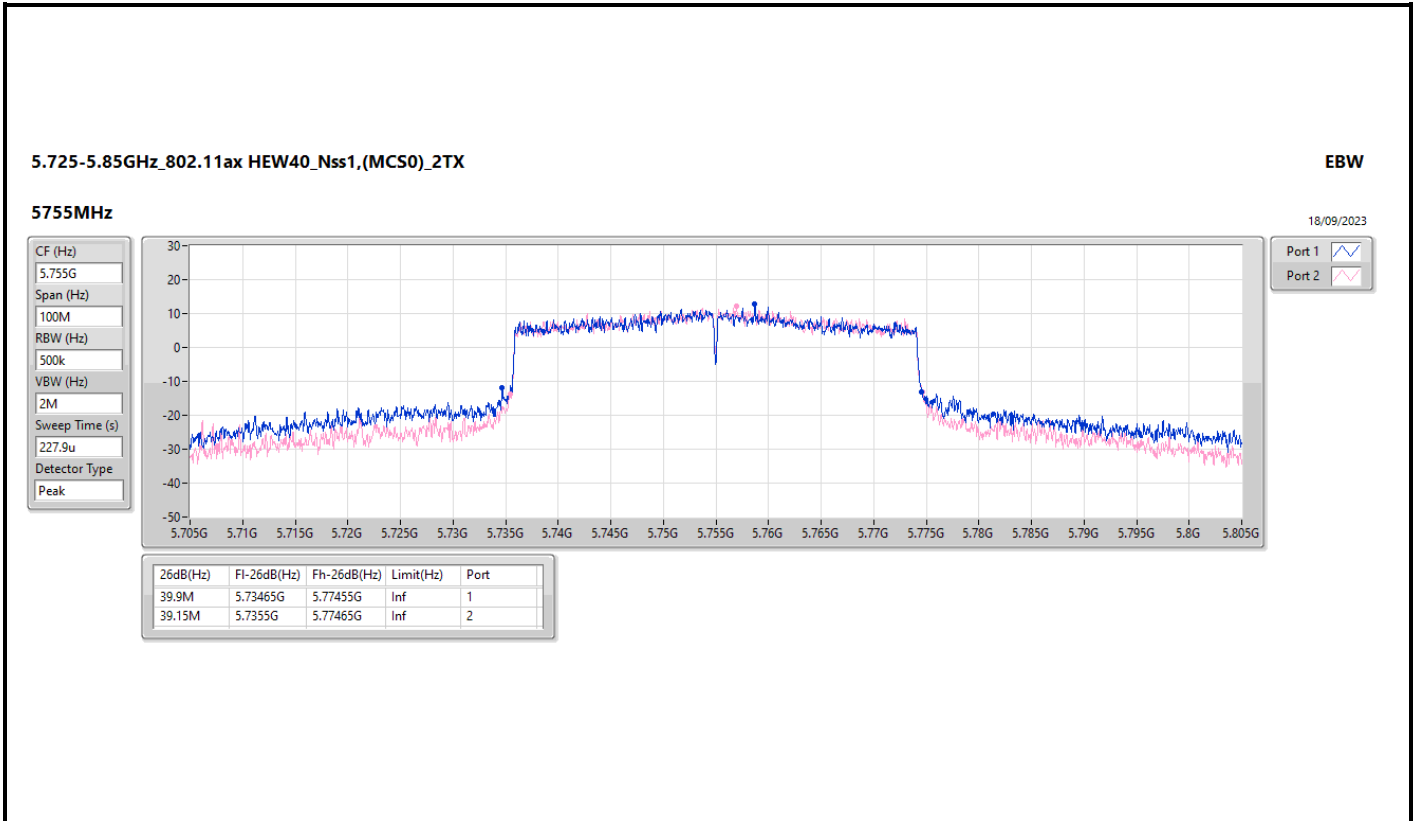
5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

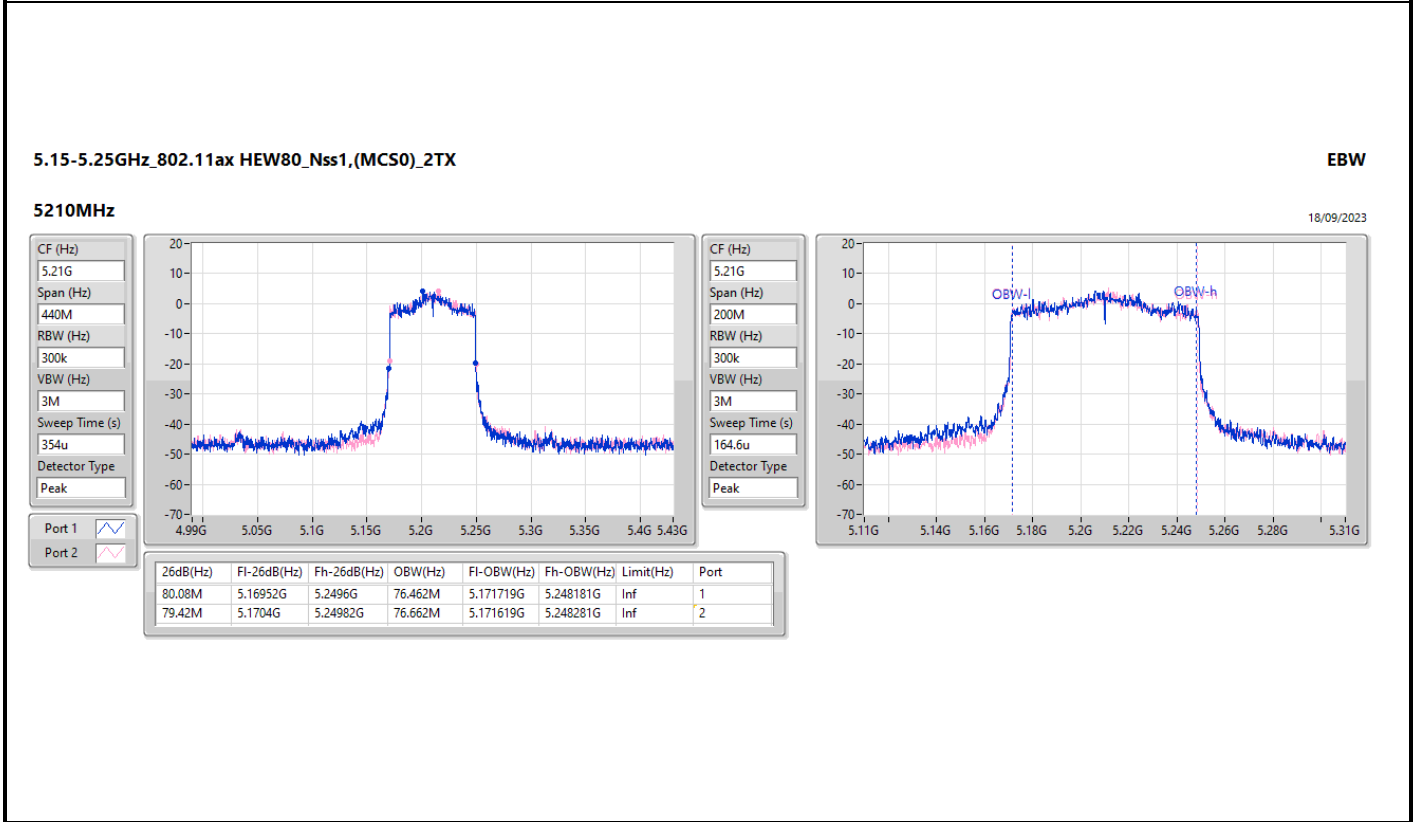
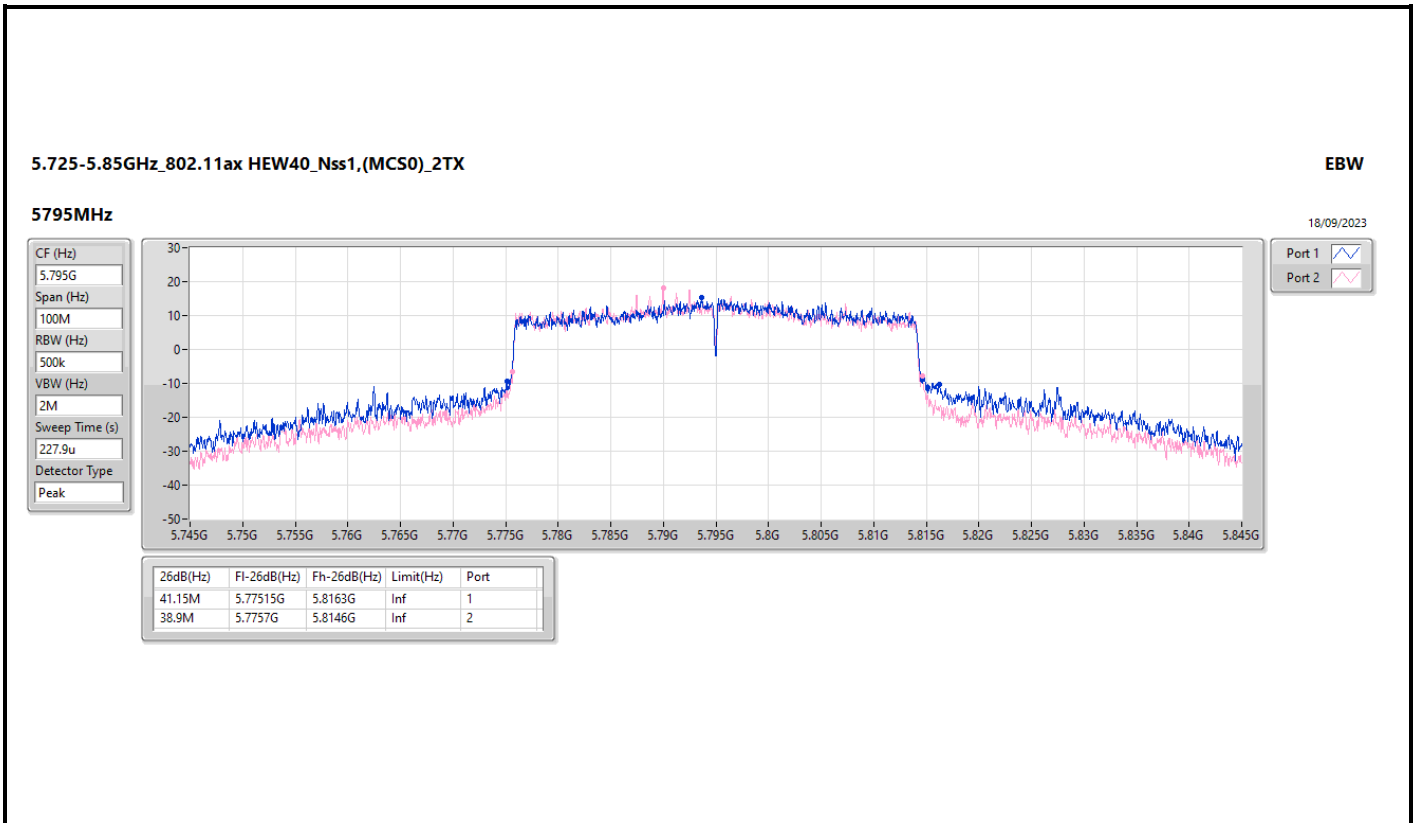
EBW

5755MHz

18/09/2023





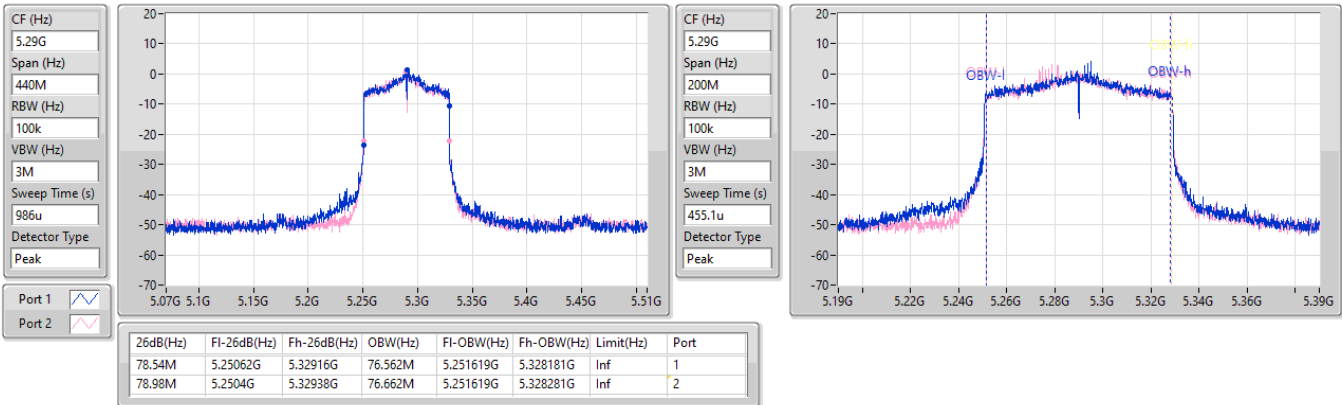


5.25-5.35GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5290MHz

18/09/2023

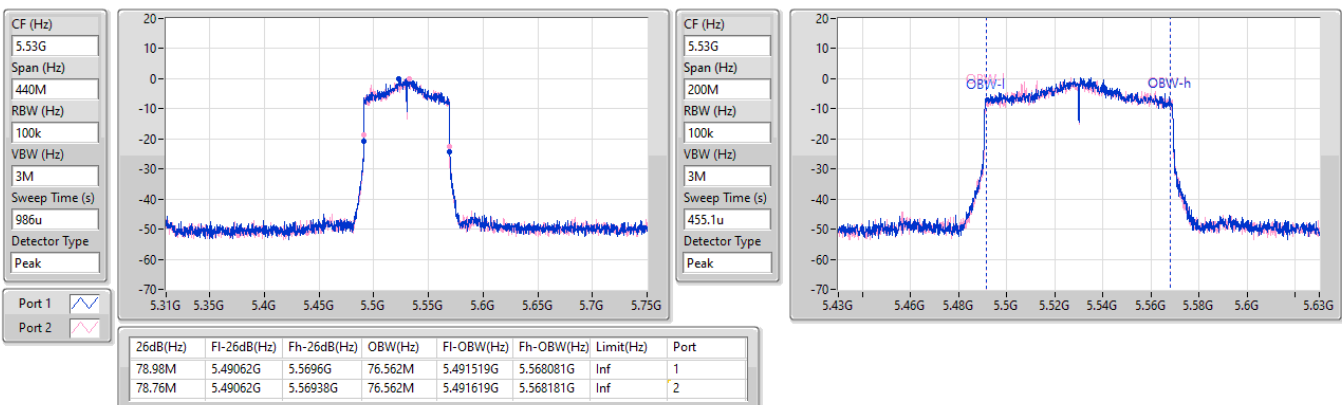


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5530MHz

18/09/2023

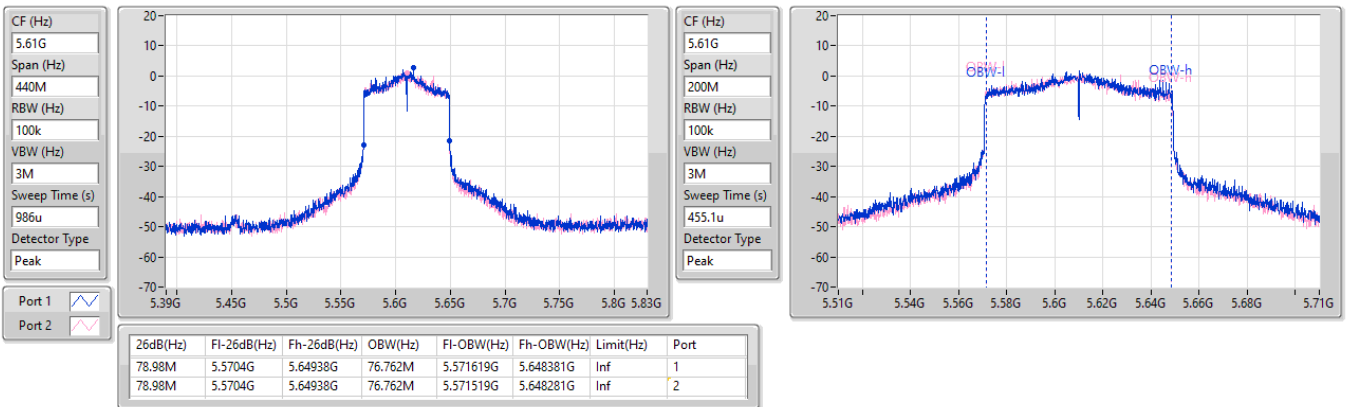


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5610MHz

18/09/2023

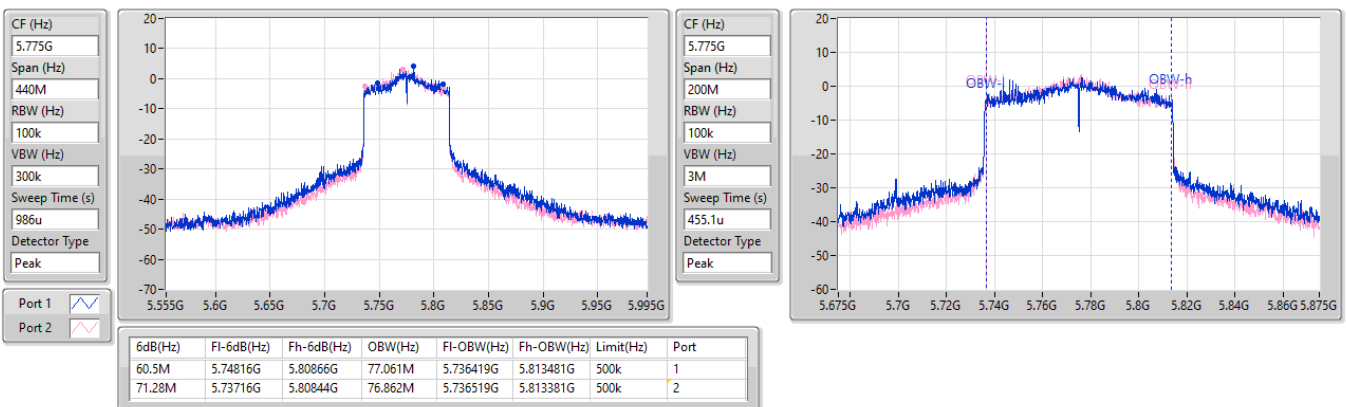


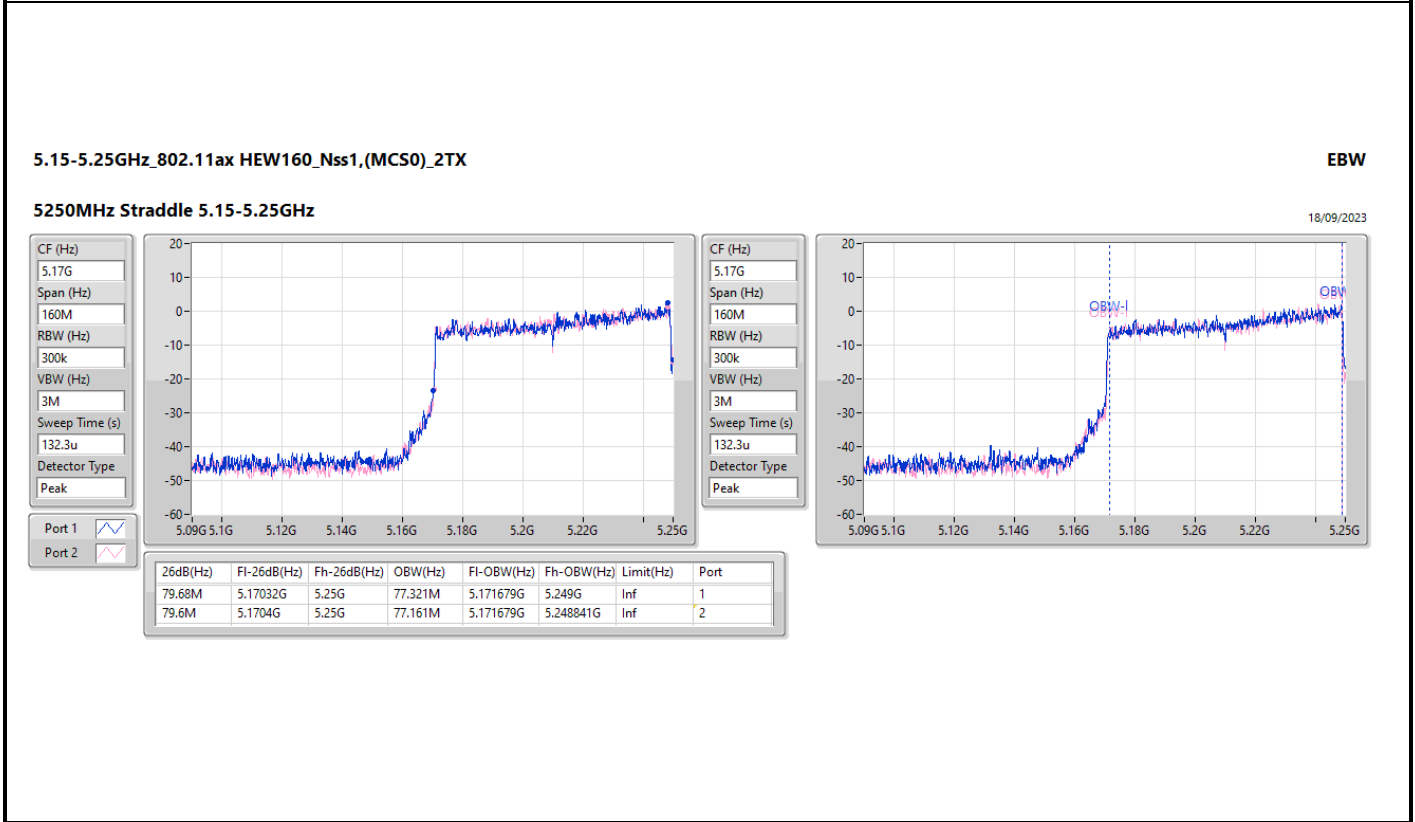
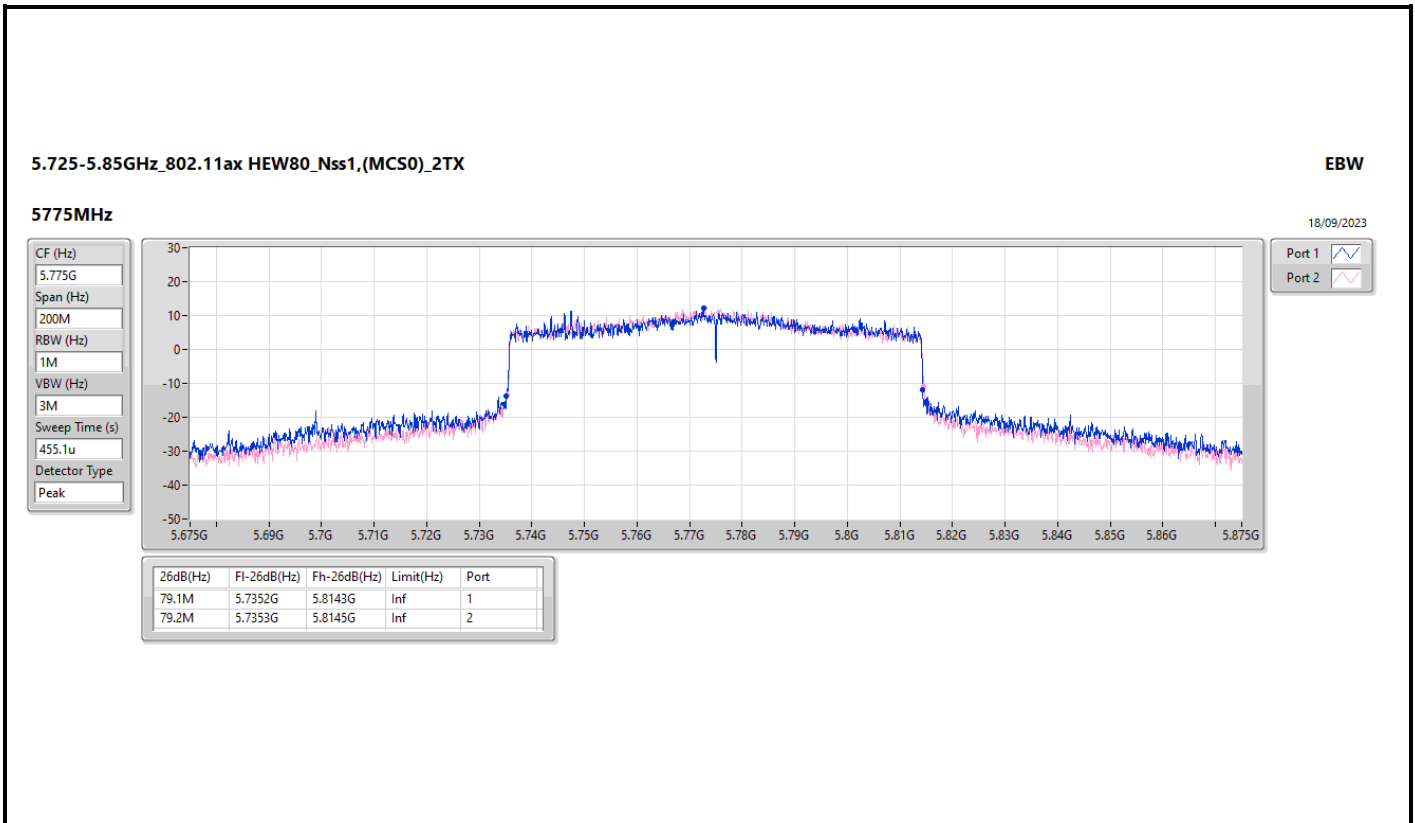
5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5775MHz

18/09/2023



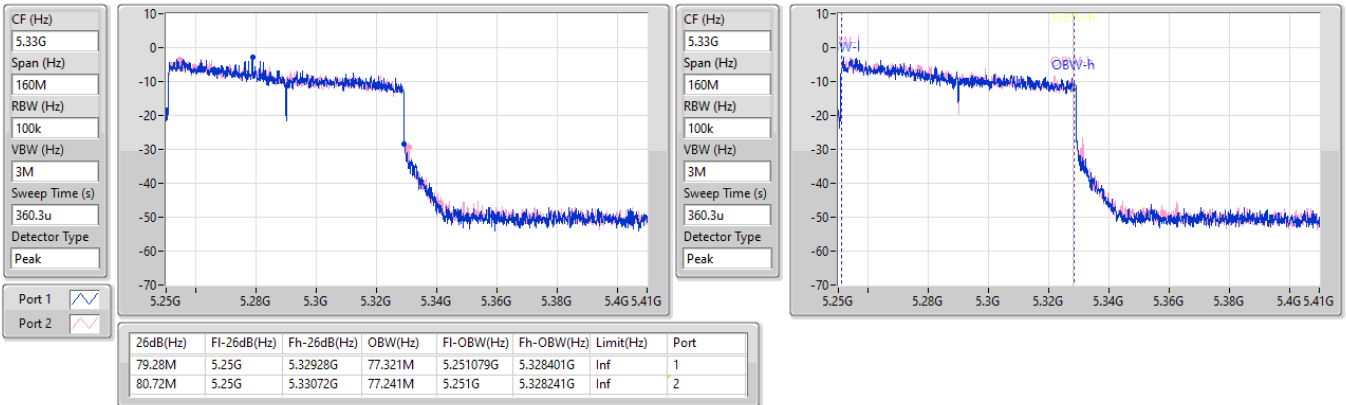


5.25-5.35GHz_802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

5250MHz Straddle 5.25-5.35GHz

18/09/2023

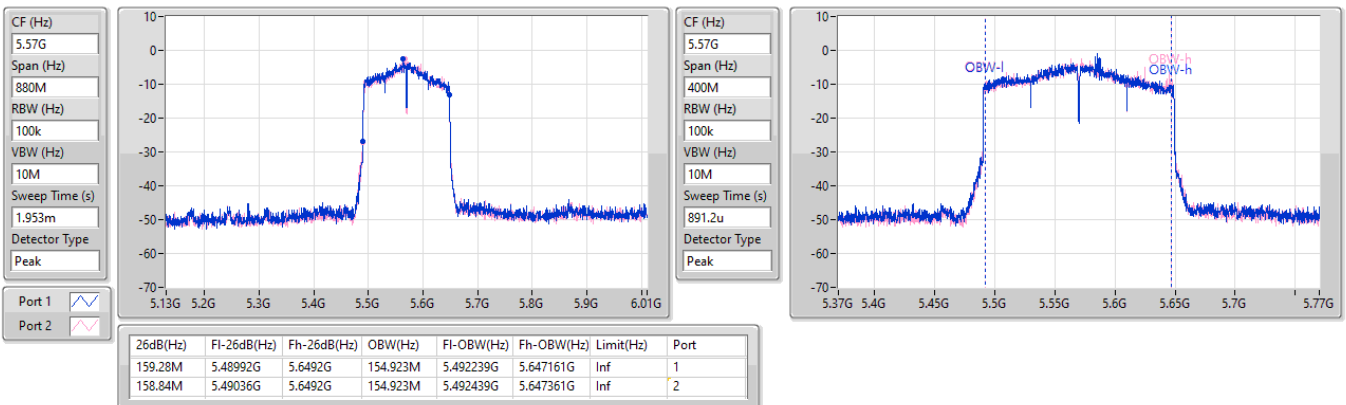


5.47-5.725GHz_802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

5570MHz

18/09/2023





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	32.725M	19.14M	19M1D1D	20.13M	18.766M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	39.16M	37.631M	37M6D1D	38.83M	37.431M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	79.64M	76.762M	76M8D1D	79.42M	76.562M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	79.76M	77.241M	77M2D1D	79.6M	77.241M
5.25-5.35GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	20.405M	18.866M	18M9D1D	19.58M	18.791M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	39.27M	37.631M	37M6D1D	38.94M	37.381M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	79.2M	76.662M	76M7D1D	78.98M	76.662M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	79.52M	77.241M	77M2D1D	79.28M	77.241M
5.47-5.725GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	20.57M	18.866M	18M9D1D	19.745M	18.766M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	39.38M	37.681M	37M7D1D	38.94M	37.381M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	79.64M	76.962M	77MOD1D	78.98M	76.462M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	158.4M	154.923M	155MD1D	158.4M	154.723M
5.725-5.85GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	19.03M	34.608M	34M6D1D	16.115M	23.413M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.95M	43.778M	43M8D1D	35.31M	38.031M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	71.5M	77.061M	77M1D1D	48.18M	76.362M

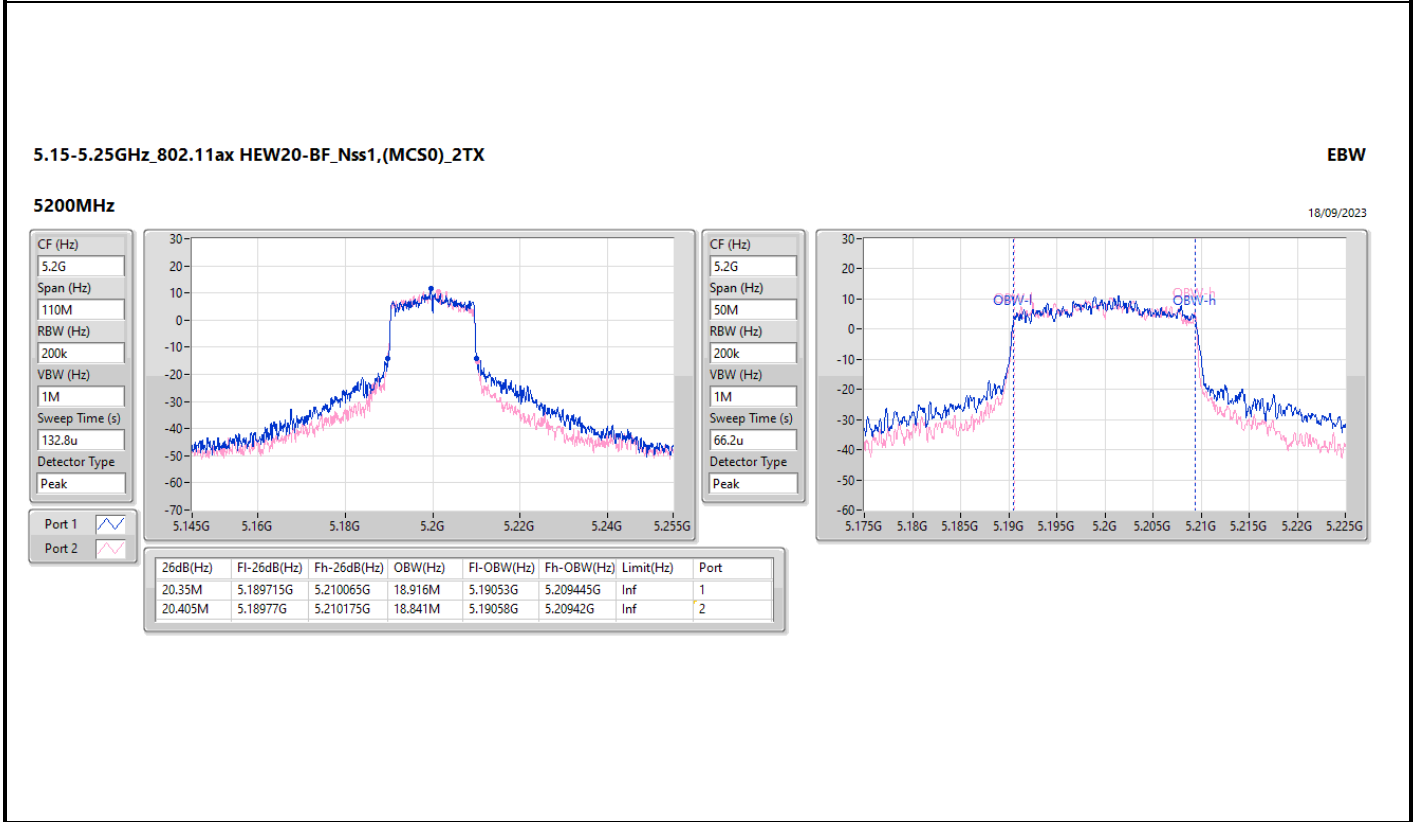
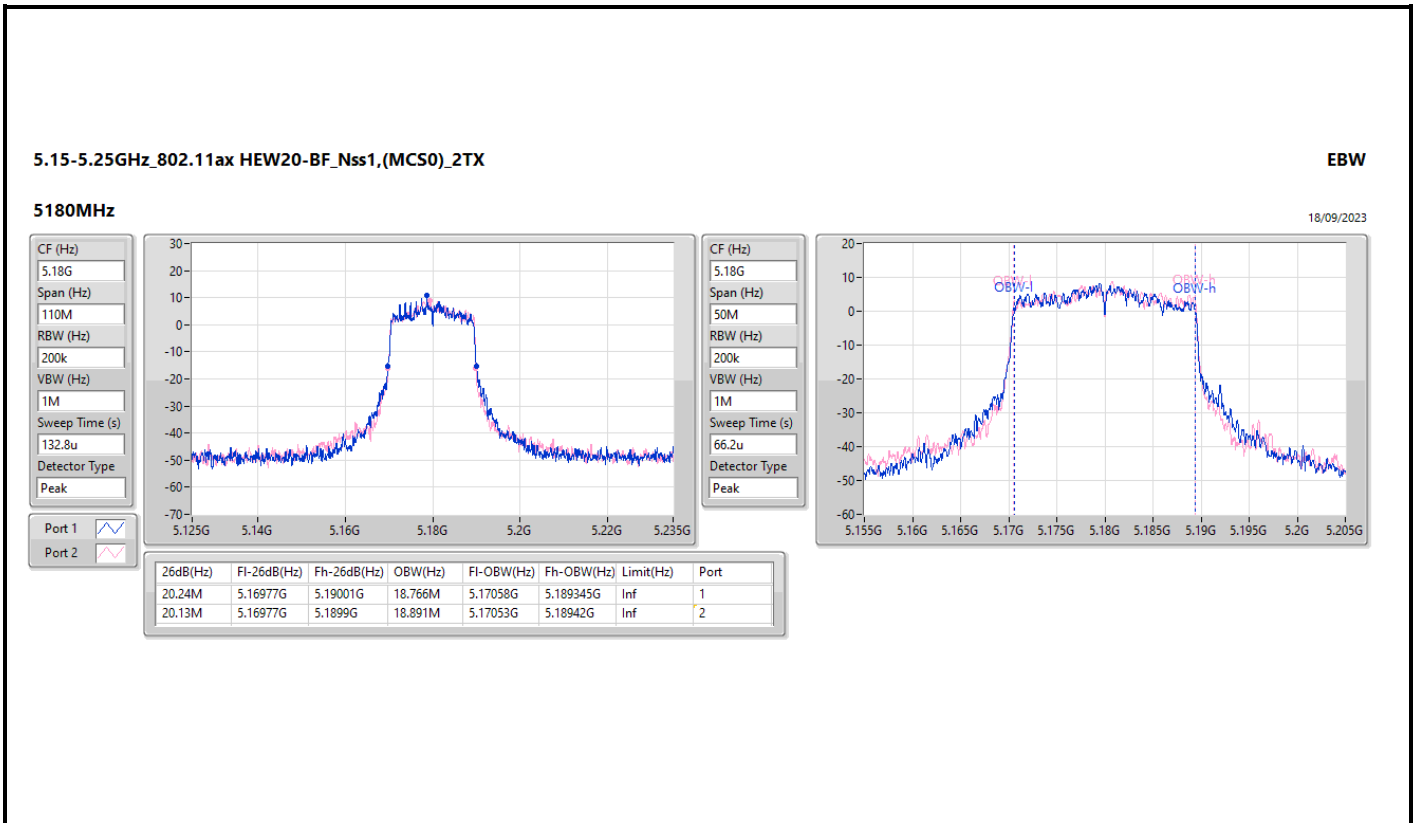
Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
 Max-OBW = Maximum 99% occupied bandwidth;
 Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
 Min-OBW = Minimum 99% occupied bandwidth



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	20.24M	18.766M	20.13M	18.891M
5200MHz	Pass	Inf	20.35M	18.916M	20.405M	18.841M
5240MHz	Pass	Inf	32.725M	19.14M	27.665M	19.14M
5260MHz	Pass	Inf	19.965M	18.841M	19.965M	18.791M
5300MHz	Pass	Inf	20.295M	18.866M	20.405M	18.866M
5320MHz	Pass	Inf	19.58M	18.791M	20.405M	18.816M
5500MHz	Pass	Inf	19.91M	18.816M	20.185M	18.816M
5580MHz	Pass	Inf	20.13M	18.766M	19.8M	18.766M
5700MHz	Pass	Inf	19.745M	18.866M	20.57M	18.791M
5745MHz	Pass	500k	18.865M	25.962M	19.03M	34.608M
5785MHz	Pass	500k	18.92M	24.938M	16.115M	23.413M
5825MHz	Pass	500k	17.985M	23.888M	18.095M	31.959M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.16M	37.531M	39.05M	37.431M
5230MHz	Pass	Inf	39.16M	37.631M	38.83M	37.531M
5270MHz	Pass	Inf	39.16M	37.631M	38.94M	37.431M
5310MHz	Pass	Inf	38.94M	37.381M	39.27M	37.481M
5510MHz	Pass	Inf	39.27M	37.431M	39.38M	37.381M
5550MHz	Pass	Inf	39.38M	37.631M	38.94M	37.681M
5670MHz	Pass	Inf	39.05M	37.531M	39.16M	37.381M
5755MHz	Pass	500k	37.73M	38.781M	37.95M	43.778M
5795MHz	Pass	500k	37.95M	42.379M	35.31M	38.031M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	79.42M	76.762M	79.64M	76.562M
5290MHz	Pass	Inf	79.2M	76.662M	78.98M	76.662M
5530MHz	Pass	Inf	78.98M	76.462M	79.42M	76.862M
5610MHz	Pass	Inf	79.2M	76.562M	79.64M	76.962M
5775MHz	Pass	500k	71.5M	77.061M	48.18M	76.362M
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	79.76M	77.241M	79.6M	77.241M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	79.28M	77.241M	79.52M	77.241M
5570MHz	Pass	Inf	158.4M	154.723M	158.4M	154.923M

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

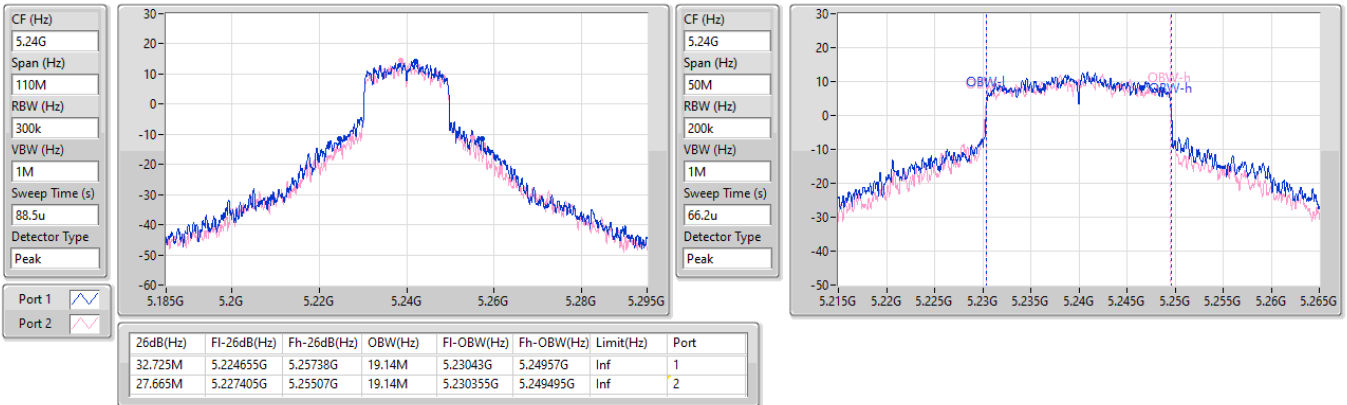


5.15-5.25GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5240MHz

18/09/2023

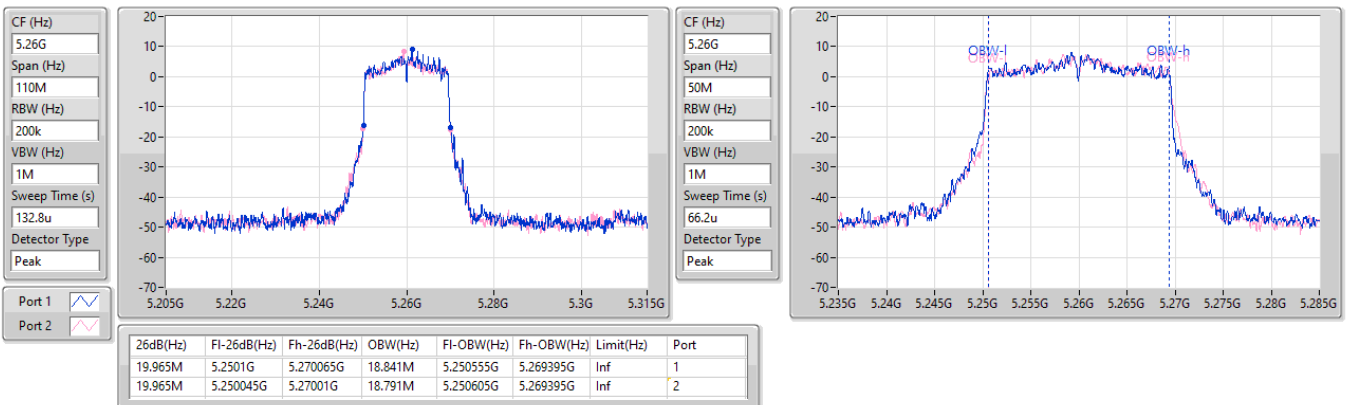


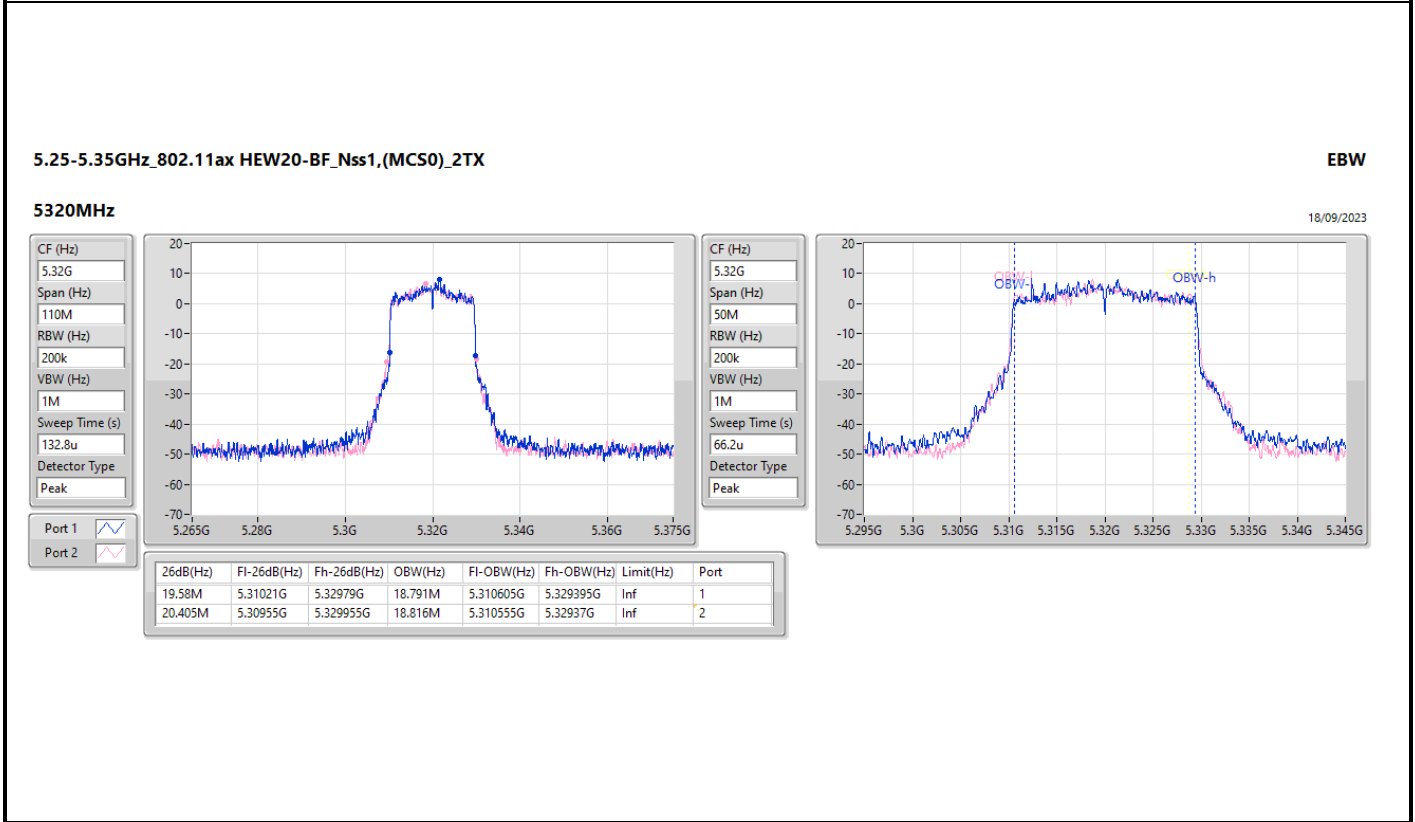
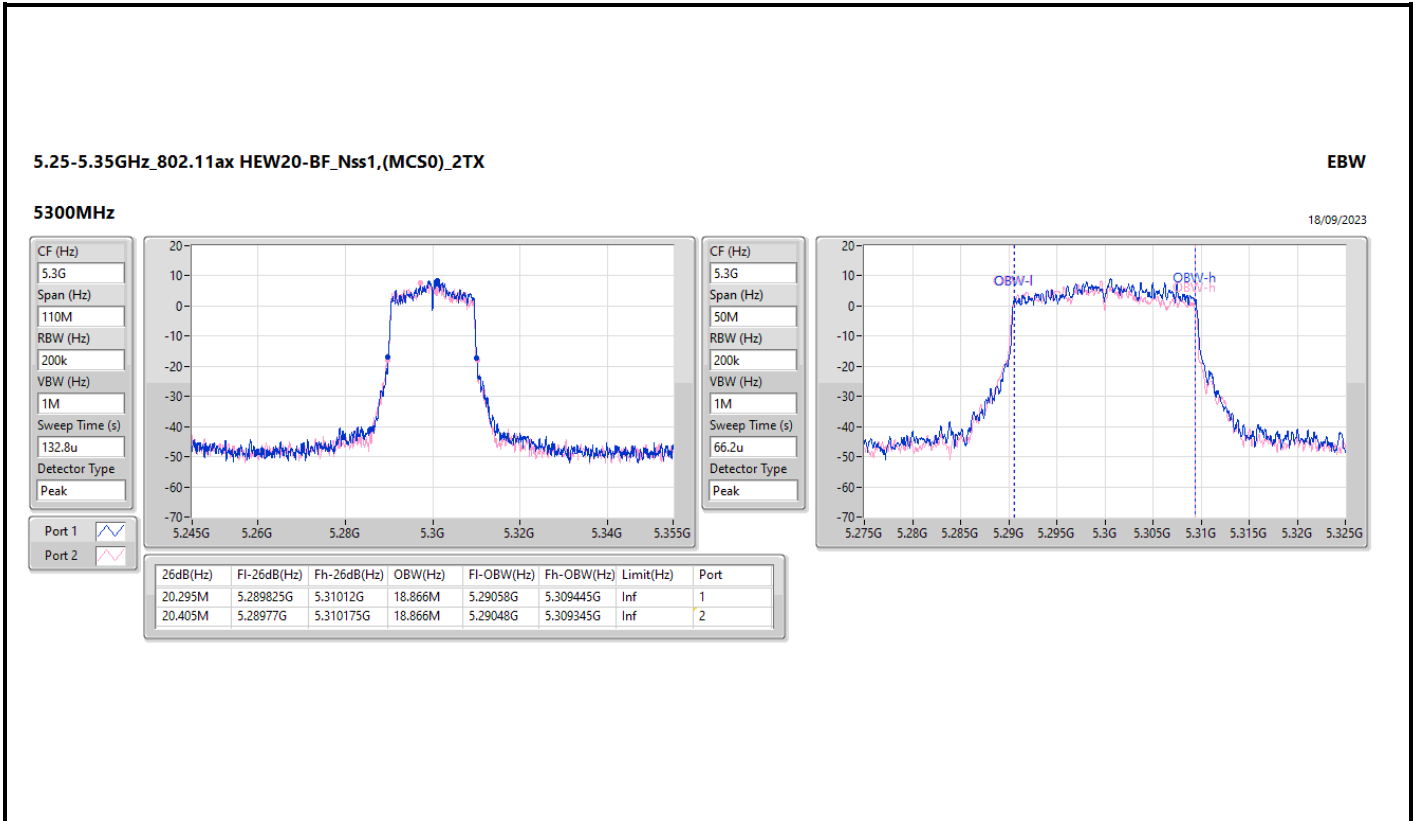
5.25-5.35GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5260MHz

18/09/2023



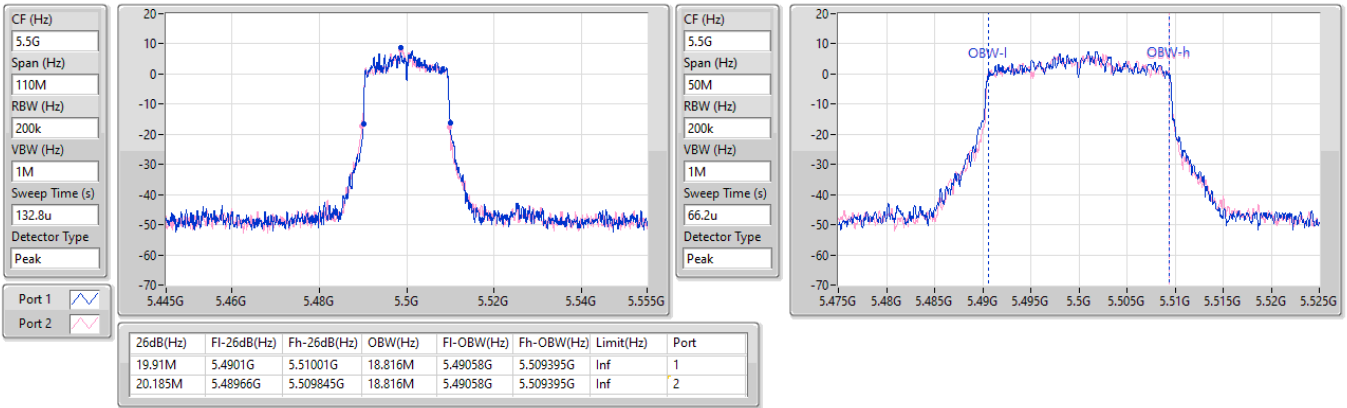


5.47-5.725GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5500MHz

18/09/2023

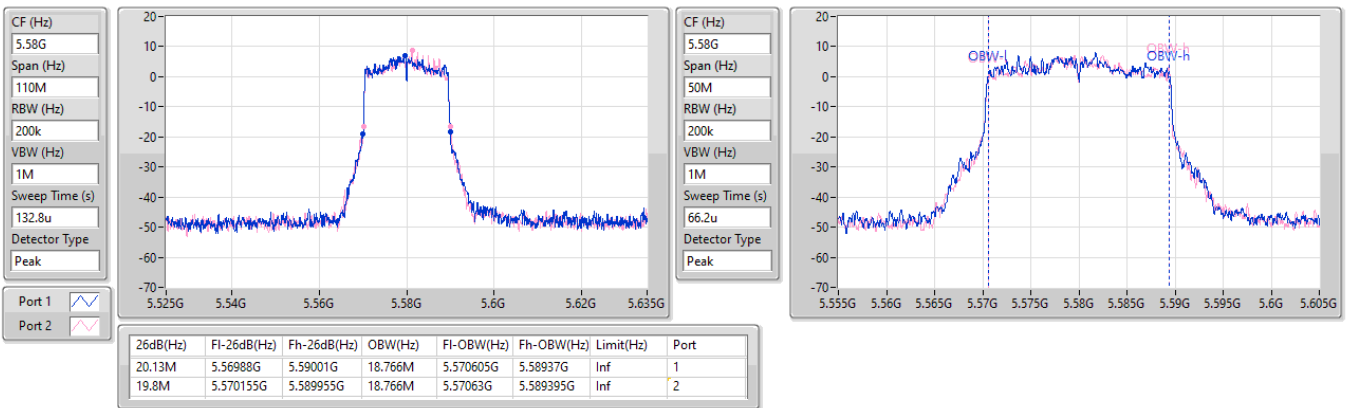


5.47-5.725GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5580MHz

18/09/2023

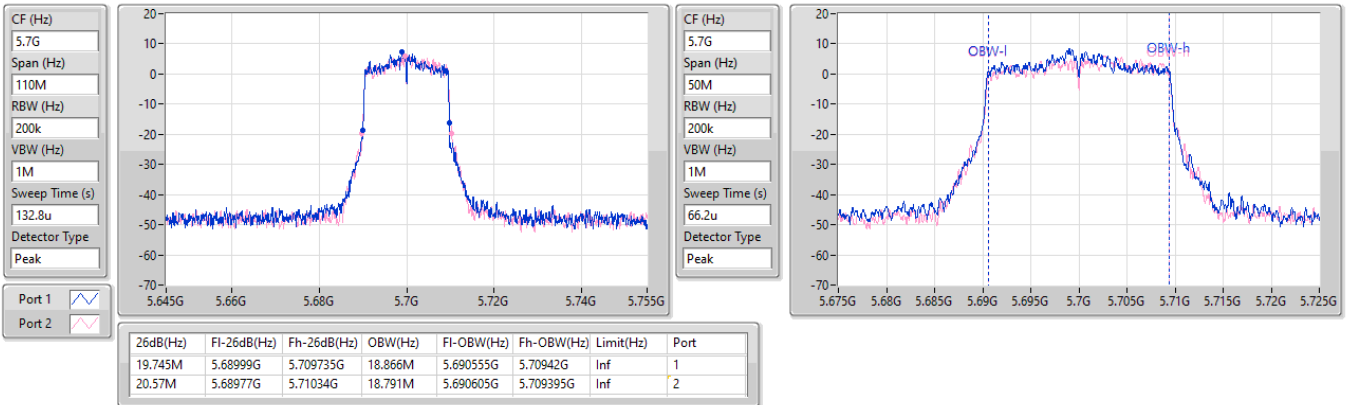


5.47-5.725GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

5700MHz

18/09/2023

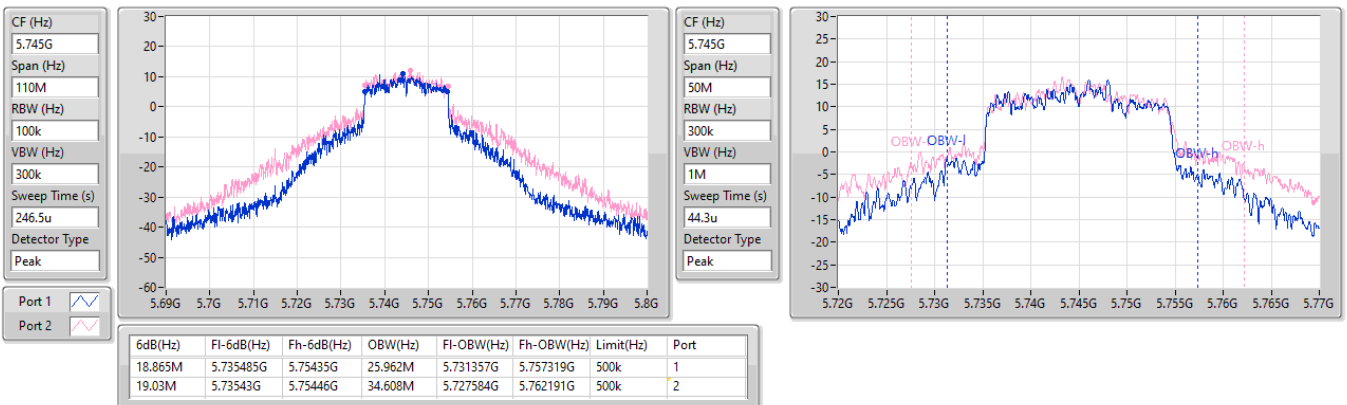


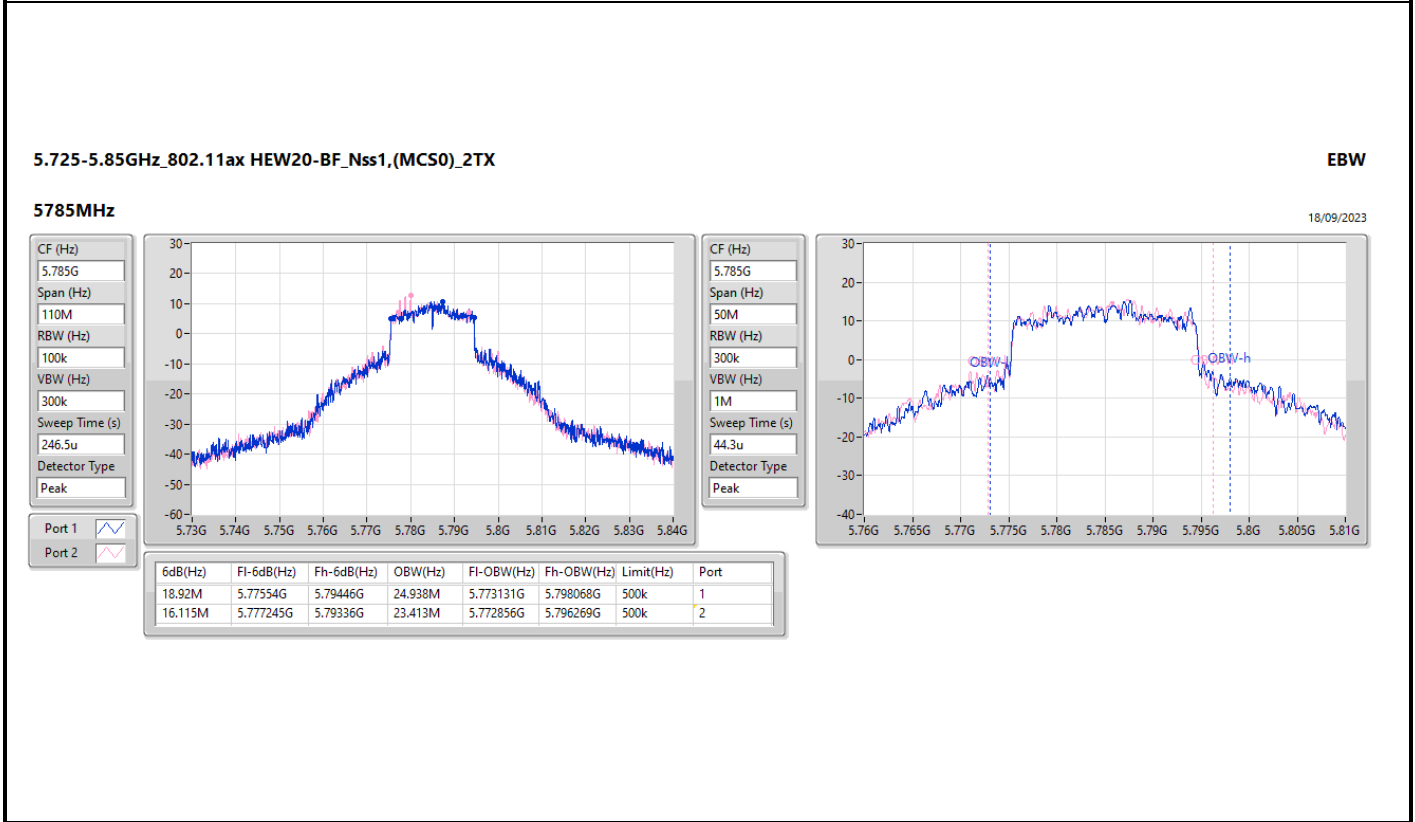
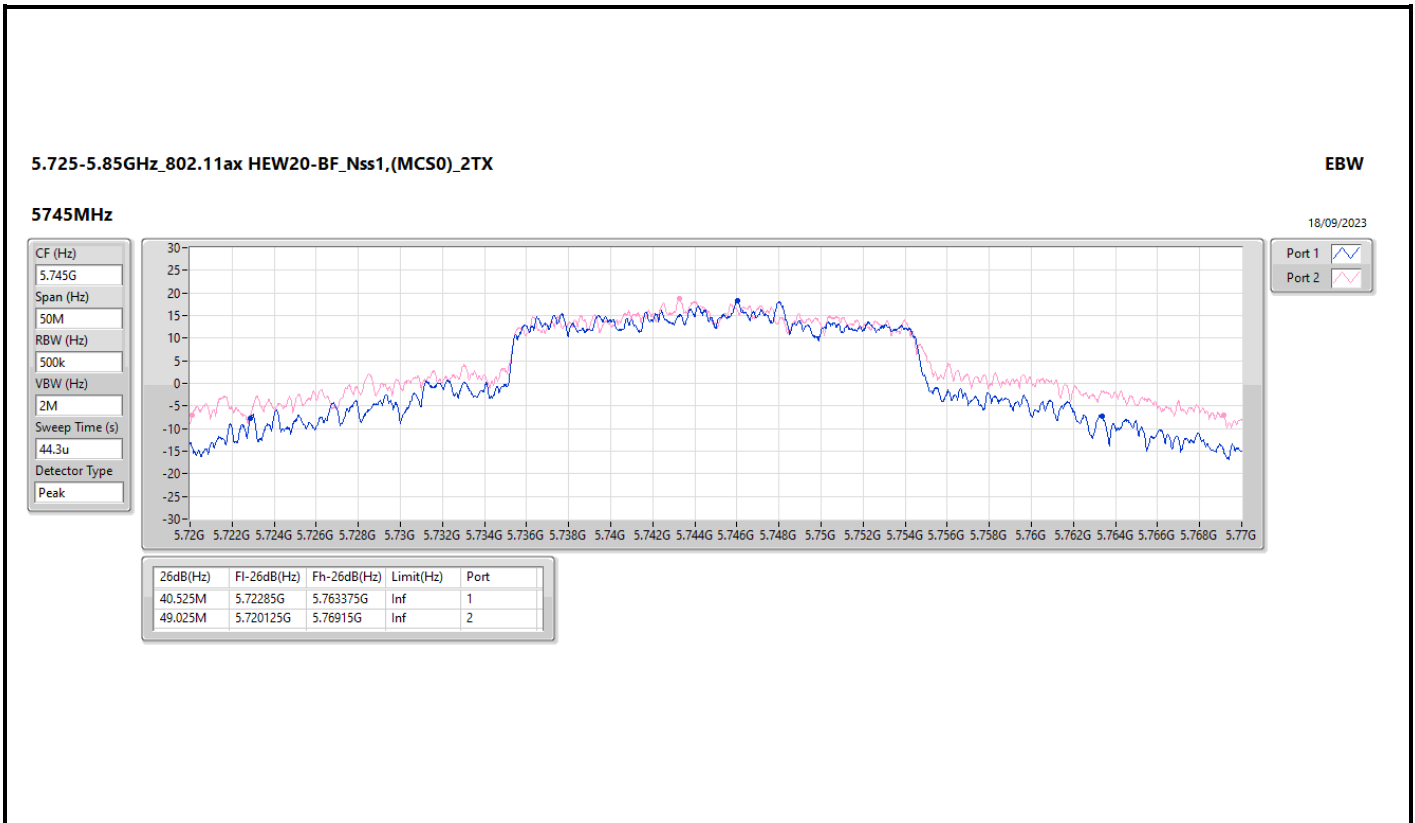
5.725-5.85GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

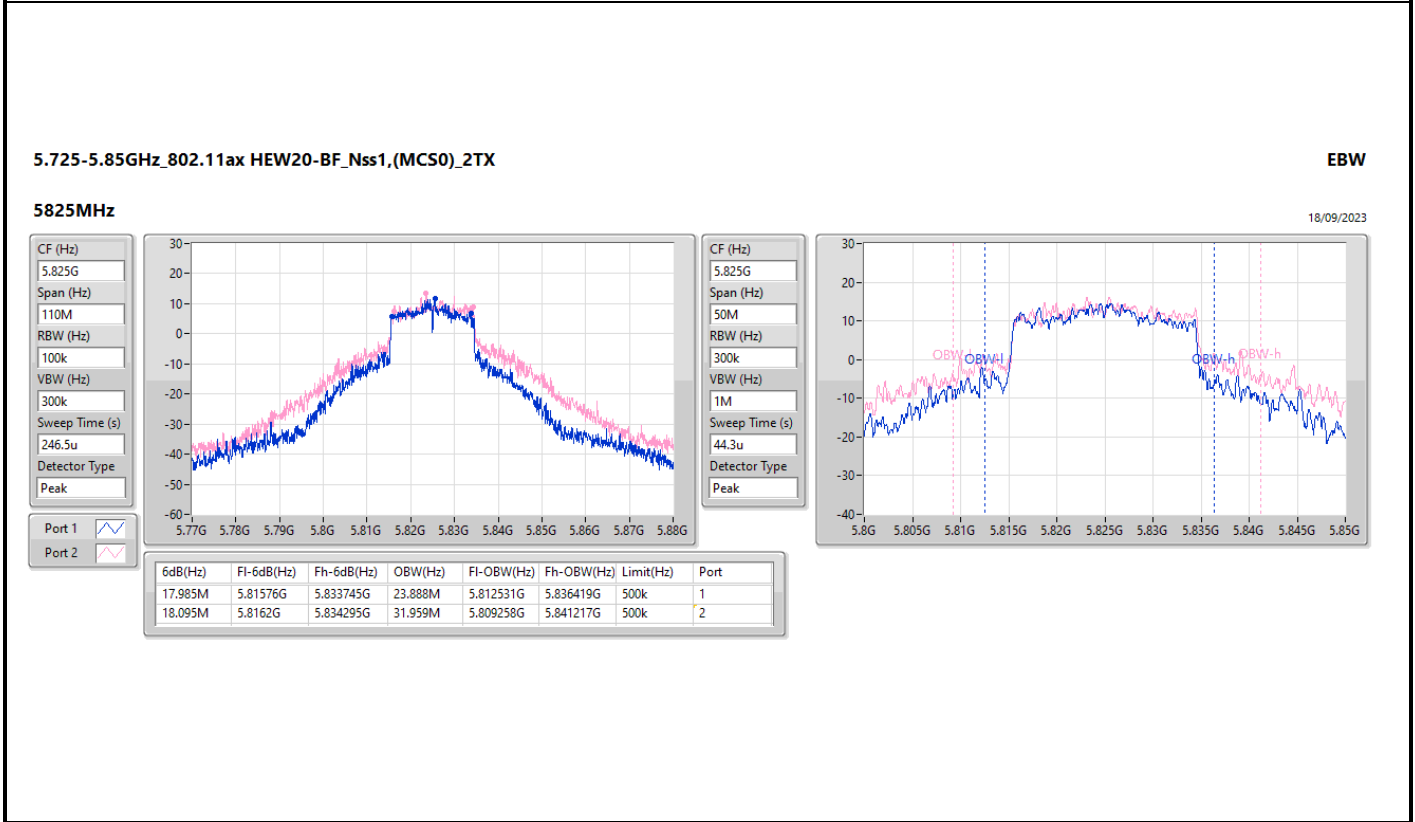
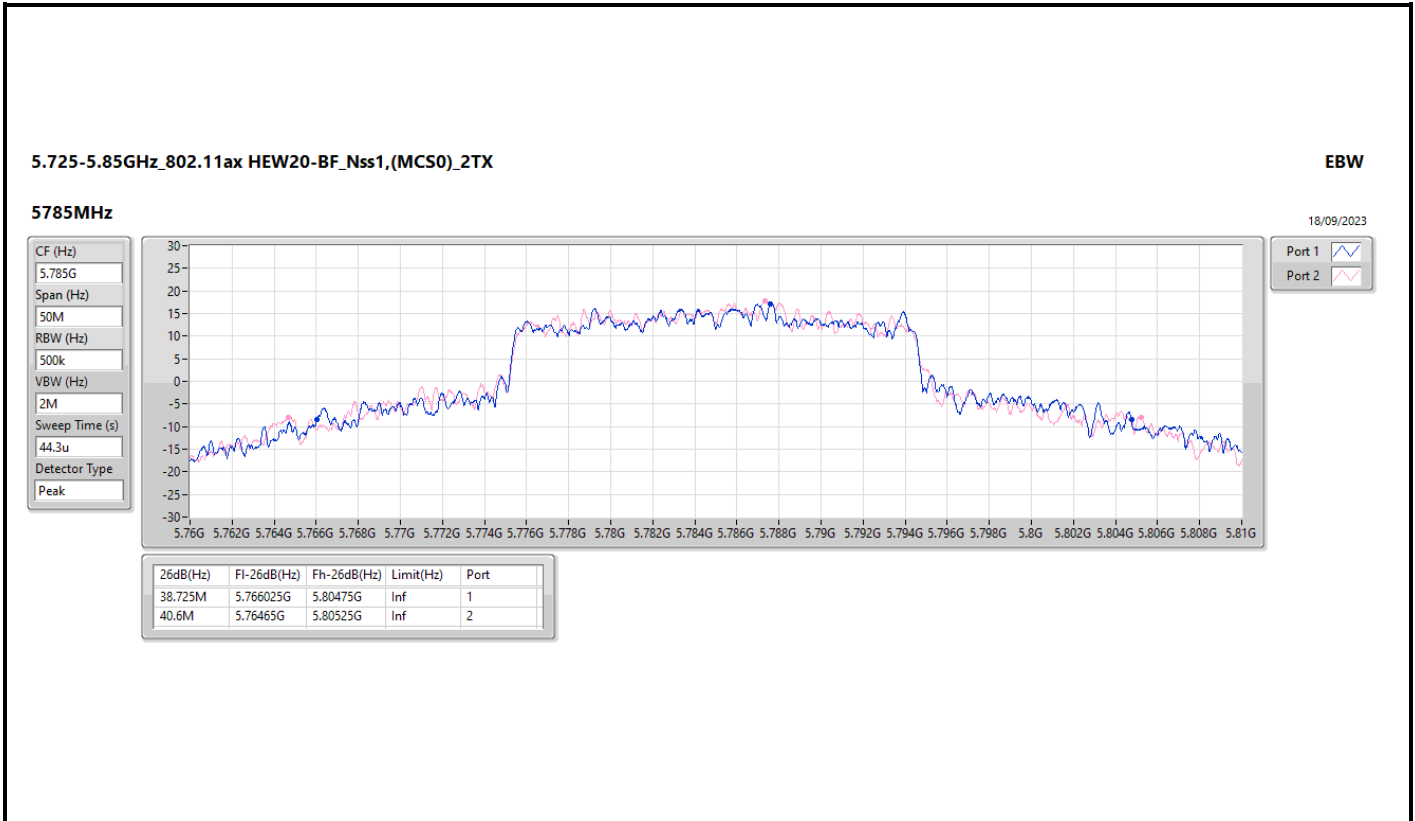
EBW

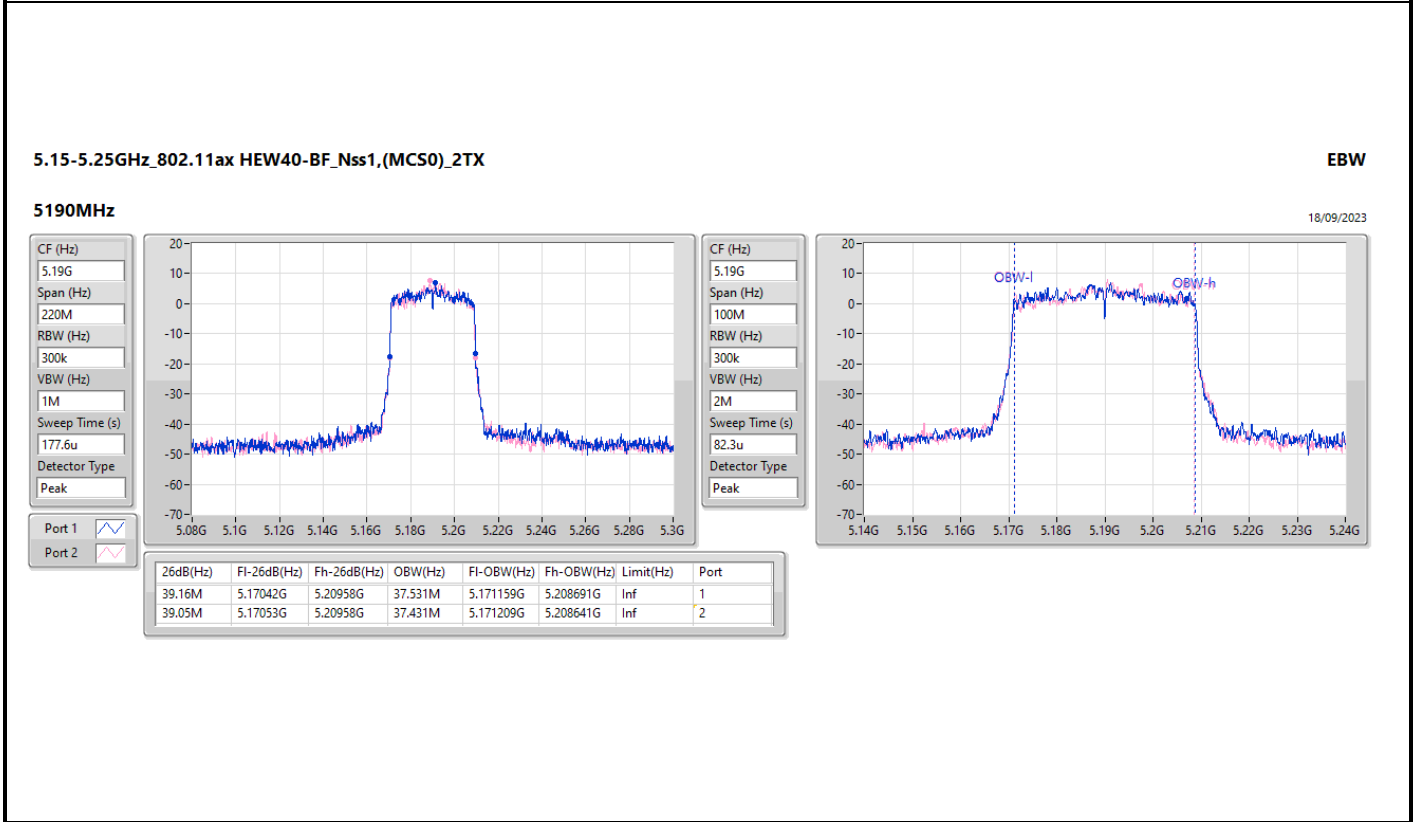
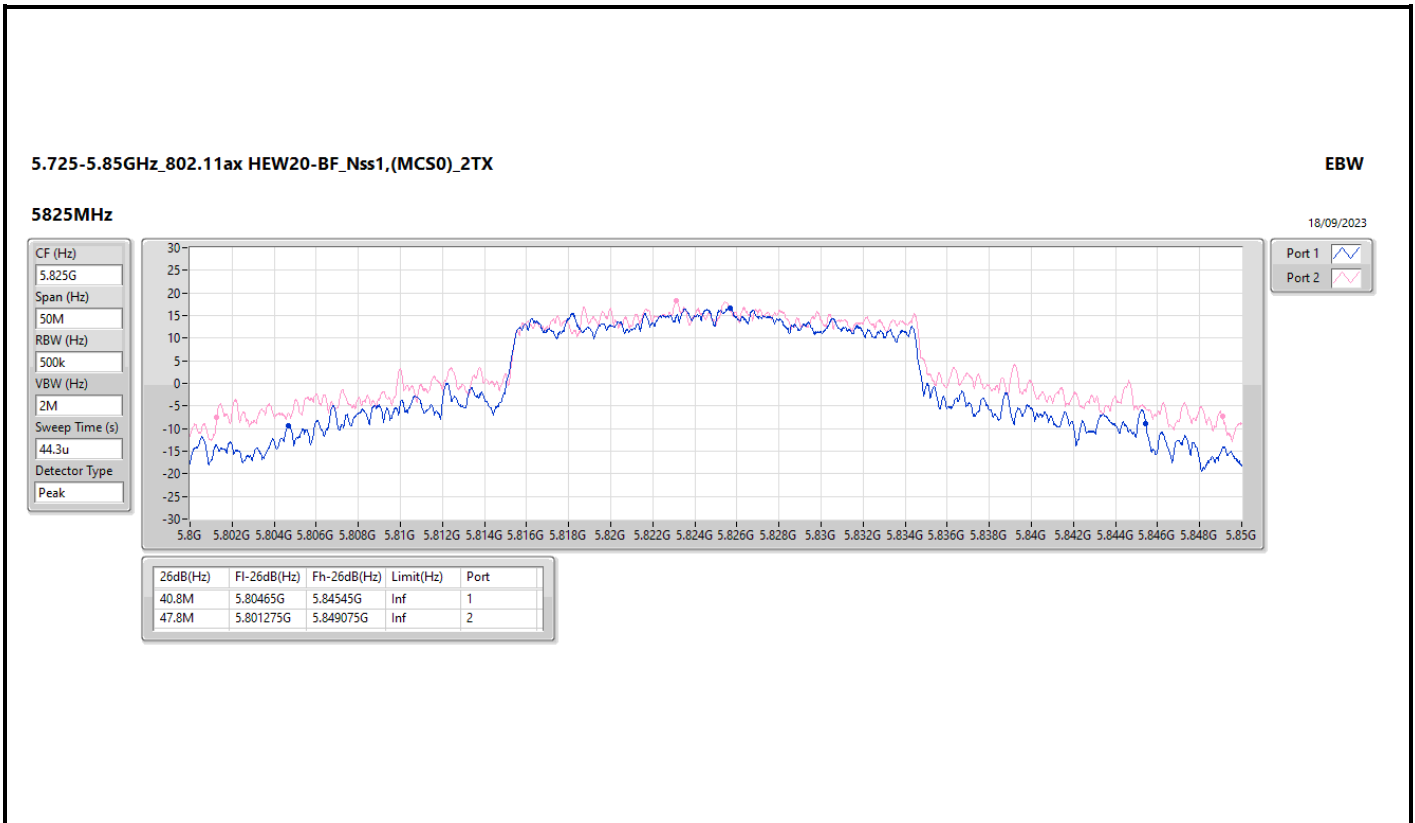
5745MHz

18/09/2023







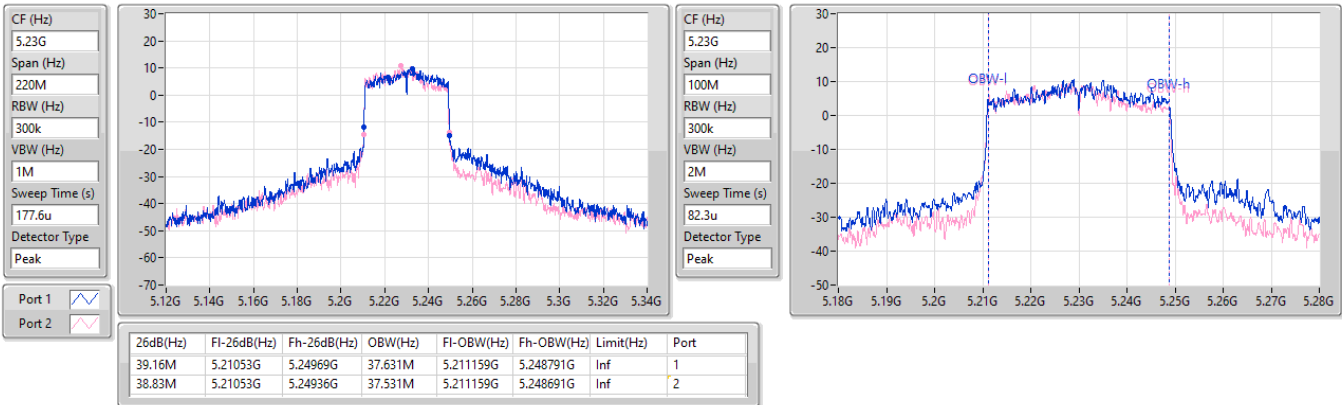


5.15-5.25GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

5230MHz

18/09/2023

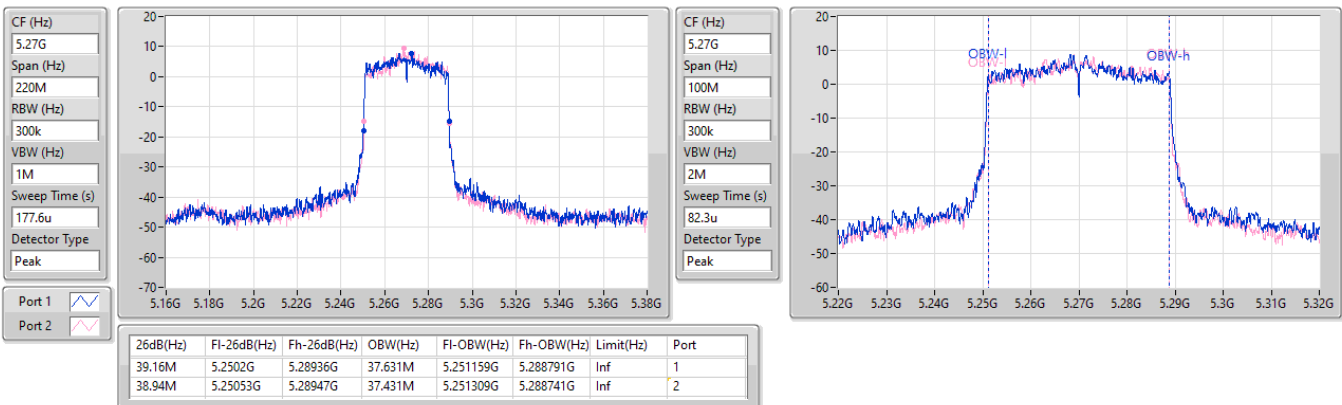


5.25-5.35GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

5270MHz

18/09/2023

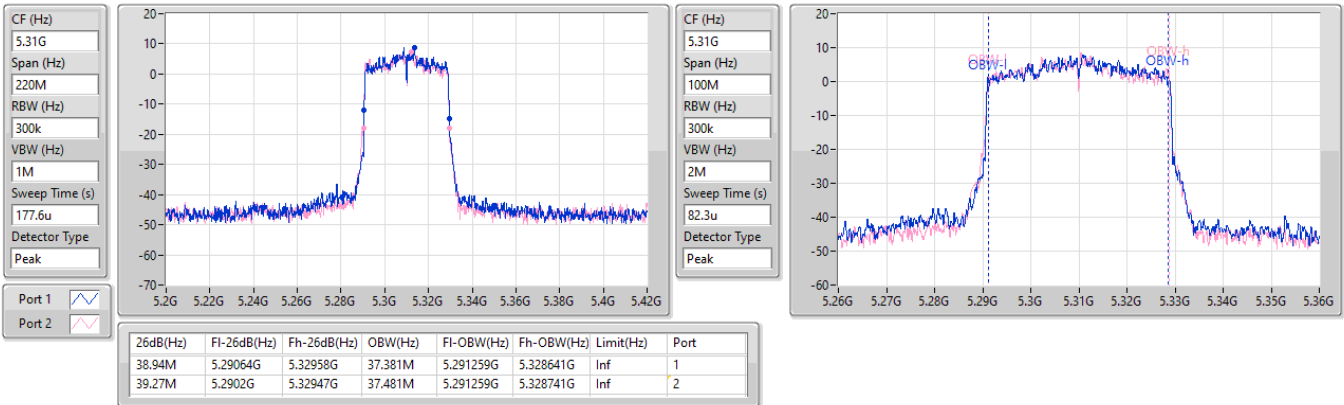


5.25-5.35GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

5310MHz

18/09/2023

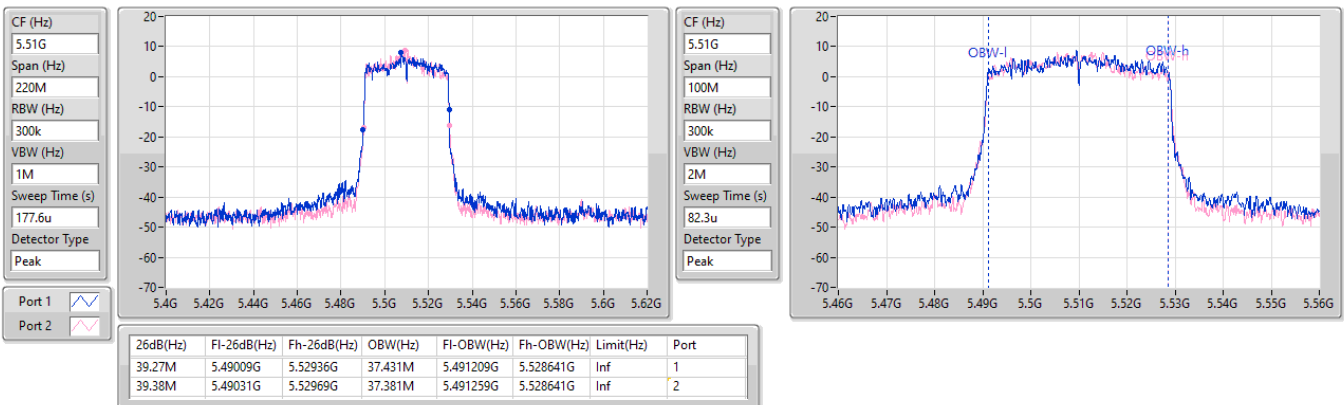


5.47-5.725GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

5510MHz

18/09/2023

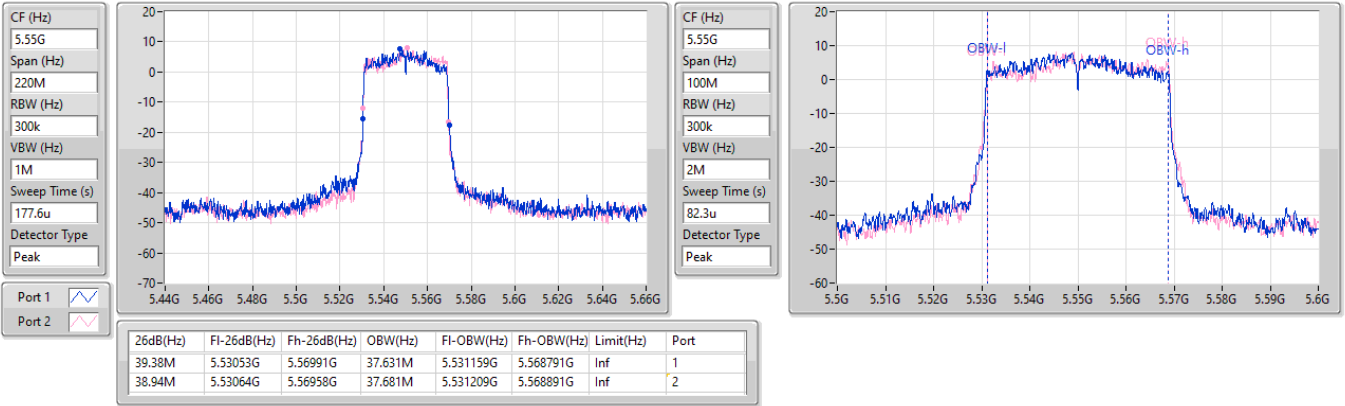


5.47-5.725GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

EBW

5550MHz

18/09/2023

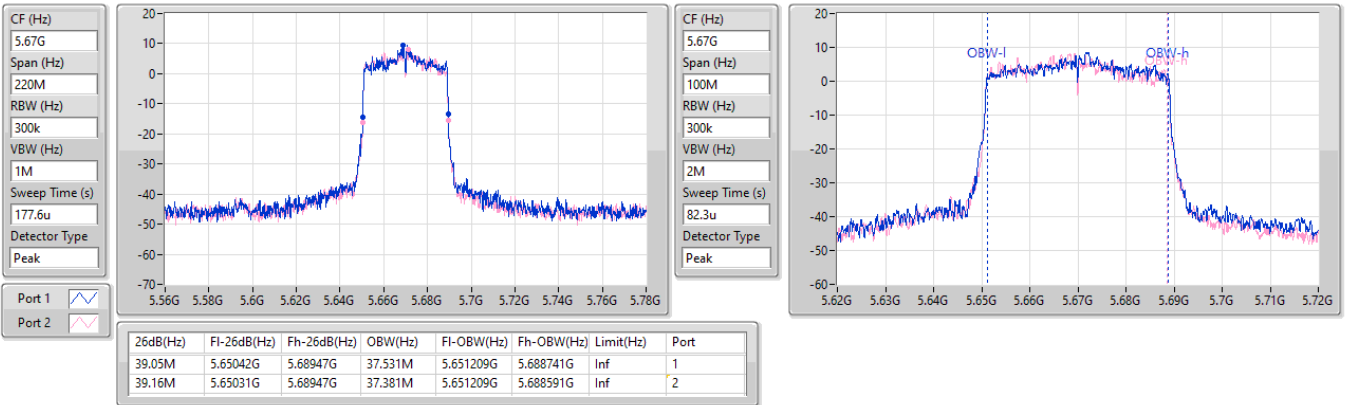


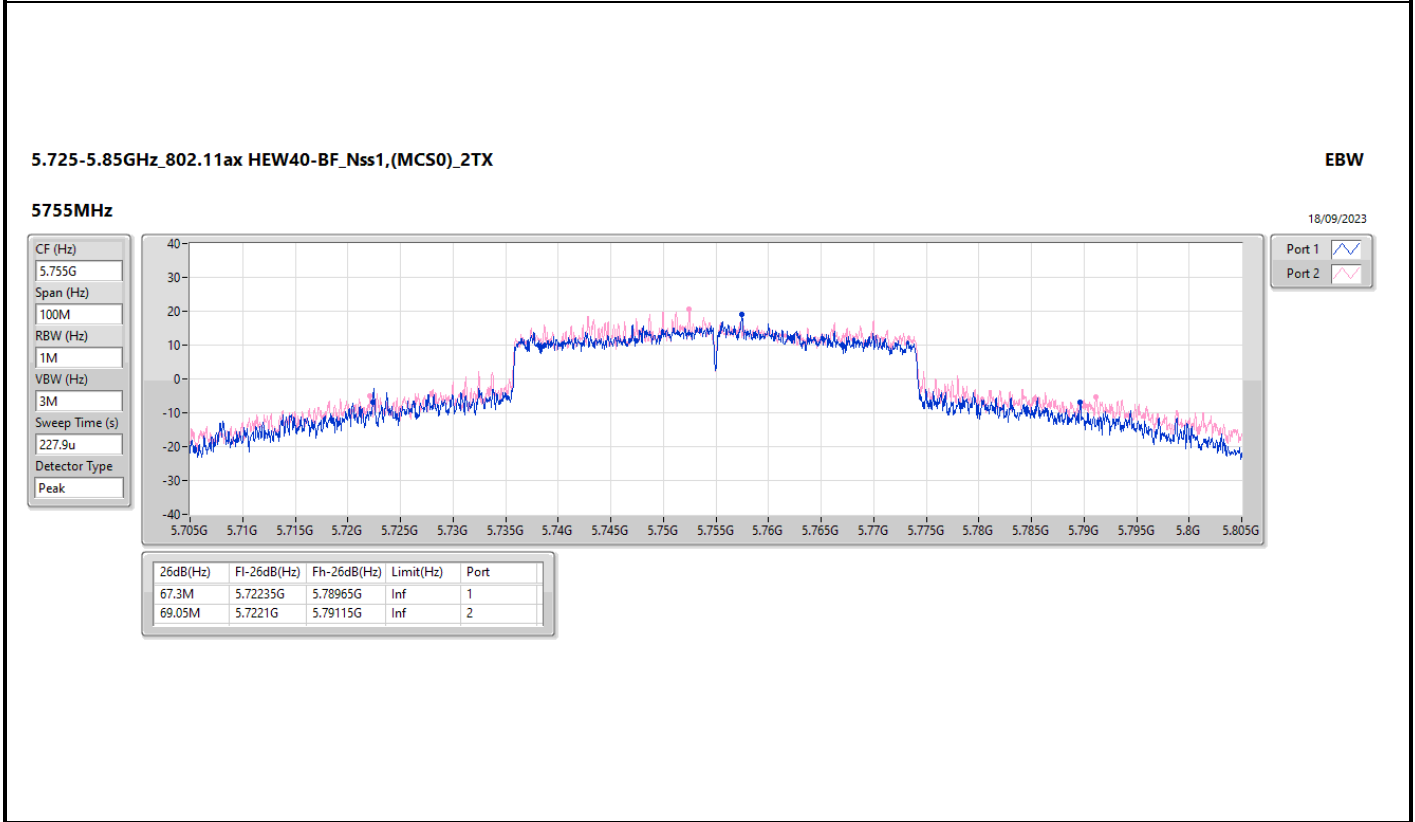
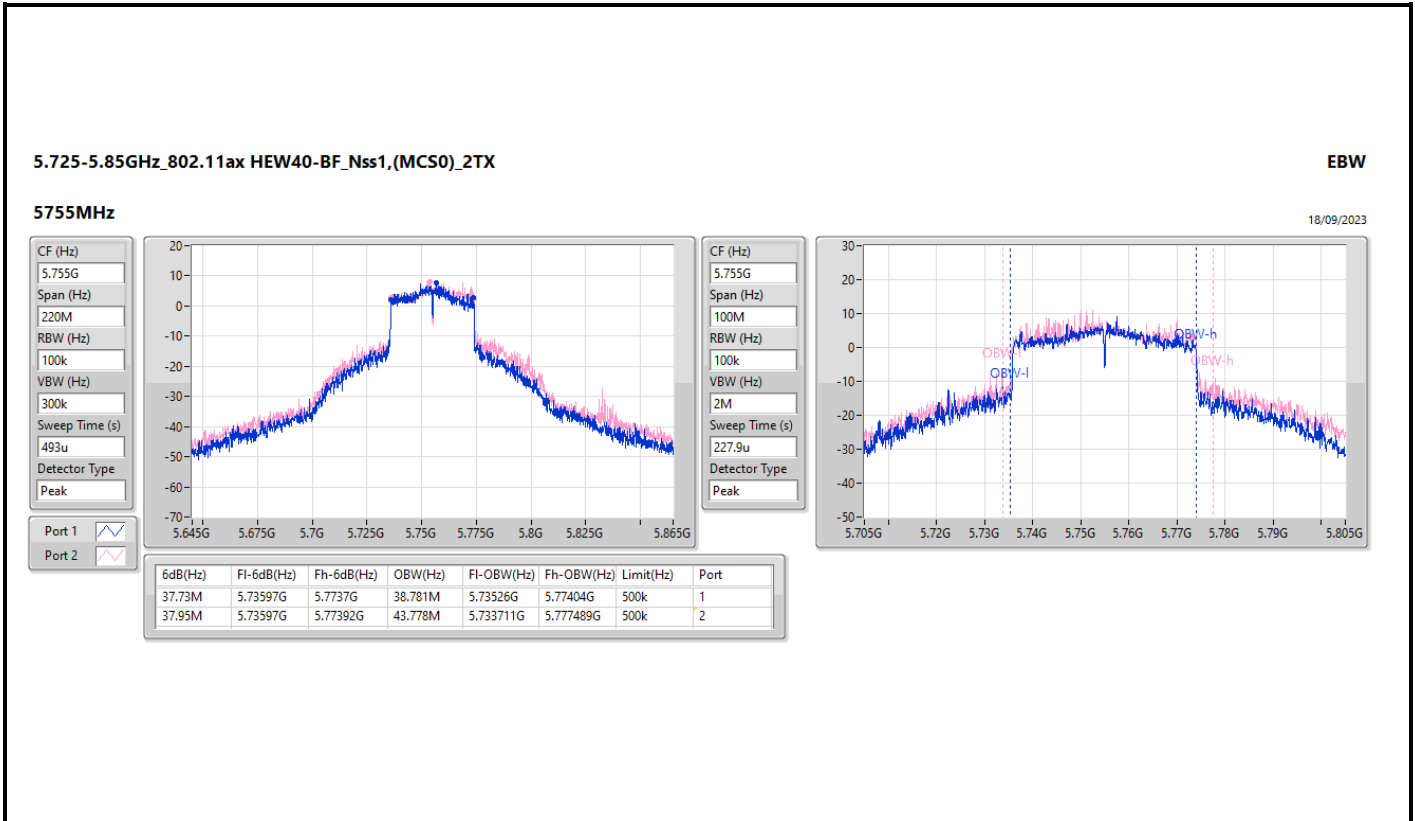
5.47-5.725GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

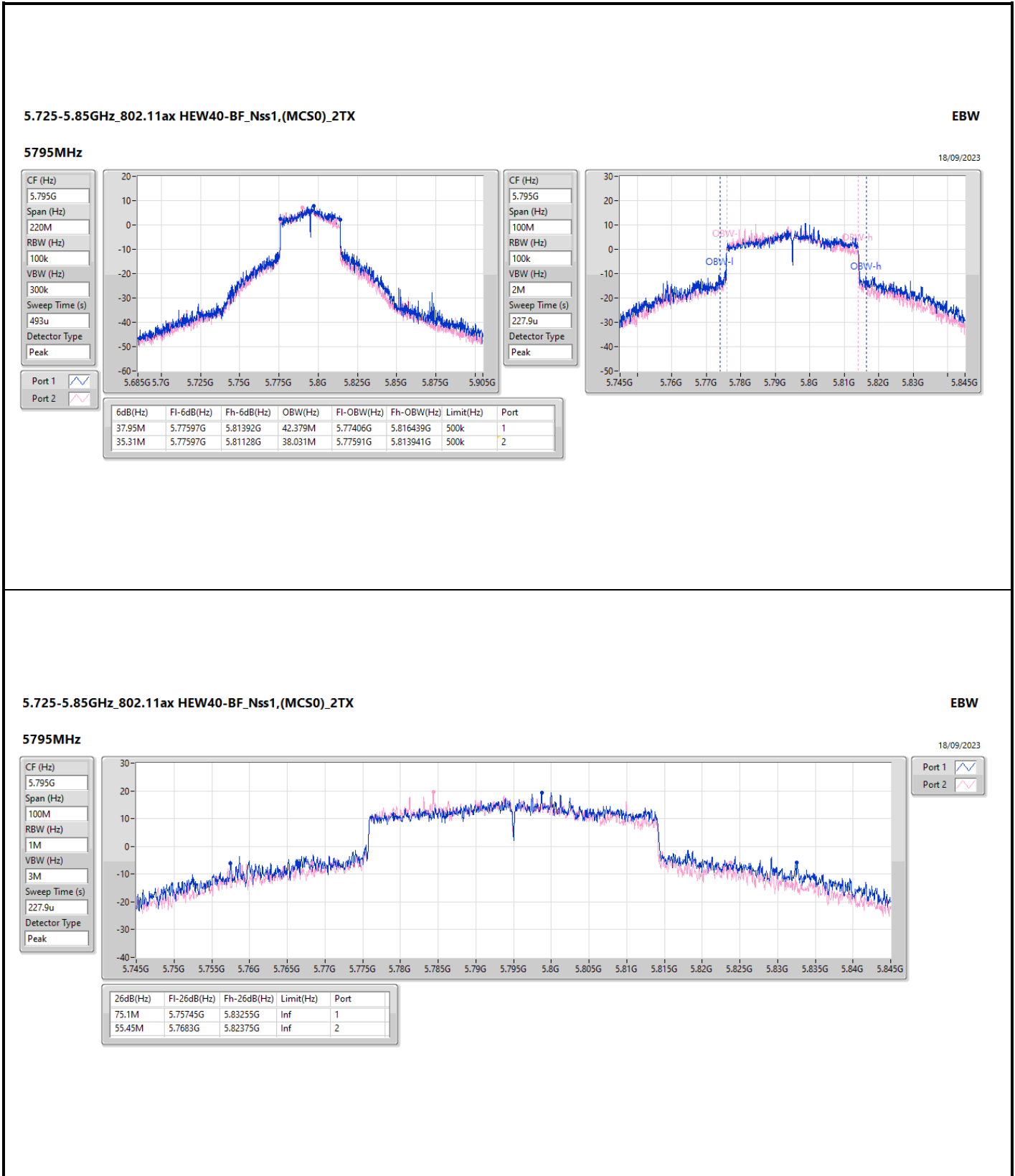
EBW

5670MHz

18/09/2023





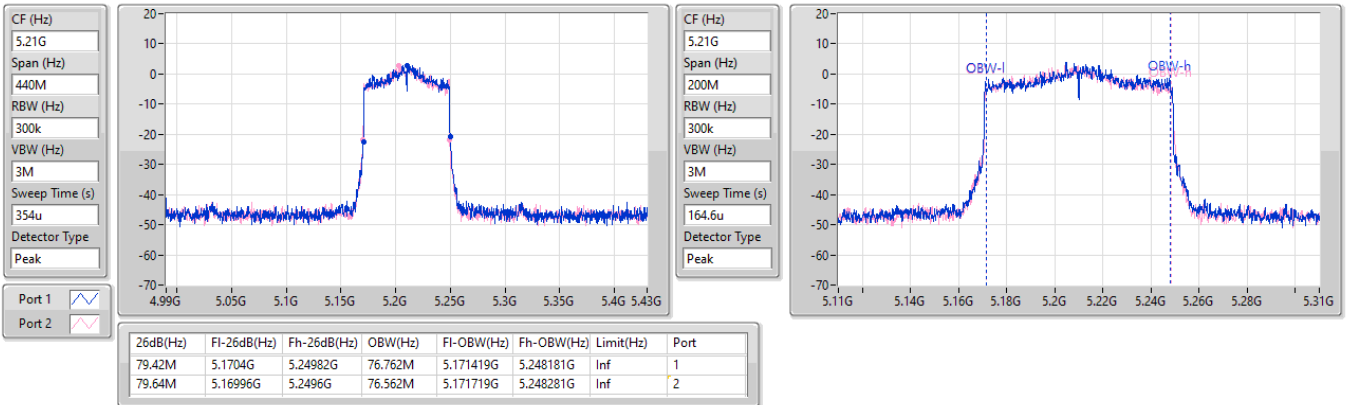


5.15-5.25GHz_802.11ax HEW80-BF_Nss1,(MCS0)_2TX

EBW

5210MHz

18/09/2023

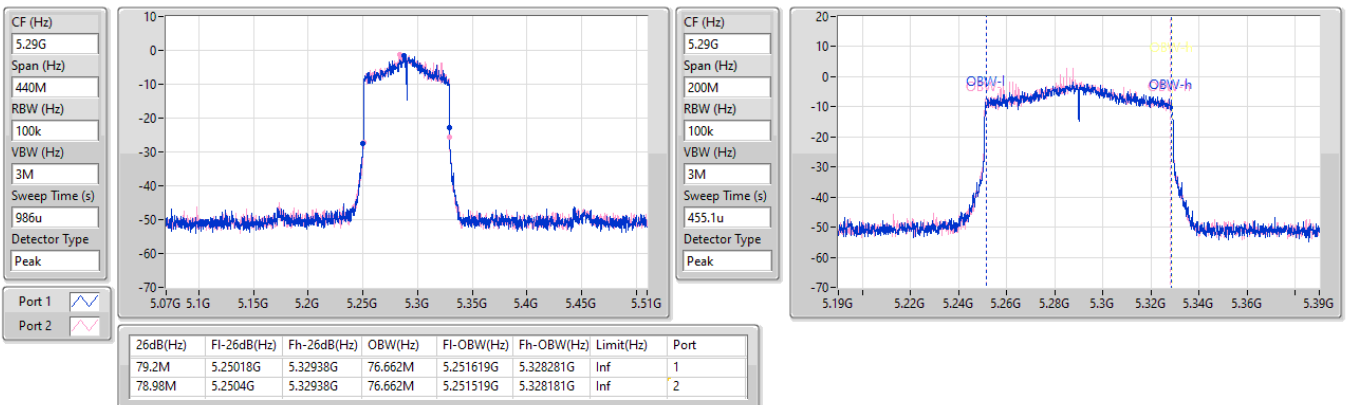


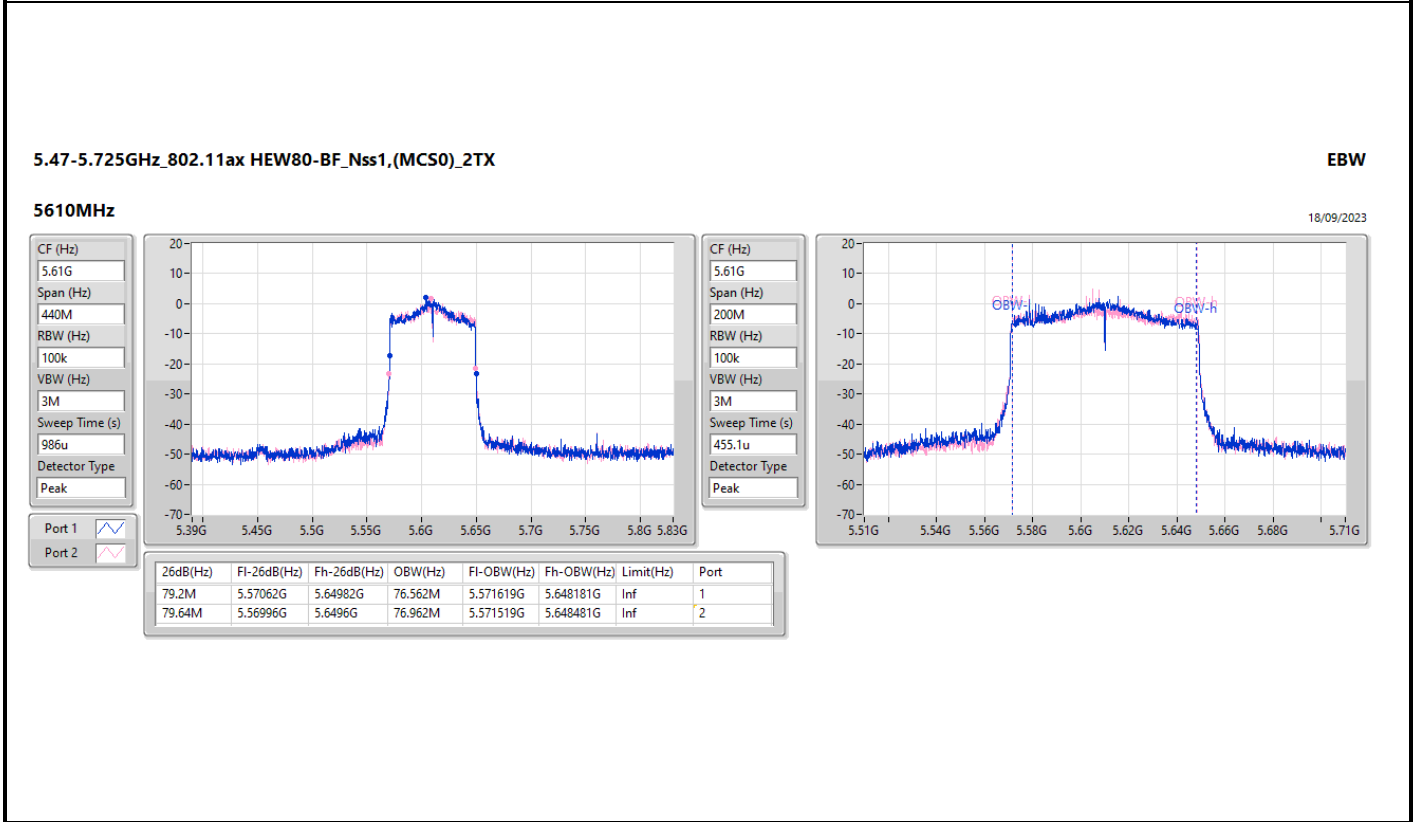
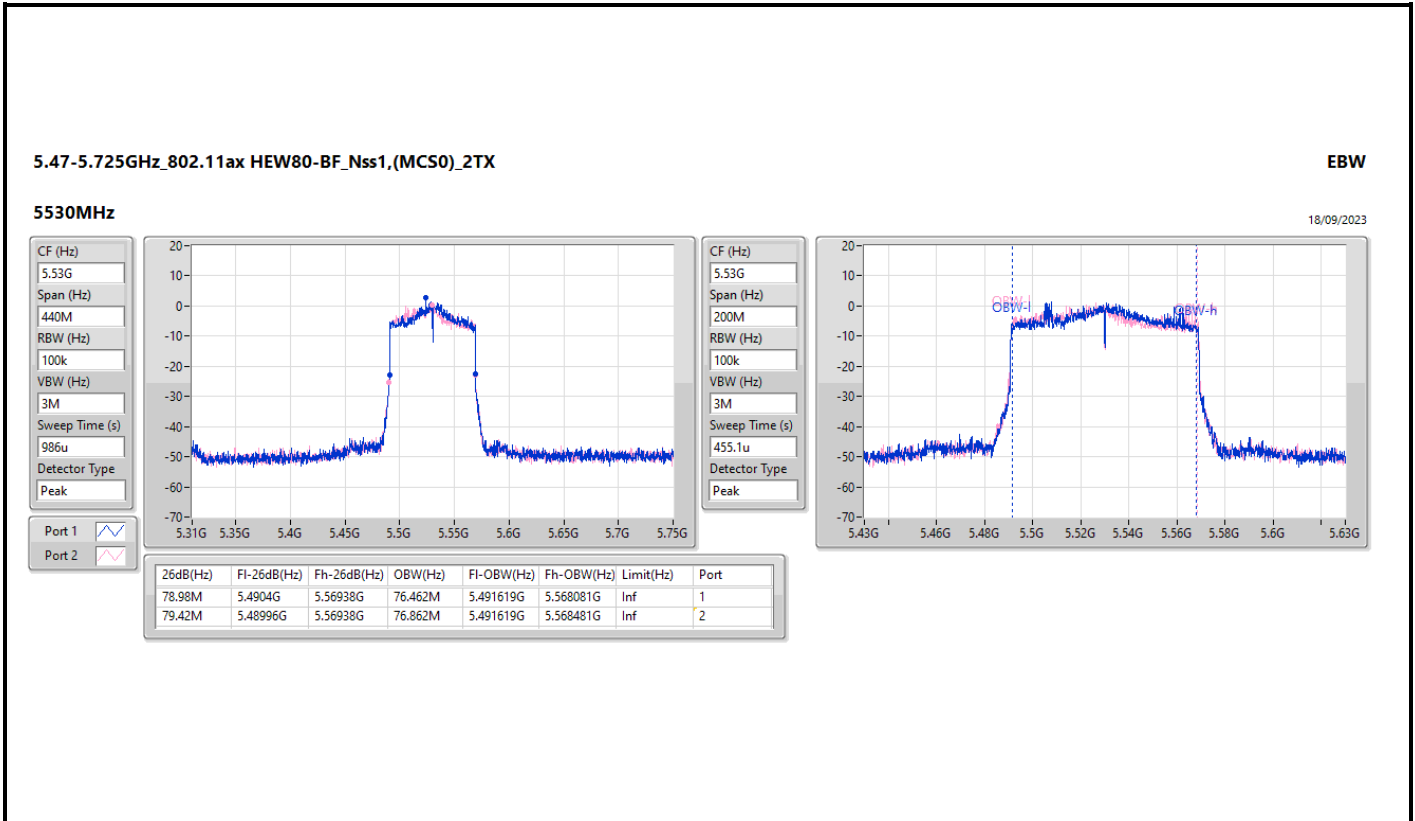
5.25-5.35GHz_802.11ax HEW80-BF_Nss1,(MCS0)_2TX

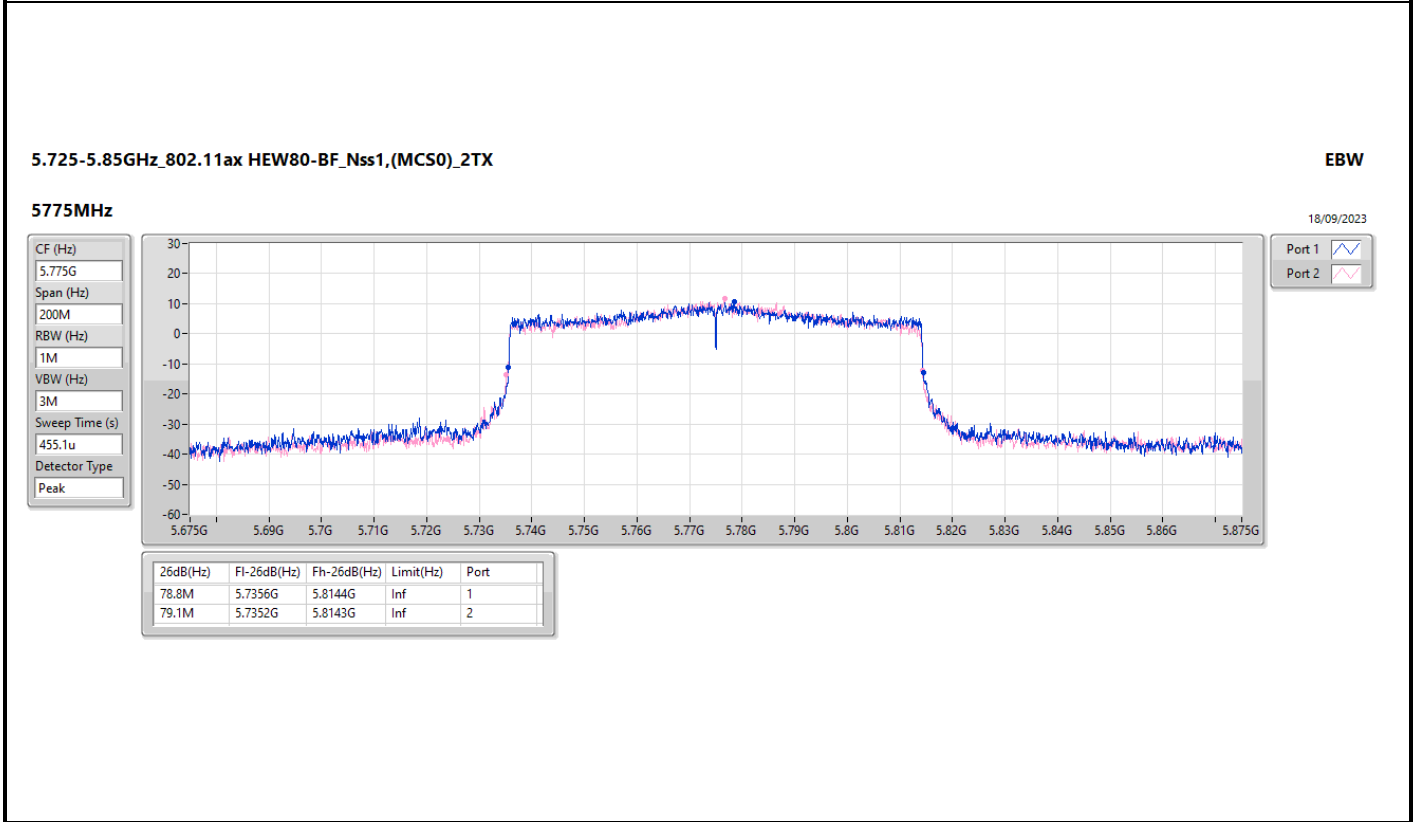
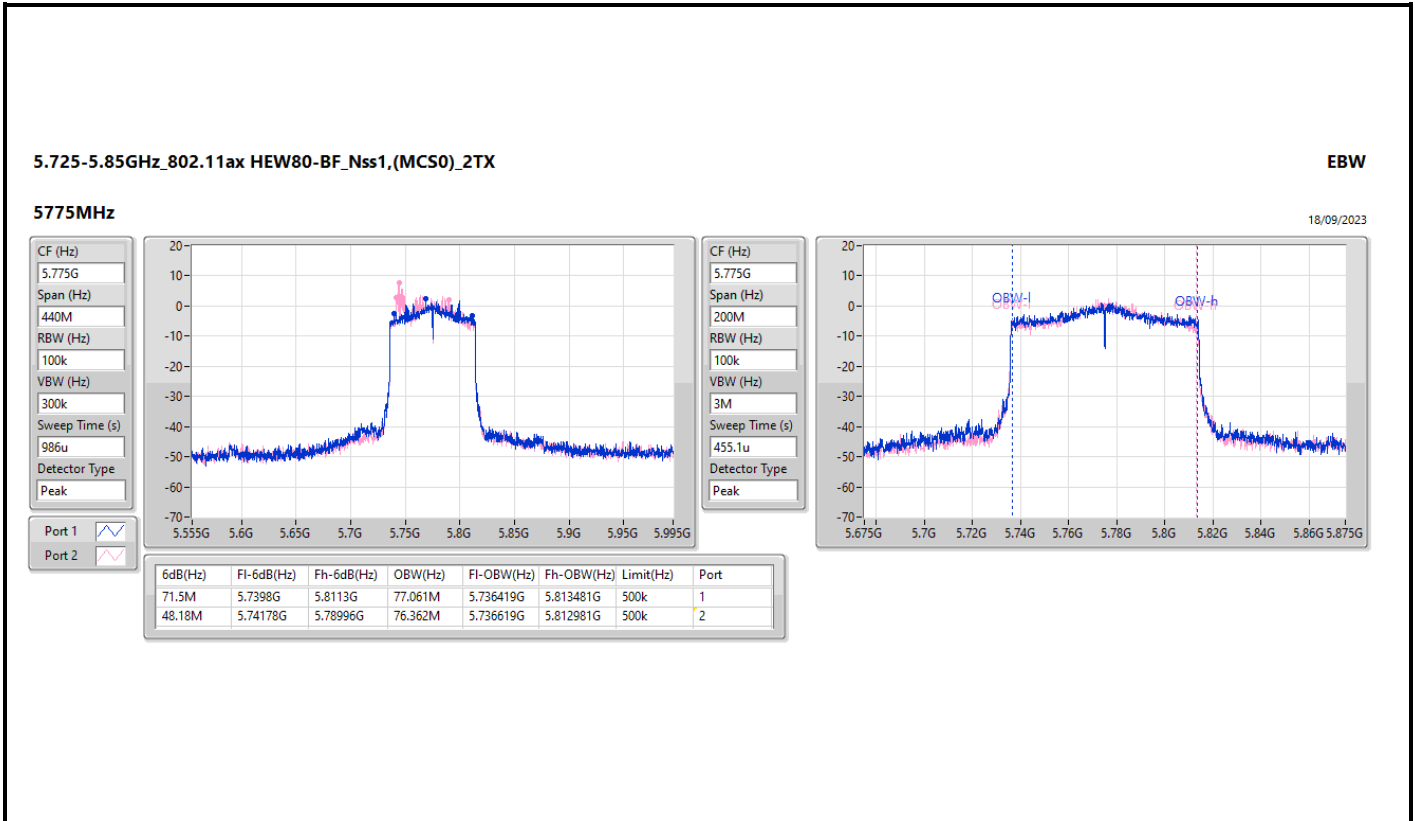
EBW

5290MHz

18/09/2023





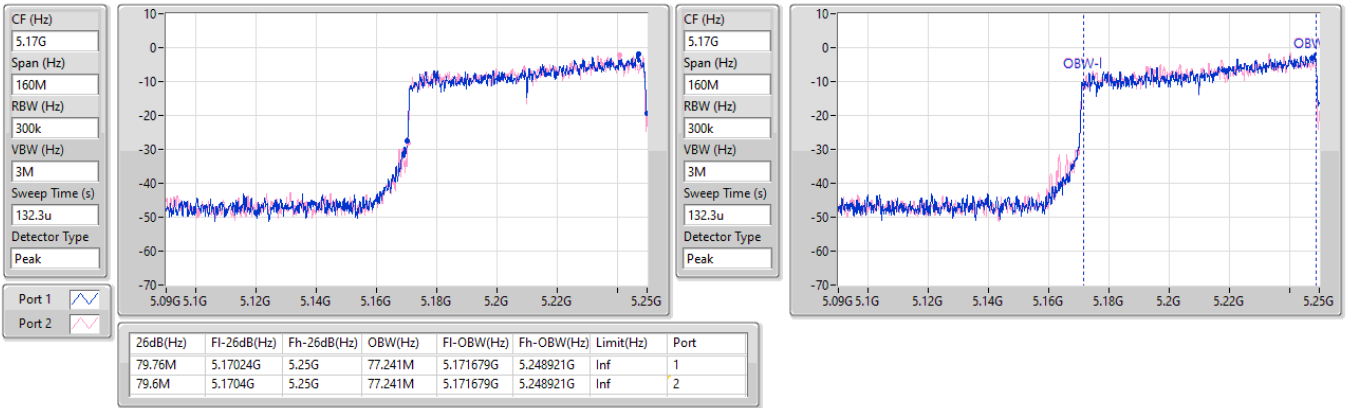


5.15-5.25GHz_802.11ax HEW160-BF_Nss1,(MCS0)_2TX

EBW

5250MHz Straddle 5.15-5.25GHz

18/09/2023

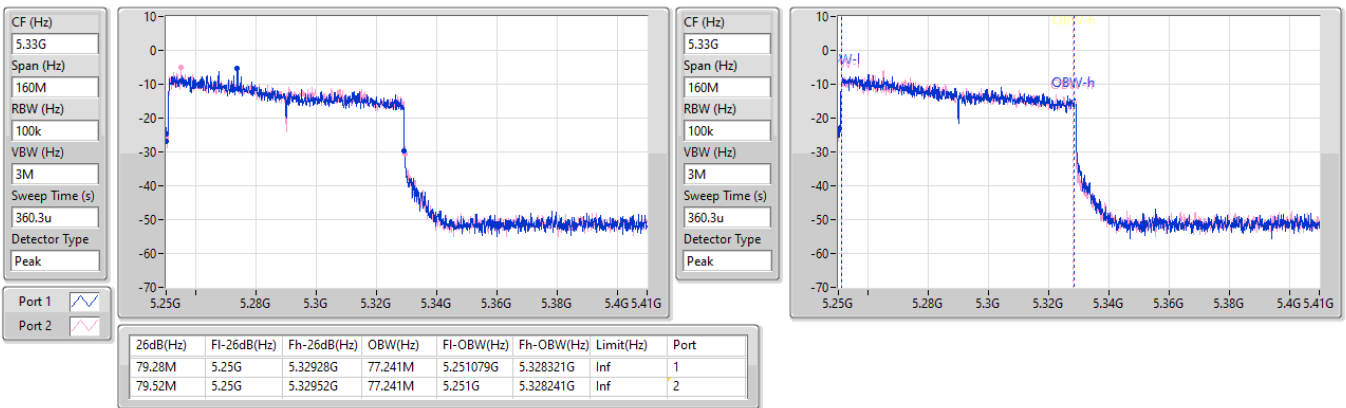


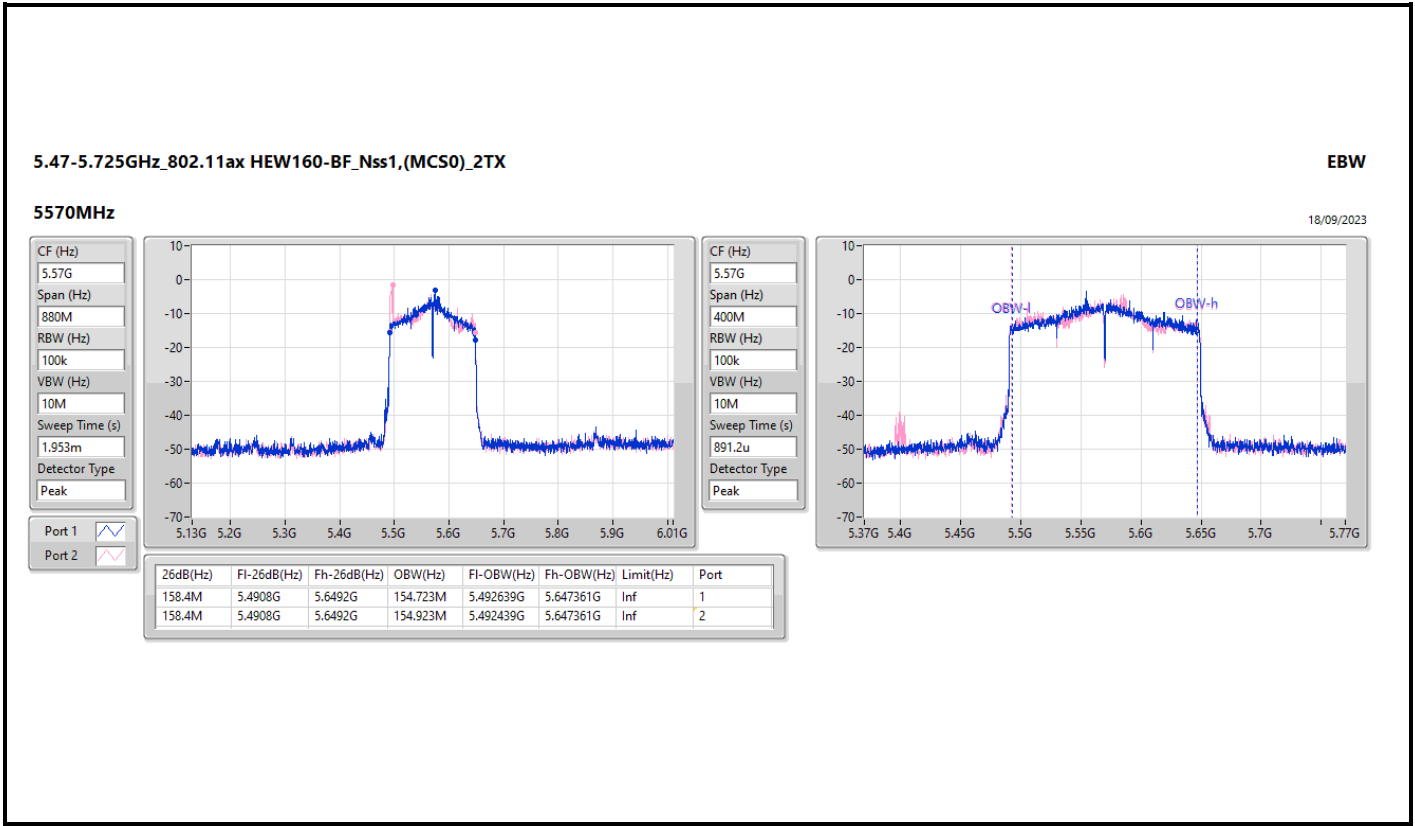
5.25-5.35GHz_802.11ax HEW160-BF_Nss1,(MCS0)_2TX

EBW

5250MHz Straddle 5.25-5.35GHz

18/09/2023







Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	23.92	0.24660
802.11ax HEW20_Nss1,(MCS0)_2TX	23.25	0.21135
802.11ax HEW40_Nss1,(MCS0)_2TX	22.80	0.19055
802.11ax HEW80_Nss1,(MCS0)_2TX	21.30	0.13490
802.11ax HEW160_Nss1,(MCS0)_2TX	18.00	0.06310
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	20.39	0.10940
802.11ax HEW20_Nss1,(MCS0)_2TX	20.48	0.11169
802.11ax HEW40_Nss1,(MCS0)_2TX	23.12	0.20512
802.11ax HEW80_Nss1,(MCS0)_2TX	21.90	0.15488
802.11ax HEW160_Nss1,(MCS0)_2TX	17.86	0.06109
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	20.11	0.10257
802.11ax HEW20_Nss1,(MCS0)_2TX	21.19	0.13152
802.11ax HEW40_Nss1,(MCS0)_2TX	23.46	0.22182
802.11ax HEW80_Nss1,(MCS0)_2TX	22.75	0.18836
802.11ax HEW160_Nss1,(MCS0)_2TX	20.65	0.11614
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	24.19	0.26242
802.11ax HEW20_Nss1,(MCS0)_2TX	24.41	0.27606
802.11ax HEW40_Nss1,(MCS0)_2TX	24.47	0.27990
802.11ax HEW80_Nss1,(MCS0)_2TX	24.13	0.25882



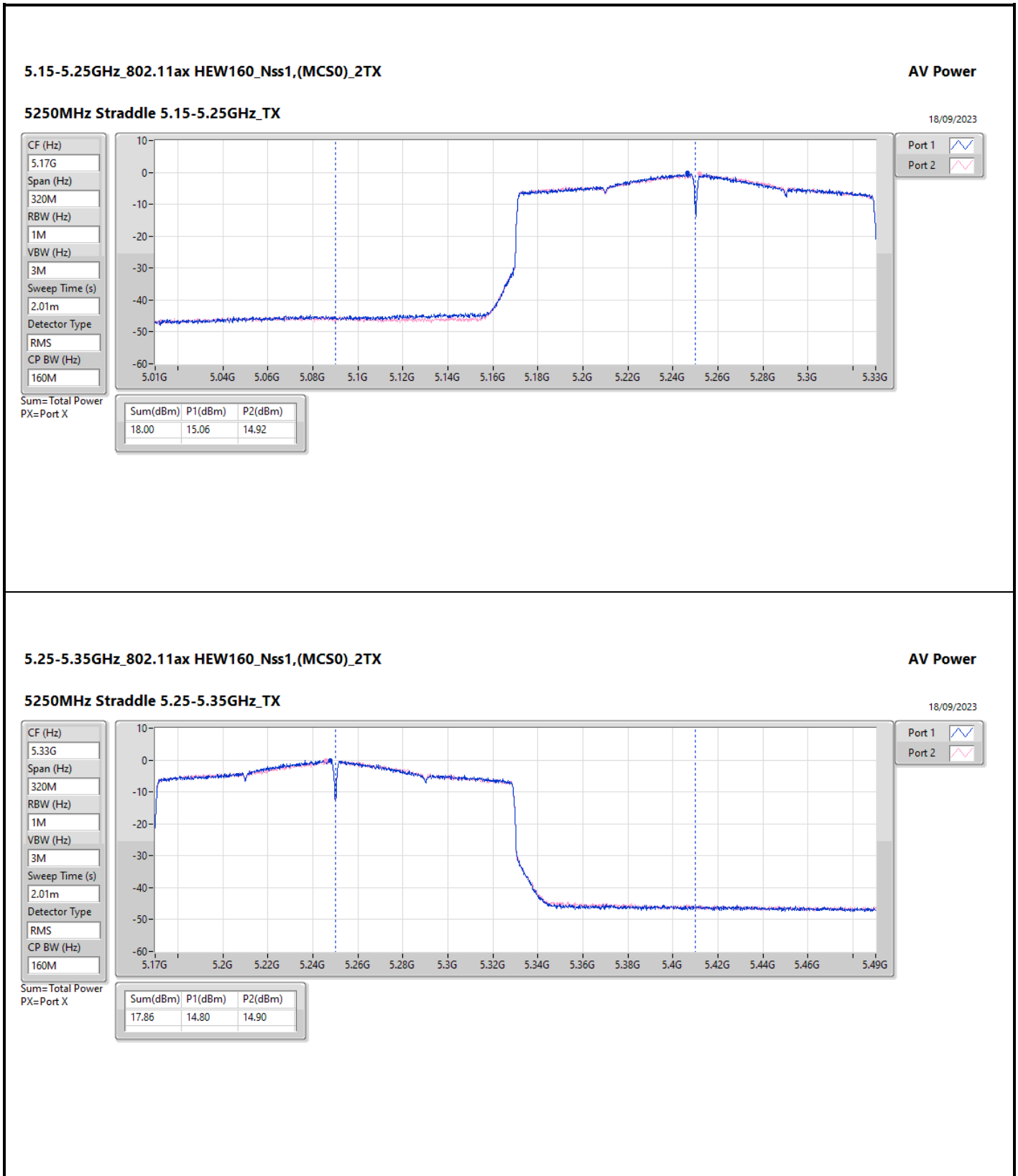
Average Power_Non-beamforming mode

Appendix C.1

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.90	19.79	19.69	22.75	30.00
5200MHz	Pass	4.90	21.16	20.64	23.92	30.00
5240MHz	Pass	4.90	20.87	20.77	23.83	30.00
5260MHz	Pass	4.90	17.10	16.94	20.03	23.72
5300MHz	Pass	4.90	17.51	16.96	20.25	23.62
5320MHz	Pass	4.90	17.61	17.13	20.39	23.71
5500MHz	Pass	4.92	16.97	16.92	19.96	23.56
5580MHz	Pass	4.92	16.96	16.87	19.93	23.67
5700MHz	Pass	4.92	17.37	16.82	20.11	23.64
5745MHz	Pass	4.92	21.22	21.09	24.17	30.00
5785MHz	Pass	4.92	21.26	21.09	24.19	30.00
5825MHz	Pass	4.92	21.25	21.08	24.18	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.90	19.01	19.11	22.07	30.00
5200MHz	Pass	4.90	20.45	20.01	23.25	30.00
5240MHz	Pass	4.90	20.11	20.17	23.15	30.00
5260MHz	Pass	4.90	17.58	17.35	20.48	23.98
5300MHz	Pass	4.90	17.32	17.11	20.23	23.98
5320MHz	Pass	4.90	17.61	17.12	20.38	23.98
5500MHz	Pass	4.92	18.16	18.20	21.19	23.98
5580MHz	Pass	4.92	17.36	17.17	20.28	23.98
5700MHz	Pass	4.92	17.52	17.23	20.39	23.98
5745MHz	Pass	4.92	20.86	21.45	24.18	30.00
5785MHz	Pass	4.92	20.31	20.38	23.36	30.00
5825MHz	Pass	4.92	21.37	21.43	24.41	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	4.90	16.22	16.41	19.33	30.00
5230MHz	Pass	4.90	19.94	19.63	22.80	30.00
5270MHz	Pass	4.90	20.04	20.17	23.12	23.98
5310MHz	Pass	4.90	19.23	18.78	22.02	23.98
5510MHz	Pass	4.92	18.66	18.20	21.45	23.98
5550MHz	Pass	4.92	20.48	20.41	23.46	23.98
5670MHz	Pass	4.92	18.75	18.83	21.80	23.98
5755MHz	Pass	4.92	21.26	21.61	24.45	30.00
5795MHz	Pass	4.92	21.70	21.21	24.47	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	4.90	18.21	18.37	21.30	30.00
5290MHz	Pass	4.90	19.02	18.75	21.90	23.98
5530MHz	Pass	4.92	18.49	18.42	21.47	23.98
5610MHz	Pass	4.92	19.95	19.51	22.75	23.98
5775MHz	Pass	4.92	20.88	21.34	24.13	30.00
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	4.90	15.06	14.92	18.00	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	4.90	14.80	14.90	17.86	23.98
5570MHz	Pass	4.92	17.77	17.50	20.65	23.98

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



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

AV Power

5250MHz Straddle 5.25-5.35GHz_TX

18/09/2023

CF (Hz)
5.33G

Span (Hz)
320M

RBW (Hz)
1M

VBW (Hz)
3M

Sweep Time (s)
2.01m

Detector Type
RMS

CP BW (Hz)
160M



Port 1 

Port 2 

Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
17.86	14.80	14.90



Summary

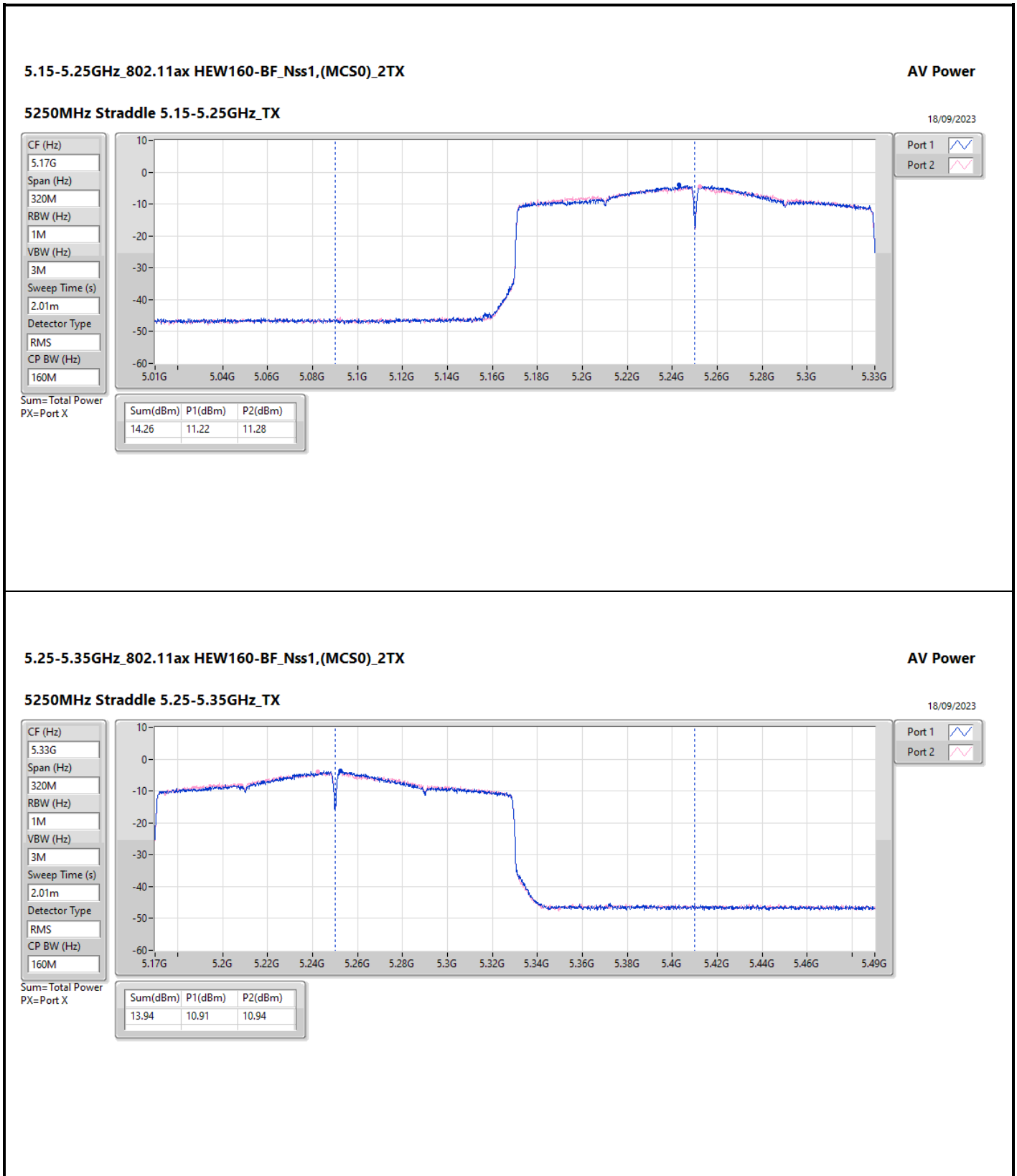
Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	25.91	0.38994
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	24.06	0.25468
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	19.47	0.08851
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	14.26	0.02667
5.25-5.35GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	20.44	0.11066
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	21.85	0.15311
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	19.62	0.09162
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	13.94	0.02477
5.47-5.725GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	20.42	0.11015
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	21.97	0.15740
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	21.56	0.14322
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	17.55	0.05689
5.725-5.85GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	27.60	0.57544
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	26.42	0.43853
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	21.94	0.15631



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	7.81	18.61	18.31	21.47	28.19
5200MHz	Pass	7.81	20.71	20.77	23.75	28.19
5240MHz	Pass	7.81	23.17	22.61	25.91	28.19
5260MHz	Pass	7.81	17.29	17.57	20.44	22.17
5300MHz	Pass	7.81	17.42	16.87	20.16	22.17
5320MHz	Pass	7.81	17.49	17.22	20.37	22.11
5500MHz	Pass	7.87	17.46	17.36	20.42	22.11
5580MHz	Pass	7.87	17.53	17.28	20.42	22.10
5700MHz	Pass	7.87	17.43	16.86	20.16	22.08
5745MHz	Pass	7.87	24.18	24.97	27.60	28.13
5785MHz	Pass	7.87	23.89	23.98	26.95	28.13
5825MHz	Pass	7.87	23.75	24.52	27.16	28.13
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	7.81	17.86	17.69	20.79	28.19
5230MHz	Pass	7.81	21.34	20.74	24.06	28.19
5270MHz	Pass	7.81	18.70	18.97	21.85	22.17
5310MHz	Pass	7.81	18.71	18.34	21.54	22.17
5510MHz	Pass	7.87	18.94	18.78	21.87	22.11
5550MHz	Pass	7.87	19.00	18.91	21.97	22.11
5670MHz	Pass	7.87	18.69	18.83	21.77	22.11
5755MHz	Pass	7.87	22.89	23.58	26.26	28.13
5795MHz	Pass	7.87	23.61	23.20	26.42	28.13
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	7.81	16.61	16.31	19.47	28.19
5290MHz	Pass	7.81	16.37	16.84	19.62	22.17
5530MHz	Pass	7.87	18.47	18.51	21.50	22.11
5610MHz	Pass	7.87	18.68	18.42	21.56	22.11
5775MHz	Pass	7.87	18.94	18.91	21.94	28.13
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	7.81	11.22	11.28	14.26	28.19
5250MHz Straddle 5.25-5.35GHz	Pass	7.81	10.91	10.94	13.94	22.17
5570MHz	Pass	7.87	14.74	14.34	17.55	22.11

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



5.25-5.35GHz_802.11ax HEW160-BF_Nss1,(MCS0)_2TX

AV Power

5250MHz Straddle 5.25-5.35GHz_TX

18/09/2023

CF (Hz)
5.33G

Span (Hz)
320M

RBW (Hz)
1M

VBW (Hz)
3M

Sweep Time (s)
2.01m

Detector Type
RMS

CP BW (Hz)
160M



Port 1 

Port 2 

Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
13.94	10.91	10.94



Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	12.69
802.11ax HEW20_Nss1,(MCS0)_2TX	11.78
802.11ax HEW40_Nss1,(MCS0)_2TX	8.48
802.11ax HEW80_Nss1,(MCS0)_2TX	3.70
802.11ax HEW160_Nss1,(MCS0)_2TX	0.77
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_2TX	9.13
802.11ax HEW20_Nss1,(MCS0)_2TX	9.12
802.11ax HEW40_Nss1,(MCS0)_2TX	8.76
802.11ax HEW80_Nss1,(MCS0)_2TX	4.96
802.11ax HEW160_Nss1,(MCS0)_2TX	1.09
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_2TX	8.97
802.11ax HEW20_Nss1,(MCS0)_2TX	9.08
802.11ax HEW40_Nss1,(MCS0)_2TX	9.08
802.11ax HEW80_Nss1,(MCS0)_2TX	5.90
802.11ax HEW160_Nss1,(MCS0)_2TX	0.99
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	11.64
802.11ax HEW20_Nss1,(MCS0)_2TX	11.20
802.11ax HEW40_Nss1,(MCS0)_2TX	8.68
802.11ax HEW80_Nss1,(MCS0)_2TX	5.81

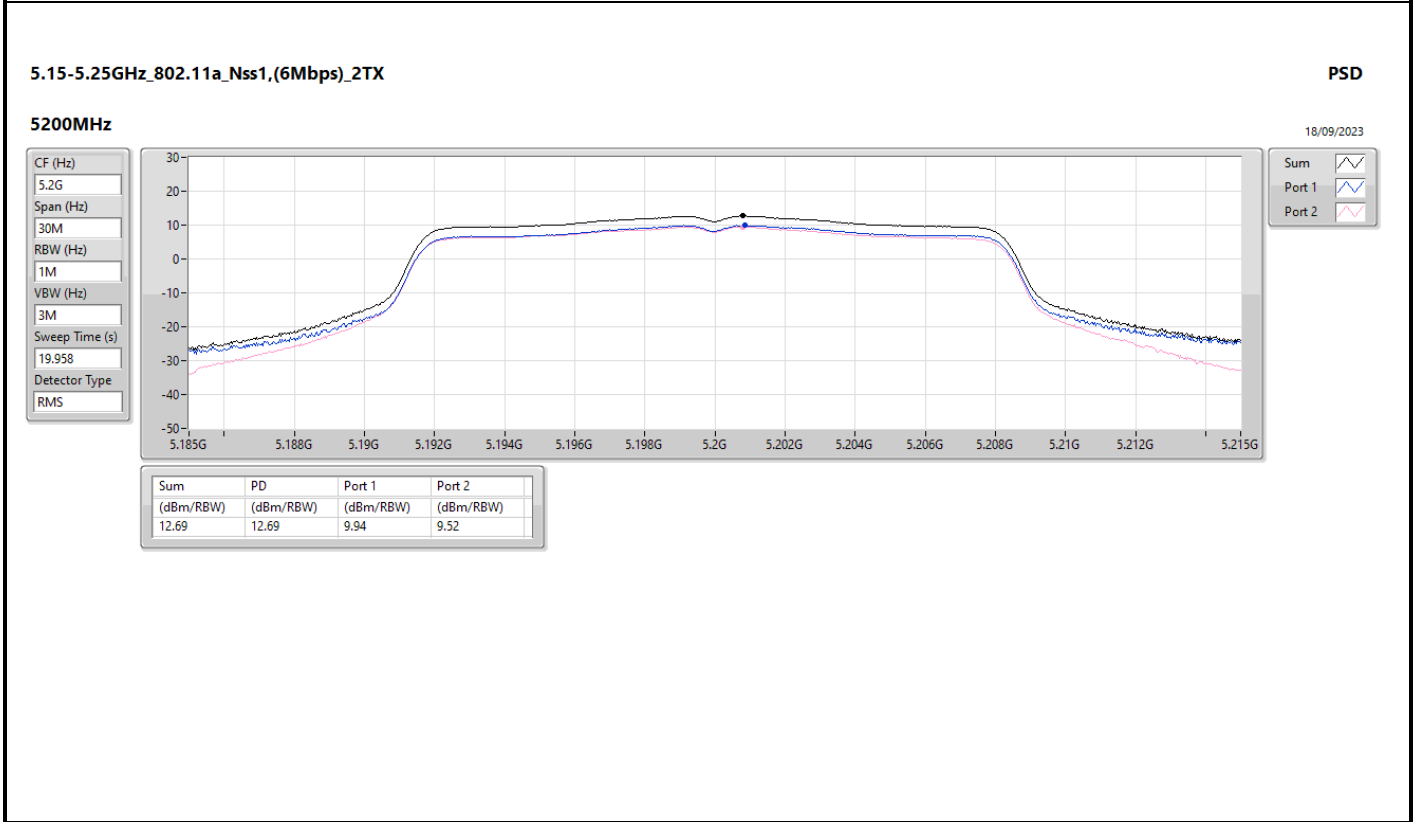
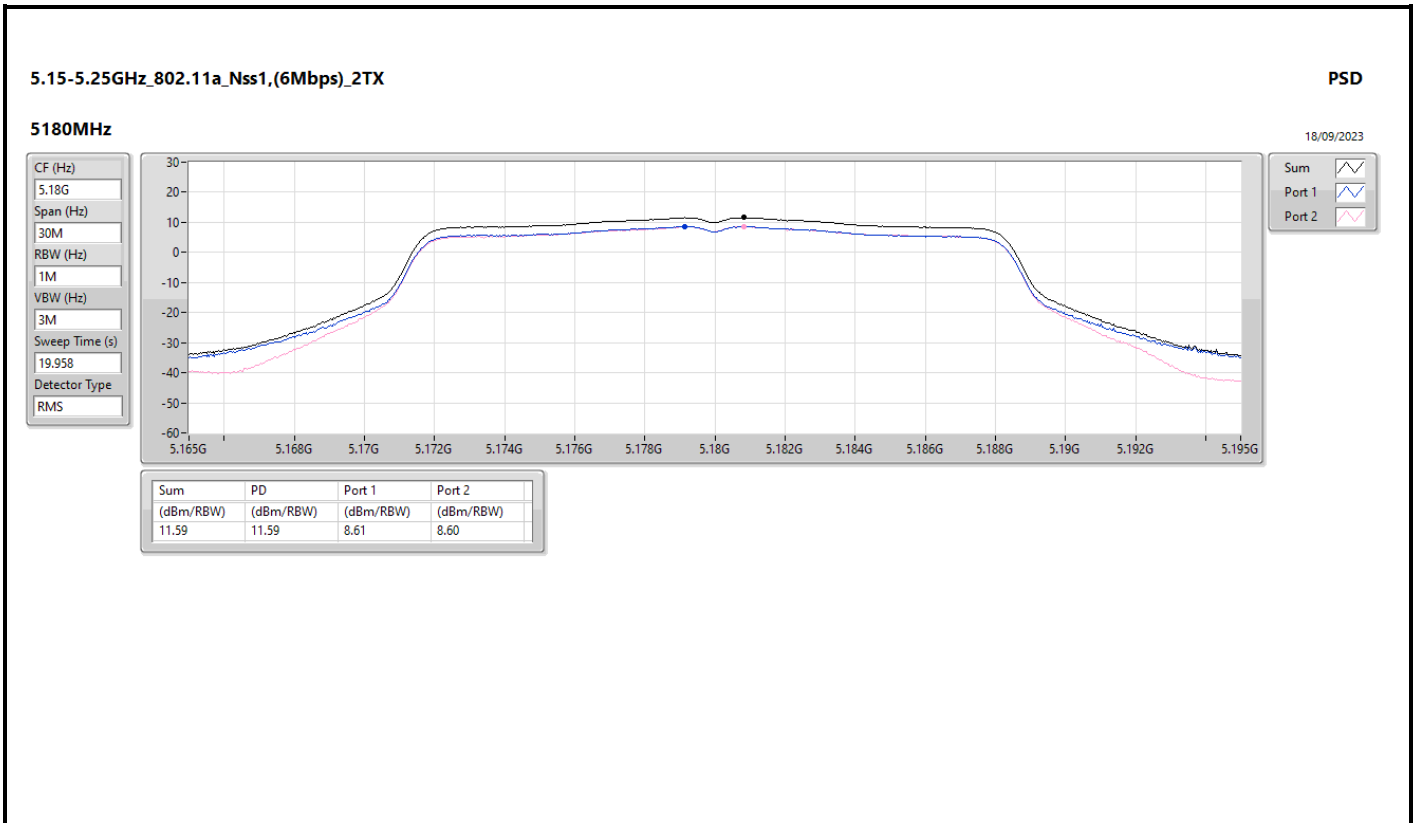
RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

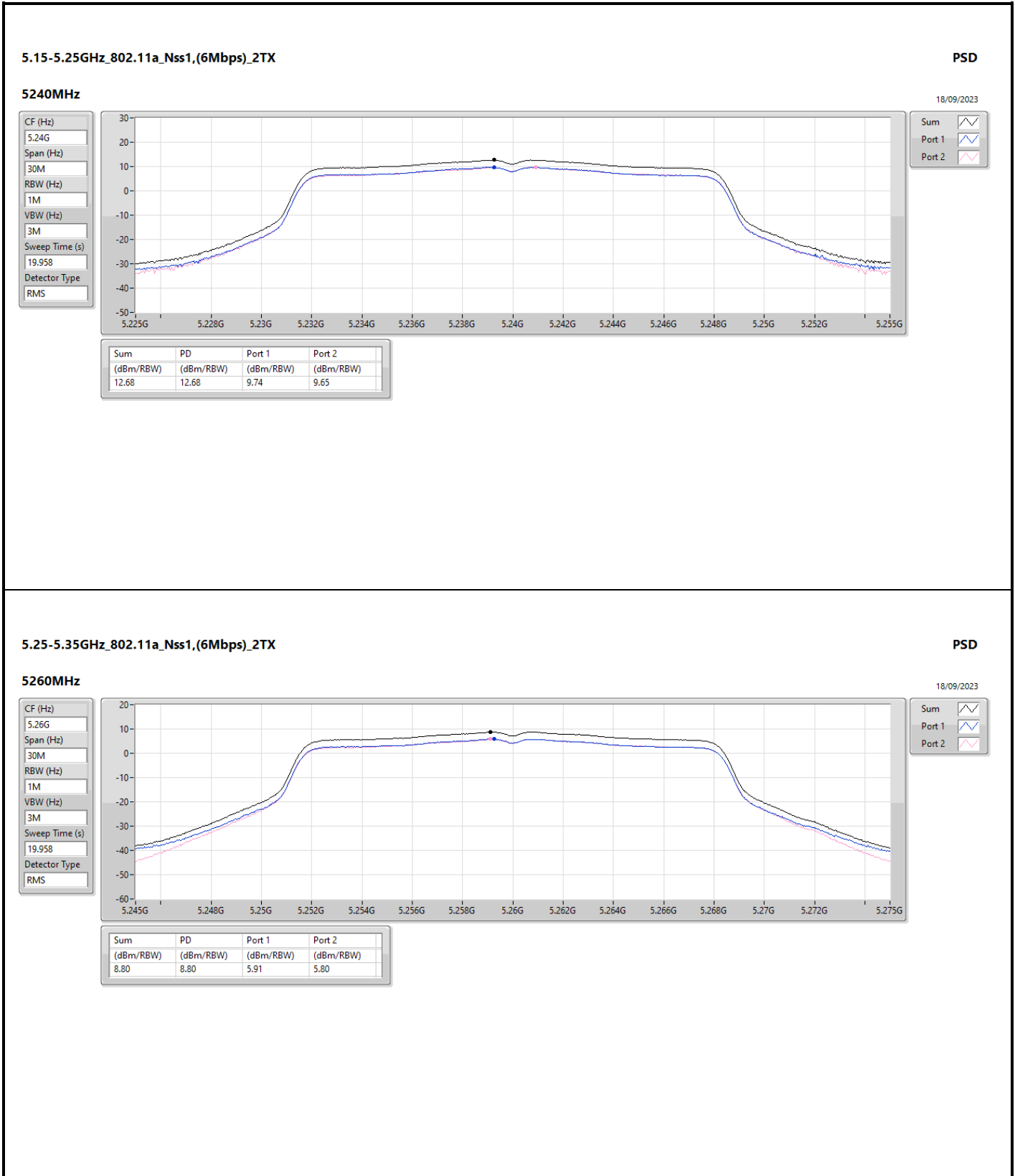


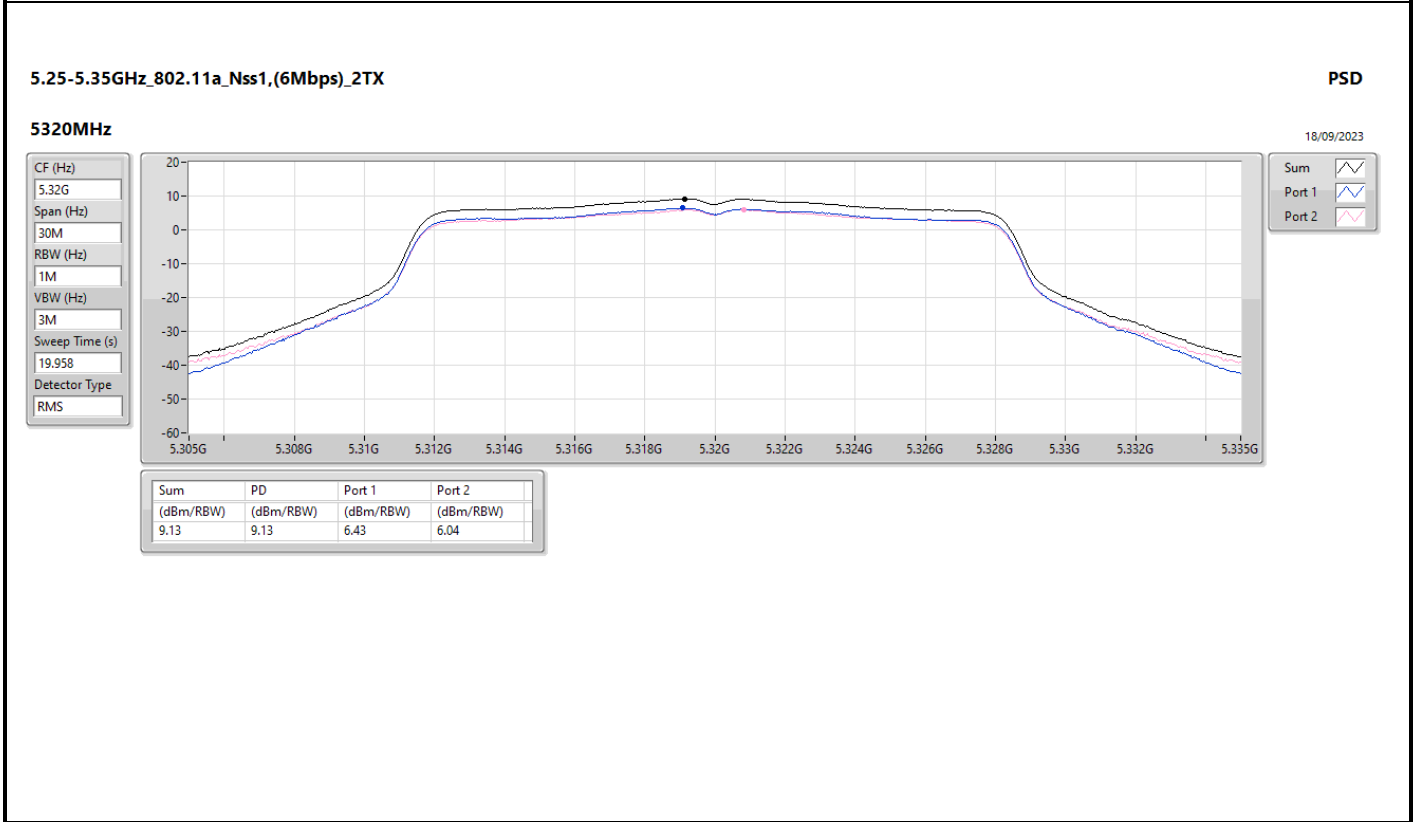
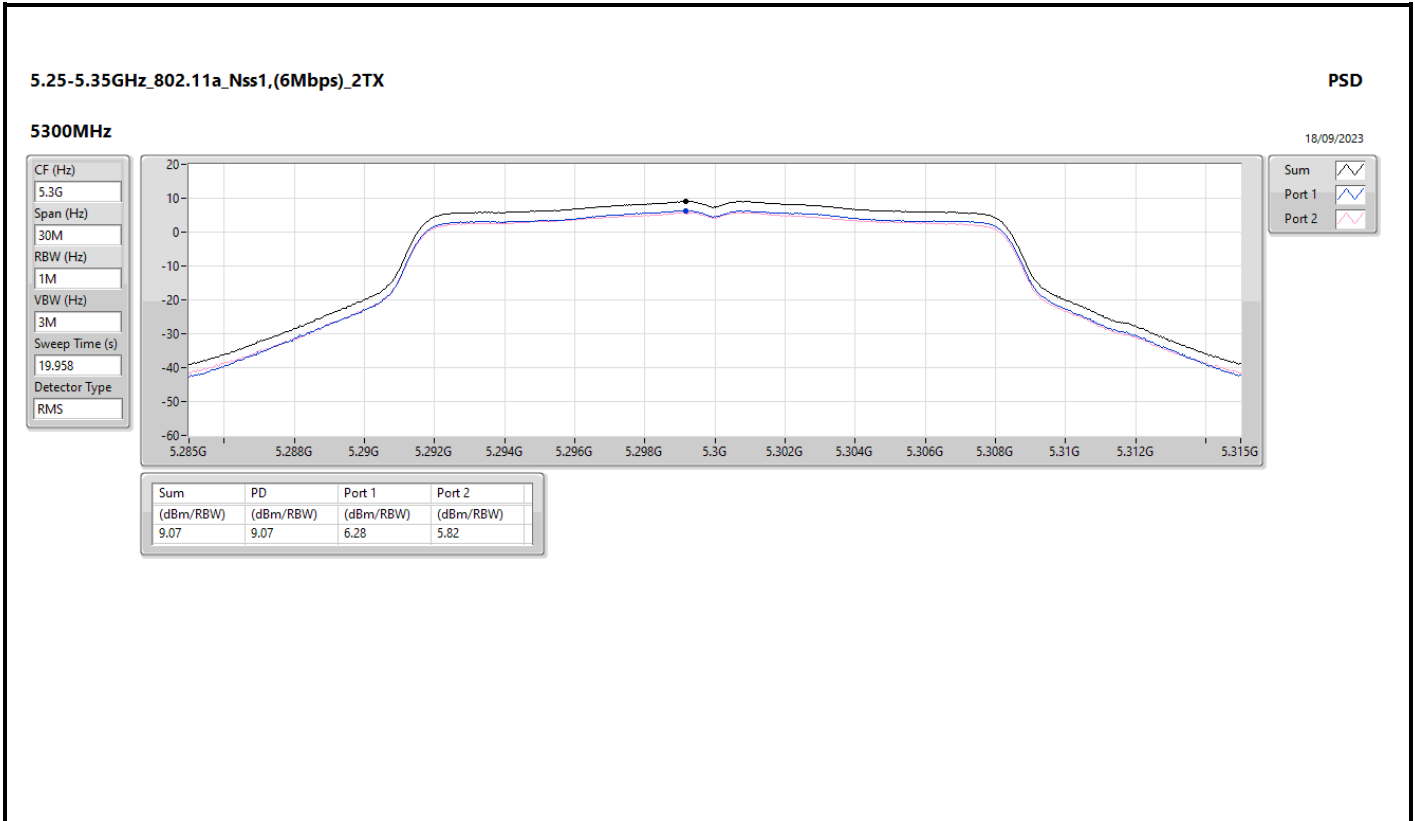
Result

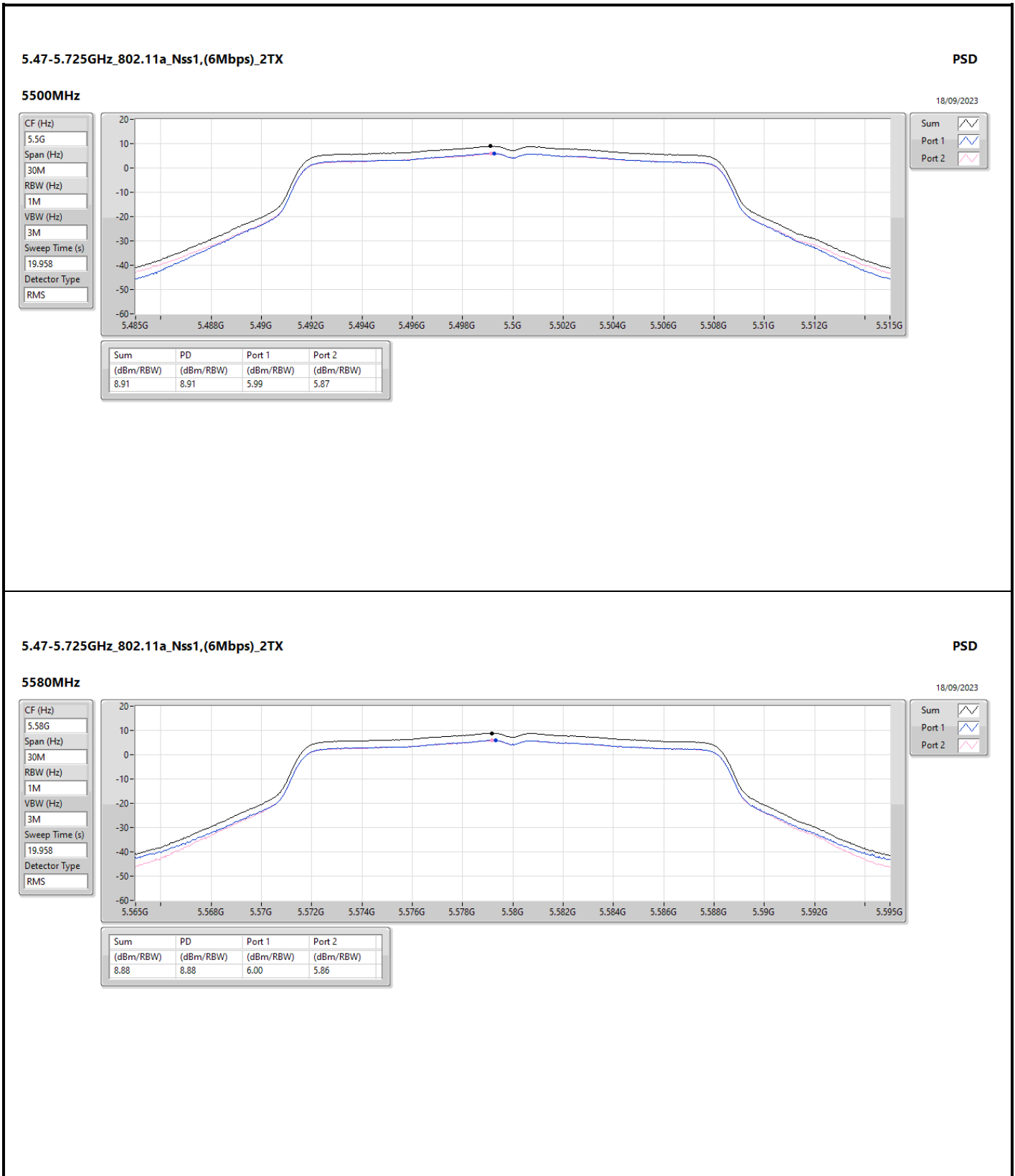
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	7.81	8.61	8.60	11.59	15.19
5200MHz	Pass	7.81	9.94	9.52	12.69	15.19
5240MHz	Pass	7.81	9.74	9.65	12.68	15.19
5260MHz	Pass	7.81	5.91	5.80	8.80	9.19
5300MHz	Pass	7.81	6.28	5.82	9.07	9.19
5320MHz	Pass	7.81	6.43	6.04	9.13	9.19
5500MHz	Pass	7.87	5.99	5.87	8.91	9.13
5580MHz	Pass	7.87	6.00	5.86	8.88	9.13
5700MHz	Pass	7.87	6.17	5.76	8.97	9.13
5745MHz	Pass	7.87	8.49	8.47	11.48	28.13
5785MHz	Pass	7.87	8.50	7.95	11.16	28.13
5825MHz	Pass	7.87	8.85	8.49	11.64	28.13
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	7.81	7.32	7.71	10.42	15.19
5200MHz	Pass	7.81	8.78	8.65	11.65	15.19
5240MHz	Pass	7.81	8.84	8.87	11.78	15.19
5260MHz	Pass	7.81	6.25	6.14	9.12	9.19
5300MHz	Pass	7.81	6.07	5.60	8.76	9.19
5320MHz	Pass	7.81	5.79	5.50	8.61	9.19
5500MHz	Pass	7.87	6.22	6.01	9.08	9.13
5580MHz	Pass	7.87	5.69	5.64	8.63	9.13
5700MHz	Pass	7.87	5.96	5.56	8.76	9.13
5745MHz	Pass	7.87	7.73	8.26	10.98	28.13
5785MHz	Pass	7.87	7.31	7.14	10.23	28.13
5825MHz	Pass	7.87	8.19	8.28	11.20	28.13
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	7.81	1.83	2.04	4.95	15.19
5230MHz	Pass	7.81	5.64	5.34	8.48	15.19
5270MHz	Pass	7.81	5.78	5.94	8.76	9.19
5310MHz	Pass	7.81	4.75	4.46	7.60	9.19
5510MHz	Pass	7.87	4.20	3.93	7.08	9.13
5550MHz	Pass	7.87	6.23	6.07	9.08	9.13
5670MHz	Pass	7.87	4.52	4.63	7.57	9.13
5755MHz	Pass	7.87	5.38	5.90	8.57	28.13
5795MHz	Pass	7.87	5.99	5.44	8.68	28.13
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	7.81	0.84	0.63	3.70	15.19
5290MHz	Pass	7.81	1.99	1.97	4.96	9.19
5530MHz	Pass	7.87	1.72	1.08	4.41	9.13
5610MHz	Pass	7.87	3.11	2.68	5.90	9.13
5775MHz	Pass	7.87	2.44	3.14	5.81	28.13
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	7.81	-2.12	-2.30	0.77	15.19
5250MHz Straddle 5.25-5.35GHz	Pass	7.81	-1.85	-1.94	1.09	9.19
5570MHz	Pass	7.87	-1.96	-1.99	0.99	9.13

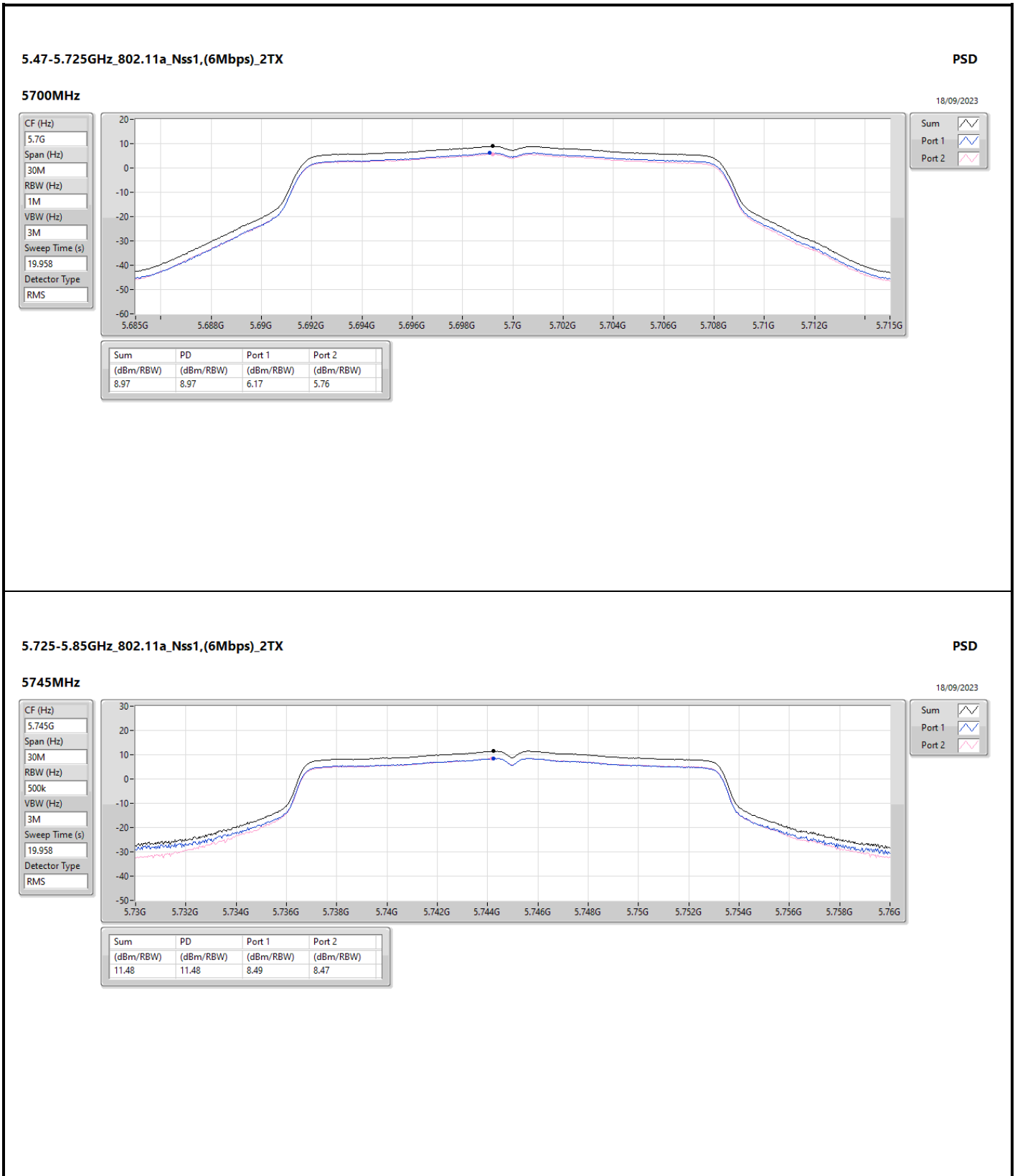
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

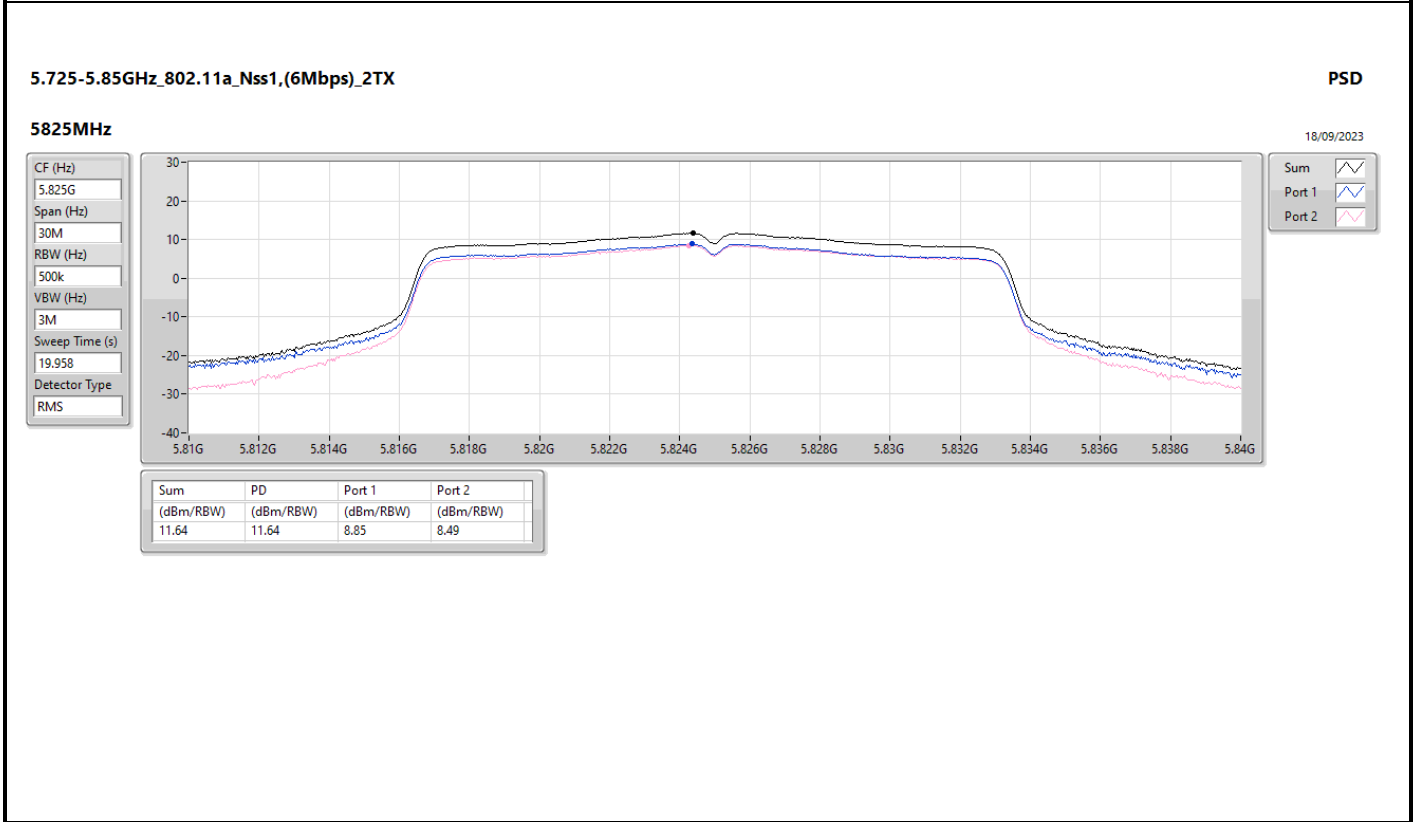
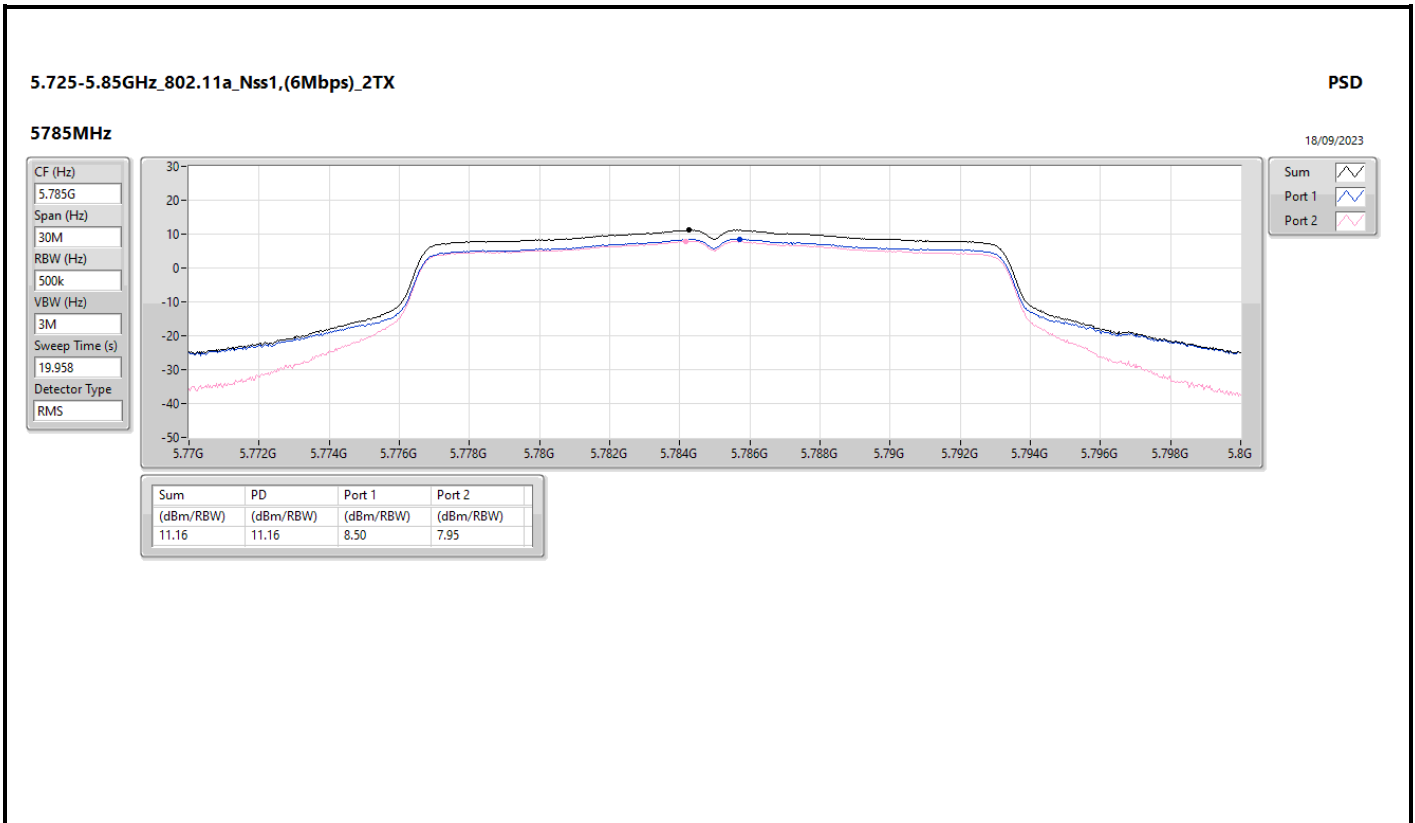


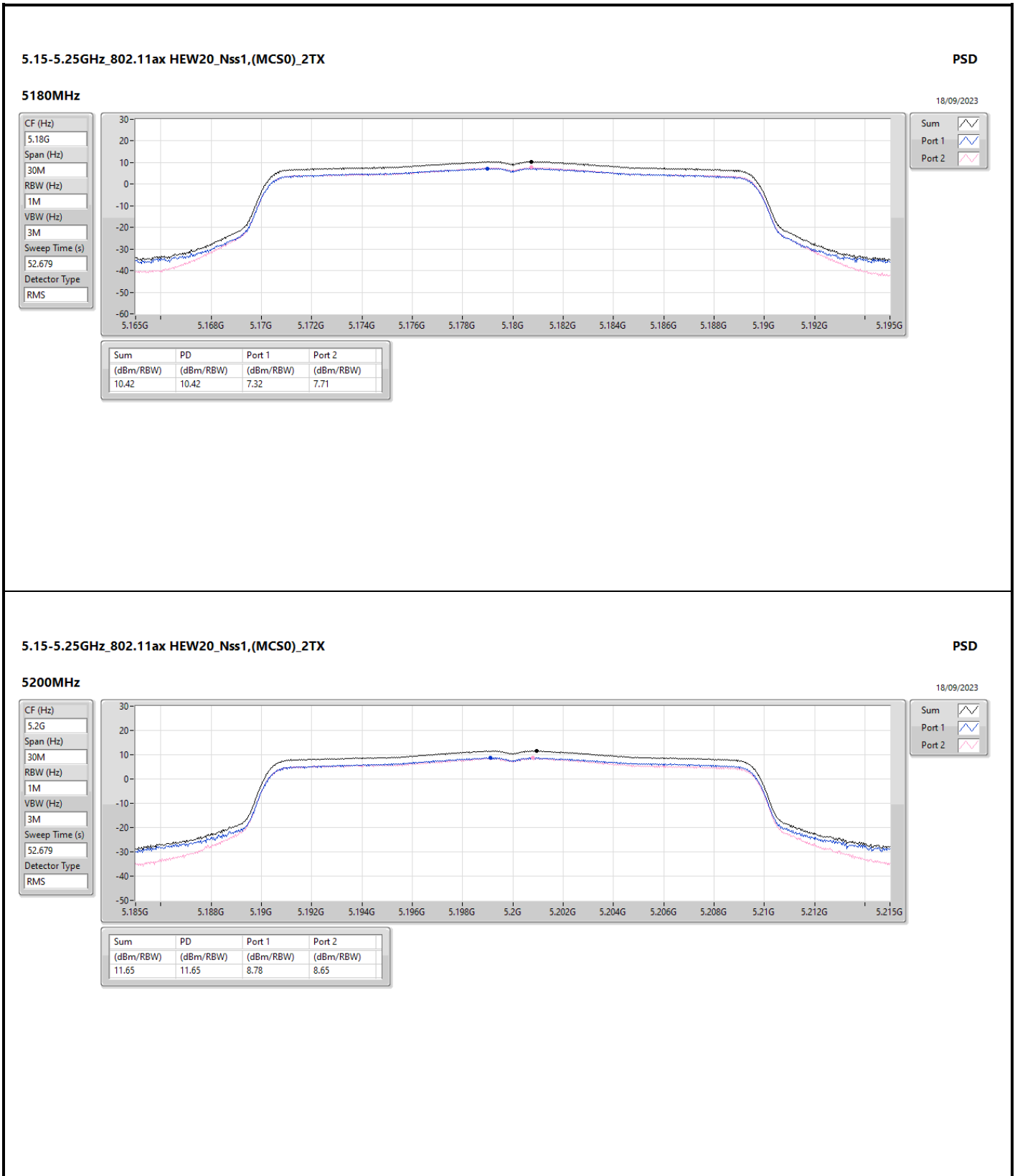


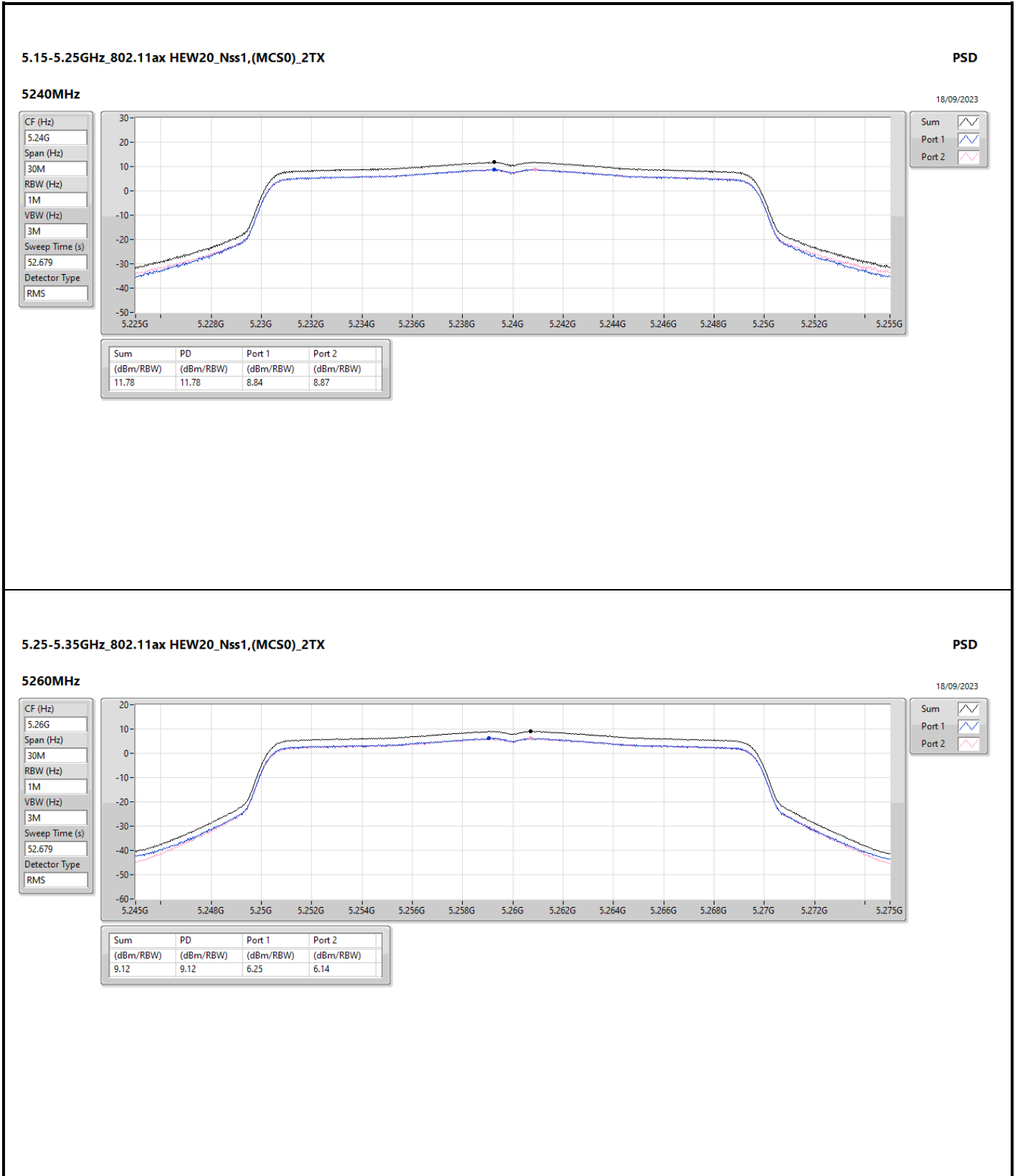


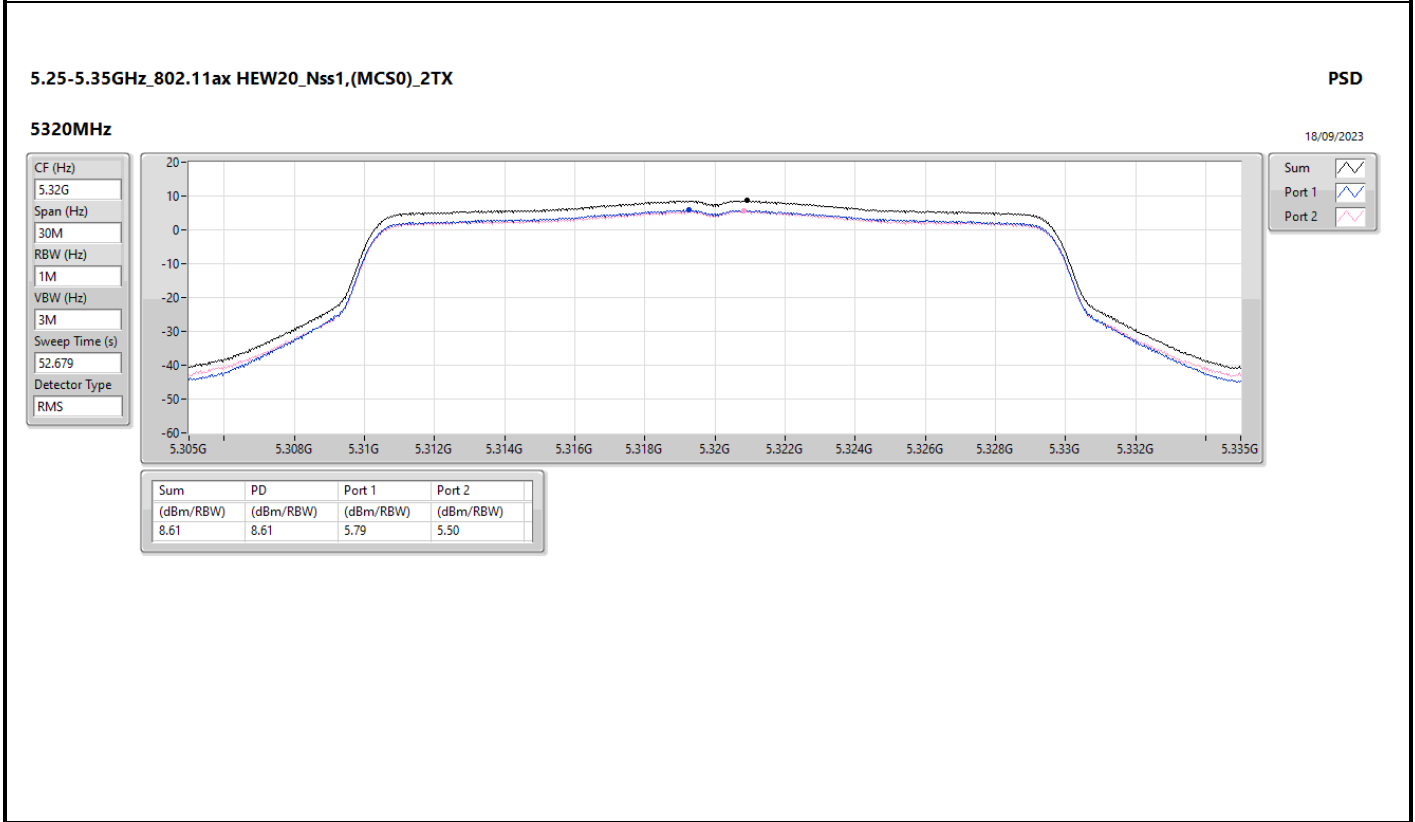
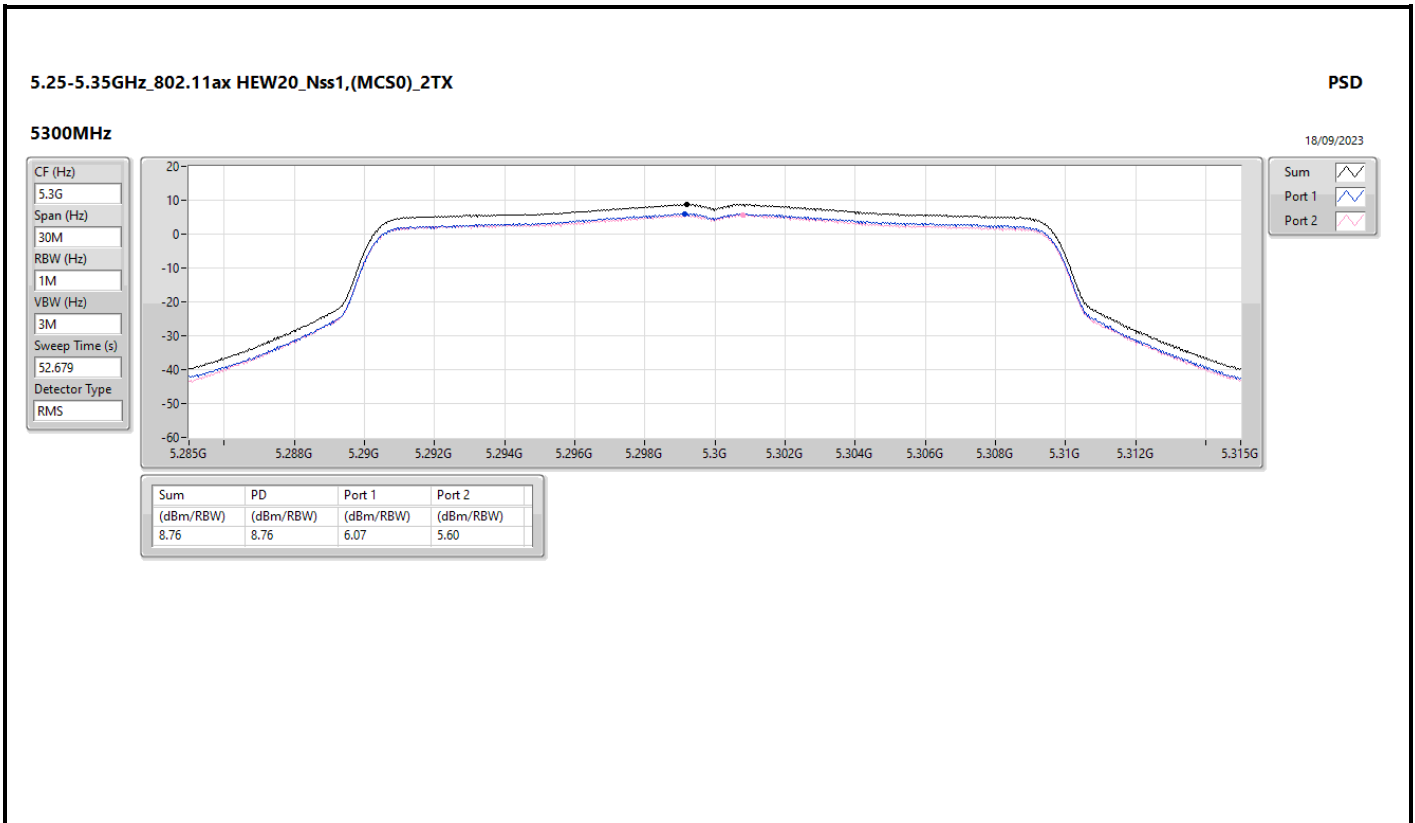


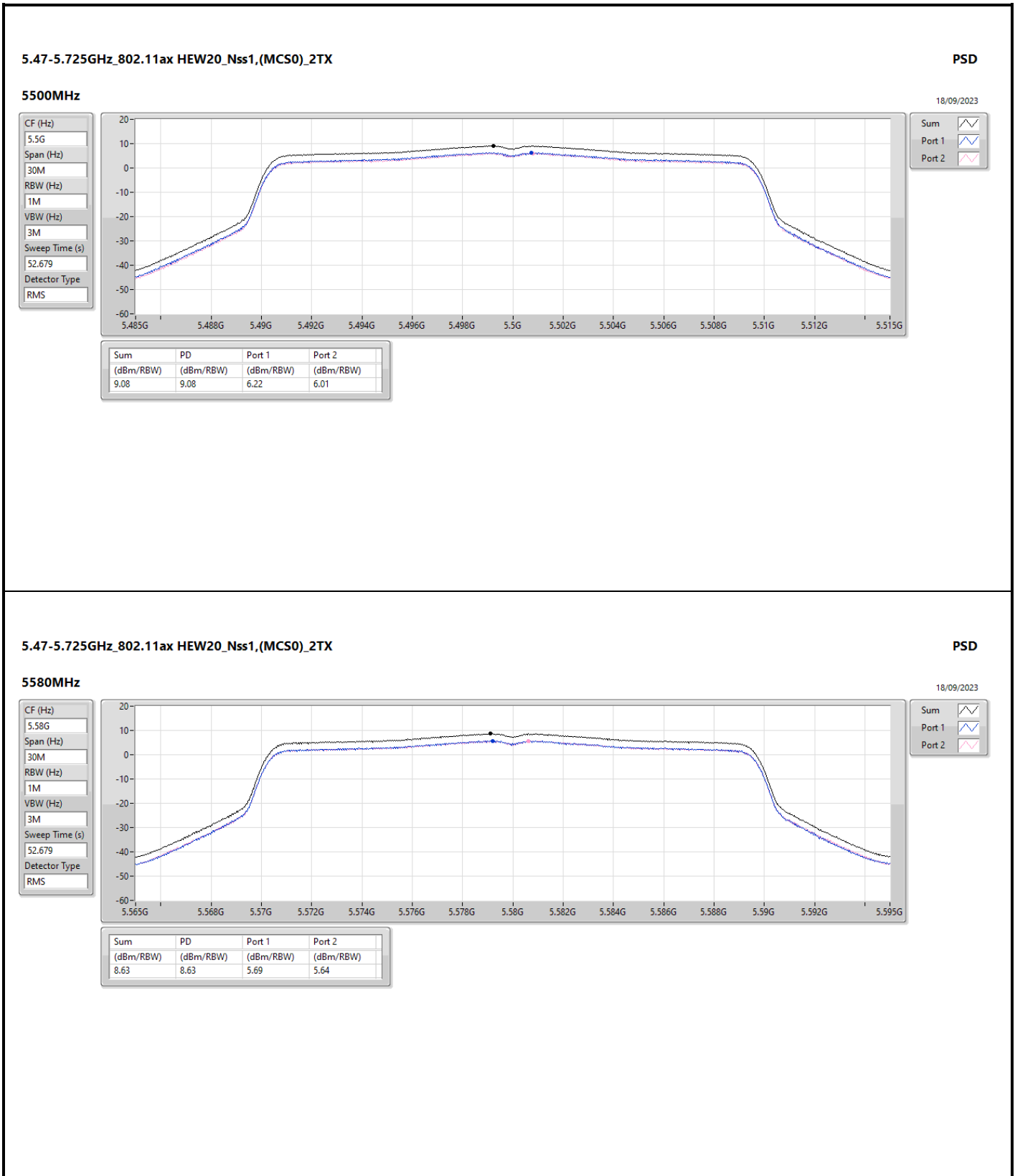


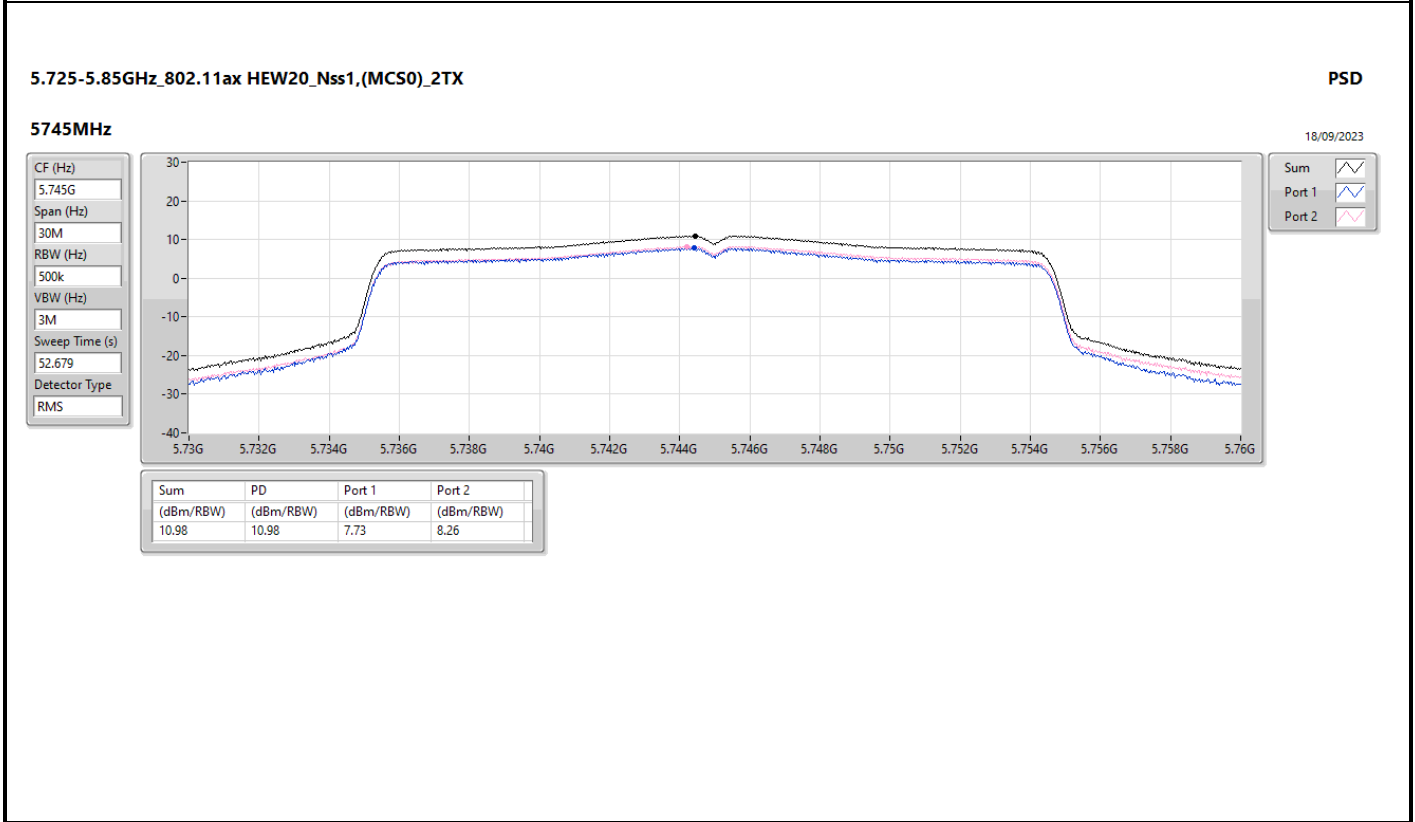
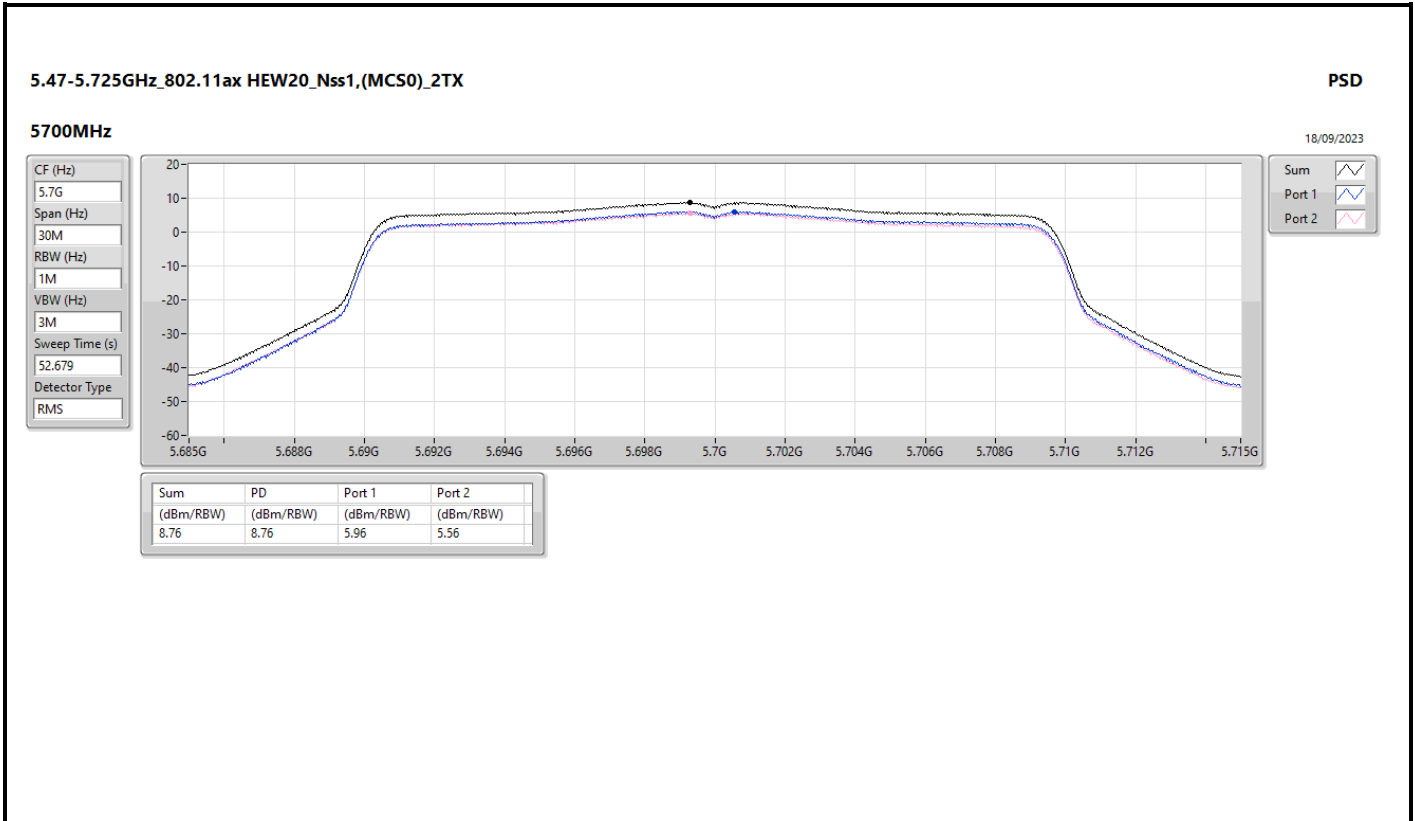


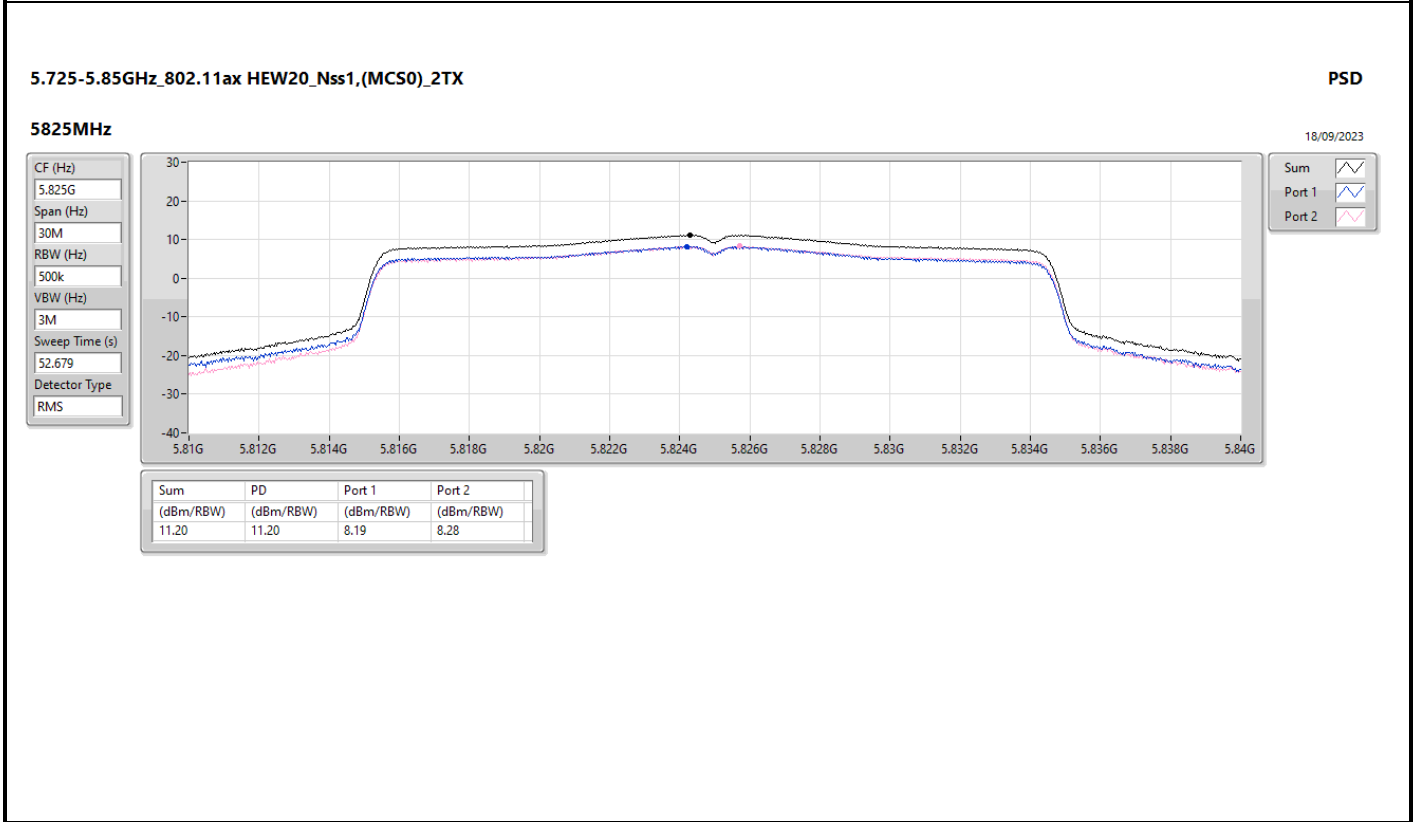
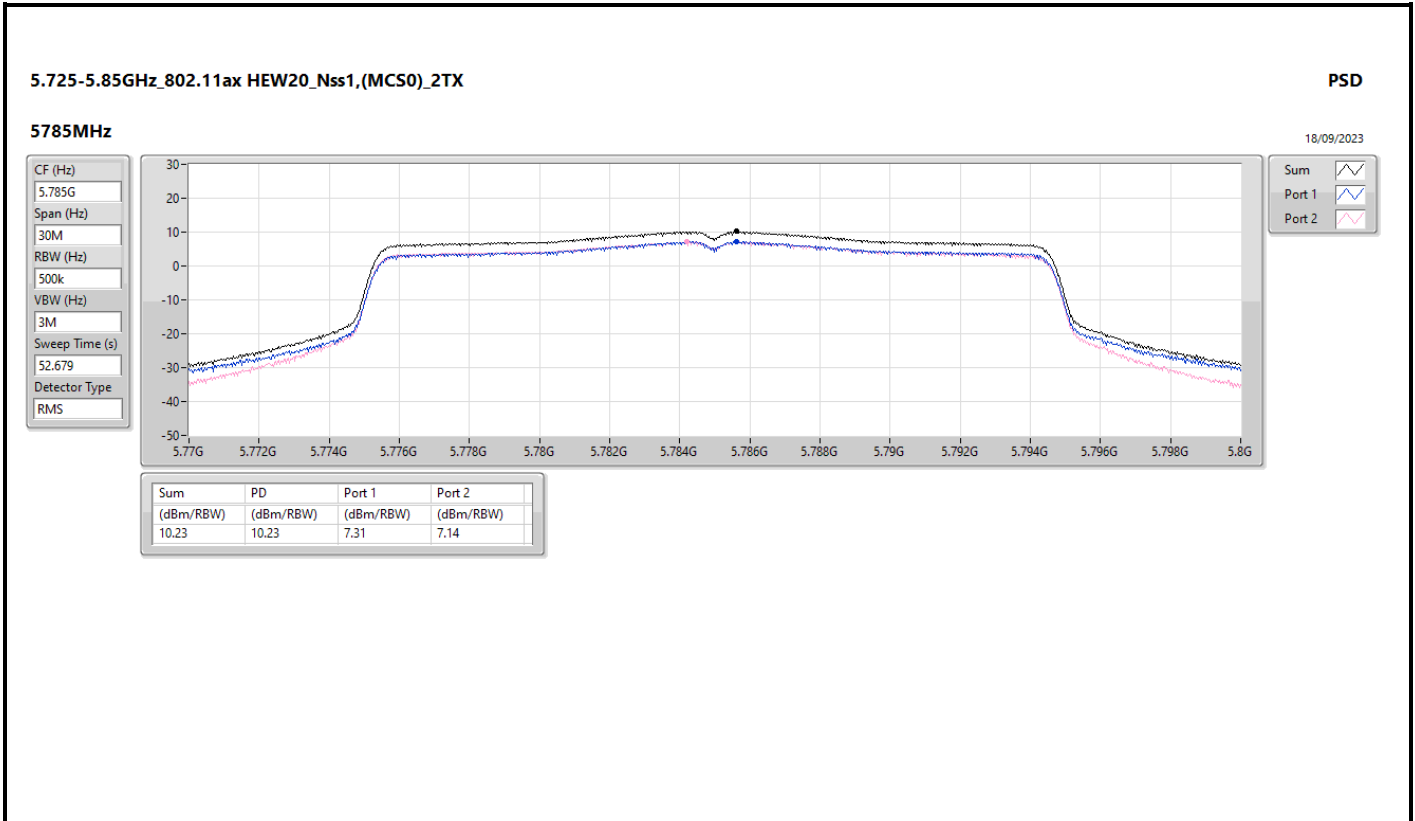


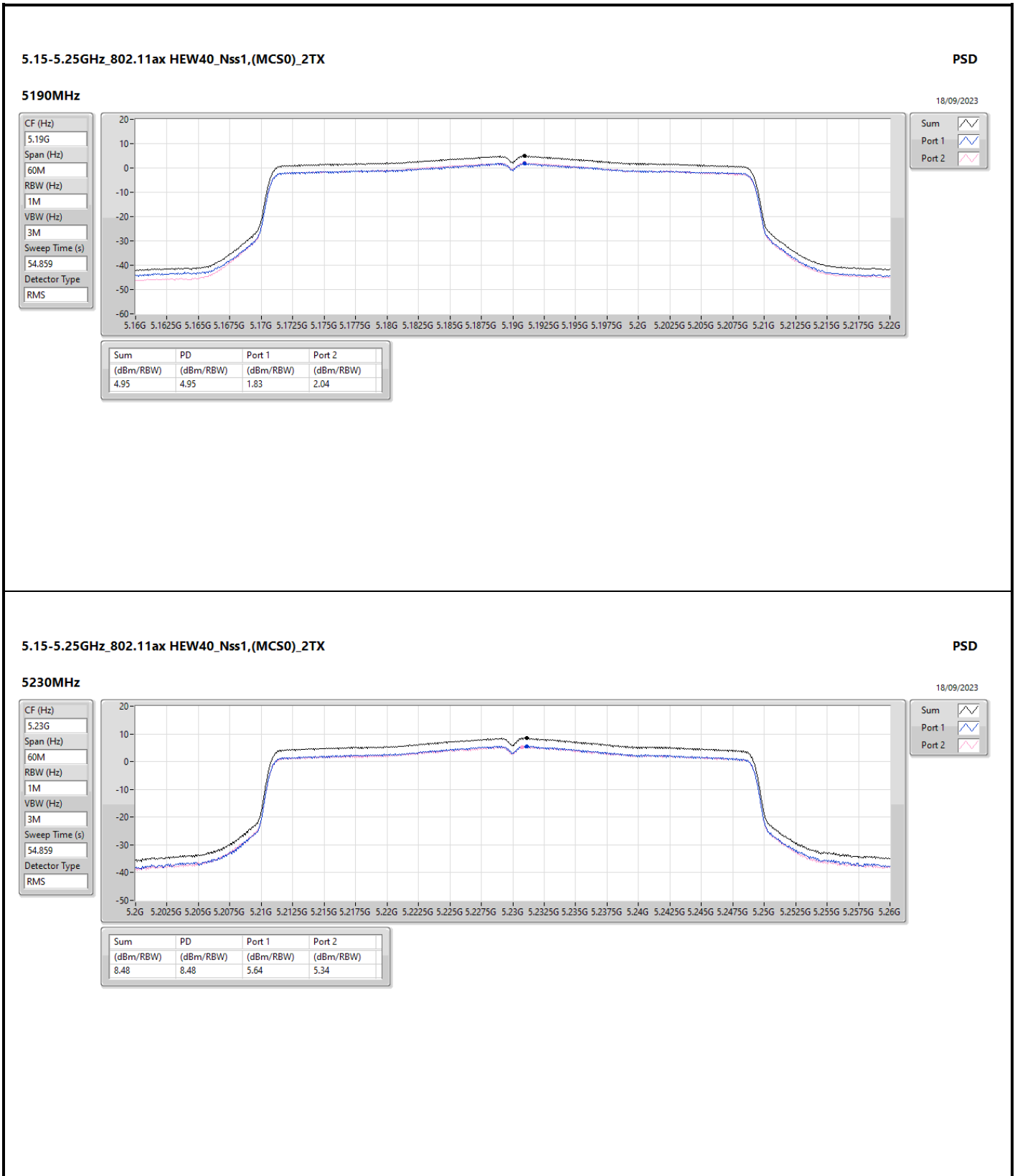


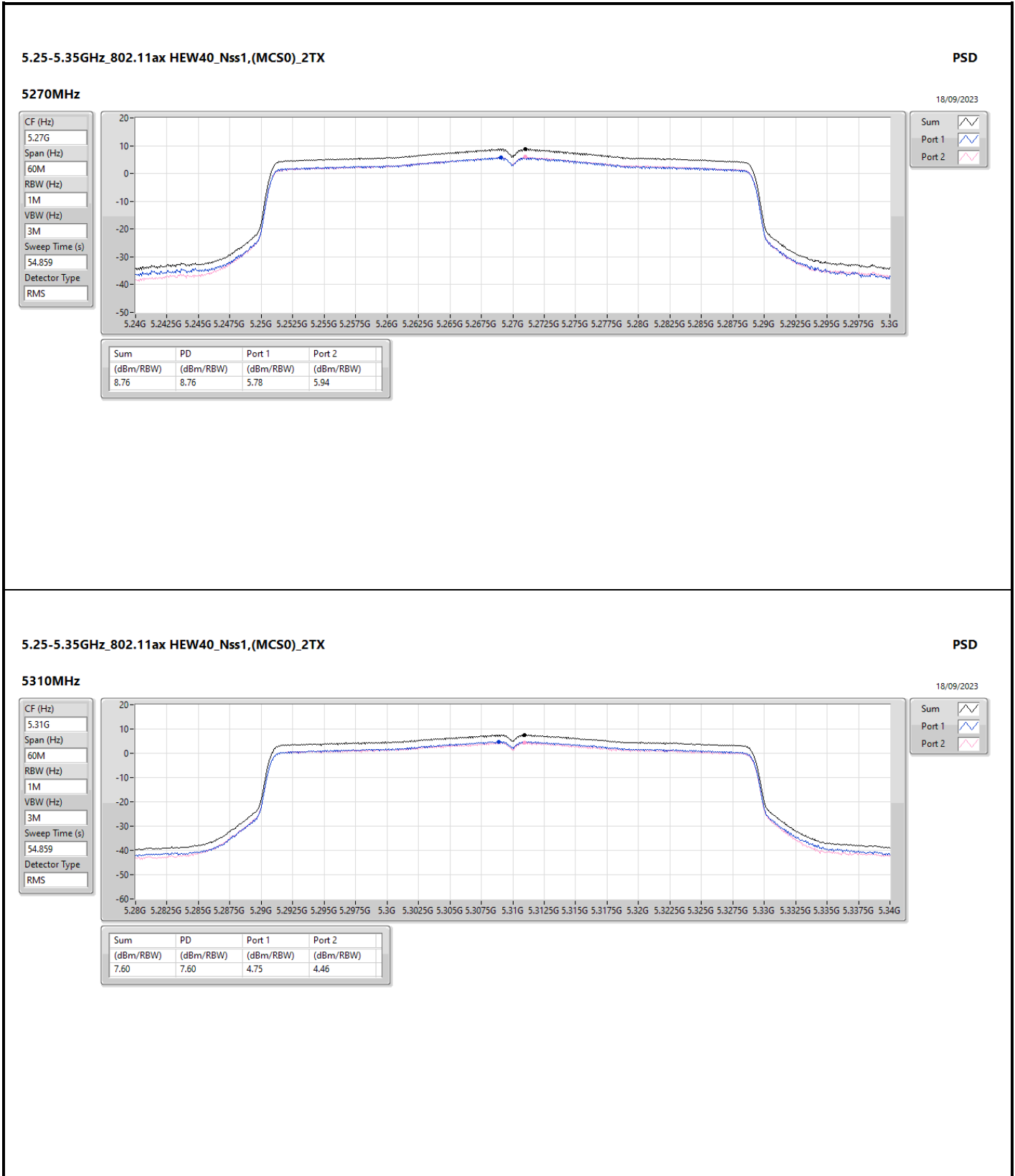


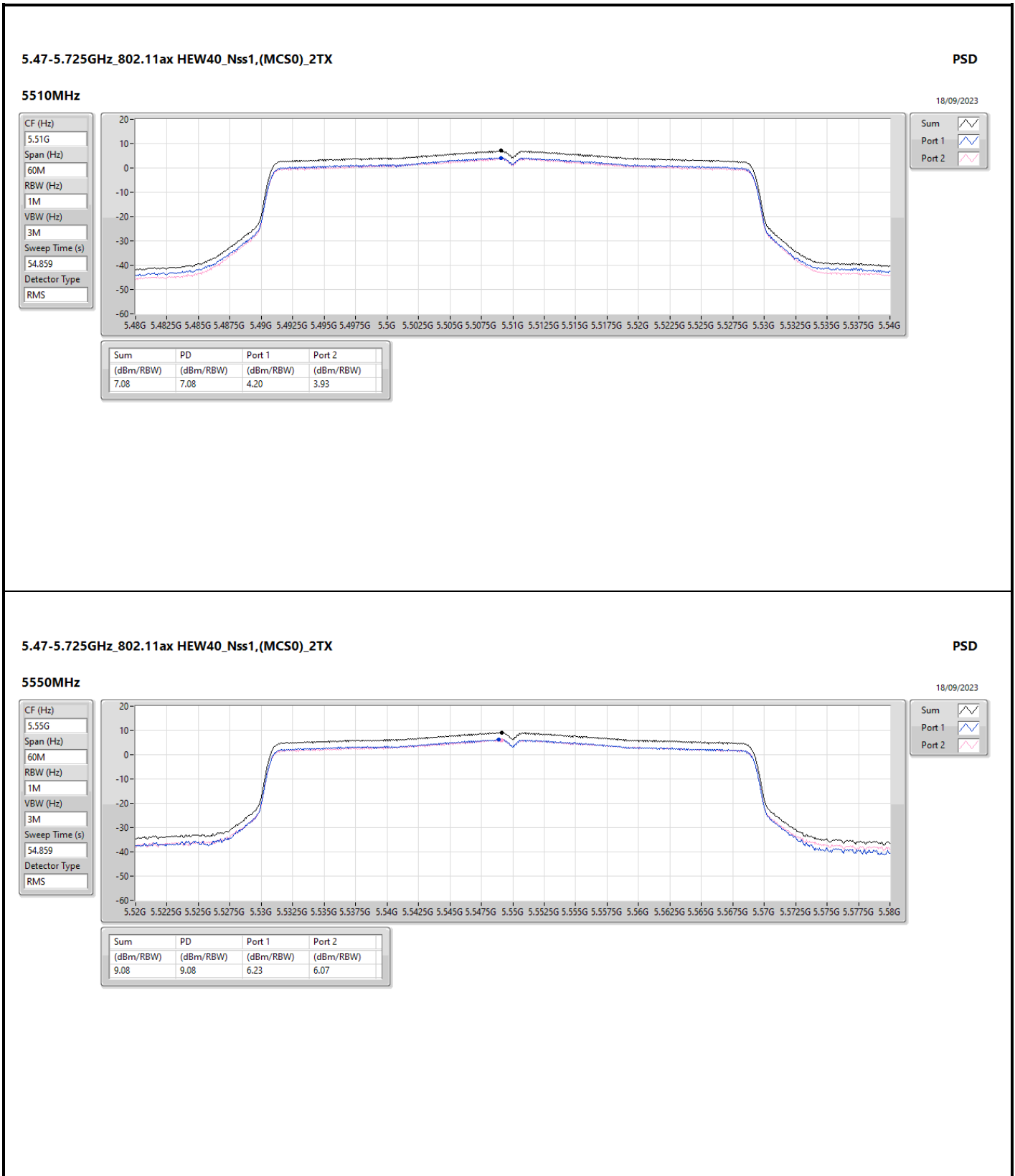


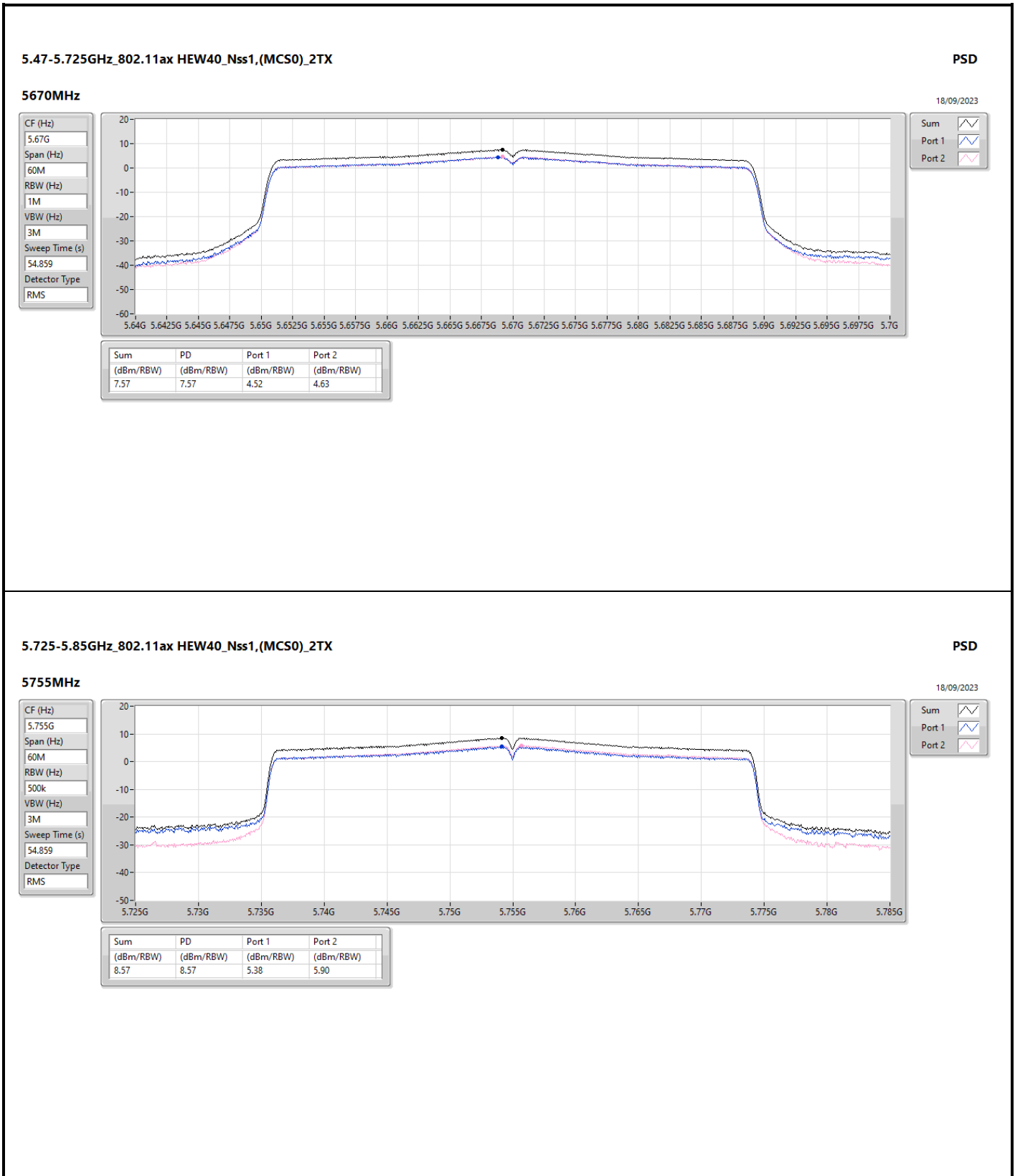


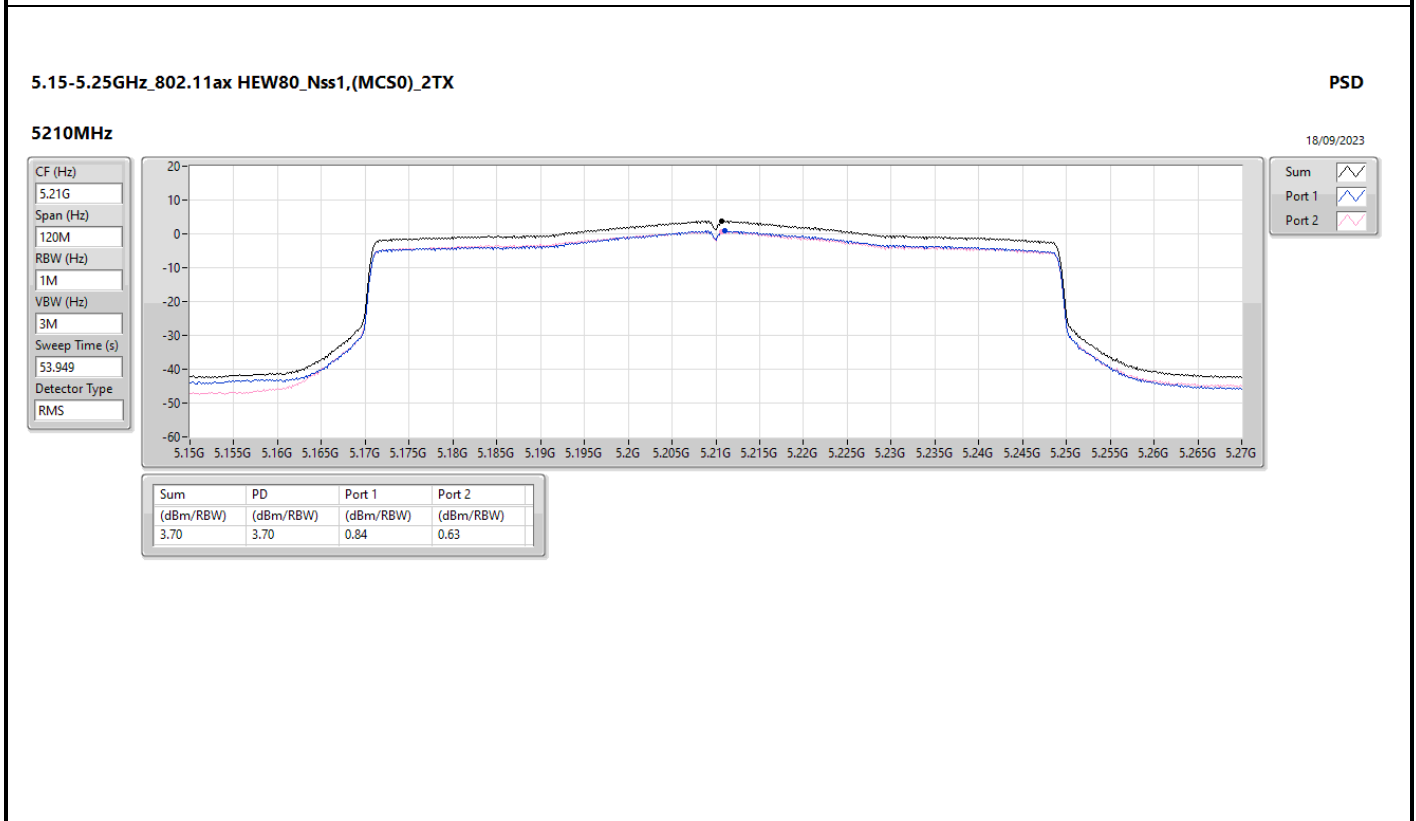
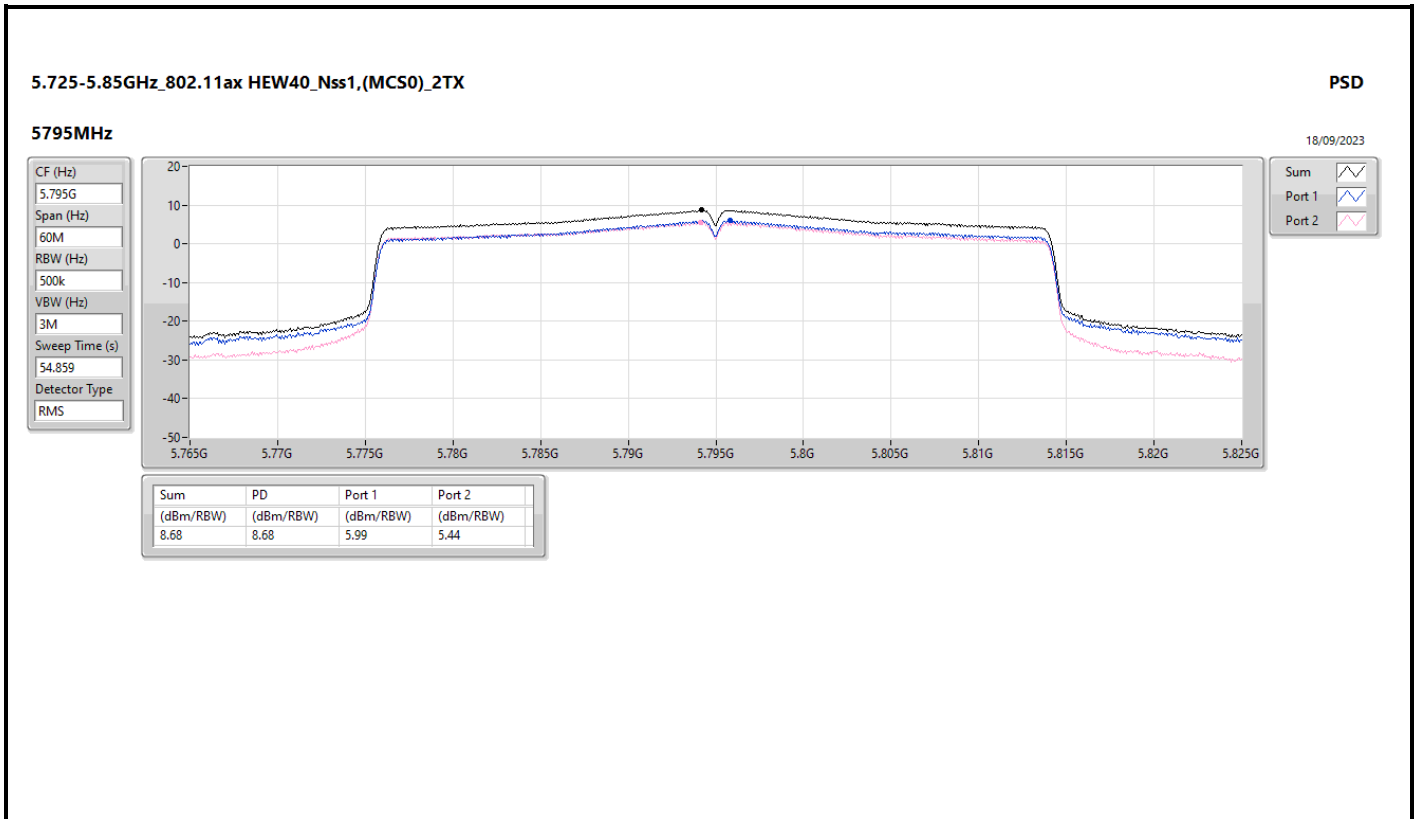


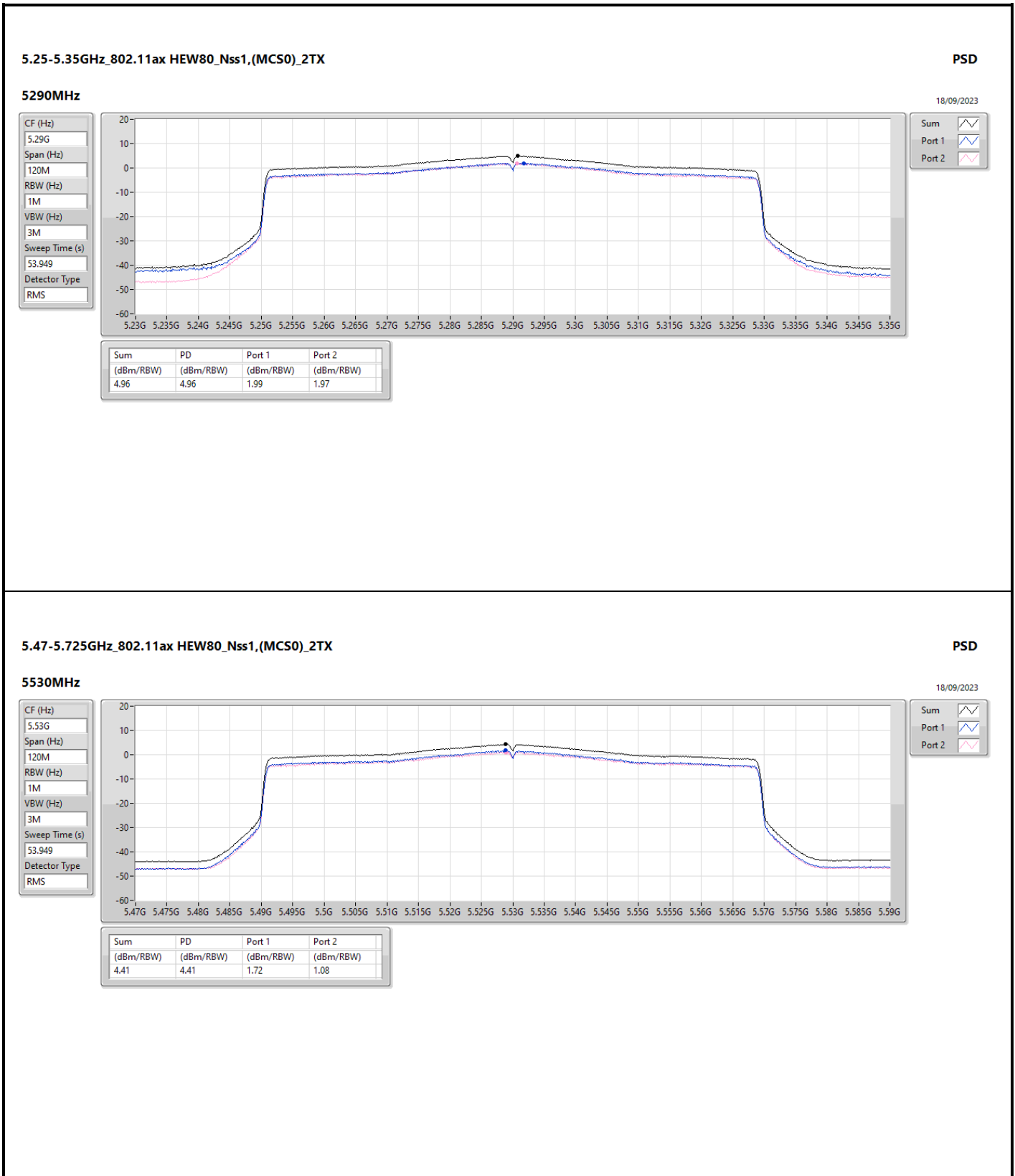


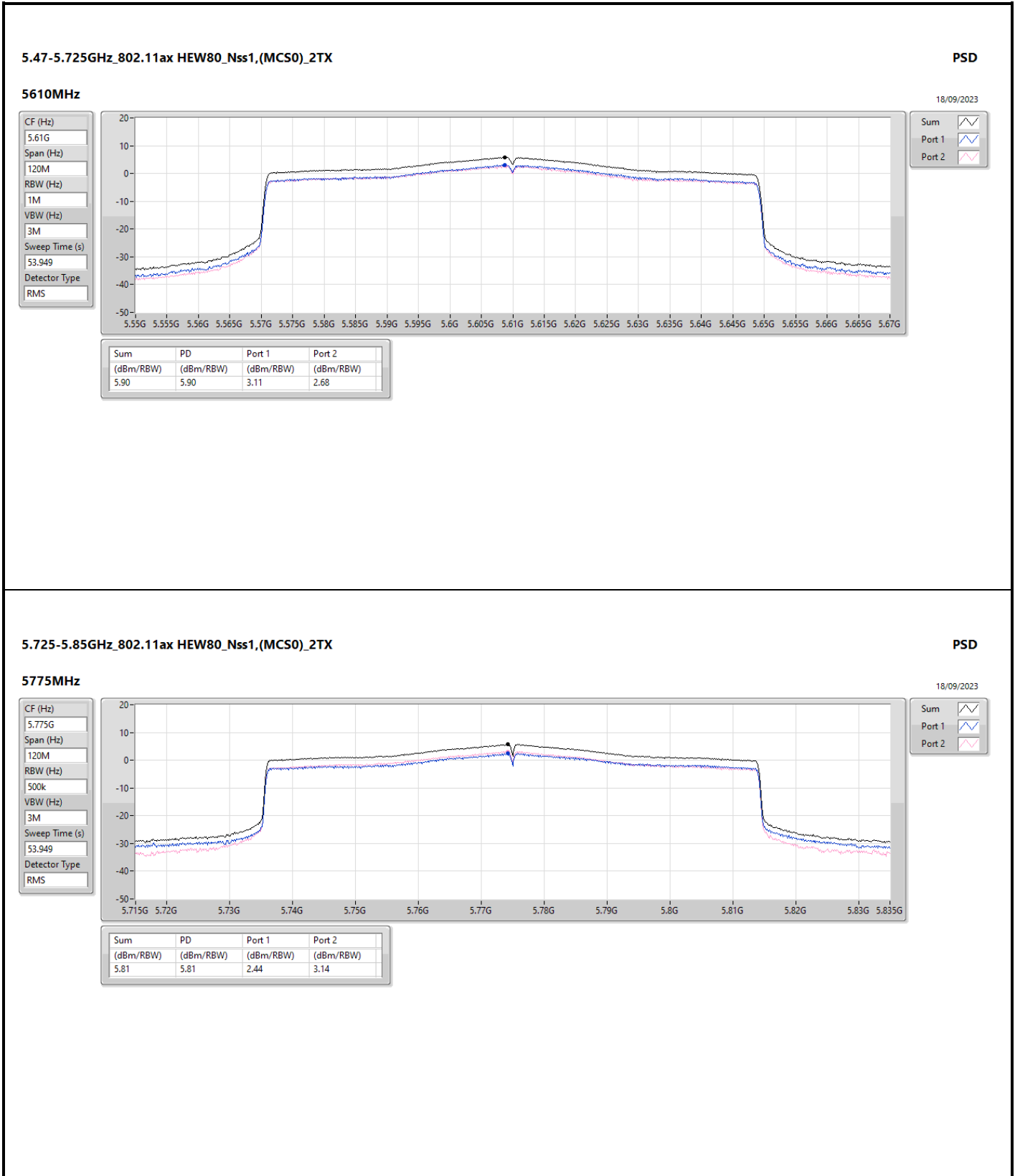


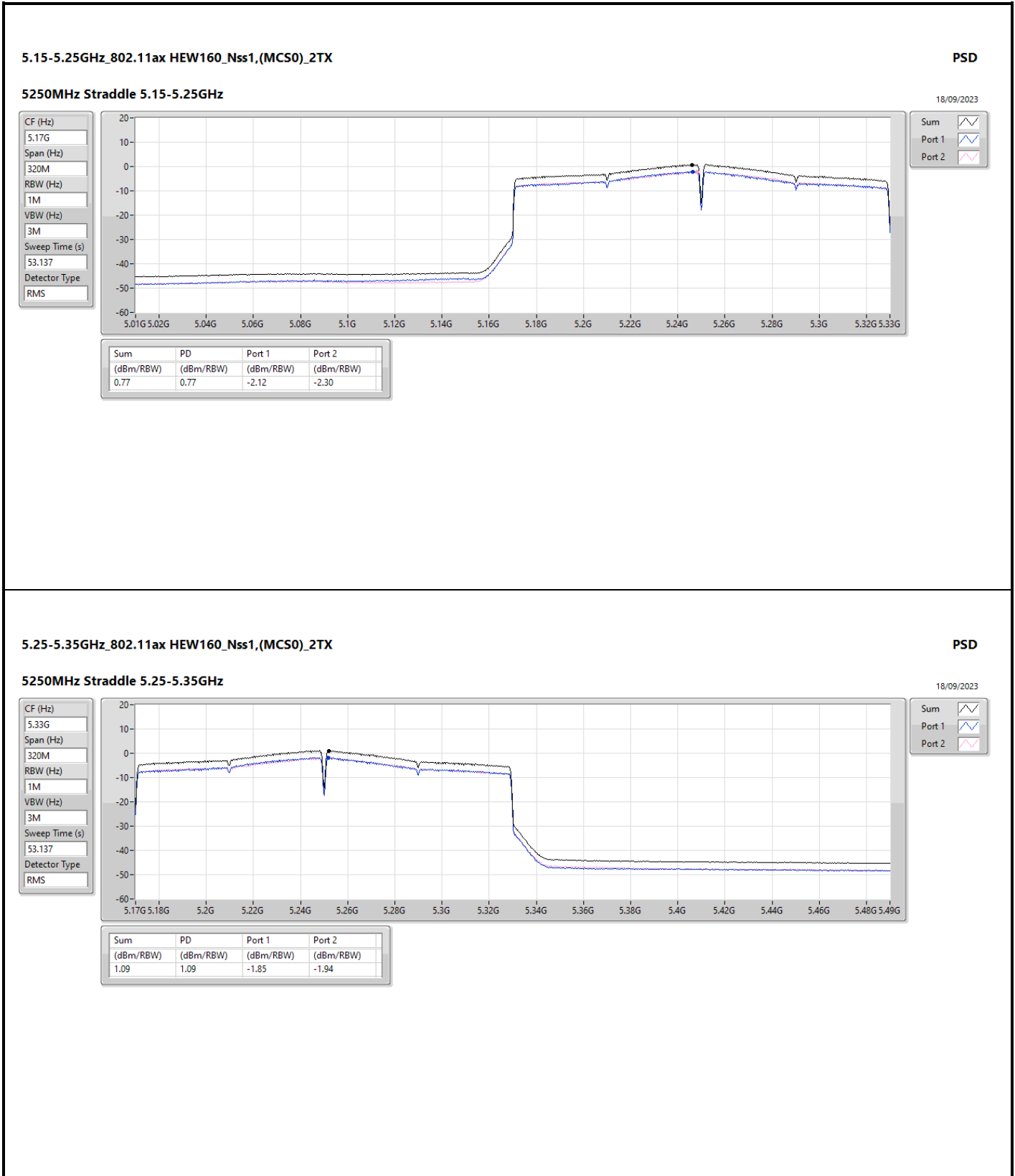


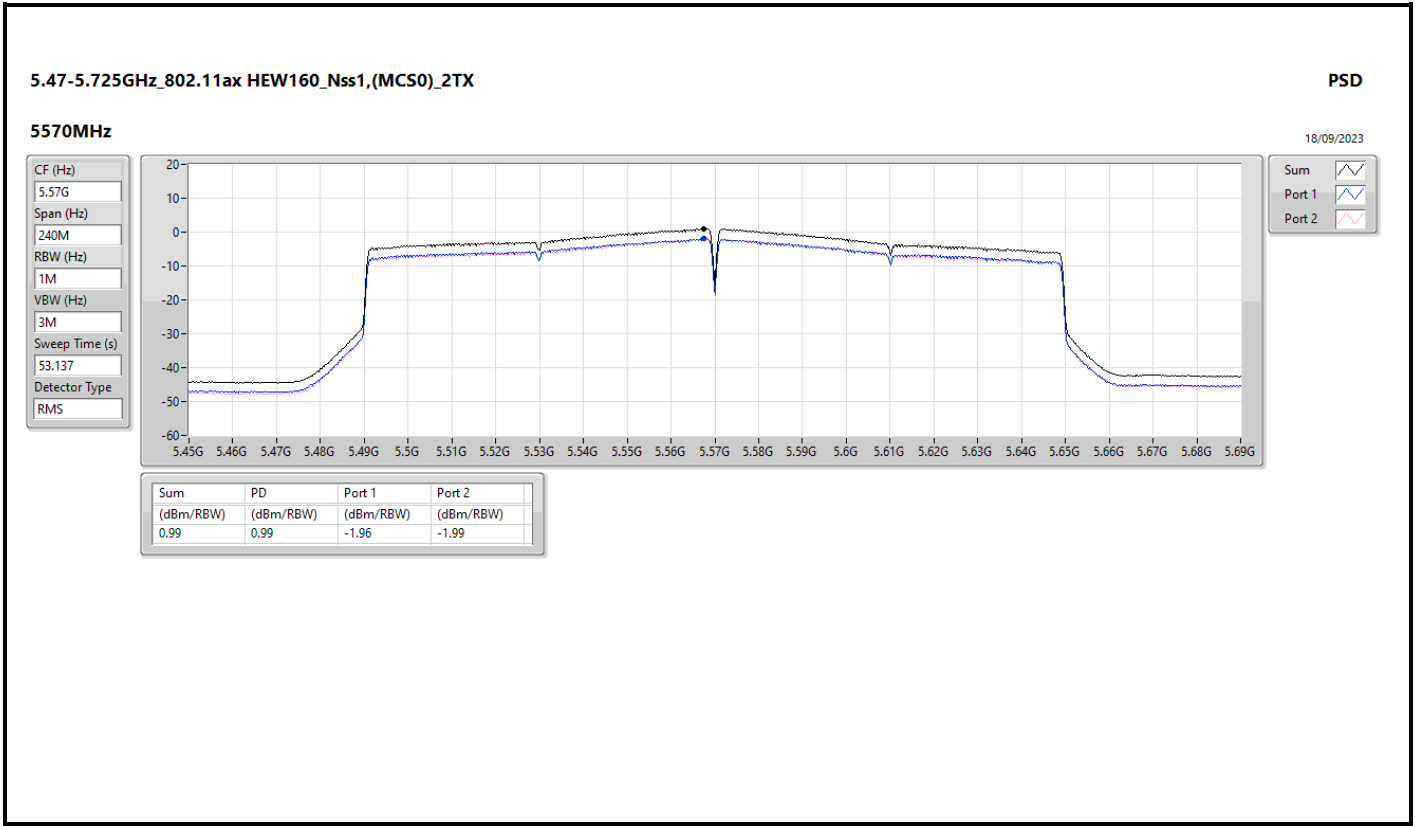














Summary

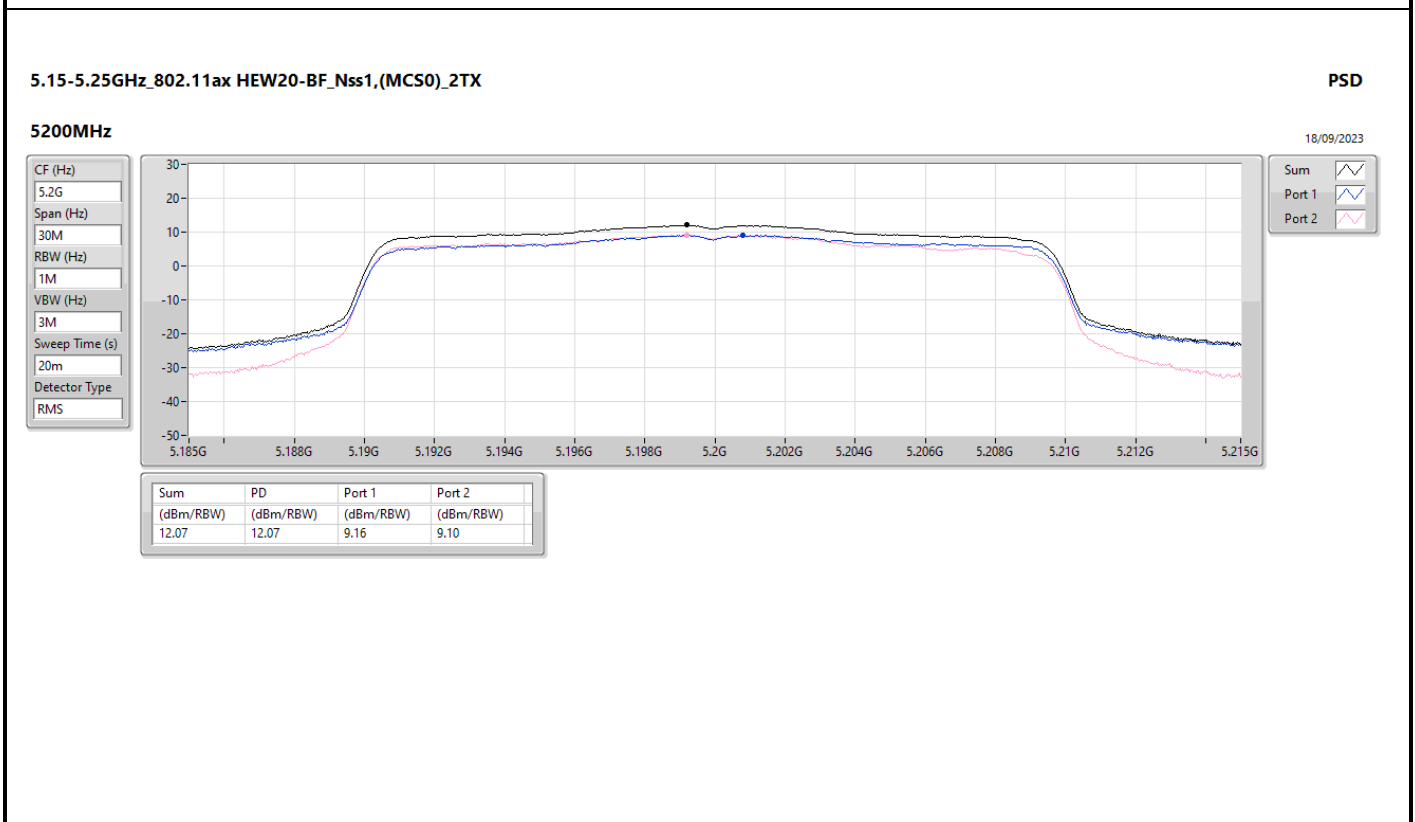
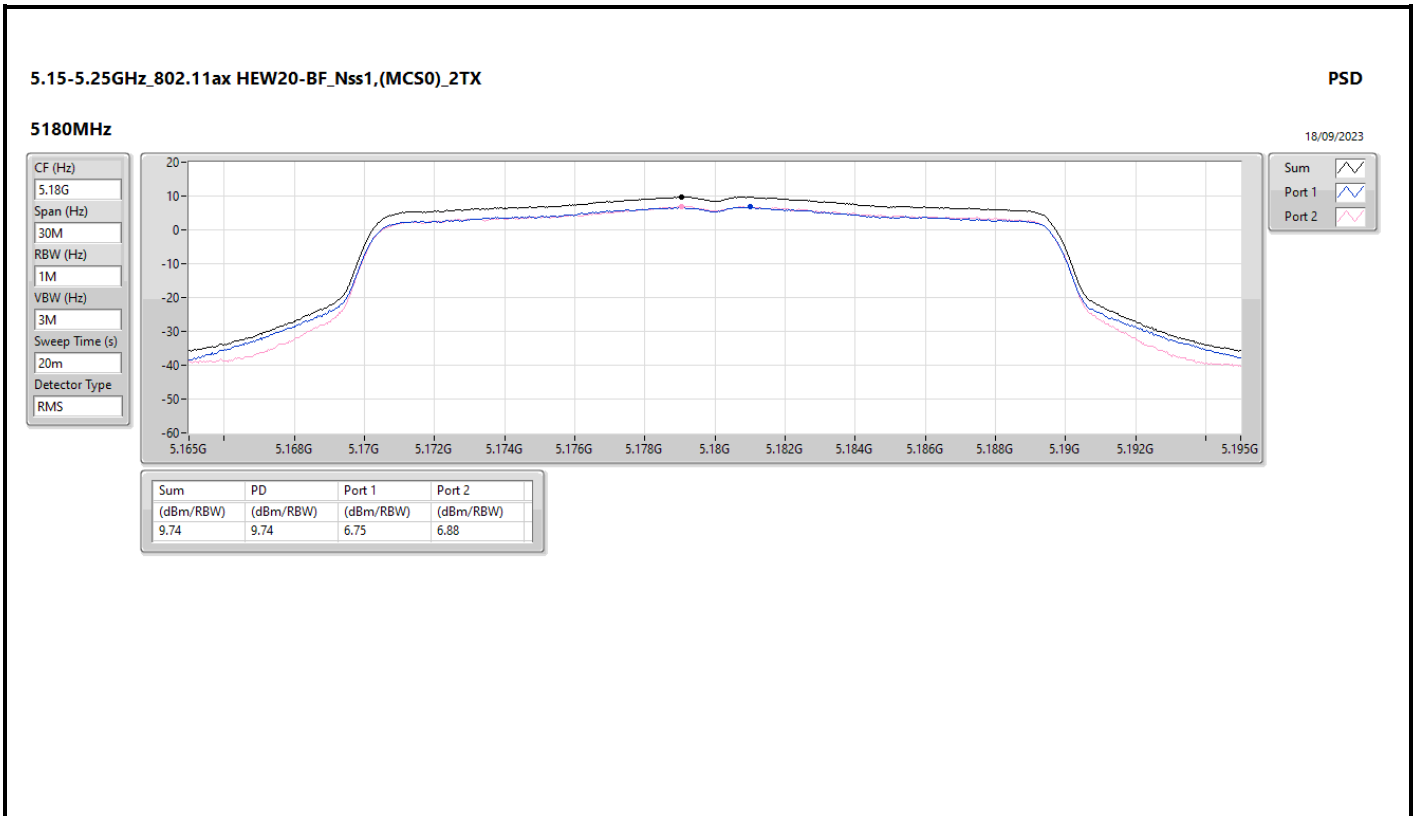
Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	14.07
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	9.75
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	2.52
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-2.98
5.25-5.35GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	8.66
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	7.77
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	2.79
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-2.89
5.47-5.725GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	8.86
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	7.75
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	5.08
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-2.16
5.725-5.85GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	14.16
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	10.49
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	4.31

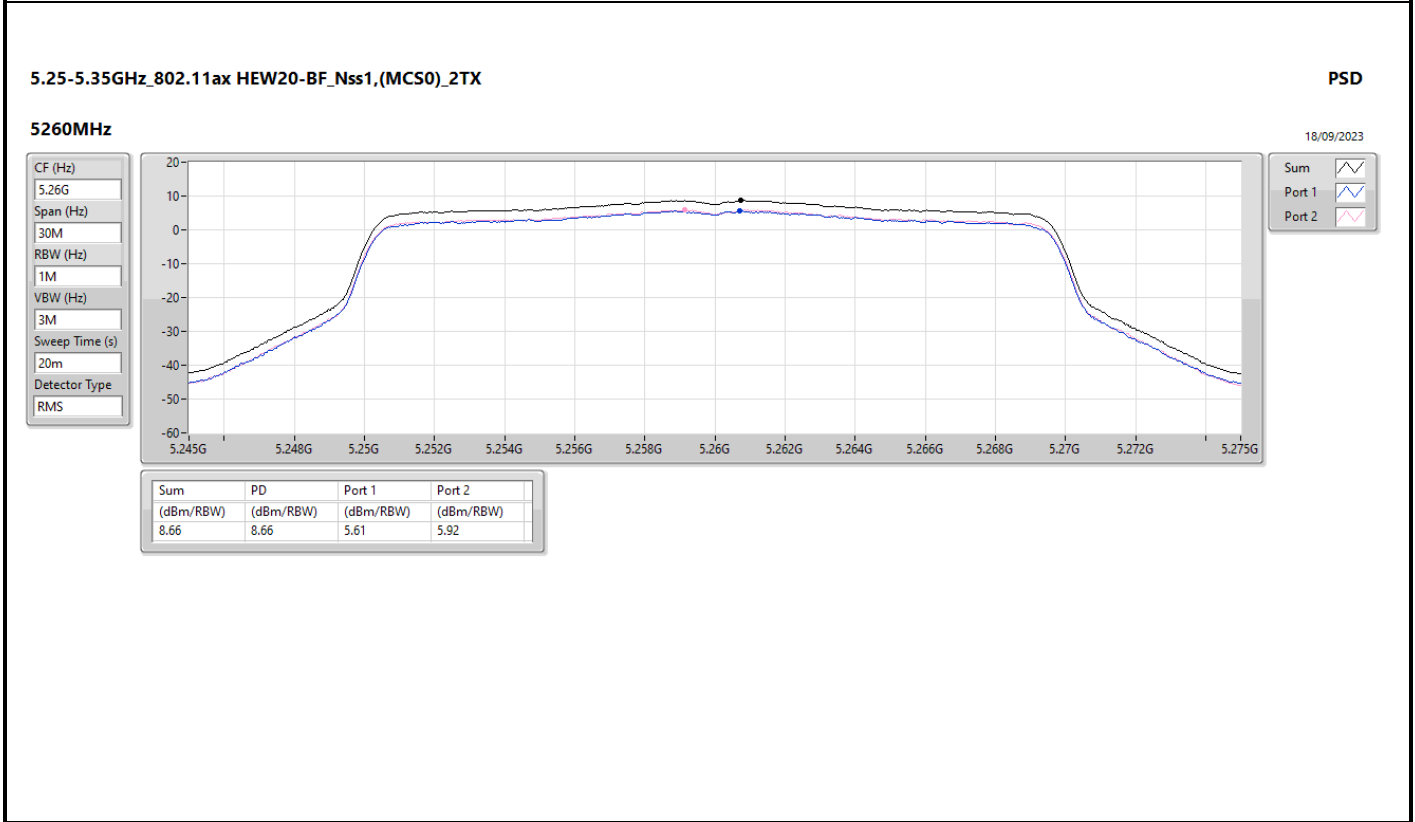
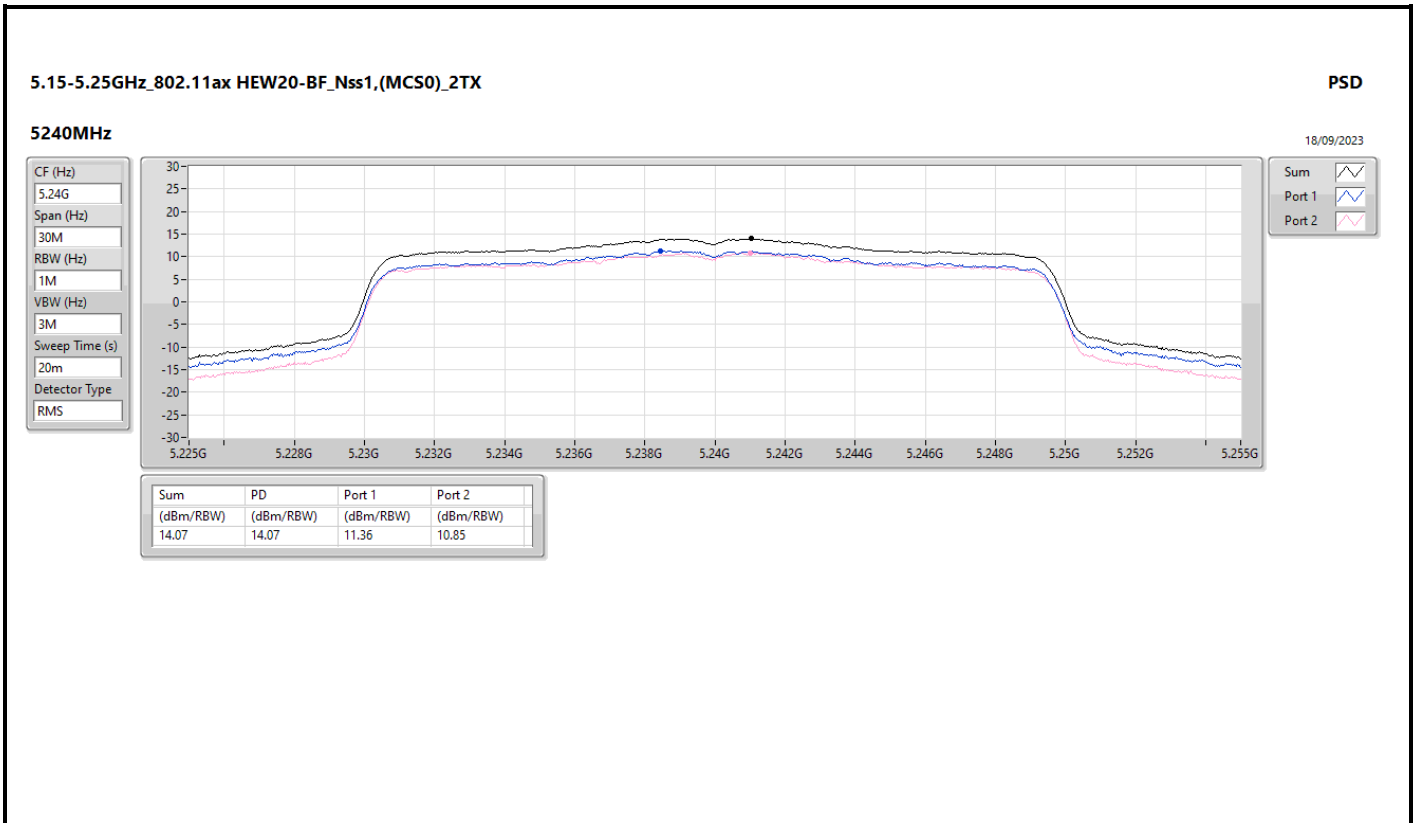
RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

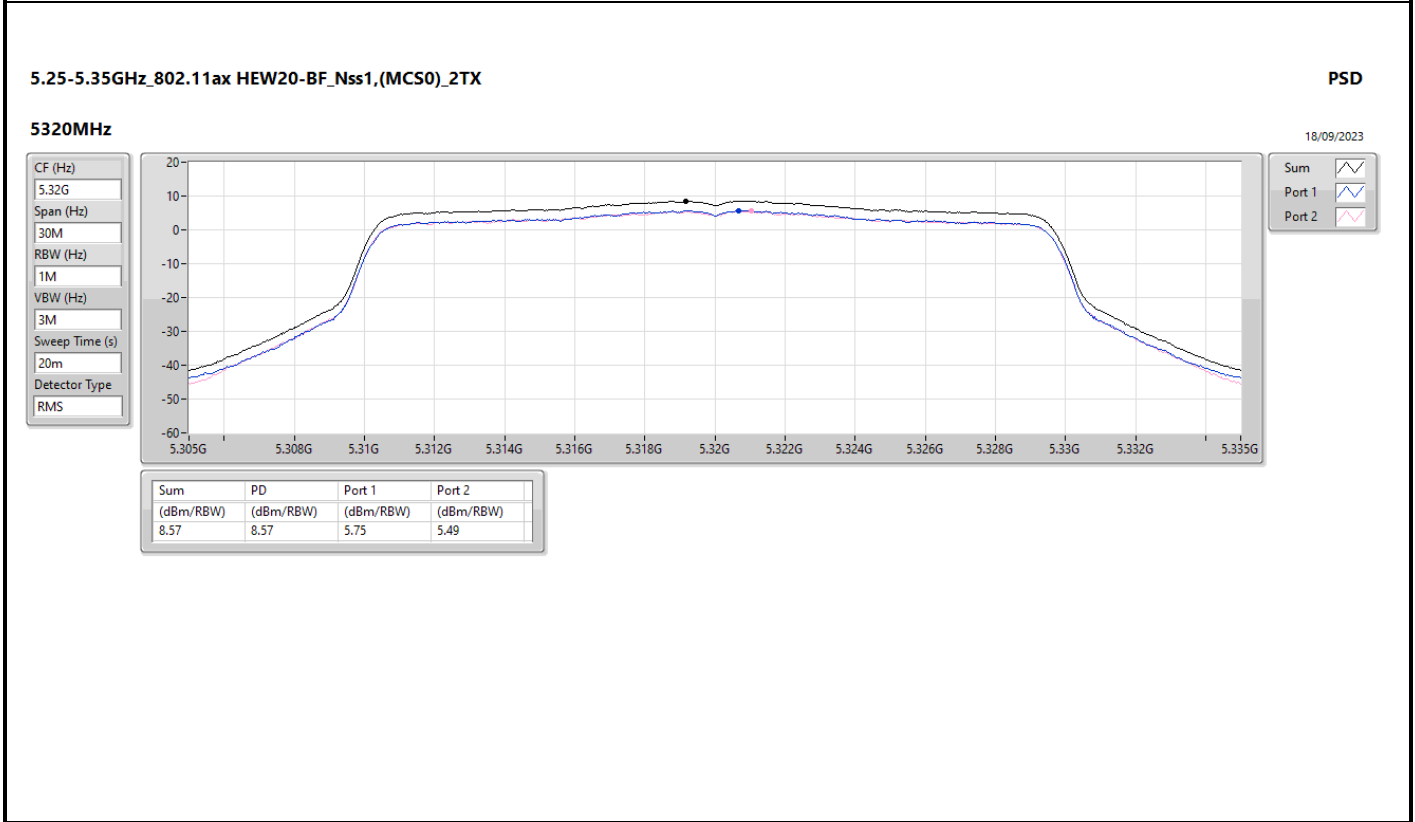
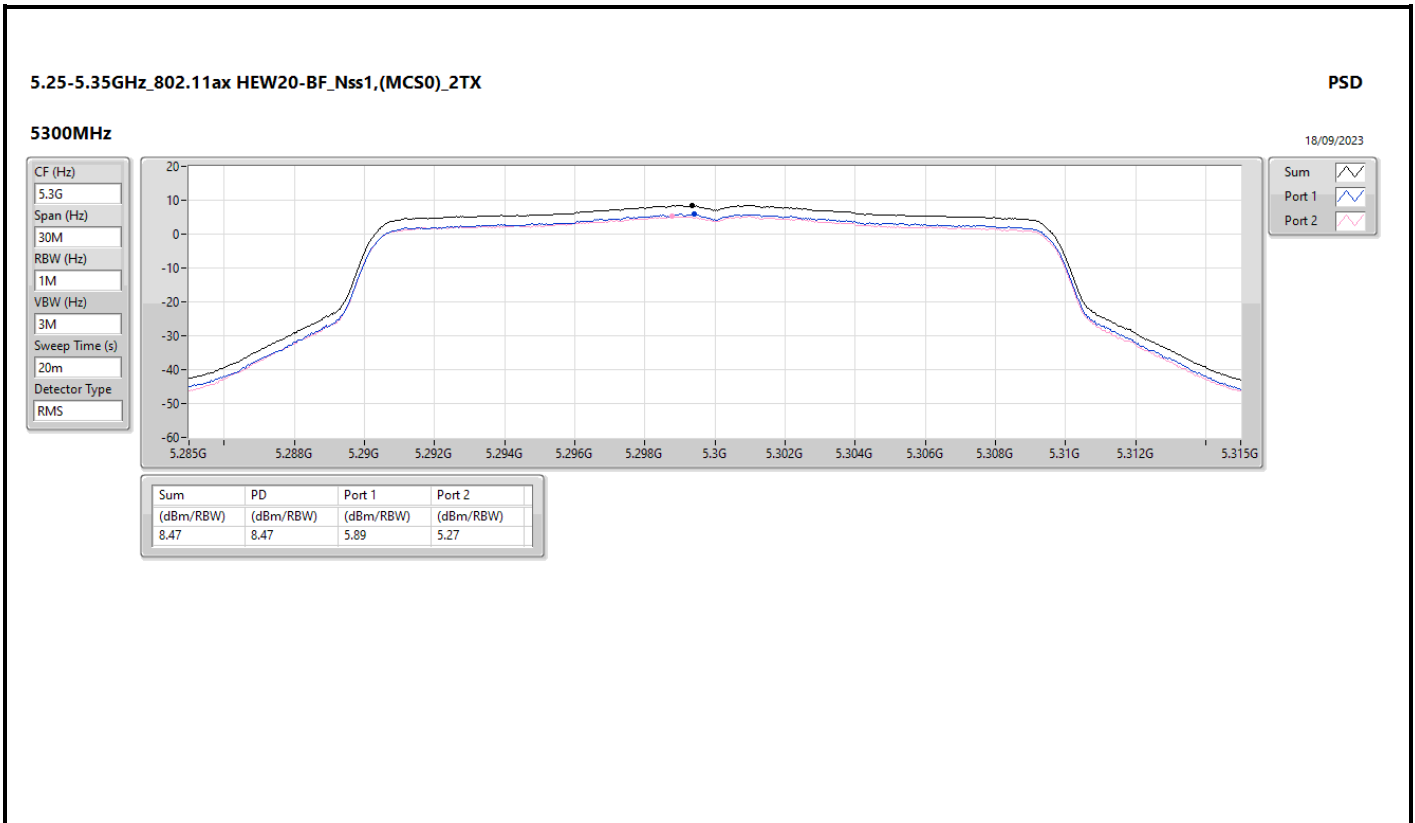
Result

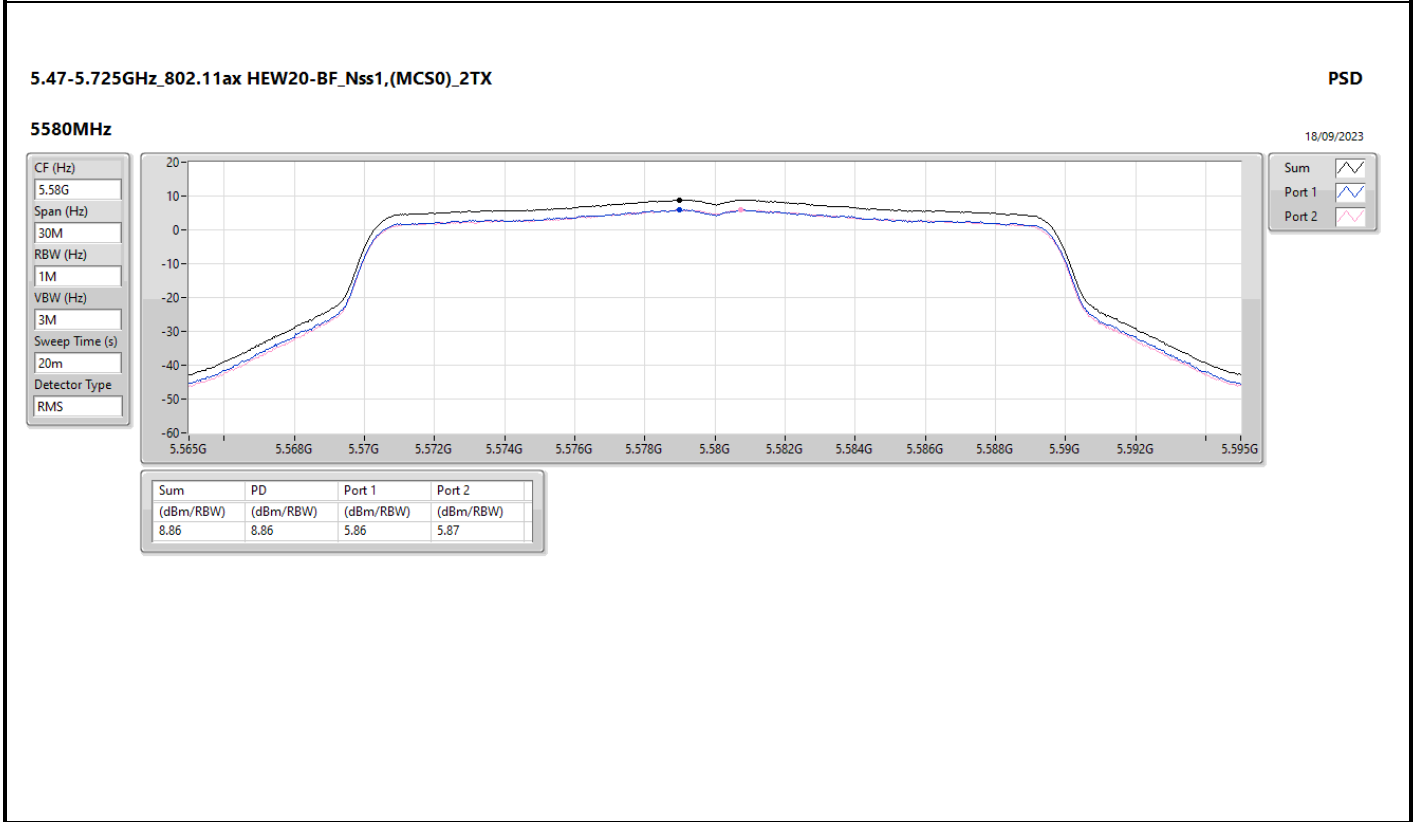
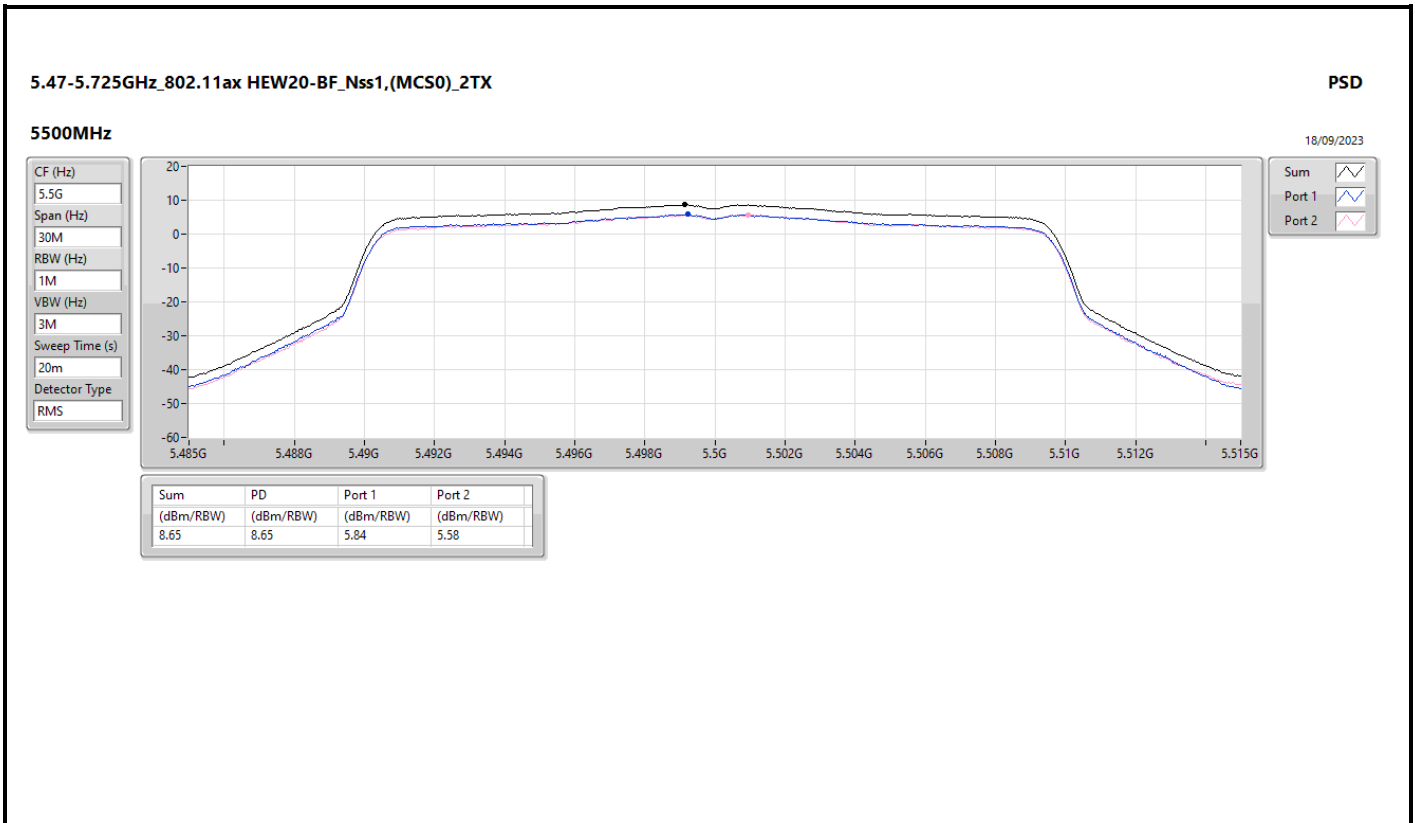
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	7.81	6.75	6.88	9.74	15.19
5200MHz	Pass	7.81	9.16	9.10	12.07	15.19
5240MHz	Pass	7.81	11.36	10.85	14.07	15.19
5260MHz	Pass	7.81	5.61	5.92	8.66	9.19
5300MHz	Pass	7.81	5.89	5.27	8.47	9.19
5320MHz	Pass	7.81	5.75	5.49	8.57	9.19
5500MHz	Pass	7.87	5.84	5.58	8.65	9.13
5580MHz	Pass	7.87	5.86	5.87	8.86	9.13
5700MHz	Pass	7.87	5.97	4.56	8.24	9.13
5745MHz	Pass	7.87	10.86	11.55	14.16	28.13
5785MHz	Pass	7.87	10.59	10.52	13.47	28.13
5825MHz	Pass	7.87	10.62	11.46	13.93	28.13
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	7.81	3.26	3.72	6.46	15.19
5230MHz	Pass	7.81	7.16	6.87	9.75	15.19
5270MHz	Pass	7.81	4.50	5.00	7.77	9.19
5310MHz	Pass	7.81	4.57	4.00	7.24	9.19
5510MHz	Pass	7.87	4.46	5.25	7.75	9.13
5550MHz	Pass	7.87	4.34	4.81	7.55	9.13
5670MHz	Pass	7.87	4.58	4.40	7.44	9.13
5755MHz	Pass	7.87	7.22	7.34	10.19	28.13
5795MHz	Pass	7.87	7.61	7.61	10.49	28.13
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	7.81	-0.36	-0.46	2.52	15.19
5290MHz	Pass	7.81	-0.47	0.27	2.79	9.19
5530MHz	Pass	7.87	2.28	1.98	5.08	9.13
5610MHz	Pass	7.87	2.63	0.65	4.73	9.13
5775MHz	Pass	7.87	0.90	1.87	4.31	28.13
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	7.81	-5.71	-6.24	-2.98	15.19
5250MHz Straddle 5.25-5.35GHz	Pass	7.81	-5.92	-5.83	-2.89	9.19
5570MHz	Pass	7.87	-5.09	-5.21	-2.16	9.13

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;











5.725-5.85GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5745MHz

PSD

18/09/2023

CF (Hz)

Span (Hz)

RBW (Hz)

VBW (Hz)

Sweep Time (s)

Detector Type

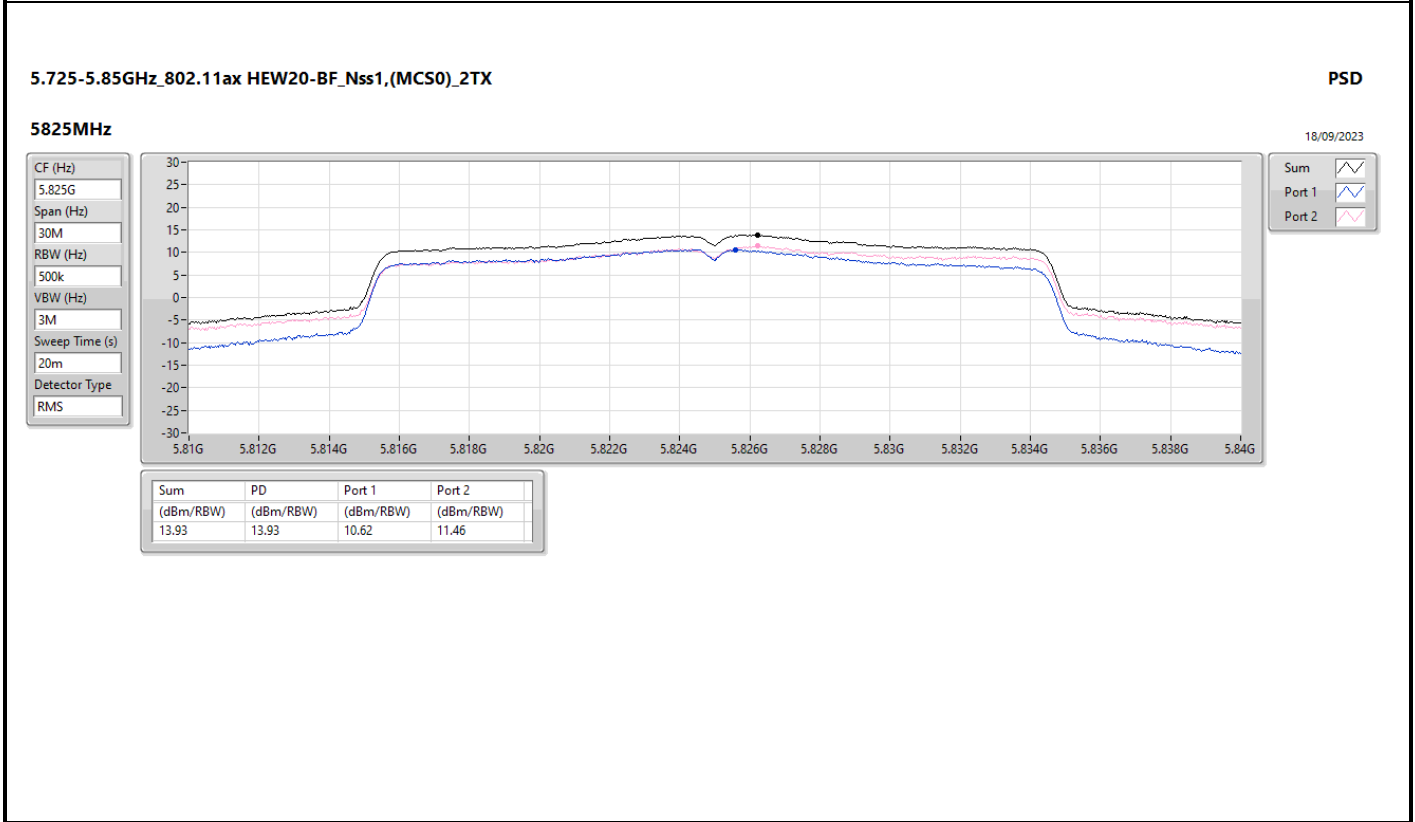
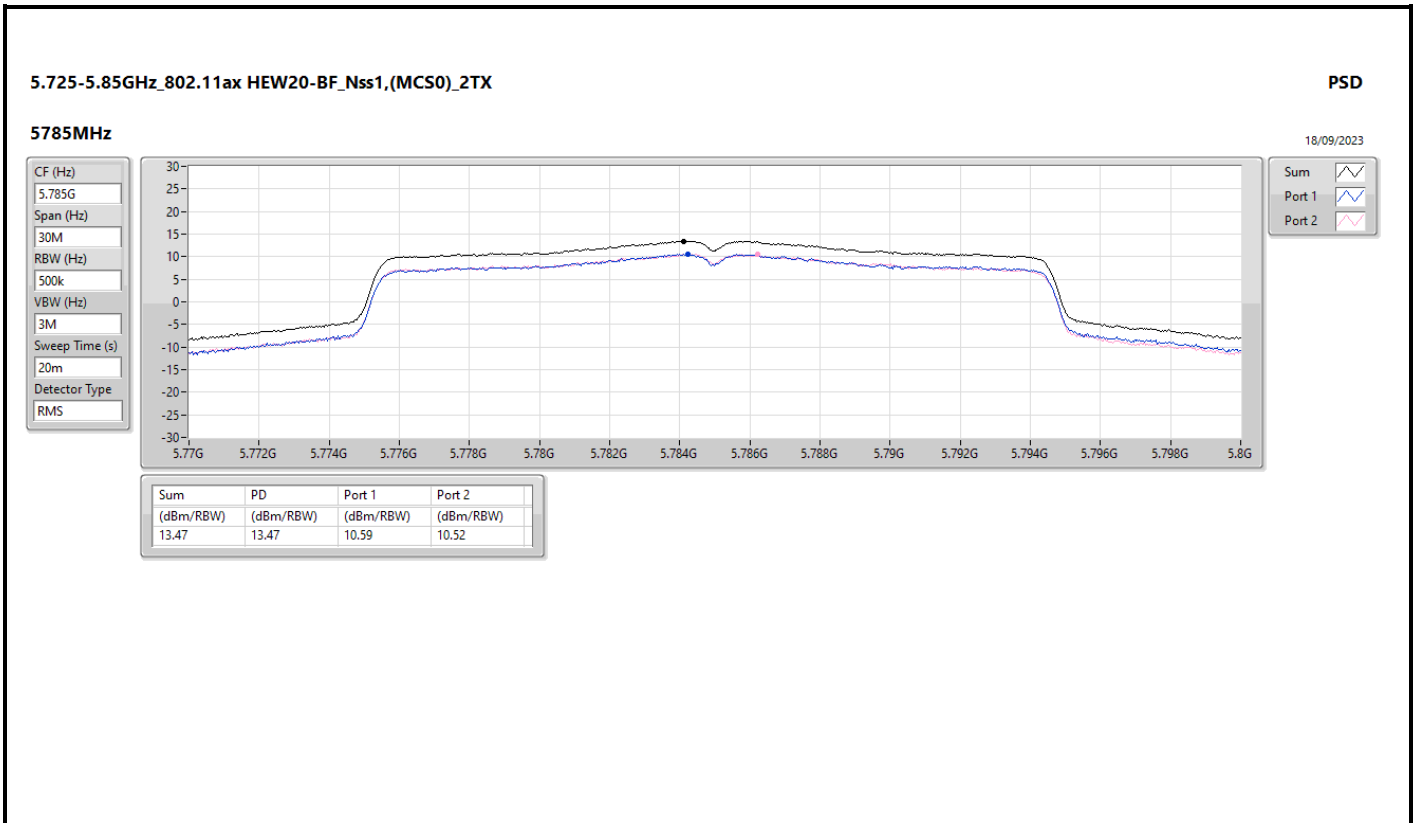


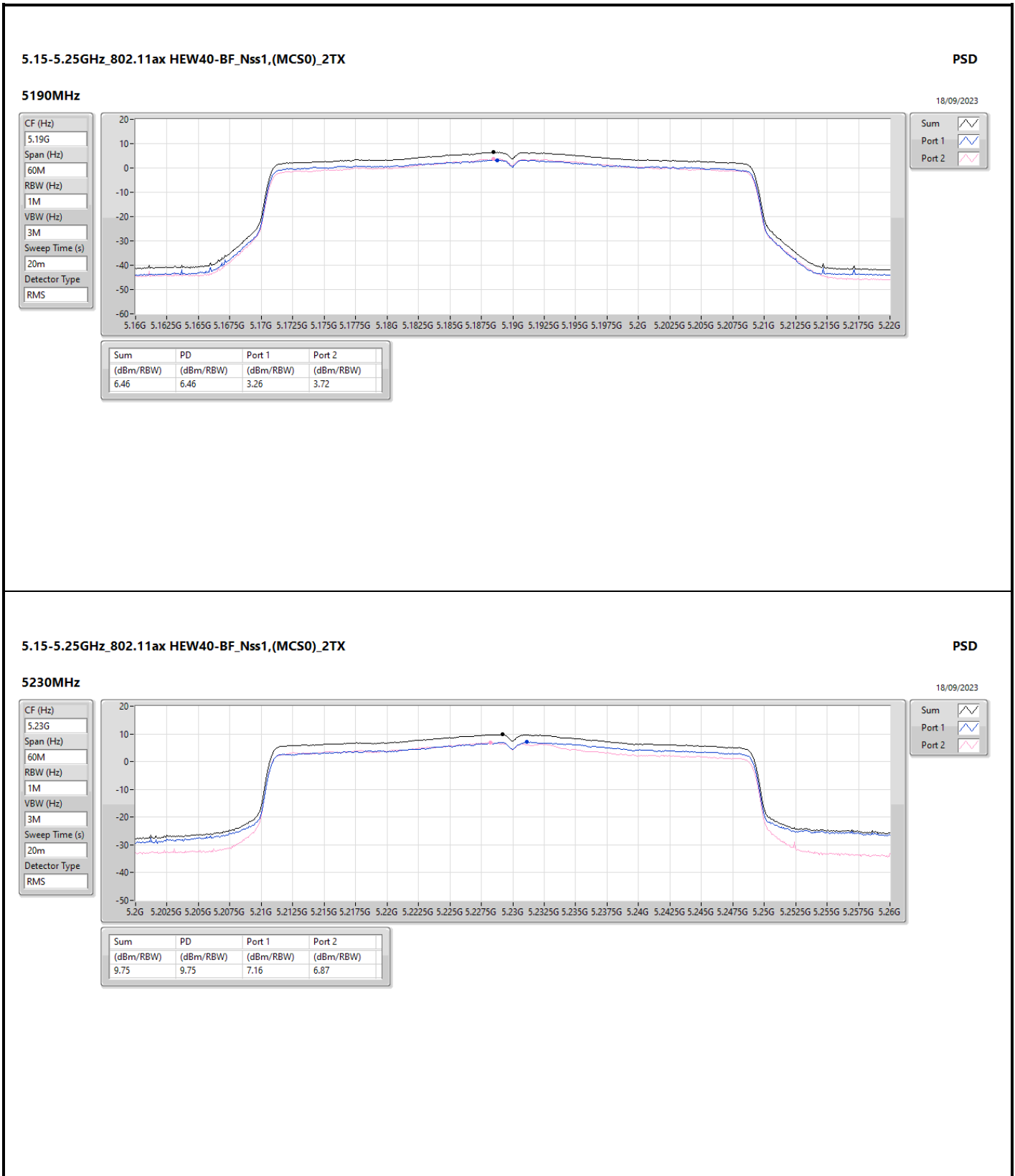
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.16	14.16	10.86	11.55

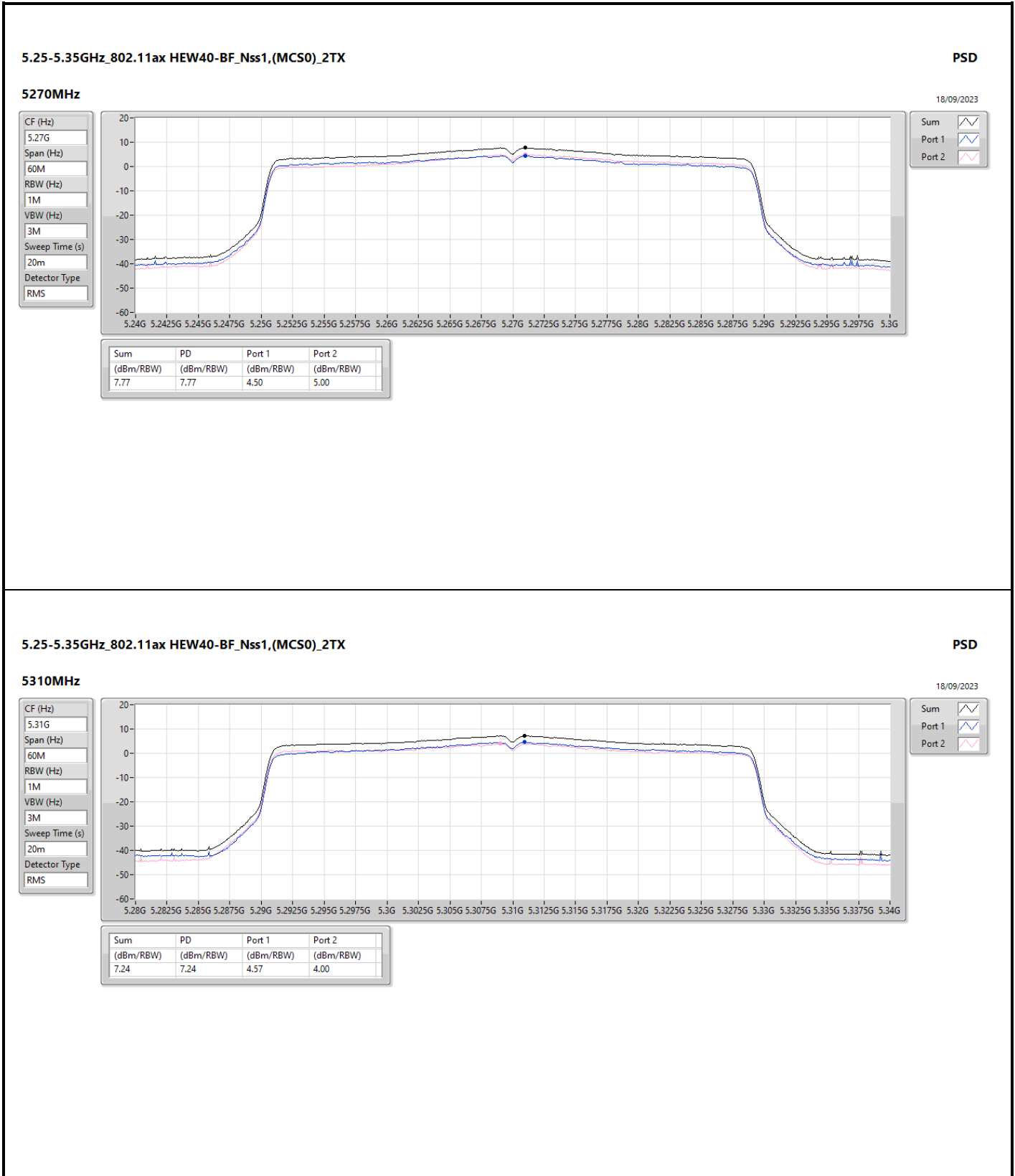
Sum

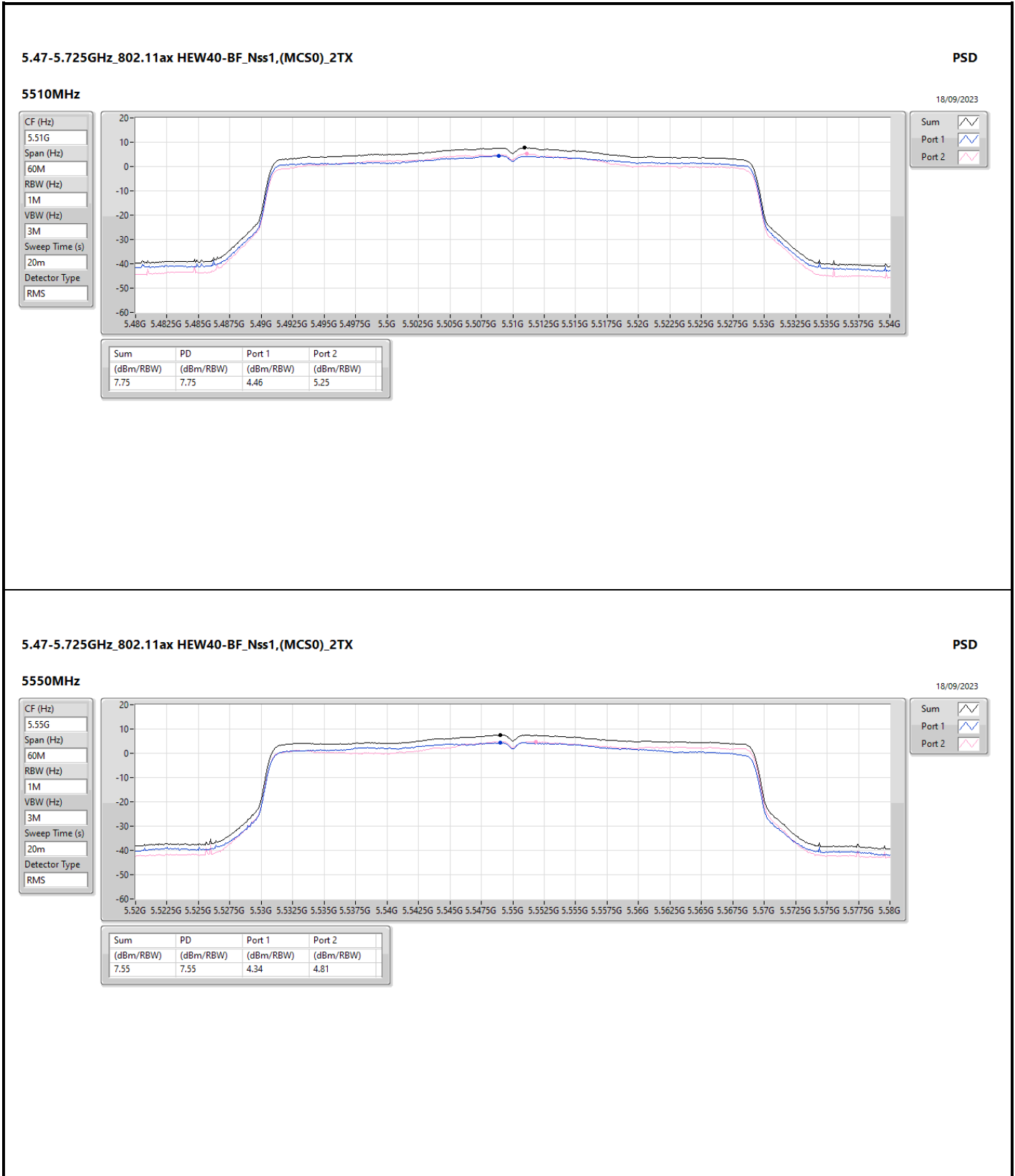
Port 1

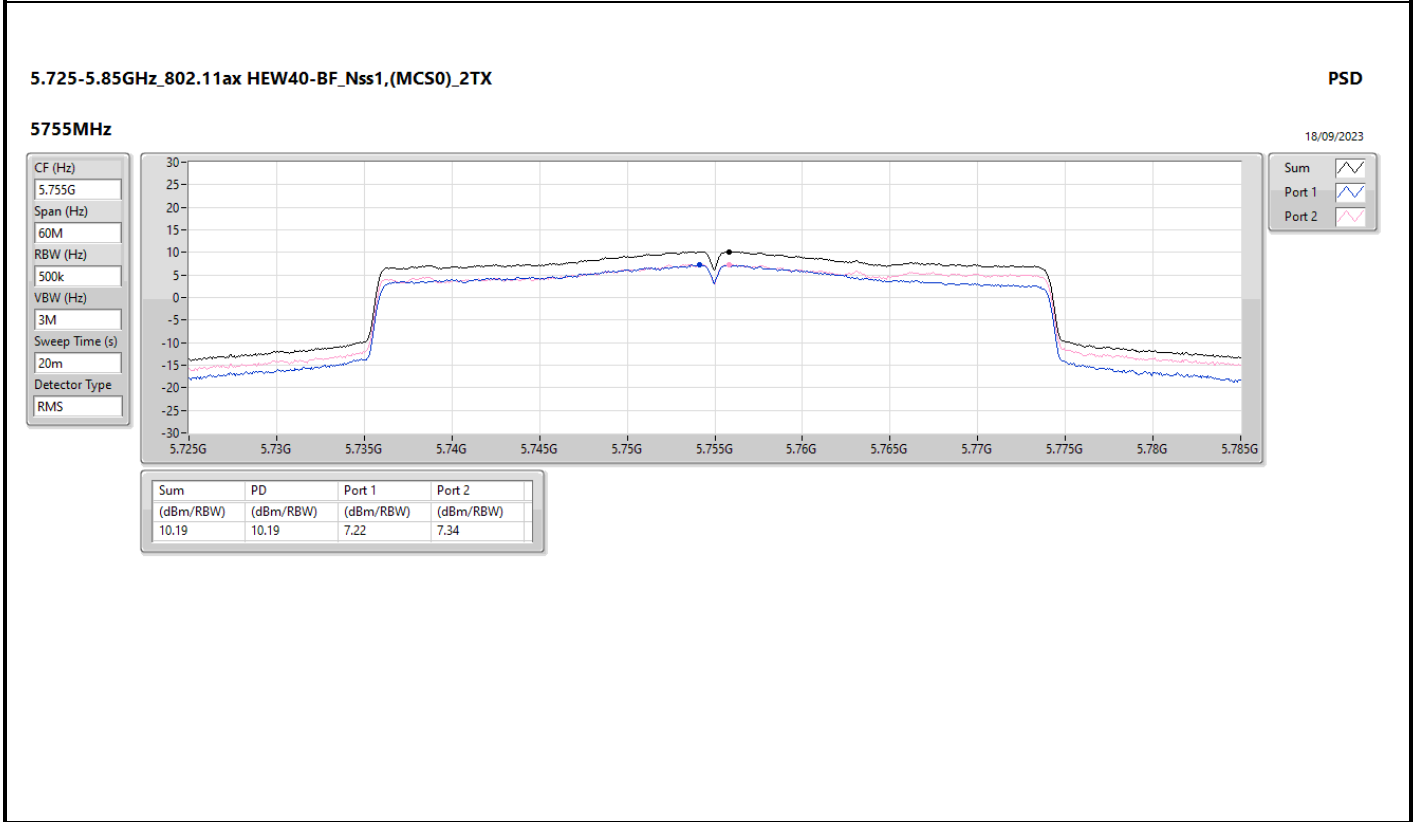
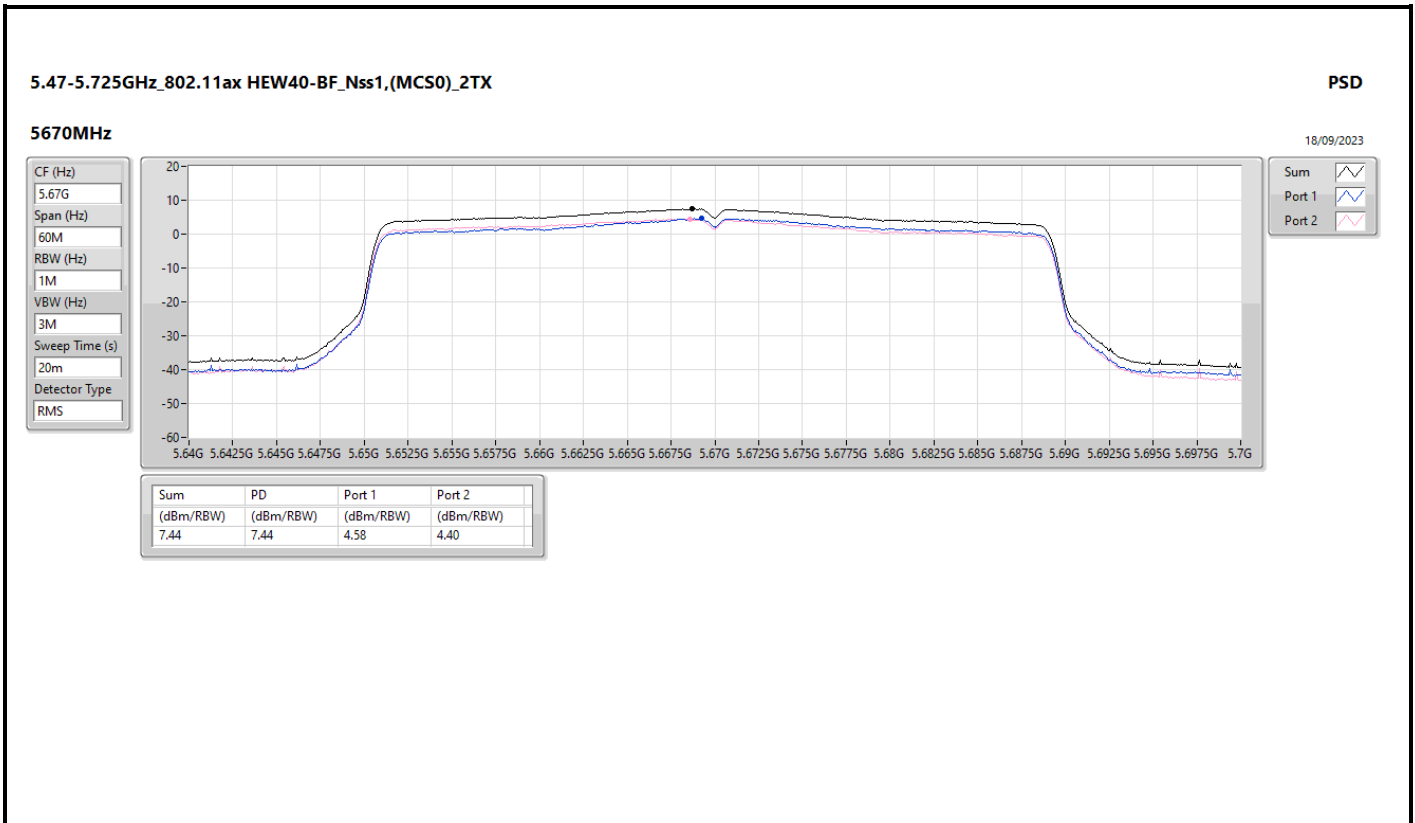
Port 2

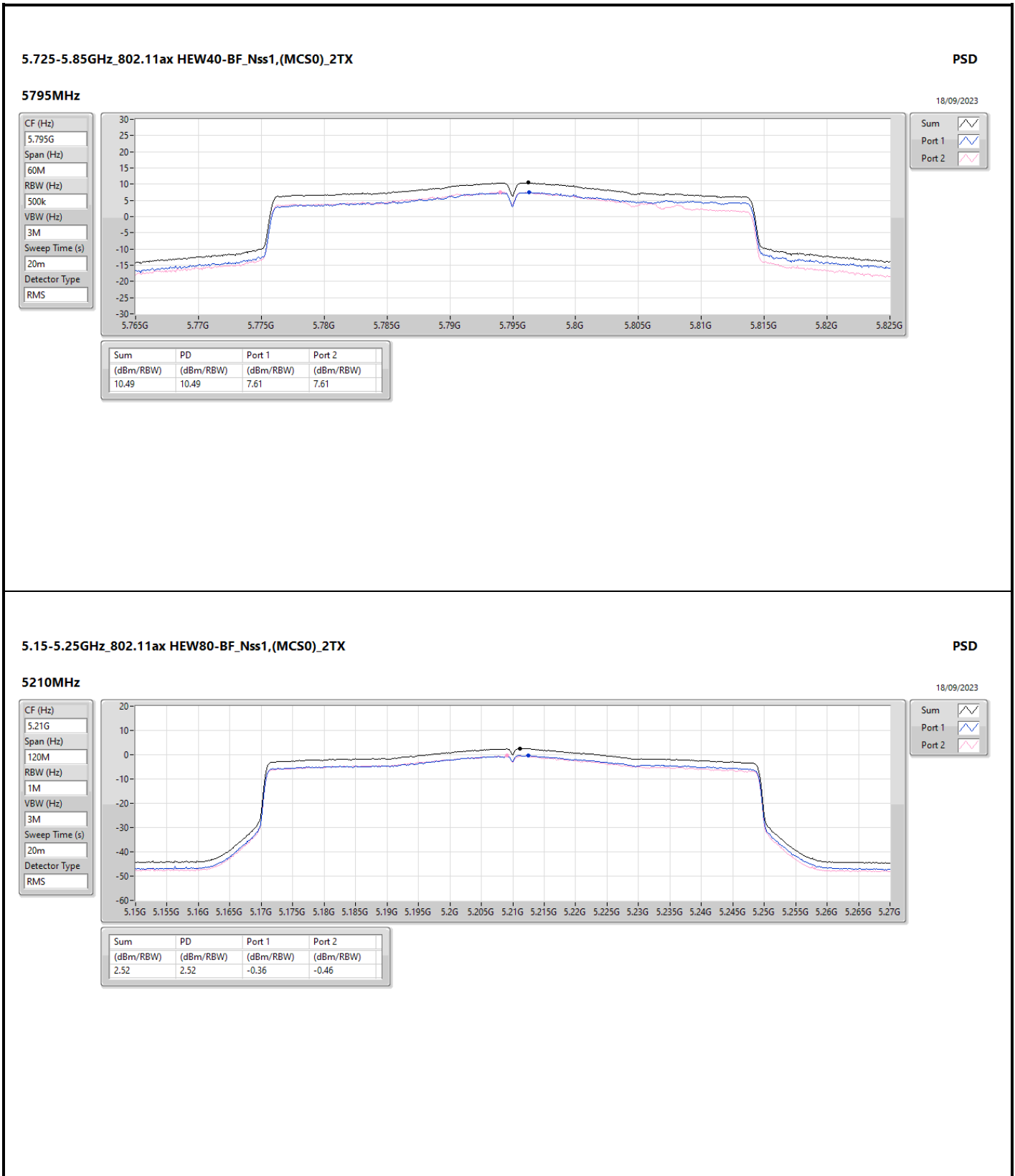


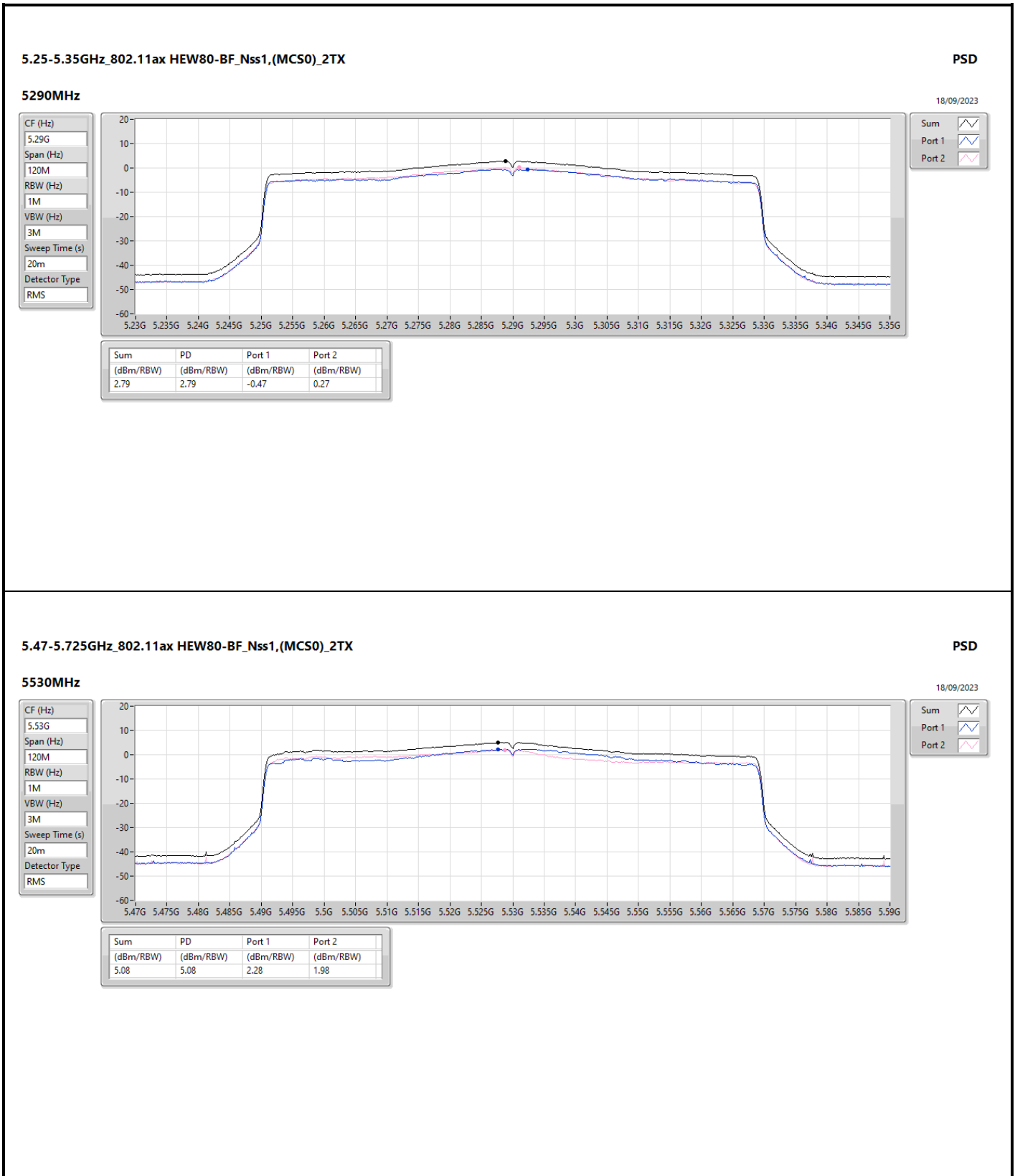


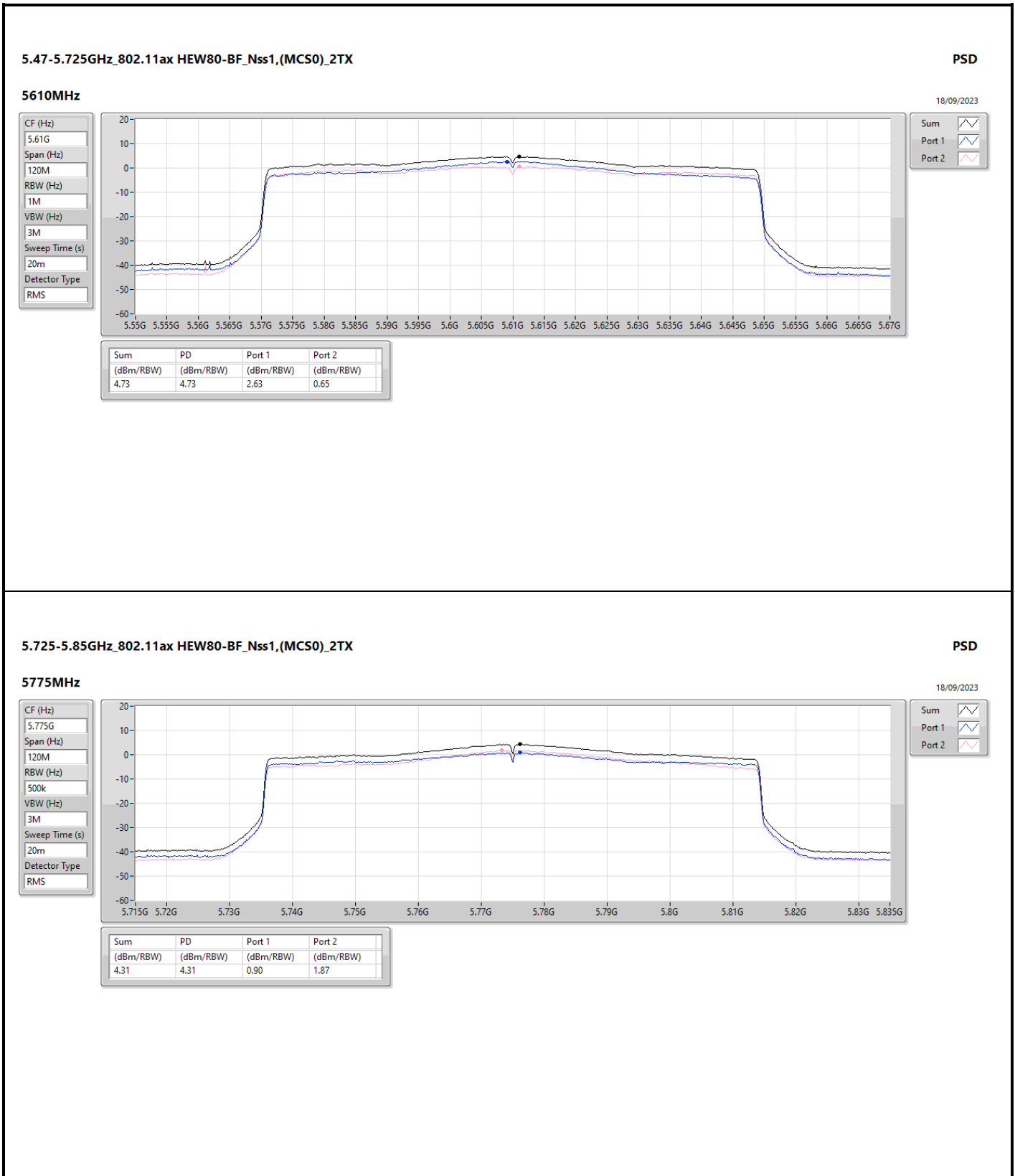


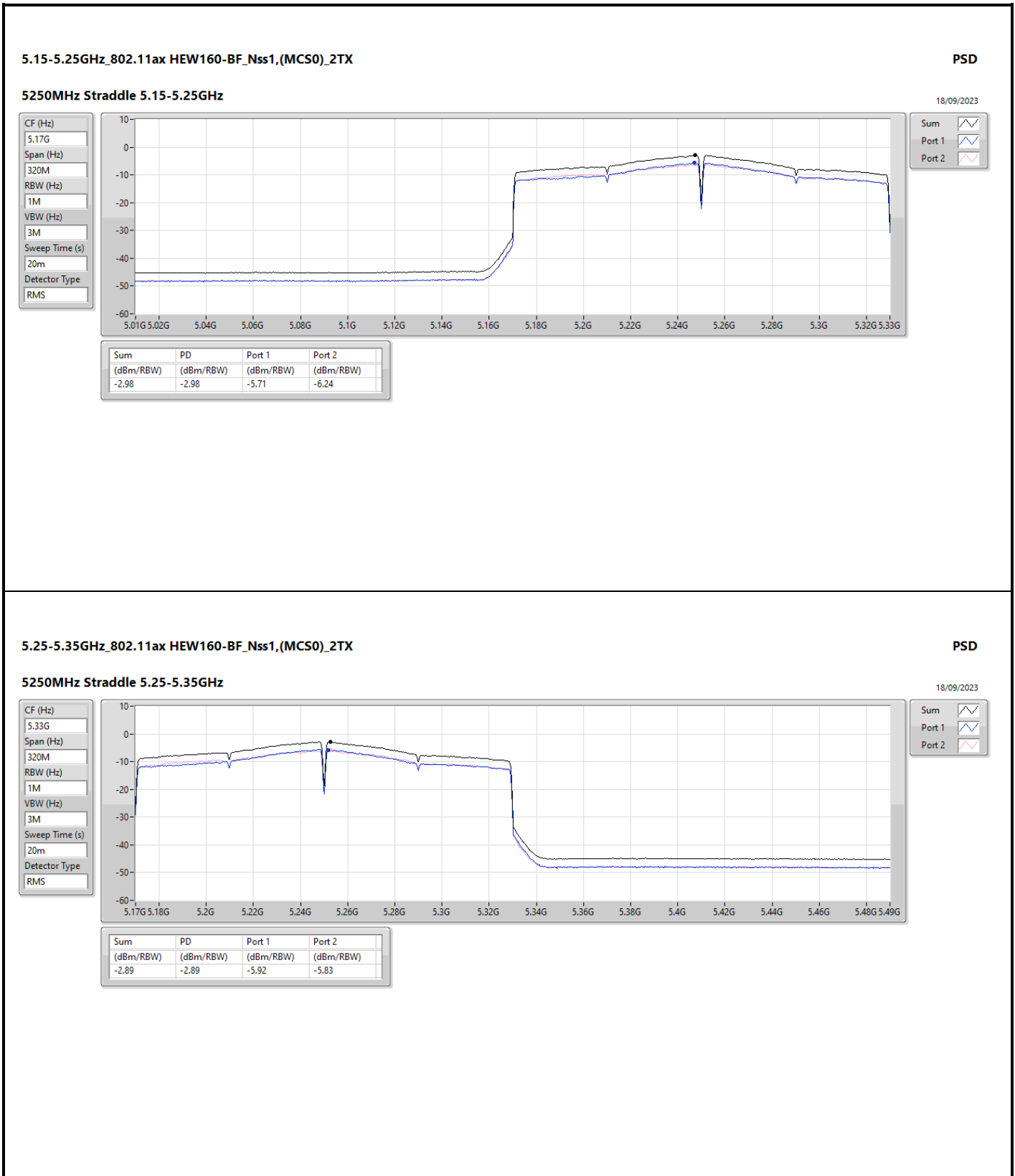


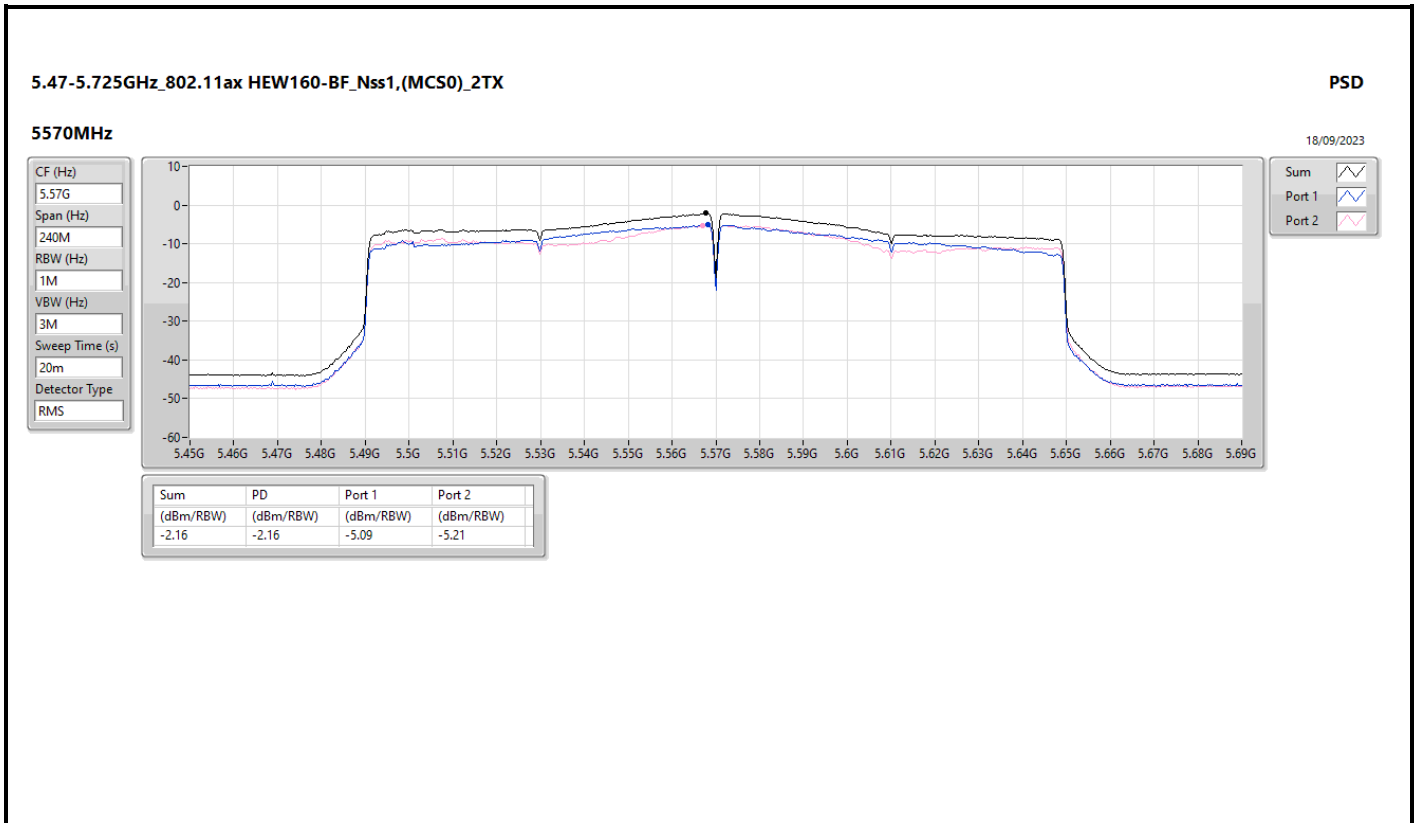










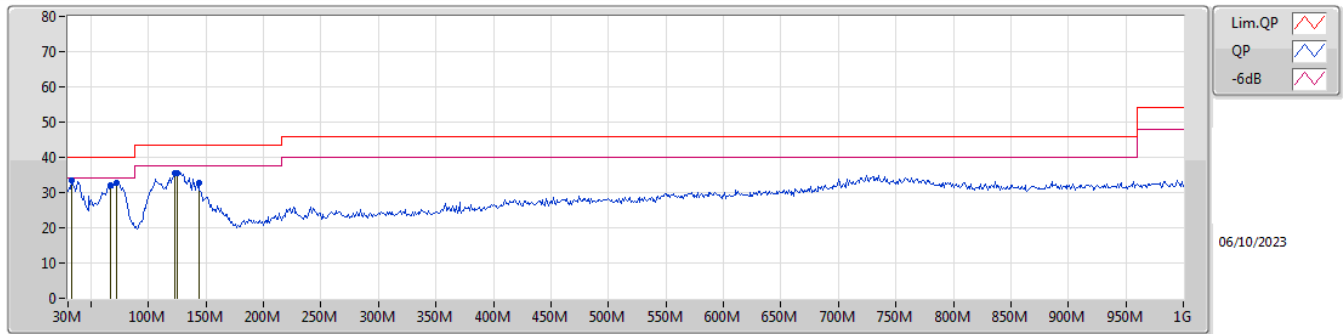




Summary

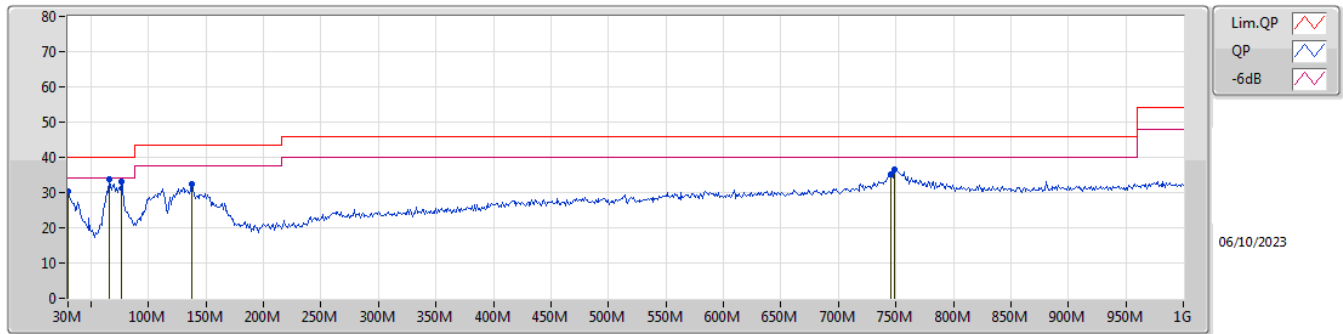
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	65.89M	33.88	40.00	-6.12	Horizontal

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	32.91M	33.33	40.00	-6.67	-21.37	3	Vertical	105	1.00	"Worst"	54.70	22.25	0.70	44.32
PK	66.86M	31.94	40.00	-8.06	-32.32	3	Vertical	174	3.00	-	64.26	11.39	0.92	44.63
PK	71.71M	32.63	40.00	-7.37	-32.15	3	Vertical	0	1.25	-	64.78	11.48	0.98	44.61
PK	123.12M	35.45	43.50	-8.05	-26.18	3	Vertical	179	1.00	-	61.63	17.20	1.25	44.63
PK	125.06M	35.47	43.50	-8.03	-26.25	3	Vertical	192	1.25	-	61.72	17.11	1.26	44.62
PK	143.49M	32.60	43.50	-10.90	-27.20	3	Vertical	141	1.00	-	59.80	16.06	1.33	44.59

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	30M	30.42	40.00	-9.58	-19.56	3	Horizontal	68	3.00	-	49.98	24.08	0.68	44.32
PK	65.89M	33.88	40.00	-6.12	-32.34	3	Horizontal	78	3.00	"Worst"	66.22	11.38	0.91	44.63
PK	76.56M	33.06	40.00	-6.94	-31.88	3	Horizontal	128	3.00	-	64.94	11.72	1.00	44.60
PK	137.67M	32.46	43.50	-11.04	-26.89	3	Horizontal	114	2.00	-	59.35	16.40	1.31	44.60
PK	745.86M	35.31	46.00	-10.69	-16.03	3	Horizontal	288	1.00	-	51.34	24.66	2.93	43.62
PK	748.77M	36.70	46.00	-9.30	-15.98	3	Horizontal	110	1.00	-	52.68	24.71	2.93	43.62

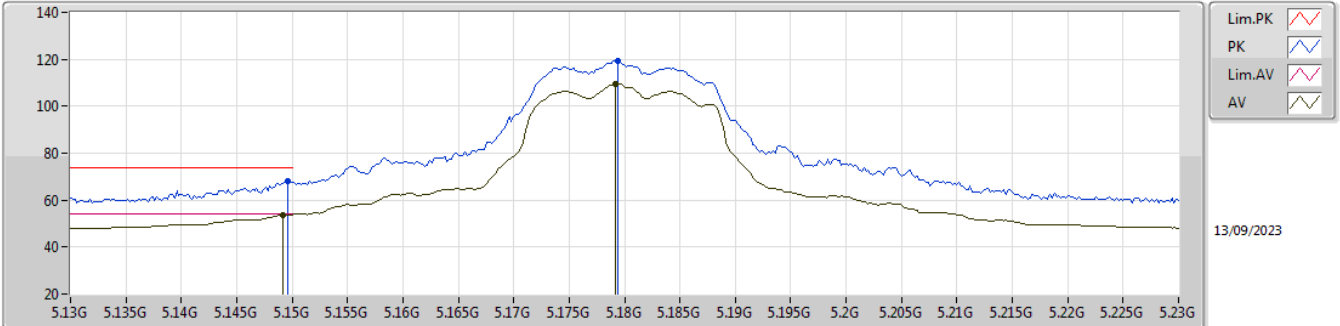


Summary

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 HEW40_Nss1,(MCS0)_2TX	Pass	AV	5.35G	53.96	54.00	-0.04	3	Vertical	64	2.94	-

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

5180MHz_TX

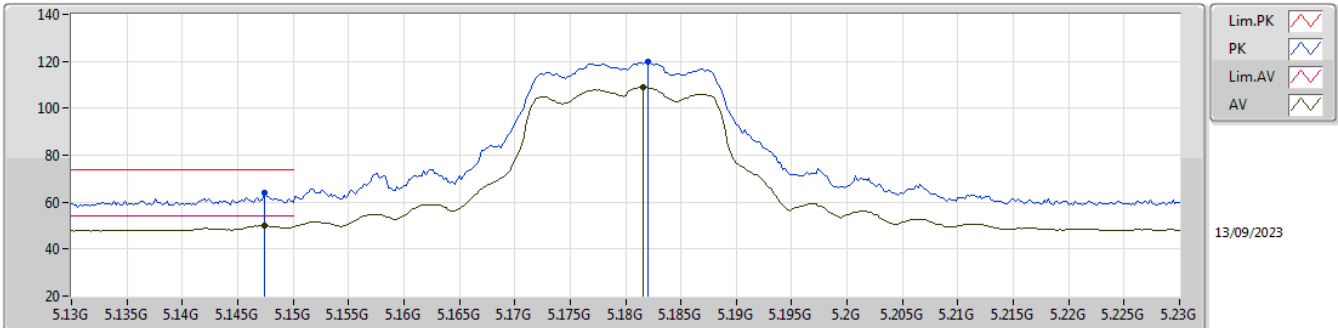


EUT_Z_2TX
Setting 20
02-E-P-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1496G	67.90	74.00	-6.10	59.21	3	Vertical	60	2.01	-	33.60	5.77	30.68
AV	5.1492G	53.84	54.00	-0.16	45.15	3	Vertical	60	2.01	-	33.60	5.77	30.68
PK	5.1794G	119.52	Inf	-Inf	110.71	3	Vertical	60	2.01	-	33.72	5.79	30.70
AV	5.1792G	109.65	Inf	-Inf	100.84	3	Vertical	60	2.01	-	33.72	5.79	30.70

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

5180MHz_TX

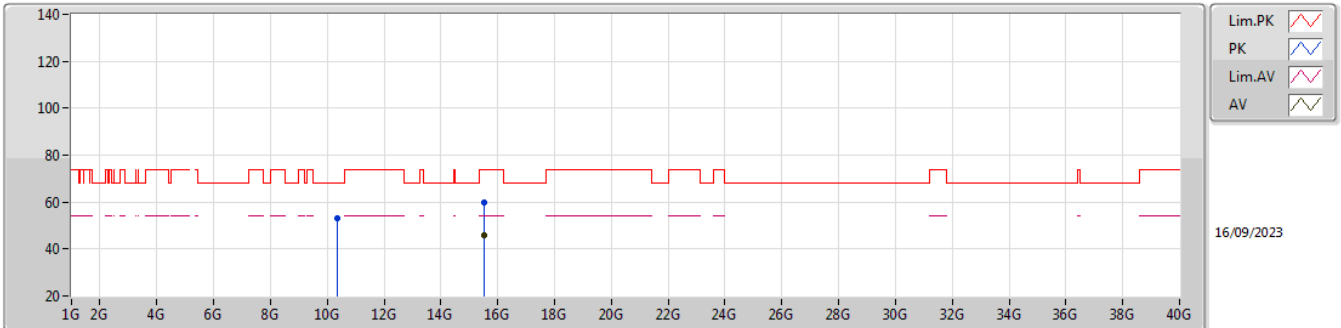


EUT_Z_2TX
Setting 20
02-E-P-5-10

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	5.1474G	64.19	74.00	-9.81	55.51	3	Horizontal	190	2.80	-	33.59	5.77	30.68
AV	5.1474G	50.06	54.00	-3.94	41.38	3	Horizontal	190	2.80	-	33.59	5.77	30.68
PK	5.182G	119.97	Inf	-Inf	111.16	3	Horizontal	190	2.80	-	33.73	5.79	30.71
AV	5.1816G	109.05	Inf	-Inf	100.24	3	Horizontal	190	2.80	-	33.73	5.79	30.71

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

5180MHz_TX

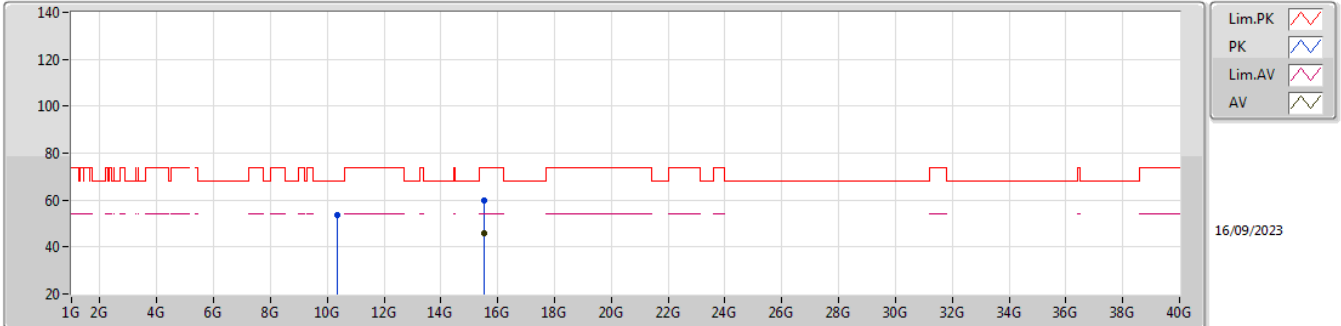


EUT_Z_2TX
Setting 20
02-E-G-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.36124G	53.11	68.20	-15.09	37.98	3	Vertical	41	1.47	-	38.48	8.43	31.78
PK	15.54226G	59.88	74.00	-14.12	43.68	3	Vertical	2	2.83	-	37.83	10.32	31.95
AV	15.53762G	45.96	54.00	-8.04	29.74	3	Vertical	2	2.83	-	37.85	10.32	31.95

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

5180MHz_TX

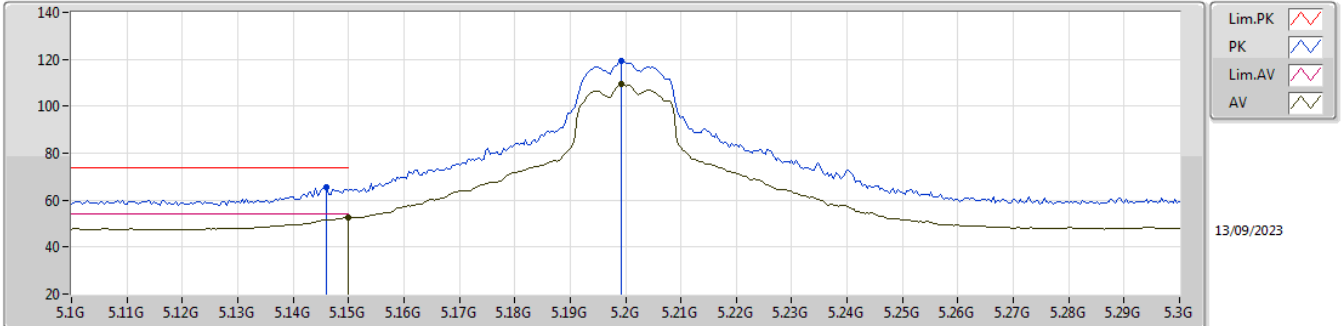


EUT_Z_2TX
Setting 20
02-E-G-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.3641G	53.51	68.20	-14.69	38.39	3	Horizontal	38	2.11	-	38.47	8.43	31.78
PK	15.53954G	59.81	74.00	-14.19	43.60	3	Horizontal	93	2.03	-	37.84	10.32	31.95
AV	15.53902G	45.92	54.00	-8.08	29.71	3	Horizontal	93	2.03	-	37.84	10.32	31.95

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

5200MHz_TX

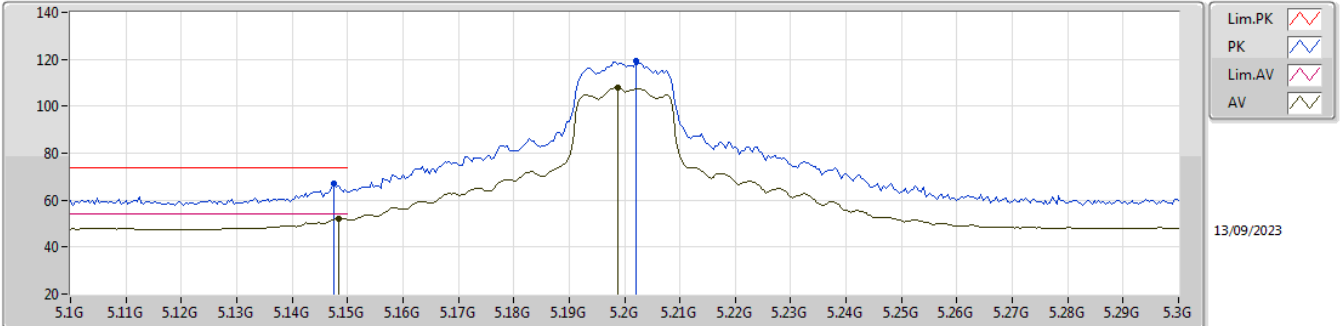


EUT_Z_2TX
Setting 21
02-E-P-5-10

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	5.146G	65.60	74.00	-8.40	56.92	3	Vertical	62	1.79	-	33.59	5.77	30.68
AV	5.15G	52.67	54.00	-1.33	43.97	3	Vertical	62	1.79	-	33.60	5.78	30.68
PK	5.1992G	119.43	Inf	-Inf	110.55	3	Vertical	62	1.79	-	33.80	5.80	30.72
AV	5.1992G	109.65	Inf	-Inf	100.77	3	Vertical	62	1.79	-	33.80	5.80	30.72

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

5200MHz_TX

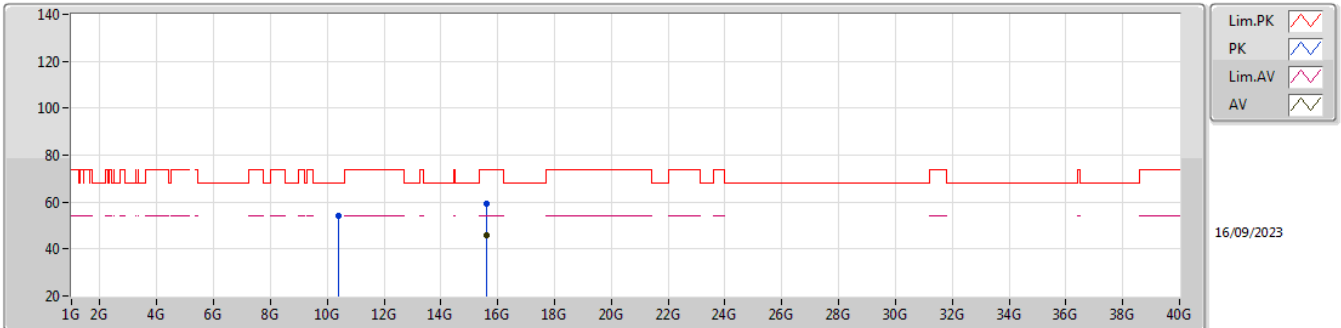


EUT_Z_2TX
Setting 21
02-E-P-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1476G	67.11	74.00	-6.89	58.42	3	Horizontal	165	1.79	-	33.60	5.77	30.68
AV	5.1484G	52.17	54.00	-1.83	43.48	3	Horizontal	165	1.79	-	33.60	5.77	30.68
PK	5.202G	119.25	Inf	-Inf	110.37	3	Horizontal	165	1.79	-	33.80	5.80	30.72
AV	5.1988G	107.86	Inf	-Inf	98.98	3	Horizontal	165	1.79	-	33.80	5.80	30.72

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

5200MHz_TX

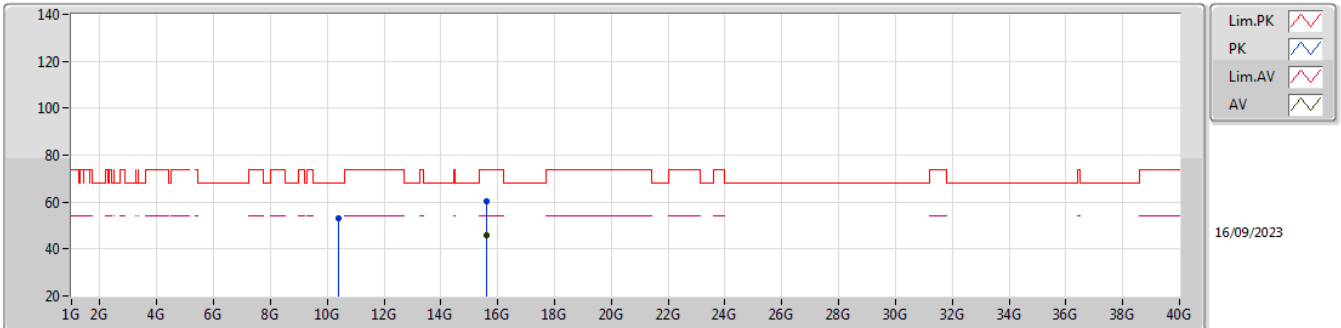


EUT_Z_2TX
Setting 21
02-E-G-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.39756G	53.93	68.20	-14.27	38.88	3	Vertical	100	1.26	-	38.40	8.44	31.79
PK	15.59962G	59.35	74.00	-14.65	43.27	3	Vertical	148	2.53	-	37.70	10.34	31.96
AV	15.59588G	45.69	54.00	-8.31	29.60	3	Vertical	148	2.53	-	37.71	10.34	31.96

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

5200MHz_TX

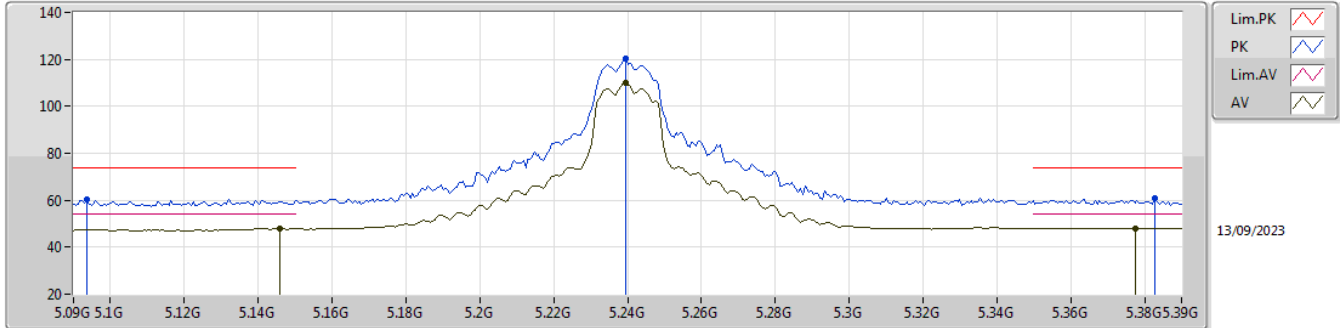


EUT_Z_2TX
Setting 21
02-E-G-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.39932G	53.20	68.20	-15.00	38.15	3	Horizontal	292	1.82	-	38.40	8.44	31.79
PK	15.59946G	60.51	74.00	-13.49	44.43	3	Horizontal	11	2.28	-	37.70	10.34	31.96
AV	15.59608G	45.68	54.00	-8.32	29.59	3	Horizontal	11	2.28	-	37.71	10.34	31.96

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

5240MHz_TX

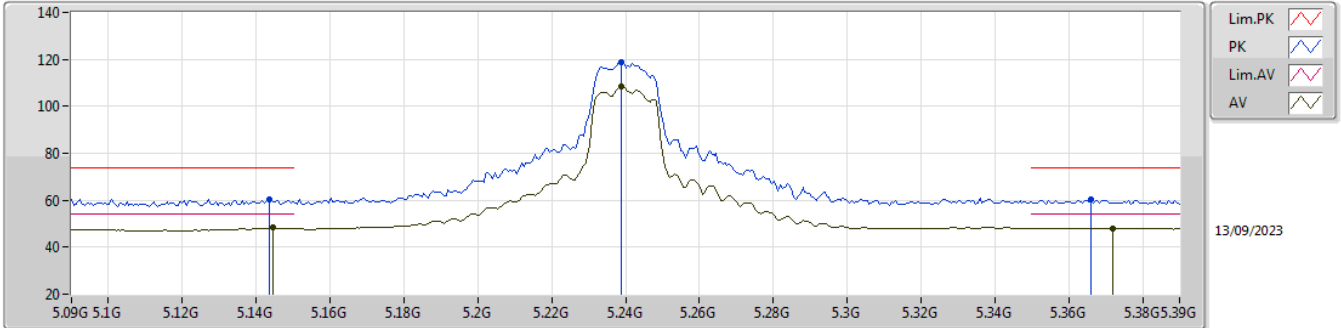


EUT_Z_2TX
Setting 21
02-E-P-5-10

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	5.0936G	60.32	74.00	-13.68	51.70	3	Vertical	57	2.37	-	33.50	5.75	30.63
AV	5.1458G	47.99	54.00	-6.01	39.31	3	Vertical	57	2.37	-	33.59	5.77	30.68
PK	5.2394G	120.12	Inf	-Inf	111.25	3	Vertical	57	2.37	-	33.80	5.82	30.75
AV	5.2394G	110.09	Inf	-Inf	101.22	3	Vertical	57	2.37	-	33.80	5.82	30.75
PK	5.3828G	61.09	74.00	-12.91	52.07	3	Vertical	57	2.37	-	34.00	5.89	30.87
AV	5.3774G	48.00	54.00	-6.00	38.97	3	Vertical	57	2.37	-	34.00	5.89	30.86

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

5240MHz_TX

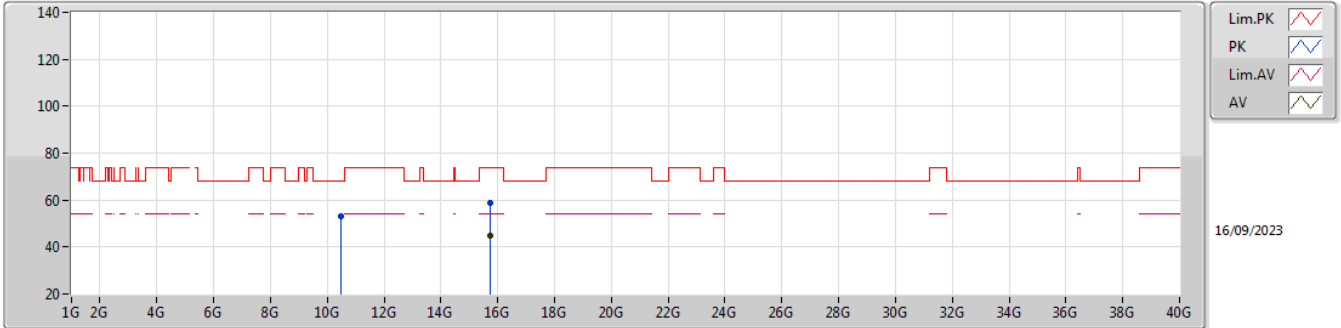


EUT_Z_2TX
Setting 21
02-E-P-5-10

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	60.36	74.00	-13.64	51.67	3	Horizontal	178	1.91	-	33.59	5.77	30.67
AV	5.1446G	48.21	54.00	-5.79	39.53	3	Horizontal	178	1.91	-	33.59	5.77	30.68
PK	5.2388G	118.87	Inf	-Inf	110.00	3	Horizontal	178	1.91	-	33.80	5.82	30.75
AV	5.2388G	108.62	Inf	-Inf	99.75	3	Horizontal	178	1.91	-	33.80	5.82	30.75
PK	5.366G	60.10	74.00	-13.90	51.07	3	Horizontal	178	1.91	-	34.00	5.88	30.85
AV	5.372G	47.96	54.00	-6.04	38.93	3	Horizontal	178	1.91	-	34.00	5.89	30.86

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

5240MHz_TX

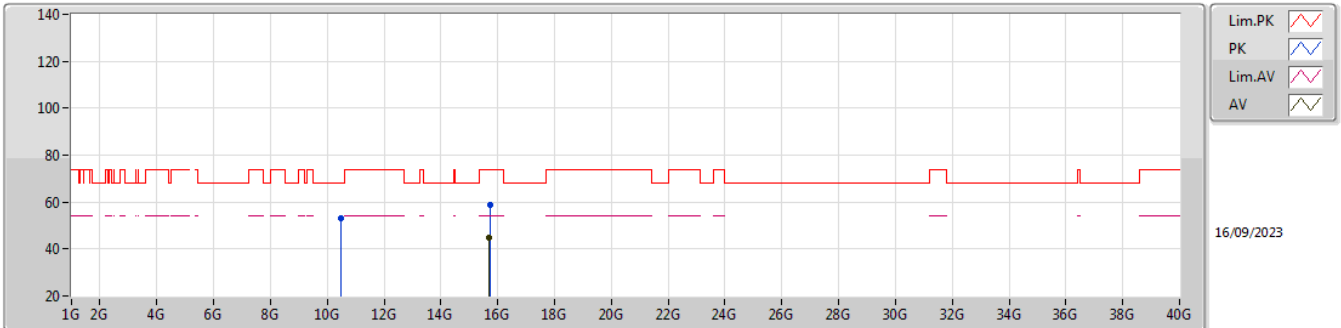


EUT_Z_2TX
Setting 21
02-E-G-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.47934G	52.98	68.20	-15.22	37.92	3	Vertical	103	1.33	-	38.40	8.47	31.81
PK	15.7226G	58.81	74.00	-15.19	42.68	3	Vertical	168	2.85	-	37.71	10.39	31.97
AV	15.71588G	44.78	54.00	-9.22	28.62	3	Vertical	168	2.85	-	37.74	10.39	31.97

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

5240MHz_TX

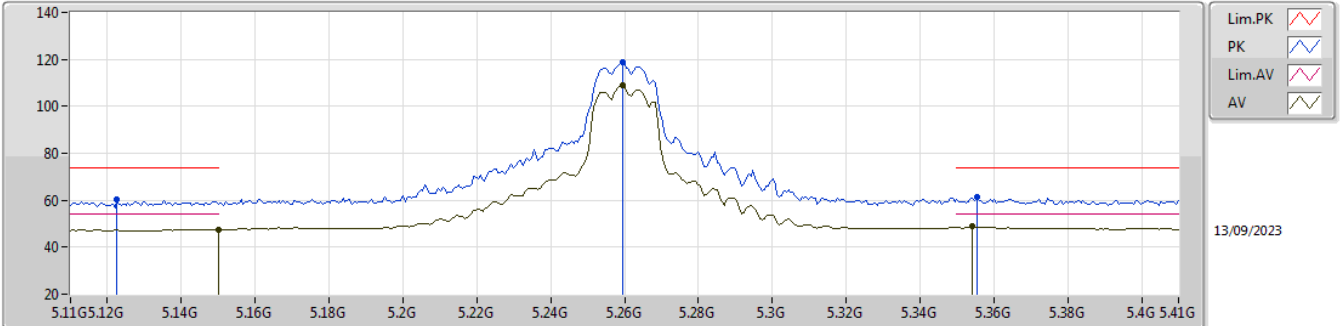


EUT_Z_2TX
Setting 21
02-E-G-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.47932G	52.97	68.20	-15.23	37.91	3	Horizontal	278	2.87	-	38.40	8.47	31.81
PK	15.71834G	58.70	74.00	-15.30	42.55	3	Horizontal	233	2.90	-	37.73	10.39	31.97
AV	15.71574G	44.77	54.00	-9.23	28.61	3	Horizontal	233	2.90	-	37.74	10.39	31.97

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

5260MHz_TX

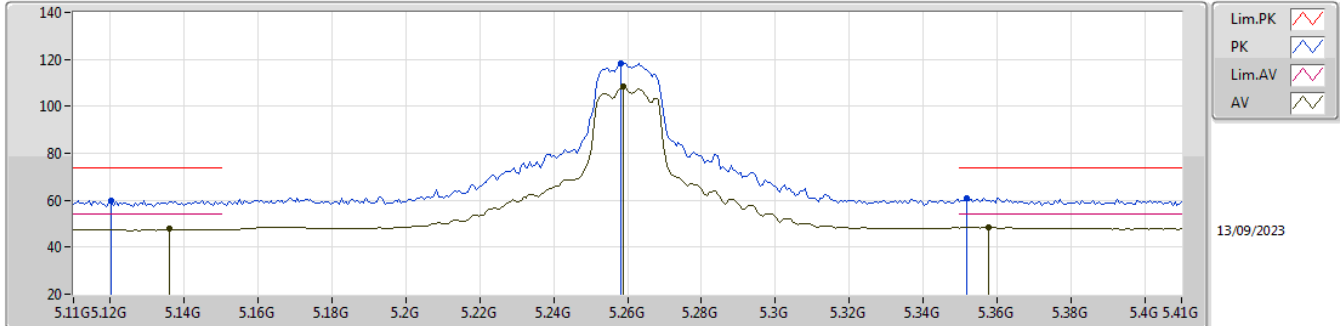


EUT_Z_2TX
Setting 21
02-E-P-5-10

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	5.1226G	60.54	74.00	-13.46	51.89	3	Vertical	55	2.49	-	33.55	5.76	30.66
AV	5.15G	47.44	54.00	-6.56	38.75	3	Vertical	55	2.49	-	33.60	5.77	30.68
PK	5.2594G	119.00	Inf	-Inf	110.12	3	Vertical	55	2.49	-	33.82	5.83	30.77
AV	5.2594G	108.95	Inf	-Inf	100.07	3	Vertical	55	2.49	-	33.82	5.83	30.77
PK	5.3554G	61.38	74.00	-12.62	52.34	3	Vertical	55	2.49	-	34.00	5.88	30.84
AV	5.3542G	48.73	54.00	-5.27	39.69	3	Vertical	55	2.49	-	34.00	5.88	30.84

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

5260MHz_TX



EUT_Z_2TX
Setting 21
02-E-P-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	5.1202G	60.08	74.00	-13.92	51.44	3	Horizontal	181	2.00	-	33.54	5.76	30.66
AV	5.1358G	47.68	54.00	-6.32	39.01	3	Horizontal	181	2.00	-	33.57	5.77	30.67
PK	5.2582G	118.34	Inf	-Inf	109.46	3	Horizontal	181	2.00	-	33.82	5.83	30.77
AV	5.2588G	108.25	Inf	-Inf	99.37	3	Horizontal	181	2.00	-	33.82	5.83	30.77
PK	5.3518G	60.99	74.00	-13.01	51.95	3	Horizontal	181	2.00	-	34.00	5.88	30.84
AV	5.3578G	48.63	54.00	-5.37	39.60	3	Horizontal	181	2.00	-	34.00	5.88	30.85