

FCC Test Report

FCC ID : 2ABVH-INARI8B2
Equipment : Tablet
Brand Name : AAVA
Model Name : INARI8B-LTG-1
Applicant : Aava Mobile Oy
NAHKATEHTAANKATU 2 90130 OULU FINLAND
Manufacturer : Aava Mobile Oy
NAHKATEHTAANKATU 2 90130 OULU FINLAND
Standard : 47 CFR FCC Part 15.407

The product was received on Jul. 04, 2018, and testing was started from Jul. 09, 2018 and completed on Jul. 18, 2018. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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



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APPENDIX A. ORIGINAL REPORT

PHOTOGRAPHS OF EUT V01



History of this test report

Report No.	Version	Description	Issued Date
FR890633-01AN	01	Initial issue of report	Jan. 08, 2019

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
None

Reviewed by: Sam Tsai

Report Producer: Ann Hou

1 General Description

1.1 Information

1.1.1 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR860615-01AN

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

Modifications	Performance Checking
Add WWAN module	The worst case of Radiated Unwanted Emissions was evaluated, and the test result of original test report was found to be the worst case scenario.
Change model name	N/A

1.2 Applicant

Aava Mobile Oy
 NAHKATEHTAANKATU 2 90130 OULU FINLAND

1.3 Manufacturer

Aava Mobile Oy
 NAHKATEHTAANKATU 2 90130 OULU FINLAND

1.4 RF General Information

Product Feature	
Equipment Name	Tablet
Brand Name	AAVA
Model No.	INARI8B-LTG-1
FCC ID	2ABVH-INARI8B2
EUT supports Radios application	NFC/GNSS WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	DV1
SW version	Windows 10
MFD	2018-04-26
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.5 Product Specification subjective to this standard

Product Specification subjective to this standard	
Power Supply	AC Adapter

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5700	100-140 [11]
Straddle 5720		5720	144 [1]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5670	102-134 [5]
Straddle 5710		5710	142 [1]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5610	106-122 [2]
Straddle 5690		5690	138 [1]
5725-5850		5775	155 [1]

1.6 Modification of EUT

No modifications are made to the EUT during all test items.



Appendix A. Original Report

Please refer to Sporton report number FR860615-01AN as below.

FCC Test Report

FCC ID : 2ABVH-INARI8B1
Equipment : Tablet
Brand Name : AAVA
Model Name : INARI8B-WIG-1
**Applicant/
Manufacturer** : Aava Mobile Oy
NAHKATEHTAANKATU 2 90130 OULU FINLAND
Standard : 47 CFR FCC Part 15.407

The product was received on Jul. 04, 2018, and testing was started from Jul. 09, 2018 and completed on Jul. 18, 2018. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications 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.

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SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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



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APPENDIX B. TEST RESULTS OF EMISSION BANDWIDTH

APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER

APPENDIX D. TEST RESULTS OF PEAK POWER SPECTRAL DENSITY

APPENDIX E. TEST RESULTS OF UNWANTED EMISSIONS

APPENDIX G. TEST PHOTOS

PHOTOGRAPHS OF EUT V01



History of this test report

Report No.	Version	Description	Issued Date
FR860615-01AN	01	Initial issue of report	Sep. 11, 2018



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 Conducted Output Power	PASS	-
3.4	15.407(a)	Peak Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-

Reviewed by: Sam Tsai

Report Producer: Debby Hung



1 General Description

1.1 Information

1.1.1 RF General Information

Product Feature	
Equipment Name	Tablet
Brand Name	AAVA
Model No.	INARI8B-WIG-1
FCC ID	2ABVH-INARI8B1
EUT supports Radios application	NFC/GNSS WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	RU
SW version	Windows 10
MFD	2018-04-26
EUT Stage	Identical Prototype

Remark: The above EUT'S information was declared by manufacturer.

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5700	100-140 [11]
Straddle 5720		5720	144 [1]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5670	102-134 [5]
Straddle 5710		5710	142 [1]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5610	106-122 [2]
Straddle 5690		5690	138 [1]
5725-5850		5775	155 [1]



Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	2TX
5.25-5.35GHz	802.11a	20	2TX
5.47-5.725GHz	802.11a	20	2TX
5.725-5.85GHz	802.11a	20	2TX
5.15-5.25GHz	802.11ac VHT20	20	2TX
5.25-5.35GHz	802.11ac VHT20	20	2TX
5.47-5.725GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.25-5.35GHz	802.11ac VHT40	40	2TX
5.47-5.725GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ac VHT80	80	2TX
5.25-5.35GHz	802.11ac VHT80	80	2TX
5.47-5.725GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	Aava Mobile Ltd	INARI8B	Ceramic	fixed on board
2	Aava Mobile Ltd	INARI8B	Ceramic	fixed on board

Ant.	Port	Gain (dBi)			
		U-NII-1	U-NII-2A	U-NII-2C	U-NII-3
1	1	3.3	3.3	3.4	3.4
2	2	2.8	2.3	1.9	1.9

For 5GHz function:

For IEEE 802.11 a/n/ac mode (1TX/1RX)

Support diversity function and pre -tested on each single chain.

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

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From AC Adapter			
EUT Function	<input type="checkbox"/>	Outdoor	<input type="checkbox"/>	Indoor
	<input type="checkbox"/>	Fixed P2P	<input checked="" type="checkbox"/>	Client
Beamforming Function	<input type="checkbox"/>	With beamforming	<input checked="" type="checkbox"/>	Without beamforming
Weather Band	<input checked="" type="checkbox"/>	With 5600~5650MHz	<input type="checkbox"/>	Without 5600~5650MHz
Type of EUT				
<input checked="" type="checkbox"/>	Stand-alone			
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)			
	Combined Equipment - Brand Name / Model No.: ...			
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)			
	Host System - Brand Name / Model No.: ...			
<input type="checkbox"/>	Other:			

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.949	0.227	2.049m	1k
802.11ac VHT20	0.955	0.2	1.918m	1k
802.11ac VHT40	0.843	0.742	946.25u	3k
802.11ac VHT80	0.812	0.904	462.5u	3k

1.2 Testing Applied 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
- ◆ KDB 789033 D02 v02r01
- ◆ KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location		
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.		
<input type="checkbox"/>	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.) TEL : 886-3-656-9065 FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.		

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Jeremy	21°C / 65%	10/Jul/2018
RF Conducted	TH01-HY	Barry	23.1°C / 64%	18/Jul/2018
Radiated	03CH09-HY	Andy	22.6°C / 56%	09/Jul/2018

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Condition

Condition Item	Abbreviation/Remark	Remark
RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Test Software Version	DRTU v11.1803.0-06808
-----------------------	-----------------------

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_1TX(Port1)	-
5180MHz	10.125
5200MHz	10.125
5240MHz	10.25
5260MHz	9.875
5300MHz	10.25
5320MHz	10.375
5500MHz	10.75
5580MHz	10.875
5700MHz	11
5720MHz Straddle 5.47-5.725GHz	11.75
5720MHz Straddle 5.725-5.85GHz	11.75
5745MHz	10.75
5785MHz	10.5
5825MHz	10.25
802.11a_Nss1,(6Mbps)_1TX(Port2)	-
5180MHz	11.875
5200MHz	11.75
5240MHz	11.625
5260MHz	11.625
5300MHz	11.625
5320MHz	11.625
5500MHz	11.875



Mode	PowerSetting
5580MHz	11.75
5700MHz	11.75
5720MHz Straddle 5.47-5.725GHz	12.25
5720MHz Straddle 5.725-5.85GHz	12.25
5745MHz	11.875
5785MHz	12
5825MHz	11.75
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	10.25,11.375
5200MHz	10.25,11.375
5240MHz	10.125,11.25
5260MHz	9.875,11.125
5300MHz	10,11.25
5320MHz	10.375,11.25
5500MHz	10.75,11.375
5580MHz	10.75,11.25
5700MHz	10.75,11.25
5720MHz Straddle 5.47-5.725GHz	11.5,11.875
5720MHz Straddle 5.725-5.85GHz	11.5,11.875
5745MHz	10,11.25
5785MHz	10.125,11.375
5825MHz	9.875,11.375
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	-
5180MHz	10.25
5200MHz	10.25
5240MHz	10.25
5260MHz	9.875
5300MHz	10.25
5320MHz	10.375
5500MHz	10.75
5580MHz	10.875
5700MHz	11
5720MHz Straddle 5.47-5.725GHz	11.875
5720MHz Straddle 5.725-5.85GHz	11.875
5745MHz	10.875



Mode	PowerSetting
5785MHz	10.625
5825MHz	10.375
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	-
5180MHz	12
5200MHz	12
5240MHz	11.75
5260MHz	11.75
5300MHz	11.75
5320MHz	11.75
5500MHz	11.875
5580MHz	11.875
5700MHz	11.75
5720MHz Straddle 5.47-5.725GHz	12.375
5720MHz Straddle 5.725-5.85GHz	12.375
5745MHz	12
5785MHz	12
5825MHz	11.875
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	10.375,11.5
5200MHz	10.375,11.500
5240MHz	10.25,11.375
5260MHz	10.25,11.375
5300MHz	10.375,11.5
5320MHz	10.5,11.5
5500MHz	10.875,11.5
5580MHz	11,11.5
5700MHz	11,11.375
5720MHz Straddle 5.47-5.725GHz	12.125,12.625
5720MHz Straddle 5.725-5.85GHz	12.125,12.625
5745MHz	10.625,11.625
5785MHz	10.375,11.75
5825MHz	10,11.5
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	-
5190MHz	10.25
5230MHz	10.375



Mode	PowerSetting
5270MHz	9.875
5310MHz	10.25
5510MHz	10.625
5550MHz	10.75
5670MHz	11
5710MHz Straddle 5.47-5.725GHz	11.125
5710MHz Straddle 5.725-5.85GHz	11.125
5755MHz	10.875
5795MHz	10.625
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-
5190MHz	12
5230MHz	11.875
5270MHz	11.75
5310MHz	11.75
5510MHz	11.75
5550MHz	11.625
5670MHz	11.875
5710MHz Straddle 5.47-5.725GHz	11.75
5710MHz Straddle 5.725-5.85GHz	11.75
5755MHz	12
5795MHz	12.125
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5190MHz	10.875,12.125
5230MHz	10.875,12
5270MHz	10.625,11.75
5310MHz	10.75,11.75
5510MHz	11.375,12.125
5550MHz	11.375,11.875
5670MHz	11.5,12
5710MHz Straddle 5.47-5.725GHz	11.375,11.75
5710MHz Straddle 5.725-5.85GHz	11.375,11.75
5755MHz	11.125,12.125
5795MHz	11,12.25
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-
5210MHz	10.5






Mode	PowerSetting
5290MHz	10.5
5530MHz	11
5610MHz	11
5690MHz Straddle 5.47-5.725GHz	11
5690MHz Straddle 5.725-5.85GHz	11
5775MHz	11
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-
5210MHz	12
5290MHz	12
5530MHz	12
5610MHz	12
5690MHz Straddle 5.47-5.725GHz	12
5690MHz Straddle 5.725-5.85GHz	12
5775MHz	12.5
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	11.25,12.5
5290MHz	11,12.125
5530MHz	12,12.5
5610MHz	11.875,12.375
5690MHz Straddle 5.47-5.725GHz	11.25,11.625
5690MHz Straddle 5.725-5.85GHz	11.25,11.625
5775MHz	11.625,13

2.3 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
Operating Mode	CTX
1	Adapter mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak 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		
1	Adapter mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT			V

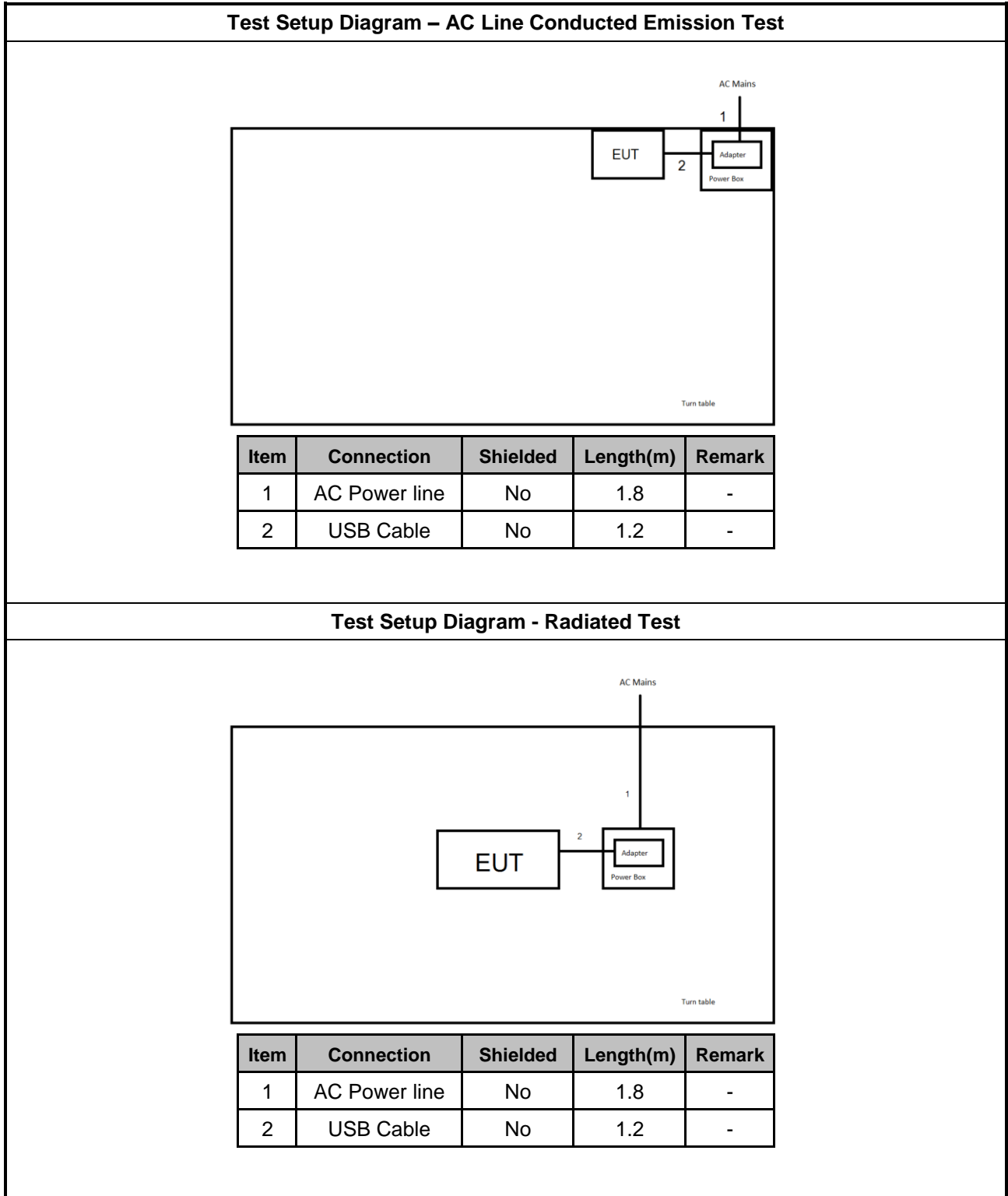
2.4 Accessories and Support Equipment

Specification of Accessories				
AC Adapter US	Brand Name	PHIHONG	Model Name	AQ18A-59CFA
Battery	Brand Name	Aava	Model Name	AMME3735
USB Cable	Brand Name	PHIHONG	Model Name	UES-1001A160-R

Reminder: Regarding to more detail and other information, please refer to user manual.

Support Equipment – Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	AC Power Source	GW	APS-9102	-

2.5 Test Setup Diagram



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.

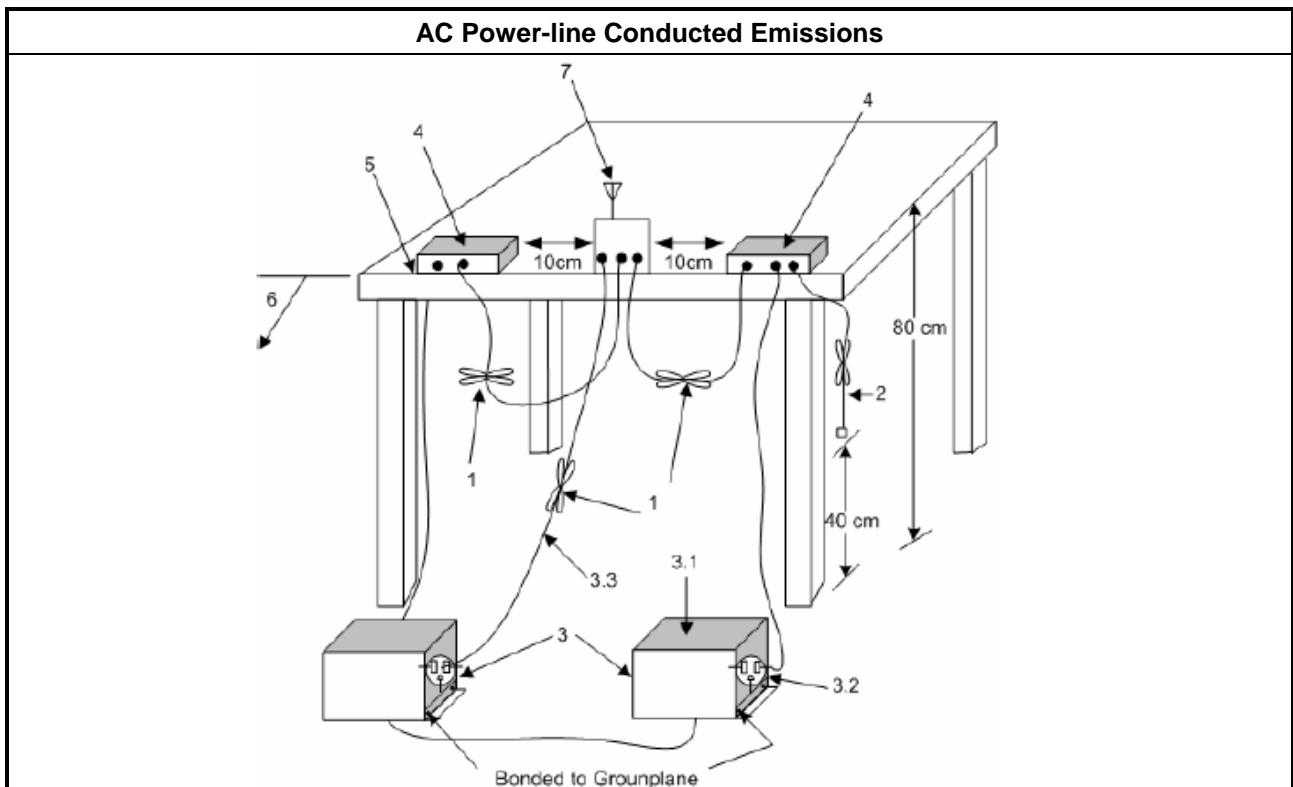
3.1.2 Measuring Instruments

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 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, 6 dB emission bandwidth \geq 500kHz.

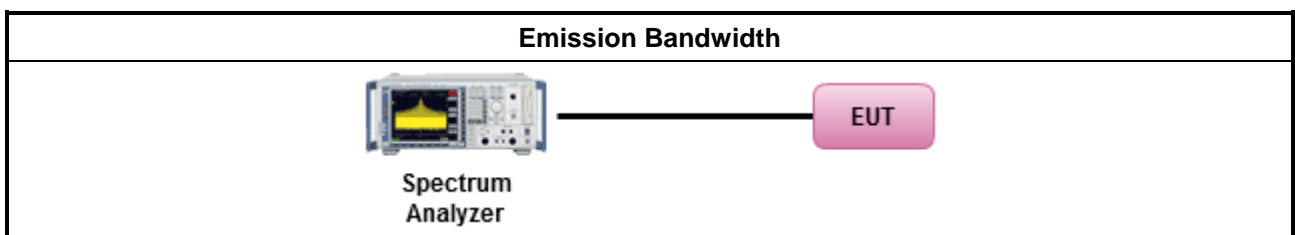
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below: 	
<input checked="" type="checkbox"/>	Refer as KDB 789033, clause C for EBW and clause D for OBW measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 6.7 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

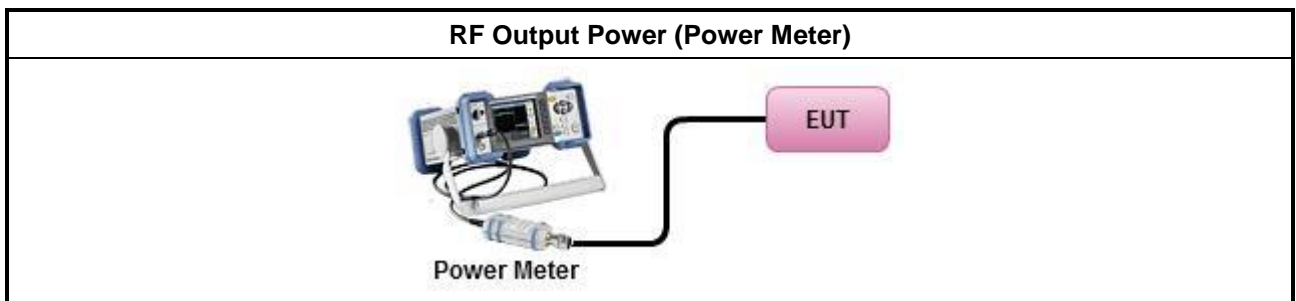
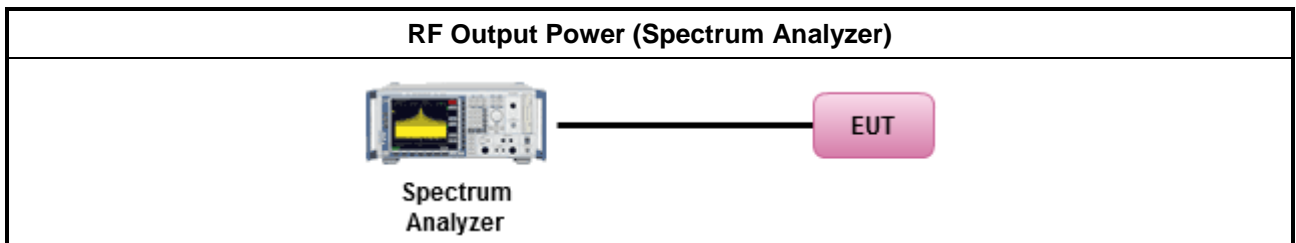
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> Maximum Conducted Output Power 	
	Duty cycle $\geq 98\%$
<input type="checkbox"/>	Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle $< 98\%$
<input checked="" type="checkbox"/>	Refer as KDB 789033, 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 KDB 789033, clause E Method PM (using an RF average power meter).
<ul style="list-style-type: none"> For conducted measurement. 	
	<ul style="list-style-type: none"> If the EUT supports multiple transmit chains using options given below: Refer as 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]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density 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 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:	
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. ▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
<p>PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz</p> <p>G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

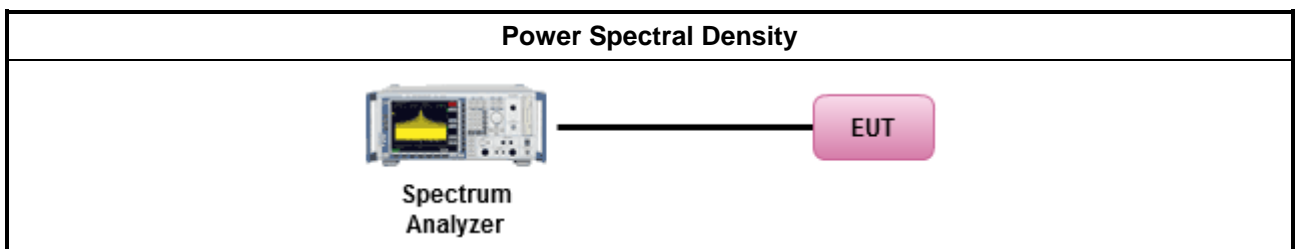
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options: 	
<input type="checkbox"/>	Refer as KDB 789033, 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%
<input type="checkbox"/>	Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging). Duty cycle < 98%
<input checked="" type="checkbox"/>	Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: <ul style="list-style-type: none"> ▪ Measure and sum the spectra across the outputs. Refer as 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. ▪ 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]) $EIRP_{total} = PPSD_{total} + DG$ 	

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Radiated 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
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	5.650-5700 GHz: e.i.r.p. -27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

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).

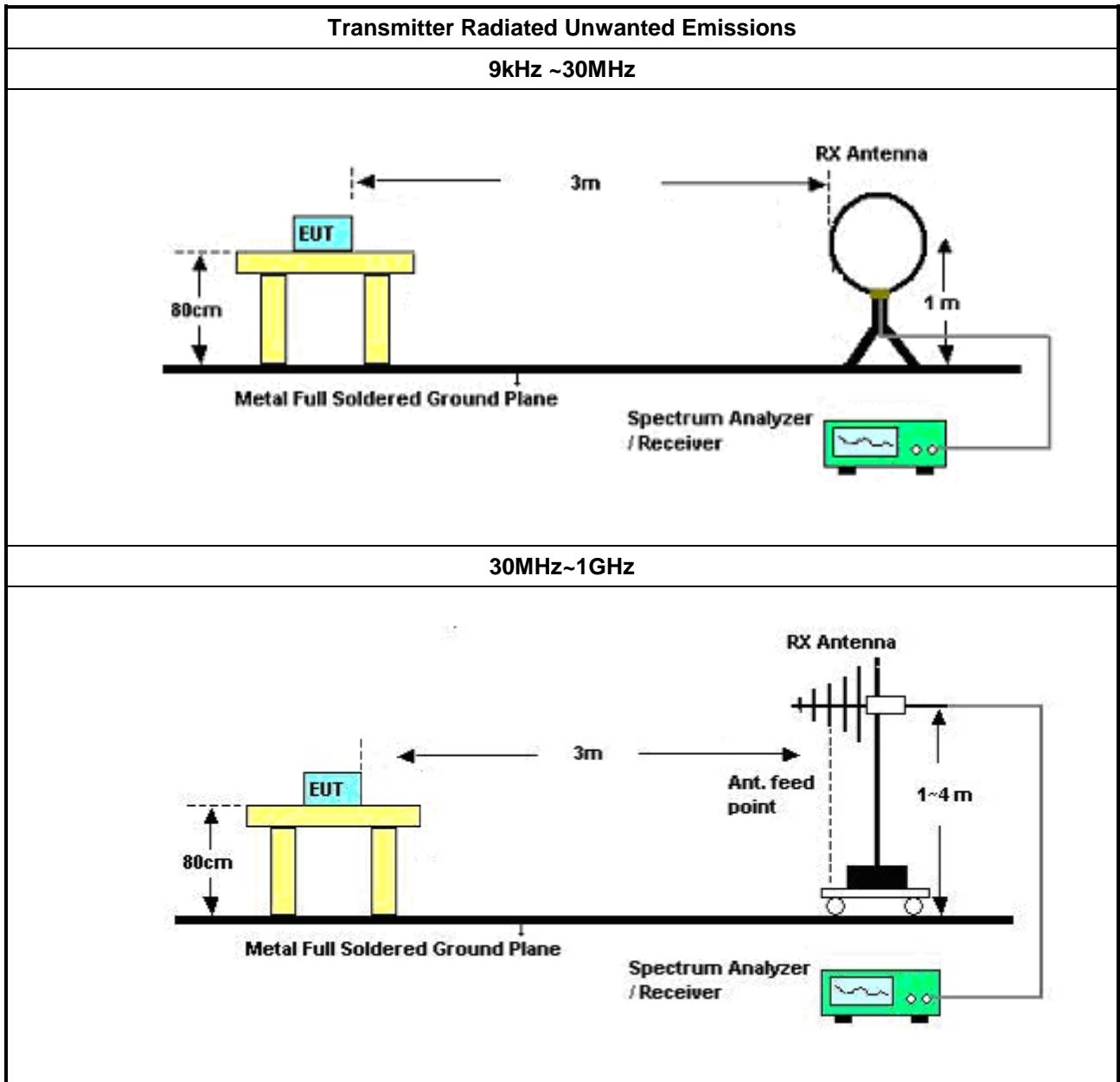
3.5.2 Measuring Instruments

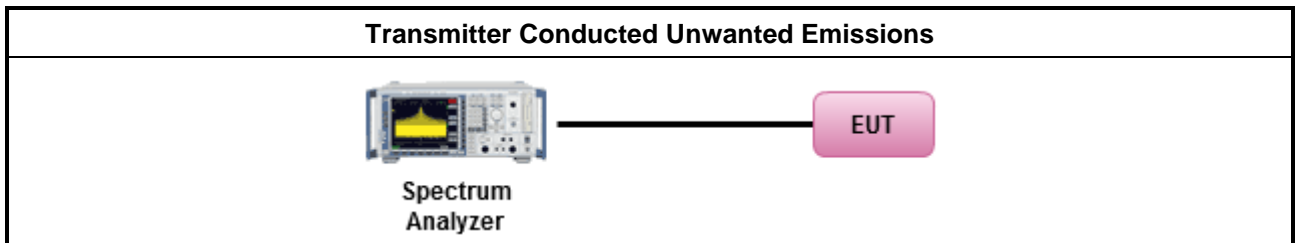
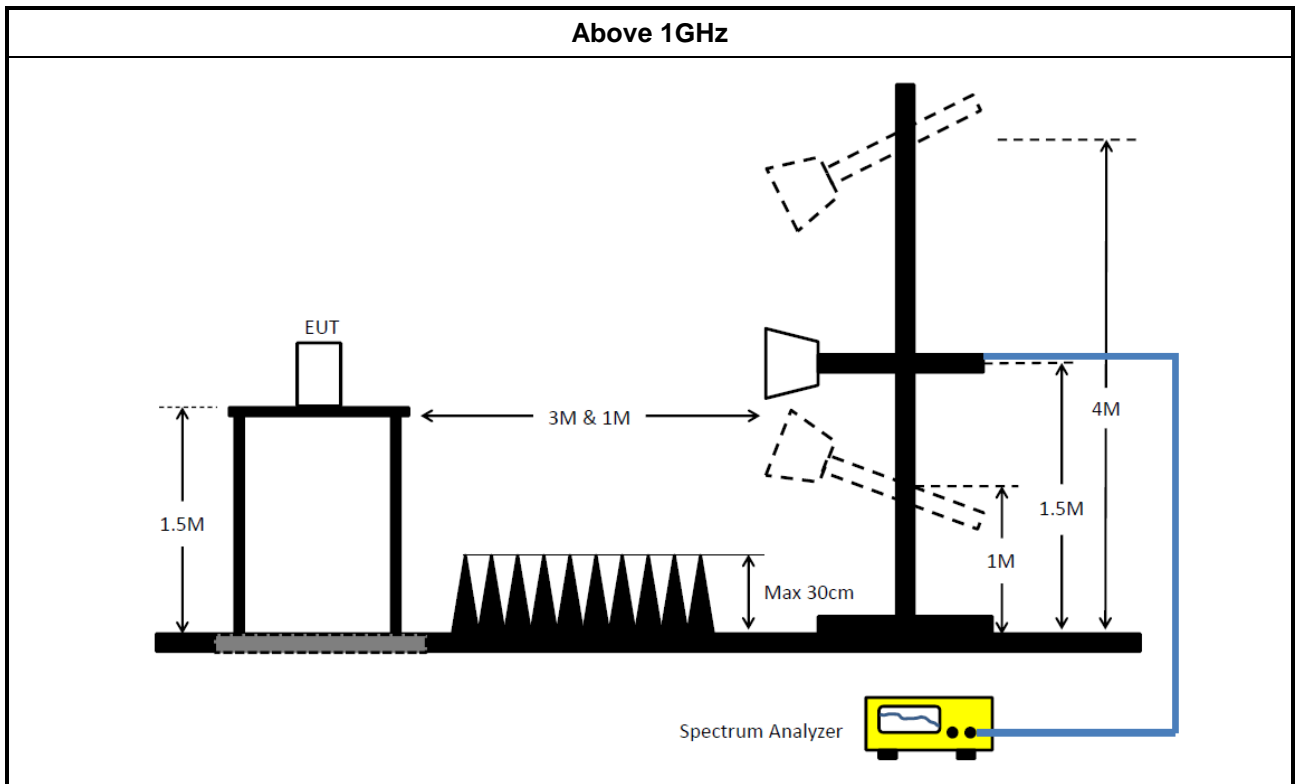
Refer a test equipment and calibration data table in this test report.

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 \geq 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 KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	<ul style="list-style-type: none"> ▪ Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.
<input checked="" type="checkbox"/>	Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW.
<input checked="" type="checkbox"/>	Refer as KDB 789033, clause G)5) (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 Transmitter Unwanted Emissions (Below 30MHz)

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

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102051	9KHz ~ 3.6GHz	03/May/2018	02/May/2019
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	17/Nov/2017	16/Nov/2018
RF Cable-CON	HUBER+SUHNER	RG213/U	0761183202000 1	9kHz ~ 30MHz	06/Oct/2017	05/Oct/2018
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Puls e Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	12/Oct/2017	11/Oct/2018

NCR : Non-Calibration Require
Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9kHz~40GHz	29/Dec/2017	28/Dec/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	05/Feb/2018	04/Feb/2019
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	05/Feb/2018	04/Feb/2019
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_10 4	MY10710/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_10 4	MY10709/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_10 4	MY10713/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018

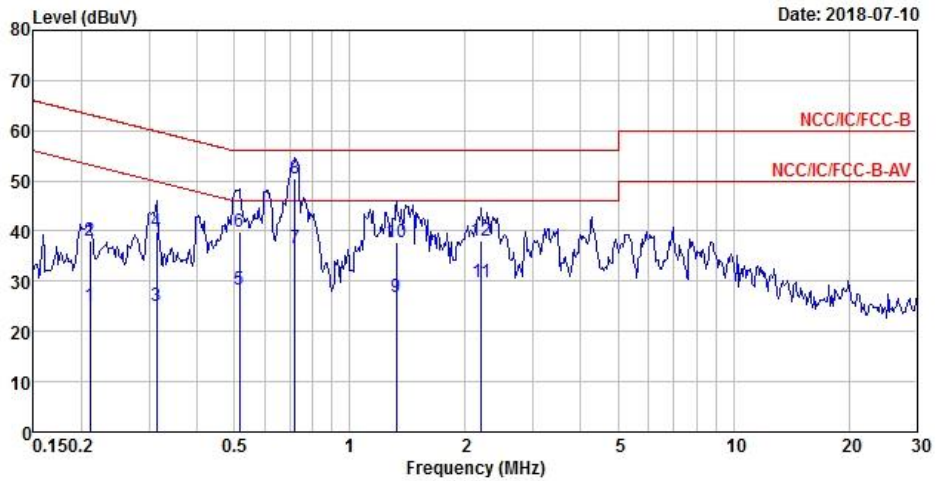


Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	23/Apr/2018	22/Apr/2019
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	14/Jun/2018	13/Jun/2019
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	10/May/2018	09/May/2019
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	27/Apr/2018	26/Apr/2019
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	20/Jul/2017	19/Jul/2018
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	09/Sep/2017	08/Sep/2018
Double Ridged Guide Horn Antenna	SCHWARZBEC K	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	30/Apr/2018	29/Apr/2019
Broadband Horn Antenna	SCHWARZBEC K	BBHA 9170	BBHA9170614	18GHz~40GHz	09/Feb/2018	08/Feb/2019
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2017	23/Aug/2018
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	29/Mar/2018	28/Mar/2019
RF Cable-R03m	Jye Bao	RG142	CB031	9kHz ~ 1GHz	1/Feb/2018	31/Jan/2019
RF Cable-high	HUBER+SUHNER	SUCOFLEX104	SN 556626/4 + 556627	1GHz ~ 40GHz	14/Mar/2018	13/Mar/2019

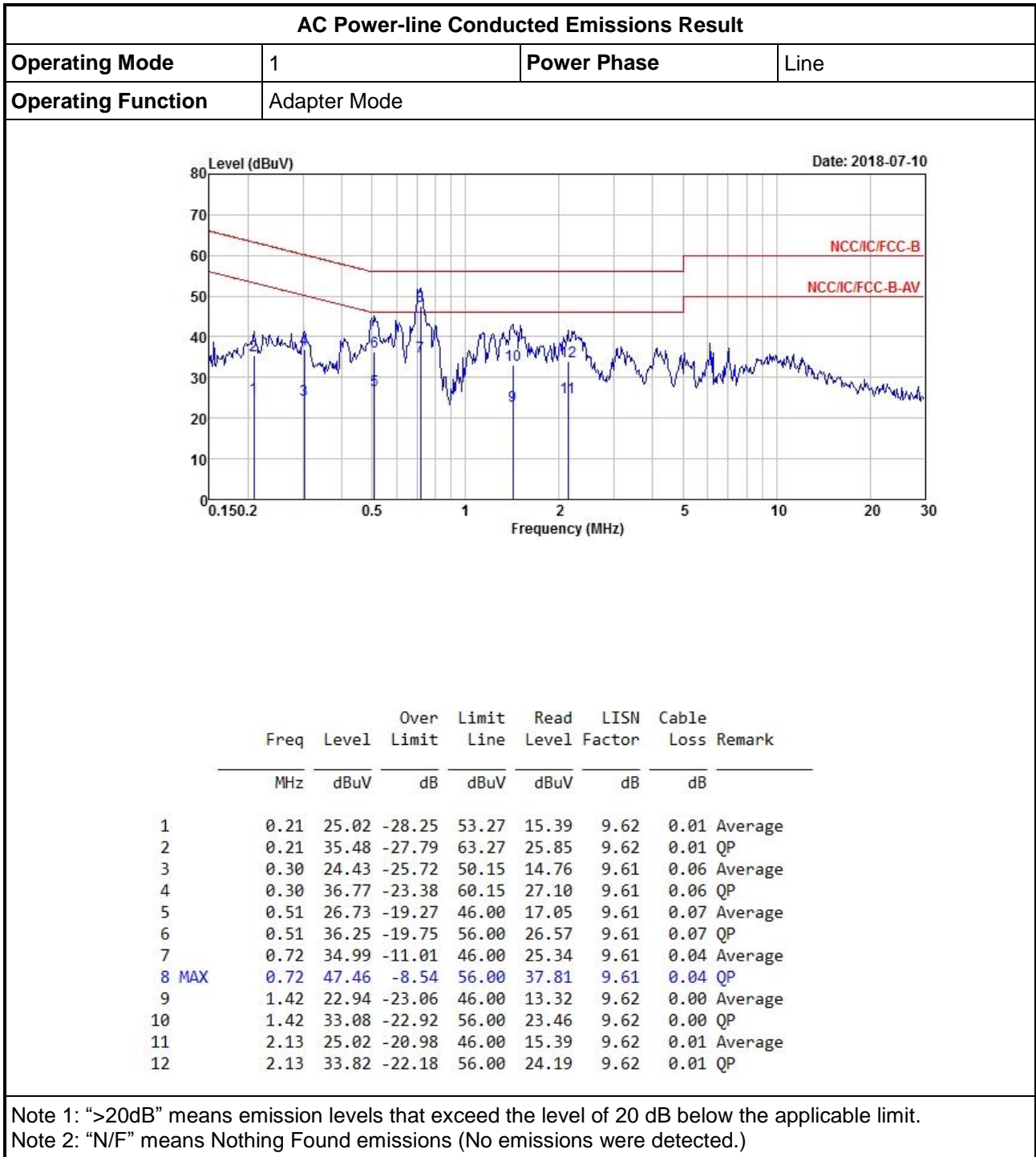
AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Adapter Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.21	25.19	-27.99	53.18	15.56	9.62	0.01	Average
2	0.21	38.08	-25.10	63.18	28.45	9.62	0.01	QP
3	0.31	25.22	-24.66	49.88	15.55	9.61	0.06	Average
4	0.31	39.88	-20.00	59.88	30.21	9.61	0.06	QP
5	0.52	28.39	-17.61	46.00	18.71	9.61	0.07	Average
6	0.52	39.75	-16.25	56.00	30.07	9.61	0.07	QP
7	0.72	36.54	-9.46	46.00	26.88	9.62	0.04	Average
8 MAX	0.72	50.41	-5.59	56.00	40.75	9.62	0.04	QP
9	1.32	26.84	-19.16	46.00	17.22	9.62	0.00	Average
10	1.32	37.69	-18.31	56.00	28.07	9.62	0.00	QP
11	2.20	29.96	-16.04	46.00	20.32	9.63	0.01	Average
12	2.20	38.17	-17.83	56.00	28.53	9.63	0.01	QP

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)



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)_1TX(Port1)	24.45M	16.417M	16M4D1D	23.5M	16.367M
802.11a_Nss1,(6Mbps)_1TX(Port2)	24.7M	16.417M	16M4D1D	23.775M	16.392M
802.11a_Nss1,(6Mbps)_2TX	24.025M	16.492M	16M5D1D	23.65M	16.367M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	24.9M	17.641M	17M6D1D	24.25M	17.616M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	24.625M	17.616M	17M6D1D	24.15M	17.616M
802.11ac VHT20_Nss1,(MCS0)_2TX	25M	17.616M	17M6D1D	24.25M	17.591M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	46.15M	36.082M	36M1D1D	45.35M	36.082M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	45.75M	36.082M	36M1D1D	45.6M	36.082M
802.11ac VHT40_Nss1,(MCS0)_2TX	46.2M	36.082M	36M1D1D	44.15M	36.032M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	87M	75.062M	75M1D1D	87M	75.062M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	86.1M	75.162M	75M2D1D	86.1M	75.162M
802.11ac VHT80_Nss1,(MCS0)_2TX	85.5M	75.262M	75M3D1D	84.2M	75.162M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	24.35M	16.442M	16M4D1D	23.6M	16.417M
802.11a_Nss1,(6Mbps)_1TX(Port2)	23.375M	16.467M	16M5D1D	23.05M	16.367M
802.11a_Nss1,(6Mbps)_2TX	24.3M	16.442M	16M4D1D	23.425M	16.392M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	24.75M	17.641M	17M6D1D	23.925M	17.591M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	24.45M	17.641M	17M6D1D	23.925M	17.616M
802.11ac VHT20_Nss1,(MCS0)_2TX	24.5M	17.641M	17M6D1D	23.525M	17.591M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	45.25M	36.082M	36M1D1D	44.75M	36.082M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	46.3M	36.082M	36M1D1D	45.05M	36.032M
802.11ac VHT40_Nss1,(MCS0)_2TX	46.1M	36.132M	36M1D1D	45.85M	36.032M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	86.9M	75.162M	75M2D1D	86.9M	75.162M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	85.5M	74.863M	74M9D1D	85.5M	74.863M
802.11ac VHT80_Nss1,(MCS0)_2TX	86.7M	75.062M	75M1D1D	84.5M	74.763M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	23.975M	16.467M	16M5D1D	16.95M	13.208M
802.11a_Nss1,(6Mbps)_1TX(Port2)	24.4M	16.417M	16M4D1D	16.59M	13.178M
802.11a_Nss1,(6Mbps)_2TX	24.125M	16.442M	16M4D1D	16.785M	13.178M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	24.875M	17.641M	17M6D1D	16.905M	13.823M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	25.15M	17.616M	17M6D1D	16.89M	13.808M
802.11ac VHT20_Nss1,(MCS0)_2TX	24.675M	17.616M	17M6D1D	16.89M	13.793M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	46.55M	36.132M	36M1D1D	37.8M	32.814M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	45.5M	36.082M	36M1D1D	37.975M	32.849M
802.11ac VHT40_Nss1,(MCS0)_2TX	45.4M	36.082M	36M1D1D	37.52M	32.849M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	86.2M	75.162M	75M2D1D	78.525M	71.739M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	85.9M	75.162M	75M2D1D	77.55M	71.814M
802.11ac VHT80_Nss1,(MCS0)_2TX	86.7M	75.062M	75M1D1D	78.075M	71.664M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	14.975M	16.417M	16M4D1D	3.14M	4.478M
802.11a_Nss1,(6Mbps)_1TX(Port2)	15.05M	16.417M	16M4D1D	3.12M	4.358M
802.11a_Nss1,(6Mbps)_2TX	15.1M	16.417M	16M4D1D	3.12M	4.438M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	15.025M	17.641M	17M6D1D	3.74M	4.678M



Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	15.1M	17.641M	17M6D1D	3.36M	4.578M
802.11ac VHT20_Nss1,(MCS0)_2TX	15.65M	17.641M	17M6D1D	3.76M	4.598M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	35.05M	36.082M	36M1D1D	3.16M	6.977M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	35M	36.082M	36M1D1D	3.16M	6.497M
802.11ac VHT40_Nss1,(MCS0)_2TX	35.1M	36.132M	36M1D1D	3.12M	6.497M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	72.5M	75.162M	75M2D1D	3.14M	8.996M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	61.3M	75.062M	75M1D1D	3.12M	8.676M
802.11ac VHT80_Nss1,(MCS0)_2TX	72.5M	75.262M	75M3D1D	3.12M	8.636M

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)_1TX(Port1)	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf	24.45M	16.417M		
5200MHz_TnomVnom	Pass	Inf	23.85M	16.392M		
5240MHz_TnomVnom	Pass	Inf	23.5M	16.367M		
5260MHz_TnomVnom	Pass	Inf	23.75M	16.442M		
5300MHz_TnomVnom	Pass	Inf	23.6M	16.417M		
5320MHz_TnomVnom	Pass	Inf	24.35M	16.442M		
5500MHz_TnomVnom	Pass	Inf	23.875M	16.392M		
5580MHz_TnomVnom	Pass	Inf	23.8M	16.392M		
5700MHz_TnomVnom	Pass	Inf	23.975M	16.467M		
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	16.95M	13.208M		
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.14M	4.478M		
5745MHz_TnomVnom	Pass	500k	14.95M	16.392M		
5785MHz_TnomVnom	Pass	500k	14.975M	16.417M		
5825MHz_TnomVnom	Pass	500k	14.975M	16.367M		
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf			23.775M	16.417M
5200MHz_TnomVnom	Pass	Inf			23.975M	16.417M
5240MHz_TnomVnom	Pass	Inf			24.7M	16.392M
5260MHz_TnomVnom	Pass	Inf			23.05M	16.442M
5300MHz_TnomVnom	Pass	Inf			23.175M	16.367M
5320MHz_TnomVnom	Pass	Inf			23.375M	16.467M
5500MHz_TnomVnom	Pass	Inf			23.9M	16.417M
5580MHz_TnomVnom	Pass	Inf			24.4M	16.392M
5700MHz_TnomVnom	Pass	Inf			23.275M	16.417M
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf			16.59M	13.178M
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k			3.12M	4.358M
5745MHz_TnomVnom	Pass	500k			15M	16.417M
5785MHz_TnomVnom	Pass	500k			13.1M	16.417M
5825MHz_TnomVnom	Pass	500k			15.05M	16.367M
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf	23.85M	16.392M	23.65M	16.417M
5200MHz_TnomVnom	Pass	Inf	23.725M	16.492M	24.025M	16.417M
5240MHz_TnomVnom	Pass	Inf	23.775M	16.367M	23.7M	16.392M
5260MHz_TnomVnom	Pass	Inf	23.775M	16.392M	24.15M	16.442M
5300MHz_TnomVnom	Pass	Inf	24.2M	16.392M	24.3M	16.417M
5320MHz_TnomVnom	Pass	Inf	23.425M	16.392M	23.925M	16.417M
5500MHz_TnomVnom	Pass	Inf	23.95M	16.392M	23.85M	16.442M
5580MHz_TnomVnom	Pass	Inf	23.225M	16.392M	24.1M	16.392M
5700MHz_TnomVnom	Pass	Inf	24.1M	16.367M	24.125M	16.417M
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	16.785M	13.178M	17.085M	13.223M
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.12M	4.518M	3.14M	4.438M
5745MHz_TnomVnom	Pass	500k	13.775M	16.392M	15.1M	16.417M
5785MHz_TnomVnom	Pass	500k	14.4M	16.417M	14.975M	16.417M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5825MHz_TnomVnom	Pass	500k	15.025M	16.417M	15M	16.417M
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf	24.9M	17.641M		
5200MHz_TnomVnom	Pass	Inf	24.4M	17.616M		
5240MHz_TnomVnom	Pass	Inf	24.25M	17.616M		
5260MHz_TnomVnom	Pass	Inf	24.1M	17.591M		
5300MHz_TnomVnom	Pass	Inf	23.925M	17.591M		
5320MHz_TnomVnom	Pass	Inf	24.75M	17.641M		
5500MHz_TnomVnom	Pass	Inf	24.05M	17.616M		
5580MHz_TnomVnom	Pass	Inf	24.875M	17.616M		
5700MHz_TnomVnom	Pass	Inf	24.1M	17.641M		
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	16.905M	13.823M		
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.74M	4.678M		
5745MHz_TnomVnom	Pass	500k	15.025M	17.641M		
5785MHz_TnomVnom	Pass	500k	14.975M	17.616M		
5825MHz_TnomVnom	Pass	500k	15M	17.616M		
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf			24.625M	17.616M
5200MHz_TnomVnom	Pass	Inf			24.625M	17.616M
5240MHz_TnomVnom	Pass	Inf			24.15M	17.616M
5260MHz_TnomVnom	Pass	Inf			23.925M	17.616M
5300MHz_TnomVnom	Pass	Inf			24.225M	17.641M
5320MHz_TnomVnom	Pass	Inf			24.45M	17.616M
5500MHz_TnomVnom	Pass	Inf			24.75M	17.616M
5580MHz_TnomVnom	Pass	Inf			25.15M	17.591M
5700MHz_TnomVnom	Pass	Inf			24.125M	17.591M
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf			16.89M	13.808M
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k			3.36M	4.578M
5745MHz_TnomVnom	Pass	500k			15.025M	17.616M
5785MHz_TnomVnom	Pass	500k			11.45M	17.591M
5825MHz_TnomVnom	Pass	500k			15.1M	17.641M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf	24.525M	17.616M	24.25M	17.616M
5200MHz_TnomVnom	Pass	Inf	24.825M	17.616M	24.75M	17.591M
5240MHz_TnomVnom	Pass	Inf	24.4M	17.616M	25M	17.616M
5260MHz_TnomVnom	Pass	Inf	24.45M	17.616M	23.825M	17.641M
5300MHz_TnomVnom	Pass	Inf	24.15M	17.616M	23.725M	17.591M
5320MHz_TnomVnom	Pass	Inf	24.5M	17.591M	23.525M	17.616M
5500MHz_TnomVnom	Pass	Inf	24.675M	17.591M	23.975M	17.616M
5580MHz_TnomVnom	Pass	Inf	23.925M	17.591M	24.325M	17.616M
5700MHz_TnomVnom	Pass	Inf	23.8M	17.566M	23.825M	17.616M
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	16.89M	13.793M	17.265M	13.823M
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.76M	4.598M	3.76M	4.618M
5745MHz_TnomVnom	Pass	500k	15.1M	17.616M	15.075M	17.641M
5785MHz_TnomVnom	Pass	500k	15.1M	17.616M	15.025M	17.616M



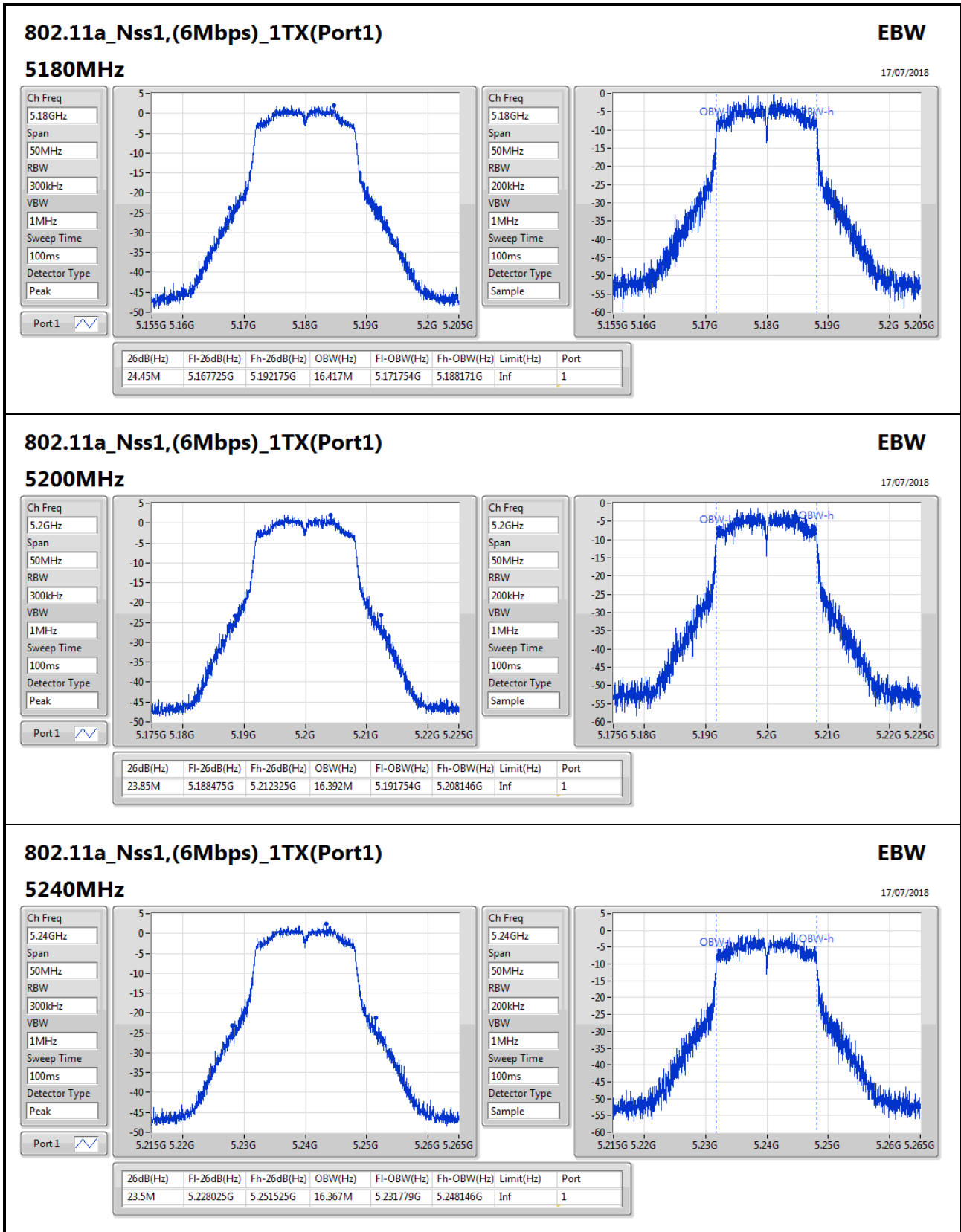
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5825MHz_TnomVnom	Pass	500k	15.075M	17.641M	15.65M	17.616M
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	Inf	46.15M	36.082M		
5230MHz_TnomVnom	Pass	Inf	45.35M	36.082M		
5270MHz_TnomVnom	Pass	Inf	45.25M	36.082M		
5310MHz_TnomVnom	Pass	Inf	44.75M	36.082M		
5510MHz_TnomVnom	Pass	Inf	46.55M	36.132M		
5550MHz_TnomVnom	Pass	Inf	45.1M	36.132M		
5670MHz_TnomVnom	Pass	Inf	45.85M	36.082M		
5710MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	37.8M	32.814M		
5710MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.16M	6.977M		
5755MHz_TnomVnom	Pass	500k	35.05M	36.082M		
5795MHz_TnomVnom	Pass	500k	35.05M	36.082M		
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	Inf			45.75M	36.082M
5230MHz_TnomVnom	Pass	Inf			45.6M	36.082M
5270MHz_TnomVnom	Pass	Inf			46.3M	36.032M
5310MHz_TnomVnom	Pass	Inf			45.05M	36.082M
5510MHz_TnomVnom	Pass	Inf			45.25M	36.082M
5550MHz_TnomVnom	Pass	Inf			45.5M	35.982M
5670MHz_TnomVnom	Pass	Inf			45M	36.032M
5710MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf			37.975M	32.849M
5710MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k			3.16M	6.497M
5755MHz_TnomVnom	Pass	500k			35M	36.082M
5795MHz_TnomVnom	Pass	500k			33.7M	36.082M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	Inf	46.2M	36.082M	44.45M	36.032M
5230MHz_TnomVnom	Pass	Inf	44.95M	36.032M	44.15M	36.032M
5270MHz_TnomVnom	Pass	Inf	46M	36.132M	45.95M	36.082M
5310MHz_TnomVnom	Pass	Inf	46.1M	36.032M	45.85M	36.132M
5510MHz_TnomVnom	Pass	Inf	45.3M	36.082M	43.6M	36.032M
5550MHz_TnomVnom	Pass	Inf	45.4M	36.032M	44.25M	36.082M
5670MHz_TnomVnom	Pass	Inf	45.2M	36.032M	44.2M	36.032M
5710MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	38.185M	32.884M	37.52M	32.849M
5710MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.12M	6.917M	3.14M	6.497M
5755MHz_TnomVnom	Pass	500k	35M	36.082M	33.85M	36.132M
5795MHz_TnomVnom	Pass	500k	35.1M	36.132M	33.7M	36.082M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	Inf	87M	75.062M		
5290MHz_TnomVnom	Pass	Inf	86.9M	75.162M		
5530MHz_TnomVnom	Pass	Inf	86.2M	75.162M		
5610MHz_TnomVnom	Pass	Inf	85.7M	74.963M		
5690MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	78.525M	71.739M		
5690MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.14M	8.996M		
5775MHz_TnomVnom	Pass	500k	72.5M	75.162M		

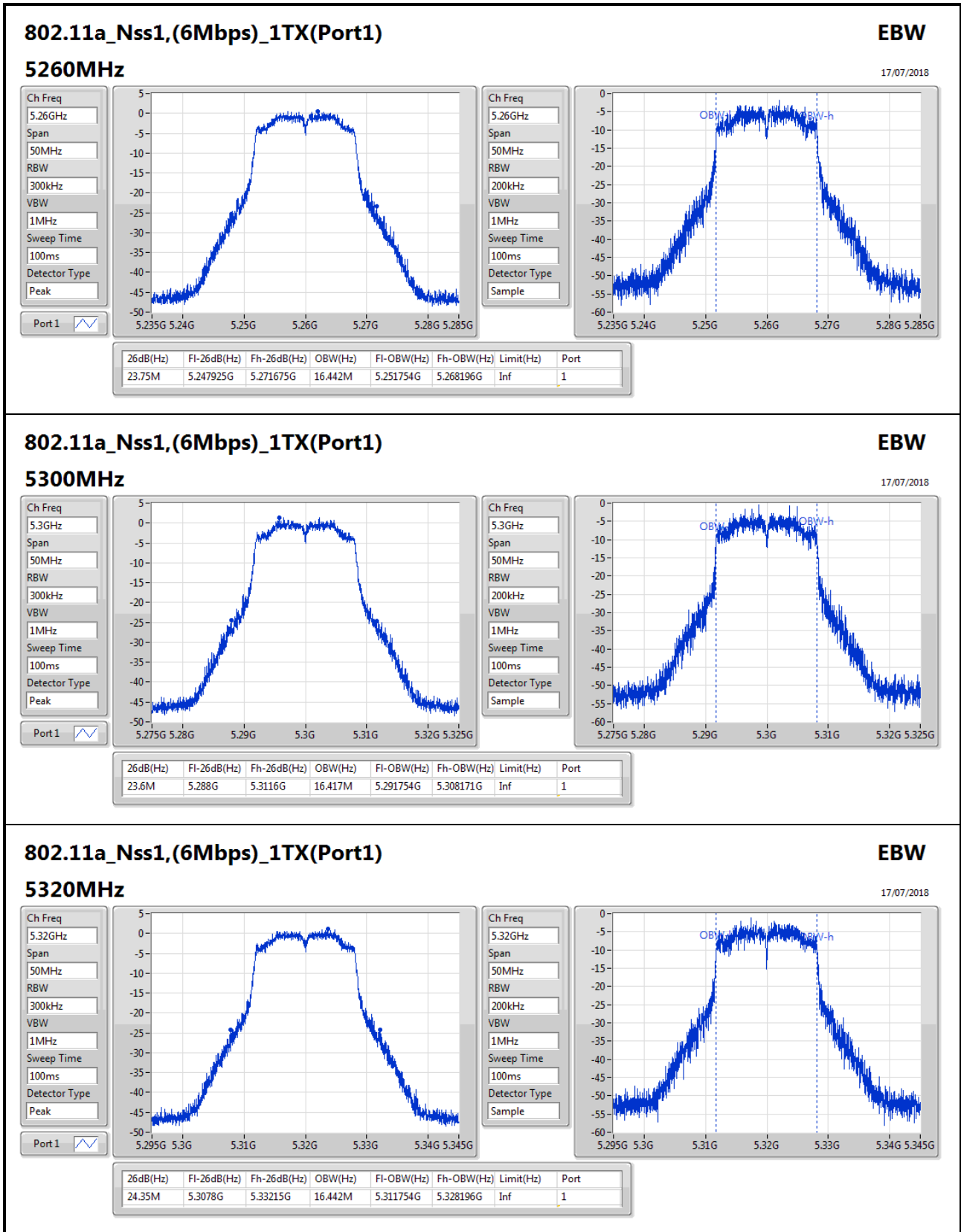


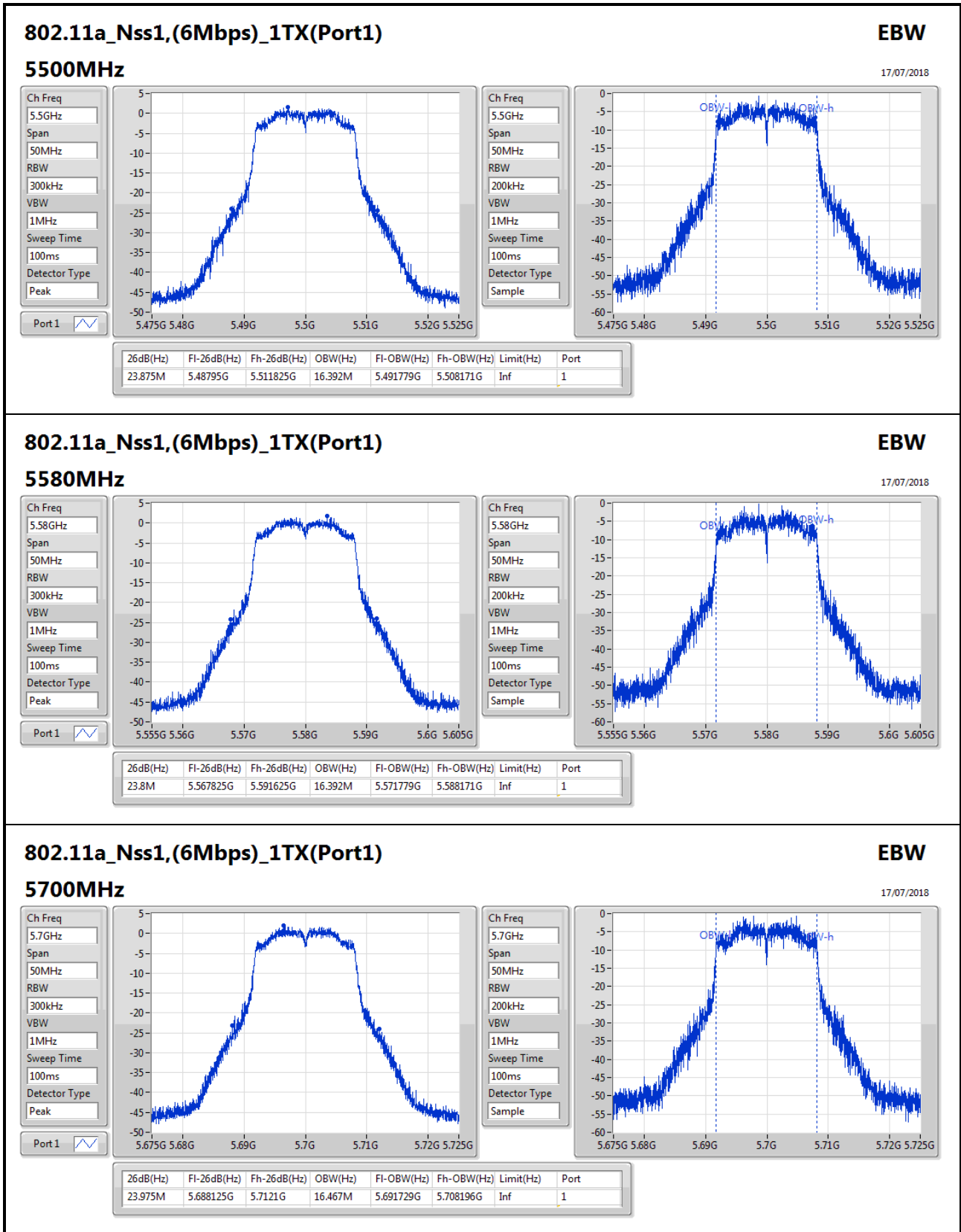
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	Inf			86.1M	75.162M
5290MHz_TnomVnom	Pass	Inf			85.5M	74.863M
5530MHz_TnomVnom	Pass	Inf			85.9M	74.763M
5610MHz_TnomVnom	Pass	Inf			84.7M	75.162M
5690MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf			77.55M	71.814M
5690MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k			3.12M	8.676M
5775MHz_TnomVnom	Pass	500k			61.3M	75.062M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	Inf	85.5M	75.162M	84.2M	75.262M
5290MHz_TnomVnom	Pass	Inf	86.7M	74.763M	84.5M	75.062M
5530MHz_TnomVnom	Pass	Inf	86.7M	75.062M	85.2M	75.062M
5610MHz_TnomVnom	Pass	Inf	84.2M	75.062M	84M	74.963M
5690MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	78.15M	71.664M	78.075M	71.964M
5690MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.12M	9.015M	3.12M	8.636M
5775MHz_TnomVnom	Pass	500k	72.5M	75.062M	71.3M	75.262M

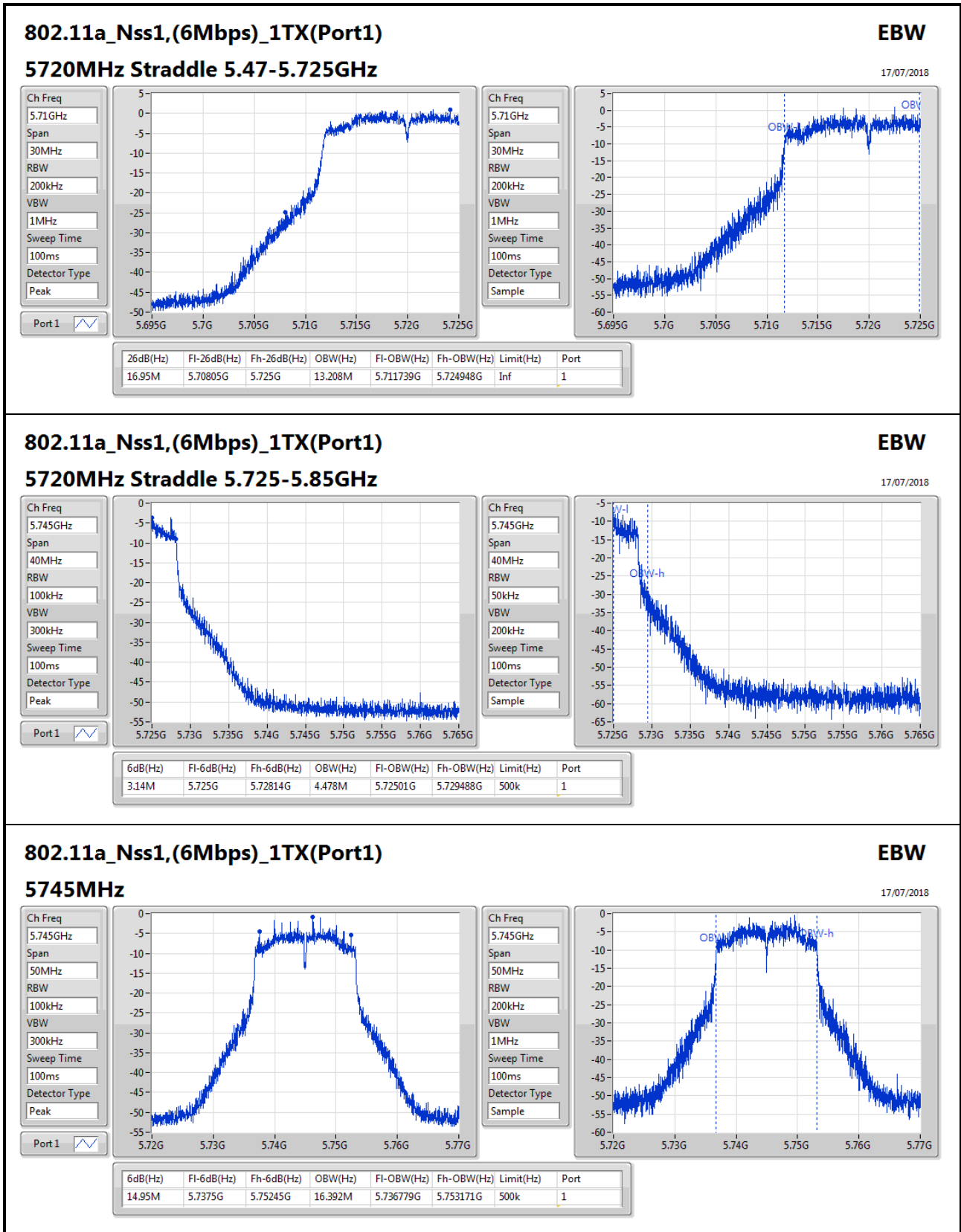
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

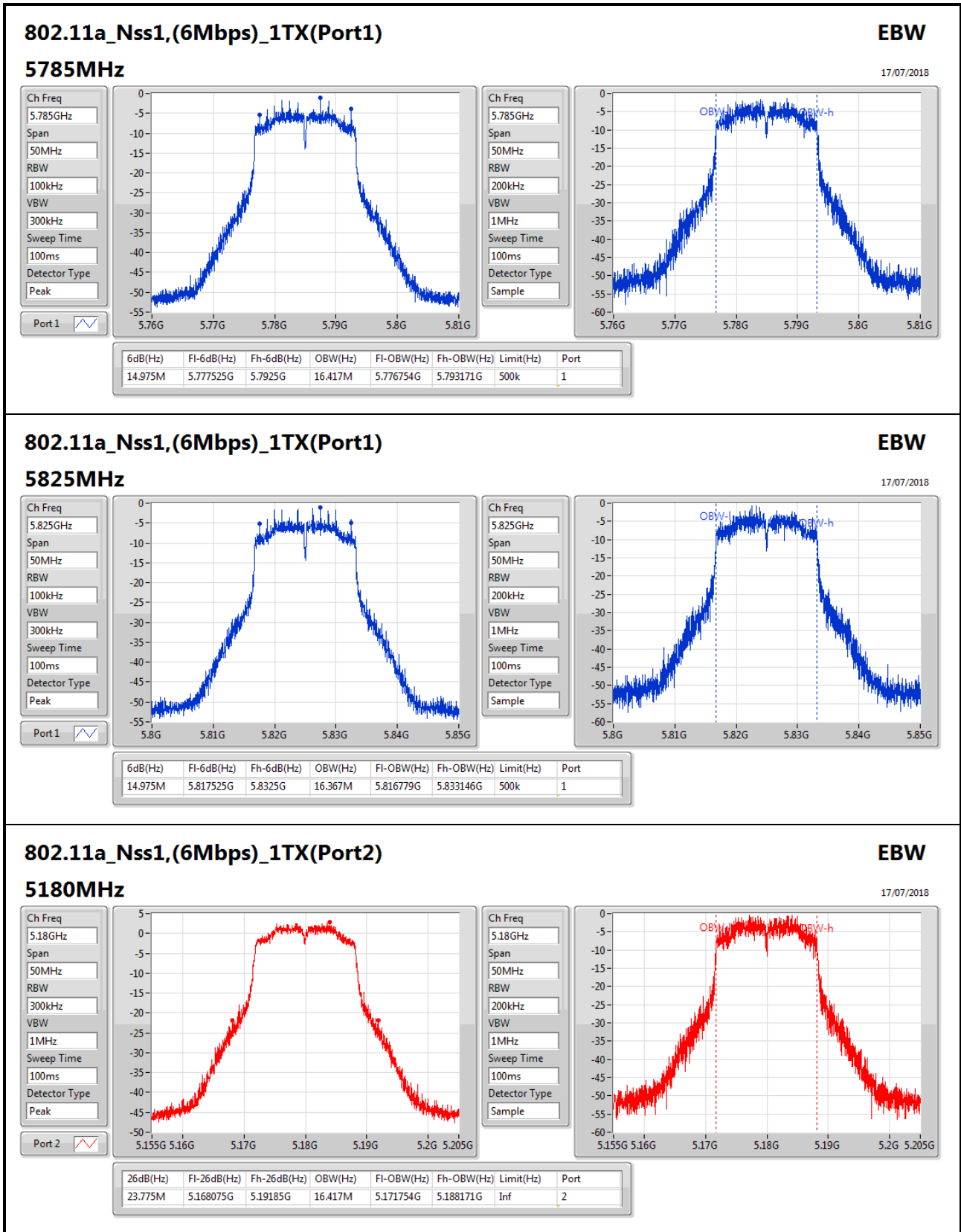
Port X-OBW = Port X 99% occupied bandwidth;










802.11a_Nss1,(6Mbps)_1TX(Port2)
EBW

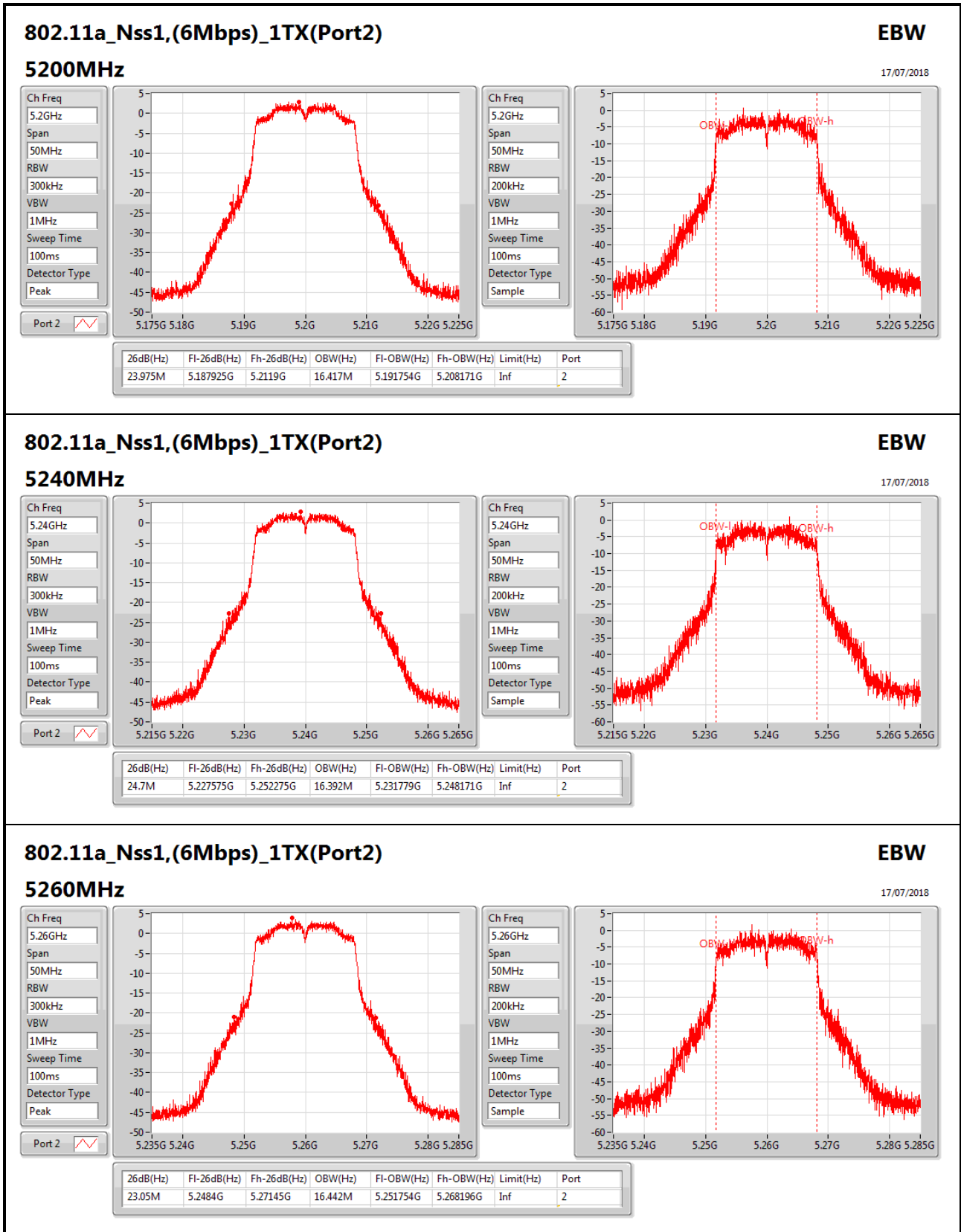
17/07/2018

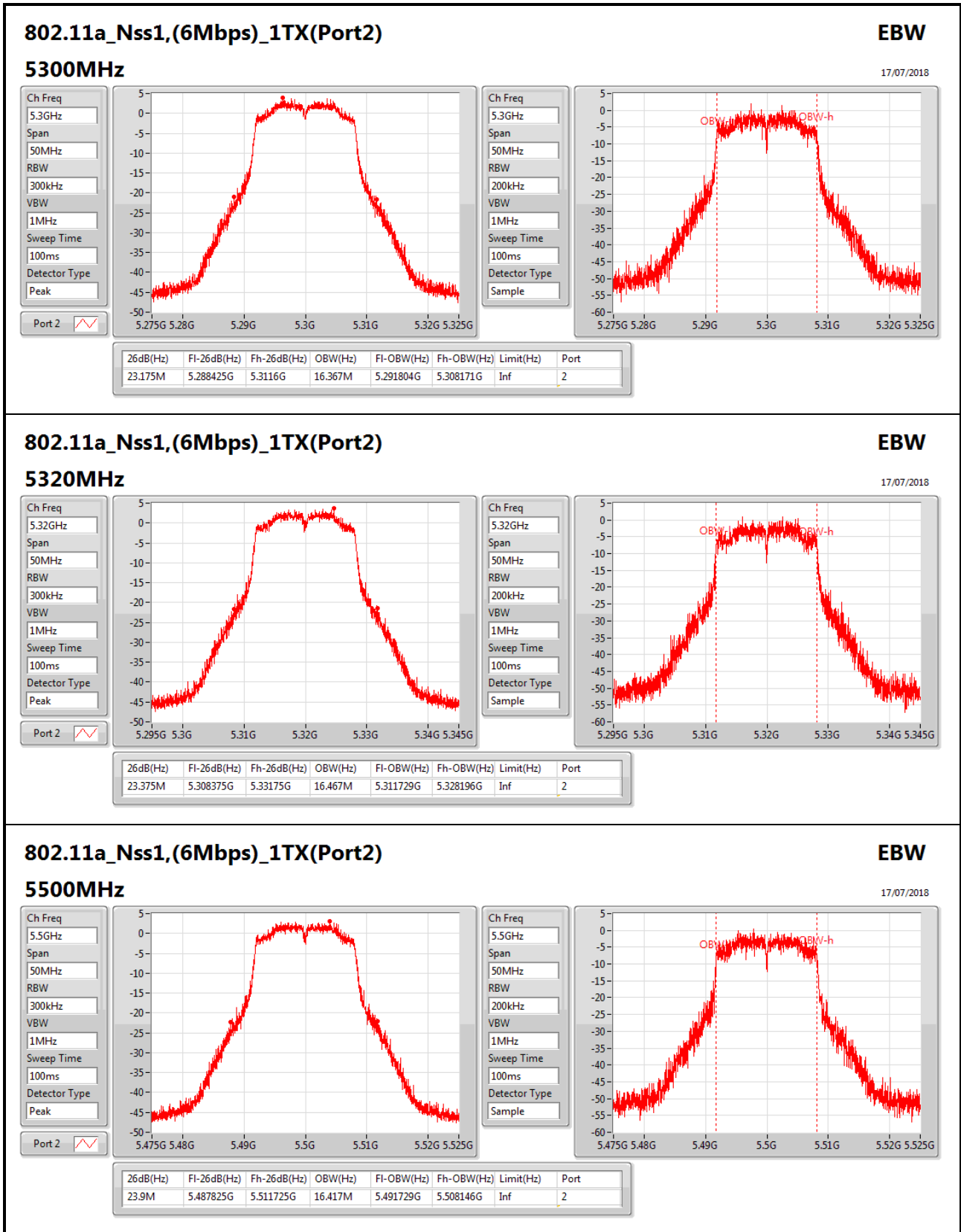
5180MHz

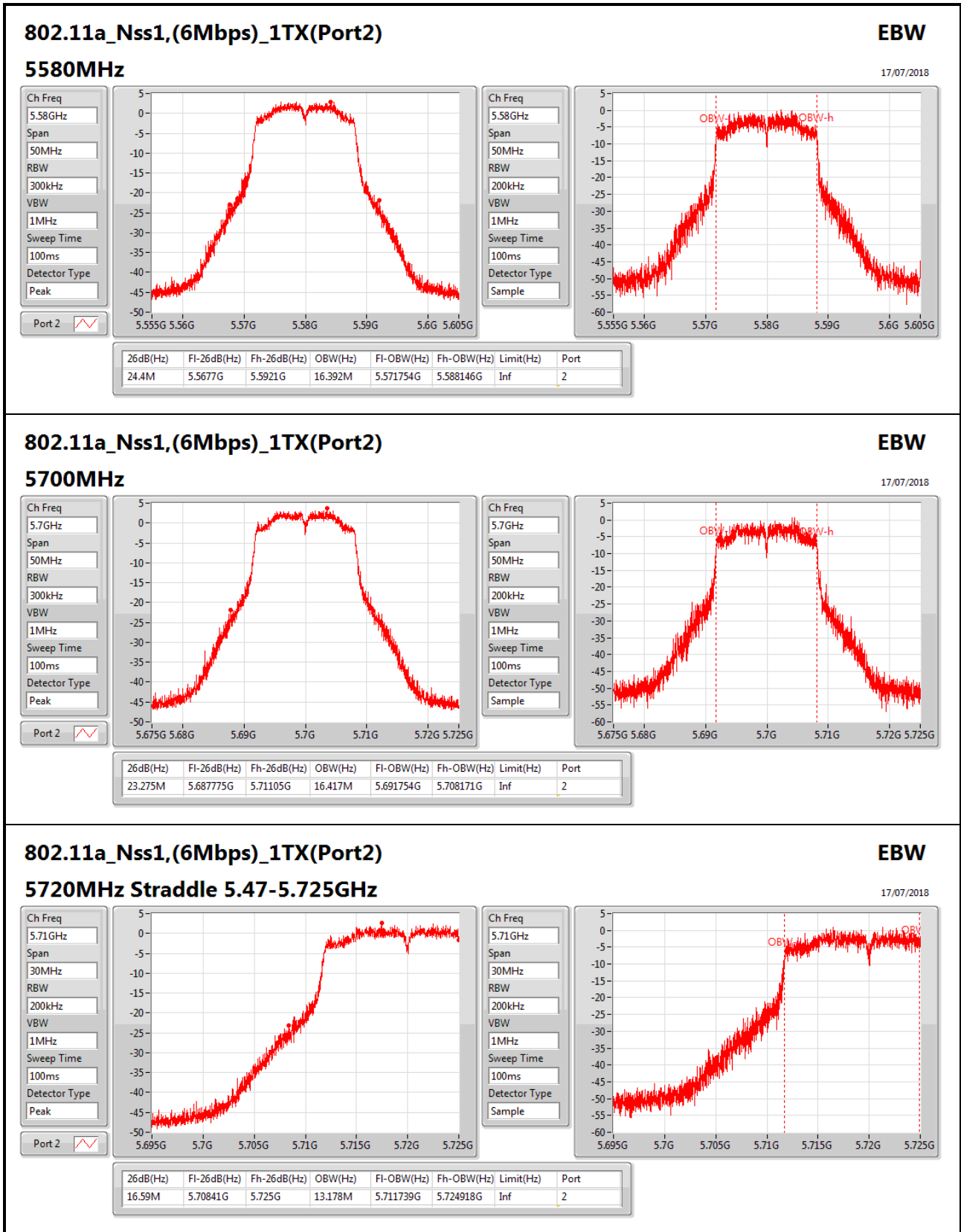
Ch Freq: 5.18GHz
Span: 50MHz
RBW: 300kHz
VBW: 1MHz
Sweep Time: 100ms
Detector Type: Peak

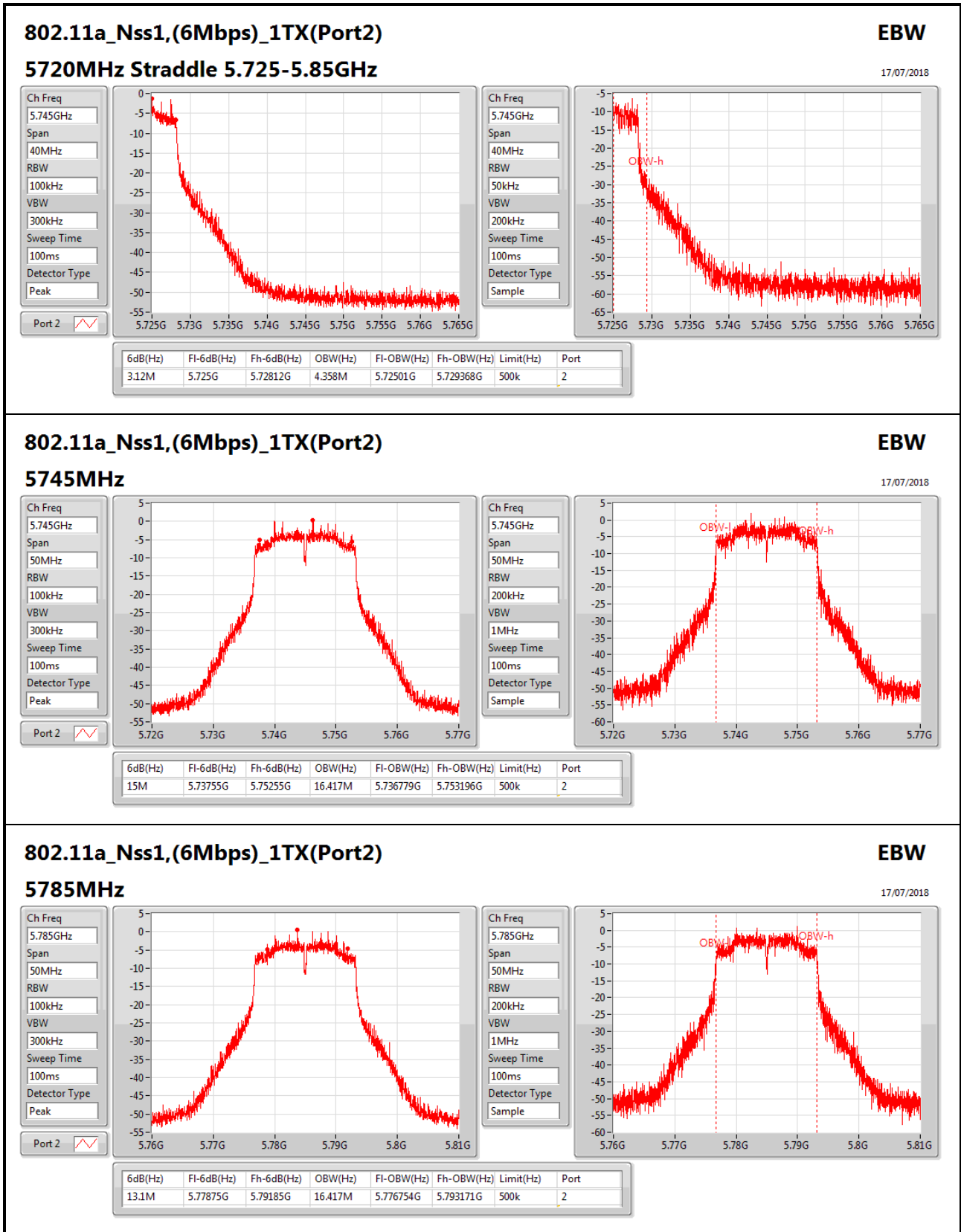
Port 2

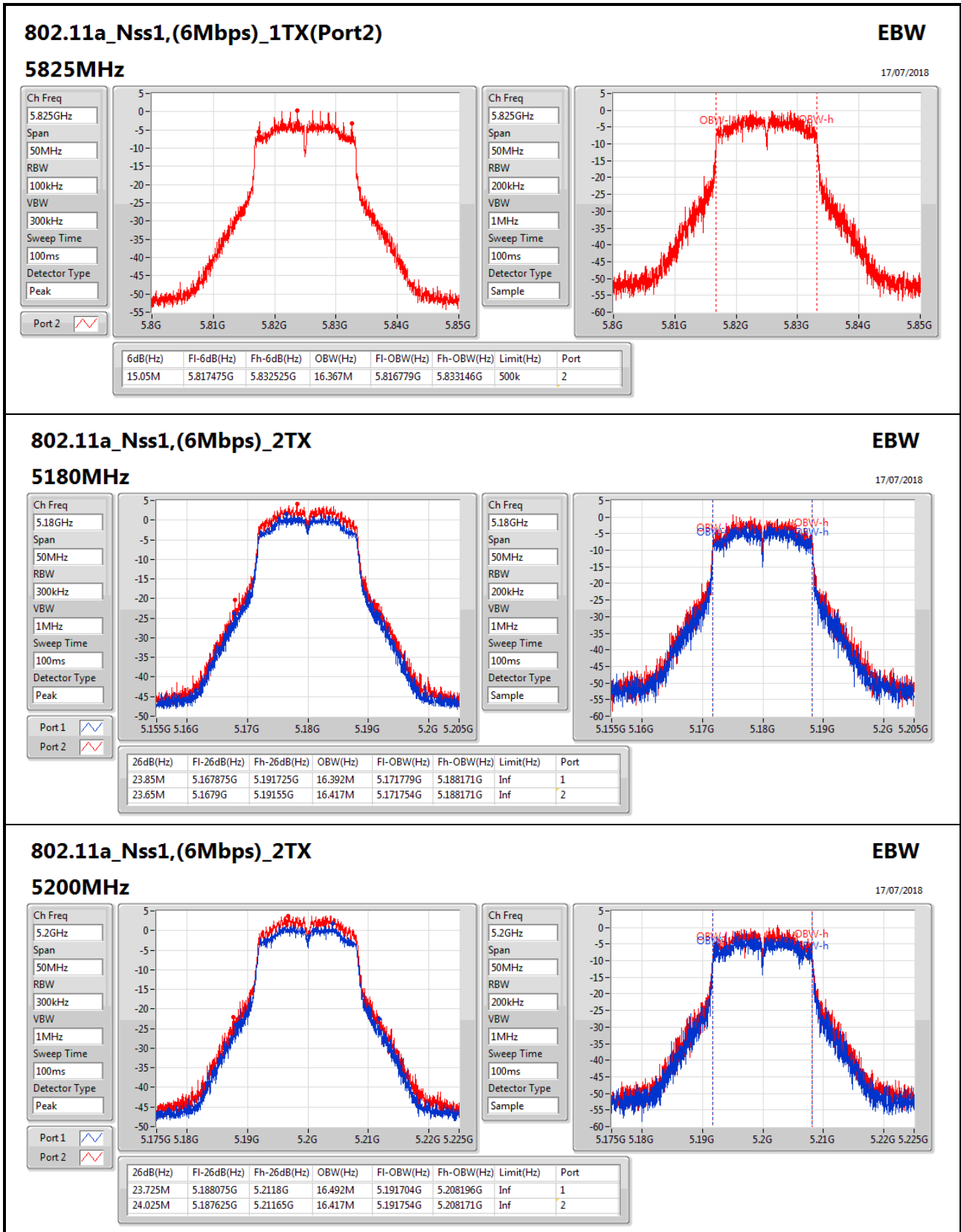
Ch Freq: 5.18GHz
Span: 50MHz
RBW: 200kHz
VBW: 1MHz
Sweep Time: 100ms
Detector Type: Sample

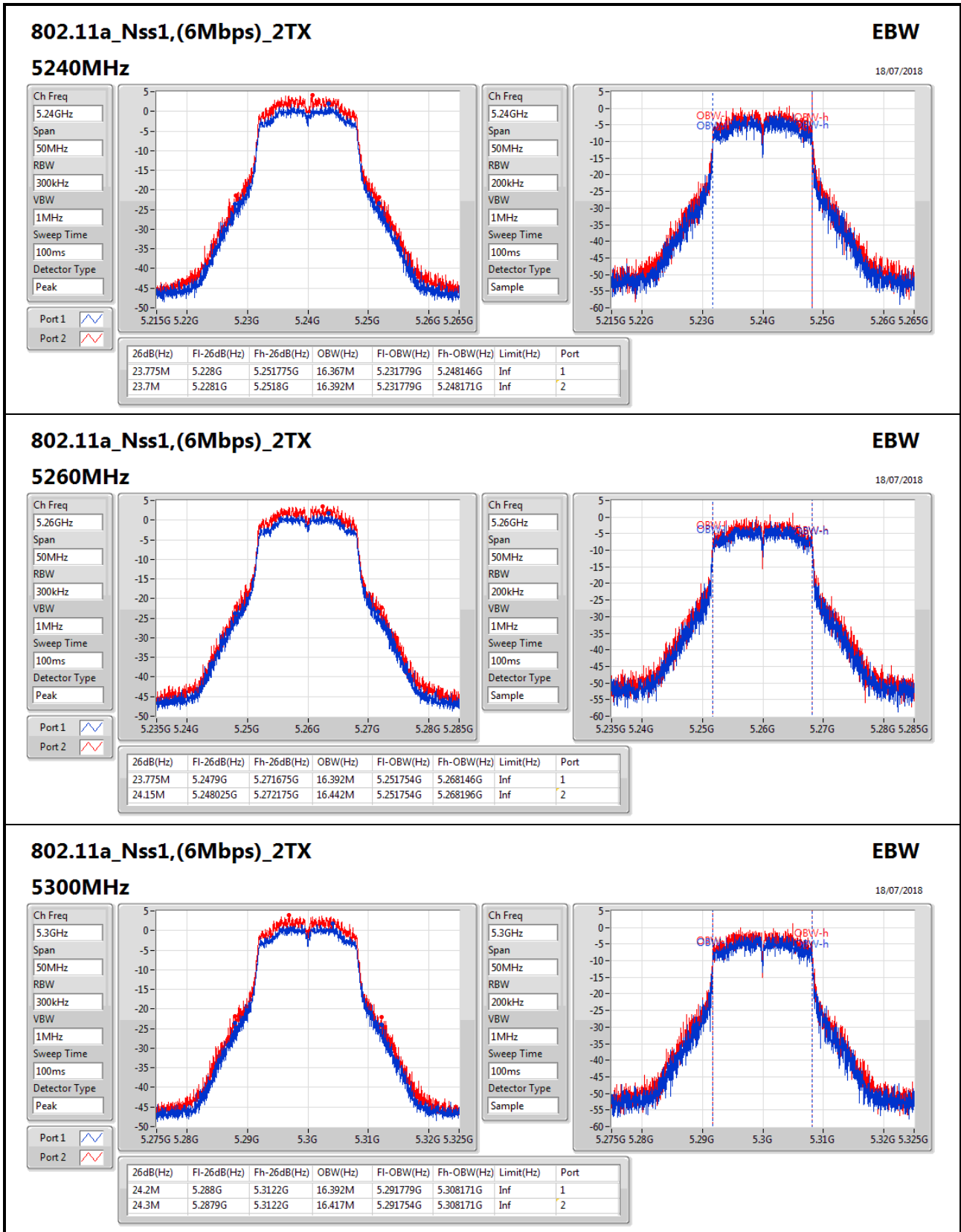


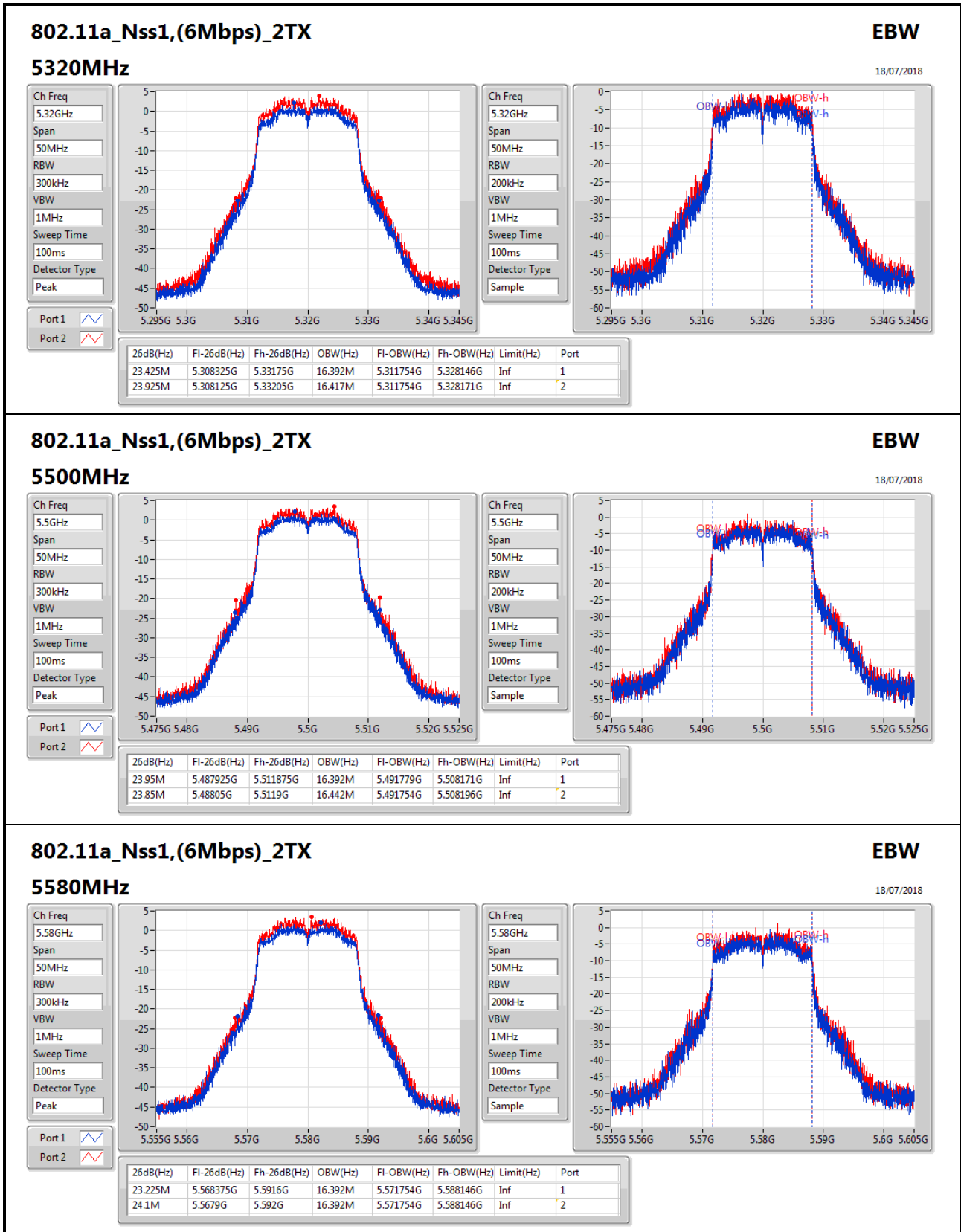


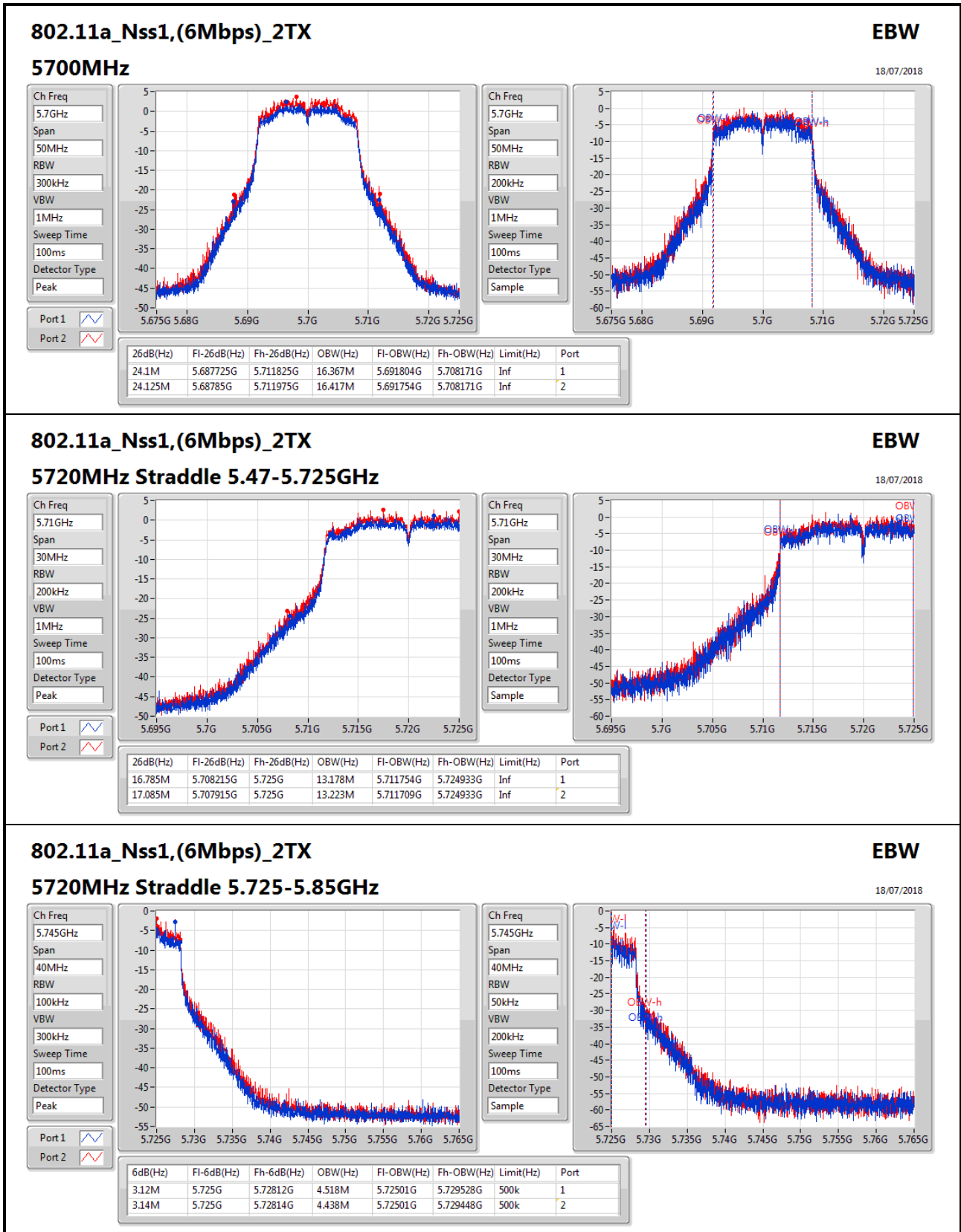











802.11a_Nss1,(6Mbps)_2TX
EBW

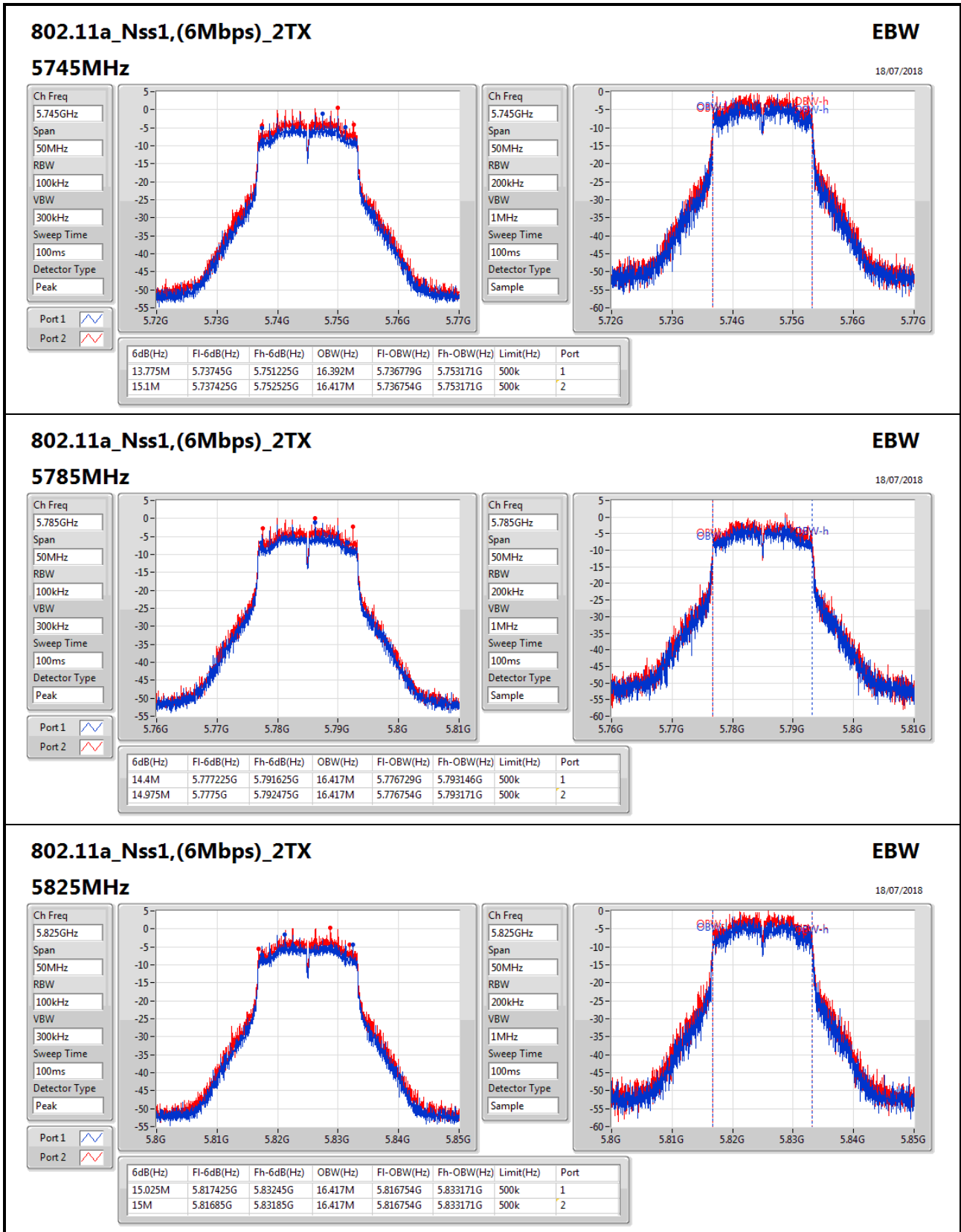
18/07/2018

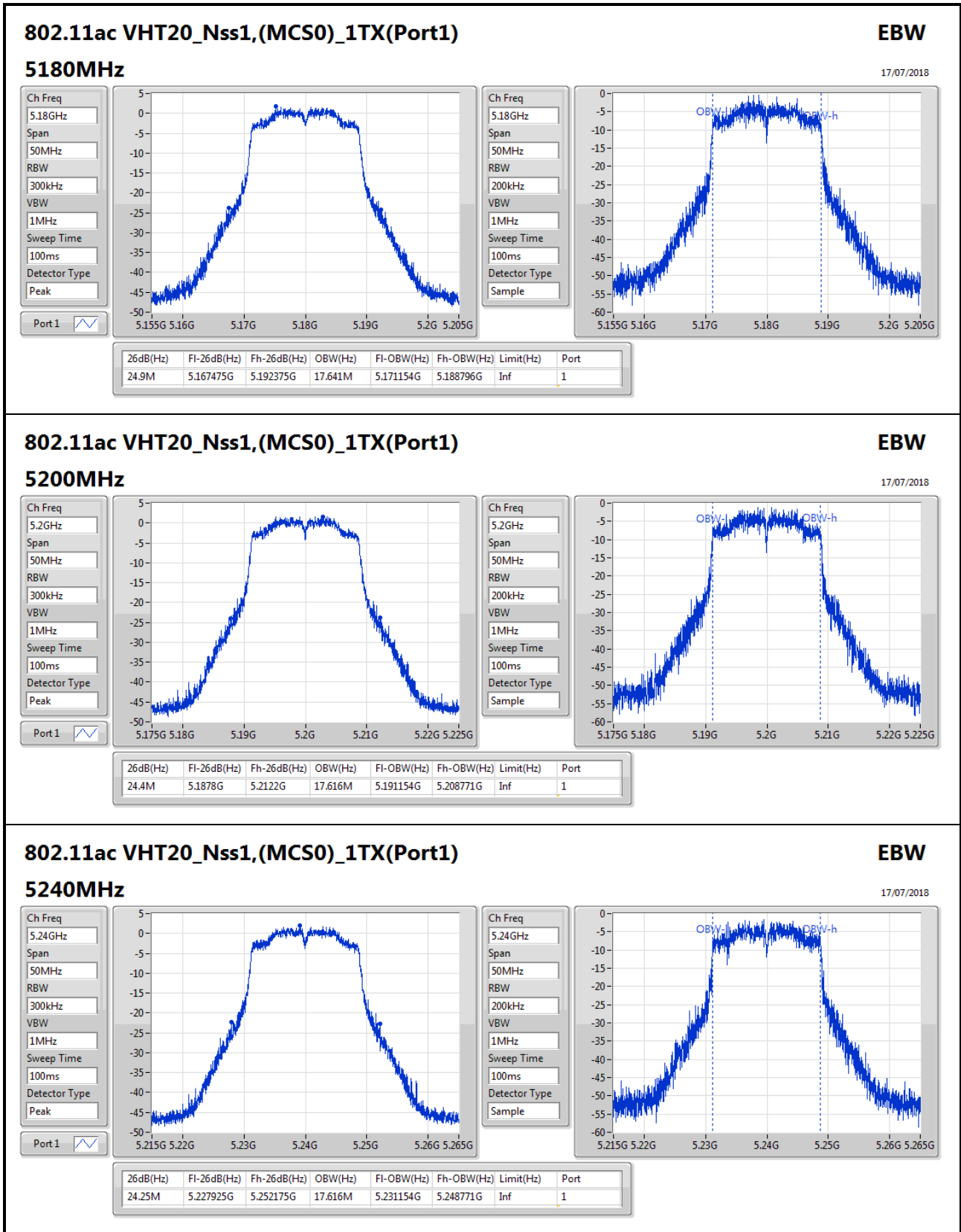
5720MHz Straddle 5.725-5.85GHz

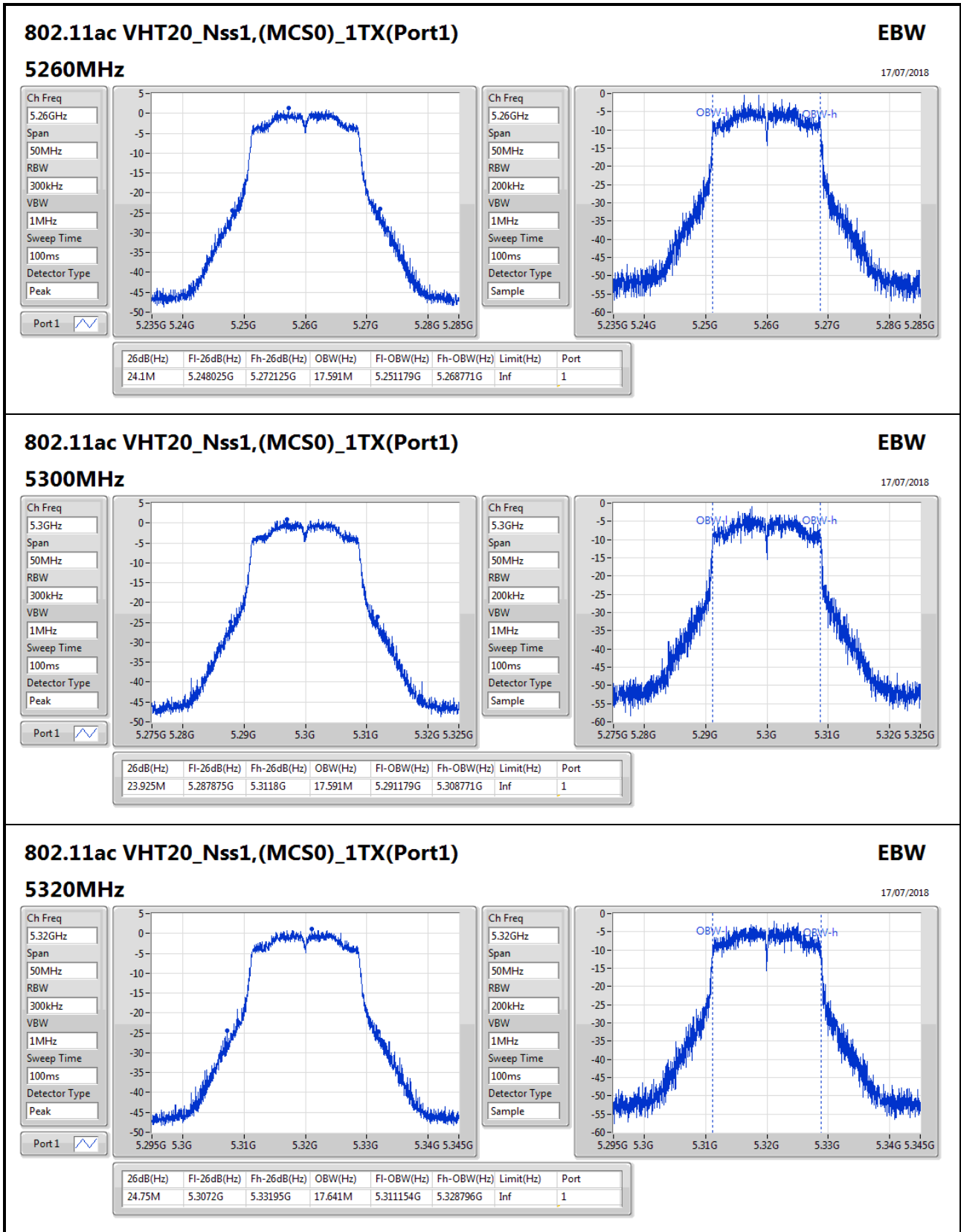
Ch Freq: 5.745GHz
Span: 40MHz
RBW: 100kHz
VBW: 300kHz
Sweep Time: 100ms
Detector Type: Peak

Ch Freq: 5.745GHz
Span: 40MHz
RBW: 50kHz
VBW: 200kHz
Sweep Time: 100ms
Detector Type: Peak

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.12M	5.725G	5.72812G	4.518M	5.72501G	5.729528G	500k	1
3.14M	5.725G	5.72814G	4.438M	5.72501G	5.729448G	500k	2






802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)
EBW

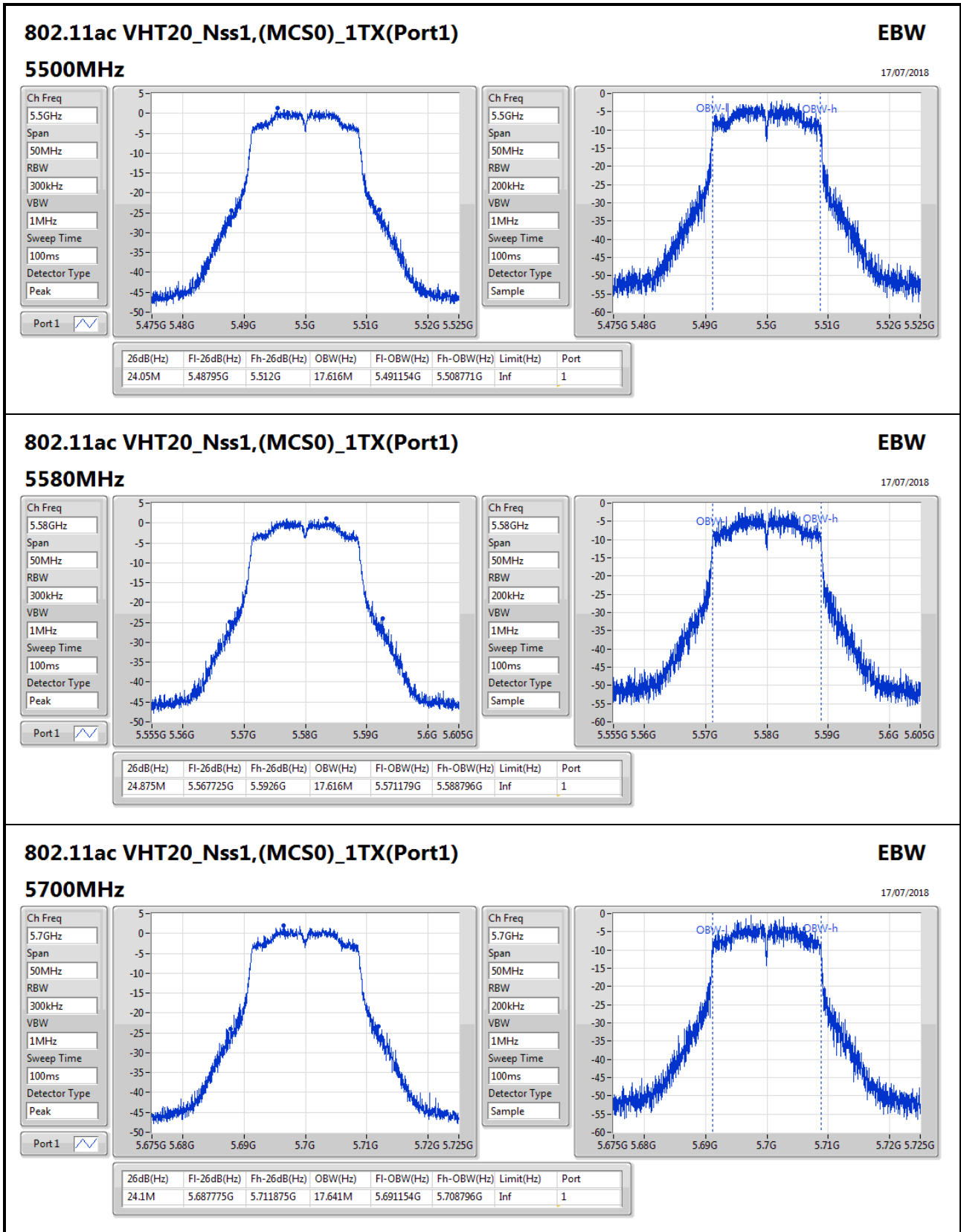
17/07/2018

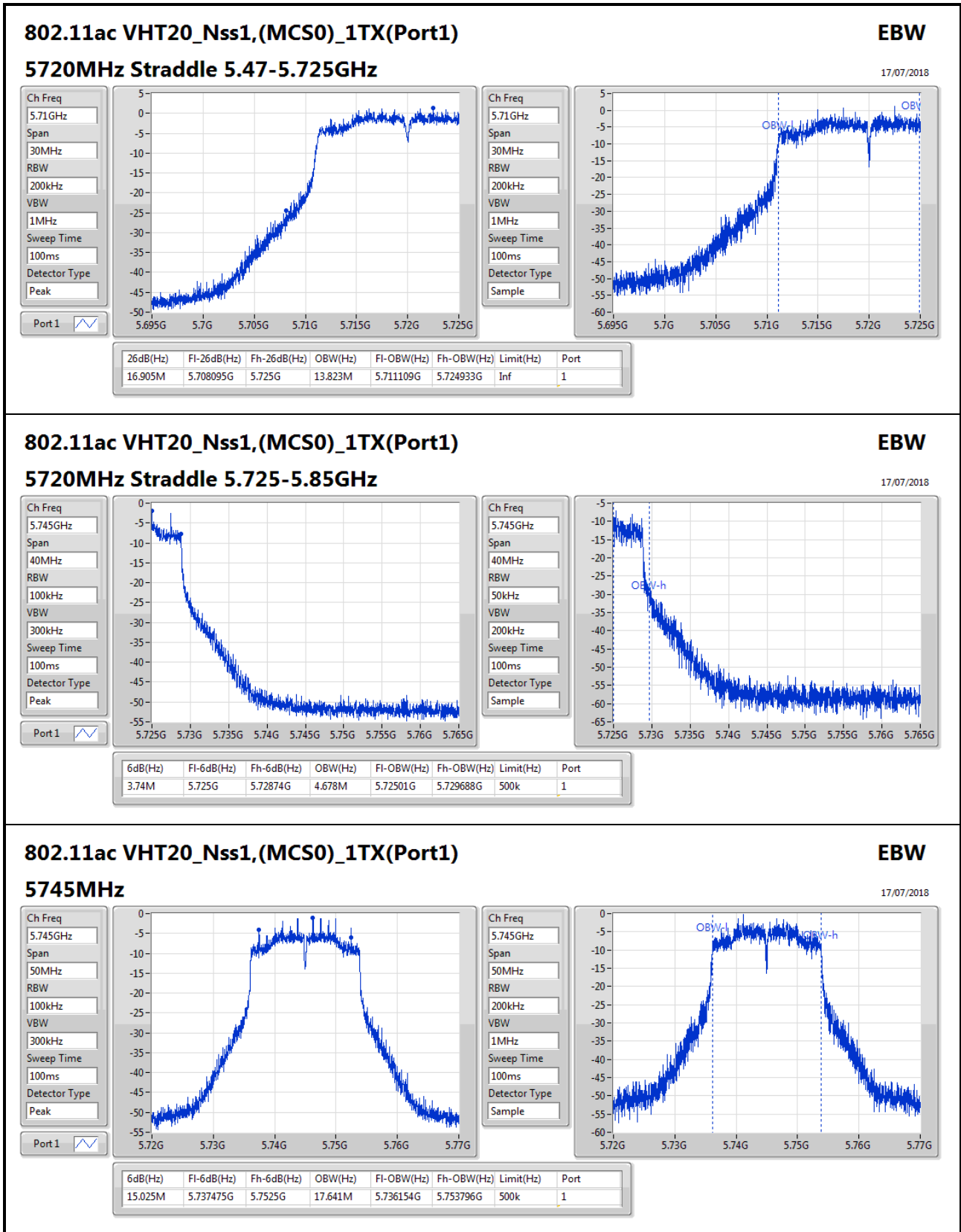
5320MHz

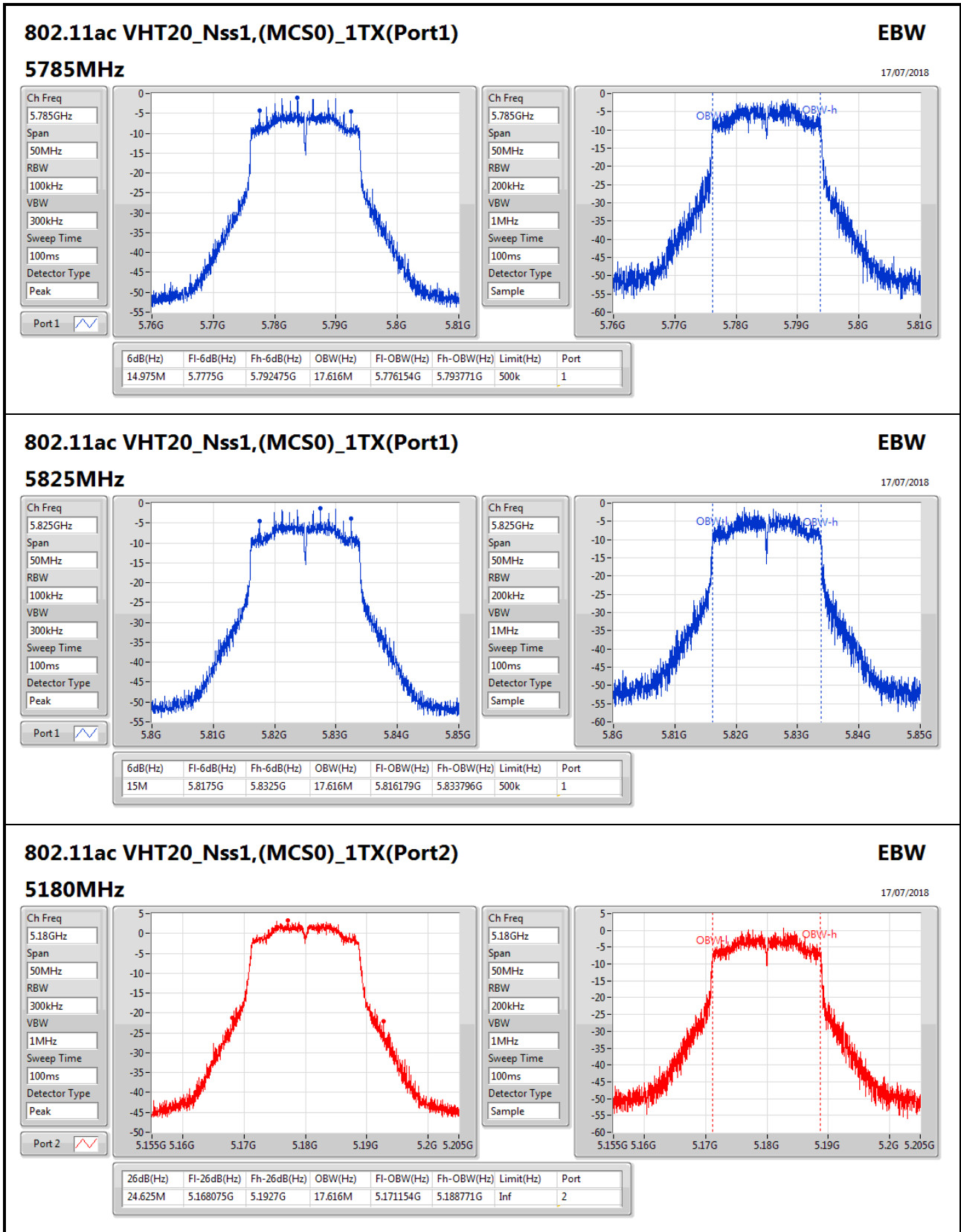
Ch Freq: 5.32GHz
Span: 50MHz
RBW: 300kHz
VBW: 1MHz
Sweep Time: 100ms
Detector Type: Peak

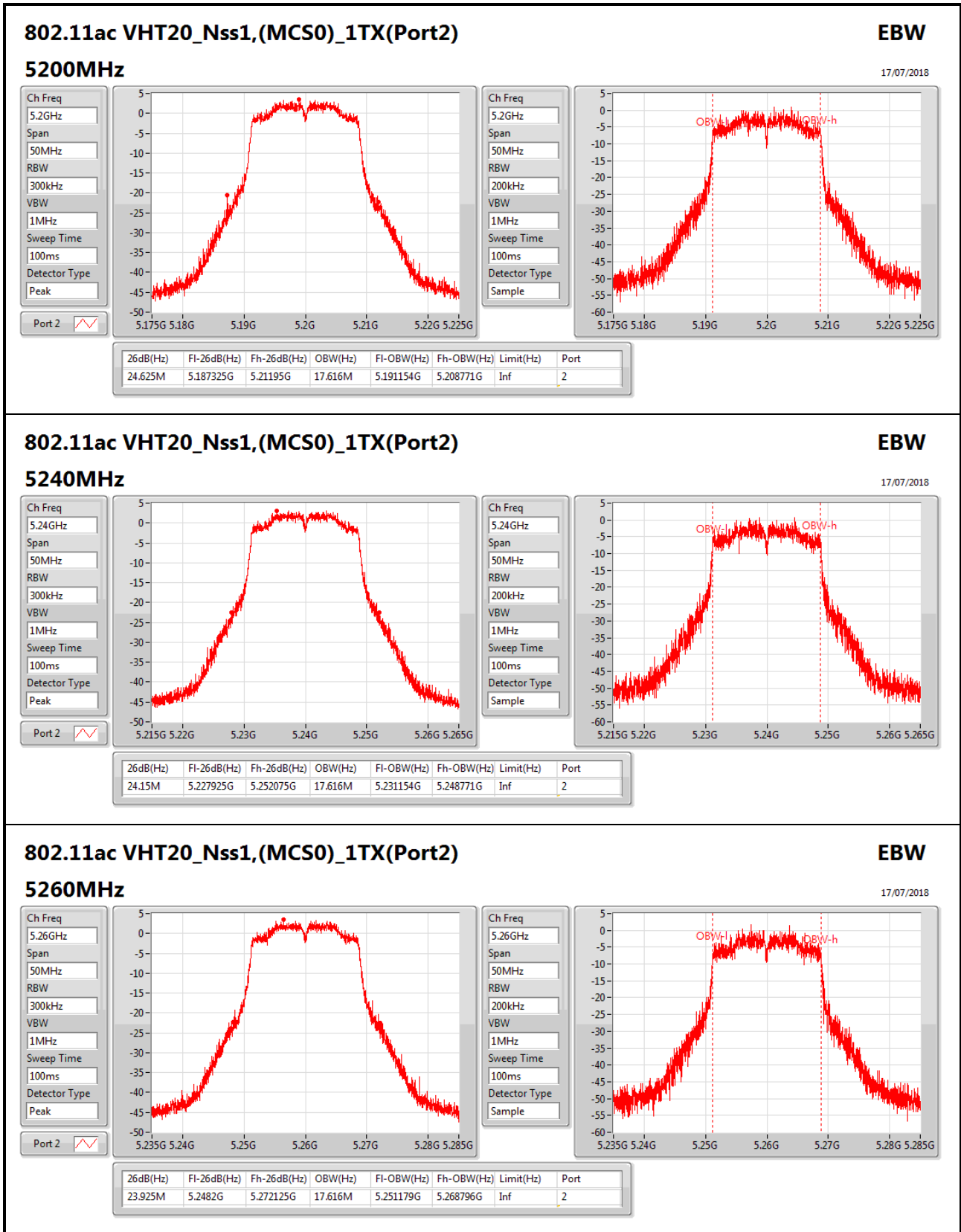
Port 1

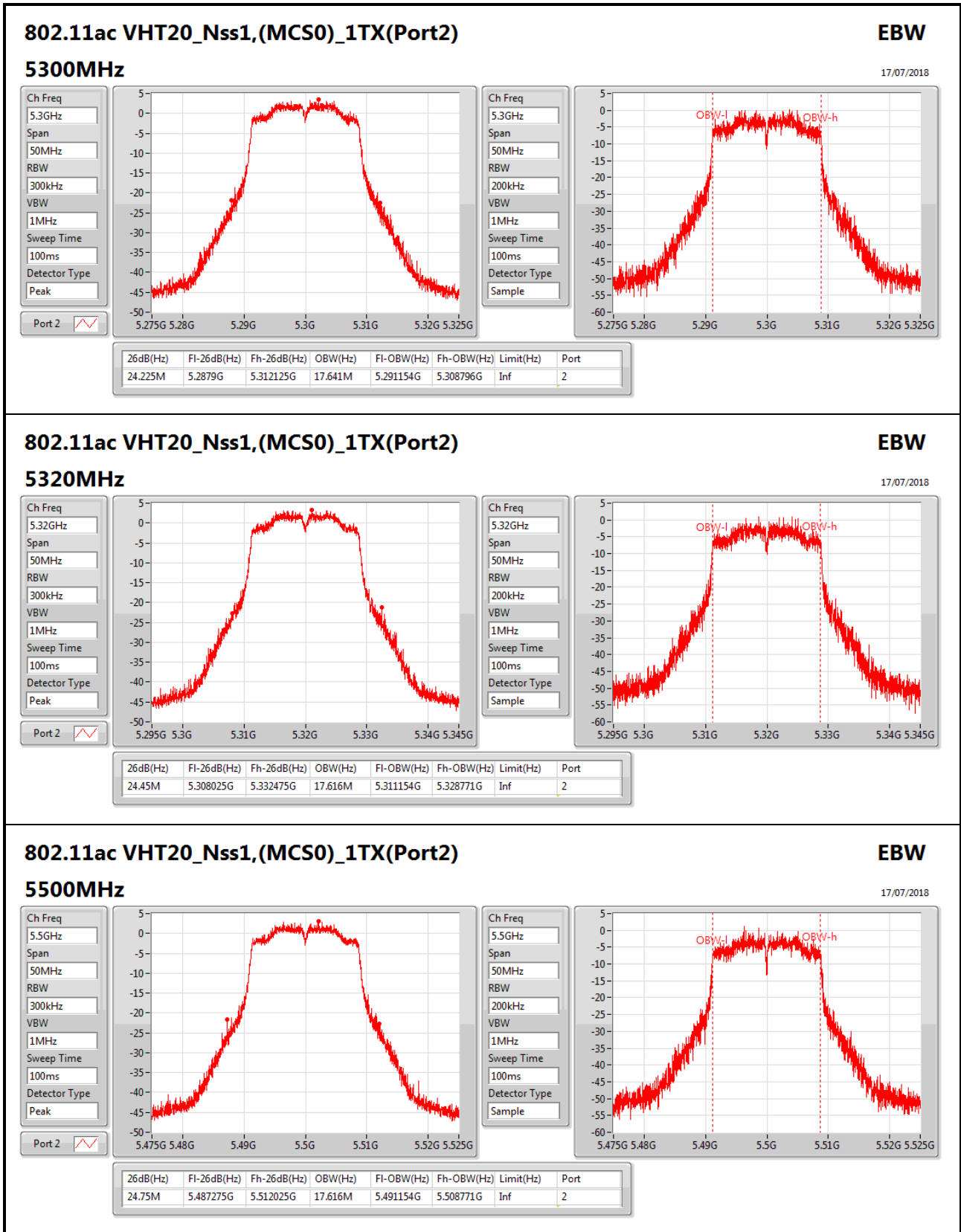
Ch Freq: 5.32GHz
Span: 50MHz
RBW: 200kHz
VBW: 1MHz
Sweep Time: 100ms
Detector Type: Sample

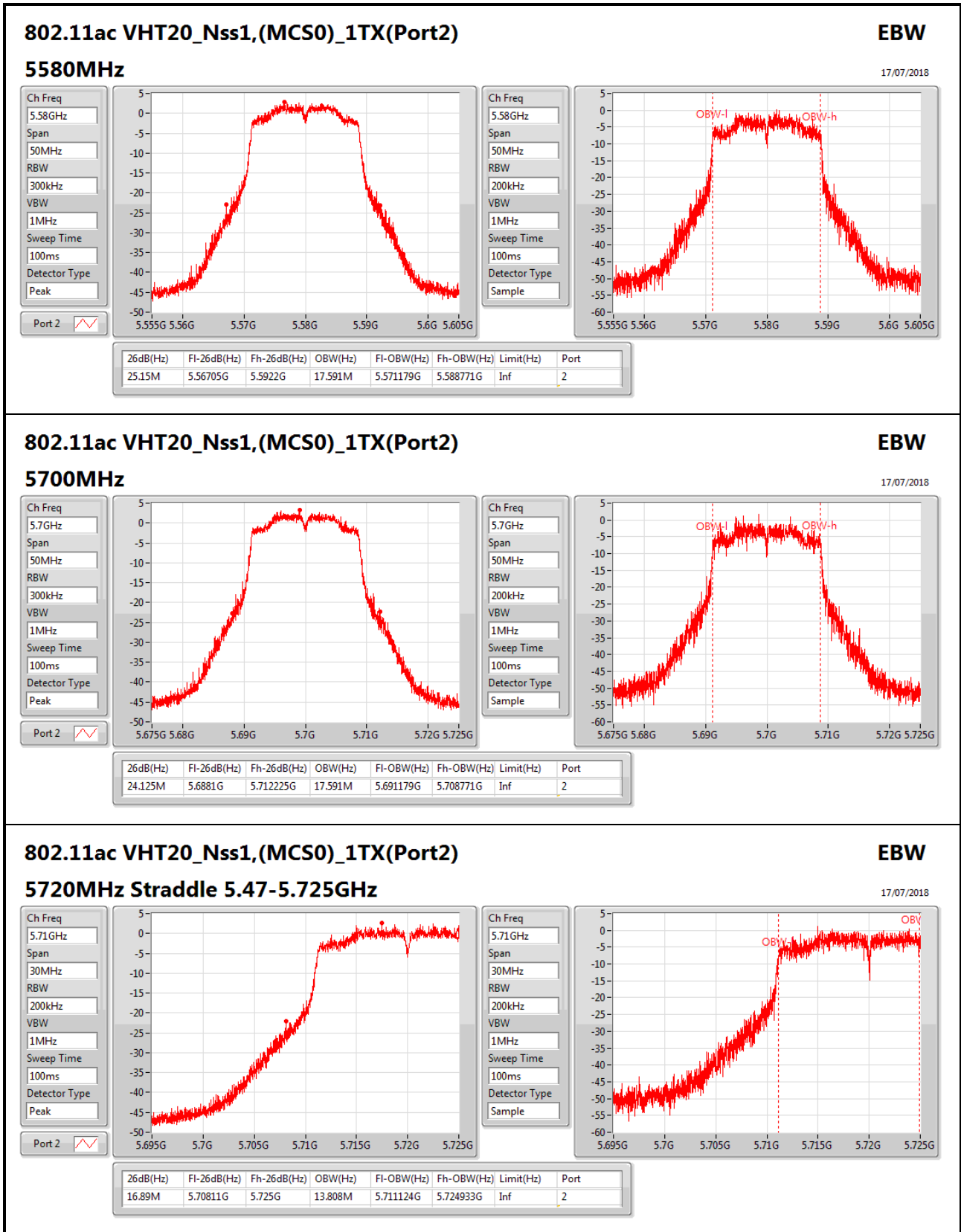


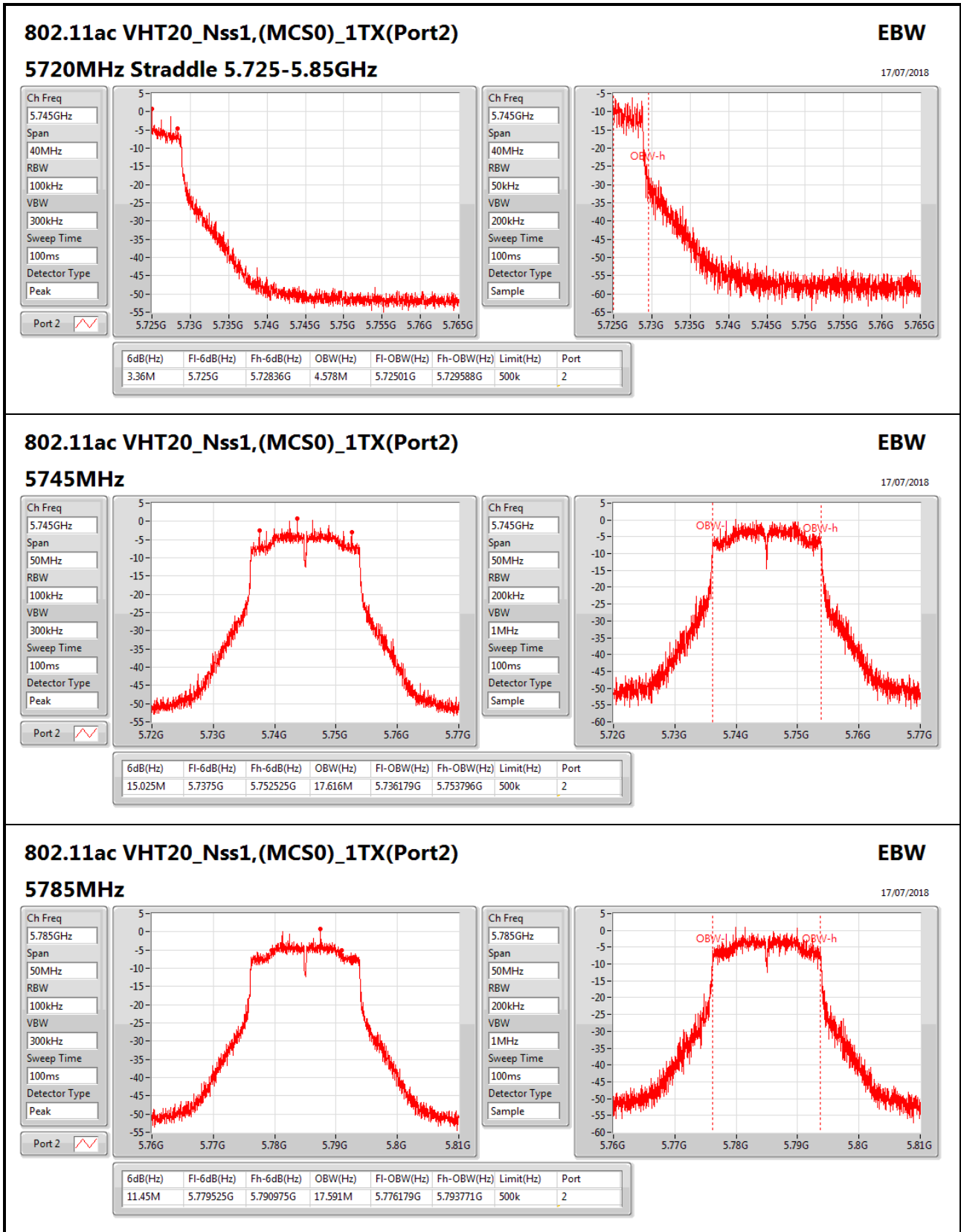


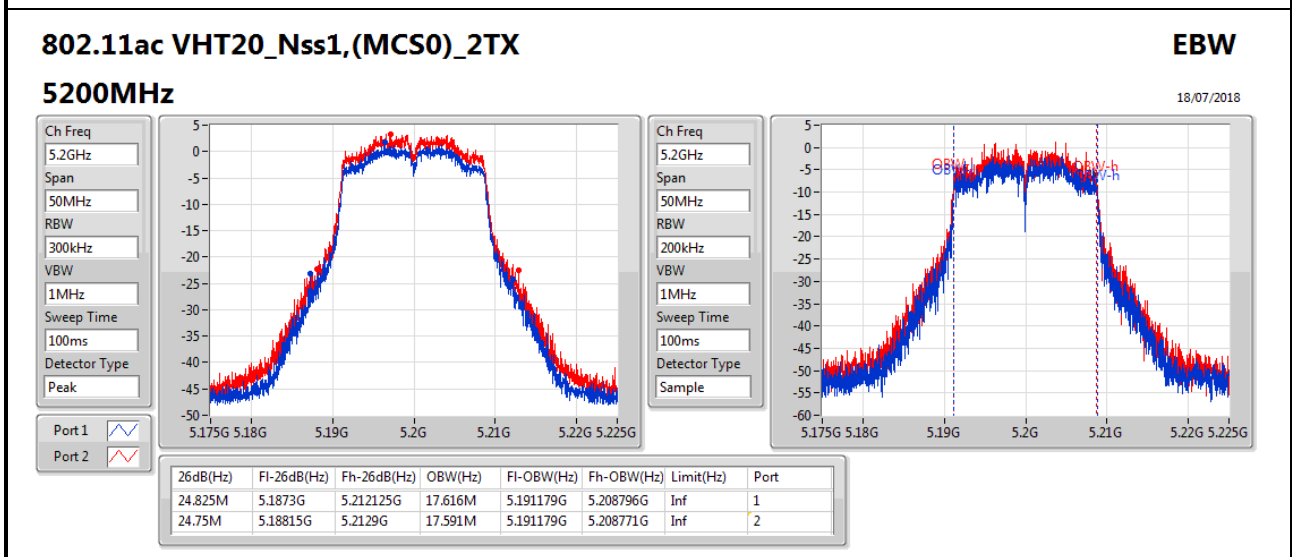
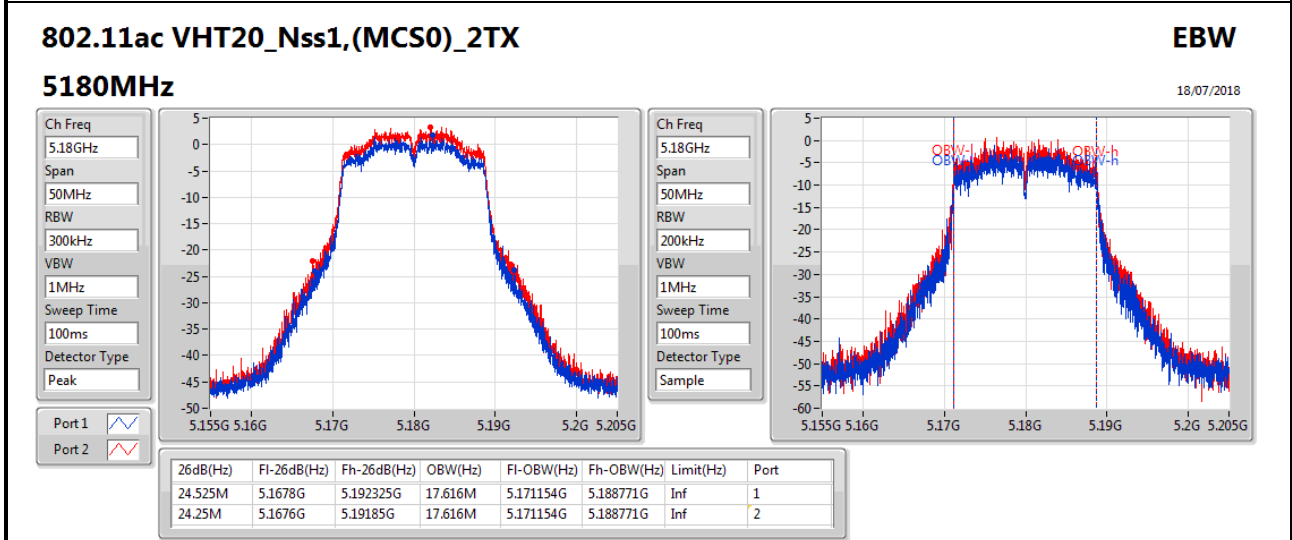
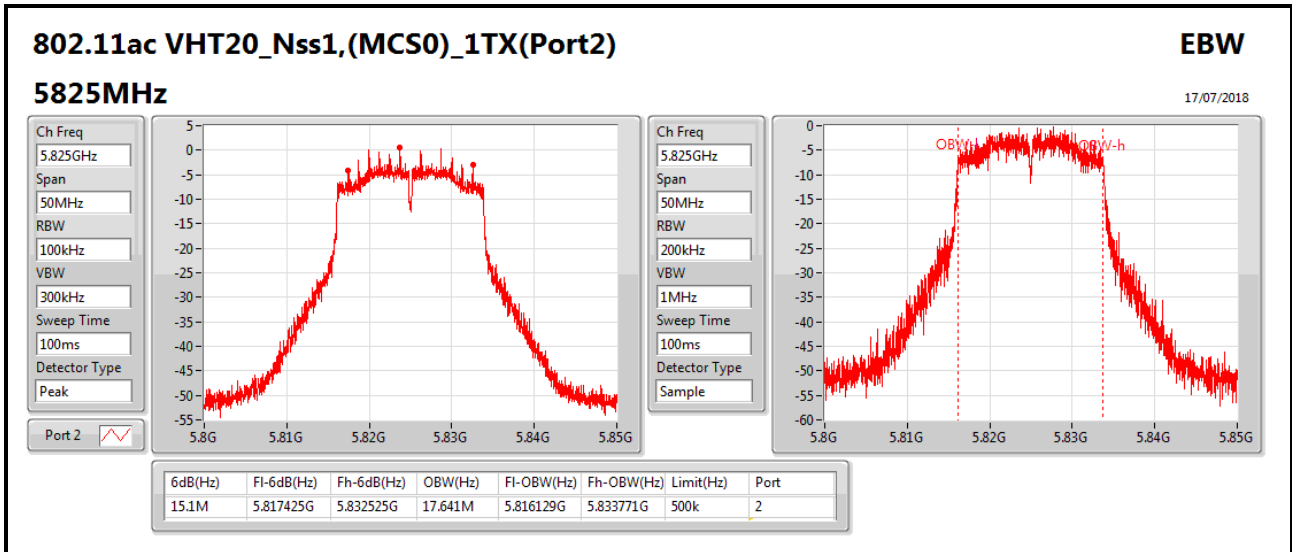


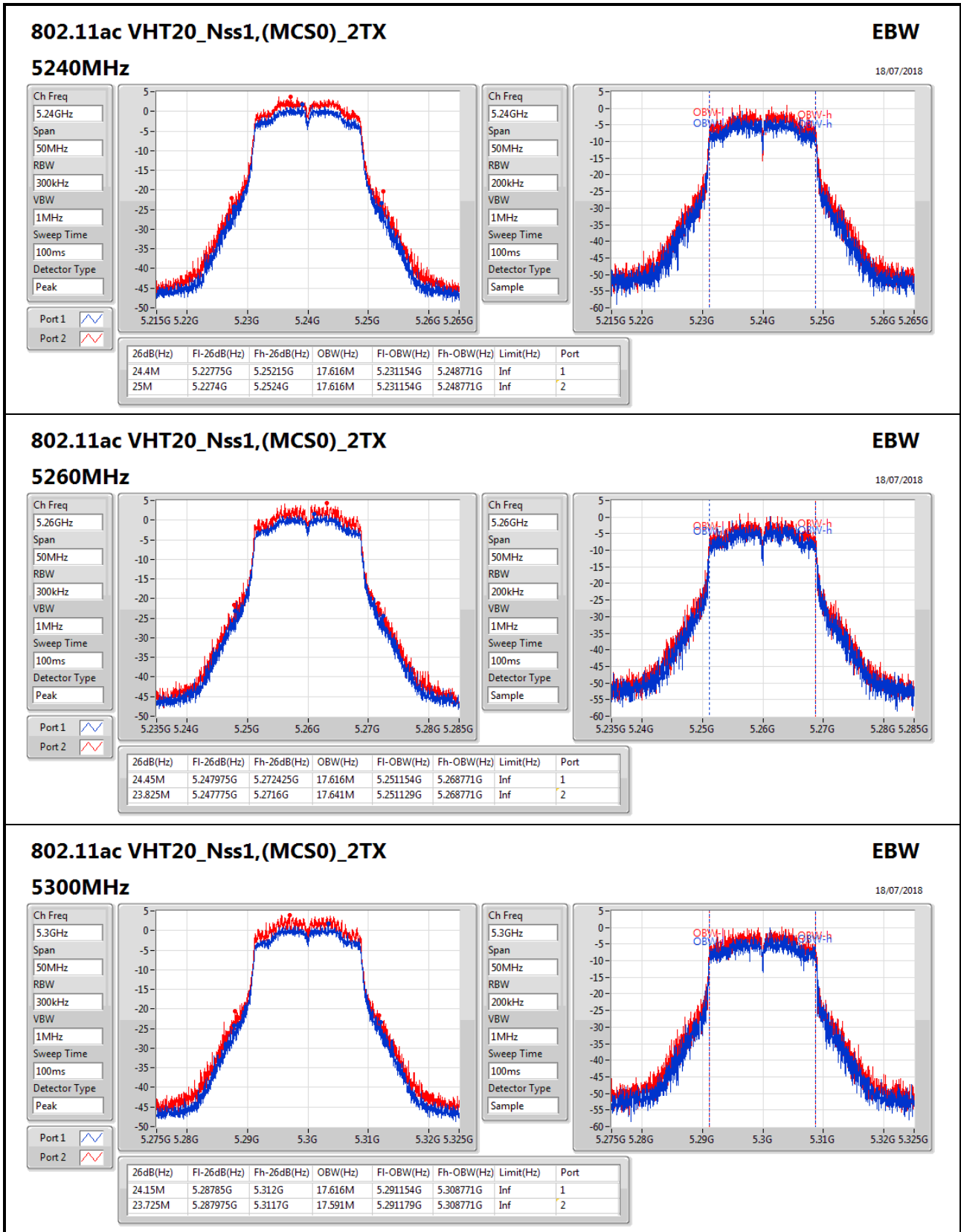


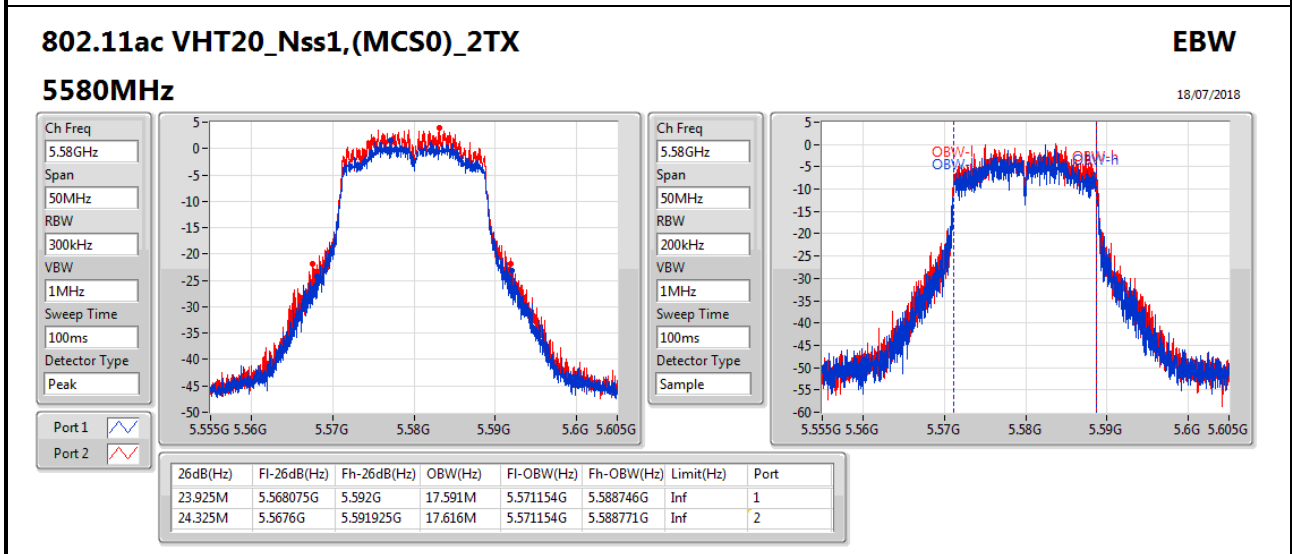
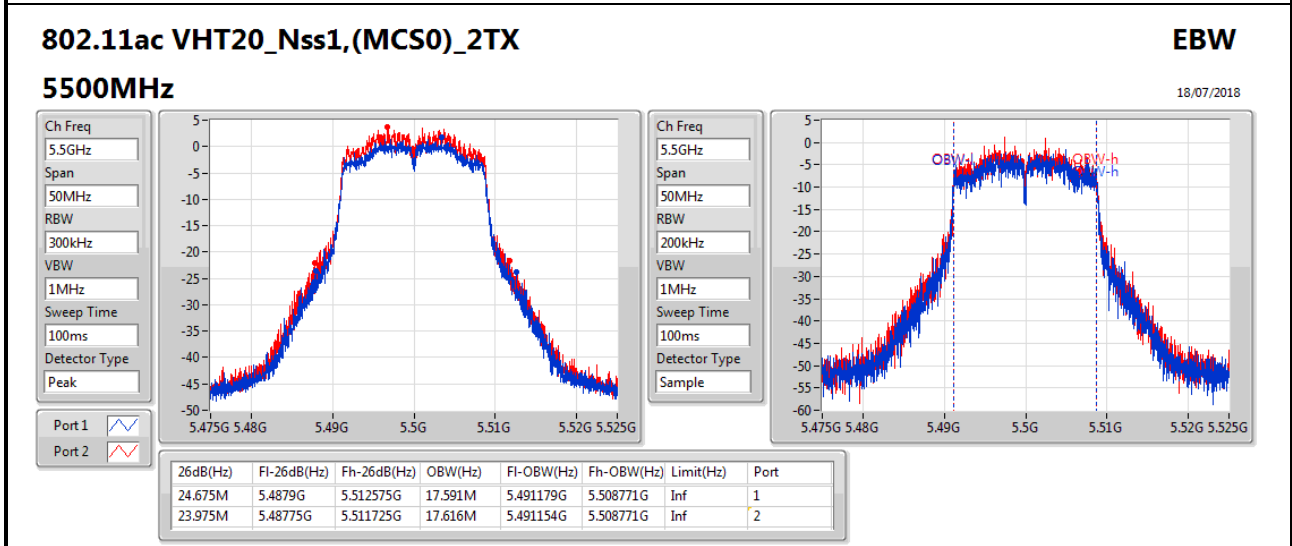
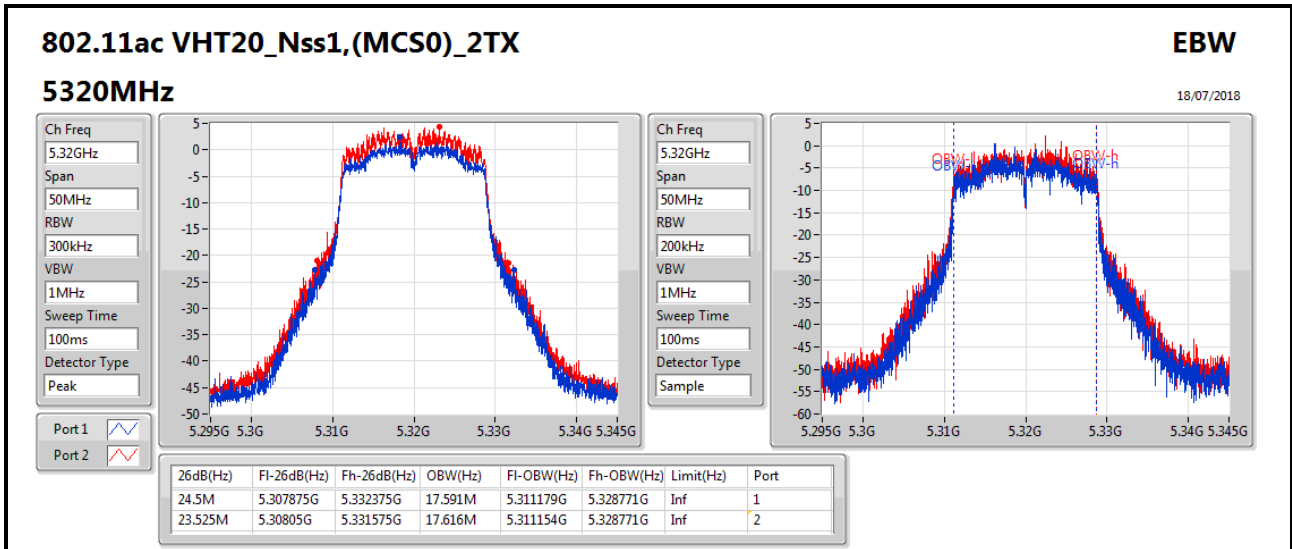


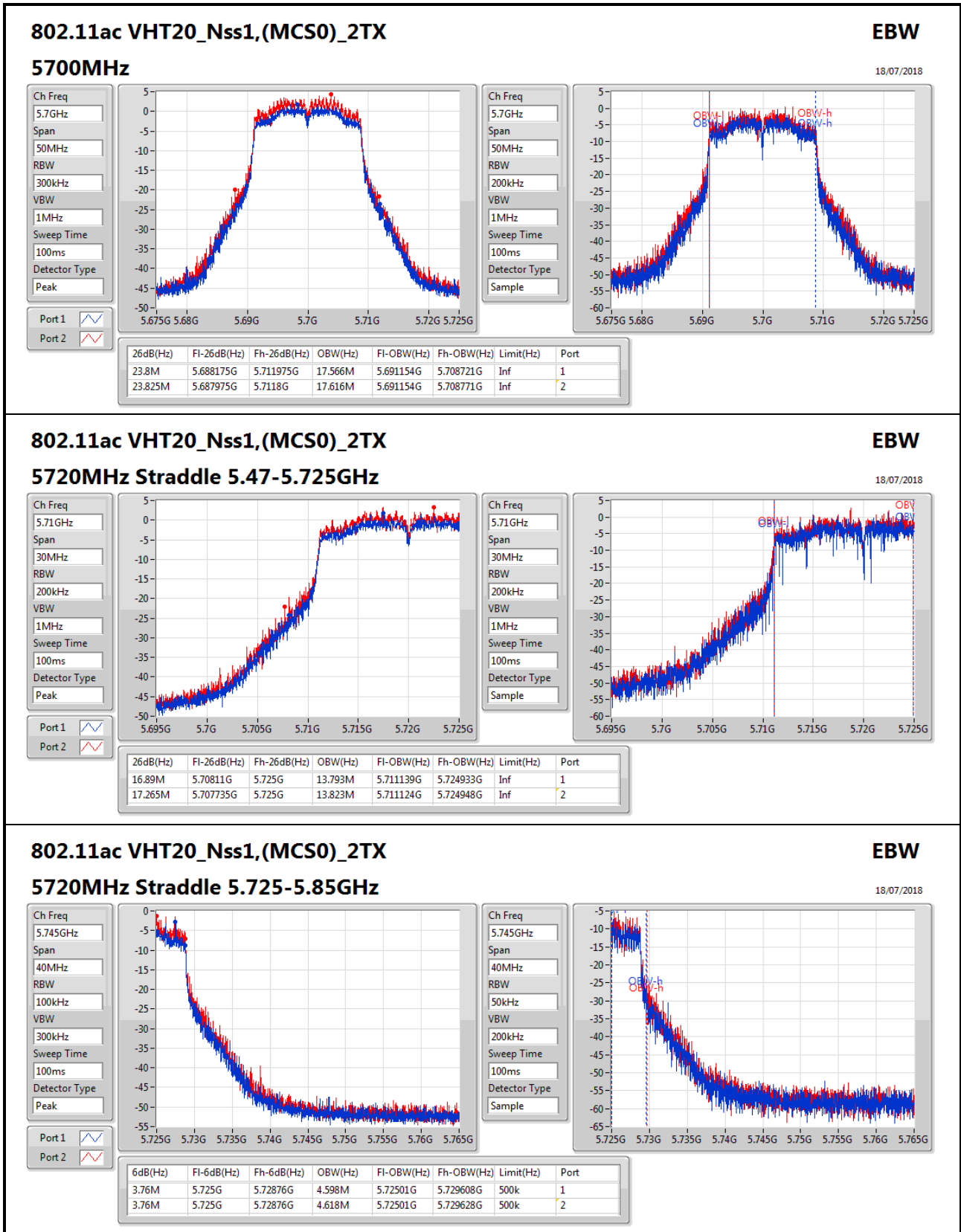


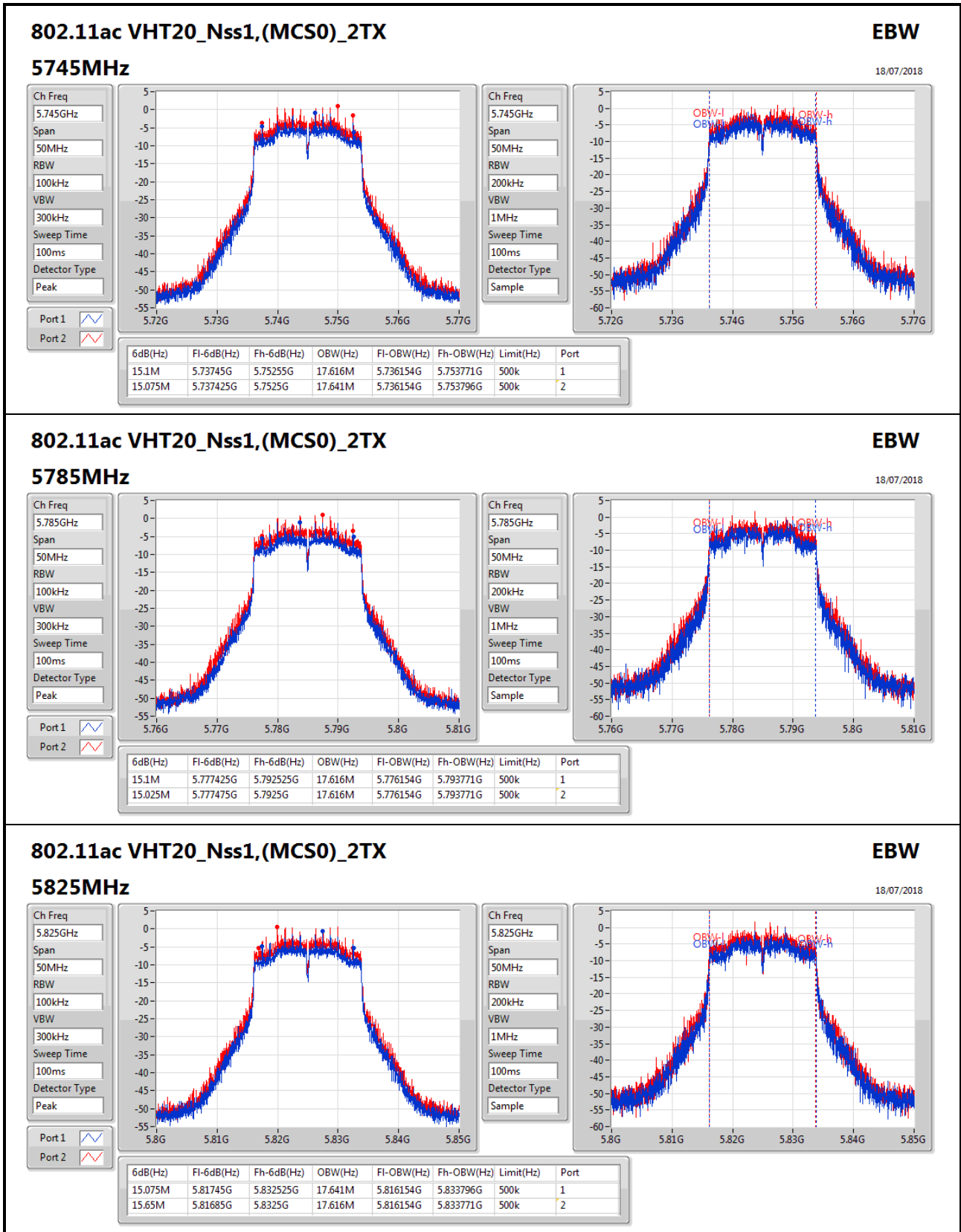


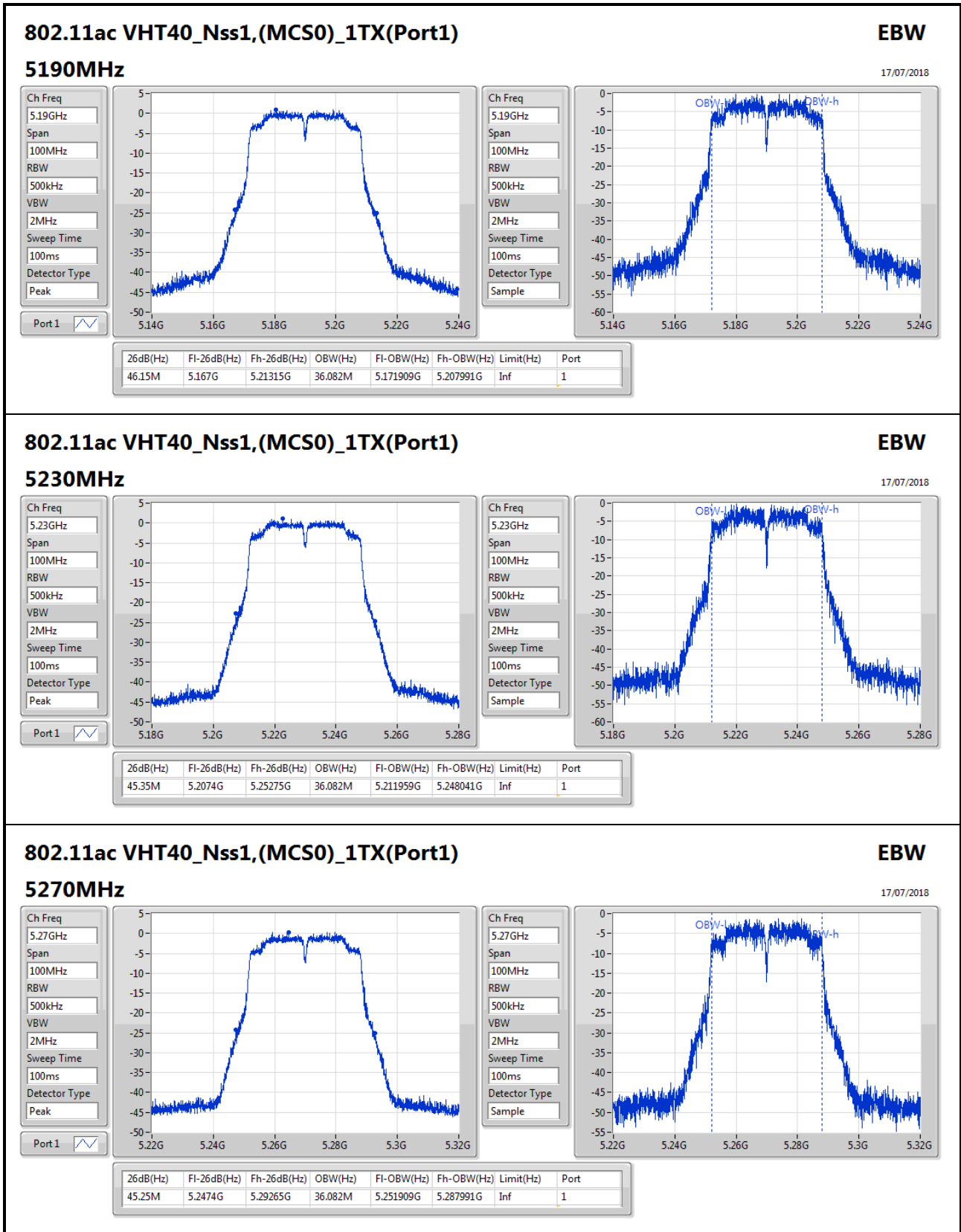


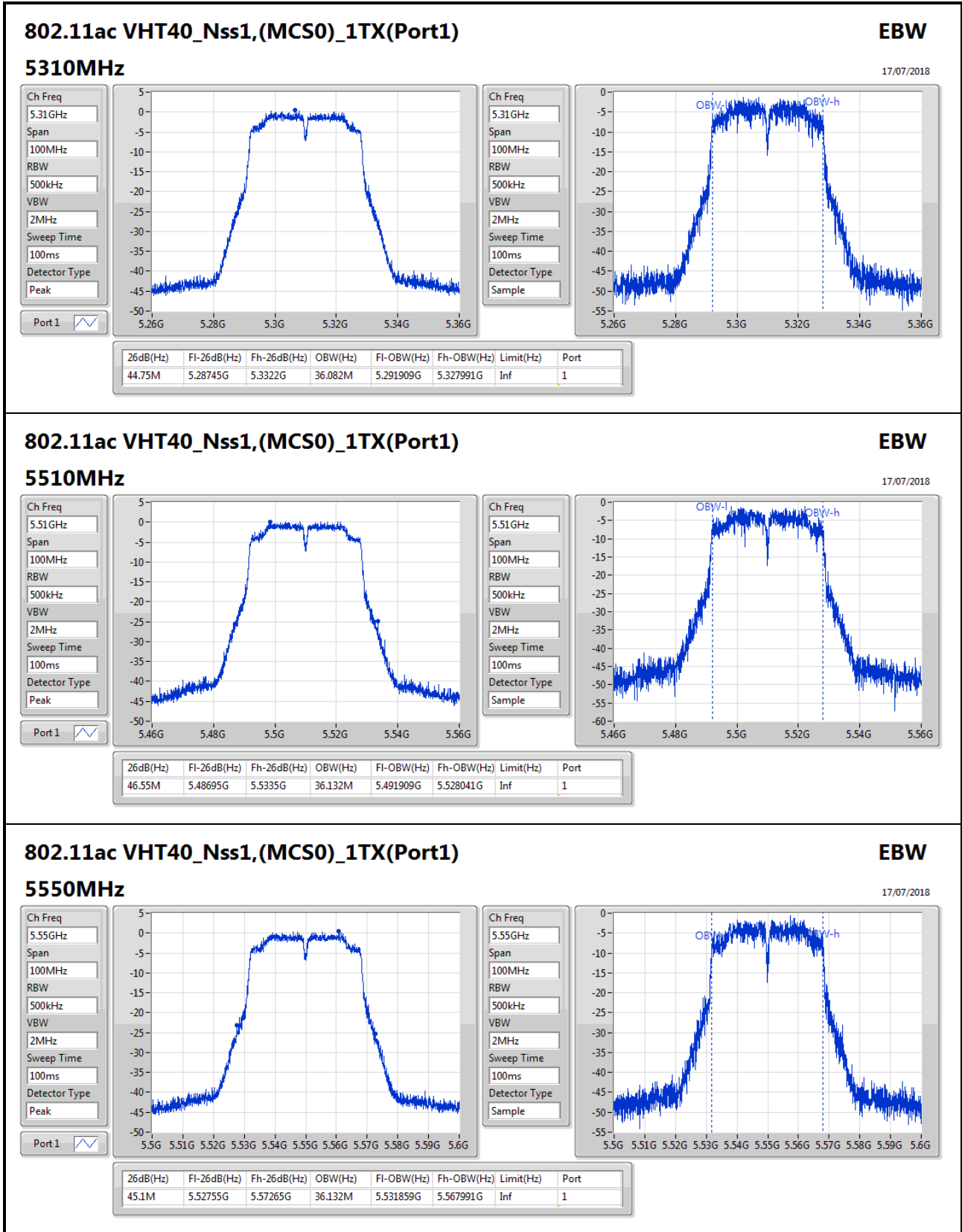


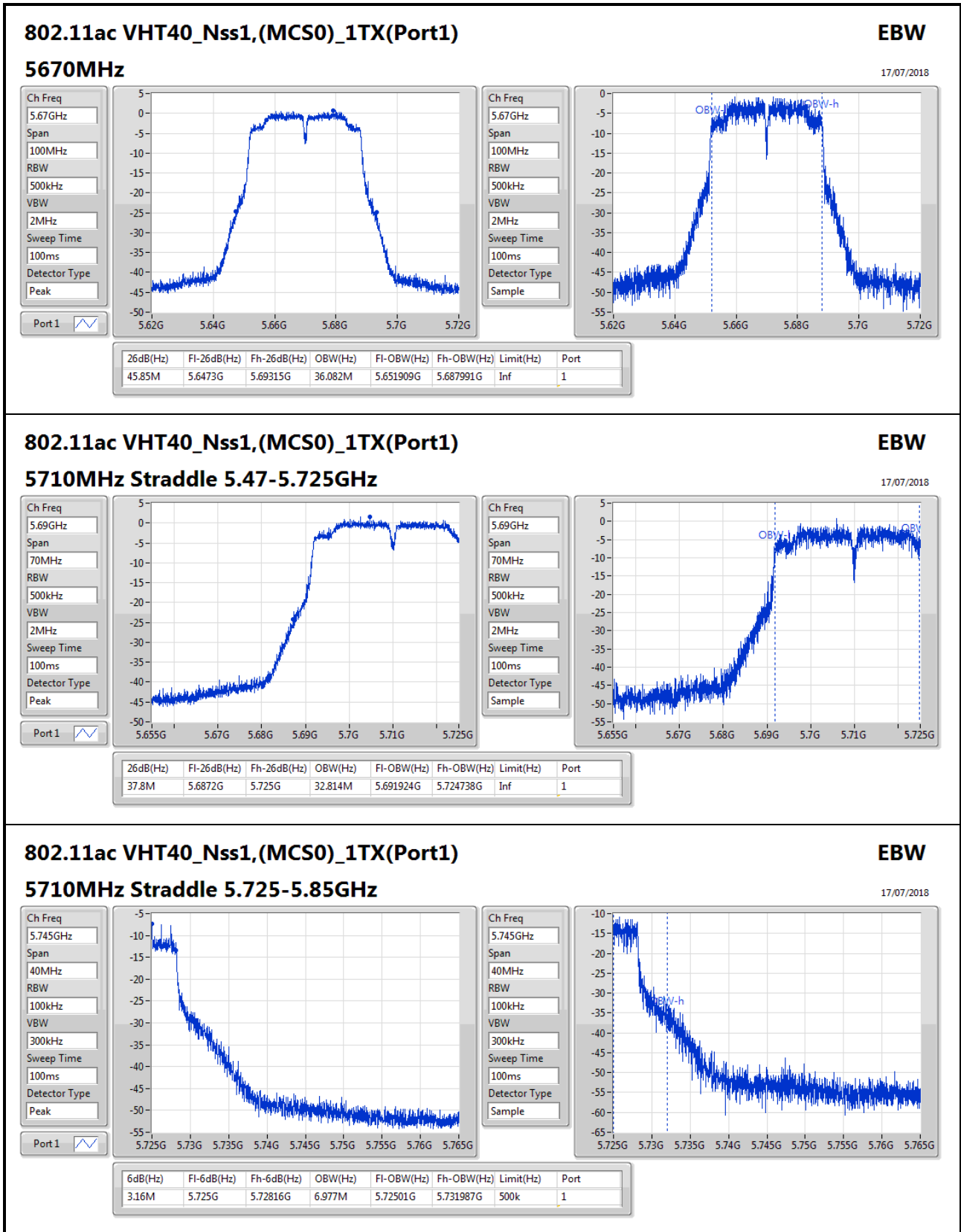


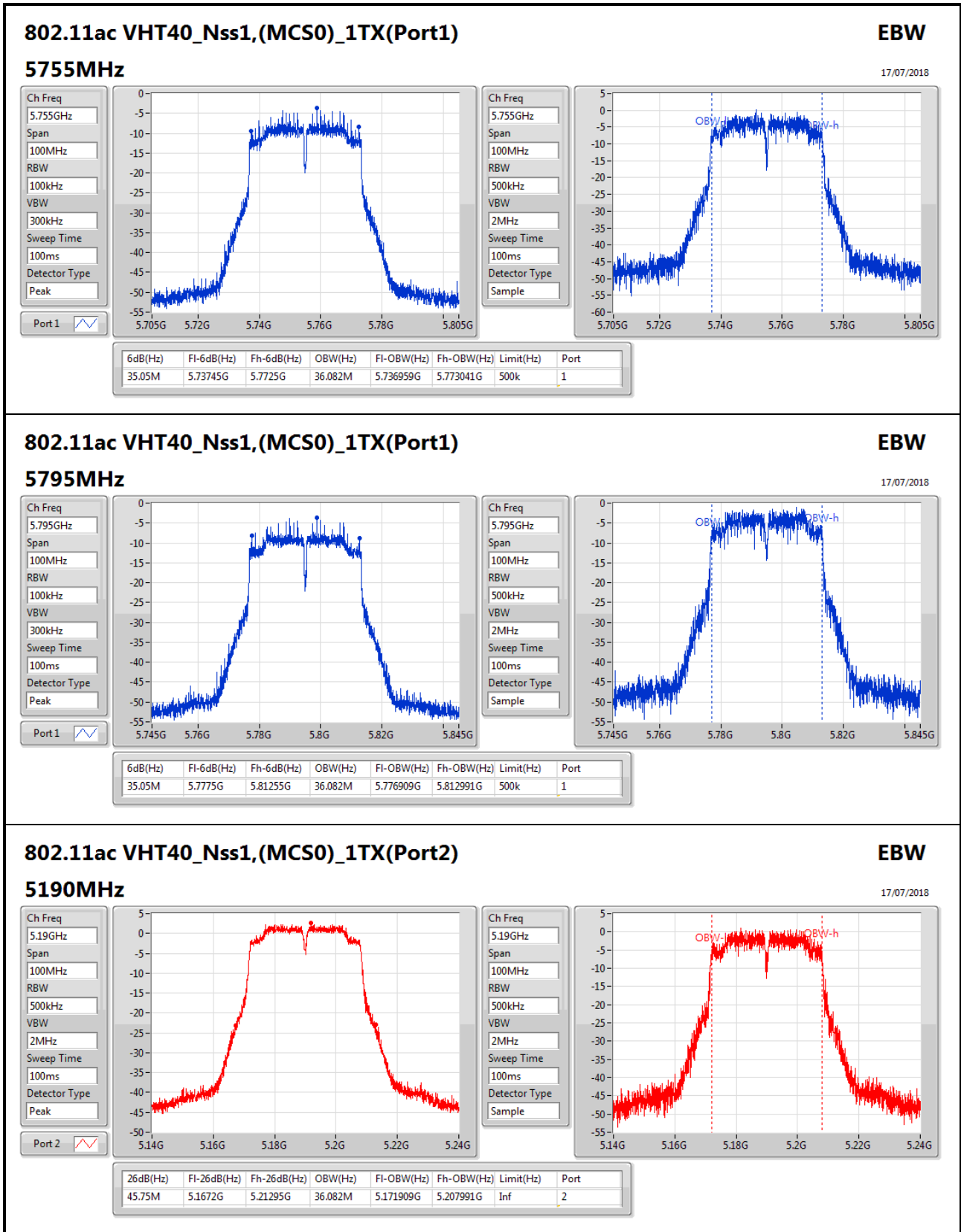


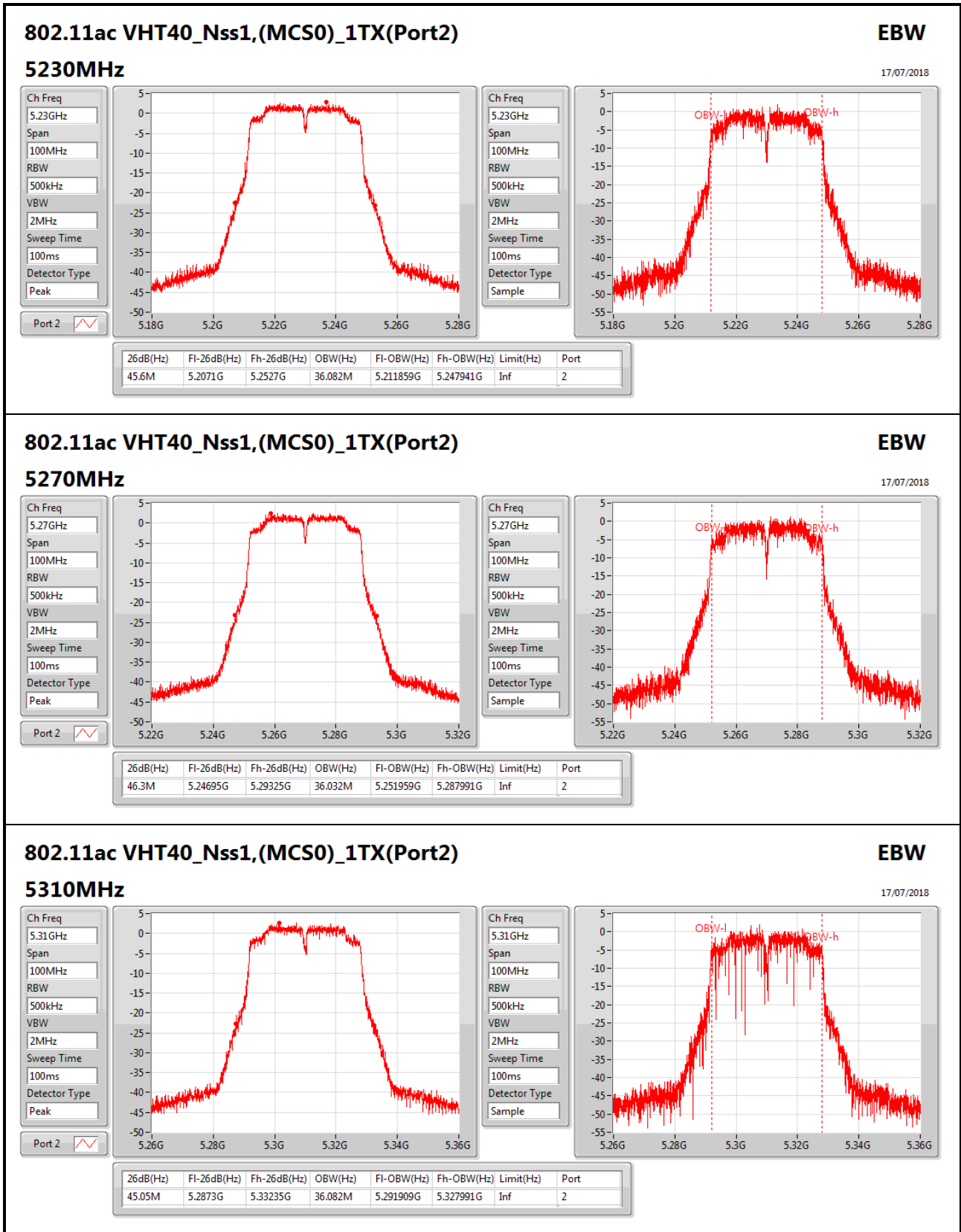


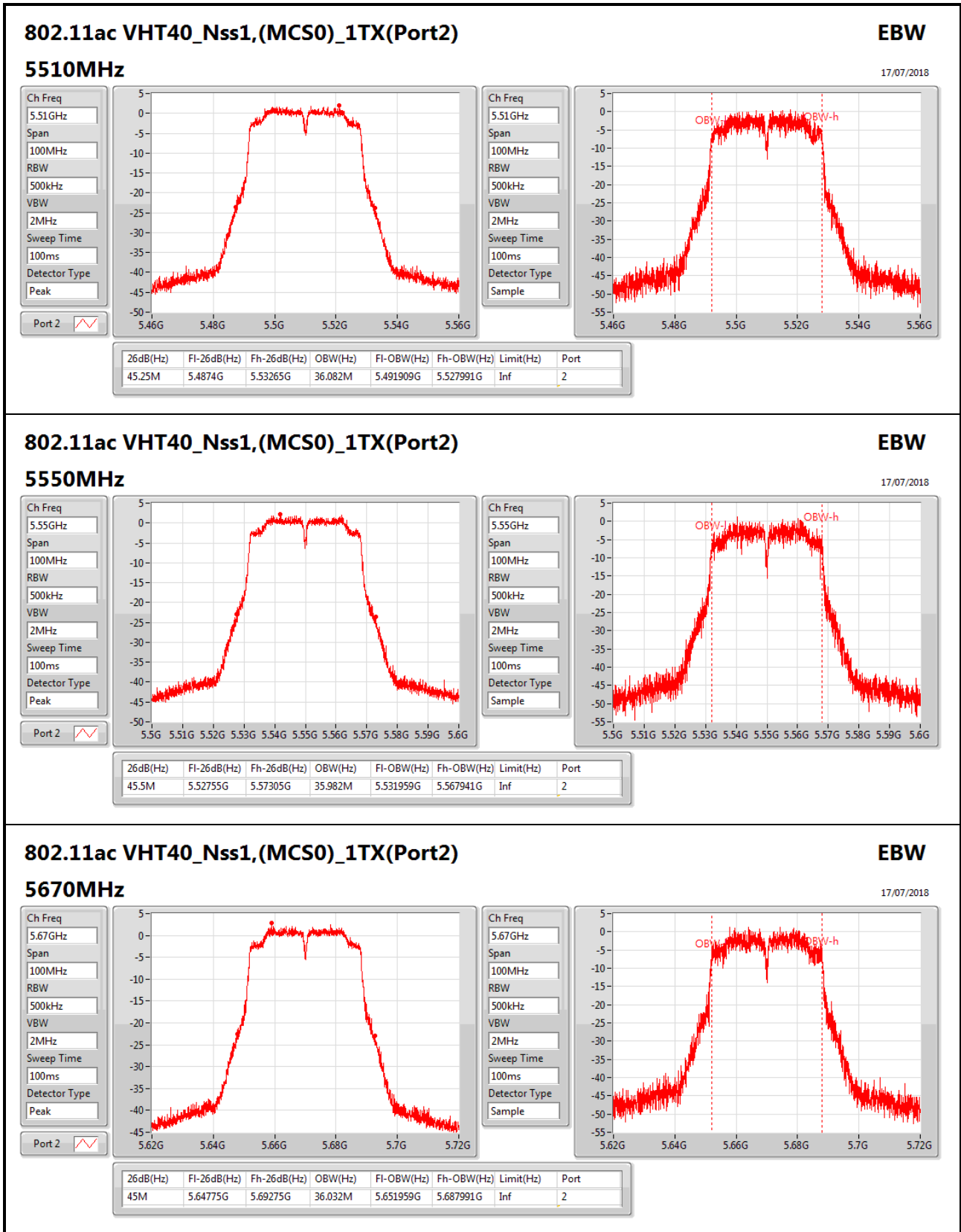


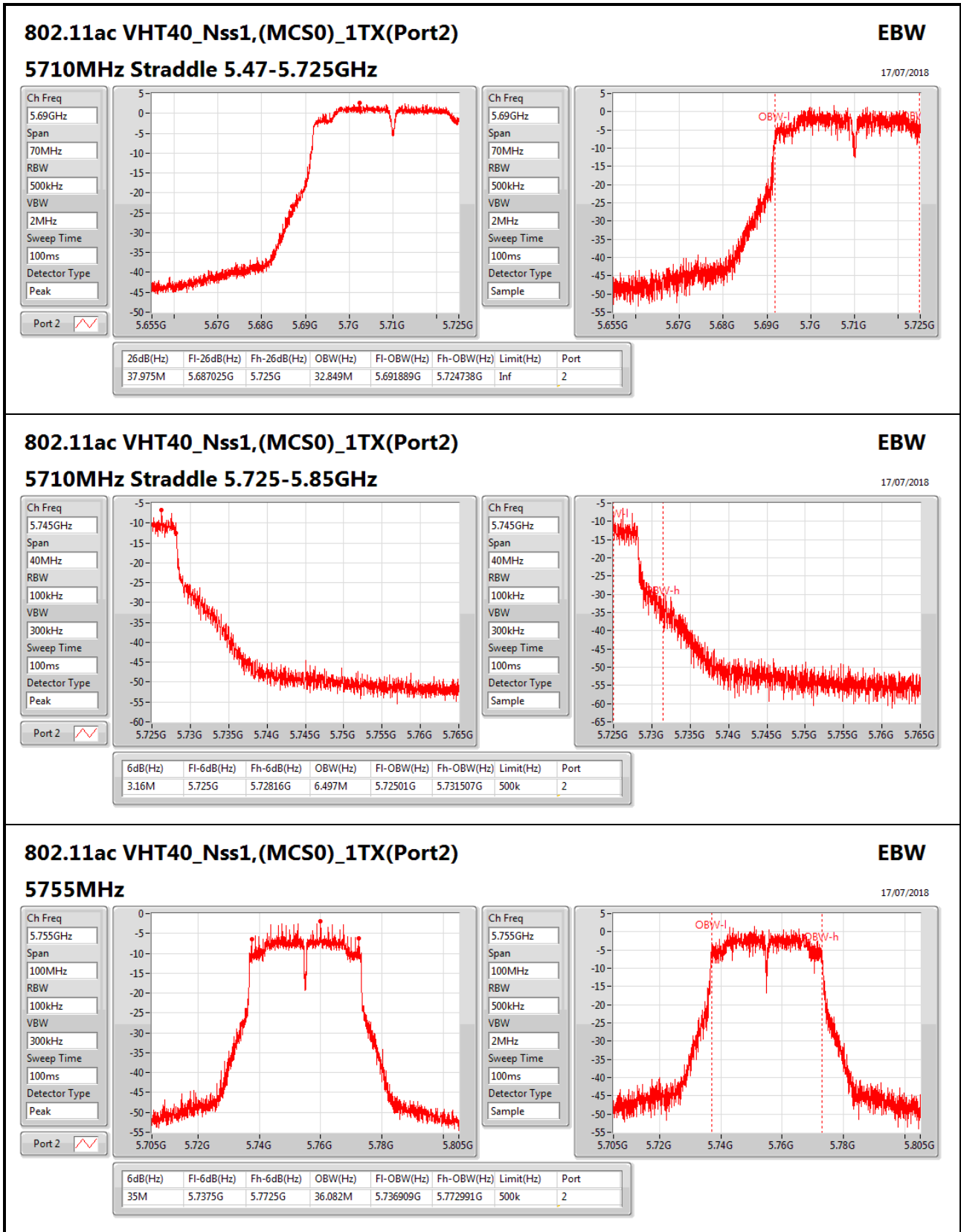


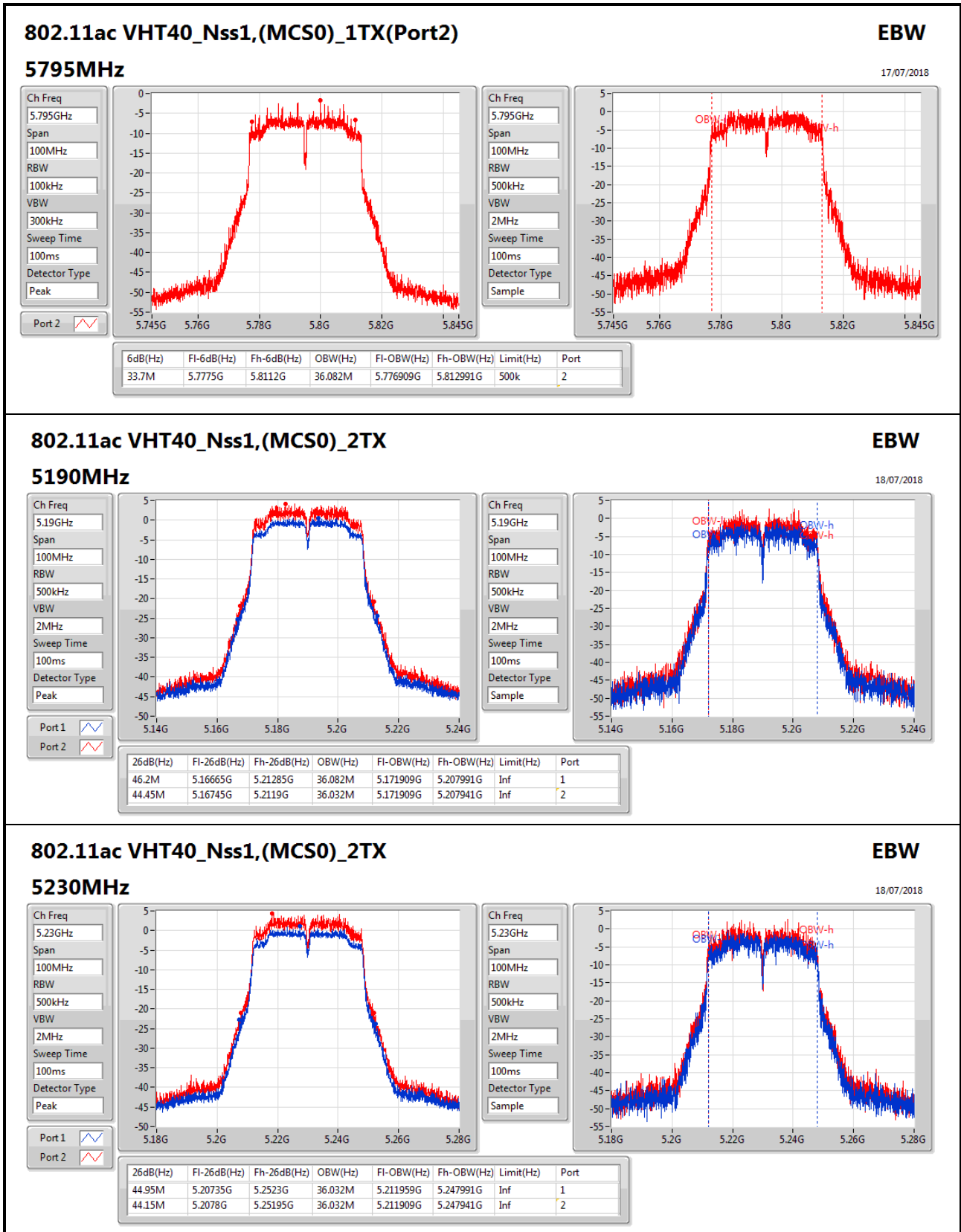


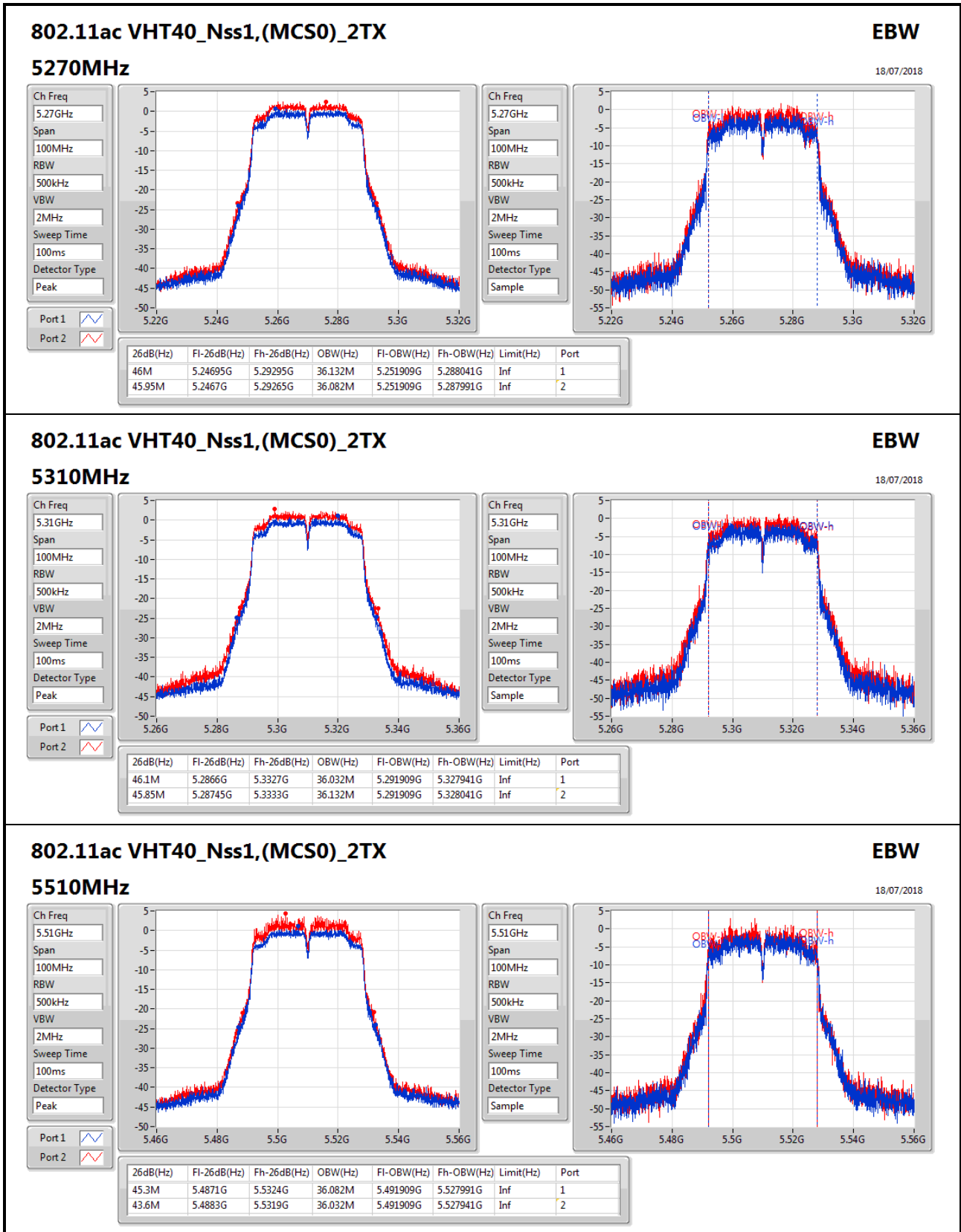


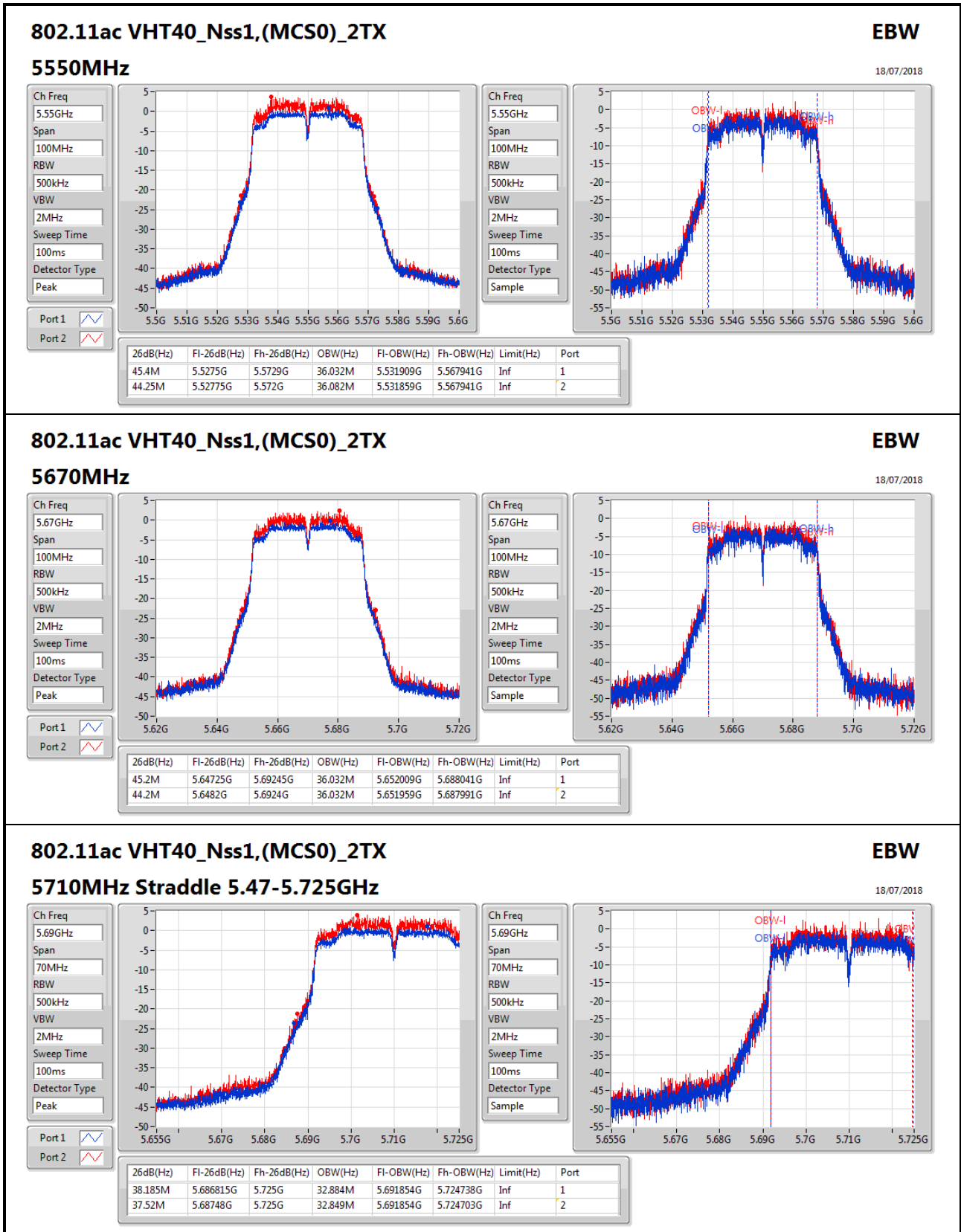


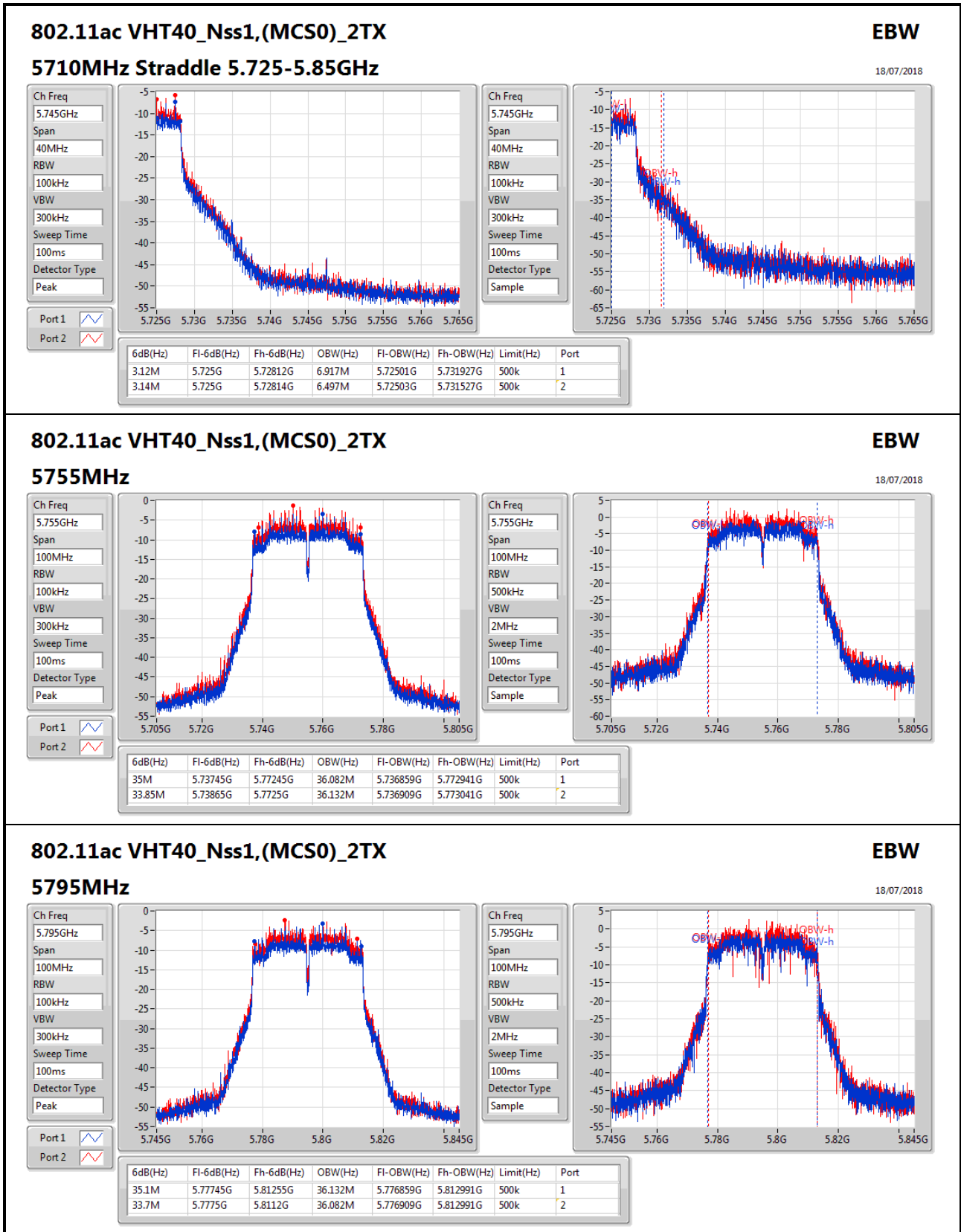


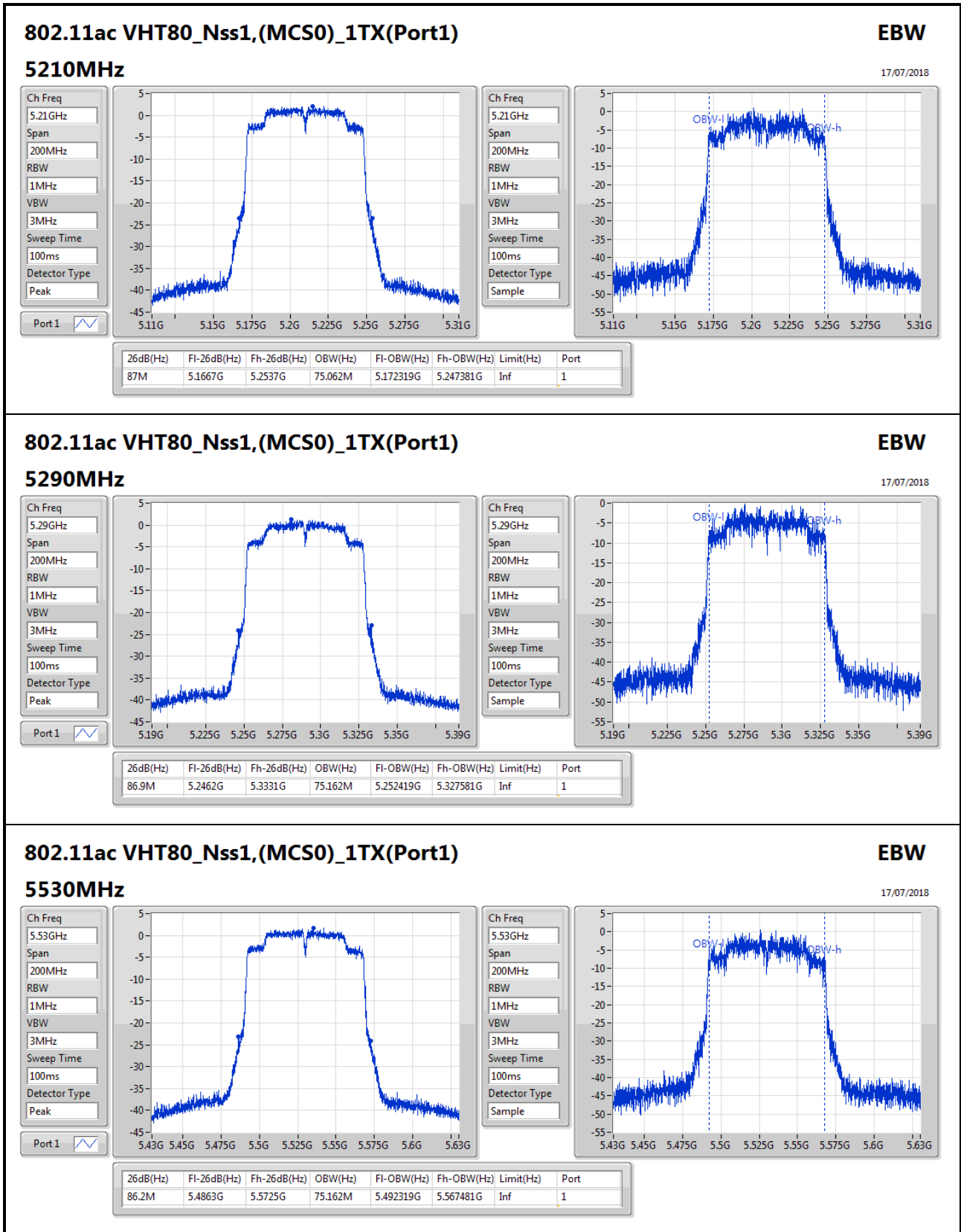


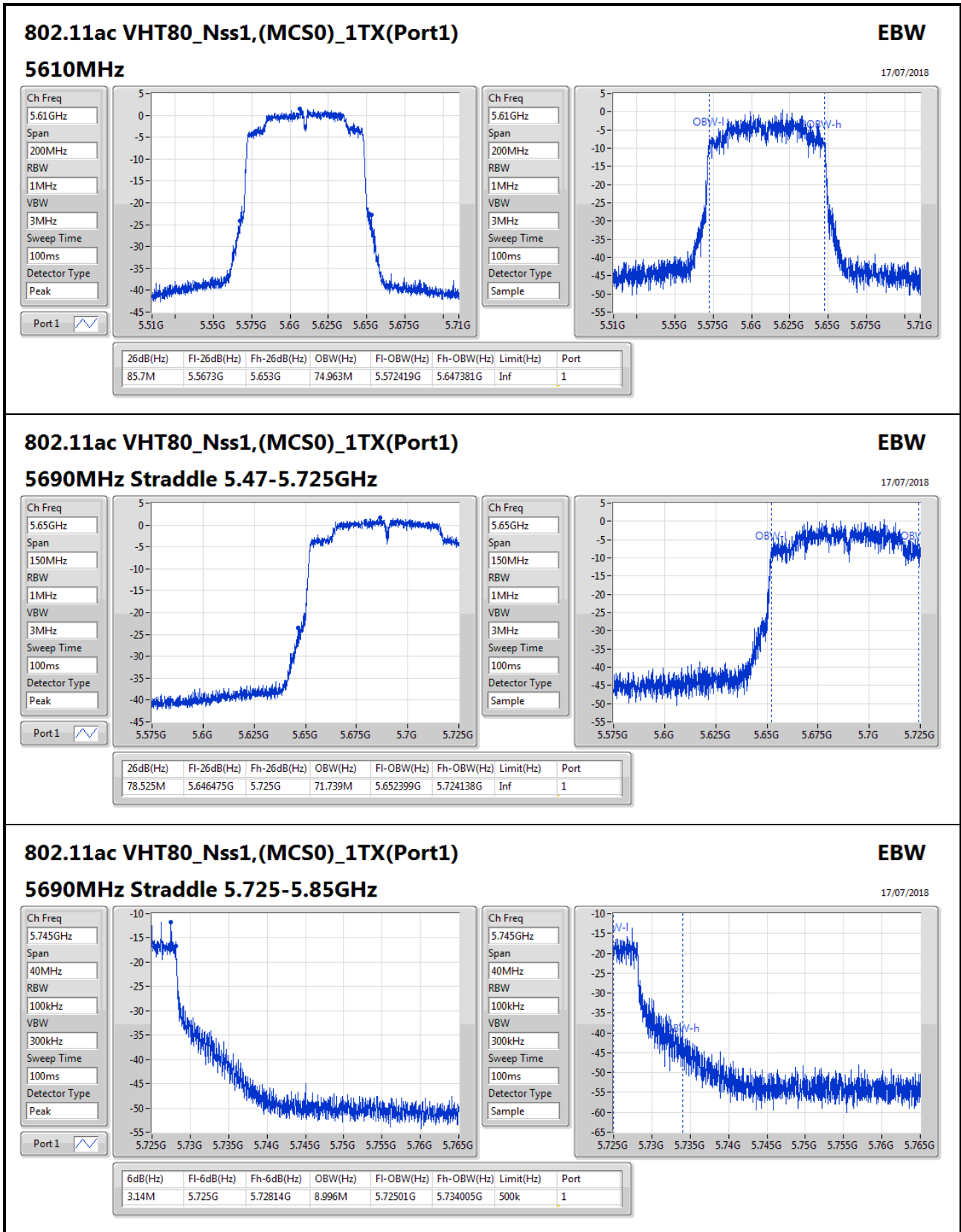


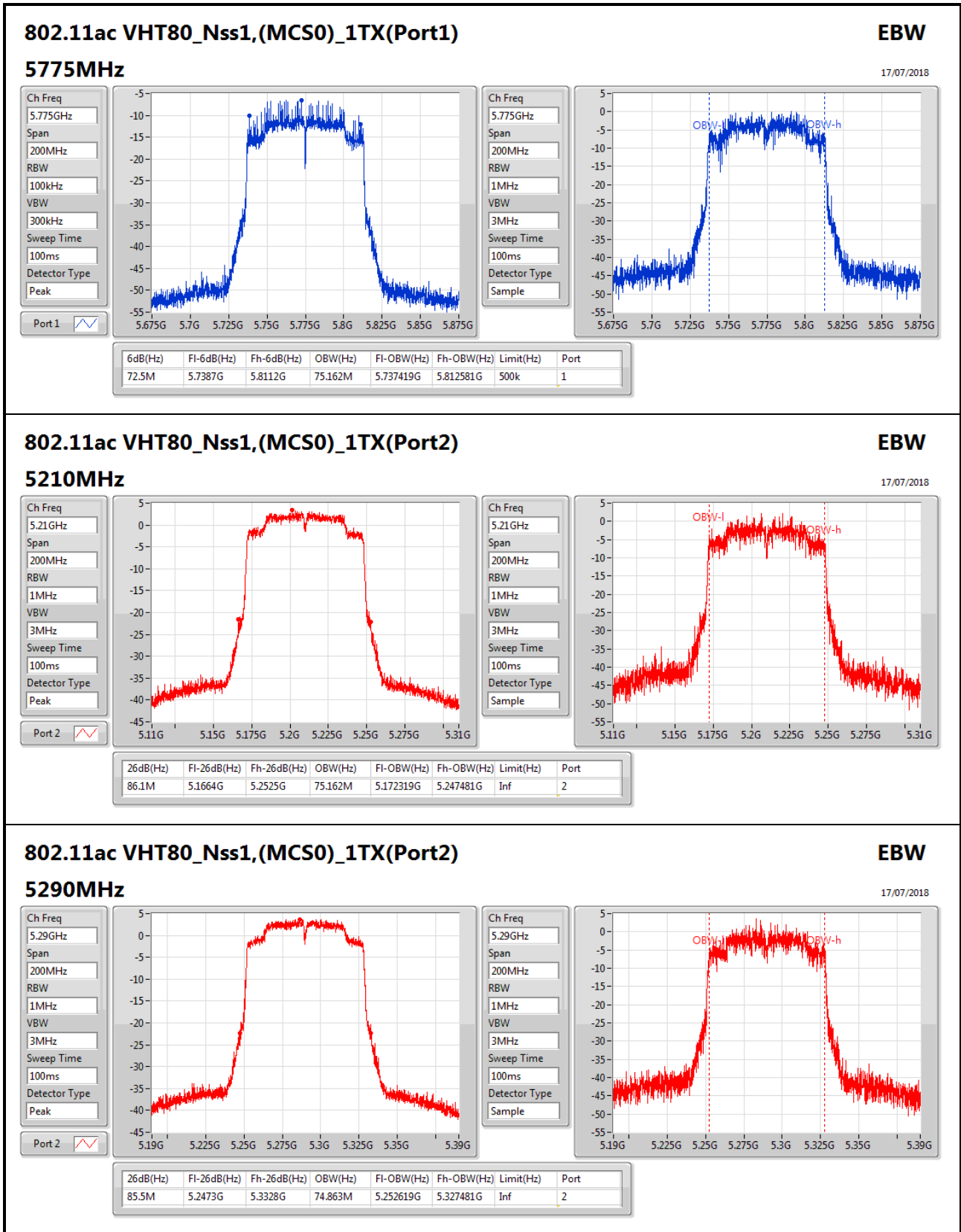


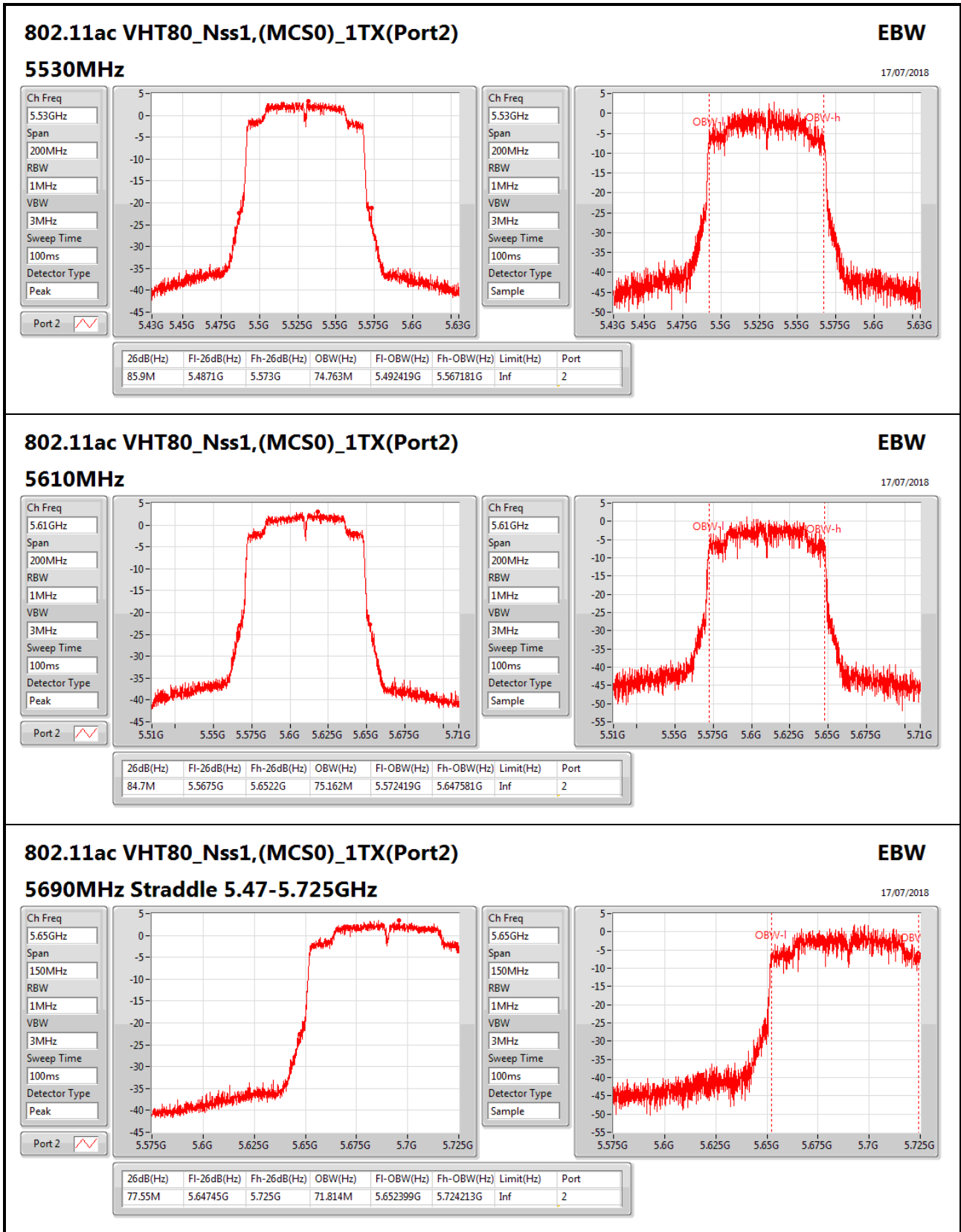


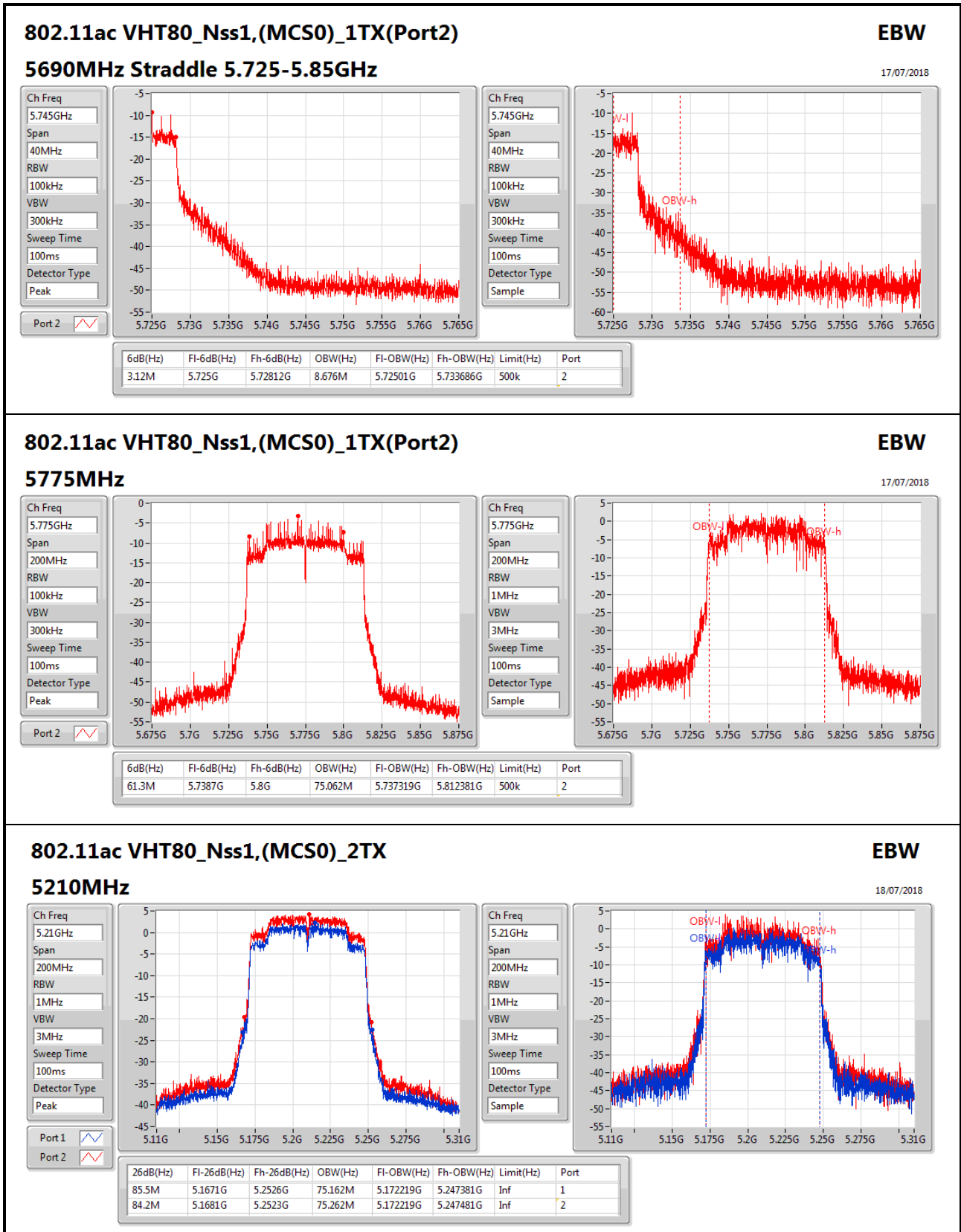


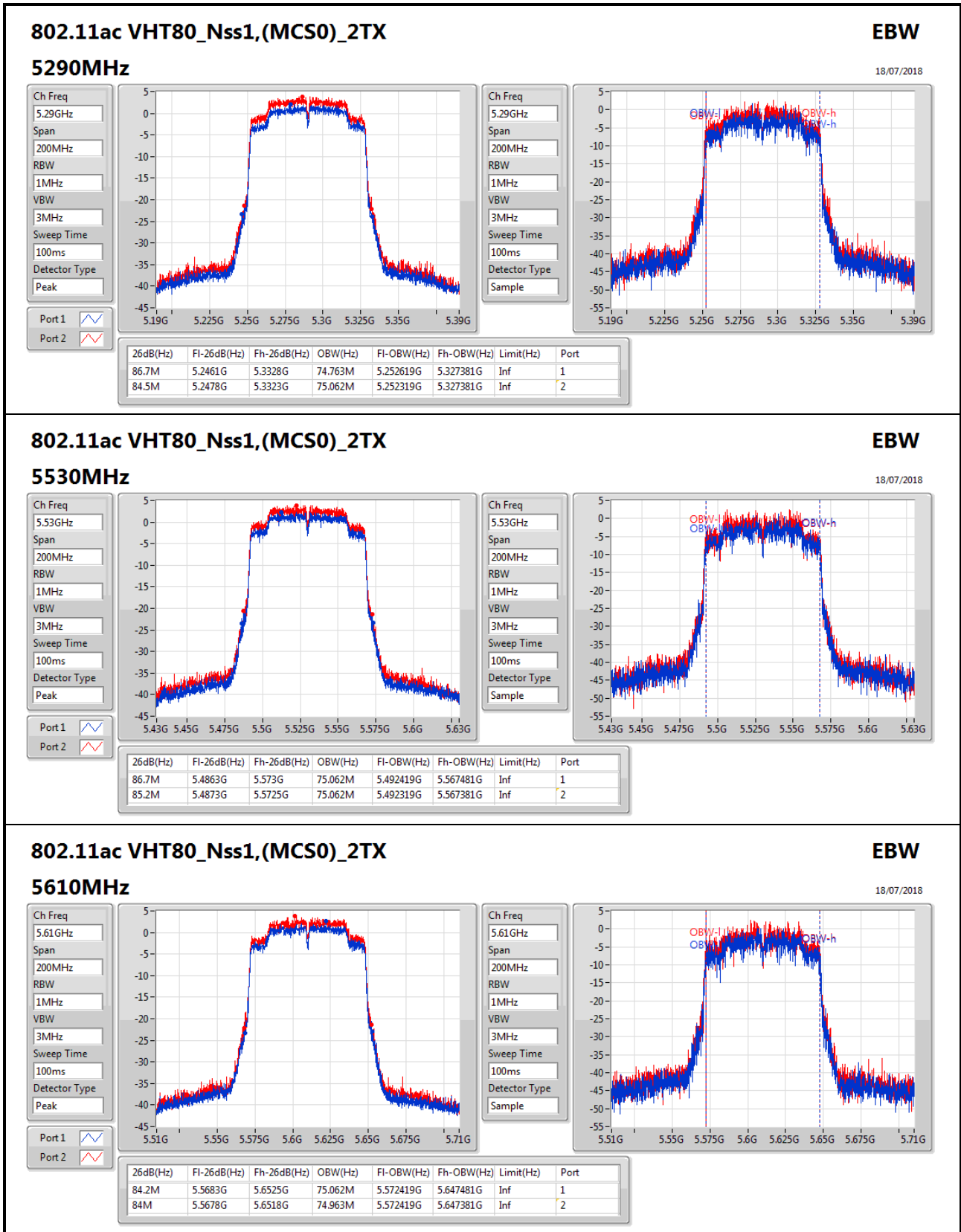











802.11ac VHT80_Nss1,(MCS0)_2TX
EBW

18/07/2018

5610MHz

Ch Freq: 5.61GHz

Span: 200MHz

RBW: 1MHz

VBW: 3MHz

Sweep Time: 100ms

Detector Type: Peak

Port 1:

Port 2:

Ch Freq: 5.61GHz

Span: 200MHz

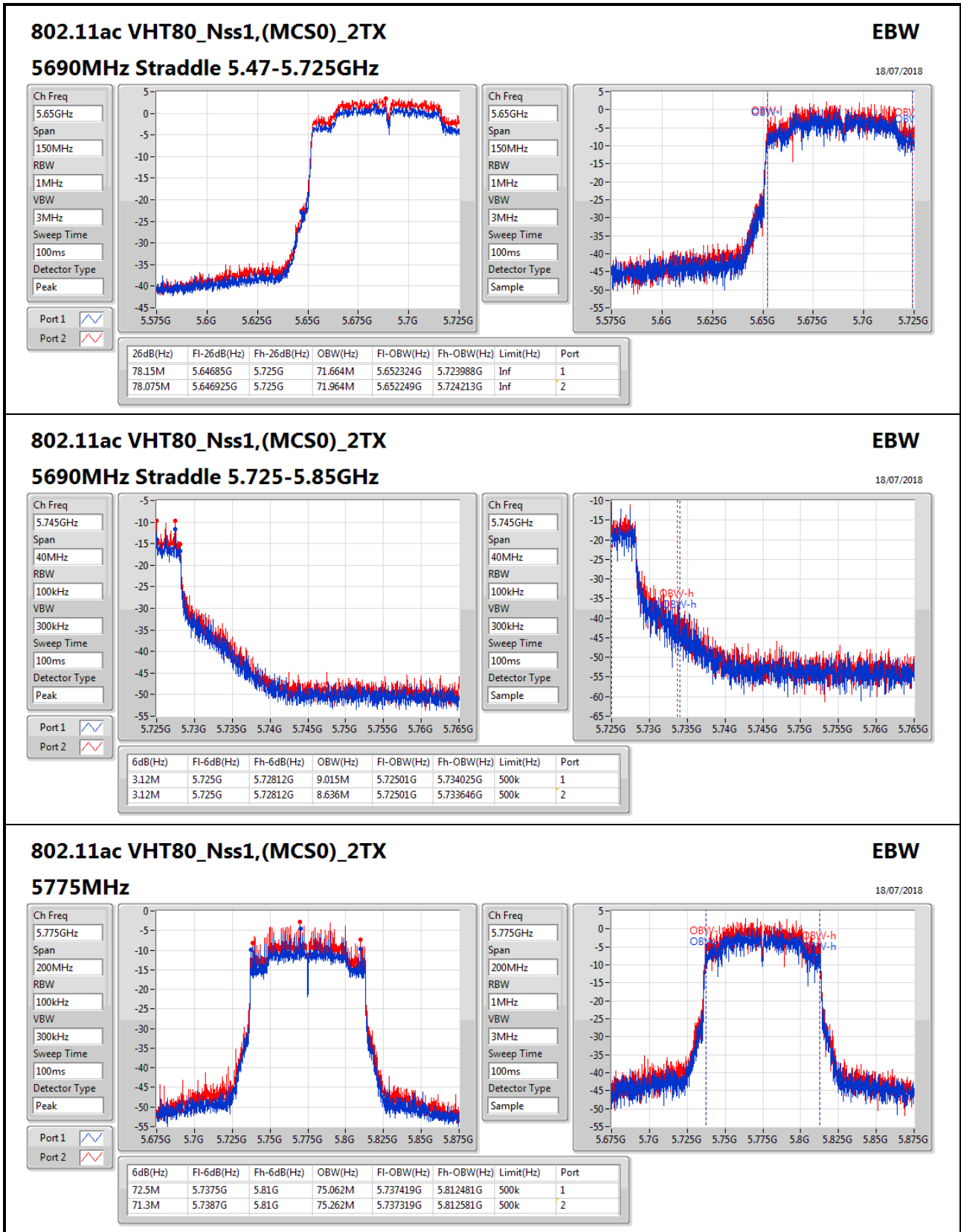
RBW: 1MHz

VBW: 3MHz

Sweep Time: 100ms

Detector Type: Sample

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
84.2M	5.5683G	5.6525G	75.062M	5.572419G	5.647481G	Inf	1
84M	5.5678G	5.6518G	74.963M	5.572419G	5.647381G	Inf	2





Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	9.51	0.00893	12.81	0.01910
802.11a_Nss1,(6Mbps)_1TX(Port2)	11.45	0.01396	14.25	0.02661
802.11a_Nss1,(6Mbps)_2TX	13.59	0.02286	16.89	0.04887
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	9.53	0.00897	12.83	0.01919
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	11.44	0.01393	14.24	0.02655
802.11ac VHT20_Nss1,(MCS0)_2TX	13.59	0.02286	16.89	0.04887
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	9.52	0.00895	12.82	0.01914
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	11.45	0.01396	14.25	0.02661
802.11ac VHT40_Nss1,(MCS0)_2TX	13.60	0.02291	16.90	0.04898
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	9.54	0.00899	12.84	0.01923
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	11.46	0.01400	14.26	0.02667
802.11ac VHT80_Nss1,(MCS0)_2TX	13.62	0.02301	16.92	0.04920
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	9.62	0.00916	12.92	0.01959
802.11a_Nss1,(6Mbps)_1TX(Port2)	11.38	0.01374	13.68	0.02333
802.11a_Nss1,(6Mbps)_2TX	13.59	0.02286	16.89	0.04887
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	9.64	0.00920	12.94	0.01968
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	11.35	0.01365	13.65	0.02317
802.11ac VHT20_Nss1,(MCS0)_2TX	13.58	0.02280	16.88	0.04875
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	9.65	0.00923	12.95	0.01972
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	11.42	0.01387	13.72	0.02355
802.11ac VHT40_Nss1,(MCS0)_2TX	13.63	0.02307	16.93	0.04932
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	9.83	0.00962	13.13	0.02056
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	11.46	0.01400	13.76	0.02377
802.11ac VHT80_Nss1,(MCS0)_2TX	13.73	0.02360	17.03	0.05047
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	10.01	0.01002	13.41	0.02193
802.11a_Nss1,(6Mbps)_1TX(Port2)	11.33	0.01358	13.23	0.02104
802.11a_Nss1,(6Mbps)_2TX	13.72	0.02355	17.12	0.05152
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	9.99	0.00998	13.39	0.02183
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	11.32	0.01355	13.22	0.02099
802.11ac VHT20_Nss1,(MCS0)_2TX	13.69	0.02339	17.09	0.05117
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	9.99	0.00998	13.39	0.02183
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	11.30	0.01349	13.20	0.02089
802.11ac VHT40_Nss1,(MCS0)_2TX	13.70	0.02344	17.10	0.05129
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	10.15	0.01035	13.55	0.02265
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	11.45	0.01396	13.35	0.02163
802.11ac VHT80_Nss1,(MCS0)_2TX	13.86	0.02432	17.26	0.05321
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	9.54	0.00899	12.94	0.01968
802.11a_Nss1,(6Mbps)_1TX(Port2)	11.29	0.01346	13.19	0.02084
802.11a_Nss1,(6Mbps)_2TX	13.51	0.02244	16.91	0.04909
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	9.50	0.00891	12.90	0.01950



Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	11.30	0.01349	13.20	0.02089
802.11ac VHT20_Nss1,(MCS0)_2TX	13.50	0.02239	16.90	0.04898
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	9.52	0.00895	12.92	0.01959
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	11.33	0.01358	13.23	0.02104
802.11ac VHT40_Nss1,(MCS0)_2TX	13.51	0.02244	16.91	0.04909
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	9.63	0.00918	13.03	0.02009
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	11.44	0.01393	13.34	0.02158
802.11ac VHT80_Nss1,(MCS0)_2TX	13.64	0.02312	17.04	0.05058



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-
5180MHz	Pass	3.30	9.45		9.45	24.00	12.75	30.00
5200MHz	Pass	3.30	9.46		9.46	24.00	12.76	30.00
5240MHz	Pass	3.30	9.51		9.51	24.00	12.81	30.00
5260MHz	Pass	3.30	9.62		9.62	24.00	12.92	30.00
5300MHz	Pass	3.30	9.59		9.59	24.00	12.89	30.00
5320MHz	Pass	3.30	9.61		9.61	24.00	12.91	30.00
5500MHz	Pass	3.40	10.01		10.01	24.00	13.41	30.00
5580MHz	Pass	3.40	9.98		9.98	24.00	13.38	30.00
5700MHz	Pass	3.40	9.95		9.95	24.00	13.35	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	3.40	9.94		9.94	23.29	13.34	29.29
5720MHz Straddle 5.725-5.85GHz	Pass	3.40	2.09		2.09	30.00	5.49	36.00
5745MHz	Pass	3.40	9.52		9.52	30.00	12.92	36.00
5785MHz	Pass	3.40	9.54		9.54	30.00	12.94	36.00
5825MHz	Pass	3.40	9.50		9.50	30.00	12.90	36.00
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-
5180MHz	Pass	2.80		11.45	11.45	24.00	14.25	30.00
5200MHz	Pass	2.80		11.42	11.42	24.00	14.22	30.00
5240MHz	Pass	2.80		11.44	11.44	24.00	14.24	30.00
5260MHz	Pass	2.30		11.32	11.32	24.00	13.62	30.00
5300MHz	Pass	2.30		11.38	11.38	24.00	13.68	30.00
5320MHz	Pass	2.30		11.37	11.37	24.00	13.67	30.00
5500MHz	Pass	1.90		11.32	11.32	24.00	13.22	30.00
5580MHz	Pass	1.90		11.30	11.30	24.00	13.20	30.00
5700MHz	Pass	1.90		11.33	11.33	24.00	13.23	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	1.90		11.25	11.25	23.20	13.15	29.20
5720MHz Straddle 5.725-5.85GHz	Pass	1.90		3.42	3.42	30.00	5.32	36.00
5745MHz	Pass	1.90		11.25	11.25	30.00	13.15	36.00
5785MHz	Pass	1.90		11.28	11.28	30.00	13.18	36.00
5825MHz	Pass	1.90		11.29	11.29	30.00	13.19	36.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.30	9.45	11.45	13.57	24.00	16.87	30.00
5200MHz	Pass	3.30	9.46	11.42	13.56	24.00	16.86	30.00
5240MHz	Pass	3.30	9.51	11.44	13.59	24.00	16.89	30.00
5260MHz	Pass	3.30	9.62	11.32	13.56	24.00	16.86	30.00
5300MHz	Pass	3.30	9.59	11.38	13.59	24.00	16.89	30.00
5320MHz	Pass	3.30	9.61	11.37	13.59	24.00	16.89	30.00
5500MHz	Pass	3.40	10.01	11.32	13.72	24.00	17.12	30.00
5580MHz	Pass	3.40	9.98	11.30	13.70	24.00	17.10	30.00
5700MHz	Pass	3.40	9.95	11.33	13.70	24.00	17.10	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	3.40	9.94	11.25	13.65	23.25	17.05	29.25
5720MHz Straddle 5.725-5.85GHz	Pass	3.40	2.09	3.42	5.82	30.00	9.22	36.00
5745MHz	Pass	3.40	9.52	11.25	13.48	30.00	16.88	36.00
5785MHz	Pass	3.40	9.54	11.28	13.51	30.00	16.91	36.00



Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5825MHz	Pass	3.40	9.50	11.29	13.50	30.00	16.90	36.00
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5180MHz	Pass	3.30	9.48		9.48	24.00	12.78	30.00
5200MHz	Pass	3.30	9.48		9.48	24.00	12.78	30.00
5240MHz	Pass	3.30	9.53		9.53	24.00	12.83	30.00
5260MHz	Pass	3.30	9.64		9.64	24.00	12.94	30.00
5300MHz	Pass	3.30	9.62		9.62	24.00	12.92	30.00
5320MHz	Pass	3.30	9.62		9.62	24.00	12.92	30.00
5500MHz	Pass	3.40	9.99		9.99	24.00	13.39	30.00
5580MHz	Pass	3.40	9.93		9.93	24.00	13.33	30.00
5700MHz	Pass	3.40	9.96		9.96	24.00	13.36	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	3.40	9.97		9.97	23.28	13.37	29.28
5720MHz Straddle 5.725-5.85GHz	Pass	3.40	2.50		2.50	30.00	5.90	36.00
5745MHz	Pass	3.40	9.50		9.50	30.00	12.90	36.00
5785MHz	Pass	3.40	9.49		9.49	30.00	12.89	36.00
5825MHz	Pass	3.40	9.45		9.45	30.00	12.85	36.00
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5180MHz	Pass	2.80		11.44	11.44	24.00	14.24	30.00
5200MHz	Pass	2.80		11.43	11.43	24.00	14.23	30.00
5240MHz	Pass	2.80		11.43	11.43	24.00	14.23	30.00
5260MHz	Pass	2.30		11.34	11.34	24.00	13.64	30.00
5300MHz	Pass	2.30		11.35	11.35	24.00	13.65	30.00
5320MHz	Pass	2.30		11.32	11.32	24.00	13.62	30.00
5500MHz	Pass	1.90		11.26	11.26	24.00	13.16	30.00
5580MHz	Pass	1.90		11.32	11.32	24.00	13.22	30.00
5700MHz	Pass	1.90		11.28	11.28	24.00	13.18	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	1.90		11.26	11.26	23.28	13.16	29.28
5720MHz Straddle 5.725-5.85GHz	Pass	1.90		3.89	3.89	30.00	5.79	36.00
5745MHz	Pass	1.90		11.30	11.30	30.00	13.20	36.00
5785MHz	Pass	1.90		11.27	11.27	30.00	13.17	36.00
5825MHz	Pass	1.90		11.28	11.28	30.00	13.18	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	3.30	9.48	11.44	13.58	24.00	16.88	30.00
5200MHz	Pass	3.30	9.48	11.43	13.57	24.00	16.87	30.00
5240MHz	Pass	3.30	9.53	11.43	13.59	24.00	16.89	30.00
5260MHz	Pass	3.30	9.64	11.34	13.58	24.00	16.88	30.00
5300MHz	Pass	3.30	9.62	11.35	13.58	24.00	16.88	30.00
5320MHz	Pass	3.30	9.62	11.32	13.56	24.00	16.86	30.00
5500MHz	Pass	3.40	9.99	11.26	13.68	24.00	17.08	30.00
5580MHz	Pass	3.40	9.93	11.32	13.69	24.00	17.09	30.00
5700MHz	Pass	3.40	9.96	11.28	13.68	24.00	17.08	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	3.40	9.97	11.26	13.67	23.28	17.07	29.28
5720MHz Straddle 5.725-5.85GHz	Pass	3.40	2.50	3.89	6.26	30.00	9.66	36.00
5745MHz	Pass	3.40	9.50	11.30	13.50	30.00	16.90	36.00
5785MHz	Pass	3.40	9.49	11.27	13.48	30.00	16.88	36.00



Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
5825MHz	Pass	3.40	9.45	11.28	13.47	30.00	16.87	36.00
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5190MHz	Pass	3.30	9.52		9.52	24.00	12.82	30.00
5230MHz	Pass	3.30	9.49		9.49	24.00	12.79	30.00
5270MHz	Pass	3.30	9.64		9.64	24.00	12.94	30.00
5310MHz	Pass	3.30	9.65		9.65	24.00	12.95	30.00
5510MHz	Pass	3.40	9.99		9.99	24.00	13.39	30.00
5550MHz	Pass	3.40	9.92		9.92	24.00	13.32	30.00
5670MHz	Pass	3.40	9.97		9.97	24.00	13.37	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	3.40	9.95		9.95	24.00	13.35	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	3.40	-2.75		-2.75	30.00	0.65	36.00
5755MHz	Pass	3.40	9.52		9.52	30.00	12.92	36.00
5795MHz	Pass	3.40	9.48		9.48	30.00	12.88	36.00
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5190MHz	Pass	2.80		11.45	11.45	24.00	14.25	30.00
5230MHz	Pass	2.80		11.44	11.44	24.00	14.24	30.00
5270MHz	Pass	2.30		11.42	11.42	24.00	13.72	30.00
5310MHz	Pass	2.30		11.37	11.37	24.00	13.67	30.00
5510MHz	Pass	1.90		11.30	11.30	24.00	13.20	30.00
5550MHz	Pass	1.90		11.26	11.26	24.00	13.16	30.00
5670MHz	Pass	1.90		11.30	11.30	24.00	13.20	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	1.90		11.28	11.28	24.00	13.18	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	1.90		-1.47	-1.47	30.00	0.43	36.00
5755MHz	Pass	1.90		11.29	11.29	30.00	13.19	36.00
5795MHz	Pass	1.90		11.33	11.33	30.00	13.23	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	3.30	9.52	11.45	13.60	24.00	16.90	30.00
5230MHz	Pass	3.30	9.49	11.44	13.58	24.00	16.88	30.00
5270MHz	Pass	3.30	9.64	11.42	13.63	24.00	16.93	30.00
5310MHz	Pass	3.30	9.65	11.37	13.60	24.00	16.90	30.00
5510MHz	Pass	3.40	9.99	11.30	13.70	24.00	17.10	30.00
5550MHz	Pass	3.40	9.92	11.26	13.65	24.00	17.05	30.00
5670MHz	Pass	3.40	9.97	11.30	13.70	24.00	17.10	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	3.40	9.95	11.28	13.68	24.00	17.08	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	3.40	-2.75	-1.47	0.95	30.00	4.35	36.00
5755MHz	Pass	3.40	9.52	11.29	13.50	30.00	16.90	36.00
5795MHz	Pass	3.40	9.48	11.33	13.51	30.00	16.91	36.00
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5210MHz	Pass	3.30	9.54		9.54	24.00	12.84	30.00
5290MHz	Pass	3.30	9.83		9.83	24.00	13.13	30.00
5530MHz	Pass	3.40	10.15		10.15	24.00	13.55	30.00
5610MHz	Pass	3.40	9.66		9.66	24.00	13.06	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	3.40	9.70		9.70	24.00	13.10	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	3.40	-7.20		-7.20	30.00	-3.80	36.00
5775MHz	Pass	3.40	9.63		9.63	30.00	13.03	36.00

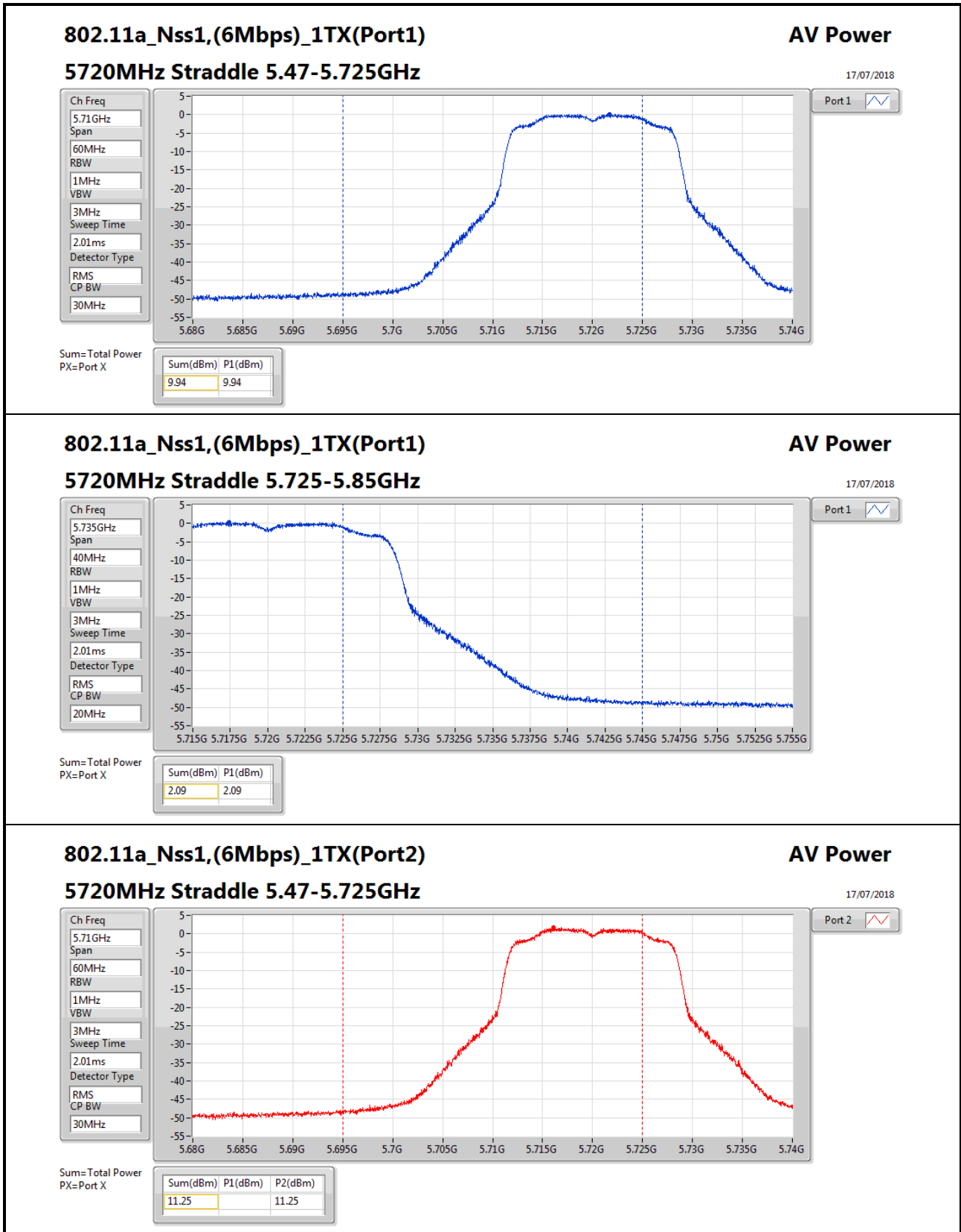


Power Result

Appendix C

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5210MHz	Pass	2.80		11.46	11.46	24.00	14.26	30.00
5290MHz	Pass	2.30		11.46	11.46	24.00	13.76	30.00
5530MHz	Pass	1.90		11.45	11.45	24.00	13.35	30.00
5610MHz	Pass	1.90		10.99	10.99	24.00	12.89	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	1.90		11.27	11.27	24.00	13.17	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	1.90		-5.56	-5.56	30.00	-3.66	36.00
5775MHz	Pass	1.90		11.44	11.44	30.00	13.34	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	3.30	9.54	11.46	13.62	24.00	16.92	30.00
5290MHz	Pass	3.30	9.83	11.46	13.73	24.00	17.03	30.00
5530MHz	Pass	3.40	10.15	11.45	13.86	24.00	17.26	30.00
5610MHz	Pass	3.40	9.66	10.99	13.39	24.00	16.79	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	3.40	9.70	11.27	13.57	24.00	16.97	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	3.40	-7.20	-5.56	-3.29	30.00	0.11	36.00
5775MHz	Pass	3.40	9.63	11.44	13.64	30.00	17.04	36.00

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



802.11a_Nss1,(6Mbps)_1TX(Port2)

5720MHz Straddle 5.47-5.725GHz

AV Power

17/07/2018

Ch Freq
5.71GHz

Span
60MHz

RBW
1MHz

VBW
3MHz

Sweep Time
2.01ms

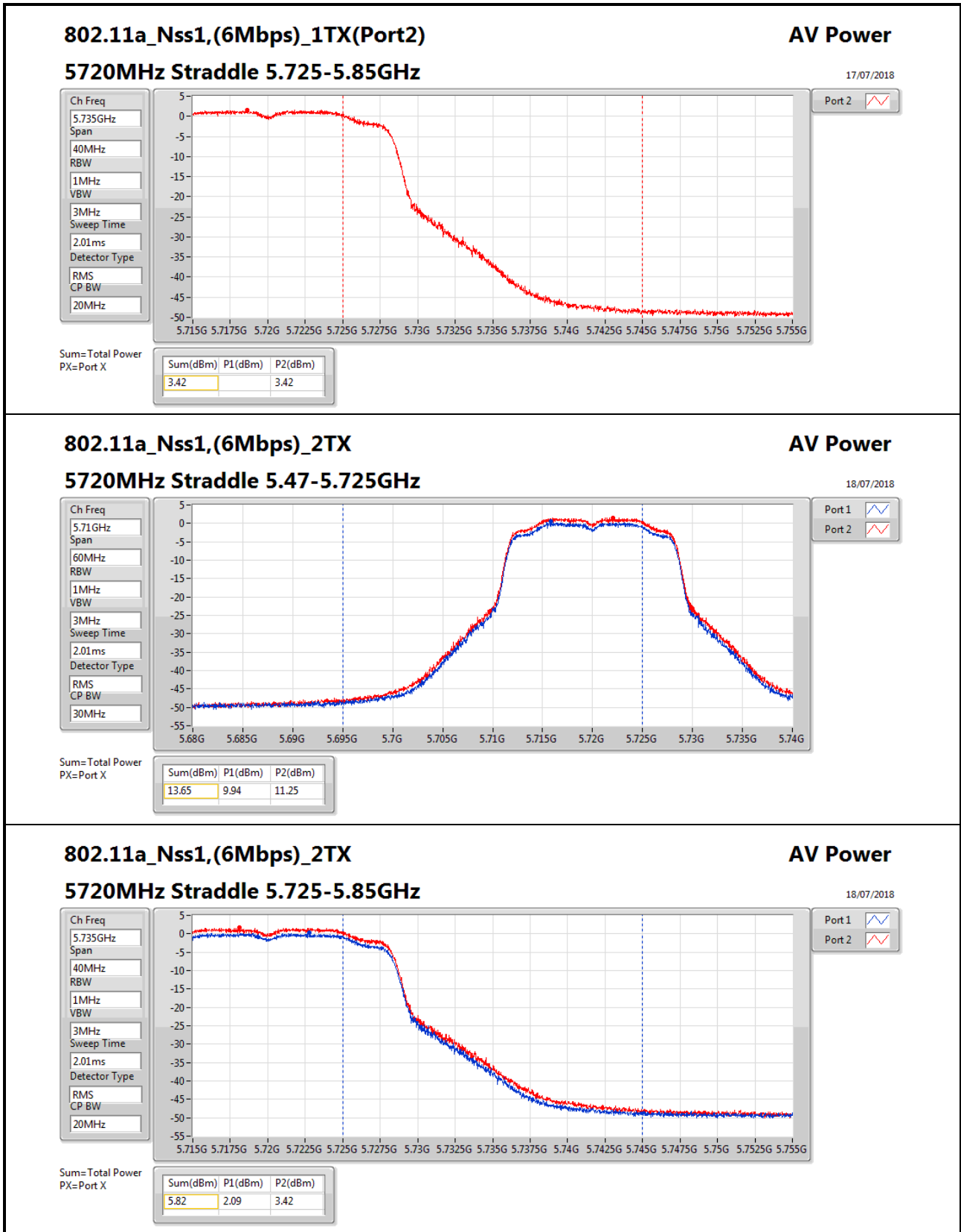
Detector Type
RMS

CP BW
30MHz

Port 2

Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
11.25	11.25	11.25



802.11a_Nss1,(6Mbps)_2TX

5720MHz Straddle 5.725-5.85GHz

AV Power

18/07/2018

Ch Freq
5.735GHz

Span
40MHz

RBW
1MHz

VBW
3MHz

Sweep Time
2.01ms

Detector Type
RMS

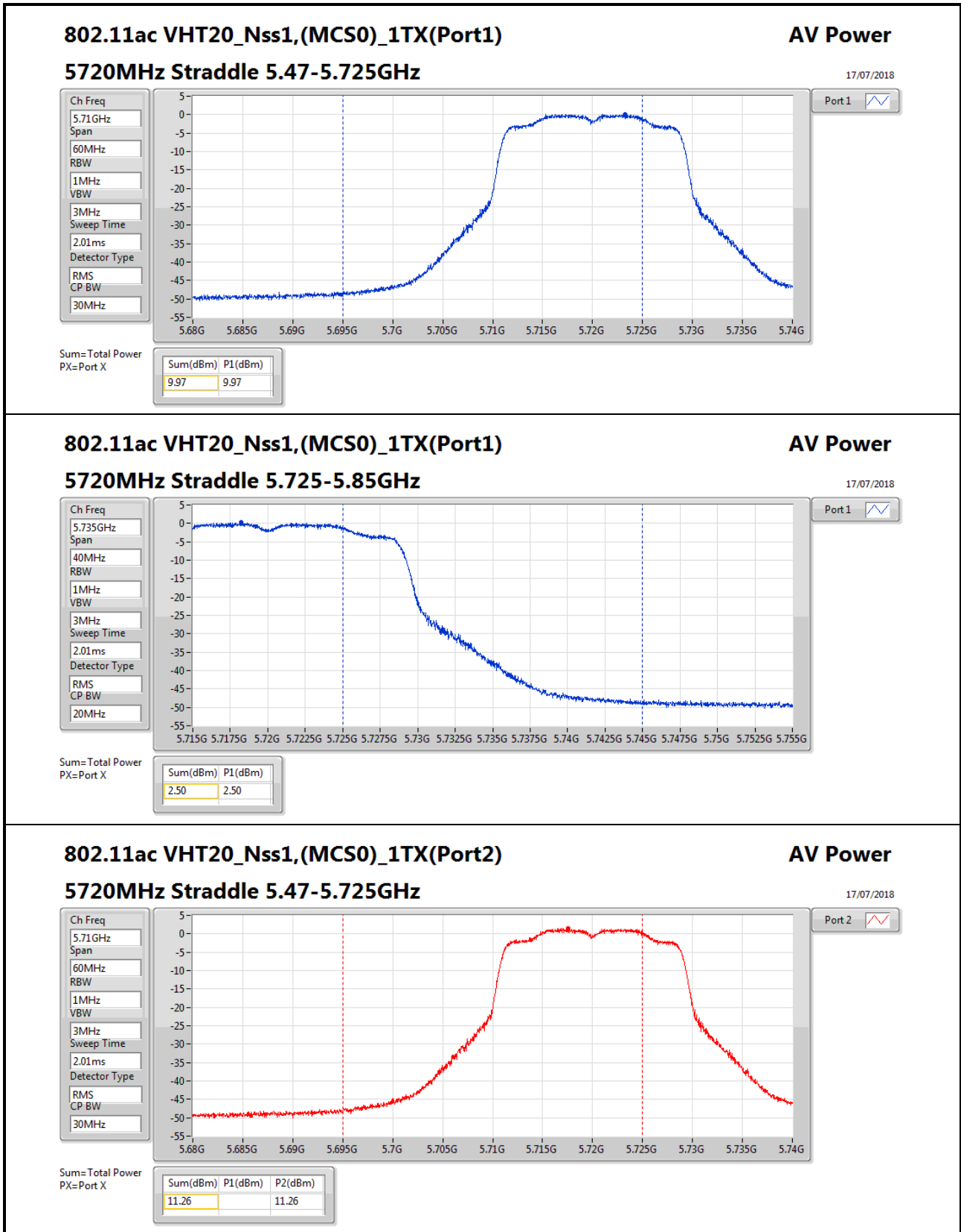
CP BW
20MHz

Port 1

Port 2

Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
5.82	2.09	3.42



802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)

5720MHz Straddle 5.47-5.725GHz

AV Power

17/07/2018

Ch Freq
5.71GHz

Span
60MHz

RBW
1MHz

VBW
3MHz

Sweep Time
2.01ms

Detector Type
RMS

CP BW
30MHz

Port 2

Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
11.26	11.26	11.26

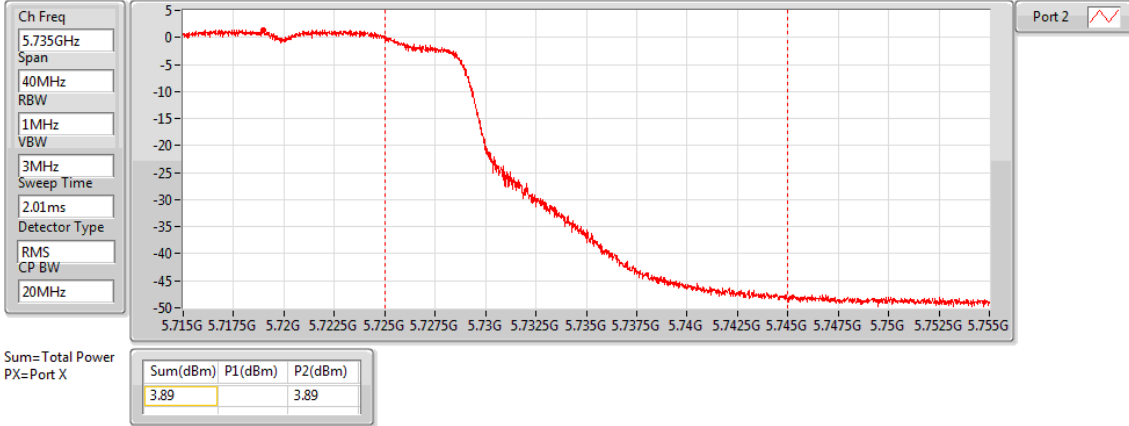


802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)

AV Power

5720MHz Straddle 5.725-5.85GHz

17/07/2018

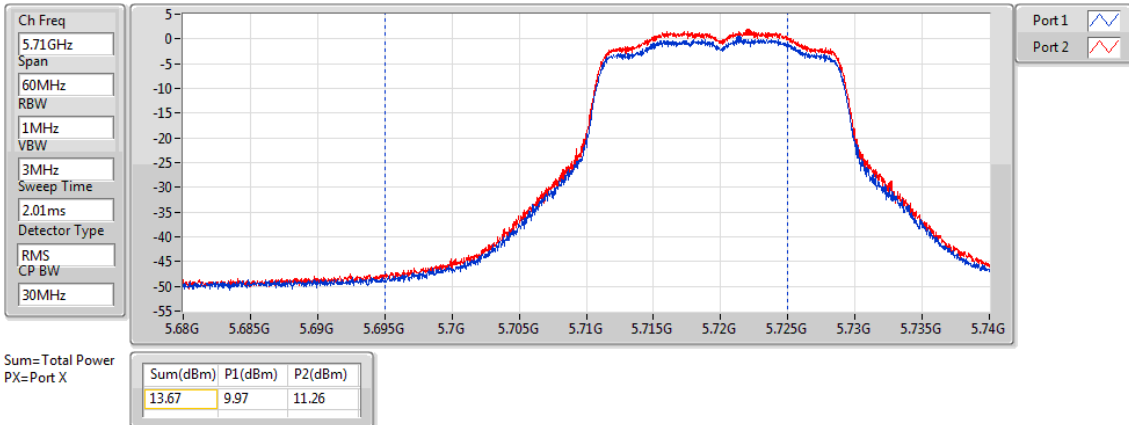


802.11ac VHT20_Nss1,(MCS0)_2TX

AV Power

5720MHz Straddle 5.47-5.725GHz

18/07/2018

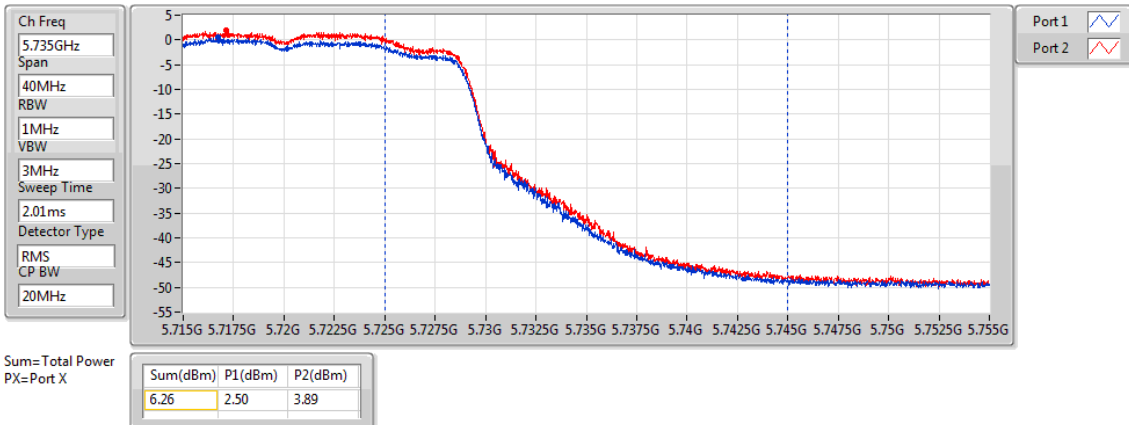


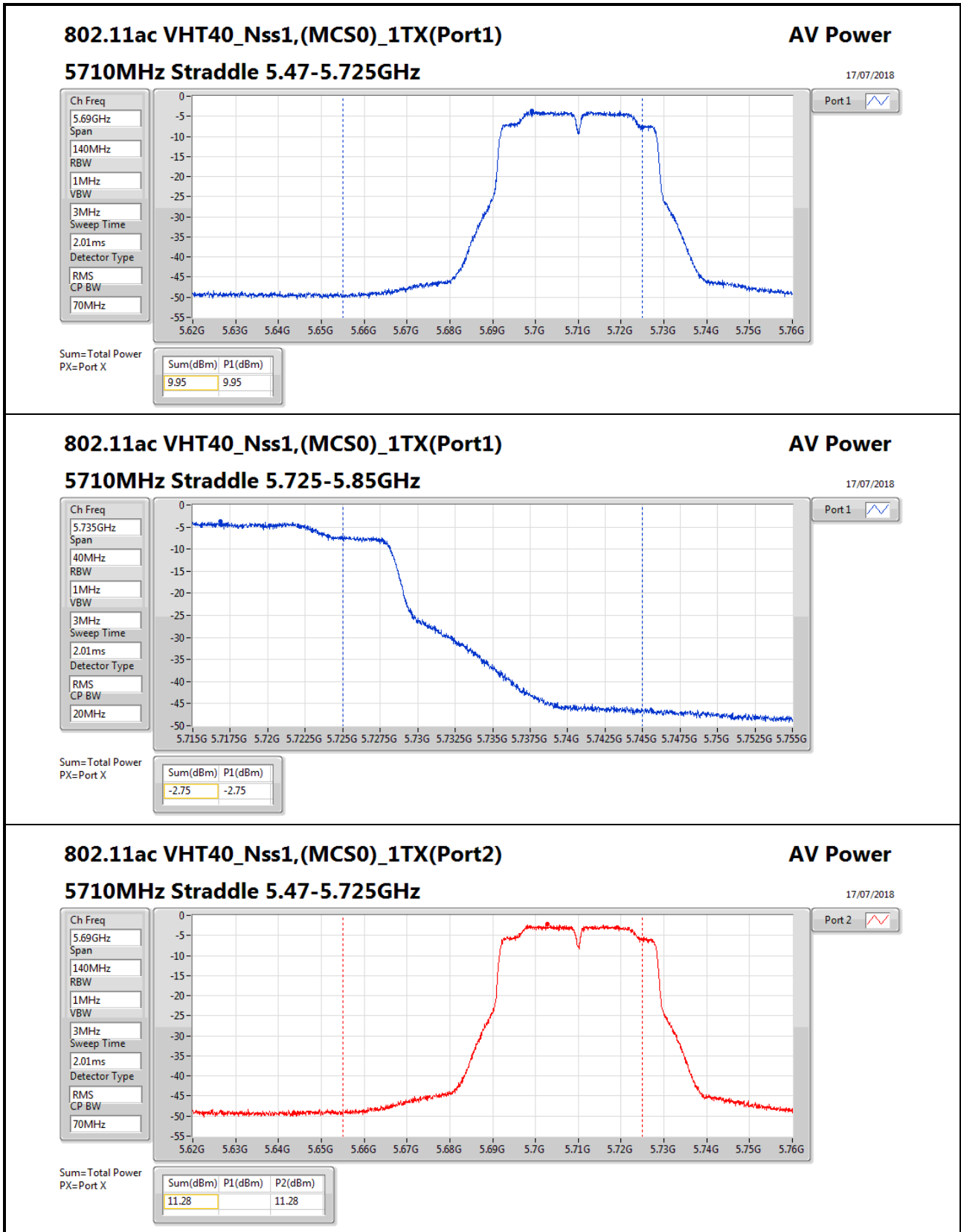
802.11ac VHT20_Nss1,(MCS0)_2TX

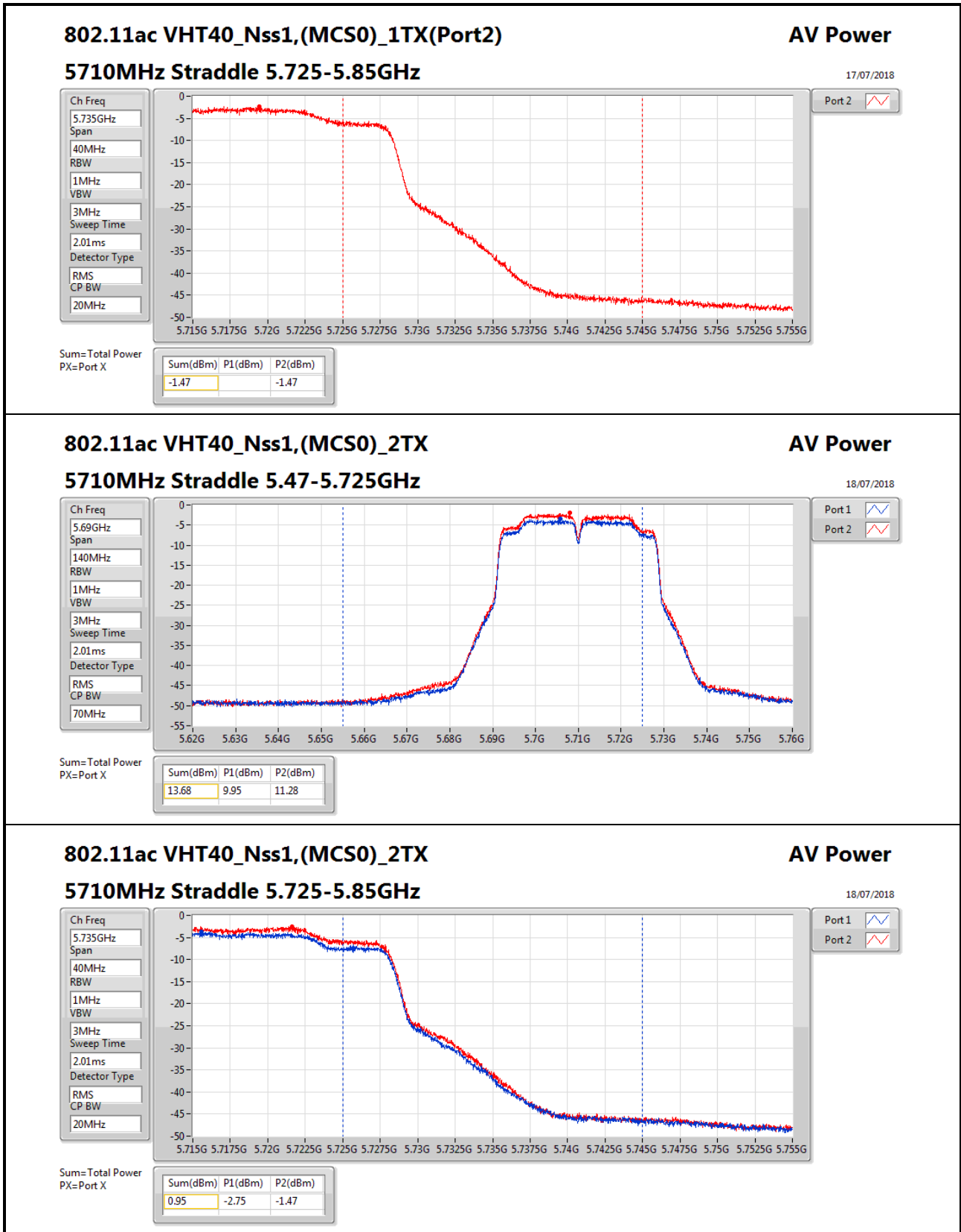
AV Power

5720MHz Straddle 5.725-5.85GHz

18/07/2018







802.11ac VHT40_Nss1,(MCS0)_2TX

5710MHz Straddle 5.725-5.85GHz

AV Power

18/07/2018

Ch Freq
5.735GHz

Span
40MHz

RBW
1MHz

VBW
3MHz

Sweep Time
2.01ms

Detector Type
RMS

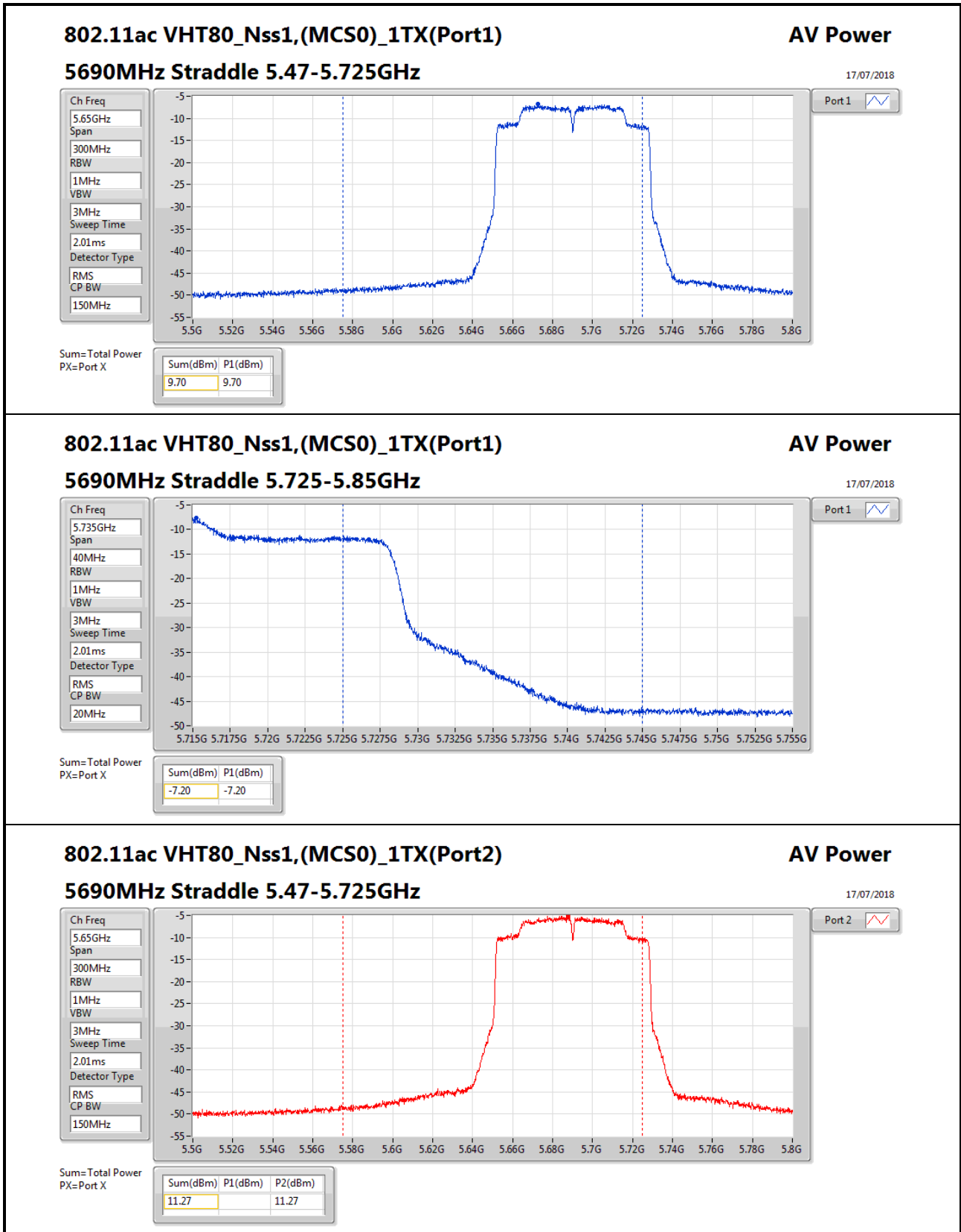
CP BW
20MHz

Port 1

Port 2

Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
0.95	-2.75	-1.47



802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)

5690MHz Straddle 5.47-5.725GHz

AV Power

17/07/2018

Ch Freq
5.65GHz

Span
300MHz

RBW
1MHz

VBW
3MHz

Sweep Time
2.01ms

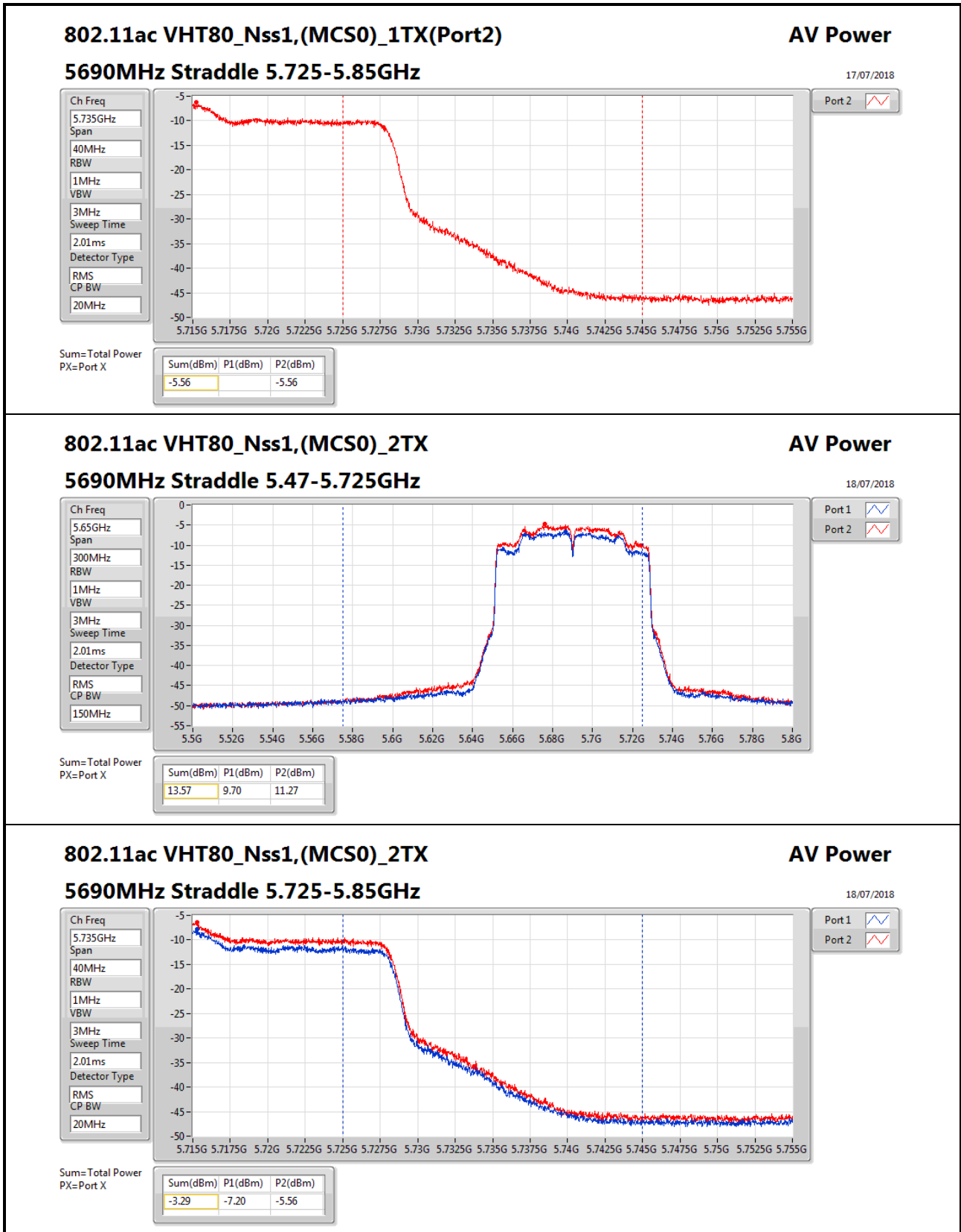
Detector Type
RMS

CP BW
150MHz

Port 2

Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
11.27	11.27	11.27





Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	-2.12	1.18
802.11a_Nss1,(6Mbps)_1TX(Port2)	-1.28	1.52
802.11a_Nss1,(6Mbps)_2TX	1.41	7.47
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	-2.40	0.90
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	-0.90	1.90
802.11ac VHT20_Nss1,(MCS0)_2TX	1.09	7.15
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	-5.46	-2.16
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-4.04	-1.24
802.11ac VHT40_Nss1,(MCS0)_2TX	-1.88	4.18
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-8.04	-4.74
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-7.13	-4.33
802.11ac VHT80_Nss1,(MCS0)_2TX	-3.99	2.07
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	-3.03	0.27
802.11a_Nss1,(6Mbps)_1TX(Port2)	-0.75	1.55
802.11a_Nss1,(6Mbps)_2TX	1.34	7.16
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	-3.20	0.10
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	-0.96	1.34
802.11ac VHT20_Nss1,(MCS0)_2TX	0.71	6.53
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	-6.29	-2.99
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-4.07	-1.77
802.11ac VHT40_Nss1,(MCS0)_2TX	-1.64	4.18
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-9.14	-5.84
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-6.52	-4.22
802.11ac VHT80_Nss1,(MCS0)_2TX	-3.95	1.87
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	-1.74	1.66
802.11a_Nss1,(6Mbps)_1TX(Port2)	-0.39	1.51
802.11a_Nss1,(6Mbps)_2TX	1.94	7.63
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	-1.83	1.57
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	-0.59	1.31
802.11ac VHT20_Nss1,(MCS0)_2TX	1.79	7.48
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	-5.47	-2.07
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-4.24	-2.34
802.11ac VHT40_Nss1,(MCS0)_2TX	-1.87	3.82
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-8.56	-5.16
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-7.01	-5.11
802.11ac VHT80_Nss1,(MCS0)_2TX	-4.11	1.58
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	-4.11	-0.71
802.11a_Nss1,(6Mbps)_1TX(Port2)	-2.48	-0.58
802.11a_Nss1,(6Mbps)_2TX	-0.35	5.34
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	-4.36	-0.96



Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	-2.66	-0.76
802.11ac VHT20_Nss1,(MCS0)_2TX	-0.63	5.06
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	-7.47	-4.07
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-5.77	-3.87
802.11ac VHT40_Nss1,(MCS0)_2TX	-3.41	2.28
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-10.06	-6.66
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-7.95	-6.05
802.11ac VHT80_Nss1,(MCS0)_2TX	-5.12	0.57

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)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-
5180MHz	Pass	3.30	-2.27		-2.27	11.00	1.03	17.00
5200MHz	Pass	3.30	-2.22		-2.22	11.00	1.08	17.00
5240MHz	Pass	3.30	-2.12		-2.12	11.00	1.18	17.00
5260MHz	Pass	3.30	-3.07		-3.07	11.00	0.23	17.00
5300MHz	Pass	3.30	-3.03		-3.03	11.00	0.27	17.00
5320MHz	Pass	3.30	-3.11		-3.11	11.00	0.19	17.00
5500MHz	Pass	3.40	-2.77		-2.77	11.00	0.63	17.00
5580MHz	Pass	3.40	-2.84		-2.84	11.00	0.56	17.00
5700MHz	Pass	3.40	-2.35		-2.35	11.00	1.05	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	3.40	-1.74		-1.74	11.00	1.66	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	3.40	-4.11		-4.11	30.00	-0.71	36.00
5745MHz	Pass	3.40	-4.18		-4.18	30.00	-0.78	36.00
5785MHz	Pass	3.40	-4.26		-4.26	30.00	-0.86	36.00
5825MHz	Pass	3.40	-4.41		-4.41	30.00	-1.01	36.00
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-
5180MHz	Pass	2.80		-1.51	-1.51	11.00	1.29	17.00
5200MHz	Pass	2.80		-1.39	-1.39	11.00	1.41	17.00
5240MHz	Pass	2.80		-1.28	-1.28	11.00	1.52	17.00
5260MHz	Pass	2.30		-0.75	-0.75	11.00	1.55	17.00
5300MHz	Pass	2.30		-0.76	-0.76	11.00	1.54	17.00
5320MHz	Pass	2.30		-0.88	-0.88	11.00	1.42	17.00
5500MHz	Pass	1.90		-1.19	-1.19	11.00	0.71	17.00
5580MHz	Pass	1.90		-1.18	-1.18	11.00	0.72	17.00
5700MHz	Pass	1.90		-0.87	-0.87	11.00	1.03	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	1.90		-0.39	-0.39	11.00	1.51	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	1.90		-2.71	-2.71	30.00	-0.81	36.00
5745MHz	Pass	1.90		-2.48	-2.48	30.00	-0.58	36.00
5785MHz	Pass	1.90		-2.48	-2.48	30.00	-0.58	36.00
5825MHz	Pass	1.90		-2.76	-2.76	30.00	-0.86	36.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.06	-2.75	-0.89	1.27	10.94	7.33	17.00
5200MHz	Pass	6.06	-2.62	-0.74	1.39	10.94	7.45	17.00
5240MHz	Pass	6.06	-2.65	-0.68	1.41	10.94	7.47	17.00
5260MHz	Pass	5.82	-2.55	-0.90	1.34	11.00	7.16	17.00
5300MHz	Pass	5.82	-2.64	-0.87	1.30	11.00	7.12	17.00
5320MHz	Pass	5.82	-2.56	-0.88	1.32	11.00	7.14	17.00
5500MHz	Pass	5.69	-2.48	-1.28	1.13	11.00	6.82	17.00
5580MHz	Pass	5.69	-2.64	-1.26	1.09	11.00	6.78	17.00
5700MHz	Pass	5.69	-2.35	-0.99	1.38	11.00	7.07	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	5.69	-1.74	-0.44	1.94	11.00	7.63	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	5.69	-4.30	-2.79	-0.47	30.00	5.22	36.00
5745MHz	Pass	5.69	-4.49	-2.60	-0.45	30.00	5.24	36.00
5785MHz	Pass	5.69	-4.16	-2.59	-0.36	30.00	5.33	36.00



Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
5825MHz	Pass	5.69	-4.30	-2.51	-0.35	30.00	5.34	36.00
802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5180MHz	Pass	3.30	-2.43		-2.43	11.00	0.87	17.00
5200MHz	Pass	3.30	-2.45		-2.45	11.00	0.85	17.00
5240MHz	Pass	3.30	-2.40		-2.40	11.00	0.90	17.00
5260MHz	Pass	3.30	-3.33		-3.33	11.00	-0.03	17.00
5300MHz	Pass	3.30	-3.35		-3.35	11.00	-0.05	17.00
5320MHz	Pass	3.30	-3.20		-3.20	11.00	0.10	17.00
5500MHz	Pass	3.40	-2.99		-2.99	11.00	0.41	17.00
5580MHz	Pass	3.40	-3.05		-3.05	11.00	0.35	17.00
5700MHz	Pass	3.40	-2.55		-2.55	11.00	0.85	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	3.40	-1.83		-1.83	11.00	1.57	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	3.40	-4.36		-4.36	30.00	-0.96	36.00
5745MHz	Pass	3.40	-4.36		-4.36	30.00	-0.96	36.00
5785MHz	Pass	3.40	-4.37		-4.37	30.00	-0.97	36.00
5825MHz	Pass	3.40	-4.62		-4.62	30.00	-1.22	36.00
802.11ac VHT20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5180MHz	Pass	2.80		-1.01	-1.01	11.00	1.79	17.00
5200MHz	Pass	2.80		-0.90	-0.90	11.00	1.90	17.00
5240MHz	Pass	2.80		-0.94	-0.94	11.00	1.86	17.00
5260MHz	Pass	2.30		-0.96	-0.96	11.00	1.34	17.00
5300MHz	Pass	2.30		-0.98	-0.98	11.00	1.32	17.00
5320MHz	Pass	2.30		-1.02	-1.02	11.00	1.28	17.00
5500MHz	Pass	1.90		-1.50	-1.50	11.00	0.40	17.00
5580MHz	Pass	1.90		-1.43	-1.43	11.00	0.47	17.00
5700MHz	Pass	1.90		-1.13	-1.13	11.00	0.77	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	1.90		-0.59	-0.59	11.00	1.31	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	1.90		-2.93	-2.93	30.00	-1.03	36.00
5745MHz	Pass	1.90		-2.66	-2.66	30.00	-0.76	36.00
5785MHz	Pass	1.90		-2.81	-2.81	30.00	-0.91	36.00
5825MHz	Pass	1.90		-2.88	-2.88	30.00	-0.98	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	6.06	-3.20	-1.37	0.81	10.94	6.87	17.00
5200MHz	Pass	6.06	-3.07	-1.19	0.94	10.94	7.00	17.00
5240MHz	Pass	6.06	-2.97	-1.06	1.09	10.94	7.15	17.00
5260MHz	Pass	5.82	-3.16	-1.49	0.71	11.00	6.53	17.00
5300MHz	Pass	5.82	-3.25	-1.50	0.70	11.00	6.52	17.00
5320MHz	Pass	5.82	-3.23	-1.53	0.66	11.00	6.48	17.00
5500MHz	Pass	5.69	-3.40	-2.17	0.26	11.00	5.95	17.00
5580MHz	Pass	5.69	-3.37	-2.01	0.34	11.00	6.03	17.00
5700MHz	Pass	5.69	-2.96	-1.75	0.67	11.00	6.36	17.00
5720MHz Straddle 5.47-5.725GHz	Pass	5.69	-1.92	-0.59	1.79	11.00	7.48	17.00
5720MHz Straddle 5.725-5.85GHz	Pass	5.69	-4.48	-2.93	-0.63	30.00	5.06	36.00
5745MHz	Pass	5.69	-4.76	-3.09	-0.84	30.00	4.85	36.00
5785MHz	Pass	5.69	-4.89	-3.02	-0.86	30.00	4.83	36.00



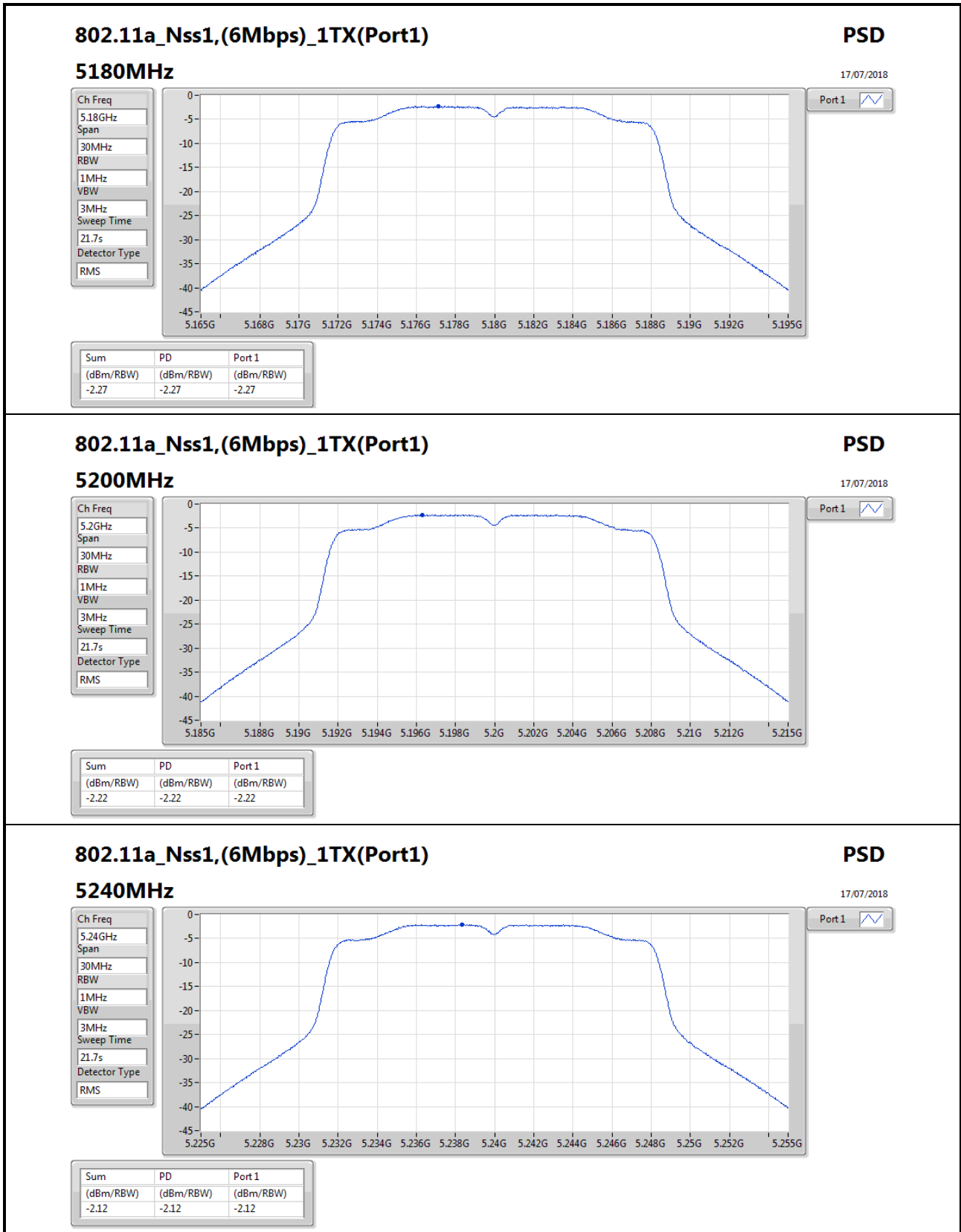
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
5825MHz	Pass	5.69	-4.97	-3.23	-1.01	30.00	4.68	36.00
802.11ac VHT40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5190MHz	Pass	3.30	-5.59		-5.59	11.00	-2.29	17.00
5230MHz	Pass	3.30	-5.46		-5.46	11.00	-2.16	17.00
5270MHz	Pass	3.30	-6.38		-6.38	11.00	-3.08	17.00
5310MHz	Pass	3.30	-6.29		-6.29	11.00	-2.99	17.00
5510MHz	Pass	3.40	-6.19		-6.19	11.00	-2.79	17.00
5550MHz	Pass	3.40	-6.24		-6.24	11.00	-2.84	17.00
5670MHz	Pass	3.40	-6.00		-6.00	11.00	-2.60	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	3.40	-5.47		-5.47	11.00	-2.07	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	3.40	-10.61		-10.61	30.00	-7.21	36.00
5755MHz	Pass	3.40	-7.47		-7.47	30.00	-4.07	36.00
5795MHz	Pass	3.40	-7.74		-7.74	30.00	-4.34	36.00
802.11ac VHT40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5190MHz	Pass	2.80		-4.04	-4.04	11.00	-1.24	17.00
5230MHz	Pass	2.80		-4.08	-4.08	11.00	-1.28	17.00
5270MHz	Pass	2.30		-4.07	-4.07	11.00	-1.77	17.00
5310MHz	Pass	2.30		-4.09	-4.09	11.00	-1.79	17.00
5510MHz	Pass	1.90		-4.73	-4.73	11.00	-2.83	17.00
5550MHz	Pass	1.90		-4.70	-4.70	11.00	-2.80	17.00
5670MHz	Pass	1.90		-4.32	-4.32	11.00	-2.42	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	1.90		-4.24	-4.24	11.00	-2.34	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	1.90		-9.11	-9.11	30.00	-7.21	36.00
5755MHz	Pass	1.90		-5.77	-5.77	30.00	-3.87	36.00
5795MHz	Pass	1.90		-5.87	-5.87	30.00	-3.97	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	6.06	-5.96	-4.05	-1.93	10.94	4.13	17.00
5230MHz	Pass	6.06	-5.91	-4.03	-1.88	10.94	4.18	17.00
5270MHz	Pass	5.82	-5.56	-3.83	-1.64	11.00	4.18	17.00
5310MHz	Pass	5.82	-5.53	-3.91	-1.70	11.00	4.12	17.00
5510MHz	Pass	5.69	-5.95	-4.61	-2.23	11.00	3.46	17.00
5550MHz	Pass	5.69	-5.88	-4.55	-2.17	11.00	3.52	17.00
5670MHz	Pass	5.69	-5.62	-4.27	-1.94	11.00	3.75	17.00
5710MHz Straddle 5.47-5.725GHz	Pass	5.69	-5.47	-4.33	-1.87	11.00	3.82	17.00
5710MHz Straddle 5.725-5.85GHz	Pass	5.69	-10.50	-9.10	-6.75	30.00	-1.06	36.00
5755MHz	Pass	5.69	-7.31	-5.59	-3.41	30.00	2.28	36.00
5795MHz	Pass	5.69	-7.38	-5.65	-3.46	30.00	2.23	36.00
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-
5210MHz	Pass	3.30	-8.04		-8.04	11.00	-4.74	17.00
5290MHz	Pass	3.30	-9.14		-9.14	11.00	-5.84	17.00
5530MHz	Pass	3.40	-8.64		-8.64	11.00	-5.24	17.00
5610MHz	Pass	3.40	-8.95		-8.95	11.00	-5.55	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	3.40	-8.56		-8.56	11.00	-5.16	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	3.40	-14.80		-14.80	30.00	-11.40	36.00
5775MHz	Pass	3.40	-10.06		-10.06	30.00	-6.66	36.00



Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-	-	-
5210MHz	Pass	2.80		-7.13	-7.13	11.00	-4.33	17.00
5290MHz	Pass	2.30		-6.52	-6.52	11.00	-4.22	17.00
5530MHz	Pass	1.90		-7.05	-7.05	11.00	-5.15	17.00
5610MHz	Pass	1.90		-7.35	-7.35	11.00	-5.45	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	1.90		-7.01	-7.01	11.00	-5.11	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	1.90		-13.19	-13.19	30.00	-11.29	36.00
5775MHz	Pass	1.90		-7.95	-7.95	30.00	-6.05	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	6.06	-8.10	-6.12	-3.99	10.94	2.07	17.00
5290MHz	Pass	5.82	-7.99	-6.09	-3.95	11.00	1.87	17.00
5530MHz	Pass	5.69	-7.78	-6.55	-4.11	11.00	1.58	17.00
5610MHz	Pass	5.69	-8.15	-6.99	-4.52	11.00	1.17	17.00
5690MHz Straddle 5.47-5.725GHz	Pass	5.69	-8.47	-6.96	-4.64	11.00	1.05	17.00
5690MHz Straddle 5.725-5.85GHz	Pass	5.69	-14.59	-13.02	-10.74	30.00	-5.05	36.00
5775MHz	Pass	5.69	-9.17	-7.30	-5.12	30.00	0.57	36.00

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 Xpower density;



802.11a_Nss1,(6Mbps)_1TX(Port1)

5240MHz

PSD

17/07/2018

Ch Freq

5.24GHz

Span

30MHz

RBW

1MHz

VBW

3MHz

Sweep Time

21.7s

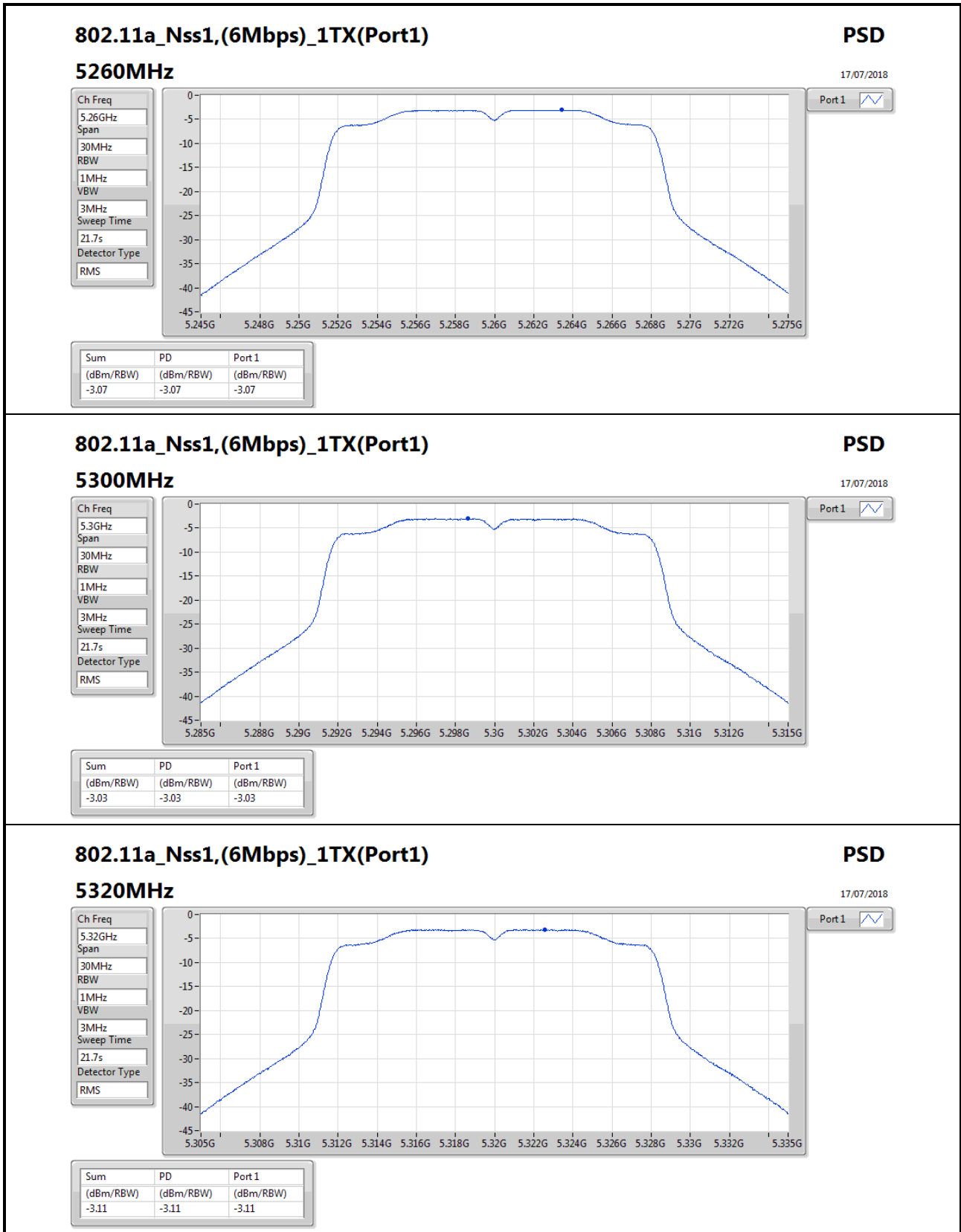
Detector Type

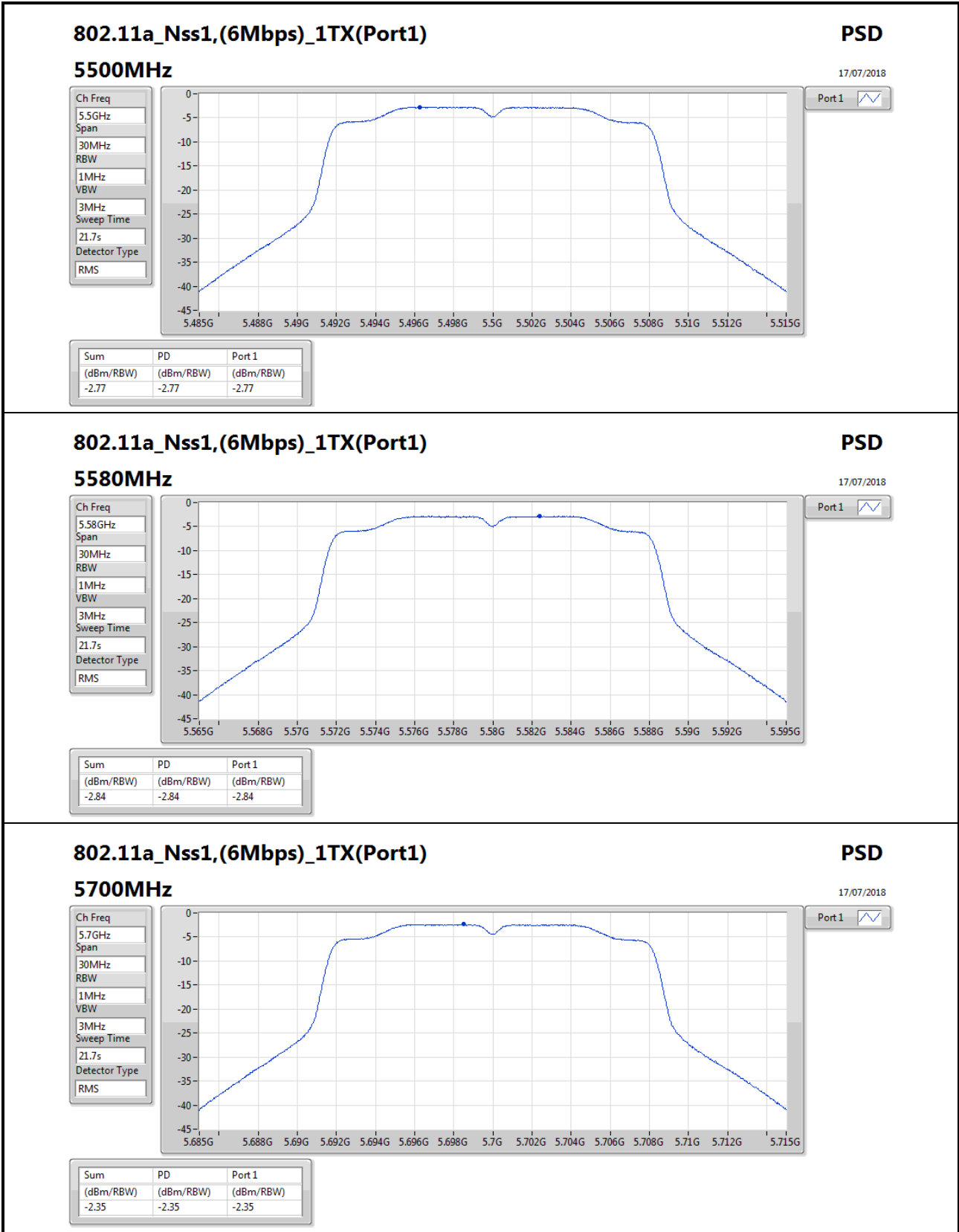
RMS



Port 1

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.12	-2.12	-2.12





802.11a_Nss1,(6Mbps)_1TX(Port1)

5700MHz

PSD

17/07/2018

Ch Freq

5.7GHz

Span

30MHz

RBW

1MHz

VBW

3MHz

Sweep Time

21.7s

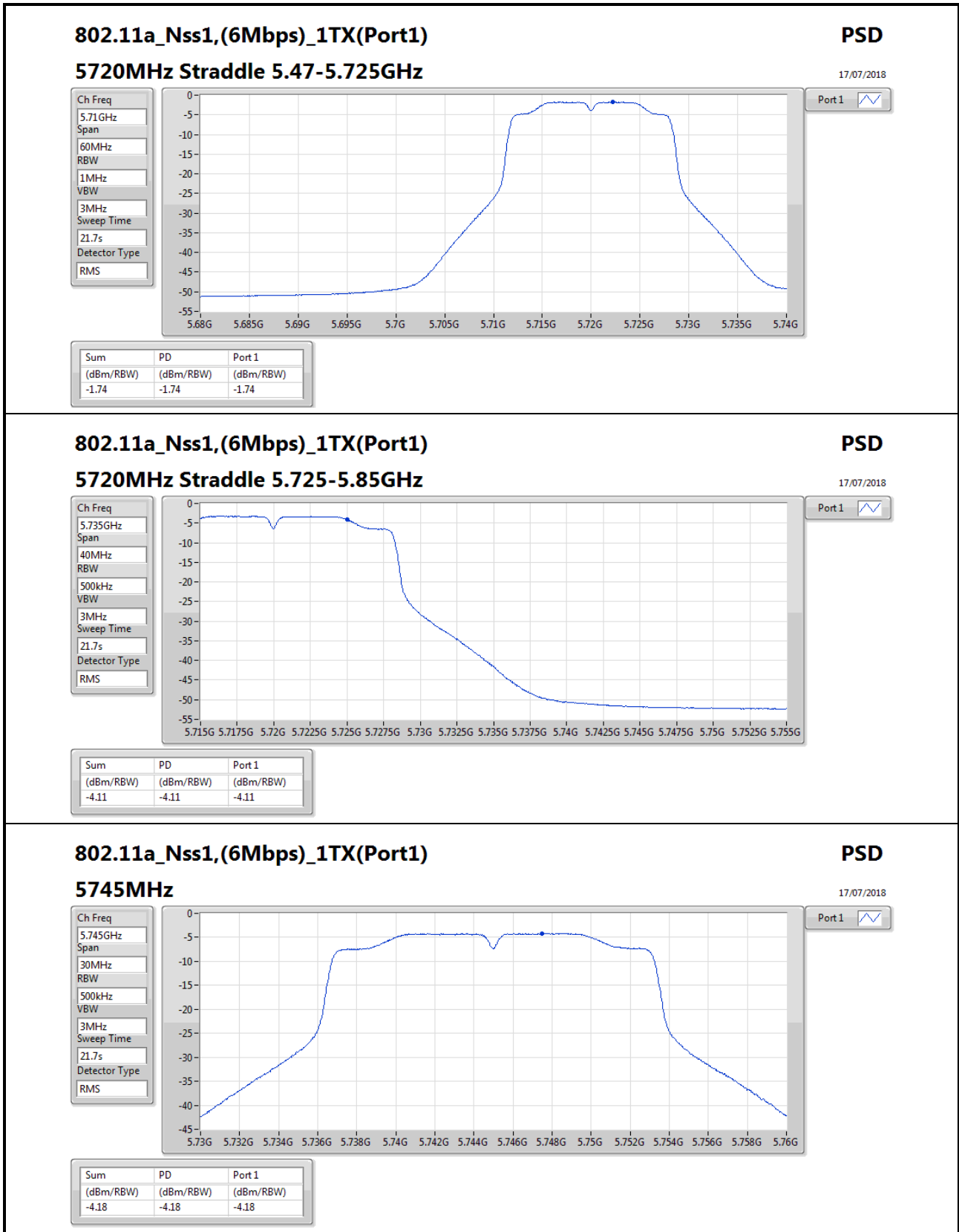
Detector Type

RMS



Port 1

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.35	-2.35	-2.35



802.11a_Nss1,(6Mbps)_1TX(Port1)

5745MHz

PSD

17/07/2018

Ch Freq

5.745GHz

Span

30MHz

RBW

500kHz

VBW

3MHz

Sweep Time

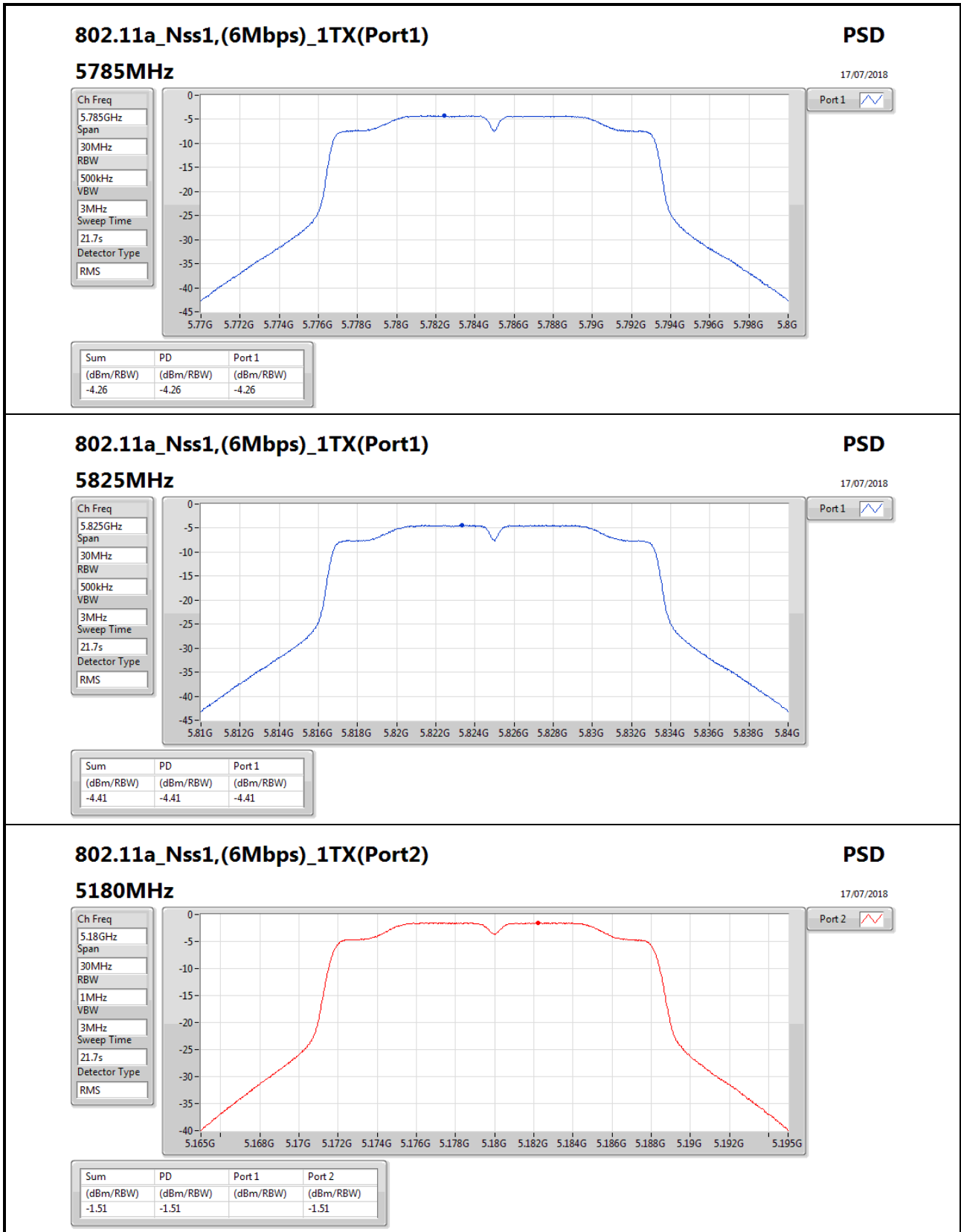
21.7s

Detector Type

RMS

Port 1

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.18	-4.18	-4.18



802.11a_Nss1,(6Mbps)_1TX(Port2)

5180MHz

PSD

17/07/2018

Ch Freq

5.18GHz

Span

30MHz

RBW

1MHz

VBW

3MHz

Sweep Time

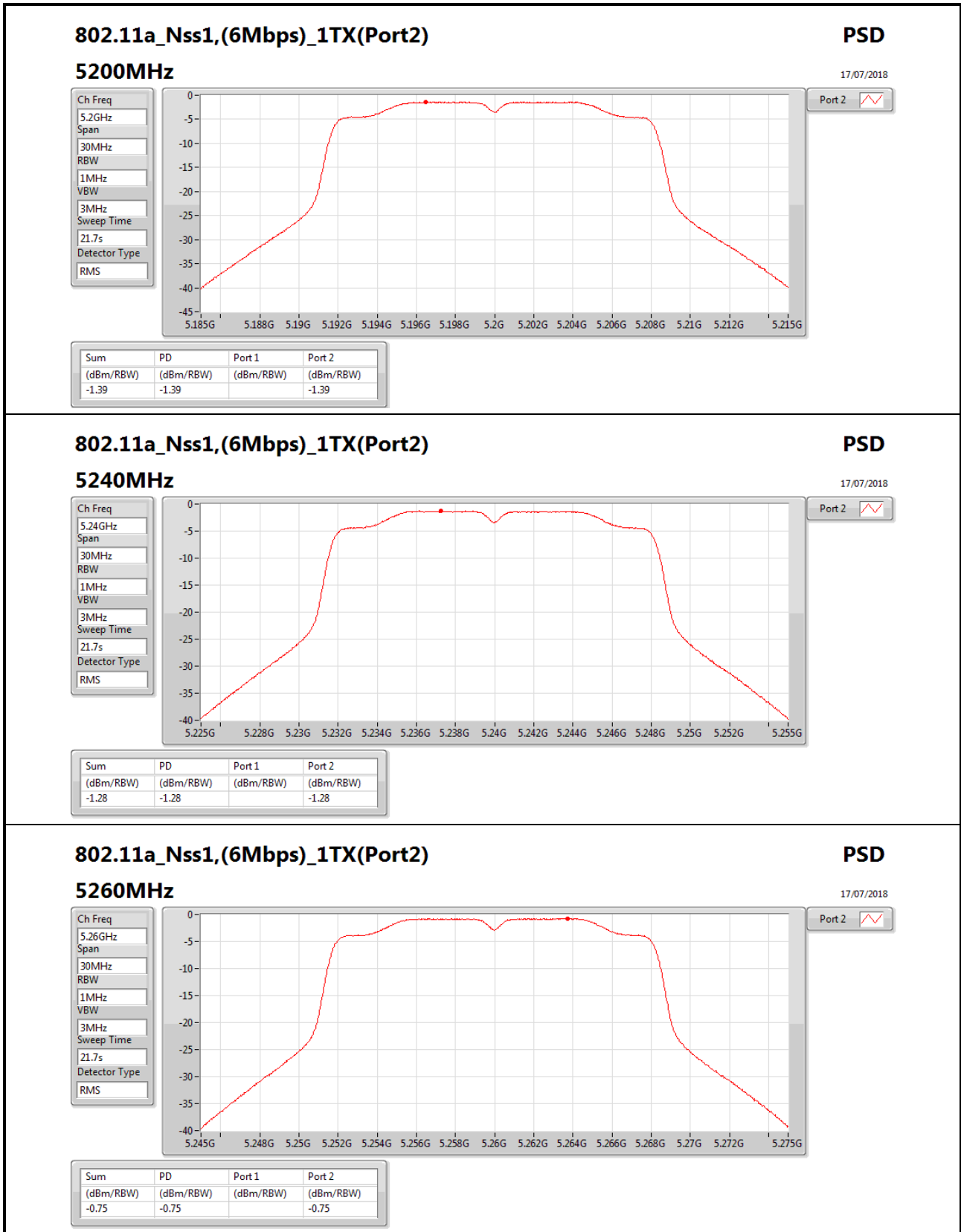
21.7s

Detector Type

RMS

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.51	-1.51	-1.51	-1.51



802.11a_Nss1,(6Mbps)_1TX(Port2)

5260MHz

PSD

17/07/2018

Ch Freq
5.26GHz

Span
30MHz

RBW
1MHz

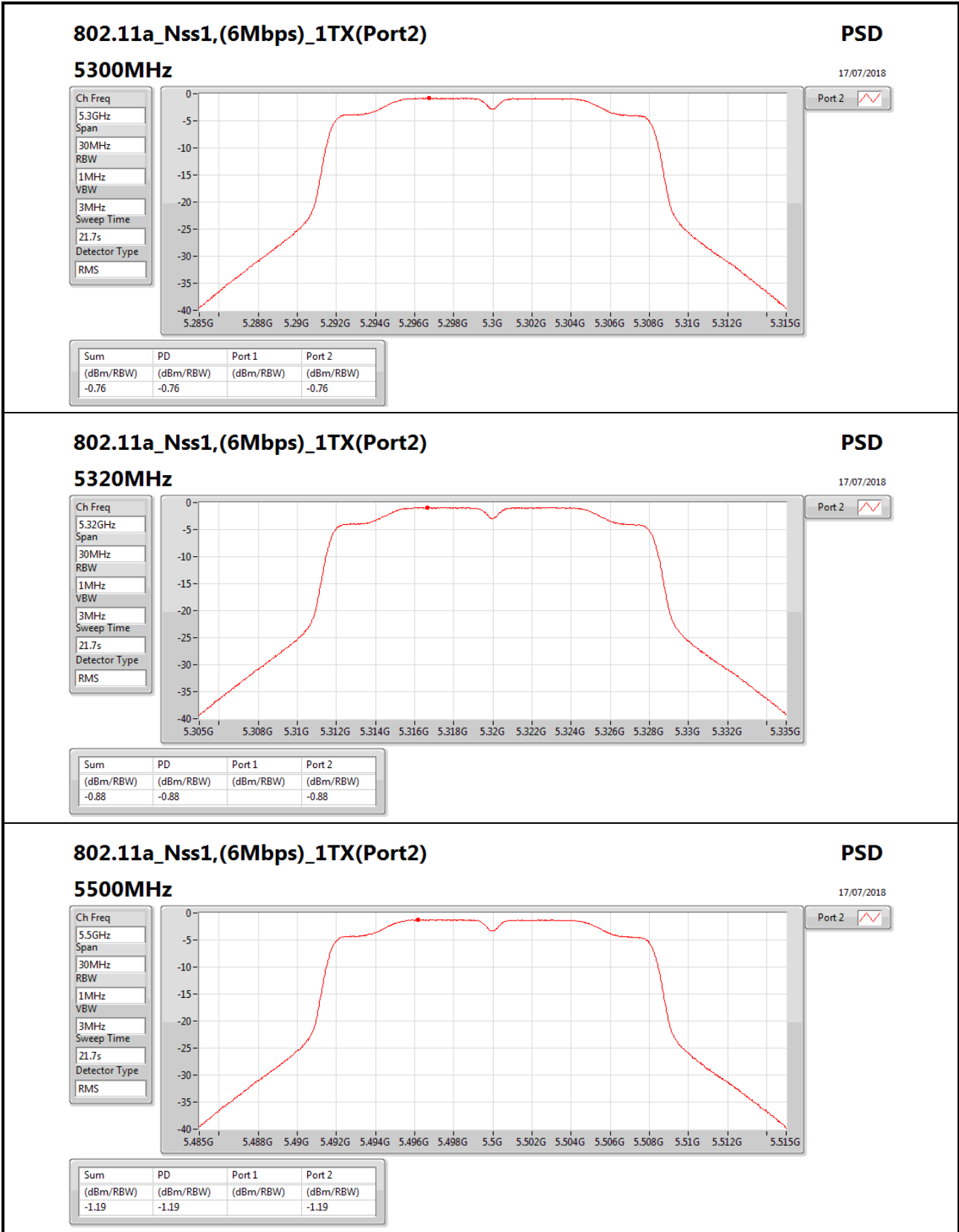
VBW
3MHz

Sweep Time
21.7s

Detector Type
RMS

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.75	-0.75		-0.75



802.11a_Nss1,(6Mbps)_1TX(Port2)

5500MHz

PSD

17/07/2018

Ch Freq
5.5GHz

Span
30MHz

RBW
1MHz

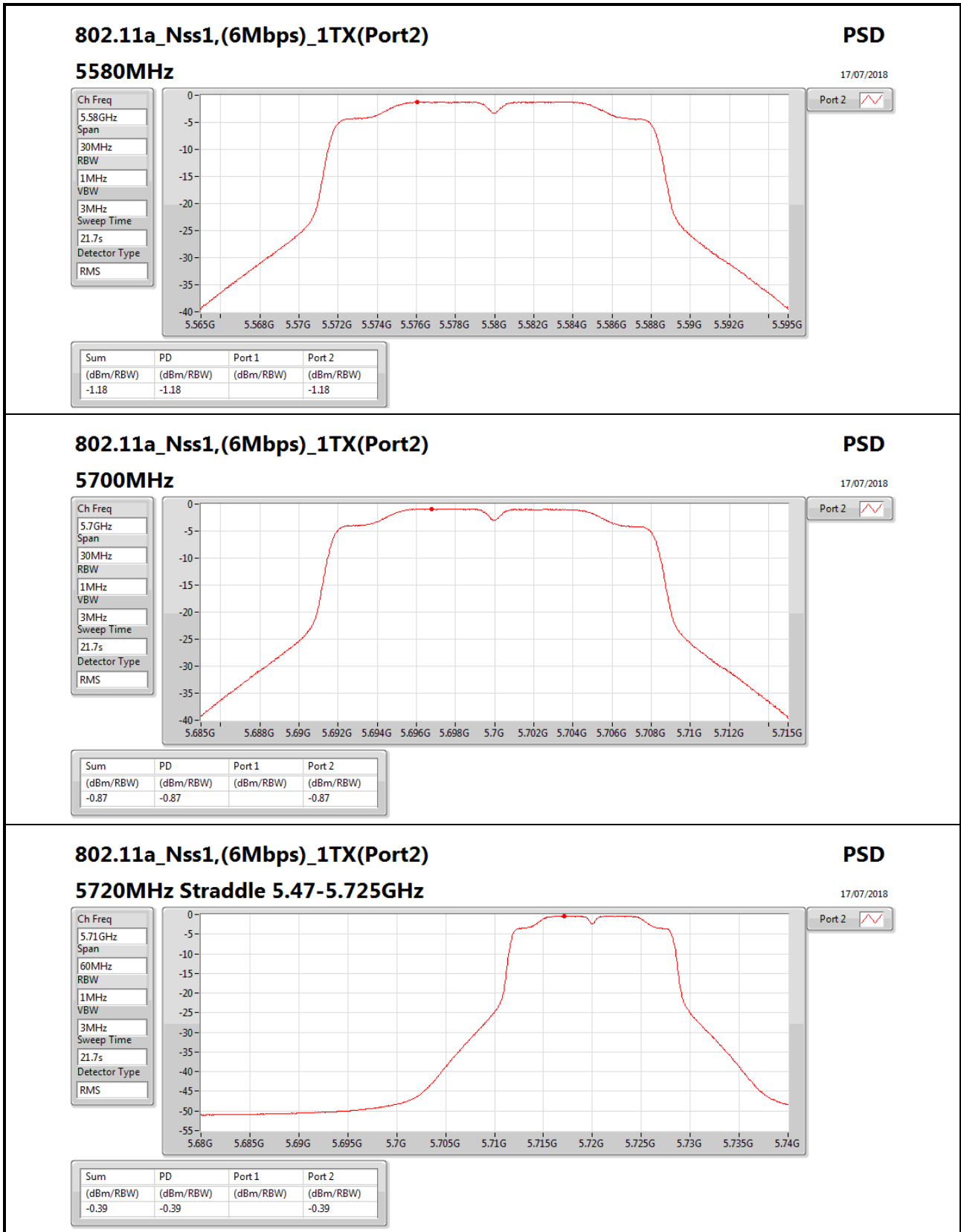
VBW
3MHz

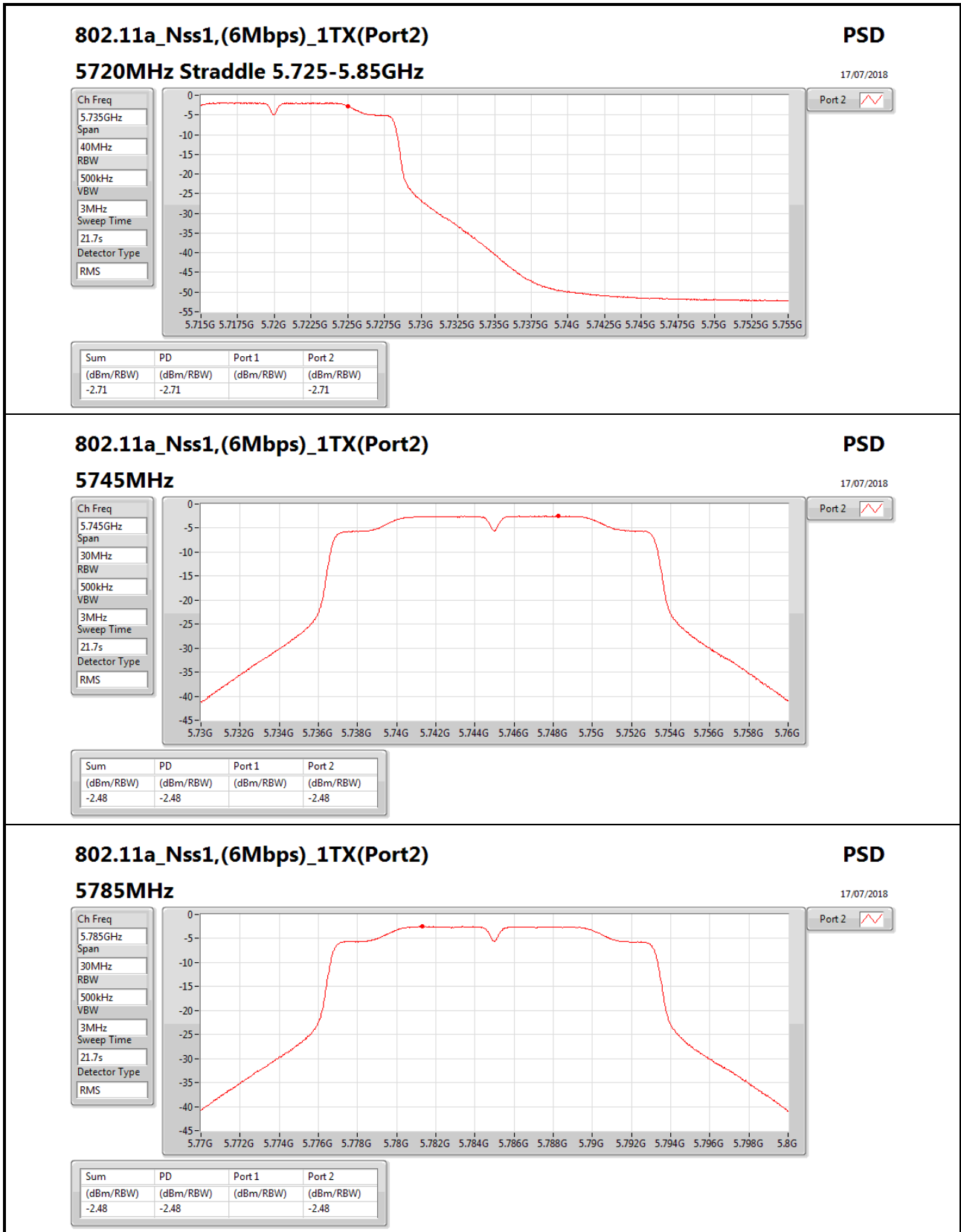
Sweep Time
21.7s

Detector Type
RMS

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.19	-1.19		-1.19





802.11a_Nss1,(6Mbps)_1TX(Port2)

5785MHz

PSD

17/07/2018

Ch Freq
5.785GHz

Span
30MHz

RBW
500kHz

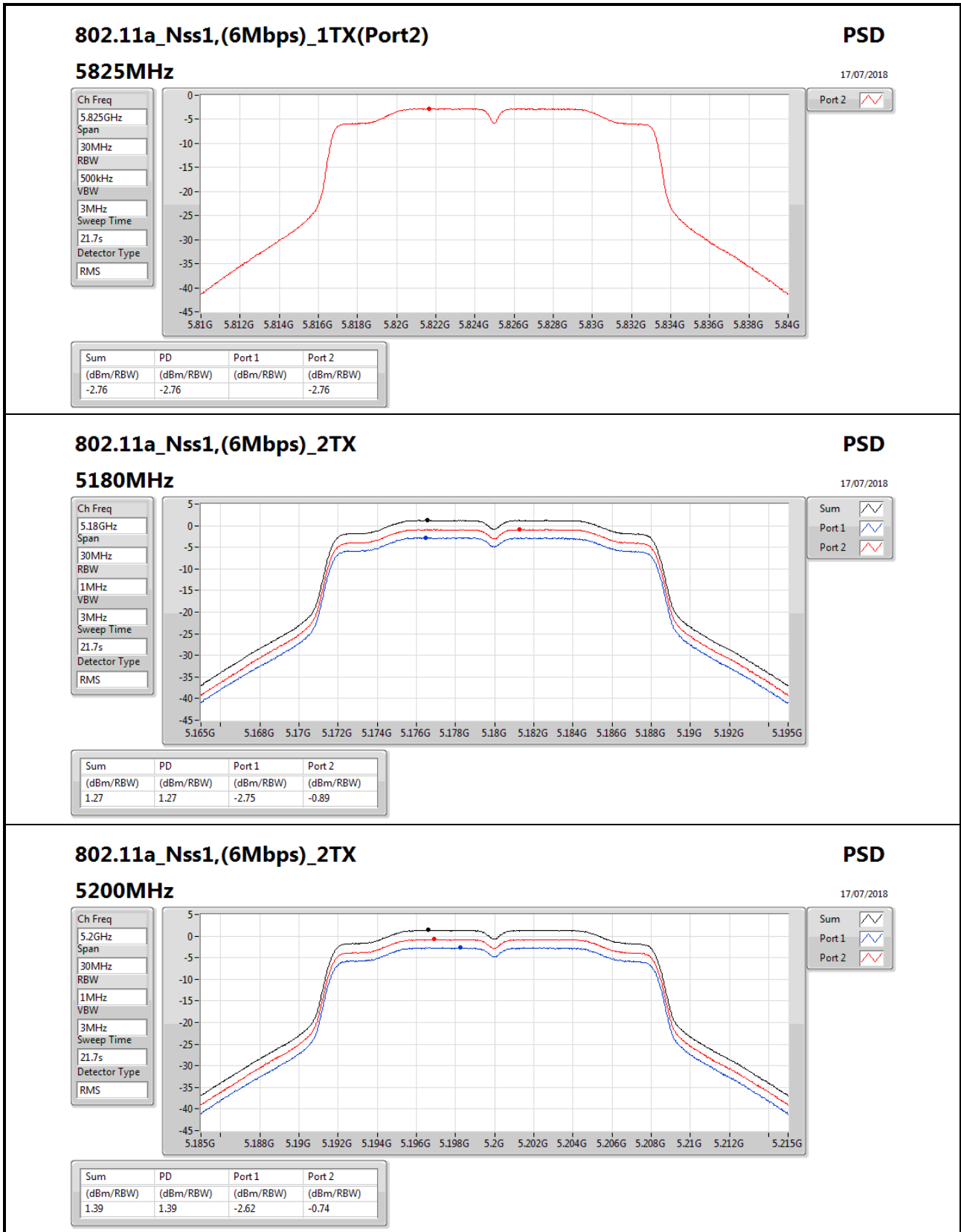
VBW
3MHz

Sweep Time
21.7s

Detector Type
RMS

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.48	-2.48		-2.48



802.11a_Nss1,(6Mbps)_2TX

5200MHz

PSD

17/07/2018

Ch Freq
5.2GHz

Span
30MHz

RBW
1MHz

VBW
3MHz

Sweep Time
21.7s

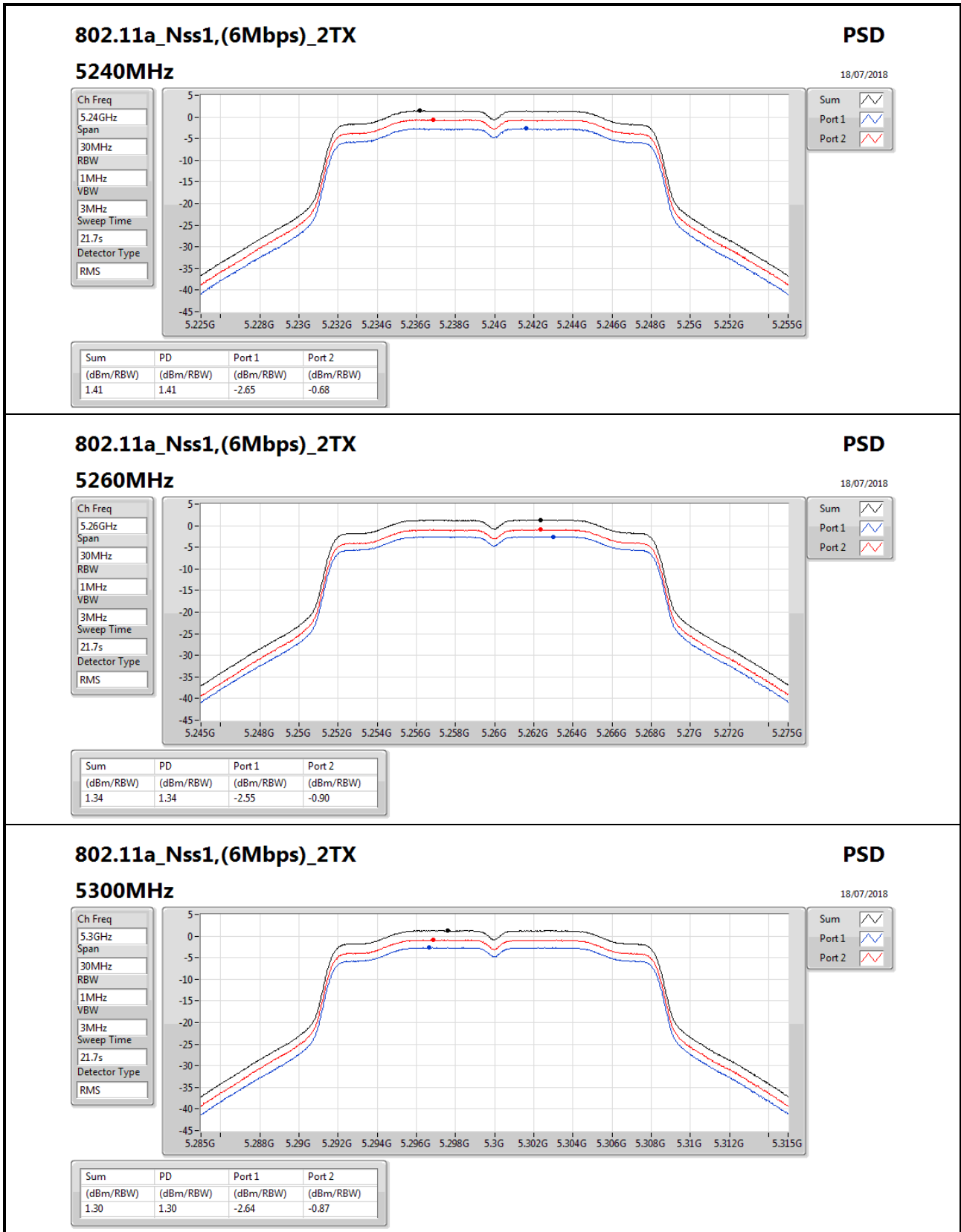
Detector Type
RMS

Sum

Port 1

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.39	1.39	-2.62	-0.74



802.11a_Nss1,(6Mbps)_2TX

5300MHz

PSD

18/07/2018

Ch Freq
5.3GHz

Span
30MHz

RBW
1MHz

VBW
3MHz

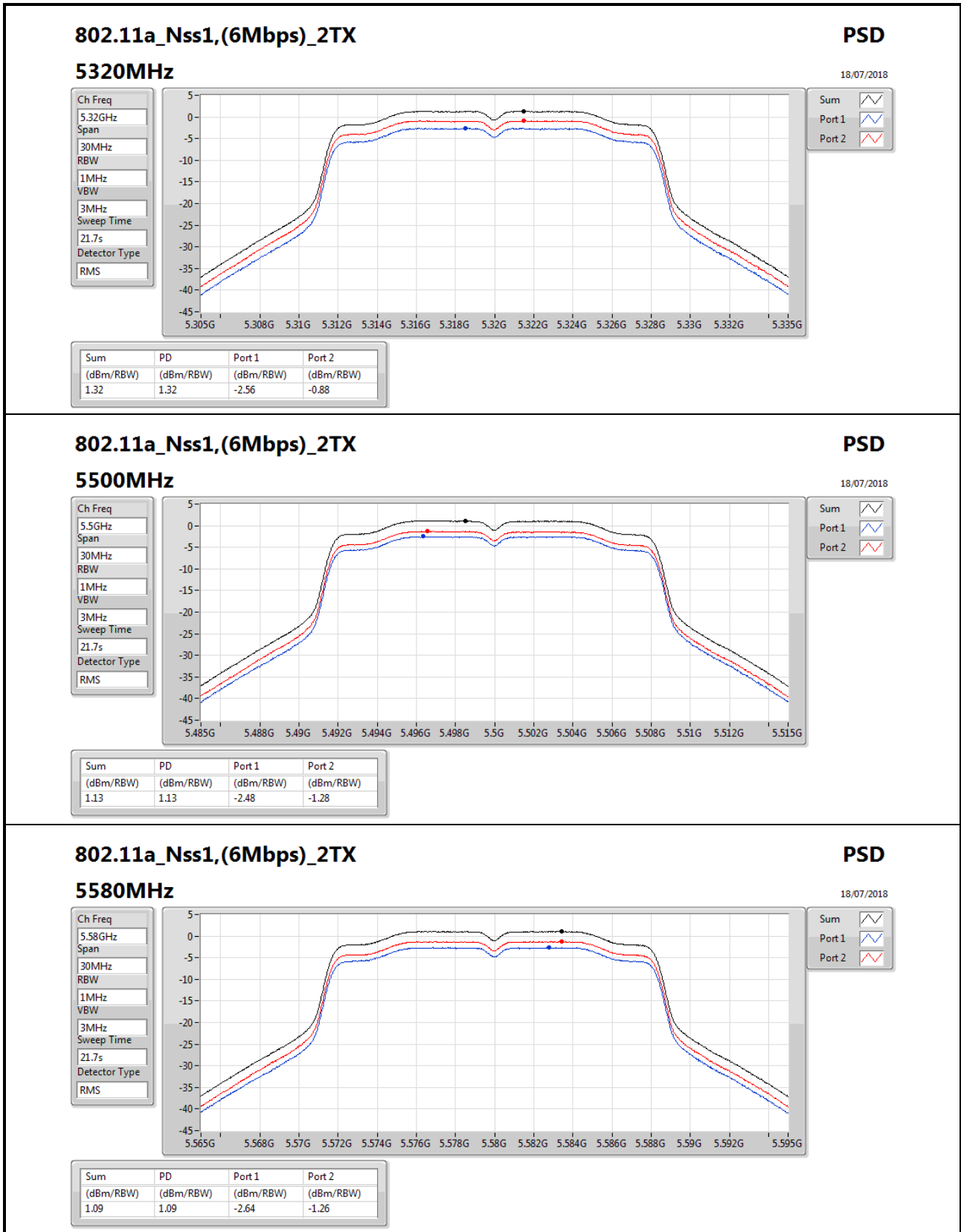
Sweep Time
21.7s

Detector Type
RMS

Sum

Port 1

Port 2



802.11a_Nss1,(6Mbps)_2TX

5580MHz

PSD

18/07/2018

Ch Freq
5.58GHz

Span
30MHz

RBW
1MHz

VBW
3MHz

Sweep Time
21.7s

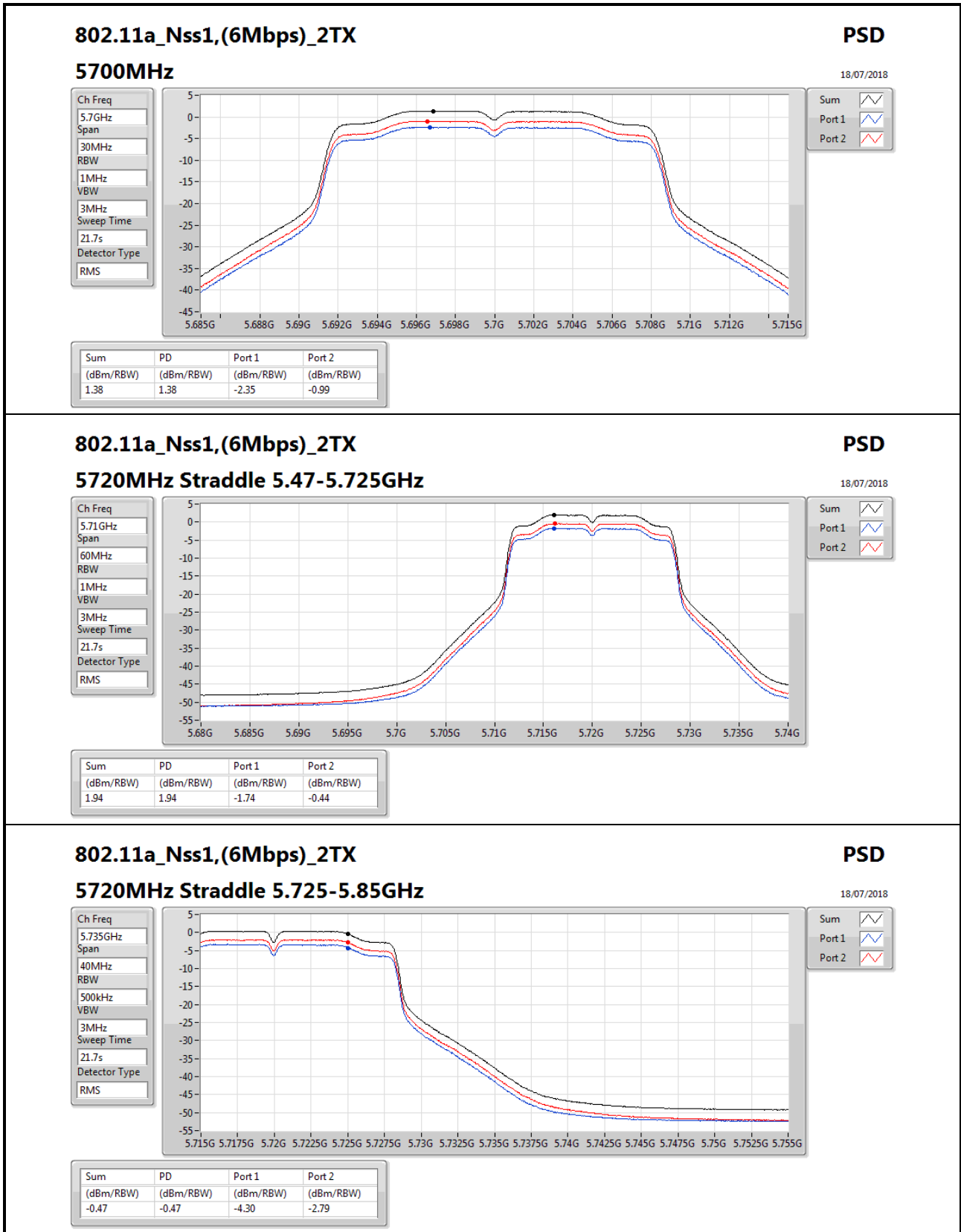
Detector Type
RMS

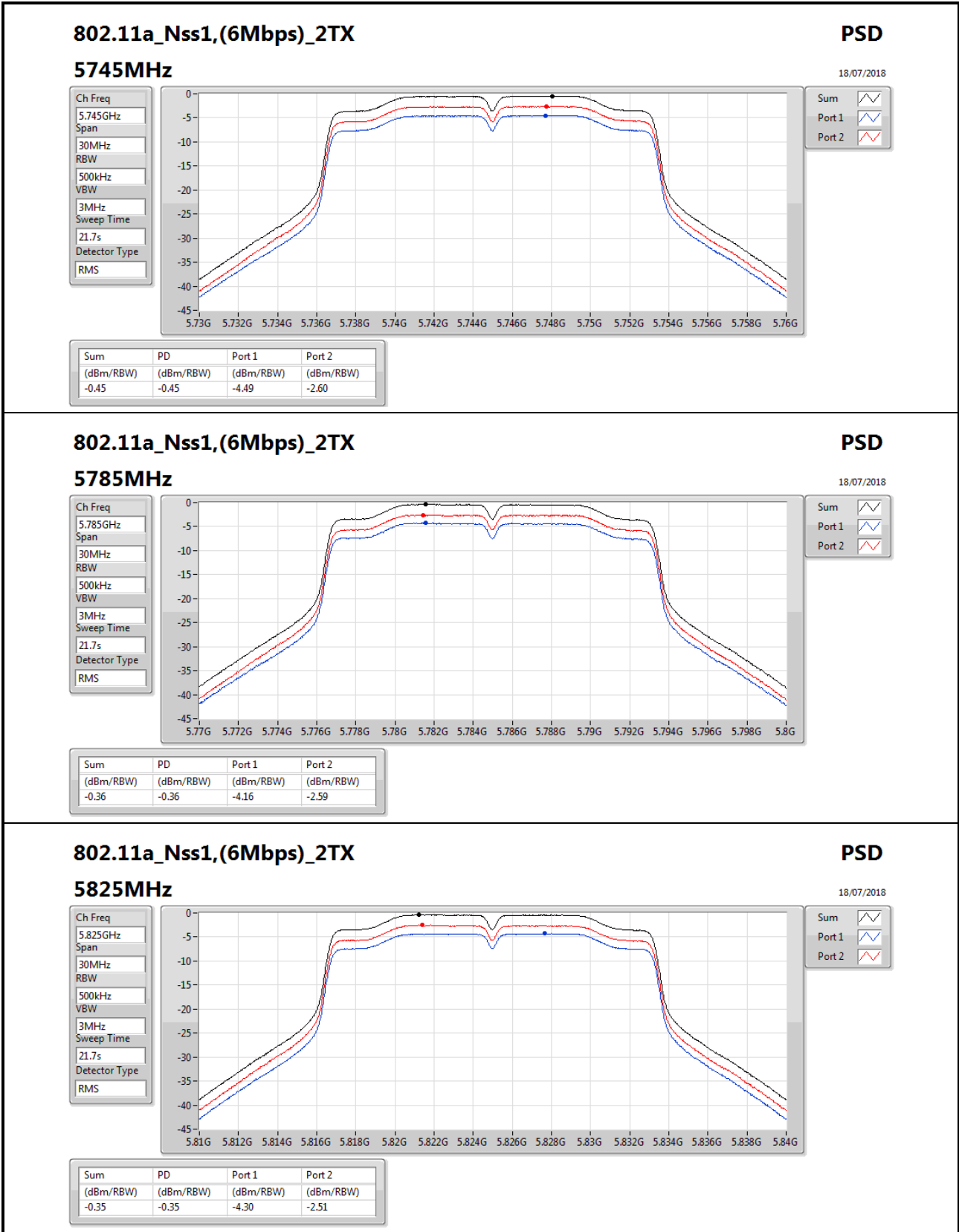
Sum

Port 1

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.09	1.09	-2.64	-1.26





802.11a_Nss1,(6Mbps)_2TX

5825MHz

PSD

18/07/2018

Ch Freq
5.825GHz

Span
30MHz

RBW
500kHz

VBW
3MHz

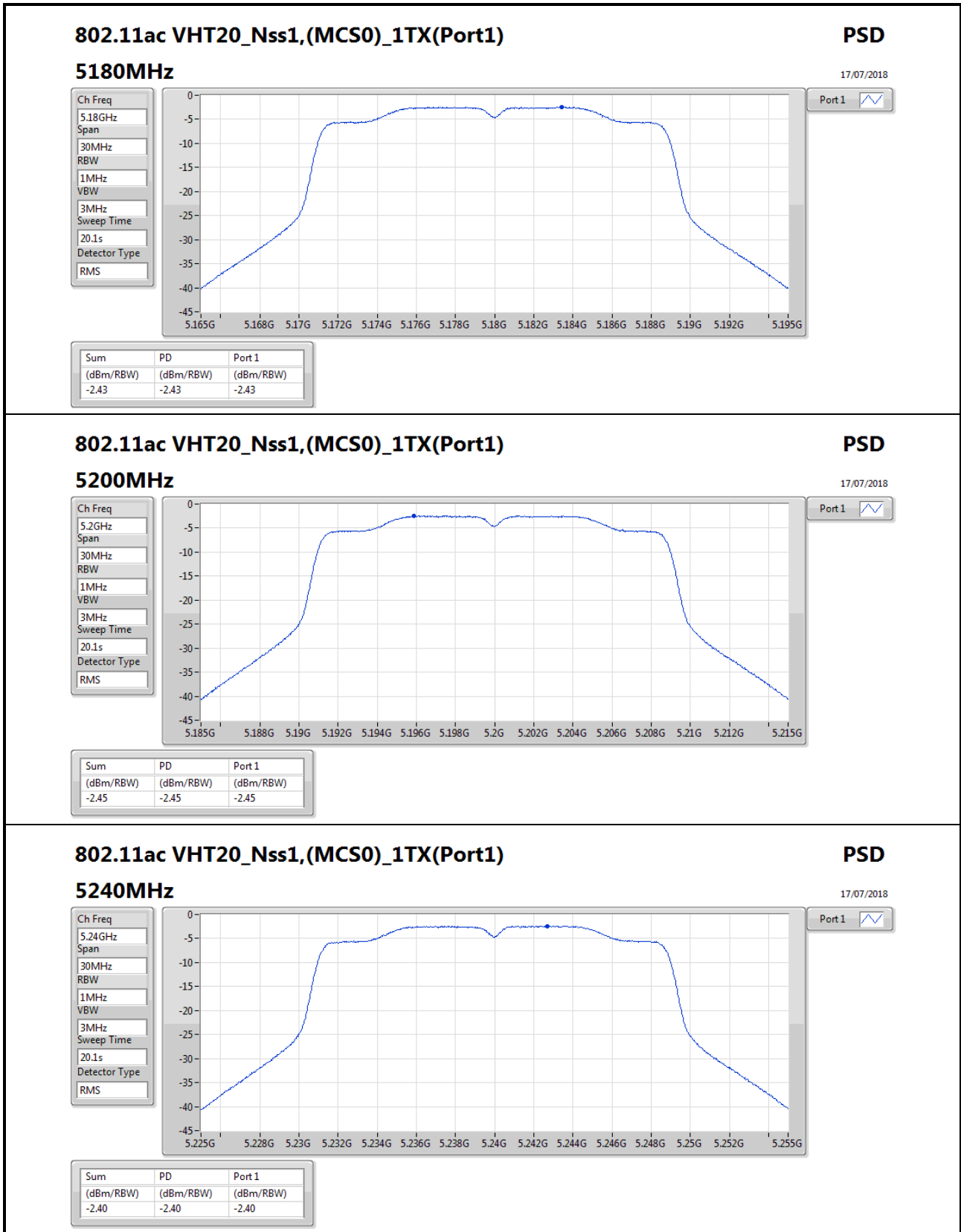
Sweep Time
21.7s

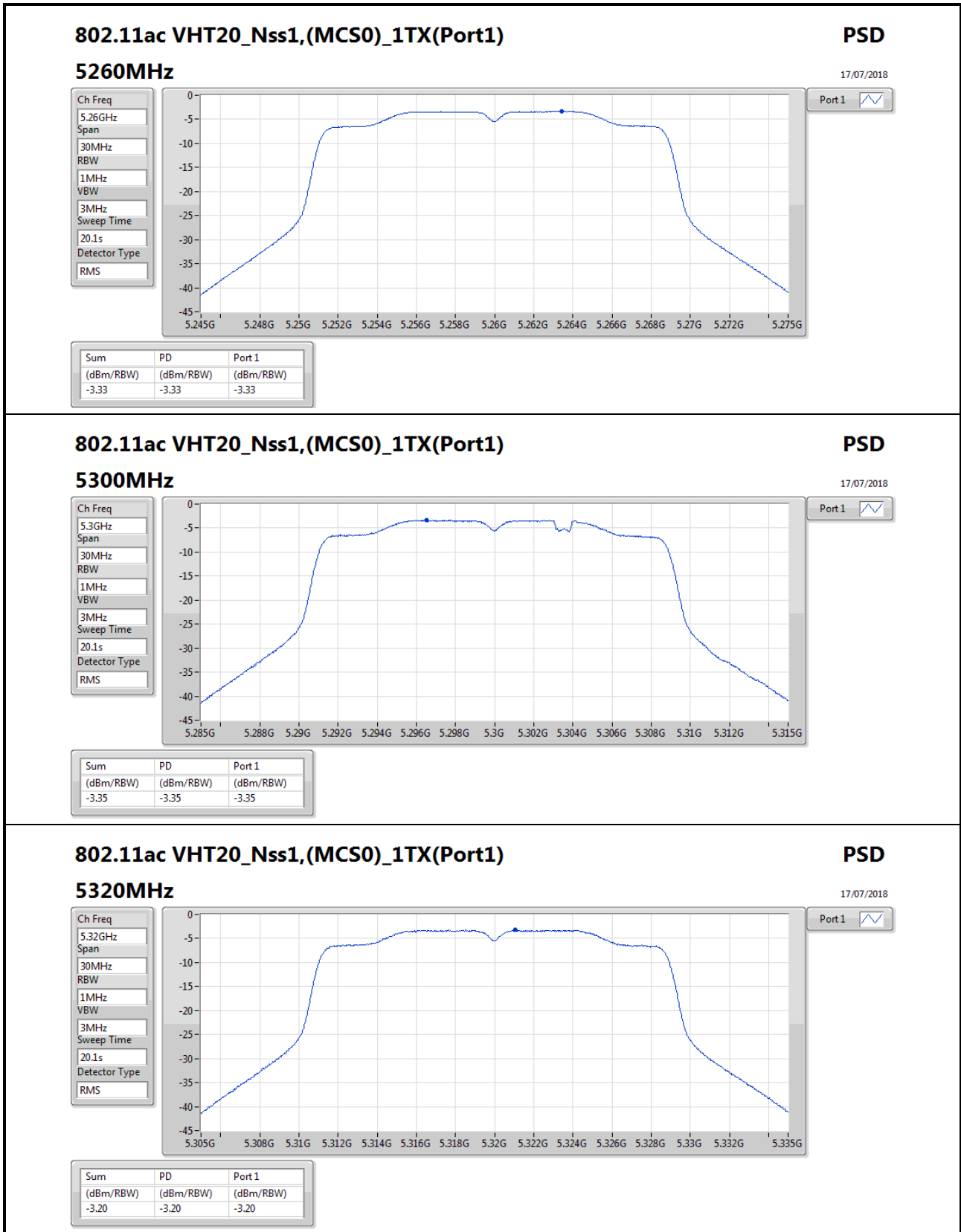
Detector Type
RMS

Sum

Port 1

Port 2





802.11ac VHT20_Nss1,(MCS0)_1TX(Port1)

5320MHz

PSD

17/07/2018

Ch Freq

5.32GHz

Span

30MHz

RBW

1MHz

VBW

3MHz

Sweep Time

20.1s

Detector Type

RMS

Port 1

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.20	-3.20	-3.20