

FCC Test Report

Equipment : Wireless Mini PCI
Brand Name : 
Model No. : XW346E
Part No. : 33500007x-E (x=0~9, a~z, A~Z, blank, "-" or "+")
FCC ID : HDC424RG350X
Standard : 47 CFR FCC Part 15.407
Frequency : 5150 MHz – 5250 MHz
5725 MHz – 5850 MHz
FCC Classification : NII
Applicant : Adtran Inc.
901 Explorer Blvd., Huntsville, AL 35806, US
Manufacturer : XAVi Technologies Corporation
9F, No.129, Hsing Te Rd., Sanchung Dist.,
New Taipei City 241, Taiwan, R.O.C.
Function : ☐ Outdoor; ☒ Indoor; ☐ Fixed P2P
☐ Portable Client
Operate Mode : Master

The product sample received on Jun. 08, 2016 and completely tested on Jul. 15, 2016. 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.

Reviewed by:

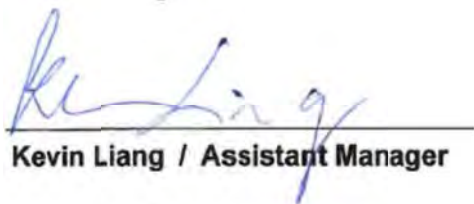

Kevin Liang / Assistant Manager

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Appendix A. Test Result of Emission Bandwidth

Appendix B. Test Result of Maximum Conducted Output Power

Appendix C. Test Result of Power Spectral Density

Appendix D. Transmitter Bandedge Emissions

Appendix E. Transmitter Unwanted Emissions

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Appendix G. Test Photos

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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
3.7	15.407(g)	Frequency Stability	Complied



SPORTON INTERNATIONAL INC.
TEL : 886-3-327-3456
FAX : 886-3-327-0973

1 General Description

1.1 Information

1.1.1 RF General Information

Band	Mode	BWch (MHz)	Nss-Min	Nant
5.2G	11a	20	1	1(1)
5.2G	11a	20	1	1(2)
5.2G	11a	20	1	1(3)
5.8G	11a	20	1	1(1)
5.8G	11a	20	1	1(2)
5.8G	11a	20	1	1(3)
5.2G	HT20	20	1,(M0-23)	3
5.8G	HT20	20	1,(M0-23)	3
5.2G	HT40	40	1,(M0-23)	3
5.8G	HT40	40	1,(M0-23)	3
5.2G	VHT20	20	1,(M0-8)	3
5.8G	VHT20	20	1,(M0-8)	3
5.2G	VHT40	40	1,(M0-9)	3
5.8G	VHT40	40	1,(M0-9)	3
5.2G	VHT80	80	1,(M0-9)	3
5.8G	VHT	80	1,(M0-9)	3
5.2G	VHT20(TxBF)	20	1,(M0NSS1-8NSS1)	3
5.8G	VHT20(TxBF)	20	1, (M0NSS1-8NSS1)	3
5.2G	VHT40(TxBF)	40	1, (M0NSS1-9NSS1)	3
5.8G	VHT40(TxBF)	40	1, (M0NSS1-9NSS1)	3
5.2G	VHT80(TxBF)	80	1, (M0NSS1-9NSS1)	3
5.8G	VHT80(TxBF)	80	1, (M0NSS1-9NSS1)	3

Note:

- 5.2G is the 5.2GHz Band (5.15-5.25GHz).
- 5.8G is the 5.8GHz Band (5.725-5.850GHz).
- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40 and VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Antenna Category	
☒	Integral antenna (antenna permanently attached)
☒	Temporary RF connector provided
☐	No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.
☐	External antenna (dedicated antennas)
☐	Single power level with corresponding antenna(s).
☐	Multiple power level and corresponding antenna(s).
☐	RF connector provided
☐	Unique antenna connector. (e.g., MMCX, U.FL, IPX, and RP-SMA, RP-N type...)
☐	Standard antenna connector. (e.g., SMA, N, BNC, and TNC type...)

Antenna General Information			
No.	Ant. Cat.	Ant. Type	Gain (dBi)
1	Integral	PCB PIFA	3.7
2	Integral	PCB PIFA	3.7
3	Integral	PCB PIFA	3.7

1.1.3 Type of EUT

Identify EUT	
EUT Serial Number	N/A
Presentation of Equipment	☐ Production ; ☒ Pre-Production ; ☐ Prototype
Type of EUT	
☒	Stand-alone
☐	Combined (EUT where the radio part is fully integrated within another device) Combined Equipment - Brand Name / Model No.: ...
☐	Plug-in radio (EUT intended for a variety of host systems) Host System - Brand Name / Model No.: ...
☐	Other:

1.1.4 Mode Test Duty Cycle

Operated Mode for Worst Duty Cycle	
☒ Operated test mode for worst duty cycle	
Test Signal Duty Cycle (x)	Power Duty Factor [dB] – (10 log 1/x)
☒ 98.6% - IEEE 802.11n (11a)	0.06
☒ 98.6% - IEEE 802.11n (HT20)	0.06
☒ 97.1% - IEEE 802.11n (HT40)	0.13
☒ 98.6% - IEEE 802.11n (VHT20)	0.06
☒ 97.1% - IEEE 802.11n (VHT40)	0.13
☒ 94.3% - IEEE 802.11n (VHT80)	0.25
☒ 88.2% - IEEE 802.11n (VHT20) (TxBF)	0.55
☒ 88.3% - IEEE 802.11n (VHT40) (TxBF)	0.54
☒ 76% - IEEE 802.11n (VHT80) (TxBF)	1.19

1.1.5 EUT Operational Condition

Supply Voltage	☒ AC mains	☒ DC	
Type of DC Source	☒ External AC adapter	☒ From UPS System	☐ Battery
Test Voltage	☒ Vnom (110 V)	☒ Vmax (126.5 V)	☒ Vmin (93.5 V)
Test Climatic	☒ Tnom (20°C)	☒ Tmax (50°C)	☒ Tmin (-5°C)

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
- ♦ FCC KDB 789033 D02 v01r02
- ♦ FCC-16-24-UNII
- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 644545 D03 v01

1.3 Testing Location Information

Testing Location				
☒	HWA YA	ADD	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.	
		TEL	886-3-327-3456	FAX : 886-3-327-0973
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Ryan	23°C / 55%	17/06/2016
RF Conducted	TH01-HY	Ryan	23.5°C / 65%	15/07/2016
Radiated	03CH03-HY	Ryan	23.5°C / 65%	15/07/2016

Test site registered number [553509] with FCC.

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))

Measurement Uncertainty		
Test Item		Uncertainty
AC power-line conducted emissions		±2.3 dB
Emission bandwidth, 6dB bandwidth		±0.6 %
RF output power, conducted		±0.1 dB
Power density, conducted		±0.6 dB
Unwanted emissions, conducted	9 – 150 kHz	±0.4 dB
	0.15 – 30 MHz	±0.4 dB
	30 – 1000 MHz	±0.6 dB
	1 – 18 GHz	±0.5 dB
	18 – 40 GHz	±0.5 dB
	40 – 200 GHz	N/A
All emissions, radiated	9 – 150 kHz	±2.5 dB
	0.15 – 30 MHz	±2.3 dB
	30 – 1000 MHz	±2.6 dB
	1 – 18 GHz	±3.6 dB
	18 – 40 GHz	±3.8 dB
	40 – 200 GHz	N/A
Temperature		±0.8 °C
Humidity		±5 %
DC and low frequency voltages		±0.9%
Time		±1.4 %
Duty Cycle		±0.6 %

2 Test Configuration of EUT

2.1 The Worst Case Modulation Configuration

Worst Modulation Used for Conformance Testing			
Modulation Mode	Transmit Chains (N_{TX})	Data Rate / MCS	Worst Data Rate / MCS
11a	1	6-54Mbps	6 Mbps
HT20	3	MCS 0-23	MCS 0
HT40	3	MCS 0-23	MCS 0
VHT20, BF	3	MCS 0-8	MCS 0
VHT40, BF	3	MCS 0-9	MCS 0
VHT80, BF	3	MCS 0-9	MCS 0
VHT20(TxBF)	3	MCS 0NSS1-8NSS1	MCS 0NSS1
VHT40(TxBF)	3	MCS 0NSS1-9NSS1	MCS 0NSS1
VHT80(TxBF)	3	MCS 0NSS1-9NSS1	MCS 0NSS1

2.2 Test Channel Mode

Test Software Version	Mtool V2.0.1.0
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Band	Mode	BWch (MHz)	Ch. (MHz)	Power Setting
5.2G	11a	20	5180	85
5.2G	11a	20	5200	85
5.2G	11a	20	5240	120
5.2G	11a	20	5180	81
5.2G	11a	20	5200	81
5.2G	11a	20	5240	120
5.2G	11a	20	5180	91
5.2G	11a	20	5200	120
5.2G	11a	20	5240	120
5.2G	HT20	20	5180	68
5.2G	HT20	20	5200	68
5.2G	HT20	20	5240	78
5.2G	HT40	40	5190	59
5.2G	HT40	40	5230	81
5.2G	VHT20	20	5180	70
5.2G	VHT20	20	5200	71
5.2G	VHT20	20	5240	81
5.2G	VHT40	40	5190	60
5.2G	VHT40	40	5230	82
5.2G	VHT80	80	5210	57
5.2G	VHT20(TxBF)	20	5180	42
5.2G	VHT20(TxBF)	20	5200	47
5.2G	VHT20(TxBF)	20	5240	75
5.2G	VHT40(TxBF)	40	5190	60
5.2G	VHT40(TxBF)	40	5230	77
5.2G	VHT80(TxBF)	80	5210	57

Band	Mode	BWch (MHz)	Ch. (MHz)	Power Setting
5.8G	11a	20	5745	80
5.8G	11a	20	5785	81
5.8G	11a	20	5825	82
5.8G	11a	20	5745	120
5.8G	11a	20	5785	120
5.8G	11a	20	5825	120
5.8G	11a	20	5745	79
5.8G	11a	20	5785	79
5.8G	11a	20	5825	74
5.8G	HT20	20	5745	71
5.8G	HT20	20	5785	73
5.8G	HT20	20	5825	74
5.8G	HT40	40	5755	81
5.8G	HT40	40	5795	82
5.8G	VHT20	20	5745	73
5.8G	VHT20	20	5785	75
5.8G	VHT20	20	5825	76
5.8G	VHT40	40	5755	82
5.8G	VHT40	40	5795	83
5.8G	VHT80	80	5775	78
5.8G	VHT20(TxBF)	20	5745	68
5.8G	VHT20(TxBF)	20	5785	65
5.8G	VHT20(TxBF)	20	5825	66
5.8G	VHT40(TxBF)	40	5755	77
5.8G	VHT40(TxBF)	40	5795	87
5.8G	VHT80(TxBF)	80	5775	71

Abbreviation Explanation

Band	Mode	BWch (MHz)	Nss-Min	Nant	Ch. (MHz)	Range	Test Cond.	Abbreviation
5.2G	VHT40	40	1,(M0-9)	2	5190	L	TN,VN	5.2G;VHT40;40;1,(M0-9);2;5190;L;TN,VN
5.2G	VHT80	80	1,(M0-9)	2	5210	S	TN,VN	5.2G;VHT80;80;1,(M0-9);2;5210;S;TN,VN

Note:

- ♦ Test range channel consist of L (Low Ch.), M (Middle Ch.), H (High Ch.), S (Single Ch. or Intra- band Ch.) and C (Inter-band Ch.).

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 Test Voltage: 120Vac / 60Hz
Operating Mode	Operating Mode Description
1	Adapter Mode
2	UPS Mode
For operating mode 2 is the worst case and it was record in this test report.	

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth, Peak Power Spectral Density, Frequency Stability
Test Condition	Conducted measurement at transmit chains

Note: Based on 802.11ac EIRP power was the worst case. Therefore only 802.11ac was tested.

The Worst Case Mode for Following Conformance Tests	
Tests Item	Transmitter Bandedge Emissions , Transmitter 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.
User Position	☒ EUT will be placed in fixed position.
	☐ EUT will be placed in mobile position and operating multiple positions.
	☐ EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions.
Operating Mode < 1GHz	☒ 1. Adapter Mode
	☒ 2. UPS Mode
For operating mode 2 is the worst case and it was record in this test report.	
Orthogonal Planes of EUT	Z Plane
	
Worst Planes of EUT	V

Note: Based on 802.11ac EIRP power was the worst case. Therefore only 802.11ac was tested.

2.4 Support Equipment

Support Equipment - AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook(Remote)	DELL	E5530	DoC
2	Adapter for NoteBook(Remote)	DELL	LA65NS2-0	DoC
3	UPS	Cyber	CSN27U12V3	-
4	AC Adapter for EUT	MOSO	MSA-C2500IS12.0-30F-US	-

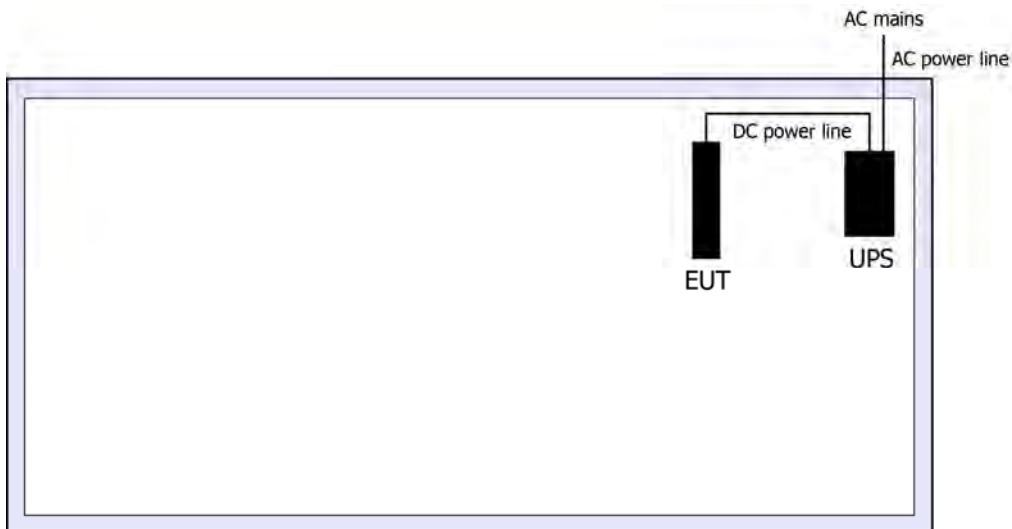
Support Equipment - Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E6400	DoC
2	Adapter for NoteBook	DELL	HA65NM130	DoC
3	UPS	Cyber	CSN27U12V3	-
4	AC Adapter for EUT	MOSO	MSA-C2500IS12.0-30F-US	-

Support Equipment - Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook(Remote)	DELL	E6400	DoC
2	Adapter for NoteBook(Remote)	DELL	HA65NM130	DoC
3	UPS	Cyber	CSN27U12V3	-
4	AC Adapter for EUT	MOSO	MSA-C2500IS12.0-30F-US	-
5	PC(Remote)	DELL	OPTIPLEX 760	-

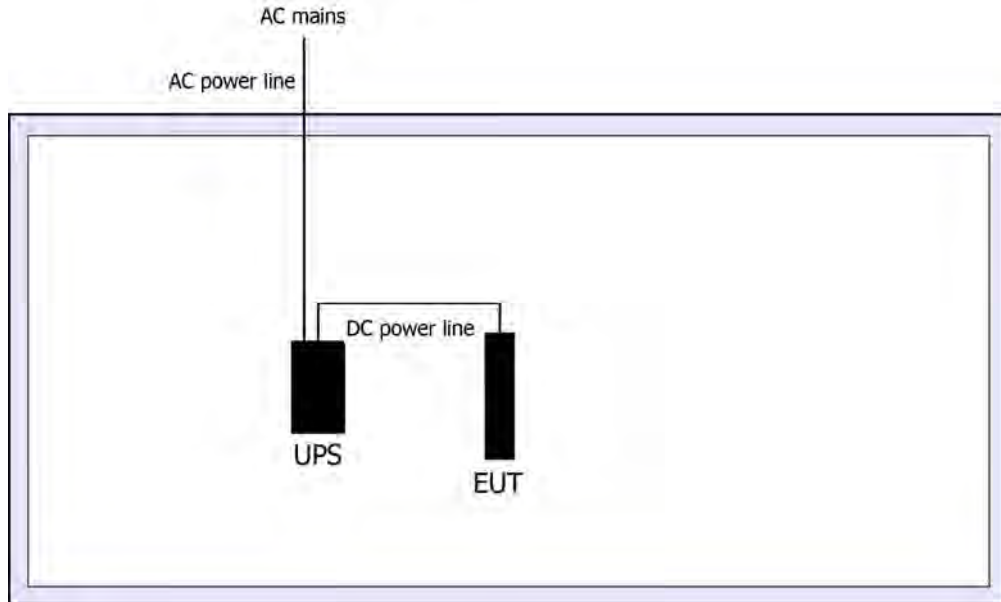
* Note. The support equipment No. 3 and No. 4 was provided from customer.

2.5 Test Setup Diagram

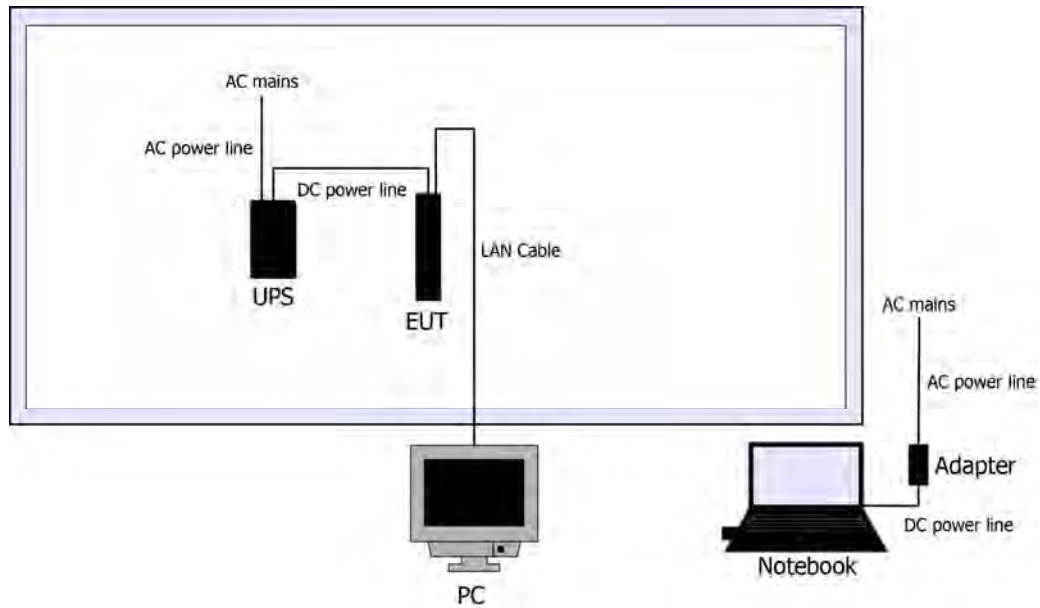
Test Setup Diagram – AC Line Conducted Emission Test (Mode 2)



Test Setup Diagram – Radiated Emission Test (Mode 2)



Test Setup Diagram – Radiated Emission Test for TxBF (Mode 2)



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.

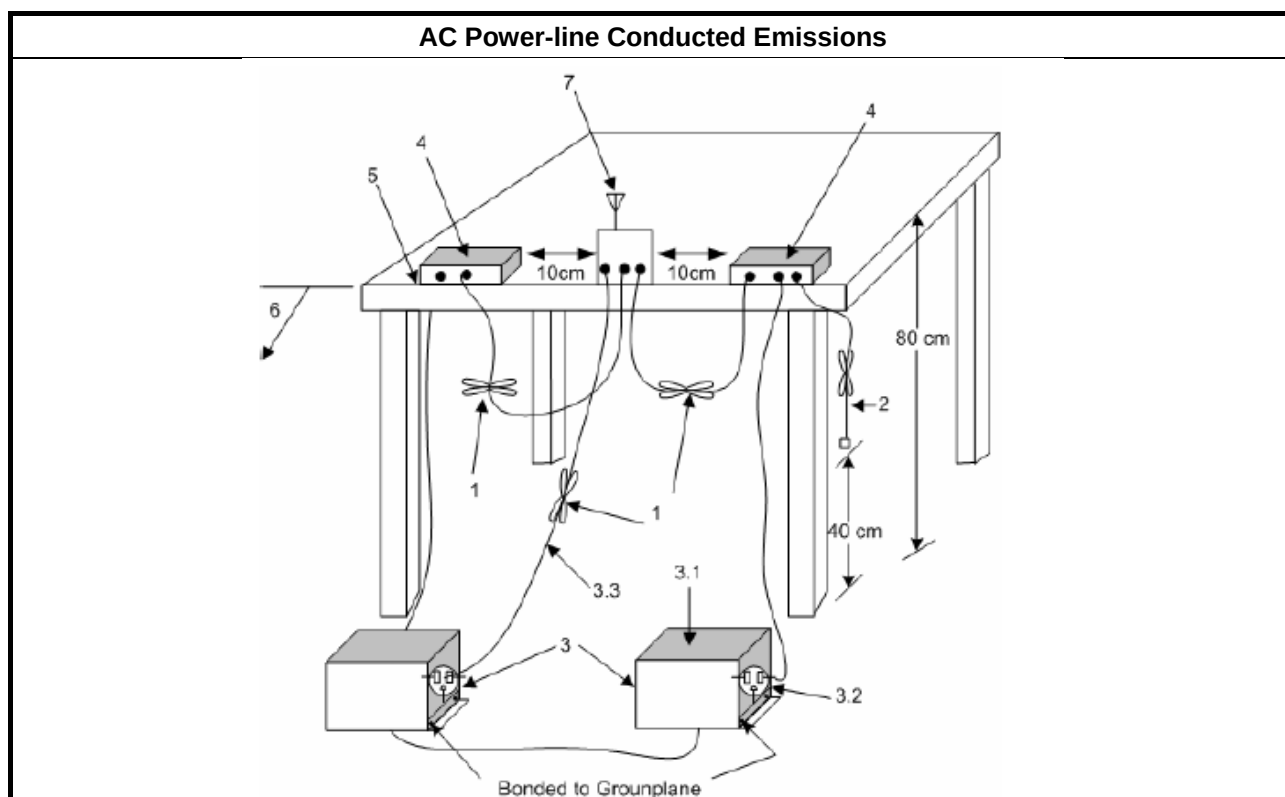
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
☒ 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 I

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band, N/A
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.

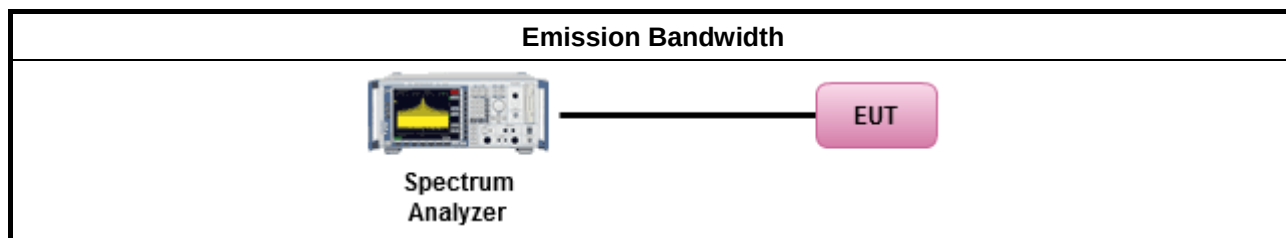
3.2.2 Measuring Instruments

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:	
☒	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
☐	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix A

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
For the 5.15-5.25 GHz band:	
	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 $P_{Out} = 24 - (G_{TX} - 6)$.
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 $P_{Out} = 24 - (G_{TX} - 6)$.	
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 $P_{Out} = 24 - (G_{TX} - 6)$.	
For the 5.725-5.85 GHz band:	
	Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$.
	Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

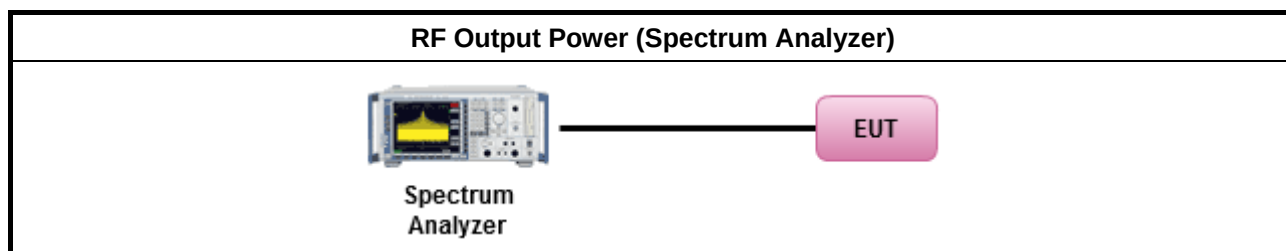
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Conducted Output Power	
	[duty cycle $\geq$ 98% or external video / power trigger]
☒	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	duty cycle $<$ 98% and average over on/off periods with duty factor
☐	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
☒	Refer as FCC 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
☐	Refer as FCC KDB 789033, clause E Method PM (using an RF average power meter).
For conducted measurement.	
	If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	If multiple transmit chains, EIRP calculation could be following as methods: $P_{\text{total}} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $\text{EIRP}_{\text{total}} = P_{\text{total}} + \text{DG}$

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix B

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
- For the 5.15-5.25 GHz band: - 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 $PPSD = 11 - (G_{TX} - 6)$. - For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$. - For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$. - For the 5.725-5.85 GHz band: - 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.	

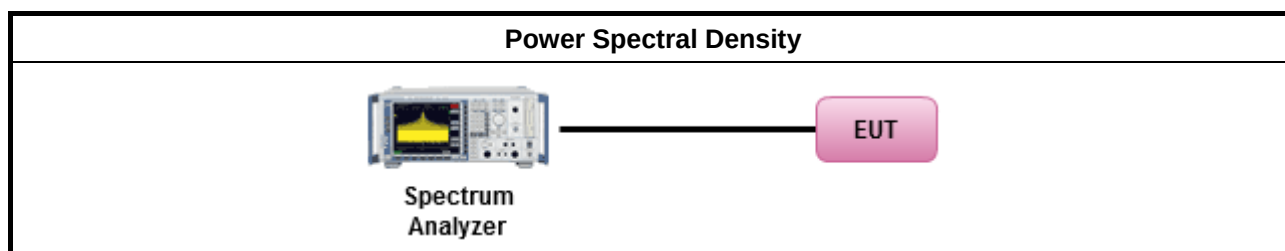
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
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:	
☐ Refer as FCC 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 ≥ 98% or external video / power trigger]	
☒ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).	
☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed) duty cycle < 98% and average over on/off periods with duty factor	
☐ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).	
☒ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below:	
☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the N _{TX} 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.	
☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,	
☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.	
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



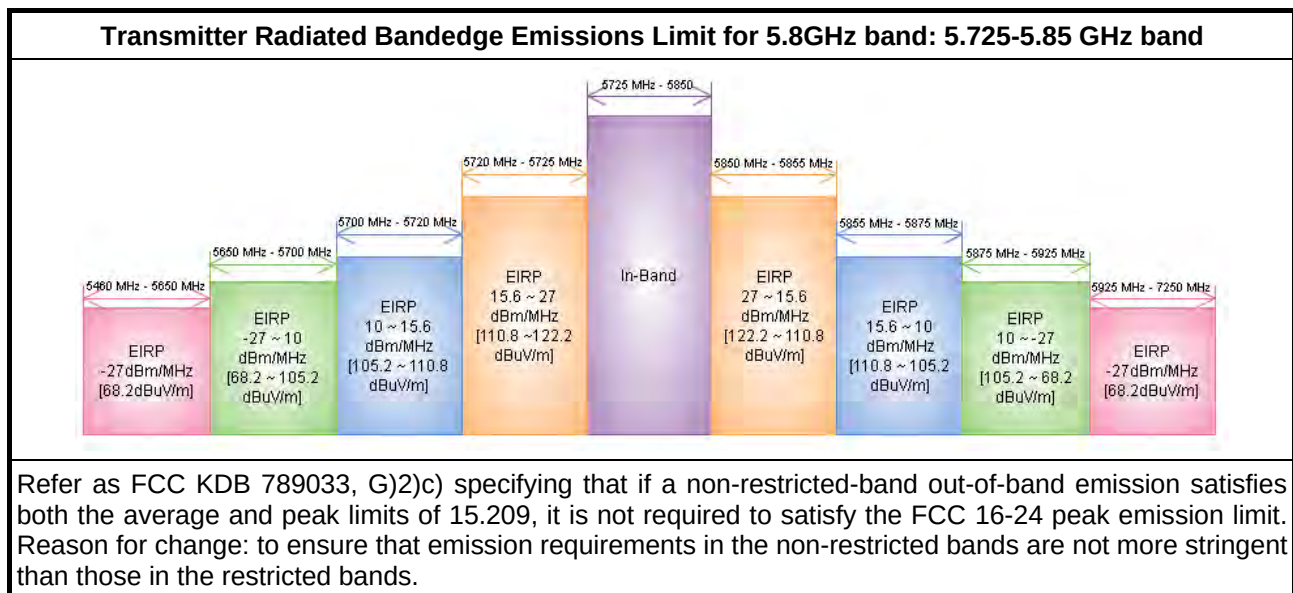
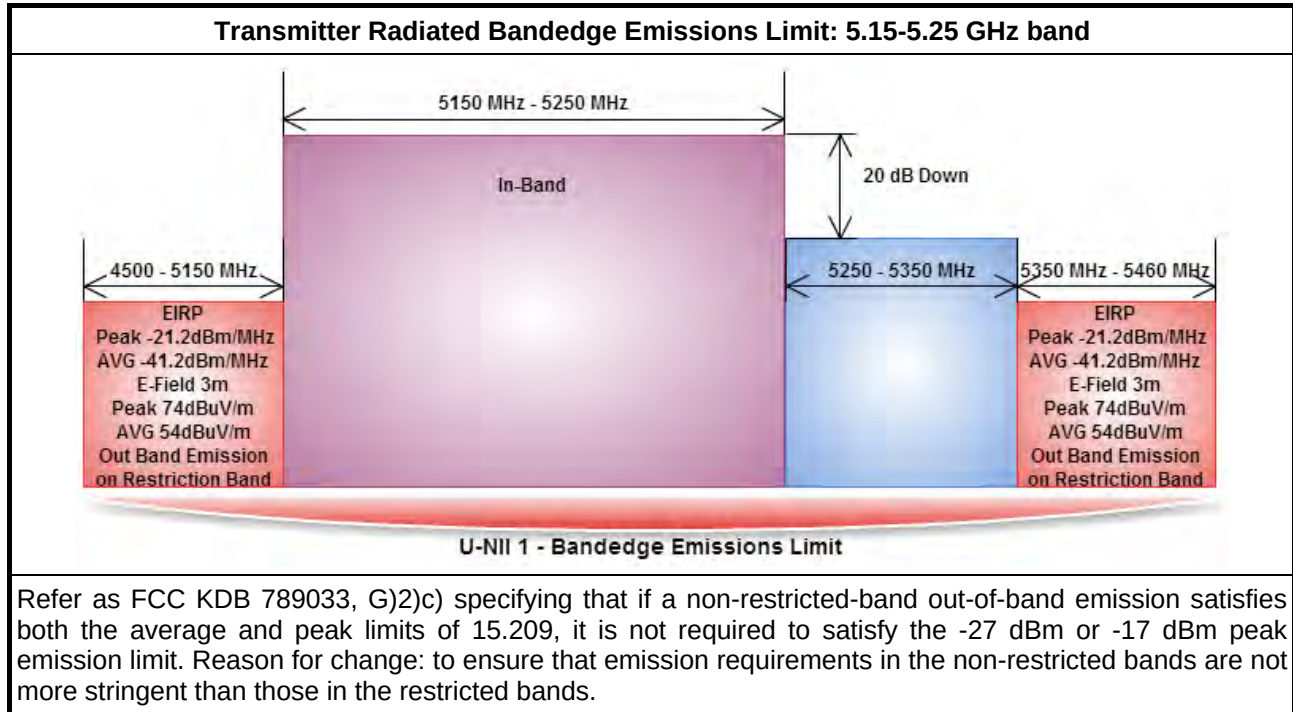


3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix C

3.5 Transmitter Bandedge Emissions

3.5.1 Transmitter Radiated Bandedge Emissions Limit



3.5.2 Measuring Instruments

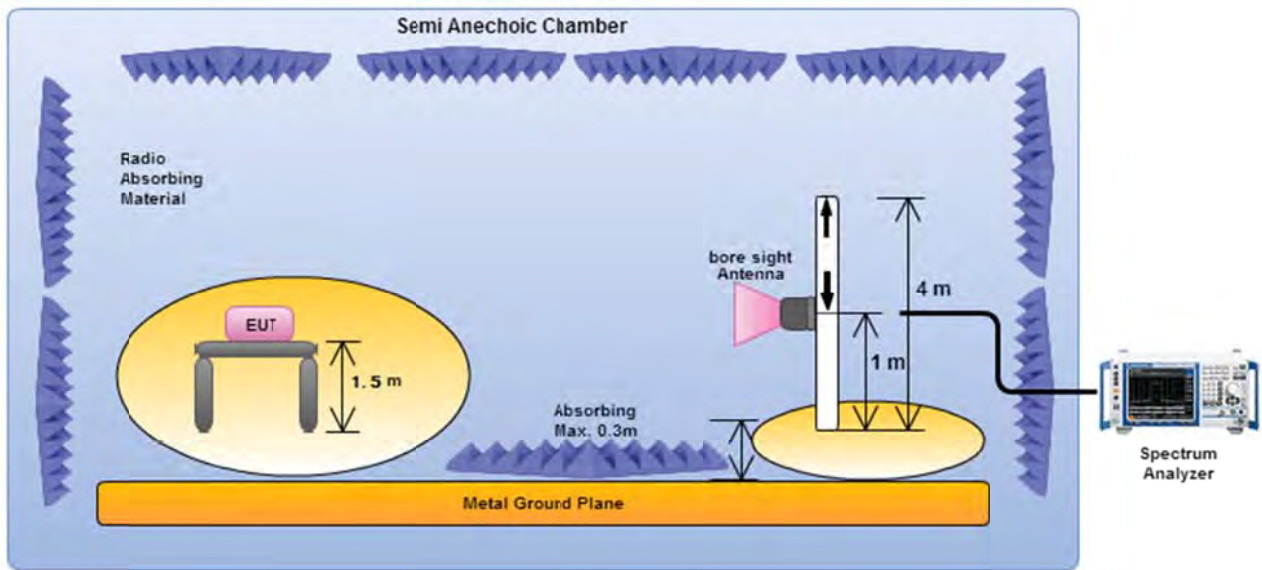
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method	
☒	The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].
☒	Refer as ANSI C63.10, clause 6.10 bandedge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
☐	If EUT operate in adjacent contiguous bands, bandedge testing performed at the lowest frequency channel at lower-band and highest frequency channel at higher-band. Transmitter in-band emissions will consist of adjacent contiguous bands (e.g., IEEE 802.11ac VHT160 The lowest frequency channel at lower-band and highest frequency channel at higher-band in-band emissions will consist of two adjacent contiguous bands.)
☐	☐ Operating in 5.15-5.25 GHz band (lower-band) and 5.25-5.35 GHz band (higher-band). ☐ Operating in 5.47-5.725 GHz band (lower-band) and 5.725-5.85 GHz band (higher-band).
☐	If EUT operate in individual non-contiguous bands, bandedge testing performed at the lowest frequency channel and highest frequency channel within lower-band and higher-band. (e.g., (e.g., IEEE 802.11ac VHT160)
☐	☐ Operating in 5.25-5.35 GHz band (lower-band) and 5.47-5.725 GHz band (higher-band). ☐ Operating in 5.15-5.25 GHz band (lower-band) and 5.725-5.85 GHz band (higher-band).
☒	For the transmitter unwanted emissions shall be measured using following options below:
☒	Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
☒	Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
☐	☐ Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging). ☐ Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW). ☒ Refer as ANSI C63.10, clause 4.1.4.2.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time. ☐ Refer as ANSI C63.10, clause 4.1.4.2.4 average value of pulsed emissions. ☒ Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit. ☐ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
☒	For the transmitter bandedge emissions shall be measured using following options below:
☐	Refer as FCC KDB 789033, clause G)3)d) for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
☒	Refer as ANSI C63.10, clause 6.10 for band-edge testing.
☐	Refer as ANSI C63.10, clause 6.10.6.2 for marker-delta method for band-edge measurements.
☒	For radiated measurement, refer as ANSI C63.10, clause 6.6. Test distance is 3m.
☒	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). Measurements in the bandedge are typically made at a closer distance 3m, because the instrumentation noise floor is typically close to the radiated emission limit.

3.5.4 Test Setup

Transmitter Radiated Bandedge Emissions



Electric field tests shall be performed in transmitter bandedge emissions using a calibrated horn antenna.

3.5.5 Transmitter Radiated Bandedge Emissions

Refer as Appendix D

3.6 Transmitter Unwanted Emissions

3.6.1 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.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	5.650-5700 GHz: e.i.r.p. -27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

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

3.6.2 Measuring Instruments

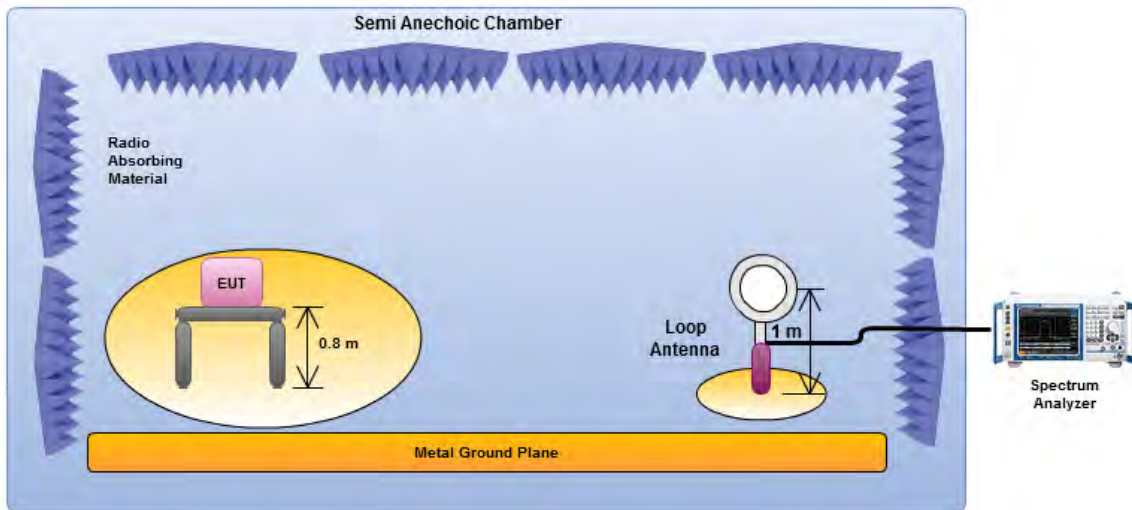
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
☒	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).
☒	The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].
☒	For the transmitter unwanted emissions shall be measured using following options below:
☒	Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
☒	Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
☐	Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
☐	Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
☒	Refer as ANSI C63.10, clause 4.1.4.2.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.
☐	Refer as ANSI C63.10, clause 4.1.4.2.4 average value of pulsed emissions.
☒	Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
☐	Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
☒	For radiated measurement.
☒	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. For 1 GHz to 5 GHz, test distance is 3m; For 5 GHz to 40 GHz, test distance is 3m.
☒	The any unwanted emissions level shall not exceed the fundamental emission level.
☒	All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

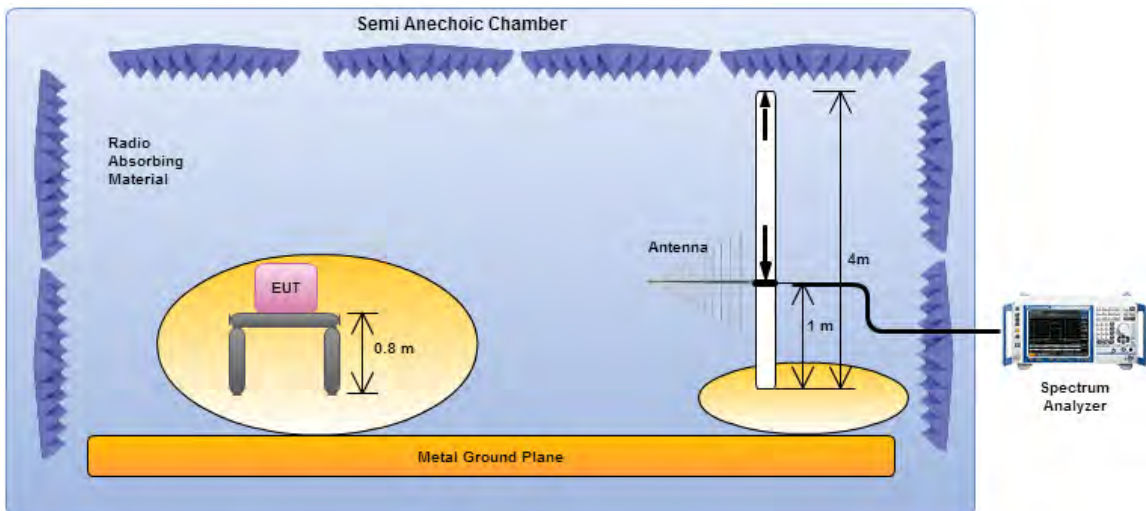
3.6.4 Test Setup

Transmitter Spurious and Out of Band Emissions (9 kHz - 30 MHz)



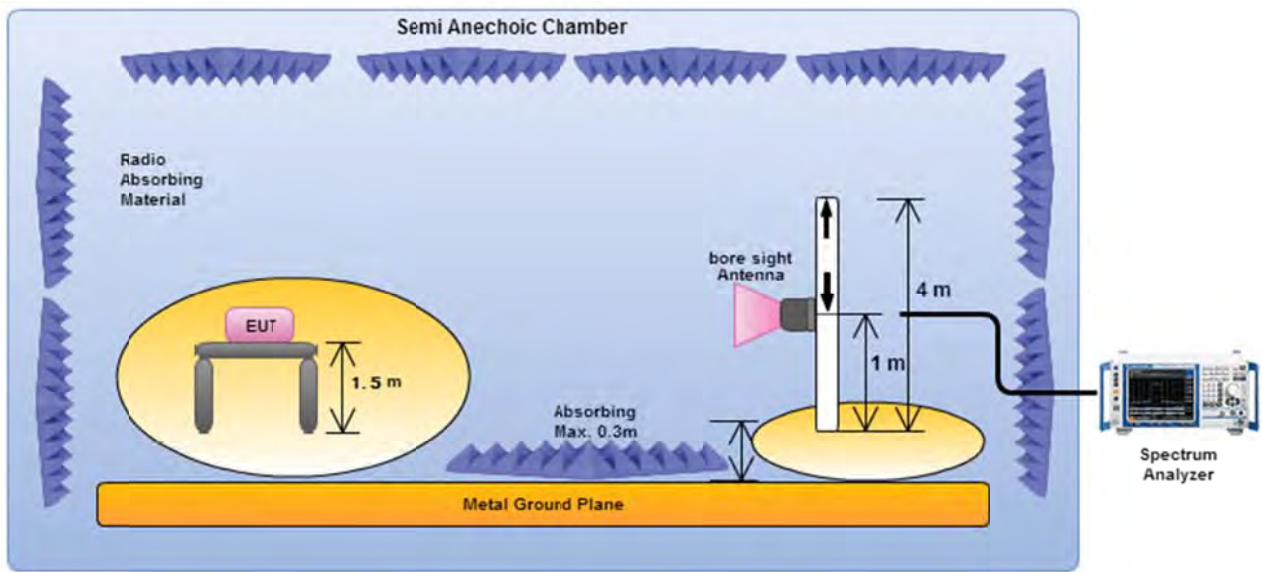
Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna.

Transmitter Radiated Unwanted Emissions Below 1GHz



Electric field tests shall be performed in the frequency range of 30 MHz to 1000 MHz using a calibrated bi-log antenna.

Transmitter Radiated Unwanted Emissions Above 1GHz



Electric field tests shall be performed in the frequency range of 1 GHz to 10th harmonic of highest fundamental frequency or 40 GHz using a calibrated horn antenna.

3.6.5 Transmitter Radiated Unwanted Emissions-with Antenna (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported. Any spurious which has more than 20 dB of margin compared to the applicable limit is not necessarily reported.

3.6.6 Test Result of Transmitter Radiated Unwanted Emissions

Refer as Appendix E

3.7 Frequency Stability

3.7.1 Frequency Stability Limit

Frequency Stability Limit
UNII Devices 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 The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz.

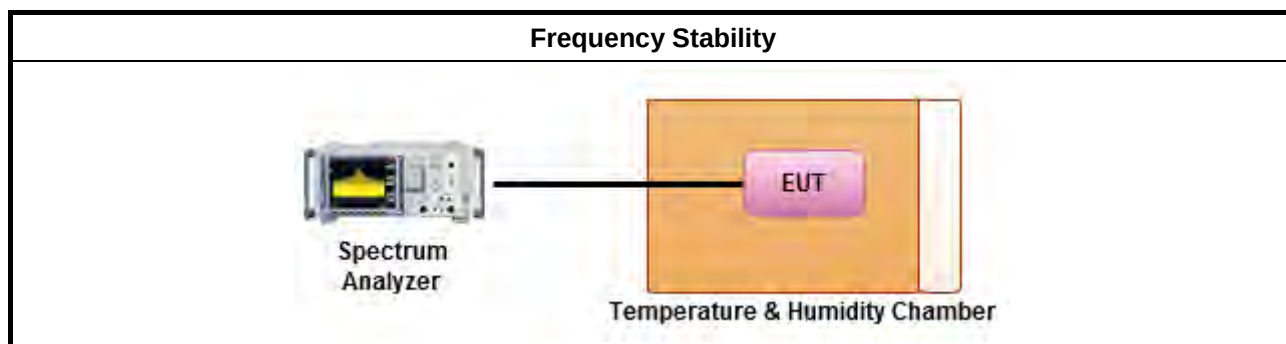
3.7.2 Measuring Instruments

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

3.7.3 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

3.7.4 Test Setup



3.7.5 Test Result of Frequency Stability

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
EMC Receiver	KEYSIGHT	N9038A	MY54130031	20Hz ~ 8.4GHz	Apr. 14, 2016	Apr. 13, 2017
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9kHz ~ 30MHz	Jan. 26, 2016	Jan. 25, 2017
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	Oct. 30, 2015	Oct. 29, 2016
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	NCR	NCR

Instrument for Conducted Test

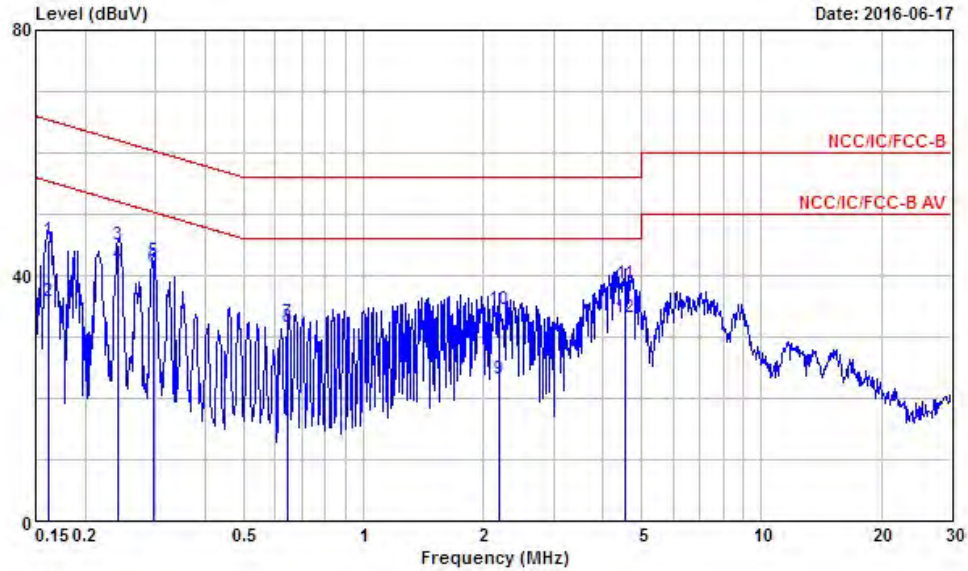
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101500	9KHz~40GHz	May 12, 2016	May 11, 2017
Power Sensor	Anritsu	MA2411B	917017	300MHz ~ 40GHz	Feb. 04, 2016	Feb. 03, 2017
Power Meter	Anritsu	ML2495A	949003	300MHz ~ 40GHz	Feb. 04, 2016	Feb. 03, 2017
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Jul. 28, 2015	Jul. 27, 2016
AC Power Source	G.W	APS-9102	EL920581	AC 0V ~ 300V	Jun. 28, 2015	Jun. 27, 2016
Temp. and Humidity Chamber	Giant Force	GTH-225-20-S	MAB0103-00 1	-20 ~ 100℃	Jun. 25, 2016	Jun. 24, 2017

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	Nov. 28, 2015	Nov. 27, 2016
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	Dec. 16, 2015	Dec. 15, 2016
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May 10, 2016	May 09, 2017
Amplifier	Agilent	8449B	3008A02120	1GHz ~ 26.5GHz	Sep. 02, 2015	Sep. 01, 2016
Spectrum	R&S	FSV40	101513	9kHz ~ 40GHz	Feb. 16, 2016	Feb. 15, 2017
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 18, 2015	Sep. 17, 2016
Horn Antenna	SCHWARZBECK	BBHA9120D	1531	1GHz ~ 18GHz	Apr. 22, 2016	Apr. 21, 2017
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz ~ 40GHz	Jan. 29, 2016	Jan. 28, 2017
Amplifier	MITEQ	JS44-18004000-33-8P	1840917	18GHz ~ 40GHz	Jun. 02, 2015	Jun. 01, 2017
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz~30 MHz	Feb.02.2015	Feb.01.2017

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	AC Power & Radio link (WLAN)		



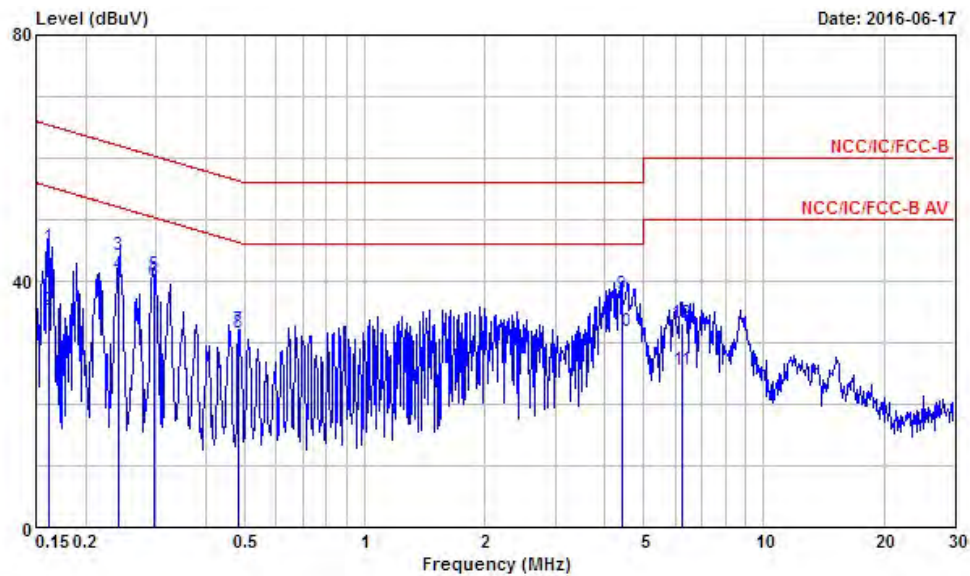
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1622960	45.68	-19.67	65.35	45.34	0.10	0.24	QP
2	0.1622960	35.75	-19.60	55.35	35.41	0.10	0.24	Average
3	0.2417320	44.87	-17.17	62.04	44.52	0.11	0.24	QP
4	0.2417320	41.83	-10.21	52.04	41.48	0.11	0.24	Average
5	0.2978930	42.37	-17.93	60.30	42.06	0.12	0.19	QP
6	0.2978930	41.35	-8.95	50.30	41.04	0.12	0.19	Average
7	0.6472440	32.37	-23.63	56.00	32.14	0.13	0.10	QP
8	0.6472440	31.54	-14.46	46.00	31.31	0.13	0.10	Average
9	2.190	23.19	-22.81	46.00	22.77	0.15	0.27	Average
10	2.190	34.39	-21.61	56.00	33.97	0.15	0.27	QP
11	4.552	38.65	-17.35	56.00	38.35	0.19	0.11	QP
12	4.552	33.27	-12.73	46.00	32.97	0.19	0.11	Average

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 Result

Operating Mode	1	Power Phase	Line
Operating Function	AC Power & Radio link (WLAN)		



	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1614960	45.55	-19.84	65.39	45.20	0.11	0.24	QP
2	0.1614960	35.14	-20.25	55.39	34.79	0.11	0.24	Average
3	0.2425320	44.27	-17.74	62.01	43.92	0.11	0.24	QP
4	0.2425320	40.95	-11.06	52.01	40.60	0.11	0.24	Average
5	0.2963450	41.11	-19.23	60.34	40.80	0.12	0.19	QP
6	0.2963450	40.06	-10.28	50.34	39.75	0.12	0.19	Average
7	0.4837480	32.20	-24.07	56.27	31.98	0.12	0.10	QP
8	0.4837480	31.55	-14.72	46.27	31.33	0.12	0.10	Average
9	4.409	37.77	-18.23	56.00	37.48	0.18	0.11	QP
10	4.409	31.73	-14.27	46.00	31.44	0.18	0.11	Average
11	6.263	25.53	-24.47	50.00	25.17	0.21	0.15	Average
12	6.263	33.21	-26.79	60.00	32.85	0.21	0.15	QP

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



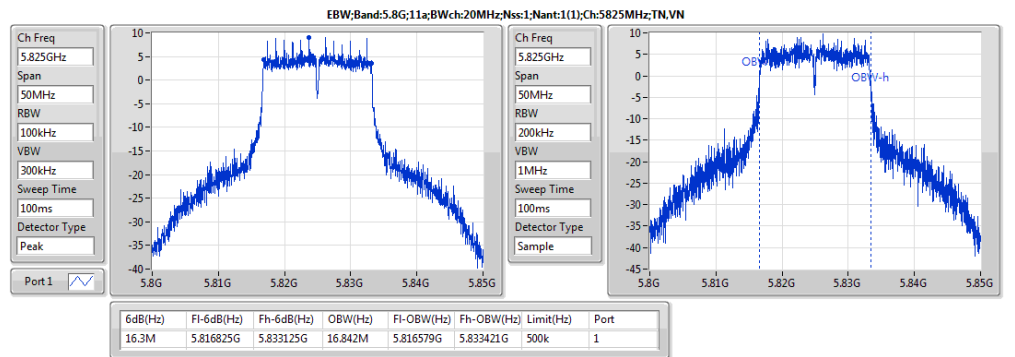
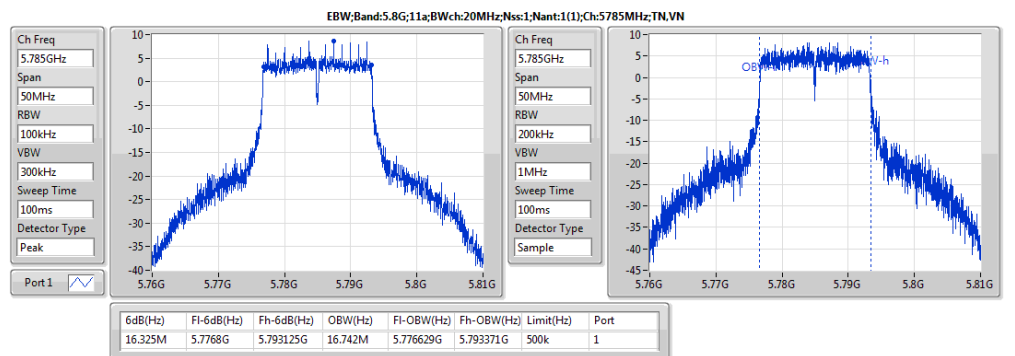
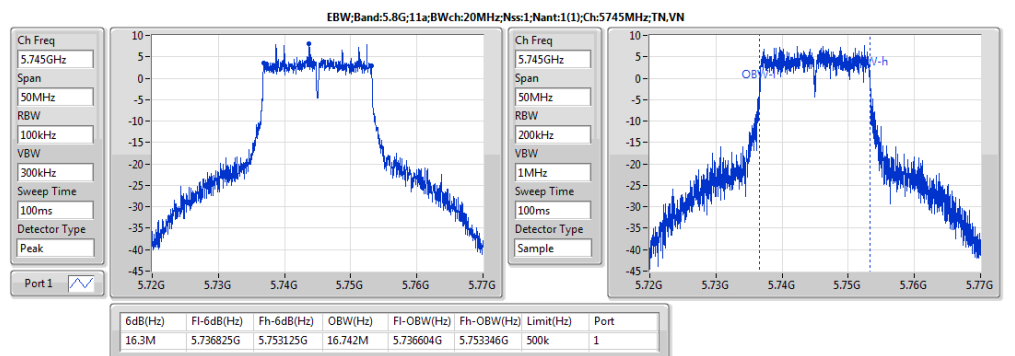
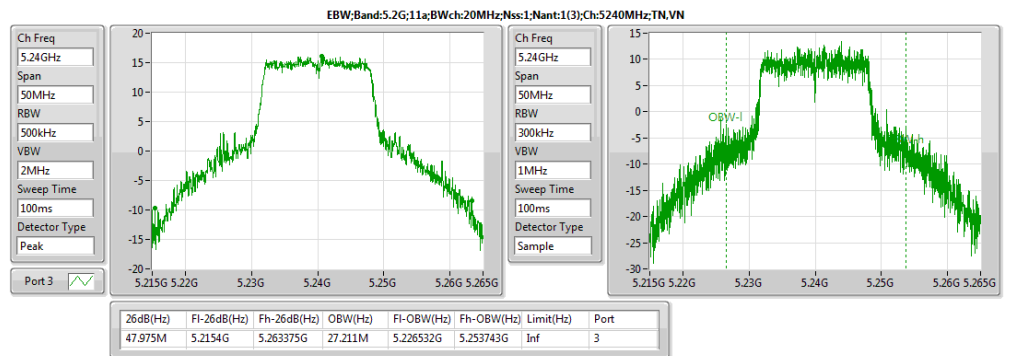
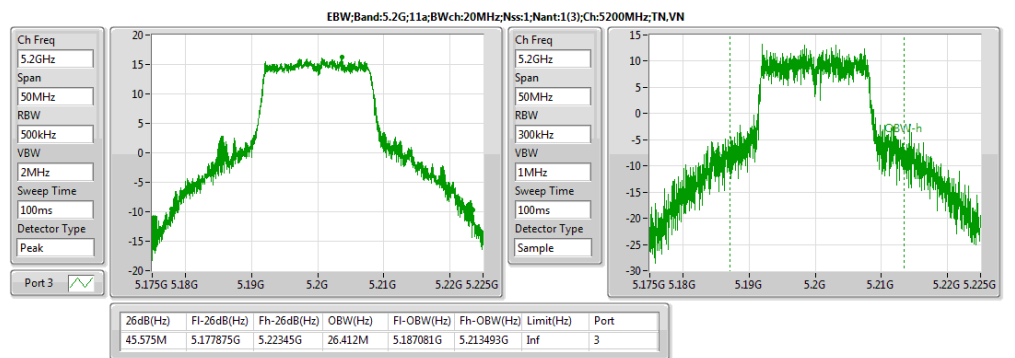
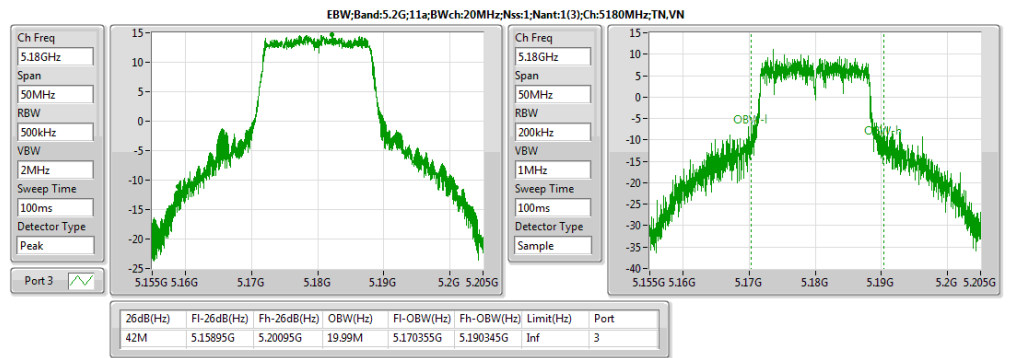
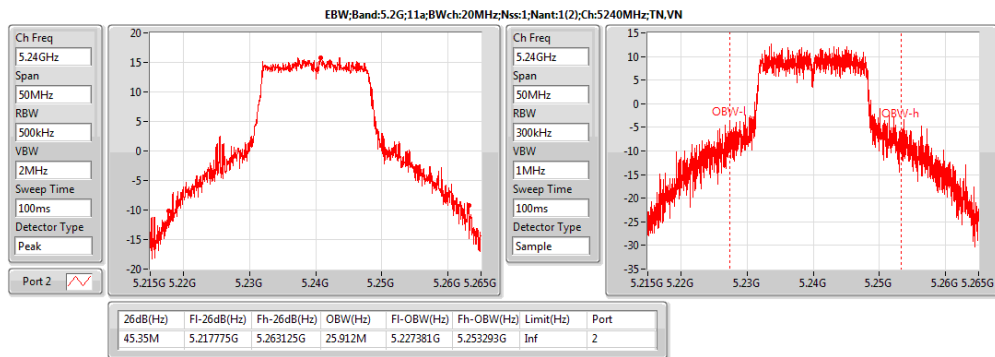
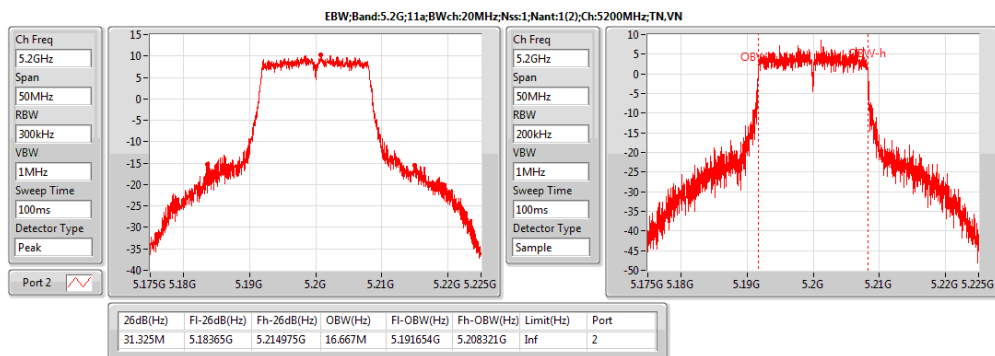
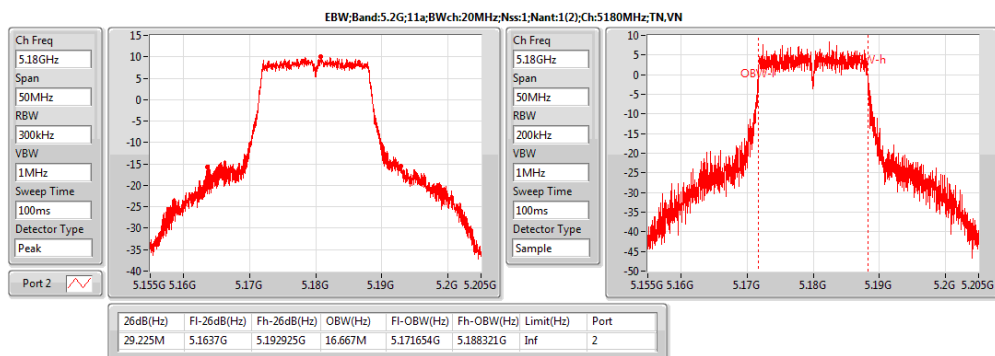
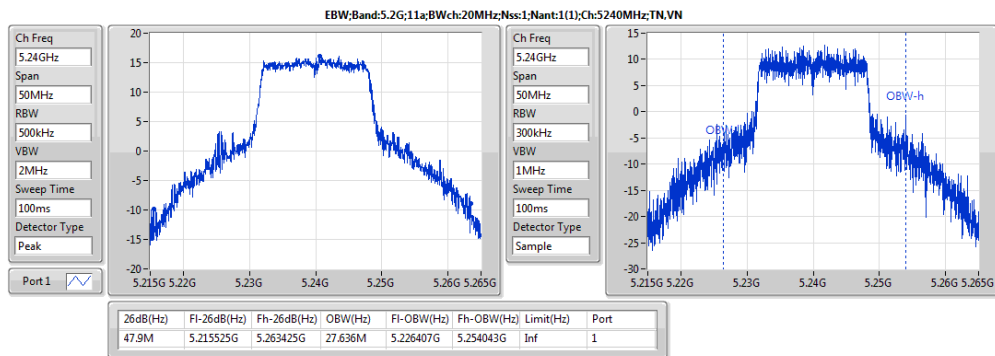
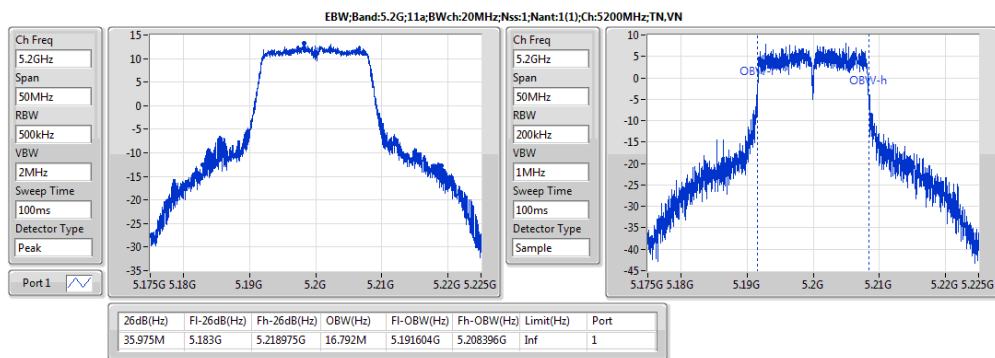
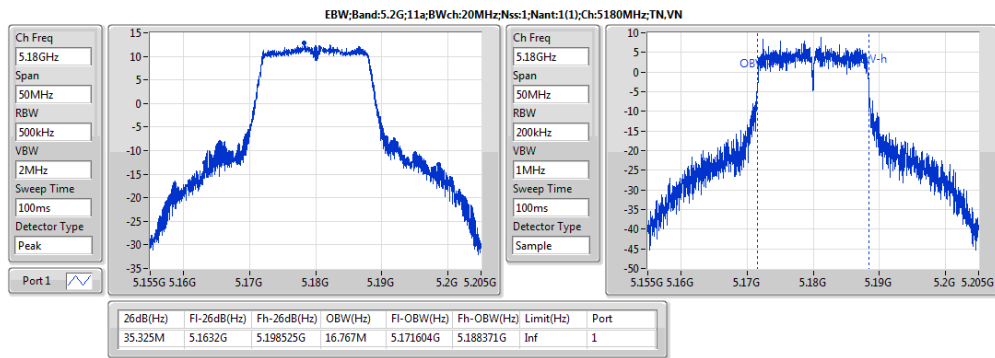
Emission Bandwidth
Summary

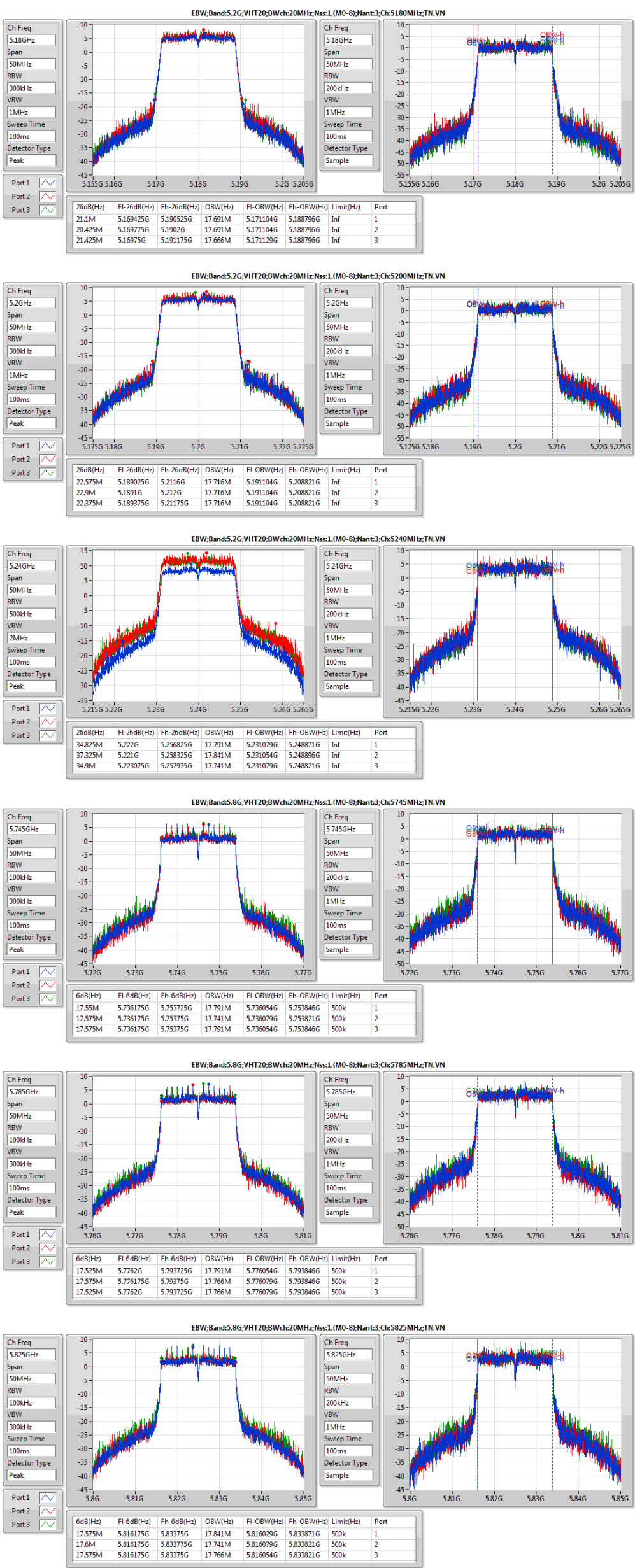
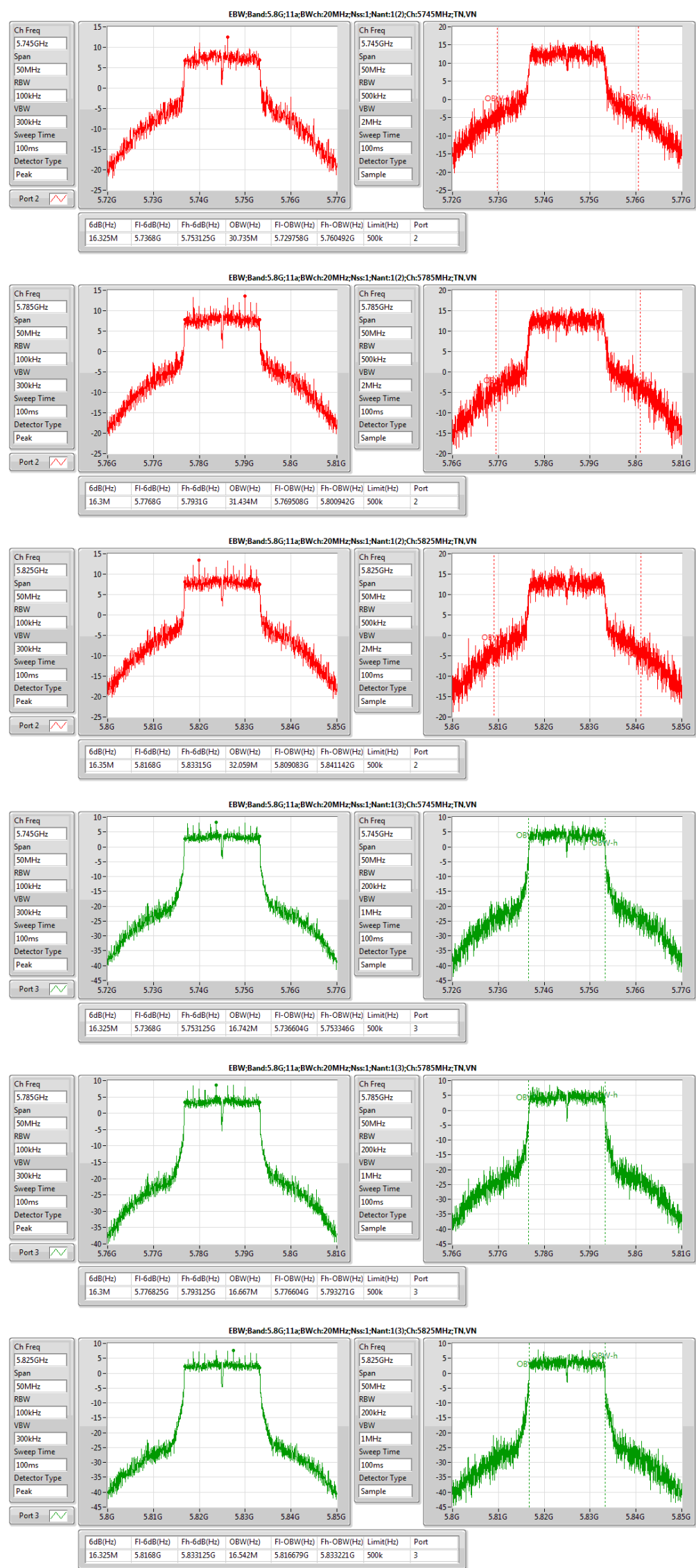
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.2G;11a;20;1;1(1)	47.9M	27.636M	27M6D1D	35.325M	16.767M
5.2G;11a;20;1;1(2)	45.35M	25.912M	25M9D1D	29.225M	16.667M
5.2G;11a;20;1;1(3)	47.975M	27.211M	27M2D1D	42M	19.99M
5.8G;11a;20;1;1(1)	16.325M	16.842M	16M8D1D	16.3M	16.742M
5.8G;11a;20;1;1(2)	16.35M	32.059M	32M1D1D	16.3M	30.735M
5.8G;11a;20;1;1(3)	16.325M	16.742M	16M7D1D	16.3M	16.542M
5.2G;VHT20;20;1,(M0-8);3	37.325M	17.841M	17M8D1D	20.425M	17.666M
5.8G;VHT20;20;1,(M0-8);3	17.6M	17.841M	17M8D1D	17.525M	17.741M
5.2G;VHT40;40;1,(M0-9);3	70.85M	36.382M	36M4D1D	39.45M	36.182M
5.8G;VHT40;40;1,(M0-9);3	36.35M	36.432M	36M4D1D	36.25M	36.332M
5.2G;VHT80;80;1,(M0-9);3	82.8M	75.762M	75M8D1D	82.2M	75.562M
5.8G;VHT80;80;1,(M0-9);3	75.8M	75.962M	76M0D1D	75.1M	75.862M

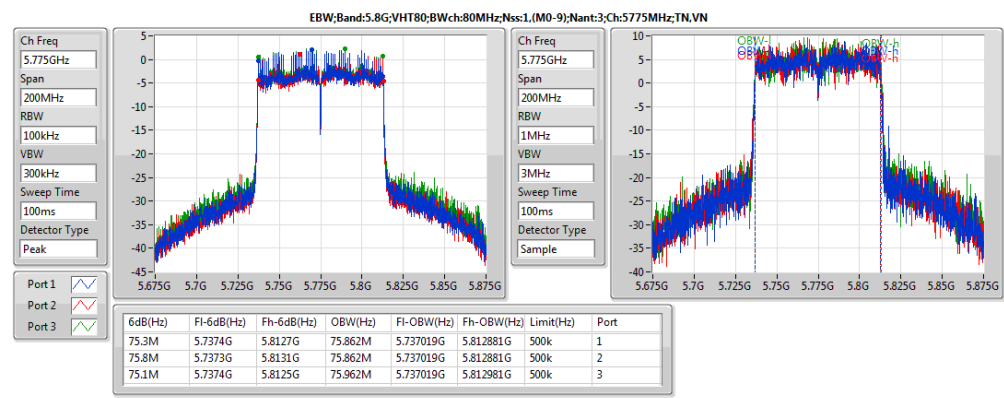
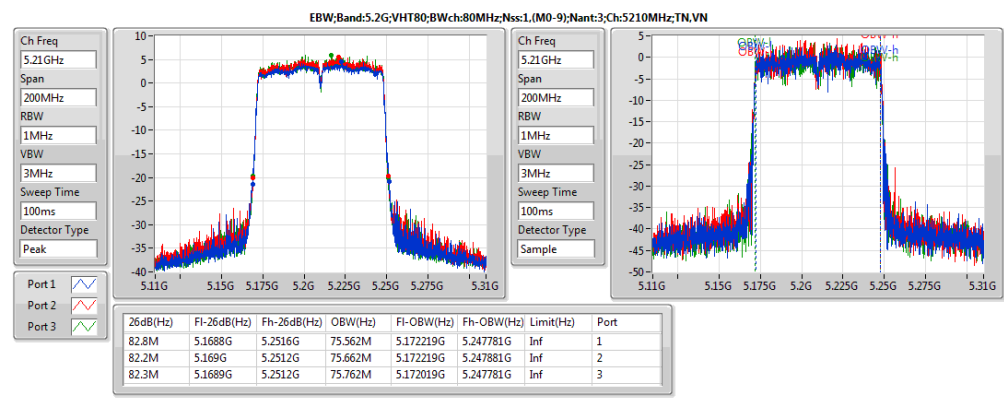
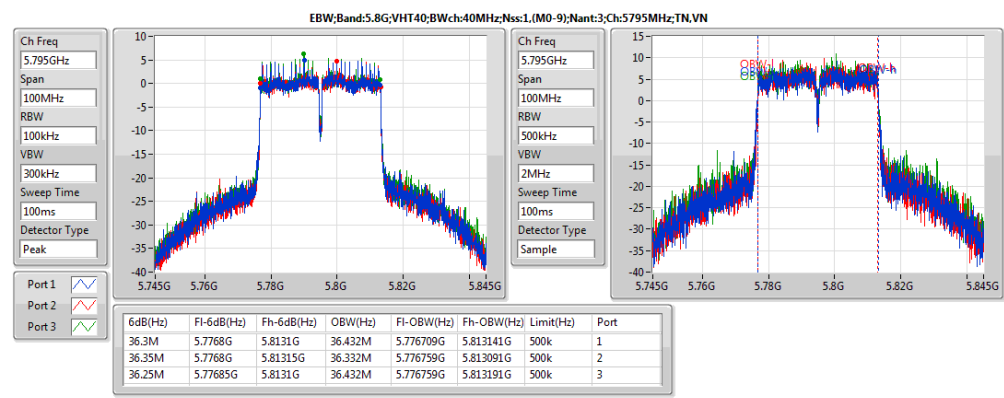
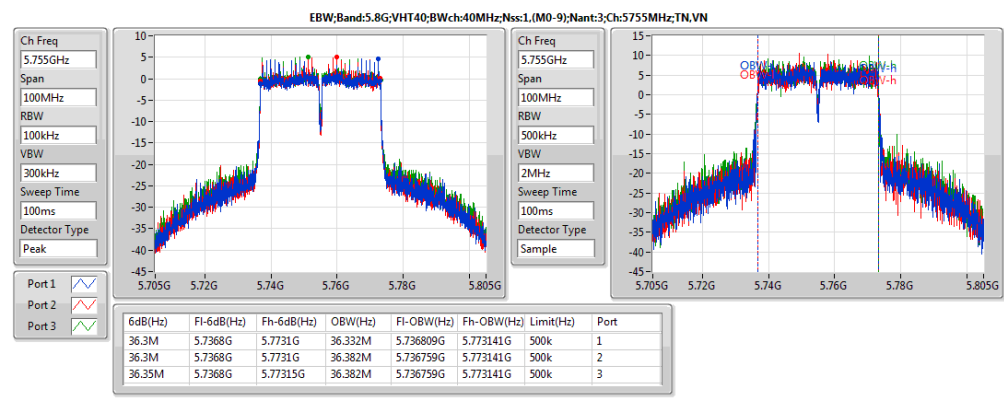
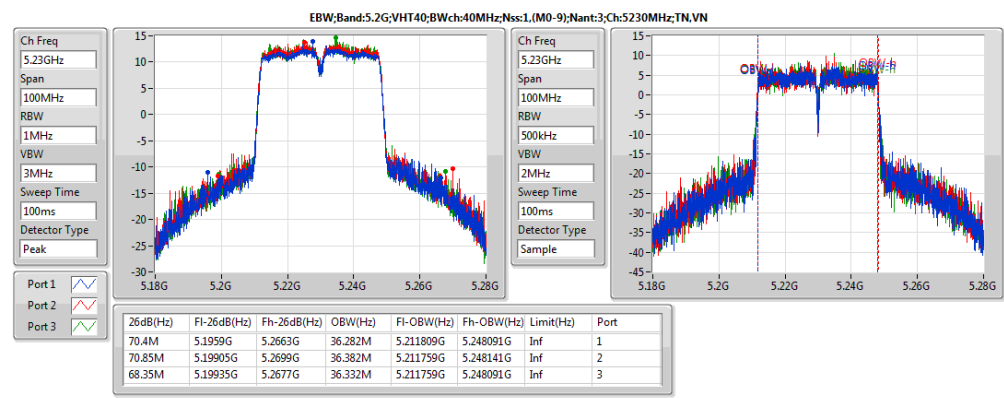
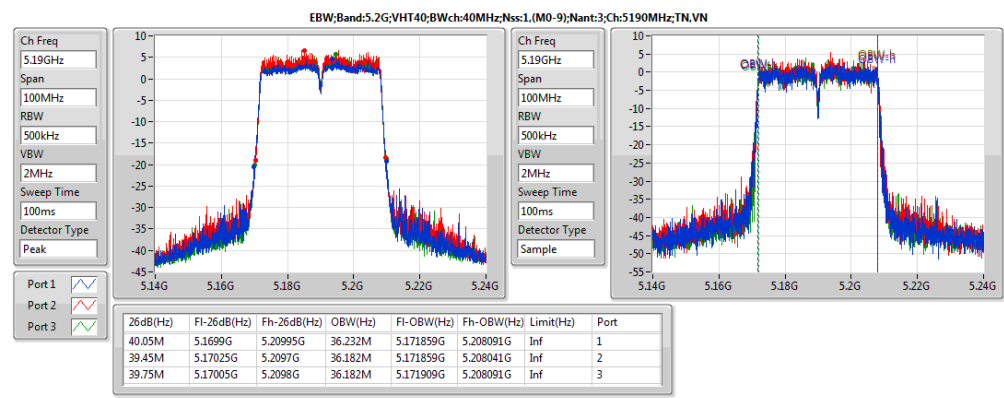


Result

Mode	Result	Limit	P1-N dB (Hz)	P1-OBW (Hz)	P2-N dB (Hz)	P2-OBW (Hz)	P3-N dB (Hz)	P3-OBW (Hz)
5.2G;11a;20;1;1(1);5180;L;TN,VN	Pass	Inf	35.325M	16.767M	-	-	-	-
5.2G;11a;20;1;1(1);5200;M;TN,VN	Pass	Inf	35.975M	16.792M	-	-	-	-
5.2G;11a;20;1;1(1);5240;H;TN,VN	Pass	Inf	47.9M	27.636M	-	-	-	-
5.2G;11a;20;1;1(2);5180;L;TN,VN	Pass	Inf	-	-	29.225M	16.667M	-	-
5.2G;11a;20;1;1(2);5200;M;TN,VN	Pass	Inf	-	-	31.325M	16.667M	-	-
5.2G;11a;20;1;1(2);5240;H;TN,VN	Pass	Inf	-	-	45.35M	25.912M	-	-
5.2G;11a;20;1;1(3);5180;L;TN,VN	Pass	Inf	-	-	-	-	42M	19.99M
5.2G;11a;20;1;1(3);5200;M;TN,VN	Pass	Inf	-	-	-	-	45.575M	26.412M
5.2G;11a;20;1;1(3);5240;H;TN,VN	Pass	Inf	-	-	-	-	47.975M	27.211M
5.8G;11a;20;1;1(1);5745;L;TN,VN	Pass	500k	16.3M	16.742M	-	-	-	-
5.8G;11a;20;1;1(1);5785;M;TN,VN	Pass	500k	16.325M	16.742M	-	-	-	-
5.8G;11a;20;1;1(1);5825;H;TN,VN	Pass	500k	16.3M	16.842M	-	-	-	-
5.8G;11a;20;1;1(2);5745;L;TN,VN	Pass	500k	-	-	16.325M	30.735M	-	-
5.8G;11a;20;1;1(2);5785;M;TN,VN	Pass	500k	-	-	16.3M	31.434M	-	-
5.8G;11a;20;1;1(2);5825;H;TN,VN	Pass	500k	-	-	16.35M	32.059M	-	-
5.8G;11a;20;1;1(3);5745;L;TN,VN	Pass	500k	-	-	-	-	16.325M	16.742M
5.8G;11a;20;1;1(3);5785;M;TN,VN	Pass	500k	-	-	-	-	16.3M	16.667M
5.8G;11a;20;1;1(3);5825;H;TN,VN	Pass	500k	-	-	-	-	16.325M	16.542M
5.2G;VHT20;20;1,(M0-8);3;5180;L;TN,VN	Pass	Inf	21.1M	17.691M	20.425M	17.691M	21.425M	17.666M
5.2G;VHT20;20;1,(M0-8);3;5200;M;TN,VN	Pass	Inf	22.575M	17.716M	22.9M	17.716M	22.375M	17.716M
5.2G;VHT20;20;1,(M0-8);3;5240;H;TN,VN	Pass	Inf	34.825M	17.791M	37.325M	17.841M	34.9M	17.741M
5.8G;VHT20;20;1,(M0-8);3;5745;L;TN,VN	Pass	500k	17.55M	17.791M	17.575M	17.741M	17.575M	17.791M
5.8G;VHT20;20;1,(M0-8);3;5785;M;TN,VN	Pass	500k	17.525M	17.791M	17.575M	17.766M	17.525M	17.766M
5.8G;VHT20;20;1,(M0-8);3;5825;H;TN,VN	Pass	500k	17.575M	17.841M	17.6M	17.741M	17.575M	17.766M
5.2G;VHT40;40;1,(M0-9);3;5190;L;TN,VN	Pass	Inf	40.05M	36.232M	39.45M	36.182M	39.75M	36.182M
5.2G;VHT40;40;1,(M0-9);3;5230;H;TN,VN	Pass	Inf	70.4M	36.282M	70.85M	36.382M	68.35M	36.332M
5.8G;VHT40;40;1,(M0-9);3;5755;L;TN,VN	Pass	500k	36.3M	36.332M	36.3M	36.382M	36.35M	36.382M
5.8G;VHT40;40;1,(M0-9);3;5795;H;TN,VN	Pass	500k	36.3M	36.432M	36.35M	36.332M	36.25M	36.432M
5.2G;VHT80;80;1,(M0-9);3;5210;S;TN,VN	Pass	Inf	82.8M	75.562M	82.2M	75.662M	82.3M	75.762M
5.8G;VHT80;80;1,(M0-9);3;5775;S;TN,VN	Pass	500k	75.3M	75.862M	75.8M	75.862M	75.1M	75.962M









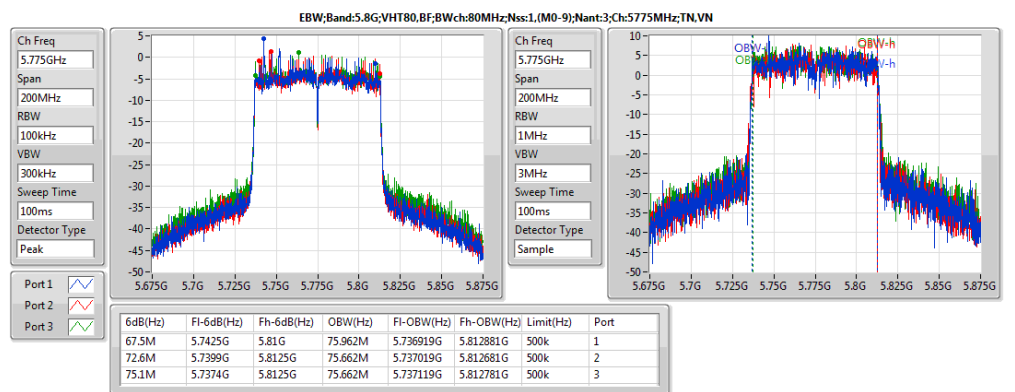
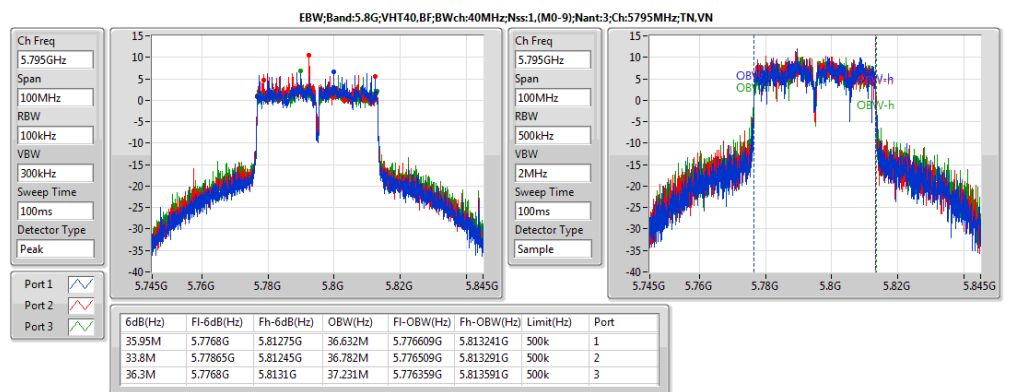
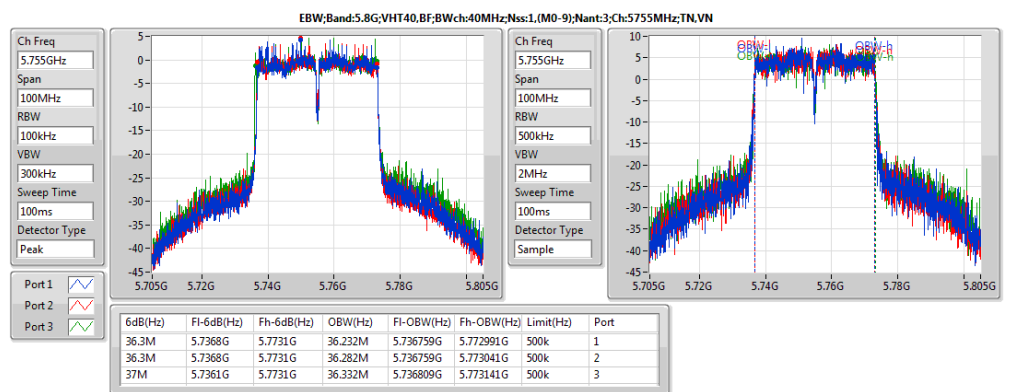
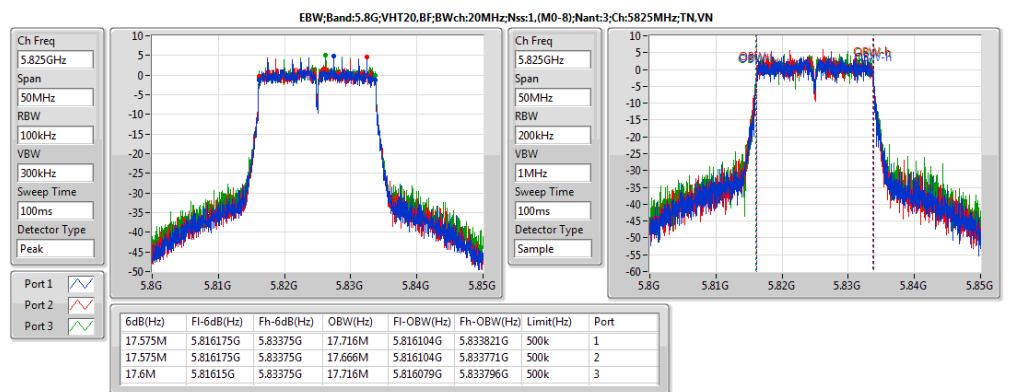
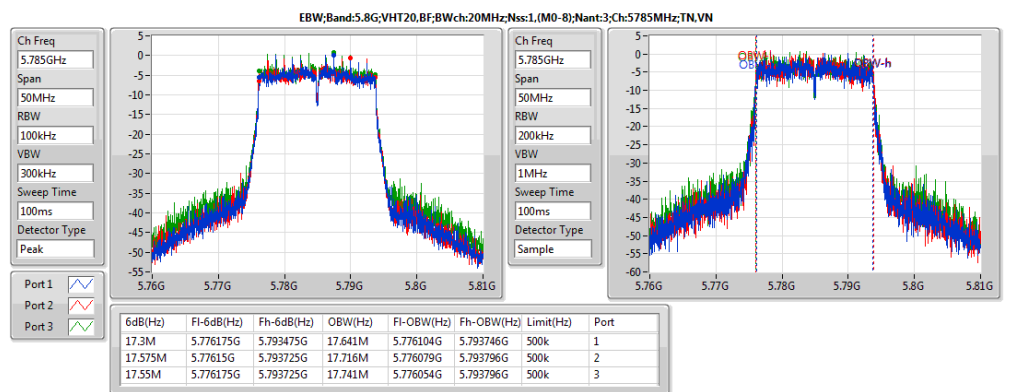
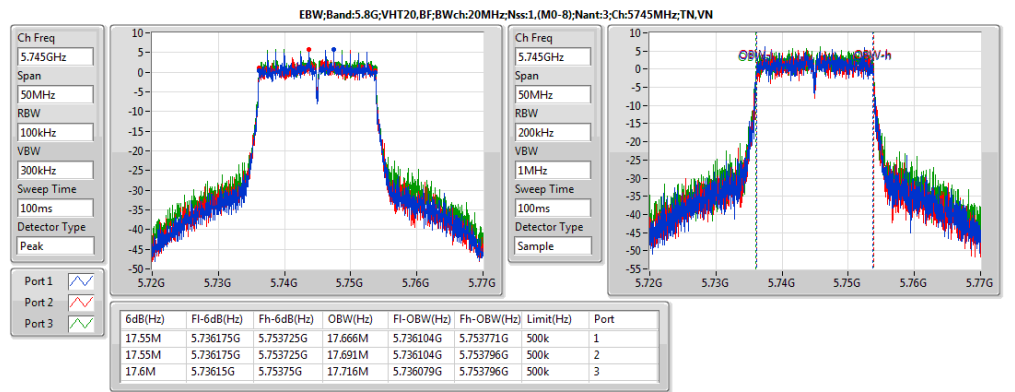
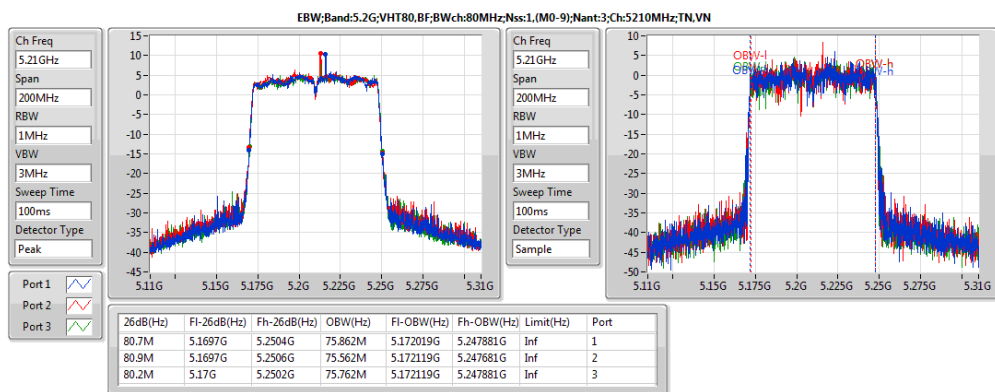
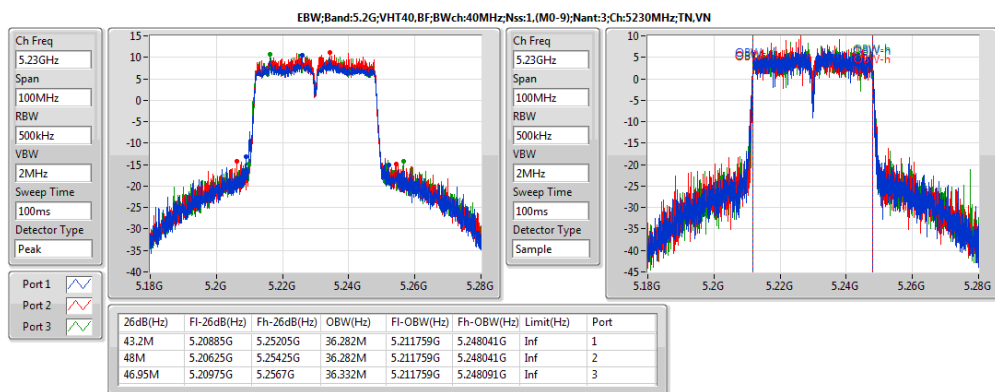
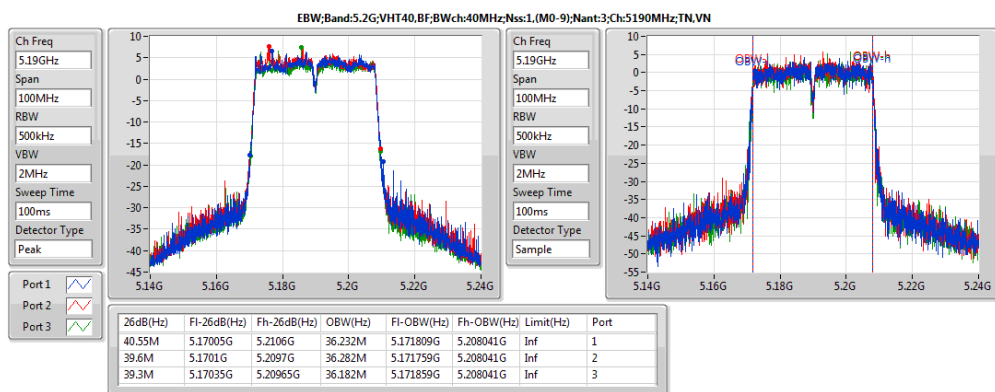
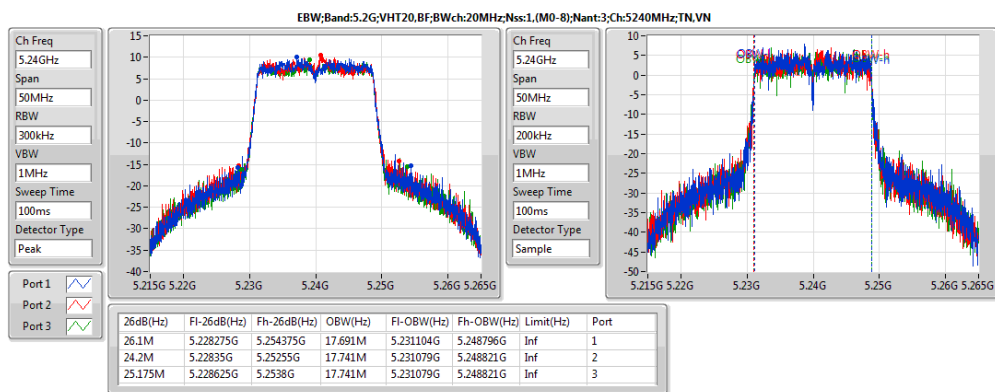
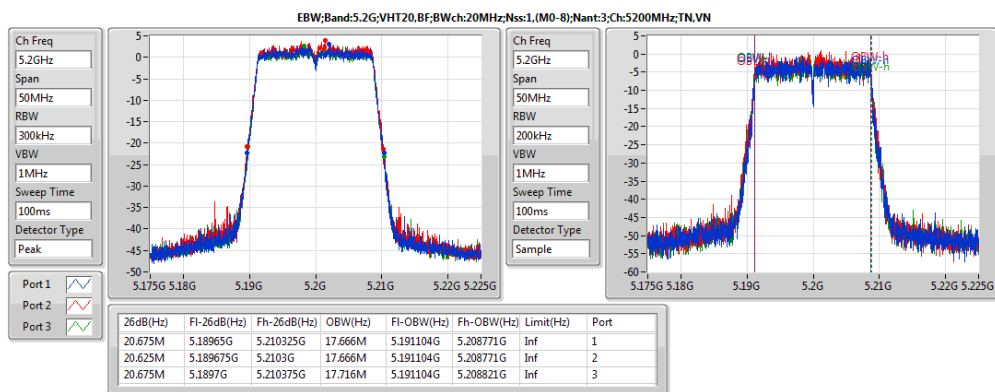
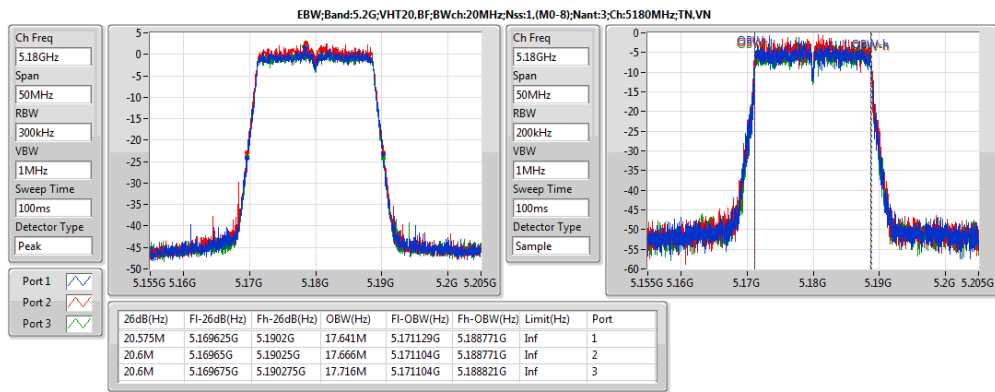
Emission Bandwidth for TxBF
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.2G;VHT20,BF;20;1,(M0-8);3	26.1M	17.741M	17M7D1D	20.575M	17.641M
5.2G;VHT40,BF;40;1,(M0-9);3	48M	36.332M	36M3D1D	39.3M	36.182M
5.2G;VHT80,BF;80;1,(M0-9);3	80.9M	75.862M	75M9D1D	80.2M	75.562M
5.8G;VHT20,BF;20;1,(M0-8);3	17.6M	17.741M	17M7D1D	17.3M	17.641M
5.8G;VHT40,BF;40;1,(M0-9);3	37M	37.231M	37M2D1D	33.8M	36.232M
5.8G;VHT80,BF;80;1,(M0-9);3	75.1M	75.962M	76M0D1D	67.5M	75.662M



Result

Mode	Result	Limit	P1-N dB (Hz)	P1-OBW (Hz)	P2-N dB (Hz)	P2-OBW (Hz)	P3-N dB (Hz)	P3-OBW (Hz)
5.2G;VHT20,BF;20;1,(M0-8);3;5180;L;TN,VN	Pass	Inf	20.575M	17.641M	20.6M	17.666M	20.6M	17.716M
5.2G;VHT20,BF;20;1,(M0-8);3;5200;M;TN,VN	Pass	Inf	20.675M	17.666M	20.625M	17.666M	20.675M	17.716M
5.2G;VHT20,BF;20;1,(M0-8);3;5240;H;TN,VN	Pass	Inf	26.1M	17.691M	24.2M	17.741M	25.175M	17.741M
5.2G;VHT40,BF;40;1,(M0-9);3;5190;L;TN,VN	Pass	Inf	40.55M	36.232M	39.6M	36.282M	39.3M	36.182M
5.2G;VHT40,BF;40;1,(M0-9);3;5230;H;TN,VN	Pass	Inf	43.2M	36.282M	48M	36.282M	46.95M	36.332M
5.2G;VHT80,BF;80;1,(M0-9);3;5210;S;TN,VN	Pass	Inf	80.7M	75.862M	80.9M	75.562M	80.2M	75.762M
5.8G;VHT20,BF;20;1,(M0-8);3;5745;L;TN,VN	Pass	500k	17.55M	17.666M	17.55M	17.691M	17.6M	17.716M
5.8G;VHT20,BF;20;1,(M0-8);3;5785;M;TN,VN	Pass	500k	17.3M	17.641M	17.575M	17.716M	17.55M	17.741M
5.8G;VHT20,BF;20;1,(M0-8);3;5825;H;TN,VN	Pass	500k	17.575M	17.716M	17.575M	17.666M	17.6M	17.716M
5.8G;VHT40,BF;40;1,(M0-9);3;5755;L;TN,VN	Pass	500k	36.3M	36.232M	36.3M	36.282M	37M	36.332M
5.8G;VHT40,BF;40;1,(M0-9);3;5795;H;TN,VN	Pass	500k	35.95M	36.632M	33.8M	36.782M	36.3M	37.231M
5.8G;VHT80,BF;80;1,(M0-9);3;5775;S;TN,VN	Pass	500k	67.5M	75.962M	72.6M	75.662M	75.1M	75.662M





Maximum Conducted Output Power
Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
5.2G;11a;20;1;1(1)	22.52	0.17865	26.22	0.41879
5.2G;11a;20;1;1(2)	22.36	0.17219	26.06	0.40365
5.2G;11a;20;1;1(3)	22.73	0.1875	26.43	0.43954
5.8G;11a;20;1;1(1)	20.09	0.10209	23.79	0.23933
5.8G;11a;20;1;1(2)	23.92	0.2466	27.62	0.5781
5.8G;11a;20;1;1(3)	19.73	0.09397	23.43	0.22029
5.2G;HT20;20;1,(M0-23);3	23.55	0.22646	27.25	0.53088
5.8G;HT20;20;1,(M0-23);3	23.42	0.21979	27.12	0.51523
5.2G;HT40;40;1,(M0-23);3	23.41	0.21928	27.11	0.51404
5.8G;HT40;40;1,(M0-23);3	24.25	0.26607	27.95	0.62373
5.2G;VHT20;20;1,(M0-8);3	23.69	0.23388	27.39	0.54828
5.8G;VHT20;20;1,(M0-8);3	23.56	0.22699	27.26	0.53211
5.2G;VHT40;40;1,(M0-9);3	23.48	0.22284	27.18	0.5224
5.8G;VHT40;40;1,(M0-9);3	24.39	0.27479	28.09	0.64417
5.2G;VHT80;80;1,(M0-9);3	18.18	0.06577	21.88	0.15417
5.8G;VHT80;80;1,(M0-9);3	23.76	0.23768	27.46	0.55719



Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Lim. (dBm)	Sum (dBm)	Sum Lim. (dBm)	P1 (dBm)	P2 (dBm)	P3 (dBm)
5.2G;11a;20;1;1(1);5180;L;TN,VN	Pass	3.70	22.81	36.00	19.11	30.00	19.11	-	-
5.2G;11a;20;1;1(1);5200;M;TN,VN	Pass	3.70	23.28	36.00	19.58	30.00	19.58	-	-
5.2G;11a;20;1;1(1);5240;H;TN,VN	Pass	3.70	26.22	36.00	22.52	30.00	22.52	-	-
5.2G;11a;20;1;1(2);5180;L;TN,VN	Pass	3.70	22.63	36.00	18.93	30.00	-	18.93	
5.2G;11a;20;1;1(2);5200;M;TN,VN	Pass	3.70	22.59	36.00	18.89	30.00	-	18.89	
5.2G;11a;20;1;1(2);5240;H;TN,VN	Pass	3.70	26.06	36.00	22.36	30.00	-	22.36	
5.2G;11a;20;1;1(3);5180;L;TN,VN	Pass	3.70	25.25	36.00	21.55	30.00	-	-	21.55
5.2G;11a;20;1;1(3);5200;M;TN,VN	Pass	3.70	26.33	36.00	22.63	30.00	-	-	22.63
5.2G;11a;20;1;1(3);5240;H;TN,VN	Pass	3.70	26.43	36.00	22.73	30.00	-	-	22.73
5.8G;11a;20;1;1(1);5745;L;TN,VN	Pass	3.70	22.98	36.00	19.28	30.00	19.28	-	-
5.8G;11a;20;1;1(1);5785;M;TN,VN	Pass	3.70	23.42	36.00	19.72	30.00	19.72	-	-
5.8G;11a;20;1;1(1);5825;H;TN,VN	Pass	3.70	23.79	36.00	20.09	30.00	20.09	-	-
5.8G;11a;20;1;1(2);5745;L;TN,VN	Pass	3.70	27.22	36.00	23.52	30.00	-	23.52	-
5.8G;11a;20;1;1(2);5785;M;TN,VN	Pass	3.70	27.51	36.00	23.81	30.00	-	23.81	-
5.8G;11a;20;1;1(2);5825;H;TN,VN	Pass	3.70	27.62	36.00	23.92	30.00	-	23.92	-
5.8G;11a;20;1;1(3);5745;L;TN,VN	Pass	3.70	23.21	36.00	19.51	30.00	-	-	19.51
5.8G;11a;20;1;1(3);5785;M;TN,VN	Pass	3.70	23.43	36.00	19.73	30.00	-	-	19.73
5.8G;11a;20;1;1(3);5825;H;TN,VN	Pass	3.70	22.46	36.00	18.76	30.00	-	-	18.76
5.2G;HT20;20;1,(M0-23);3;5180;L;TN,VN	Pass	3.70	24.44	36.00	20.74	30.00	15.81	16.15	15.93
5.2G;HT20;20;1,(M0-23);3;5200;M;TN,VN	Pass	3.70	24.62	36.00	20.92	30.00	15.96	16.31	16.18
5.2G;HT20;20;1,(M0-23);3;5240;H;TN,VN	Pass	3.70	27.25	36.00	23.55	30.00	18.63	18.84	18.87
5.8G;HT20;20;1,(M0-23);3;5745;L;TN,VN	Pass	3.70	26.00	36.00	22.30	30.00	17.55	17.24	17.79
5.8G;HT20;20;1,(M0-23);3;5785;M;TN,VN	Pass	3.70	26.72	36.00	23.02	30.00	18.20	17.99	18.55
5.8G;HT20;20;1,(M0-23);3;5825;H;TN,VN	Pass	3.70	27.12	36.00	23.42	30.00	18.56	18.36	18.99
5.2G;HT40;40;1,(M0-23);3;5190;L;TN,VN	Pass	3.70	22.16	36.00	18.46	30.00	13.48	13.95	13.61
5.2G;HT40;40;1,(M0-23);3;5230;H;TN,VN	Pass	3.70	27.11	36.00	23.41	30.00	18.47	18.70	18.74
5.8G;HT40;40;1,(M0-23);3;5755;L;TN,VN	Pass	3.70	27.52	36.00	23.82	30.00	18.86	18.92	19.34
5.8G;HT40;40;1,(M0-23);3;5795;H;TN,VN	Pass	3.70	27.95	36.00	24.25	30.00	19.29	19.33	19.81
5.2G;VHT20;20;1,(M0-8);3;5180;L;TN,VN	Pass	3.70	24.48	36.00	20.78	30.00	16.00	16.04	15.98
5.2G;VHT20;20;1,(M0-8);3;5200;M;TN,VN	Pass	3.70	24.86	36.00	21.16	30.00	16.30	16.42	16.45
5.2G;VHT20;20;1,(M0-8);3;5240;H;TN,VN	Pass	3.70	27.39	36.00	23.69	30.00	18.78	19.02	18.96
5.8G;VHT20;20;1,(M0-8);3;5745;L;TN,VN	Pass	3.70	26.13	36.00	22.43	30.00	17.55	17.38	18.02
5.8G;VHT20;20;1,(M0-8);3;5785;M;TN,VN	Pass	3.70	26.81	36.00	23.11	30.00	18.25	18.11	18.63
5.8G;VHT20;20;1,(M0-8);3;5825;H;TN,VN	Pass	3.70	27.26	36.00	23.56	30.00	18.67	18.61	19.07
5.2G;VHT40;40;1,(M0-9);3;5190;L;TN,VN	Pass	3.70	22.26	36.00	18.56	30.00	13.58	14.04	13.73
5.2G;VHT40;40;1,(M0-9);3;5230;H;TN,VN	Pass	3.70	27.18	36.00	23.48	30.00	18.63	18.80	18.70
5.8G;VHT40;40;1,(M0-9);3;5755;L;TN,VN	Pass	3.70	27.60	36.00	23.90	30.00	19.04	18.88	19.44
5.8G;VHT40;40;1,(M0-9);3;5795;H;TN,VN	Pass	3.70	28.09	36.00	24.39	30.00	19.51	19.39	19.93
5.2G;VHT80;80;1,(M0-9);3;5210;S;TN,VN	Pass	3.70	21.88	36.00	18.18	30.00	13.25	13.64	13.34
5.8G;VHT80;80;1,(M0-9);3;5775;S;TN,VN	Pass	3.70	27.46	36.00	23.76	30.00	18.88	18.73	19.33



Maximum Conducted Output Power for TxBF
Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
5.2G;VHT20,BF;20;1,(M0-8);3	20.60	0.11482	29.08	0.8091
5.2G;VHT40,BF;40;1,(M0-9);3	20.66	0.11641	29.13	0.81846
5.2G;VHT80,BF;80;1,(M0-9);3	16.39	0.04355	24.86	0.3062
5.8G;VHT20,BF;20;1,(M0-8);3	19.76	0.09462	28.23	0.66527
5.8G;VHT40,BF;40;1,(M0-9);3	22.99	0.19907	31.46	1.39959
5.8G;VHT80,BF;80;1,(M0-9);3	19.41	0.0873	27.88	0.61376



Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Lim. (dBm)	Sum (dBm)	Sum Lim. (dBm)	P1 (dBm)	P2 (dBm)	P3 (dBm)
5.2G;VHT20,BF;20;1,(M0-8);3;5180;L;TN,VN	Pass	8.47	21.87	36.00	13.40	27.53	8.08	9.17	8.55
5.2G;VHT20,BF;20;1,(M0-8);3;5200;M;TN,VN	Pass	8.47	22.97	36.00	14.50	27.53	9.12	10.76	9.09
5.2G;VHT20,BF;20;1,(M0-8);3;5240;H;TN,VN	Pass	8.47	29.08	36.00	20.60	27.53	15.95	15.72	15.82
5.2G;VHT40,BF;40;1,(M0-9);3;5190;L;TN,VN	Pass	8.47	26.07	36.00	17.60	27.53	12.71	13.21	12.53
5.2G;VHT40,BF;40;1,(M0-9);3;5230;H;TN,VN	Pass	8.47	29.13	36.00	20.66	27.53	16.04	16.06	15.55
5.2G;VHT80,BF;80;1,(M0-9);3;5210;S;TN,VN	Pass	8.47	24.86	36.00	16.39	27.53	11.53	11.83	11.50
5.8G;VHT20,BF;20;1,(M0-8);3;5745;L;TN,VN	Pass	8.47	28.23	36.00	19.76	27.53	14.91	14.71	15.33
5.8G;VHT20,BF;20;1,(M0-8);3;5785;M;TN,VN	Pass	8.47	26.97	36.00	18.50	27.53	13.56	13.78	13.84
5.8G;VHT20,BF;20;1,(M0-8);3;5825;H;TN,VN	Pass	8.47	27.31	36.00	18.84	27.53	14.06	13.79	14.34
5.8G;VHT40,BF;40;1,(M0-9);3;5755;L;TN,VN	Pass	8.47	29.03	36.00	20.56	27.53	16.04	15.71	15.60
5.8G;VHT40,BF;40;1,(M0-9);3;5795;H;TN,VN	Pass	8.47	31.46	36.00	22.99	27.53	18.34	18.30	18.00
5.8G;VHT80,BF;80;1,(M0-9);3;5775;S;TN,VN	Pass	8.47	27.88	36.00	19.41	27.53	14.39	14.95	14.55



Power Spectral Density
Summary

Mode	PD (dBm/RBW)	EIRP.PD (dBm/RBW)
5.2G;11a;20;1;1(1)	11.67	15.37
5.2G;11a;20;1;1(2)	11.29	14.99
5.2G;11a;20;1;1(3)	11.69	15.39
5.8G;11a;20;1;1(1)	6.60	10.30
5.8G;11a;20;1;1(2)	10.04	13.74
5.8G;11a;20;1;1(3)	6.06	9.76
5.2G;VHT20;20;1,(M0-8);3	12.28	20.75
5.8G;VHT20;20;1,(M0-8);3	9.34	17.81
5.2G;VHT40;40;1,(M0-9);3	8.98	17.45
5.8G;VHT40;40;1,(M0-9);3	6.93	15.40
5.2G;VHT80;80;1,(M0-9);3	0.54	9.01
5.8G;VHT80;80;1,(M0-9);3	3.19	11.66



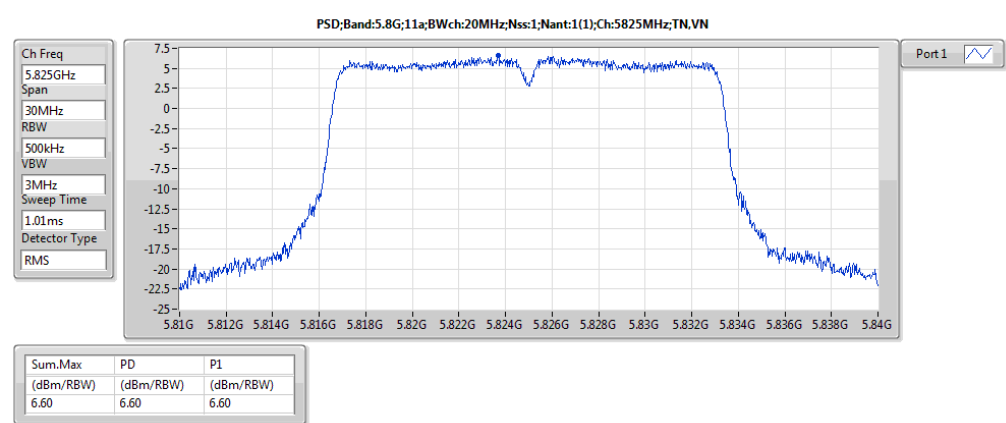
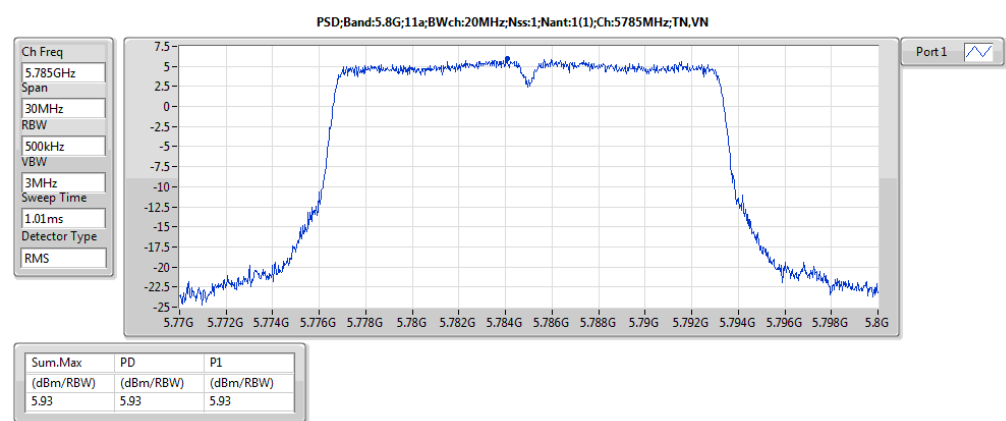
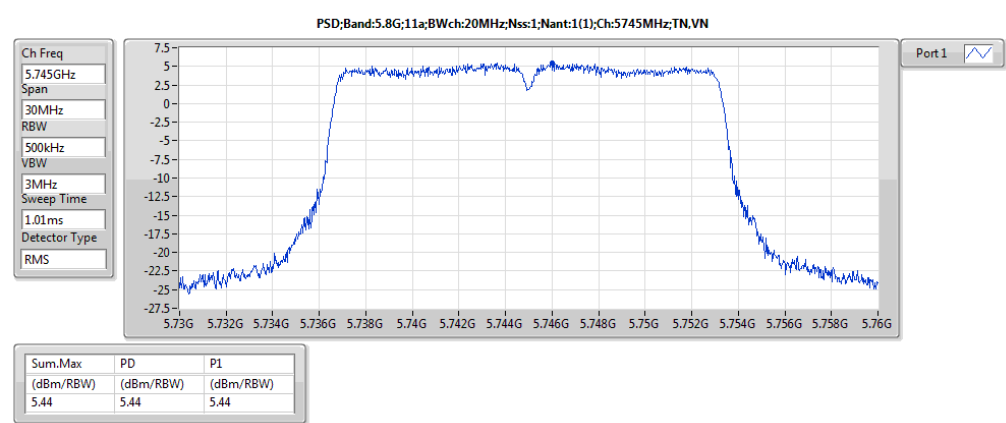
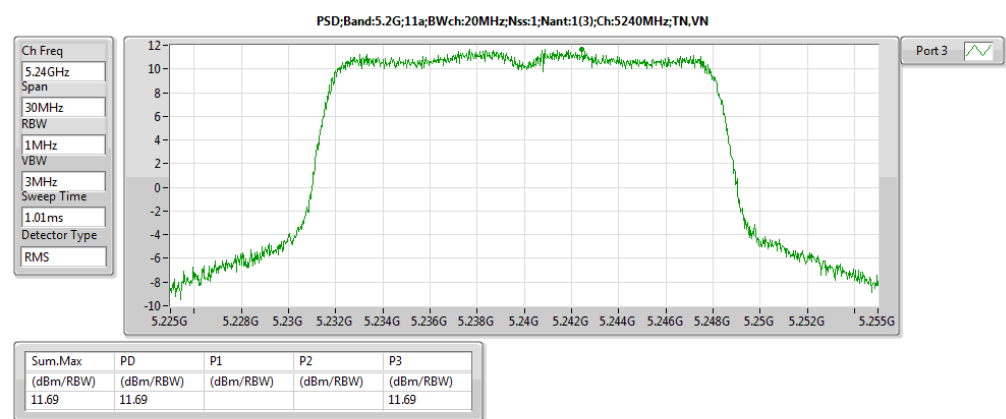
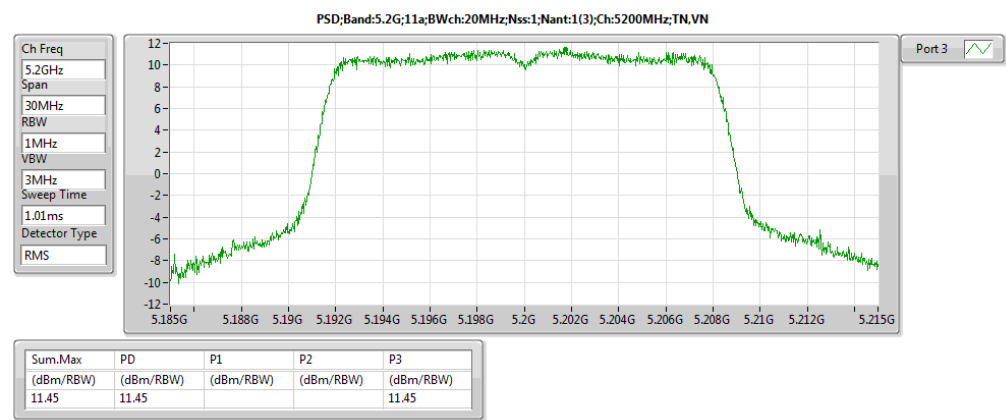
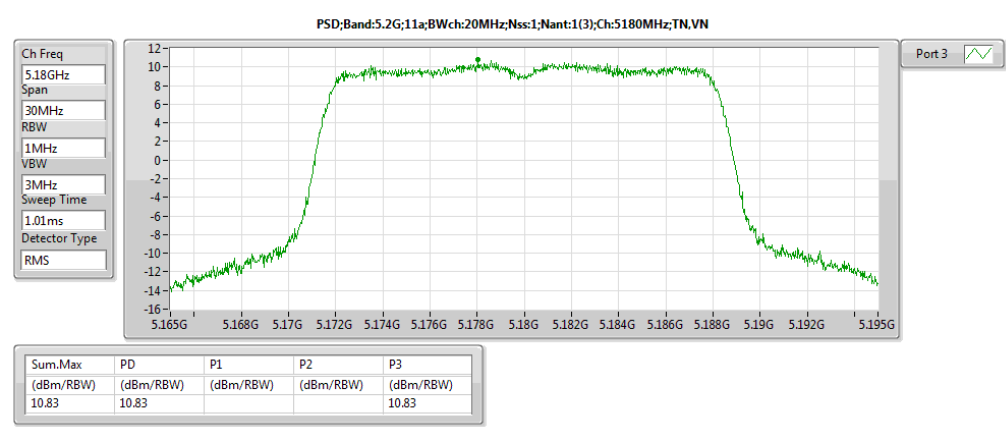
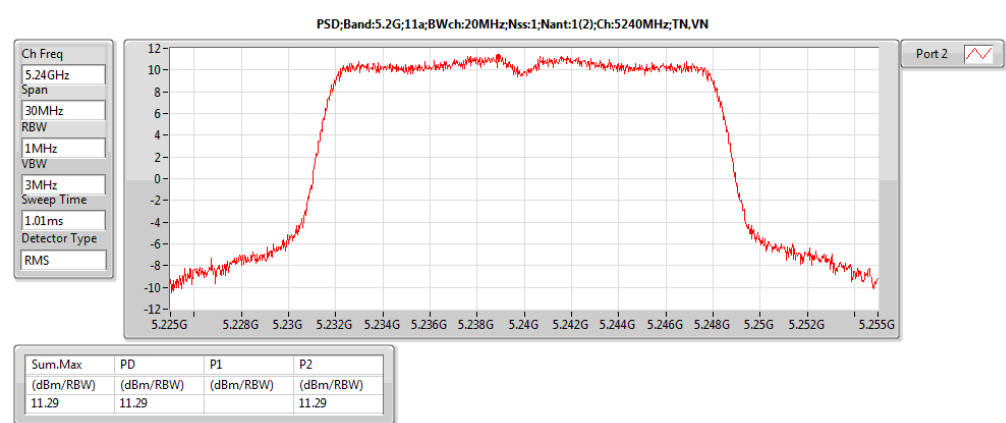
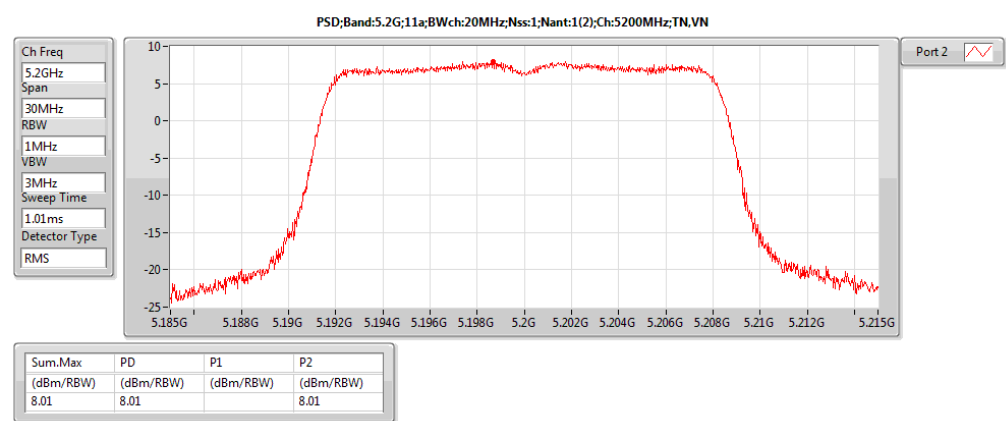
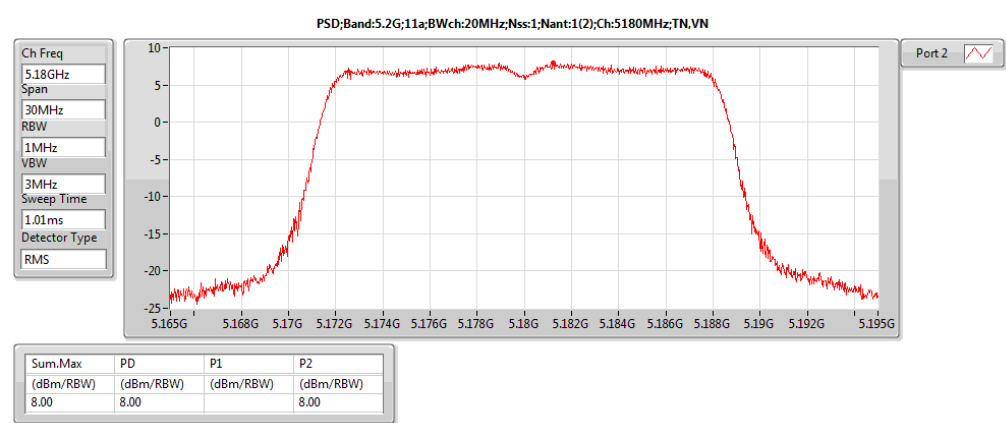
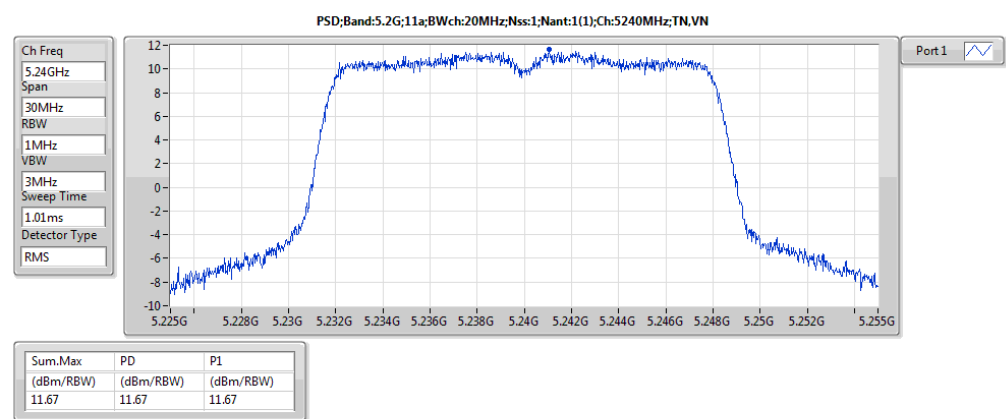
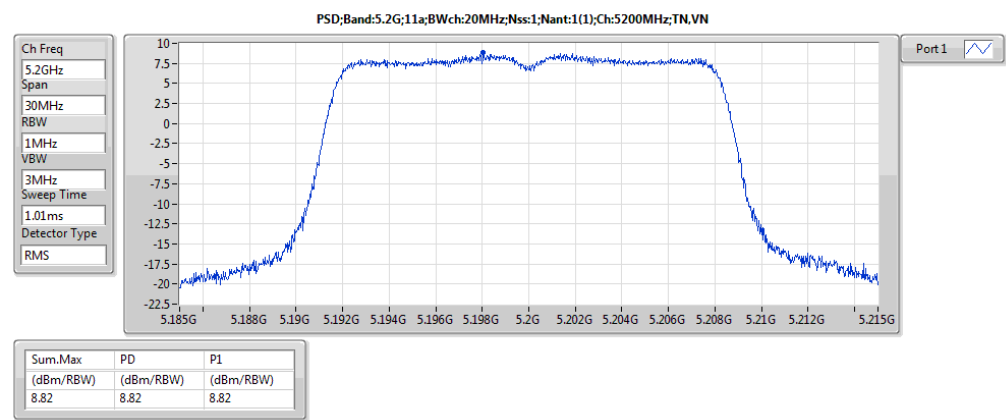
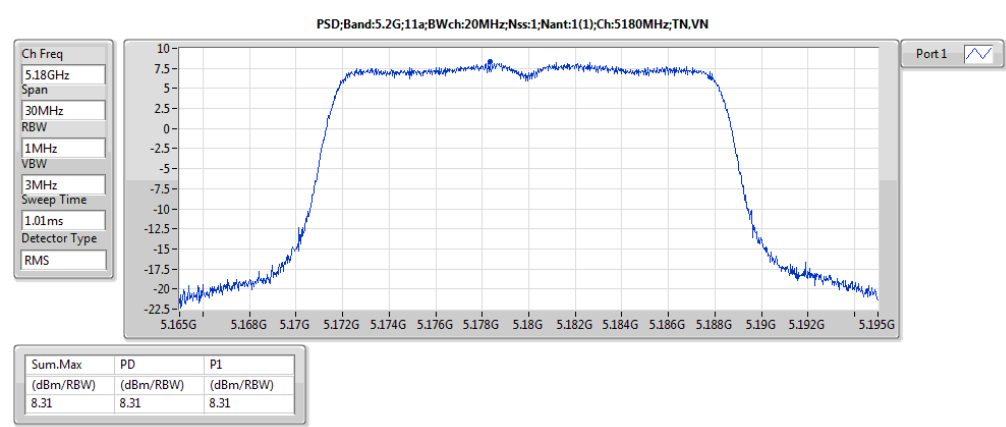
Result

Mode	Result	Meas.RBW (Hz)	Lim.RBW (Hz)	BWCF (dB)	DG (dBi)	Sum.Max (dBm/RBW)	PD (dBm/RBW)	PD.Limit (dBm/RBW)	EIRP.PD (dBm/RBW)	EIRP.PD.Li m (dBm/RBW)	P1 (dBm/RBW)	P2 (dBm/RBW)	P3 (dBm/RBW)
5.2G;11a;20;1;1(1);5180;L;TN,VN	Pass	1M	1M	0.00	3.70	8.31	8.31	17.00	12.01	Inf	8.31	-	-
5.2G;11a;20;1;1(1);5200;M;TN,VN	Pass	1M	1M	0.00	3.70	8.82	8.82	17.00	12.52	Inf	8.82	-	-
5.2G;11a;20;1;1(1);5240;H;TN,VN	Pass	1M	1M	0.00	3.70	11.67	11.67	17.00	15.37	Inf	11.67	-	-
5.2G;11a;20;1;1(2);5180;L;TN,VN	Pass	1M	1M	0.00	3.70	8.00	8.00	17.00	11.70	Inf	-	8.00	-
5.2G;11a;20;1;1(2);5200;M;TN,VN	Pass	1M	1M	0.00	3.70	8.01	8.01	17.00	11.71	Inf	-	8.01	-
5.2G;11a;20;1;1(2);5240;H;TN,VN	Pass	1M	1M	0.00	3.70	11.29	11.29	17.00	14.99	Inf	-	11.29	-
5.2G;11a;20;1;1(3);5180;L;TN,VN	Pass	1M	1M	0.00	3.70	10.83	10.83	17.00	14.53	Inf	-	-	10.83
5.2G;11a;20;1;1(3);5200;M;TN,VN	Pass	1M	1M	0.00	3.70	11.45	11.45	17.00	15.15	Inf	-	-	11.45
5.2G;11a;20;1;1(3);5240;H;TN,VN	Pass	1M	1M	0.00	3.70	11.69	11.69	17.00	15.39	Inf	-	-	11.69
5.8G;11a;20;1;1(1);5745;L;TN,VN	Pass	500k	500k	0.00	3.70	5.44	5.44	30.00	9.14	36.00	5.44	-	-
5.8G;11a;20;1;1(1);5785;M;TN,VN	Pass	500k	500k	0.00	3.70	5.93	5.93	30.00	9.63	36.00	5.93	-	-
5.8G;11a;20;1;1(1);5825;H;TN,VN	Pass	500k	500k	0.00	3.70	6.60	6.60	30.00	10.30	36.00	6.60	-	-
5.8G;11a;20;1;1(2);5745;L;TN,VN	Pass	500k	500k	0.00	3.70	10.04	10.04	30.00	13.74	36.00	-	10.04	-
5.8G;11a;20;1;1(2);5785;M;TN,VN	Pass	500k	500k	0.00	3.70	10.00	10.00	30.00	13.70	36.00	-	10.00	-
5.8G;11a;20;1;1(2);5825;H;TN,VN	Pass	500k	500k	0.00	3.70	10.01	10.01	30.00	13.71	36.00	-	10.01	-
5.8G;11a;20;1;1(3);5745;L;TN,VN	Pass	500k	500k	0.00	3.70	5.96	5.96	30.00	9.66	36.00	-	-	5.96
5.8G;11a;20;1;1(3);5785;M;TN,VN	Pass	500k	500k	0.00	3.70	6.06	6.06	30.00	9.76	36.00	-	-	6.06
5.8G;11a;20;1;1(3);5825;H;TN,VN	Pass	500k	500k	0.00	3.70	4.97	4.97	30.00	8.67	36.00	-	-	4.97
5.2G;VHT20;20;1;(M0-8);3;5180;L;TN,VN	Pass	1M	1M	0.00	8.47	9.61	9.61	14.53	18.08	Inf	4.77	5.13	5.07
5.2G;VHT20;20;1;(M0-8);3;5200;M;TN,VN	Pass	1M	1M	0.00	8.47	9.80	9.80	14.53	18.27	Inf	5.31	5.44	5.50
5.2G;VHT20;20;1;(M0-8);3;5240;H;TN,VN	Pass	1M	1M	0.00	8.47	12.28	12.28	14.53	20.75	Inf	7.62	7.75	7.91
5.8G;VHT20;20;1;(M0-8);3;5745;L;TN,VN	Pass	500k	500k	0.00	8.47	8.29	8.29	27.53	16.76	33.53	4.01	3.45	4.17
5.8G;VHT20;20;1;(M0-8);3;5785;M;TN,VN	Pass	500k	500k	0.00	8.47	8.84	8.84	27.53	17.31	33.53	4.32	4.23	4.82
5.8G;VHT20;20;1;(M0-8);3;5825;H;TN,VN	Pass	500k	500k	0.00	8.47	9.34	9.34	27.53	17.81	33.53	4.66	4.55	5.23
5.2G;VHT40;40;1;(M0-9);3;5190;L;TN,VN	Pass	1M	1M	0.00	8.47	3.97	3.97	14.53	12.44	Inf	-0.88	-0.60	-0.81
5.2G;VHT40;40;1;(M0-9);3;5230;H;TN,VN	Pass	1M	1M	0.00	8.47	8.98	8.98	14.53	17.45	Inf	4.11	4.42	4.28
5.8G;VHT40;40;1;(M0-9);3;5755;L;TN,VN	Pass	500k	500k	0.00	8.47	6.30	6.30	27.53	14.77	33.53	1.53	1.48	1.92
5.8G;VHT40;40;1;(M0-9);3;5795;H;TN,VN	Pass	500k	500k	0.00	8.47	6.93	6.93	27.53	15.40	33.53	2.07	2.22	2.46
5.2G;VHT80;80;1;(M0-9);3;5210;S;TN,VN	Pass	1M	1M	0.00	8.47	0.54	0.54	14.53	9.01	Inf	-4.48	-4.02	-4.10
5.8G;VHT80;80;1;(M0-9);3;5775;S;TN,VN	Pass	500k	500k	0.00	8.47	3.19	3.19	27.53	11.66	33.53	-1.62	-1.77	-1.28



PSD Result

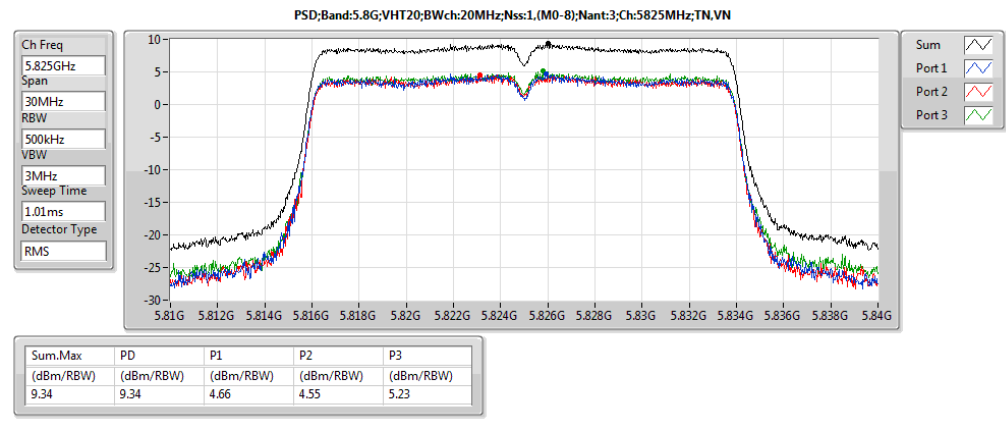
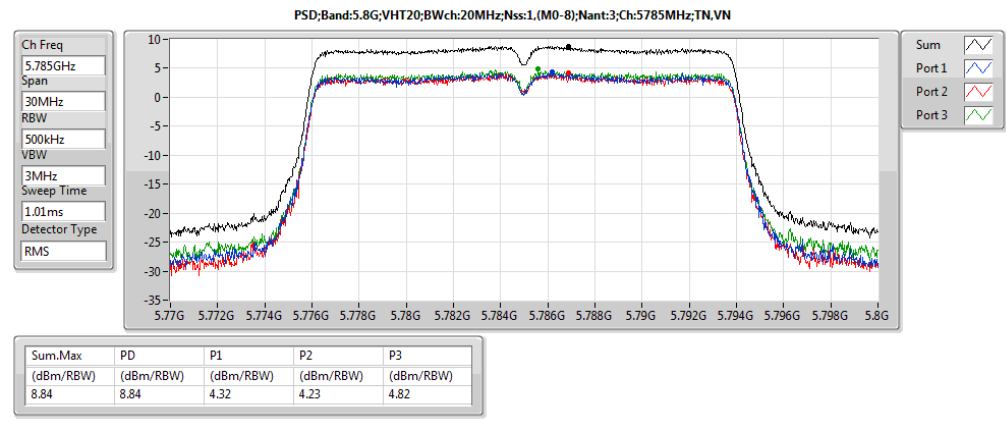
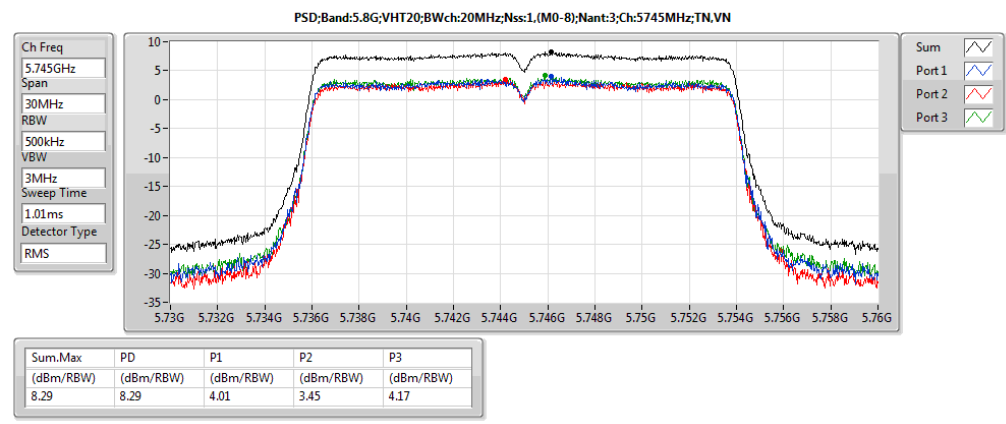
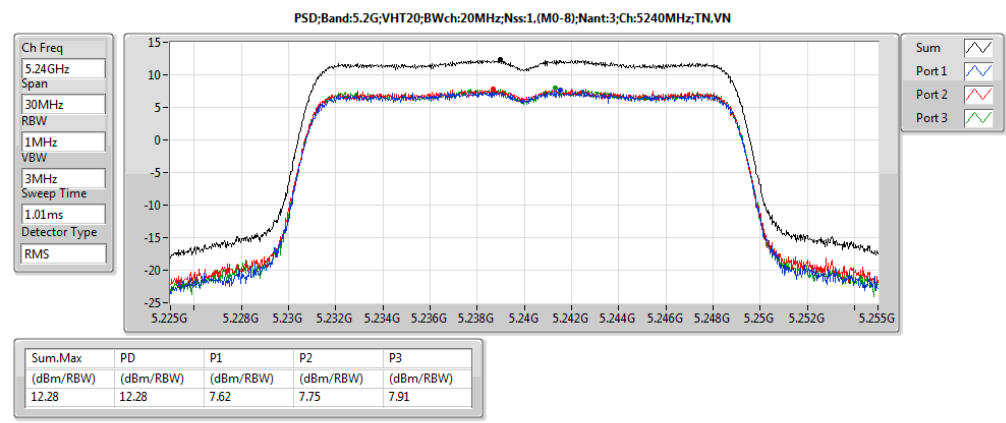
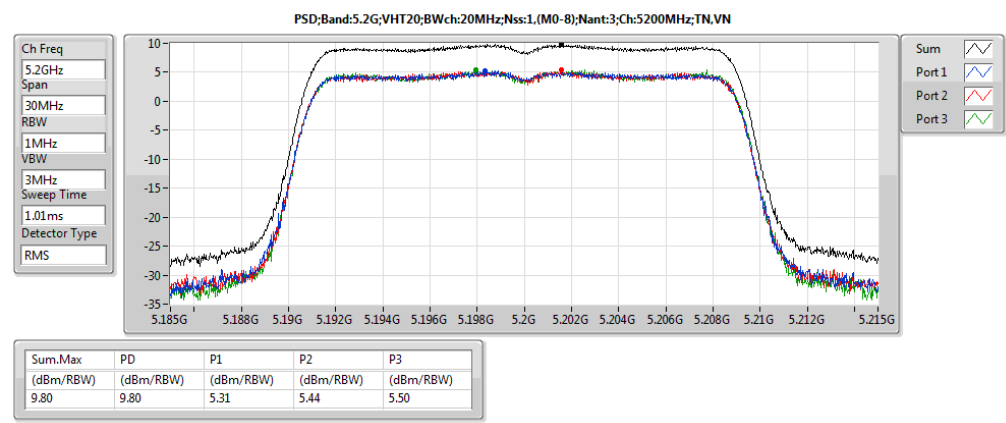
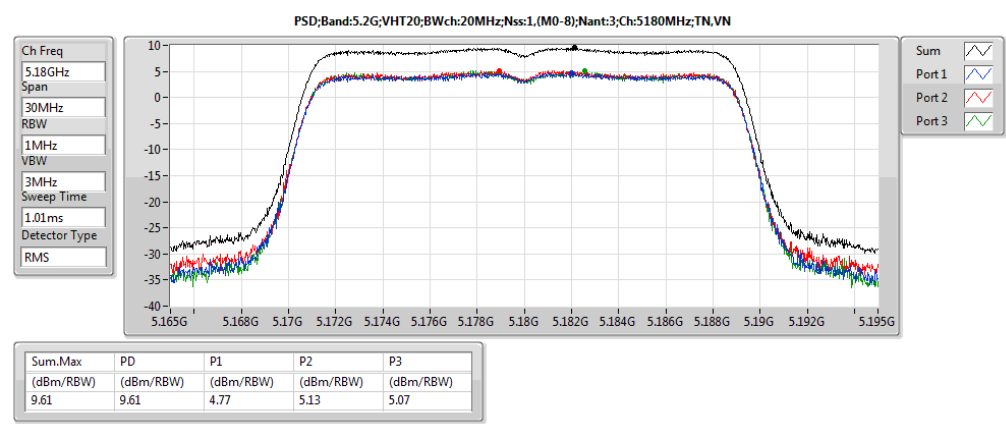
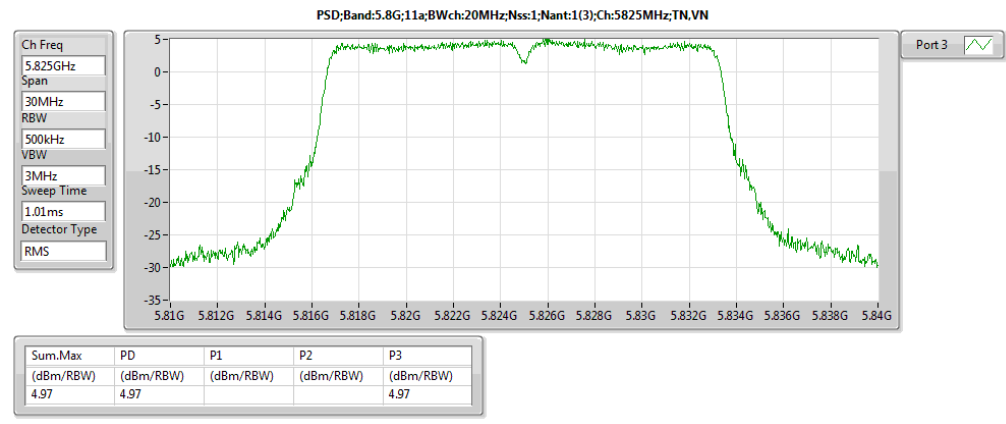
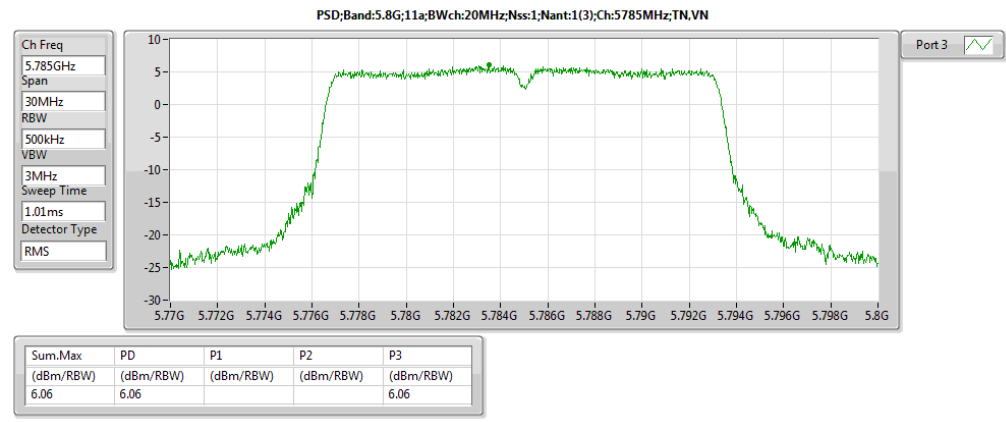
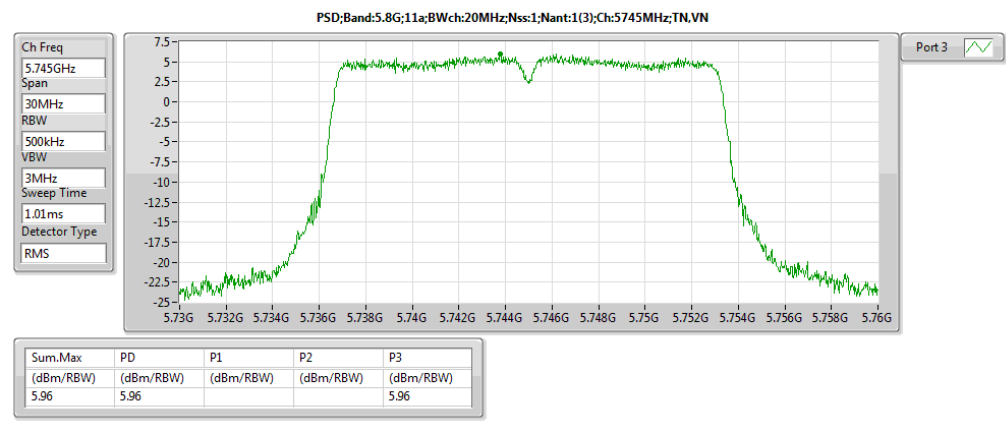
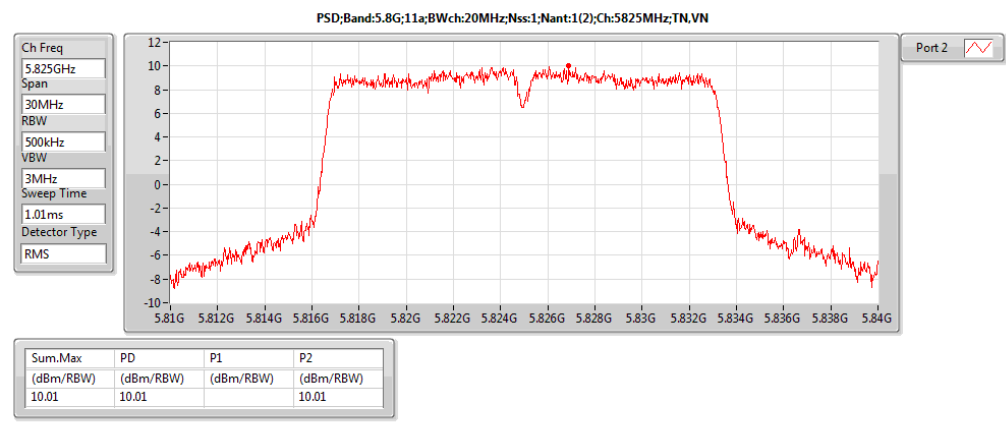
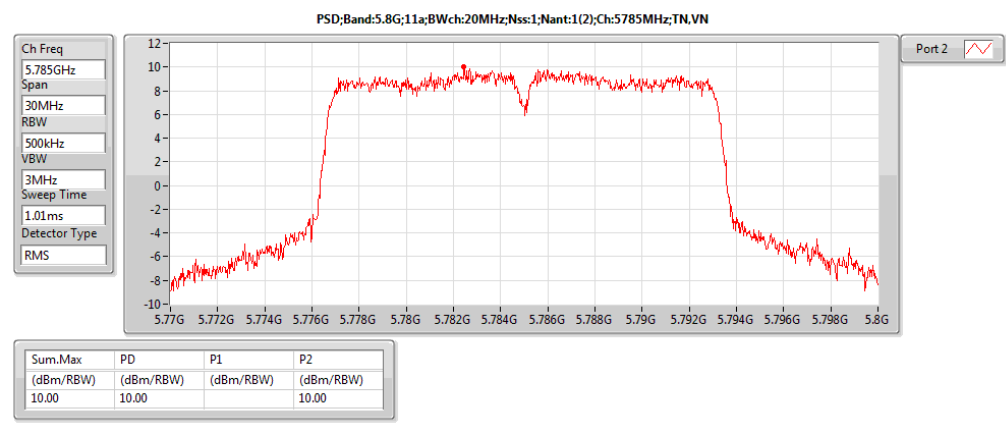
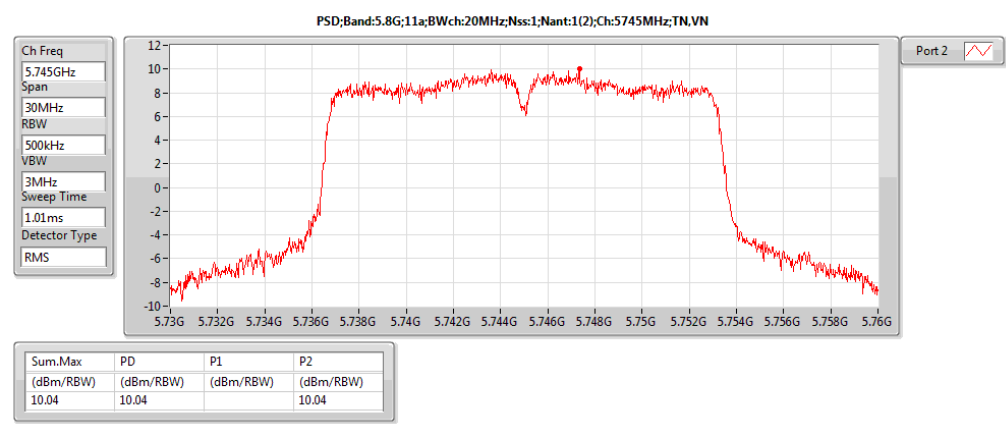
Appendix C





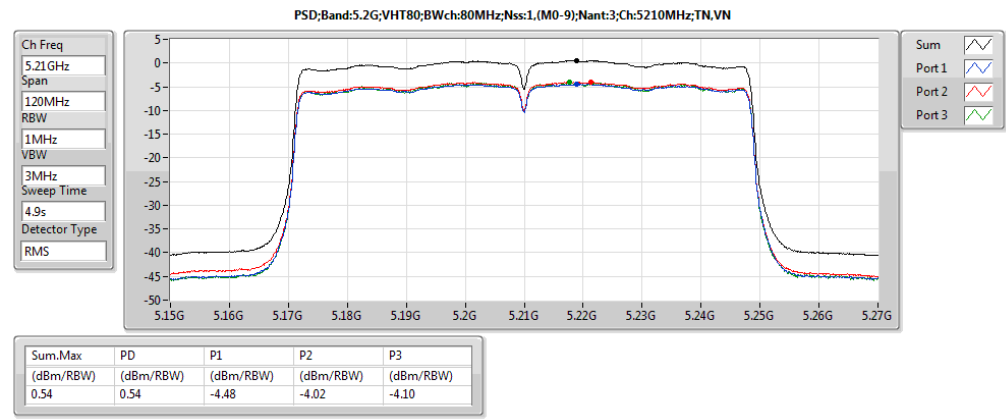
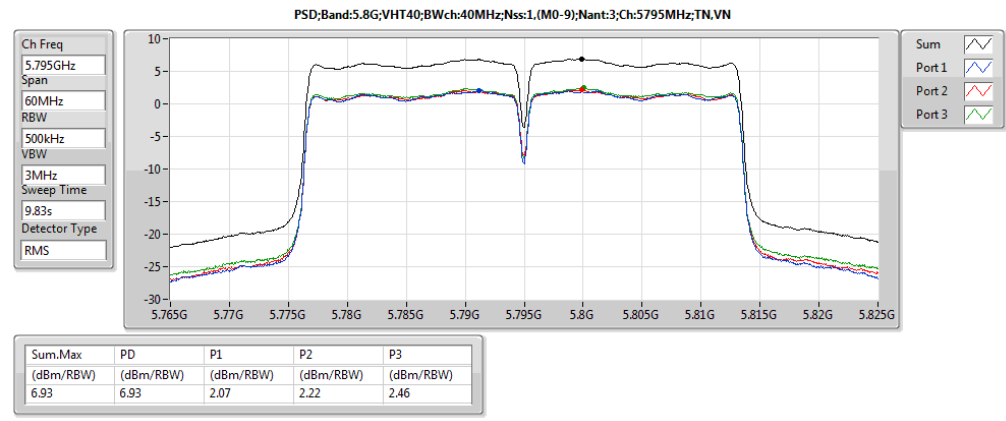
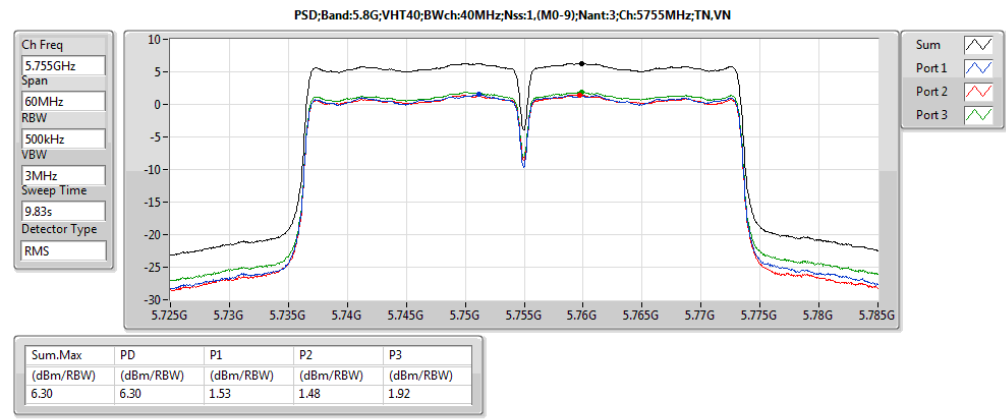
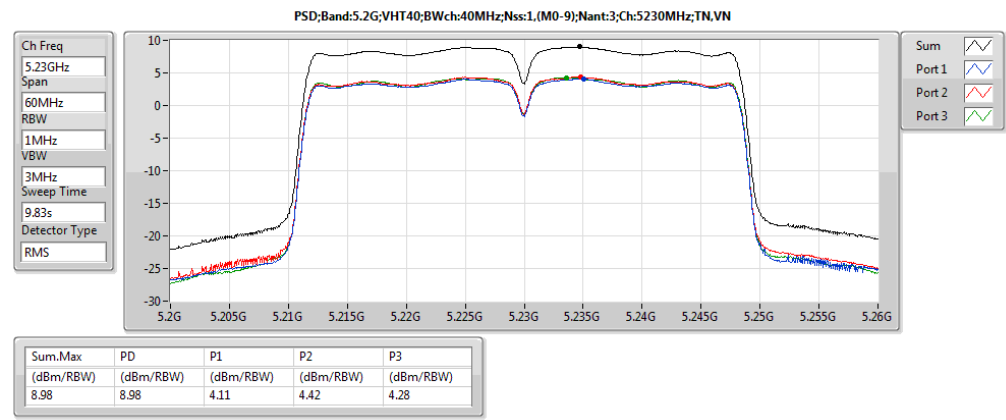
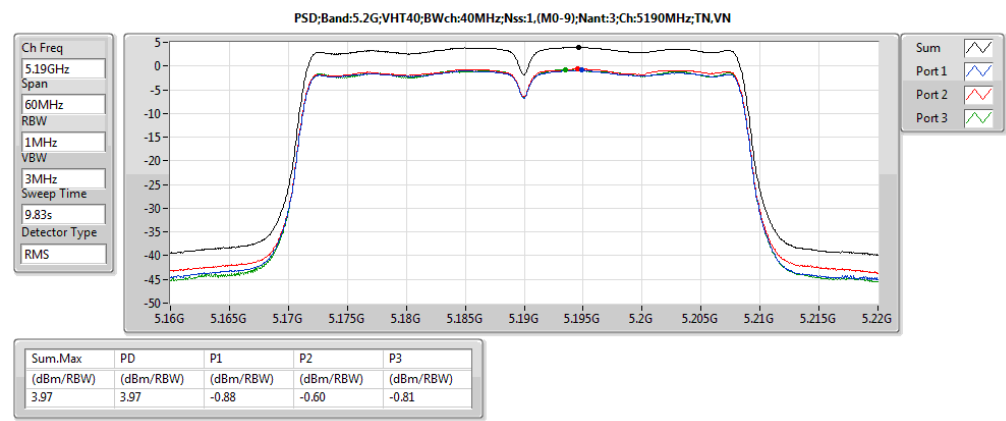
PSD Result

Appendix C





PSD Result





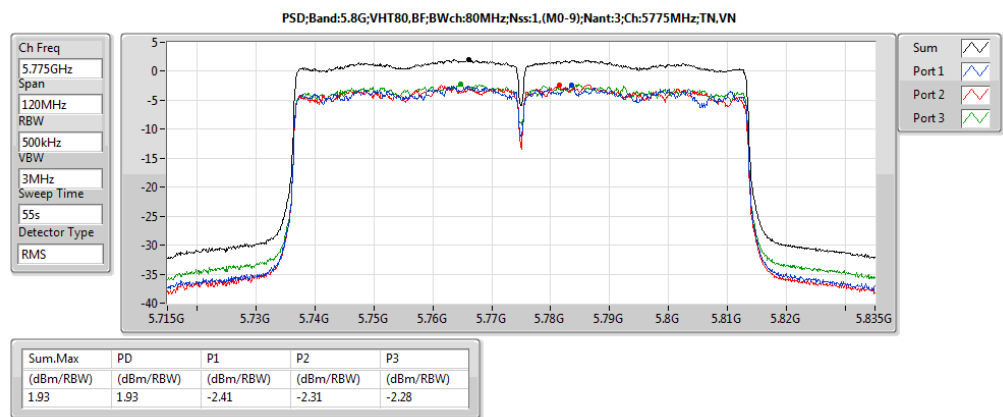
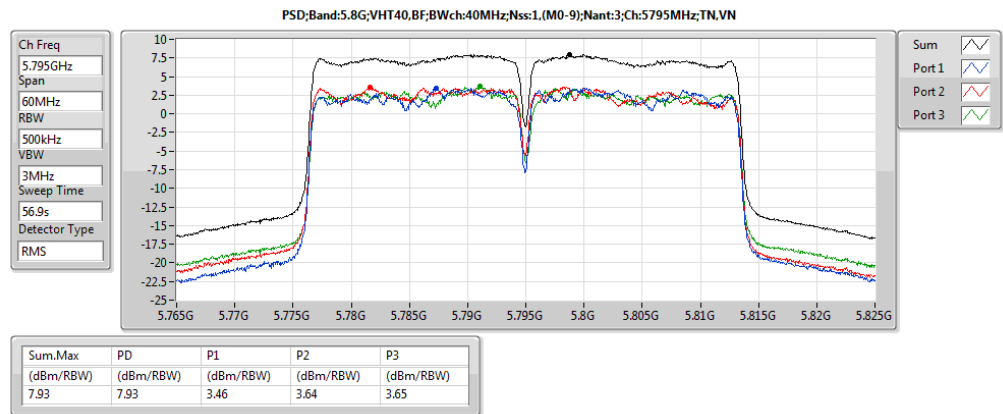
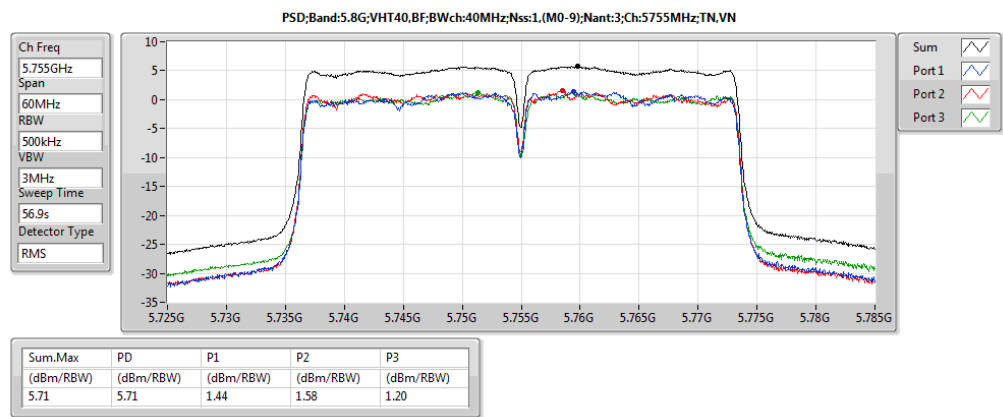
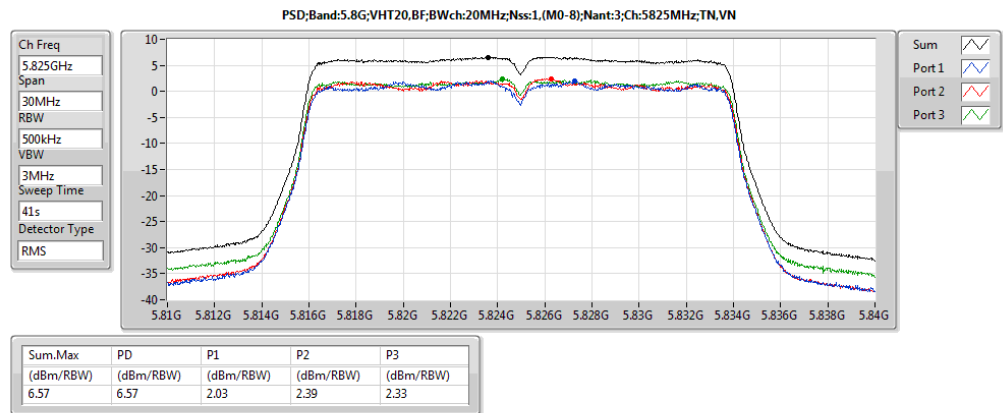
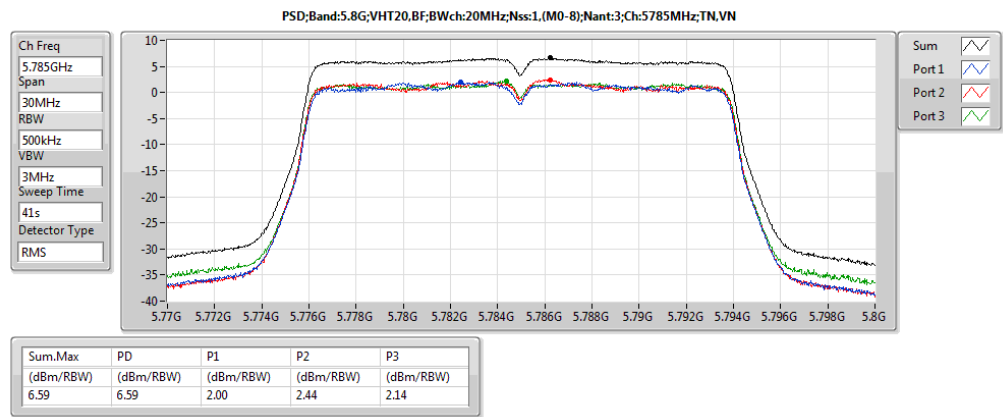
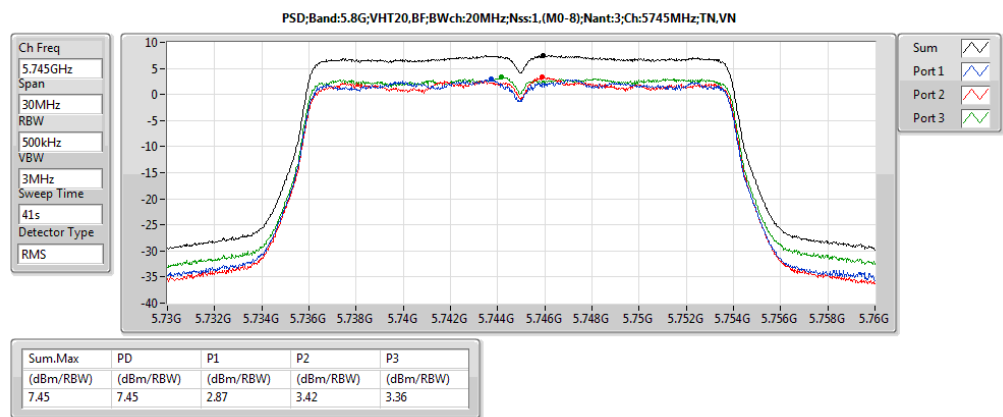
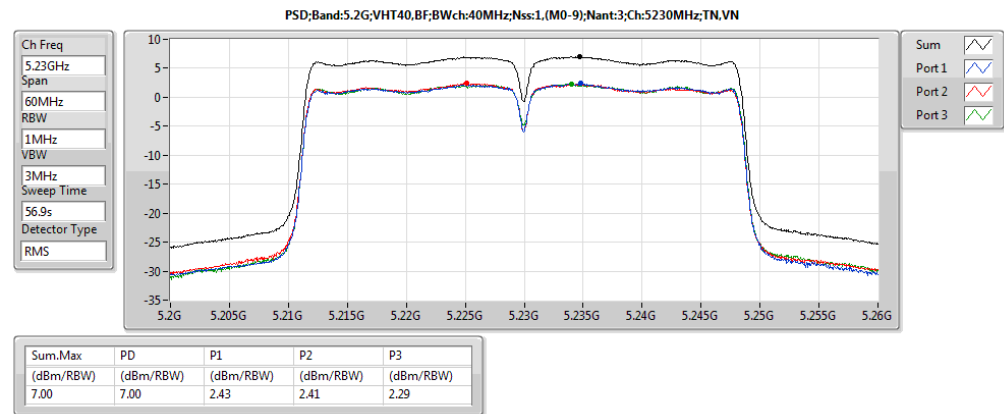
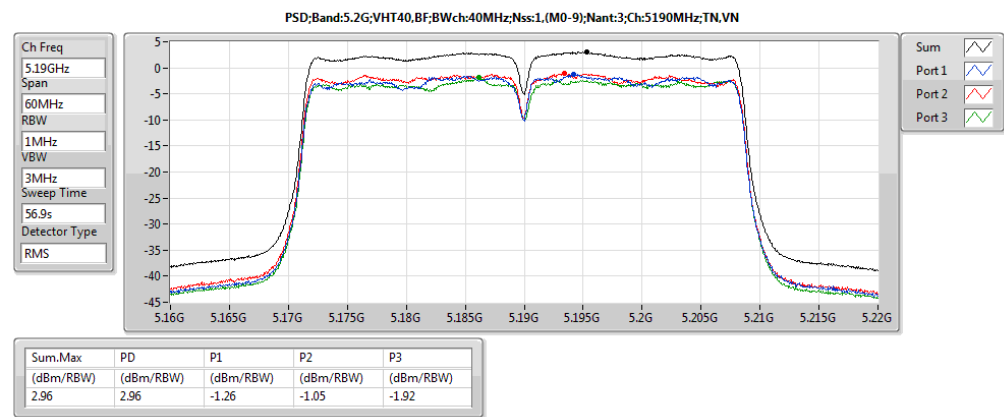
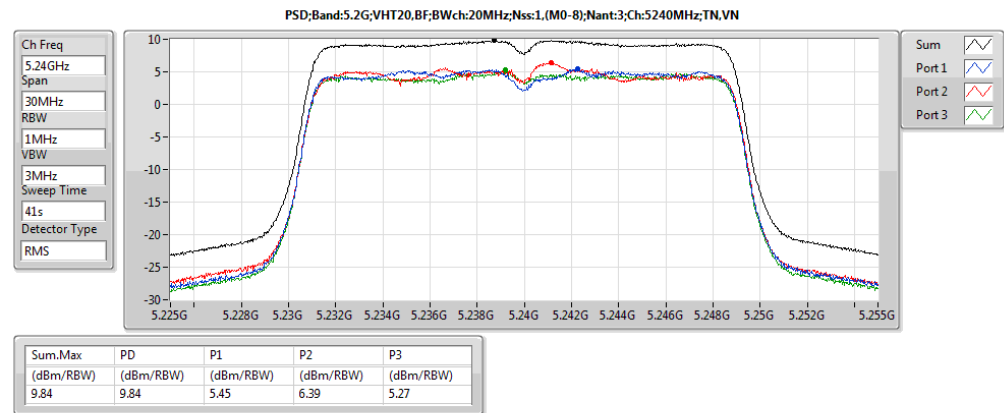
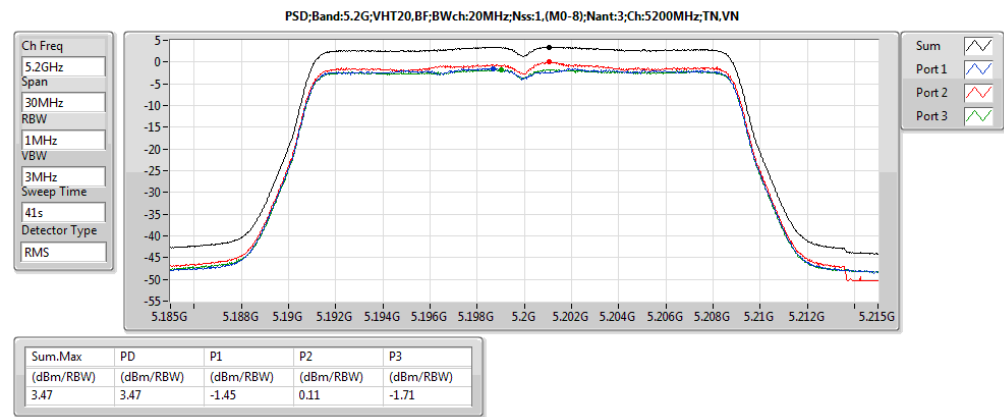
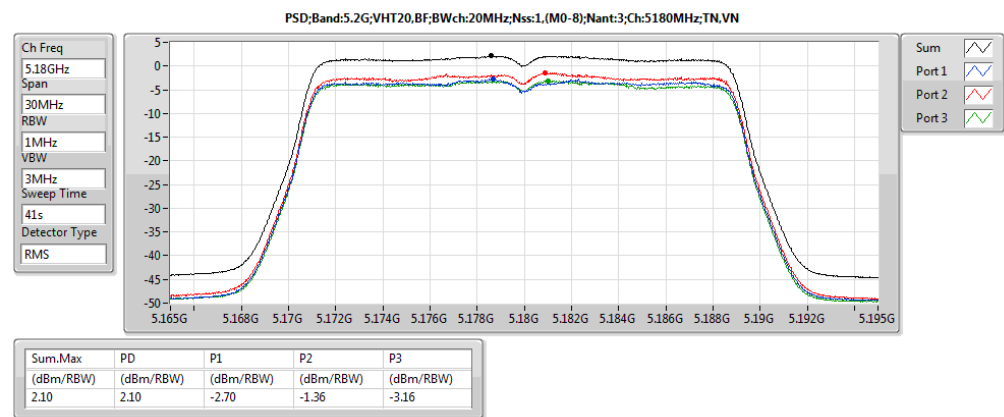
Power Spectral Density for TxBF
Summary

Mode	PD (dBm/RBW)	EIRP.PD (dBm/RBW)
5.2G;VHT20,BF;20;1,(M0-8);3	9.84	18.31
5.2G;VHT40,BF;40;1,(M0-9);3	7.00	15.47
5.2G;VHT80,BF;80;1,(M0-9);3	0.08	8.55
5.8G;VHT20,BF;20;1,(M0-8);3	7.45	15.92
5.8G;VHT40,BF;40;1,(M0-9);3	7.93	16.40
5.8G;VHT80,BF;80;1,(M0-9);3	1.93	10.41



Result

Mode	Result	Meas.RBW (Hz)	Lim.RBW (Hz)	BWCF (dB)	DG (dBi)	Sum.Max (dBm/RBW)	PD (dBm/RBW)	PD.Limit (dBm/RBW)	EIRP.PD (dBm/RBW)	EIRP.PD.Li m (dBm/RBW)	P1 (dBm/RBW)	P2 (dBm/RBW)	P3 (dBm/RBW)
5.2G;VHT20,BF;20;1,(M0-8);3;5180;L;TN,VN	Pass	1M	1M	0.00	8.47	2.10	2.10	14.53	10.57	Inf	-2.70	-1.36	-3.16
5.2G;VHT20,BF;20;1,(M0-8);3;5200;M;TN,VN	Pass	1M	1M	0.00	8.47	3.47	3.47	14.53	11.94	Inf	-1.45	0.11	-1.71
5.2G;VHT20,BF;20;1,(M0-8);3;5240;H;TN,VN	Pass	1M	1M	0.00	8.47	9.84	9.84	14.53	18.31	Inf	5.45	6.39	5.27
5.2G;VHT40,BF;40;1,(M0-9);3;5190;L;TN,VN	Pass	1M	1M	0.00	8.47	2.96	2.96	14.53	11.43	Inf	-1.26	-1.05	-1.92
5.2G;VHT40,BF;40;1,(M0-9);3;5230;H;TN,VN	Pass	1M	1M	0.00	8.47	7.00	7.00	14.53	15.47	Inf	2.43	2.41	2.29
5.2G;VHT80,BF;80;1,(M0-9);3;5210;S;TN,VN	Pass	1M	1M	0.00	8.47	0.08	0.08	14.53	8.55	Inf	-4.08	-3.91	-4.72
5.8G;VHT20,BF;20;1,(M0-8);3;5745;L;TN,VN	Pass	500k	500k	0.00	8.47	7.45	7.45	27.53	15.92	33.53	2.87	3.42	3.36
5.8G;VHT20,BF;20;1,(M0-8);3;5785;M;TN,VN	Pass	500k	500k	0.00	8.47	6.59	6.59	27.53	15.06	33.53	2.00	2.44	2.14
5.8G;VHT20,BF;20;1,(M0-8);3;5825;H;TN,VN	Pass	500k	500k	0.00	8.47	6.57	6.57	27.53	15.04	33.53	2.03	2.39	2.33
5.8G;VHT40,BF;40;1,(M0-9);3;5755;L;TN,VN	Pass	500k	500k	0.00	8.47	5.71	5.71	27.53	14.18	33.53	1.44	1.58	1.20
5.8G;VHT40,BF;40;1,(M0-9);3;5795;H;TN,VN	Pass	500k	500k	0.00	8.47	7.93	7.93	27.53	16.40	33.53	3.46	3.64	3.65
5.8G;VHT80,BF;80;1,(M0-9);3;5775;S;TN,VN	Pass	500k	500k	0.00	8.47	1.93	1.93	27.53	10.41	33.53	-2.41	-2.31	-2.28



Transmitter Radiated Bandedge Emissions (with Antenna)

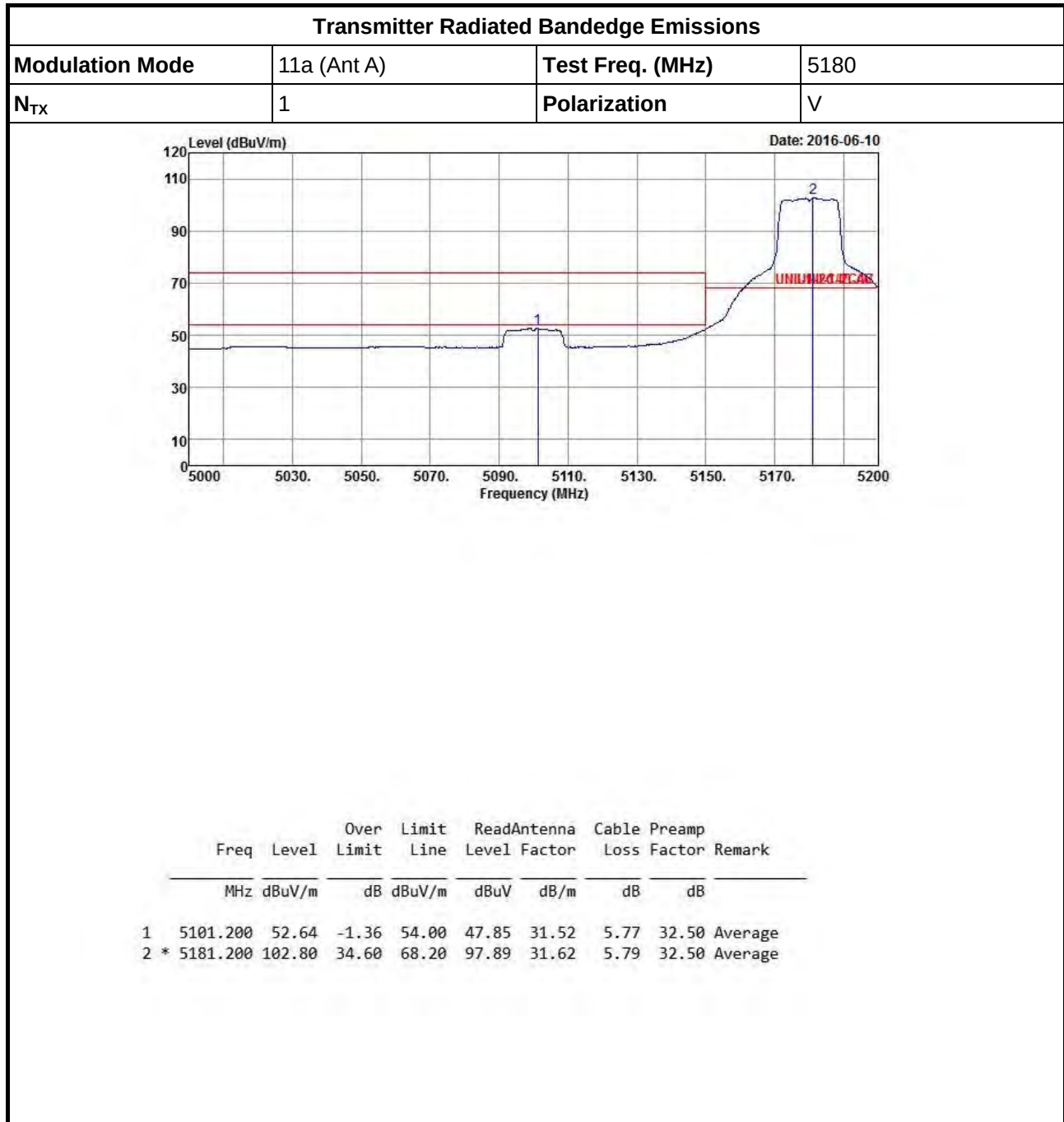
U-NII 5150-5250MHz Transmitter Radiated Bandedge (with Antenna)										
Modulation Mode	N _{Tx}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11a (Ant A)	1	5180	3	5149.200	70.10	74	5101.200	52.64	54	V
11a (Ant A)	1	5240	3	5399.280	62.76	74	5399.280	50.48	54	V
11a (Ant B)	1	5180	3	5146.800	70.83	74	5099.200	52.82	54	V
11a (Ant B)	1	5240	3	5403.880	62.44	74	5402.040	50.24	54	V
11a (Ant C)	1	5180	3	5149.900	70.28	74	5150.000	51.30	54	V
11a (Ant C)	1	5240	3	5121.440	59.26	74	5088.320	46.01	54	V
VHT20	3	5180	3	5146.800	65.29	74	5101.600	52.98	54	V
VHT20	3	5240	3	5398.000	64.46	74	5398.000	52.99	54	V
VHT40	3	5190	3	5147.420	70.61	74	5149.940	52.27	54	V
VHT40	3	5230	3	5135.600	66.08	74	5146.400	52.84	54	V
VHT80	3	5210	3	5145.000	67.74	74	5150.000	52.98	54	V

Note 1: Measurement worst emissions of receive antenna polarization.

U-NII 5725-5850MHz Transmitter Radiated Bandedge (with Antenna)							
Modulation Mode	N _{Tx}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Pol.
11a (Ant A)	1	5745	3	5579.200	60.37	68.2	V
11a (Ant A)	1	5825	3	5982.000	63.56	68.2	V
11a (Ant B)	1	5745	3	5582.800	64.29	68.2	V
11a (Ant B)	1	5825	3	5981.000	64.87	68.2	V
11a (Ant C)	1	5745	3	5583.700	59.59	68.2	V
11a (Ant C)	1	5825	3	5985.000	60.12	68.2	V
VHT20	3	5745	3	5984.800	61.72	68.2	V
VHT20	3	5825	3	5984.300	65.40	68.2	V
VHT40	3	5755	3	5926.000	63.04	68.2	V
VHT40	3	5795	3	5961.000	64.01	68.2	V
VHT80	3	5775	3	5634.000	66.30	68.2	V

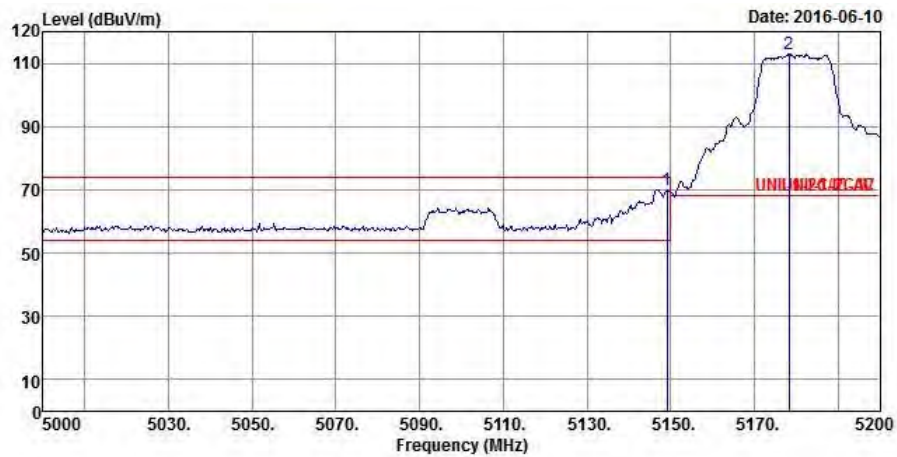
Note 1: Measurement worst emissions of receive antenna polarization.

Transmitter Radiated Bandedge Emissions (with Antenna)



Transmitter Radiated Bandedge Emissions

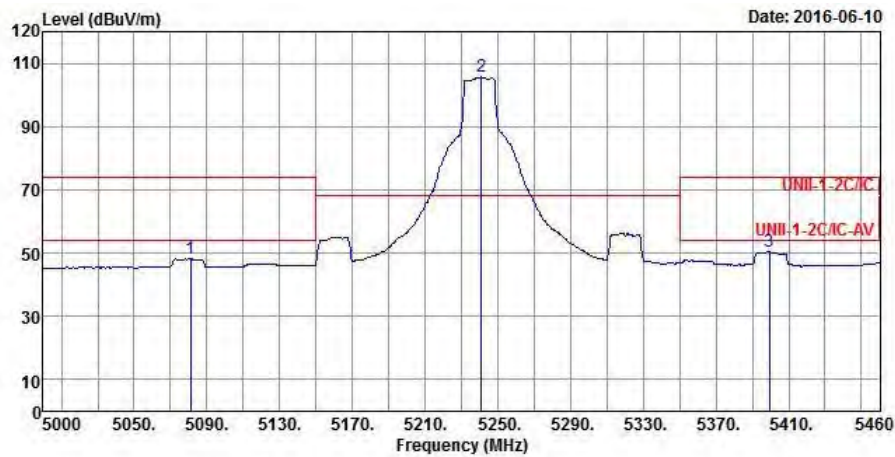
Modulation Mode	11a (Ant A)	Test Freq. (MHz)	5180
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5149.200	70.10	-3.90	74.00	65.24	31.58	5.78	32.50 Peak
2 *	5178.400	113.06	44.86	68.20	108.17	31.61	5.78	32.50 Peak

Transmitter Radiated Bandedge Emissions

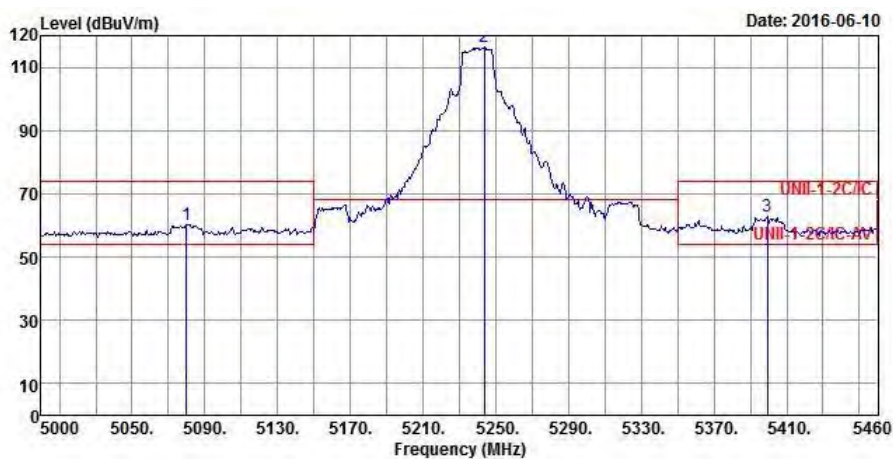
Modulation Mode	11a (Ant A)	Test Freq. (MHz)	5240
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB	dB	
1	5080.960	48.18	-5.82	54.00	43.42	31.50	5.76	32.50 Average
2 *	5241.040	105.70	37.50	68.20	100.71	31.69	5.79	32.49 Average
3	5399.280	50.48	-3.52	54.00	45.31	31.88	5.77	32.48 Average

Transmitter Radiated Bandedge Emissions

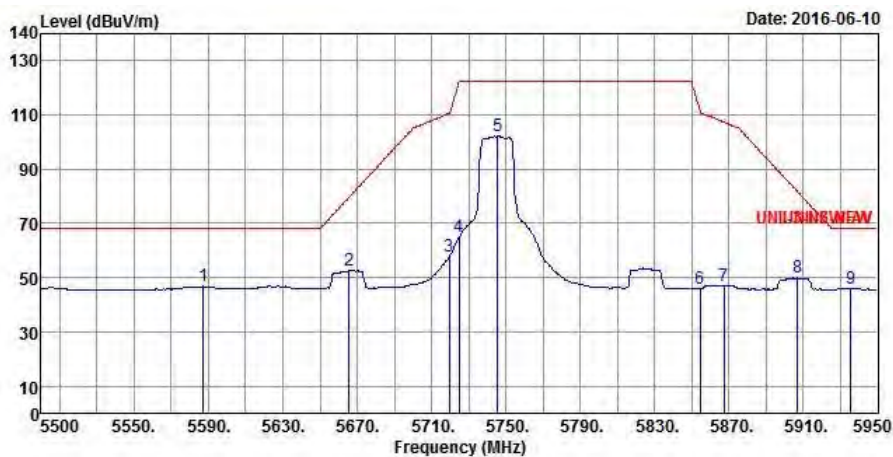
Modulation Mode	11a (Ant A)	Test Freq. (MHz)	5240
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5080.040	60.25	-13.75	74.00	55.49	31.50	5.76	32.50 Peak
2 *	5243.800	116.44	48.24	68.20	111.45	31.69	5.79	32.49 Peak
3	5399.280	62.76	-11.24	74.00	57.59	31.88	5.77	32.48 Peak

Transmitter Radiated Bandedge Emissions

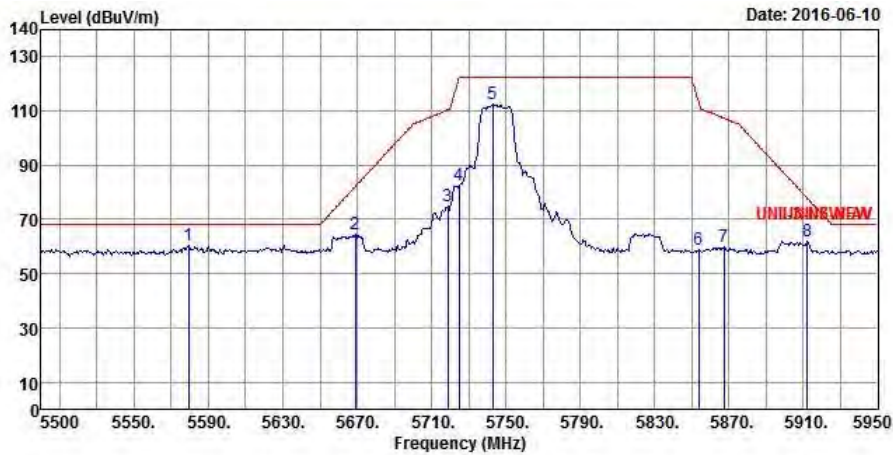
Modulation Mode	11a (Ant A)	Test Freq. (MHz)	5745
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5587.300	46.83	-21.37	68.20	41.26	32.10	5.96	32.49 Average
2	5665.600	52.71	-27.07	79.78	47.09	32.20	5.92	32.50 Average
3	5719.600	57.63	-53.06	110.69	51.99	32.26	5.89	32.51 Average
4	5725.000	65.07	-57.13	122.20	59.43	32.27	5.88	32.51 Average
5	5745.700	102.13	-20.07	122.20	96.48	32.29	5.87	32.51 Average
6	5854.600	46.19	-65.52	111.71	40.52	32.43	5.77	32.53 Average
7	5867.200	47.11	-60.27	107.38	41.44	32.44	5.76	32.53 Average
8	5906.800	49.91	-31.72	81.63	44.24	32.49	5.71	32.53 Average
9	5935.600	45.87	-22.33	68.20	40.21	32.52	5.68	32.54 Average

Transmitter Radiated Bandedge Emissions

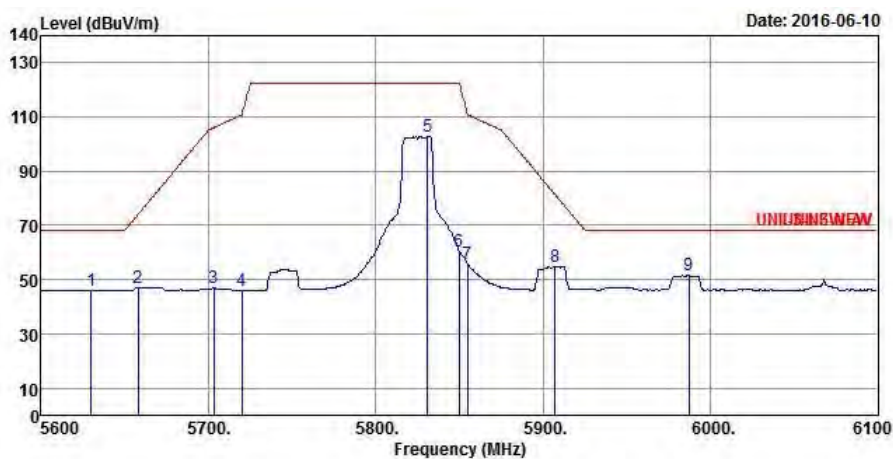
Modulation Mode	11a (Ant A)	Test Freq. (MHz)	5745
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5579.200	60.37	-7.83	68.20	54.81	32.10	5.95	32.49 Peak
2	5669.200	64.71	-17.74	82.45	59.09	32.20	5.92	32.50 Peak
3	5718.700	74.88	-35.56	110.44	69.24	32.26	5.89	32.51 Peak
4	5725.000	82.75	-39.45	122.20	77.11	32.27	5.88	32.51 Peak
5	5743.000	112.60	-9.60	122.20	106.95	32.29	5.87	32.51 Peak
6	5853.700	58.67	-55.09	113.76	53.01	32.42	5.77	32.53 Peak
7	5867.200	59.95	-47.43	107.38	54.28	32.44	5.76	32.53 Peak
8	5912.200	61.90	-15.74	77.64	56.24	32.49	5.71	32.54 Peak
9	5950.000	58.78	-9.42	68.20	53.12	32.54	5.66	32.54 Peak

Transmitter Radiated Bandedge Emissions

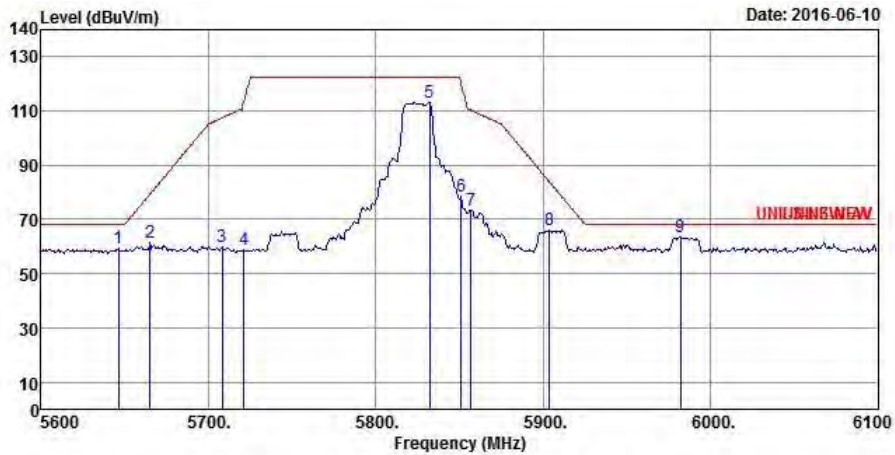
Modulation Mode	11a (Ant A)	Test Freq. (MHz)	5825
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5630.000	46.12	-22.08	68.20	40.50	32.16	5.95	32.49 Average
2	5658.000	47.12	-27.02	74.14	41.50	32.19	5.93	32.50 Average
3	5703.000	46.79	-59.25	106.04	41.15	32.24	5.90	32.50 Average
4	5720.000	46.20	-64.60	110.80	40.56	32.26	5.89	32.51 Average
5	5831.000	102.85	-19.35	122.20	97.17	32.40	5.80	32.52 Average
6	5850.000	60.51	-61.69	122.20	54.84	32.42	5.78	32.53 Average
7	5855.000	55.57	-55.23	110.80	49.90	32.43	5.77	32.53 Average
8	5907.000	54.90	-26.58	81.48	49.23	32.49	5.71	32.53 Average
9	5987.000	51.56	-16.64	68.20	45.91	32.58	5.62	32.55 Average

Transmitter Radiated Bandedge Emissions

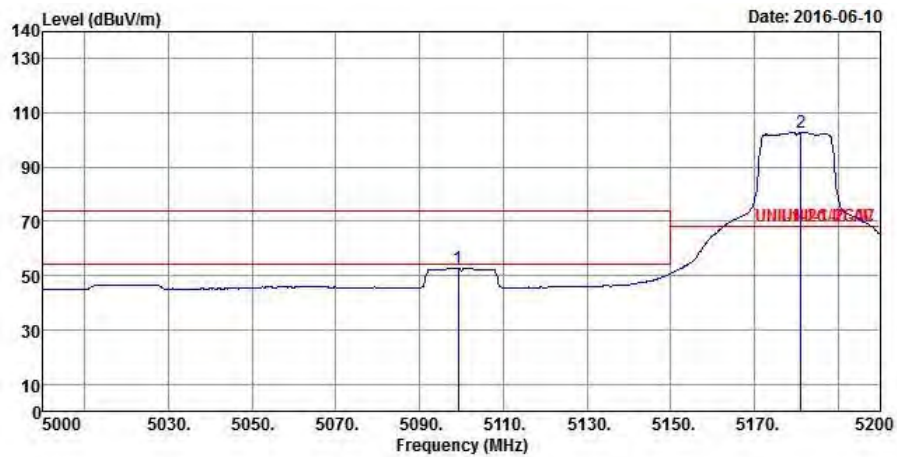
Modulation Mode	11a (Ant A)	Test Freq. (MHz)	5825
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5646.000	59.27	-8.93	68.20	53.64	32.18	5.94	32.49 Peak
2	5665.000	61.32	-18.01	79.33	55.70	32.20	5.92	32.50 Peak
3	5708.000	60.04	-47.40	107.44	54.41	32.25	5.89	32.51 Peak
4	5721.000	58.83	-54.25	113.08	53.18	32.27	5.89	32.51 Peak
5	5832.000	113.28	-8.92	122.20	107.61	32.40	5.79	32.52 Peak
6	5851.000	78.48	-41.44	119.92	72.82	32.42	5.77	32.53 Peak
7	5857.000	73.30	-36.94	110.24	67.63	32.43	5.77	32.53 Peak
8	5904.000	66.18	-17.52	83.70	60.51	32.48	5.72	32.53 Peak
9	5982.000	63.56	-4.64	68.20	57.90	32.58	5.63	32.55 Peak

Transmitter Radiated Bandedge Emissions

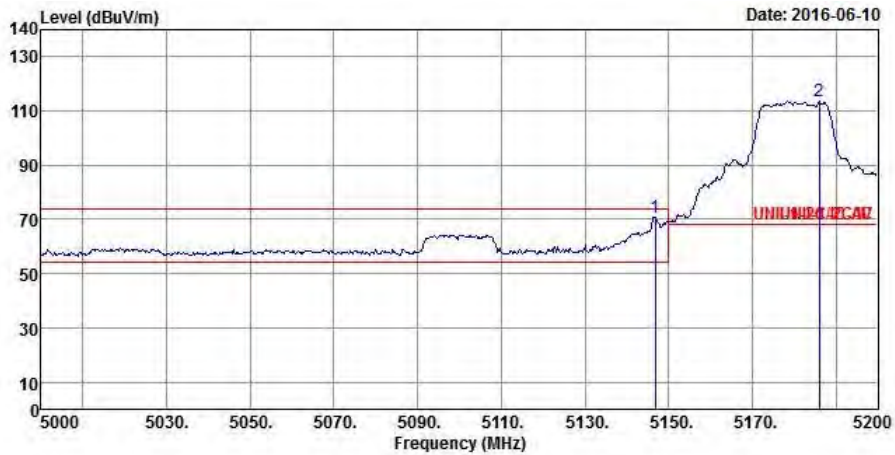
Modulation Mode	11a (Ant B)	Test Freq. (MHz)	5180
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB	dB	
1	5099.200	52.82	-1.18	54.00	48.04	31.52	5.76	32.50 Average
2 *	5181.200	102.90	34.70	68.20	97.99	31.62	5.79	32.50 Average

Transmitter Radiated Bandedge Emissions

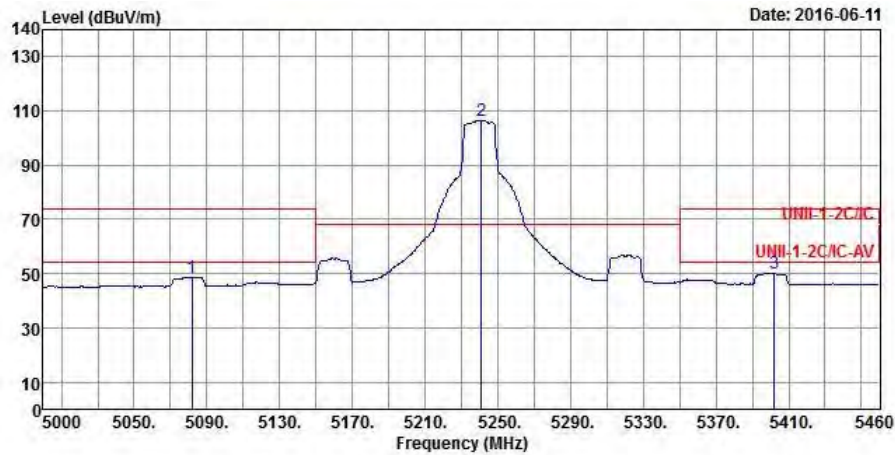
Modulation Mode	11a (Ant B)	Test Freq. (MHz)	5180
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5146.800	70.83	-3.17	74.00	65.97	31.58	5.78	32.50 Peak
2 *	5186.000	113.55	45.35	68.20	108.64	31.62	5.79	32.50 Peak

Transmitter Radiated Bandedge Emissions

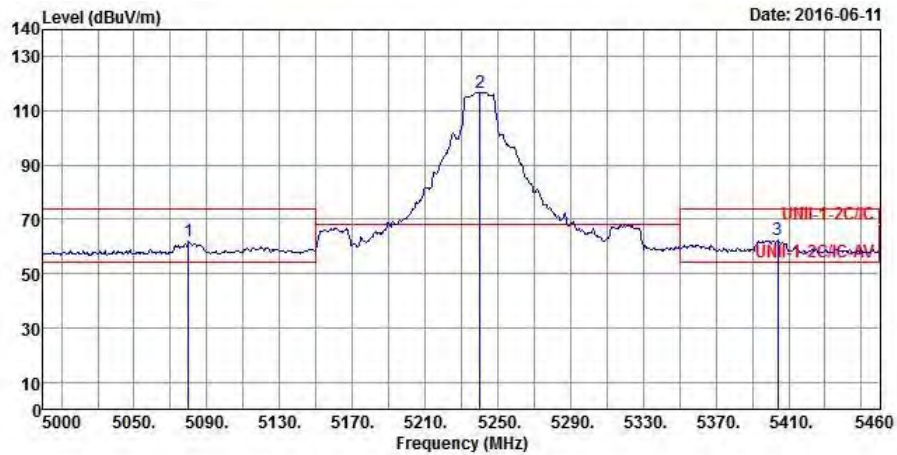
Modulation Mode	11a (Ant B)	Test Freq. (MHz)	5240
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB	dB	
1	5081.880	48.63	-5.37	54.00	43.87	31.50	5.76	32.50 Average
2 *	5241.040	106.65	38.45	68.20	101.66	31.69	5.79	32.49 Average
3	5402.040	50.24	-3.76	54.00	45.07	31.88	5.77	32.48 Average

Transmitter Radiated Bandedge Emissions

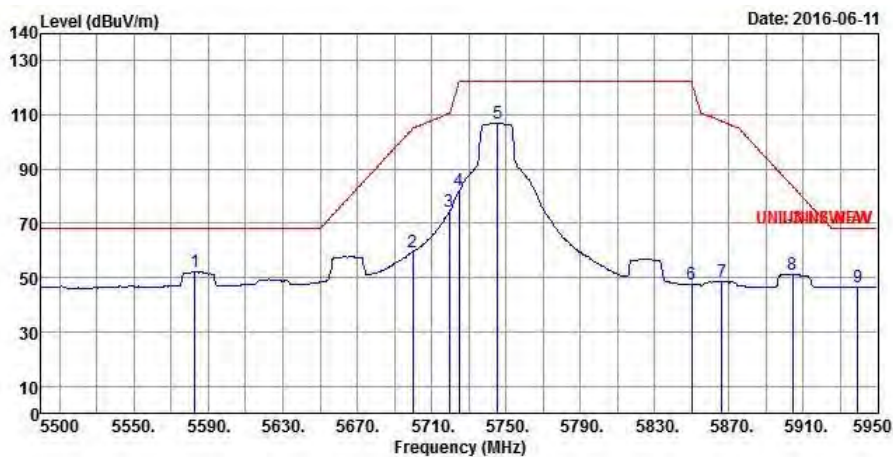
Modulation Mode	11a (Ant B)	Test Freq. (MHz)	5240
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5080.040	61.80	-12.20	74.00	57.04	31.50	5.76	32.50 Peak
2 *	5240.120	116.90	48.70	68.20	111.91	31.69	5.79	32.49 Peak
3	5403.880	62.44	-11.56	74.00	57.27	31.88	5.77	32.48 Peak

Transmitter Radiated Bandedge Emissions

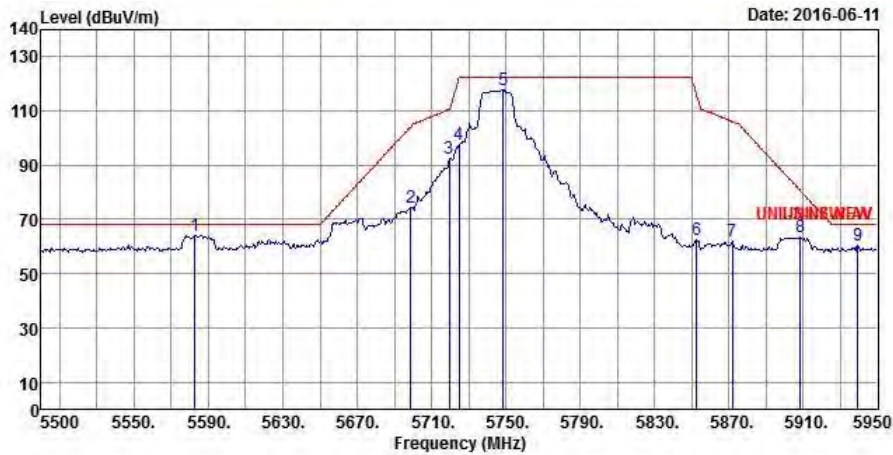
Modulation Mode	11a (Ant B)	Test Freq. (MHz)	5745
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable Preamp			
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5582.800	52.19	-16.01	68.20	46.63	32.10	5.95	32.49	Average
2	5699.800	59.55	-45.50	105.05	53.91	32.24	5.90	32.50	Average
3	5719.600	74.25	-36.44	110.69	68.61	32.26	5.89	32.51	Average
4	5725.000	82.20	-40.00	122.20	76.56	32.27	5.88	32.51	Average
5	5745.700	107.01	-15.19	122.20	101.36	32.29	5.87	32.51	Average
6	5850.100	47.44	-74.53	121.97	41.78	32.42	5.77	32.53	Average
7	5866.300	48.81	-58.82	107.63	43.14	32.44	5.76	32.53	Average
8	5904.100	51.39	-32.24	83.63	45.72	32.48	5.72	32.53	Average
9	5939.200	46.74	-21.46	68.20	41.07	32.53	5.68	32.54	Average

Transmitter Radiated Bandedge Emissions

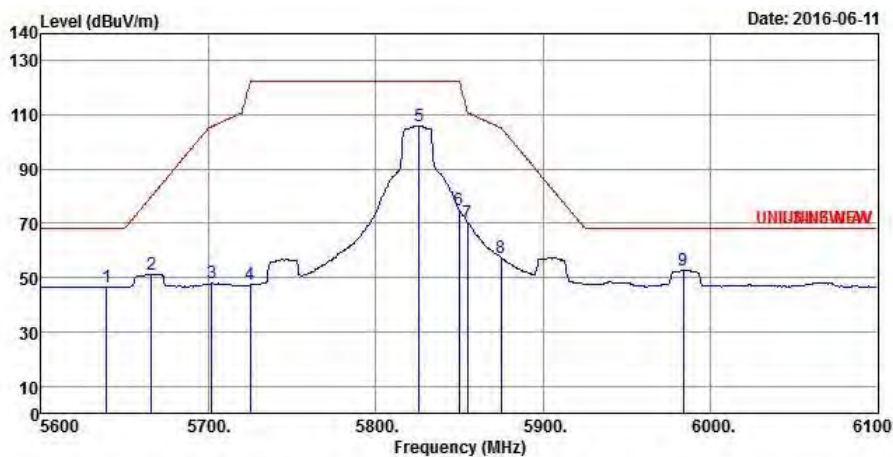
Modulation Mode	11a (Ant B)	Test Freq. (MHz)	5745
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable Preamp			
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5582.800	64.29	-3.91	68.20	58.73	32.10	5.95	32.49	Peak
2	5698.900	74.64	-29.75	104.39	69.00	32.24	5.90	32.50	Peak
3	5719.600	92.37	-18.32	110.69	86.73	32.26	5.89	32.51	Peak
4	5725.000	97.89	-24.31	122.20	92.25	32.27	5.88	32.51	Peak
5	5748.400	117.95	-4.25	122.20	112.29	32.30	5.87	32.51	Peak
6	5852.800	62.43	-53.39	115.82	56.77	32.42	5.77	32.53	Peak
7	5871.700	61.79	-44.33	106.12	56.12	32.45	5.75	32.53	Peak
8	5908.600	63.45	-16.85	80.30	57.78	32.49	5.71	32.53	Peak
9	5939.200	60.56	-7.64	68.20	54.89	32.53	5.68	32.54	Peak

Transmitter Radiated Bandedge Emissions

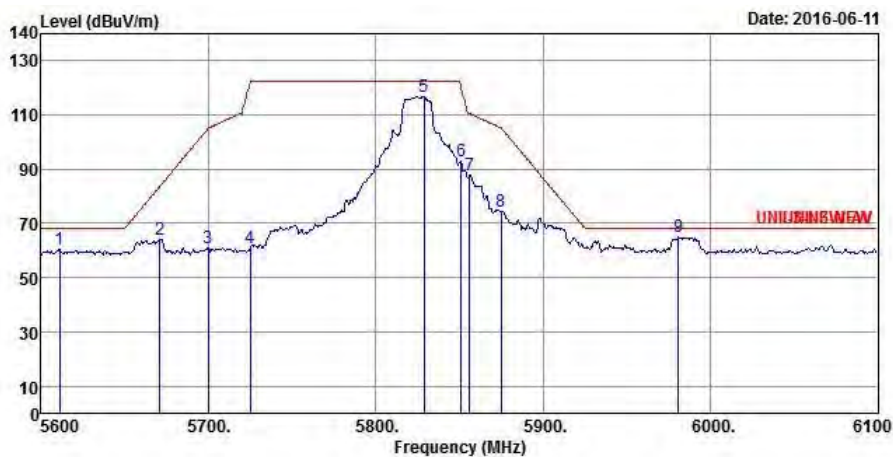
Modulation Mode	11a (Ant B)	Test Freq. (MHz)	5825
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB	dB	
1	5639.000	46.73	-21.47	68.20	41.11	32.17	5.94	32.49 Average
2	5666.000	51.22	-28.86	80.08	45.60	32.20	5.92	32.50 Average
3	5702.000	47.82	-57.94	105.76	42.18	32.24	5.90	32.50 Average
4	5725.000	47.31	-74.89	122.20	41.67	32.27	5.88	32.51 Average
5	5826.000	106.05	-16.15	122.20	100.38	32.39	5.80	32.52 Average
6	5850.000	74.94	-47.26	122.20	69.27	32.42	5.78	32.53 Average
7	5855.000	70.44	-40.36	110.80	64.77	32.43	5.77	32.53 Average
8	5875.000	57.44	-47.76	105.20	51.77	32.45	5.75	32.53 Average
9	5984.000	52.75	-15.45	68.20	47.09	32.58	5.63	32.55 Average

Transmitter Radiated Bandedge Emissions

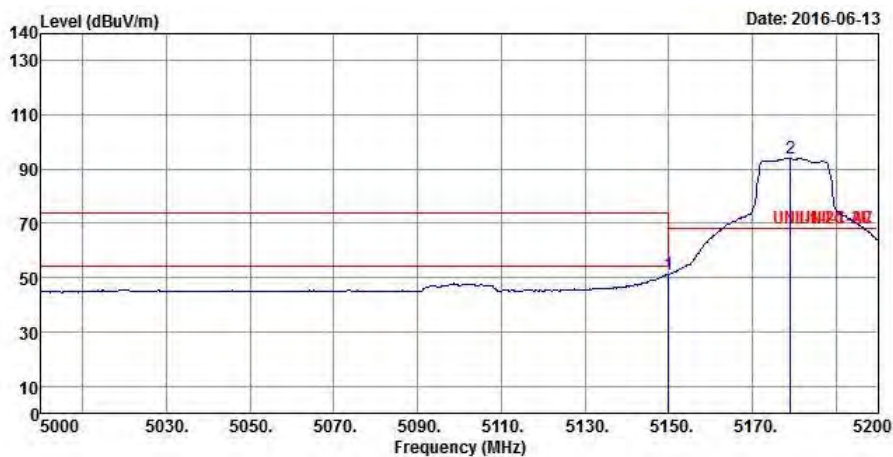
Modulation Mode	11a (Ant B)	Test Freq. (MHz)	5825
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5611.000	60.28	-7.92	68.20	54.68	32.13	5.96	32.49 Peak
2	5671.000	63.86	-19.92	83.78	58.23	32.21	5.92	32.50 Peak
3	5700.000	60.93	-44.27	105.20	55.29	32.24	5.90	32.50 Peak
4	5725.000	60.91	-61.29	122.20	55.27	32.27	5.88	32.51 Peak
5	5829.000	116.88	-5.32	122.20	111.21	32.39	5.80	32.52 Peak
6	5851.000	93.07	-26.85	119.92	87.41	32.42	5.77	32.53 Peak
7	5856.000	88.06	-22.46	110.52	82.39	32.43	5.77	32.53 Peak
8	5875.000	74.62	-30.58	105.20	68.95	32.45	5.75	32.53 Peak
9	5981.000	64.87	-3.33	68.20	59.21	32.58	5.63	32.55 Peak

Transmitter Radiated Bandedge Emissions

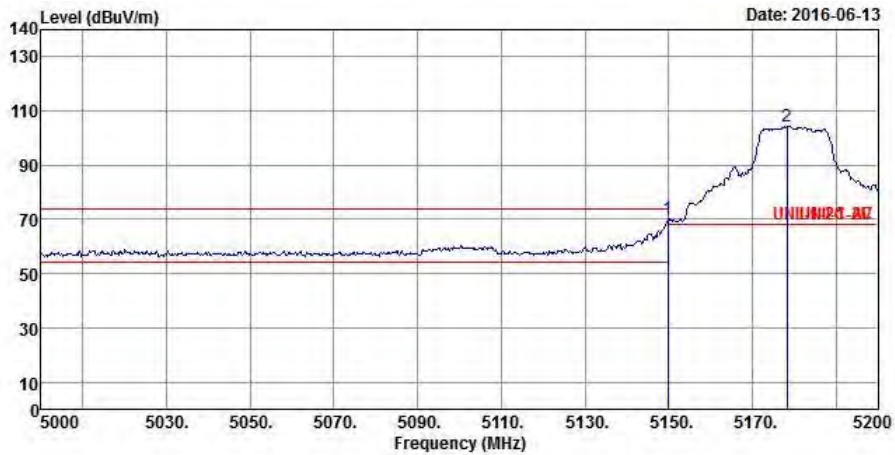
Modulation Mode	11a (Ant C)	Test Freq. (MHz)	5180
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5150.000	51.30	-2.70	54.00	46.44	31.58	5.78	32.50 Average
2 *	5179.200	94.23	26.03	68.20	89.33	31.62	5.78	32.50 Average

Transmitter Radiated Bandedge Emissions

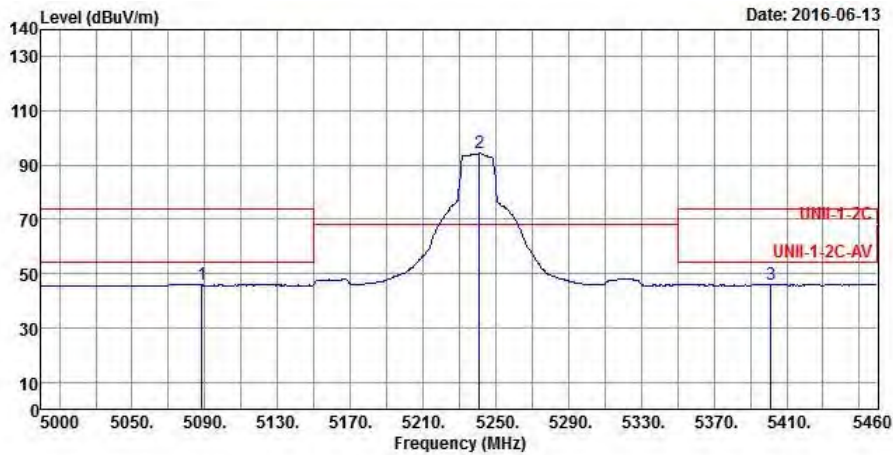
Modulation Mode	11a (Ant C)	Test Freq. (MHz)	5180
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5149.900	70.28	-3.72	74.00	65.42	31.58	5.78	32.50 Peak
2 *	5178.400	104.32	36.12	68.20	99.43	31.61	5.78	32.50 Peak

Transmitter Radiated Bandedge Emissions

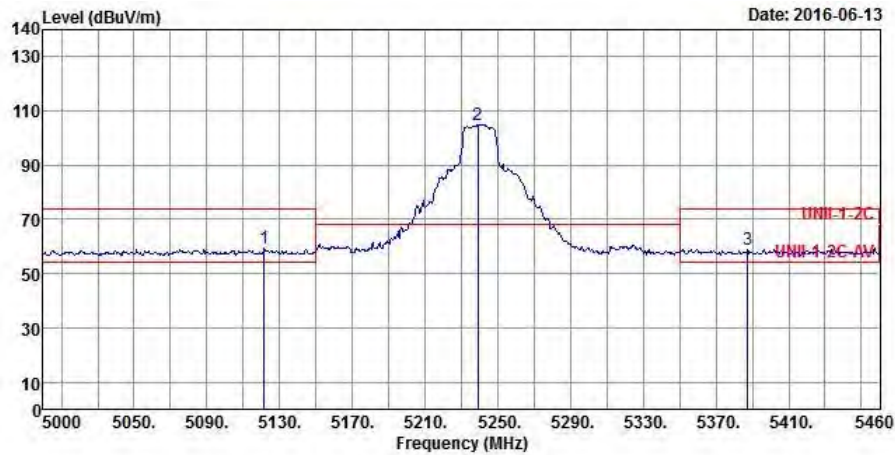
Modulation Mode	11a (Ant C)	Test Freq. (MHz)	5240
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5088.320	46.01	-7.99	54.00	41.24	31.51	5.76	32.50 Average
2 *	5241.040	94.39	26.19	68.20	89.40	31.69	5.79	32.49 Average
3	5401.120	46.01	-7.99	54.00	40.84	31.88	5.77	32.48 Average

Transmitter Radiated Bandedge Emissions

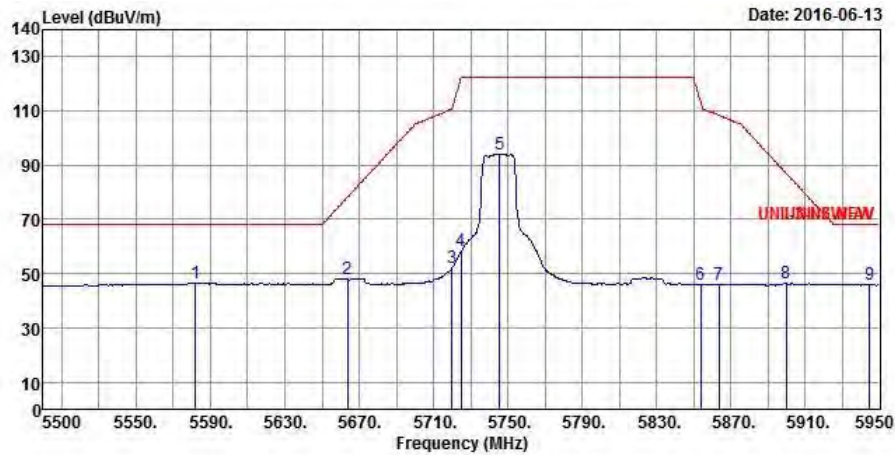
Modulation Mode	11a (Ant C)	Test Freq. (MHz)	5240
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5121.440	59.26	-14.74	74.00	54.44	31.55	5.77	32.50 Peak
2 *	5239.200	105.00	36.80	68.20	100.01	31.69	5.79	32.49 Peak
3	5387.320	59.13	-14.87	74.00	53.98	31.86	5.77	32.48 Peak

Transmitter Radiated Bandedge Emissions

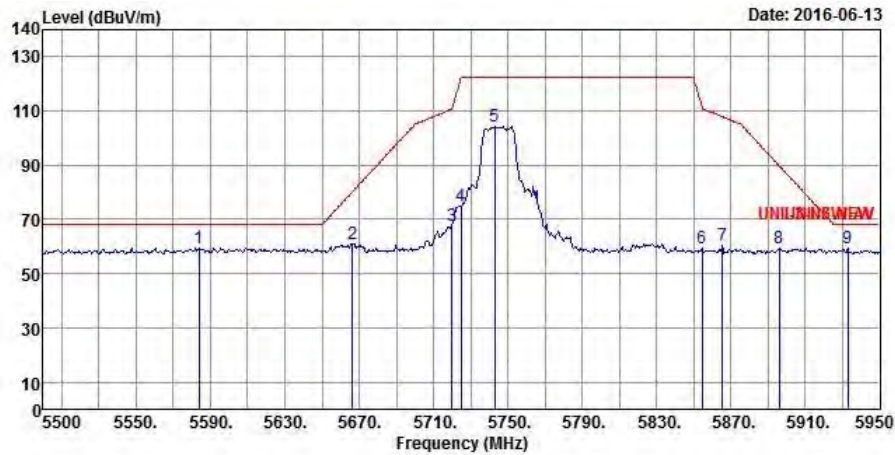
Modulation Mode	11a (Ant C)	Test Freq. (MHz)	5745
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5581.900	46.40	-21.80	68.20	40.84	32.10	5.95	32.49 Average
2	5663.800	48.19	-30.25	78.44	42.56	32.20	5.93	32.50 Average
3	5720.000	52.07	-58.73	110.80	46.43	32.26	5.89	32.51 Average
4	5725.000	58.43	-63.77	122.20	52.79	32.27	5.88	32.51 Average
5	5745.700	94.18	-28.02	122.20	88.53	32.29	5.87	32.51 Average
6	5853.700	46.15	-67.61	113.76	40.49	32.42	5.77	32.53 Average
7	5863.600	46.23	-62.16	108.39	40.56	32.44	5.76	32.53 Average
8	5899.600	46.32	-40.64	86.96	40.65	32.48	5.72	32.53 Average
9	5944.600	45.93	-22.27	68.20	40.27	32.53	5.67	32.54 Average

Transmitter Radiated Bandedge Emissions

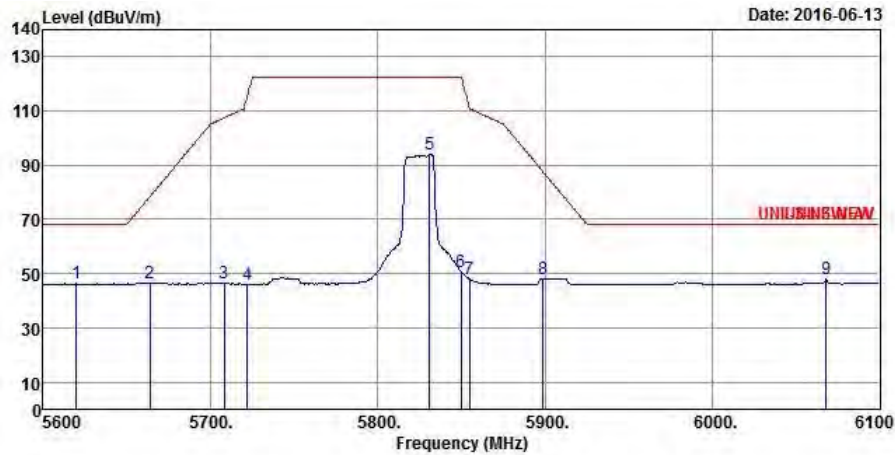
Modulation Mode	11a (Ant C)	Test Freq. (MHz)	5745
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV		dB	
1	5583.700	59.59	-8.61	68.20	54.03	32.10	5.95	32.49 Peak
2	5666.500	60.87	-19.58	80.45	55.25	32.20	5.92	32.50 Peak
3	5720.000	67.50	-43.30	110.80	61.86	32.26	5.89	32.51 Peak
4	5725.000	75.09	-47.11	122.20	69.45	32.27	5.88	32.51 Peak
5	5743.000	104.47	-17.73	122.20	98.82	32.29	5.87	32.51 Peak
6	5854.600	59.41	-52.30	111.71	53.74	32.43	5.77	32.53 Peak
7	5865.400	60.27	-47.62	107.89	54.60	32.44	5.76	32.53 Peak
8	5896.000	59.28	-30.34	89.62	53.61	32.48	5.72	32.53 Peak
9	5932.900	59.27	-8.93	68.20	53.61	32.52	5.68	32.54 Peak

Transmitter Radiated Bandedge Emissions

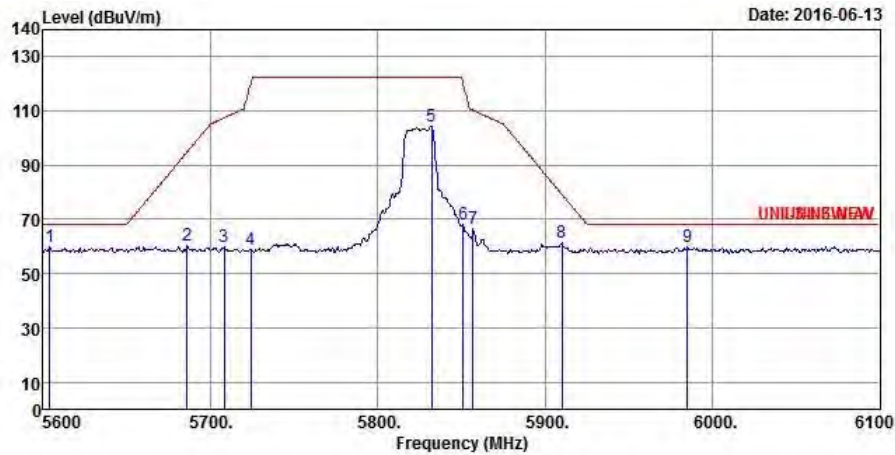
Modulation Mode	11a (Ant C)	Test Freq. (MHz)	5825
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB	dB	
1	5620.000	46.31	-21.89	68.20	40.70	32.14	5.96	32.49 Average
2	5664.000	46.63	-31.96	78.59	41.00	32.20	5.93	32.50 Average
3	5708.000	46.45	-60.99	107.44	40.82	32.25	5.89	32.51 Average
4	5722.000	46.19	-69.17	115.36	40.55	32.27	5.88	32.51 Average
5	5831.000	93.88	-28.32	122.20	88.20	32.40	5.80	32.52 Average
6	5850.000	50.66	-71.54	122.20	44.99	32.42	5.78	32.53 Average
7	5855.000	47.98	-62.82	110.80	42.31	32.43	5.77	32.53 Average
8	5899.000	48.27	-39.13	87.40	42.60	32.48	5.72	32.53 Average
9	6068.000	48.27	-19.93	68.20	42.36	32.79	5.68	32.56 Average

Transmitter Radiated Bandedge Emissions

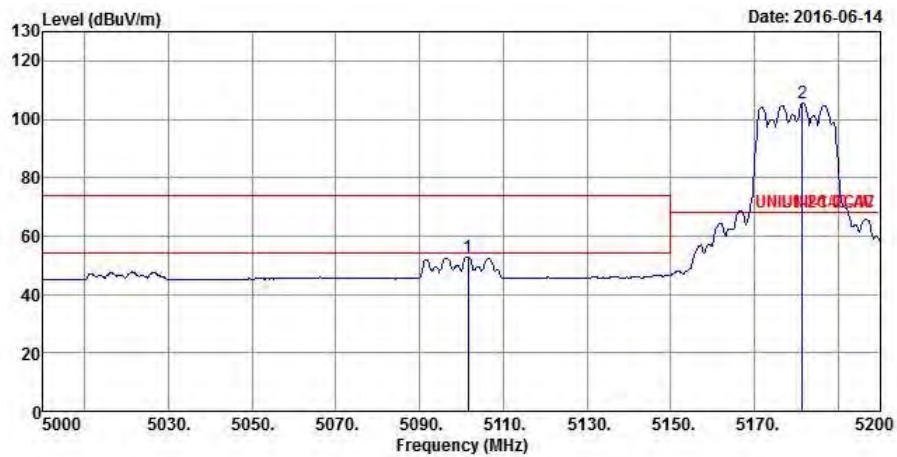
Modulation Mode	11a (Ant C)	Test Freq. (MHz)	5825
N _{TX}	1	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5604.000	59.88	-8.32	68.20	54.28	32.12	5.97	32.49 Peak
2	5686.000	60.23	-34.64	94.87	54.60	32.22	5.91	32.50 Peak
3	5708.000	59.93	-47.51	107.44	54.30	32.25	5.89	32.51 Peak
4	5724.000	58.81	-61.11	119.92	53.17	32.27	5.88	32.51 Peak
5	5832.000	104.25	-17.95	122.20	98.58	32.40	5.79	32.52 Peak
6	5851.000	68.33	-51.59	119.92	62.67	32.42	5.77	32.53 Peak
7	5857.000	66.41	-43.83	110.24	60.74	32.43	5.77	32.53 Peak
8	5910.000	61.45	-17.82	79.27	55.79	32.49	5.71	32.54 Peak
9	5985.000	60.12	-8.08	68.20	54.46	32.58	5.63	32.55 Peak

Transmitter Radiated Bandedge Emissions

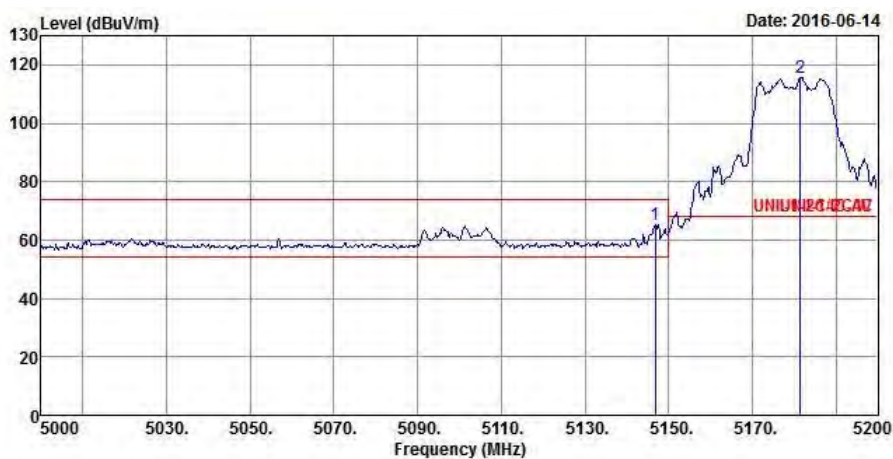
Modulation Mode	VHT20	Test Freq. (MHz)	5180
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB	dB	
1	5101.600	52.98	-1.02	54.00	48.19	31.52	5.77	32.50 Average
2 *	5181.600	105.47	37.27	68.20	100.56	31.62	5.79	32.50 Average

Transmitter Radiated Bandedge Emissions

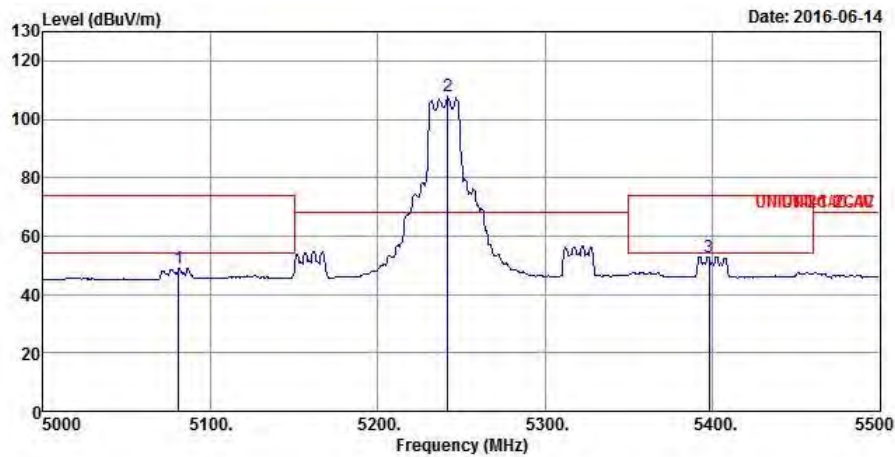
Modulation Mode	VHT20	Test Freq. (MHz)	5180
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5146.800	65.29	-8.71	74.00	60.43	31.58	5.78	32.50 Peak
2 *	5181.600	115.60	47.40	68.20	110.69	31.62	5.79	32.50 Peak

Transmitter Radiated Bandedge Emissions

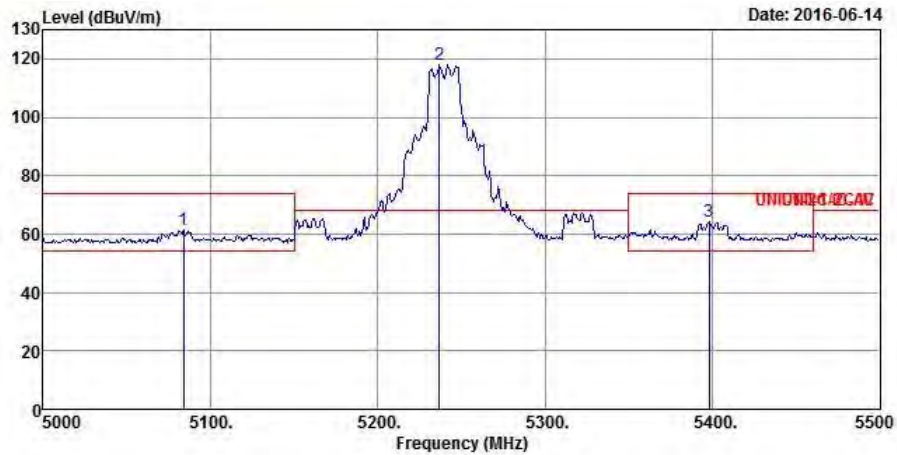
Modulation Mode	VHT20	Test Freq. (MHz)	5240
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5081.000	48.86	-5.14	54.00	44.10	31.50	5.76	32.50 Average
2 *	5242.000	107.70	39.50	68.20	102.71	31.69	5.79	32.49 Average
3	5398.000	52.99	-1.01	54.00	47.82	31.88	5.77	32.48 Average

Transmitter Radiated Bandedge Emissions

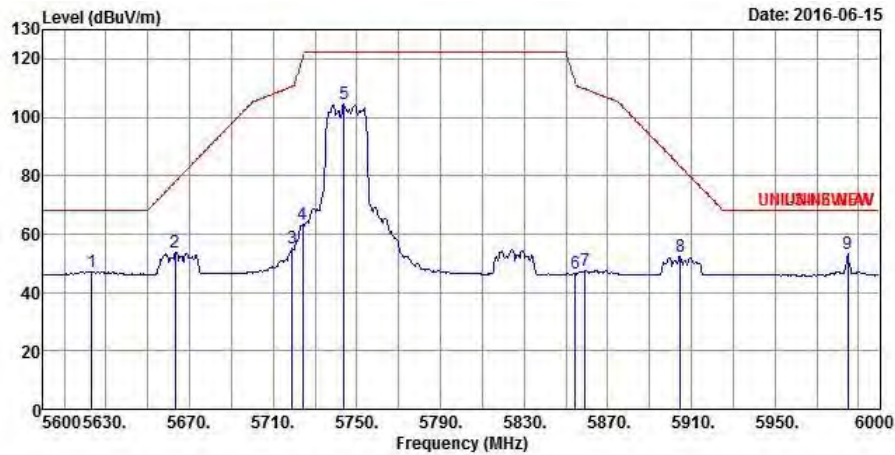
Modulation Mode	VHT20	Test Freq. (MHz)	5240
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5084.000	61.21	-12.79	74.00	56.45	31.50	5.76	32.50 Peak
2 *	5237.000	118.06	49.86	68.20	113.08	31.68	5.79	32.49 Peak
3	5398.000	64.46	-9.54	74.00	59.29	31.88	5.77	32.48 Peak

Transmitter Radiated Bandedge Emissions

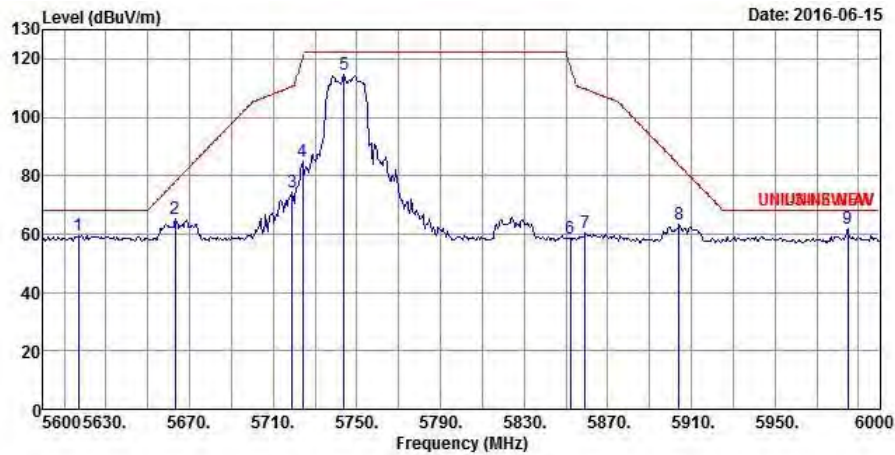
Modulation Mode	VHT20	Test Freq. (MHz)	5745
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable Preamp			
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5623.200	47.14	-21.06	68.20	41.53	32.15	5.95	32.49	Average
2	5663.200	53.85	-24.15	78.00	48.22	32.20	5.93	32.50	Average
3	5719.200	54.99	-55.59	110.58	49.35	32.26	5.89	32.51	Average
4	5724.000	63.30	-56.62	119.92	57.66	32.27	5.88	32.51	Average
5	5744.000	104.72	-17.48	122.20	99.07	32.29	5.87	32.51	Average
6	5854.400	46.34	-65.83	112.17	40.67	32.43	5.77	32.53	Average
7	5859.200	47.44	-62.18	109.62	41.78	32.43	5.76	32.53	Average
8	5904.800	52.39	-30.72	83.11	46.72	32.49	5.71	32.53	Average
9	5984.800	53.11	-15.09	68.20	47.45	32.58	5.63	32.55	Average

Transmitter Radiated Bandedge Emissions

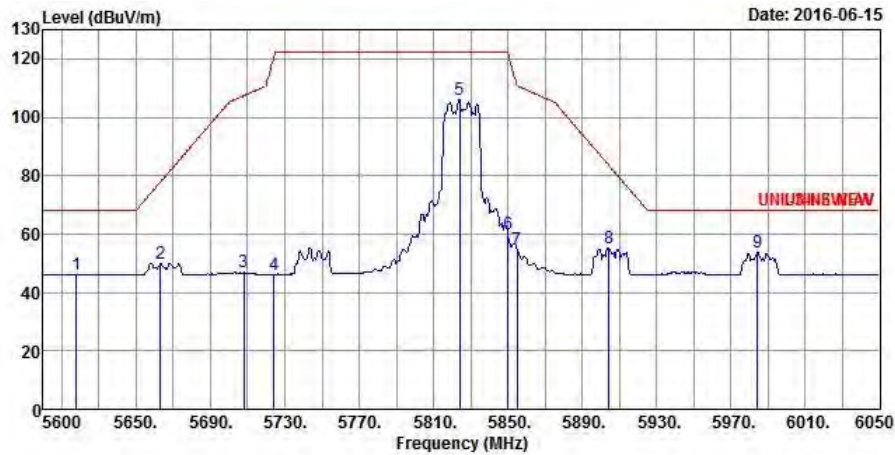
Modulation Mode	VHT20	Test Freq. (MHz)	5745
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable Preamp			
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5616.800	59.51	-8.69	68.20	53.90	32.14	5.96	32.49	Peak
2	5663.200	65.34	-12.66	78.00	59.71	32.20	5.93	32.50	Peak
3	5719.200	74.43	-36.15	110.58	68.79	32.26	5.89	32.51	Peak
4	5724.000	84.67	-35.25	119.92	79.03	32.27	5.88	32.51	Peak
5	5744.000	114.67	-7.53	122.20	109.02	32.29	5.87	32.51	Peak
6	5852.000	58.66	-58.98	117.64	53.00	32.42	5.77	32.53	Peak
7	5859.200	60.29	-49.33	109.62	54.63	32.43	5.76	32.53	Peak
8	5904.000	63.38	-20.32	83.70	57.71	32.48	5.72	32.53	Peak
9	5984.800	61.72	-6.48	68.20	56.06	32.58	5.63	32.55	Peak

Transmitter Radiated Bandedge Emissions

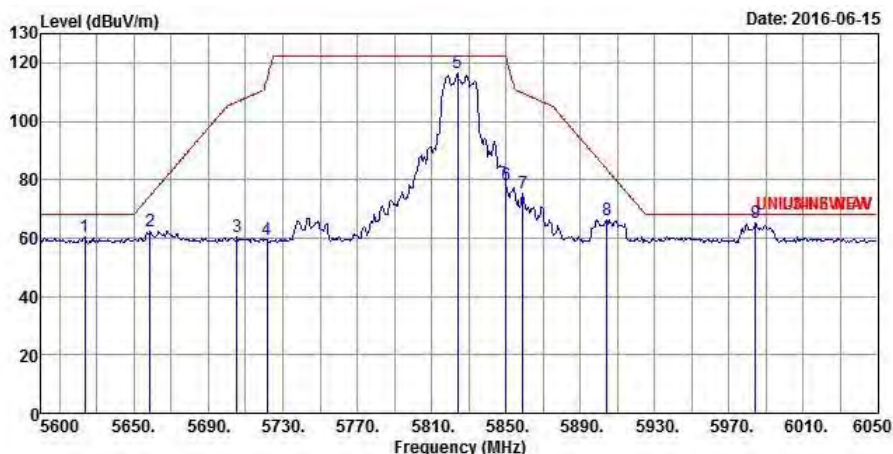
Modulation Mode	VHT20	Test Freq. (MHz)	5825
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable Preamp			
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5618.000	46.25	-21.95	68.20	40.64	32.14	5.96	32.49	Average
2	5663.000	49.99	-27.86	77.85	44.36	32.20	5.93	32.50	Average
3	5708.000	46.88	-60.56	107.44	41.25	32.25	5.89	32.51	Average
4	5724.200	46.24	-74.14	120.38	40.60	32.27	5.88	32.51	Average
5	5824.100	105.87	-16.33	122.20	100.20	32.39	5.80	32.52	Average
6	5850.200	59.73	-62.01	121.74	54.07	32.42	5.77	32.53	Average
7	5855.150	54.76	-56.00	110.76	49.09	32.43	5.77	32.53	Average
8	5904.200	55.40	-28.15	83.55	49.72	32.49	5.72	32.53	Average
9	5984.300	53.82	-14.38	68.20	48.16	32.58	5.63	32.55	Average

Transmitter Radiated Bandedge Emissions

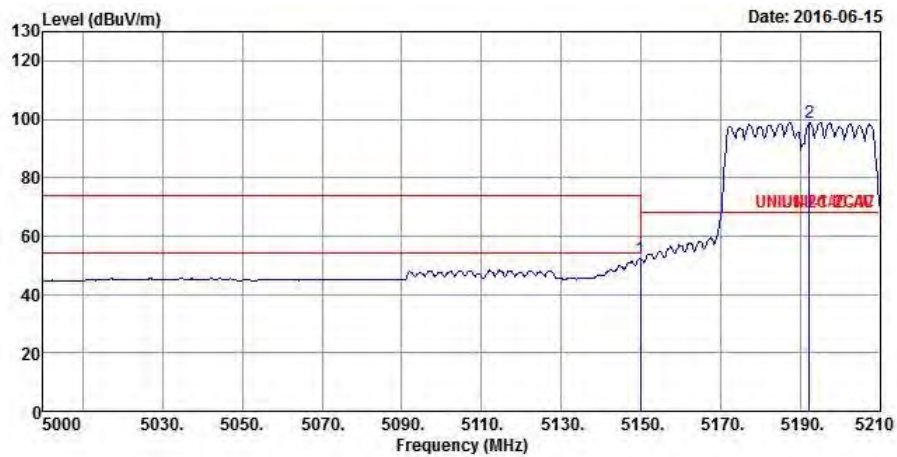
Modulation Mode	VHT20	Test Freq. (MHz)	5825
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5623.400	60.61	-7.59	68.20	55.00	32.15	5.95	32.49
2	5658.500	62.58	-11.93	74.51	56.96	32.19	5.93	32.50
3	5705.300	60.21	-46.48	106.69	54.57	32.25	5.90	32.51
4	5721.500	59.39	-54.83	114.22	53.75	32.27	5.88	32.51
5	5824.100	116.38	-5.82	122.20	110.71	32.39	5.80	32.52
6	5850.200	78.38	-43.36	121.74	72.72	32.42	5.77	32.53
7	5859.200	75.12	-34.50	109.62	69.46	32.43	5.76	32.53
8	5904.200	66.43	-17.12	83.55	60.75	32.49	5.72	32.53
9	5984.300	65.40	-2.80	68.20	59.74	32.58	5.63	32.55

Transmitter Radiated Bandedge Emissions

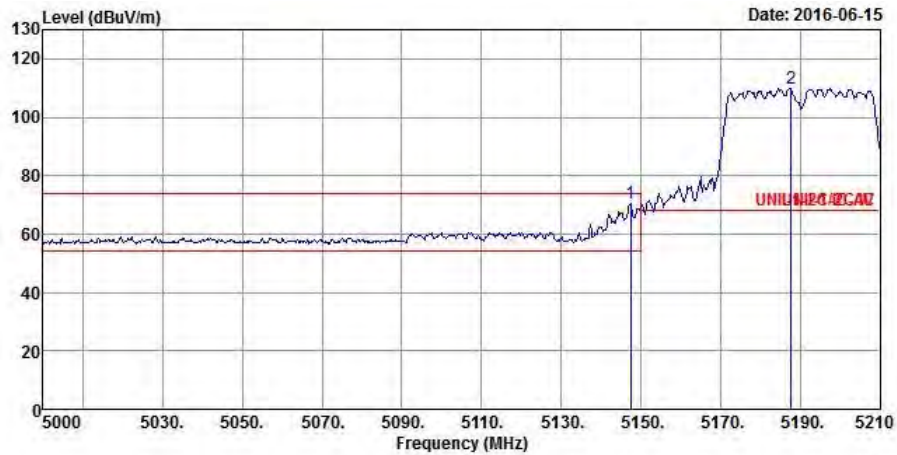
Modulation Mode	VHT40	Test Freq. (MHz)	5190
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5149.940	52.27	-1.73	54.00	47.41	31.58	5.78	32.50	Average
2 *	5192.360	98.79	30.59	68.20	93.87	31.63	5.79	32.50	Average

Transmitter Radiated Bandedge Emissions

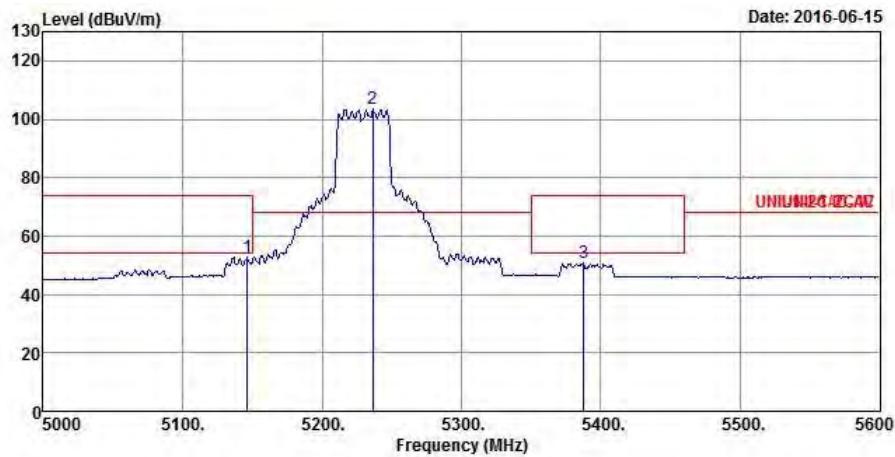
Modulation Mode	VHT40	Test Freq. (MHz)	5190
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5147.420	70.61	-3.39	74.00	65.75	31.58	5.78	32.50 Peak
2 *	5187.740	109.79	41.59	68.20	104.87	31.63	5.79	32.50 Peak

Transmitter Radiated Bandedge Emissions

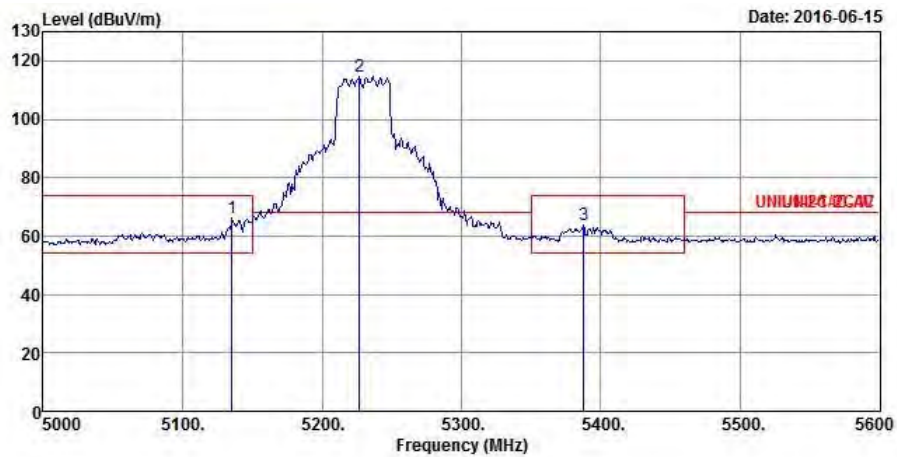
Modulation Mode	VHT40	Test Freq. (MHz)	5230
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5146.400	52.84	-1.16	54.00	47.98	31.58	5.78	32.50 Average
2 *	5236.400	103.73	35.53	68.20	98.75	31.68	5.79	32.49 Average
3	5387.600	50.65	-3.35	54.00	45.49	31.87	5.77	32.48 Average

Transmitter Radiated Bandedge Emissions

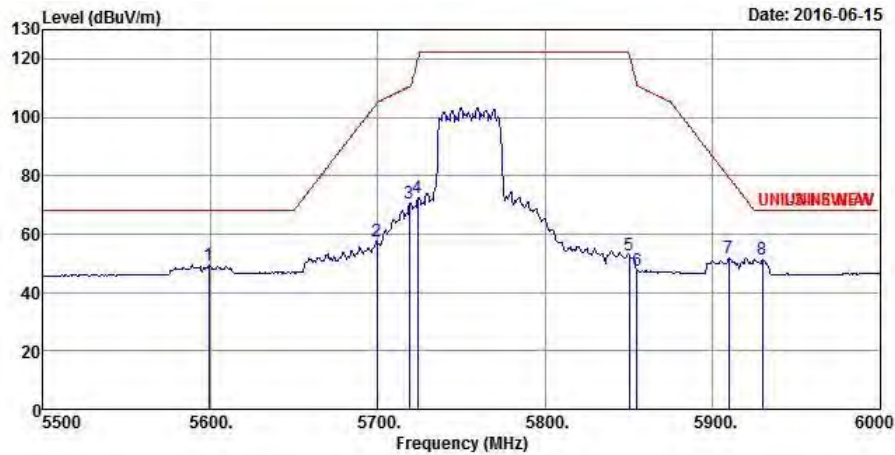
Modulation Mode	VHT40	Test Freq. (MHz)	5230
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5135.600	66.08	-7.92	74.00	61.25	31.56	5.77	32.50
2 *	5226.800	114.65	46.45	68.20	109.68	31.67	5.79	32.49
3	5387.600	63.97	-10.03	74.00	58.81	31.87	5.77	32.48

Transmitter Radiated Bandedge Emissions

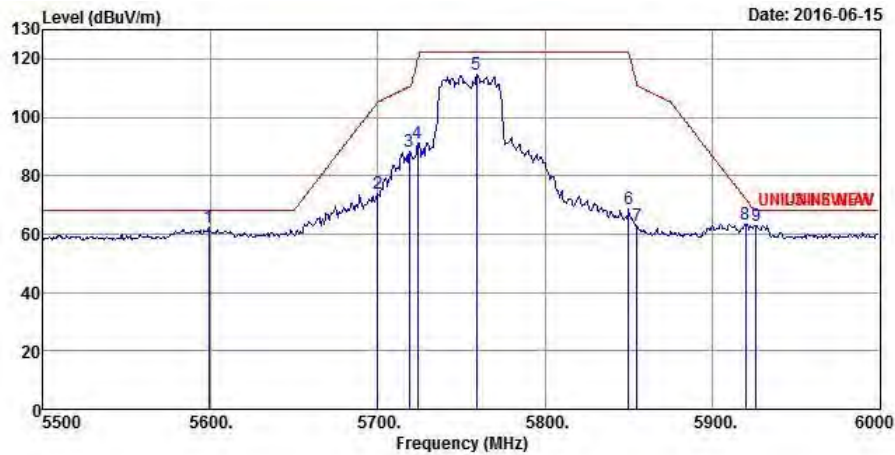
Modulation Mode	VHT40	Test Freq. (MHz)	5755
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5599.000	49.39	-18.81	68.20	43.79	32.12	5.97	32.49 Average
2	5699.500	57.53	-47.30	104.83	51.89	32.24	5.90	32.50 Average
3	5719.000	70.45	-40.07	110.52	64.81	32.26	5.89	32.51 Average
4	5724.000	72.53	-47.39	119.92	66.89	32.27	5.88	32.51 Average
5	5850.500	52.69	-68.37	121.06	47.03	32.42	5.77	32.53 Average
6	5855.000	47.38	-63.42	110.80	41.71	32.43	5.77	32.53 Average
7	5910.000	51.75	-27.52	79.27	46.09	32.49	5.71	32.54 Average
8	5930.000	51.24	-16.96	68.20	45.57	32.52	5.69	32.54 Average

Transmitter Radiated Bandedge Emissions

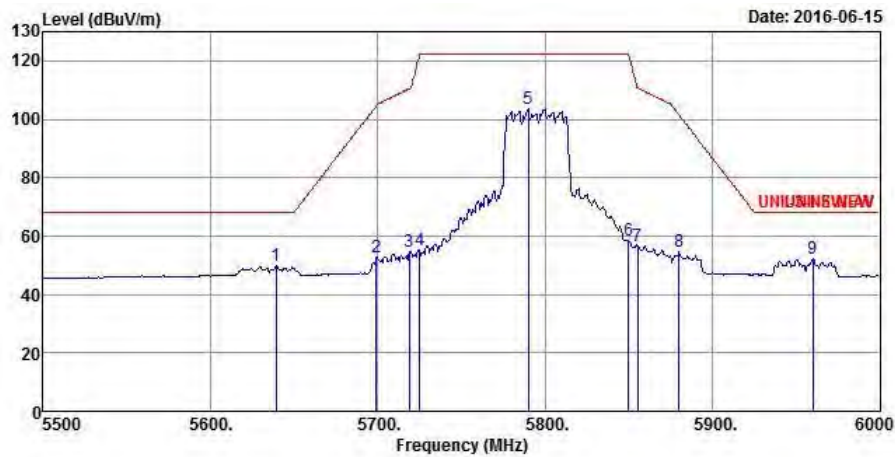
Modulation Mode	VHT40	Test Freq. (MHz)	5755
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5599.000	62.35	-5.85	68.20	56.75	32.12	5.97	32.49
2	5700.000	73.64	-31.56	105.20	68.00	32.24	5.90	32.50
3	5719.000	88.40	-22.12	110.52	82.76	32.26	5.89	32.51
4	5724.000	91.00	-28.92	119.92	85.36	32.27	5.88	32.51
5	5759.000	114.42	-7.78	122.20	108.76	32.31	5.86	32.51
6	5850.000	68.54	-53.66	122.20	62.87	32.42	5.78	32.53
7	5855.000	62.73	-48.07	110.80	57.06	32.43	5.77	32.53
8	5920.000	63.52	-8.37	71.89	57.86	32.50	5.70	32.54
9	5926.000	63.04	-5.16	68.20	57.38	32.51	5.69	32.54

Transmitter Radiated Bandedge Emissions

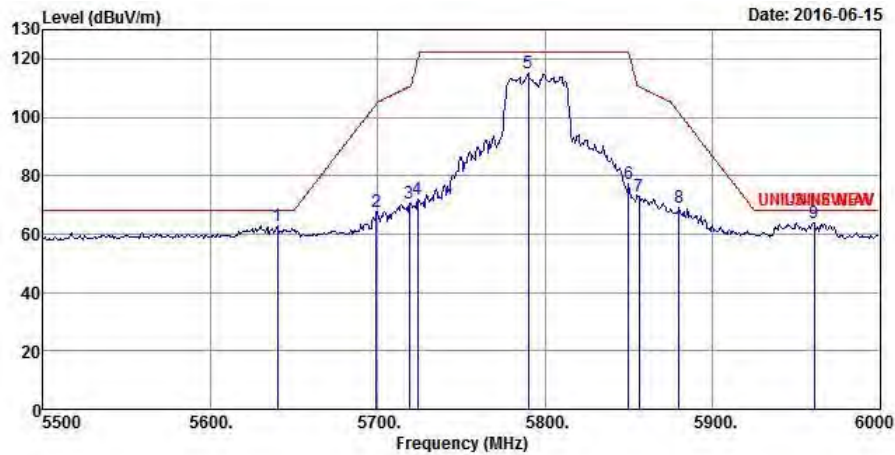
Modulation Mode	VHT40	Test Freq. (MHz)	5795
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB	dB	
1	5639.000	49.68	-18.52	68.20	44.06	32.17	5.94	32.49 Average
2	5699.000	52.59	-51.87	104.46	46.95	32.24	5.90	32.50 Average
3	5719.000	54.81	-55.71	110.52	49.17	32.26	5.89	32.51 Average
4	5725.000	55.21	-66.99	122.20	49.57	32.27	5.88	32.51 Average
5	5790.000	103.48	-18.72	122.20	97.81	32.35	5.84	32.52 Average
6	5850.000	58.65	-63.55	122.20	52.98	32.42	5.78	32.53 Average
7	5855.500	56.54	-54.12	110.66	50.87	32.43	5.77	32.53 Average
8	5880.000	54.46	-47.03	101.49	48.79	32.46	5.74	32.53 Average
9	5960.000	52.15	-16.05	68.20	46.50	32.55	5.65	32.55 Average

Transmitter Radiated Bandedge Emissions

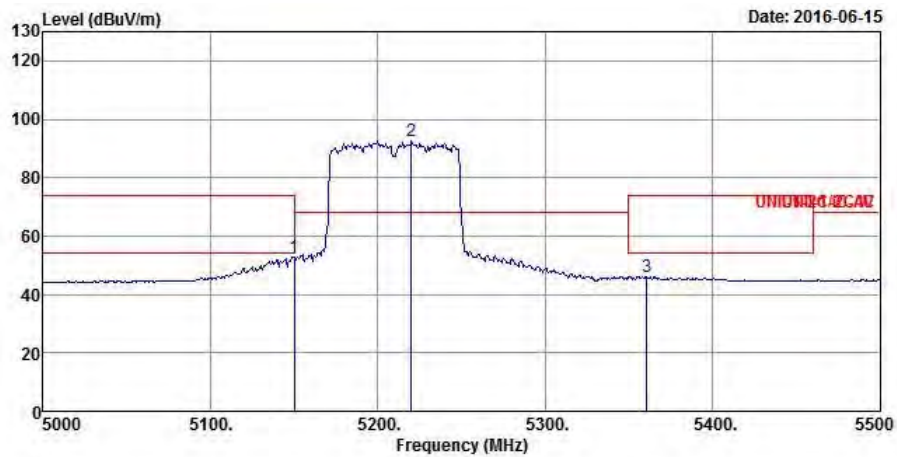
Modulation Mode	VHT40	Test Freq. (MHz)	5795
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5640.000	62.79	-5.41	68.20	57.17	32.17	5.94	32.49 Peak
2	5699.000	67.71	-36.75	104.46	62.07	32.24	5.90	32.50 Peak
3	5719.000	70.75	-39.77	110.52	65.11	32.26	5.89	32.51 Peak
4	5724.000	71.91	-48.01	119.92	66.27	32.27	5.88	32.51 Peak
5	5790.000	115.12	-7.08	122.20	109.45	32.35	5.84	32.52 Peak
6	5850.000	77.20	-45.00	122.20	71.53	32.42	5.78	32.53 Peak
7	5856.000	72.71	-37.81	110.52	67.04	32.43	5.77	32.53 Peak
8	5880.000	69.22	-32.27	101.49	63.55	32.46	5.74	32.53 Peak
9	5961.000	64.01	-4.19	68.20	58.36	32.55	5.65	32.55 Peak

Transmitter Radiated Bandedge Emissions

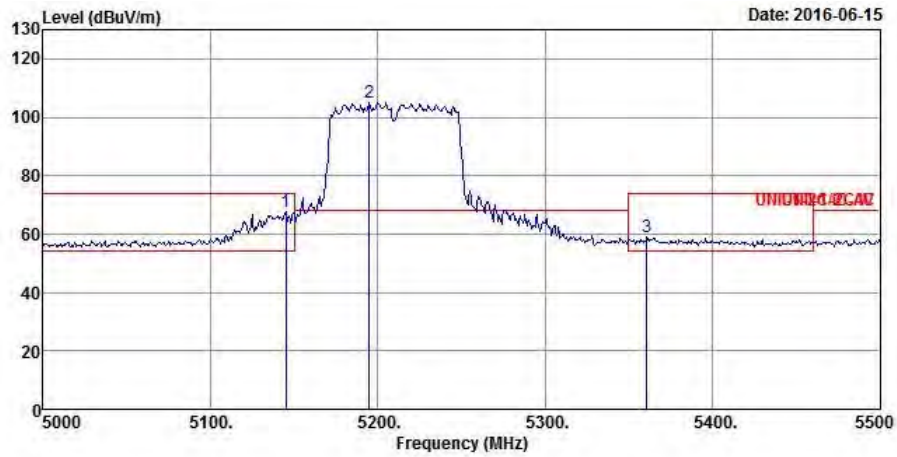
Modulation Mode	VHT80	Test Freq. (MHz)	5210
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5150.000	52.98	-1.02	54.00	48.12	31.58	5.78	32.50 Average
2 *	5220.000	92.71	24.51	68.20	87.75	31.66	5.79	32.49 Average
3	5361.000	45.98	-8.02	54.00	40.86	31.83	5.77	32.48 Average

Transmitter Radiated Bandedge Emissions

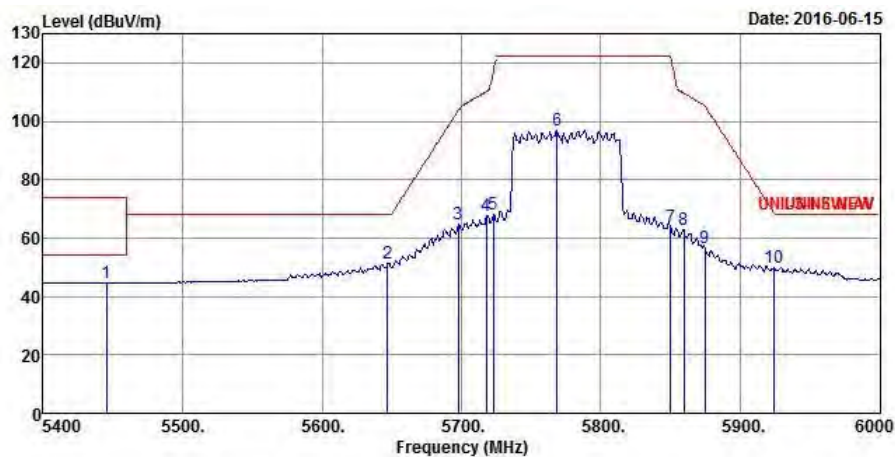
Modulation Mode	VHT80	Test Freq. (MHz)	5210
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5145.000	67.74	-6.26	74.00	62.89	31.57	5.78	32.50 Peak
2 *	5195.000	105.29	37.09	68.20	100.36	31.63	5.79	32.49 Peak
3	5361.000	58.86	-15.14	74.00	53.74	31.83	5.77	32.48 Peak

Transmitter Radiated Bandedge Emissions

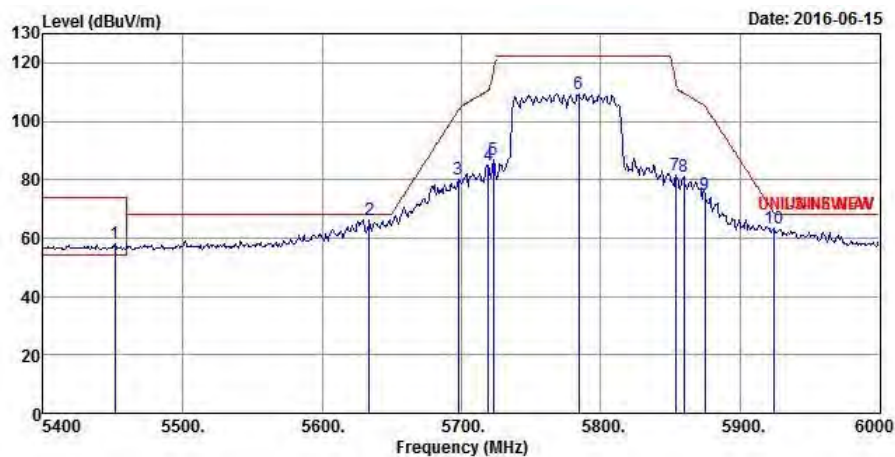
Modulation Mode	VHT80	Test Freq. (MHz)	5775
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable Preamp			
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5445.600	44.71	-9.29	54.00	39.43	31.93	5.82	32.47	Average
2	5647.200	51.26	-16.94	68.20	45.63	32.18	5.94	32.49	Average
3	5697.600	64.53	-38.90	103.43	58.89	32.24	5.90	32.50	Average
4	5718.000	67.87	-42.37	110.24	62.23	32.26	5.89	32.51	Average
5	5722.800	67.95	-49.23	117.18	62.31	32.27	5.88	32.51	Average
6	5768.400	97.12	-25.08	122.20	91.46	32.32	5.85	32.51	Average
7	5850.000	63.99	-58.21	122.20	58.32	32.42	5.78	32.53	Average
8	5859.600	62.92	-46.59	109.51	57.26	32.43	5.76	32.53	Average
9	5874.600	56.42	-48.89	105.31	50.75	32.45	5.75	32.53	Average
10	5974.400	50.00	-10.00	60.00	40.00	32.00	5.00	32.00	Average

Transmitter Radiated Bandedge Emissions

Modulation Mode	VHT80	Test Freq. (MHz)	5775
N _{TX}	3	Polarization	V



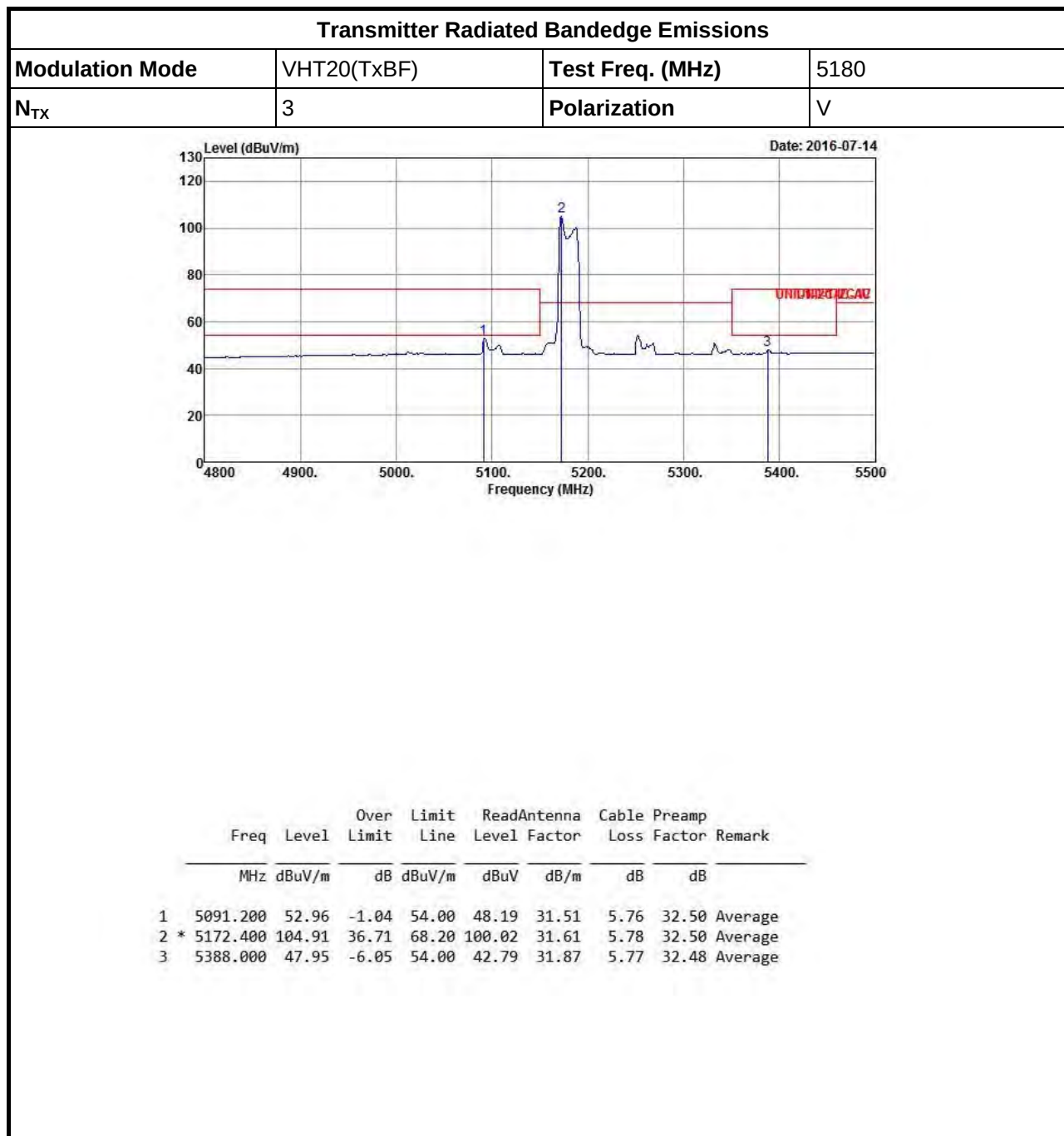
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	5451.600	57.86	-16.14	74.00	52.57	31.94	5.82	32.47
2	5634.000	66.30	-1.90	68.20	60.68	32.16	5.95	32.49
3	5697.600	80.03	-23.40	103.43	74.39	32.24	5.90	32.50
4	5719.200	84.76	-25.82	110.58	79.12	32.26	5.89	32.51
5	5722.800	87.03	-30.15	117.18	81.39	32.27	5.88	32.51
6	5784.000	109.37	-12.83	122.20	103.71	32.34	5.84	32.52
7	5853.600	81.40	-32.59	113.99	75.74	32.42	5.77	32.53
8	5859.600	80.99	-28.52	109.51	75.33	32.43	5.76	32.53
9	5874.600	75.06	-30.25	105.31	69.39	32.45	5.75	32.53
10	5924.000	62.12	-5.52	60.64	57.46	32.51	5.60	32.54

Transmitter Radiated Bandedge Emissions (TxBF)

U-NII 5150-5250MHz Transmitter Radiated Bandedge (TxBF)										
Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
VHT20(TxBF)	3	5180	3	5,092.600	64.42	74	5,091.200	52.96	54	V
VHT20(TxBF)	3	5240	3	5,403.400	63.82	74	5,399.200	52.76	54	V
VHT40(TxBF)	3	5190	3	5,146.000	67.65	74	5,150.000	52.81	54	V
VHT40(TxBF)	3	5230	3	5,145.000	64.08	74	5,386.000	51.30	54	V
VHT80(TxBF)	3	5210	3	5,142.000	70.64	74	5,142.000	52.83	54	V
Note 1: Measurement worst emissions of receive antenna polarization.										

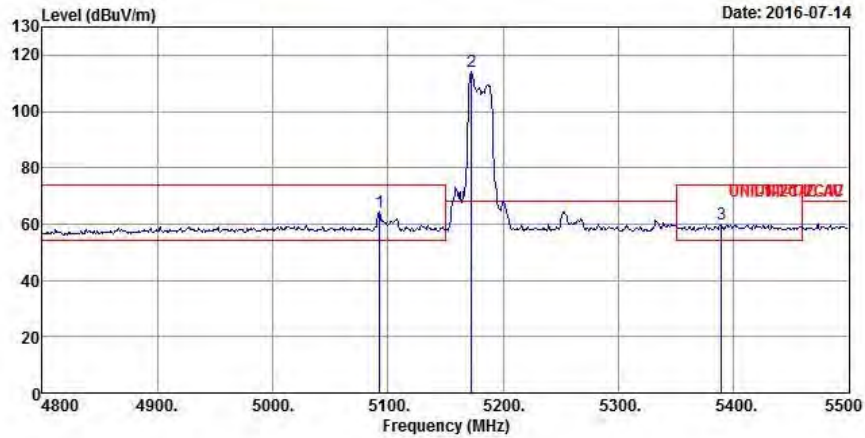
U-NII 5725-5850MHz Transmitter Radiated Bandedge (TxBF)							
Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Pol.
VHT20(TxBF)	3	5745	3	5,587.600	62.90	68.2	V
VHT20(TxBF)	3	5825	3	5,560.300	61.11	68.2	V
VHT40(TxBF)	3	5755	3	5,649.600	64.70	68.2	V
VHT40(TxBF)	3	5795	3	5,962.800	64.56	68.2	V
VHT80(TxBF)	3	5775	3	5,642.800	67.04	68.2	V
Note 1: Measurement worst emissions of receive antenna polarization.							

Transmitter Radiated Bandedge Emissions (TxBF)



Transmitter Radiated Bandedge Emissions

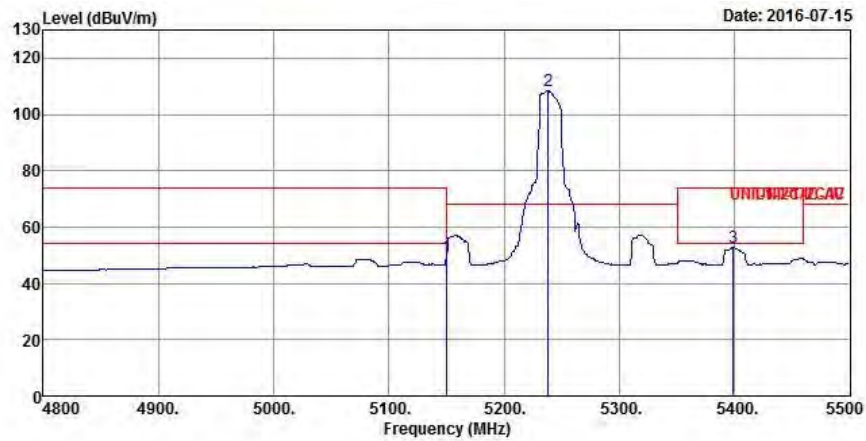
Modulation Mode	VHT20(TxBF)	Test Freq. (MHz)	5180
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5092.600	64.42	-9.58	74.00	59.65	31.51	5.76	32.50	Peak
2 *	5172.400	114.19	45.99	68.20	109.30	31.61	5.78	32.50	Peak
3	5389.400	59.94	-14.06	74.00	54.78	31.87	5.77	32.48	Peak

Transmitter Radiated Bandedge Emissions

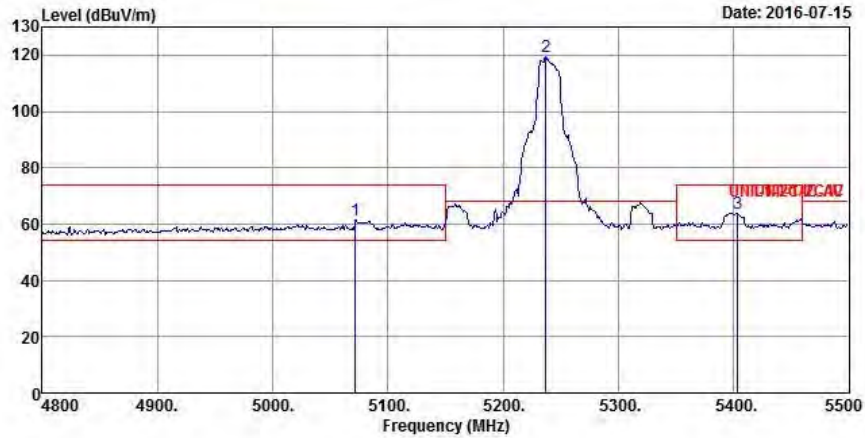
Modulation Mode	VHT20(TxBF)	Test Freq. (MHz)	5240
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5150.000	49.47	-4.53	54.00	44.61	31.58	5.78	32.50	Average
2 *	5238.200	108.33	40.13	68.20	103.34	31.69	5.79	32.49	Average
3	5399.200	52.76	-1.24	54.00	47.59	31.88	5.77	32.48	Average

Transmitter Radiated Bandedge Emissions

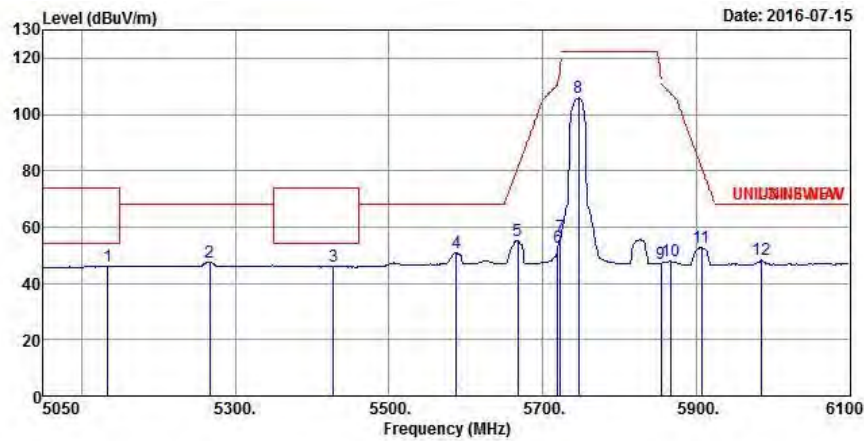
Modulation Mode	VHT20(TxBF)	Test Freq. (MHz)	5240
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5071.600	61.52	-12.48	74.00	56.77	31.49	5.76	32.50	Peak
2 *	5236.800	119.65	51.45	68.20	114.67	31.68	5.79	32.49	Peak
3	5403.400	63.82	-10.18	74.00	58.65	31.88	5.77	32.48	Peak

Transmitter Radiated Bandedge Emissions

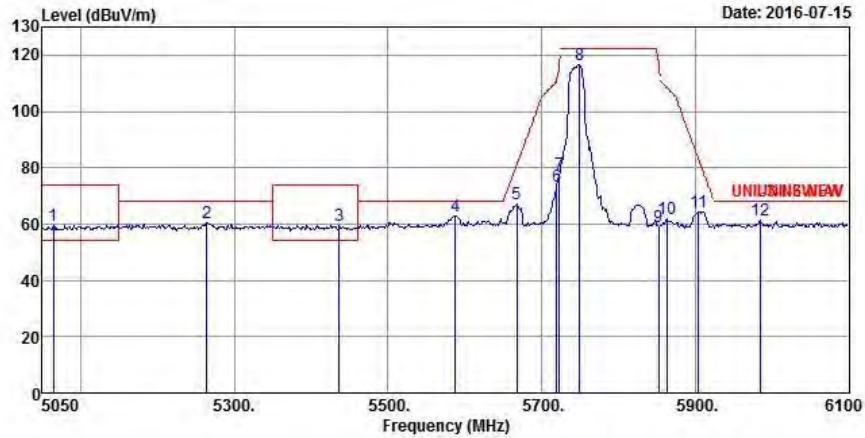
Modulation Mode	VHT20(TxBF)	Test Freq. (MHz)	5745
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5134.000	46.04	-7.96	54.00	41.21	31.56	5.77	32.50	Average
2	5266.300	47.57	-20.63	68.20	42.56	31.72	5.78	32.49	Average
3	5428.000	46.13	-7.87	54.00	40.89	31.91	5.80	32.47	Average
4	5587.600	50.76	-17.44	68.20	45.18	32.11	5.96	32.49	Average
5	5667.400	55.10	-26.01	81.11	49.48	32.20	5.92	32.50	Average
6	5719.900	52.56	-58.21	110.77	46.92	32.26	5.89	32.51	Average
7	5723.050	56.44	-61.32	117.76	50.80	32.27	5.88	32.51	Average
8	5747.200	105.78	-16.42	122.20	100.12	32.30	5.87	32.51	Average
9	5854.300	46.98	-65.42	112.40	41.31	32.43	5.77	32.53	Average
10	5866.900	47.77	-59.70	107.47	42.10	32.44	5.76	32.53	Average
11	5906.800	52.59	-29.04	81.63	46.92	32.49	5.71	32.53	Average

Transmitter Radiated Bandedge Emissions

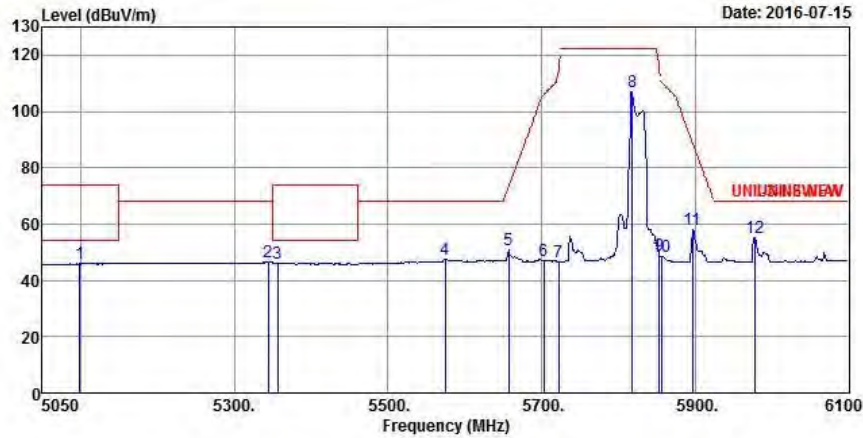
Modulation Mode	VHT20(TxBF)	Test Freq. (MHz)	5745
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5064.700	59.63	-14.37	74.00	54.90	31.48	5.76	32.51	Peak
2	5264.200	60.65	-7.55	68.20	55.64	31.72	5.78	32.49	Peak
3	5436.400	59.45	-14.55	74.00	54.19	31.92	5.81	32.47	Peak
4	5587.600	62.90	-5.30	68.20	57.32	32.11	5.96	32.49	Peak
5	5667.400	67.21	-13.90	81.11	61.59	32.20	5.92	32.50	Peak
6	5719.900	73.53	-37.24	110.77	67.89	32.26	5.89	32.51	Peak
7	5723.050	77.68	-40.07	117.75	72.04	32.27	5.88	32.51	Peak
8	5749.300	116.62	-5.58	122.20	110.96	32.30	5.87	32.51	Peak
9	5852.200	59.14	-58.04	117.18	53.48	32.42	5.77	32.53	Peak
10	5862.700	61.73	-46.91	108.64	56.06	32.44	5.76	32.53	Peak
11	5904.700	64.37	-18.81	83.18	58.70	32.49	5.71	32.53	Peak

Transmitter Radiated Bandedge Emissions

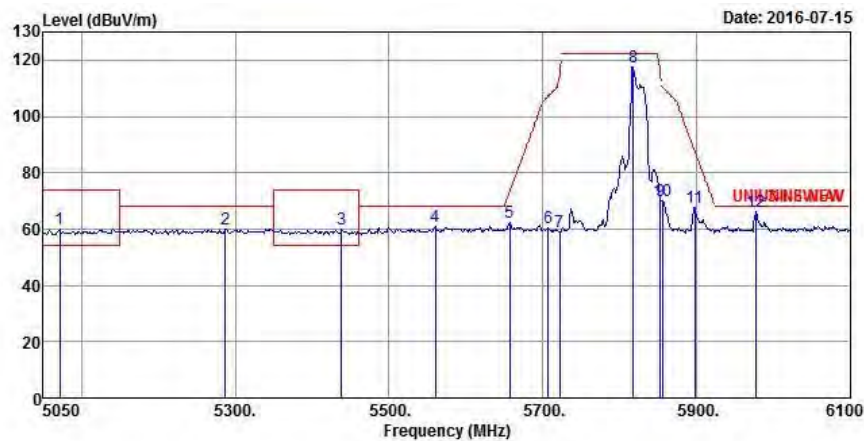
Modulation Mode	VHT20(TxBF)	Test Freq. (MHz)	5825
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5098.300	45.86	-8.14	54.00	41.08	31.52	5.76	32.50	Average
2	5344.000	46.62	-21.58	68.20	41.51	31.81	5.78	32.48	Average
3	5356.600	46.11	-7.89	54.00	40.99	31.83	5.77	32.48	Average
4	5575.000	47.59	-20.61	68.20	42.04	32.09	5.94	32.48	Average
5	5656.900	50.94	-22.39	73.33	45.32	32.19	5.93	32.50	Average
6	5703.100	46.90	-59.17	106.07	41.26	32.24	5.90	32.50	Average
7	5722.000	46.74	-68.62	115.36	41.10	32.27	5.88	32.51	Average
8	5818.600	107.02	-15.18	122.20	101.35	32.38	5.81	32.52	Average
9	5853.250	49.05	-65.74	114.79	43.39	32.42	5.77	32.53	Average
10	5856.400	48.54	-61.87	110.41	42.87	32.43	5.77	32.53	Average
11	5896.300	58.08	-31.32	89.40	52.41	32.48	5.72	32.53	Average

Transmitter Radiated Bandedge Emissions

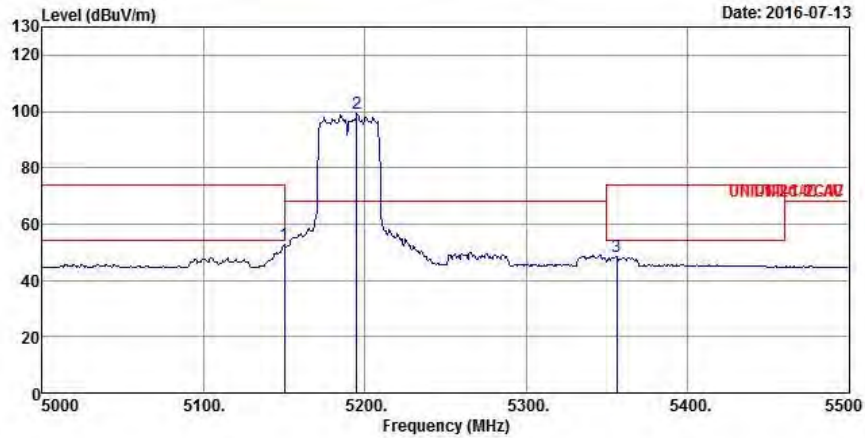
Modulation Mode	VHT20(TxBF)	Test Freq. (MHz)	5825
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5071.000	59.92	-14.08	74.00	55.17	31.49	5.76	32.50	Peak
2	5287.300	60.19	-8.01	68.20	55.16	31.74	5.78	32.49	Peak
3	5438.500	59.85	-14.15	74.00	54.58	31.93	5.81	32.47	Peak
4	5560.300	61.11	-7.09	68.20	55.59	32.07	5.93	32.48	Peak
5	5656.900	62.26	-11.07	73.33	56.64	32.19	5.93	32.50	Peak
6	5707.300	60.32	-46.93	107.25	54.69	32.25	5.89	32.51	Peak
7	5722.000	58.99	-56.37	115.36	53.35	32.27	5.88	32.51	Peak
8	5818.600	117.65	-4.55	122.20	111.98	32.38	5.81	32.52	Peak
9	5853.250	70.15	-44.64	114.79	64.49	32.42	5.77	32.53	Peak
10	5856.400	69.98	-40.43	110.41	64.31	32.43	5.77	32.53	Peak
11	5898.400	67.68	-20.17	87.85	62.01	32.48	5.72	32.53	Peak

Transmitter Radiated Bandedge Emissions

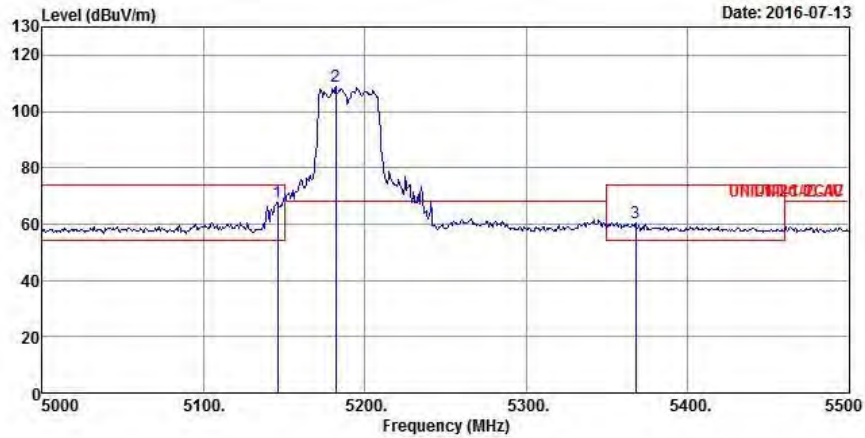
Modulation Mode	VHT40(TxBF)	Test Freq. (MHz)	5190
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5150.000	52.81	-1.19	54.00	47.95	31.58	5.78	32.50	Average
2 *	5195.000	99.11	30.91	68.20	94.18	31.63	5.79	32.49	Average
3	5356.000	48.51	-5.49	54.00	43.39	31.83	5.77	32.48	Average

Transmitter Radiated Bandedge Emissions

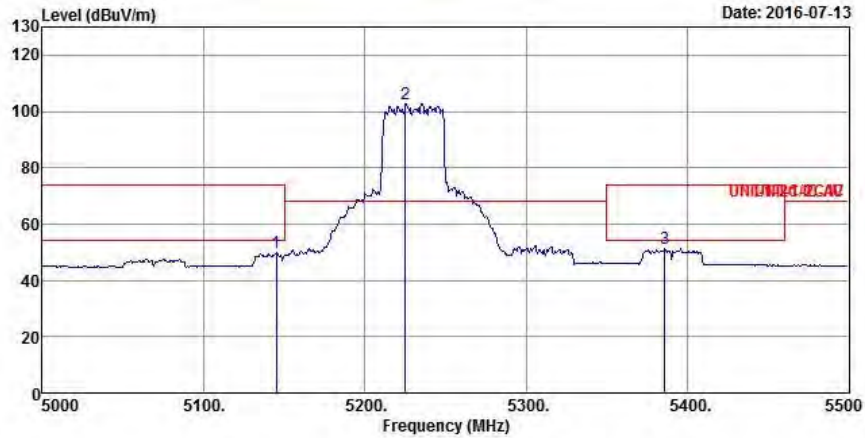
Modulation Mode	VHT40(TxBF)	Test Freq. (MHz)	5190
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5146.000	67.65	-6.35	74.00	62.79	31.58	5.78	32.50	Peak
2 *	5182.000	108.97	40.77	68.20	104.06	31.62	5.79	32.50	Peak
3	5368.000	60.35	-13.65	74.00	55.22	31.84	5.77	32.48	Peak

Transmitter Radiated Bandedge Emissions

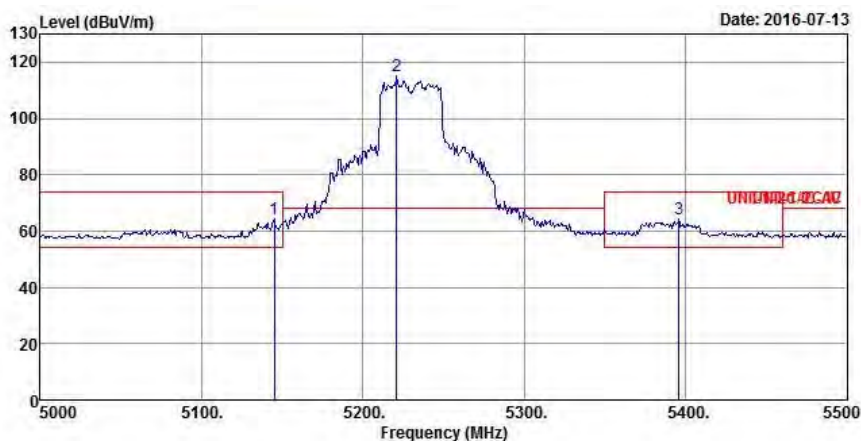
Modulation Mode	VHT40(TxBF)	Test Freq. (MHz)	5230
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5145.000	50.08	-3.92	54.00	45.23	31.57	5.78	32.50	Average
2 *	5225.000	102.84	34.64	68.20	97.87	31.67	5.79	32.49	Average
3	5386.000	51.30	-2.70	54.00	46.15	31.86	5.77	32.48	Average

Transmitter Radiated Bandedge Emissions

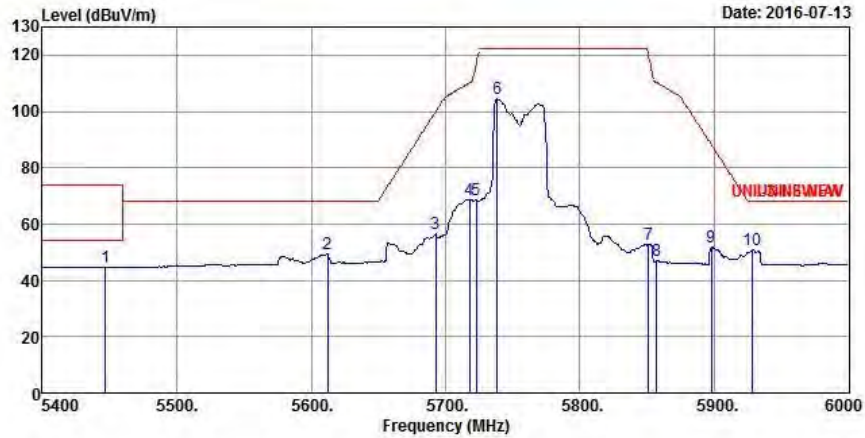
Modulation Mode	VHT40(TxBF)	Test Freq. (MHz)	5230
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5145.000	64.08	-9.92	74.00	59.23	31.57	5.78	32.50	Peak
2 *	5221.000	114.90	46.70	68.20	109.93	31.67	5.79	32.49	Peak
3	5396.000	64.05	-9.95	74.00	58.88	31.88	5.77	32.48	Peak

Transmitter Radiated Bandedge Emissions

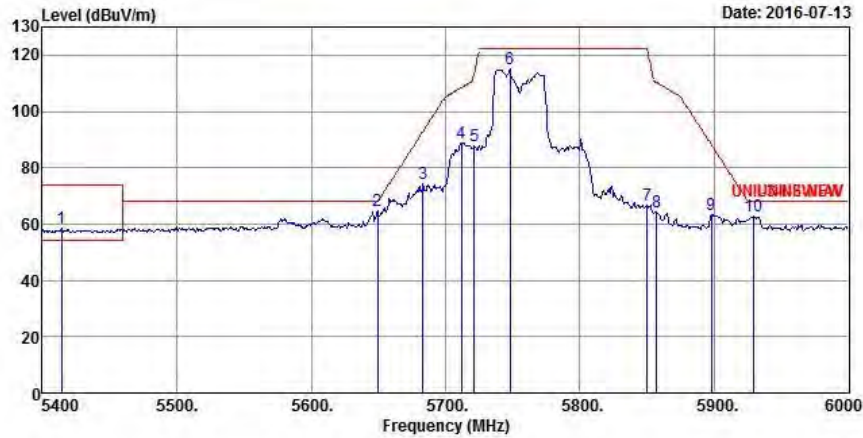
Modulation Mode	VHT40(TxBF)	Test Freq. (MHz)	5755
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5446.800	44.67	-9.33	54.00	39.38	31.94	5.82	32.47	Average
2	5612.400	49.44	-18.76	68.20	43.84	32.13	5.96	32.49	Average
3	5692.800	56.44	-43.45	99.89	50.80	32.23	5.91	32.50	Average
4	5718.000	68.83	-41.41	110.24	63.19	32.26	5.89	32.51	Average
5	5722.800	68.71	-48.47	117.18	63.07	32.27	5.88	32.51	Average
6	5738.400	104.38	-17.82	122.20	98.73	32.29	5.87	32.51	Average
7	5851.200	52.55	-66.91	119.46	46.89	32.42	5.77	32.53	Average
8	5857.200	46.97	-63.21	110.18	41.30	32.43	5.77	32.53	Average
9	5898.000	51.84	-36.30	88.14	46.17	32.48	5.72	32.53	Average
10	5928.000	50.71	-17.49	68.20	45.05	32.51	5.69	32.54	Average

Transmitter Radiated Bandedge Emissions

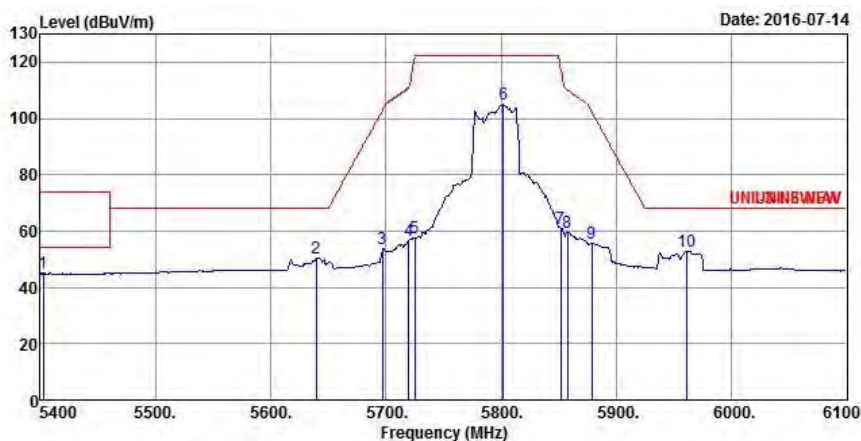
Modulation Mode	VHT40(TxBF)	Test Freq. (MHz)	5755
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5414.400	58.29	-15.71	74.00	53.09	31.90	5.78	32.48	Peak
2	5649.600	64.70	-3.50	68.20	59.07	32.18	5.94	32.49	Peak
3	5683.200	74.19	-18.61	92.80	68.56	32.22	5.91	32.50	Peak
4	5712.000	88.98	-19.58	108.56	83.35	32.25	5.89	32.51	Peak
5	5721.600	87.59	-26.86	114.45	81.95	32.27	5.88	32.51	Peak
6	5748.000	114.90	-7.30	122.20	109.24	32.30	5.87	32.51	Peak
7	5850.000	66.87	-55.33	122.20	61.20	32.42	5.78	32.53	Peak
8	5857.200	64.48	-45.70	110.18	58.81	32.43	5.77	32.53	Peak
9	5898.000	63.17	-24.97	88.14	57.50	32.48	5.72	32.53	Peak
10	5929.200	62.75	-5.45	68.20	57.08	32.52	5.69	32.54	Peak

Transmitter Radiated Bandedge Emissions

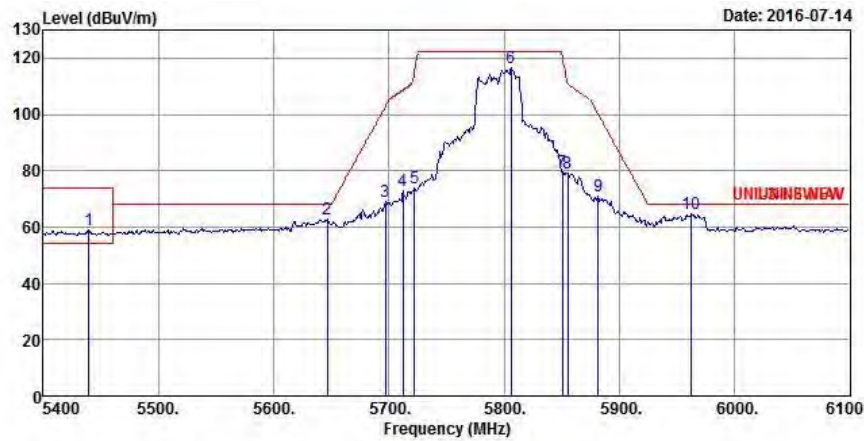
Modulation Mode	VHT40(TxBF)	Test Freq. (MHz)	5795
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5402.800	44.98	-9.02	54.00	39.81	31.88	5.77	32.48	Average
2	5639.400	50.46	-17.74	68.20	44.84	32.17	5.94	32.49	Average
3	5696.800	53.61	-49.23	102.84	47.97	32.24	5.90	32.50	Average
4	5719.900	56.62	-54.15	110.77	50.98	32.26	5.89	32.51	Average
5	5724.800	57.47	-64.27	121.74	51.83	32.27	5.88	32.51	Average
6	5801.800	104.82	-17.38	122.20	99.15	32.36	5.83	32.52	Average
7	5851.500	61.07	-57.71	118.78	55.41	32.42	5.77	32.53	Average
8	5857.800	59.54	-50.47	110.01	53.87	32.43	5.77	32.53	Average
9	5878.800	55.79	-46.59	102.38	50.13	32.45	5.74	32.53	Average
10	5961.400	52.84	-15.36	68.20	47.19	32.55	5.65	32.55	Average

Transmitter Radiated Bandedge Emissions

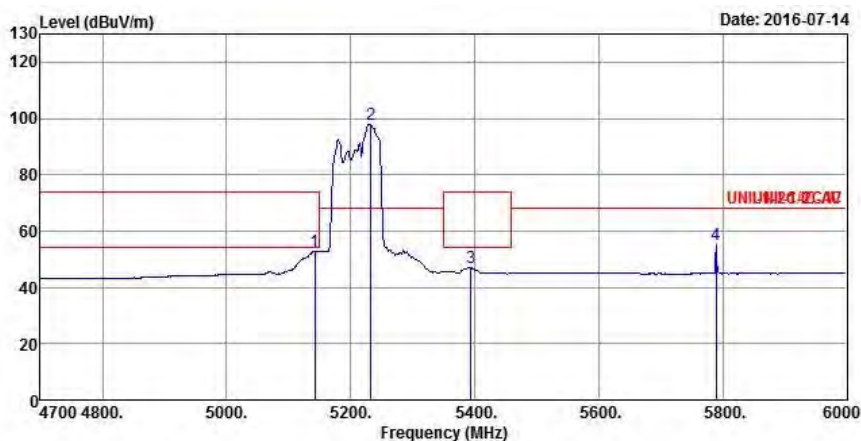
Modulation Mode	VHT40(TxBF)	Test Freq. (MHz)	5795
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5439.200	58.89	-15.11	74.00	53.62	31.93	5.81	32.47	Peak
2	5646.400	62.83	-5.37	68.20	57.20	32.18	5.94	32.49	Peak
3	5696.800	68.97	-33.87	102.84	63.33	32.24	5.90	32.50	Peak
4	5712.200	72.75	-35.87	108.62	67.12	32.25	5.89	32.51	Peak
5	5722.000	73.81	-41.55	115.36	68.17	32.27	5.88	32.51	Peak
6	5806.000	116.61	-5.59	122.20	110.94	32.37	5.82	32.52	Peak
7	5850.800	79.41	-40.97	120.38	73.75	32.42	5.77	32.53	Peak
8	5855.000	79.12	-31.68	110.80	73.45	32.43	5.77	32.53	Peak
9	5881.600	71.17	-29.13	100.30	65.50	32.46	5.74	32.53	Peak
10	5962.800	64.56	-3.64	68.20	58.90	32.56	5.65	32.55	Peak

Transmitter Radiated Bandedge Emissions

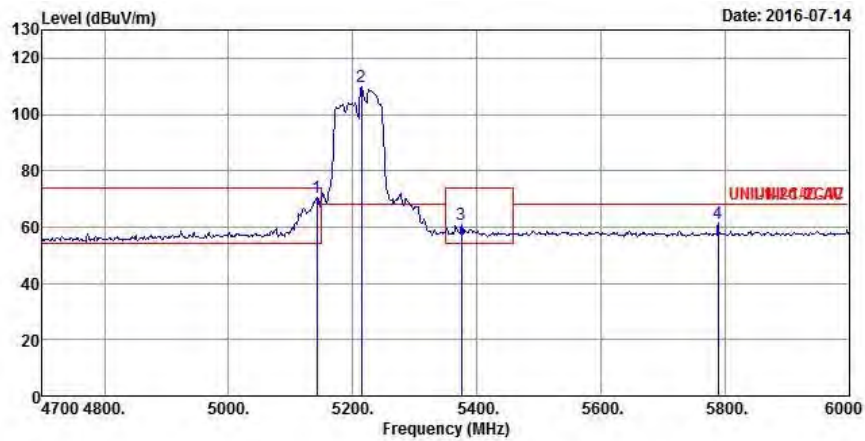
Modulation Mode	VHT80(TxBF)	Test Freq. (MHz)	5210
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5142.000	52.83	-1.17	54.00	47.98	31.57	5.78	32.50	Average
2 *	5233.000	98.03	29.83	68.20	93.05	31.68	5.79	32.49	Average
3	5394.200	47.15	-6.85	54.00	41.99	31.87	5.77	32.48	Average
4	5789.400	55.26	-12.94	68.20	49.59	32.35	5.84	32.52	Average

Transmitter Radiated Bandedge Emissions

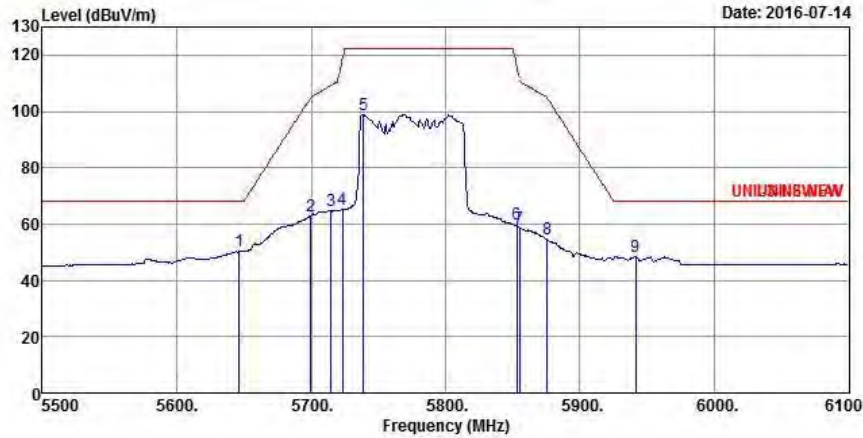
Modulation Mode	VHT80(TxBF)	Test Freq. (MHz)	5210
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5142.000	70.64	-3.36	74.00	65.79	31.57	5.78	32.50	Peak
2 *	5214.800	109.77	41.57	68.20	104.81	31.66	5.79	32.49	Peak
3	5376.000	60.77	-13.23	74.00	55.63	31.85	5.77	32.48	Peak
4	5789.400	61.44	-6.76	68.20	55.77	32.35	5.84	32.52	Peak

Transmitter Radiated Bandedge Emissions

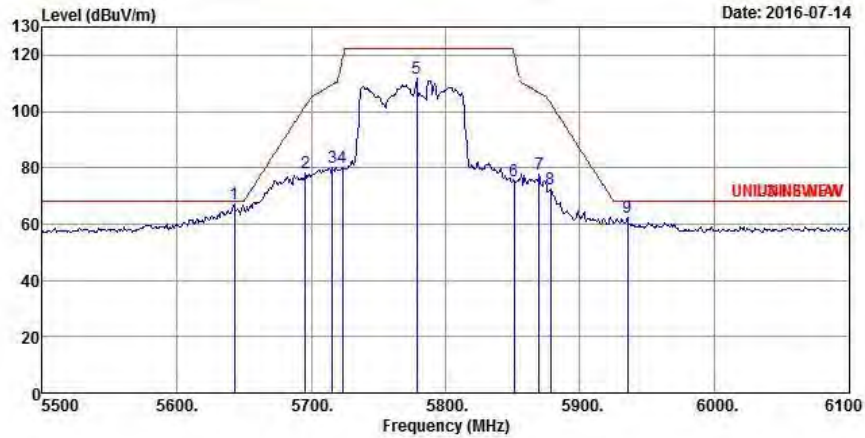
Modulation Mode	VHT80(TxBF)	Test Freq. (MHz)	5775
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5646.400	50.41	-17.79	68.20	44.78	32.18	5.94	32.49	Average
2	5699.800	62.98	-42.07	105.05	57.34	32.24	5.90	32.50	Average
3	5714.800	64.76	-44.59	109.35	59.12	32.26	5.89	32.51	Average
4	5723.200	65.39	-52.71	118.10	59.75	32.27	5.88	32.51	Average
5	5738.800	99.04	-23.16	122.20	93.39	32.29	5.87	32.51	Average
6	5852.800	59.79	-56.03	115.82	54.13	32.42	5.77	32.53	Average
7	5855.200	58.74	-52.00	110.74	53.07	32.43	5.77	32.53	Average
8	5875.600	54.49	-50.26	104.75	48.82	32.45	5.75	32.53	Average
9	5941.600	48.50	-19.70	68.20	42.84	32.53	5.67	32.54	Average

Transmitter Radiated Bandedge Emissions

Modulation Mode	VHT80(TxBF)	Test Freq. (MHz)	5775
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5642.800	67.04	-1.16	68.20	61.42	32.17	5.94	32.49	Peak
2	5695.600	78.17	-23.79	101.96	72.54	32.23	5.90	32.50	Peak
3	5716.000	80.18	-29.50	109.68	74.54	32.26	5.89	32.51	Peak
4	5723.200	80.33	-37.77	118.10	74.69	32.27	5.88	32.51	Peak
5	5778.400	111.59	-10.61	122.20	105.92	32.33	5.85	32.51	Peak
6	5851.000	75.19	-44.73	119.92	69.53	32.42	5.77	32.53	Peak
7	5869.600	77.95	-28.76	106.71	72.29	32.44	5.75	32.53	Peak
8	5878.000	72.54	-30.43	102.97	66.88	32.45	5.74	32.53	Peak
9	5935.600	62.29	-5.91	68.20	56.63	32.52	5.68	32.54	Peak