



FCC Test Report

Equipment : cnPilot e430W Indoor
Brand Name : Cambium Networks
Model No. : cnPilot e430W Indoor
FCC ID : Z8H89FT0039
Standard : 47 CFR FCC Part 15.407
Operating Band : 5150 MHz – 5250 MHz
5725 MHz – 5850 MHz
Applicant : Cambium Networks Inc.
3800 Golf Road, Suite 360 Rolling Meadows, IL 60008,
USA
Manufacturer : XAVi Technologies Corporation
22F., No.69, Sec. 2, Guangfu Rd., Sanchong Dist., New
Taipei City 241, Taiwan (R.O.C.)
Function : Outdoor; Indoor; Fixed P2P
 Client

The product sample received on Nov. 01, 2017 and completely tested on Dec. 29, 2017. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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


Phoenix Chen / Assistant Manager





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APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS

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 F. TEST RESULTS OF FREQUENCY STABILITY

APPENDIX G. TEST PHOTOS

PHOTOGRAPHS OF EUT V01



Summary of Test Result

Conformance Test Specifications			
Report Clause	Ref. Std. Clause	Description	Result
1.1.2	15.203	Antenna Requirement	Complied
3.1	15.207	AC Power-line Conducted Emissions	Complied
3.2	15.407(a)	Emission Bandwidth	Complied
3.3	15.407(a)	Maximum Conducted Output Power	Complied
3.4	15.407(a)	Peak Power Spectral Density	Complied
3.5	15.407(b)	Unwanted Emissions	Complied
3.6	15.407(g)	Frequency Stability	Complied



Revision History



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5725-5850		5775	155 [1]

Non-Beamforming

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	1TX(Port1)
5.15-5.25GHz	802.11a	20	1TX(Port2)
5.15-5.25GHz	802.11a	20	2TX
5.725-5.85GHz	802.11a	20	1TX(Port1)
5.725-5.85GHz	802.11a	20	1TX(Port2)
5.725-5.85GHz	802.11a	20	2TX
5.15-5.25GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX

Beamforming

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



Note:

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

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector
1	1	-	-	PIFA Antenna	I-PEX
2	2	-	-	PIFA Antenna	I-PEX
3	1	-	-	PIFA Antenna	I-PEX
4	2	-	-	PIFA Antenna	I-PEX
5	1	-	-	PIFA Antenna	I-PEX

Ant.	Gain (dBi)				BT	
	2.4G	5G				
		Non-Beamforming	Beamforming			
1	2.98	-	-	-	-	
2	2.98	-	-	-	-	
3	-	4.05	3.01	-	-	
4	-	4.05	3.01	-	-	
5	-	-	-	-	2.79	

Note 1: The EUT has five antennas.

For 2.4GHz function:

For IEEE 802.11 b/g mode (1TX/1RX)

Ant. 1 (port 1) or Ant. 2 (port 2) can be used as transmitting/receiving antenna alone and simultaneously.

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

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

For 5GHz function:

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

Ant. 3 (port 1) or Ant. 4 (port 2) can be used as transmitting/receiving antenna alone and simultaneously.

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

Ant. 3 (port 1) and Ant. 4 (port 2) could transmit/receive simultaneously.

For BT function:

For BT-LE/BR/EDR (1TX/1RX)

Only Ant. 5 (port 1) can be used as transmitting/receiving antenna.



1.1.3 EUT Information

Identify EUT	
RF Chip	IPQ4019(Qualcomm)
Operational Condition	
EUT Power Type	From AC Adapter
Beamforming Function	<input checked="" type="checkbox"/> With beamforming <input type="checkbox"/> Without beamforming
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

Non-Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.954	0.205	2.065m	1k
802.11ac VHT20	0.985	0.066	n/a (DC ≥ 0.98)	n/a (DC ≥ 0.98)
802.11ac VHT40	0.961	0.173	2.437m	1k
802.11ac VHT80	0.924	0.343	1.15m	1k

Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ac VHT20-BF	0.921	0.357	1.819m	1k
802.11ac VHT40-BF	0.847	0.721	1.691m	1k
802.11ac VHT80-BF	0.848	0.716	2.006m	1k



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 v02
- ◆ 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
RF Conducted	TH01-HY	Gary	22.7°C / 57%	30/Nov/2017
Radiated	03CH09-HY	Andy	23.5°C / 65%	01/Dec/2017
Radiated (9kHz to 30MHz)	03CH02-HY	Andy	23.5°C / 65%	29/Dec/2017
AC Conduction	CO04-HY	Eric	23.5°C / 65%	04/Dec/2017

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%



2 Test Configuration of EUT

2.1 Test Condition

Condition Item	Abbreviation/Remark	Remark
RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V
Freq. Stability	Abbreviation	Remark
0°C	-	-
10°C	-	-
20°C	-	-
30°C	-	-
40°C	-	-
50°C	-	-
138V	-	-
120V	-	-

2.2 Test Channel Mode

Test Software Version	QCARCT 3.0.265.0
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Non-Beamforming

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX(Port1)	-
5180MHz	19.5
5200MHz	19
5240MHz	19
802.11a_Nss1,(6Mbps)_1TX(Port2)	-
5180MHz	19.5
5200MHz	19.5
5240MHz	19
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	22
5200MHz	22
5240MHz	22
802.11a_Nss1,(6Mbps)_1TX(Port1)	-
5745MHz	19.5
5785MHz	19.5



Mode	Power Setting
5825MHz	19.5
802.11a_Nss1,(6Mbps)_1TX(Port2)	-
5745MHz	22
5785MHz	22
5825MHz	22
802.11a_Nss1,(6Mbps)_2TX	-
5745MHz	22
5785MHz	22
5825MHz	22
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	22
5200MHz	22
5240MHz	20.5
5745MHz	22
5785MHz	22
5825MHz	22
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5190MHz	15
5230MHz	21.5
5755MHz	22
5795MHz	22
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	12
5775MHz	17

**Beamforming**

Mode	Power Setting
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	20
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	20
5230MHz	20
5755MHz	20
5795MHz	20
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	18
5775MHz	20



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-Non Beamforming
2	Adapter mode- Beamforming

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density Frequency Stability
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	Y Plane 
Worst Planes of EUT	V

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	WLAN 2.4GHz+WLAN 5GHz

Refer to Sporton Test Report No.: FA7O2713 for Co-location RF Exposure Evaluation.



2.4 Support Equipment

Support Equipment - RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	Notebook	DELL	E5410	DoC
4	Adapter for NB	DELL	HA65NM130	DoC
5	AC Source	GW	APS-9102	-
6	AC adaptor	CWT	KPL-050S-VI	-
7	Client	-	E430W	-

Note: Support equipment No.6 & 7 was provided by customer.

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	AC adaptor	CWT	KPL-050S-VI	-
2	Client (remote)	-	E430W	-
3	Adapter for Client (remote)	CUI	EMSA120300-P5P-SZ	-
4	Notebook (remote)	DELL	E5410	DoC
5	Adapter for NB (remote)	DELL	LA65NS2-01	-

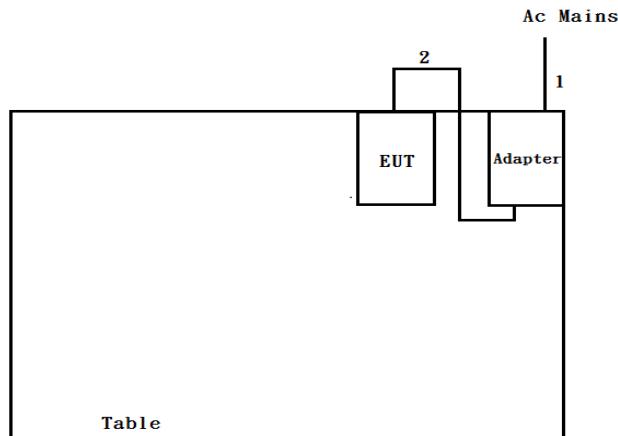
Note: Support equipment No.1 & 2 & 3 were provided by customer.

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	AC adaptor	CWT	KPL-050S-VI	-
2	Client	-	E430W	-
3	Adapter for Client	CUI	EMSA120300-P5P-SZ	-
4	Notebook	DELL	E5410	DoC
5	Adapter for NB	DELL	LA65NS2-01	-

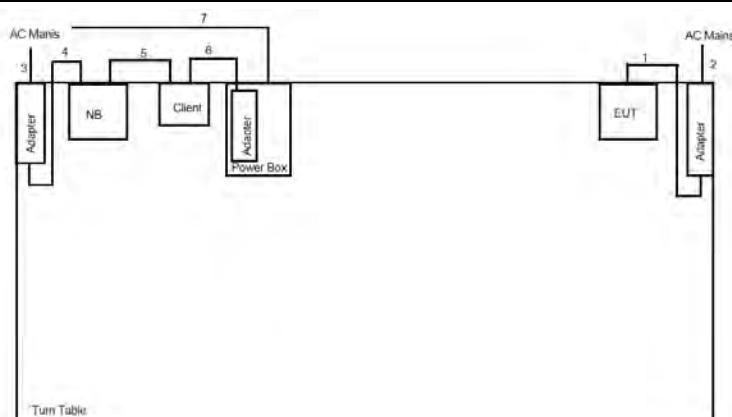
Note: Support equipment No.1 & 2 & 3 were provided by customer.



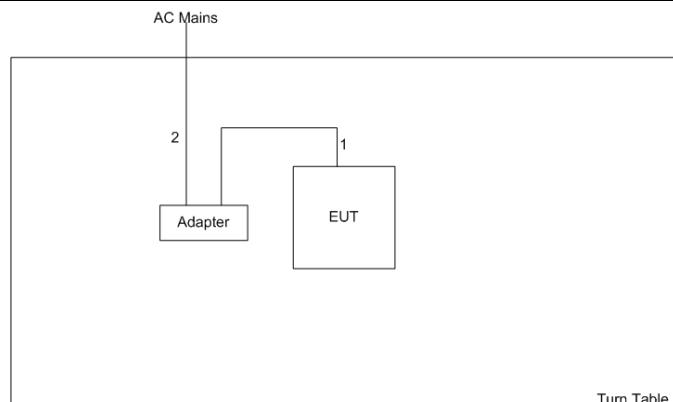
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test – Non-Beamforming

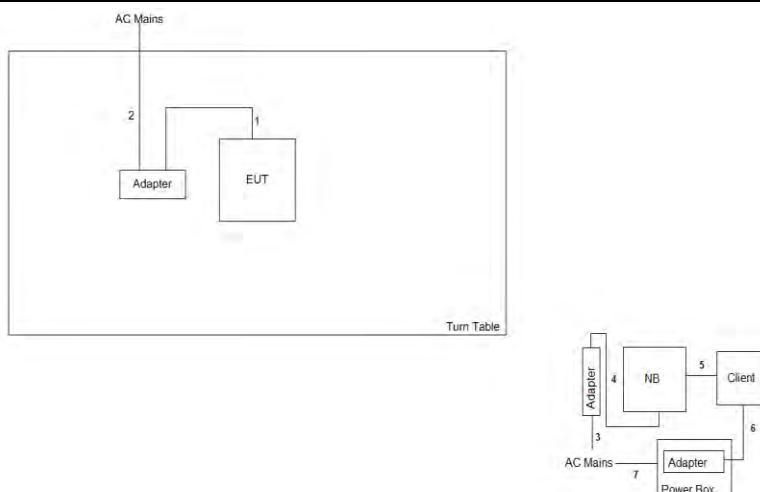
Item	Connection	Shielded	Length(m)	Remark
1	AC power line	No	1.8	-
2	DC power line	No	1	-

Test Setup Diagram – AC Line Conducted Emission Test – Beamforming

Item	Connection	Shielded	Length(m)	Remark
1	DC power line	No	1	-
2	AC power line	No	1.8	-
3	AC Power line	No	1.8	-
4	DC Power line	No	1.8	-
5	RJ-45 cable	No	1.8	-
6	DC Power line	No	1.5	-
7	AC Power line	No	1.8	-

**Test Setup Diagram - Radiated Test – Non-Beamforming**

Item	Connection	Shielded	Length(m)	Remark
1	DC power line	No	1	-
2	AC power line	No	1.8	-

Test Setup Diagram - Radiated Test – Beamforming

Item	Connection	Shielded	Length(m)	Remark
1	DC power line	No	1	-
2	AC power line	No	1.8	-
3	AC Power line	No	1.8	-
4	DC Power line	No	1.8	-
5	RJ-45 cable	No	1.8	-
6	DC Power line	No	1.5	-
7	AC Power line	No	1.8	-

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.

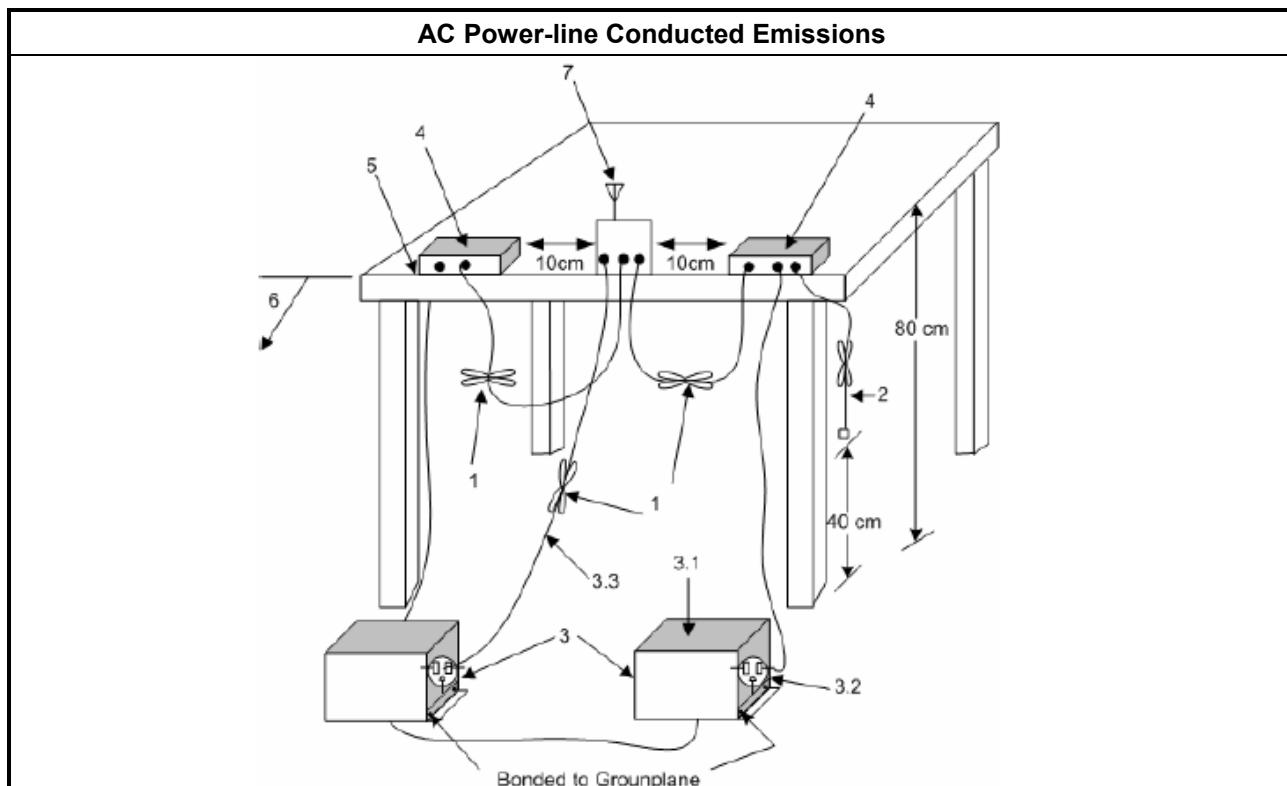
3.1.2 Measuring Instruments

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 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 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.

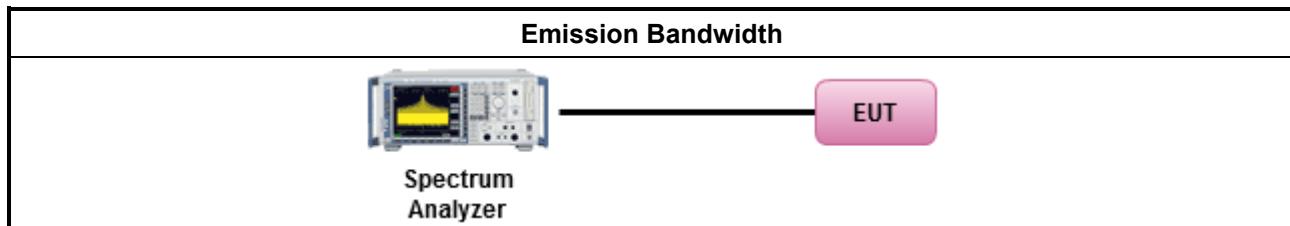
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪ 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 6.6 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 ≤ 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 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 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 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 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>P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	



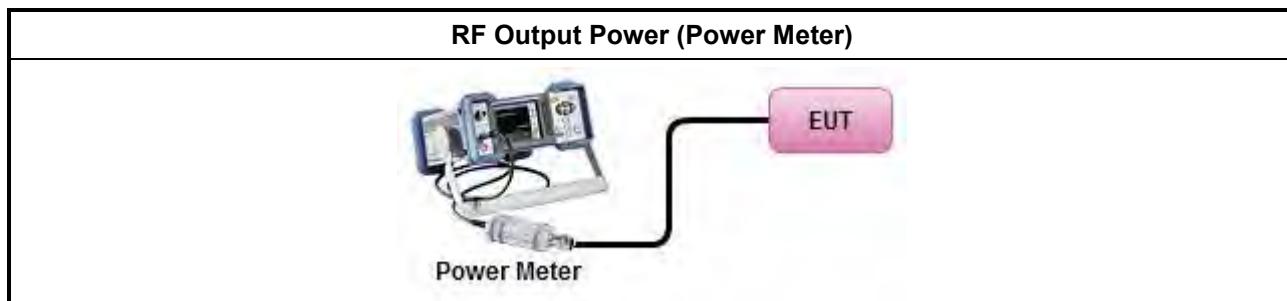
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
▪ 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 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).
▪ 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.▪ 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:	<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 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 type="checkbox"/> For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= $11 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	<ul style="list-style-type: none">▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then PPSD= $30 - (G_{TX} - 6)$.▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz G_{TX} = the maximum transmitting antenna directional gain in dBi.	

3.4.2 Measuring Instruments

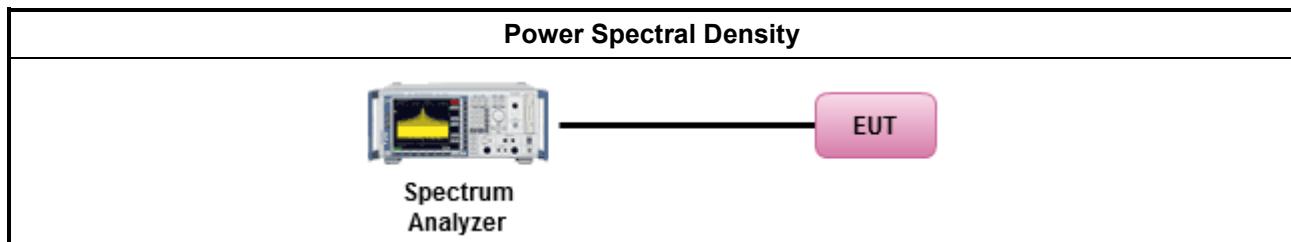
Refer a test equipment and calibration data table in this test report.



3.4.3 Test Procedures

Test Method		
<ul style="list-style-type: none">▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:		
<input type="checkbox"/> Refer as KDB 789033, F5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth		
Duty cycle \geq 98%		
<input checked="" 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.	
<ul style="list-style-type: none">▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$		

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 ~ 68.2 dBuV/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.

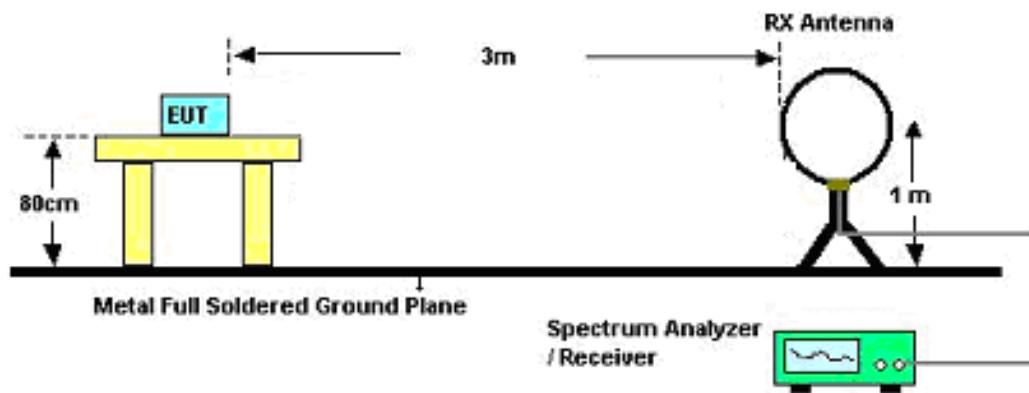
3.5.3 Test Procedures

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 G2) for unwanted emissions into non-restricted bands.▪ Refer as KDB 789033, clause G1) for unwanted emissions into restricted bands.
<ul style="list-style-type: none"><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.▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
<ul style="list-style-type: none">▪ The any unwanted emissions level shall not exceed the fundamental emission level.
<ul style="list-style-type: none">▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

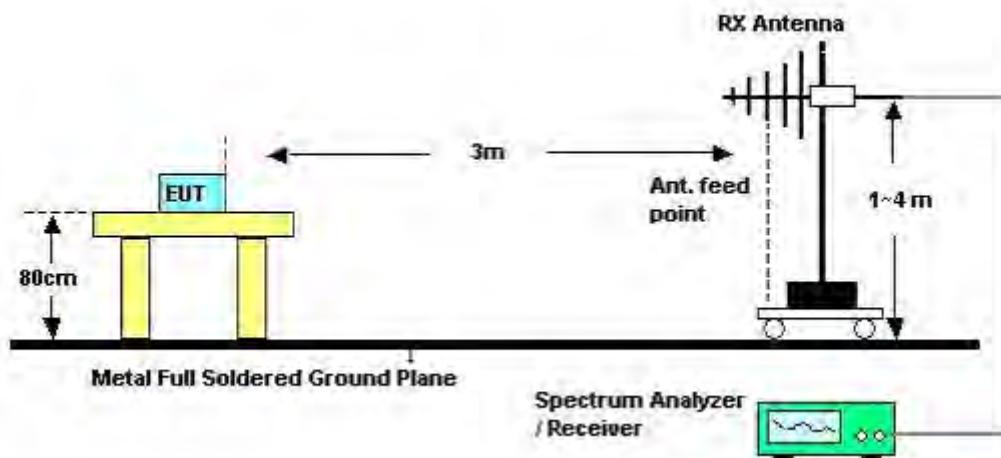
3.5.4 Test Setup

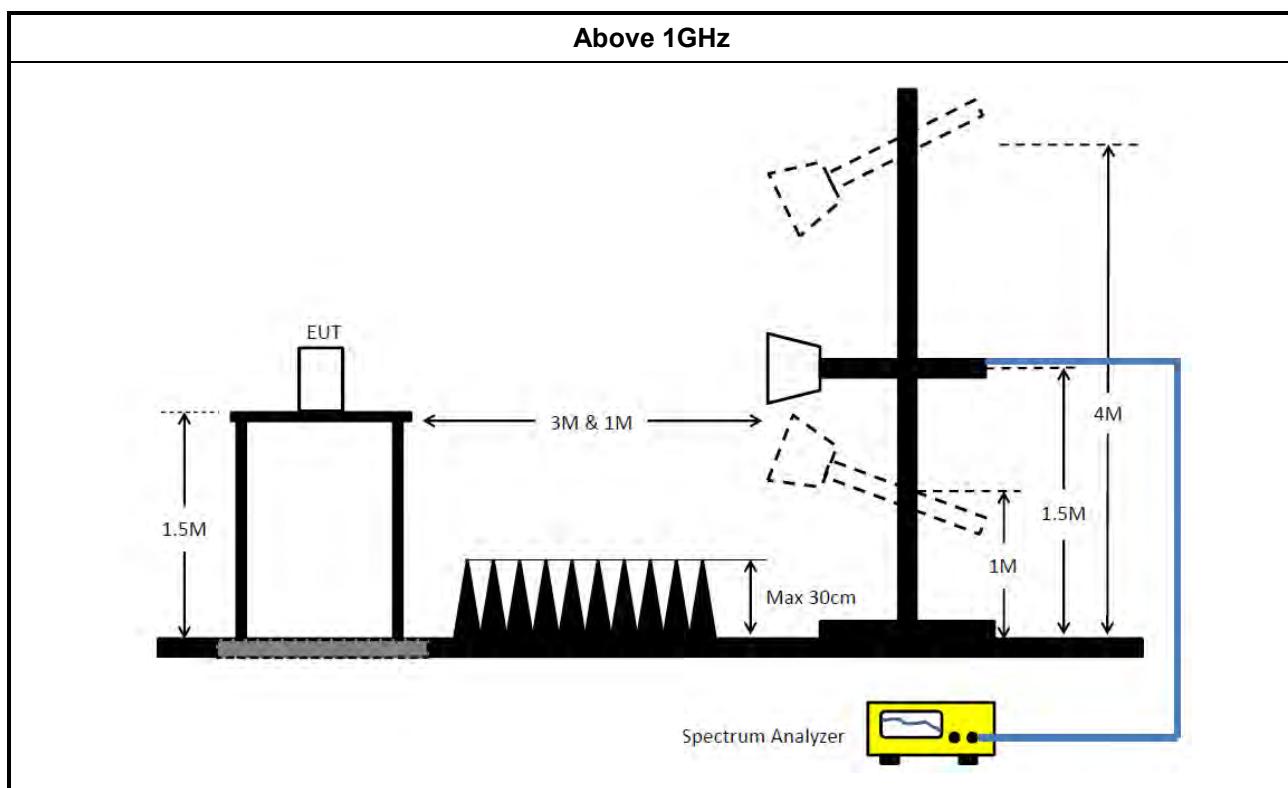
Transmitter Radiated Unwanted Emissions

9kHz ~30MHz



30MHz~1GHz





3.5.5 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



3.6 Frequency Stability

3.6.1 Frequency Stability Limit

Frequency Stability Limit	
UNII Devices	
<ul style="list-style-type: none">▪ In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.	
IEEE Std. 802.11	
<ul style="list-style-type: none">▪ The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band.	

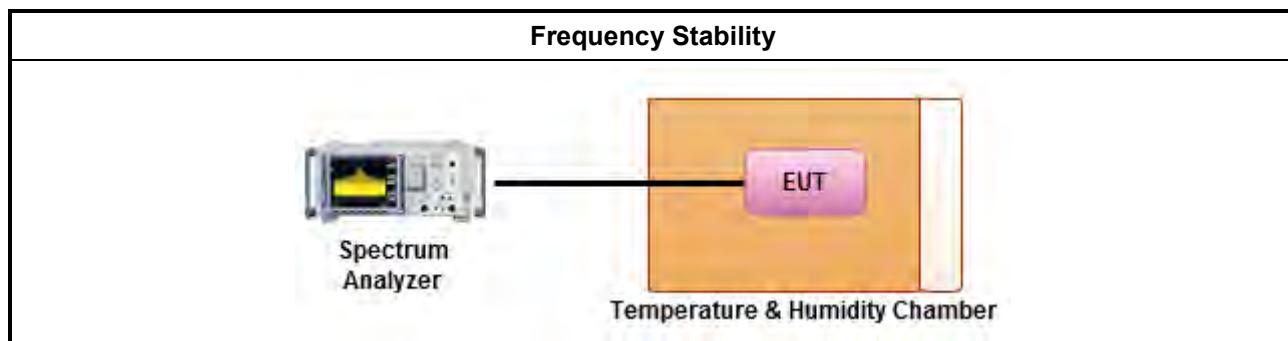
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method	
▪ Refer as ANSI C63.10, clause 6.8 for frequency stability tests	
	▪ Frequency stability with respect to ambient temperature
	▪ Frequency stability when varying supply voltage

3.6.4 Test Setup



3.6.5 Test Result of Frequency Stability

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument for AC Conduction – Non-Beamforming

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	15/Nov/2016	14/Nov/2017
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	06/Oct/2017	05/Oct/2018
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	R&S	ESH3-Z2	100921	10 kHz ~ 30 MHz	12/Oct/2017	11/Oct/2018

NCR : Non-Calibration Require

Instrument for AC Conduction – Beamforming

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	06/Oct/2017	05/Oct/2018
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	12/Oct/2017	11/Oct/2018
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	17/Nov/2017	16/Nov/2018

NCR : Non-Calibration Require



Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	31/Oct/2017	30/Oct/2018
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	01/Nov/2017	31/Oct/2018
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	19/Apr/2017	18/Apr/2018
Amplifier	Keysight	83017A	MY53270196	1GHz ~ 26.5GHz	31/Aug/2017	30/Aug/2018
Spectrum	R&S	FSV40	101500	9kHz ~ 40GHz	28/Jun/2017	27/Jun/2018
Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	26/Jan/2017	25/Jan/2018
RF Cable-high	SUHNER	SUCOFLEX106	CB222	1GHz ~ 40GHz	26/Jan/2017	25/Jan/2018
Bilog Antenna	SCHAFFNER	CBL 6112B	22237	30MHz ~ 1GHz	08/Jul/2017	07/Jul/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz ~ 40GHz	06/Feb/ 2017	05/Feb/2018
Horn Antenna	SCHWARZBECK	BBHA9120D	1531	1GHz ~ 18GHz	25/Apr/ 2017	24/Apr/2018
Amplifier	MITEQ	JS44-18004000-3 3-8P	1840917	18GHz ~ 40GHz	06/Fed/2017	05/Fed/2018

Instrument for Radiated Test - 9kHz to 30MHz

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP 40	101500	10Hz~40GHz	28/Jun/2017	27/Jun/2018
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	20/Oct/2017	19/Oct/2018
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	27/Oct/2017	26/Oct/2018
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	29/Jun/2017	28/Jun/2018
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	26/Jan/2017	25/Jan/2018
Receiver	R&S	ESU3	102052	9kHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018
Loop Antenna	TESEQ	HLA 6120	24155	9 kHz~30 MHz	03/Feb/2017	02/Feb/2018



Instrument for Conducted Test – Non-Beamforming

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
Temp. and Humidity Chamber	Giant Force	GTH-225-40-CP-AR	MAA1611-005	-40 ~ 100°C	21/Nov/2016	20/Nov/2018
RF Cable-0.2m	HUBER+ SUHNER	SUCOFLEX_104	MY677/3	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+ SUHNER	SUCOFLEX_104	MY678/3	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.5m	HUBER+ SUHNER	SUCOFLEX_104	MY10717/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018

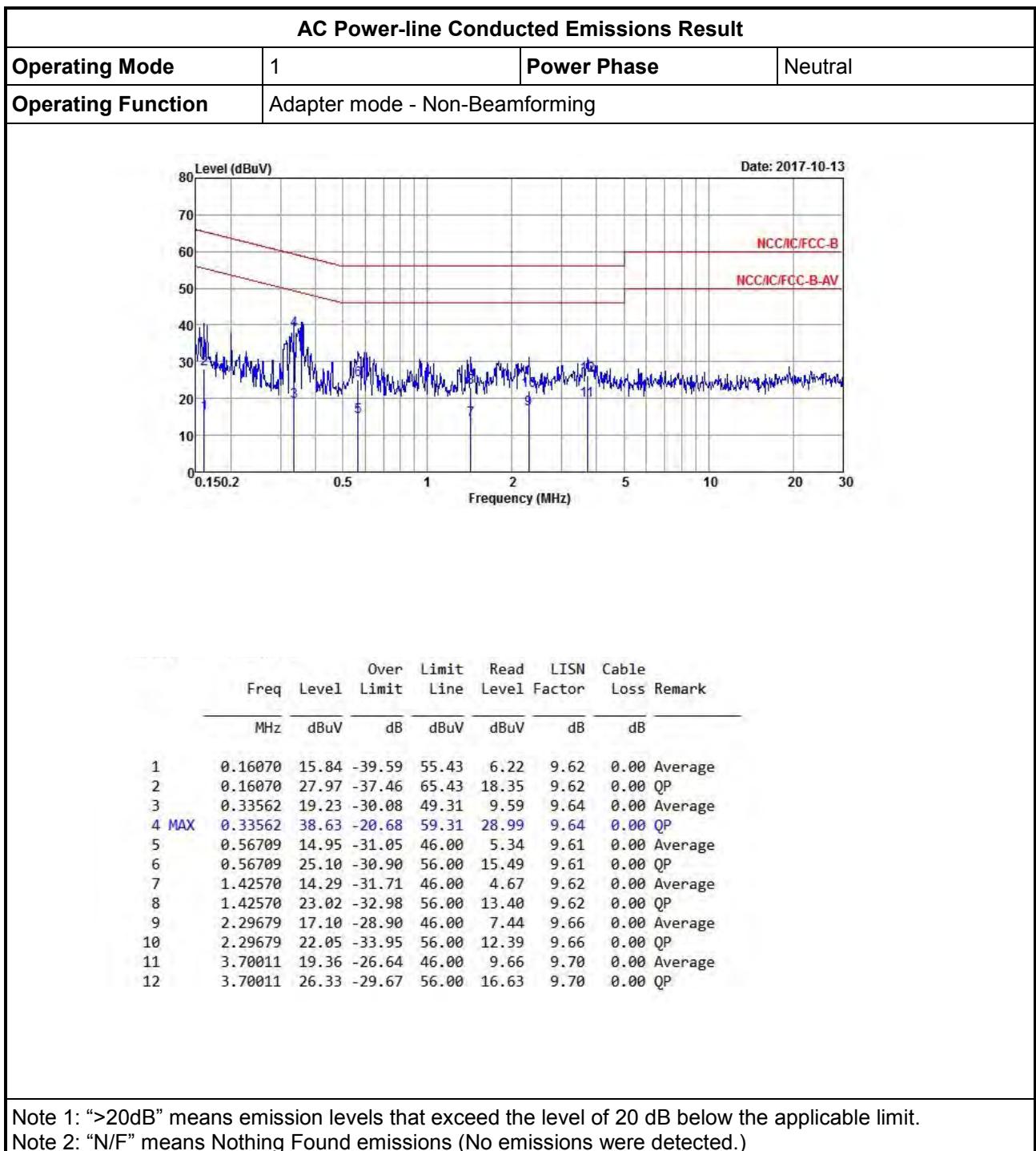
Instrument for Conducted Test – Beamforming

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9kHz~40GHz	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	10/May/2017	09/May/2018
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	06/Nov/2017	05/Nov/2018
RF Cable-0.2m	HUBER+ SUHNER	SUCOFLEX_104	MY10710/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+ SUHNER	SUCOFLEX_104	MY10709/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.5m	HUBER+ SUHNER	SUCOFLEX_104	MY10713/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018



AC Power-line Conducted Emissions

Appendix A



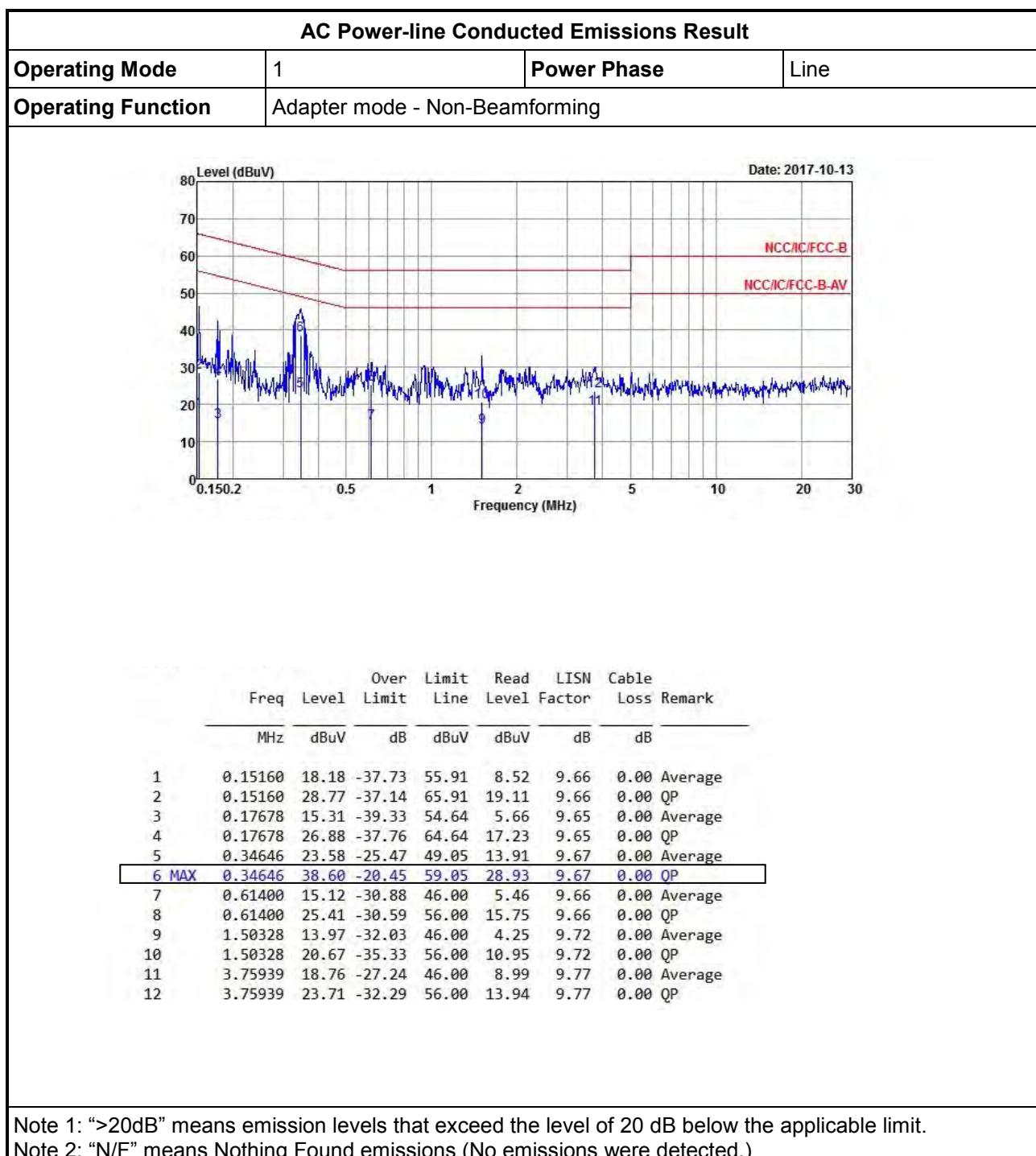
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)



AC Power-line Conducted Emissions

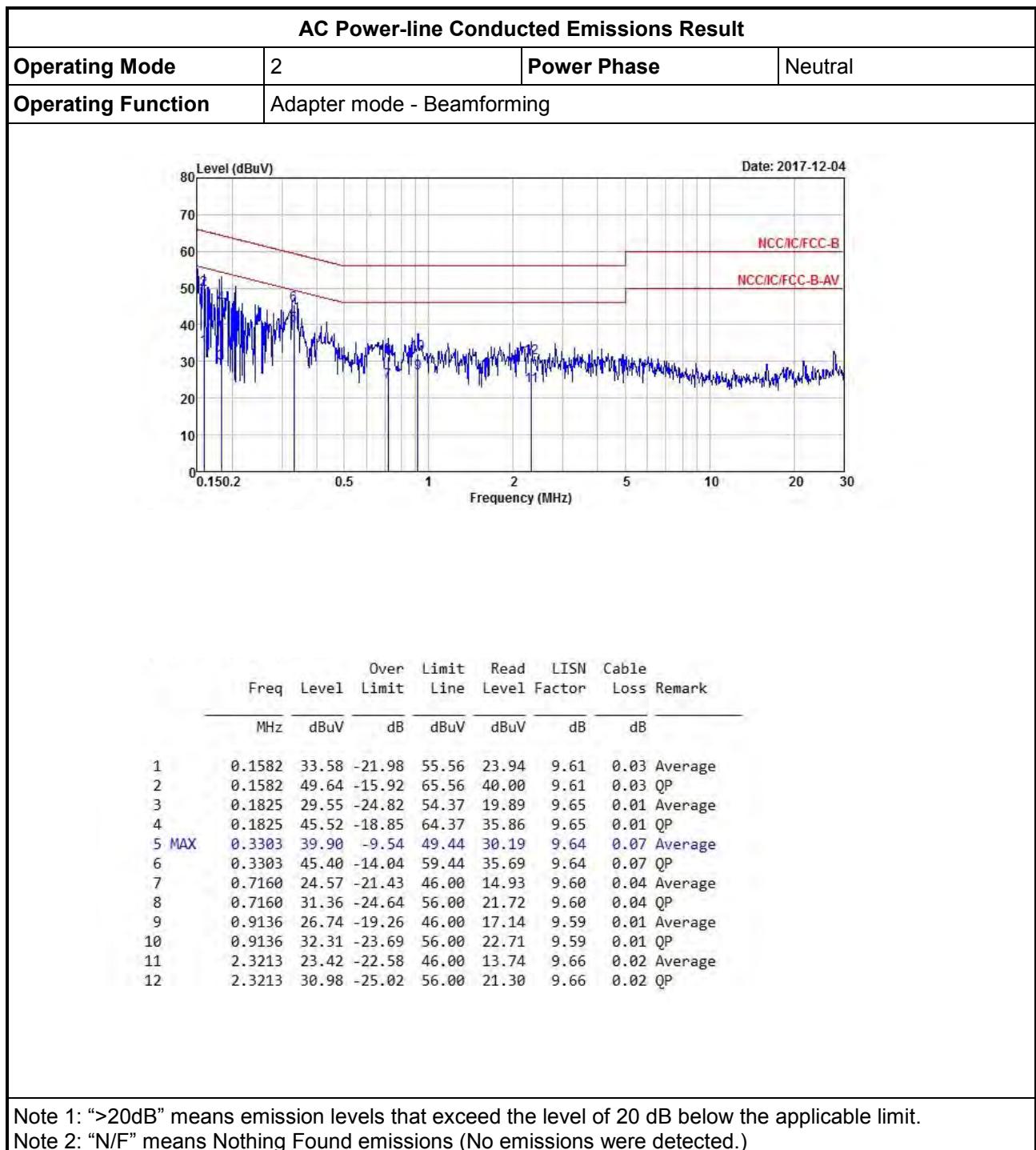
Appendix A





AC Power-line Conducted Emissions

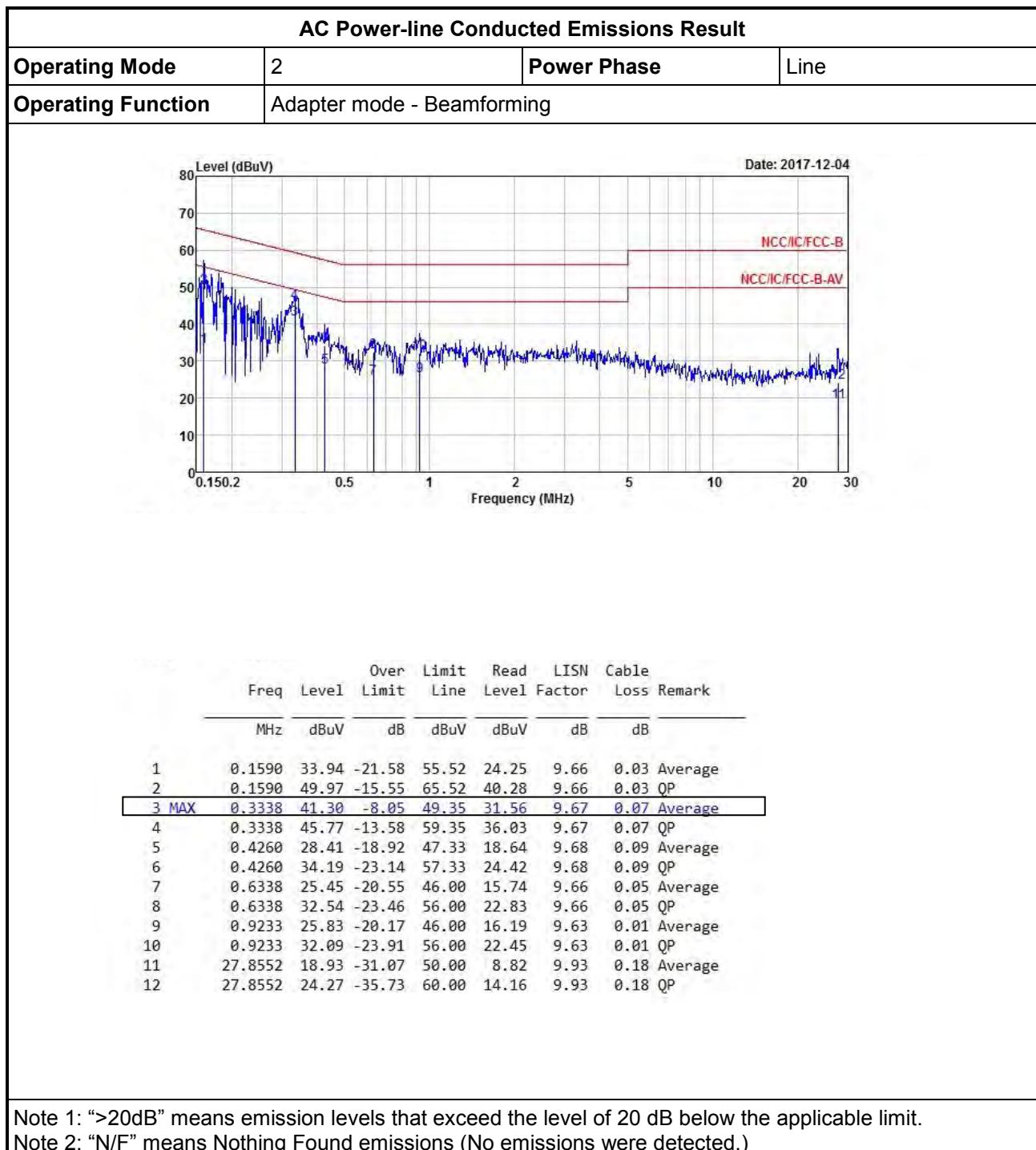
Appendix A





AC Power-line Conducted Emissions

Appendix A



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)	34M	16.742M	16M7D1D	32.525M	16.592M
802.11a_Nss1,(6Mbps)_1TX(Port2)	36M	17.941M	17M9D1D	35.625M	17.416M
802.11a_Nss1,(6Mbps)_2TX	36.15M	16.692M	16M7D1D	29.65M	16.592M
802.11ac VHT20_Nss1,(MCS0)_2TX	44.825M	19.865M	19M9D1D	36.275M	17.891M
802.11ac VHT40_Nss1,(MCS0)_2TX	85.15M	37.931M	37M9D1D	39.4M	35.932M
802.11ac VHT80_Nss1,(MCS0)_2TX	84M	75.862M	75M9D1D	83.2M	75.662M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	16.325M	16.617M	16M6D1D	16.3M	16.492M
802.11a_Nss1,(6Mbps)_1TX(Port2)	16.3M	20.815M	20M8D1D	16.3M	16.692M
802.11a_Nss1,(6Mbps)_2TX	16.3M	22.514M	22M5D1D	16M	17.316M
802.11ac VHT20_Nss1,(MCS0)_2TX	17.575M	27.911M	27M9D1D	17.3M	22.414M
802.11ac VHT40_Nss1,(MCS0)_2TX	36.05M	49.025M	49M0D1D	32.55M	41.129M
802.11ac VHT80_Nss1,(MCS0)_2TX	76M	75.962M	76M0D1D	75.4M	75.862M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

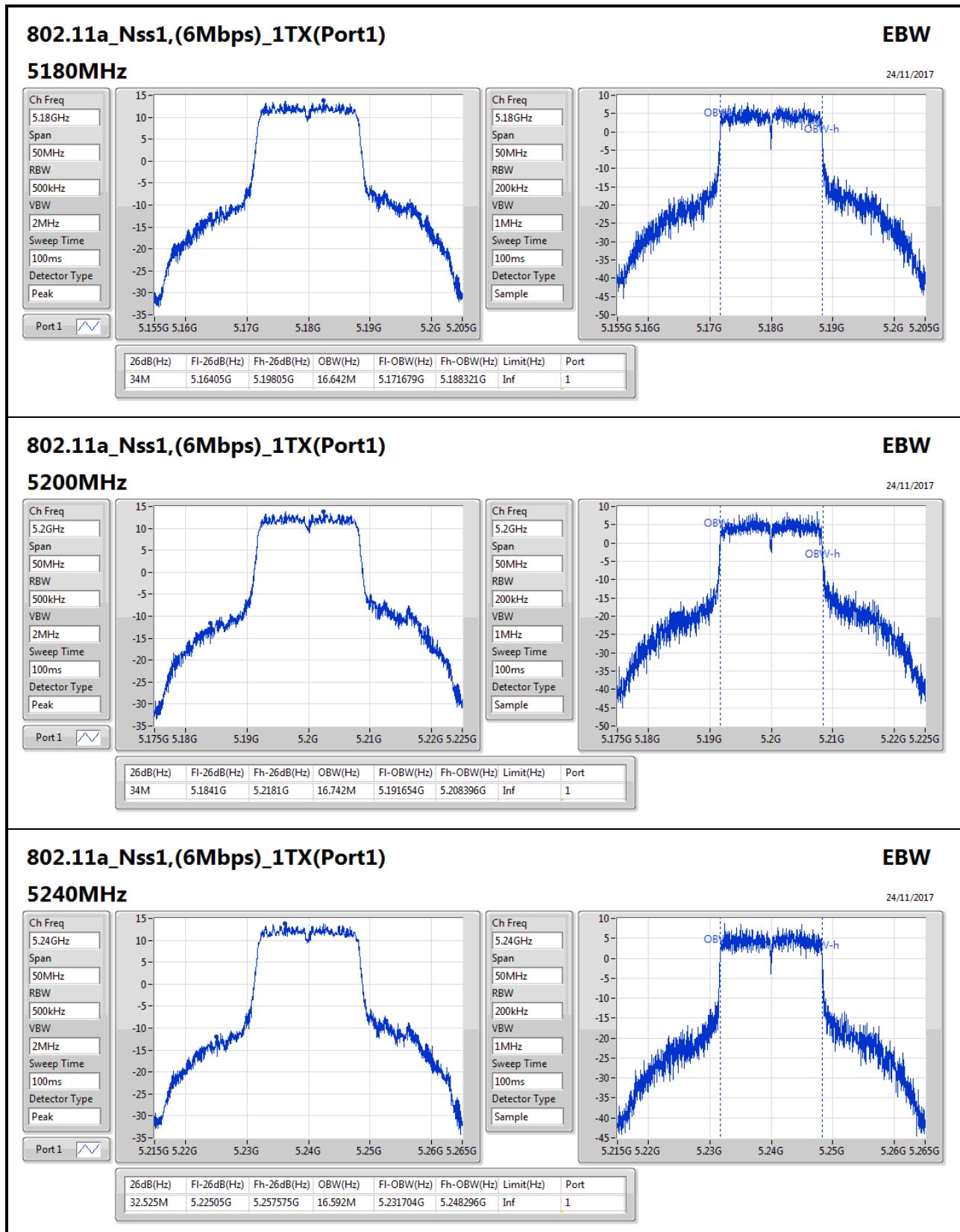


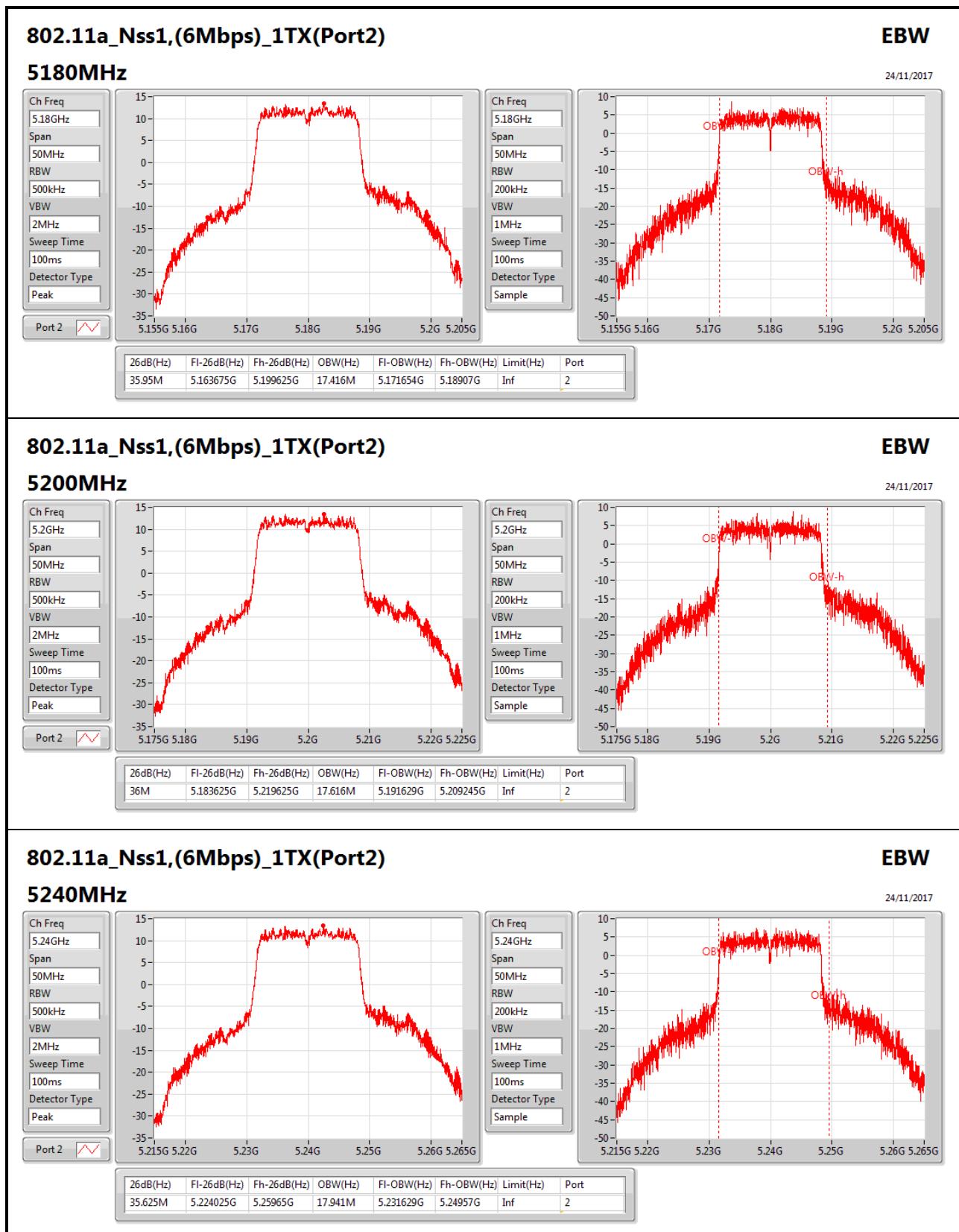
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-
5180MHz	Pass	Inf	34M	16.642M		
5200MHz	Pass	Inf	34M	16.742M		
5240MHz	Pass	Inf	32.525M	16.592M		
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
5180MHz	Pass	Inf			35.95M	17.416M
5200MHz	Pass	Inf			36M	17.616M
5240MHz	Pass	Inf			35.625M	17.941M
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	35.85M	16.667M	33.125M	16.667M
5200MHz	Pass	Inf	36.15M	16.667M	33.9M	16.667M
5240MHz	Pass	Inf	35.625M	16.692M	29.65M	16.592M
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-
5745MHz	Pass	500k	16.325M	16.492M		
5785MHz	Pass	500k	16.3M	16.542M		
5825MHz	Pass	500k	16.3M	16.617M		
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
5745MHz	Pass	500k			16.3M	17.966M
5785MHz	Pass	500k			16.3M	20.815M
5825MHz	Pass	500k			16.3M	16.692M
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5745MHz	Pass	500k	16.3M	21.214M	16.3M	18.016M
5785MHz	Pass	500k	16.275M	22.514M	16.3M	18.391M
5825MHz	Pass	500k	16M	18.866M	16.3M	17.316M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	44.825M	19.515M	41.625M	19.665M
5200MHz	Pass	Inf	43.975M	19.14M	41.7M	19.865M
5240MHz	Pass	Inf	38.425M	18.016M	36.275M	17.891M
5745MHz	Pass	500k	17.55M	24.763M	17.55M	22.589M
5785MHz	Pass	500k	17.5M	27.911M	17.3M	22.814M
5825MHz	Pass	500k	17.575M	24.263M	17.55M	22.414M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.4M	35.932M	39.55M	36.032M
5230MHz	Pass	Inf	85.15M	37.931M	81.35M	36.632M
5755MHz	Pass	500k	33.85M	47.426M	32.55M	41.129M
5795MHz	Pass	500k	34.05M	49.025M	36.05M	43.478M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	84M	75.662M	83.2M	75.862M
5775MHz	Pass	500k	76M	75.862M	75.4M	75.962M

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

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

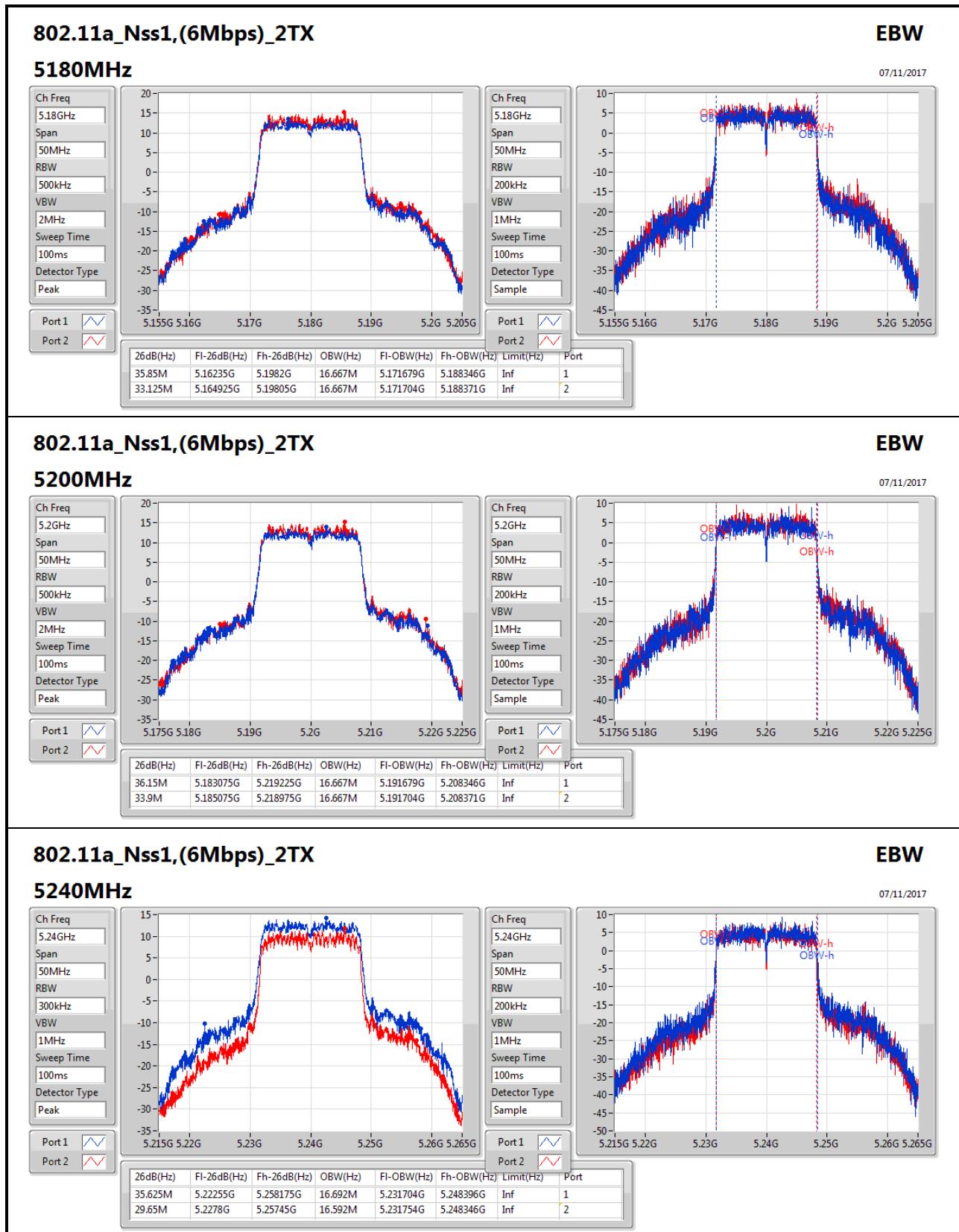


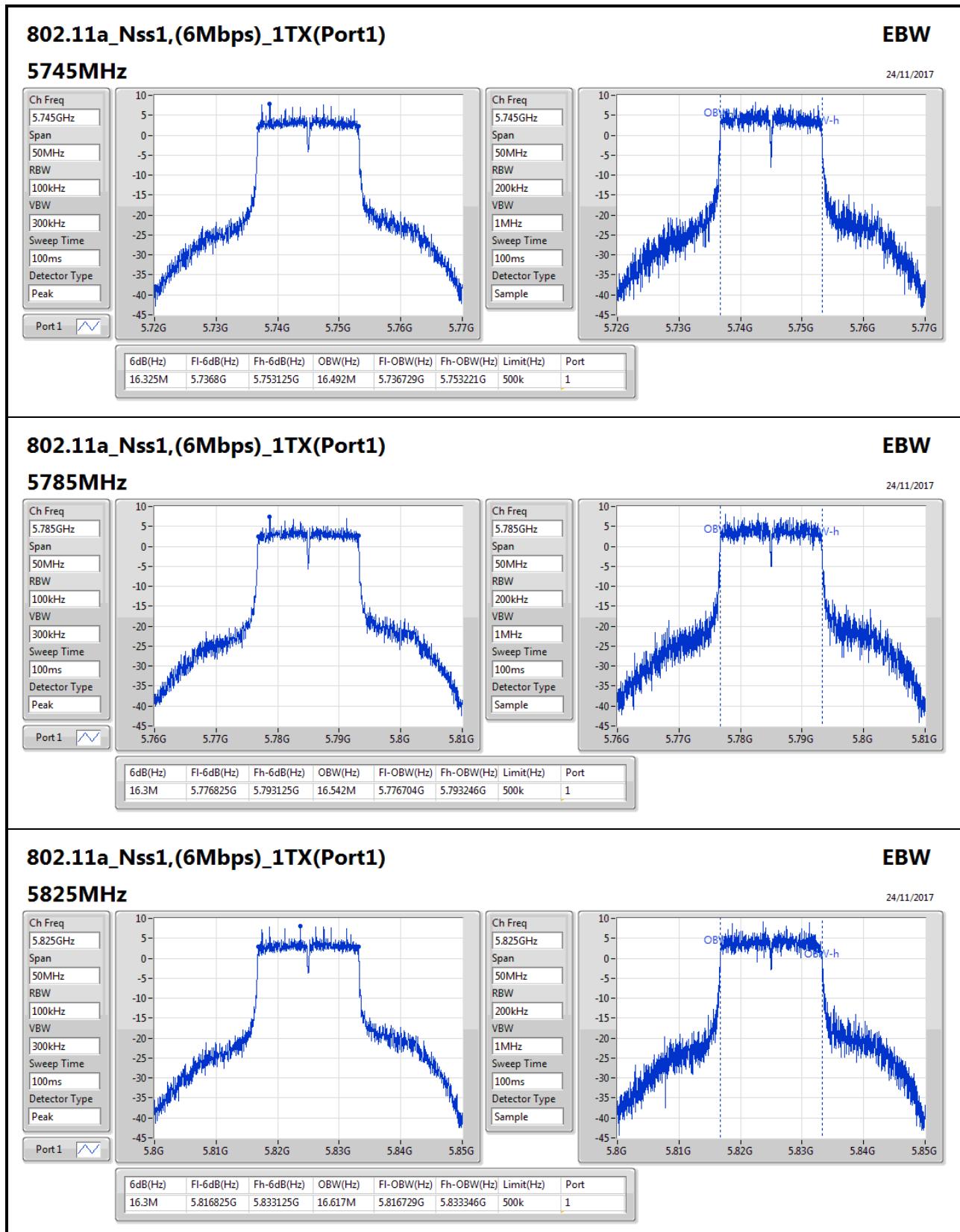


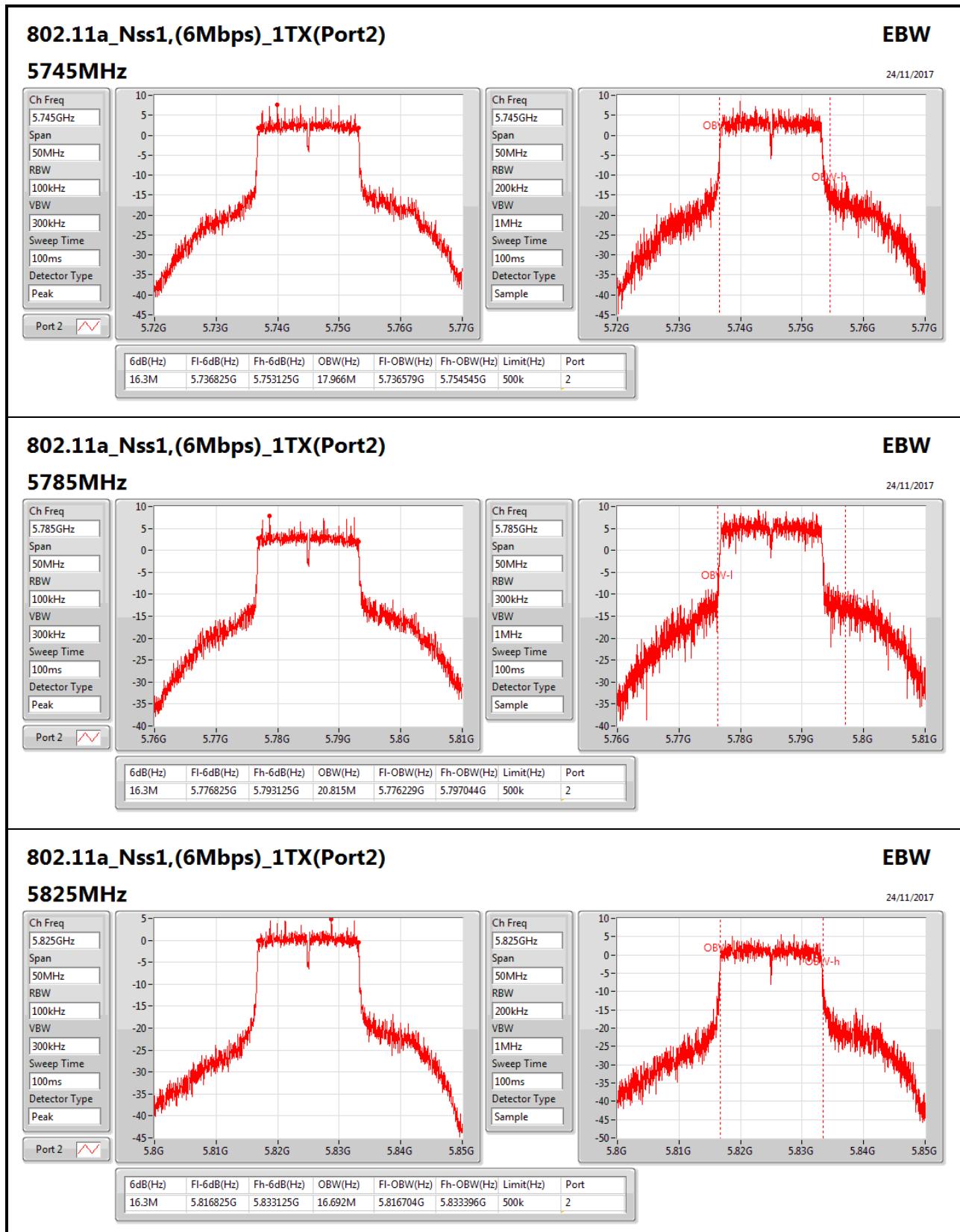


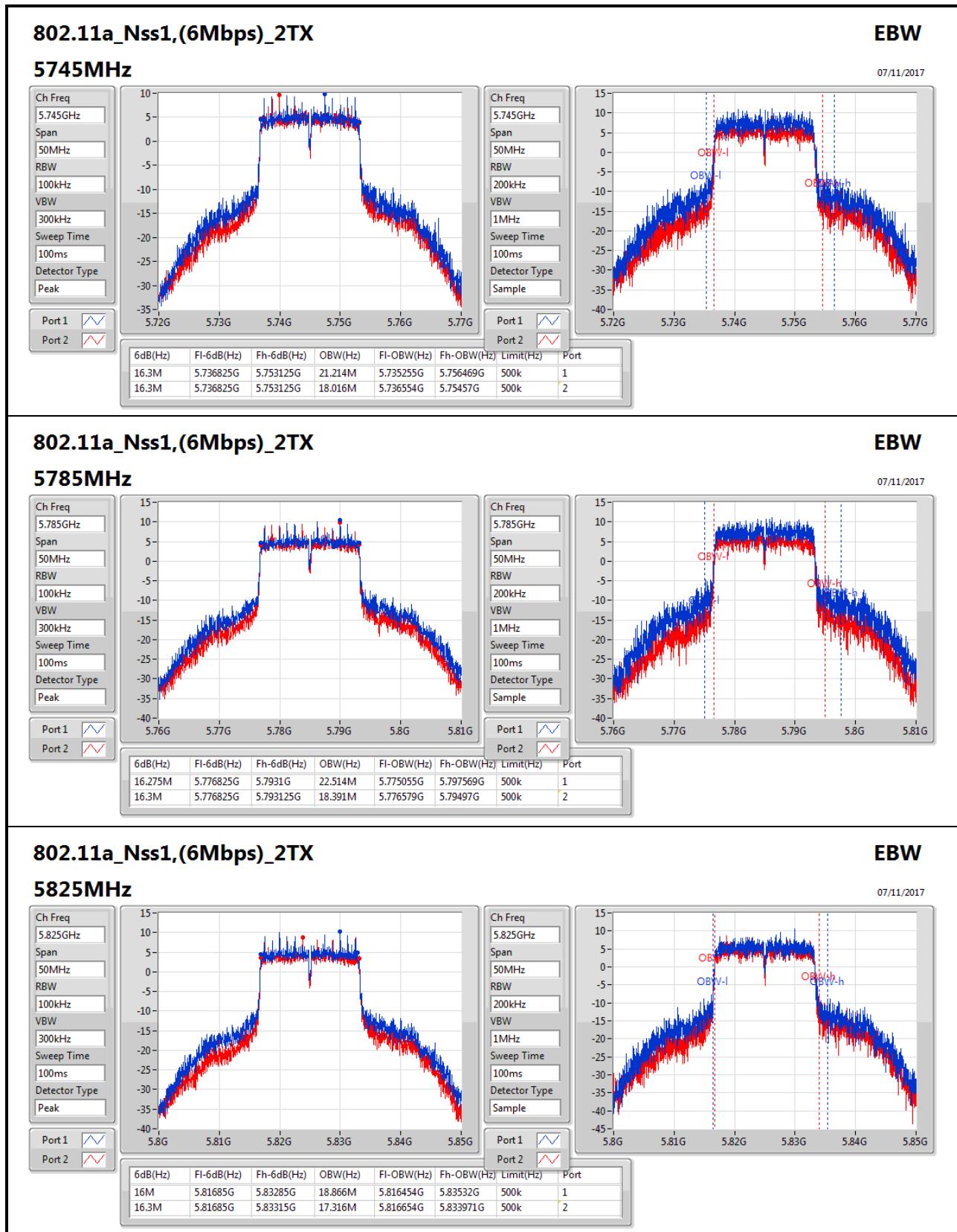
EBW Result – Non-Beamforming

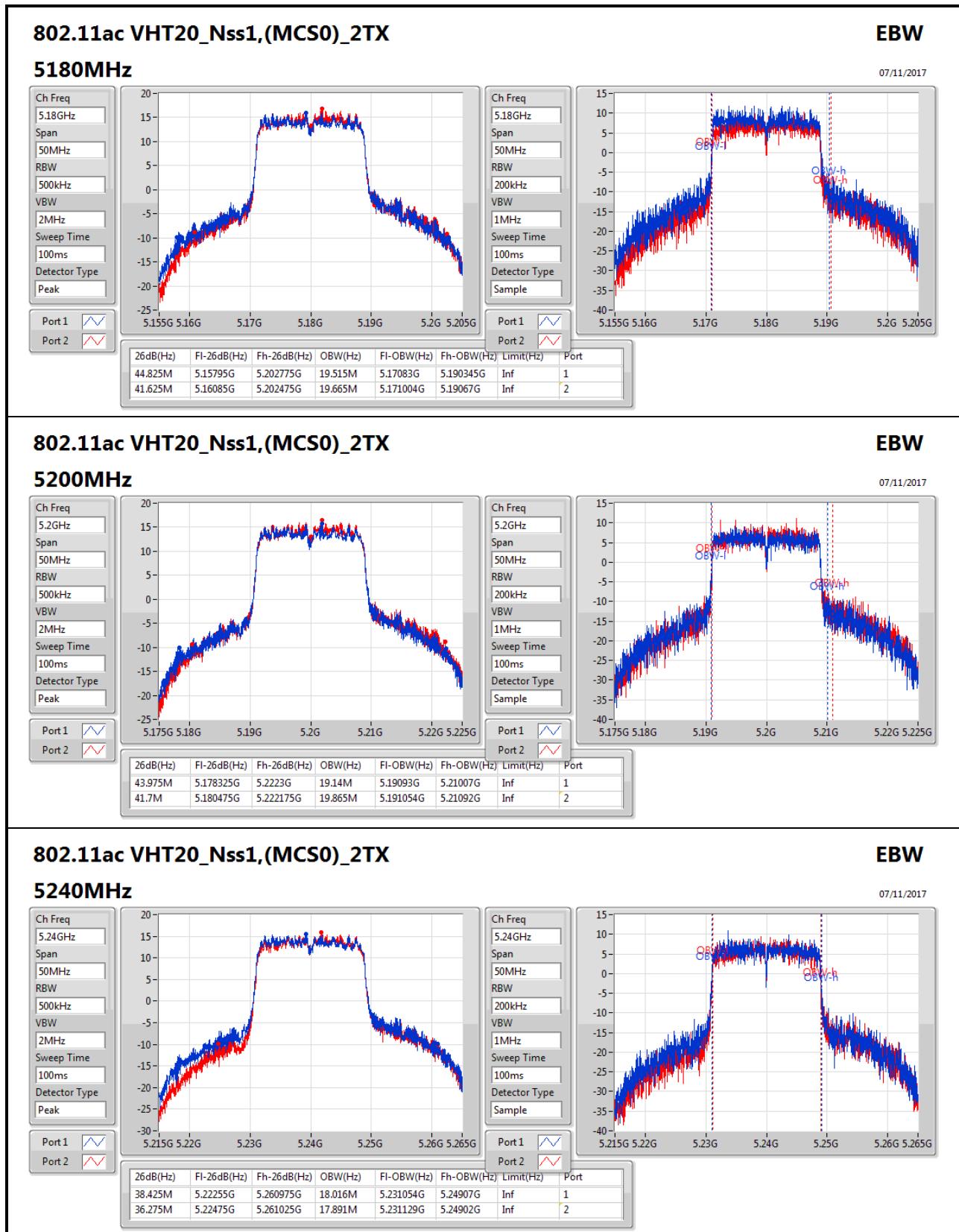
Appendix B.1

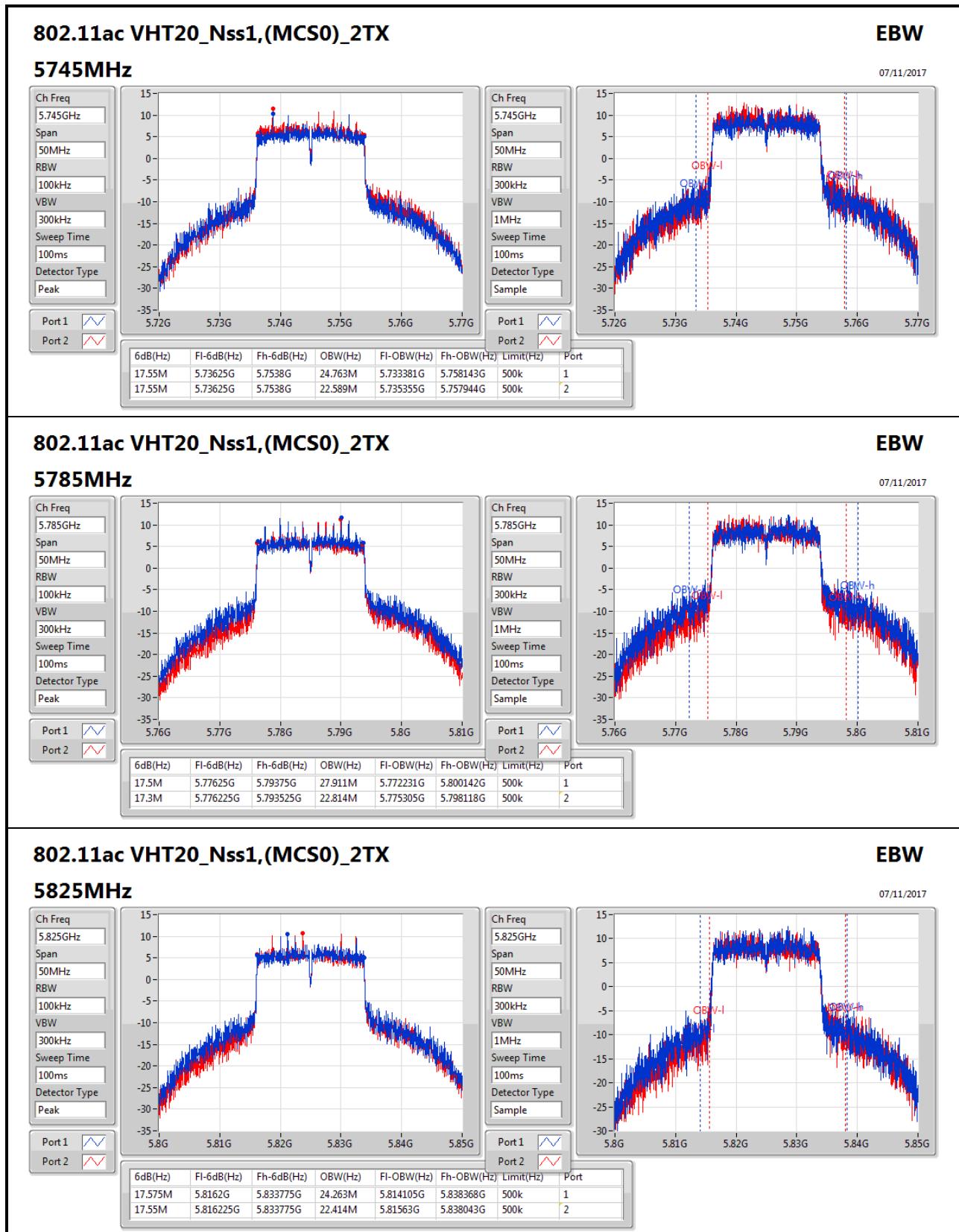


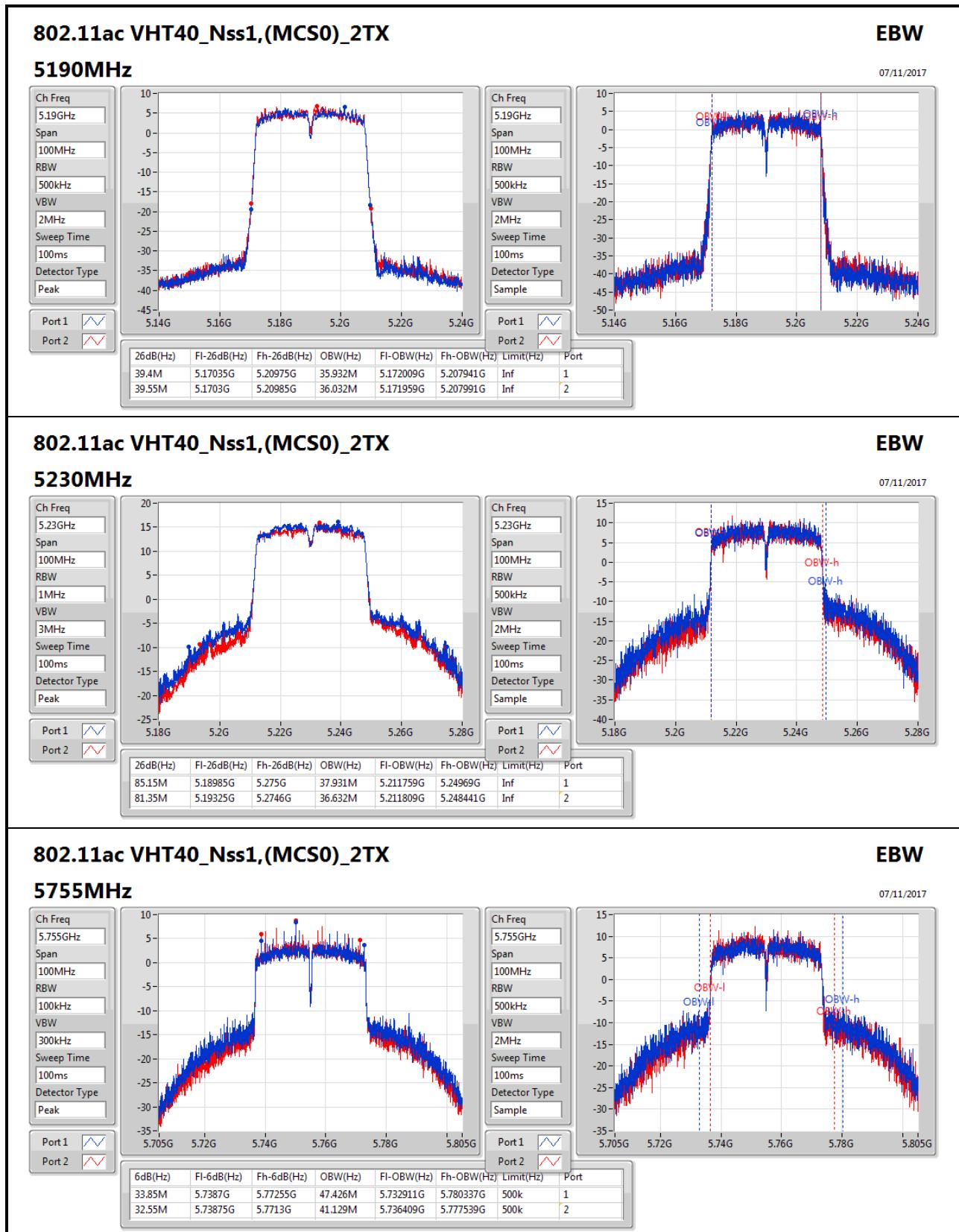


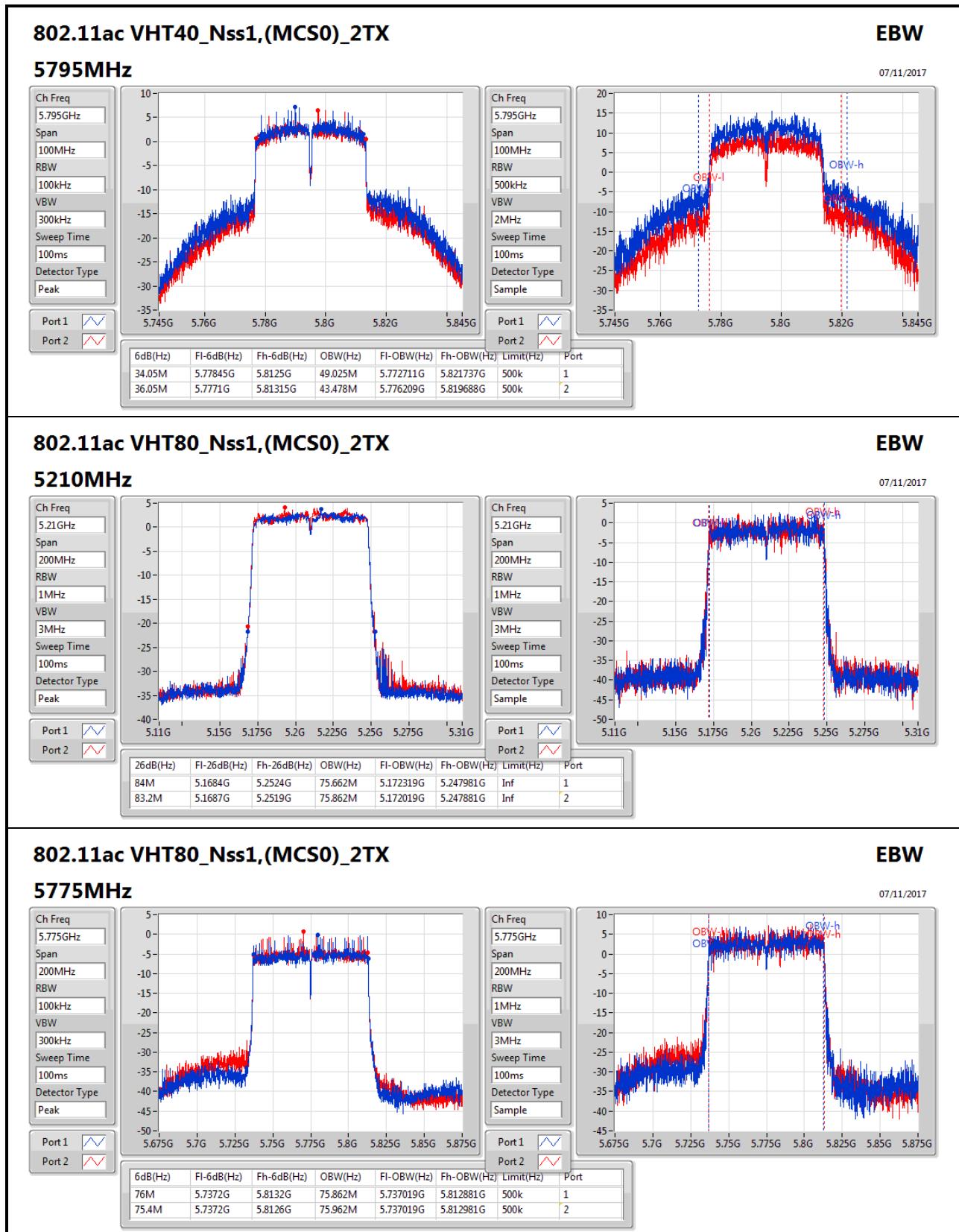












**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	23.625M	17.766M	17M8D1D	23.1M	17.716M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	42.4M	36.032M	36M0D1D	41.05M	35.982M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	83.6M	75.662M	75M7D1D	82.6M	75.562M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	17.7M	17.741M	17M7D1D	17.55M	17.691M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	35.65M	36.082M	36M1D1D	33.75M	36.032M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	75.6M	76.062M	76M1D1D	75.4M	75.862M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

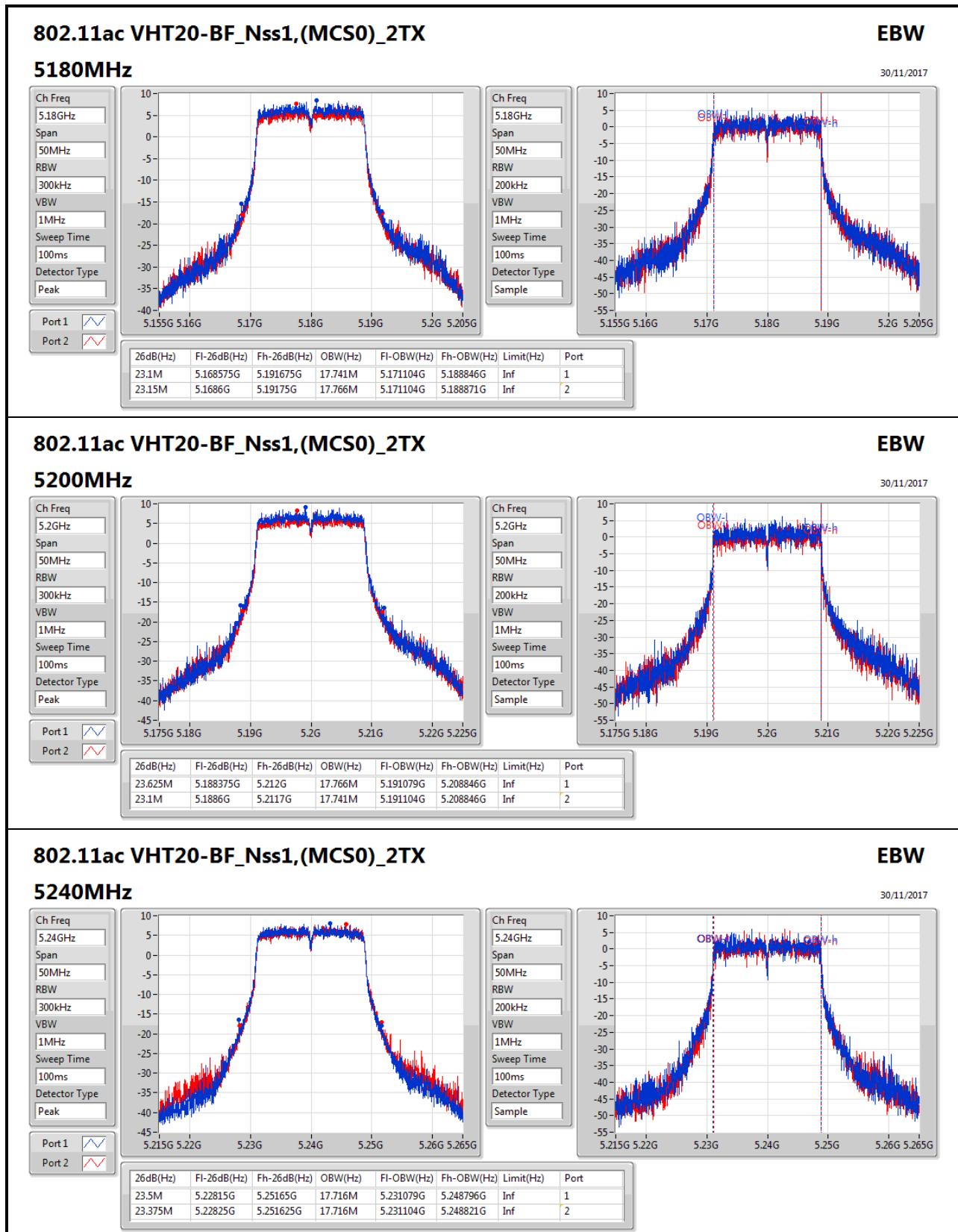


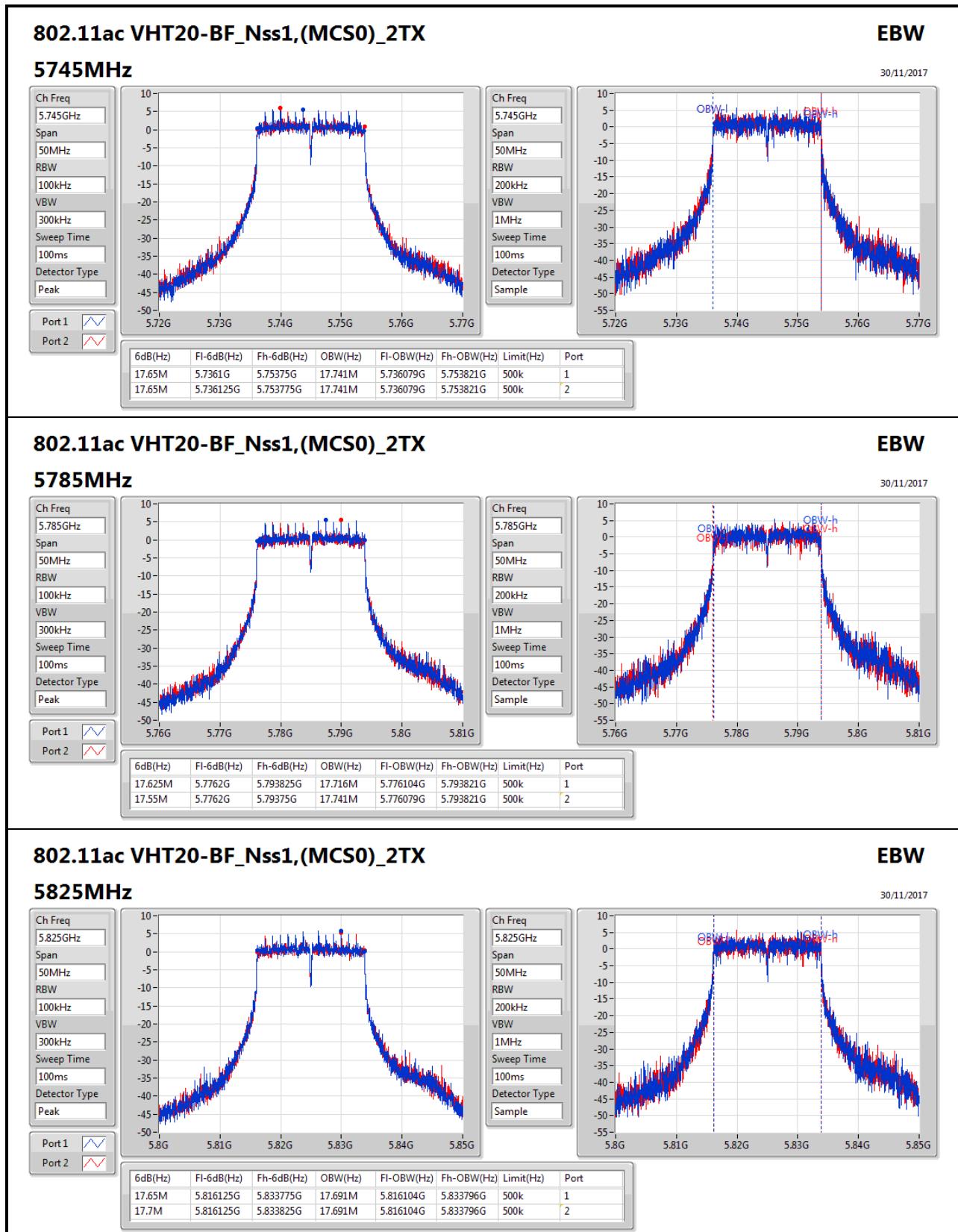
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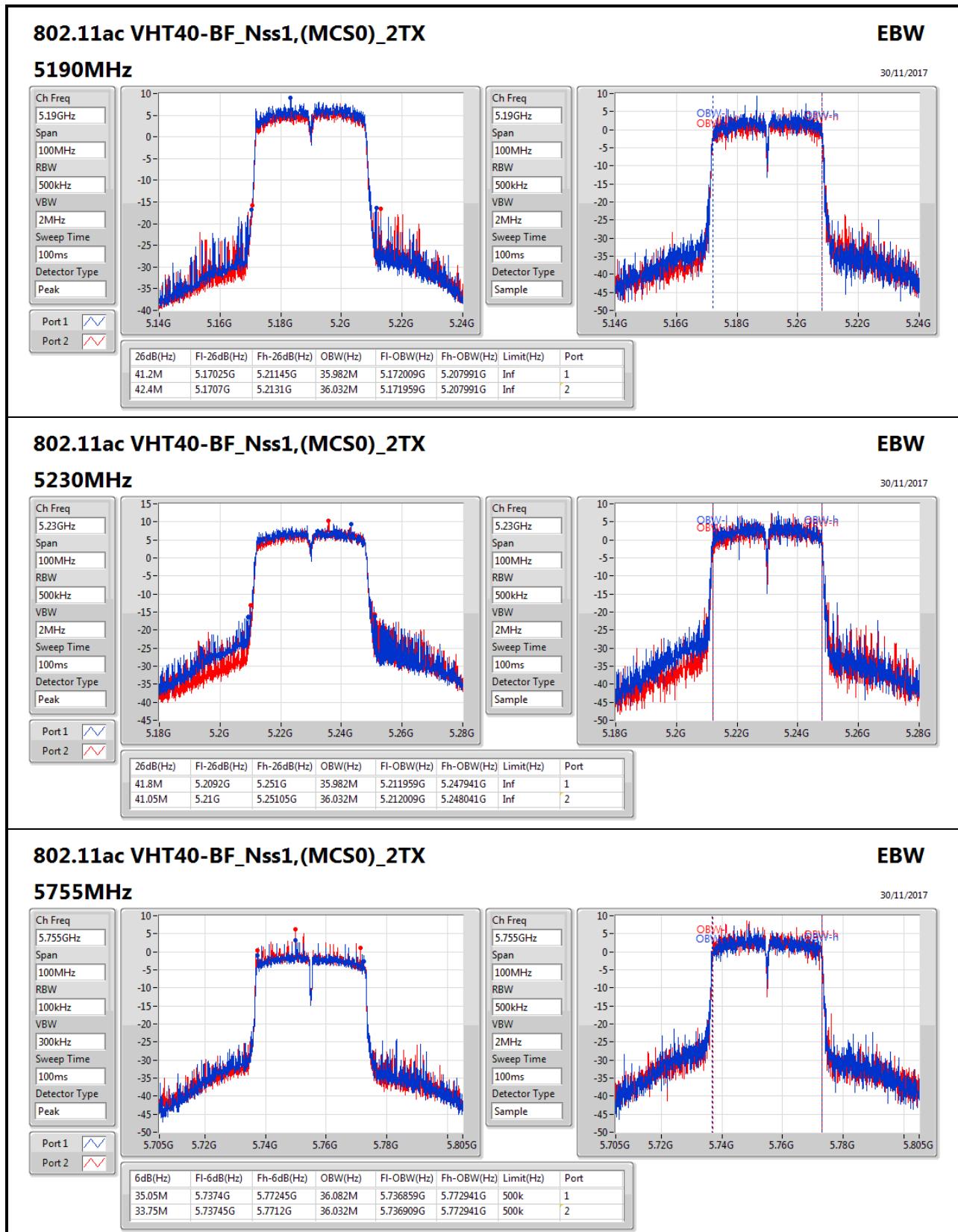
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	23.1M	17.741M	23.15M	17.766M
5200MHz	Pass	Inf	23.625M	17.766M	23.1M	17.741M
5240MHz	Pass	Inf	23.5M	17.716M	23.375M	17.716M
5745MHz	Pass	500k	17.65M	17.741M	17.65M	17.741M
5785MHz	Pass	500k	17.625M	17.716M	17.55M	17.741M
5825MHz	Pass	500k	17.65M	17.691M	17.7M	17.691M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	41.2M	35.982M	42.4M	36.032M
5230MHz	Pass	Inf	41.8M	35.982M	41.05M	36.032M
5755MHz	Pass	500k	35.05M	36.082M	33.75M	36.032M
5795MHz	Pass	500k	35M	36.032M	35.65M	36.082M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	83.6M	75.562M	82.6M	75.662M
5775MHz	Pass	500k	75.4M	75.862M	75.6M	76.062M

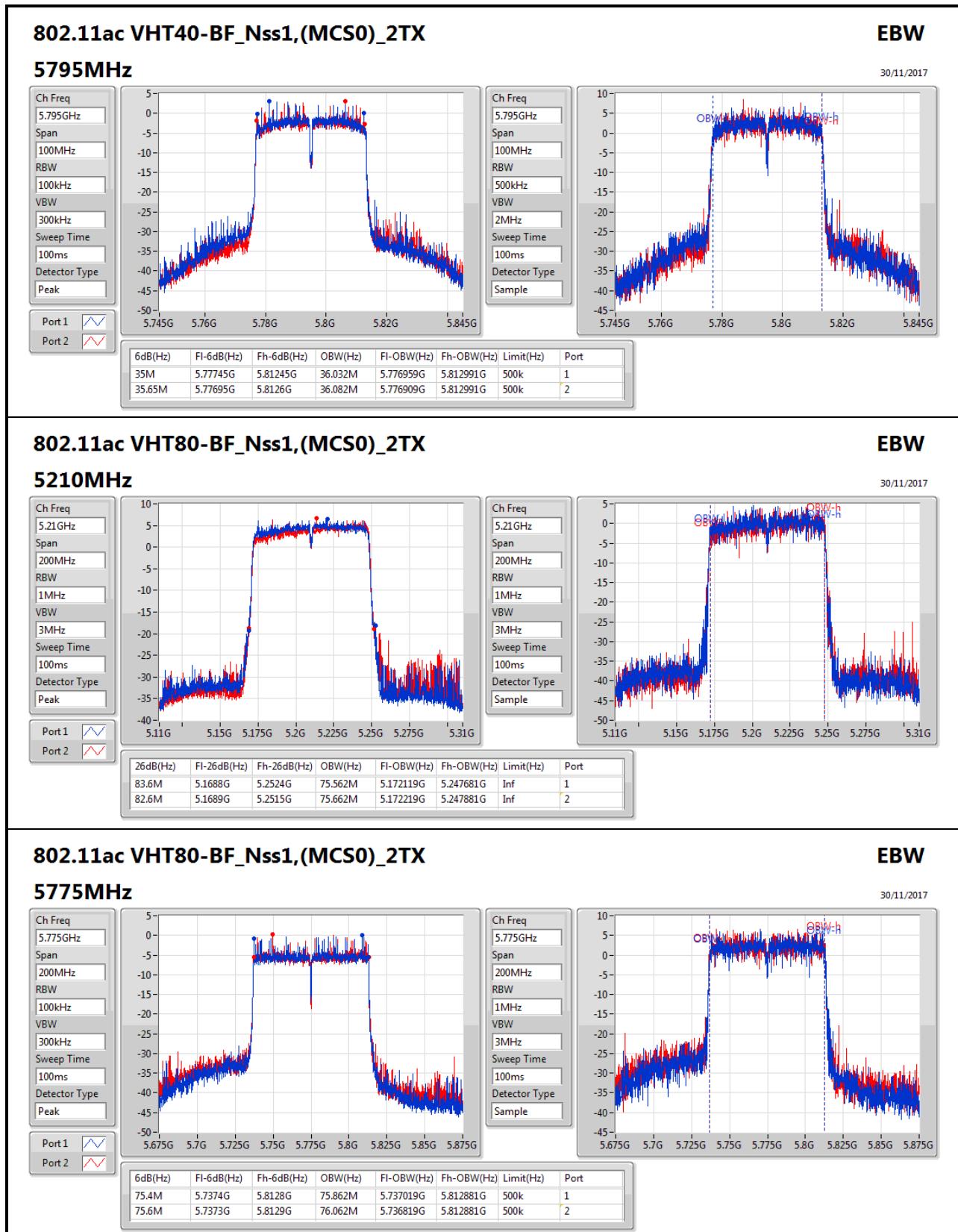
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

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









**Summary**

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	19.98	0.09954	24.03	0.25293
802.11a_Nss1,(6Mbps)_1TX(Port2)	19.72	0.09376	23.77	0.23823
802.11a_Nss1,(6Mbps)_2TX	24.48	0.28054	28.53	0.71285
802.11ac VHT20_Nss1,(MCS0)_2TX	24.55	0.28510	28.60	0.72444
802.11ac VHT40_Nss1,(MCS0)_2TX	24.01	0.25177	28.06	0.63973
802.11ac VHT80_Nss1,(MCS0)_2TX	15.30	0.03388	19.35	0.08610
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	19.96	0.09908	24.01	0.25177
802.11a_Nss1,(6Mbps)_1TX(Port2)	19.40	0.08710	23.45	0.22131
802.11a_Nss1,(6Mbps)_2TX	24.47	0.27990	28.52	0.71121
802.11ac VHT20_Nss1,(MCS0)_2TX	24.62	0.28973	28.67	0.73621
802.11ac VHT40_Nss1,(MCS0)_2TX	24.30	0.26915	28.35	0.68391
802.11ac VHT80_Nss1,(MCS0)_2TX	19.95	0.09886	24.00	0.25119



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	4.05	19.98		19.98	30.00	24.03	36.00
5200MHz	Pass	4.05	19.76		19.76	30.00	23.81	36.00
5240MHz	Pass	4.05	19.95		19.95	30.00	24.00	36.00
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.05		19.68	19.68	30.00	23.73	36.00
5200MHz	Pass	4.05		19.72	19.72	30.00	23.77	36.00
5240MHz	Pass	4.05		19.55	19.55	30.00	23.60	36.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.05	20.77	21.22	24.01	30.00	28.06	36.00
5200MHz	Pass	4.05	21.04	21.44	24.25	30.00	28.30	36.00
5240MHz	Pass	4.05	21.61	21.32	24.48	30.00	28.53	36.00
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-
5745MHz	Pass	4.05	19.72		19.72	30.00	23.77	36.00
5785MHz	Pass	4.05	19.79		19.79	30.00	23.84	36.00
5825MHz	Pass	4.05	19.96		19.96	30.00	24.01	36.00
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-
5745MHz	Pass	4.05		18.84	18.84	30.00	22.89	36.00
5785MHz	Pass	4.05		19.25	19.25	30.00	23.30	36.00
5825MHz	Pass	4.05		19.40	19.40	30.00	23.45	36.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5745MHz	Pass	4.05	21.19	21.45	24.33	30.00	28.38	36.00
5785MHz	Pass	4.05	21.47	21.44	24.47	30.00	28.52	36.00
5825MHz	Pass	4.05	21.04	20.57	23.82	30.00	27.87	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	4.05	21.38	21.69	24.55	30.00	28.60	36.00
5200MHz	Pass	4.05	21.04	21.50	24.29	30.00	28.34	36.00
5240MHz	Pass	4.05	21.11	20.80	23.97	30.00	28.02	36.00
5745MHz	Pass	4.05	21.26	21.94	24.62	30.00	28.67	36.00
5785MHz	Pass	4.05	21.53	21.52	24.54	30.00	28.59	36.00
5825MHz	Pass	4.05	21.49	21.42	24.47	30.00	28.52	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	4.05	15.51	15.44	18.49	30.00	22.54	36.00
5230MHz	Pass	4.05	21.21	20.78	24.01	30.00	28.06	36.00
5755MHz	Pass	4.05	21.17	21.39	24.29	30.00	28.34	36.00
5795MHz	Pass	4.05	21.41	21.17	24.30	30.00	28.35	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	4.05	12.19	12.39	15.30	30.00	19.35	36.00
5775MHz	Pass	4.05	16.83	17.04	19.95	30.00	24.00	36.00

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

**Summary**

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	18.57	0.07194	25.63	0.36559
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	19.05	0.08035	26.11	0.40832
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	16.68	0.04656	23.74	0.23659
5.725-5.85GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	18.72	0.07447	25.78	0.37844
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	19.55	0.09016	26.61	0.45814
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	19.47	0.08851	26.53	0.44978

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.06	15.51	15.47	18.50	28.94	25.56	36.00
5200MHz	Pass	7.06	15.25	15.02	18.15	28.94	25.21	36.00
5240MHz	Pass	7.06	15.96	15.11	18.57	28.94	25.63	36.00
5745MHz	Pass	7.06	15.49	15.53	18.52	28.94	25.58	36.00
5785MHz	Pass	7.06	15.28	15.48	18.39	28.94	25.45	36.00
5825MHz	Pass	7.06	15.87	15.55	18.72	28.94	25.78	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	7.06	15.70	15.65	18.69	28.94	25.75	36.00
5230MHz	Pass	7.06	16.08	16.00	19.05	28.94	26.11	36.00
5755MHz	Pass	7.06	15.86	15.58	18.73	28.94	25.79	36.00
5795MHz	Pass	7.06	16.65	16.43	19.55	28.94	26.61	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	7.06	13.80	13.53	16.68	28.94	23.74	36.00
5775MHz	Pass	7.06	16.47	16.45	19.47	28.94	26.53	36.00

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

**Summary**

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	6.81	10.86
802.11a_Nss1,(6Mbps)_1TX(Port2)	6.48	10.53
802.11a_Nss1,(6Mbps)_2TX	12.00	19.06
802.11ac VHT20_Nss1,(MCS0)_2TX	12.11	19.17
802.11ac VHT40_Nss1,(MCS0)_2TX	8.56	15.62
802.11ac VHT80_Nss1,(MCS0)_2TX	-3.74	3.32
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	4.88	8.93
802.11a_Nss1,(6Mbps)_1TX(Port2)	4.30	8.35
802.11a_Nss1,(6Mbps)_2TX	10.33	17.39
802.11ac VHT20_Nss1,(MCS0)_2TX	10.93	17.99
802.11ac VHT40_Nss1,(MCS0)_2TX	6.85	13.91
802.11ac VHT80_Nss1,(MCS0)_2TX	-0.59	6.47

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

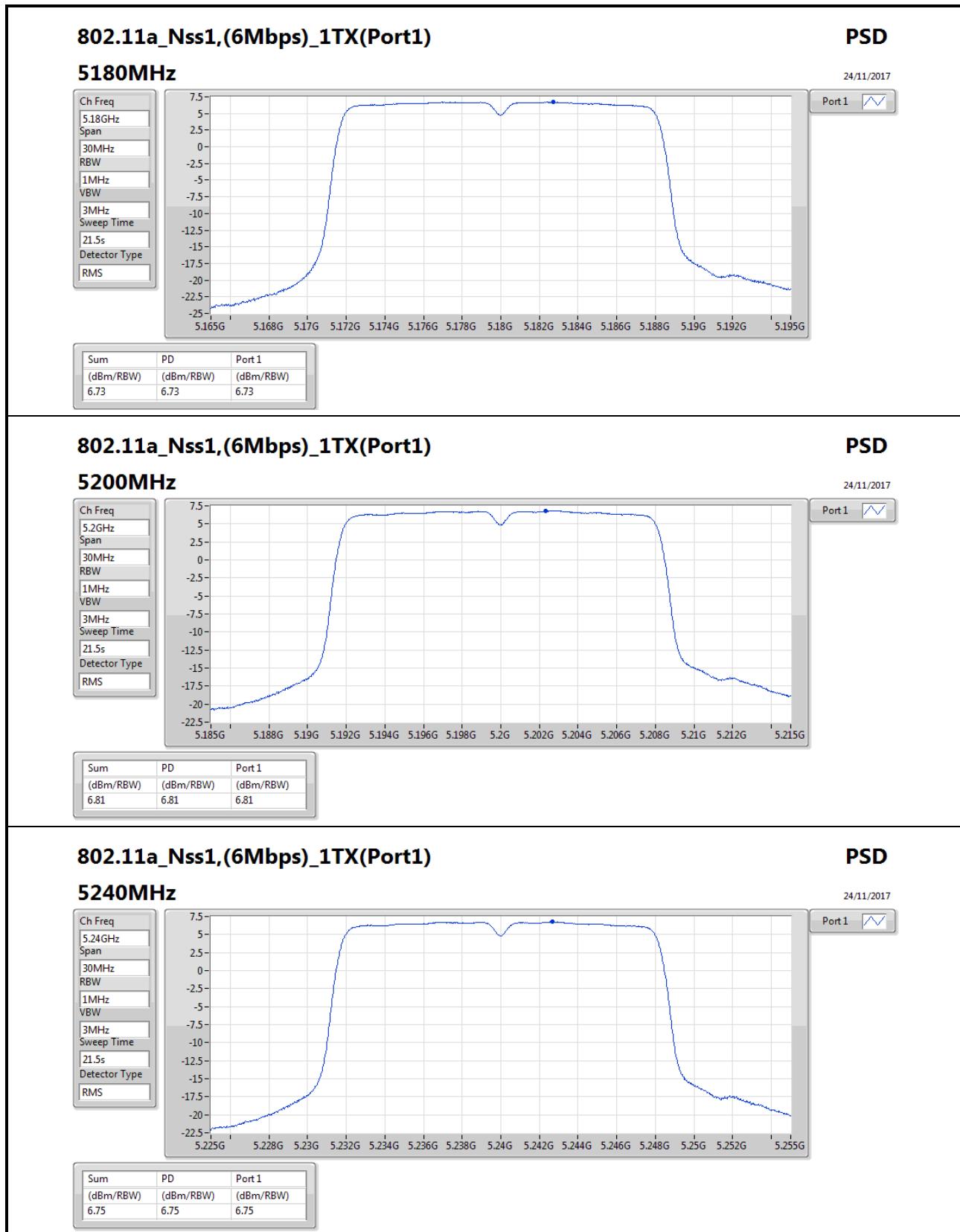


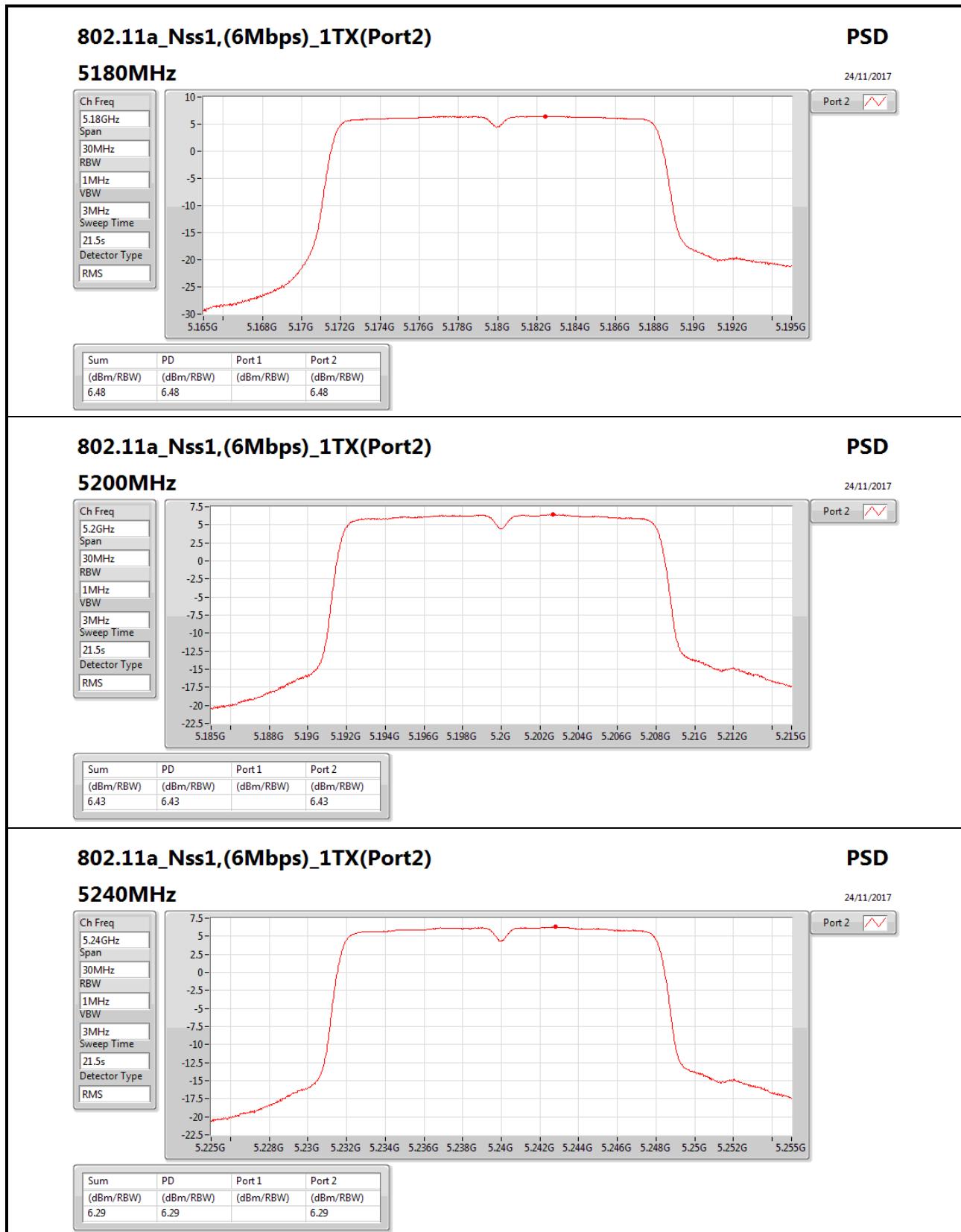
Result

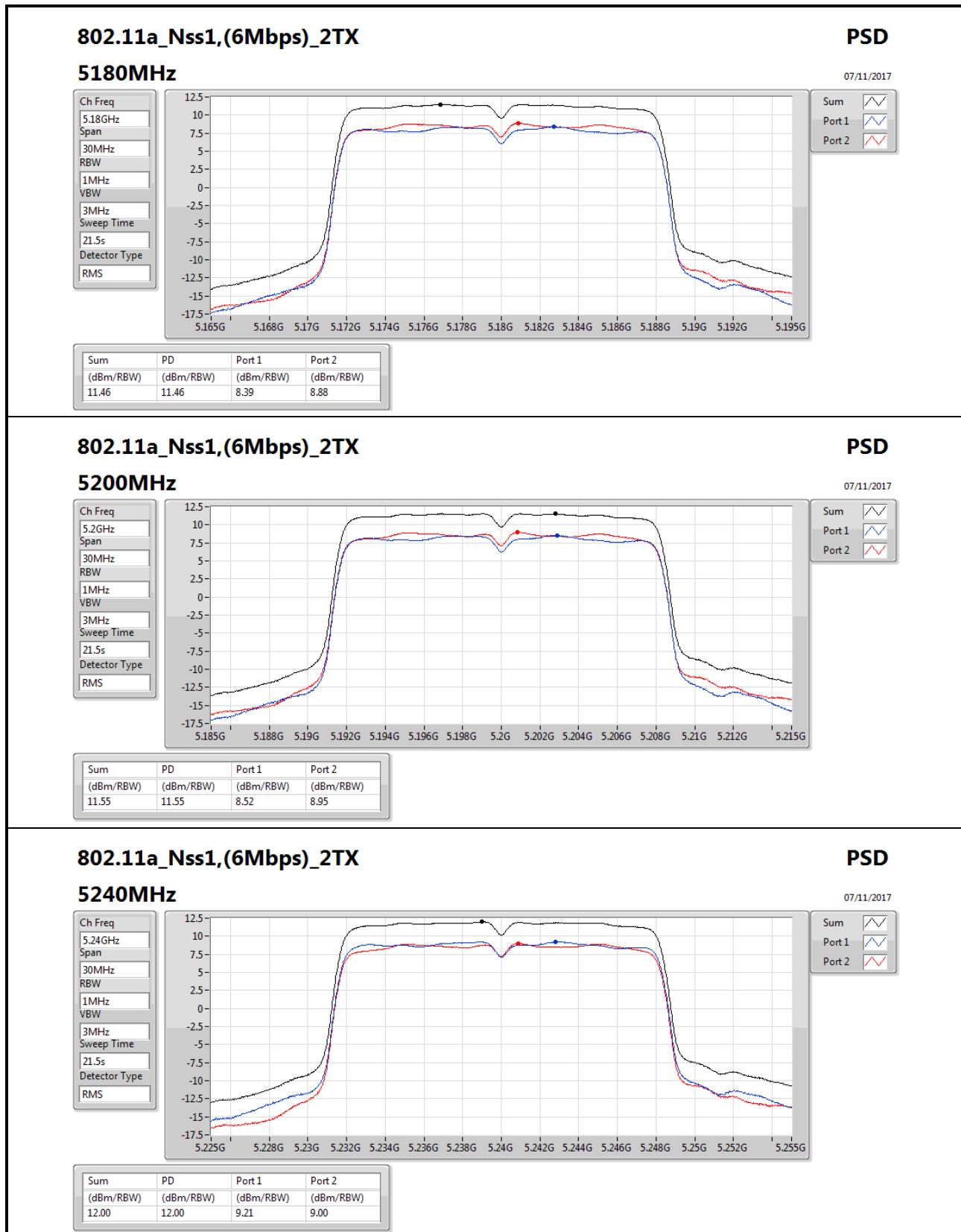
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.05	6.73		6.73	17.00	10.78	23.00
5200MHz	Pass	4.05	6.81		6.81	17.00	10.86	23.00
5240MHz	Pass	4.05	6.75		6.75	17.00	10.80	23.00
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-
5180MHz	Pass	4.05		6.48	6.48	17.00	10.53	23.00
5200MHz	Pass	4.05		6.43	6.43	17.00	10.48	23.00
5240MHz	Pass	4.05		6.29	6.29	17.00	10.34	23.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.06	8.39	8.88	11.46	15.94	18.52	23.00
5200MHz	Pass	7.06	8.52	8.95	11.55	15.94	18.61	23.00
5240MHz	Pass	7.06	9.21	9.00	12.00	15.94	19.06	23.00
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-
5745MHz	Pass	4.05	4.88		4.88	30.00	8.93	36.00
5785MHz	Pass	4.05	4.80		4.80	30.00	8.85	36.00
5825MHz	Pass	4.05	4.88		4.88	30.00	8.93	36.00
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-
5745MHz	Pass	4.05		3.90	3.90	30.00	7.95	36.00
5785MHz	Pass	4.05		4.30	4.30	30.00	8.35	36.00
5825MHz	Pass	4.05		2.02	2.02	30.00	6.07	36.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5745MHz	Pass	7.06	7.15	7.52	10.28	28.94	17.34	36.00
5785MHz	Pass	7.06	7.39	7.47	10.33	28.94	17.39	36.00
5825MHz	Pass	7.06	7.27	7.16	10.09	28.94	17.15	36.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.06	9.03	9.56	12.11	15.94	19.17	23.00
5200MHz	Pass	7.06	8.84	9.34	11.80	15.94	18.86	23.00
5240MHz	Pass	7.06	9.05	8.90	11.83	15.94	18.89	23.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5745MHz	Pass	7.06	8.04	8.42	10.93	28.94	17.99	36.00
5785MHz	Pass	7.06	7.86	8.08	10.63	28.94	17.69	36.00
5825MHz	Pass	7.06	7.87	7.95	10.49	28.94	17.55	36.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	7.06	0.16	0.42	2.99	15.94	10.05	23.00
5230MHz	Pass	7.06	5.82	5.63	8.56	15.94	15.62	23.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5755MHz	Pass	7.06	3.79	4.05	6.81	28.94	13.87	36.00
5795MHz	Pass	7.06	4.16	3.90	6.85	28.94	13.91	36.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	7.06	-6.54	-6.48	-3.74	15.94	3.32	23.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5775MHz	Pass	7.06	-3.41	-3.36	-0.59	28.94	6.47	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;



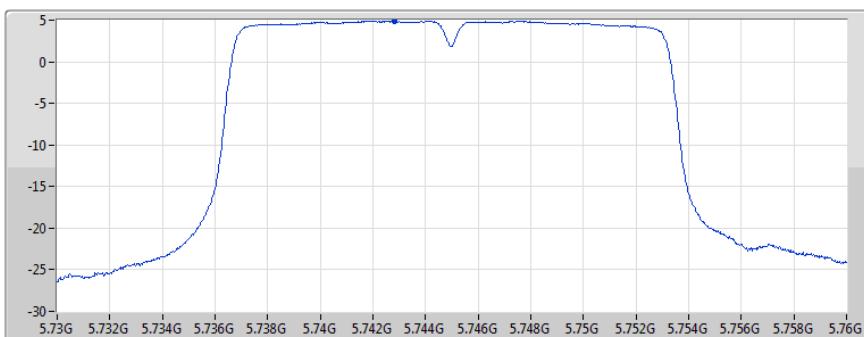




**802.11a_Nss1,(6Mbps)_1TX(Port1)****PSD****5745MHz**

24/11/2017

Ch Freq
5.745GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
21.5s
Detector Type
RMS



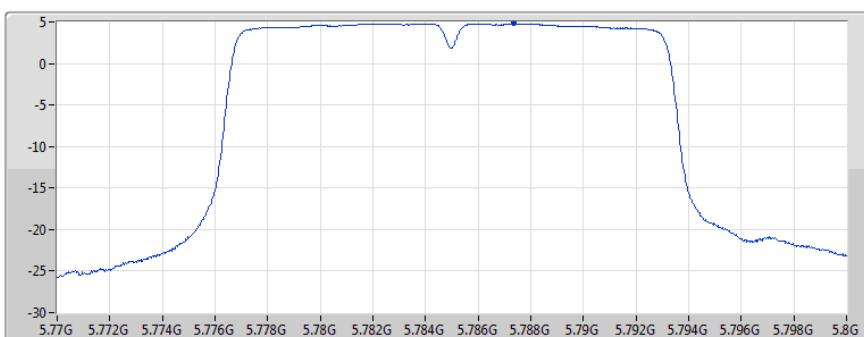
Port 1

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.88	4.88	4.88

802.11a_Nss1,(6Mbps)_1TX(Port1)**PSD****5785MHz**

24/11/2017

Ch Freq
5.785GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
21.5s
Detector Type
RMS



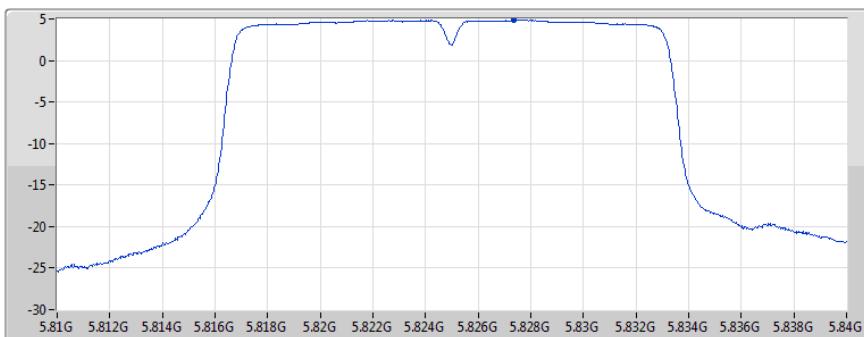
Port 1

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.80	4.80	4.80

802.11a_Nss1,(6Mbps)_1TX(Port1)**PSD****5825MHz**

24/11/2017

Ch Freq
5.825GHz
Span
30MHz
RBW
500kHz
VBW
3MHz
Sweep Time
21.5s
Detector Type
RMS



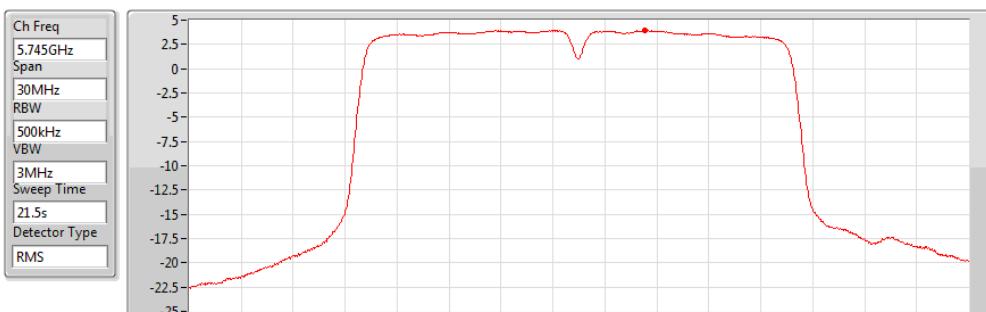
Port 1

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.88	4.88	4.88

**802.11a_Nss1,(6Mbps)_1TX(Port2)****5745MHz****PSD**

24/11/2017

Port 2

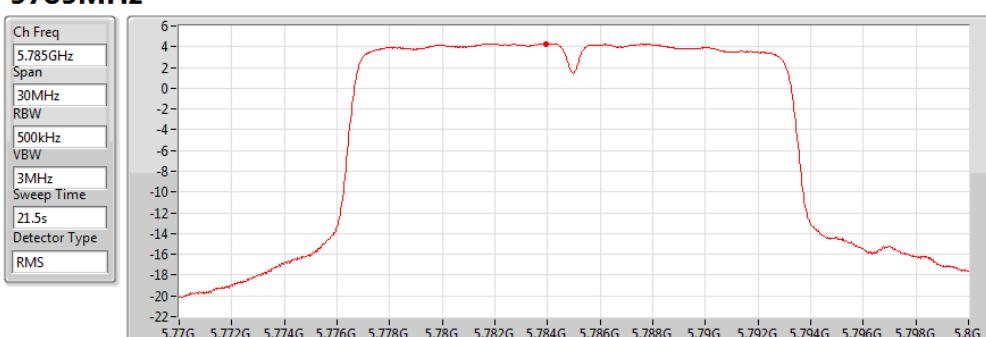


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.90	3.90		3.90

802.11a_Nss1,(6Mbps)_1TX(Port2)**5785MHz****PSD**

24/11/2017

Port 2

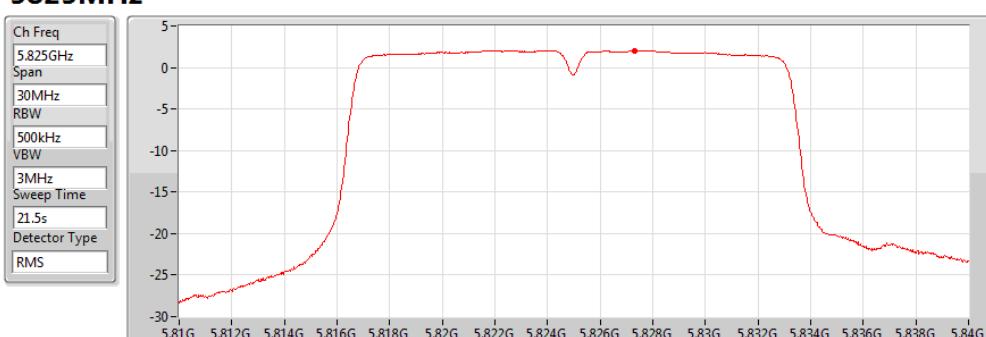


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.30	4.30		4.30

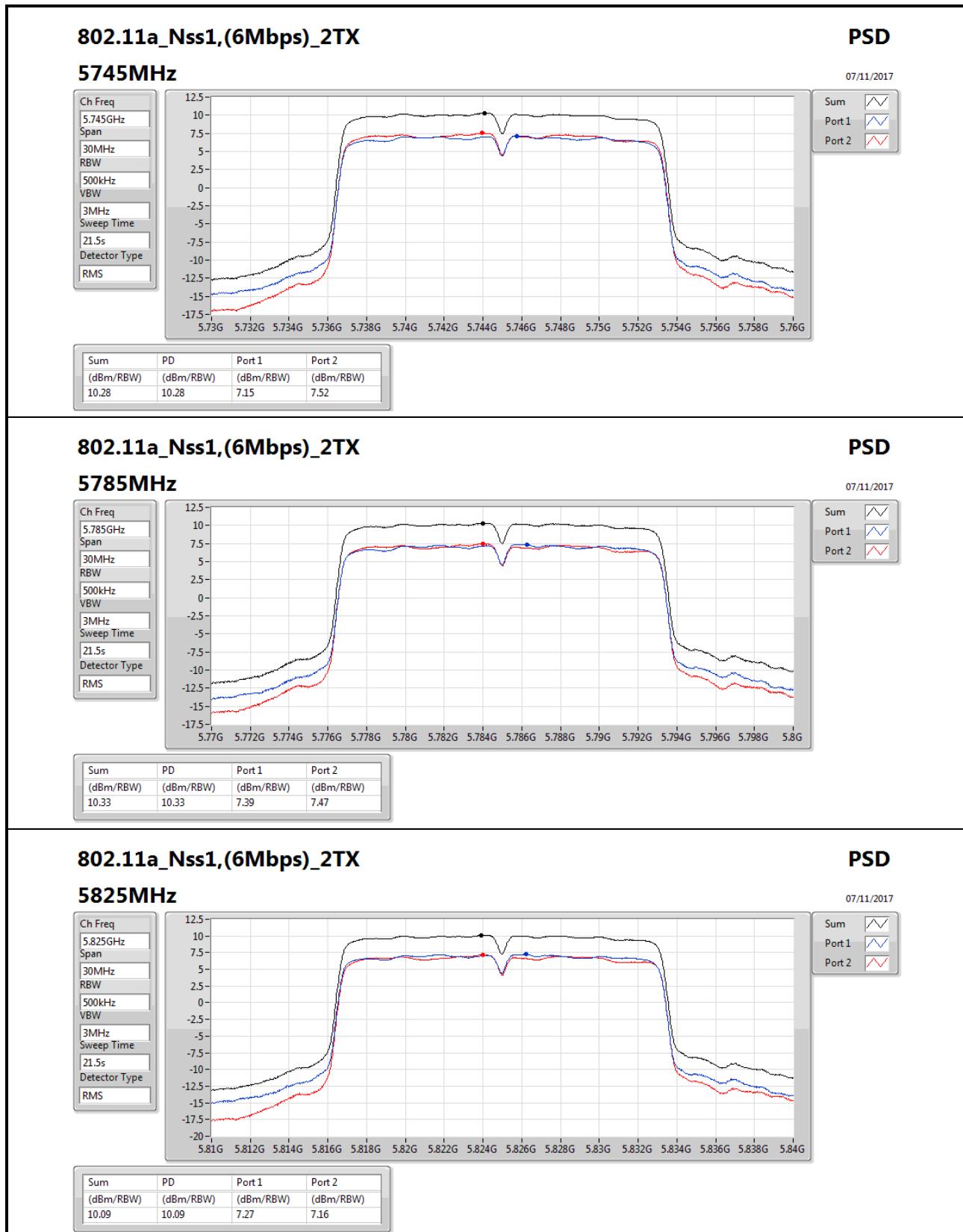
802.11a_Nss1,(6Mbps)_1TX(Port2)**5825MHz****PSD**

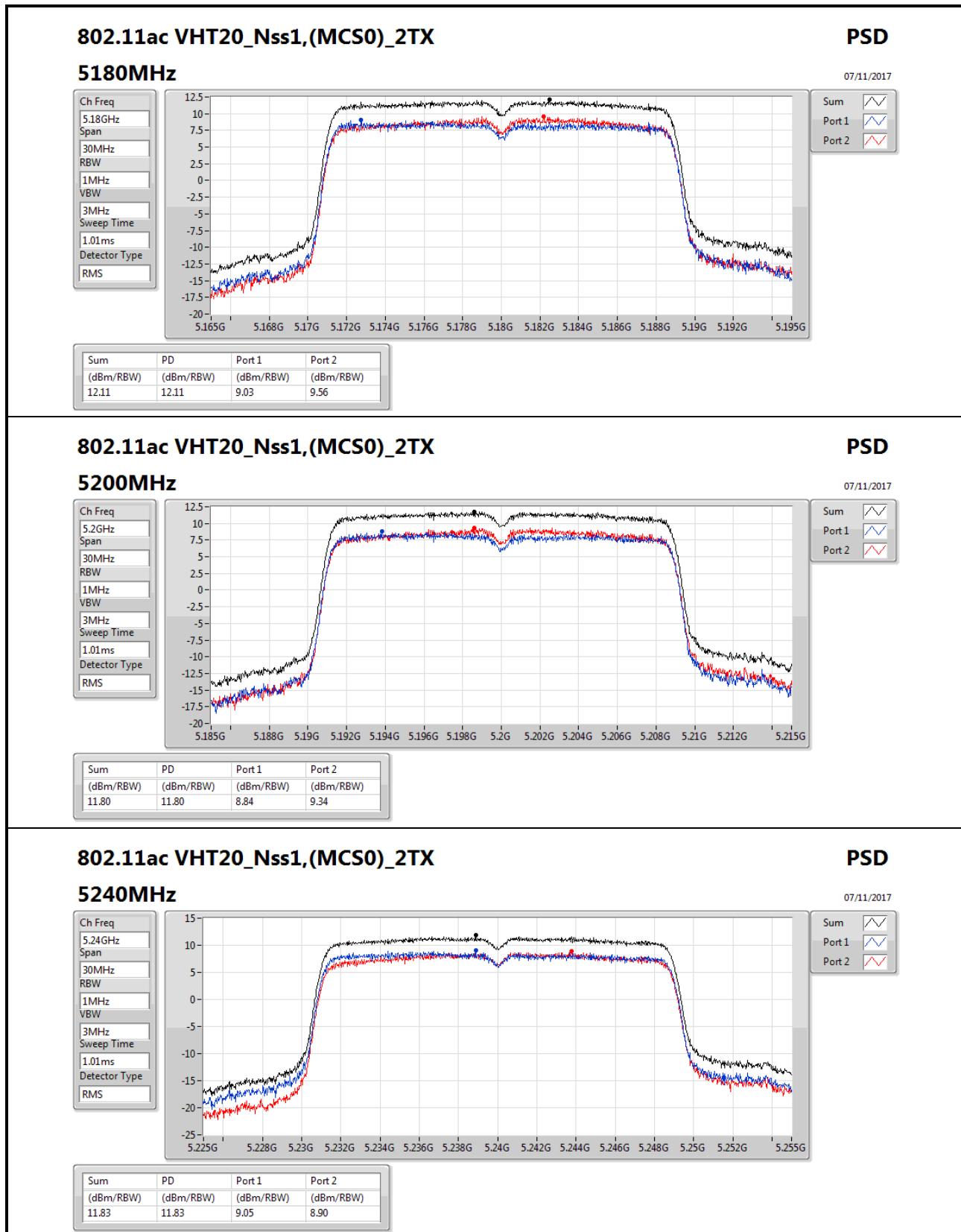
24/11/2017

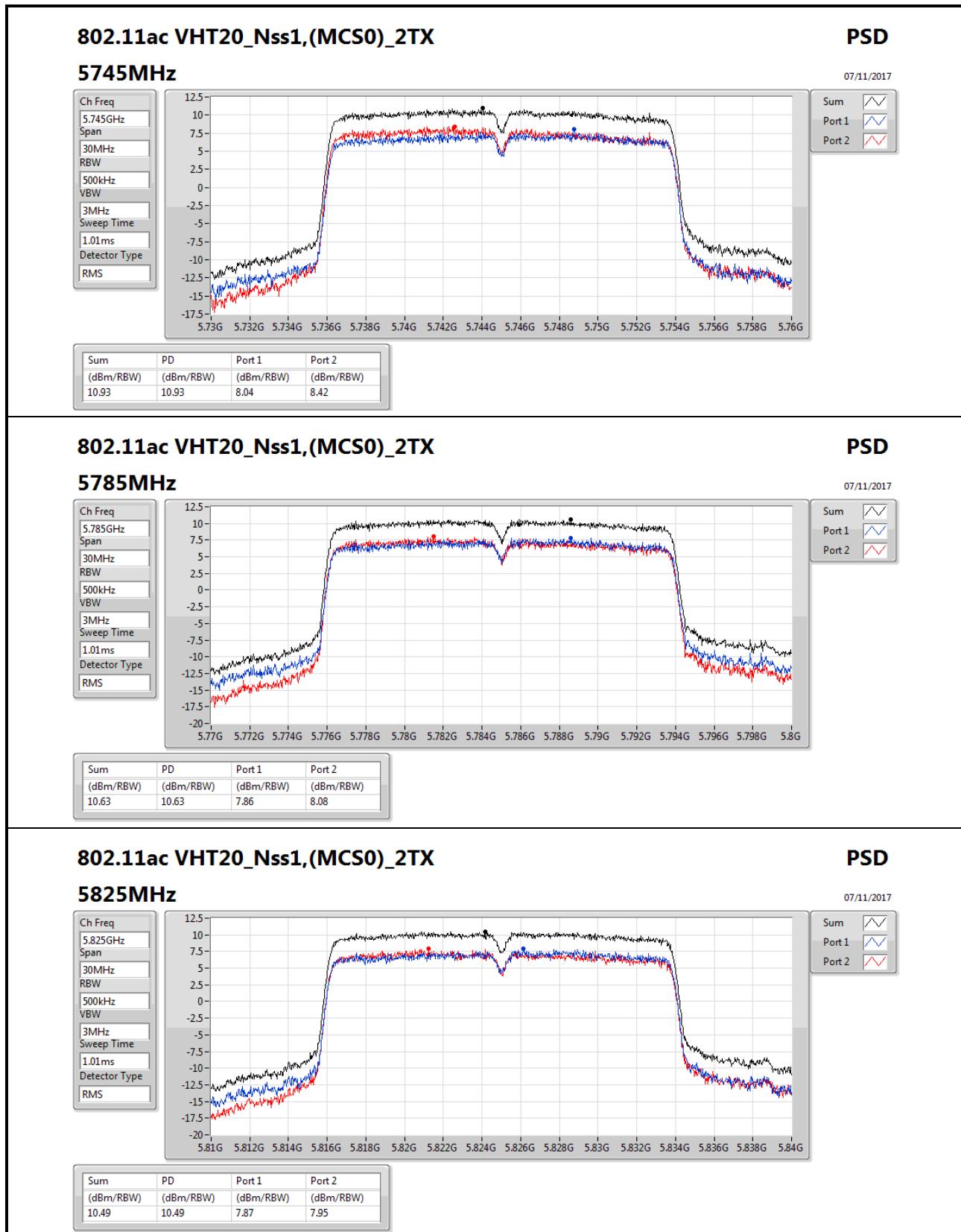
Port 2

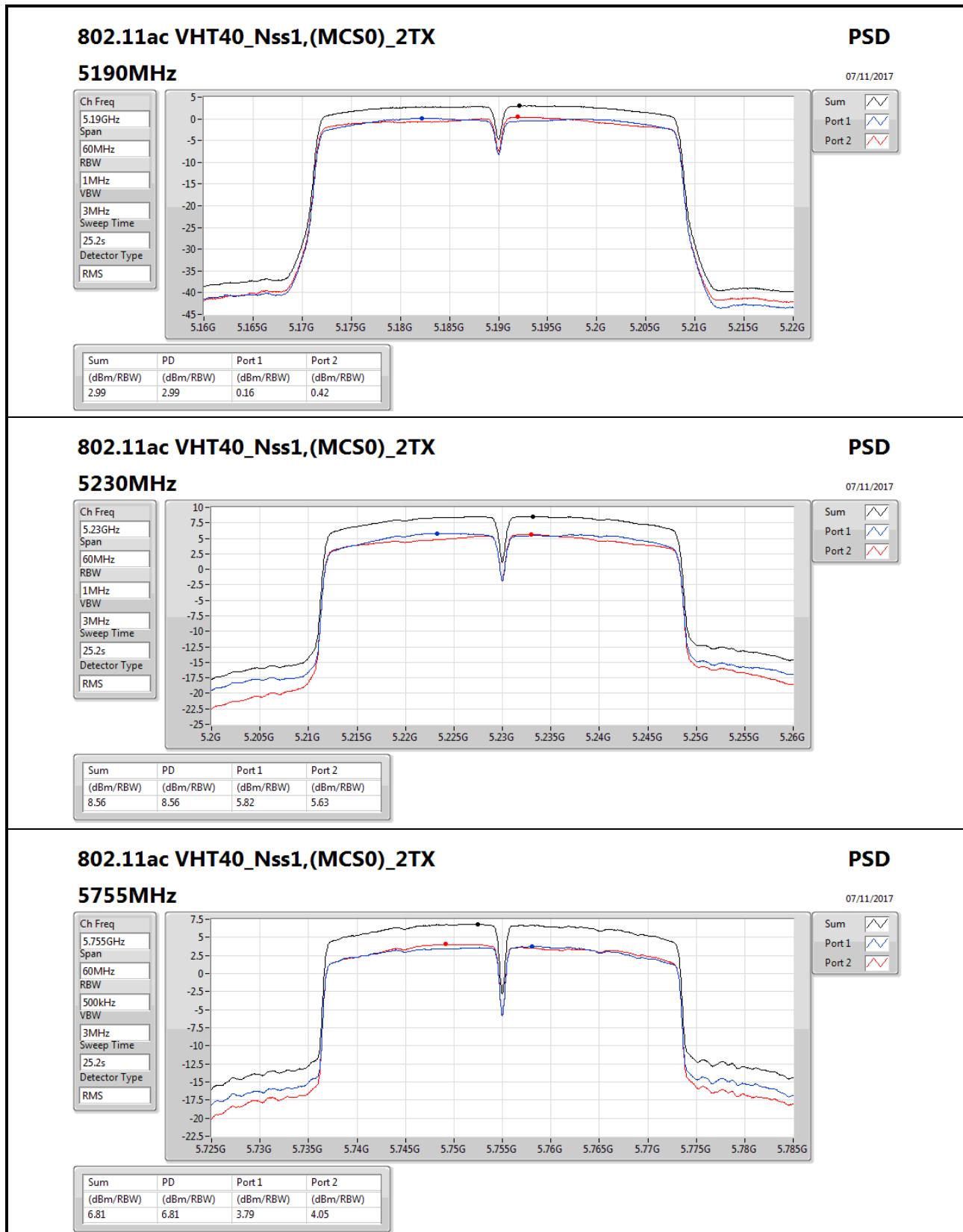


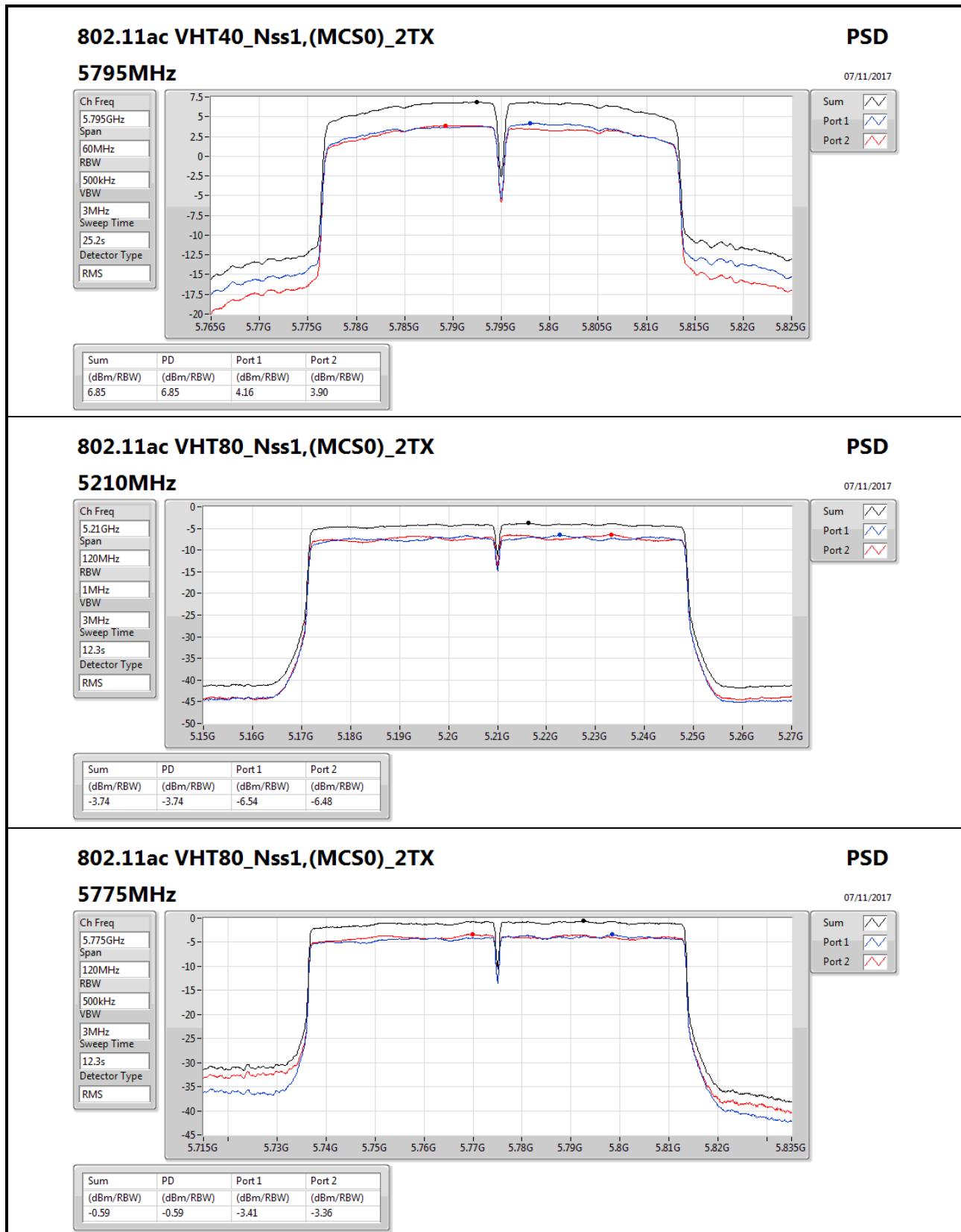
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.02	2.02		2.02











**Summary**

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	6.07	13.13
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	3.82	10.88
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-1.56	5.50
5.725-5.85GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	4.68	11.74
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	2.54	9.60
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-0.92	6.14

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



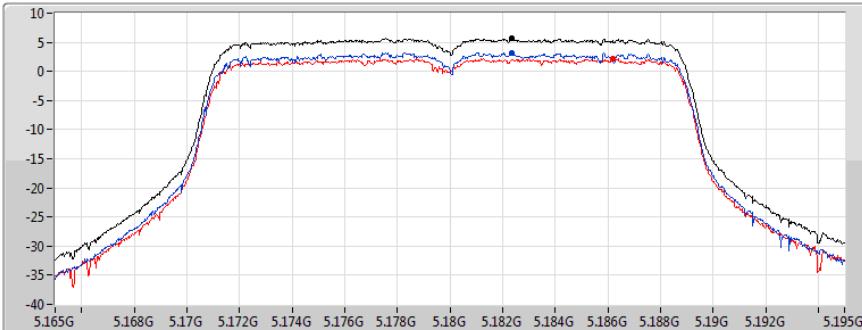
Result

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)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	7.06	3.20	2.19	5.67	15.94	12.73	23.00
5200MHz	Pass	7.06	3.34	2.44	5.71	15.94	12.77	23.00
5240MHz	Pass	7.06	3.68	3.27	6.07	15.94	13.13	23.00
5745MHz	Pass	7.06	1.62	1.73	4.68	28.94	11.74	36.00
5785MHz	Pass	7.06	1.32	1.03	4.08	28.94	11.14	36.00
5825MHz	Pass	7.06	1.73	1.75	4.55	28.94	11.61	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	7.06	0.73	-0.16	3.12	15.94	10.18	23.00
5230MHz	Pass	7.06	1.14	0.86	3.82	15.94	10.88	23.00
5755MHz	Pass	7.06	-0.58	-0.14	2.54	28.94	9.60	36.00
5795MHz	Pass	7.06	-0.13	-0.54	2.39	28.94	9.45	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	7.06	-4.04	-4.44	-1.56	15.94	5.50	23.00
5775MHz	Pass	7.06	-3.61	-3.61	-0.92	28.94	6.14	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;

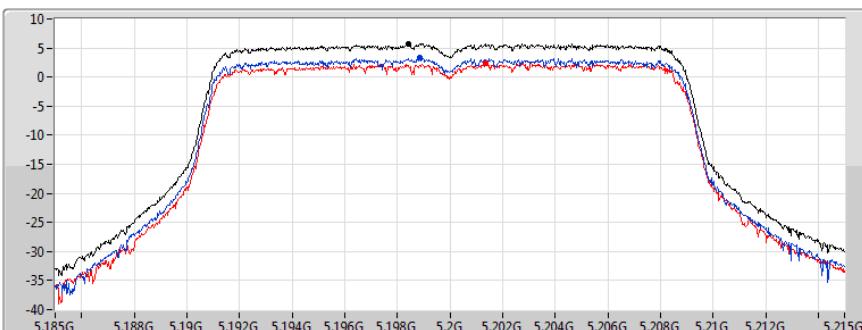
802.11ac VHT20-BF_Nss1,(MCS0)_2TX
5180MHz

Ch Freq
5.18GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20.1s
Detector Type
RMS

PSD

30/11/2017

Sum
Port 1
Port 2

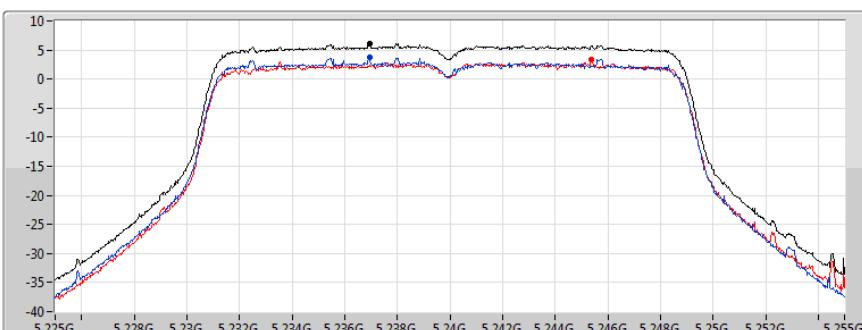
802.11ac VHT20-BF_Nss1,(MCS0)_2TX
5200MHz

Ch Freq
5.2GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20.1s
Detector Type
RMS

PSD

30/11/2017

Sum
Port 1
Port 2

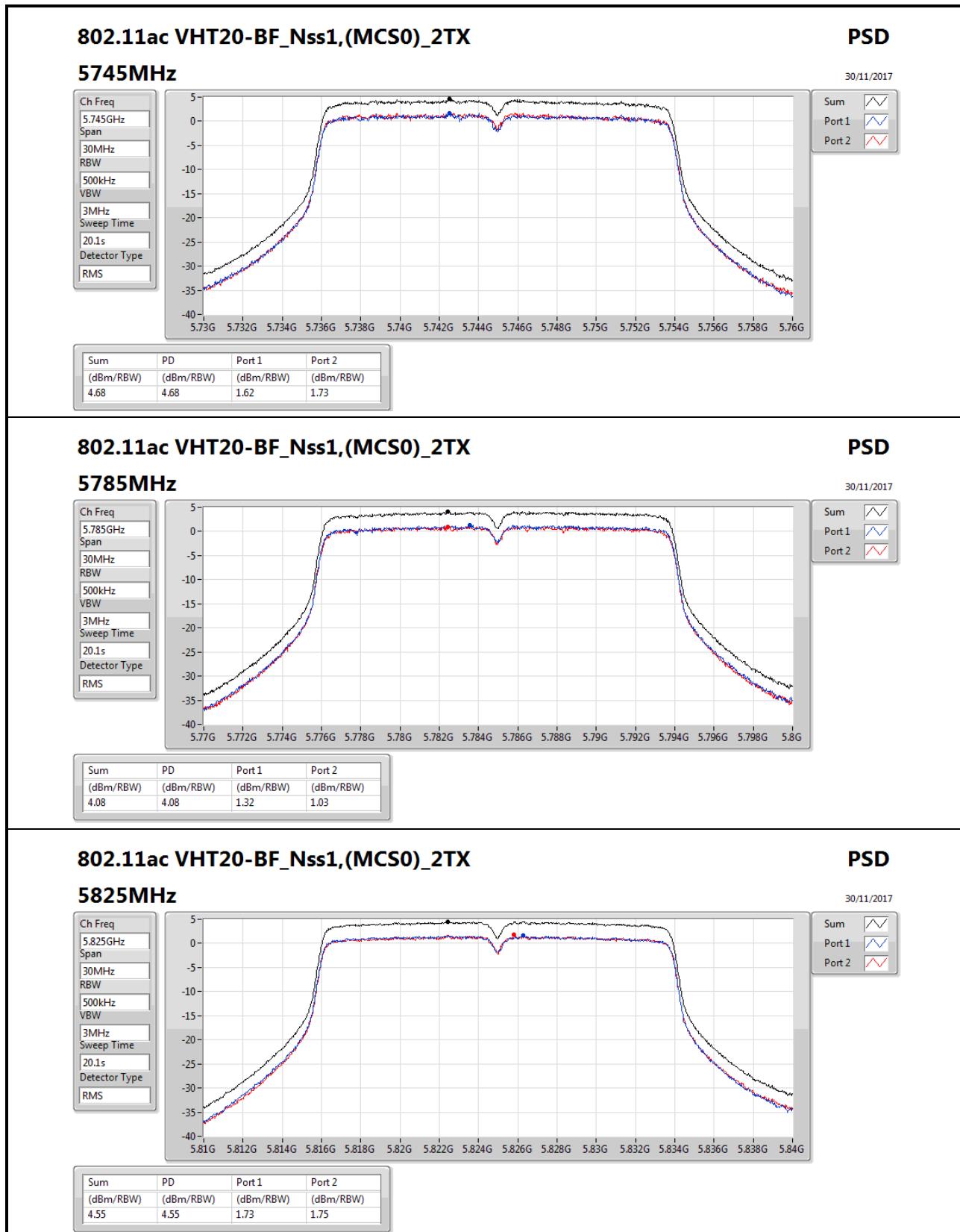
802.11ac VHT20-BF_Nss1,(MCS0)_2TX
5240MHz

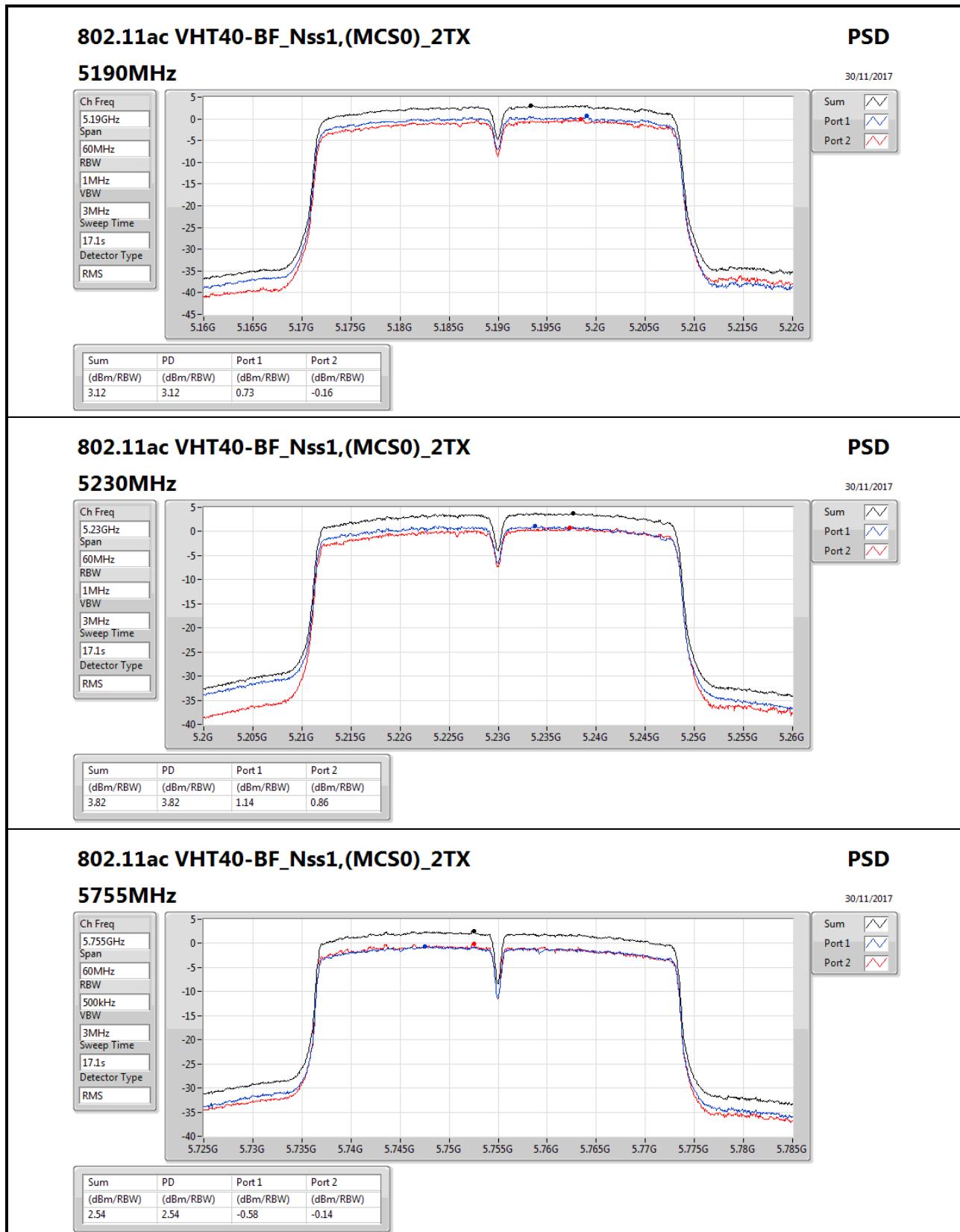
Ch Freq
5.24GHz
Span
30MHz
RBW
1MHz
VBW
3MHz
Sweep Time
20.1s
Detector Type
RMS

PSD

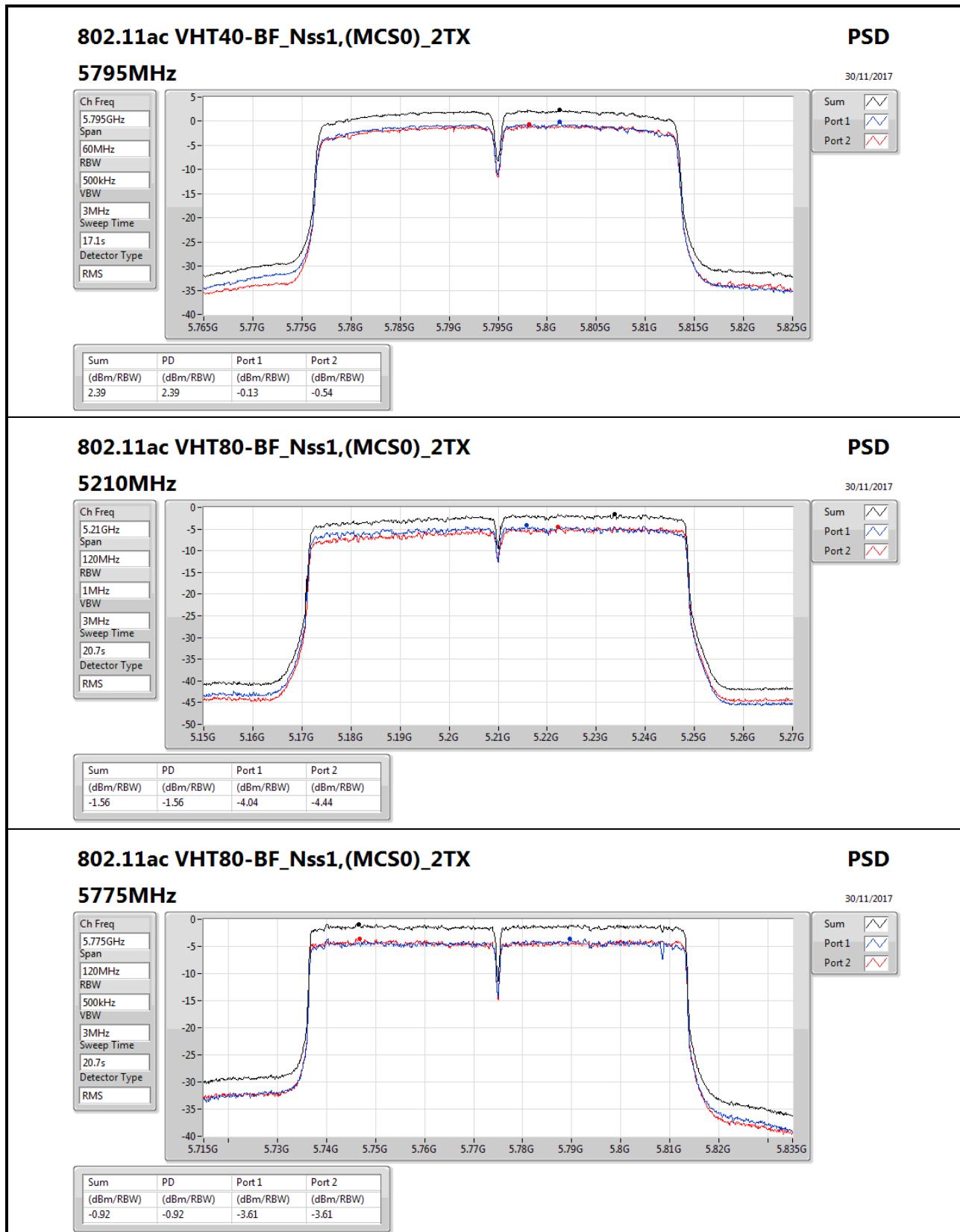
30/11/2017

Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.67	5.67	3.20	2.19
5.71	5.71	3.34	2.44
6.07	6.07	3.68	3.27







**Summary**

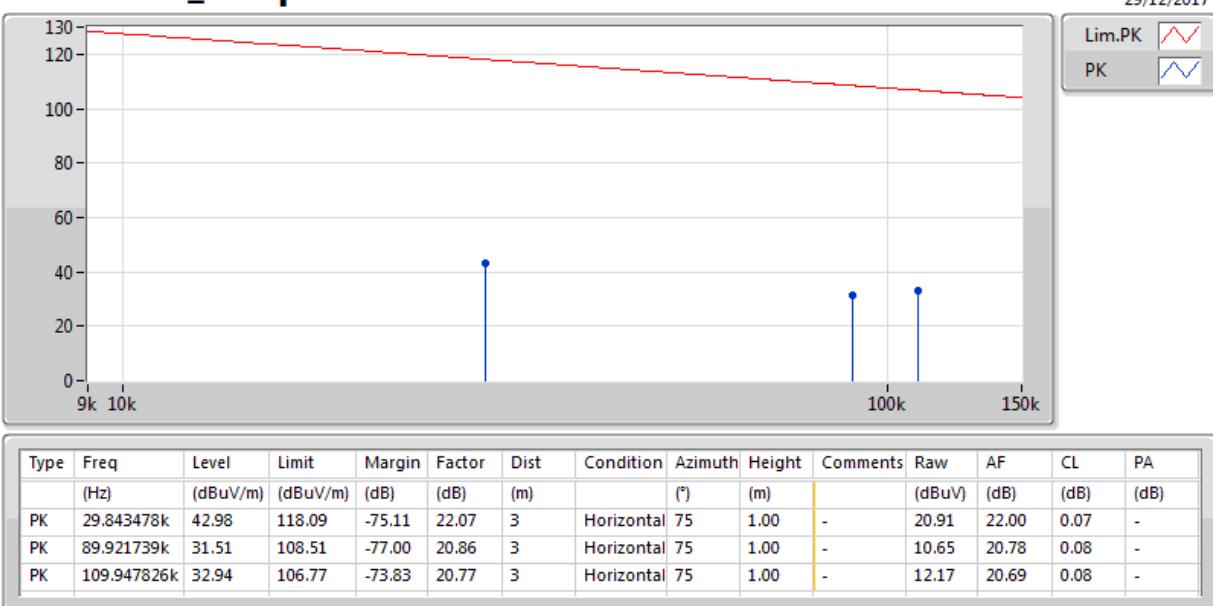
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	PK	47.46M	35.69	40.00	-4.31	-12.59	3	Vertical	360	1.00	-

**Result**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	PK	29.843478k	42.98	118.09	-75.11	22.07	3	Horizontal	75	1.00	-
5775MHz	Pass	PK	89.921739k	31.51	108.51	-77.00	20.86	3	Horizontal	75	1.00	-
5775MHz	Pass	PK	109.947826k	32.94	106.77	-73.83	20.77	3	Horizontal	75	1.00	-
5775MHz	Pass	PK	1.188261M	39.68	66.13	-26.45	21.01	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	3.567609M	47.98	69.50	-21.52	20.88	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	8.283043M	37.33	69.50	-32.17	21.77	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	41.64M	26.56	40.00	-13.44	-9.90	3	Horizontal	360	2.00	-
5775MHz	Pass	PK	181.32M	31.41	43.50	-12.09	-11.25	3	Horizontal	360	2.00	-
5775MHz	Pass	PK	299.66M	37.13	46.00	-8.87	-6.22	3	Horizontal	360	2.00	-
5775MHz	Pass	PK	377.26M	32.70	46.00	-13.30	-5.04	3	Horizontal	360	2.00	-
5775MHz	Pass	PK	468.44M	36.85	46.00	-9.15	-2.69	3	Horizontal	360	2.00	-
5775MHz	Pass	PK	685.72M	31.14	46.00	-14.86	-0.39	3	Horizontal	360	2.00	-
5775MHz	Pass	PK	47.46M	35.69	40.00	-4.31	-12.59	3	Vertical	360	1.00	-
5775MHz	Pass	PK	142.52M	30.10	43.50	-13.40	-9.84	3	Vertical	360	1.00	-
5775MHz	Pass	PK	249.22M	25.42	46.00	-20.58	-7.46	3	Vertical	360	1.00	-
5775MHz	Pass	PK	299.66M	36.72	46.00	-9.28	-6.22	3	Vertical	360	1.00	-
5775MHz	Pass	PK	383.08M	35.29	46.00	-10.71	-4.90	3	Vertical	360	1.00	-
5775MHz	Pass	PK	454.86M	41.04	46.00	-4.96	-3.11	3	Vertical	360	1.00	-

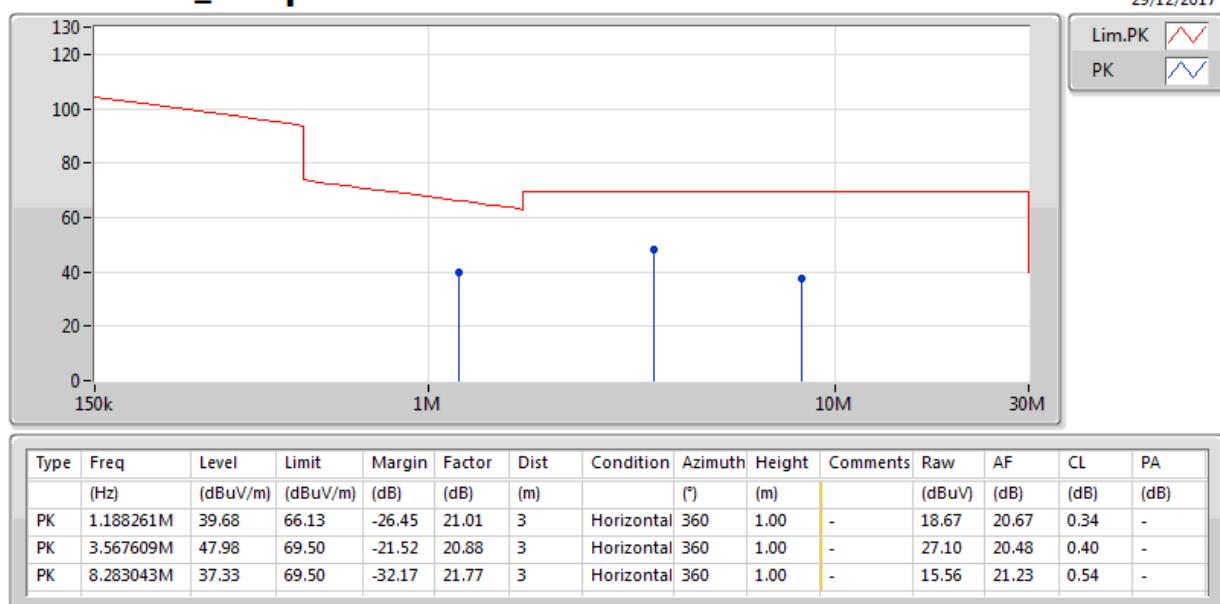
802.11ac VHT80_Nss1,(MCS0)_2TX

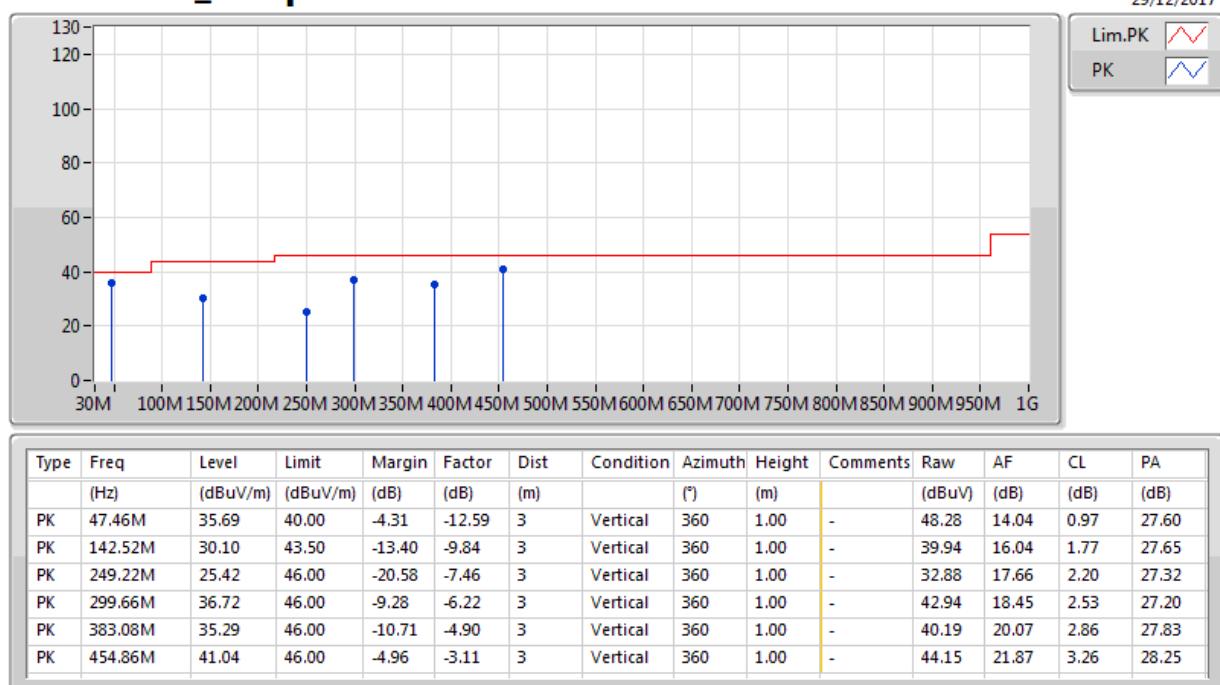
5775MHz_Adapter



802.11ac VHT80_Nss1,(MCS0)_2TX

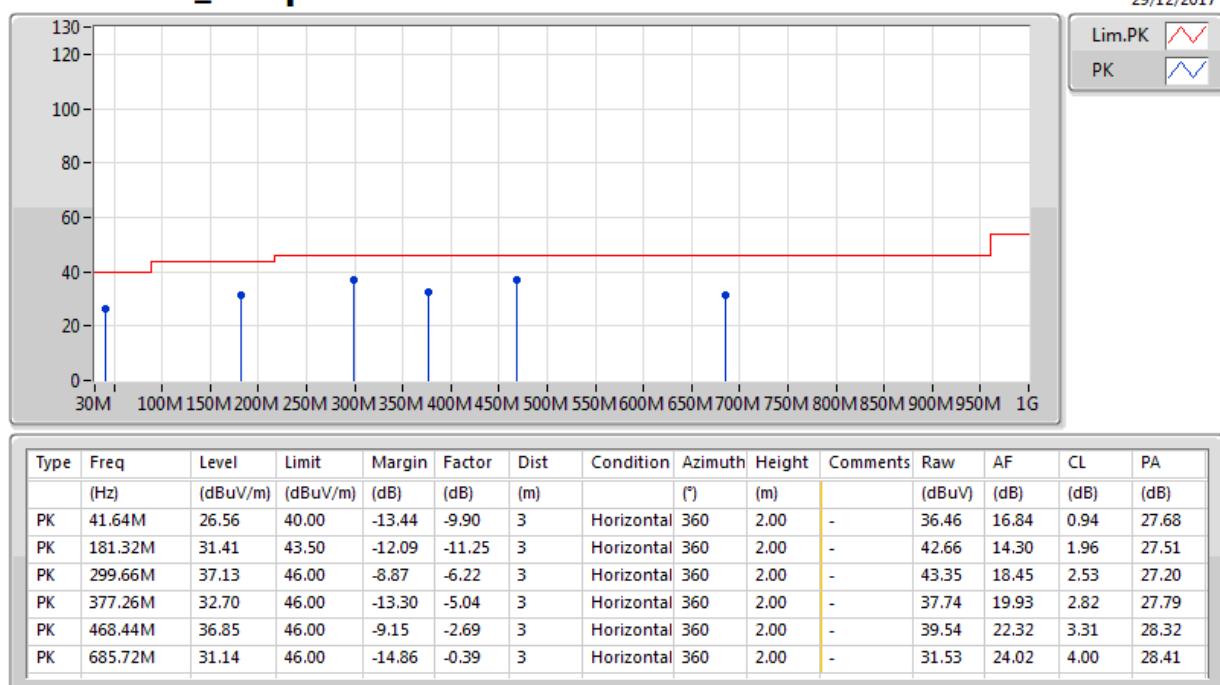
5775MHz_Adapter



**802.11ac VHT80_Nss1,(MCS0)_2TX****5775MHz_Adapter**

802.11ac VHT80_Nss1,(MCS0)_2TX

5775MHz_Adapter



**Summary**

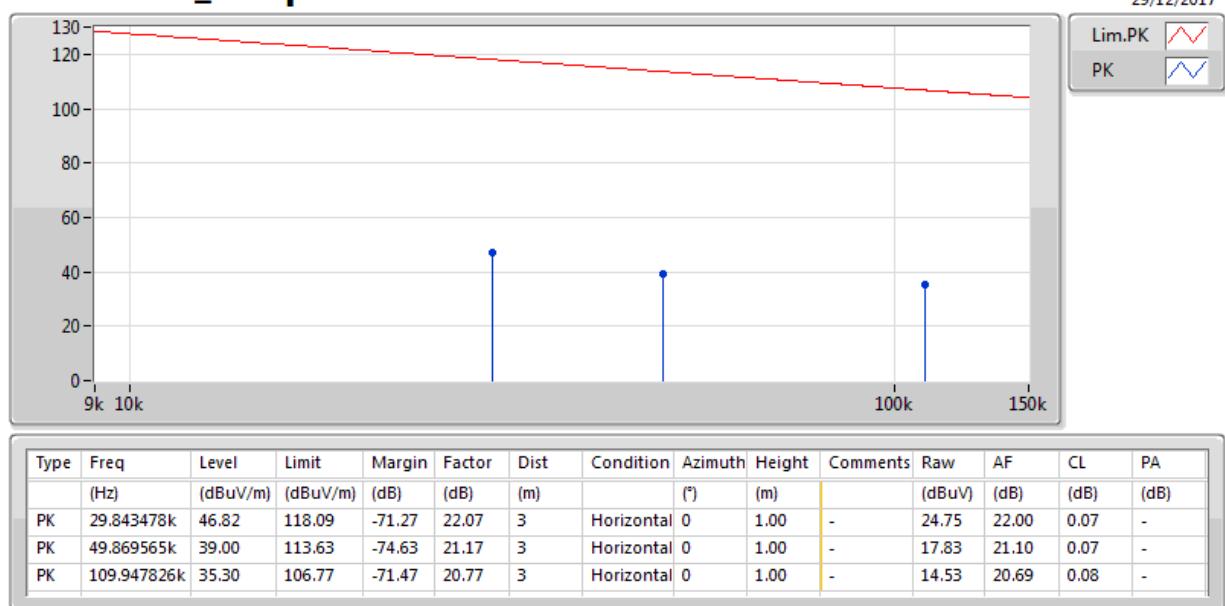
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
VHT80-BF_Nss1,(MCS0)_2TX	Pass	PK	390.84M	42.84	46.00	-3.16	-12.56	3	Vertical	360	1.00	-

**Result**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5775MHz	Pass	PK	29.843478k	46.82	118.09	-71.27	22.07	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	49.869565k	39.00	113.63	-74.63	21.17	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	109.947826k	35.30	106.77	-71.47	20.77	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	1.188261M	36.41	66.13	-29.72	21.01	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	3.567609M	43.60	69.50	-25.90	20.88	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	9.278043M	35.93	69.50	-33.57	21.95	3	Horizontal	360	1.00	-
5775MHz	Pass	PK	132.82M	30.94	43.50	-12.56	-18.03	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	165.8M	32.84	43.50	-10.66	-19.23	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	286.08M	35.73	46.00	-10.27	-15.44	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	303.54M	40.24	46.00	-5.76	-15.03	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	392.78M	40.63	46.00	-5.37	-12.49	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	724.52M	38.13	46.00	-7.87	-6.54	3	Horizontal	0	1.00	-
5775MHz	Pass	PK	49.4M	33.50	40.00	-6.50	-22.39	3	Vertical	360	1.00	-
5775MHz	Pass	PK	163.86M	36.19	43.50	-7.31	-19.06	3	Vertical	360	1.00	-
5775MHz	Pass	PK	299.66M	38.87	46.00	-7.13	-15.09	3	Vertical	360	1.00	-
5775MHz	Pass	PK	390.84M	42.84	46.00	-3.16	-12.56	3	Vertical	360	1.00	-
5775MHz	Pass	PK	703.18M	42.63	46.00	-3.37	-7.14	3	Vertical	360	1.00	-
5775MHz	Pass	QP	462.62M	42.30	46.00	-3.70	-10.60	3	Vertical	236	1.52	-

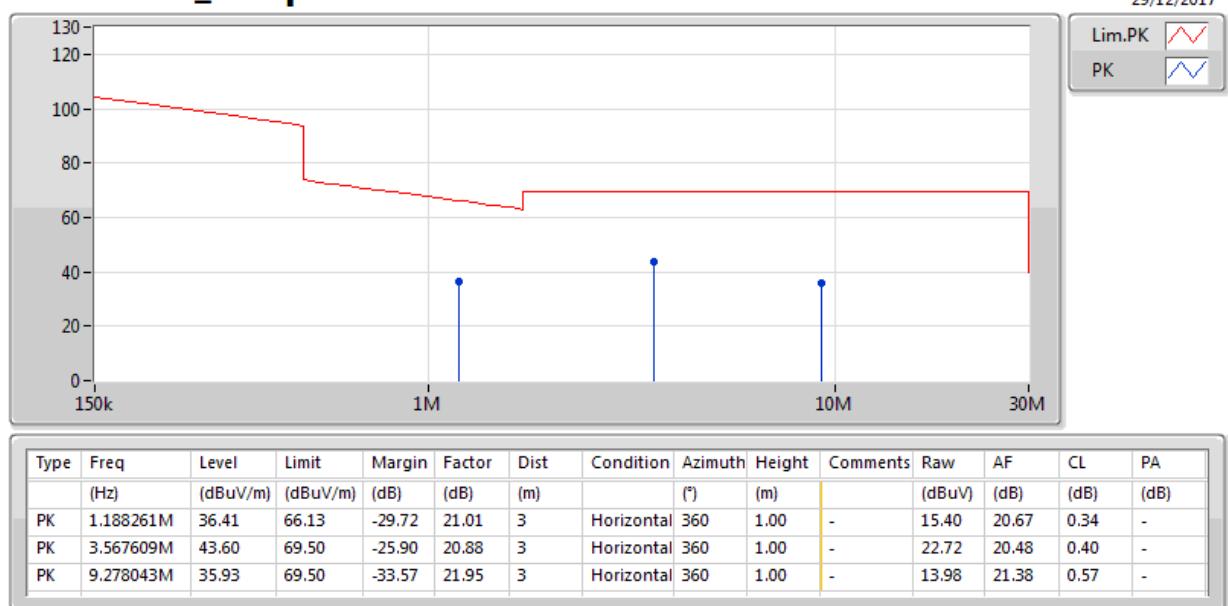
VHT80-BF_Nss1,(MCS0)_2TX

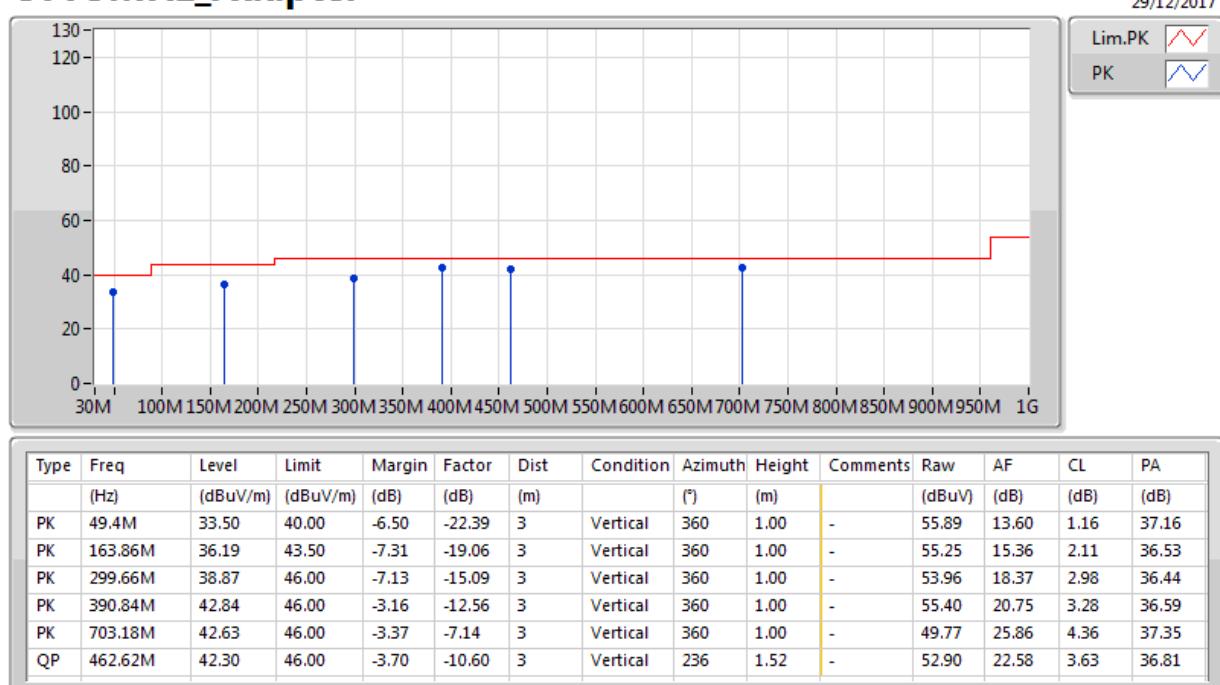
5775MHz_Adapter

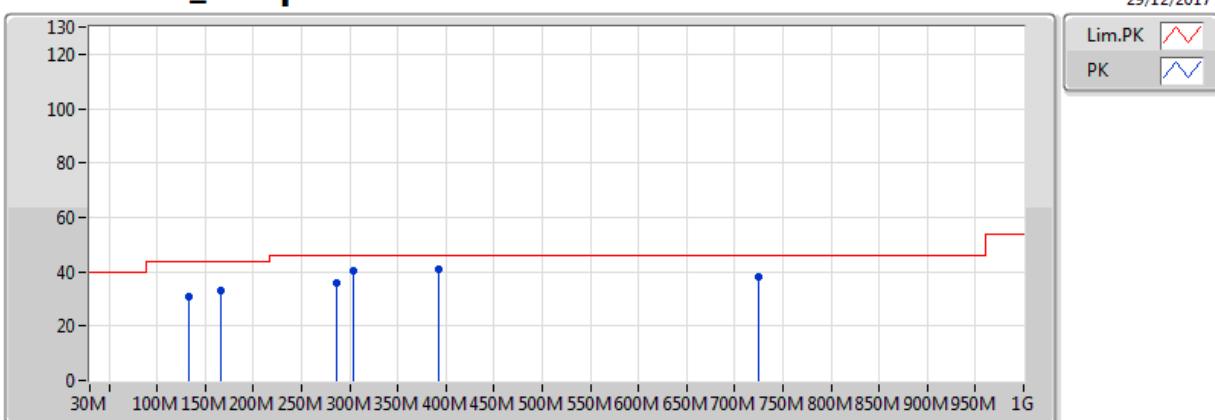


VHT80-BF_Nss1,(MCS0)_2TX

5775MHz_Adapter



**VHT80-BF_Nss1,(MCS0)_2TX****5775MHz_Adapter**

**VHT80-BF_Nss1,(MCS0)_2TX****5775MHz_Adapter**

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	132.82M	30.94	43.50	-12.56	-18.03	3	Horizontal	0	1.00	-	48.97	16.74	1.89	36.66
PK	165.8M	32.84	43.50	-10.66	-19.23	3	Horizontal	0	1.00	-	52.07	15.18	2.12	36.53
PK	286.08M	35.73	46.00	-10.27	-15.44	3	Horizontal	0	1.00	-	51.17	18.13	2.86	36.43
PK	303.54M	40.24	46.00	-5.76	-15.03	3	Horizontal	0	1.00	-	55.27	18.43	2.99	36.45
PK	392.78M	40.63	46.00	-5.37	-12.49	3	Horizontal	0	1.00	-	53.12	20.82	3.29	36.60
PK	724.52M	38.13	46.00	-7.87	-6.54	3	Horizontal	0	1.00	-	44.67	26.43	4.41	37.38

**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	Pass	AV	5.1498G	53.04	54.00	-0.96	4.79	3	Vertical	349	1.02	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	Pass	AV	5.1498G	52.55	54.00	-1.45	4.79	3	Vertical	77	1.24	-
802.11a_Nss1,(6Mbps)_2TX	Pass	AV	5.1474G	53.51	54.00	-0.49	2.73	3	Vertical	8	1.03	-
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	AV	5.1476G	50.22	54.00	-3.78	2.73	3	Vertical	38	1.02	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	AV	5.149995G	53.01	54.00	-0.99	2.73	3	Vertical	39	1.01	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	AV	5.138G	53.60	54.00	-0.40	2.72	3	Vertical	359	1.18	-
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	Pass	AV	11.49G	50.42	54.00	-3.58	15.94	3	Vertical	29	1.53	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	Pass	AV	11.64988G	52.69	54.00	-1.31	15.74	3	Vertical	360	3.48	-
802.11a_Nss1,(6Mbps)_2TX	Pass	AV	11.49G	47.76	54.00	-6.24	13.36	3	Vertical	0	1.01	-
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	AV	11.57G	47.72	54.00	-6.28	13.25	3	Vertical	1	1.01	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	AV	11.50214G	46.15	54.00	-7.85	13.35	3	Vertical	155	1.20	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	PK	5.6442G	66.91	68.20	-1.29	3.22	3	Vertical	13	1.15	-



Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	AV	5.1498G	49.12	54.00	-4.88	4.79	3	Horizontal	274	1.50	-
5180MHz	Pass	AV	5.183G	90.63	Inf	-Inf	4.84	3	Horizontal	274	1.50	-
5180MHz	Pass	PK	5.1468G	59.01	74.00	-14.99	4.79	3	Horizontal	274	1.50	-
5180MHz	Pass	PK	5.1764G	98.18	Inf	-Inf	4.83	3	Horizontal	274	1.50	-
5180MHz	Pass	AV	5.1498G	53.04	54.00	-0.96	4.79	3	Vertical	349	1.02	-
5180MHz	Pass	AV	5.1768G	98.83	Inf	-Inf	4.83	3	Vertical	349	1.02	-
5180MHz	Pass	PK	5.1498G	63.44	74.00	-10.56	4.79	3	Vertical	349	1.02	-
5180MHz	Pass	PK	5.1742G	106.35	Inf	-Inf	4.82	3	Vertical	349	1.02	-
5180MHz	Pass	AV	15.55092G	48.99	54.00	-5.01	17.11	3	Horizontal	49	1.75	-
5180MHz	Pass	PK	15.55032G	59.69	74.00	-14.31	17.12	3	Horizontal	49	1.75	-
5180MHz	Pass	AV	15.54456G	48.95	54.00	-5.05	17.14	3	Vertical	358	1.18	-
5180MHz	Pass	PK	15.54054G	59.37	74.00	-14.63	17.15	3	Vertical	358	1.18	-
5200MHz	Pass	AV	5.1376G	47.10	54.00	-6.90	4.77	3	Horizontal	274	1.50	-
5200MHz	Pass	AV	5.2024G	91.20	Inf	-Inf	4.86	3	Horizontal	274	1.50	-
5200MHz	Pass	PK	5.1008G	57.34	74.00	-16.66	4.72	3	Horizontal	274	1.50	-
5200MHz	Pass	PK	5.2048G	98.47	Inf	-Inf	4.87	3	Horizontal	274	1.50	-
5200MHz	Pass	AV	5.148G	47.55	54.00	-6.45	4.79	3	Vertical	345	1.08	-
5200MHz	Pass	AV	5.1992G	99.48	Inf	-Inf	4.86	3	Vertical	345	1.08	-
5200MHz	Pass	PK	5.1428G	58.30	74.00	-15.70	4.78	3	Vertical	345	1.08	-
5200MHz	Pass	PK	5.1964G	107.06	Inf	-Inf	4.85	3	Vertical	345	1.08	-
5200MHz	Pass	AV	15.60606G	49.15	54.00	-4.85	16.92	3	Horizontal	355	2.08	-
5200MHz	Pass	PK	15.5898G	60.09	74.00	-13.91	16.98	3	Horizontal	355	2.08	-
5200MHz	Pass	AV	15.60738G	49.05	54.00	-4.95	16.92	3	Vertical	43	1.71	-
5200MHz	Pass	PK	15.6144G	59.66	74.00	-14.34	16.89	3	Vertical	43	1.71	-
5240MHz	Pass	AV	5.1188G	47.26	54.00	-6.74	4.75	3	Horizontal	277	1.52	-
5240MHz	Pass	AV	5.243G	91.89	Inf	-Inf	4.92	3	Horizontal	277	1.52	-
5240MHz	Pass	AV	5.3552G	46.52	54.00	-7.48	5.07	3	Horizontal	277	1.52	-
5240MHz	Pass	PK	5.1386G	57.20	74.00	-16.80	4.77	3	Horizontal	277	1.52	-
5240MHz	Pass	PK	5.2424G	99.30	Inf	-Inf	4.92	3	Horizontal	277	1.52	-
5240MHz	Pass	PK	5.3612G	56.67	74.00	-17.33	5.08	3	Horizontal	277	1.52	-
5240MHz	Pass	AV	5.1278G	47.38	54.00	-6.62	4.76	3	Vertical	346	1.09	-
5240MHz	Pass	AV	5.2376G	99.26	Inf	-Inf	4.91	3	Vertical	346	1.09	-
5240MHz	Pass	AV	5.3876G	46.68	54.00	-7.32	5.11	3	Vertical	346	1.09	-
5240MHz	Pass	PK	5.105G	57.68	74.00	-16.32	4.73	3	Vertical	346	1.09	-
5240MHz	Pass	PK	5.2364G	106.77	Inf	-Inf	4.91	3	Vertical	346	1.09	-
5240MHz	Pass	PK	5.3768G	56.67	74.00	-17.33	5.10	3	Vertical	346	1.09	-
5240MHz	Pass	AV	15.70974G	48.62	54.00	-5.38	16.56	3	Horizontal	136	2.00	-
5240MHz	Pass	PK	15.7062G	59.43	74.00	-14.57	16.58	3	Horizontal	136	2.00	-
5240MHz	Pass	AV	15.71934G	48.73	54.00	-5.27	16.53	3	Vertical	166	1.87	-
5240MHz	Pass	PK	15.70884G	59.34	74.00	-14.66	16.57	3	Vertical	166	1.87	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	AV	5.1492G	49.30	54.00	-4.70	4.79	3	Horizontal	203	1.36	-
5180MHz	Pass	AV	5.1768G	91.94	Inf	-Inf	4.83	3	Horizontal	203	1.36	-
5180MHz	Pass	PK	5.1496G	59.07	74.00	-14.93	4.79	3	Horizontal	203	1.36	-
5180MHz	Pass	PK	5.1762G	99.43	Inf	-Inf	4.83	3	Horizontal	203	1.36	-
5180MHz	Pass	AV	5.1498G	52.55	54.00	-1.45	4.79	3	Vertical	77	1.24	-
5180MHz	Pass	AV	5.1828G	97.01	Inf	-Inf	4.84	3	Vertical	77	1.24	-



RSE TX above 1GHz Result – Non-Beamforming

Appendix E.3

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5180MHz	Pass	PK	5.1498G	62.50	74.00	-11.50	4.79	3	Vertical	77	1.24	-
5180MHz	Pass	PK	5.1826G	105.73	Inf	-Inf	4.84	3	Vertical	77	1.24	-
5180MHz	Pass	AV	15.54786G	48.92	54.00	-5.08	17.12	3	Horizontal	251	1.09	-
5180MHz	Pass	PK	15.54054G	59.30	74.00	-14.70	17.15	3	Horizontal	251	1.09	-
5180MHz	Pass	AV	15.54468G	48.93	54.00	-5.07	17.14	3	Vertical	253	1.26	-
5180MHz	Pass	PK	15.54174G	59.71	74.00	-14.29	17.15	3	Vertical	253	1.26	-
5200MHz	Pass	AV	5.1292G	47.23	54.00	-6.77	4.76	3	Horizontal	277	1.52	-
5200MHz	Pass	AV	5.198G	90.20	Inf	-Inf	4.86	3	Horizontal	277	1.52	-
5200MHz	Pass	PK	5.1268G	57.16	74.00	-16.84	4.76	3	Horizontal	277	1.52	-
5200MHz	Pass	PK	5.1964G	97.89	Inf	-Inf	4.85	3	Horizontal	277	1.52	-
5200MHz	Pass	AV	5.1496G	47.56	54.00	-6.44	4.79	3	Vertical	45	2.38	-
5200MHz	Pass	AV	5.1968G	97.18	Inf	-Inf	4.86	3	Vertical	45	2.38	-
5200MHz	Pass	PK	5.1048G	57.30	74.00	-16.70	4.73	3	Vertical	45	2.38	-
5200MHz	Pass	PK	5.1964G	104.89	Inf	-Inf	4.85	3	Vertical	45	2.38	-
5200MHz	Pass	AV	15.58854G	49.05	54.00	-4.95	16.98	3	Horizontal	64	1.64	-
5200MHz	Pass	PK	15.58968G	59.49	74.00	-14.51	16.98	3	Horizontal	64	1.64	-
5200MHz	Pass	AV	15.59496G	49.02	54.00	-4.98	16.96	3	Vertical	292	1.27	-
5200MHz	Pass	PK	15.59466G	59.34	74.00	-14.66	16.96	3	Vertical	292	1.27	-
5240MHz	Pass	AV	5.1386G	47.26	54.00	-6.74	4.77	3	Horizontal	278	1.49	-
5240MHz	Pass	AV	5.243G	90.62	Inf	-Inf	4.92	3	Horizontal	278	1.49	-
5240MHz	Pass	AV	5.3666G	46.60	54.00	-7.40	5.08	3	Horizontal	278	1.49	-
5240MHz	Pass	PK	5.1476G	57.98	74.00	-16.02	4.79	3	Horizontal	278	1.49	-
5240MHz	Pass	PK	5.2424G	98.24	Inf	-Inf	4.92	3	Horizontal	278	1.49	-
5240MHz	Pass	PK	5.381G	56.34	74.00	-17.66	5.10	3	Horizontal	278	1.49	-
5240MHz	Pass	AV	5.1122G	47.45	54.00	-6.55	4.74	3	Vertical	355	1.04	-
5240MHz	Pass	AV	5.243G	97.08	Inf	-Inf	4.92	3	Vertical	355	1.04	-
5240MHz	Pass	AV	5.3714G	46.65	54.00	-7.35	5.09	3	Vertical	355	1.04	-
5240MHz	Pass	PK	5.1242G	57.29	74.00	-16.71	4.75	3	Vertical	355	1.04	-
5240MHz	Pass	PK	5.2424G	104.56	Inf	-Inf	4.92	3	Vertical	355	1.04	-
5240MHz	Pass	PK	5.3528G	56.91	74.00	-17.09	5.06	3	Vertical	355	1.04	-
5240MHz	Pass	AV	15.7155G	48.96	54.00	-5.04	16.54	3	Horizontal	25	1.50	-
5240MHz	Pass	PK	15.72522G	59.12	74.00	-14.88	16.51	3	Horizontal	25	1.50	-
5240MHz	Pass	AV	15.71226G	48.69	54.00	-5.31	16.56	3	Vertical	56	1.87	-
5240MHz	Pass	PK	15.72306G	59.21	74.00	-14.79	16.52	3	Vertical	56	1.87	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	AV	5.7438G	92.90	Inf	-Inf	5.88	3	Horizontal	228	1.50	-
5745MHz	Pass	PK	5.6034G	57.41	68.20	-10.79	5.52	3	Horizontal	228	1.50	-
5745MHz	Pass	PK	5.7474G	100.27	Inf	-Inf	5.89	3	Horizontal	228	1.50	-
5745MHz	Pass	PK	5.9838G	57.97	68.20	-10.23	6.49	3	Horizontal	228	1.50	-
5745MHz	Pass	AV	5.7474G	101.58	Inf	-Inf	5.89	3	Vertical	331	1.50	-
5745MHz	Pass	PK	5.6202G	58.71	68.20	-9.49	5.56	3	Vertical	331	1.50	-
5745MHz	Pass	PK	5.7474G	108.52	Inf	-Inf	5.89	3	Vertical	331	1.50	-
5745MHz	Pass	PK	5.9274G	57.91	68.20	-10.29	6.35	3	Vertical	331	1.50	-
5745MHz	Pass	AV	11.49006G	47.39	54.00	-6.61	15.94	3	Horizontal	259	1.13	-
5745MHz	Pass	PK	11.50314G	57.72	74.00	-16.28	15.93	3	Horizontal	259	1.13	-
5745MHz	Pass	AV	11.49G	50.42	54.00	-3.58	15.94	3	Vertical	29	1.53	-
5745MHz	Pass	PK	11.49144G	60.05	74.00	-13.95	15.94	3	Vertical	29	1.53	-
5785MHz	Pass	AV	5.7874G	93.57	Inf	-Inf	5.99	3	Horizontal	228	1.34	-
5785MHz	Pass	PK	5.599G	57.10	68.20	-11.10	5.51	3	Horizontal	228	1.34	-



RSE TX above 1GHz Result – Non-Beamforming

Appendix E.3

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5785MHz	Pass	PK	5.7814G	100.79	Inf	-Inf	5.97	3	Horizontal	228	1.34	-
5785MHz	Pass	PK	5.9554G	58.18	68.20	-10.02	6.42	3	Horizontal	228	1.34	-
5785MHz	Pass	AV	5.7886G	101.29	Inf	-Inf	5.99	3	Vertical	329	1.50	-
5785MHz	Pass	PK	5.6002G	57.59	68.20	-10.61	5.51	3	Vertical	329	1.50	-
5785MHz	Pass	PK	5.7898G	108.15	Inf	-Inf	5.99	3	Vertical	329	1.50	-
5785MHz	Pass	PK	5.9602G	57.81	68.20	-10.39	6.43	3	Vertical	329	1.50	-
5785MHz	Pass	AV	11.56988G	47.46	54.00	-6.54	15.84	3	Horizontal	88	1.07	-
5785MHz	Pass	PK	11.56352G	57.26	74.00	-16.74	15.85	3	Horizontal	88	1.07	-
5785MHz	Pass	AV	11.57012G	50.34	54.00	-3.66	15.84	3	Vertical	3	1.08	-
5785MHz	Pass	PK	11.5706G	60.27	74.00	-13.73	15.84	3	Vertical	3	1.08	-
5825MHz	Pass	AV	5.8238G	93.47	Inf	-Inf	6.08	3	Horizontal	225	1.33	-
5825MHz	Pass	PK	5.5814G	57.50	68.20	-10.70	5.46	3	Horizontal	225	1.33	-
5825MHz	Pass	PK	5.8214G	101.18	Inf	-Inf	6.08	3	Horizontal	225	1.33	-
5825MHz	Pass	PK	5.9666G	57.91	68.20	-10.29	6.45	3	Horizontal	225	1.33	-
5825MHz	Pass	AV	5.8286G	101.63	Inf	-Inf	6.09	3	Vertical	333	1.56	-
5825MHz	Pass	PK	5.6162G	57.55	68.20	-10.65	5.55	3	Vertical	333	1.56	-
5825MHz	Pass	PK	5.8286G	108.79	Inf	-Inf	6.09	3	Vertical	333	1.56	-
5825MHz	Pass	PK	5.927G	58.66	68.20	-9.54	6.35	3	Vertical	333	1.56	-
5825MHz	Pass	AV	11.65G	47.21	54.00	-6.79	15.74	3	Horizontal	150	1.43	-
5825MHz	Pass	PK	11.752G	56.52	74.00	-17.48	15.61	3	Horizontal	150	1.43	-
5825MHz	Pass	AV	11.64994G	49.90	54.00	-4.10	15.74	3	Vertical	227	1.88	-
5825MHz	Pass	PK	11.65162G	59.86	74.00	-14.14	15.74	3	Vertical	227	1.88	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	AV	5.7414G	92.46	Inf	-Inf	5.87	3	Horizontal	270	1.56	-
5745MHz	Pass	PK	5.6166G	58.78	68.20	-9.42	5.55	3	Horizontal	270	1.56	-
5745MHz	Pass	PK	5.739G	99.79	Inf	-Inf	5.87	3	Horizontal	270	1.56	-
5745MHz	Pass	PK	5.9334G	58.18	68.20	-10.02	6.36	3	Horizontal	270	1.56	-
5745MHz	Pass	AV	5.7438G	97.66	Inf	-Inf	5.88	3	Vertical	349	1.61	-
5745MHz	Pass	PK	5.619G	57.98	68.20	-10.22	5.56	3	Vertical	349	1.61	-
5745MHz	Pass	PK	5.7414G	104.88	Inf	-Inf	5.87	3	Vertical	349	1.61	-
5745MHz	Pass	PK	5.9598G	58.48	68.20	-9.72	6.43	3	Vertical	349	1.61	-
5745MHz	Pass	AV	11.48232G	46.80	54.00	-7.20	15.95	3	Horizontal	135	2.35	-
5745MHz	Pass	PK	11.49108G	57.30	74.00	-16.70	15.94	3	Horizontal	135	2.35	-
5745MHz	Pass	AV	11.48994G	51.77	54.00	-2.23	15.94	3	Vertical	48	2.04	-
5745MHz	Pass	PK	11.49204G	62.56	74.00	-11.44	15.94	3	Vertical	48	2.04	-
5785MHz	Pass	AV	5.7826G	92.04	Inf	-Inf	5.98	3	Horizontal	270	1.55	-
5785MHz	Pass	PK	5.6278G	57.71	68.20	-10.49	5.58	3	Horizontal	270	1.55	-
5785MHz	Pass	PK	5.779G	99.54	Inf	-Inf	5.97	3	Horizontal	270	1.55	-
5785MHz	Pass	PK	5.9458G	58.41	68.20	-9.79	6.39	3	Horizontal	270	1.55	-
5785MHz	Pass	AV	5.7886G	97.37	Inf	-Inf	5.99	3	Vertical	350	1.55	-
5785MHz	Pass	PK	5.647G	57.75	68.20	-10.45	5.63	3	Vertical	350	1.55	-
5785MHz	Pass	PK	5.7886G	104.29	Inf	-Inf	5.99	3	Vertical	350	1.55	-
5785MHz	Pass	PK	5.9494G	57.99	68.20	-10.21	6.40	3	Vertical	350	1.55	-
5785MHz	Pass	AV	11.57486G	46.72	54.00	-7.28	15.83	3	Horizontal	225	2.07	-
5785MHz	Pass	PK	11.56784G	57.67	74.00	-16.33	15.84	3	Horizontal	225	2.07	-
5785MHz	Pass	AV	11.57G	50.45	54.00	-3.55	15.84	3	Vertical	328	2.34	-
5785MHz	Pass	PK	11.57144G	61.17	74.00	-12.83	15.84	3	Vertical	328	2.34	-
5825MHz	Pass	AV	5.8274G	90.85	Inf	-Inf	6.09	3	Horizontal	271	1.38	-
5825MHz	Pass	PK	5.5838G	58.01	68.20	-10.19	5.47	3	Horizontal	271	1.38	-



RSE TX above 1GHz Result – Non-Beamforming

Appendix E.3

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5825MHz	Pass	PK	5.8274G	98.51	Inf	-Inf	6.09	3	Horizontal	271	1.38	-
5825MHz	Pass	PK	5.9834G	58.16	68.20	-10.04	6.49	3	Horizontal	271	1.38	-
5825MHz	Pass	AV	5.8274G	97.99	Inf	-Inf	6.09	3	Vertical	349	1.53	-
5825MHz	Pass	PK	5.6246G	57.74	68.20	-10.46	5.57	3	Vertical	349	1.53	-
5825MHz	Pass	PK	5.8274G	105.39	Inf	-Inf	6.09	3	Vertical	349	1.53	-
5825MHz	Pass	PK	5.9882G	57.82	68.20	-10.38	6.50	3	Vertical	349	1.53	-
5825MHz	Pass	AV	11.57216G	47.43	54.00	-6.57	15.84	3	Horizontal	81	1.56	-
5825MHz	Pass	PK	11.56826G	58.29	74.00	-15.71	15.84	3	Horizontal	81	1.56	-
5825MHz	Pass	AV	11.64988G	52.69	54.00	-1.31	15.74	3	Vertical	360	3.48	-
5825MHz	Pass	PK	11.65168G	62.89	74.00	-11.11	15.74	3	Vertical	360	3.48	-
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	AV	5.149995G	46.46	54.00	-7.54	2.73	3	Horizontal	161	1.38	-
5180MHz	Pass	AV	5.181G	94.99	Inf	-Inf	2.75	3	Horizontal	161	1.38	-
5180MHz	Pass	PK	5.1498G	59.87	74.00	-14.13	2.73	3	Horizontal	161	1.38	-
5180MHz	Pass	PK	5.1858G	105.34	Inf	-Inf	2.75	3	Horizontal	161	1.38	-
5180MHz	Pass	AV	5.1474G	53.51	54.00	-0.49	2.73	3	Vertical	8	1.03	-
5180MHz	Pass	AV	5.1826G	104.82	Inf	-Inf	2.75	3	Vertical	8	1.03	-
5180MHz	Pass	PK	5.1472G	68.21	74.00	-5.79	2.73	3	Vertical	8	1.03	-
5180MHz	Pass	PK	5.1778G	114.49	Inf	-Inf	2.75	3	Vertical	8	1.03	-
5180MHz	Pass	AV	15.53046G	45.94	54.00	-8.06	14.15	3	Horizontal	0	1.50	-
5180MHz	Pass	PK	15.5373G	58.58	74.00	-15.42	14.11	3	Horizontal	0	1.50	-
5180MHz	Pass	AV	15.54144G	46.57	54.00	-7.43	14.09	3	Vertical	360	1.50	-
5180MHz	Pass	PK	15.54456G	58.85	74.00	-15.15	14.08	3	Vertical	360	1.50	-
5200MHz	Pass	AV	5.1044G	43.10	54.00	-10.90	2.70	3	Horizontal	232	2.40	-
5200MHz	Pass	AV	5.1956G	94.79	Inf	-Inf	2.76	3	Horizontal	232	2.40	-
5200MHz	Pass	PK	5.1168G	55.71	74.00	-18.29	2.71	3	Horizontal	232	2.40	-
5200MHz	Pass	PK	5.2056G	105.17	Inf	-Inf	2.76	3	Horizontal	232	2.40	-
5200MHz	Pass	AV	5.149995G	43.75	54.00	-10.25	2.73	3	Vertical	0	2.46	-
5200MHz	Pass	AV	5.1968G	103.38	Inf	-Inf	2.76	3	Vertical	0	2.46	-
5200MHz	Pass	PK	5.149995G	57.11	74.00	-16.89	2.73	3	Vertical	0	2.46	-
5200MHz	Pass	PK	5.1968G	113.63	Inf	-Inf	2.76	3	Vertical	0	2.46	-
5200MHz	Pass	AV	15.5973G	45.79	54.00	-8.21	13.83	3	Horizontal	360	1.50	-
5200MHz	Pass	PK	15.58596G	58.38	74.00	-15.62	13.88	3	Horizontal	360	1.50	-
5200MHz	Pass	AV	15.61362G	45.61	54.00	-8.39	13.75	3	Vertical	0	1.50	-
5200MHz	Pass	PK	15.61398G	58.58	74.00	-15.42	13.75	3	Vertical	0	1.50	-
5240MHz	Pass	AV	5.0984G	43.23	54.00	-10.77	2.70	3	Horizontal	232	2.47	-
5240MHz	Pass	AV	5.2358G	94.05	Inf	-Inf	2.78	3	Horizontal	232	2.47	-
5240MHz	Pass	AV	5.3798G	43.55	54.00	-10.45	2.87	3	Horizontal	232	2.47	-
5240MHz	Pass	PK	5.1146G	55.20	74.00	-18.80	2.71	3	Horizontal	232	2.47	-
5240MHz	Pass	PK	5.246G	104.26	Inf	-Inf	2.79	3	Horizontal	232	2.47	-
5240MHz	Pass	PK	5.378G	55.96	74.00	-18.04	2.87	3	Horizontal	232	2.47	-
5240MHz	Pass	AV	5.0996G	43.35	54.00	-10.65	2.70	3	Vertical	0	1.07	-
5240MHz	Pass	AV	5.2424G	103.69	Inf	-Inf	2.79	3	Vertical	0	1.07	-
5240MHz	Pass	AV	5.3846G	43.71	54.00	-10.29	2.87	3	Vertical	0	1.07	-
5240MHz	Pass	PK	5.102G	55.19	74.00	-18.81	2.70	3	Vertical	0	1.07	-
5240MHz	Pass	PK	5.237G	113.46	Inf	-Inf	2.78	3	Vertical	0	1.07	-
5240MHz	Pass	PK	5.3516G	55.79	74.00	-18.21	2.85	3	Vertical	0	1.07	-
5240MHz	Pass	AV	15.7077G	44.75	54.00	-9.25	13.31	3	Horizontal	360	1.50	-
5240MHz	Pass	PK	15.7236G	57.63	74.00	-16.37	13.23	3	Horizontal	360	1.50	-



RSE TX above 1GHz Result – Non-Beamforming

Appendix E.3

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5240MHz	Pass	AV	15.7071G	44.89	54.00	-9.11	13.31	3	Vertical	0	1.50	-
5240MHz	Pass	PK	15.71124G	57.57	74.00	-16.43	13.29	3	Vertical	0	1.50	-
5745MHz	Pass	AV	5.7462G	97.84	Inf	-Inf	3.43	3	Horizontal	190	2.98	-
5745MHz	Pass	PK	5.4762G	55.66	68.20	-12.54	2.92	3	Horizontal	190	2.98	-
5745MHz	Pass	PK	5.7462G	107.08	Inf	-Inf	3.43	3	Horizontal	190	2.98	-
5745MHz	Pass	PK	5.955G	56.00	68.20	-12.20	3.86	3	Horizontal	190	2.98	-
5745MHz	Pass	AV	5.7486G	105.95	Inf	-Inf	3.44	3	Vertical	13	1.01	-
5745MHz	Pass	PK	5.4666G	56.13	68.20	-12.07	2.91	3	Vertical	13	1.01	-
5745MHz	Pass	PK	5.7474G	115.74	Inf	-Inf	3.43	3	Vertical	13	1.01	-
5745MHz	Pass	PK	5.9826G	55.91	68.20	-12.29	3.92	3	Vertical	13	1.01	-
5745MHz	Pass	AV	11.49G	43.05	54.00	-10.95	13.36	3	Horizontal	107	1.89	-
5745MHz	Pass	PK	11.49G	57.14	74.00	-16.86	13.36	3	Horizontal	107	1.89	-
5745MHz	Pass	AV	11.49G	47.76	54.00	-6.24	13.36	3	Vertical	0	1.01	-
5745MHz	Pass	PK	11.49G	60.51	74.00	-13.49	13.36	3	Vertical	0	1.01	-
5785MHz	Pass	AV	5.7862G	97.32	Inf	-Inf	3.52	3	Horizontal	191	2.83	-
5785MHz	Pass	PK	5.6086G	56.04	68.20	-12.16	3.15	3	Horizontal	191	2.83	-
5785MHz	Pass	PK	5.7814G	106.74	Inf	-Inf	3.51	3	Horizontal	191	2.83	-
5785MHz	Pass	PK	5.9542G	55.69	68.20	-12.51	3.86	3	Horizontal	191	2.83	-
5785MHz	Pass	AV	5.7874G	105.66	Inf	-Inf	3.52	3	Vertical	11	1.21	-
5785MHz	Pass	PK	5.5126G	55.36	68.20	-12.84	2.96	3	Vertical	11	1.21	-
5785MHz	Pass	PK	5.7826G	114.74	Inf	-Inf	3.51	3	Vertical	11	1.21	-
5785MHz	Pass	PK	5.9266G	56.23	68.20	-11.97	3.80	3	Vertical	11	1.21	-
5785MHz	Pass	AV	11.57G	41.95	54.00	-12.05	13.25	3	Horizontal	192	1.27	-
5785MHz	Pass	PK	11.57G	54.87	74.00	-19.13	13.25	3	Horizontal	192	1.27	-
5785MHz	Pass	AV	11.57G	47.64	54.00	-6.36	13.25	3	Vertical	2	1.01	-
5785MHz	Pass	PK	11.57G	61.23	74.00	-12.77	13.25	3	Vertical	2	1.01	-
5825MHz	Pass	AV	5.8262G	96.38	Inf	-Inf	3.60	3	Horizontal	190	3.37	-
5825MHz	Pass	PK	5.6078G	55.95	68.20	-12.25	3.15	3	Horizontal	190	3.37	-
5825MHz	Pass	PK	5.831G	106.34	Inf	-Inf	3.61	3	Horizontal	190	3.37	-
5825MHz	Pass	PK	5.9774G	57.14	68.20	-11.06	3.90	3	Horizontal	190	3.37	-
5825MHz	Pass	AV	5.8226G	106.16	Inf	-Inf	3.60	3	Vertical	10	1.02	-
5825MHz	Pass	PK	5.567G	56.55	68.20	-11.65	3.06	3	Vertical	10	1.02	-
5825MHz	Pass	PK	5.8274G	115.73	Inf	-Inf	3.60	3	Vertical	10	1.02	-
5825MHz	Pass	PK	5.9822G	55.53	68.20	-12.67	3.91	3	Vertical	10	1.02	-
5825MHz	Pass	AV	11.65G	42.93	54.00	-11.07	13.15	3	Horizontal	190	1.06	-
5825MHz	Pass	PK	11.65G	55.71	74.00	-18.29	13.15	3	Horizontal	190	1.06	-
5825MHz	Pass	AV	11.65G	47.72	54.00	-6.28	13.15	3	Vertical	352	1.03	-
5825MHz	Pass	PK	11.65G	60.13	74.00	-13.87	13.15	3	Vertical	352	1.03	-
802.11ac VHT20_Nss1_(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	AV	5.149995G	45.79	54.00	-8.21	2.73	3	Horizontal	247	2.94	-
5180MHz	Pass	AV	5.1772G	96.15	Inf	-Inf	2.75	3	Horizontal	247	2.94	-
5180MHz	Pass	PK	5.1498G	59.99	74.00	-14.01	2.73	3	Horizontal	247	2.94	-
5180MHz	Pass	PK	5.1772G	106.81	Inf	-Inf	2.75	3	Horizontal	247	2.94	-
5180MHz	Pass	AV	5.1476G	50.22	54.00	-3.78	2.73	3	Vertical	38	1.02	-
5180MHz	Pass	AV	5.1834G	102.35	Inf	-Inf	2.75	3	Vertical	38	1.02	-
5180MHz	Pass	PK	5.146G	67.83	74.00	-6.17	2.73	3	Vertical	38	1.02	-
5180MHz	Pass	PK	5.1818G	113.24	Inf	-Inf	2.75	3	Vertical	38	1.02	-
5180MHz	Pass	AV	15.54342G	45.68	54.00	-8.32	14.08	3	Horizontal	55	1.14	-
5180MHz	Pass	PK	15.55104G	59.71	74.00	-14.29	14.05	3	Horizontal	55	1.14	-



RSE TX above 1GHz Result – Non-Beamforming

Appendix E.3

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5180MHz	Pass	AV	15.54618G	45.52	54.00	-8.48	14.07	3	Vertical	335	1.50	-
5180MHz	Pass	PK	15.54624G	58.74	74.00	-15.26	14.07	3	Vertical	335	1.50	-
5200MHz	Pass	AV	5.1028G	42.79	54.00	-11.21	2.70	3	Horizontal	248	3.03	-
5200MHz	Pass	AV	5.1976G	96.10	Inf	-Inf	2.76	3	Horizontal	248	3.03	-
5200MHz	Pass	PK	5.1052G	54.78	74.00	-19.22	2.70	3	Horizontal	248	3.03	-
5200MHz	Pass	PK	5.1972G	106.53	Inf	-Inf	2.76	3	Horizontal	248	3.03	-
5200MHz	Pass	AV	5.1024G	43.05	54.00	-10.95	2.70	3	Vertical	23	1.01	-
5200MHz	Pass	AV	5.1976G	102.81	Inf	-Inf	2.76	3	Vertical	23	1.01	-
5200MHz	Pass	PK	5.1472G	55.51	74.00	-18.49	2.73	3	Vertical	23	1.01	-
5200MHz	Pass	PK	5.1996G	113.05	Inf	-Inf	2.76	3	Vertical	23	1.01	-
5200MHz	Pass	AV	15.597G	45.46	54.00	-8.54	13.83	3	Horizontal	246	2.37	-
5200MHz	Pass	PK	15.5871G	58.51	74.00	-15.49	13.88	3	Horizontal	246	2.37	-
5200MHz	Pass	AV	15.60504G	45.75	54.00	-8.25	13.79	3	Vertical	16	1.86	-
5200MHz	Pass	PK	15.59646G	58.66	74.00	-15.34	13.83	3	Vertical	16	1.86	-
5240MHz	Pass	AV	5.1104G	42.94	54.00	-11.06	2.71	3	Horizontal	244	3.01	-
5240MHz	Pass	AV	5.2376G	95.51	Inf	-Inf	2.78	3	Horizontal	244	3.01	-
5240MHz	Pass	AV	5.3882G	43.03	54.00	-10.97	2.87	3	Horizontal	244	3.01	-
5240MHz	Pass	PK	5.1194G	55.73	74.00	-18.27	2.71	3	Horizontal	244	3.01	-
5240MHz	Pass	PK	5.237G	106.18	Inf	-Inf	2.78	3	Horizontal	244	3.01	-
5240MHz	Pass	PK	5.3864G	55.53	74.00	-18.47	2.87	3	Horizontal	244	3.01	-
5240MHz	Pass	AV	5.1092G	42.90	54.00	-11.10	2.71	3	Vertical	357	1.08	-
5240MHz	Pass	AV	5.2454G	103.37	Inf	-Inf	2.79	3	Vertical	357	1.08	-
5240MHz	Pass	AV	5.363G	43.14	54.00	-10.86	2.86	3	Vertical	357	1.08	-
5240MHz	Pass	PK	5.1008G	55.89	74.00	-18.11	2.70	3	Vertical	357	1.08	-
5240MHz	Pass	PK	5.2454G	113.72	Inf	-Inf	2.79	3	Vertical	357	1.08	-
5240MHz	Pass	PK	5.3708G	55.67	74.00	-18.33	2.86	3	Vertical	357	1.08	-
5240MHz	Pass	AV	15.71106G	44.27	54.00	-9.73	13.29	3	Horizontal	292	1.44	-
5240MHz	Pass	PK	15.73038G	58.08	74.00	-15.92	13.20	3	Horizontal	292	1.44	-
5240MHz	Pass	AV	15.72336G	44.49	54.00	-9.51	13.23	3	Vertical	21	1.95	-
5240MHz	Pass	PK	15.7245G	58.12	74.00	-15.88	13.23	3	Vertical	21	1.95	-
5745MHz	Pass	AV	5.7486G	97.60	Inf	-Inf	3.44	3	Horizontal	190	2.97	-
5745MHz	Pass	PK	5.6046G	57.04	68.20	-11.16	3.14	3	Horizontal	190	2.97	-
5745MHz	Pass	PK	5.7474G	108.63	Inf	-Inf	3.43	3	Horizontal	190	2.97	-
5745MHz	Pass	PK	5.967G	56.54	68.20	-11.66	3.88	3	Horizontal	190	2.97	-
5745MHz	Pass	AV	5.7426G	105.60	Inf	-Inf	3.42	3	Vertical	26	1.11	-
5745MHz	Pass	PK	5.5482G	56.85	68.20	-11.35	3.03	3	Vertical	26	1.11	-
5745MHz	Pass	PK	5.7426G	115.94	Inf	-Inf	3.42	3	Vertical	26	1.11	-
5745MHz	Pass	PK	5.9622G	56.39	68.20	-11.81	3.87	3	Vertical	26	1.11	-
5745MHz	Pass	AV	11.49G	42.33	54.00	-11.67	13.36	3	Horizontal	358	1.15	-
5745MHz	Pass	PK	11.49G	56.00	74.00	-18.00	13.36	3	Horizontal	358	1.15	-
5745MHz	Pass	AV	11.49G	46.25	54.00	-7.75	13.36	3	Vertical	3	1.03	-
5745MHz	Pass	PK	11.49G	58.91	74.00	-15.09	13.36	3	Vertical	3	1.03	-
5785MHz	Pass	AV	5.7886G	97.56	Inf	-Inf	3.52	3	Horizontal	189	2.71	-
5785MHz	Pass	PK	5.5654G	56.18	68.20	-12.02	3.06	3	Horizontal	189	2.71	-
5785MHz	Pass	PK	5.7874G	108.44	Inf	-Inf	3.52	3	Horizontal	189	2.71	-
5785MHz	Pass	PK	5.9578G	56.97	68.20	-11.23	3.87	3	Horizontal	189	2.71	-
5785MHz	Pass	AV	5.779G	105.83	Inf	-Inf	3.50	3	Vertical	16	1.13	-
5785MHz	Pass	PK	5.6218G	56.88	68.20	-11.32	3.17	3	Vertical	16	1.13	-
5785MHz	Pass	PK	5.7802G	116.14	Inf	-Inf	3.51	3	Vertical	16	1.13	-



RSE TX above 1GHz Result – Non-Beamforming

Appendix E.3

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5785MHz	Pass	PK	5.9278G	56.80	68.20	-11.40	3.81	3	Vertical	16	1.13	-
5785MHz	Pass	AV	11.57G	42.31	54.00	-11.69	13.25	3	Horizontal	319	1.08	-
5785MHz	Pass	PK	11.57G	57.46	74.00	-16.54	13.25	3	Horizontal	319	1.08	-
5785MHz	Pass	AV	11.57G	47.72	54.00	-6.28	13.25	3	Vertical	1	1.01	-
5785MHz	Pass	PK	11.57G	63.05	74.00	-10.95	13.25	3	Vertical	1	1.01	-
5825MHz	Pass	AV	5.8274G	97.62	Inf	-Inf	3.60	3	Horizontal	189	2.93	-
5825MHz	Pass	PK	5.5802G	55.90	68.20	-12.30	3.09	3	Horizontal	189	2.93	-
5825MHz	Pass	PK	5.8286G	107.49	Inf	-Inf	3.61	3	Horizontal	189	2.93	-
5825MHz	Pass	PK	5.9714G	55.76	68.20	-12.44	3.89	3	Horizontal	189	2.93	-
5825MHz	Pass	AV	5.8178G	105.78	Inf	-Inf	3.59	3	Vertical	15	1.01	-
5825MHz	Pass	PK	5.639G	56.05	68.20	-12.15	3.21	3	Vertical	15	1.01	-
5825MHz	Pass	PK	5.819G	115.60	Inf	-Inf	3.59	3	Vertical	15	1.01	-
5825MHz	Pass	PK	5.969G	56.58	68.20	-11.62	3.89	3	Vertical	15	1.01	-
5825MHz	Pass	AV	11.65G	42.31	54.00	-11.69	13.15	3	Horizontal	354	1.04	-
5825MHz	Pass	PK	11.65G	55.19	74.00	-18.81	13.15	3	Horizontal	354	1.04	-
5825MHz	Pass	AV	11.65G	46.96	54.00	-7.04	13.15	3	Vertical	350	1.03	-
5825MHz	Pass	PK	11.65G	60.36	74.00	-13.64	13.15	3	Vertical	350	1.03	-
802.11ac VHT40_Nss1_(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	AV	5.149995G	48.45	54.00	-5.55	2.73	3	Horizontal	237	2.38	-
5190MHz	Pass	AV	5.192G	89.94	Inf	-Inf	2.76	3	Horizontal	237	2.38	-
5190MHz	Pass	PK	5.1496G	61.55	74.00	-12.45	2.73	3	Horizontal	237	2.38	-
5190MHz	Pass	PK	5.1916G	99.43	Inf	-Inf	2.75	3	Horizontal	237	2.38	-
5190MHz	Pass	AV	5.149995G	53.01	54.00	-0.99	2.73	3	Vertical	39	1.01	-
5190MHz	Pass	AV	5.1948G	98.65	Inf	-Inf	2.76	3	Vertical	39	1.01	-
5190MHz	Pass	PK	5.1456G	65.90	74.00	-8.10	2.73	3	Vertical	39	1.01	-
5190MHz	Pass	PK	5.194G	108.10	Inf	-Inf	2.76	3	Vertical	39	1.01	-
5190MHz	Pass	AV	15.55908G	47.98	54.00	-6.02	14.01	3	Horizontal	254	1.10	-
5190MHz	Pass	PK	15.55626G	61.33	74.00	-12.67	14.02	3	Horizontal	254	1.10	-
5190MHz	Pass	AV	15.55662G	48.14	54.00	-5.86	14.02	3	Vertical	160	1.07	-
5190MHz	Pass	PK	15.56808G	62.22	74.00	-11.78	13.97	3	Vertical	160	1.07	-
5230MHz	Pass	AV	5.1308G	43.13	54.00	-10.87	2.72	3	Horizontal	161	2.19	-
5230MHz	Pass	AV	5.232G	90.92	Inf	-Inf	2.78	3	Horizontal	161	2.19	-
5230MHz	Pass	PK	5.1352G	55.62	74.00	-18.38	2.72	3	Horizontal	161	2.19	-
5230MHz	Pass	PK	5.2324G	99.99	Inf	-Inf	2.78	3	Horizontal	161	2.19	-
5230MHz	Pass	AV	5.149995G	44.20	54.00	-9.80	2.73	3	Vertical	357	1.06	-
5230MHz	Pass	AV	5.2348G	100.53	Inf	-Inf	2.78	3	Vertical	357	1.06	-
5230MHz	Pass	PK	5.1496G	57.68	74.00	-16.32	2.73	3	Vertical	357	1.06	-
5230MHz	Pass	PK	5.2344G	110.14	Inf	-Inf	2.78	3	Vertical	357	1.06	-
5230MHz	Pass	AV	15.68148G	46.72	54.00	-7.28	13.43	3	Horizontal	111	1.50	-
5230MHz	Pass	PK	15.69582G	59.65	74.00	-14.35	13.36	3	Horizontal	111	1.50	-
5230MHz	Pass	AV	15.67752G	46.61	54.00	-7.39	13.45	3	Vertical	297	1.50	-
5230MHz	Pass	PK	15.6804G	60.77	74.00	-13.23	13.43	3	Vertical	297	1.50	-
5755MHz	Pass	AV	5.7586G	94.75	Inf	-Inf	3.46	3	Horizontal	190	2.98	-
5755MHz	Pass	PK	5.6194G	56.17	68.20	-12.03	3.17	3	Horizontal	190	2.98	-
5755MHz	Pass	PK	5.7598G	104.12	Inf	-Inf	3.46	3	Horizontal	190	2.98	-
5755MHz	Pass	PK	5.9254G	56.37	68.20	-11.83	3.80	3	Horizontal	190	2.98	-
5755MHz	Pass	AV	5.7466G	102.82	Inf	-Inf	3.43	3	Vertical	13	1.07	-
5755MHz	Pass	PK	5.6458G	57.36	68.20	-10.84	3.22	3	Vertical	13	1.07	-
5755MHz	Pass	PK	5.7466G	112.46	Inf	-Inf	3.43	3	Vertical	13	1.07	-



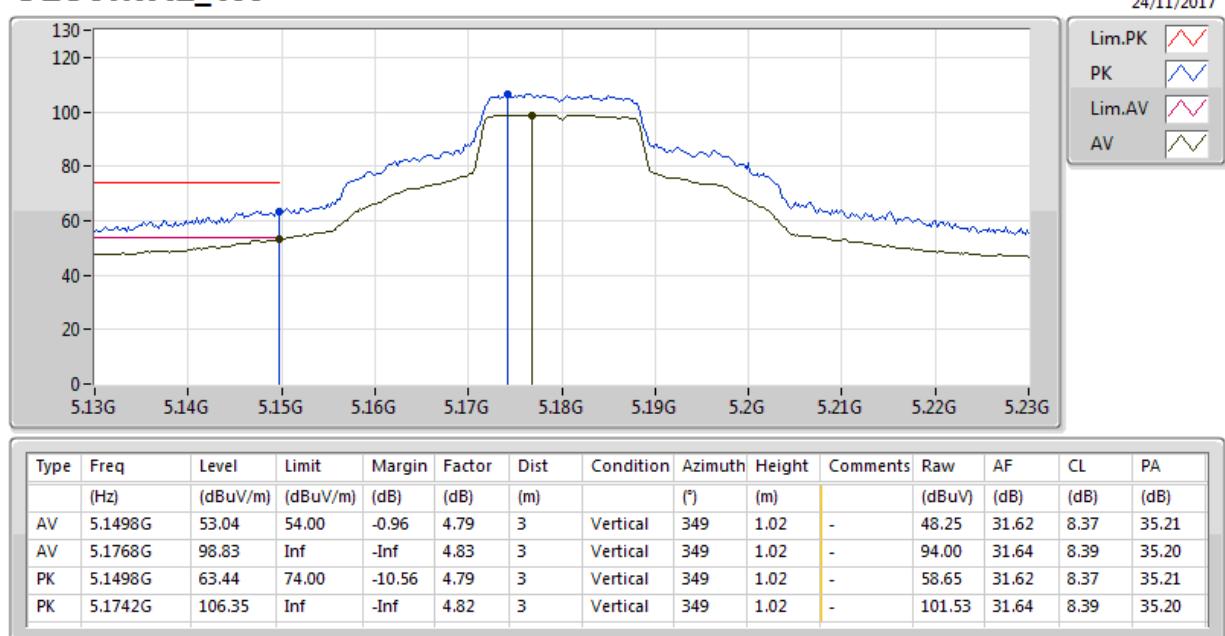
RSE TX above 1GHz Result – Non-Beamforming

Appendix E.3

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5755MHz	Pass	PK	5.9506G	56.63	68.20	-11.57	3.85	3	Vertical	13	1.07	-
5755MHz	Pass	AV	11.50496G	44.19	54.00	-9.81	13.34	3	Horizontal	206	2.14	-
5755MHz	Pass	PK	11.50694G	57.03	74.00	-16.97	13.34	3	Horizontal	206	2.14	-
5755MHz	Pass	AV	11.50214G	46.15	54.00	-7.85	13.35	3	Vertical	155	1.20	-
5755MHz	Pass	PK	11.50304G	58.90	74.00	-15.10	13.35	3	Vertical	155	1.20	-
5795MHz	Pass	AV	5.7986G	95.43	Inf	-Inf	3.55	3	Horizontal	190	3.39	-
5795MHz	Pass	PK	5.6246G	56.24	68.20	-11.96	3.18	3	Horizontal	190	3.39	-
5795MHz	Pass	PK	5.7986G	104.81	Inf	-Inf	3.55	3	Horizontal	190	3.39	-
5795MHz	Pass	PK	5.9378G	56.29	68.20	-11.91	3.83	3	Horizontal	190	3.39	-
5795MHz	Pass	AV	5.7878G	103.63	Inf	-Inf	3.52	3	Vertical	15	1.12	-
5795MHz	Pass	PK	5.495G	56.36	68.20	-11.84	2.93	3	Vertical	15	1.12	-
5795MHz	Pass	PK	5.7878G	112.95	Inf	-Inf	3.52	3	Vertical	15	1.12	-
5795MHz	Pass	PK	5.9402G	56.54	68.20	-11.66	3.83	3	Vertical	15	1.12	-
5795MHz	Pass	AV	11.58568G	44.83	54.00	-9.17	13.23	3	Horizontal	207	2.07	-
5795MHz	Pass	PK	11.60332G	58.13	74.00	-15.87	13.21	3	Horizontal	207	2.07	-
5795MHz	Pass	AV	11.584G	45.84	54.00	-8.16	13.24	3	Vertical	155	1.17	-
5795MHz	Pass	PK	11.60212G	59.03	74.00	-14.97	13.21	3	Vertical	155	1.17	-
802.11ac VHT80_Nss1.(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	AV	5.145G	48.18	54.00	-5.82	2.73	3	Horizontal	248	2.88	-
5210MHz	Pass	AV	5.206G	84.81	Inf	-Inf	2.76	3	Horizontal	248	2.88	-
5210MHz	Pass	AV	5.426G	43.64	54.00	-10.36	2.89	3	Horizontal	248	2.88	-
5210MHz	Pass	PK	5.128G	61.06	74.00	-12.94	2.72	3	Horizontal	248	2.88	-
5210MHz	Pass	PK	5.204G	95.19	Inf	-Inf	2.76	3	Horizontal	248	2.88	-
5210MHz	Pass	PK	5.431G	55.91	74.00	-18.09	2.90	3	Horizontal	248	2.88	-
5210MHz	Pass	AV	5.138G	53.60	54.00	-0.40	2.72	3	Vertical	359	1.18	-
5210MHz	Pass	AV	5.217G	92.67	Inf	-Inf	2.77	3	Vertical	359	1.18	-
5210MHz	Pass	AV	5.367G	44.08	54.00	-9.92	2.86	3	Vertical	359	1.18	-
5210MHz	Pass	PK	5.138G	67.20	74.00	-6.80	2.72	3	Vertical	359	1.18	-
5210MHz	Pass	PK	5.217G	102.27	Inf	-Inf	2.77	3	Vertical	359	1.18	-
5210MHz	Pass	PK	5.378G	56.35	74.00	-17.65	2.87	3	Vertical	359	1.18	-
5210MHz	Pass	AV	15.62136G	47.42	54.00	-6.58	13.71	3	Horizontal	300	3.13	-
5210MHz	Pass	PK	15.62358G	61.19	74.00	-12.81	13.70	3	Horizontal	300	3.13	-
5210MHz	Pass	AV	15.61698G	47.64	54.00	-6.36	13.74	3	Vertical	215	1.85	-
5210MHz	Pass	PK	15.63636G	60.85	74.00	-13.15	13.64	3	Vertical	215	1.85	-
5775MHz	Pass	AV	5.7786G	90.00	Inf	-Inf	3.50	3	Horizontal	190	1.14	-
5775MHz	Pass	PK	5.6418G	59.06	68.20	-9.14	3.21	3	Horizontal	190	1.14	-
5775MHz	Pass	PK	5.7774G	99.92	Inf	-Inf	3.50	3	Horizontal	190	1.14	-
5775MHz	Pass	PK	5.937G	56.65	68.20	-11.55	3.82	3	Horizontal	190	1.14	-
5775MHz	Pass	AV	5.787G	99.24	Inf	-Inf	3.52	3	Vertical	13	1.15	-
5775MHz	Pass	PK	5.6442G	66.91	68.20	-1.29	3.22	3	Vertical	13	1.15	-
5775MHz	Pass	PK	5.7882G	109.08	Inf	-Inf	3.52	3	Vertical	13	1.15	-
5775MHz	Pass	PK	5.9298G	59.03	68.20	-9.17	3.81	3	Vertical	13	1.15	-
5775MHz	Pass	AV	11.54442G	43.64	54.00	-10.36	13.29	3	Horizontal	208	2.03	-
5775MHz	Pass	PK	11.54502G	56.34	74.00	-17.66	13.29	3	Horizontal	208	2.03	-
5775MHz	Pass	AV	11.55006G	44.86	54.00	-9.14	13.28	3	Vertical	158	3.07	-
5775MHz	Pass	PK	11.56254G	56.79	74.00	-17.21	13.26	3	Vertical	158	3.07	-

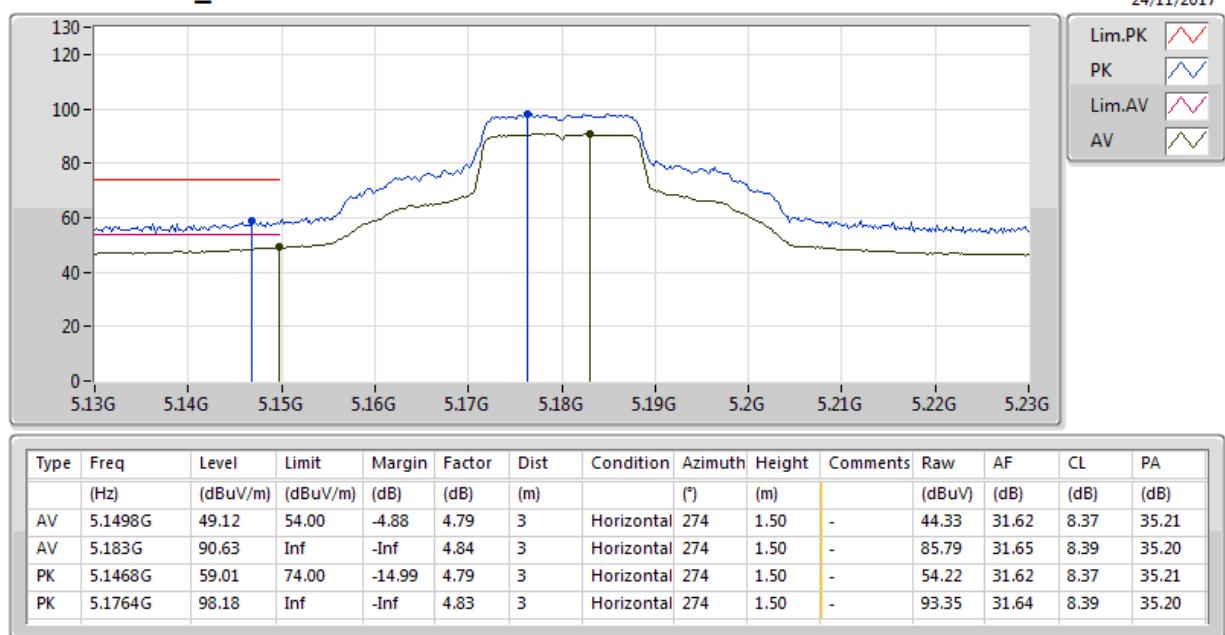
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5180MHz_TX



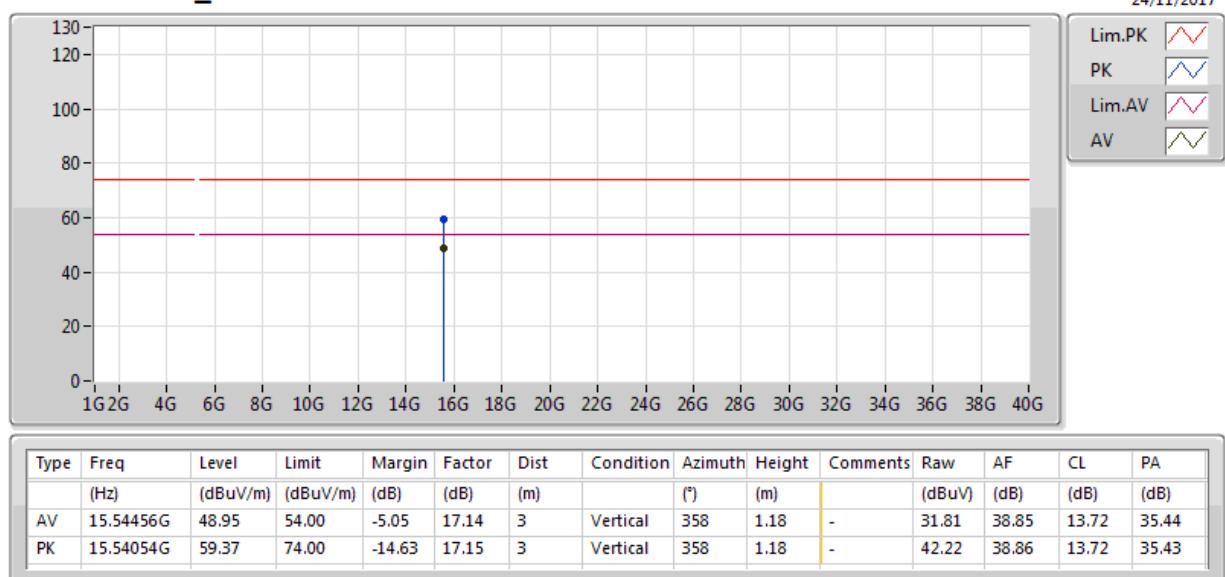
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5180MHz_TX



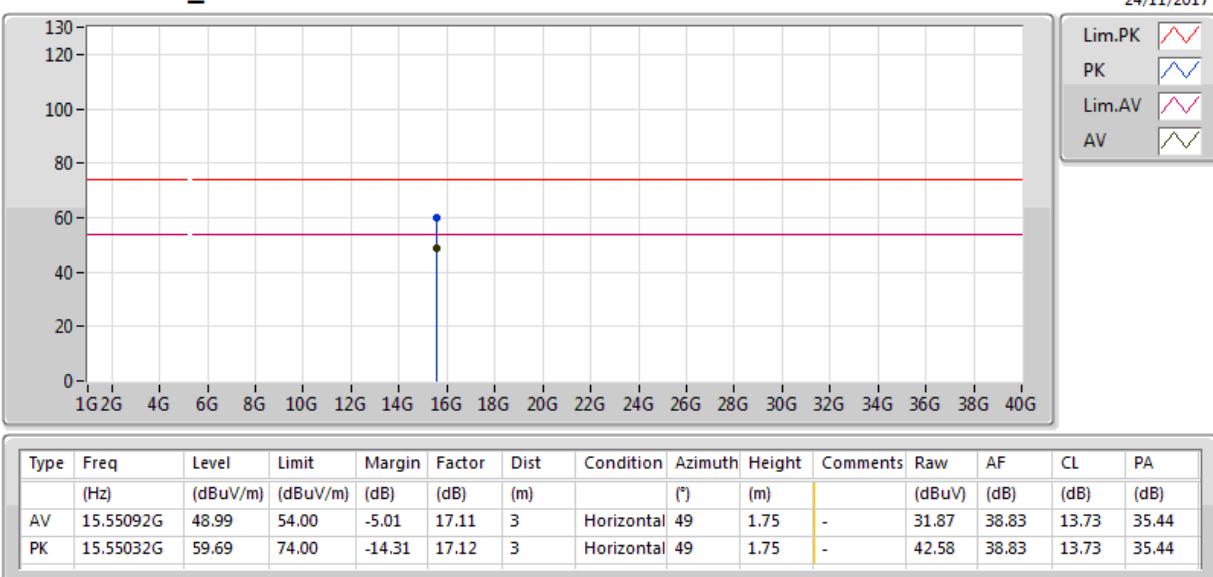
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5180MHz_TX



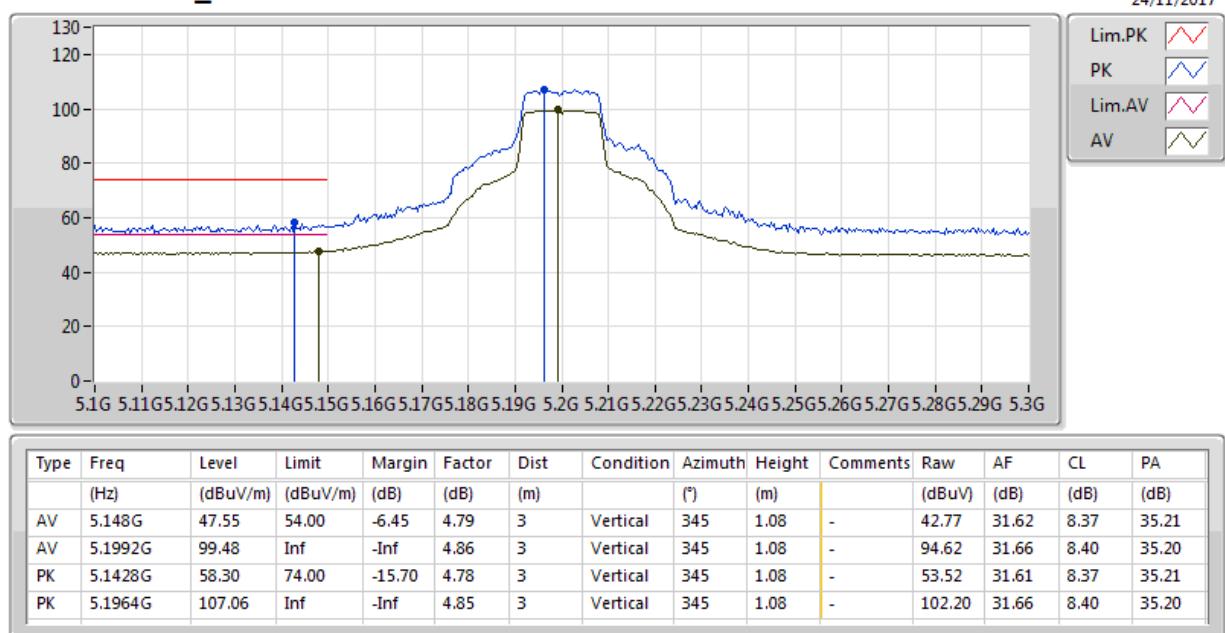
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5180MHz_TX



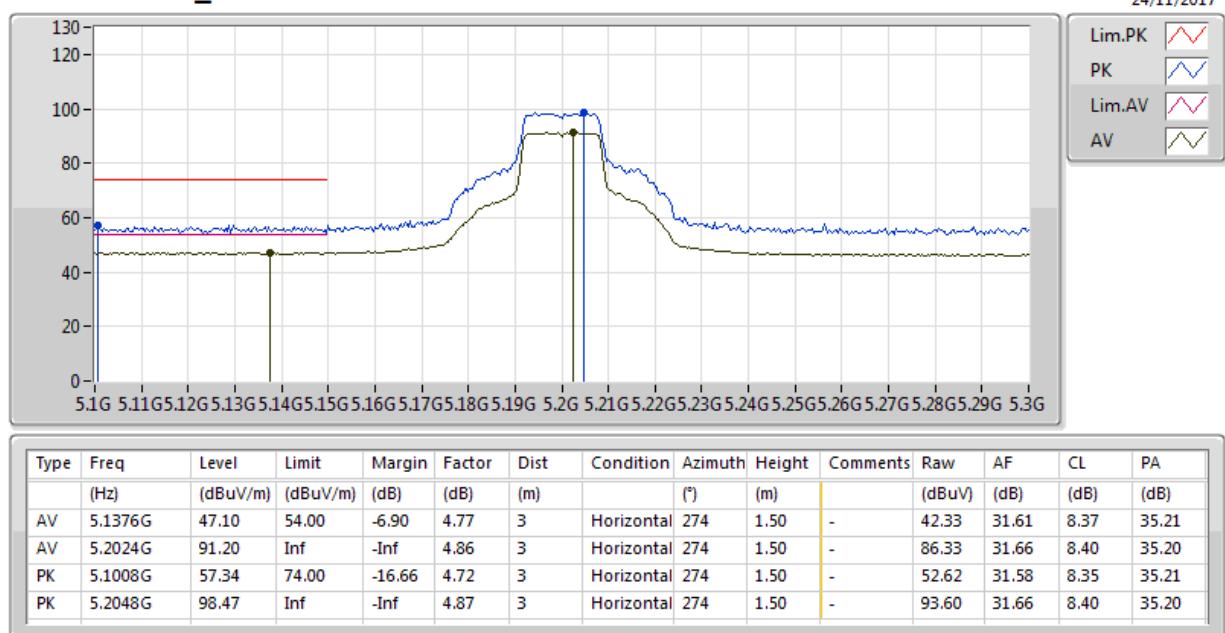
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5200MHz_TX



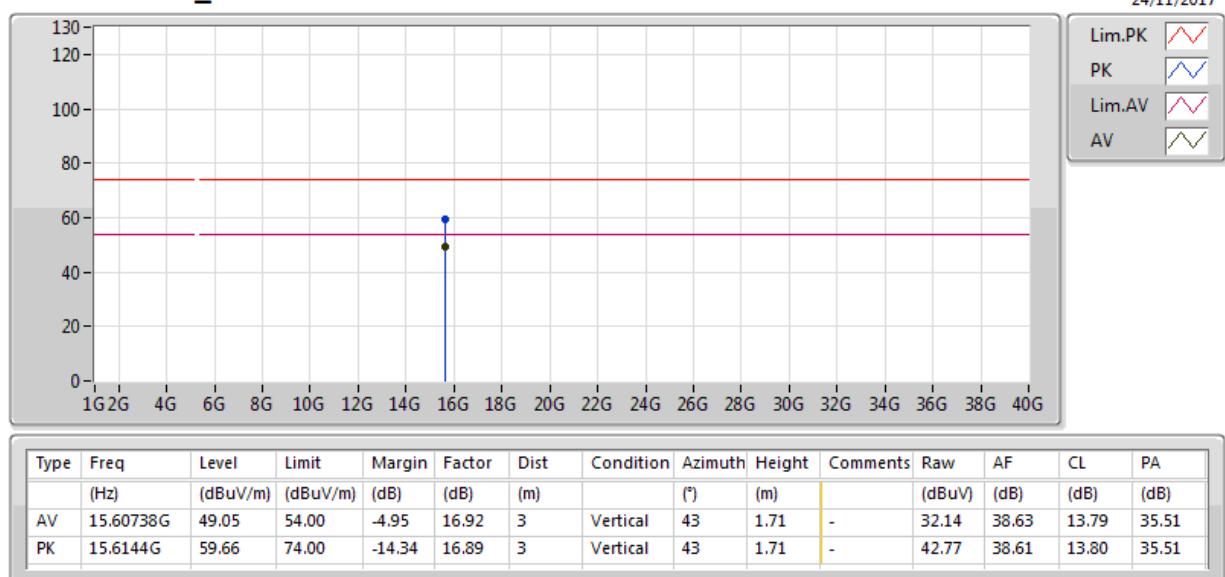
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5200MHz_TX



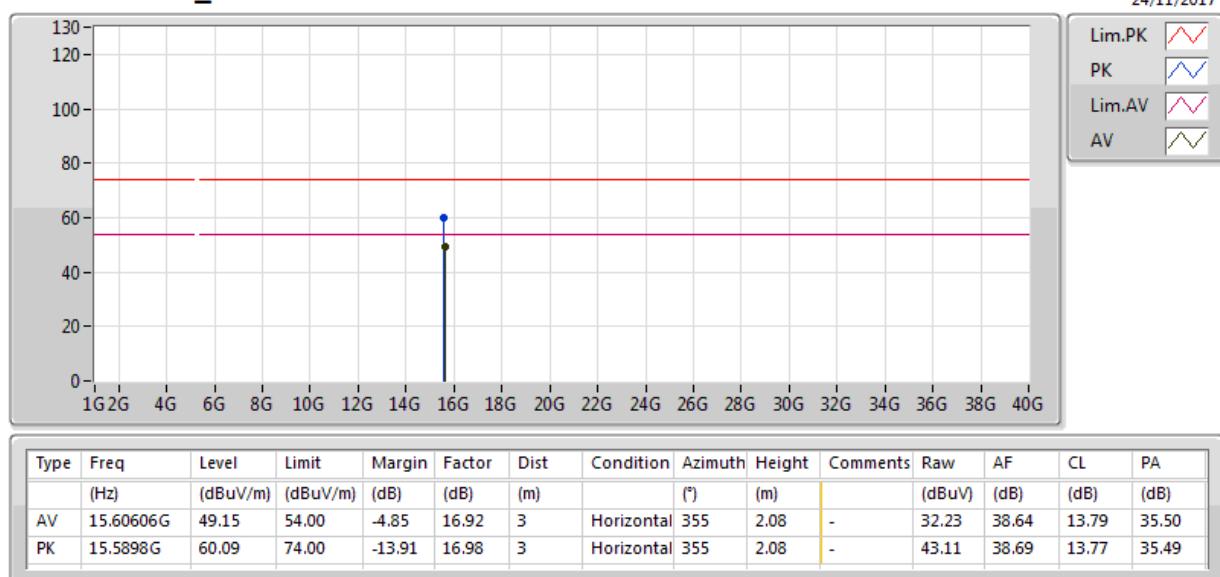
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5200MHz_TX



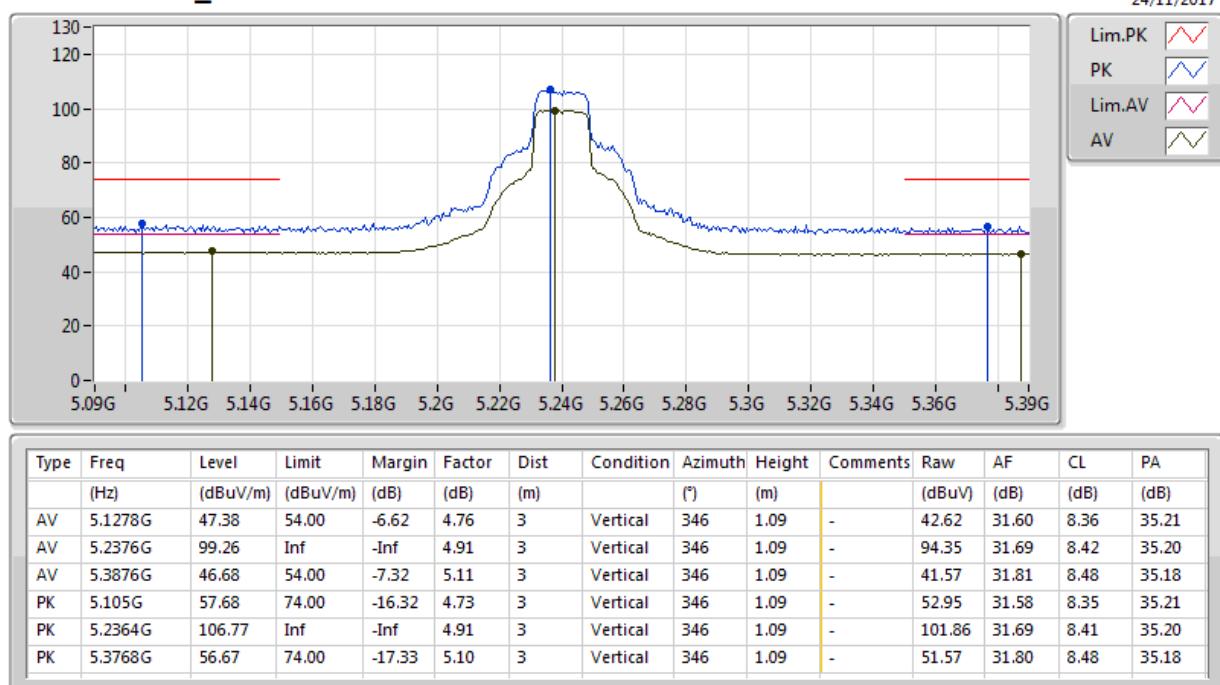
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5200MHz_TX



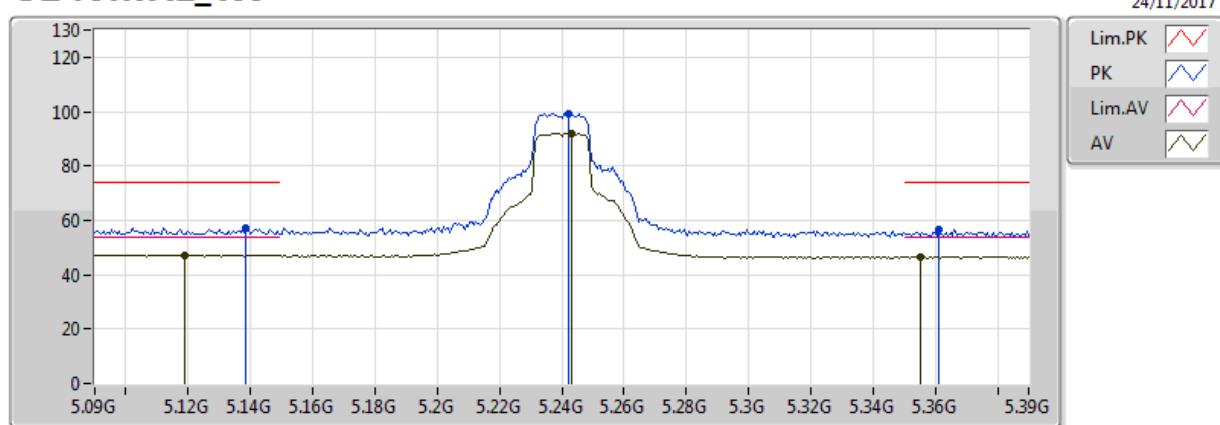
802.11a_Nss1,(6Mbps)_1TX(Port1)

5240MHz_TX



802.11a_Nss1,(6Mbps)_1TX(Port1)

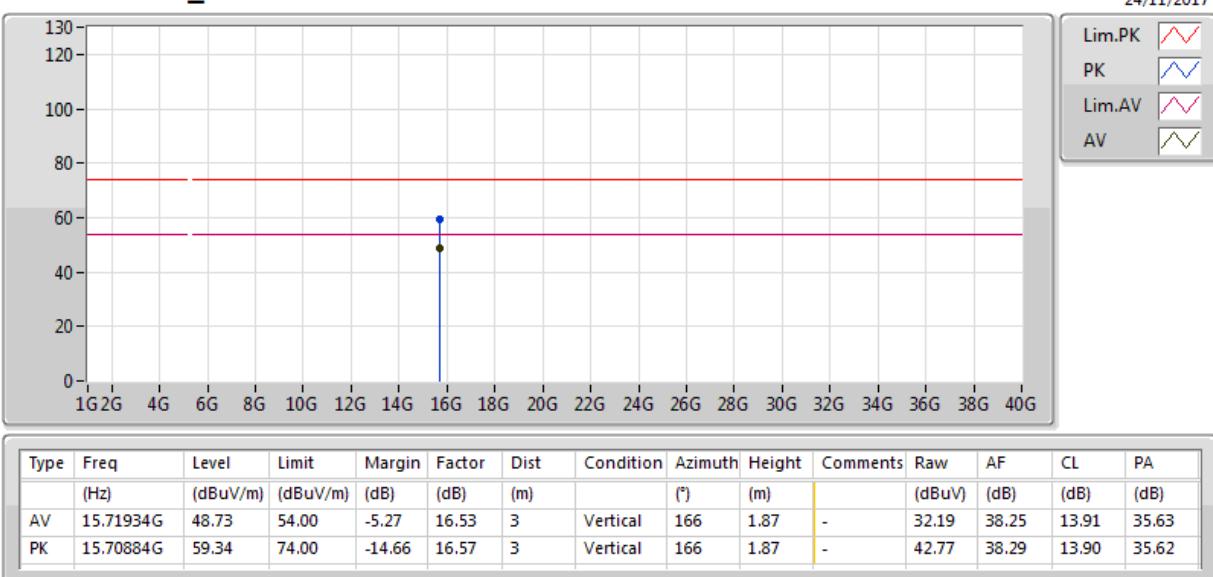
5240MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	5.1188G	47.26	54.00	-6.74	4.75	3	Horizontal	277	1.52	-	42.52	31.60	8.36	35.21
AV	5.243G	91.89	Inf	-Inf	4.92	3	Horizontal	277	1.52	-	86.97	31.69	8.42	35.20
AV	5.3552G	46.52	54.00	-7.48	5.07	3	Horizontal	277	1.52	-	41.45	31.78	8.47	35.18
PK	5.1386G	57.20	74.00	-16.80	4.77	3	Horizontal	277	1.52	-	52.42	31.61	8.37	35.21
PK	5.2424G	99.30	Inf	-Inf	4.92	3	Horizontal	277	1.52	-	94.38	31.69	8.42	35.20
PK	5.3612G	56.67	74.00	-17.33	5.08	3	Horizontal	277	1.52	-	51.59	31.79	8.47	35.18

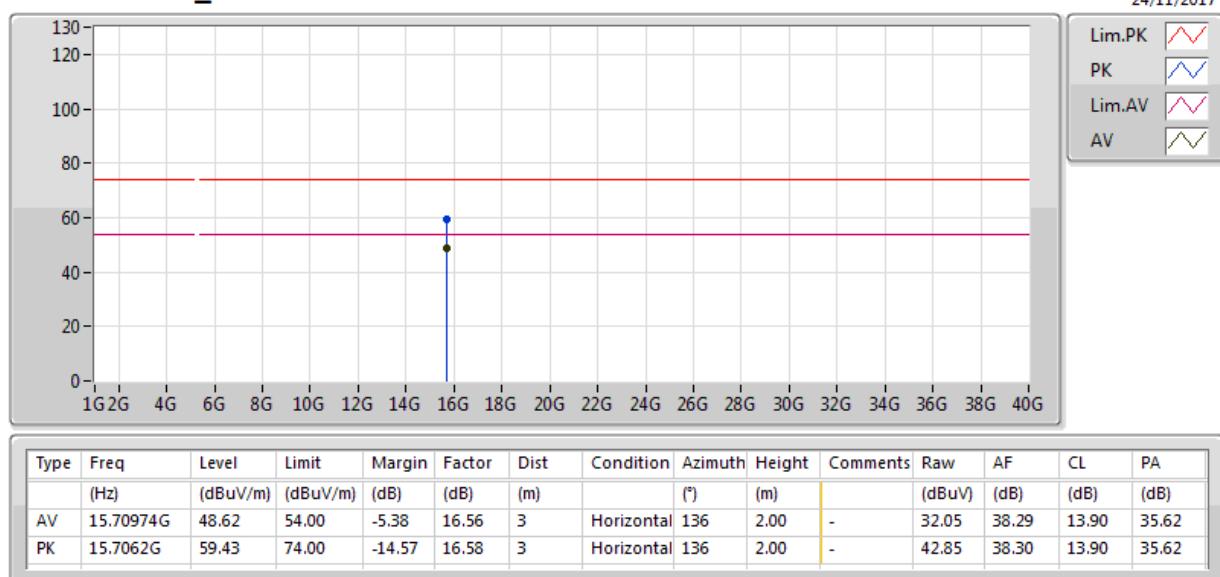
802.11a_Nss1,(6Mbps)_1TX(Port1)

5240MHz_TX



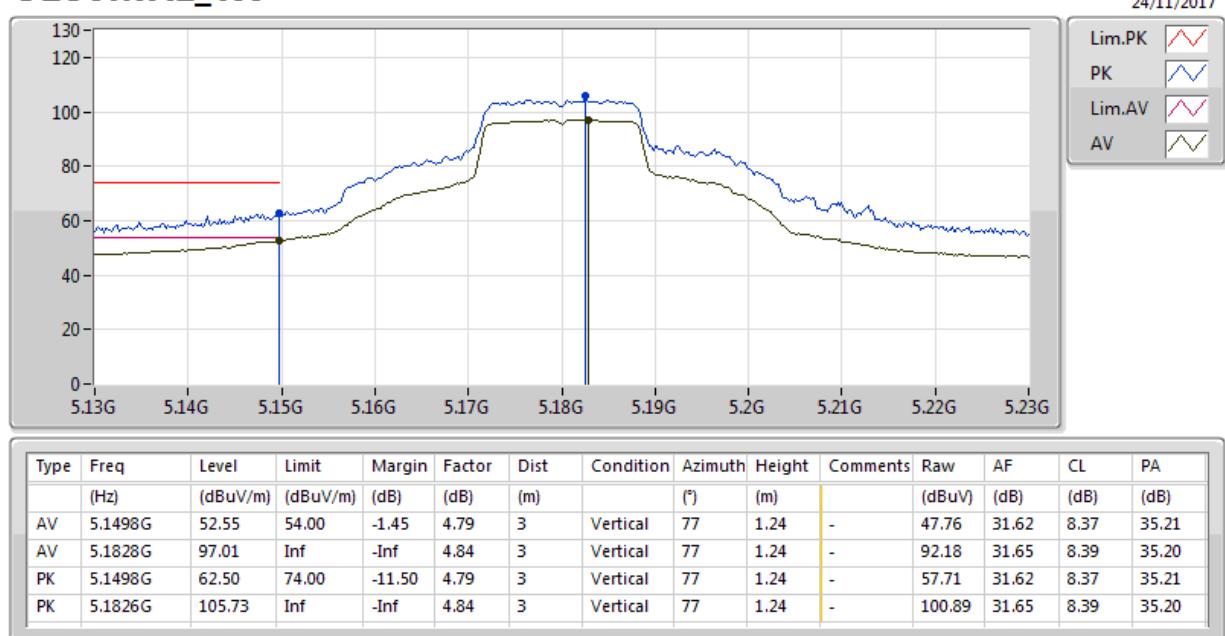
802.11a_Nss1,(6Mbps)_1TX(Port1)

5240MHz_TX



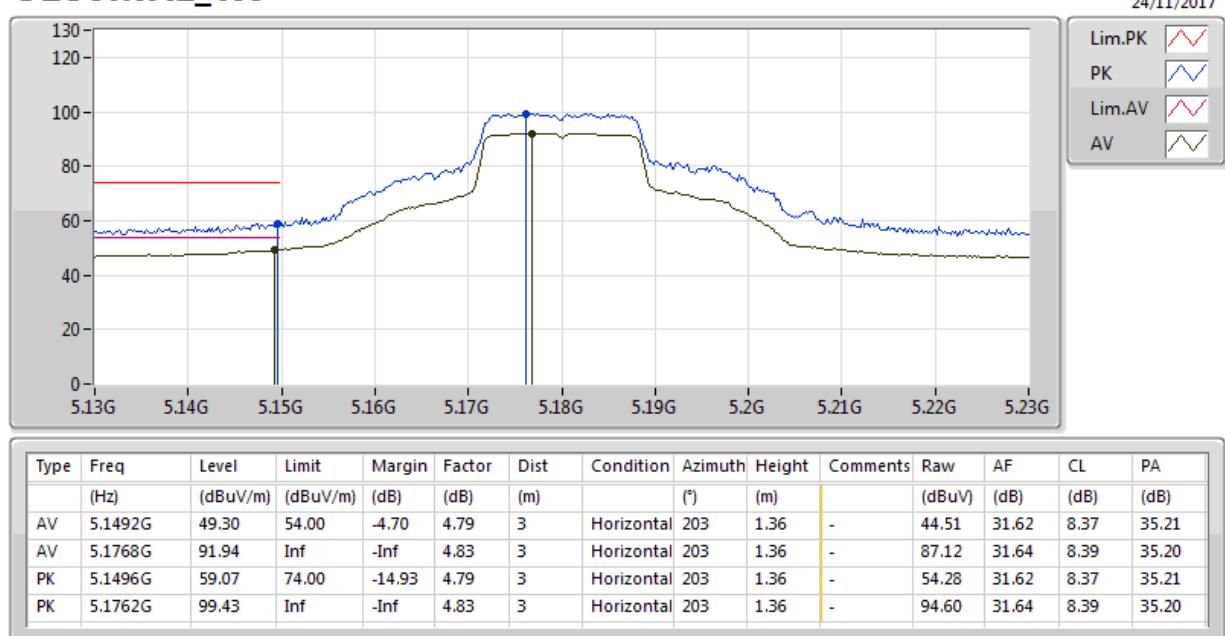
802.11a_Nss1,(6Mbps)_1TX(Port2)

5180MHz_TX



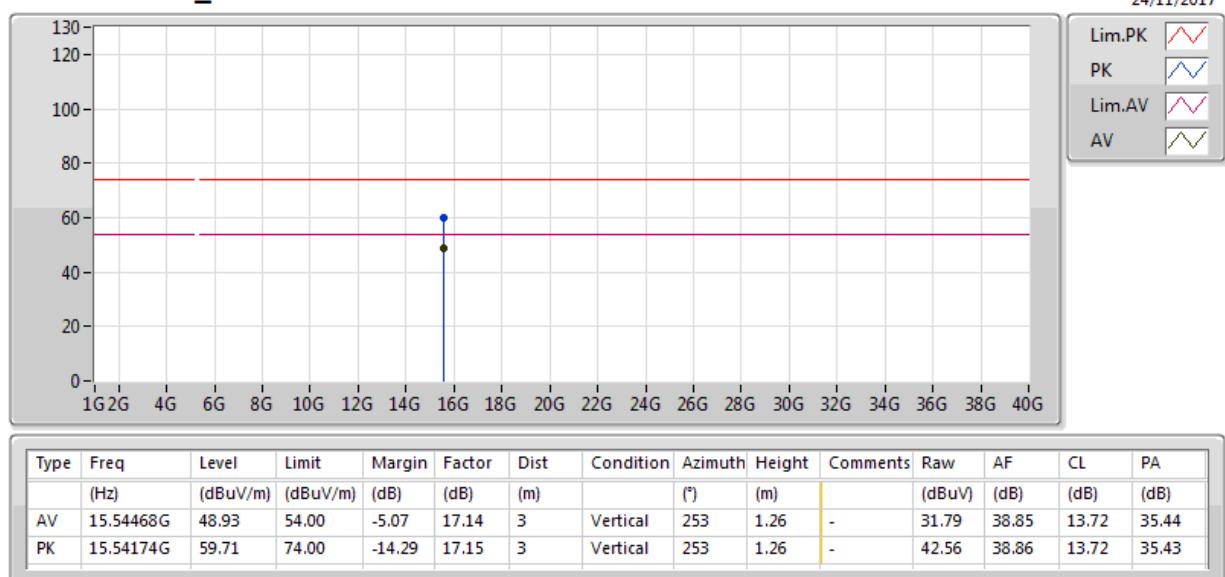
802.11a_Nss1,(6Mbps)_1TX(Port2)

5180MHz_TX



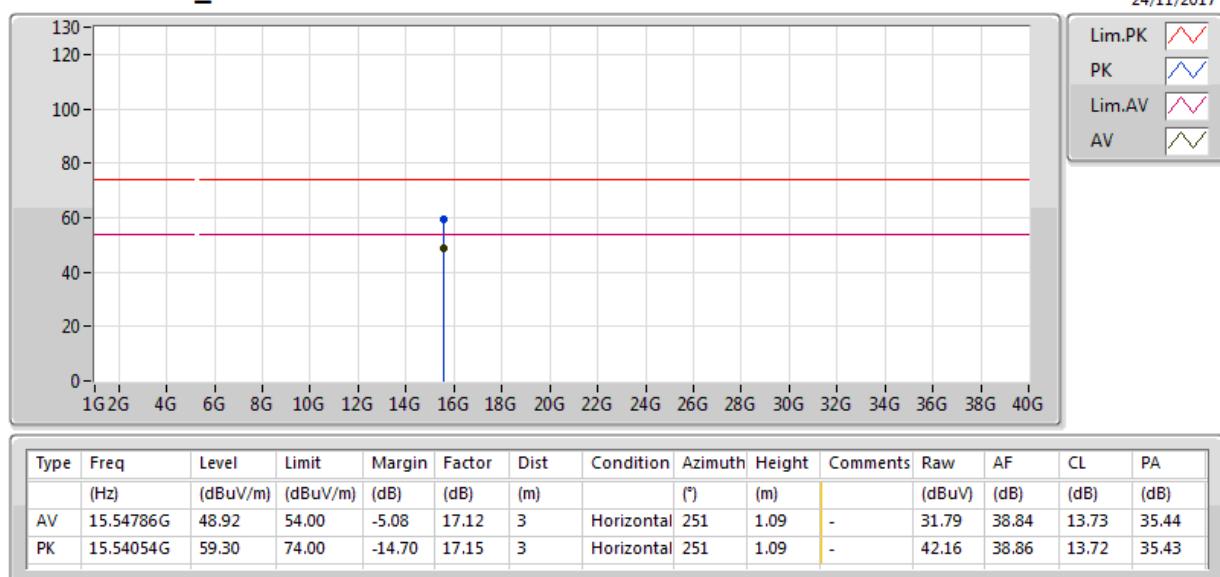
802.11a_Nss1,(6Mbps)_1TX(Port2)

5180MHz_TX



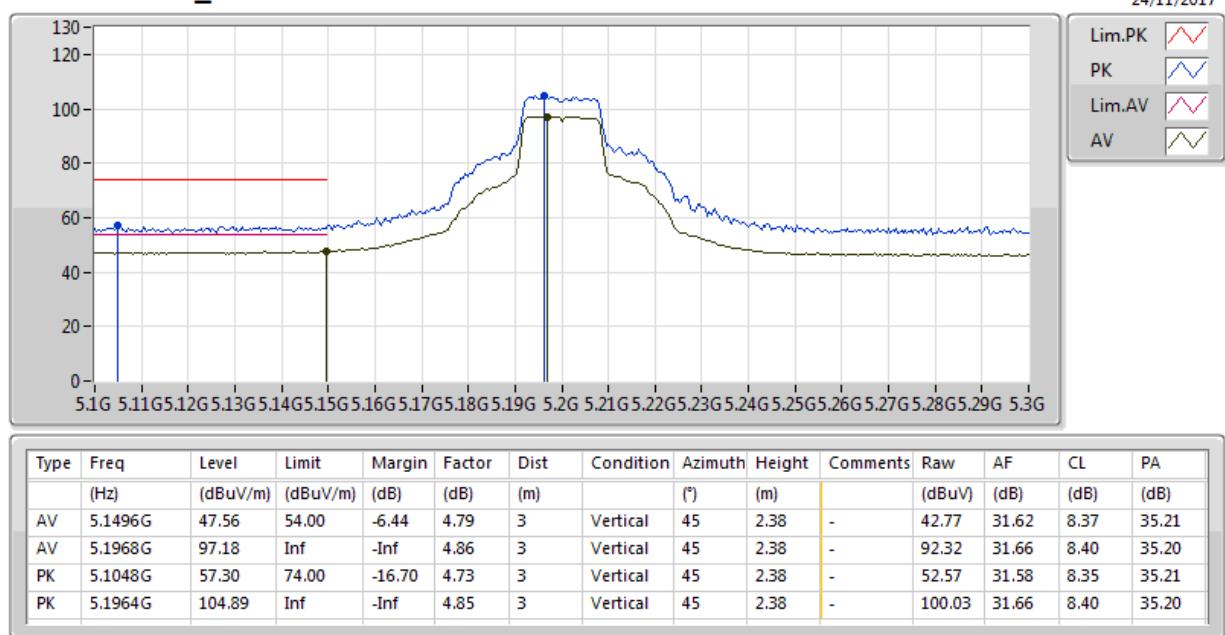
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5180MHz_TX



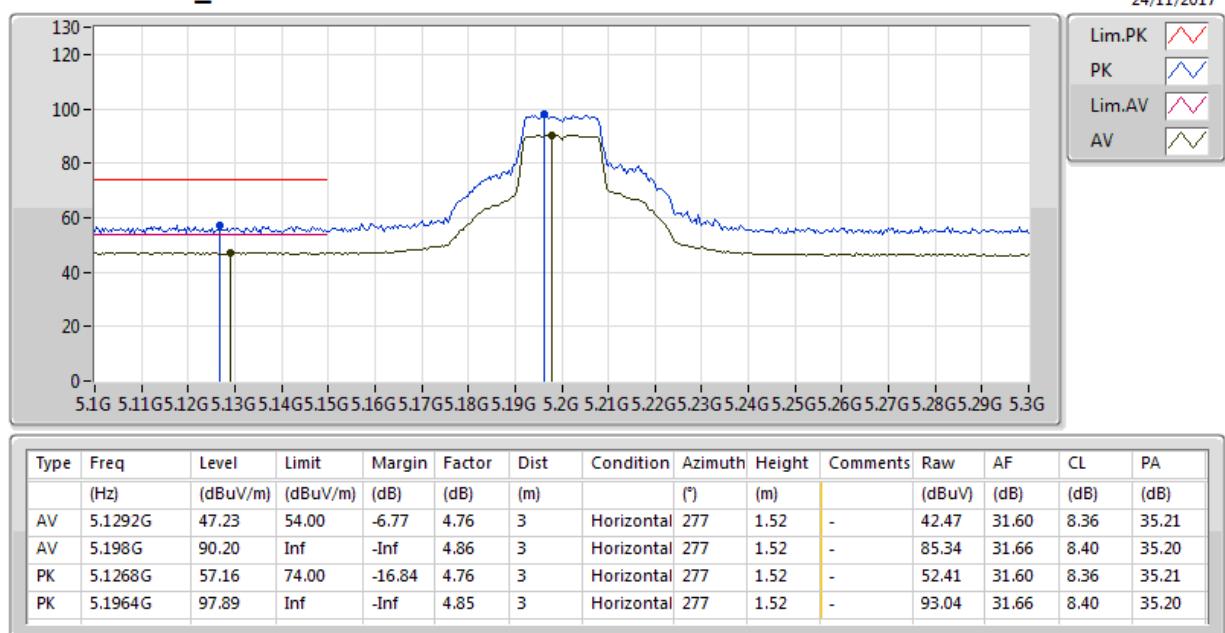
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5200MHz_TX



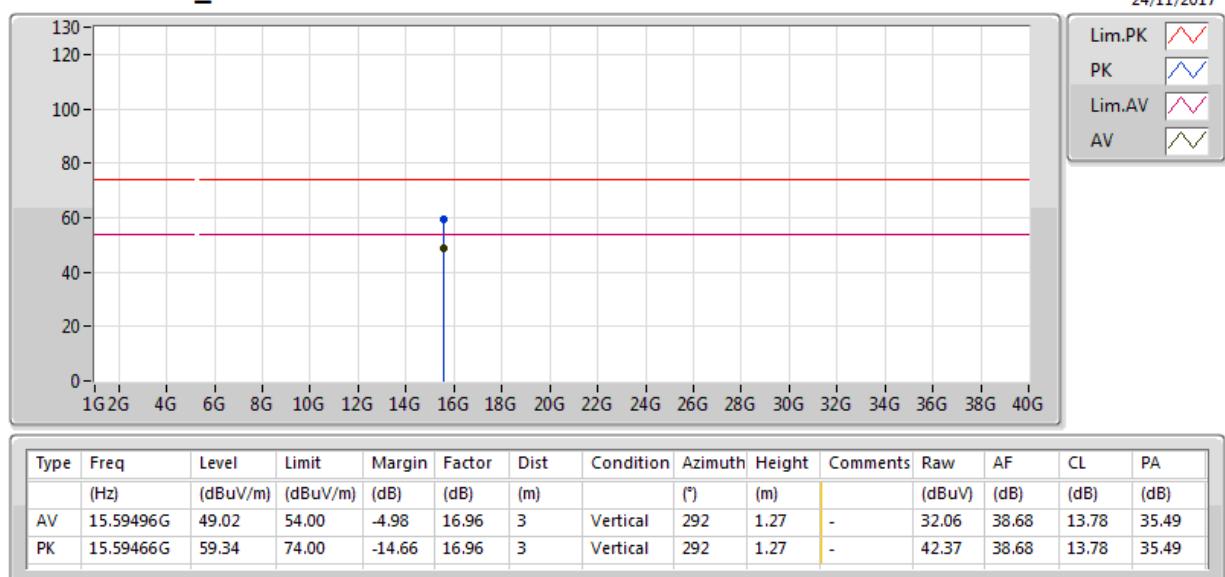
802.11a_Nss1,(6Mbps)_1TX(Port2)

5200MHz_TX



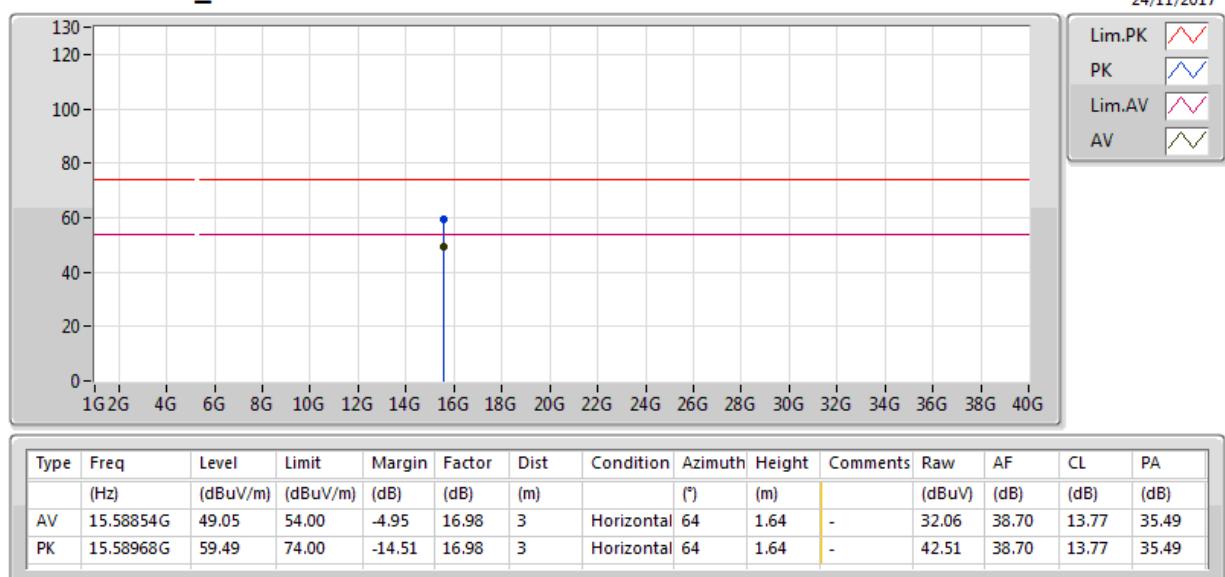
802.11a_Nss1,(6Mbps)_1TX(Port2)

5200MHz_TX



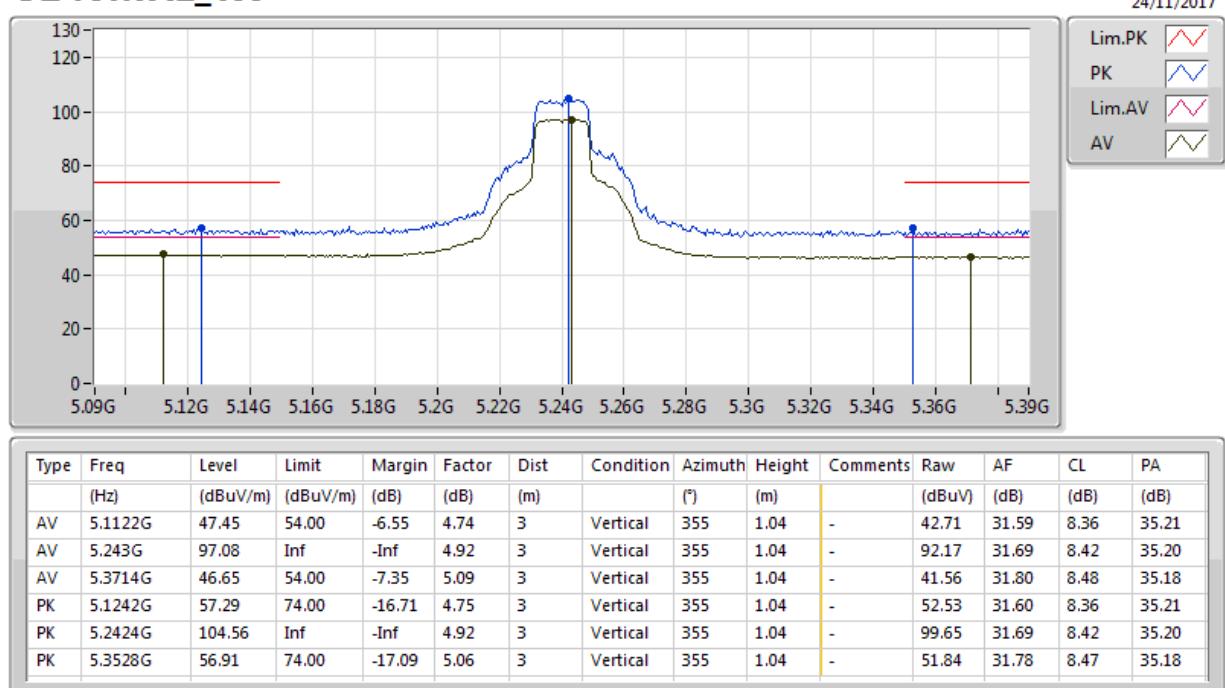
802.11a_Nss1,(6Mbps)_1TX(Port2)

5200MHz_TX



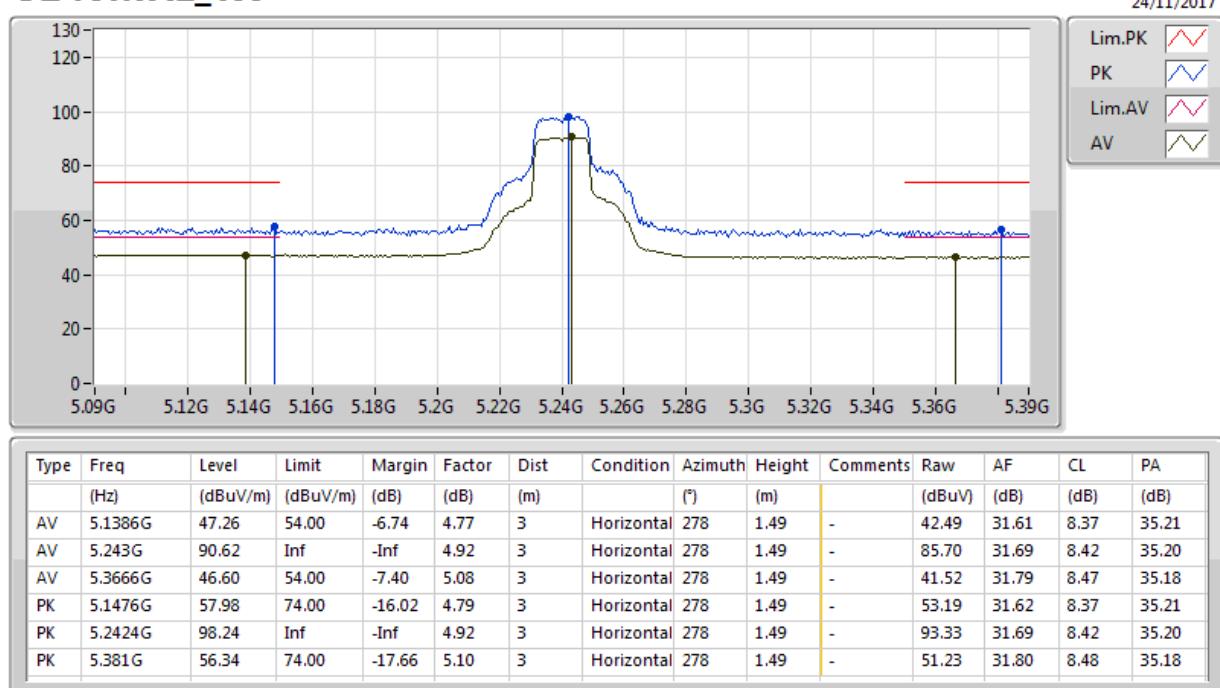
802.11a_Nss1,(6Mbps)_1TX(Port2)

5240MHz_TX



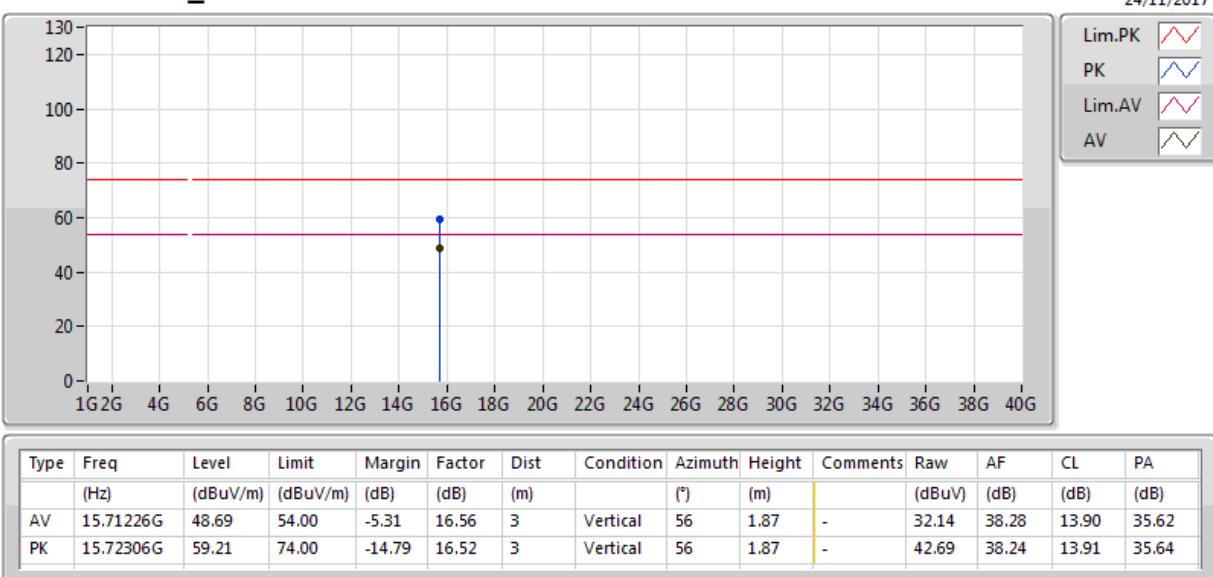
802.11a_Nss1,(6Mbps)_1TX(Port2)

5240MHz_TX



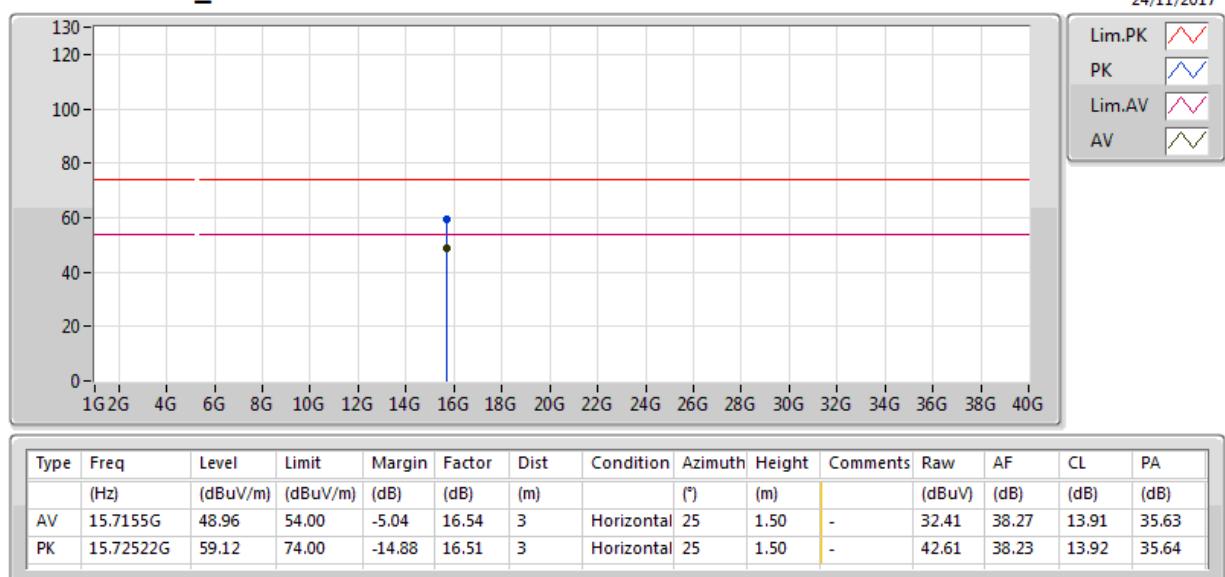
802.11a_Nss1,(6Mbps)_1TX(Port2)

5240MHz_TX



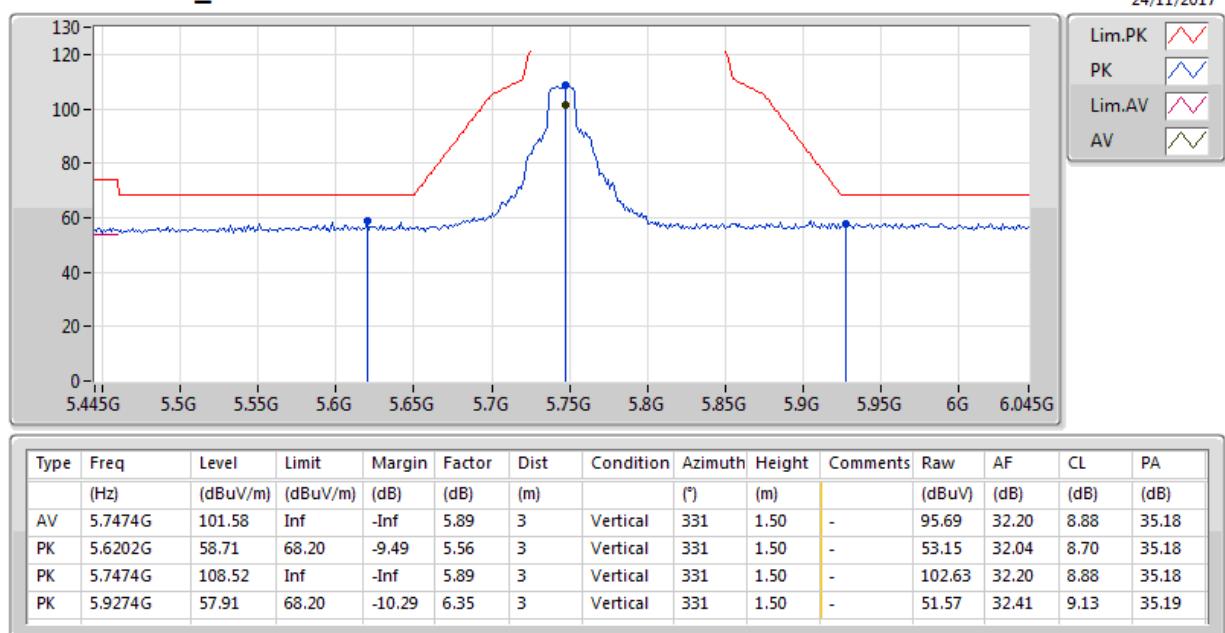
802.11a_Nss1,(6Mbps)_1TX(Port2)

5240MHz_TX



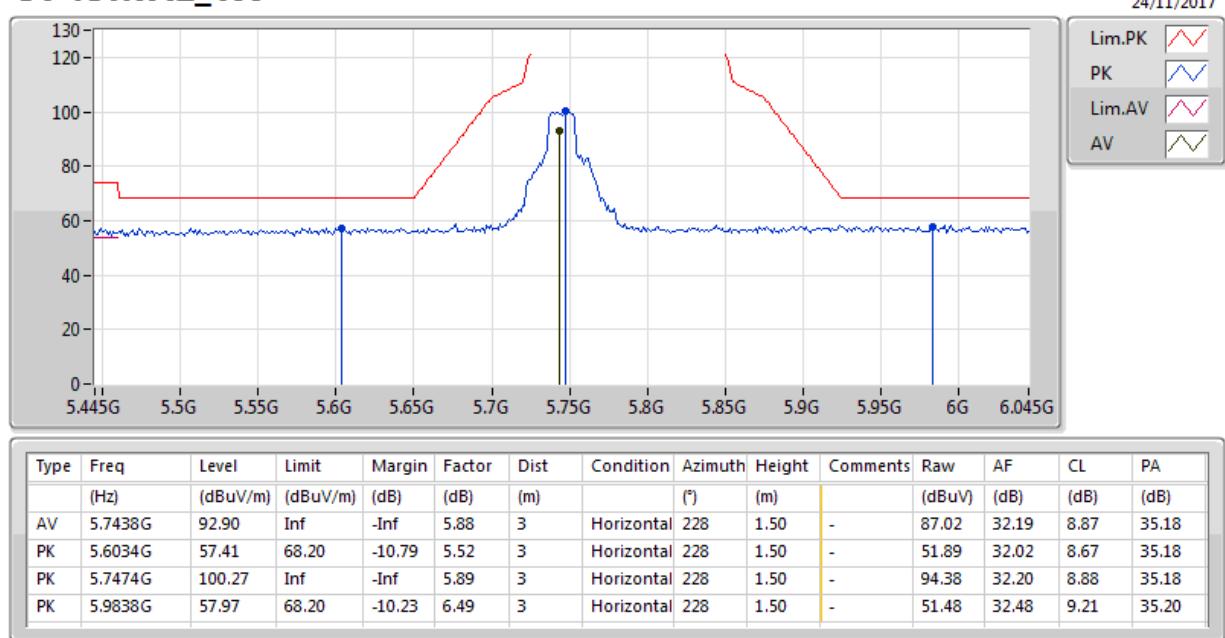
802.11a_Nss1,(6Mbps)_1TX(Port1)

5745MHz_TX



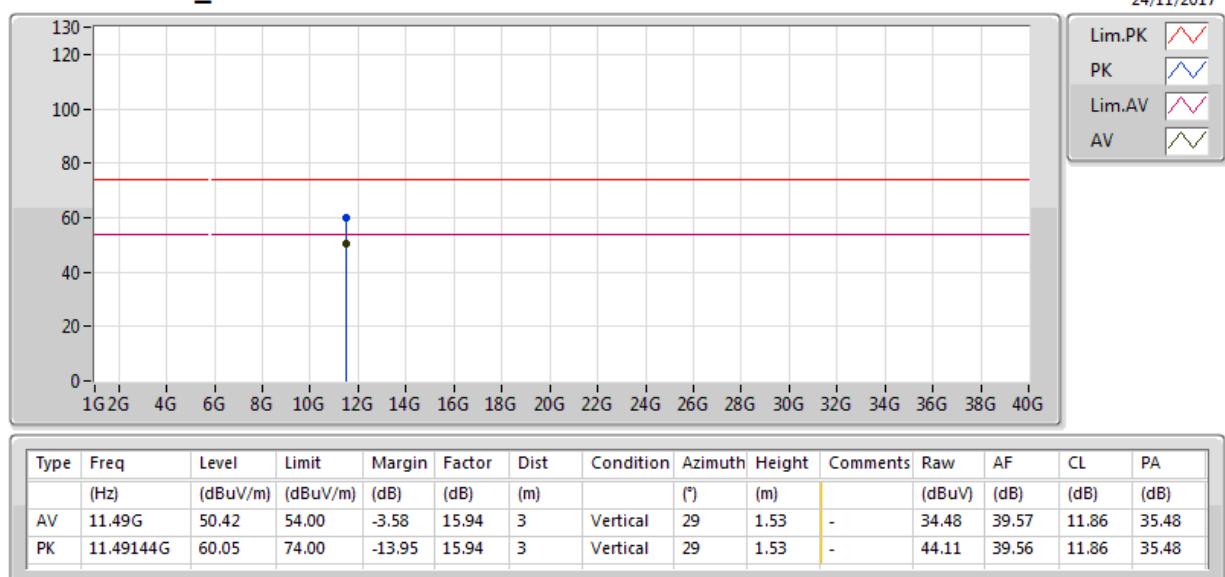
802.11a_Nss1,(6Mbps)_1TX(Port1)

5745MHz_TX



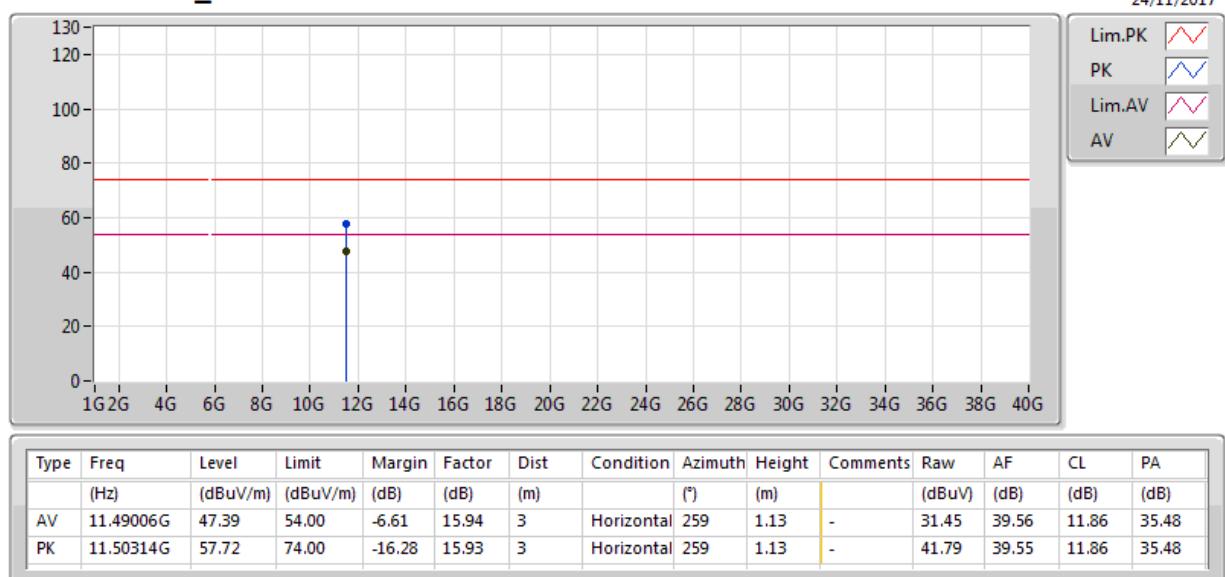
802.11a_Nss1,(6Mbps)_1TX(Port1)

5745MHz_TX



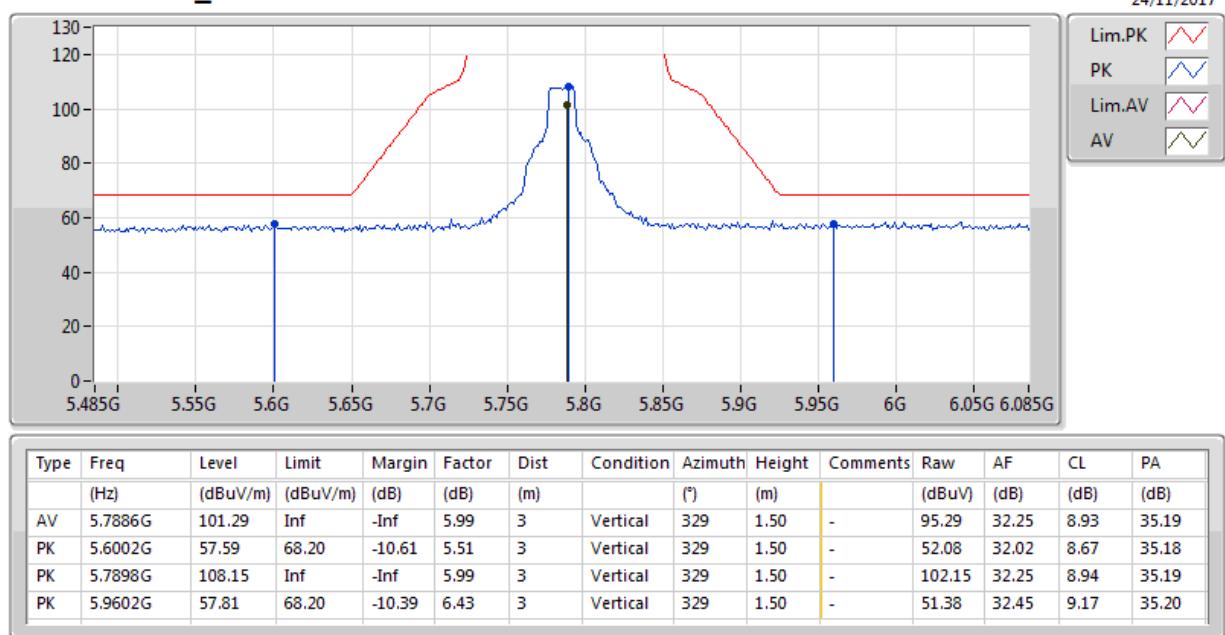
802.11a_Nss1,(6Mbps)_1TX(Port1)

5745MHz_TX



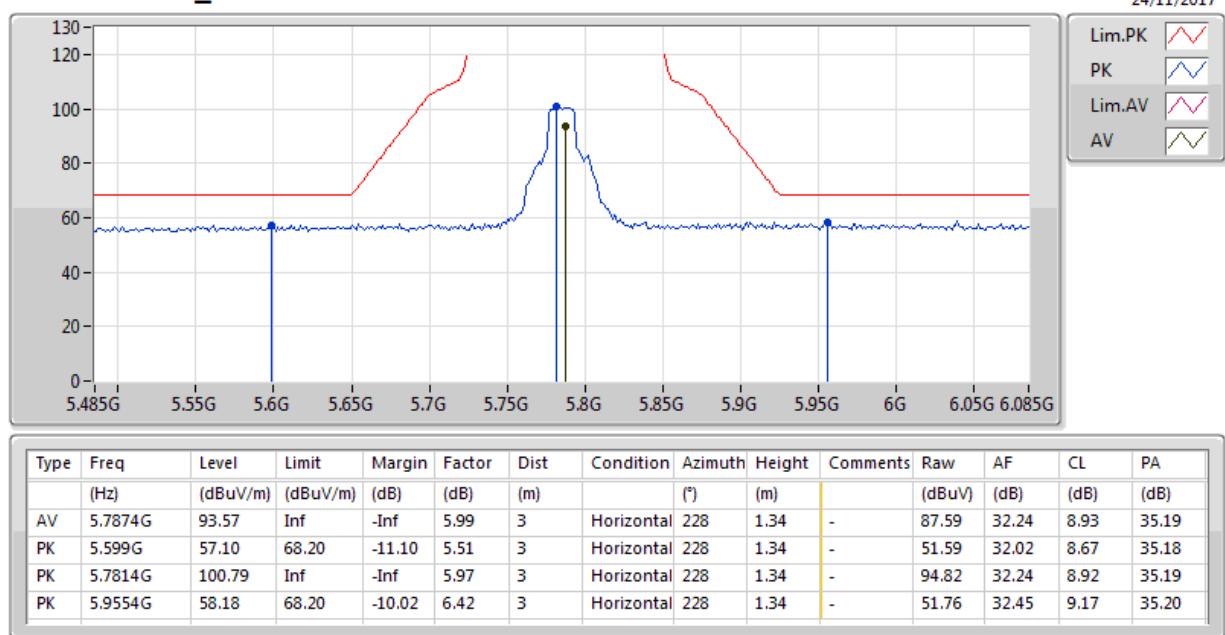
802.11a_Nss1,(6Mbps)_1TX(Port1)

5785MHz_TX



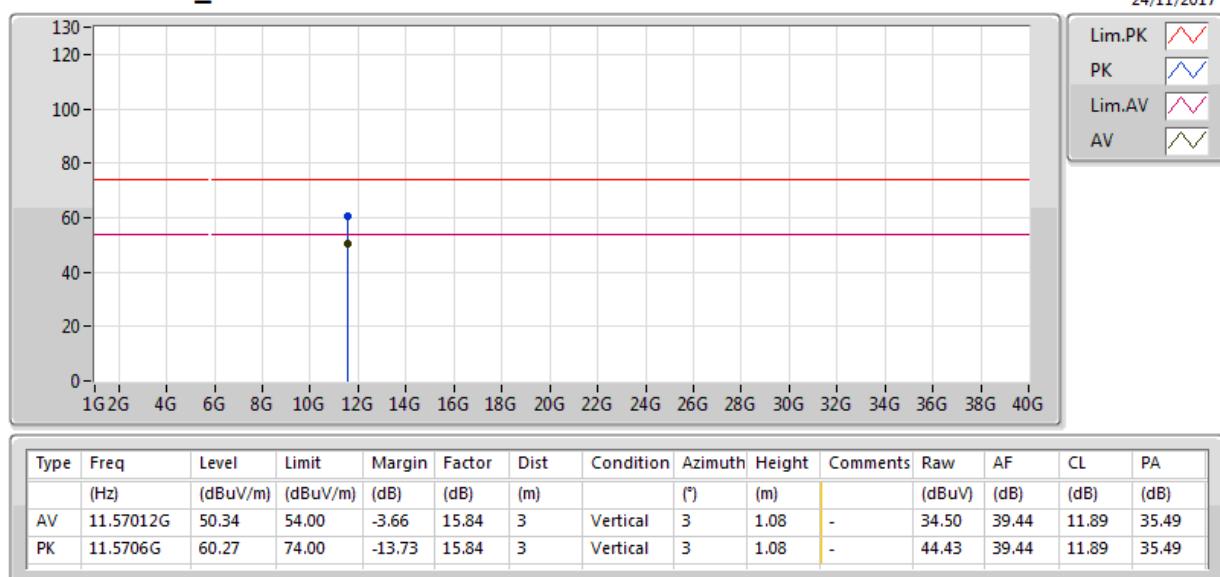
802.11a_Nss1,(6Mbps)_1TX(Port1)

5785MHz_TX



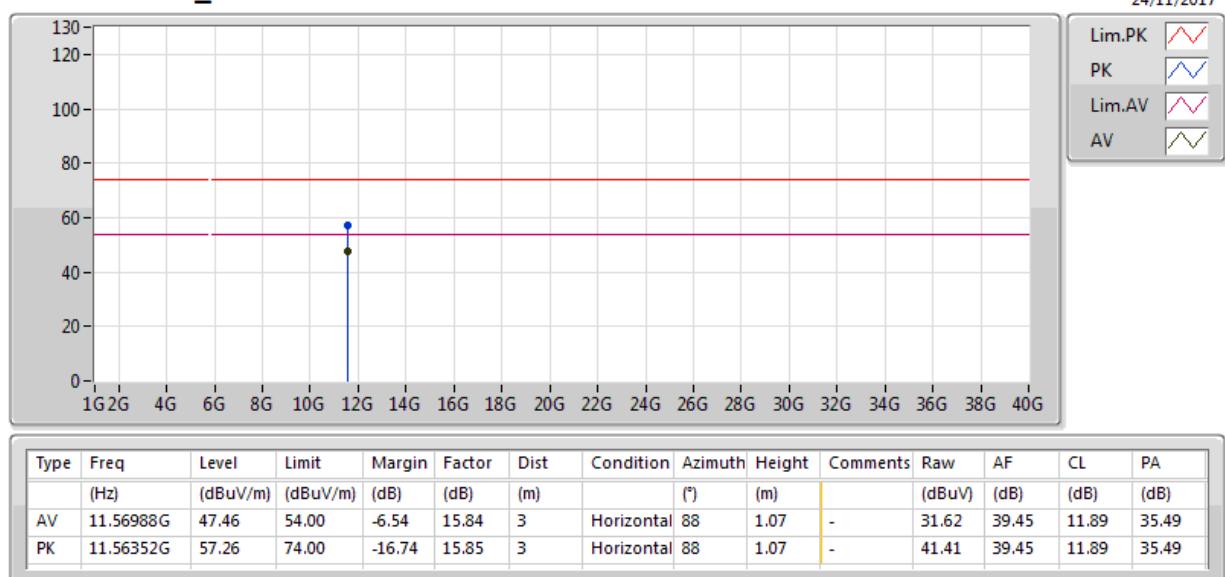
802.11a_Nss1,(6Mbps)_1TX(Port1)

5785MHz_TX



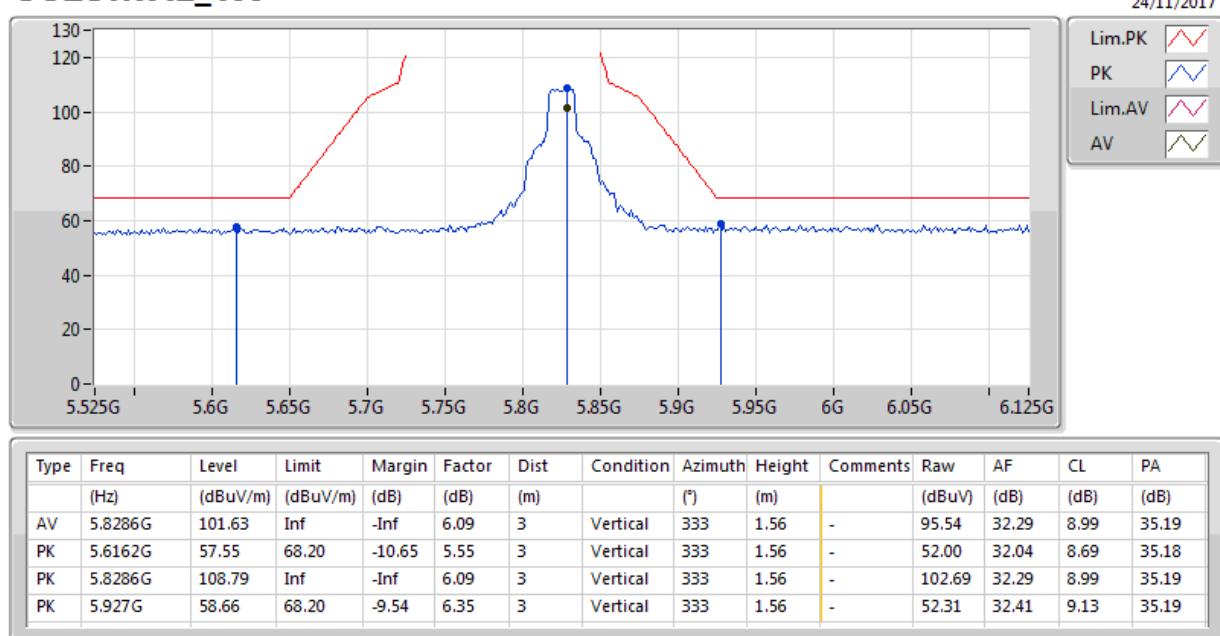
802.11a_Nss1,(6Mbps)_1TX(Port1)

5785MHz_TX



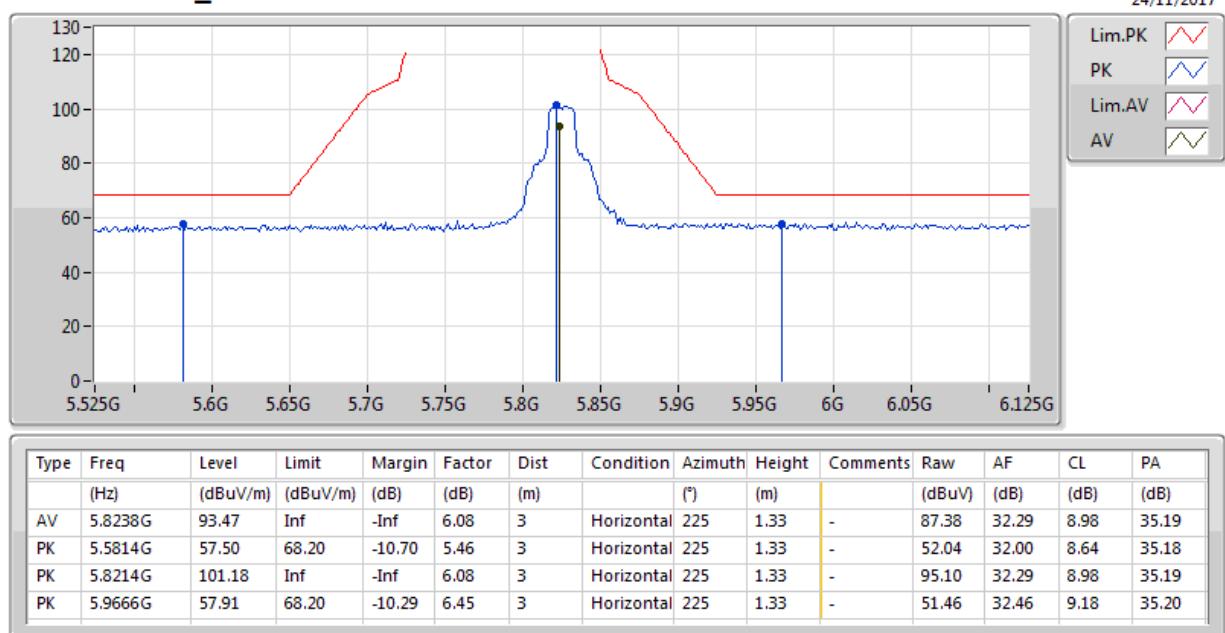
802.11a_Nss1,(6Mbps)_1TX(Port1)

5825MHz_TX



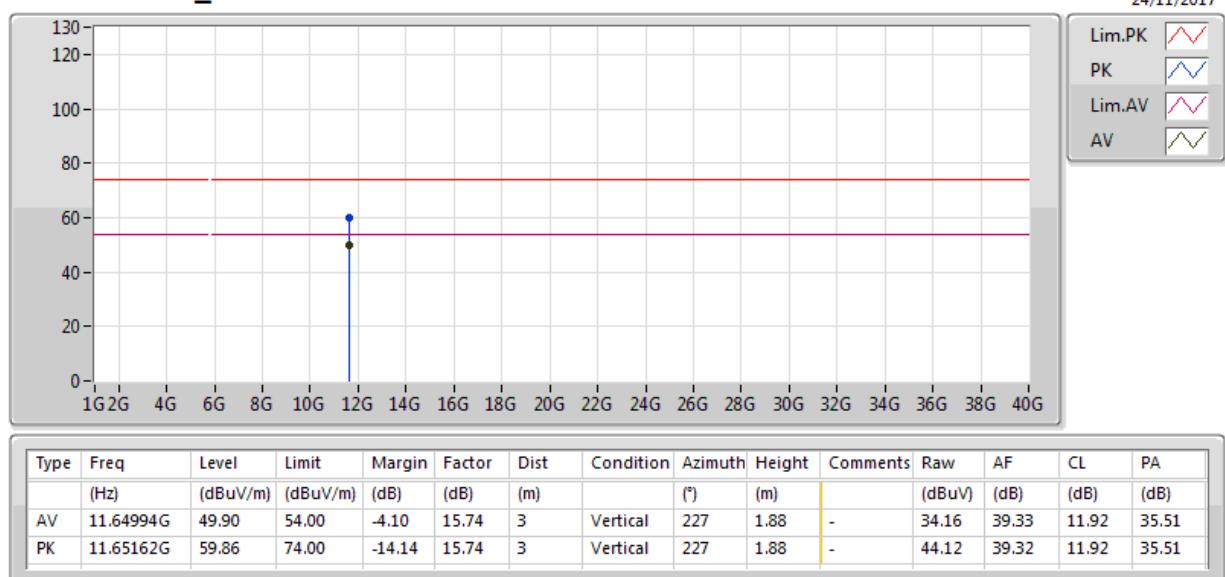
802.11a_Nss1,(6Mbps)_1TX(Port1)

5825MHz_TX



802.11a_Nss1,(6Mbps)_1TX(Port1)

5825MHz_TX



802.11a_Nss1,(6Mbps)_1TX(Port1)

5825MHz_TX

