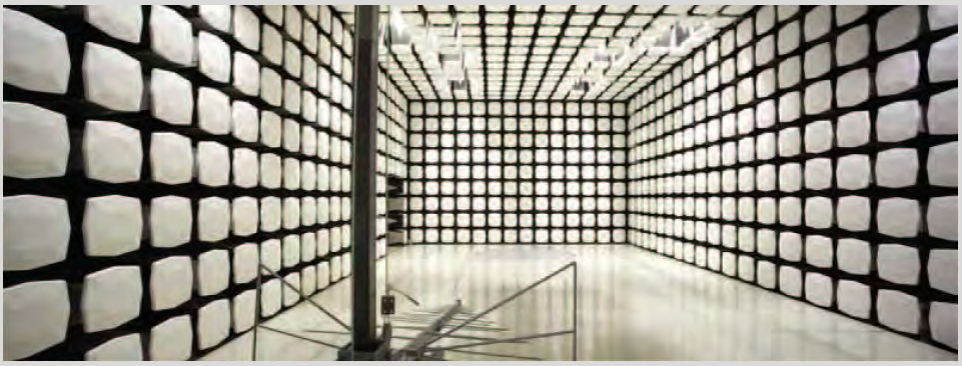
Microsoft Corporation

Model 1631

FCC 15.407:2014

FCC 15.207:2014

Report #: MCSO1698.2 PART 3 OF 4



Report Prepared By Northwest EMC Inc.

NORTHWEST EMC – (888) 364-2378 – www.nwemc.com

California – Minnesota – Oregon – New York – Washington

PEAK POWER SPECTRAL DENSITY

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval (mo.)
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Power Meter	Gigatronics	8651A	SPM	11/26/2013	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	36
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
MXG Analog Signal Generator	Agilent	N5181A	TIG	3/28/2014	36
Spectrum Analyzer	Agilent	E4446A	AAQ	1/21/2014	24

TEST DESCRIPTION

FCC KDB 789033 D01 General UNII Test Procedures Section E was followed. The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. The data rate(s) listed in the datasheet were tested. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input.

Prior to measuring peak power spectral density, the transmission pulse duration (T) was measured. The transmission pulse duration and the associated data are found elsewhere in this test report.

The spectrum analyzer settings were as follows:

- The span was set to encompass entire emission bandwidth (B), centered on the transmit channel.
- RBW = 1 MHz, VBW ≥ 3 MHz
- Sample detector was used because Method SA-1 Alternate was used to measure the Maximum Conducted Output Power.
- Trace average 100 traces in power averaging mode (not video averaging).

The peak power spectral density (PPSD) was determined to be the highest level found across the emission in any 1 MHz band after 100 sweeps of power averaging (not video averaging).

PEAK POWER SPECTRAL DENSITY

EUT:	Model 1631			**Work Order:**	MCSO1698
Serial Number:	006840341053			**Date:**	04/23/14
Customer:	Microsoft Corporation			**Temperature:**	22.3°C
Attendees:	None			**Humidity:**	32%
Project:	None			**Barometric Pres.:**	1014
Tested by:	Jared Ison	**Power:**	110VAC/60Hz	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.407:2014	ANSI C63.10:2009

COMMENTS

Modes of operation tested were client provided. Reference power level table for channel power setting.

DEVIATIONS FROM TEST STANDARD

None

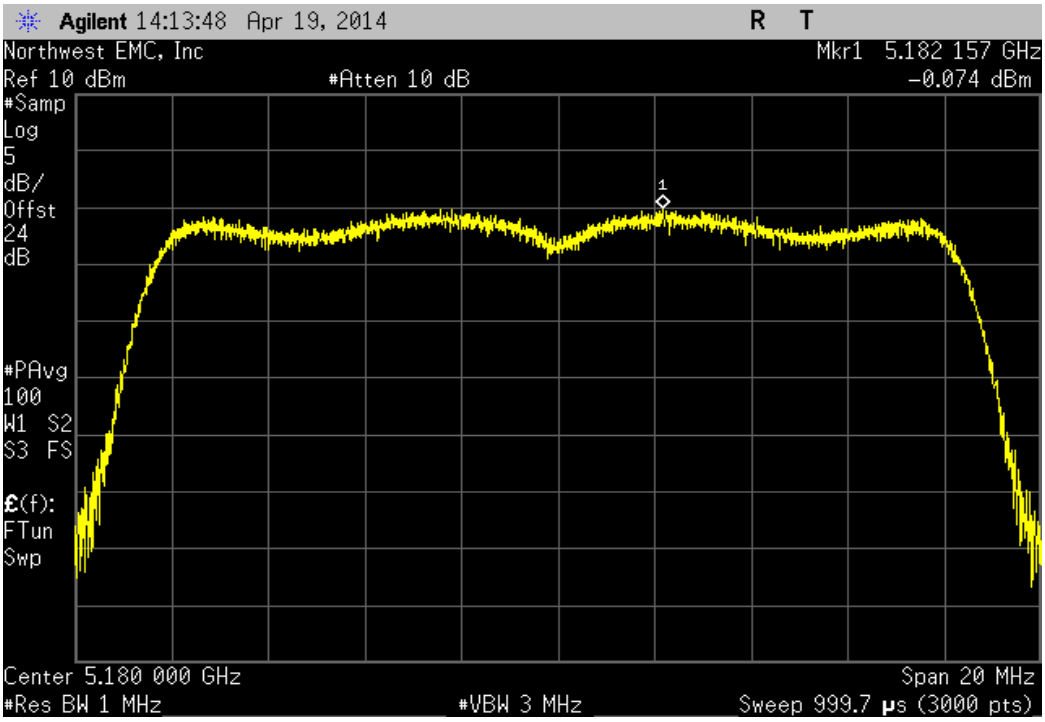
Configuration #	6	Signature

			Value (dBm / MHz)	Limit (dBm / MHz)	Result
IEEE 802.11(a)					
	20 MHz				
		6 Mbps			
		Ch. 36, Low Channel 5180MHz	-0.074	4	Pass
		Ch. 48, High Channel 5240 MHz	-0.093	4	Pass
		Ch. 52, Low Channel 5260 MHz	-0.155	11	Pass
		Ch. 64, High Channel 5320 MHz	0.185	11	Pass
		Ch. 100, Low Channel 5500 MHz	0.024	11	Pass
		Ch. 116, Mid Channel 5580 MHz	0.081	11	Pass
		Ch. 140, High Channel 5700 MHz	-0.44	11	Pass
		36 Mbps			
		Ch. 36, Low Channel 5180MHz	0.199	4	Pass
		Ch. 48, High Channel 5240 MHz	-0.334	4	Pass
		Ch. 52, Low Channel 5260 MHz	-0.432	11	Pass
		Ch. 64, High Channel 5320 MHz	0.158	11	Pass
		Ch. 100, Low Channel 5500 MHz	0.059	11	Pass
		Ch. 116, Mid Channel 5580 MHz	0.039	11	Pass
		Ch. 140, High Channel 5700 MHz	-0.165	11	Pass
		54 Mbps			
		Ch. 36, Low Channel 5180MHz	-0.17	4	Pass
		Ch. 48, High Channel 5240 MHz	-0.099	4	Pass
		Ch. 52, Low Channel 5260 MHz	-0.068	11	Pass
		Ch. 64, High Channel 5320 MHz	0.068	11	Pass
		Ch. 100, Low Channel 5500 MHz	-0.389	11	Pass
		Ch. 116, Mid Channel 5580 MHz	0.19	11	Pass
		Ch. 140, High Channel 5700 MHz	-0.496	11	Pass
IEEE 802.11(n)					
	20 MHz				
		HT, MCS7			
		Ch. 36, Low Channel 5180MHz	-1.002	4	Pass
		Ch. 48, High Channel 5240 MHz	-0.726	4	Pass
		Ch. 52, Low Channel 5260 MHz	-0.666	11	Pass
		Ch. 64, High Channel 5320 MHz	-0.376	11	Pass
		Ch. 100, Low Channel 5500 MHz	-0.87	11	Pass
		Ch. 116, Mid Channel 5580 MHz	-0.538	11	Pass
		Ch. 140, High Channel 5700 MHz	-0.601	11	Pass
	40 MHz				
		HT, MCS7			
		Ch. 36/40, Low Channel 5190 MHz	-4.536	4	Pass
		Ch. 44/48, High Channel 5230 MHz	-4.268	4	Pass
		Ch. 52/56, Low Channel 5270 MHz	-4.117	11	Pass
		Ch. 60/64, High Channel 5310 MHz	-3.627	11	Pass
		Ch. 100/104, Low Channel 5510 MHz	-4.294	11	Pass
		Ch. 132/136, High Channel 5670 MHz	-4.254	11	Pass
IEEE 802.11(ac)					
	20 MHz				
		VHT, MCS0			
		Ch. 36, Low Channel 5180MHz	-0.645	4	Pass
		Ch. 48, High Channel 5240 MHz	-0.596	4	Pass
		Ch. 52, Low Channel 5260 MHz	-0.745	11	Pass
		Ch. 64, High Channel 5320 MHz	-0.119	11	Pass
		Ch. 100, Low Channel 5500 MHz	-0.641	11	Pass
		Ch. 116, Mid Channel 5580 MHz	-0.323	11	Pass
		Ch. 140, High Channel 5700 MHz	-0.93	11	Pass
		VHT, MCS8			
		Ch. 36, Low Channel 5180MHz	-0.709	4	Pass
		Ch. 48, High Channel 5240 MHz	-0.873	4	Pass
		Ch. 52, Low Channel 5260 MHz	-0.501	11	Pass
		Ch. 64, High Channel 5320 MHz	0.03	11	Pass
		Ch. 100, Low Channel 5500 MHz	-0.488	11	Pass
		Ch. 116, Mid Channel 5580 MHz	-0.65	11	Pass
		Ch. 140, High Channel 5700 MHz	-1.006	11	Pass
	40 MHz				
		VHT, MCS0			
		Ch. 36/40, Low Channel 5190 MHz	-4.06	4	Pass
		Ch. 44/48, High Channel 5230 MHz	-3.252	4	Pass
		Ch. 52/56, Low Channel 5270 MHz	-3.626	11	Pass
		Ch. 60/64, High Channel 5310 MHz	-3.34	11	Pass
		Ch. 100/104, Low Channel 5510 MHz	-3.452	11	Pass
		Ch. 132/136, High Channel 5670 MHz	-3.68	11	Pass
		VHT, MCS9			
		Ch. 36/40, Low Channel 5190 MHz	-4.243	4	Pass
		Ch. 44/48, High Channel 5230 MHz	-3.39	4	Pass
		Ch. 52/56, Low Channel 5270 MHz	-3.6	11	Pass
		Ch. 60/64, High Channel 5310 MHz	-3.219	11	Pass
		Ch. 100/104, Low Channel 5510 MHz	-3.849	11	Pass
		Ch. 132/136, High Channel 5670 MHz	-3.897	11	Pass
	80 MHz				
		VHT, MCS0			

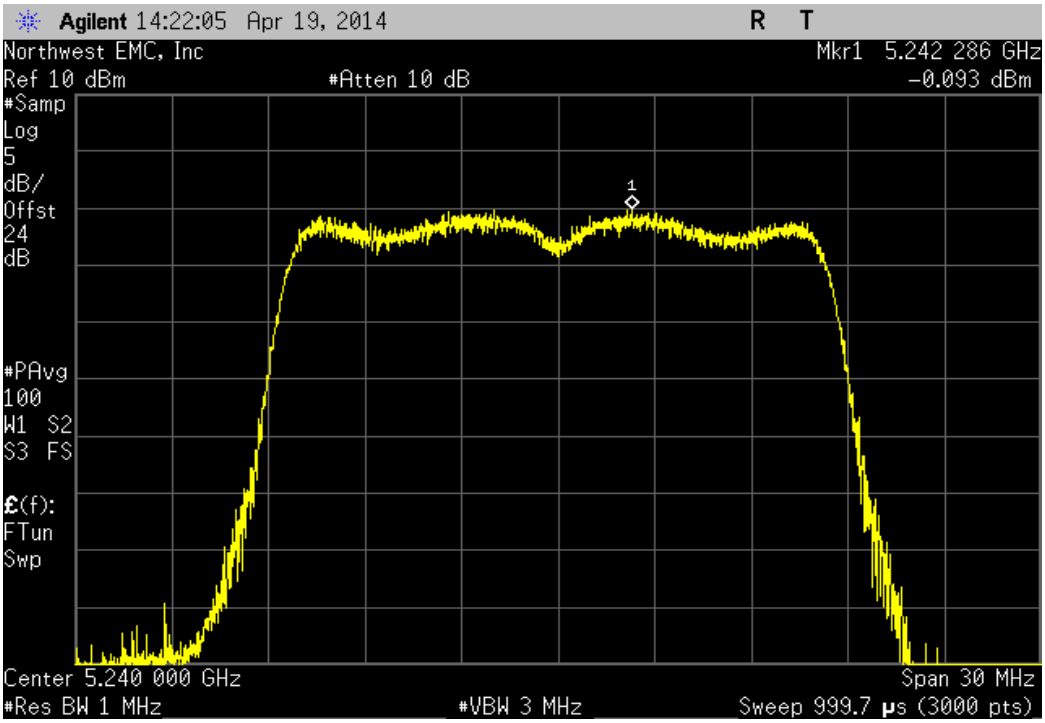
Ch. 42, Low Channel 5210 MHz	-7.805	4	Pass
Ch. 58, High Channel 5290 MHz	-7.766	11	Pass
Ch. 106, Low Channel 5530 MHz	-8.101	11	Pass
VHT, MCS9			
Ch. 42, Low Channel 5210 MHz	-9.76	4	Pass
Ch. 58, High Channel 5290 MHz	-7.593	11	Pass
Ch. 106, Low Channel 5530 MHz	-7.7	11	Pass

PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.074	4	Pass

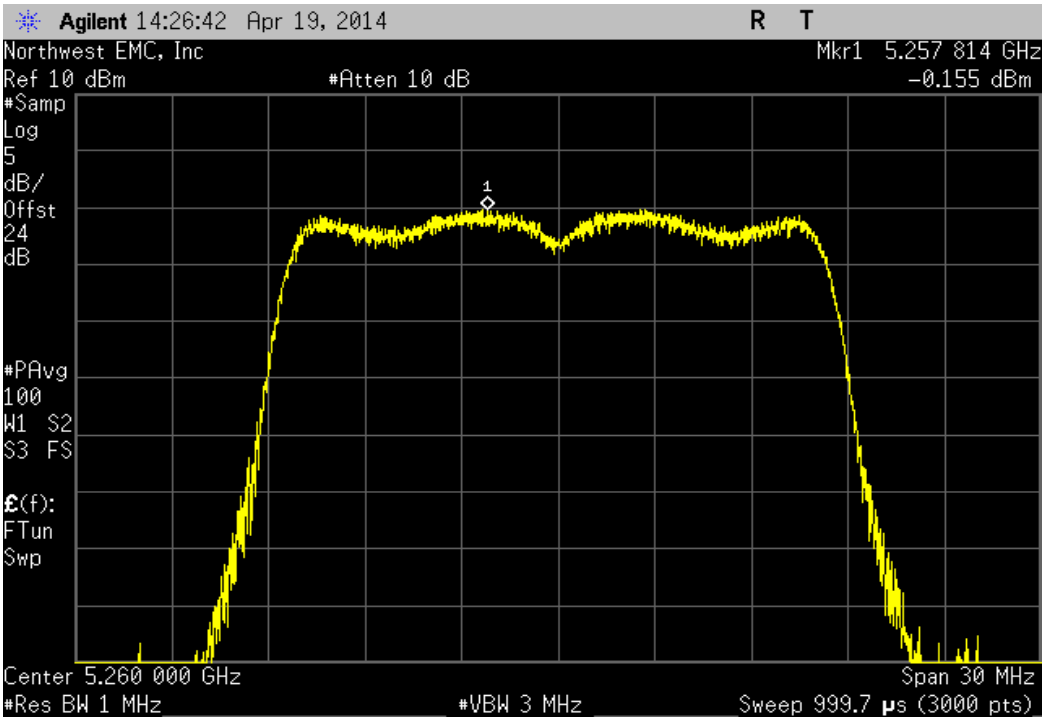


IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 48, High Channel 5240 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.093	4	Pass

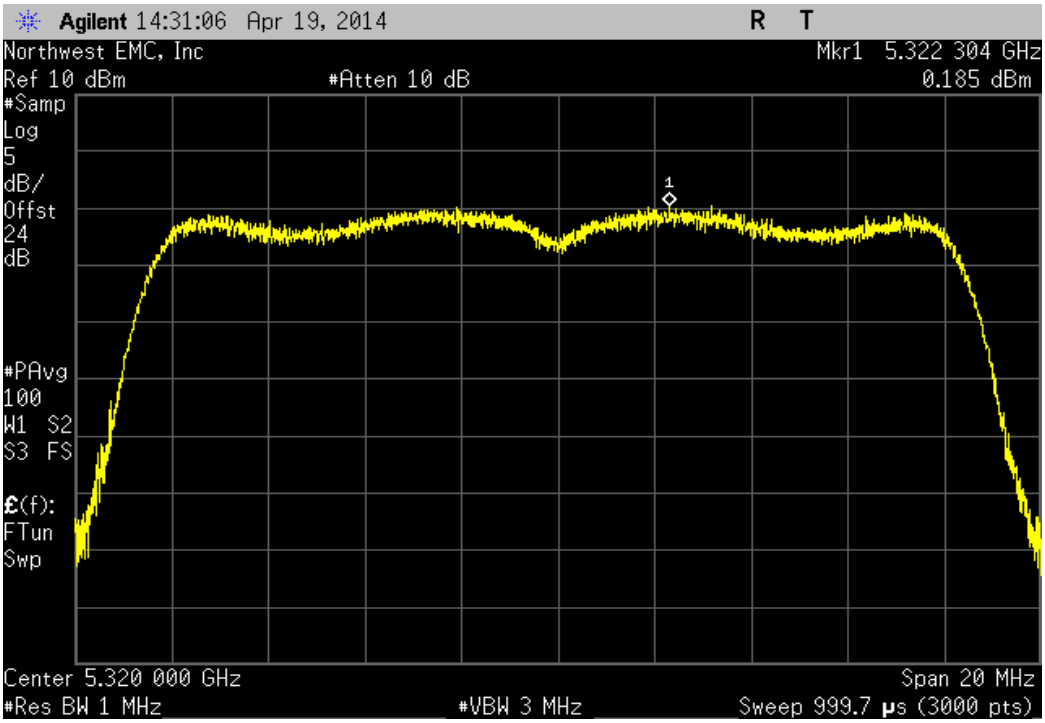


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 52, Low Channel 5260 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.155	11	Pass



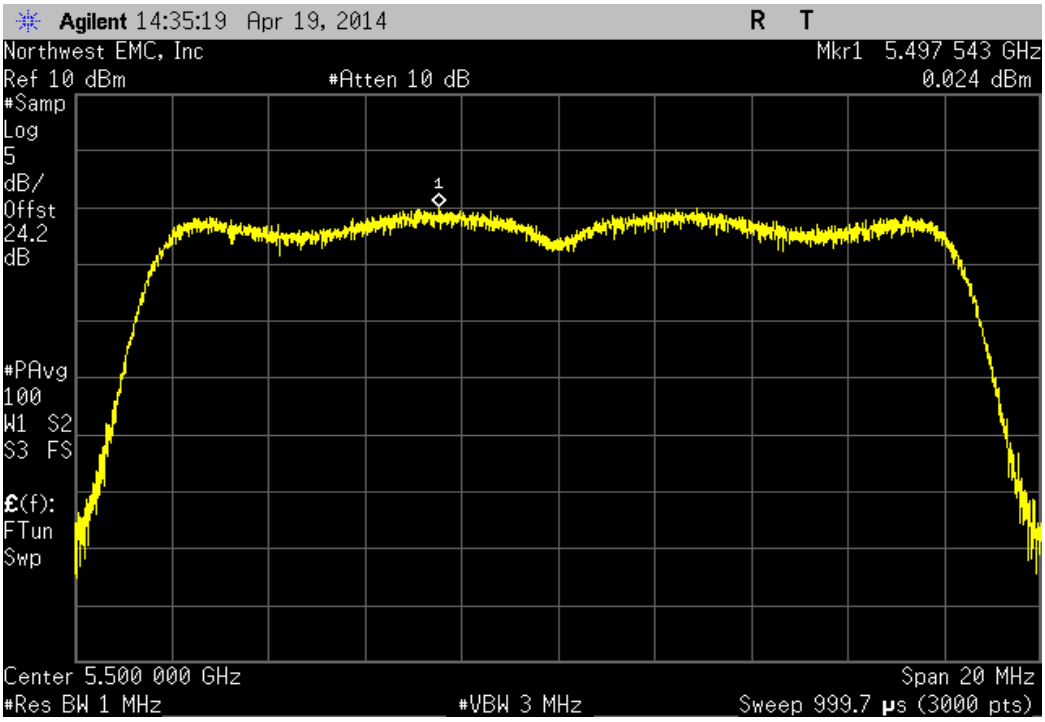
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 64, High Channel 5320 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.185	11	Pass



PEAK POWER SPECTRAL DENSITY

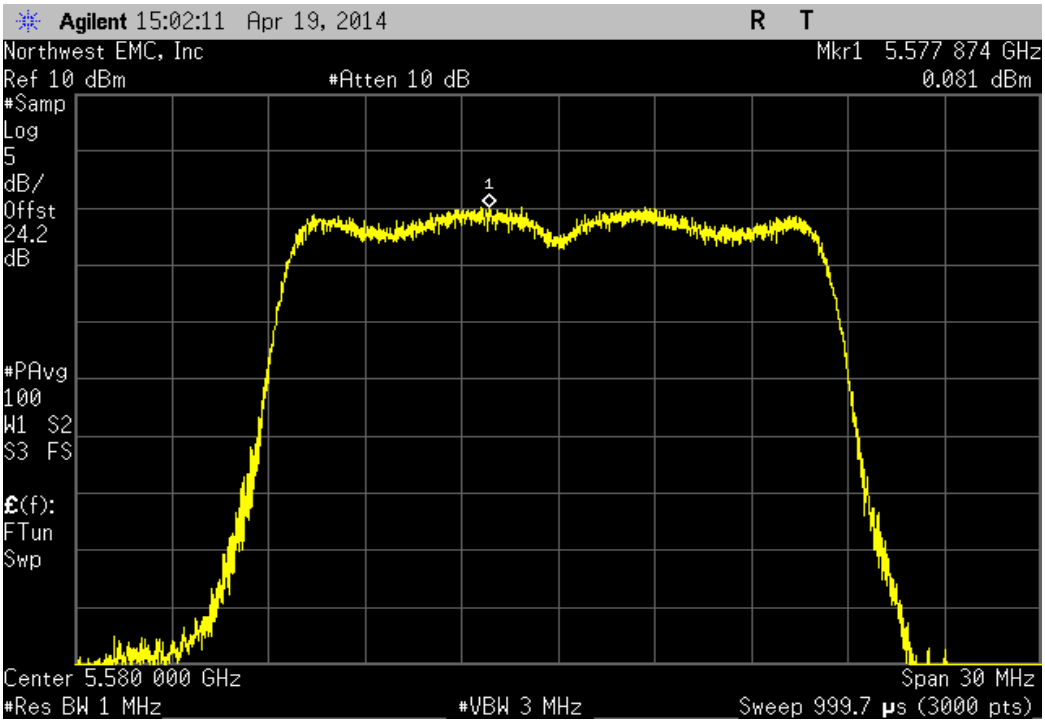
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 100, Low Channel 5500 MHz

				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				0.024	11	Pass



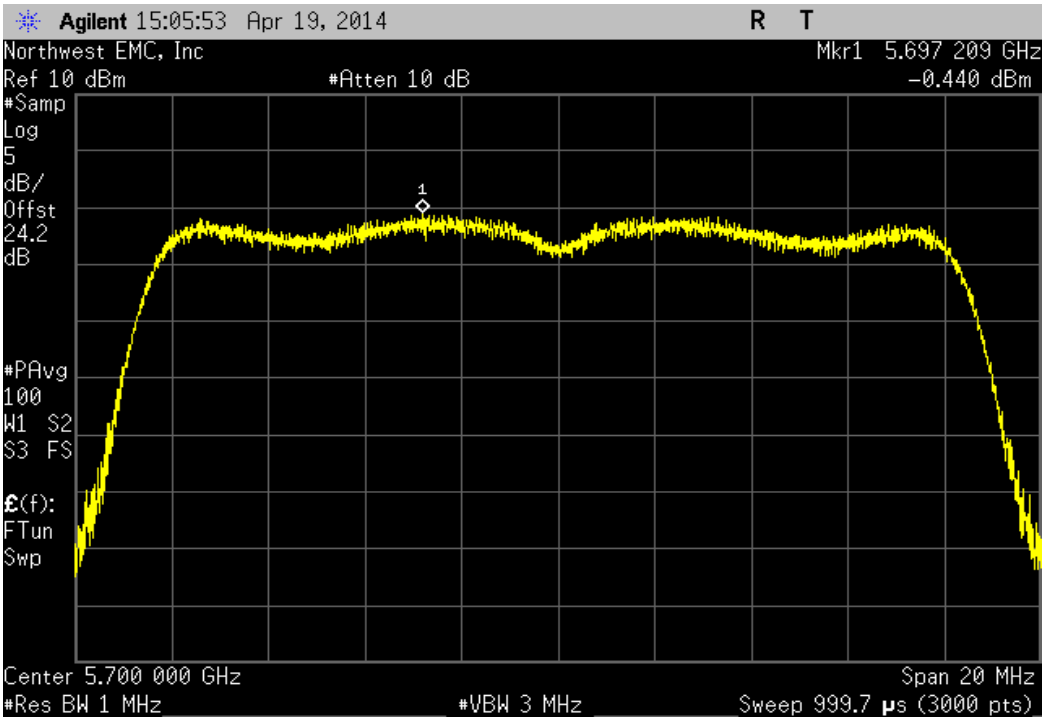
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 116, Mid Channel 5580 MHz

				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				0.081	11	Pass

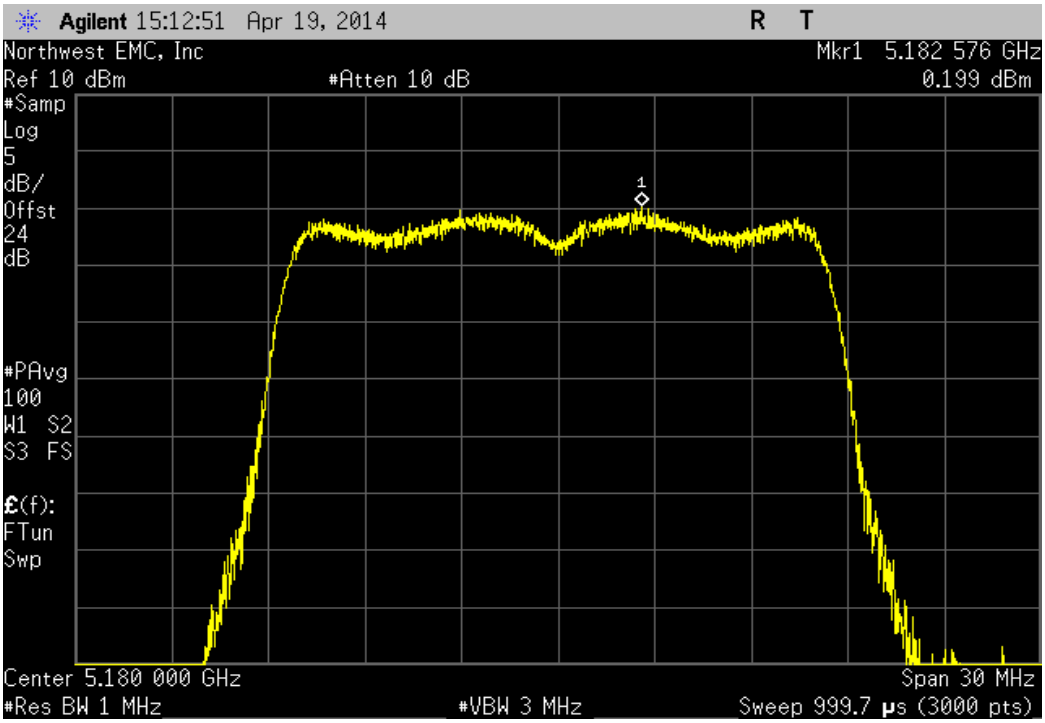


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 140, High Channel 5700 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.44	11	Pass

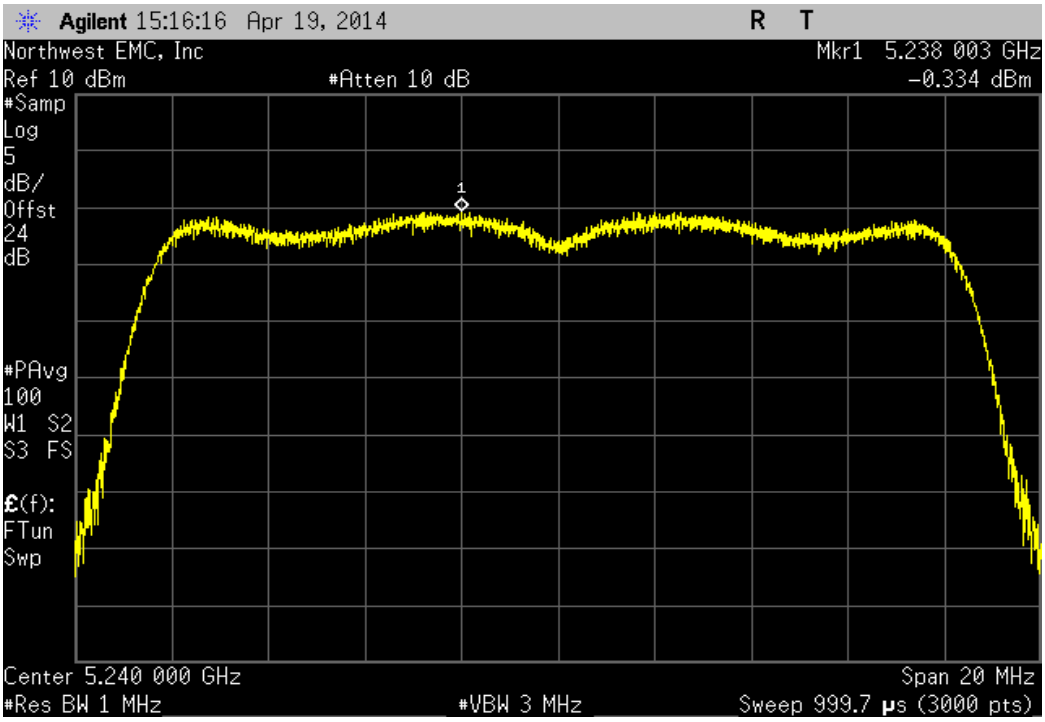


IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.199	4	Pass

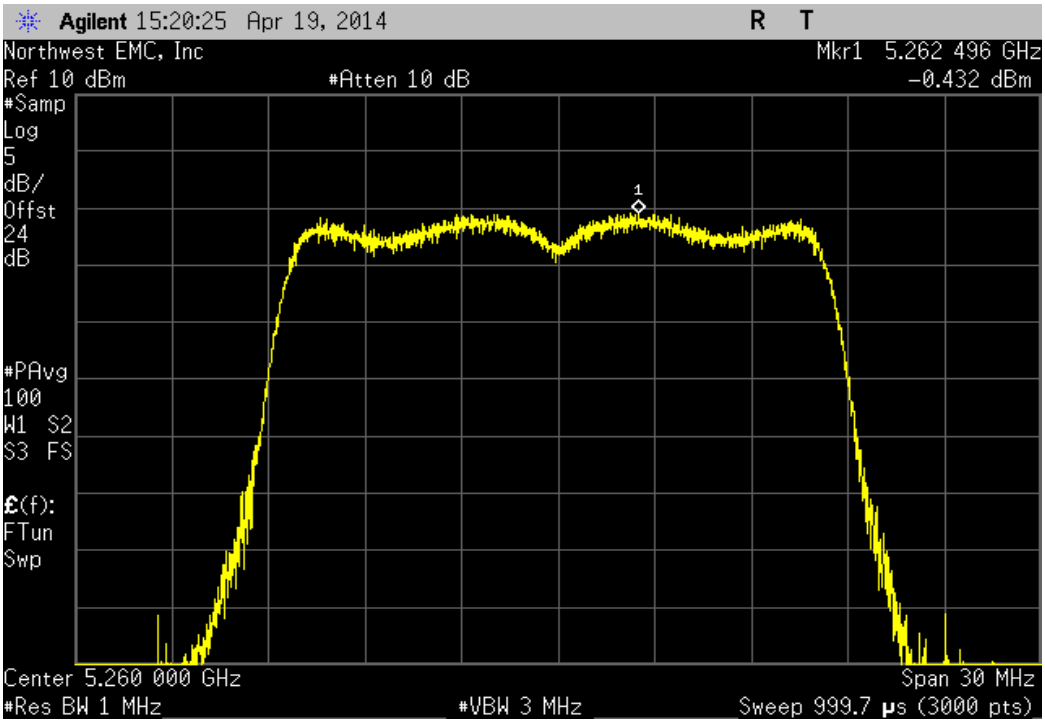


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 48, High Channel 5240 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.334	4	Pass

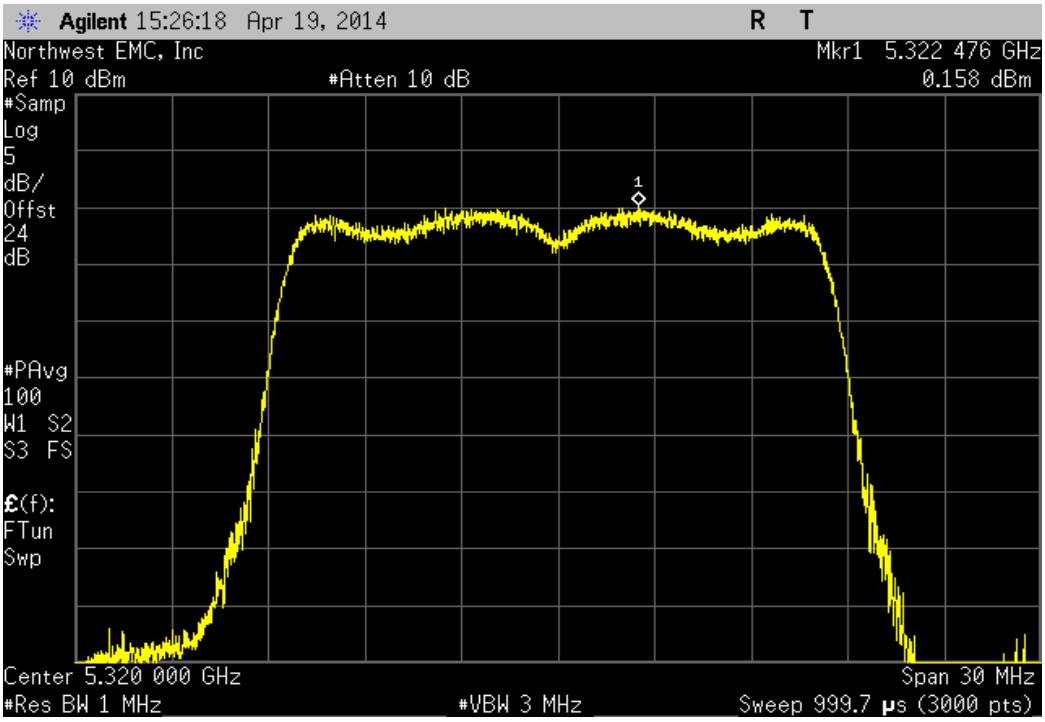


IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.432	11	Pass

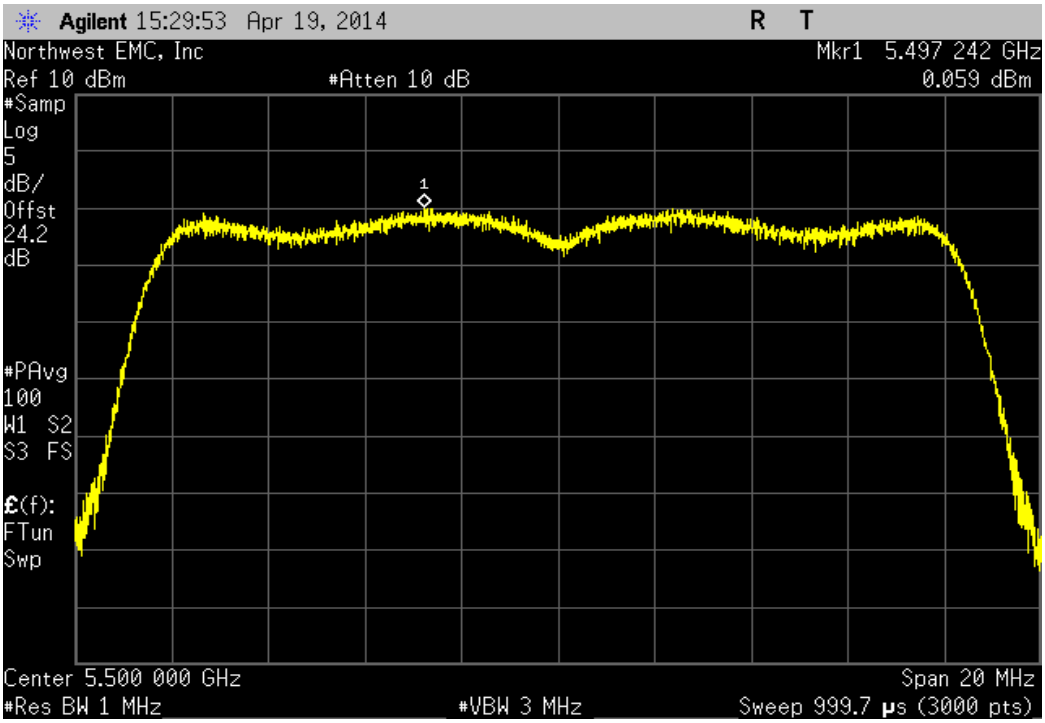


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 64, High Channel 5320 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.158	11	Pass

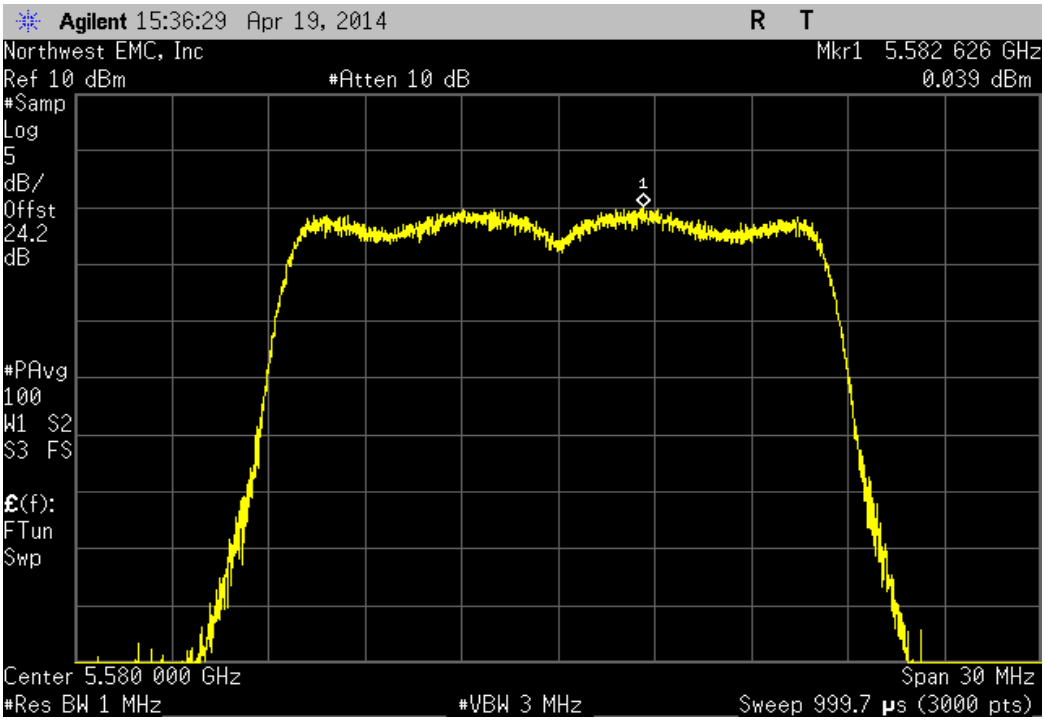


IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 100, Low Channel 5500 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.059	11	Pass

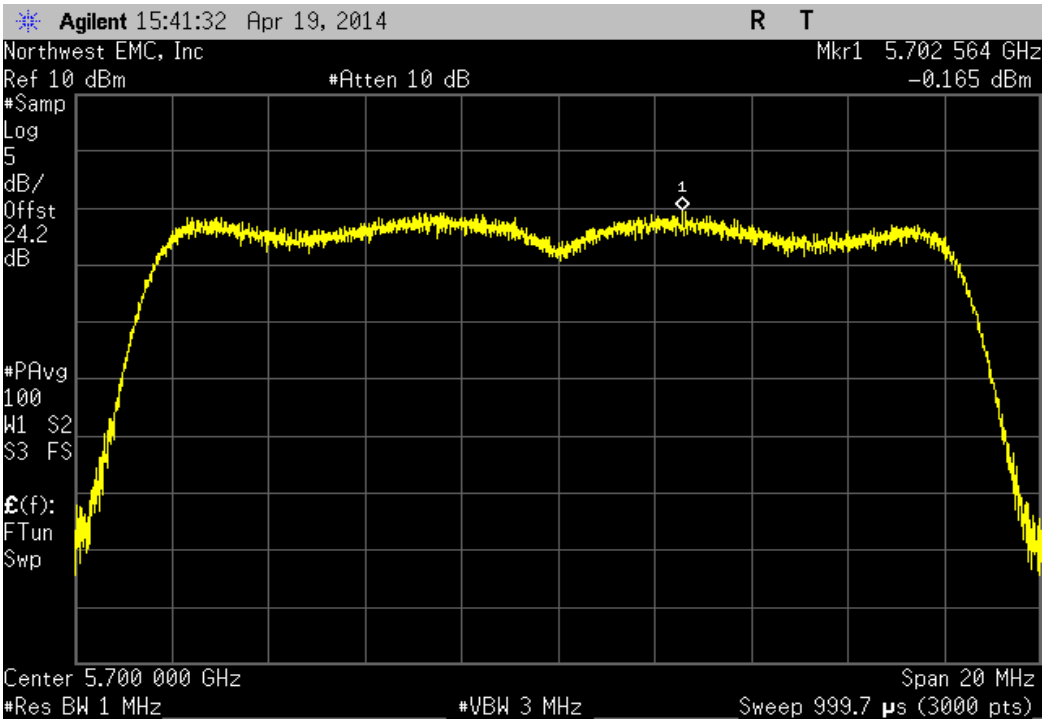


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 116, Mid Channel 5580 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.039	11	Pass

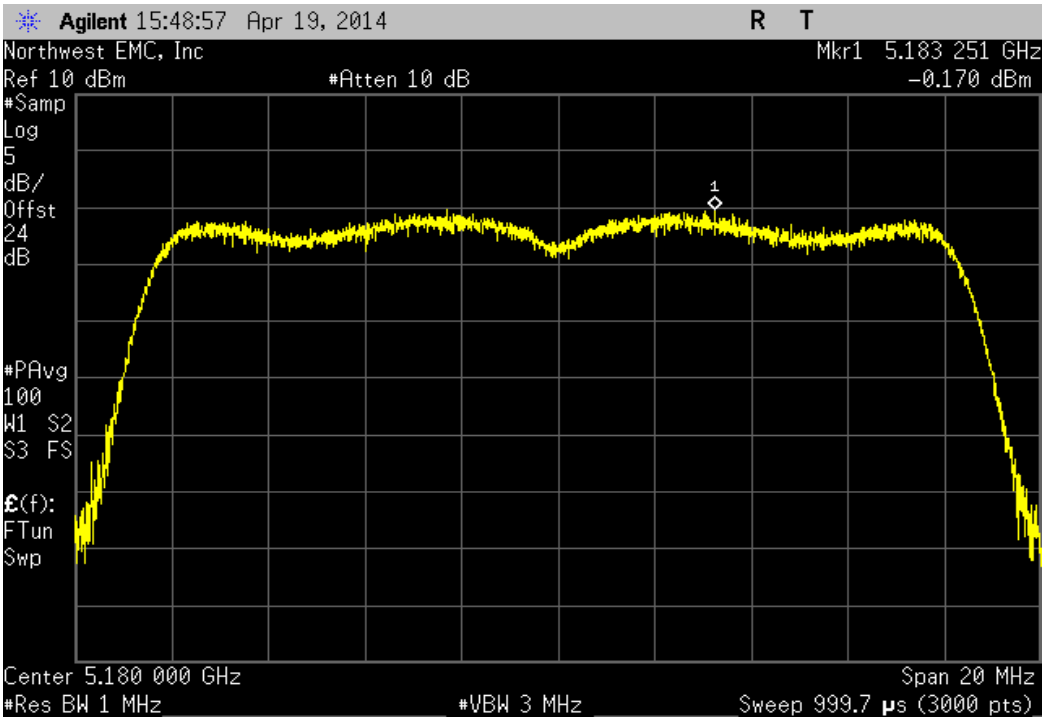


IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 140, High Channel 5700 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.165	11	Pass

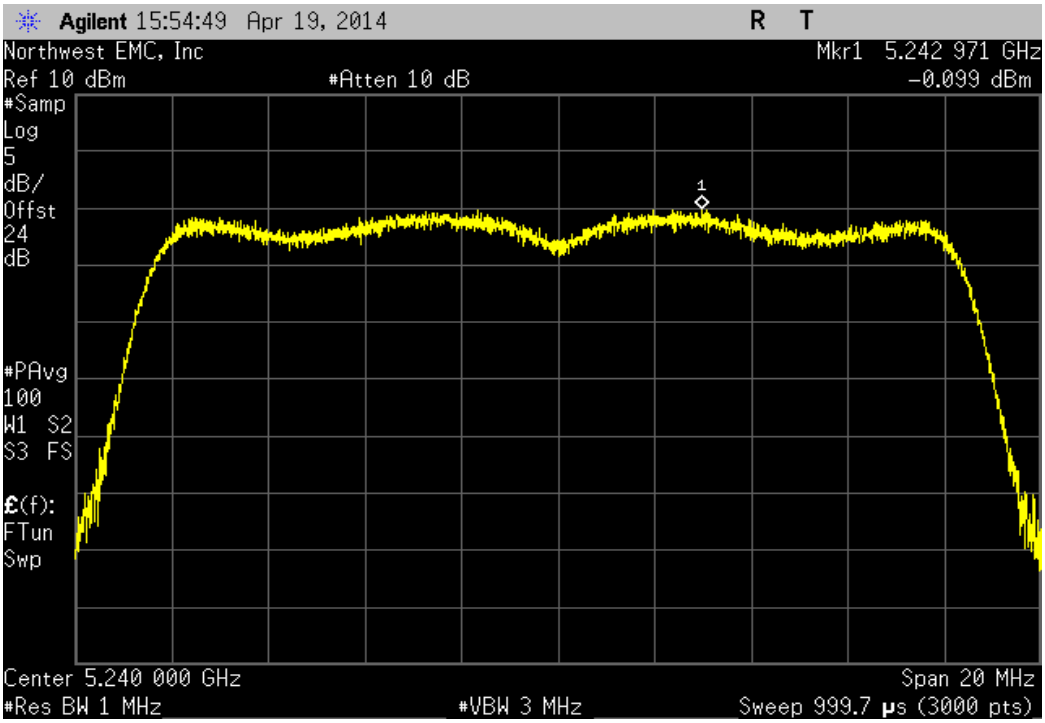


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.17	4	Pass

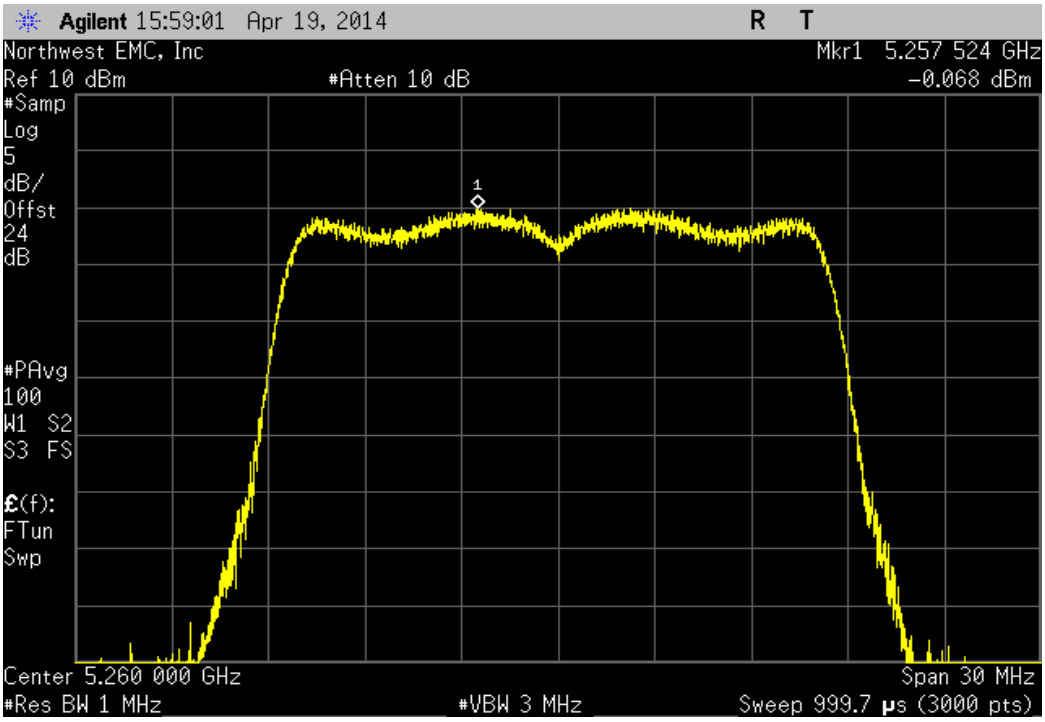


IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 48, High Channel 5240 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.099	4	Pass

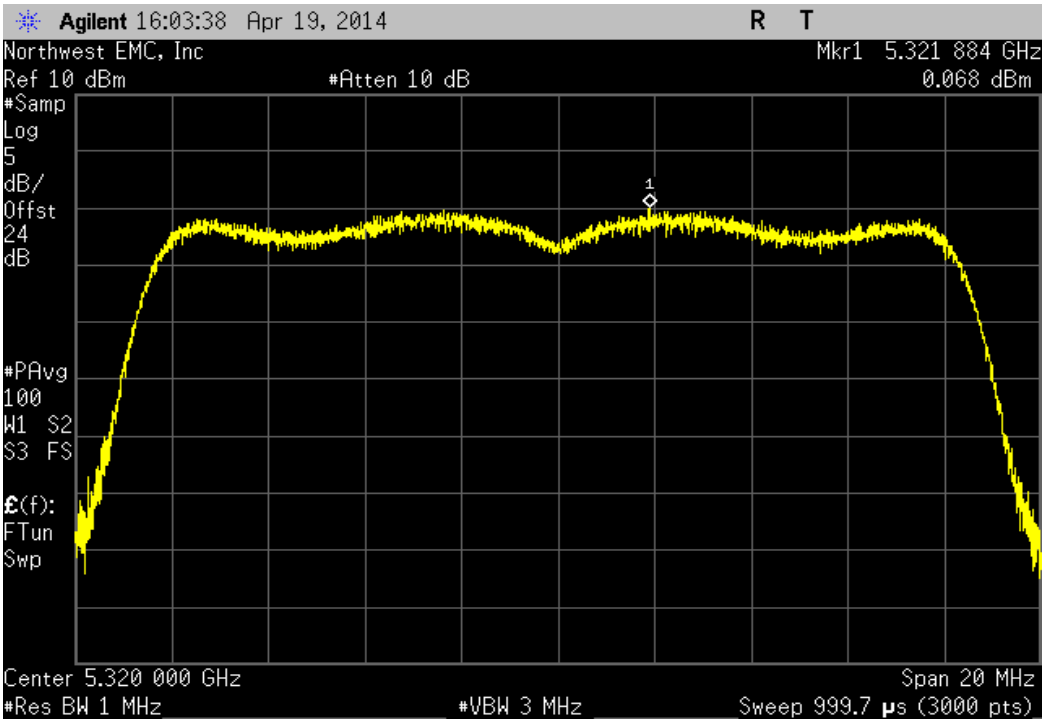


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.068	11	Pass

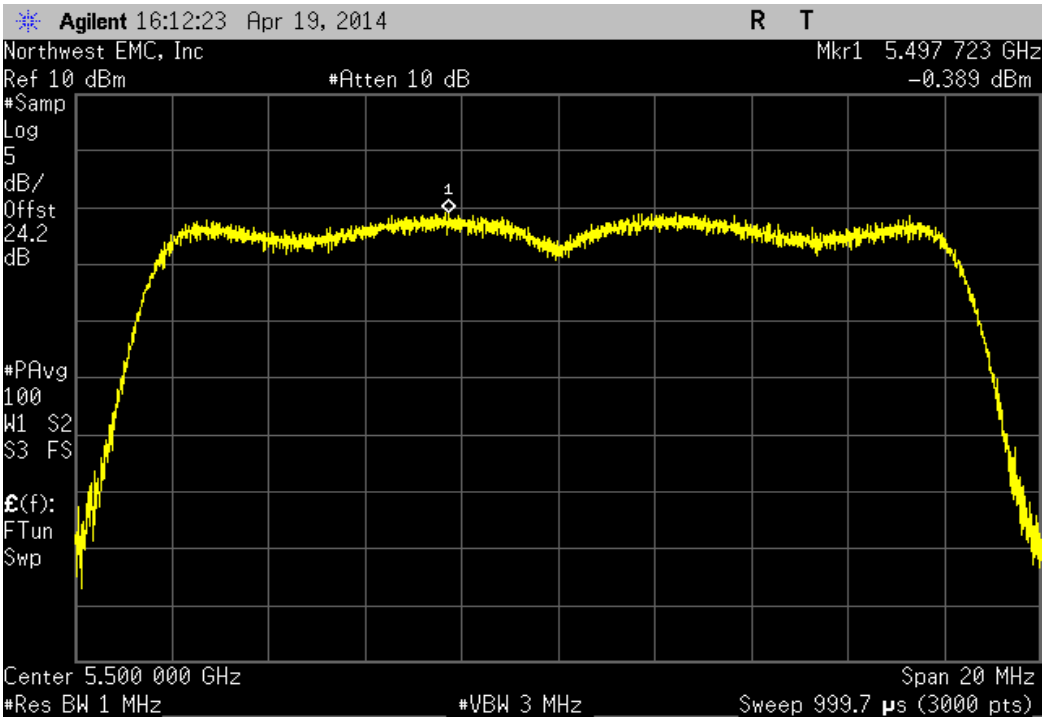


IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 64, High Channel 5320 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				0.068	11	Pass

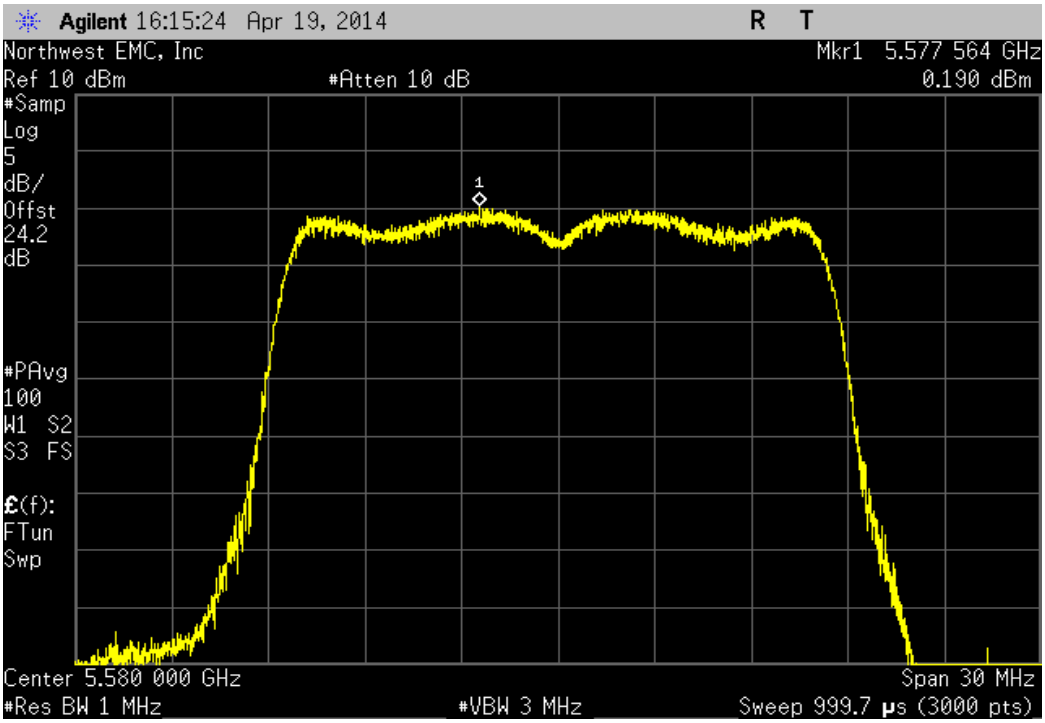


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 100, Low Channel 5500 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.389	11	Pass

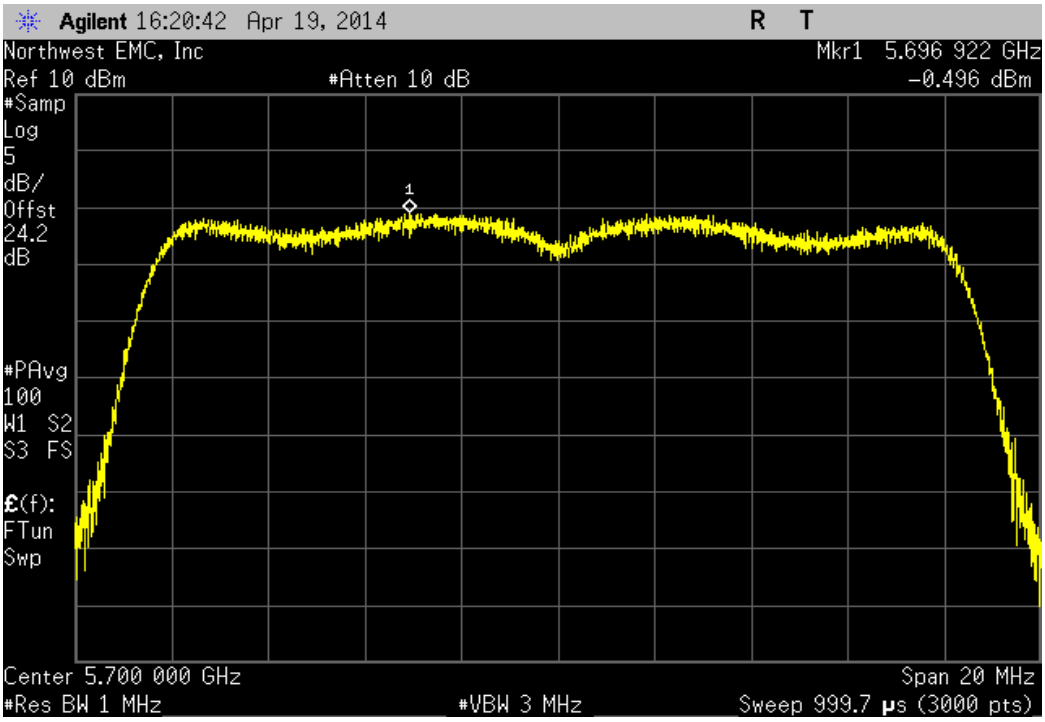


IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 116, Mid Channel 5580 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.19	11	Pass

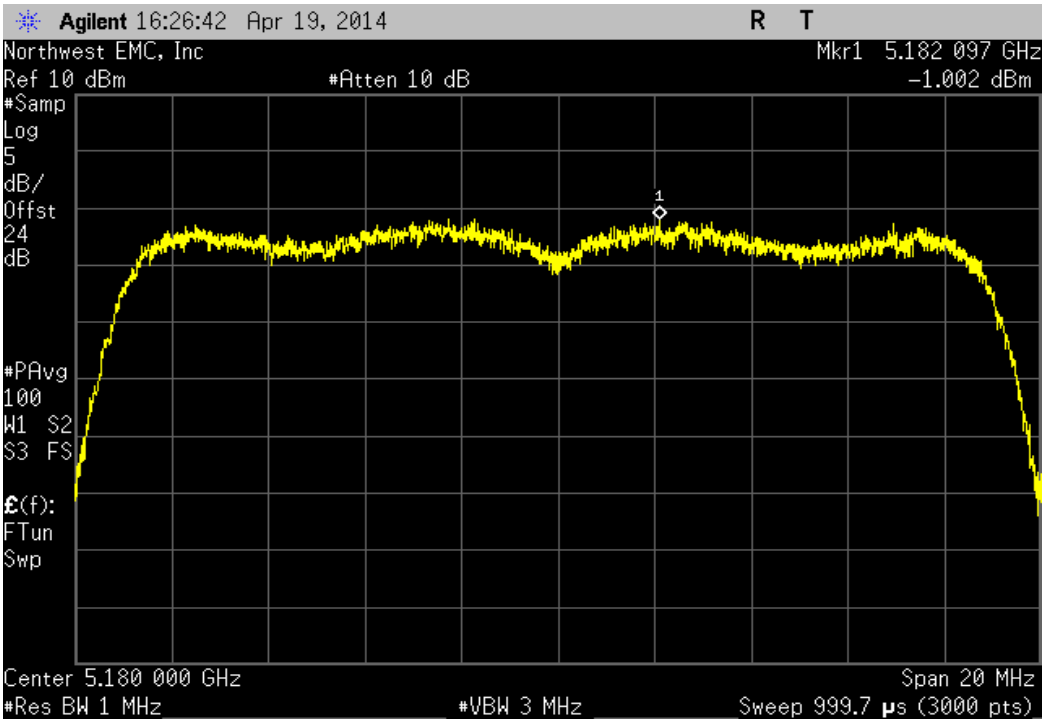


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 140, High Channel 5700 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.496	11	Pass

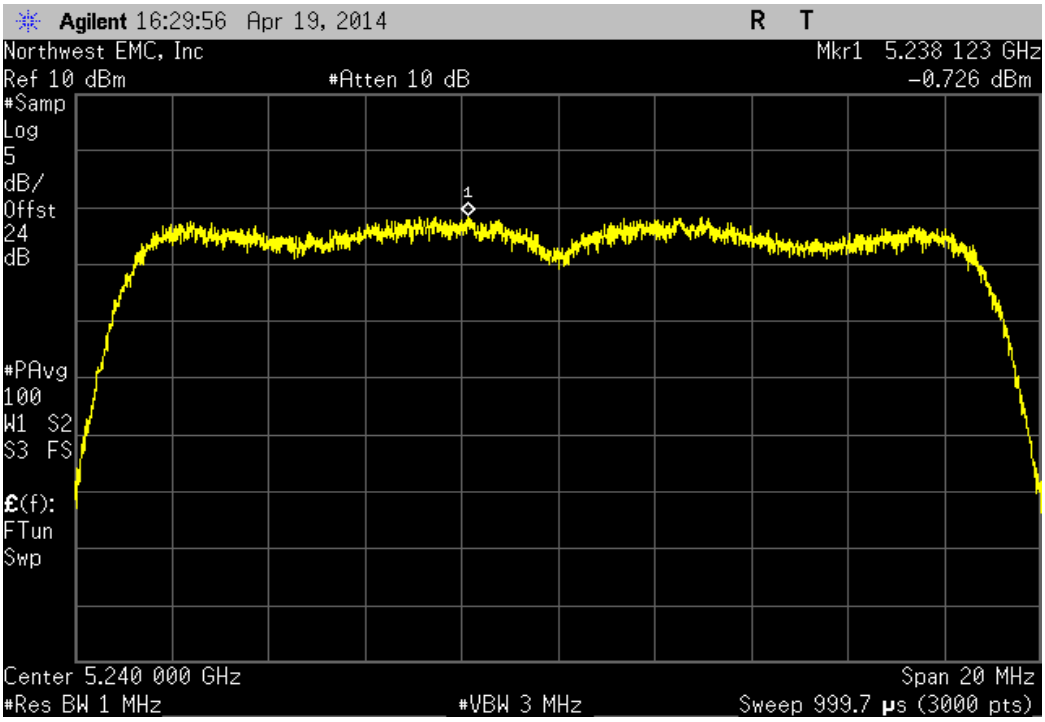


IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-1.002	4	Pass

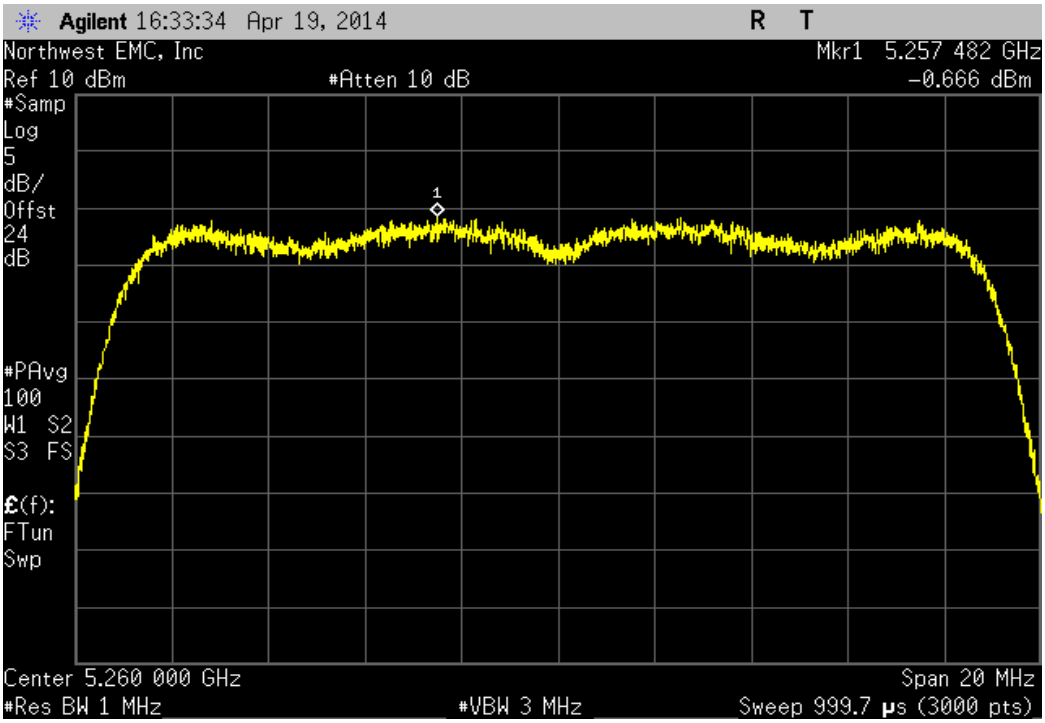


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 48, High Channel 5240 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.726	4	Pass

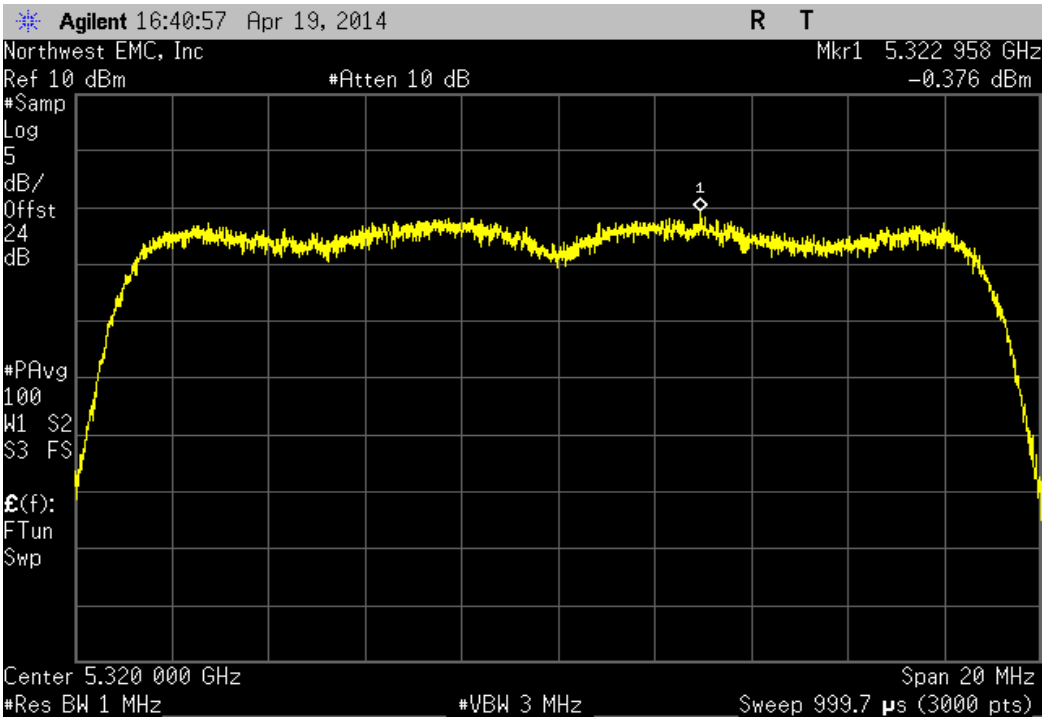


IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.666	11	Pass

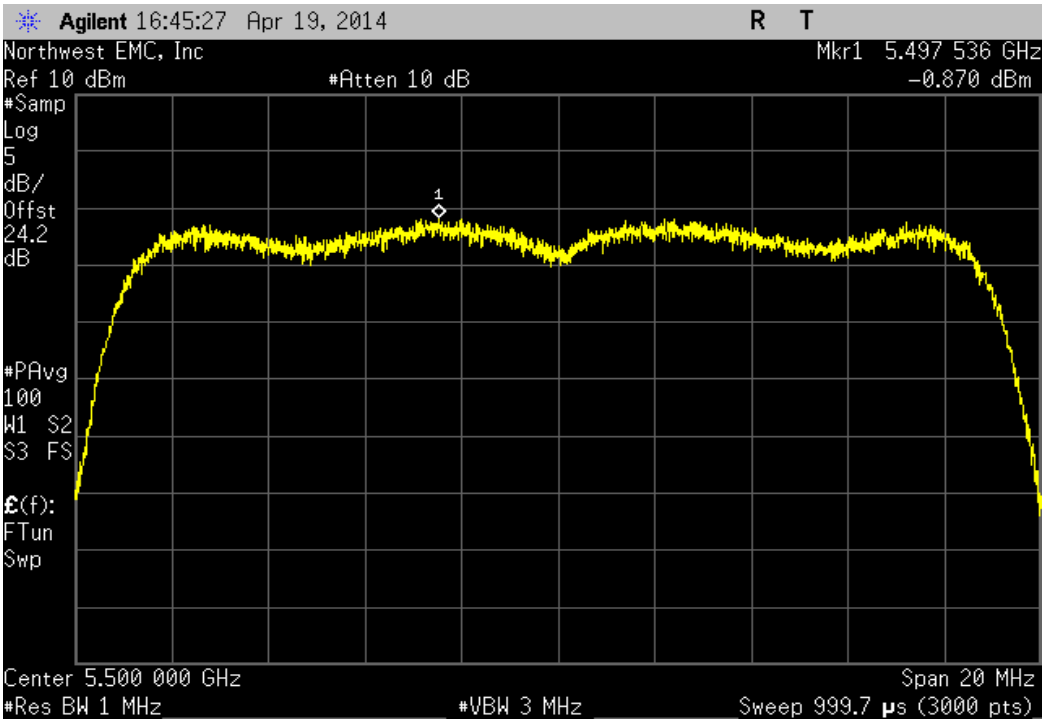


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 64, High Channel 5320 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.376	11	Pass

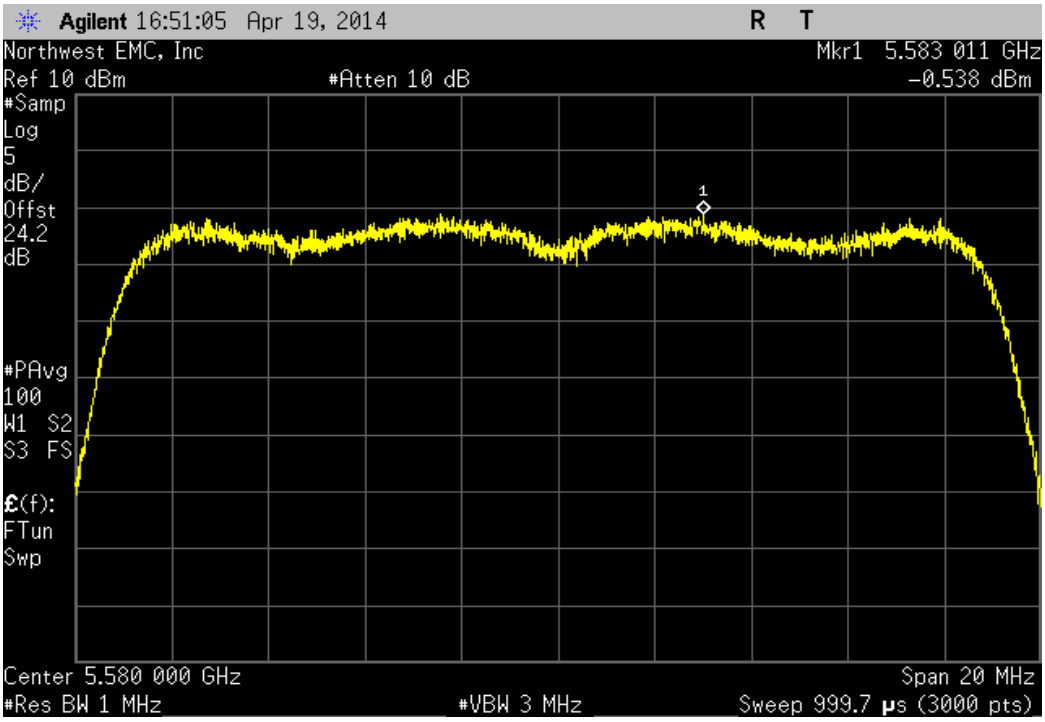


IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 100, Low Channel 5500 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.87	11	Pass

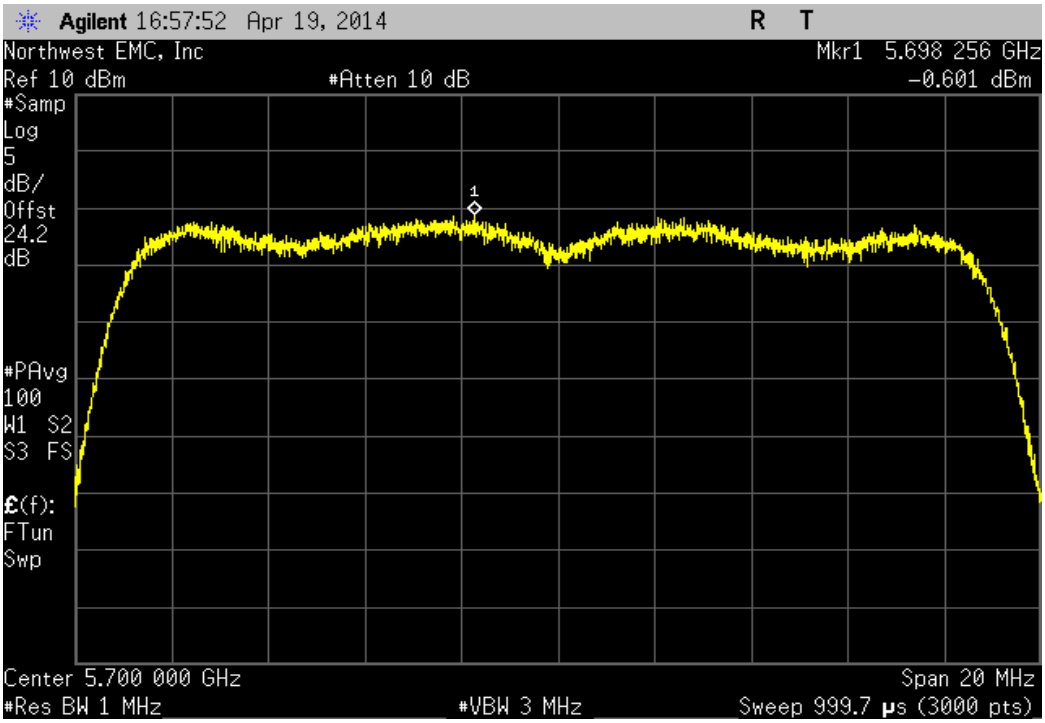


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 116, Mid Channel 5580 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.538	11	Pass

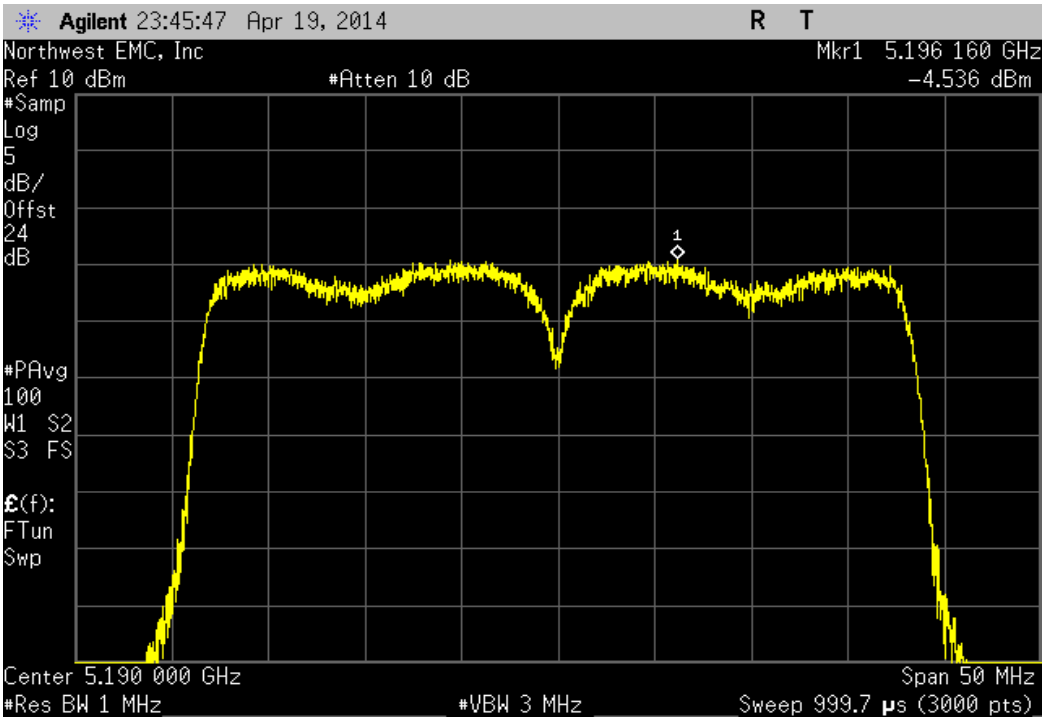


IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 140, High Channel 5700 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.601	11	Pass

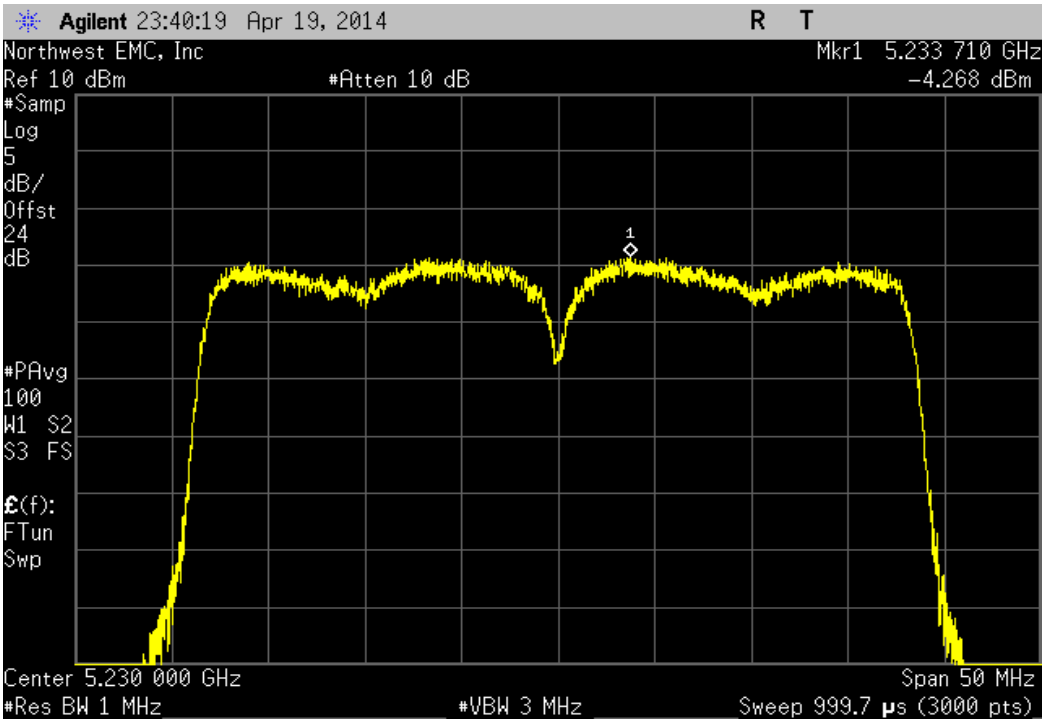


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 36/40, Low Channel 5190 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.536	4	Pass

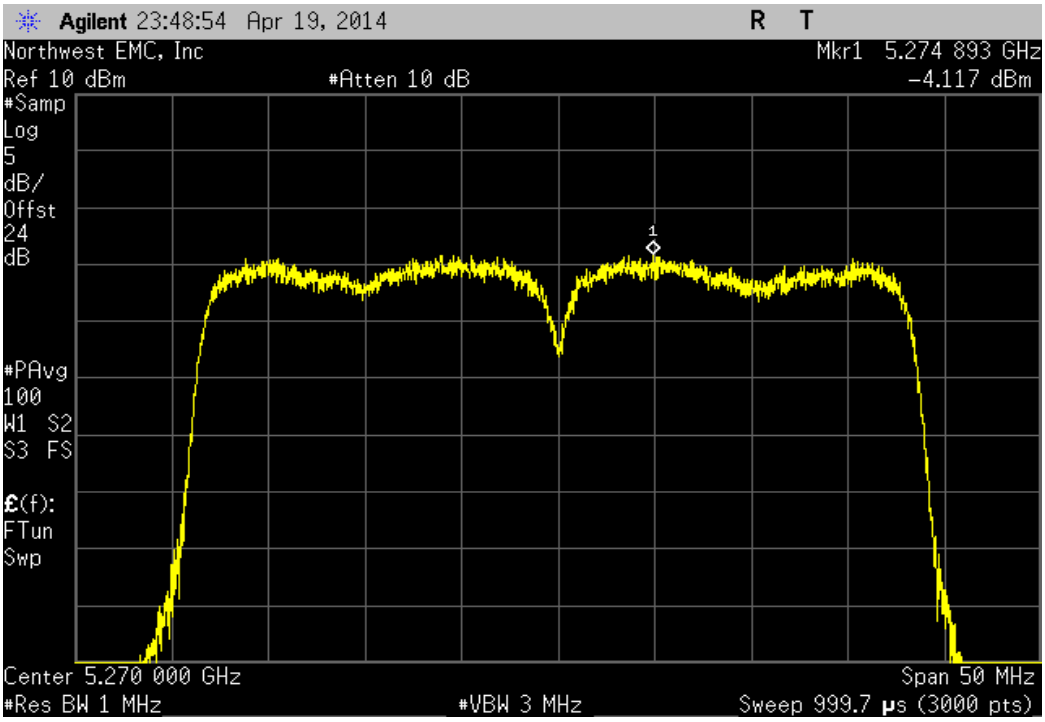


IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 44/48, High Channel 5230 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.268	4	Pass

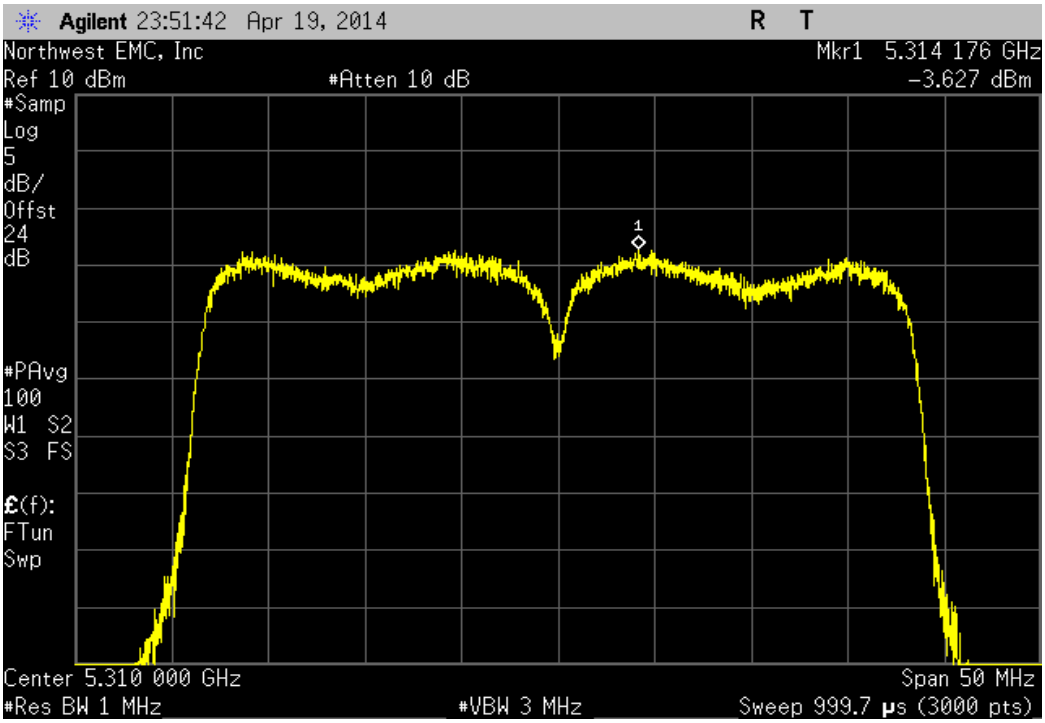


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 52/56, Low Channel 5270 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.117	11	Pass

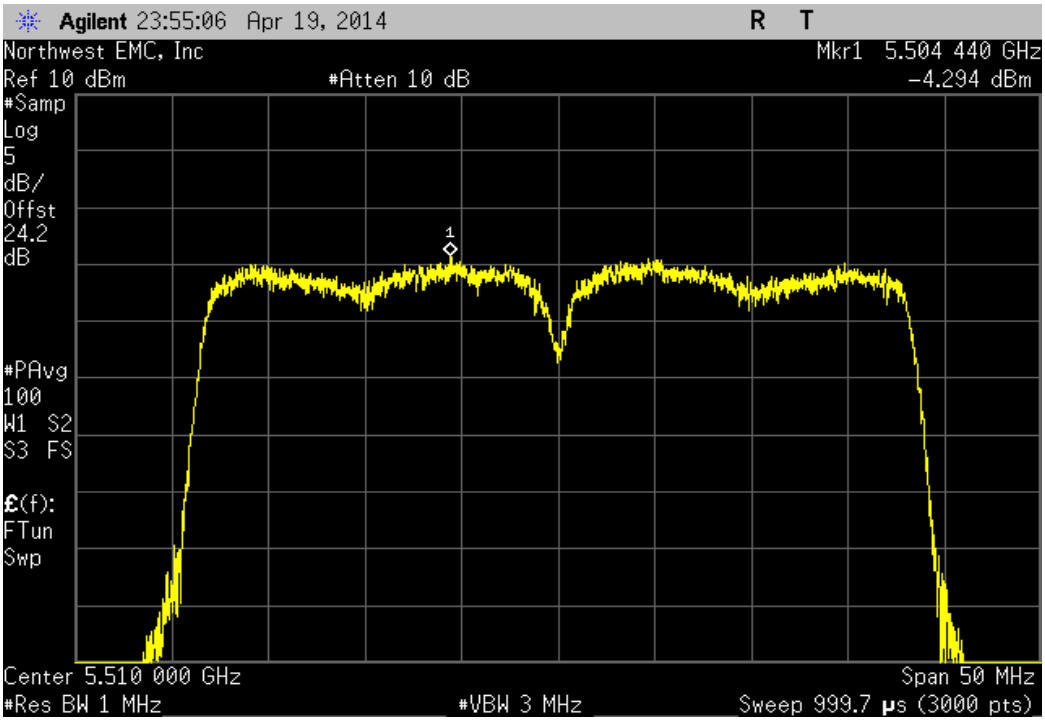


IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 60/64, High Channel 5310 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.627	11	Pass

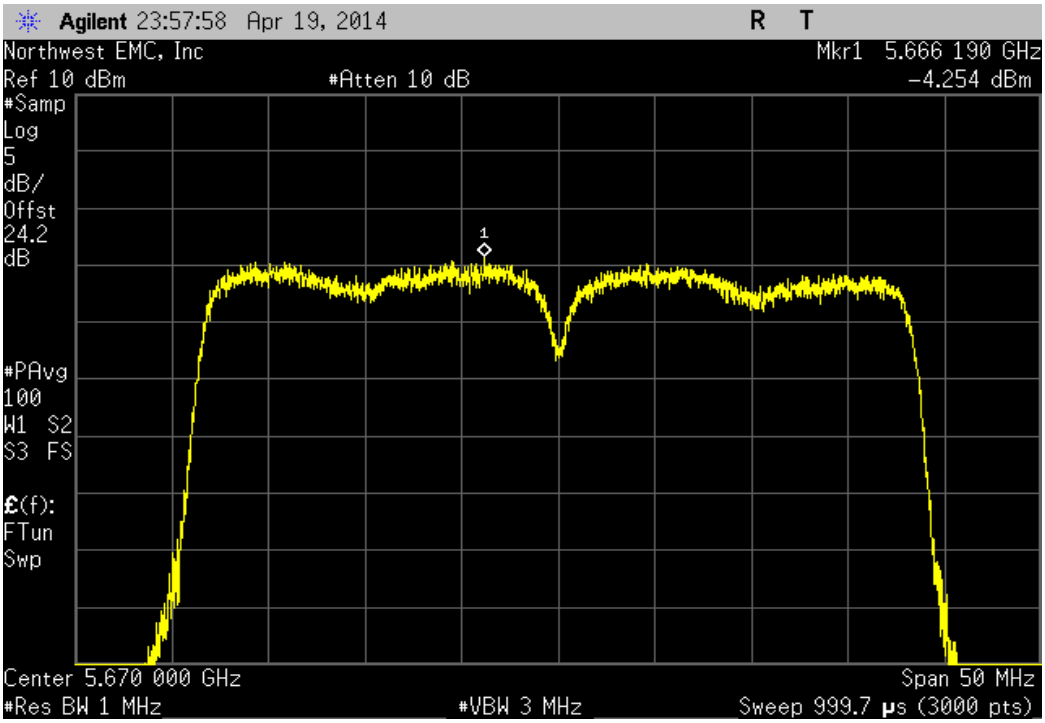


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 100/104, Low Channel 5510 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.294	11	Pass

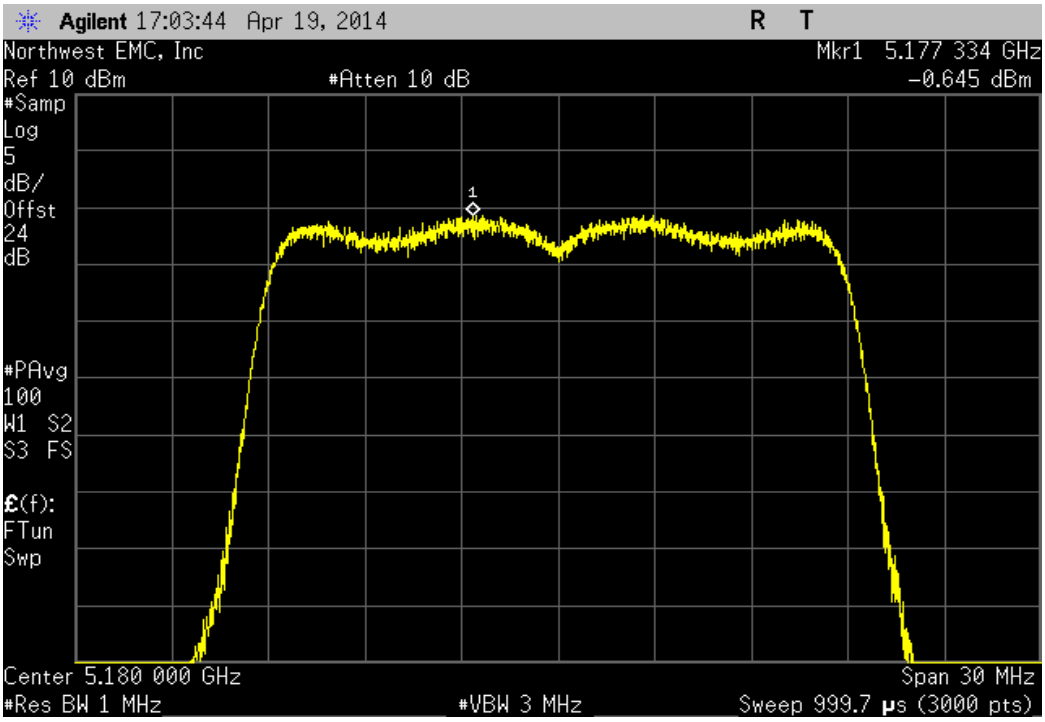


IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 132/136, High Channel 5670 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.254	11	Pass

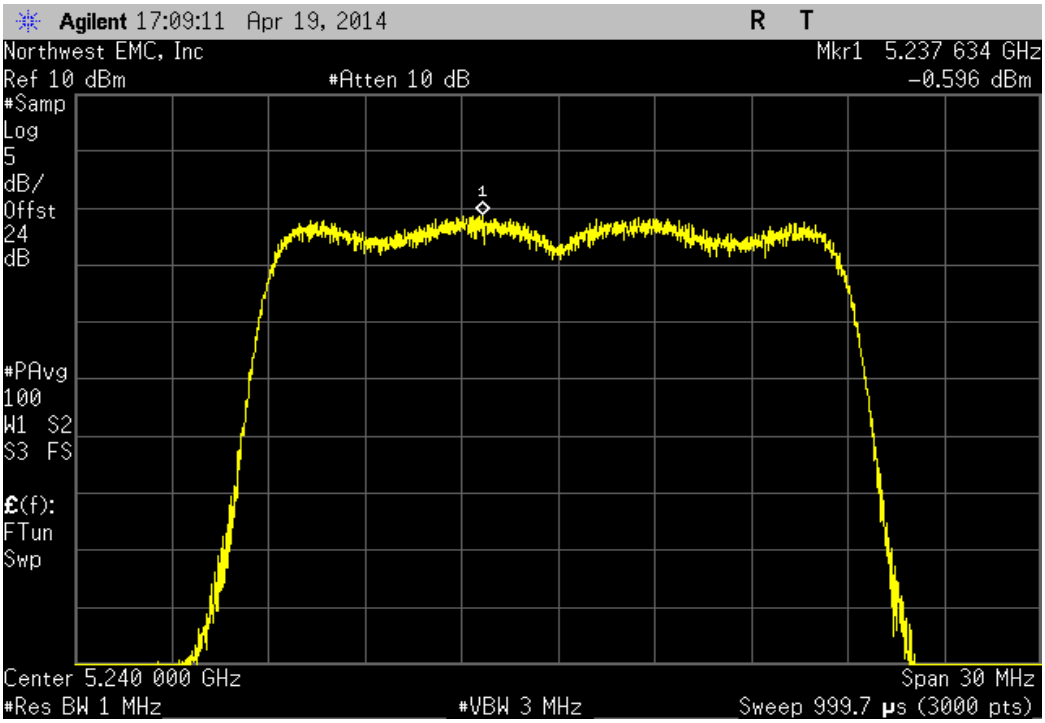


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 36, Low Channel 5180MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.645	4	Pass

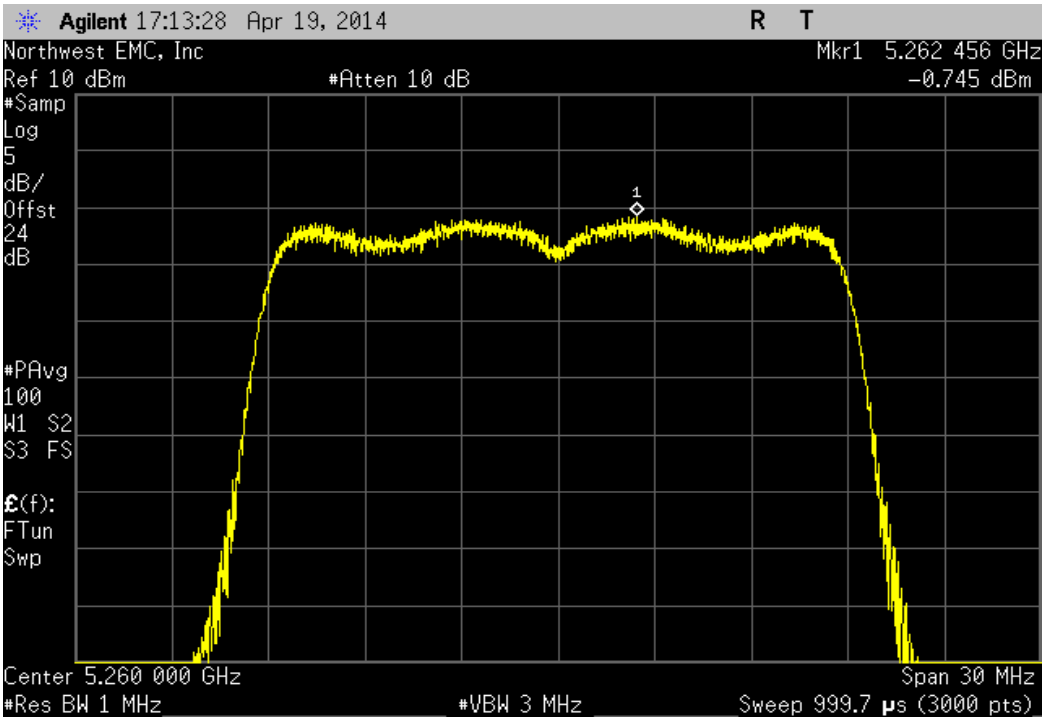


IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 48, High Channel 5240 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.596	4	Pass

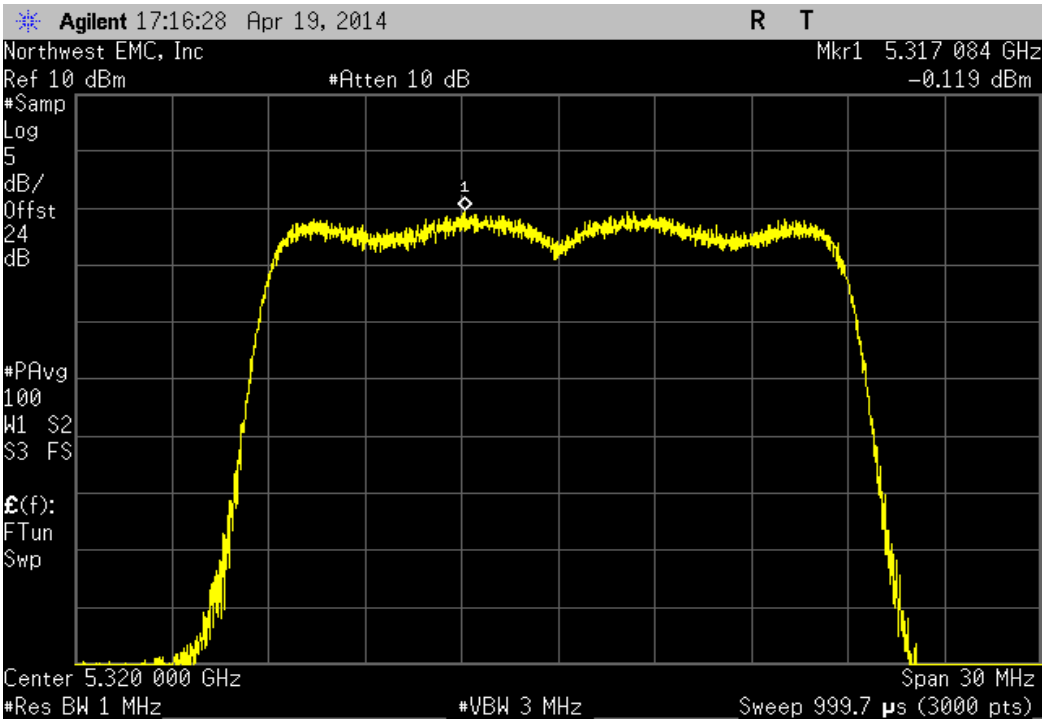


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.745	11	Pass

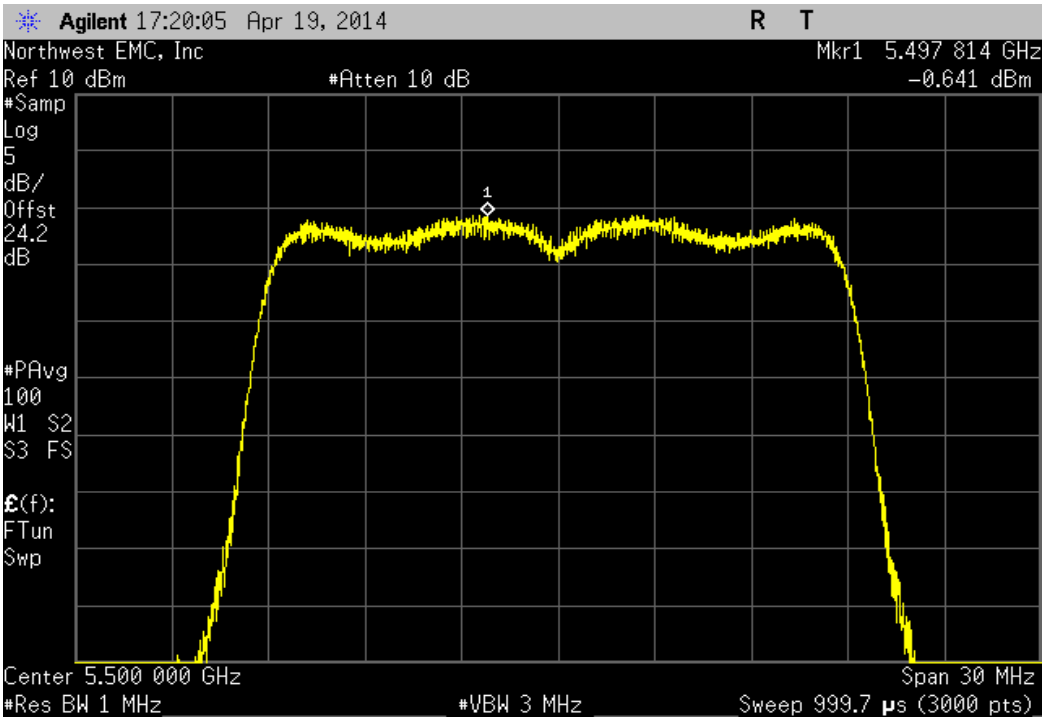


IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 64, High Channel 5320 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.119	11	Pass

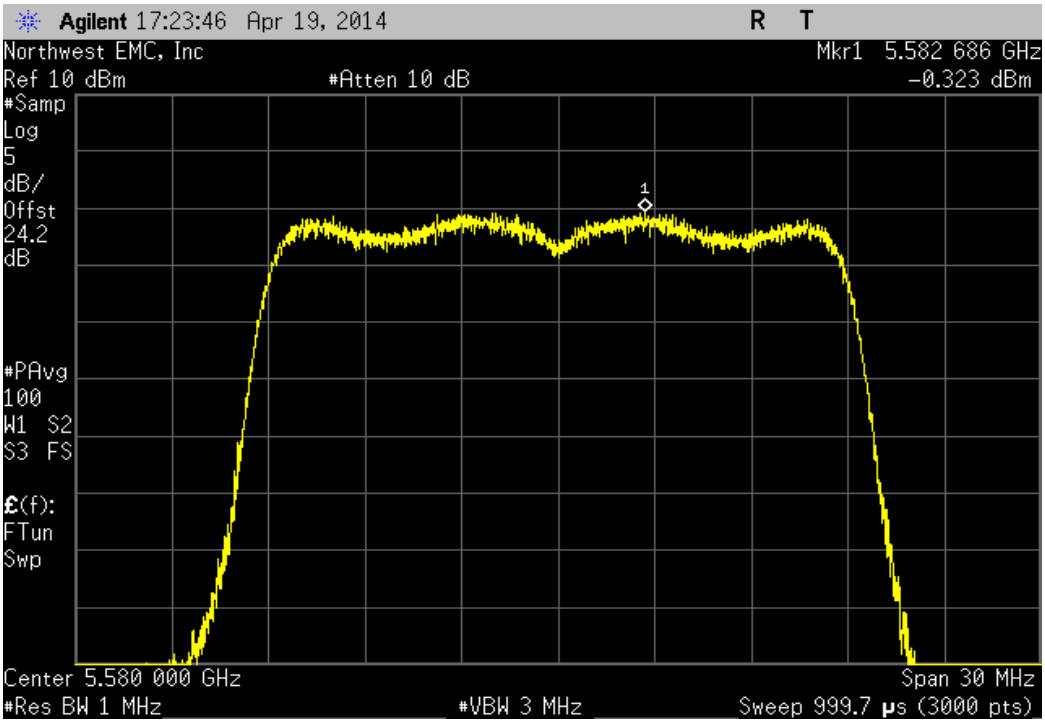


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 100, Low Channel 5500 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.641	11	Pass

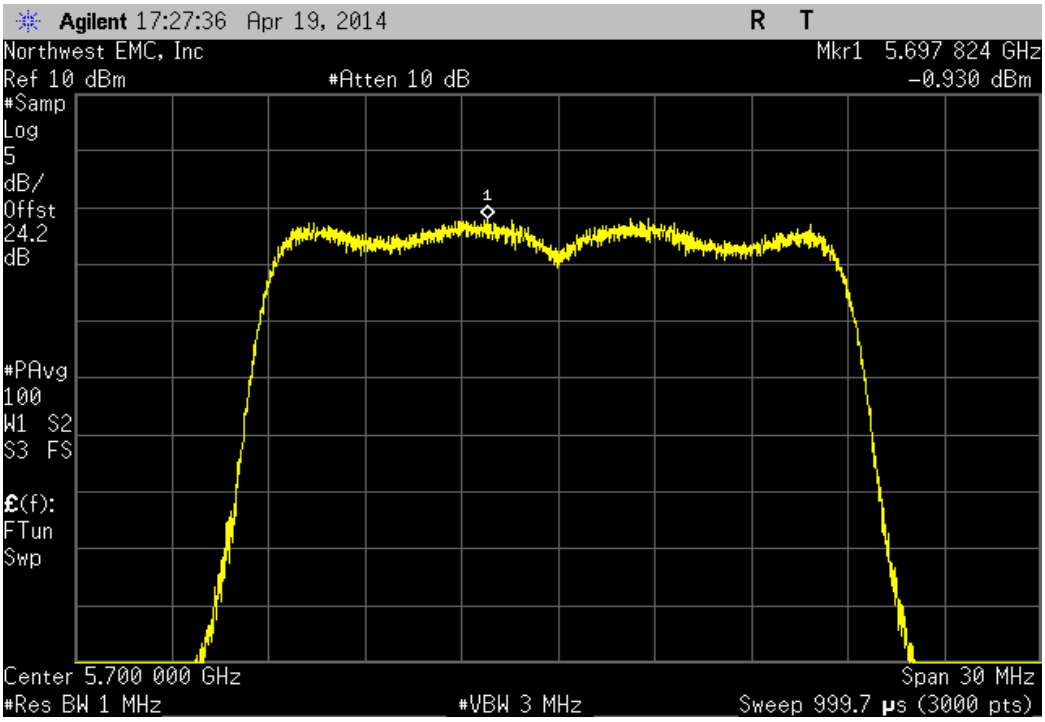


IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 116, Mid Channel 5580 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.323	11	Pass

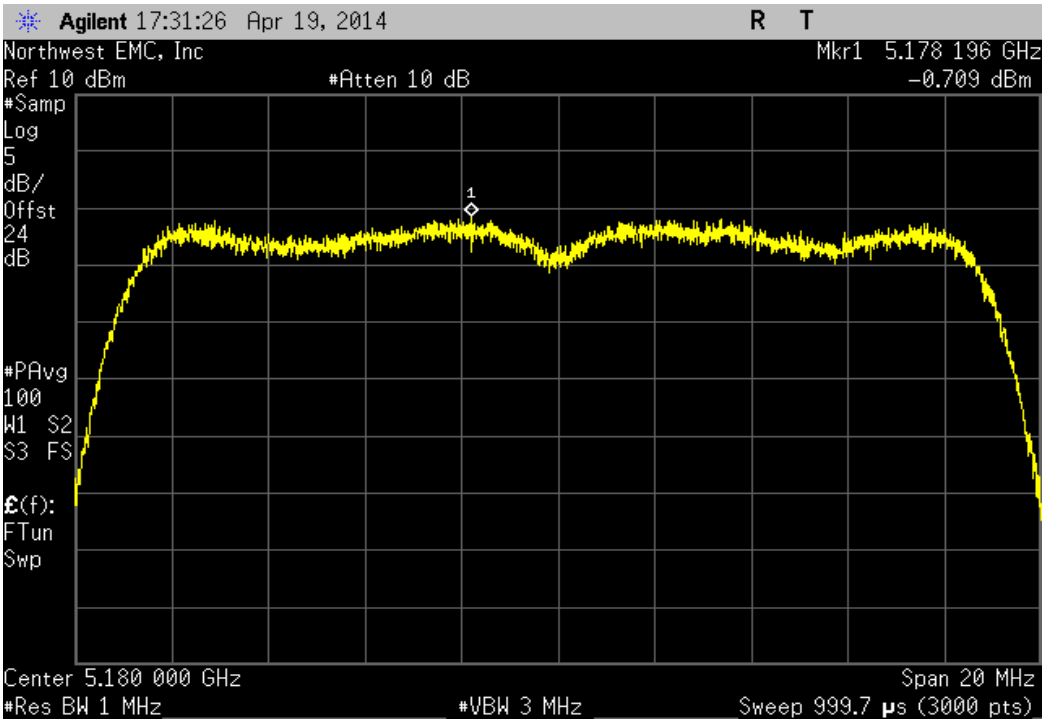


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 140, High Channel 5700 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.93	11	Pass

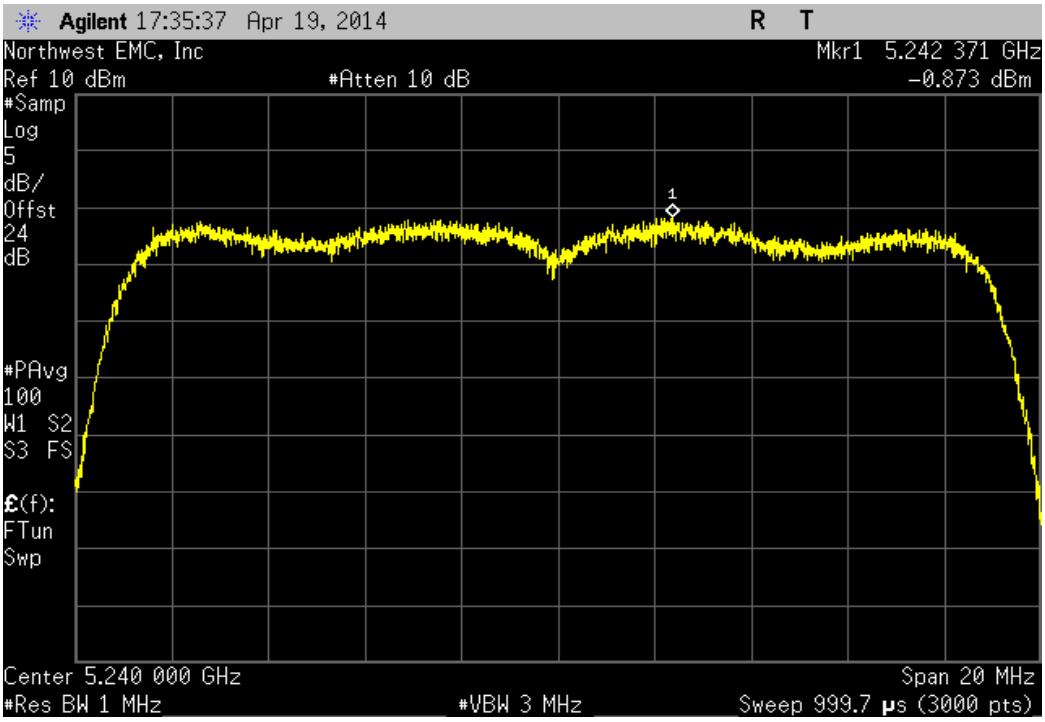


IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.709	4	Pass

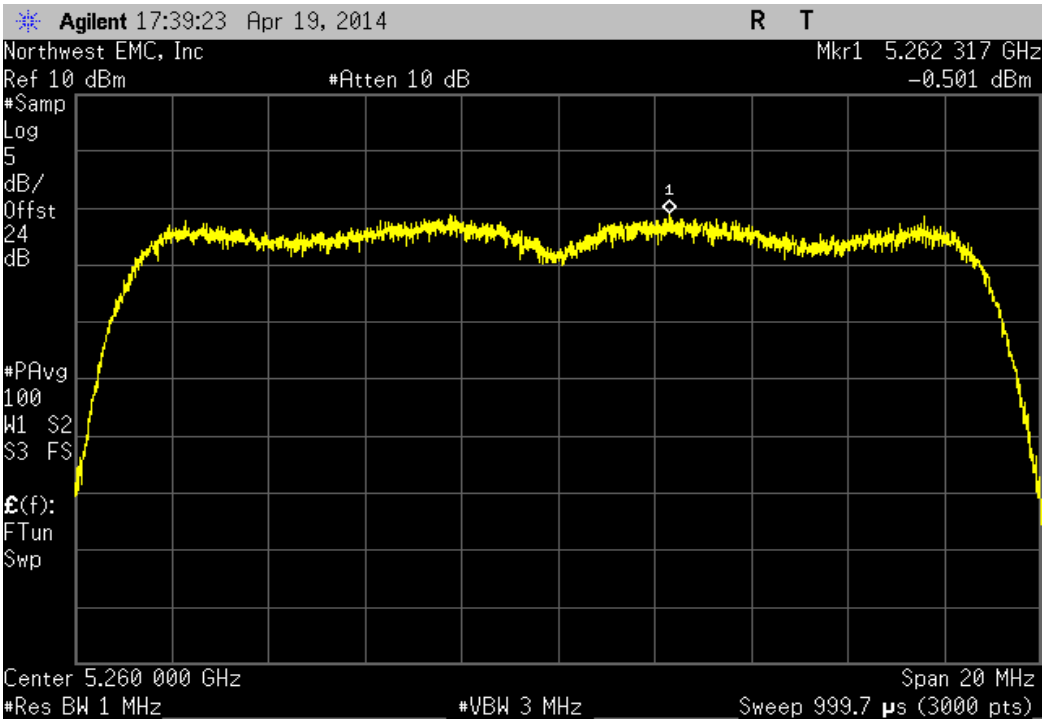


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 48, High Channel 5240 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.873	4	Pass

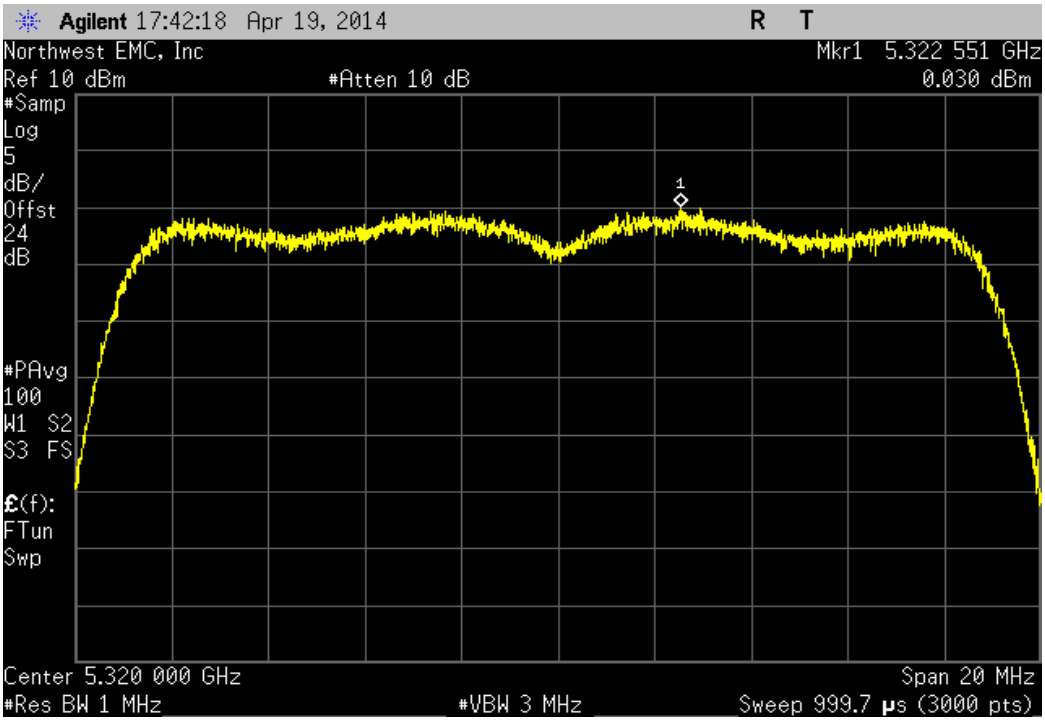


IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 52, Low Channel 5260 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.501	11	Pass

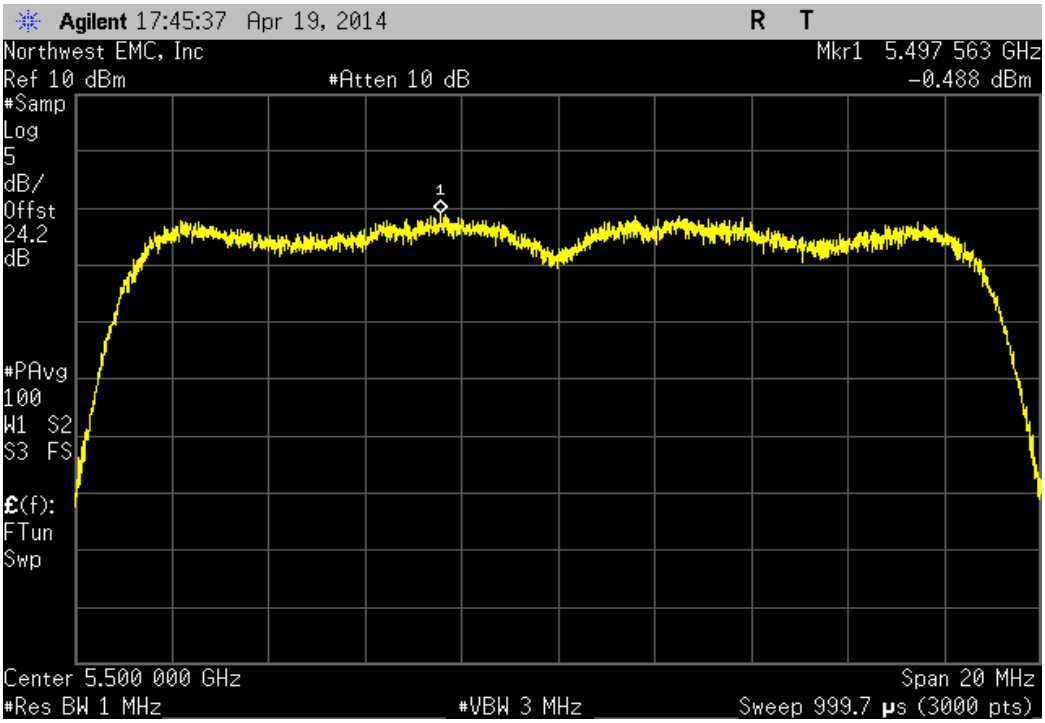


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 64, High Channel 5320 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.03	11	Pass

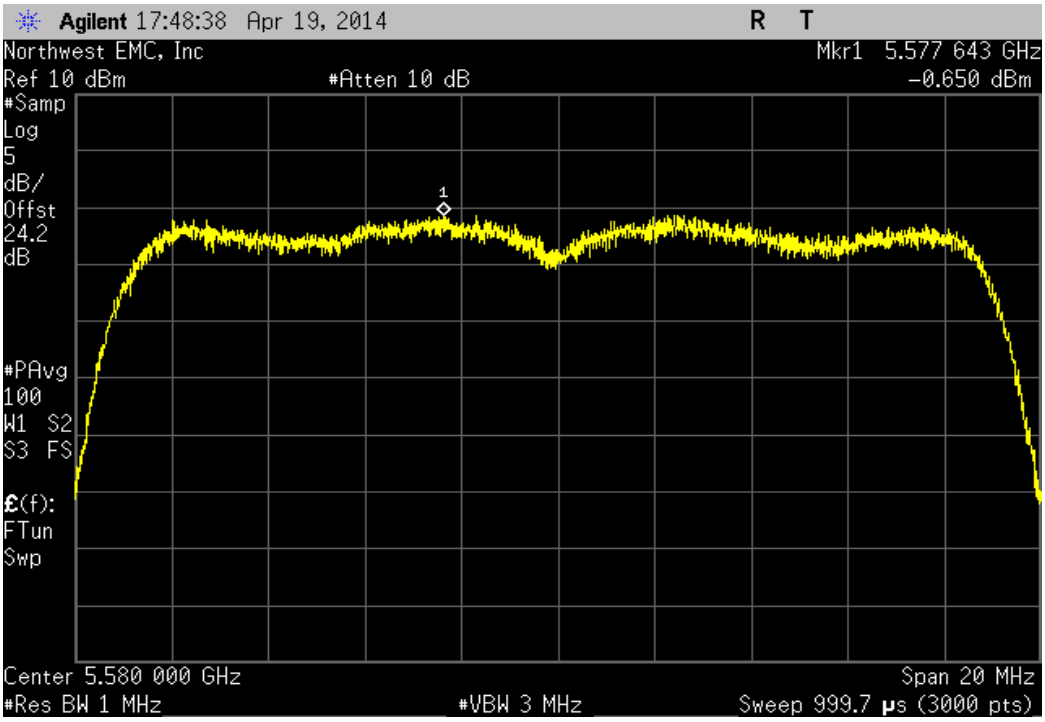


IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 100, Low Channel 5500 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.488	11	Pass

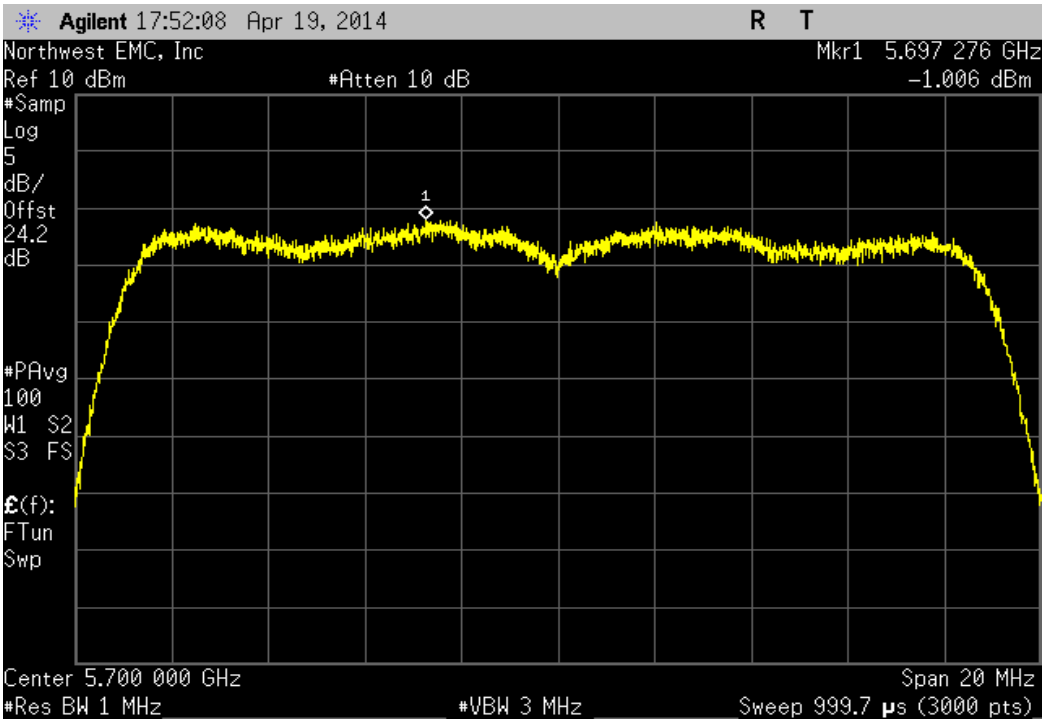


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 116, Mid Channel 5580 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.65	11	Pass

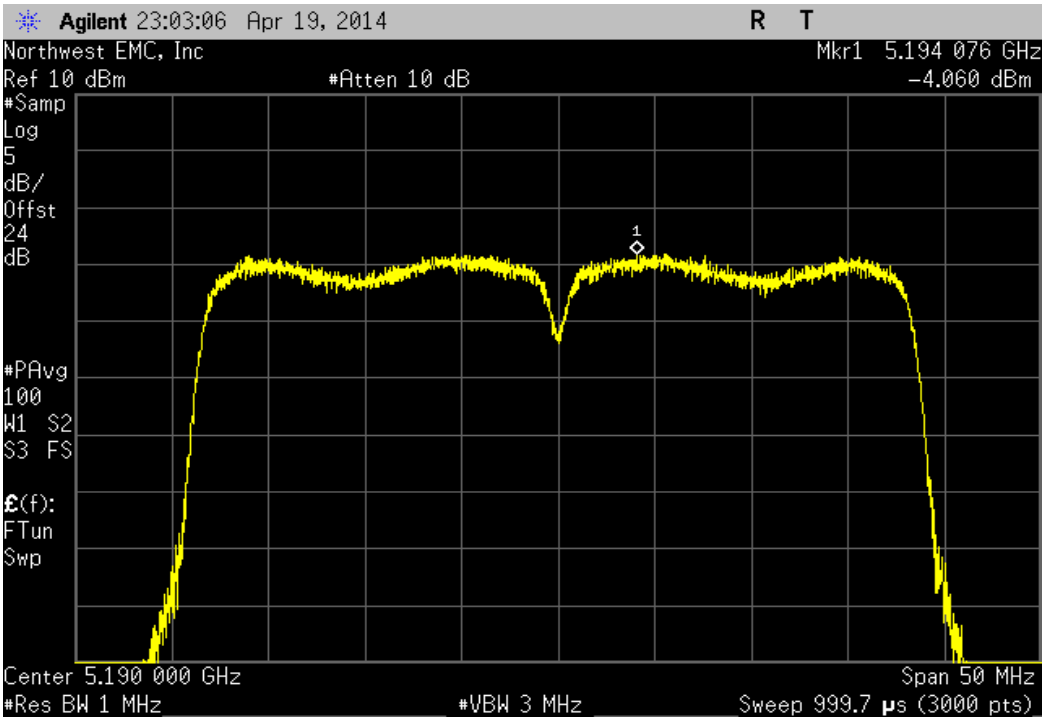


IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 140, High Channel 5700 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-1.006	11	Pass

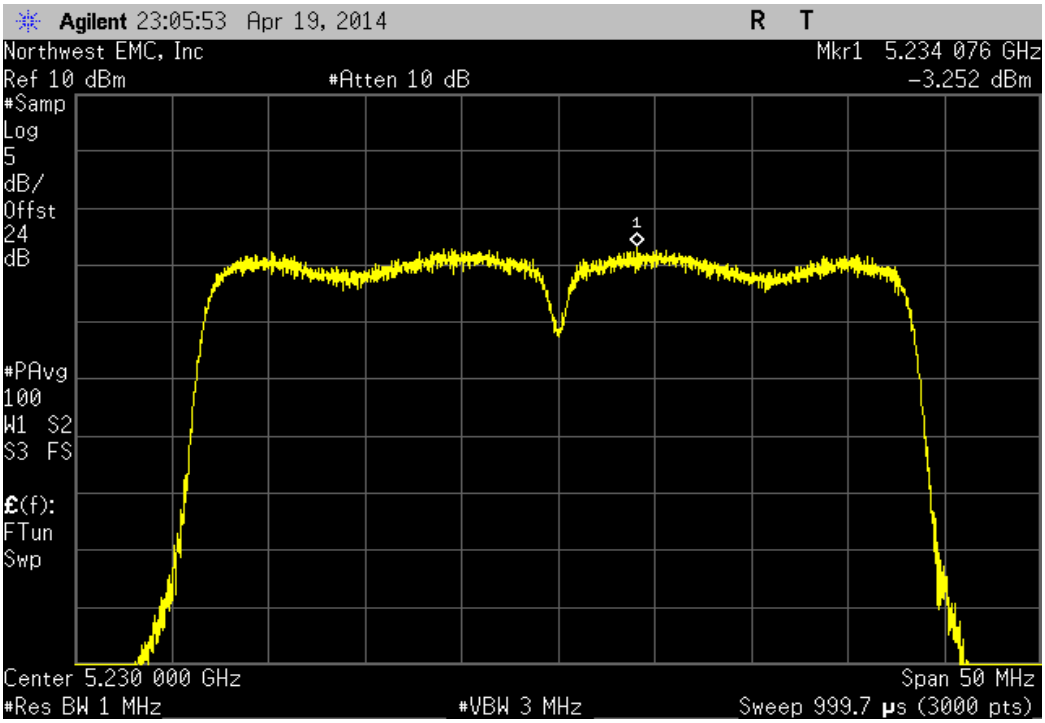


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 36/40, Low Channel 5190 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.06	4	Pass

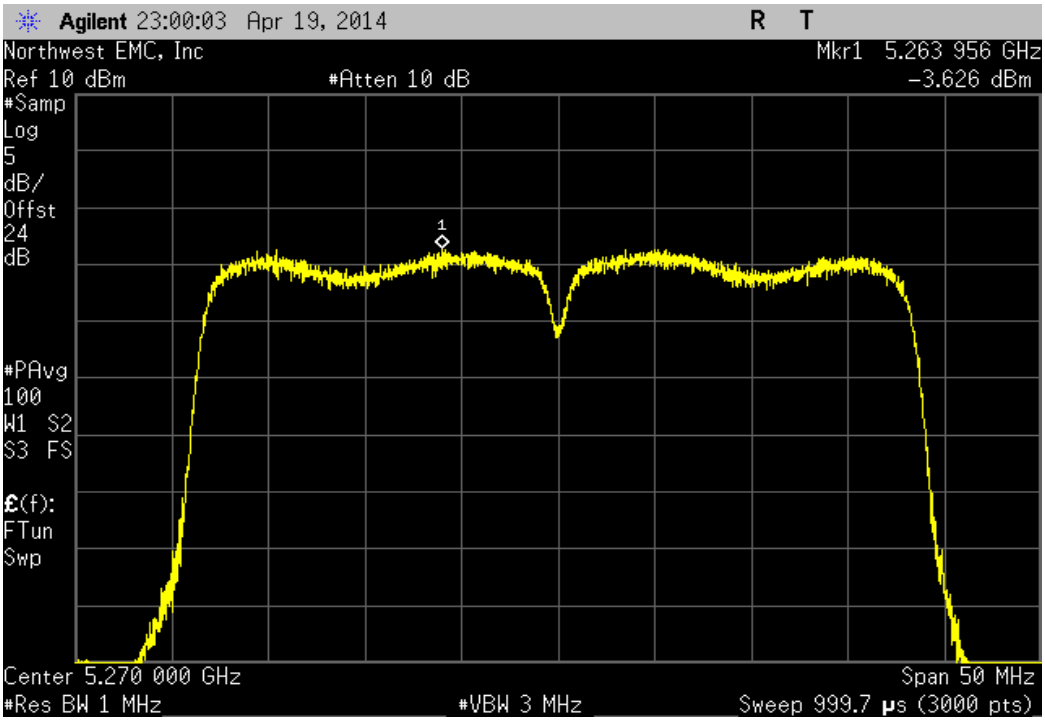


IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 44/48, High Channel 5230 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.252	4	Pass



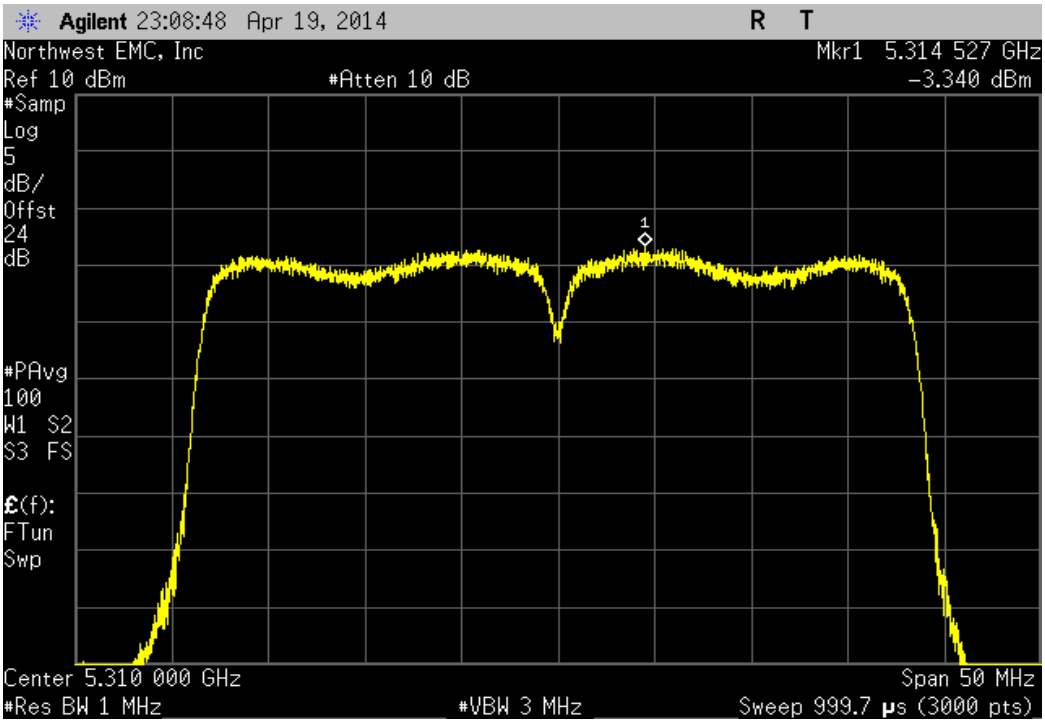
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 52/56, Low Channel 5270 MHz

				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.626	11	Pass



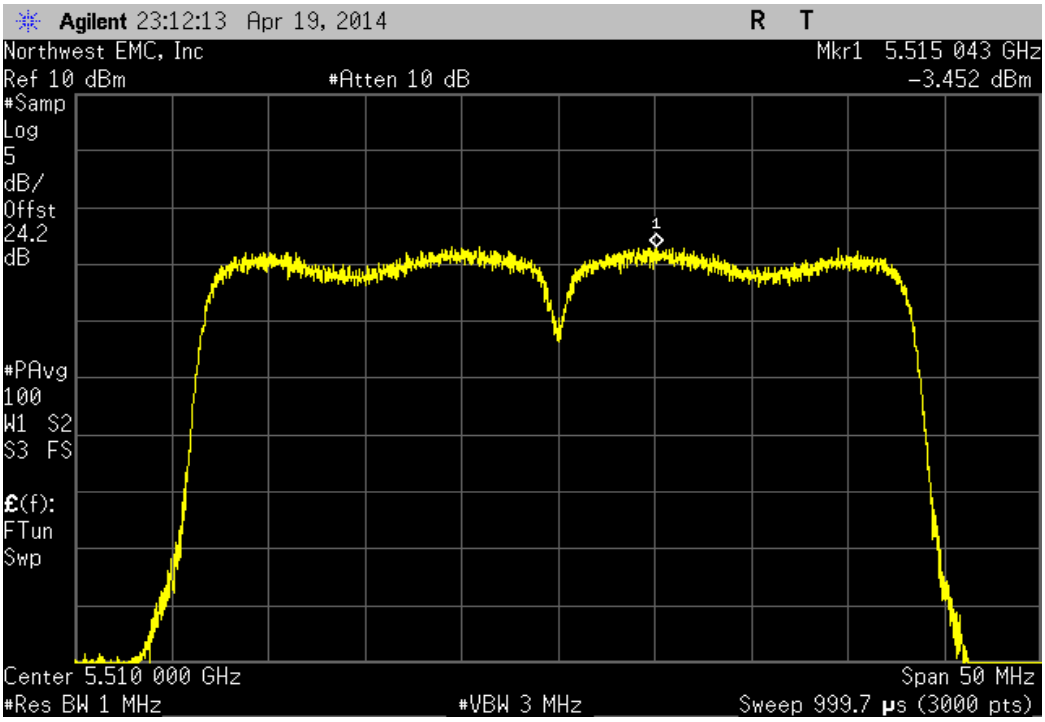
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 60/64, High Channel 5310 MHz

				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.34	11	Pass

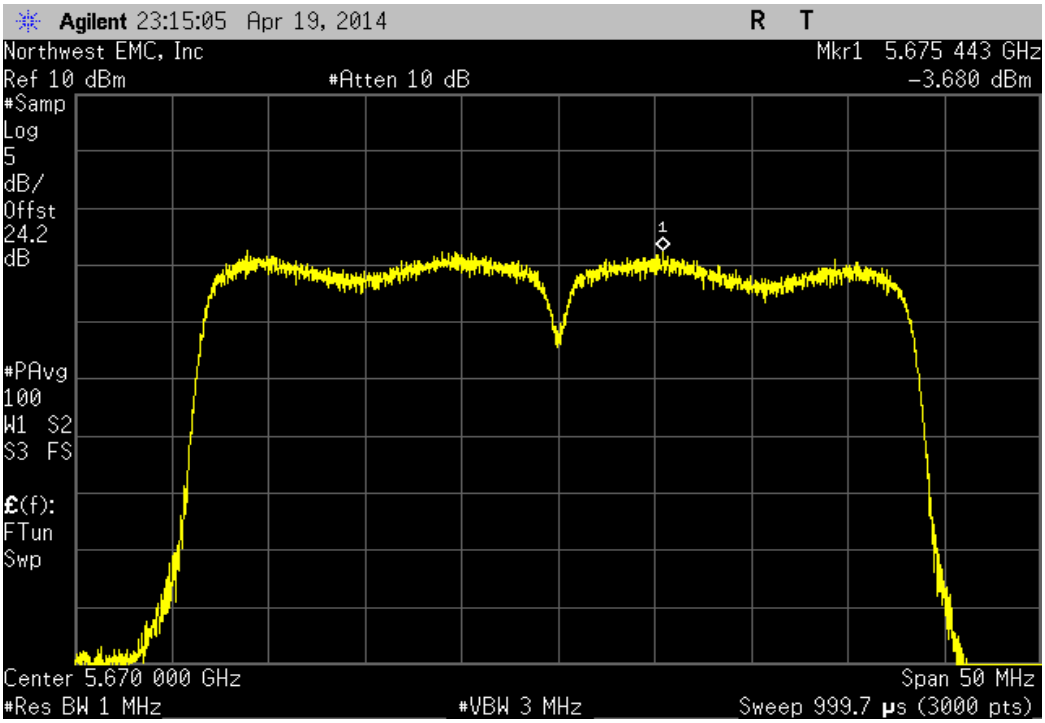


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 100/104, Low Channel 5510 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.452	11	Pass

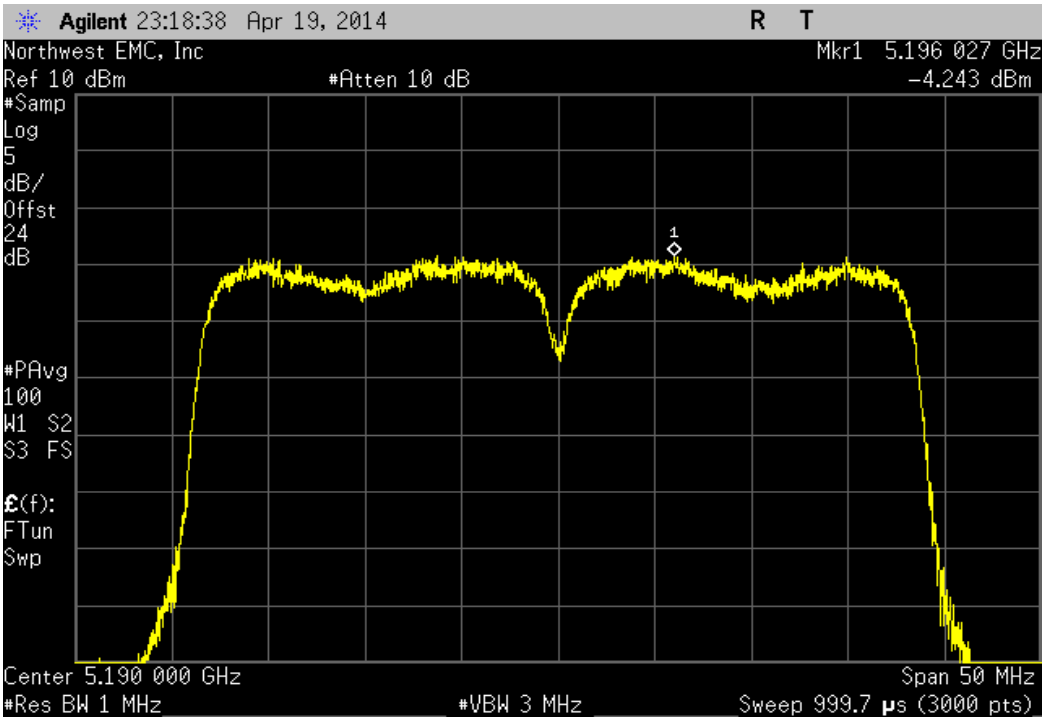


IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 132/136, High Channel 5670 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.68	11	Pass

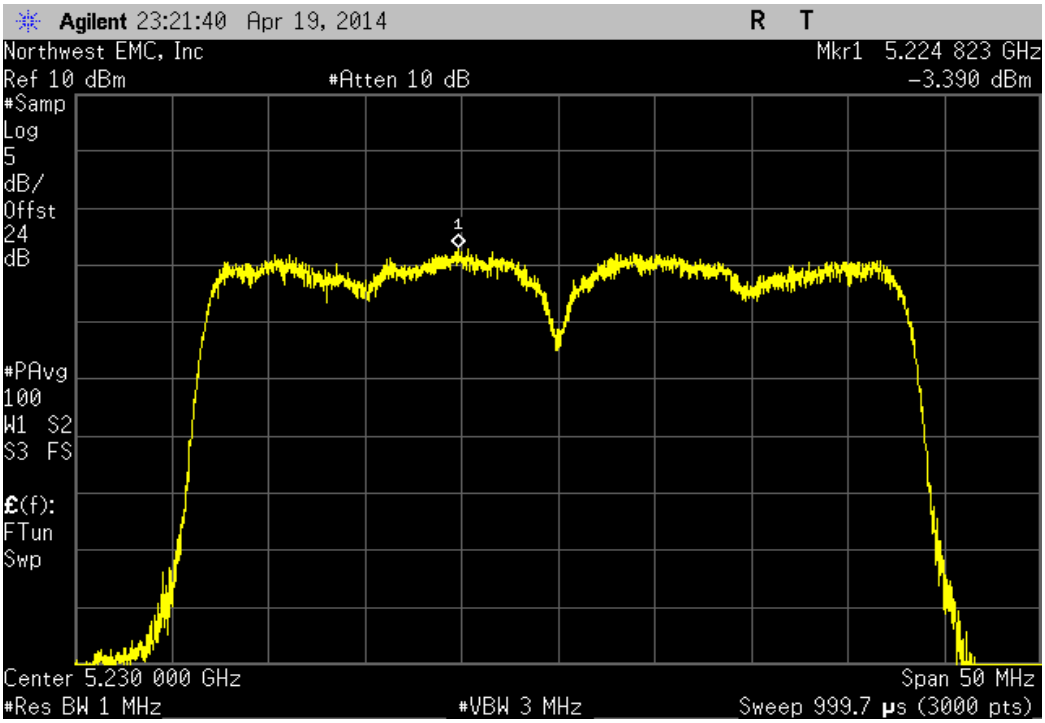


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 36/40, Low Channel 5190 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.243	4	Pass

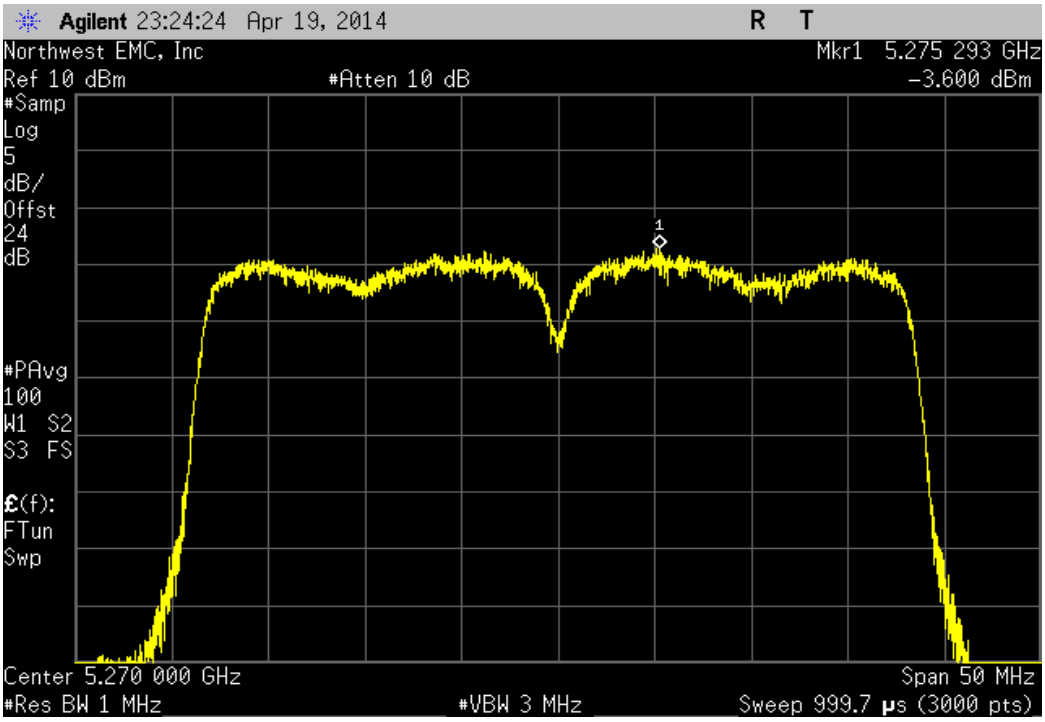


IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 44/48, High Channel 5230 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.39	4	Pass

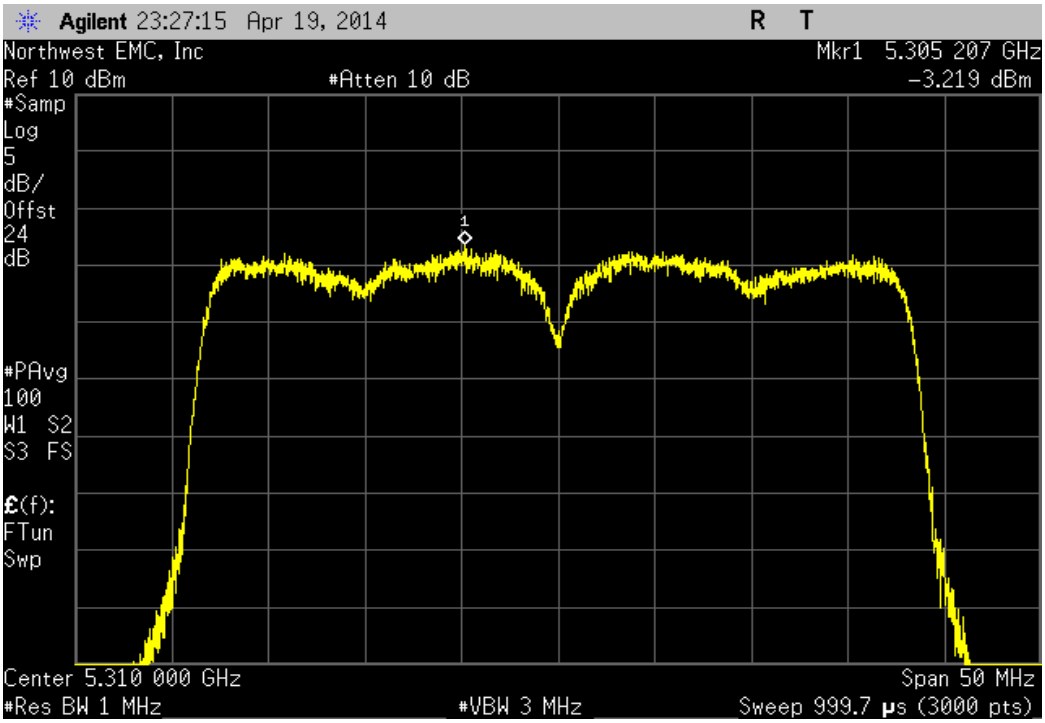


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 52/56, Low Channel 5270 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.6	11	Pass

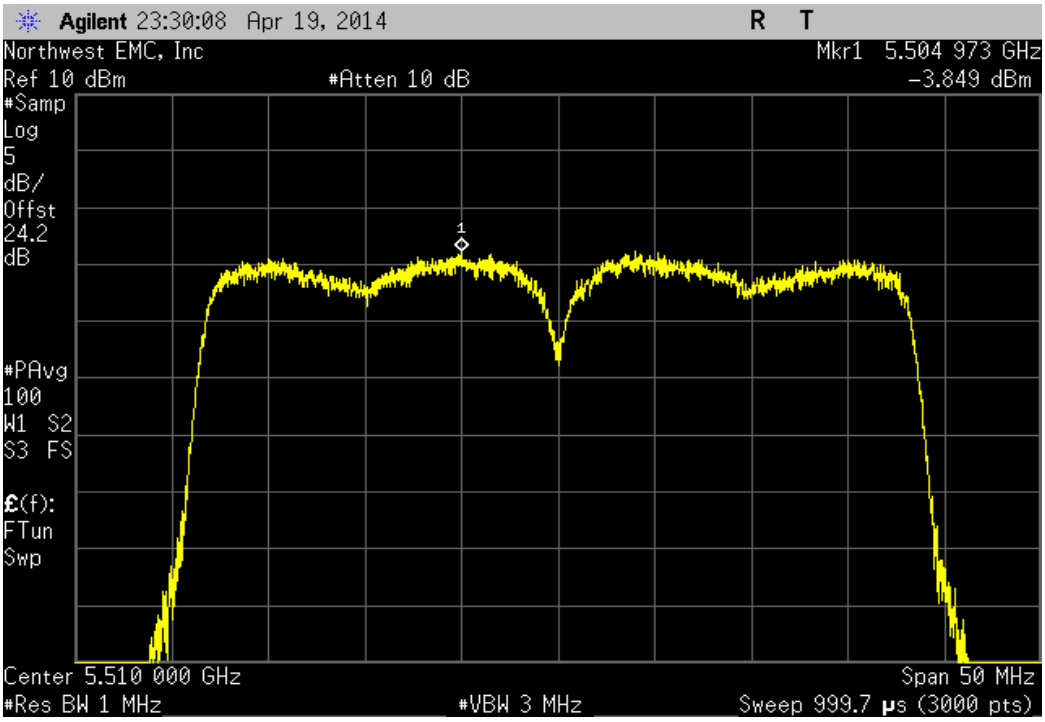


IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 60/64, High Channel 5310 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.219	11	Pass

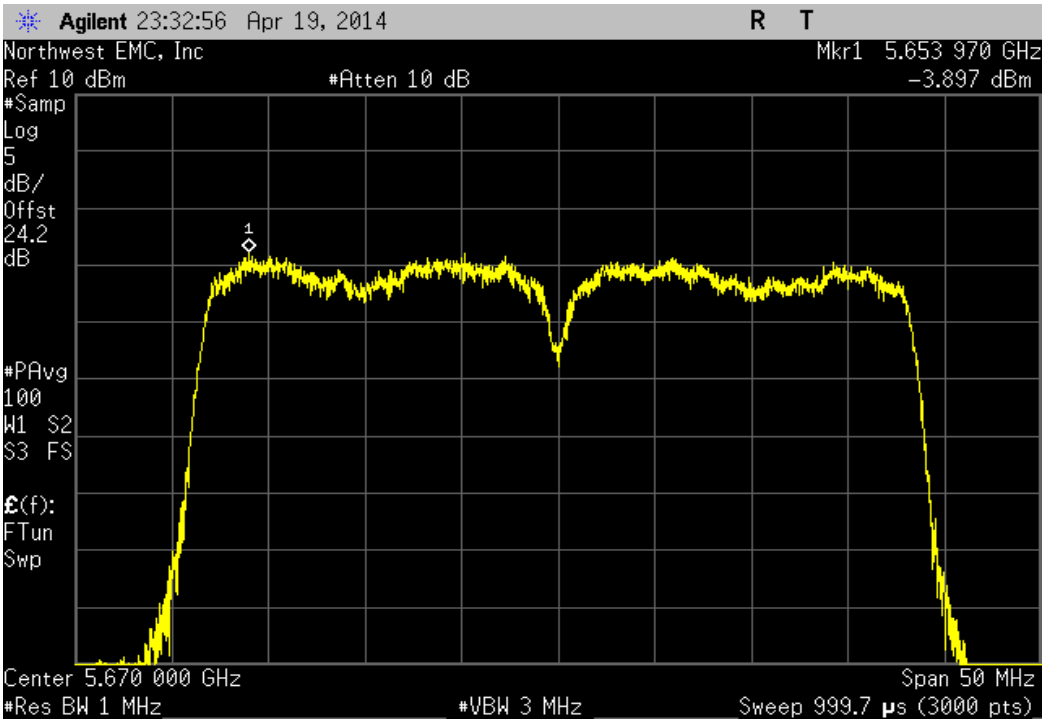


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 100/104, Low Channel 5510 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.849	11	Pass

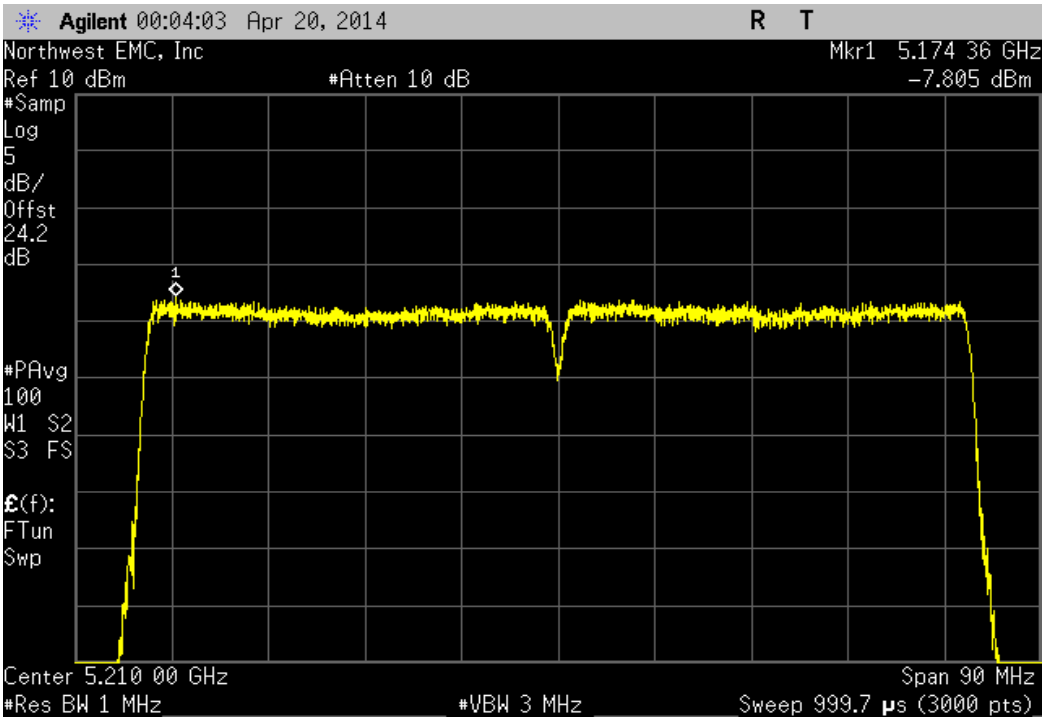


IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 132/136, High Channel 5670 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.897	11	Pass

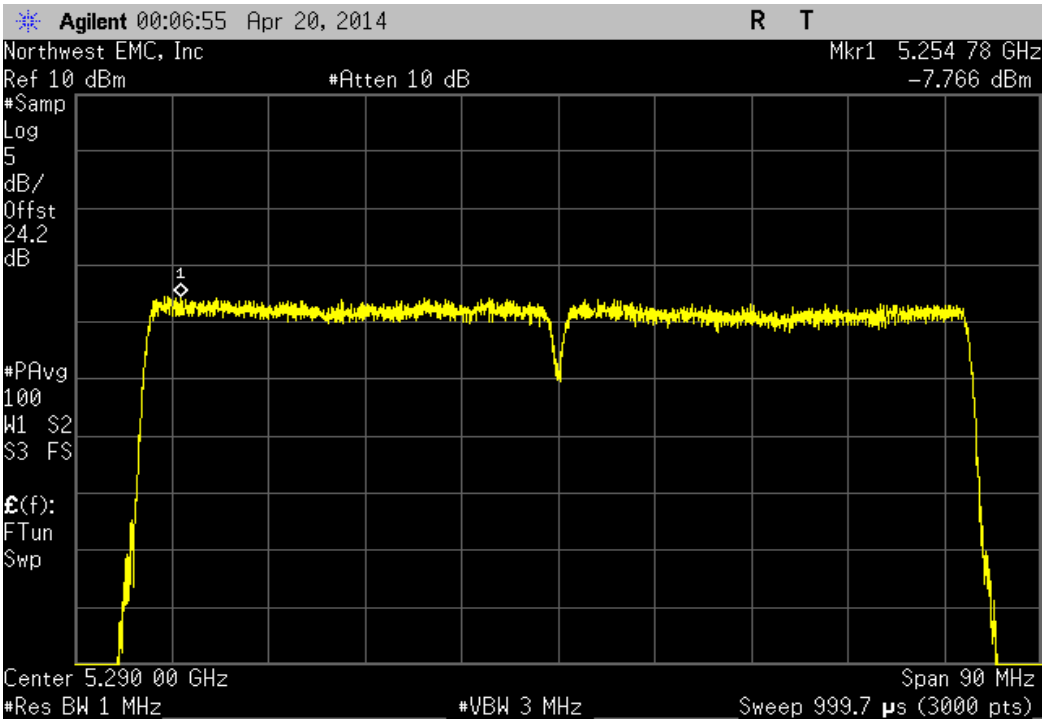


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 42, Low Channel 5210 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-7.805	4	Pass

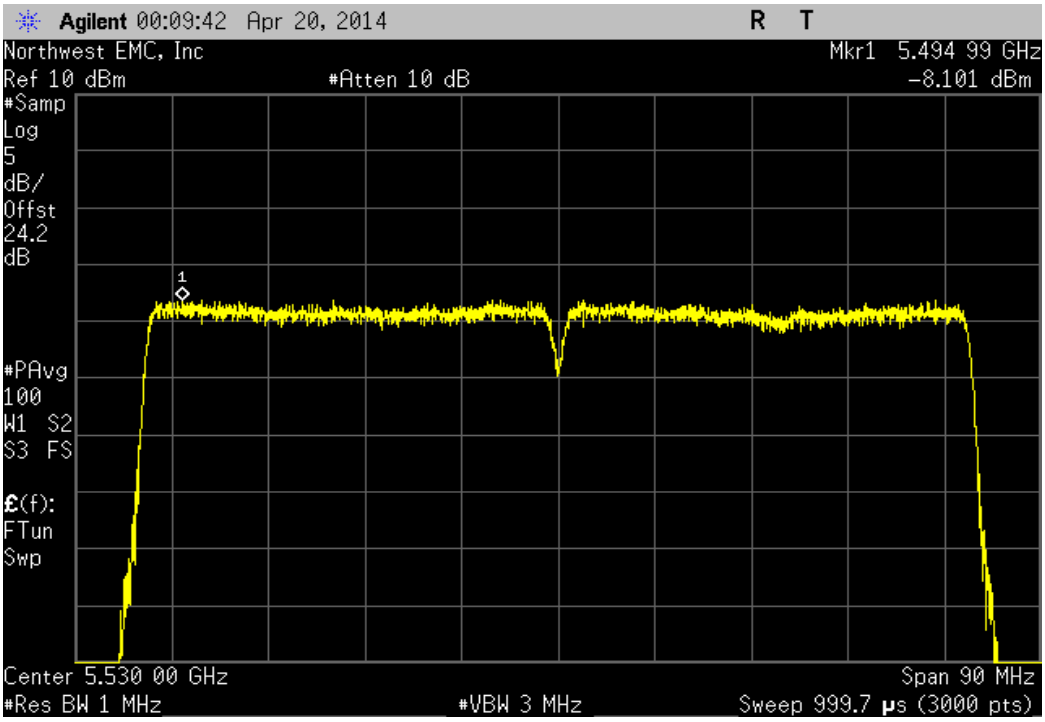


IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 58, High Channel 5290 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-7.766	11	Pass

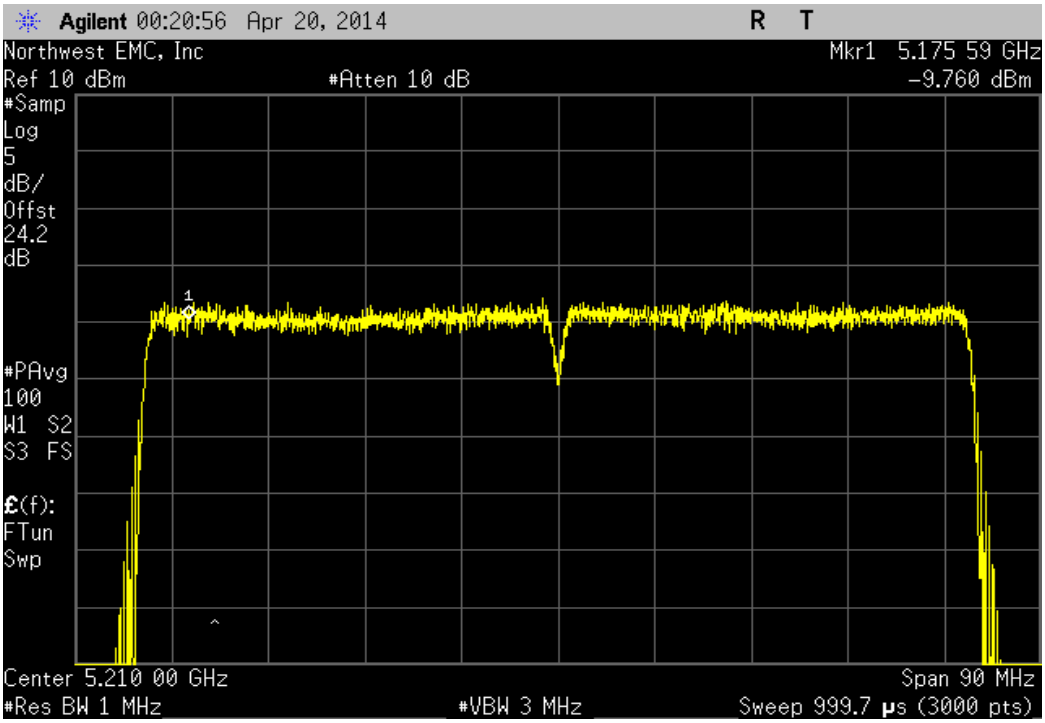


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 106, Low Channel 5530 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-8.101	11	Pass

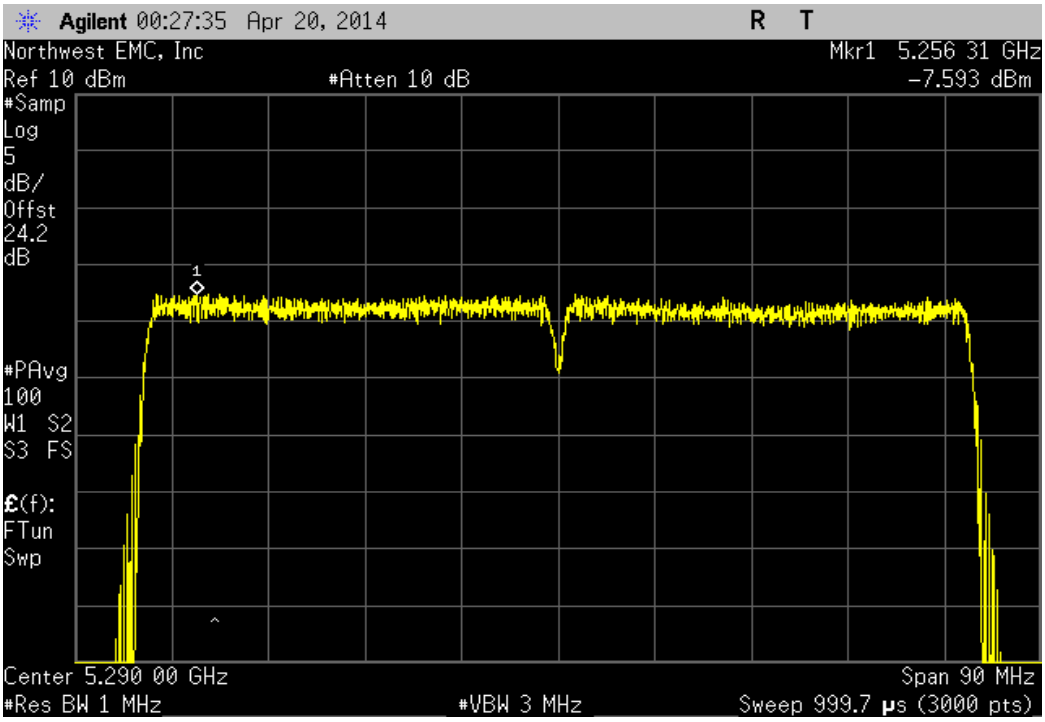


IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 42, Low Channel 5210 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-9.76	4	Pass

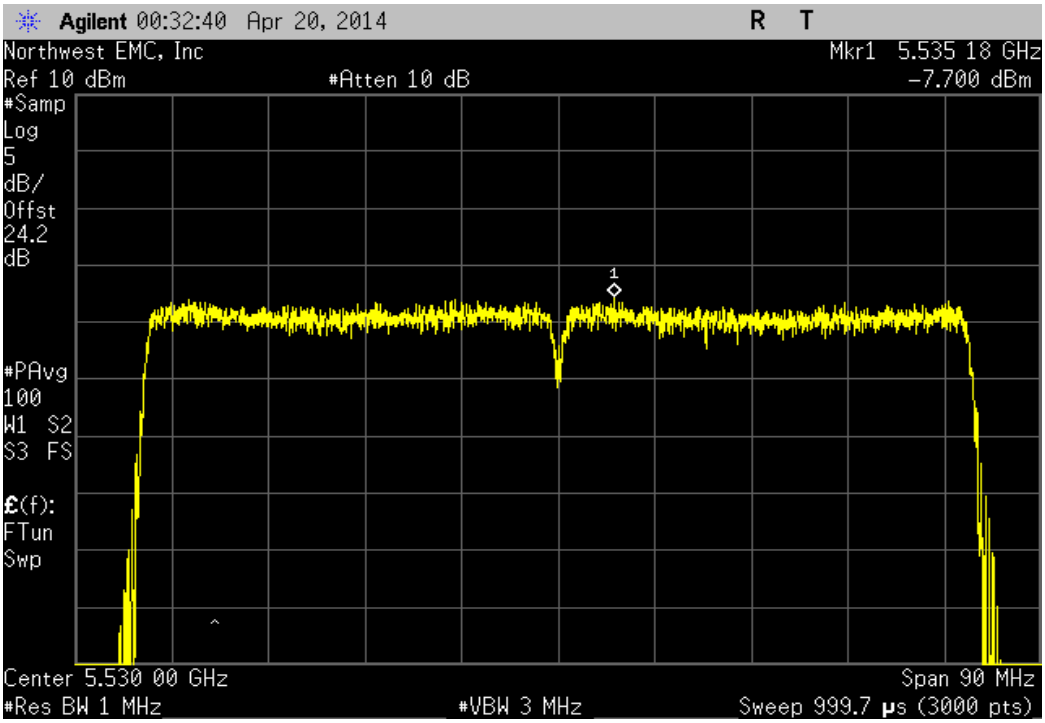


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 58, High Channel 5290 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-7.593	11	Pass



IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 106, Low Channel 5530 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-7.7	11	Pass



PEAK POWER SPECTRAL DENSITY

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval (mo.)
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Power Meter	Gigatronics	8651A	SPM	11/26/2013	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	36
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
MXG Analog Signal Generator	Agilent	N5181A	TIG	3/28/2014	36
Spectrum Analyzer	Agilent	E4446A	AAQ	1/21/2014	24

TEST DESCRIPTION

FCC KDB 789033 D01 General UNII Test Procedures Section E was followed. The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. The data rate(s) listed in the datasheet were tested. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input.

Prior to measuring peak power spectral density, the transmission pulse duration (T) was measured. The transmission pulse duration and the associated data are found elsewhere in this test report.

The spectrum analyzer settings were as follows:

- The span was set to encompass entire emission bandwidth (B), centered on the transmit channel.
- RBW = 1 MHz, VBW ≥ 3 MHz
- Sample detector was used because Method SA-1 Alternate was used to measure the Maximum Conducted Output Power.
- Trace average 100 traces in power averaging mode (not video averaging).

The peak power spectral density (PPSD) was determined to be the highest level found across the emission in any 1 MHz band after 100 sweeps of power averaging (not video averaging).

PEAK POWER SPECTRAL DENSITY

EUT:	Model 1631	Work Order:	MCSO1698
Serial Number:	006840341053	Date:	04/23/14
Customer:	Microsoft Corporation	Temperature:	22.3°C
Attendees:	None	Humidity:	32%
Project:	None	Barometric Pres.:	1014
Tested by:	Jared Ison	Power: 110VAC/60Hz	Job Site: EV06

TEST SPECIFICATIONS	Test Method
FCC 15.407:2014	ANSI C63.10:2009

COMMENTS

Modes of operation tested were client provided. Reference power level table for channel power setting.

DEVIATIONS FROM TEST STANDARD

None

Configuration #	6	Signature

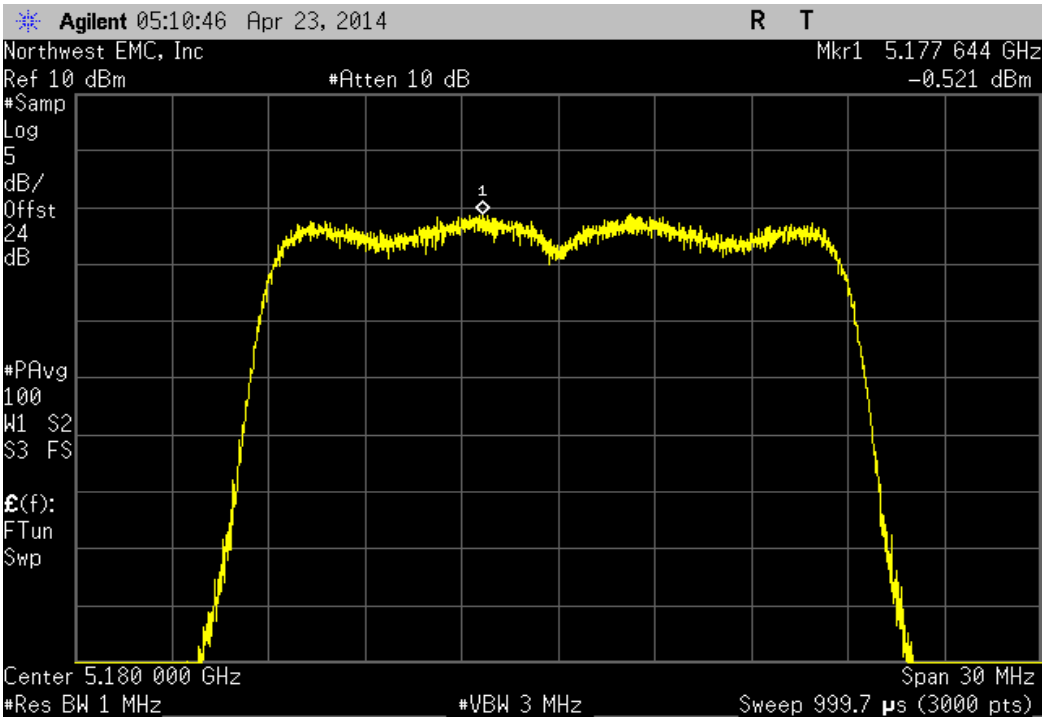
	Value (dBm / MHz)	Limit (dBm / MHz)	Result
Chain A			
IEEE 802.11(n)			
20 MHz			
HT, MCS8			
Ch. 36, Low Channel 5180MHz	-0.521	4	N/A
Ch. 48, High Channel 5240 MHz	-0.688	4	N/A
Ch. 52, Low Channel 5260 MHz	-0.196	11	N/A
Ch. 64, High Channel 5320 MHz	-0.344	11	N/A
Ch. 100, Low Channel 5500 MHz	-0.263	11	N/A
Ch. 116, Mid Channel 5580 MHz	-0.318	11	N/A
Ch. 140, High Channel 5700 MHz	-0.678	11	N/A
HT, MCS15			
Ch. 36, Low Channel 5180MHz	-1.187	4	N/A
Ch. 48, High Channel 5240 MHz	-1.095	4	N/A
Ch. 52, Low Channel 5260 MHz	-1.281	11	N/A
Ch. 64, High Channel 5320 MHz	0.04	11	N/A
Ch. 100, Low Channel 5500 MHz	-0.694	11	N/A
Ch. 116, Mid Channel 5580 MHz	-0.626	11	N/A
Ch. 140, High Channel 5700 MHz	-1.093	11	N/A
40 MHz			
HT, MCS8			
Ch. 36/40, Low Channel 5190 MHz	-4.031	4	N/A
Ch. 44/48, High Channel 5230 MHz	-3.841	4	N/A
Ch. 52/56, Low Channel 5270 MHz	-4.193	11	N/A
Ch. 60/64, High Channel 5310 MHz	-3.769	11	N/A
Ch. 100/104, Low Channel 5510 MHz	-4.246	11	N/A
Ch. 132/136, High Channel 5670 MHz	-4.059	11	N/A
HT, MCS15			
Ch. 36/40, Low Channel 5190 MHz	-4.891	4	N/A
Ch. 44/48, High Channel 5230 MHz	-4.367	4	N/A
Ch. 52/56, Low Channel 5270 MHz	-4.186	11	N/A
Ch. 60/64, High Channel 5310 MHz	-4.006	11	N/A
Ch. 100/104, Low Channel 5510 MHz	-4.264	11	N/A
Ch. 132/136, High Channel 5670 MHz	-4.306	11	N/A
IEEE 802.11(ac)			
20 MHz			
VHT, MCS0			
Ch. 36, Low Channel 5180MHz	-0.274	4	N/A
Ch. 48, High Channel 5240 MHz	-0.998	4	N/A
Ch. 52, Low Channel 5260 MHz	-0.806	11	N/A
Ch. 64, High Channel 5320 MHz	-0.743	11	N/A
Ch. 100, Low Channel 5500 MHz	-0.917	11	N/A
Ch. 116, Mid Channel 5580 MHz	-0.68	11	N/A
Ch. 140, High Channel 5700 MHz	-0.599	11	N/A
VHT, MCS8			
Ch. 36, Low Channel 5180MHz	-0.553	4	N/A
Ch. 48, High Channel 5240 MHz	-0.975	4	N/A
Ch. 52, Low Channel 5260 MHz	-0.548	11	N/A
Ch. 64, High Channel 5320 MHz	-0.433	11	N/A
Ch. 100, Low Channel 5500 MHz	-0.607	11	N/A
Ch. 116, Mid Channel 5580 MHz	-0.544	11	N/A
Ch. 140, High Channel 5700 MHz	-0.769	11	N/A
40 MHz			
VHT, MCS0			
Ch. 36/40, Low Channel 5190 MHz	-3.956	4	N/A
Ch. 44/48, High Channel 5230 MHz	-3.555	4	N/A
Ch. 52/56, Low Channel 5270 MHz	-3.961	11	N/A
Ch. 60/64, High Channel 5310 MHz	-3.386	11	N/A
Ch. 100/104, Low Channel 5510 MHz	-4.063	11	N/A
Ch. 132/136, High Channel 5670 MHz	-4.232	11	N/A
VHT, MCS9			
Ch. 36/40, Low Channel 5190 MHz	-4.309	4	N/A
Ch. 44/48, High Channel 5230 MHz	-4.303	4	N/A
Ch. 52/56, Low Channel 5270 MHz	-3.862	11	N/A
Ch. 60/64, High Channel 5310 MHz	-3.909	11	N/A
Ch. 100/104, Low Channel 5510 MHz	-4.291	11	N/A
Ch. 132/136, High Channel 5670 MHz	-3.942	11	N/A
80 MHz			
VHT, MCS0			
Ch. 42, Low Channel 5210 MHz	-8.623	4	N/A
Ch. 58, High Channel 5290 MHz	-8.515	11	N/A
Ch. 106, Low Channel 5530 MHz	-9.142	11	N/A
VHT, MCS9			
Ch. 42, Low Channel 5210 MHz	-7.903	4	N/A
Ch. 58, High Channel 5290 MHz	-7.992	11	N/A
Ch. 106, Low Channel 5530 MHz	-8.509	11	N/A
Chain B			
IEEE 802.11(n)			
20 MHz			
HT, MCS8			
Ch. 36, Low Channel 5180MHz	-0.359	4	N/A
Ch. 48, High Channel 5240 MHz	-0.955	4	N/A
Ch. 52, Low Channel 5260 MHz	-0.55	11	N/A
Ch. 64, High Channel 5320 MHz	-0.536	11	N/A
Ch. 100, Low Channel 5500 MHz	-0.148	11	N/A
Ch. 116, Mid Channel 5580 MHz	-0.713	11	N/A
Ch. 140, High Channel 5700 MHz	-0.969	11	N/A
HT, MCS15			
Ch. 36, Low Channel 5180MHz	-0.516	4	N/A
Ch. 48, High Channel 5240 MHz	-0.85	4	N/A
Ch. 52, Low Channel 5260 MHz	-1.442	11	N/A
Ch. 64, High Channel 5320 MHz	-0.63	11	N/A
Ch. 100, Low Channel 5500 MHz	-0.768	11	N/A

			Ch. 116, Mid Channel 5580 MHz				-0.714	11	N/A
			Ch. 140, High Channel 5700 MHz				-0.991	11	N/A
		40 MHz							
			HT, MCS8						
			Ch. 36/40, Low Channel 5190 MHz				-3.568	4	N/A
			Ch. 44/48, High Channel 5230 MHz				-4.377	4	N/A
			Ch. 52/56, Low Channel 5270 MHz				-3.79	11	N/A
			Ch. 60/64, High Channel 5310 MHz				-4.067	11	N/A
			Ch. 100/104, Low Channel 5510 MHz				-3.677	11	N/A
			Ch. 132/136, High Channel 5670 MHz				-3.737	11	N/A
			HT, MCS15						
			Ch. 36/40, Low Channel 5190 MHz				-3.047	4	N/A
			Ch. 44/48, High Channel 5230 MHz				-4.77	4	N/A
			Ch. 52/56, Low Channel 5270 MHz				-4.248	11	N/A
			Ch. 60/64, High Channel 5310 MHz				-4.492	11	N/A
			Ch. 100/104, Low Channel 5510 MHz				-4.622	11	N/A
			Ch. 132/136, High Channel 5670 MHz				-4.351	11	N/A
	IEEE 802.11(ac)								
		20 MHz							
			VHT, MCS0						
			Ch. 36, Low Channel 5180MHz				-0.344	4	N/A
			Ch. 48, High Channel 5240 MHz				-0.387	4	N/A
			Ch. 52, Low Channel 5260 MHz				-0.111	11	N/A
			Ch. 64, High Channel 5320 MHz				0.087	11	N/A
			Ch. 100, Low Channel 5500 MHz				-0.334	11	N/A
			Ch. 116, Mid Channel 5580 MHz				-0.23	11	N/A
			Ch. 140, High Channel 5700 MHz				-0.485	11	N/A
			VHT, MCS8						
			Ch. 36, Low Channel 5180MHz				-0.956	4	N/A
			Ch. 48, High Channel 5240 MHz				-1.29	4	N/A
			Ch. 52, Low Channel 5260 MHz				-0.706	11	N/A
			Ch. 64, High Channel 5320 MHz				-0.333	11	N/A
			Ch. 100, Low Channel 5500 MHz				-0.898	11	N/A
			Ch. 116, Mid Channel 5580 MHz				-0.39	11	N/A
			Ch. 140, High Channel 5700 MHz				-0.64	11	N/A
		40 MHz							
			VHT, MCS0						
			Ch. 36/40, Low Channel 5190 MHz				-4.447	4	N/A
			Ch. 44/48, High Channel 5230 MHz				-3.491	4	N/A
			Ch. 52/56, Low Channel 5270 MHz				-4.282	11	N/A
			Ch. 60/64, High Channel 5310 MHz				-3.699	11	N/A
			Ch. 100/104, Low Channel 5510 MHz				-4.025	11	N/A
			Ch. 132/136, High Channel 5670 MHz				-3.912	11	N/A
			VHT, MCS9						
			Ch. 36/40, Low Channel 5190 MHz				-4.204	4	N/A
			Ch. 44/48, High Channel 5230 MHz				-4.526	4	N/A
			Ch. 52/56, Low Channel 5270 MHz				-3.927	11	N/A
			Ch. 60/64, High Channel 5310 MHz				-4.285	11	N/A
			Ch. 100/104, Low Channel 5510 MHz				-3.489	11	N/A
			Ch. 132/136, High Channel 5670 MHz				-4.555	11	N/A
		80 MHz							
			VHT, MCS0						
			Ch. 42, Low Channel 5210 MHz				-8.754	4	N/A
			Ch. 58, High Channel 5290 MHz				-8.167	11	N/A
			Ch. 106, Low Channel 5530 MHz				-8.949	11	N/A
			VHT, MCS9						
			Ch. 42, Low Channel 5210 MHz				-8.867	4	N/A
			Ch. 58, High Channel 5290 MHz				-7.99	11	N/A
			Ch. 106, Low Channel 5530 MHz				-8.382	11	N/A
A IEEE 802.11(n)									
	20 MHz								
		5725 MHz - 5850 MHz Band			Value	Summing Factor	Summed Power	Limit	
		HT, MCS8			dBm/MHz	(dBm)	(dBm/MHz)	dBm/3kHz	Result
			Ch. 36, Low Channel 5180MHz		-0.521	3	2.479	4	Pass
			Ch. 48, High Channel 5240 MHz		-0.688	3	2.312	4	Pass
			Ch. 52, Low Channel 5260 MHz		-0.196	3	2.804	11	Pass
			Ch. 64, High Channel 5320 MHz		-0.344	3	2.656	11	Pass
			Ch. 100, Low Channel 5500 MHz		-0.263	3	2.737	11	Pass
			Ch. 116, Mid Channel 5580 MHz		-0.318	3	2.682	11	Pass
			Ch. 140, High Channel 5700 MHz		-0.678	3	2.322	11	Pass
			HT, MCS15						
			Ch. 36, Low Channel 5180MHz		-1.187	3	1.813	4	Pass
			Ch. 48, High Channel 5240 MHz		-1.095	3	1.905	4	Pass
			Ch. 52, Low Channel 5260 MHz		-1.281	3	1.719	11	Pass
			Ch. 64, High Channel 5320 MHz		0.04	3	3.04	11	Pass
			Ch. 100, Low Channel 5500 MHz		-0.694	3	2.306	11	Pass
			Ch. 116, Mid Channel 5580 MHz		-0.626	3	2.374	11	Pass
			Ch. 140, High Channel 5700 MHz		-1.093	3	1.907	11	Pass
	40 MHz								
		5725 MHz - 5850 MHz Band							
		HT, MCS8							
			Ch. 36/40, Low Channel 5190 MHz		-4.031	3	-1.031	4	Pass
			Ch. 44/48, High Channel 5230 MHz		-3.841	3	-0.841	4	Pass
			Ch. 52/56, Low Channel 5270 MHz		-4.193	3	-1.193	11	Pass
			Ch. 60/64, High Channel 5310 MHz		-3.769	3	-0.769	11	Pass
			Ch. 100/104, Low Channel 5510 MHz		-4.246	3	-1.246	11	Pass
			Ch. 132/136, High Channel 5670 MHz		-4.059	3	-1.059	11	Pass
			HT, MCS15						
			Ch. 36/40, Low Channel 5190 MHz		-4.891	3	-1.891	4	Pass
			Ch. 44/48, High Channel 5230 MHz		-4.367	3	-1.367	4	Pass
			Ch. 52/56, Low Channel 5270 MHz		-4.186	3	-1.186	11	Pass
			Ch. 60/64, High Channel 5310 MHz		-4.006	3	-1.006	11	Pass
			Ch. 100/104, Low Channel 5510 MHz		-4.264	3	-1.264	11	Pass
			Ch. 132/136, High Channel 5670 MHz		-4.306	3	-1.306	11	Pass
A IEEE 802.11(ac)									
	20 MHz								
		5725 MHz - 5850 MHz Band							
		VHT, MCS0							
			Ch. 36, Low Channel 5180MHz		-0.274	3	2.726	4	Pass
			Ch. 48, High Channel 5240 MHz		-0.998	3	2.002	4	Pass
			Ch. 52, Low Channel 5260 MHz		-0.806	3	2.194	11	Pass
			Ch. 64, High Channel 5320 MHz		-0.743	3	2.257	11	Pass
			Ch. 100, Low Channel 5500 MHz		-0.917	3	2.083	11	Pass
			Ch. 116, Mid Channel 5580 MHz		-0.68	3	2.32	11	Pass
			Ch. 140, High Channel 5700 MHz		-0.599	3	2.401	11	Pass
			VHT, MCS8						
			Ch. 36, Low Channel 5180MHz		-0.553	3	2.447	4	Pass
			Ch. 48, High Channel 5240 MHz		-0.975	3	2.025	4	Pass
			Ch. 52, Low Channel 5260 MHz		-0.548	3	2.452	11	Pass
			Ch. 64, High Channel 5320 MHz		-0.433	3	2.567	11	Pass
			Ch. 100, Low Channel 5500 MHz		-0.607	3	2.393	11	Pass
			Ch. 116, Mid Channel 5580 MHz		-0.544	3	2.456	11	Pass
			Ch. 140, High Channel 5700 MHz		-0.769	3	2.231	11	Pass
	40 MHz								
		5725 MHz - 5850 MHz Band							
		VHT, MCS0							
			Ch. 36/40, Low Channel 5190 MHz		-3.956	3	-0.956	4	Pass
			Ch. 44/48, High Channel 5230 MHz		-3.555	3	-0.555	4	Pass
			Ch. 52/56, Low Channel 5270 MHz		-3.961	3	-0.961	11	Pass
			Ch. 60/64, High Channel 5310 MHz		-3.386	3	-0.386	11	Pass

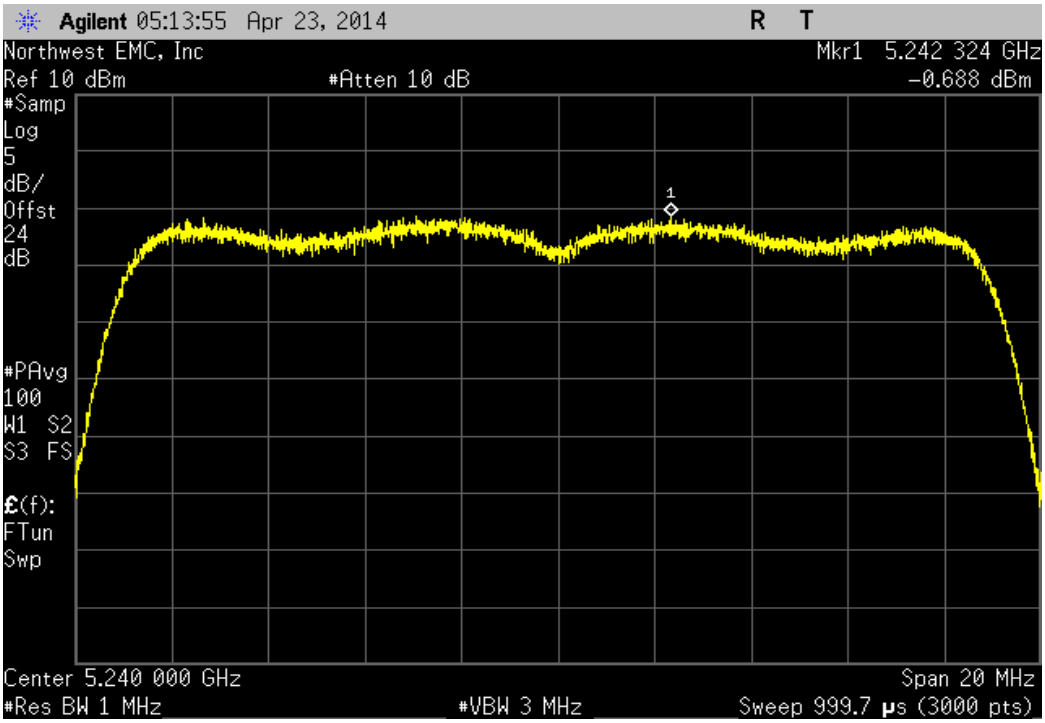
			Ch. 100/104, Low Channel 5510 MHz	-4.063	3	-1.063	11	Pass
			Ch. 132/136, High Channel 5670 MHz	-4.232	3	-1.232	11	Pass
			VHT, MCS9					
			Ch. 36/40, Low Channel 5190 MHz	-4.309	3	-1.309	4	Pass
			Ch. 44/48, High Channel 5230 MHz	-4.303	3	-1.303	4	Pass
			Ch. 52/56, Low Channel 5270 MHz	-3.862	3	-0.862	11	Pass
			Ch. 60/64, High Channel 5310 MHz	-3.909	3	-0.909	11	Pass
			Ch. 100/104, Low Channel 5510 MHz	-4.291	3	-1.291	11	Pass
			Ch. 132/136, High Channel 5670 MHz	-3.942	3	-0.942	11	Pass
	80 MHz							
		5725 MHz - 5850 MHz Band						
			VHT, MCS0					
			Ch. 42, Low Channel 5210 MHz	-8.623	3	-5.623	4	Pass
			Ch. 58, High Channel 5290 MHz	-8.515	3	-5.515	11	Pass
			Ch. 106, Low Channel 5530 MHz	-9.142	3	-6.142	11	Pass
			VHT, MCS9					
			Ch. 42, Low Channel 5210 MHz	-7.903	3	-4.903	4	Pass
			Ch. 58, High Channel 5290 MHz	-7.992	3	-4.992	11	Pass
			Ch. 106, Low Channel 5530 MHz	-8.509	3	-5.509	11	Pass
B IEEE 802.11(n)								
	20 MHz							
		5725 MHz - 5850 MHz Band						
			HT, MCS8					
			Ch. 36, Low Channel 5180MHz	-0.359	3	2.641	4	Pass
			Ch. 48, High Channel 5240 MHz	-0.955	3	2.045	4	Pass
			Ch. 52, Low Channel 5260 MHz	-0.55	3	2.45	11	Pass
			Ch. 64, High Channel 5320 MHz	-0.536	3	2.464	11	Pass
			Ch. 100, Low Channel 5500 MHz	-0.148	3	2.852	11	Pass
			Ch. 116, Mid Channel 5580 MHz	-0.713	3	2.287	11	Pass
			Ch. 140, High Channel 5700 MHz	-0.969	3	2.031	11	Pass
			HT, MCS15					
			Ch. 36, Low Channel 5180MHz	-0.516	3	2.484	4	Pass
			Ch. 48, High Channel 5240 MHz	-0.85	3	2.15	4	Pass
			Ch. 52, Low Channel 5260 MHz	-1.442	3	1.558	11	Pass
			Ch. 64, High Channel 5320 MHz	-0.63	3	2.37	11	Pass
			Ch. 100, Low Channel 5500 MHz	-0.768	3	2.232	11	Pass
			Ch. 116, Mid Channel 5580 MHz	-0.714	3	2.286	11	Pass
			Ch. 140, High Channel 5700 MHz	-0.991	3	2.009	11	Pass
	40 MHz							
		5725 MHz - 5	HT, MCS8					
			Ch. 36/40, Low Channel 5190 MHz	-3.568	3	-0.568	4	Pass
			Ch. 44/48, High Channel 5230 MHz	-4.377	3	-1.377	4	Pass
			Ch. 52/56, Low Channel 5270 MHz	-3.79	3	-0.79	11	Pass
			Ch. 60/64, High Channel 5310 MHz	-4.067	3	-1.067	11	Pass
			Ch. 100/104, Low Channel 5510 MHz	-3.677	3	-0.677	11	Pass
			Ch. 132/136, High Channel 5670 MHz	-3.737	3	-0.737	11	Pass
			HT, MCS15					
			Ch. 36/40, Low Channel 5190 MHz	-3.047	3	-0.047	4	Pass
			Ch. 44/48, High Channel 5230 MHz	-4.77	3	-1.77	4	Pass
			Ch. 52/56, Low Channel 5270 MHz	-4.248	3	-1.248	11	Pass
			Ch. 60/64, High Channel 5310 MHz	-4.492	3	-1.492	11	Pass
			Ch. 100/104, Low Channel 5510 MHz	-4.622	3	-1.622	11	Pass
			Ch. 132/136, High Channel 5670 MHz	-4.351	3	-1.351	11	Pass
B IEEE 802.11(ac)								
	20 MHz							
		5725 MHz - 5850 MHz Band						
			VHT, MCS0					
			Ch. 36, Low Channel 5180MHz	-0.344	3	2.656	4	Pass
			Ch. 48, High Channel 5240 MHz	-0.387	3	2.613	4	Pass
			Ch. 52, Low Channel 5260 MHz	-0.111	3	2.889	11	Pass
			Ch. 64, High Channel 5320 MHz	0.087	3	3.087	11	Pass
			Ch. 100, Low Channel 5500 MHz	-0.334	3	2.666	11	Pass
			Ch. 116, Mid Channel 5580 MHz	-0.23	3	2.77	11	Pass
			Ch. 140, High Channel 5700 MHz	-0.485	3	2.515	11	Pass
			VHT, MCS8					
			Ch. 36, Low Channel 5180MHz	-0.956	3	2.044	4	Pass
			Ch. 48, High Channel 5240 MHz	-1.29	3	1.71	4	Pass
			Ch. 52, Low Channel 5260 MHz	-0.706	3	2.294	11	Pass
			Ch. 64, High Channel 5320 MHz	-0.333	3	2.667	11	Pass
			Ch. 100, Low Channel 5500 MHz	-0.898	3	2.102	11	Pass
			Ch. 116, Mid Channel 5580 MHz	-0.39	3	2.61	11	Pass
			Ch. 140, High Channel 5700 MHz	-0.64	3	2.36	11	Pass
	40 MHz							
		5725 MHz - 5850 MHz Band						
			VHT, MCS0					
			Ch. 36/40, Low Channel 5190 MHz	-4.447	3	-1.447	4	Pass
			Ch. 44/48, High Channel 5230 MHz	-3.491	3	-0.491	4	Pass
			Ch. 52/56, Low Channel 5270 MHz	-4.282	3	-1.282	11	Pass
			Ch. 60/64, High Channel 5310 MHz	-3.699	3	-0.699	11	Pass
			Ch. 100/104, Low Channel 5510 MHz	-4.025	3	-1.025	11	Pass
			Ch. 132/136, High Channel 5670 MHz	-3.912	3	-0.912	11	Pass
			VHT, MCS9					
			Ch. 36/40, Low Channel 5190 MHz	-4.204	3	-1.204	4	Pass
			Ch. 44/48, High Channel 5230 MHz	-4.526	3	-1.526	4	Pass
			Ch. 52/56, Low Channel 5270 MHz	-3.927	3	-0.927	11	Pass
			Ch. 60/64, High Channel 5310 MHz	-4.285	3	-1.285	11	Pass
			Ch. 100/104, Low Channel 5510 MHz	-3.489	3	-0.489	11	Pass
			Ch. 132/136, High Channel 5670 MHz	-4.555	3	-1.555	11	Pass
	80 MHz							
		5725 MHz - 5850 MHz Band						
			VHT, MCS0					
			Ch. 42, Low Channel 5210 MHz	-8.754	3	-5.754	4	Pass
			Ch. 58, High Channel 5290 MHz	-8.167	3	-5.167	11	Pass
			Ch. 106, Low Channel 5530 MHz	-8.949	3	-5.949	11	Pass
			VHT, MCS9					
			Ch. 42, Low Channel 5210 MHz	-8.867	3	-5.867	4	Pass
			Ch. 58, High Channel 5290 MHz	-7.99	3	-4.99	11	Pass
			Ch. 106, Low Channel 5530 MHz	-8.382	3	-5.382	11	Pass

PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.521	4	Pass

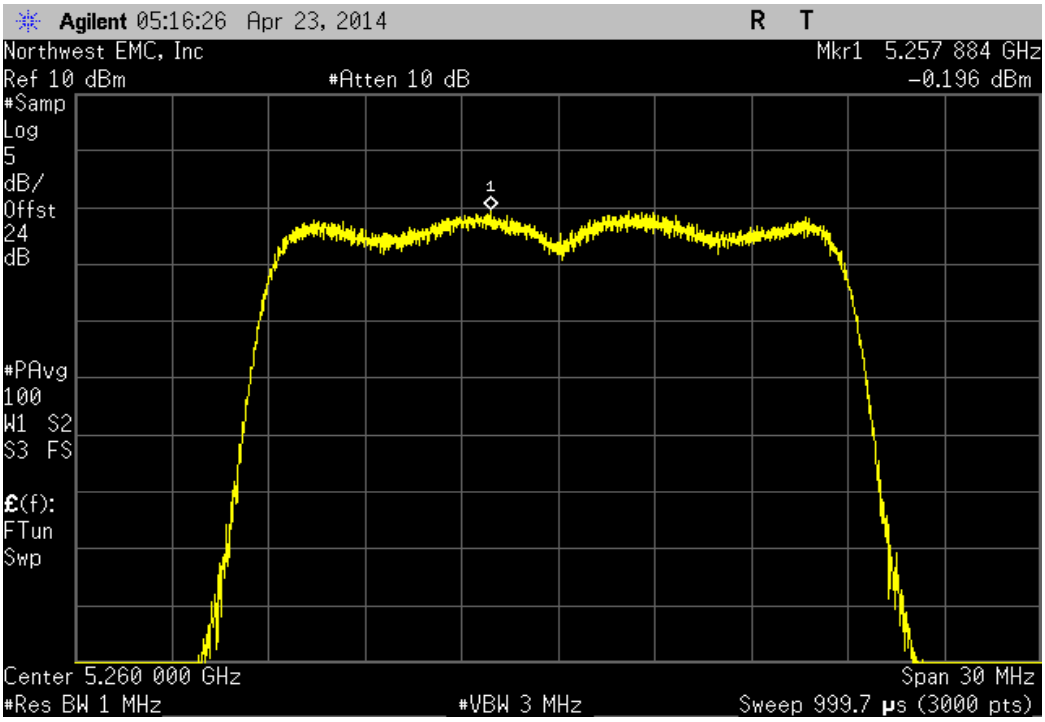


Chain A, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 48, High Channel 5240 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.688	4	Pass

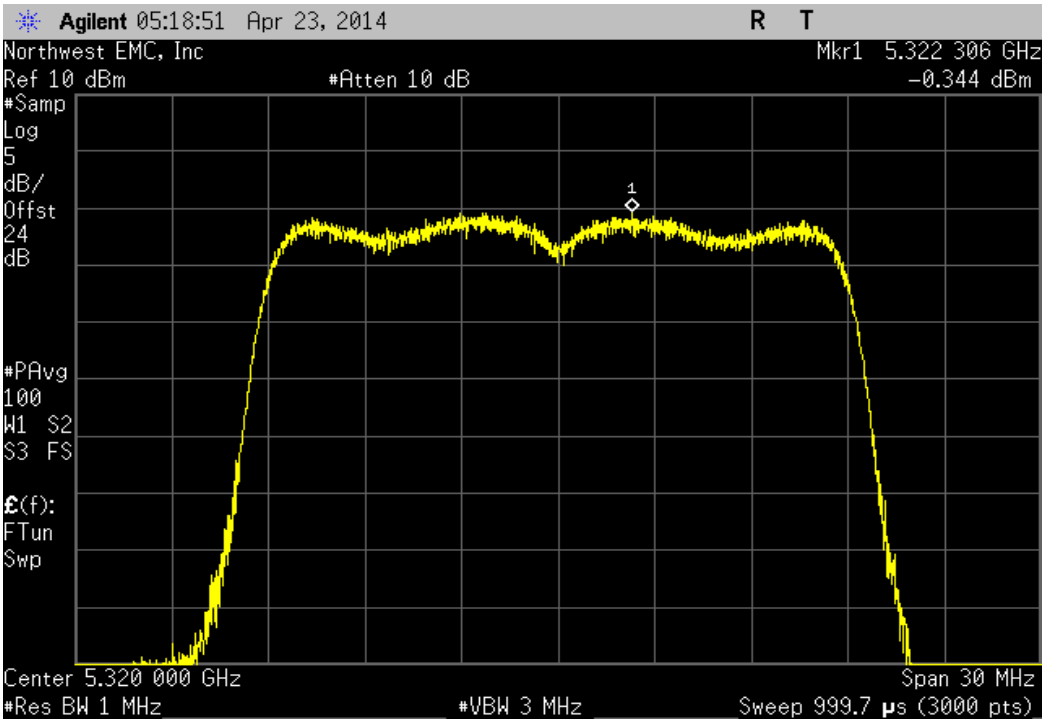


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.196	11	Pass

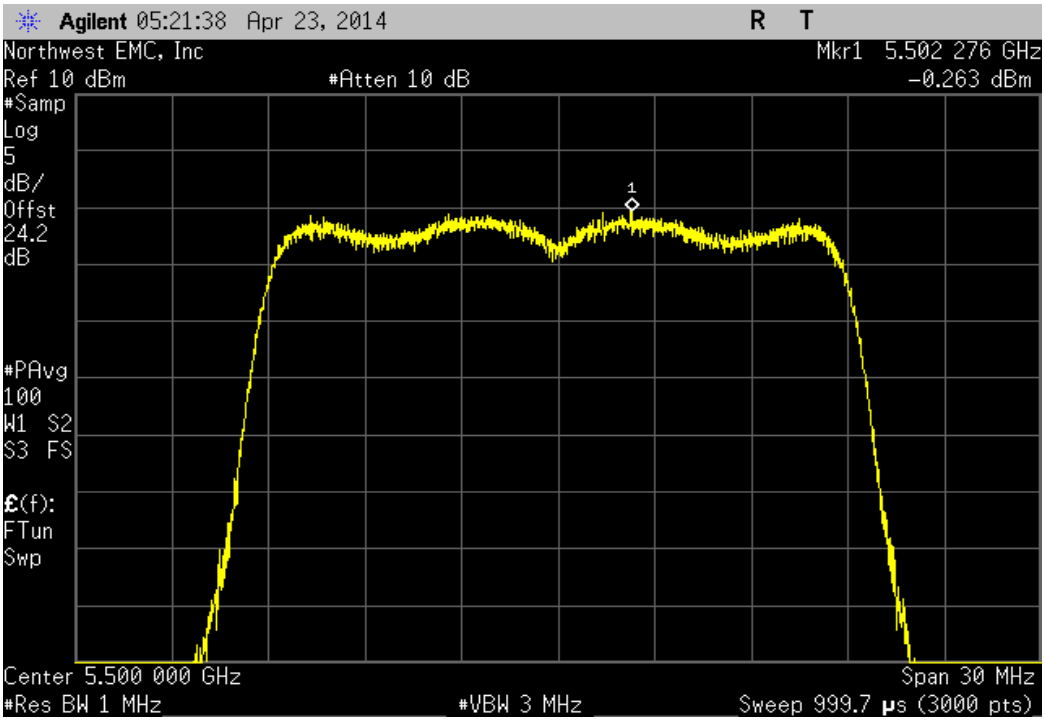


Chain A, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 64, High Channel 5320 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.344	11	Pass

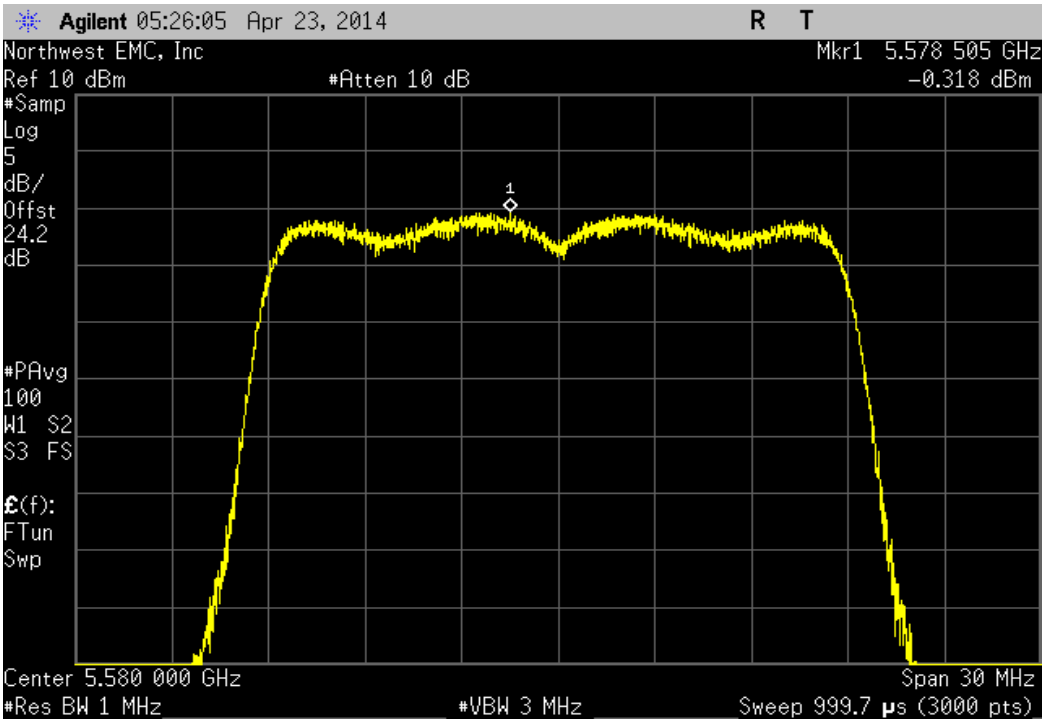


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 100, Low Channel 5500 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.263	11	Pass

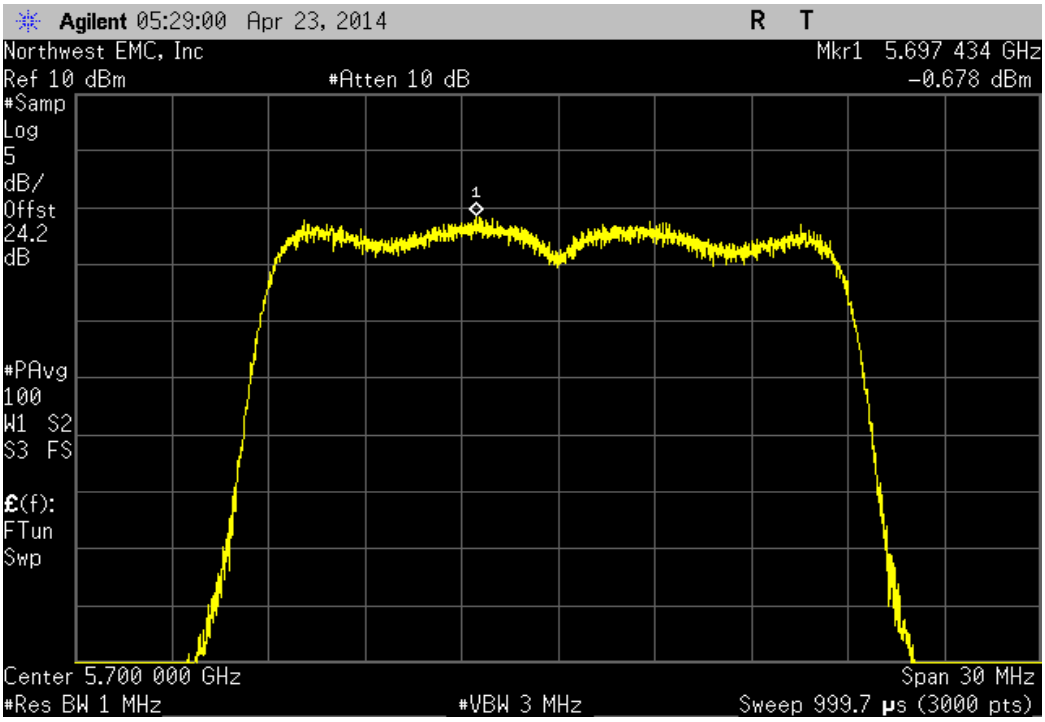


Chain A, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 116, Mid Channel 5580 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.318	11	Pass

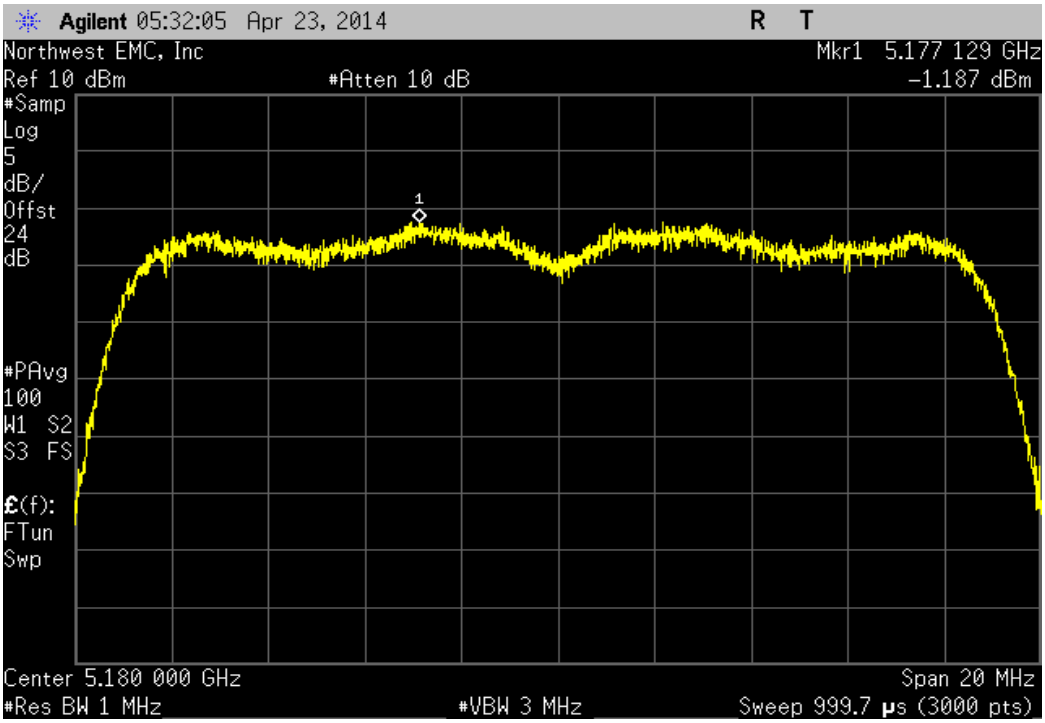


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 140, High Channel 5700 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.678	11	Pass

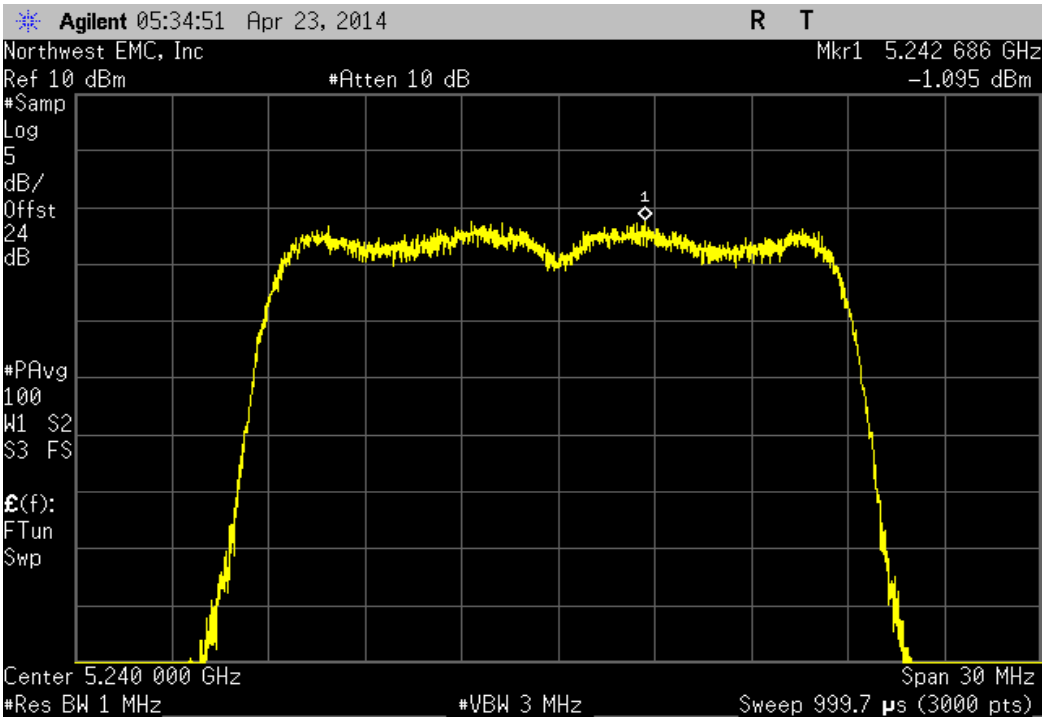


Chain A, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-1.187	4	Pass

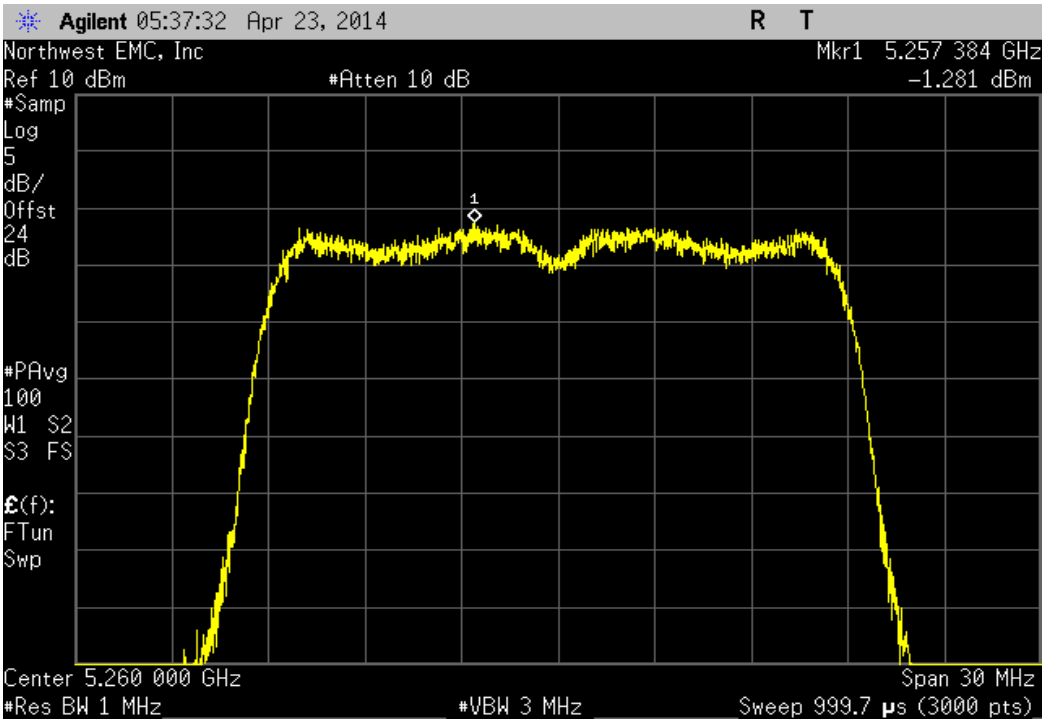


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 48, High Channel 5240 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-1.095	4	Pass

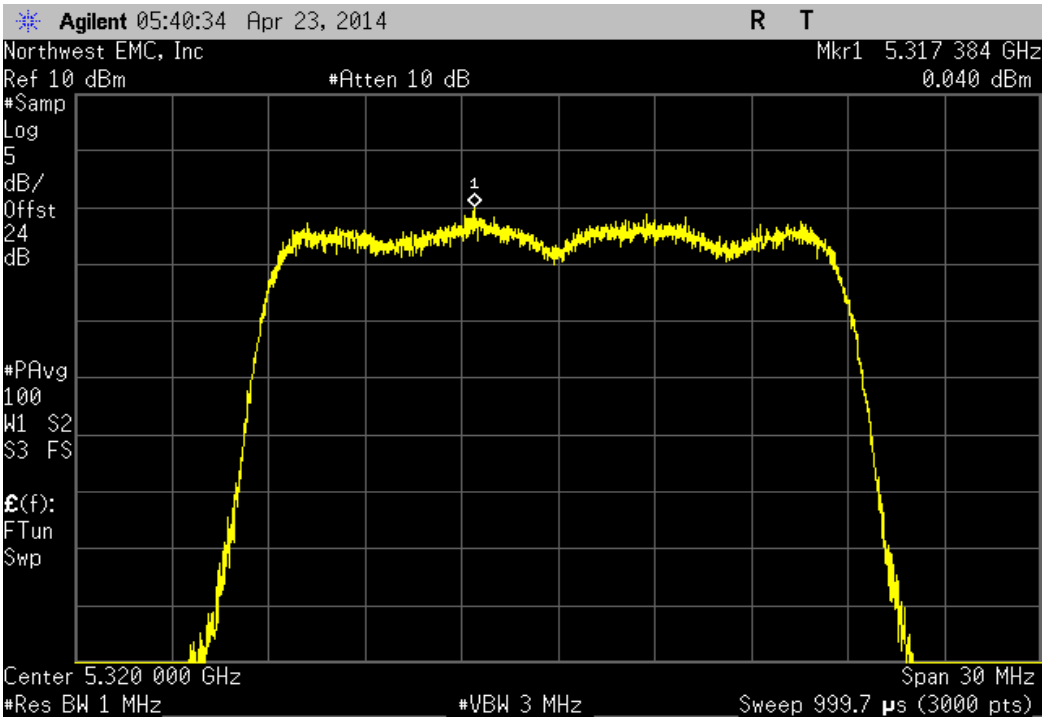


Chain A, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-1.281	11	Pass

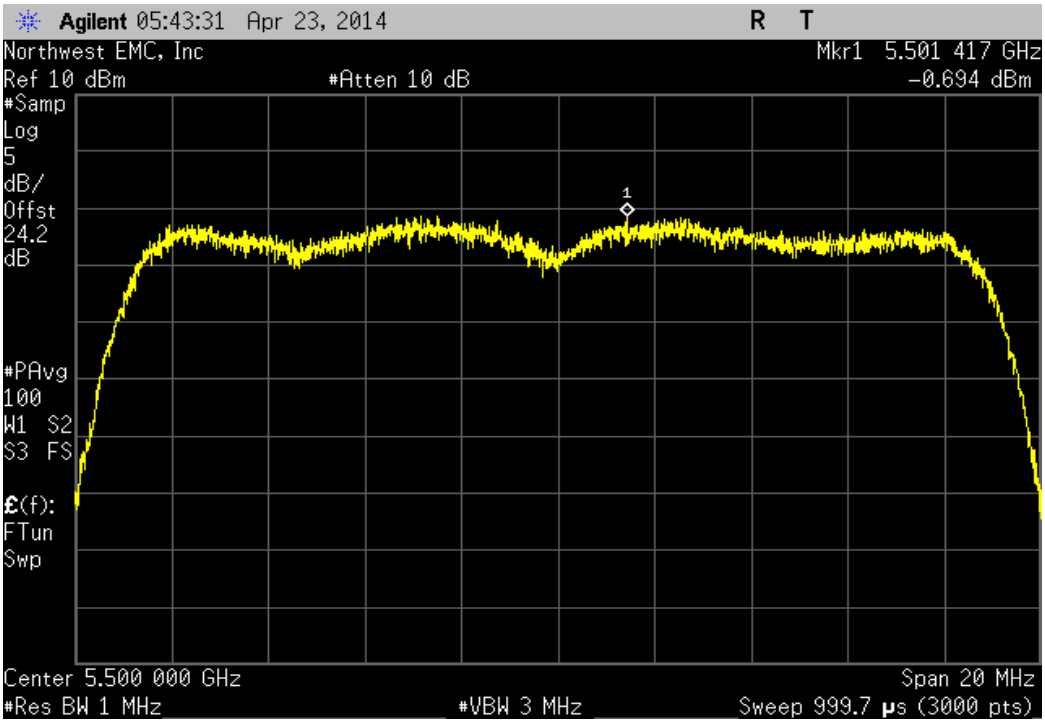


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 64, High Channel 5320 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.04	11	Pass

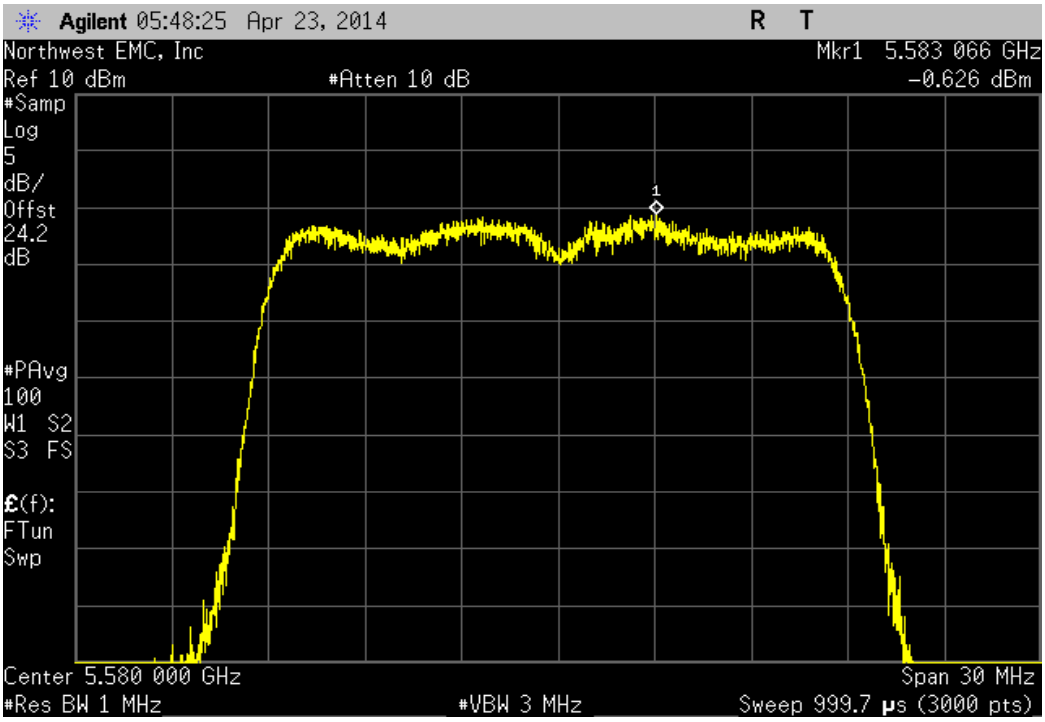


Chain A, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 100, Low Channel 5500 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.694	11	Pass

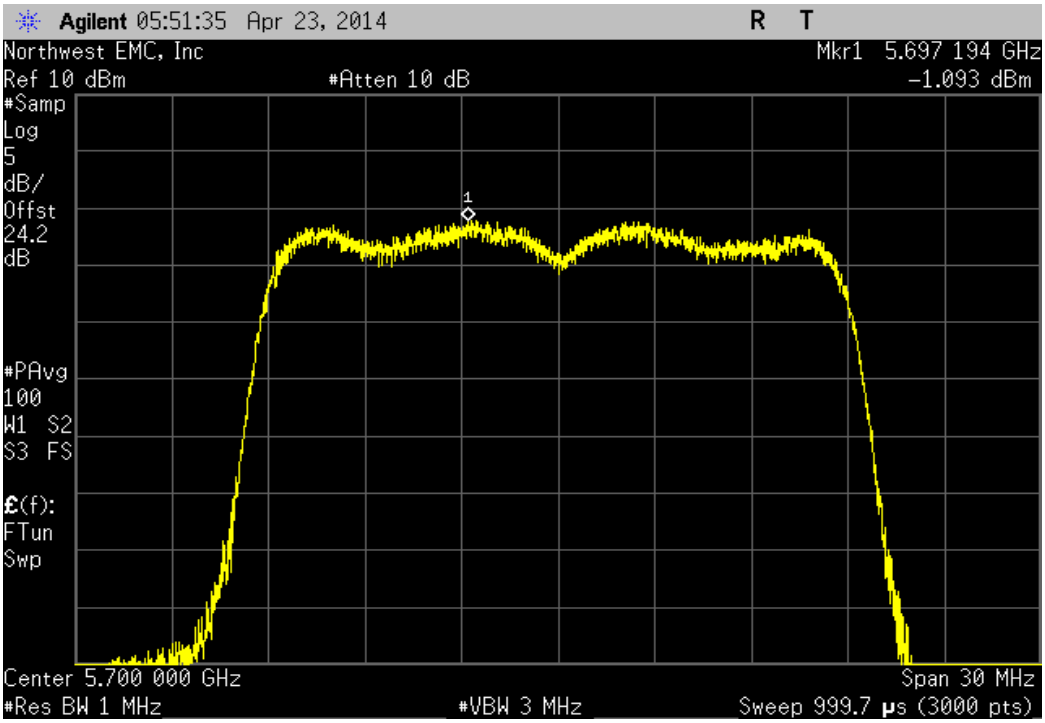


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 116, Mid Channel 5580 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.626	11	Pass

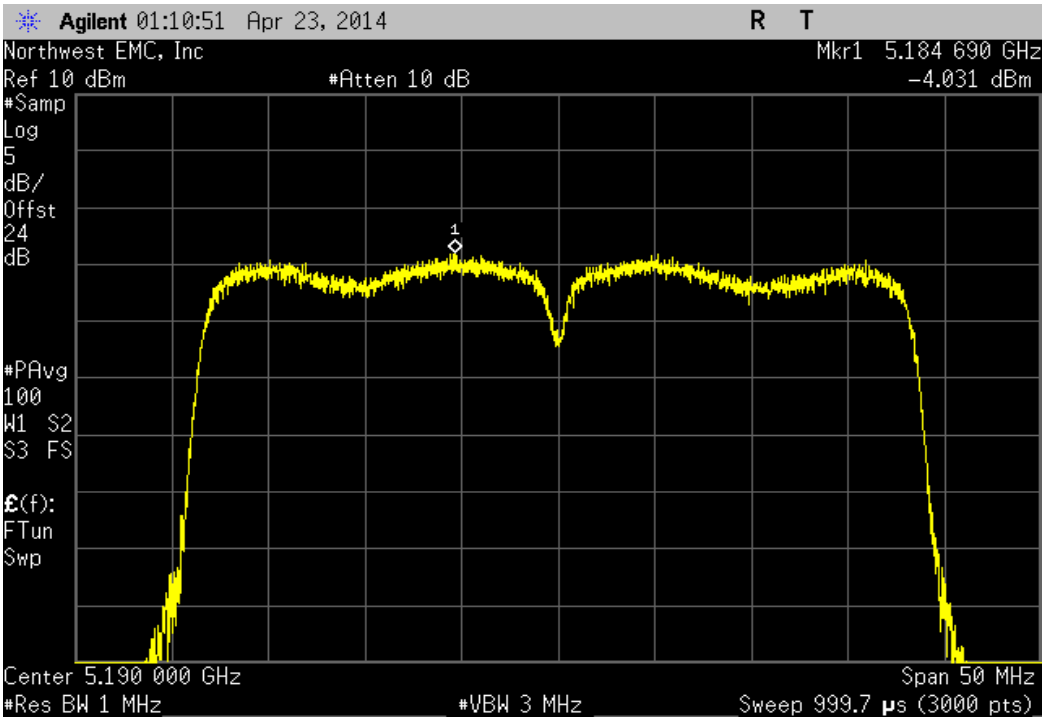


Chain A, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 140, High Channel 5700 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-1.093	11	Pass

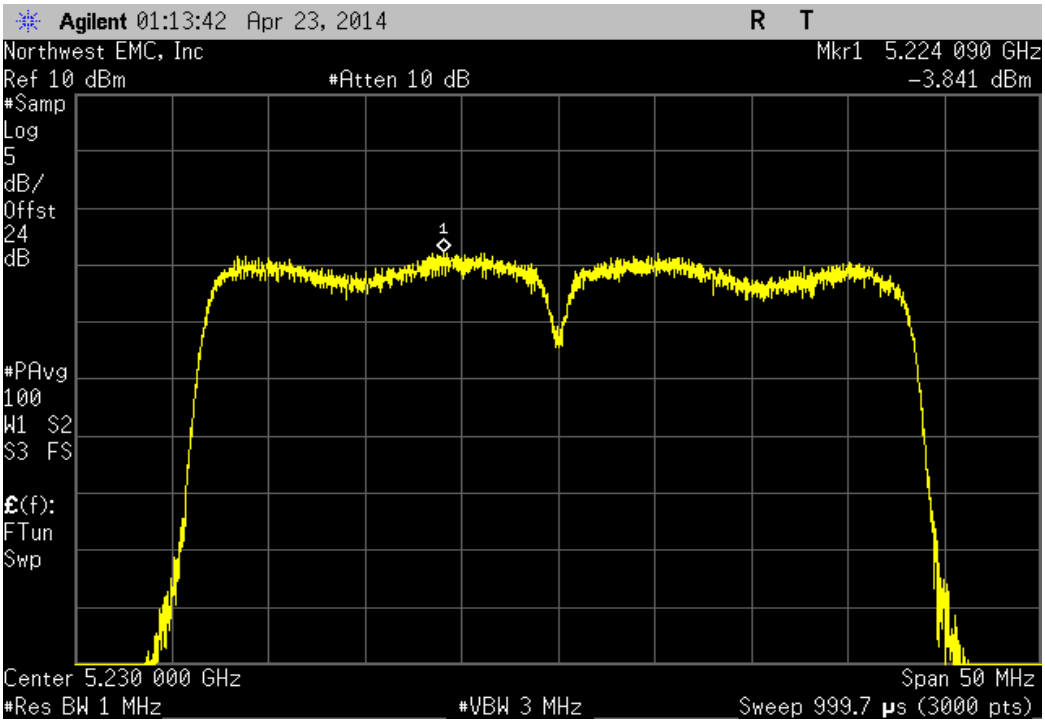


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 40 MHz, HT, MCS8, Ch. 36/40, Low Channel 5190 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.031	4	Pass

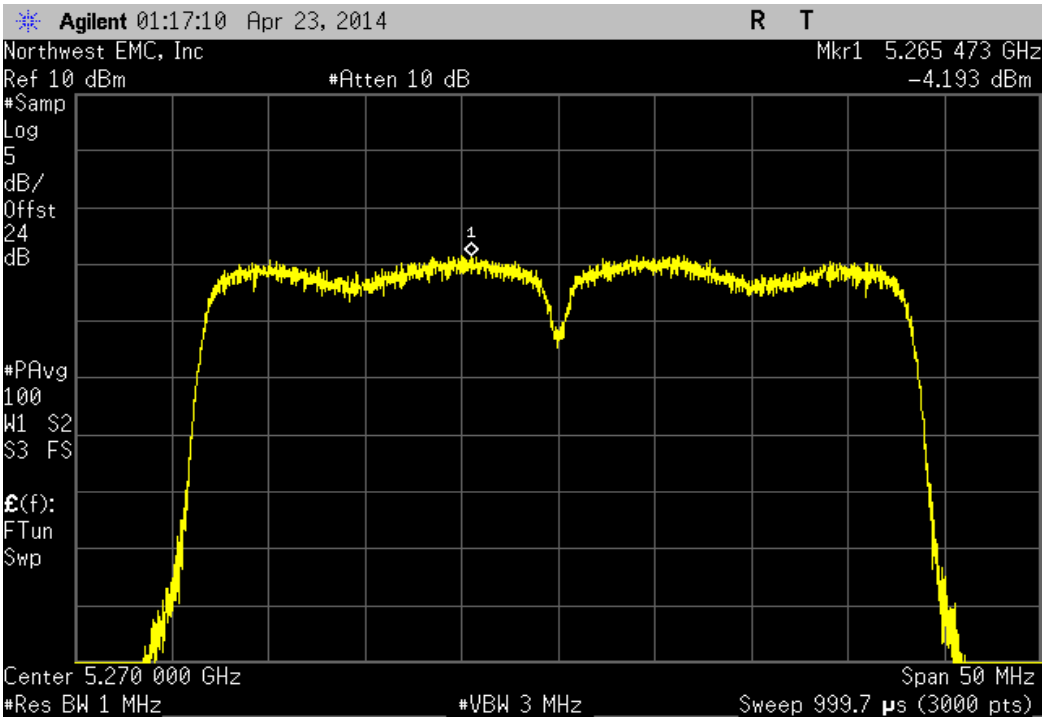


Chain A, IEEE 802.11(n), 40 MHz, HT, MCS8, Ch. 44/48, High Channel 5230 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.841	4	Pass

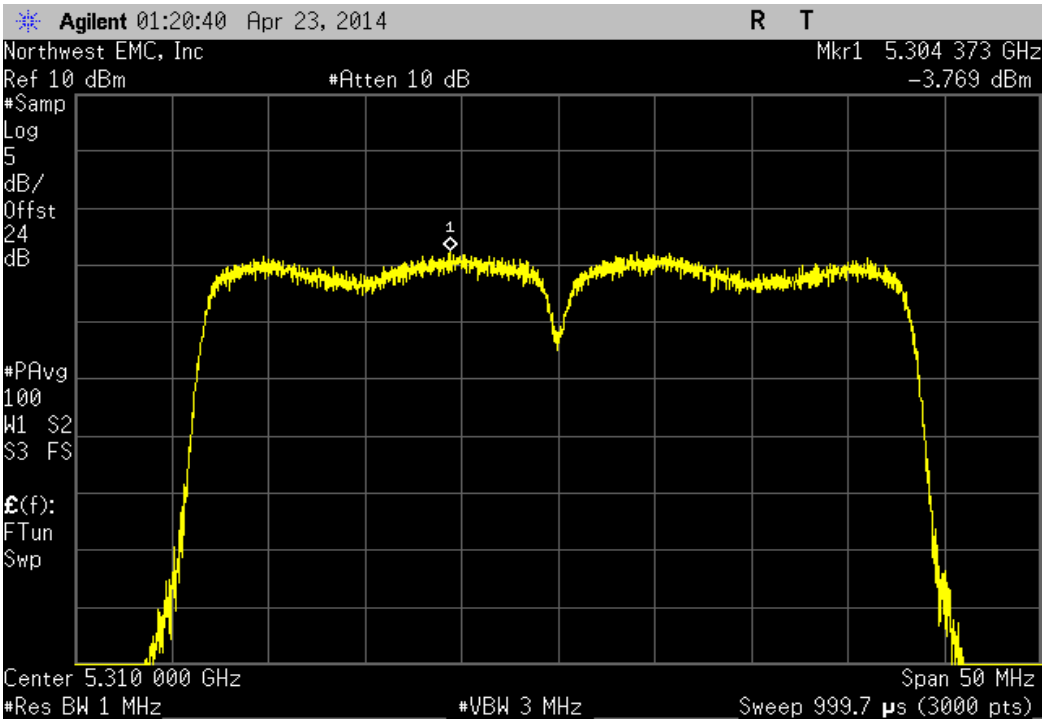


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 40 MHz, HT, MCS8, Ch. 52/56, Low Channel 5270 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.193	11	Pass

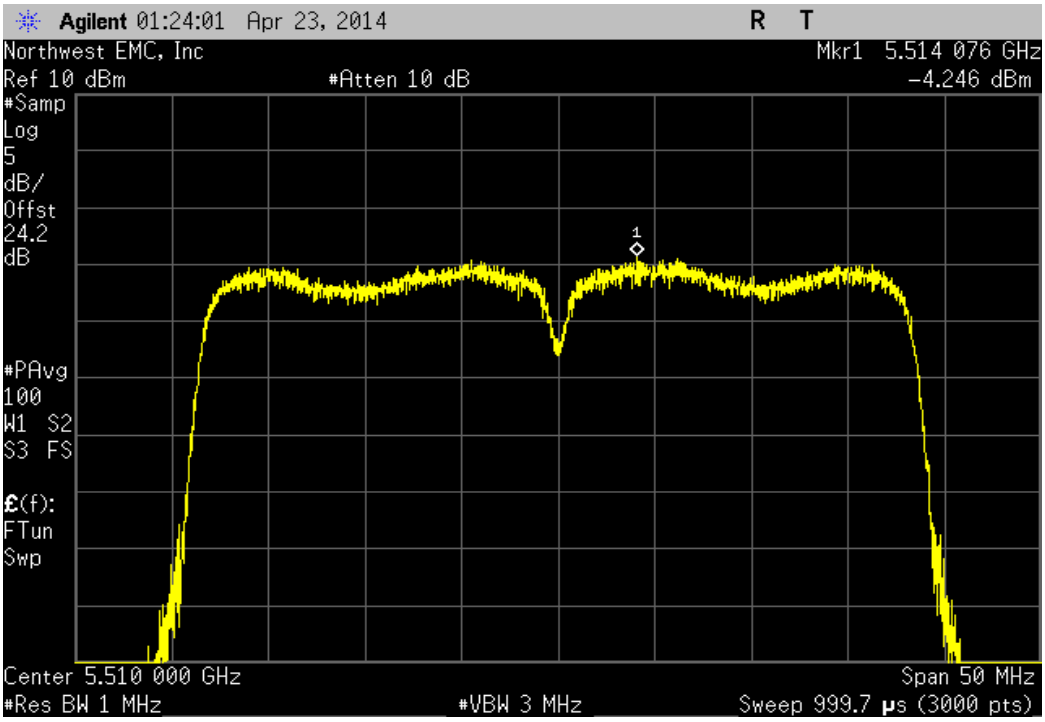


Chain A, IEEE 802.11(n), 40 MHz, HT, MCS8, Ch. 60/64, High Channel 5310 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.769	11	Pass

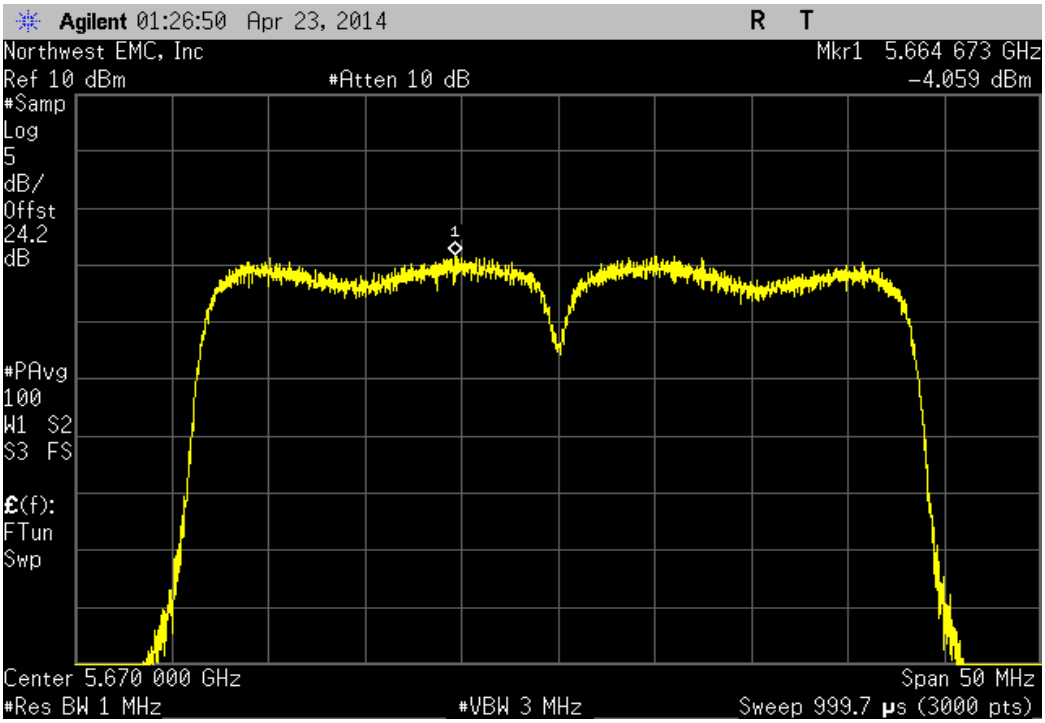


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 40 MHz, HT, MCS8, Ch. 100/104, Low Channel 5510 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.246	11	Pass

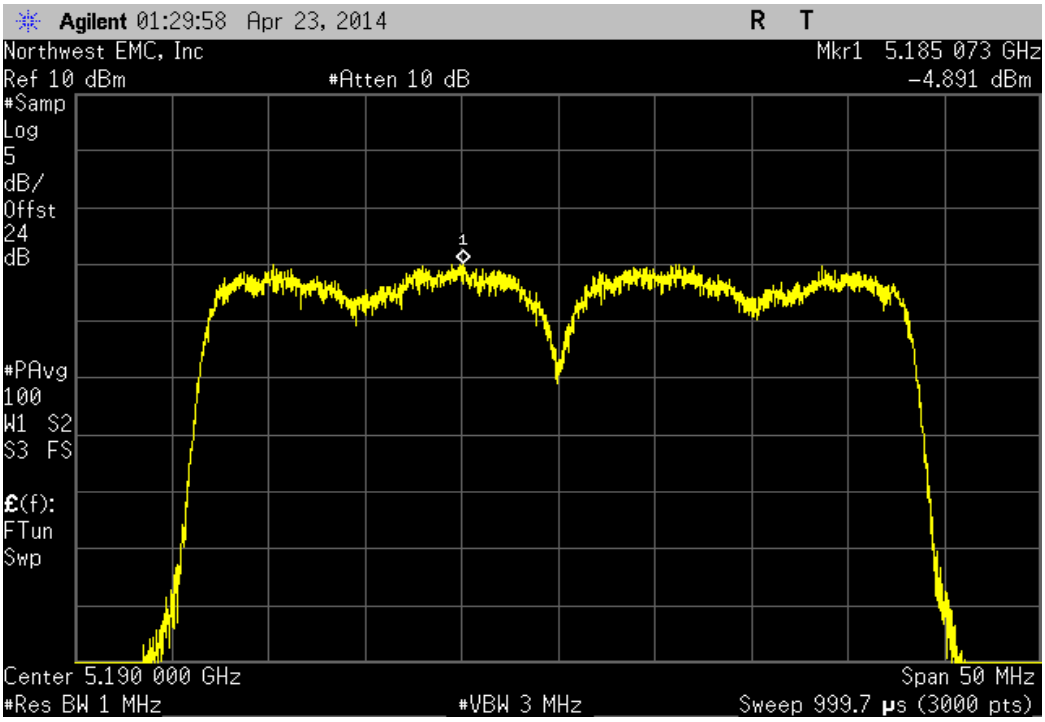


Chain A, IEEE 802.11(n), 40 MHz, HT, MCS8, Ch. 132/136, High Channel 5670 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.059	11	Pass

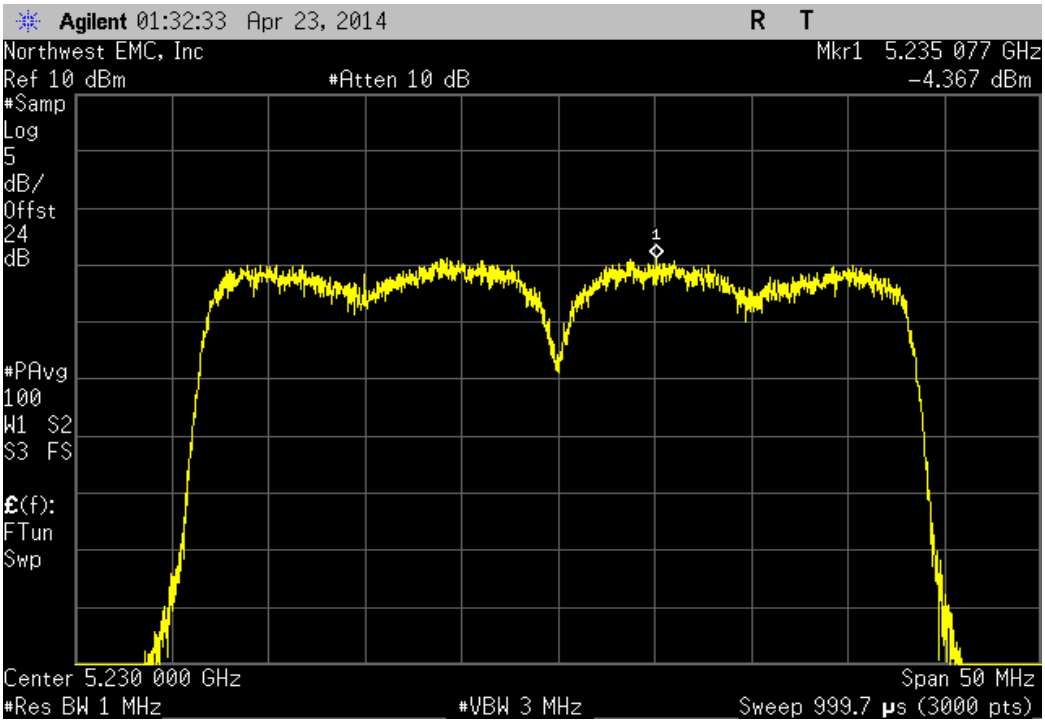


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 40 MHz, HT, MCS15, Ch. 36/40, Low Channel 5190 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.891	4	Pass

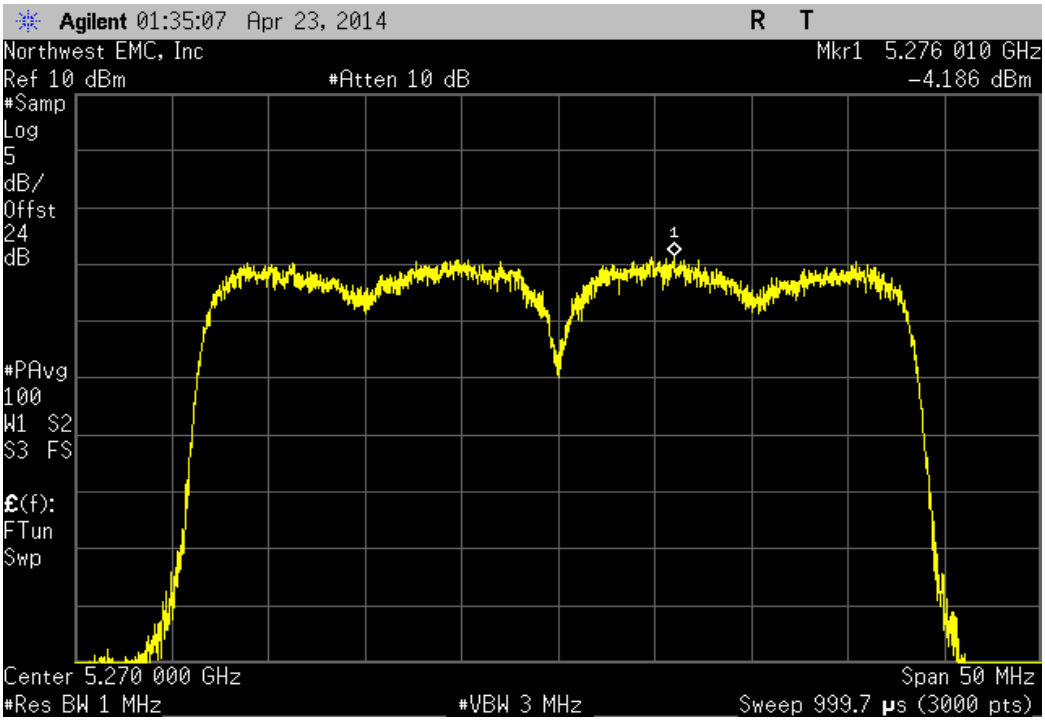


Chain A, IEEE 802.11(n), 40 MHz, HT, MCS15, Ch. 44/48, High Channel 5230 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.367	4	Pass

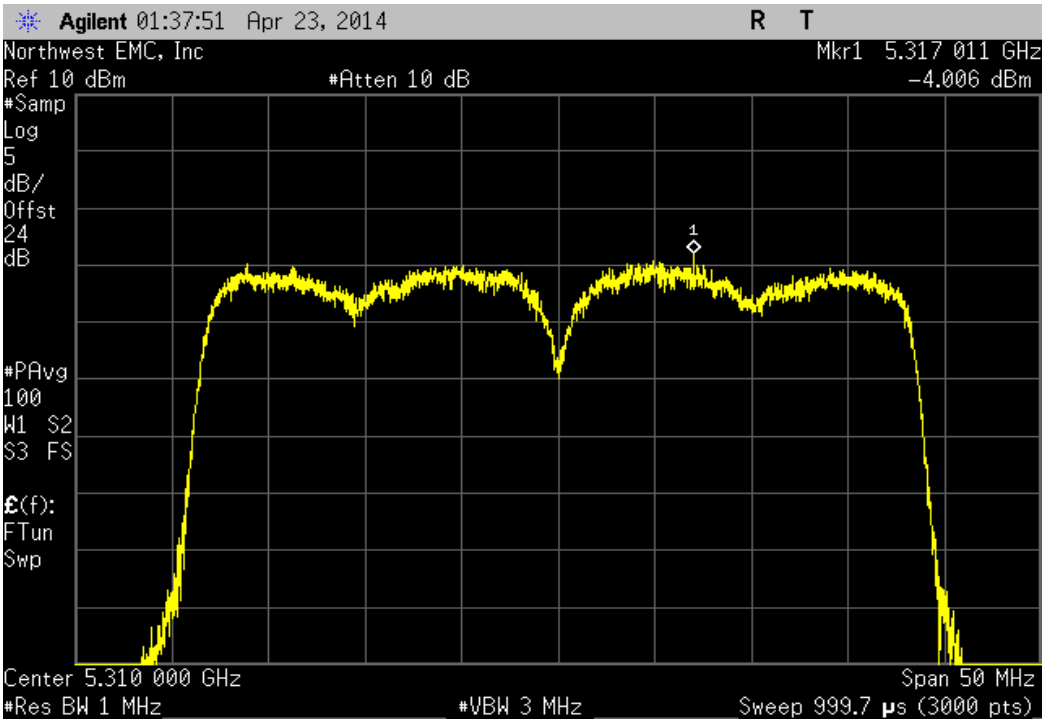


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 40 MHz, HT, MCS15, Ch. 52/56, Low Channel 5270 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.186	11	Pass

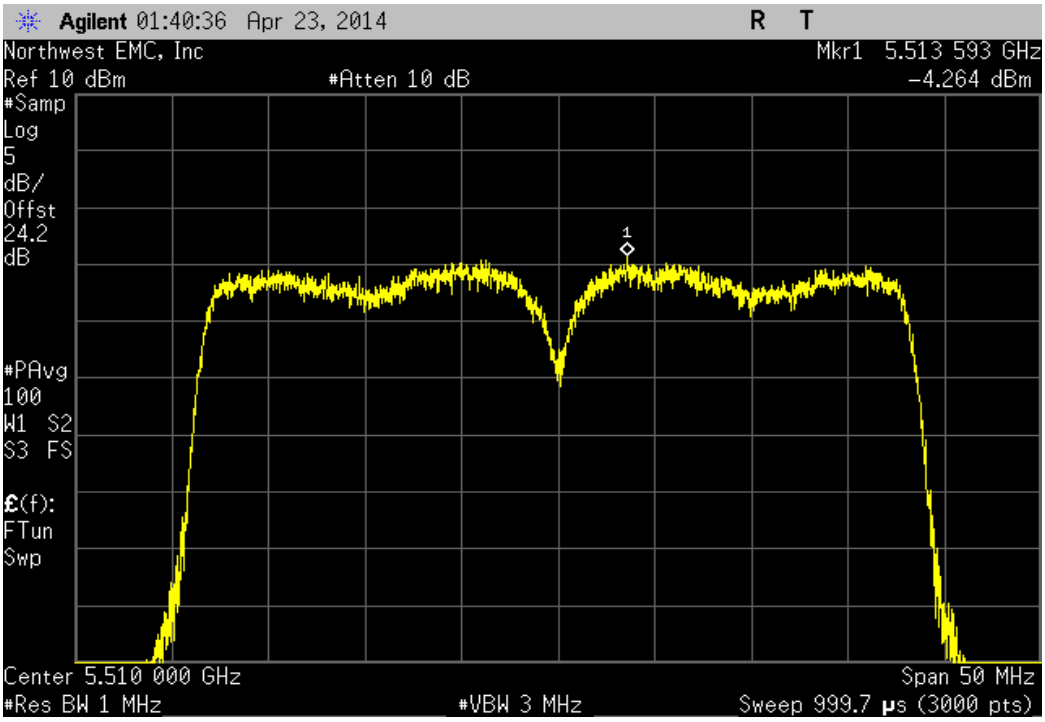


Chain A, IEEE 802.11(n), 40 MHz, HT, MCS15, Ch. 60/64, High Channel 5310 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.006	11	Pass

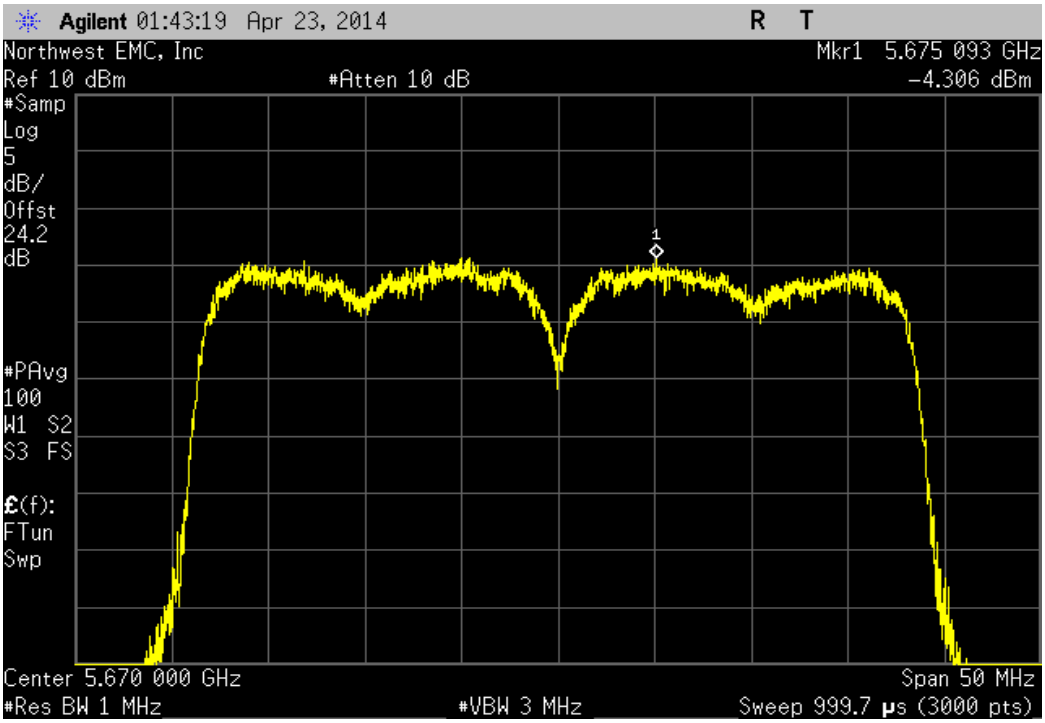


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(n), 40 MHz, HT, MCS15, Ch. 100/104, Low Channel 5510 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.264	11	Pass

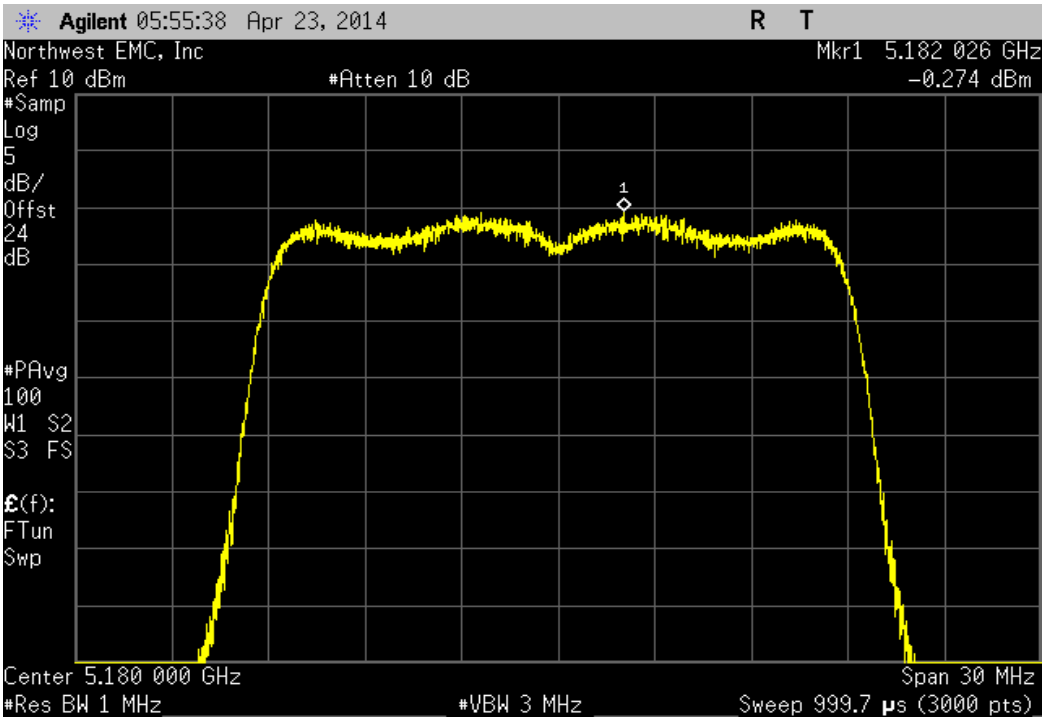


Chain A, IEEE 802.11(n), 40 MHz, HT, MCS15, Ch. 132/136, High Channel 5670 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.306	11	Pass

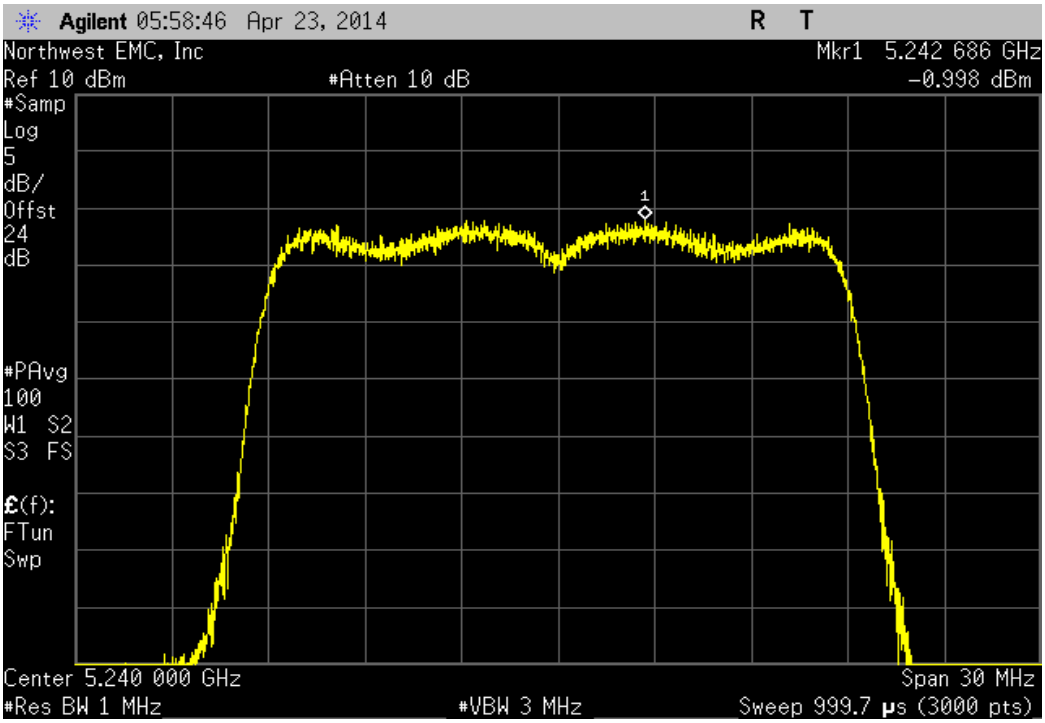


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 36, Low Channel 5180MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.274	4	Pass

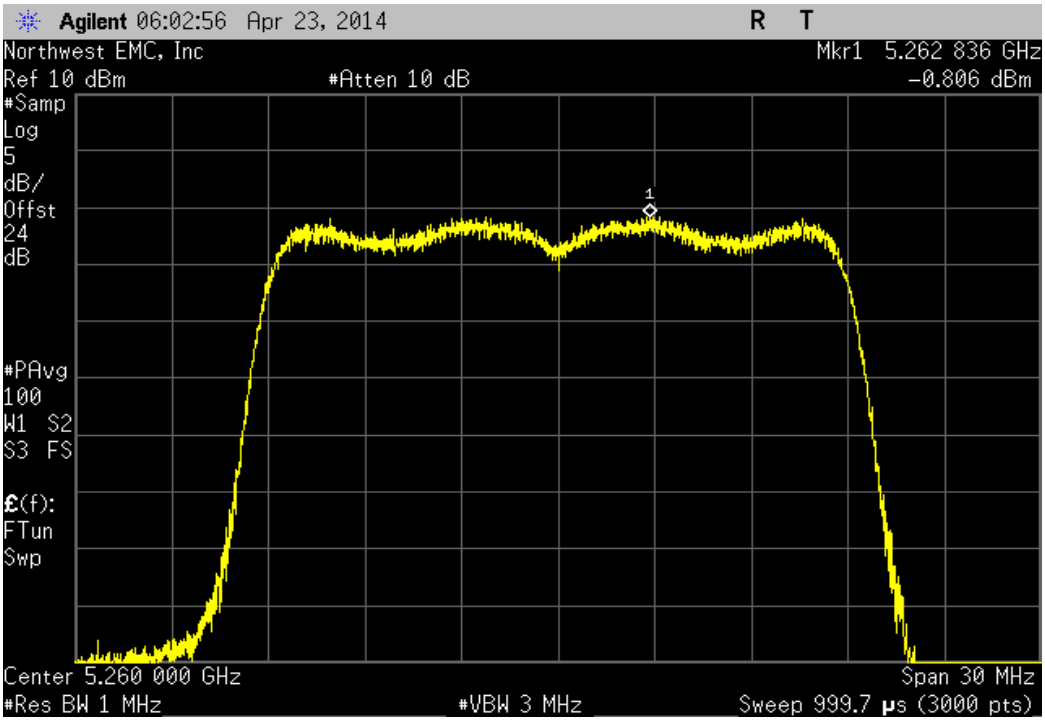


Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 48, High Channel 5240 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.998	4	Pass

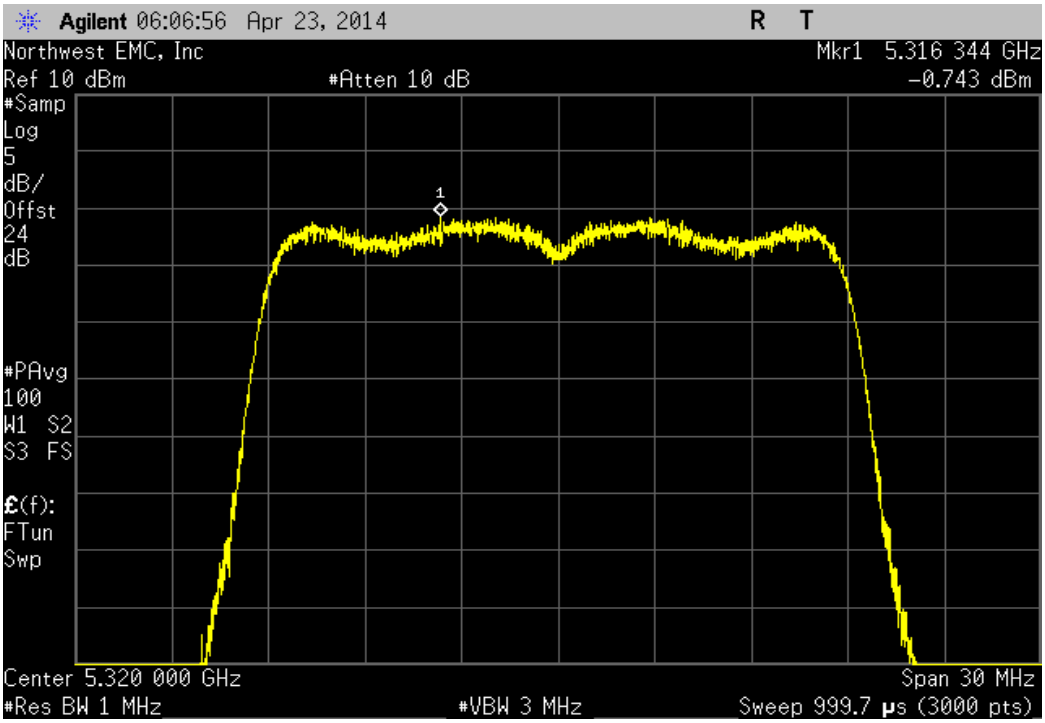


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.806	11	Pass

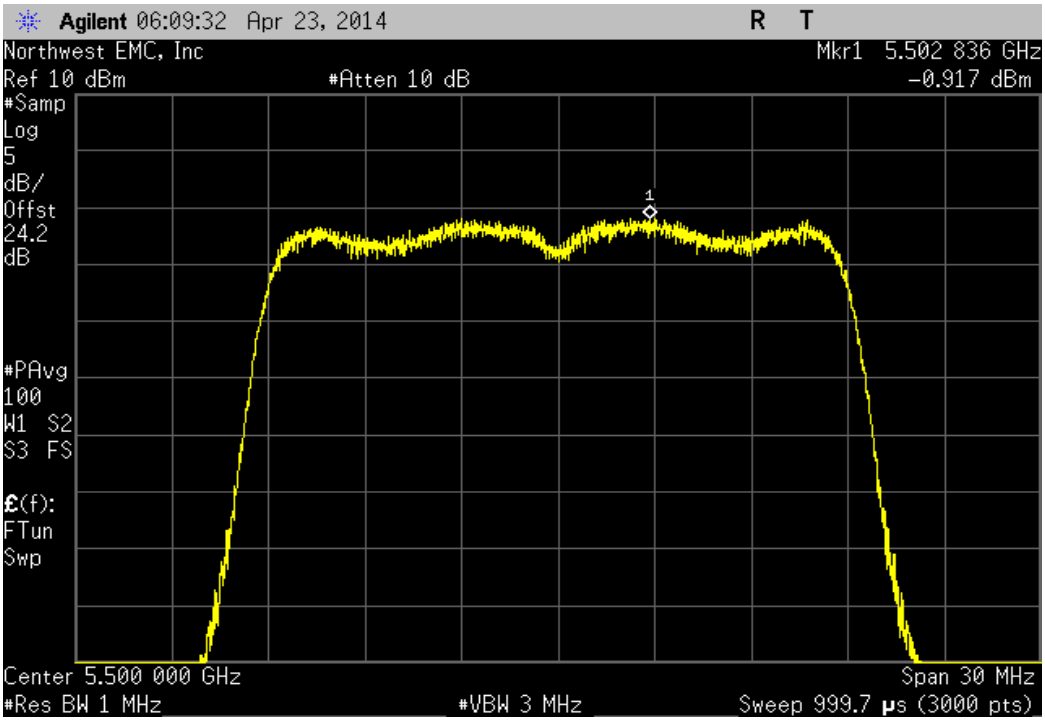


Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 64, High Channel 5320 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.743	11	Pass

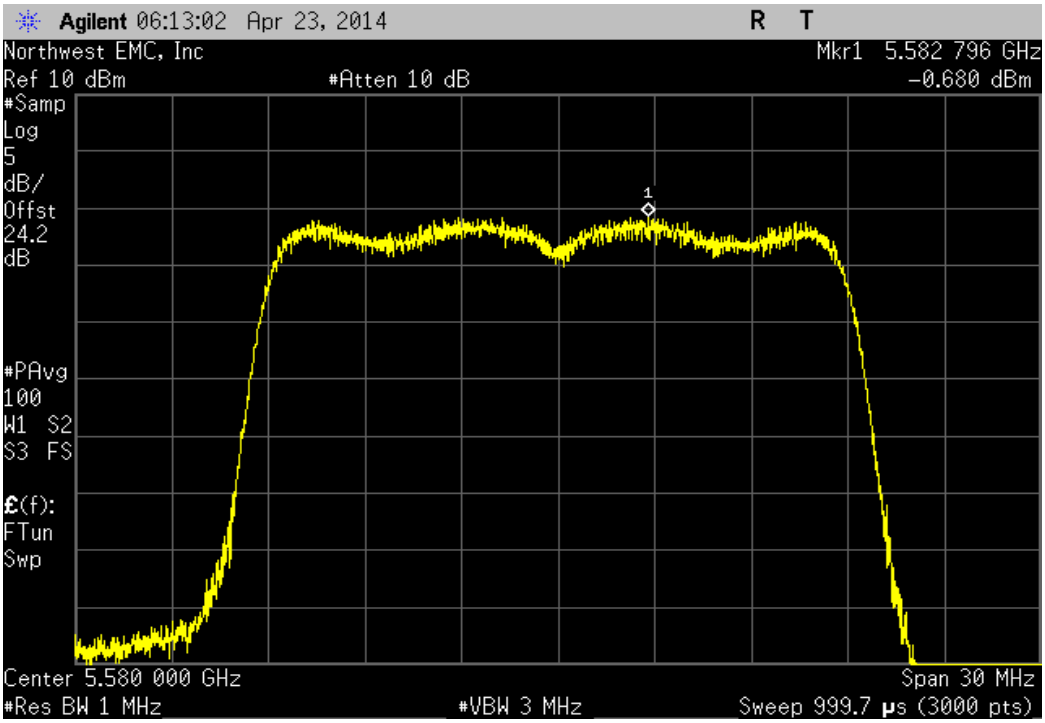


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 100, Low Channel 5500 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.917	11	Pass

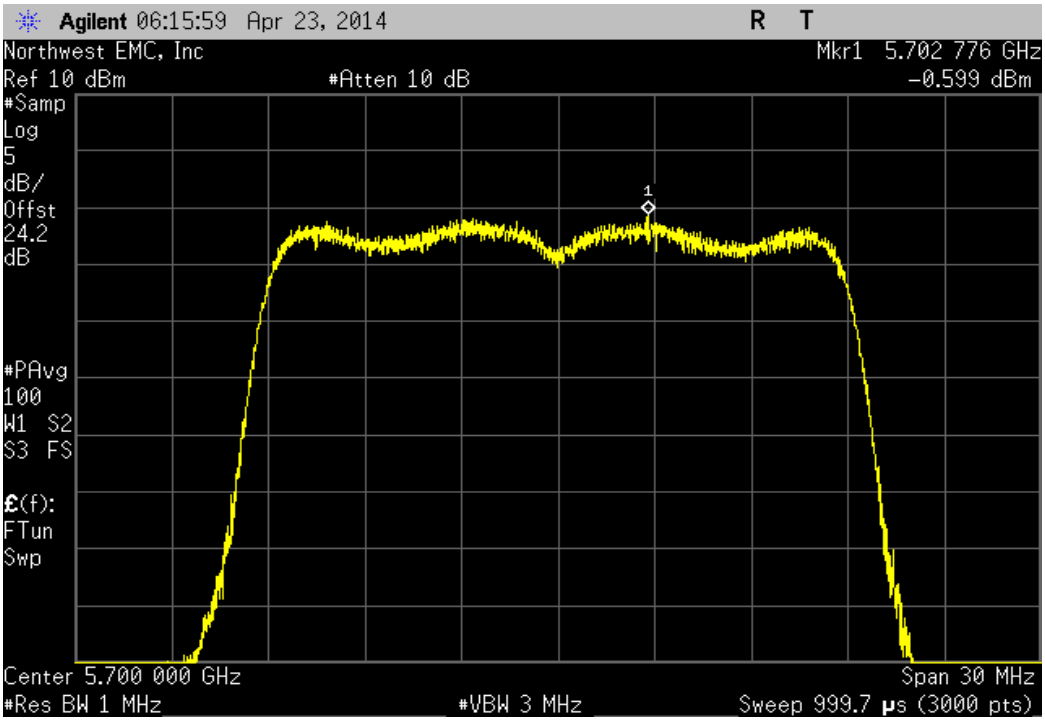


Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 116, Mid Channel 5580 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.68	11	Pass

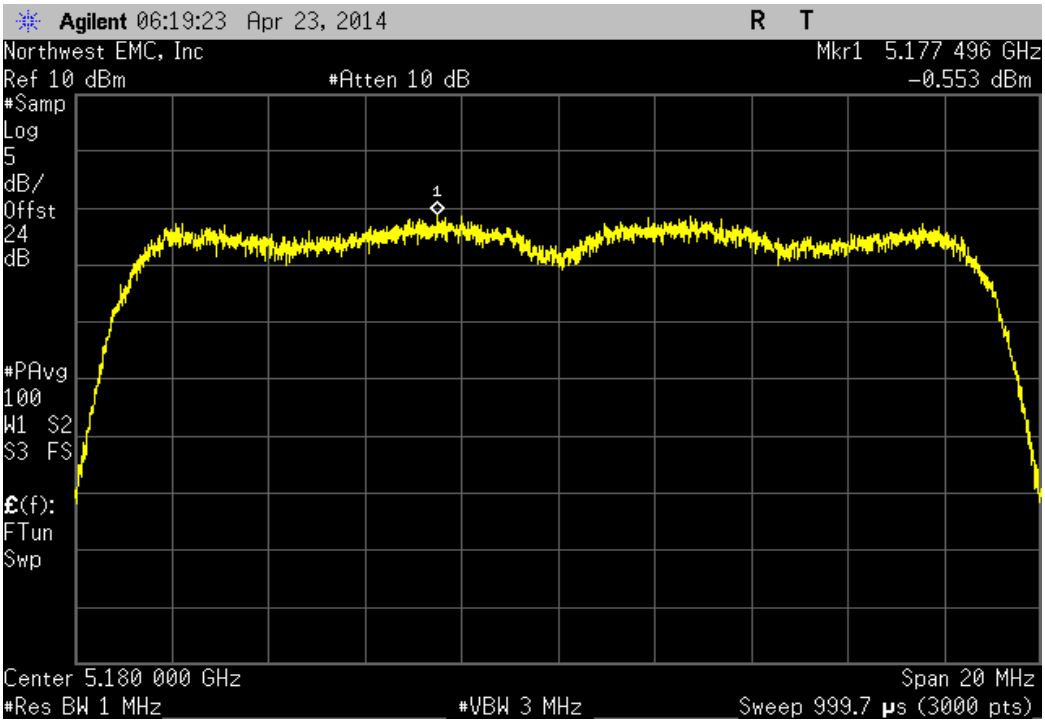


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 140, High Channel 5700 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.599	11	Pass

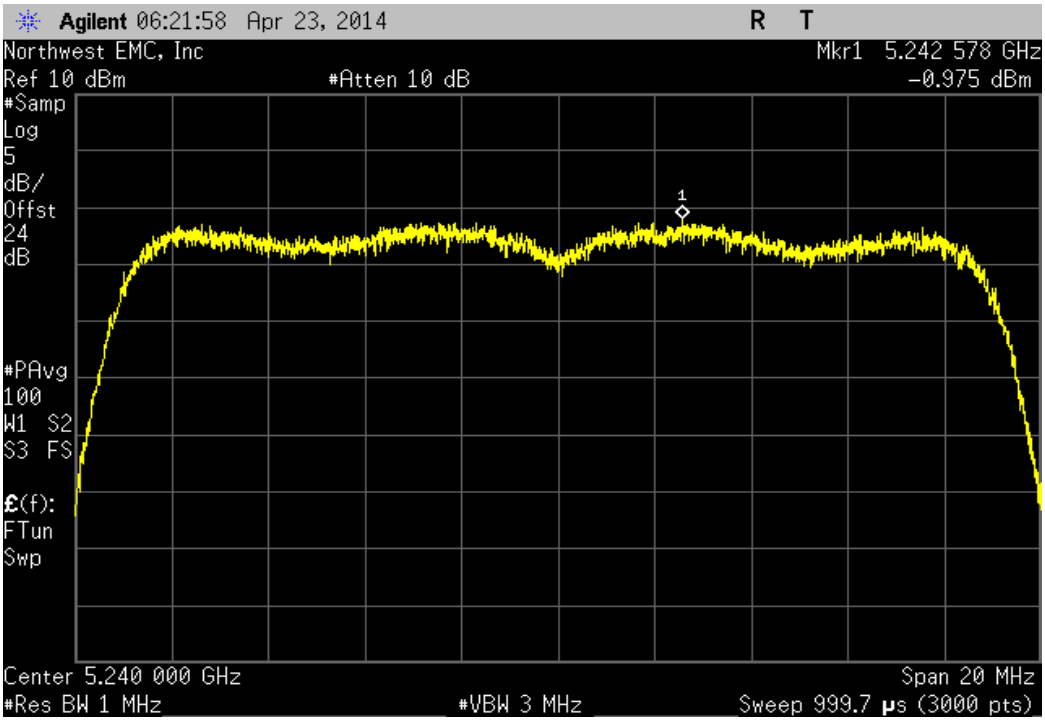


Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 36, Low Channel 5180MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.553	4	Pass

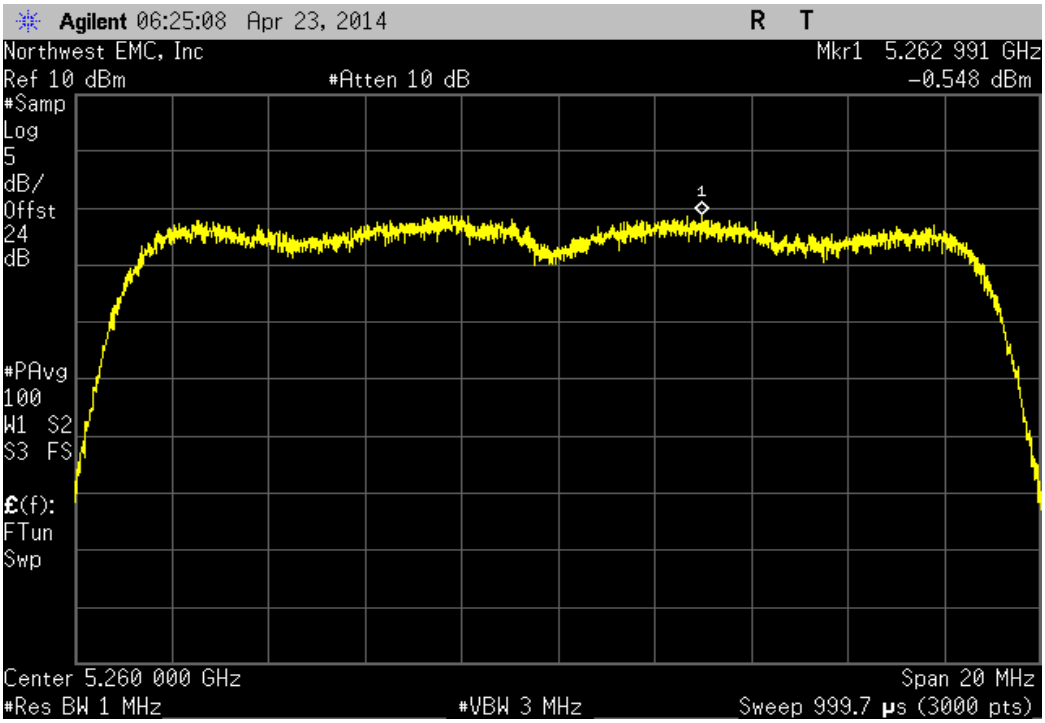


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 48, High Channel 5240 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.975	4	Pass

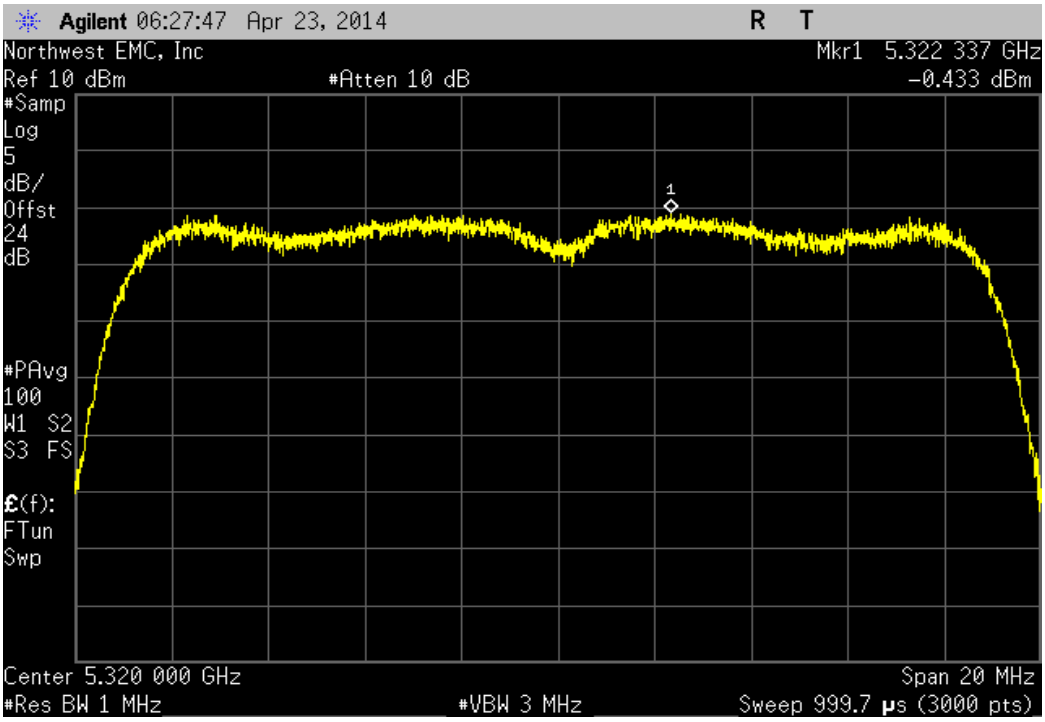


Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.548	11	Pass

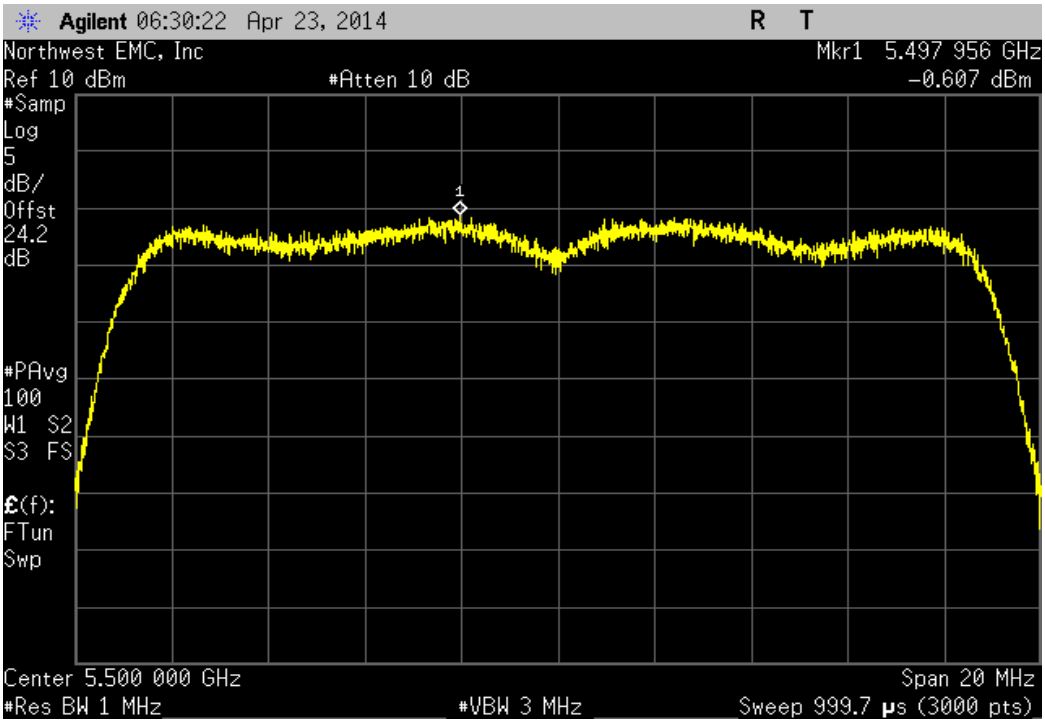


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 64, High Channel 5320 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.433	11	Pass

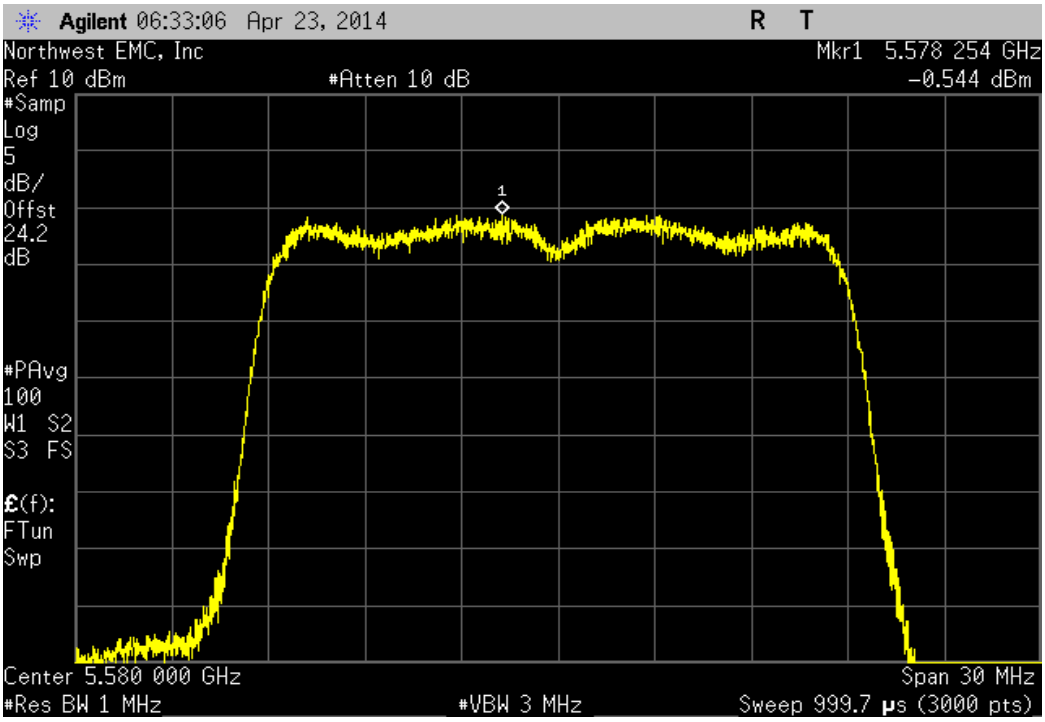


Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 100, Low Channel 5500 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.607	11	Pass

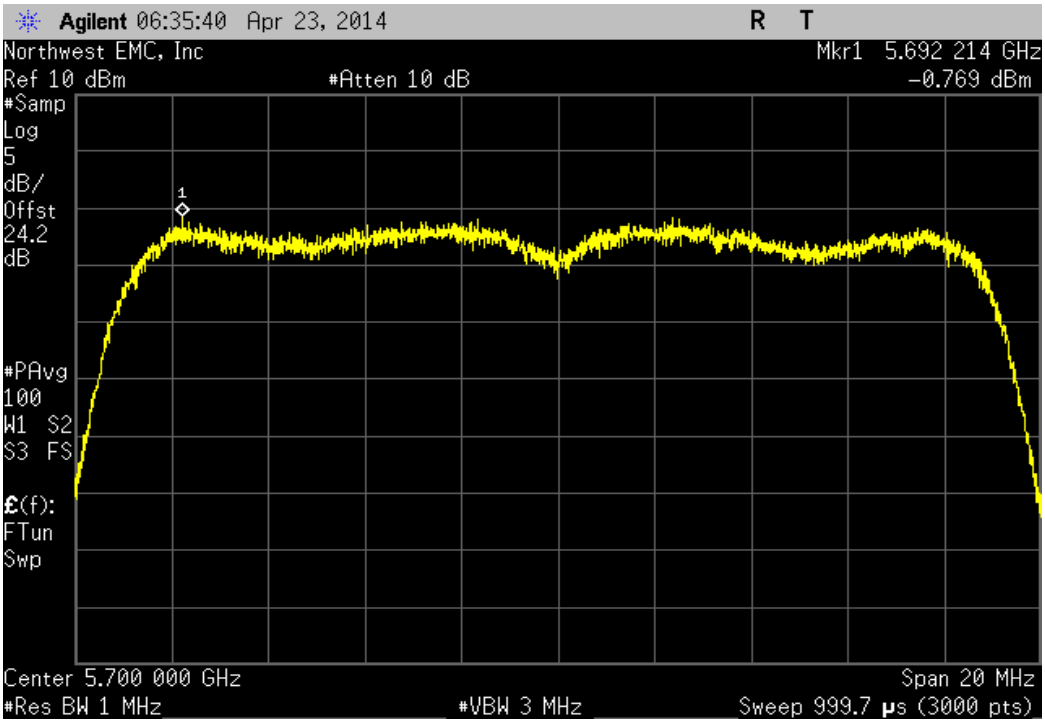


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 116, Mid Channel 5580 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.544	11	Pass

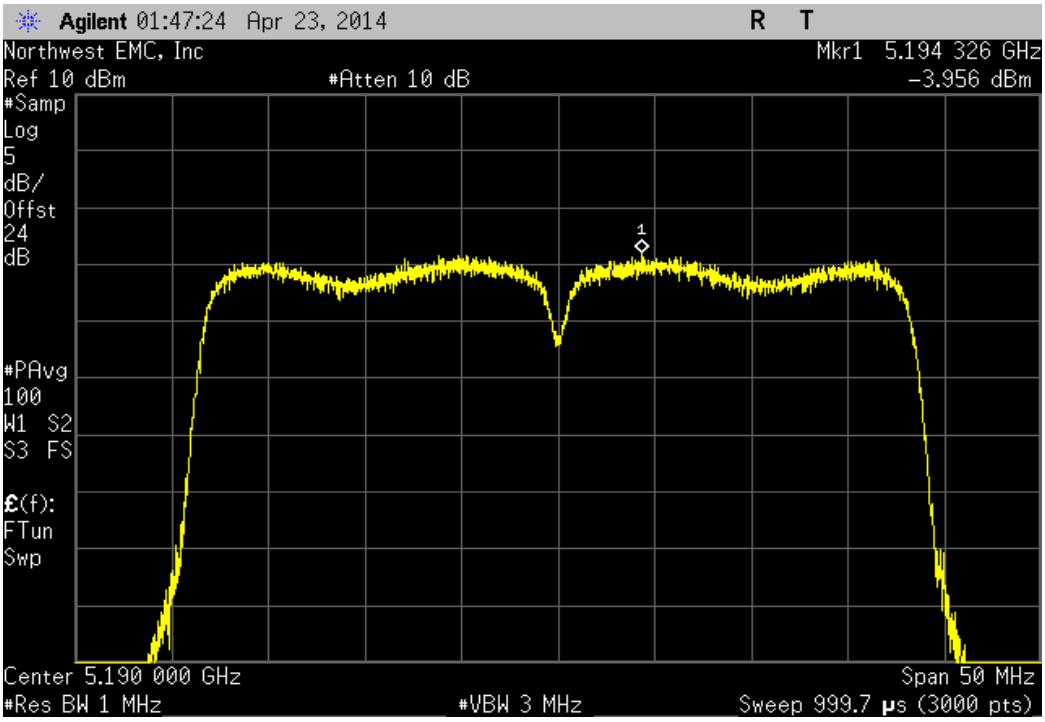


Chain A, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 140, High Channel 5700 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.769	11	Pass

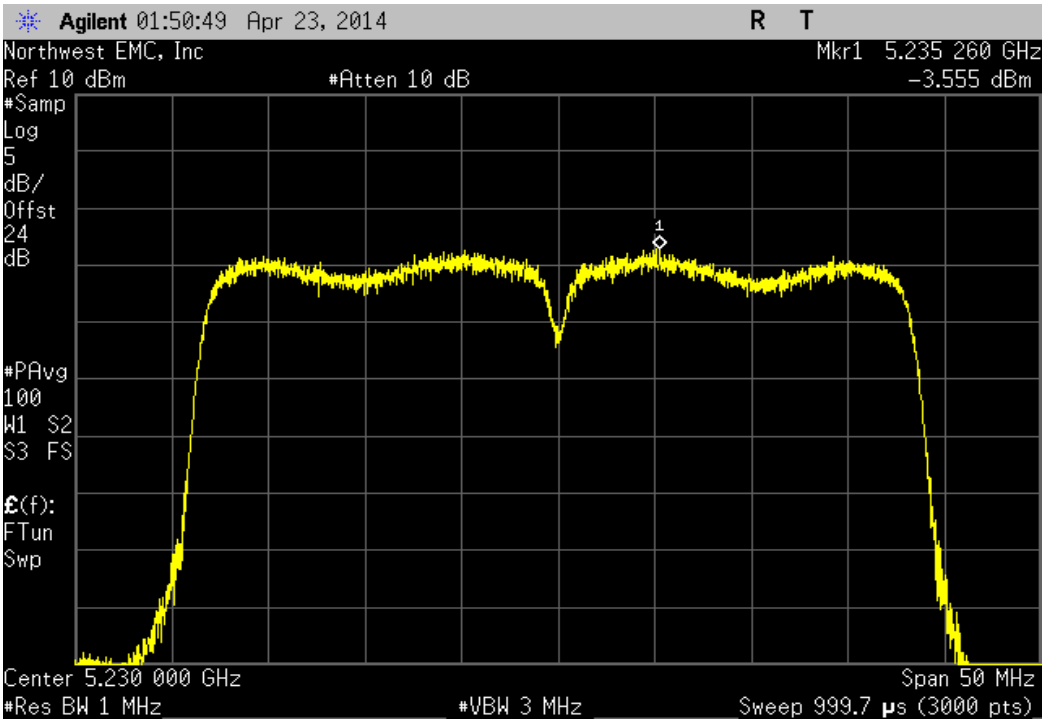


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 36/40, Low Channel 5190 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.956	4	Pass

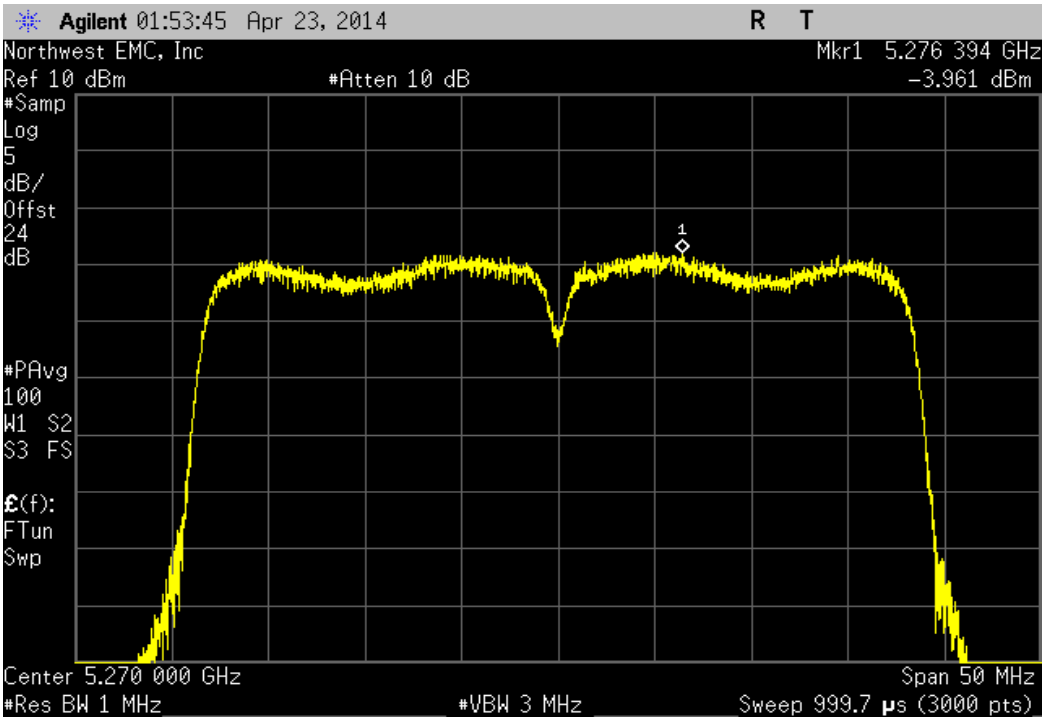


Chain A, IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 44/48, High Channel 5230 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.555	4	Pass

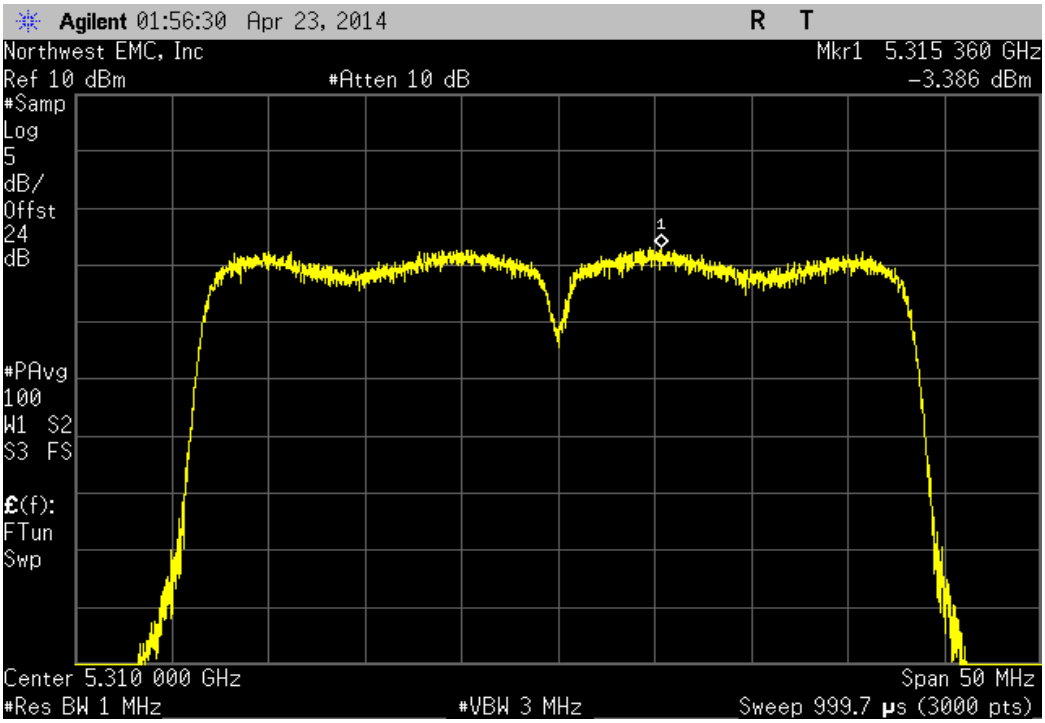


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 52/56, Low Channel 5270 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.961	11	Pass

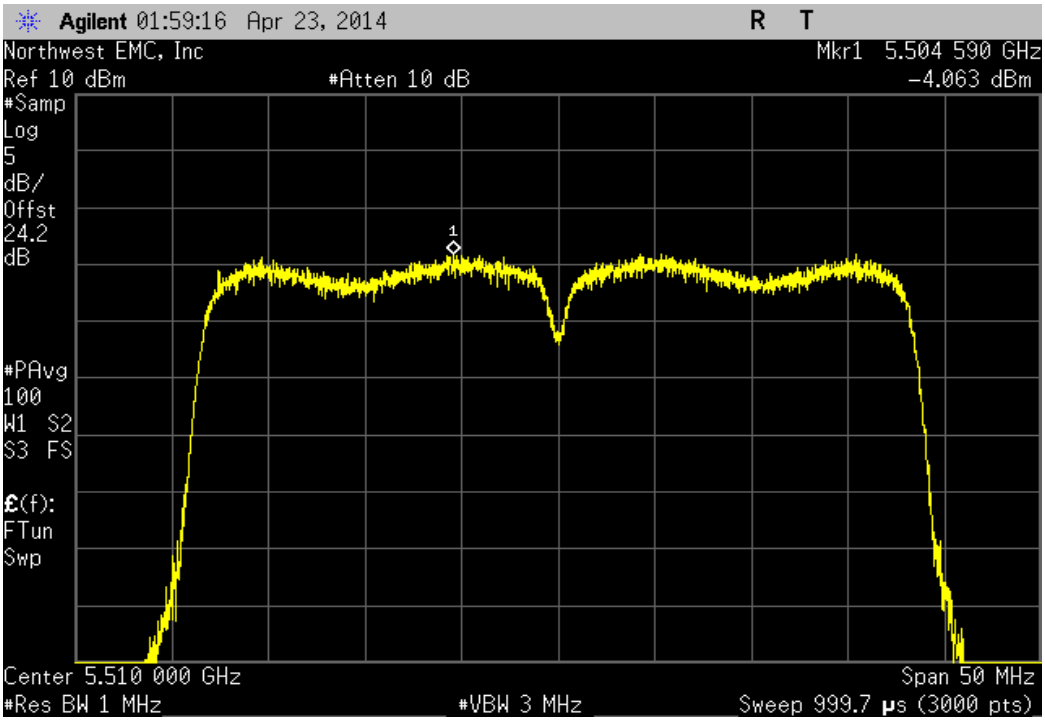


Chain A, IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 60/64, High Channel 5310 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.386	11	Pass

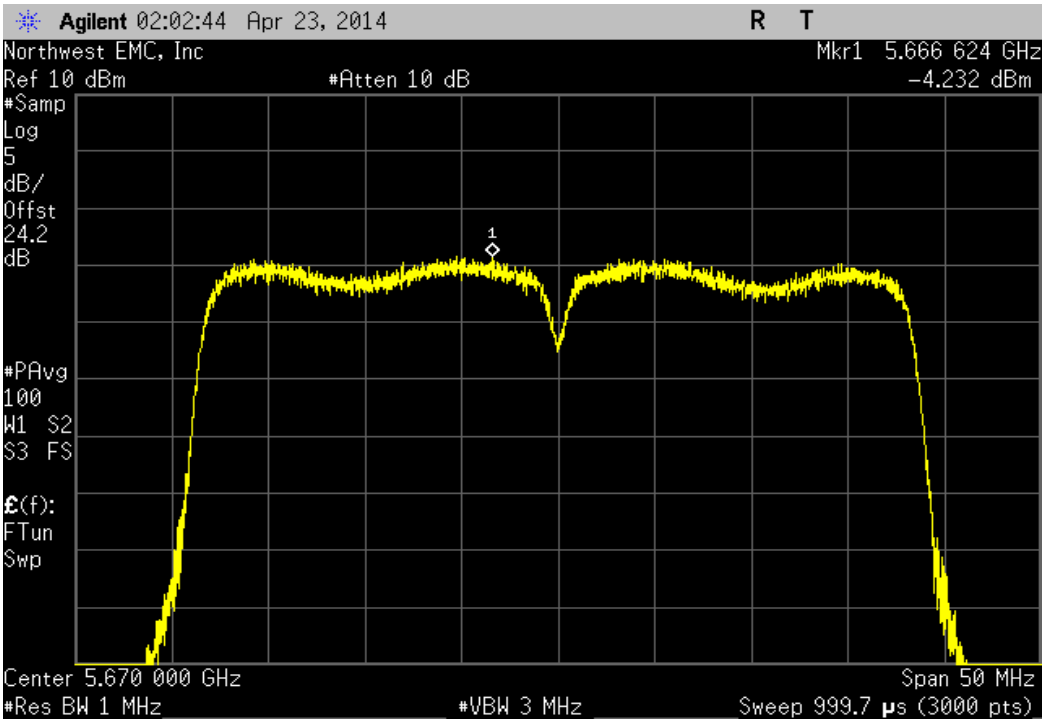


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 100/104, Low Channel 5510 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.063	11	Pass

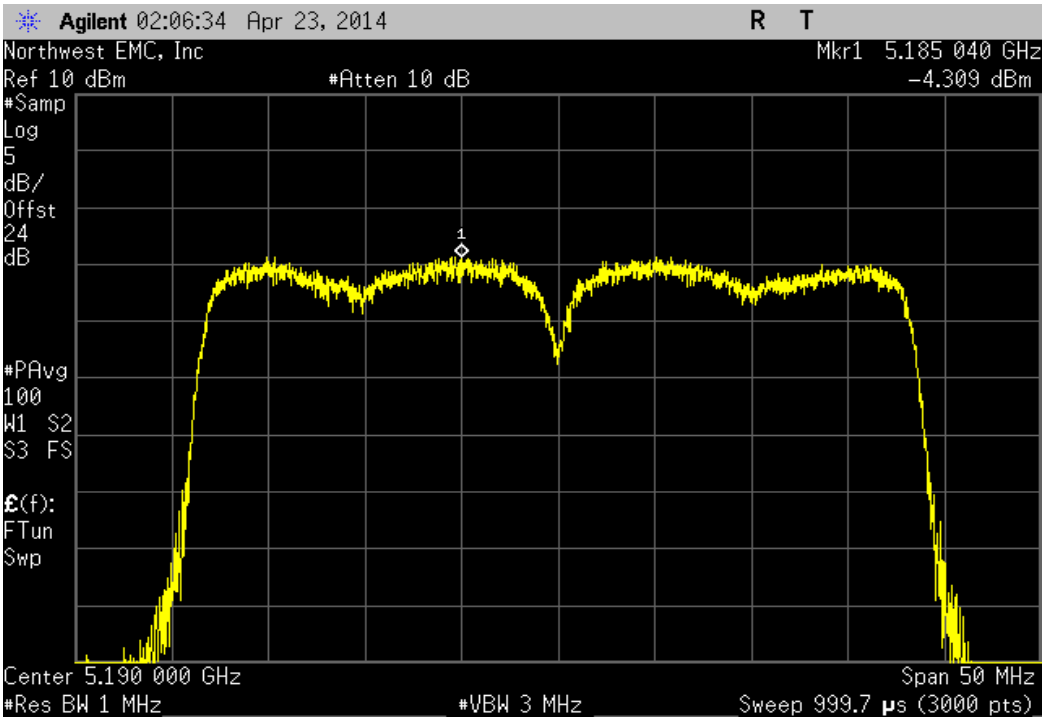


Chain A, IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 132/136, High Channel 5670 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.232	11	Pass

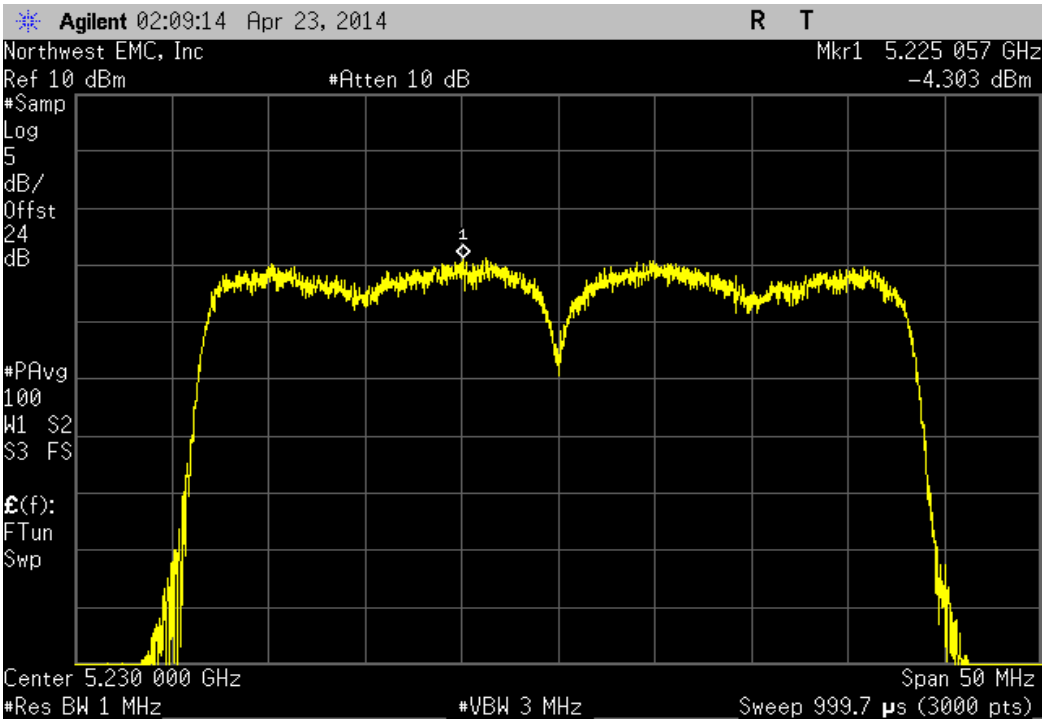


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 36/40, Low Channel 5190 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.309	4	Pass

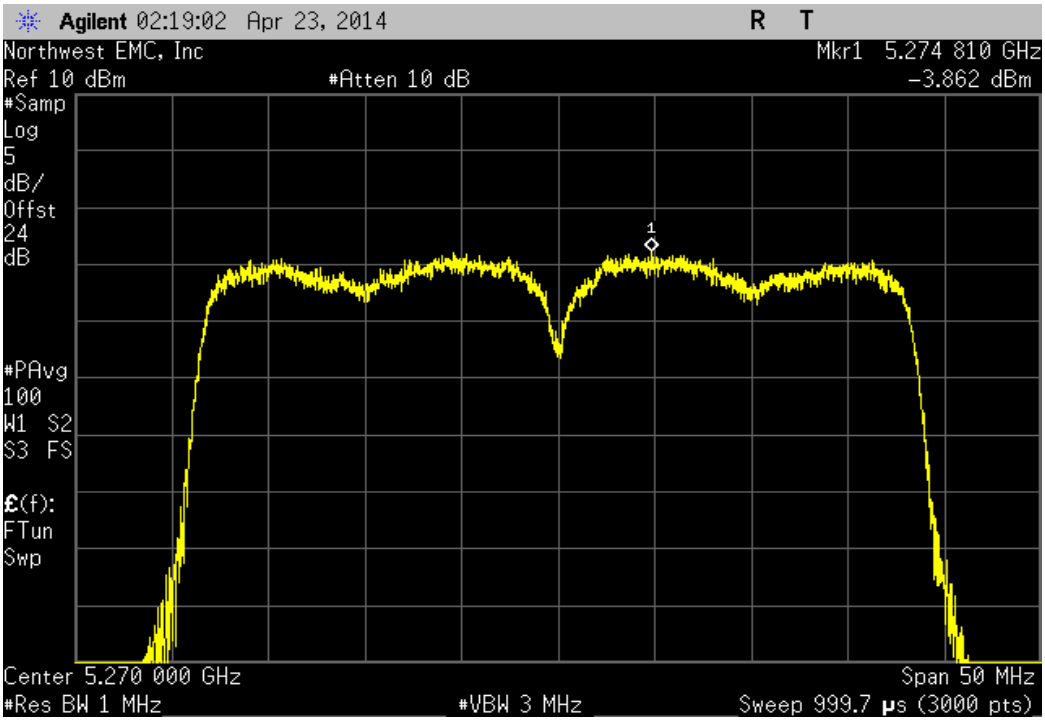


Chain A, IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 44/48, High Channel 5230 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.303	4	Pass

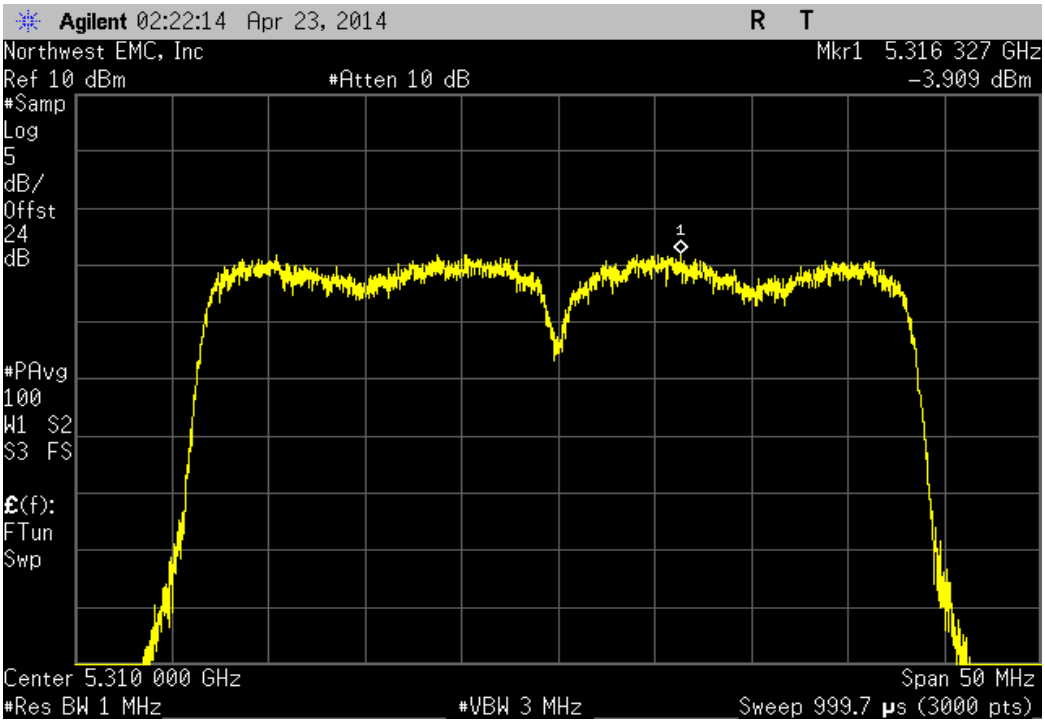


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 52/56, Low Channel 5270 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.862	11	Pass

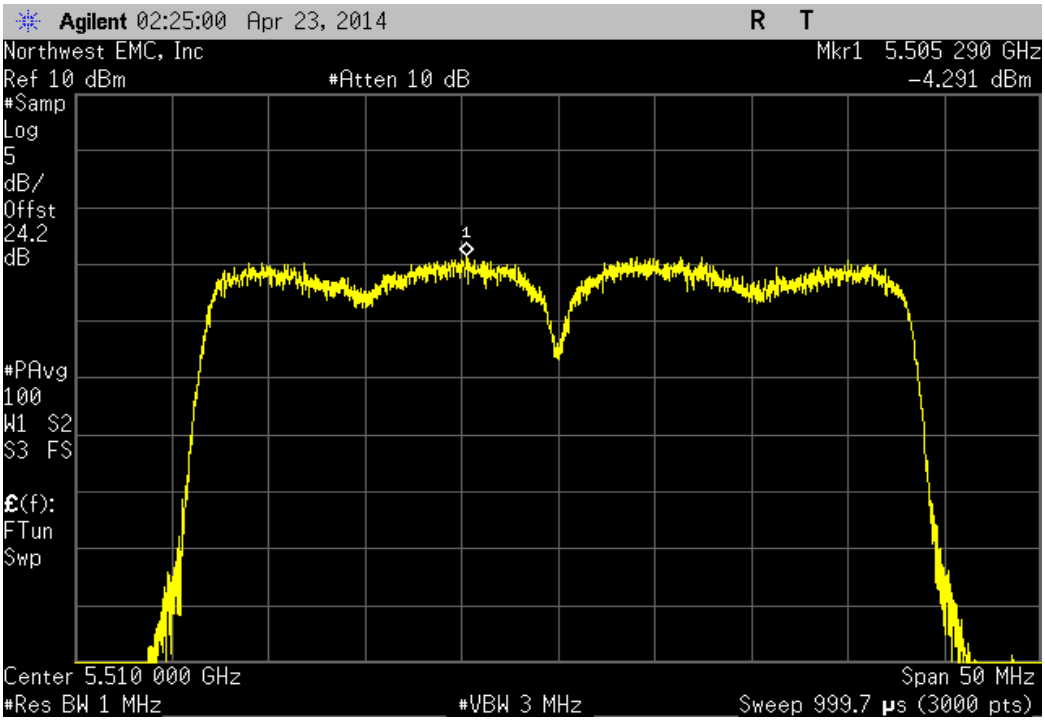


Chain A, IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 60/64, High Channel 5310 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.909	11	Pass

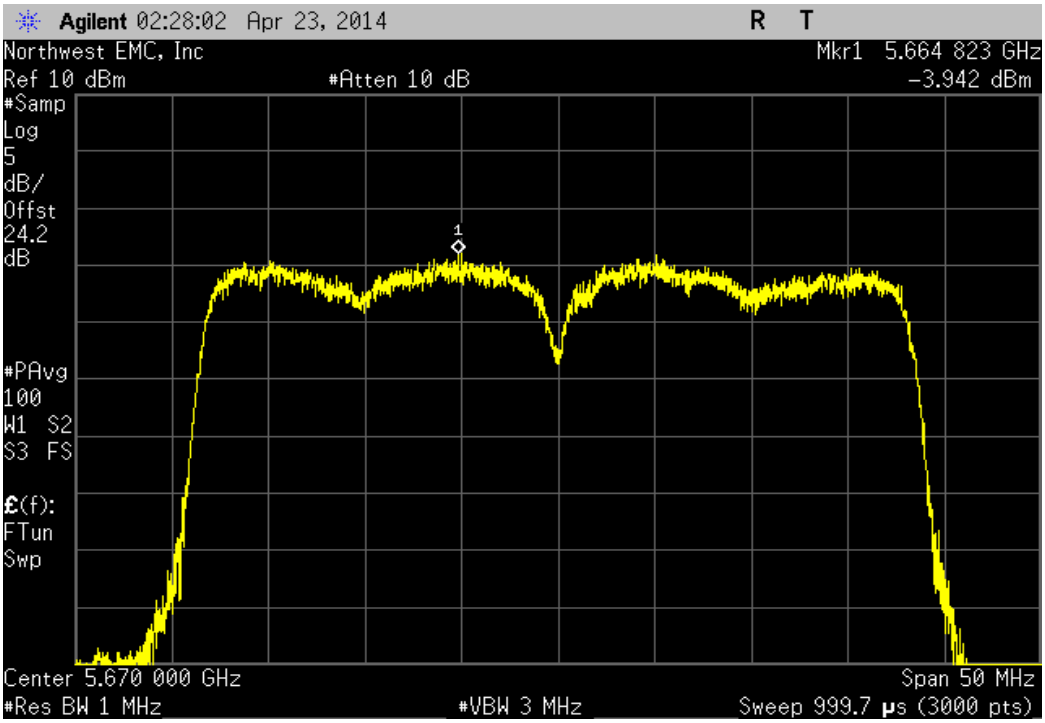


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 100/104, Low Channel 5510 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.291	11	Pass

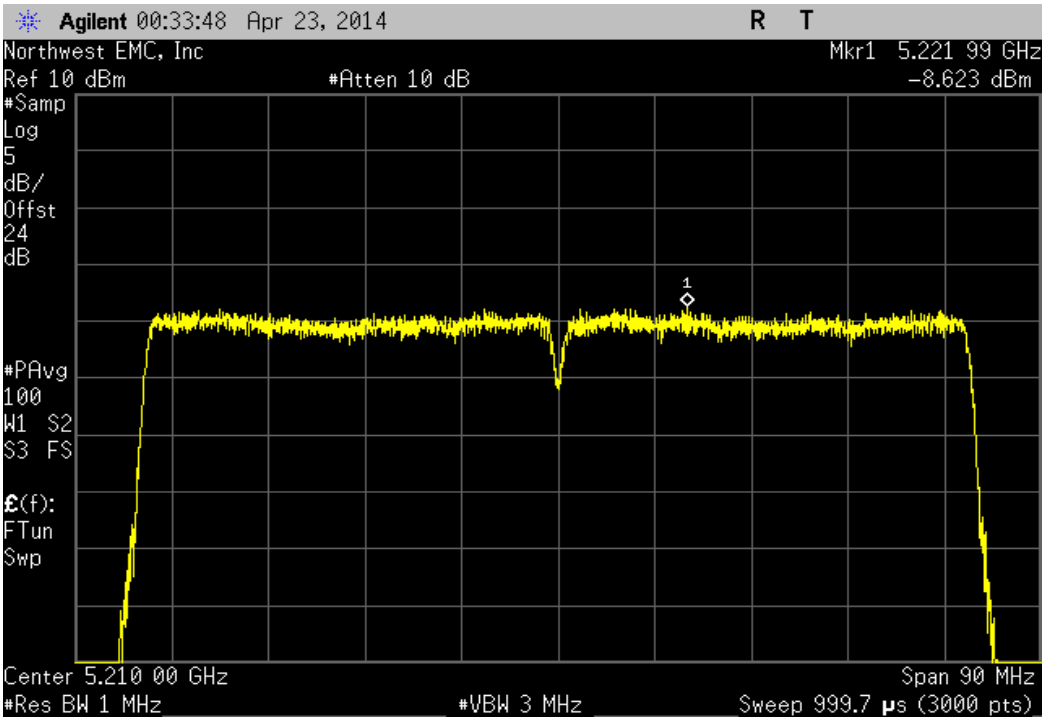


Chain A, IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 132/136, High Channel 5670 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.942	11	Pass

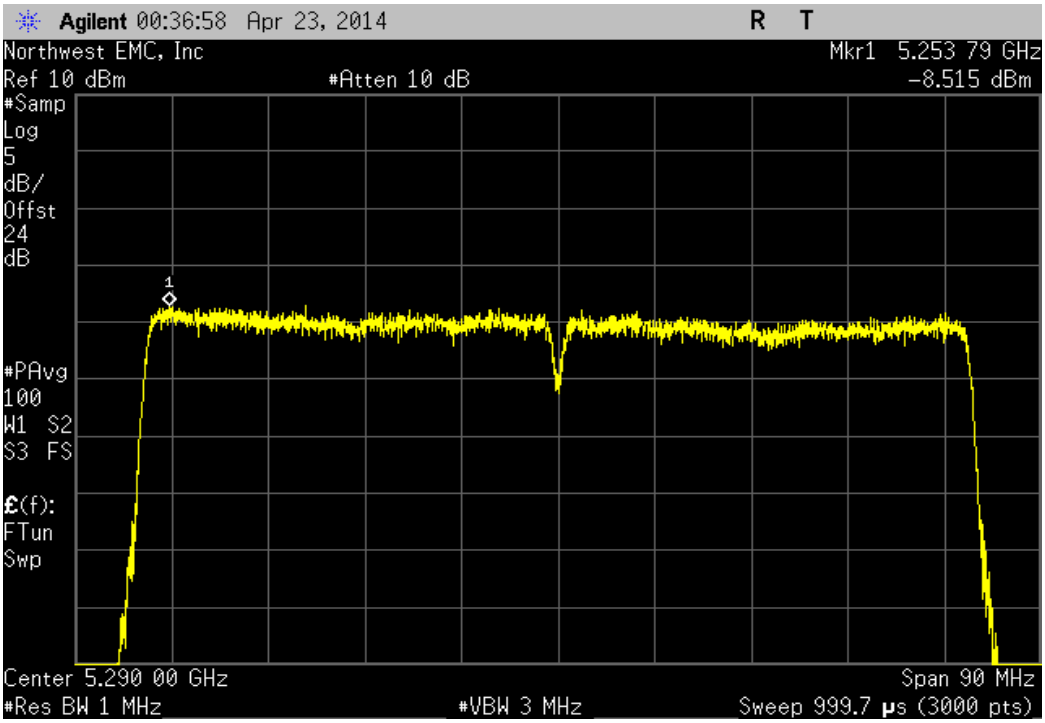


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 42, Low Channel 5210 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-8.623	4	Pass

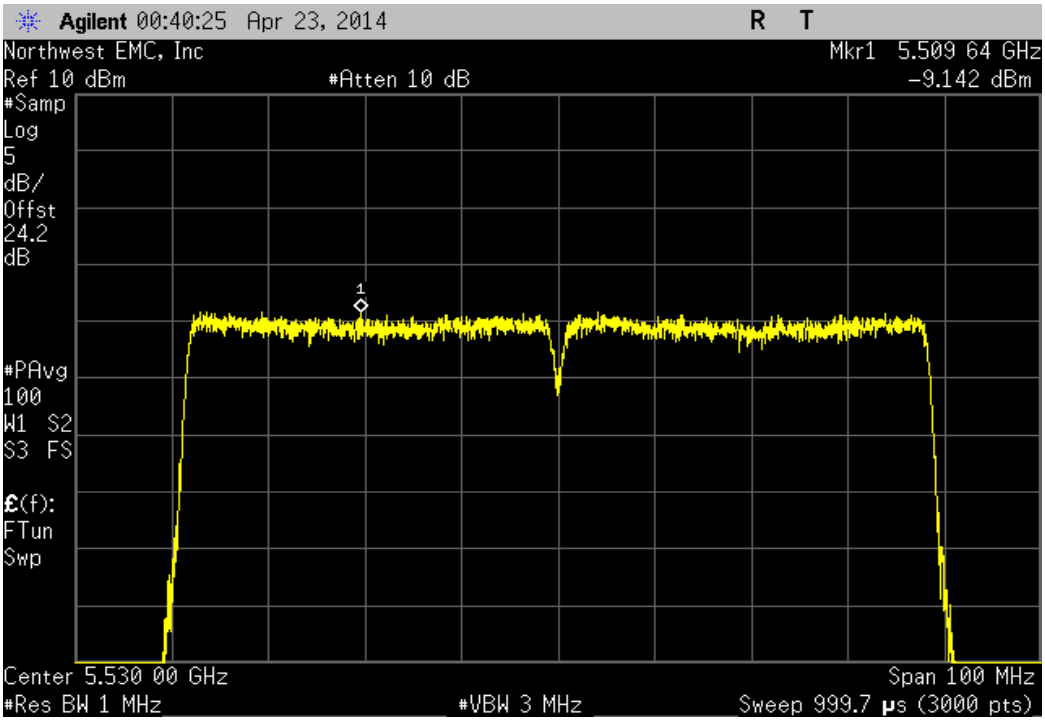


Chain A, IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 58, High Channel 5290 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-8.515	11	Pass

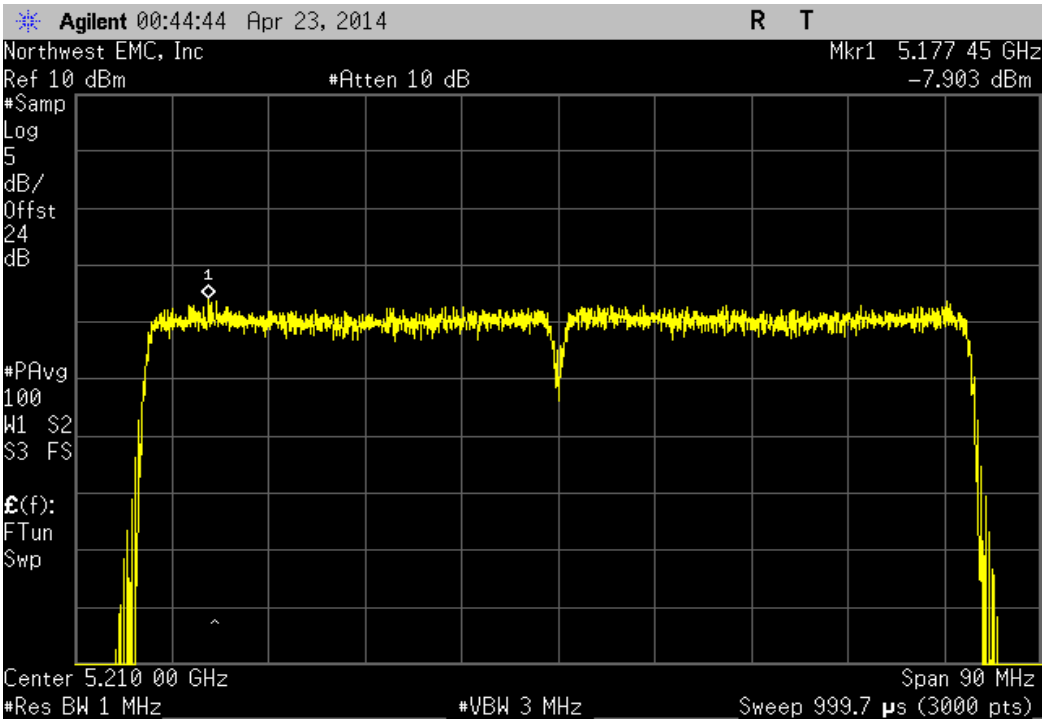


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 106, Low Channel 5530 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-9.142	11	Pass

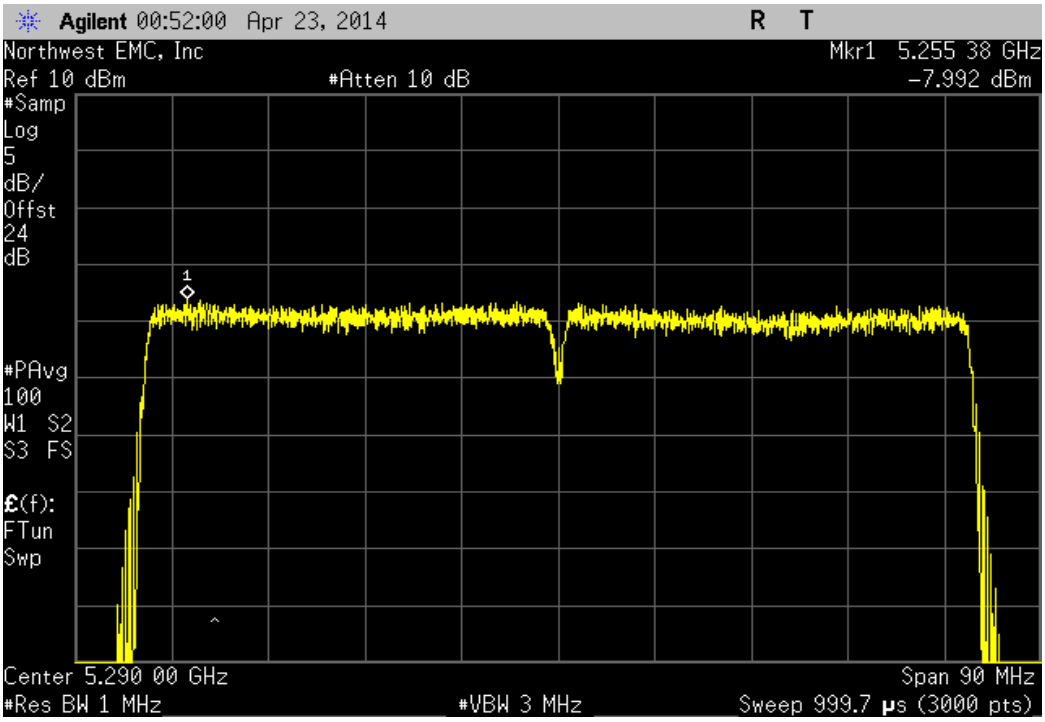


Chain A, IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 42, Low Channel 5210 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-7.903	4	Pass

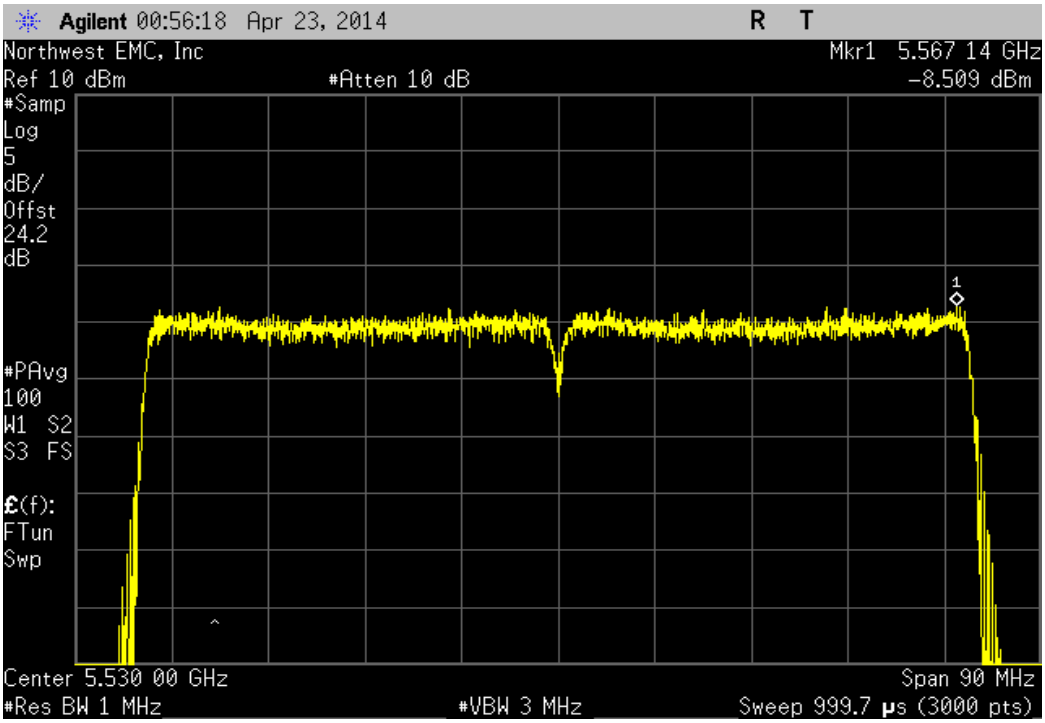


PEAK POWER SPECTRAL DENSITY

Chain A, IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 58, High Channel 5290 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-7.992	11	Pass

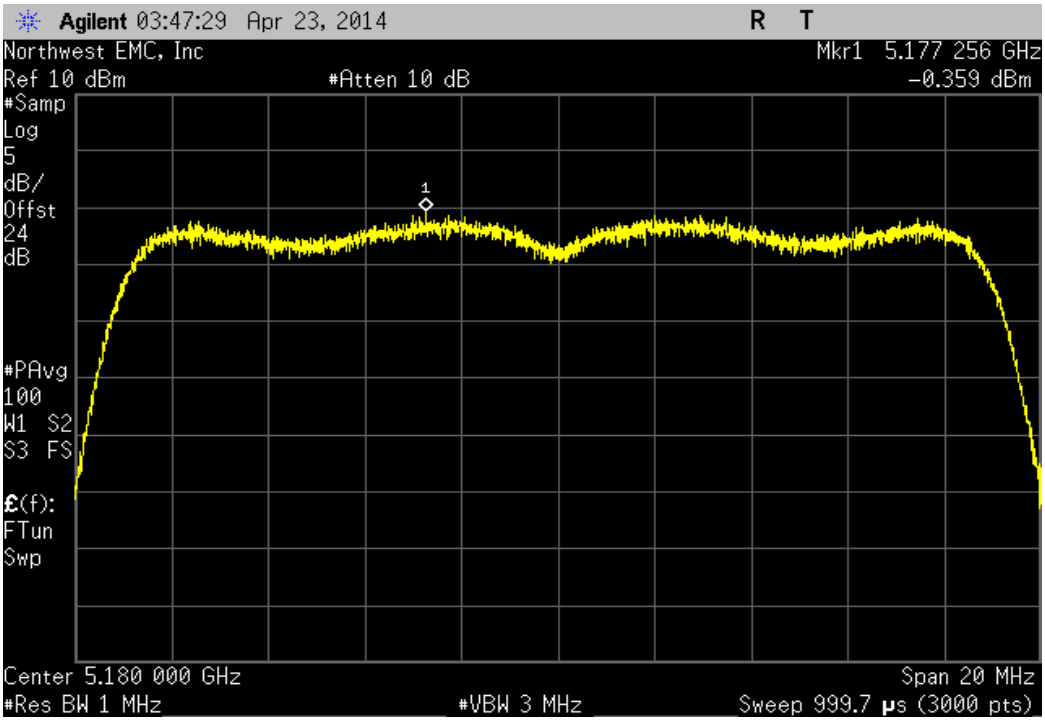


Chain A, IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 106, Low Channel 5530 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-8.509	11	Pass

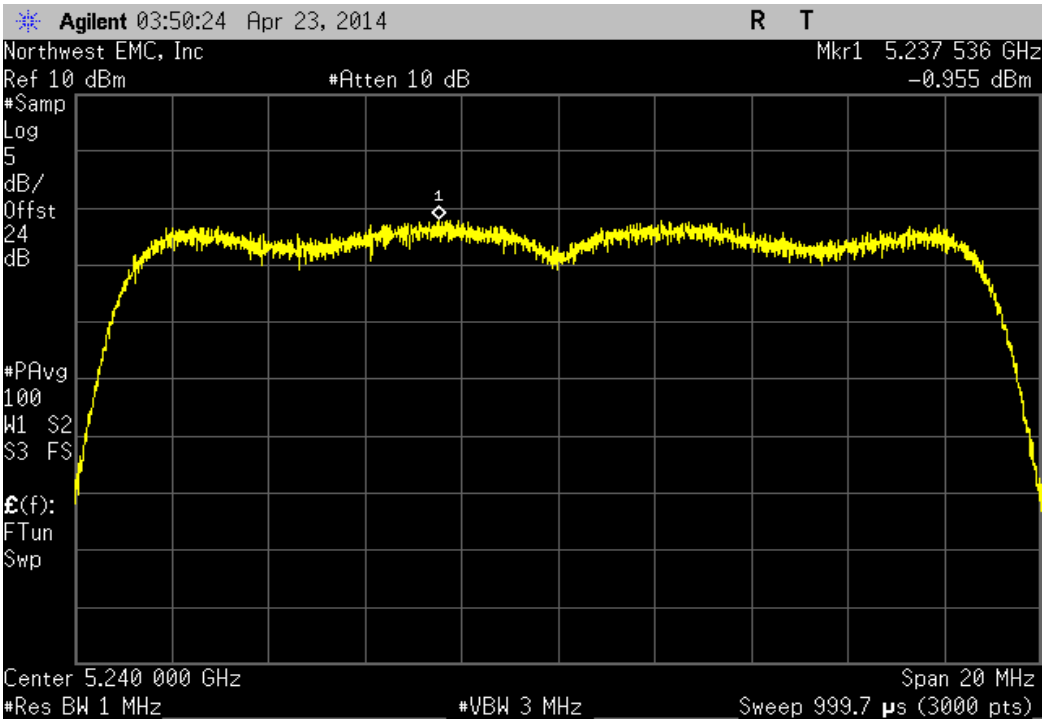


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 36, Low Channel 5180MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.359	4	Pass

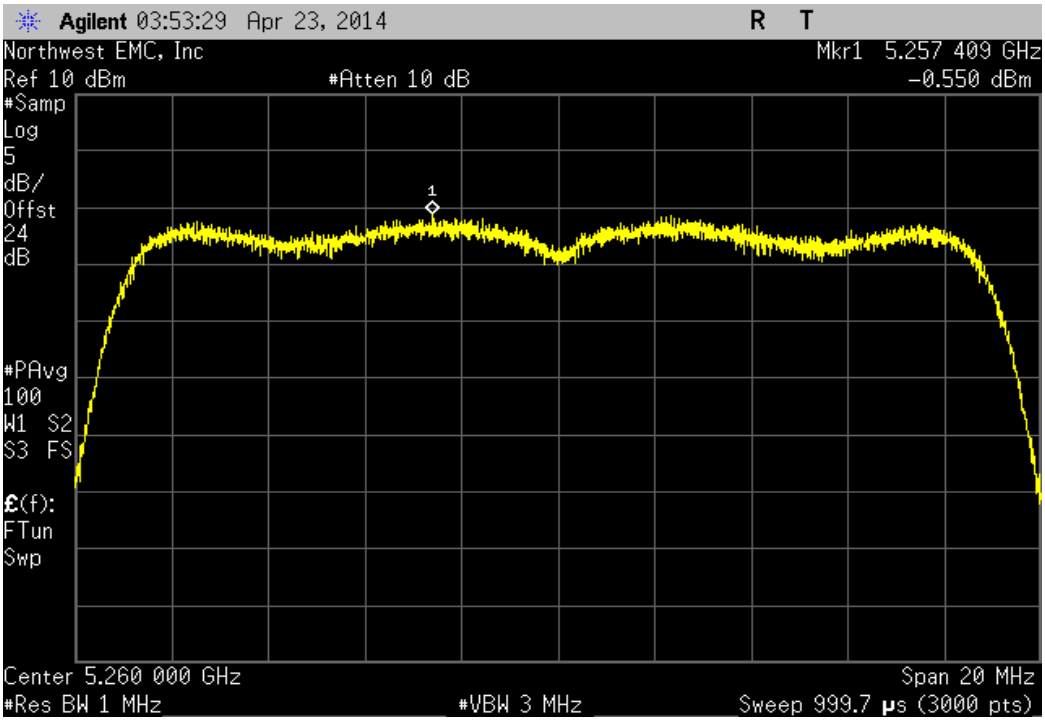


Chain B, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 48, High Channel 5240 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.955	4	Pass

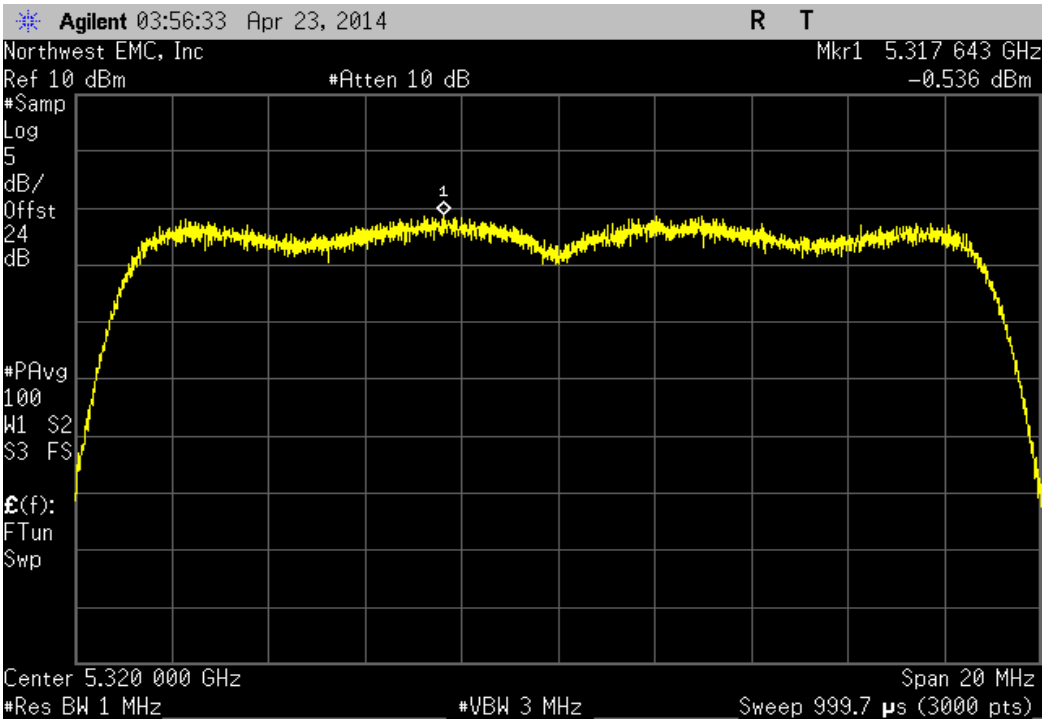


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.55	11	Pass

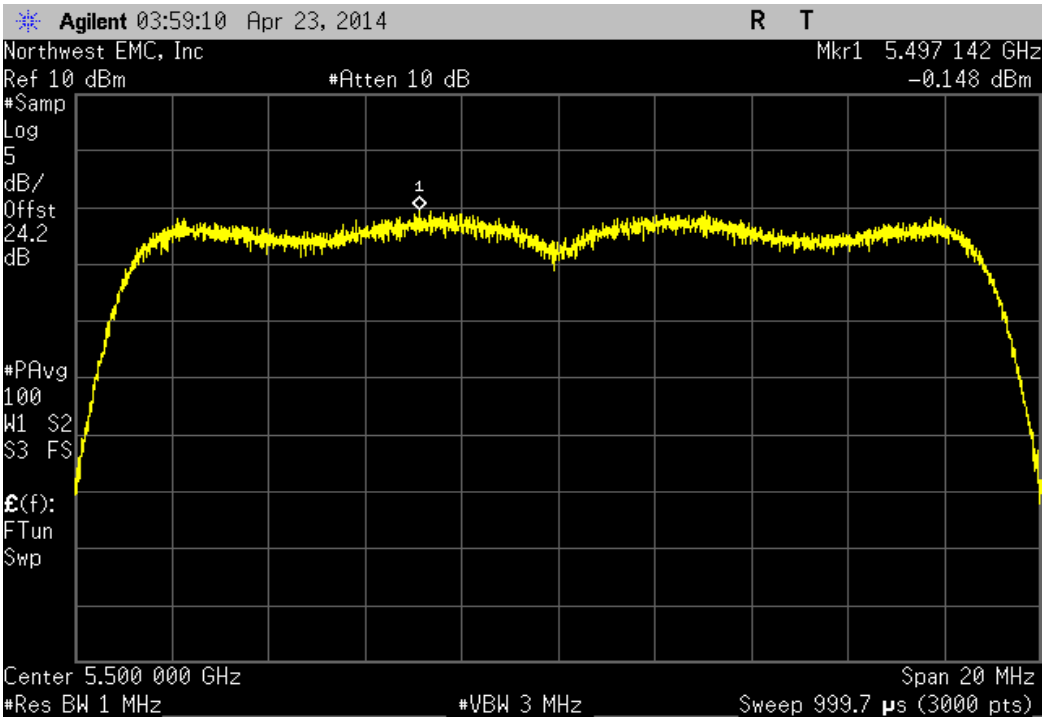


Chain B, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 64, High Channel 5320 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.536	11	Pass

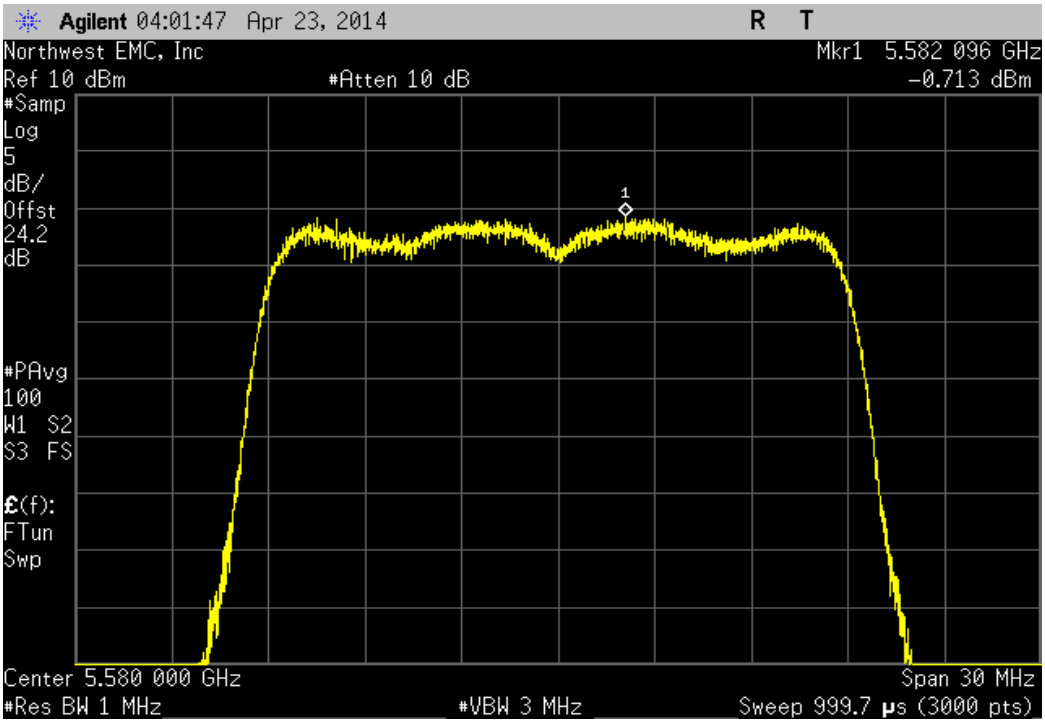


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 100, Low Channel 5500 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.148	11	Pass

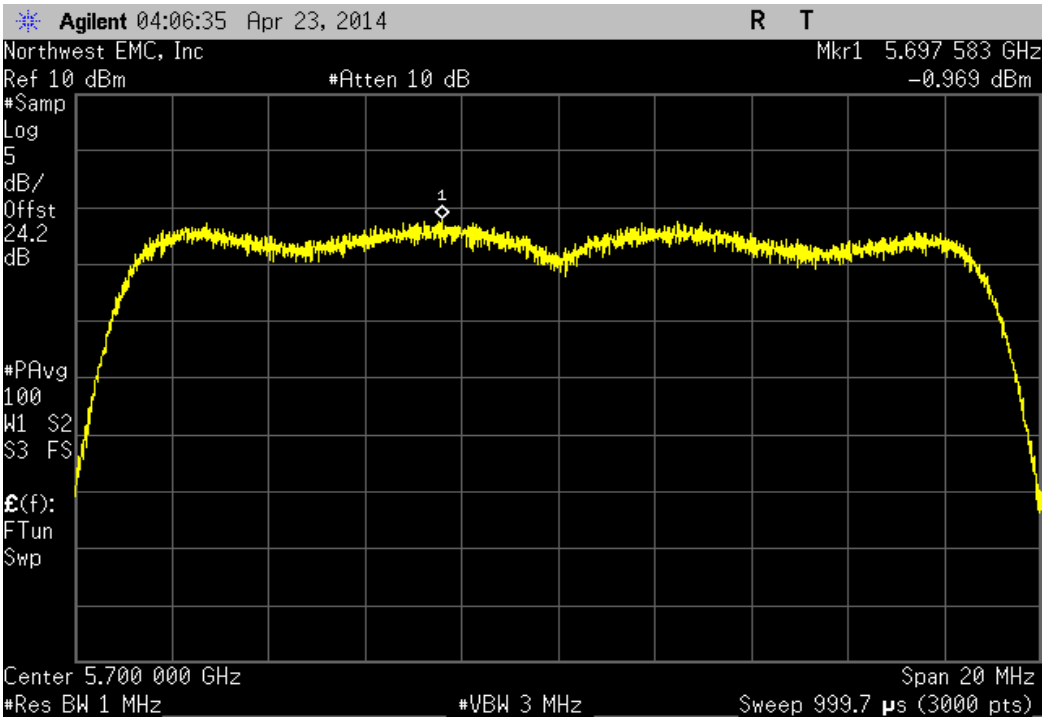


Chain B, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 116, Mid Channel 5580 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.713	11	Pass

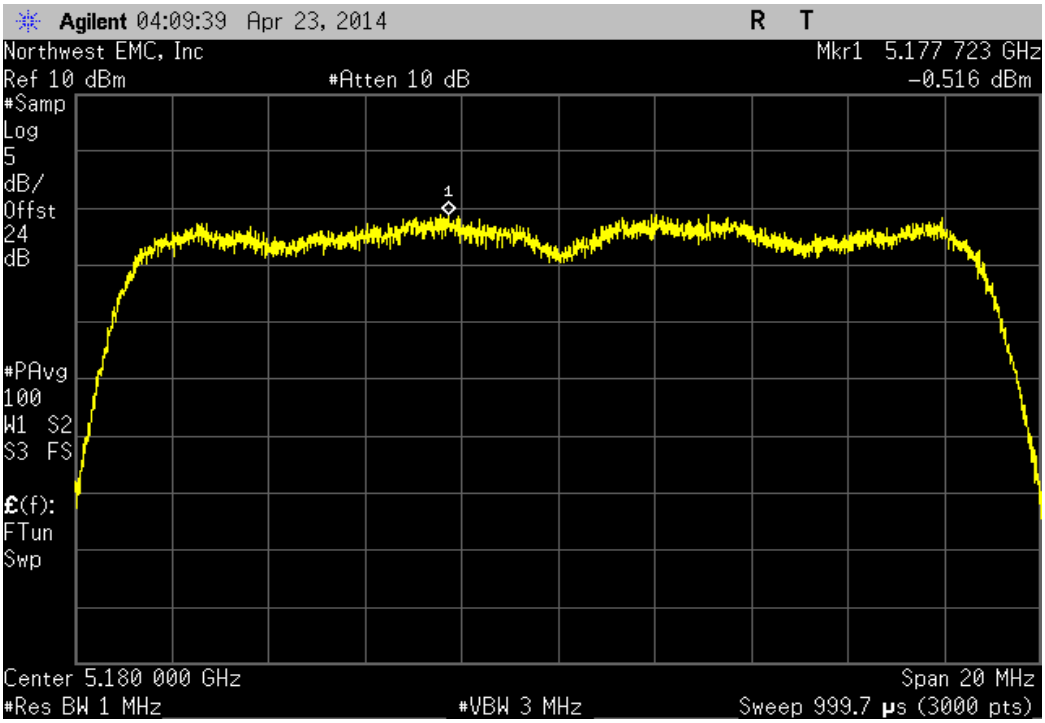


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 20 MHz, HT, MCS8, Ch. 140, High Channel 5700 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.969	11	Pass

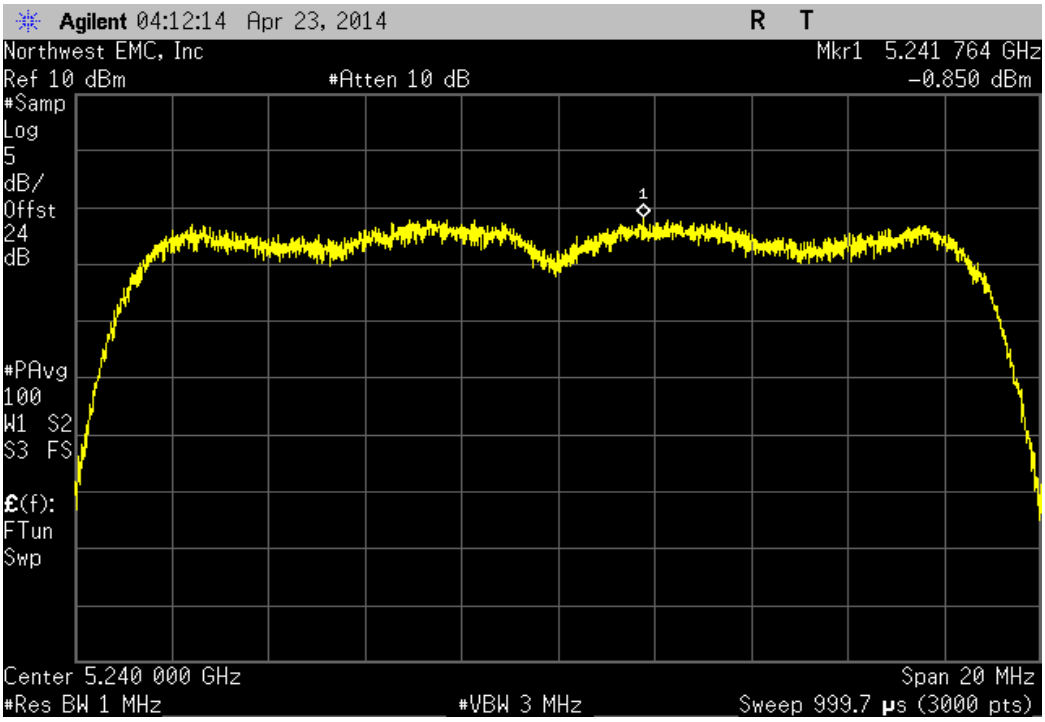


Chain B, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.516	4	Pass

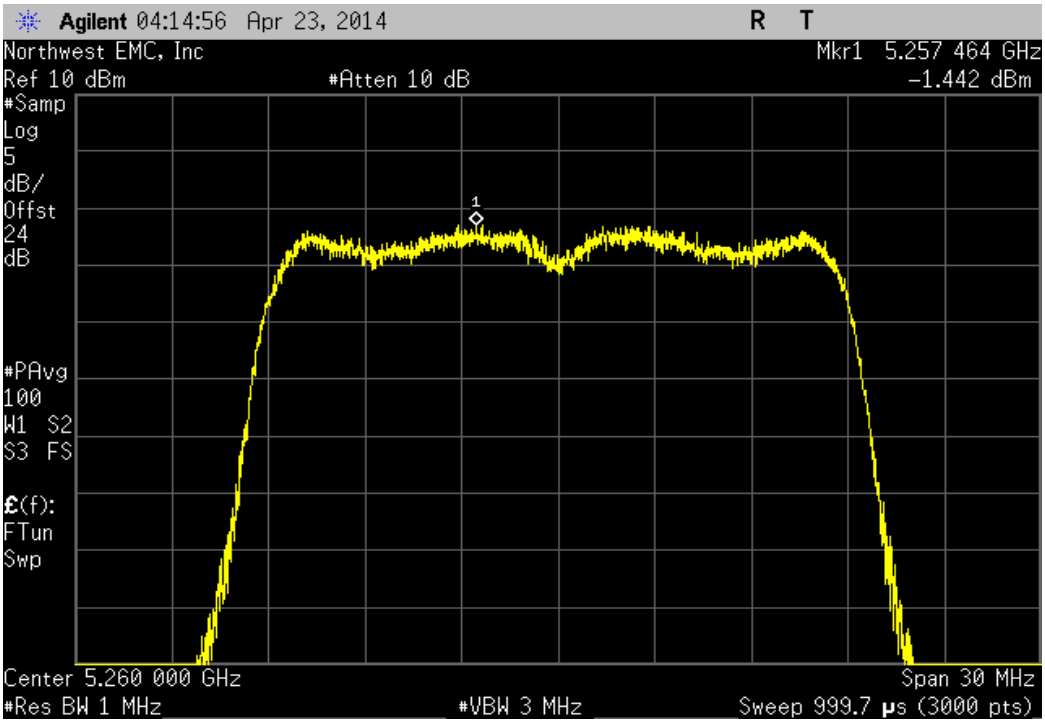


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 48, High Channel 5240 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.85	4	Pass

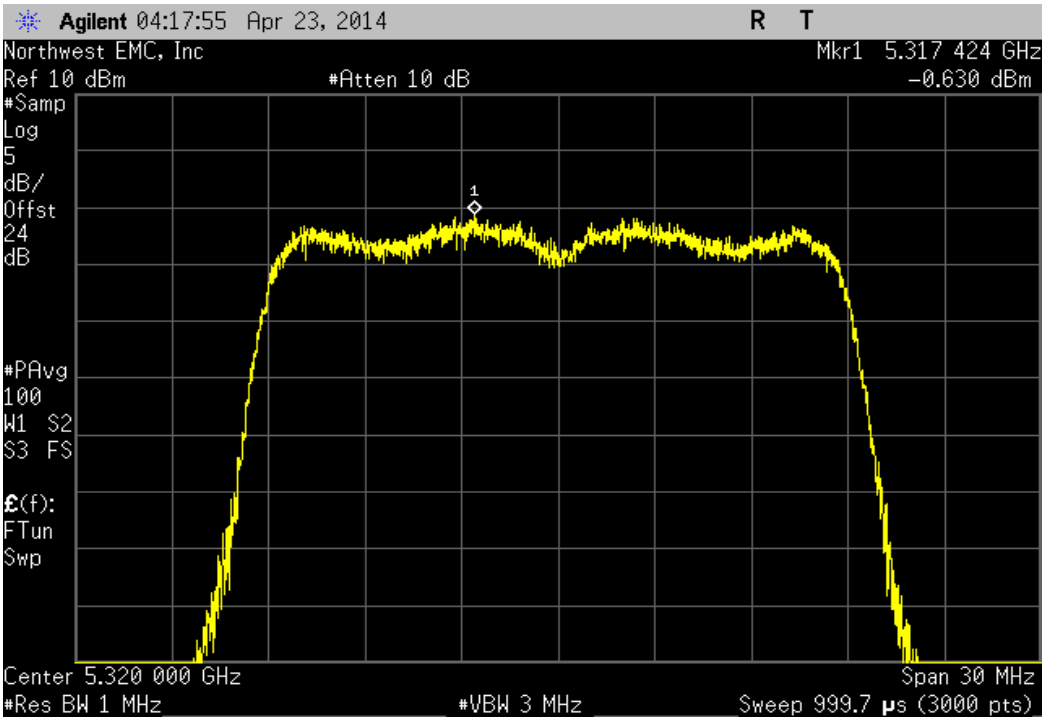


Chain B, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-1.442	11	Pass

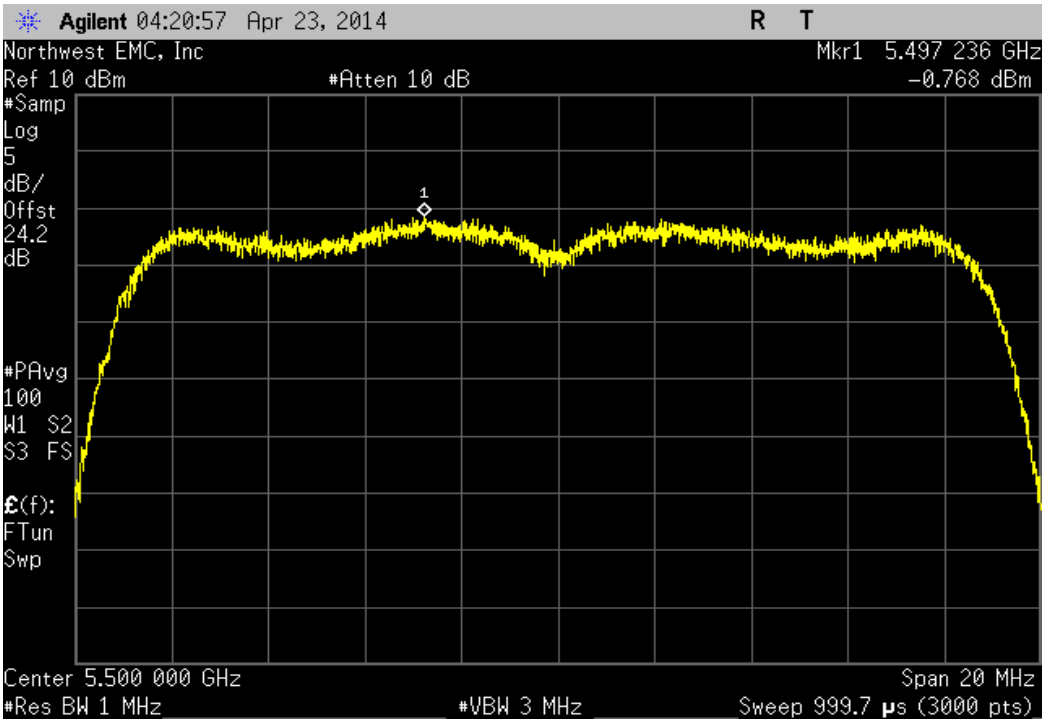


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 64, High Channel 5320 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.63	11	Pass

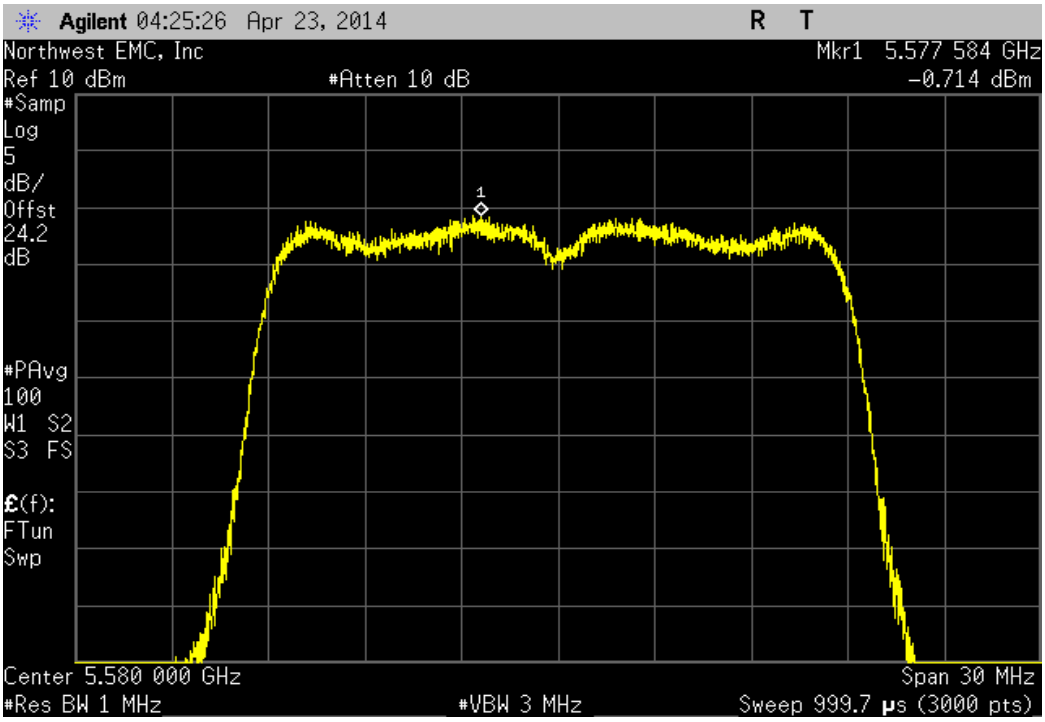


Chain B, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 100, Low Channel 5500 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.768	11	Pass

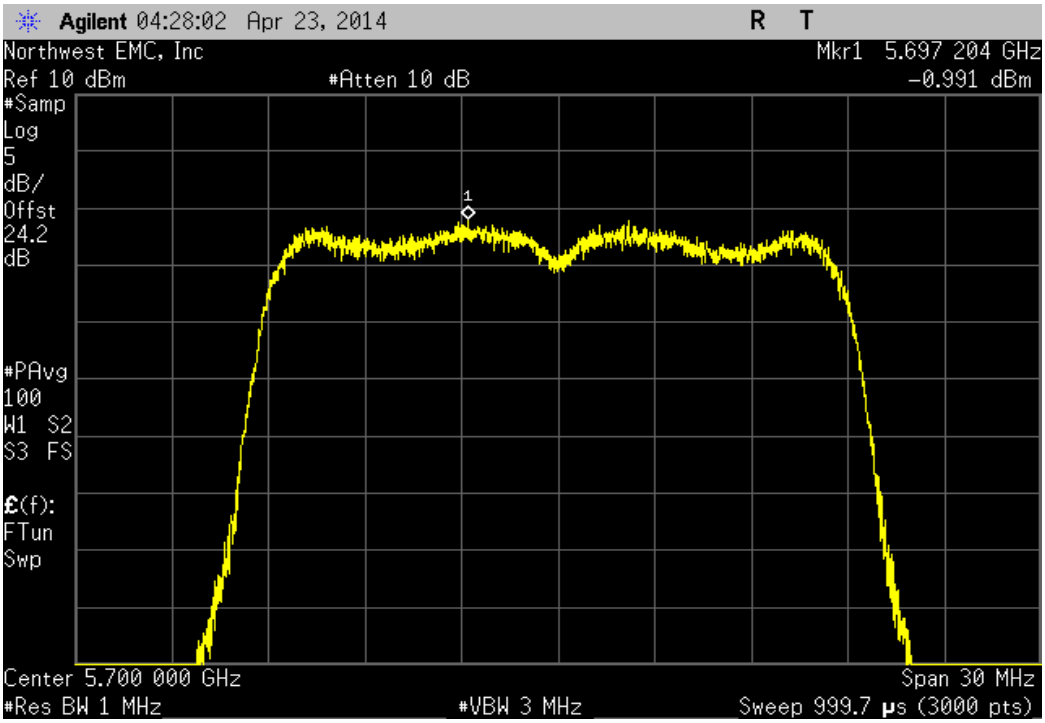


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 116, Mid Channel 5580 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.714	11	Pass

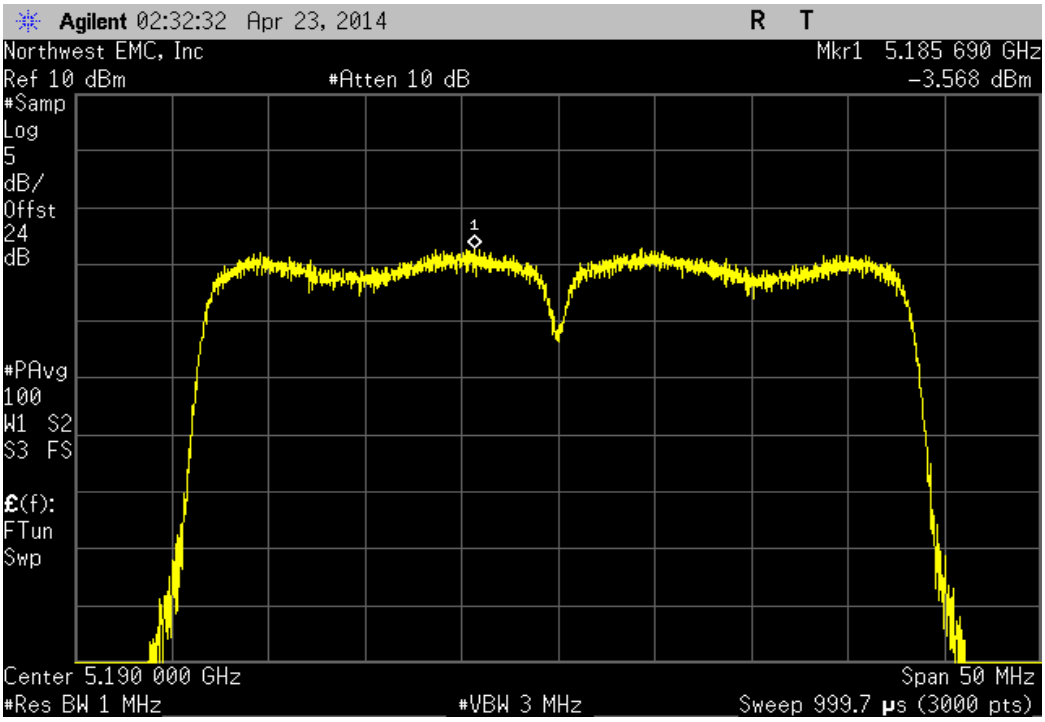


Chain B, IEEE 802.11(n), 20 MHz, HT, MCS15, Ch. 140, High Channel 5700 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.991	11	Pass

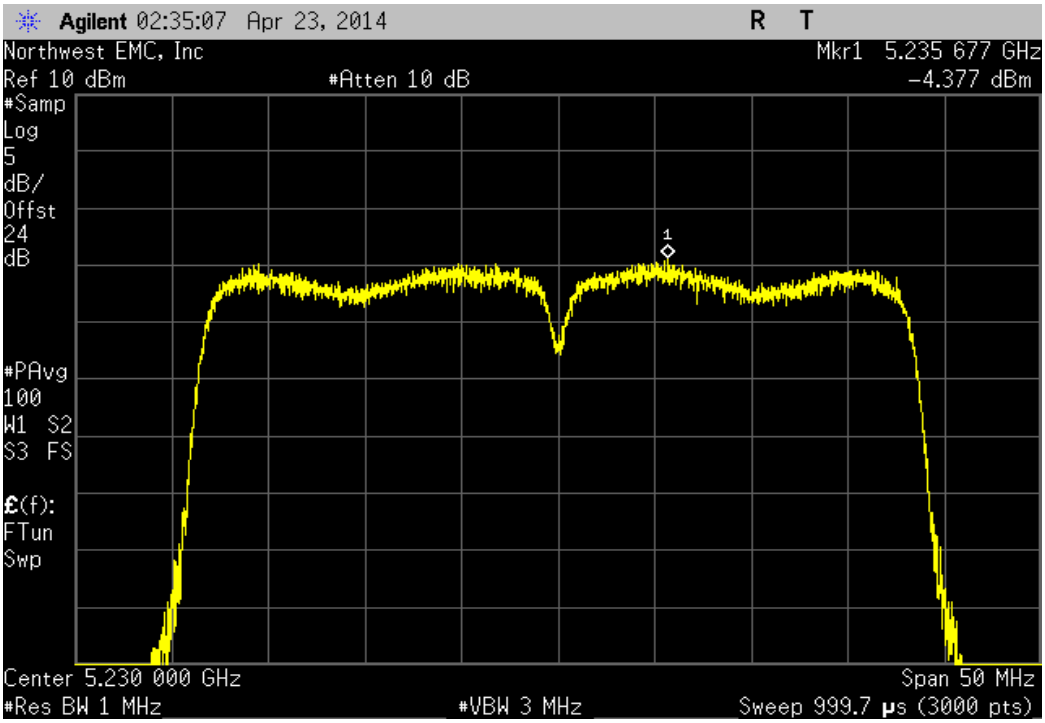


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 40 MHz, HT, MCS8, Ch. 36/40, Low Channel 5190 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.568	4	Pass

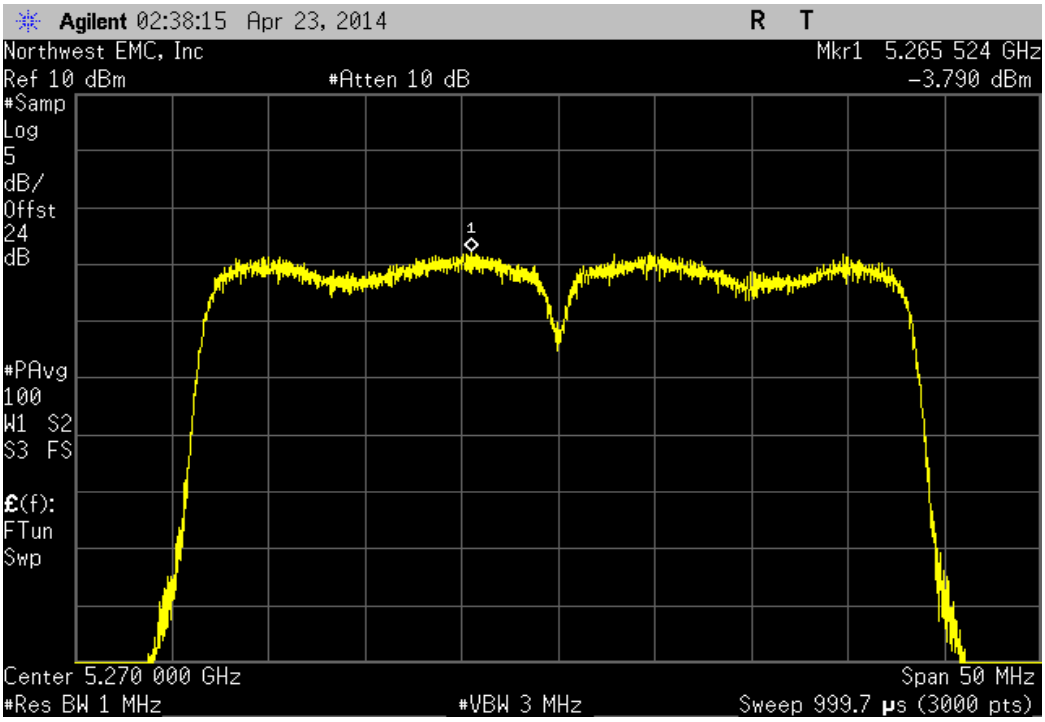


Chain B, IEEE 802.11(n), 40 MHz, HT, MCS8, Ch. 44/48, High Channel 5230 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.377	4	Pass

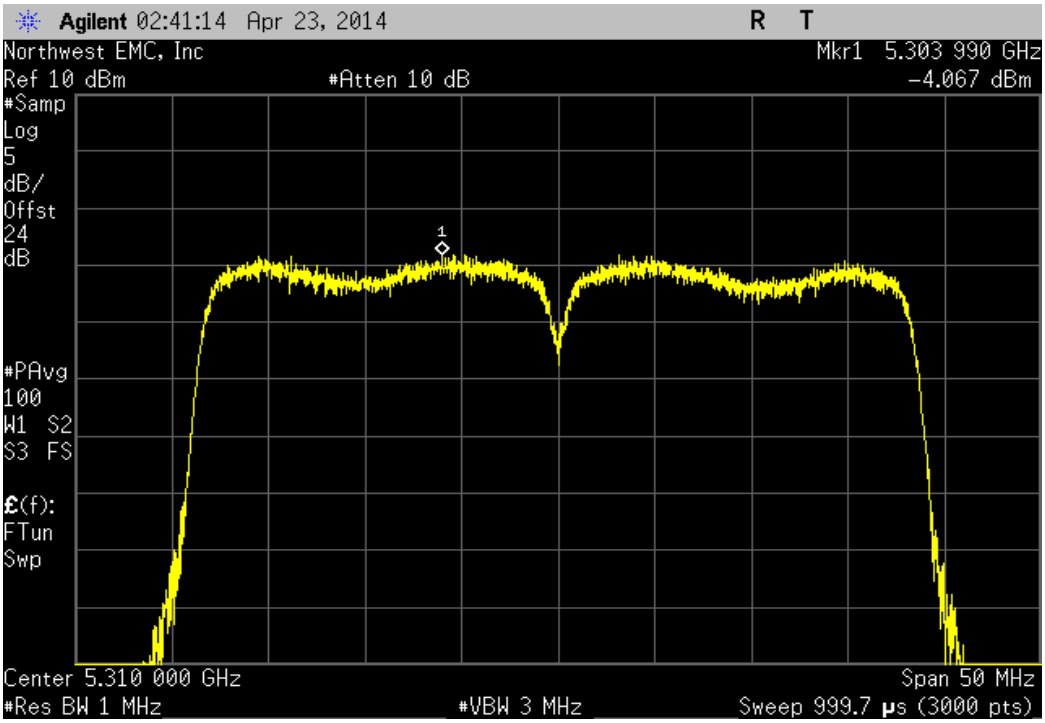


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 40 MHz, HT, MCS8, Ch. 52/56, Low Channel 5270 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.79	11	Pass

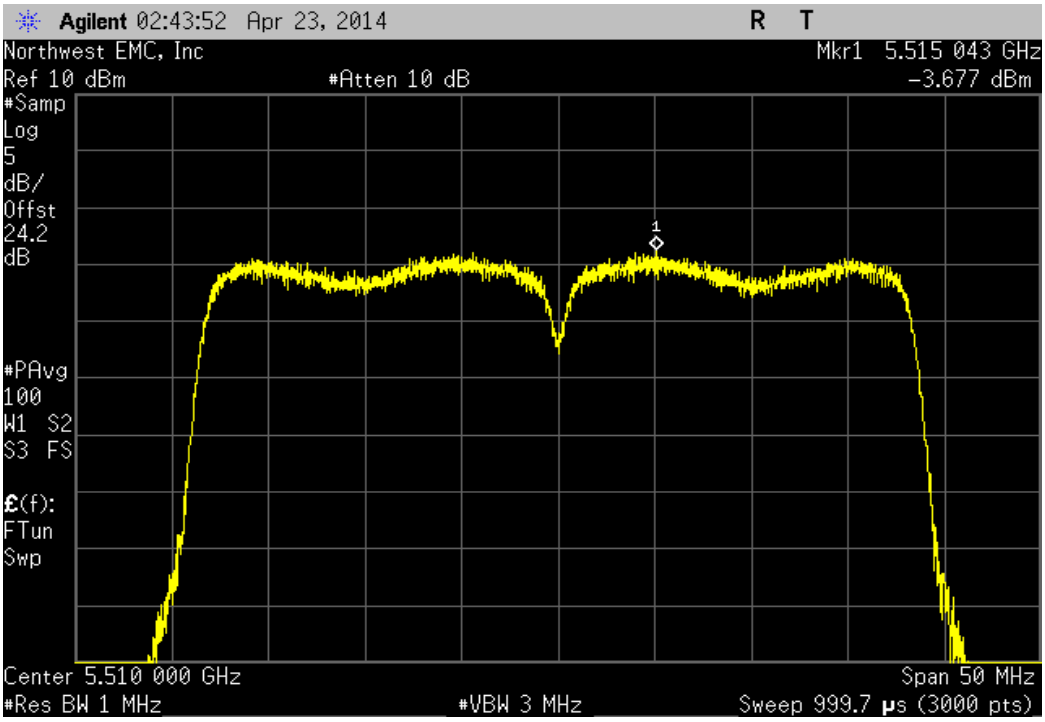


Chain B, IEEE 802.11(n), 40 MHz, HT, MCS8, Ch. 60/64, High Channel 5310 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.067	11	Pass

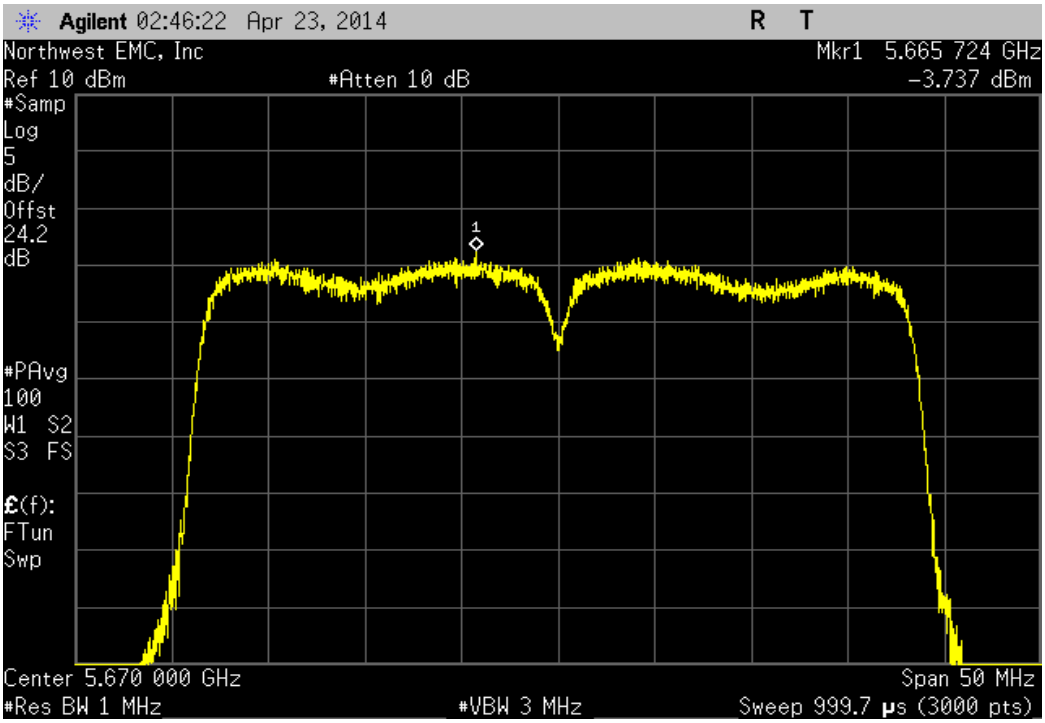


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 40 MHz, HT, MCS8, Ch. 100/104, Low Channel 5510 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.677	11	Pass

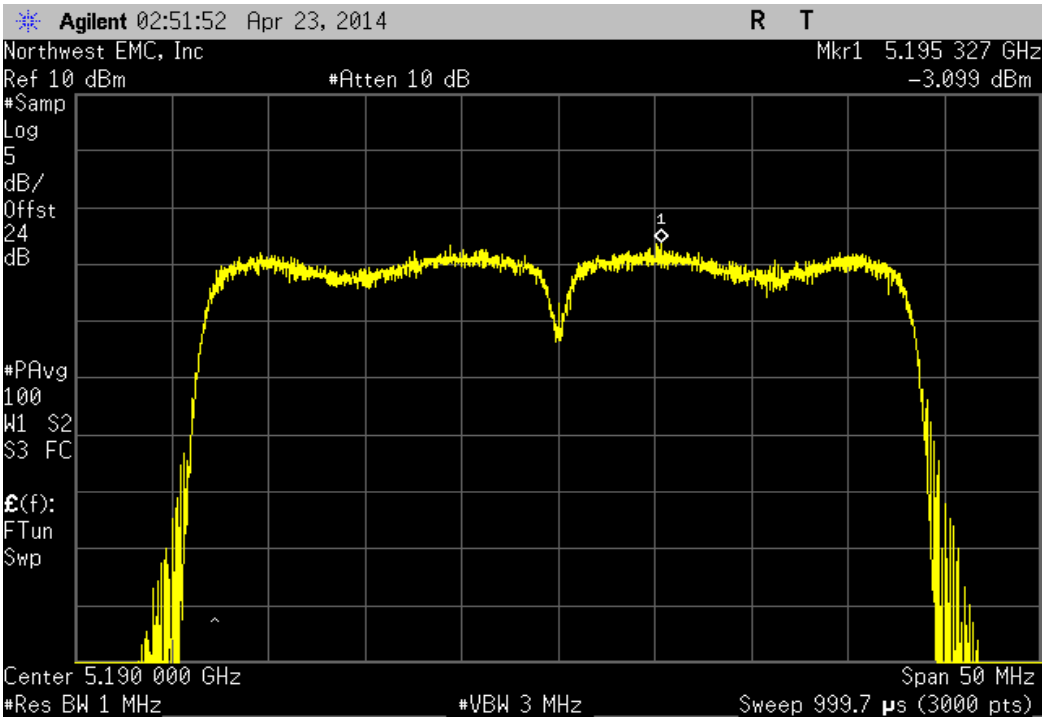


Chain B, IEEE 802.11(n), 40 MHz, HT, MCS8, Ch. 132/136, High Channel 5670 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.737	11	Pass

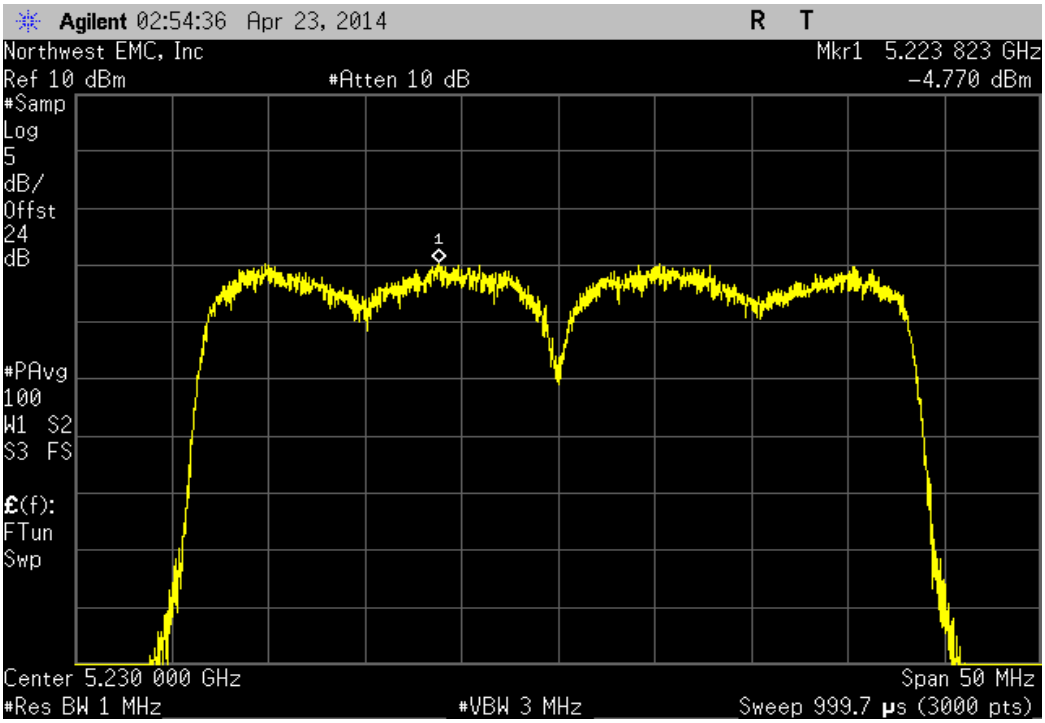


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 40 MHz, HT, MCS15, Ch. 36/40, Low Channel 5190 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.047	4	Pass

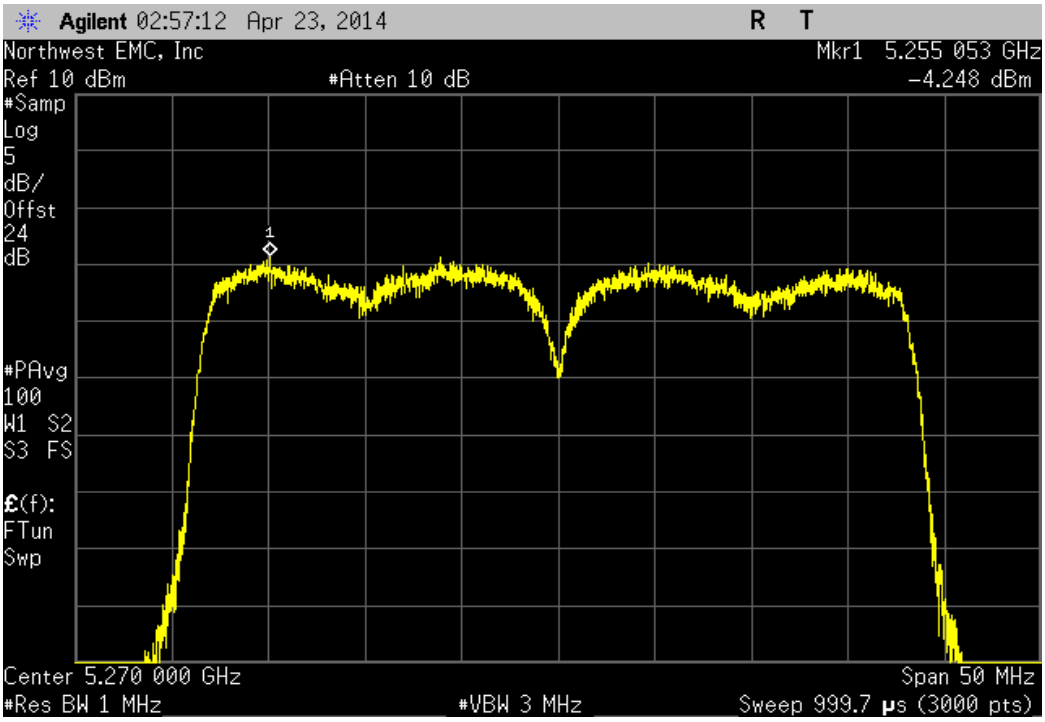


Chain B, IEEE 802.11(n), 40 MHz, HT, MCS15, Ch. 44/48, High Channel 5230 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.77	4	Pass

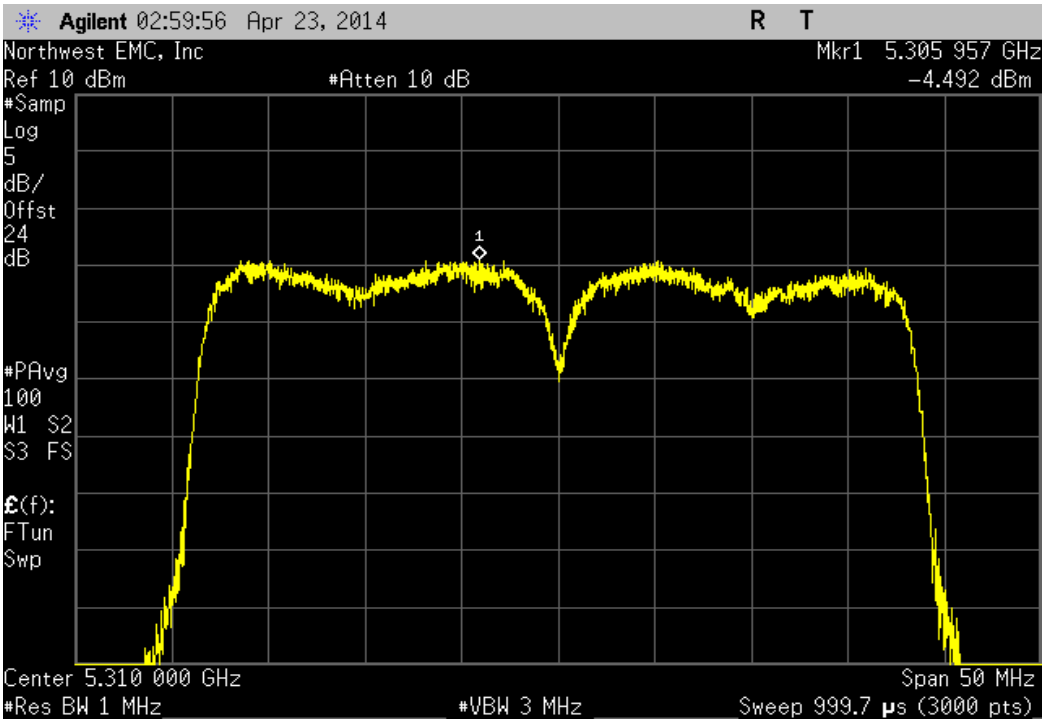


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 40 MHz, HT, MCS15, Ch. 52/56, Low Channel 5270 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.248	11	Pass

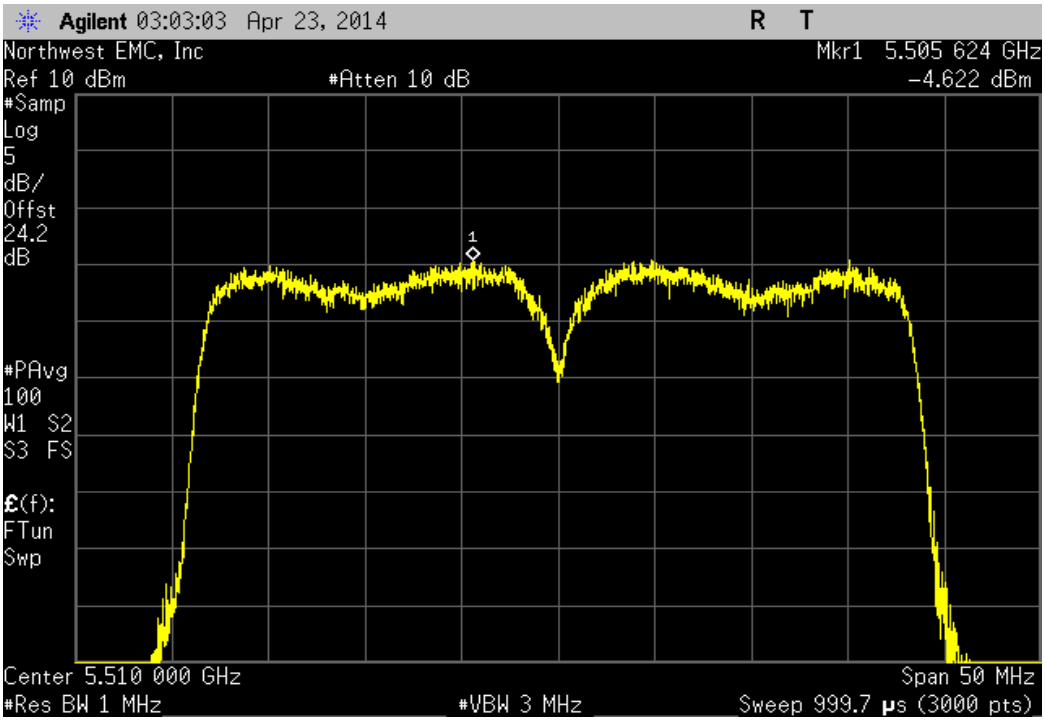


Chain B, IEEE 802.11(n), 40 MHz, HT, MCS15, Ch. 60/64, High Channel 5310 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.492	11	Pass

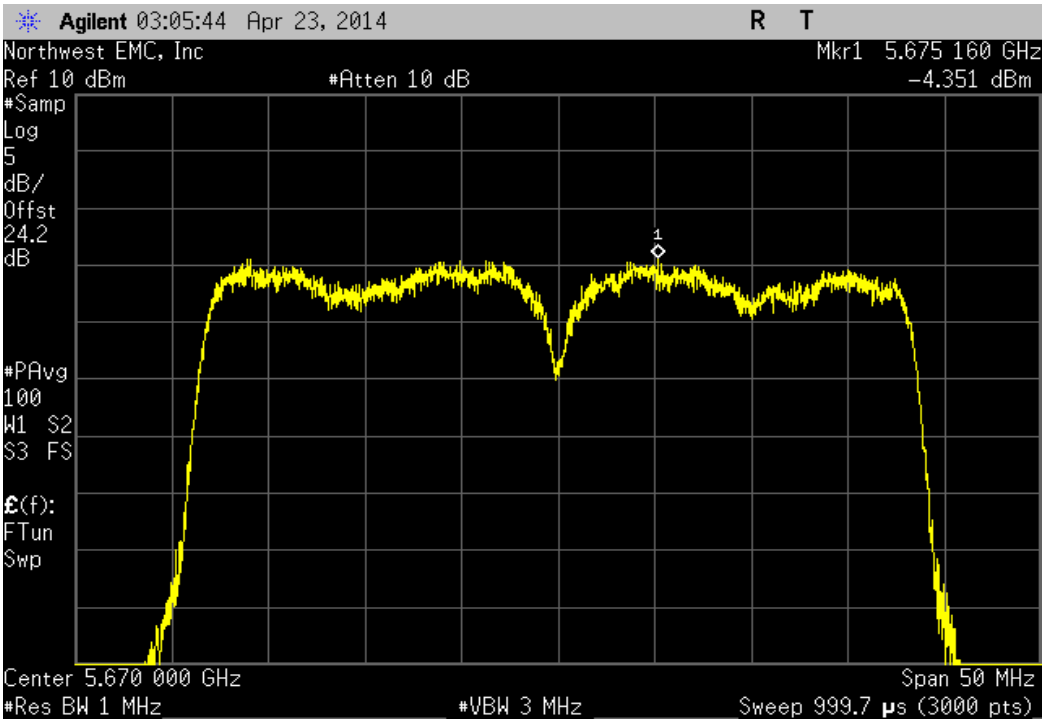


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(n), 40 MHz, HT, MCS15, Ch. 100/104, Low Channel 5510 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.622	11	Pass

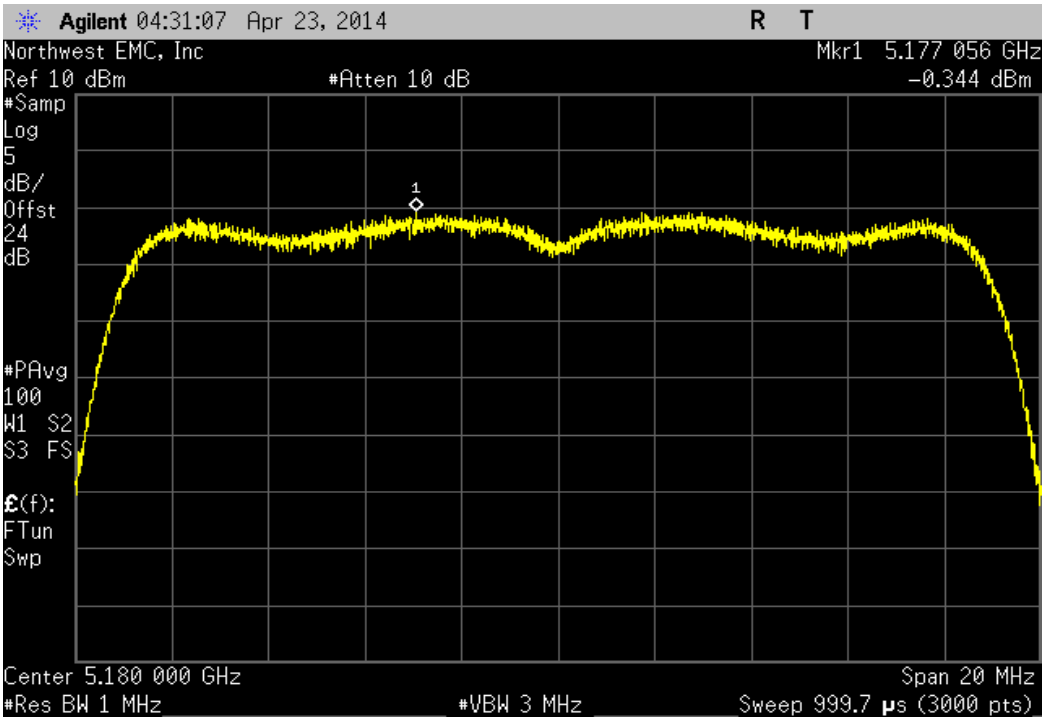


Chain B, IEEE 802.11(n), 40 MHz, HT, MCS15, Ch. 132/136, High Channel 5670 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.351	11	Pass

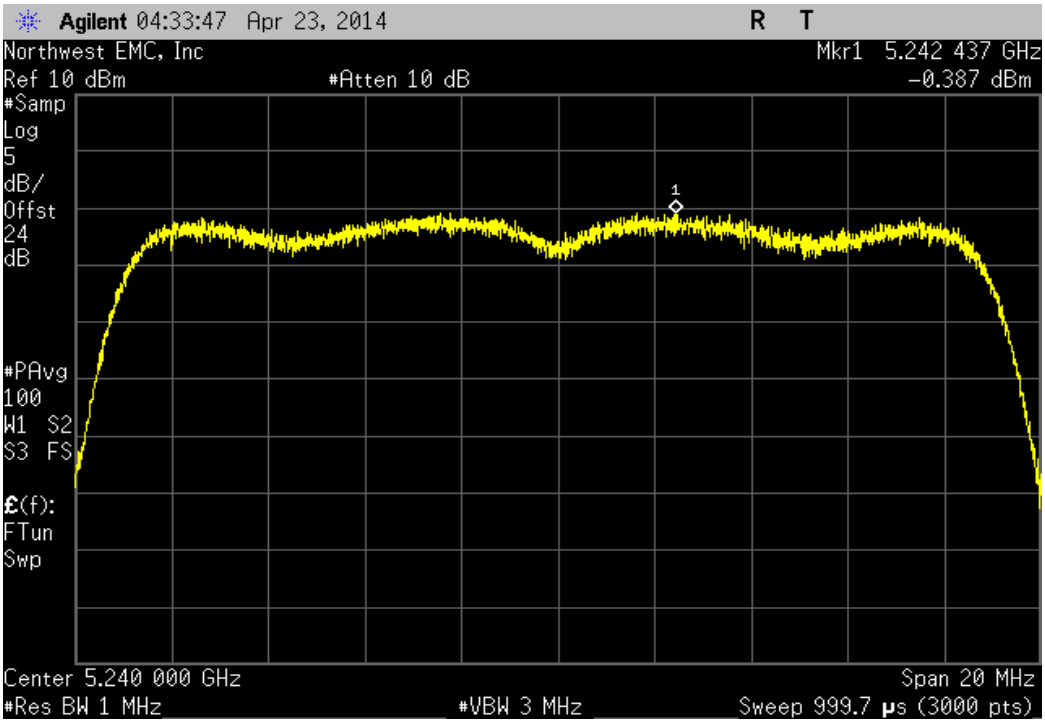


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 36, Low Channel 5180MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.344	4	Pass

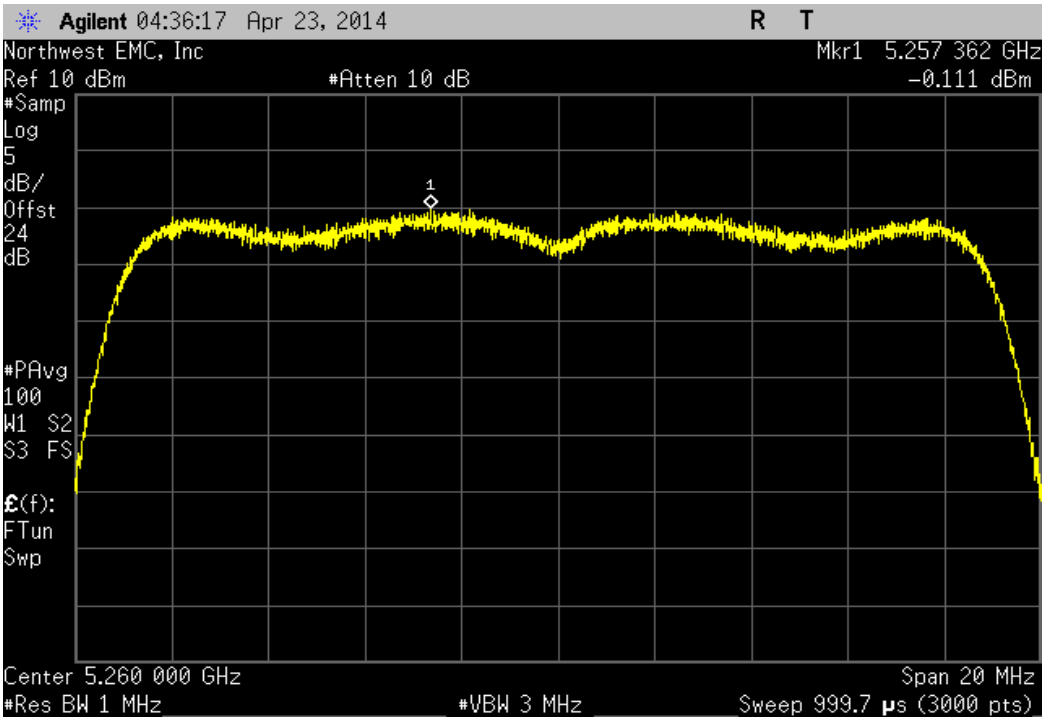


Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 48, High Channel 5240 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.387	4	Pass

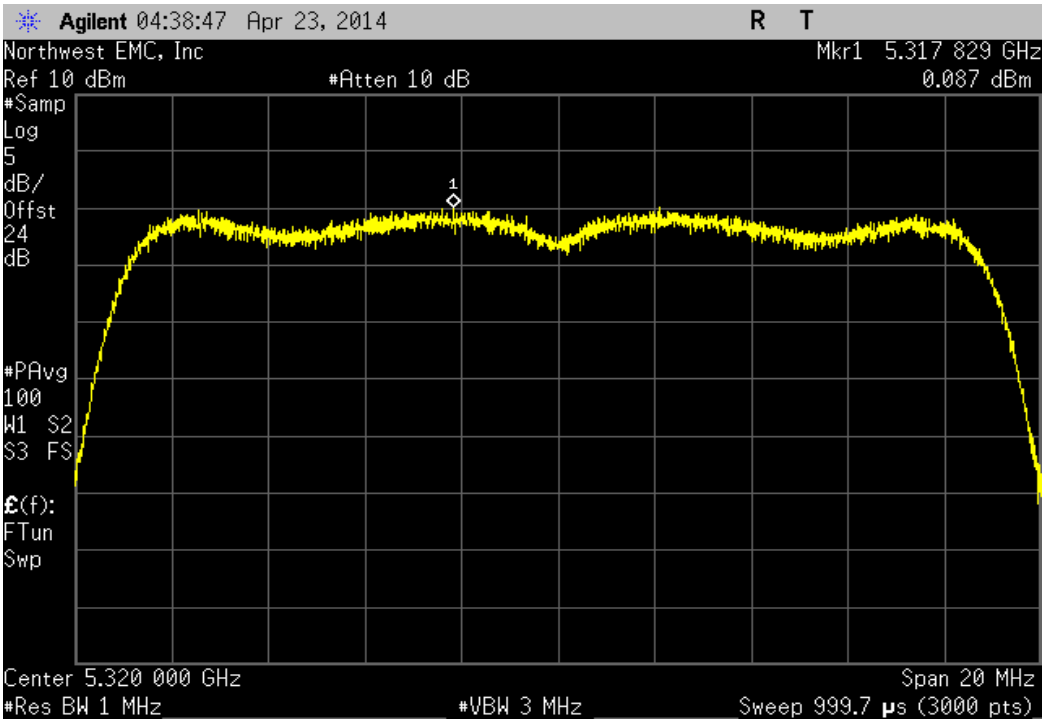


PEAK POWER SPECTRAL DENSITY

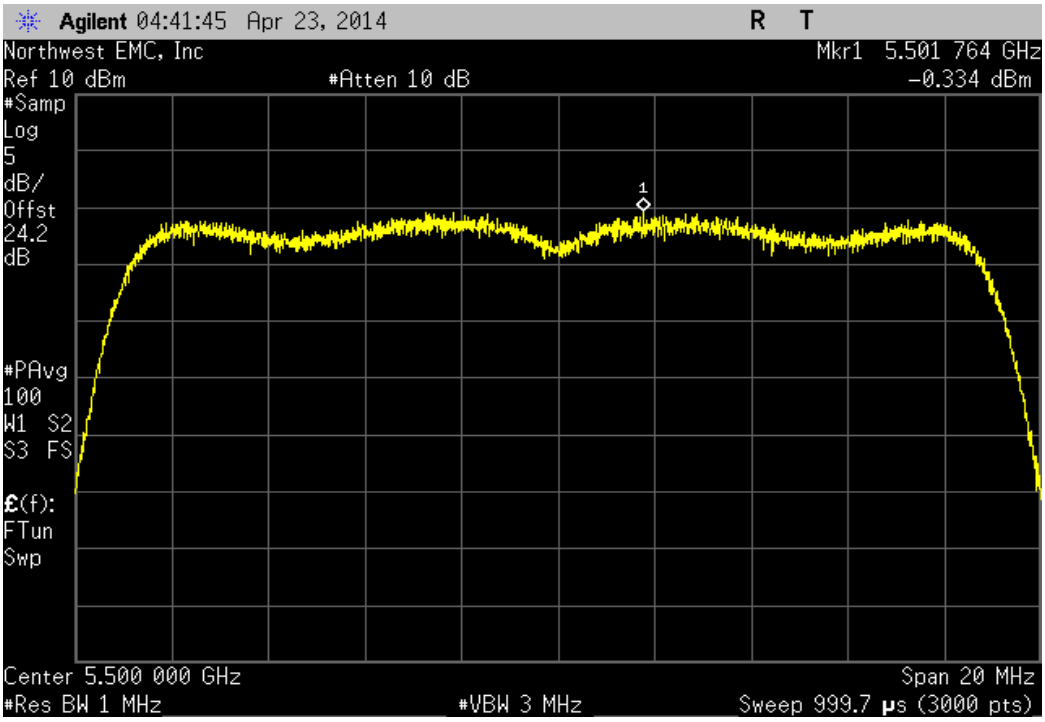
Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.111	11	Pass



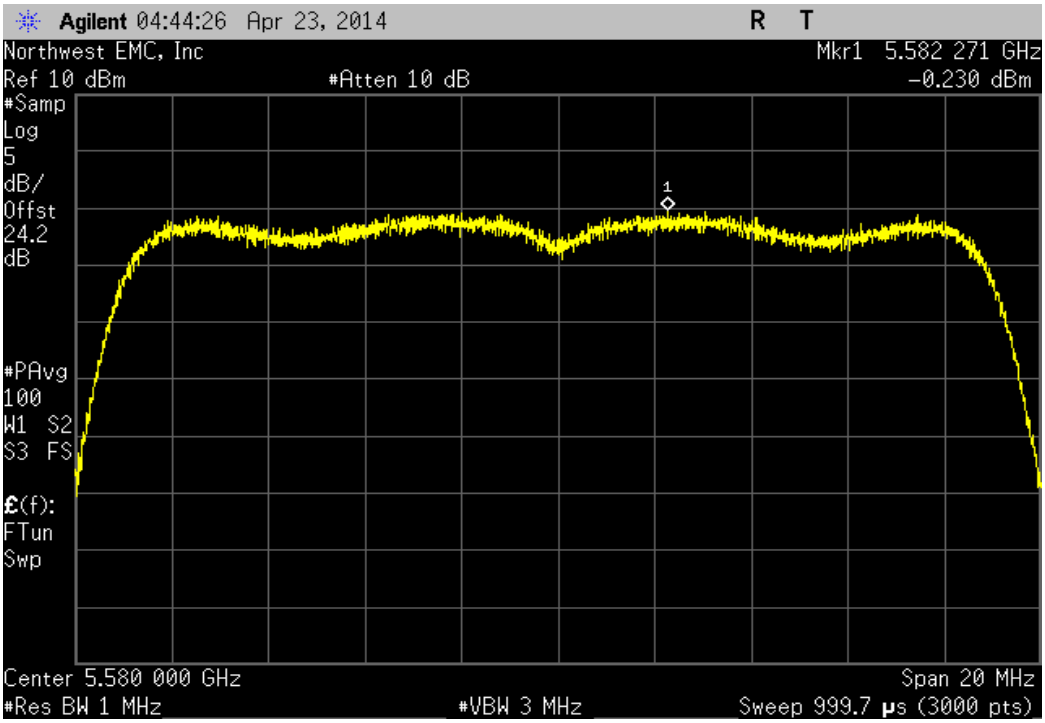
Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 64, High Channel 5320 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				0.087	11	Pass



Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 100, Low Channel 5500 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.334	11	Pass

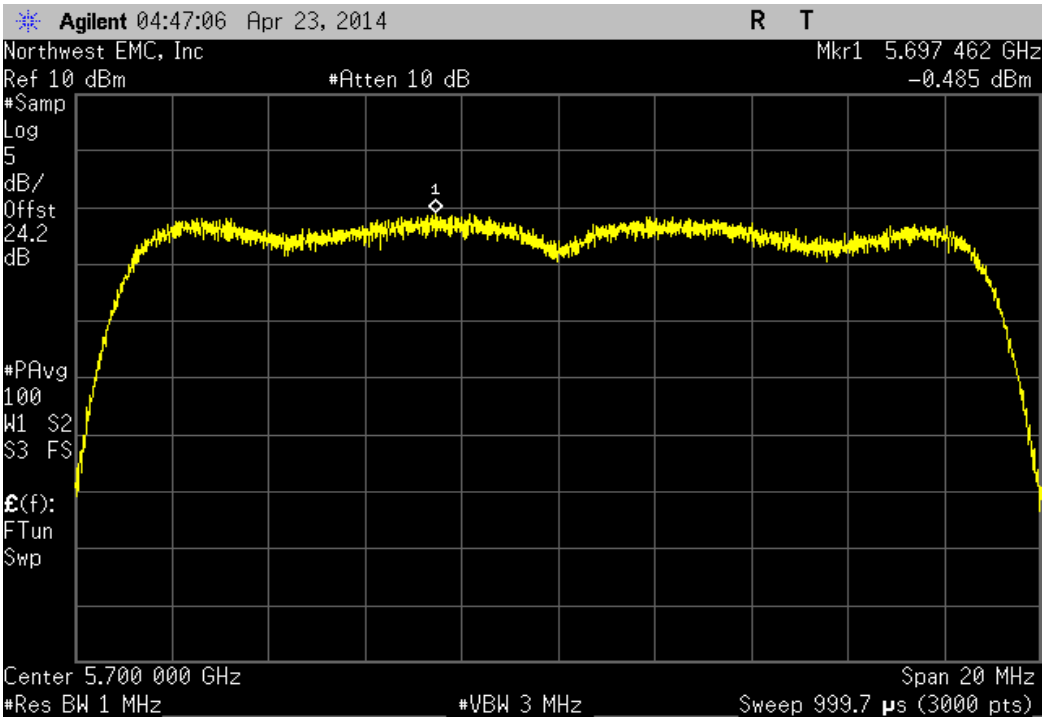


Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 116, Mid Channel 5580 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.23	11	Pass

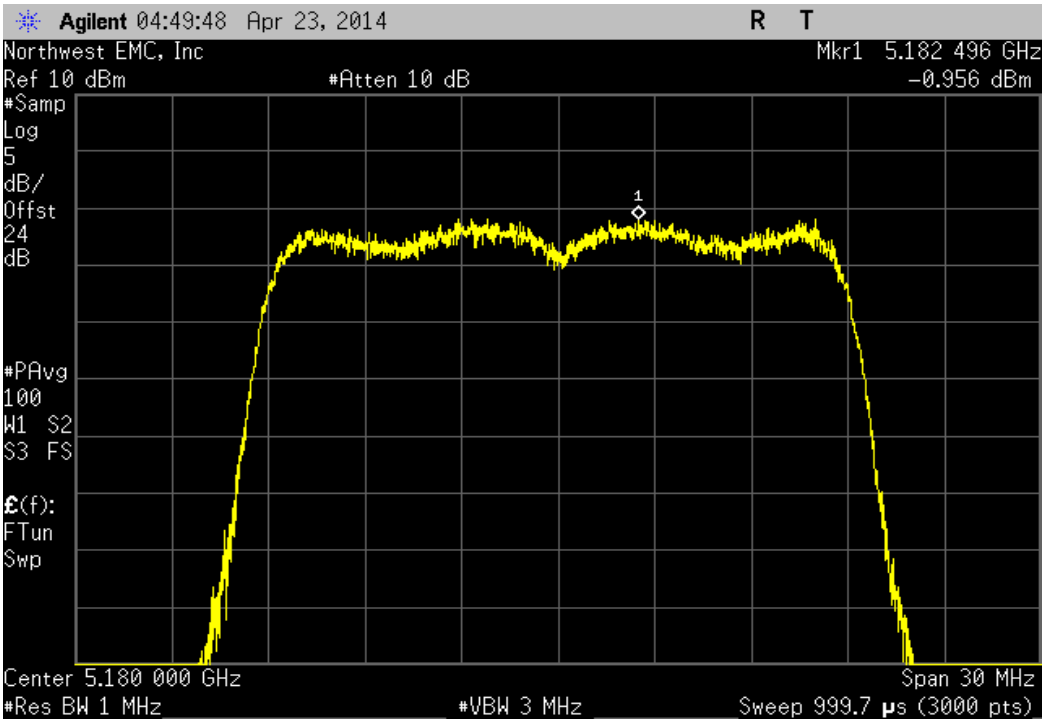


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 140, High Channel 5700 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.485	11	Pass

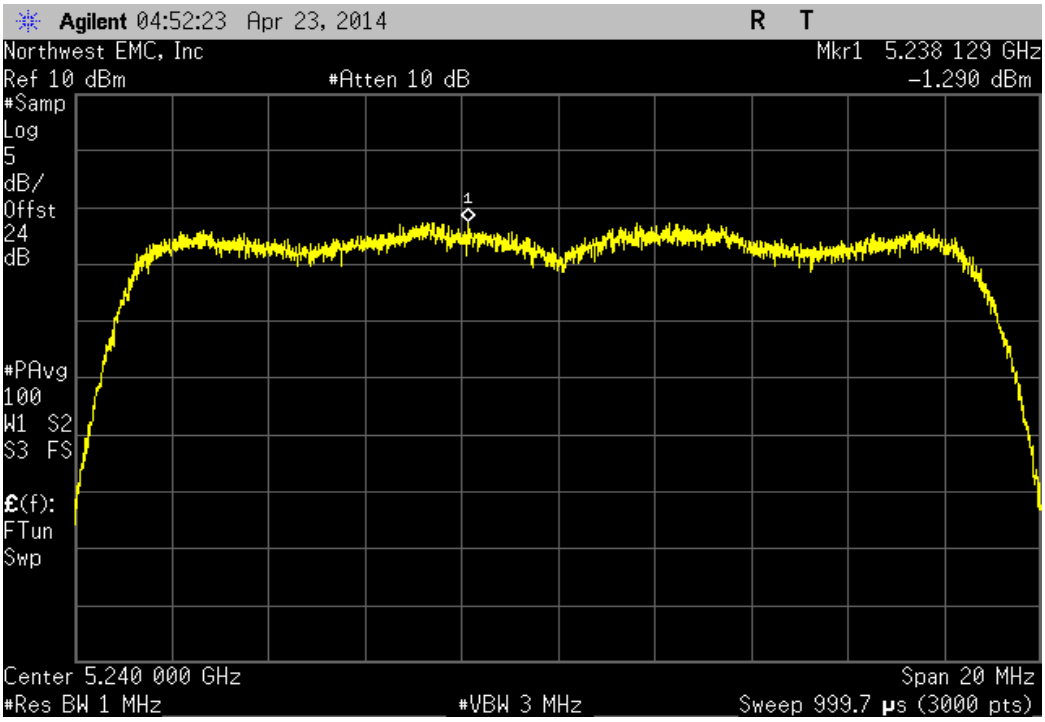


Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.956	4	Pass

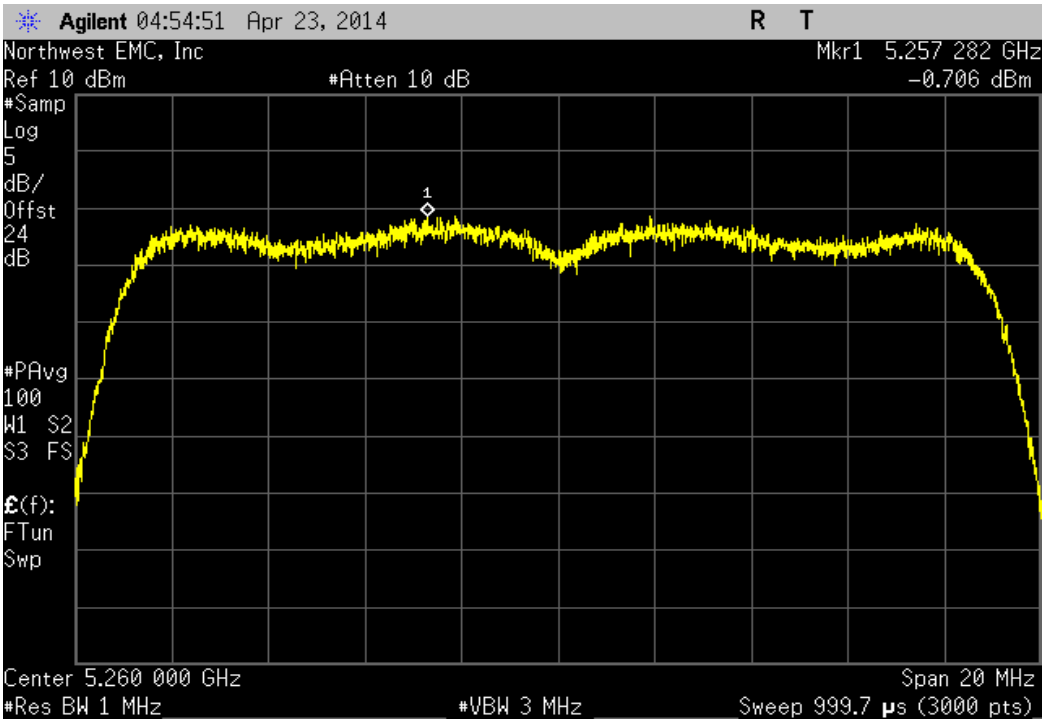


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 48, High Channel 5240 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-1.29	4	Pass

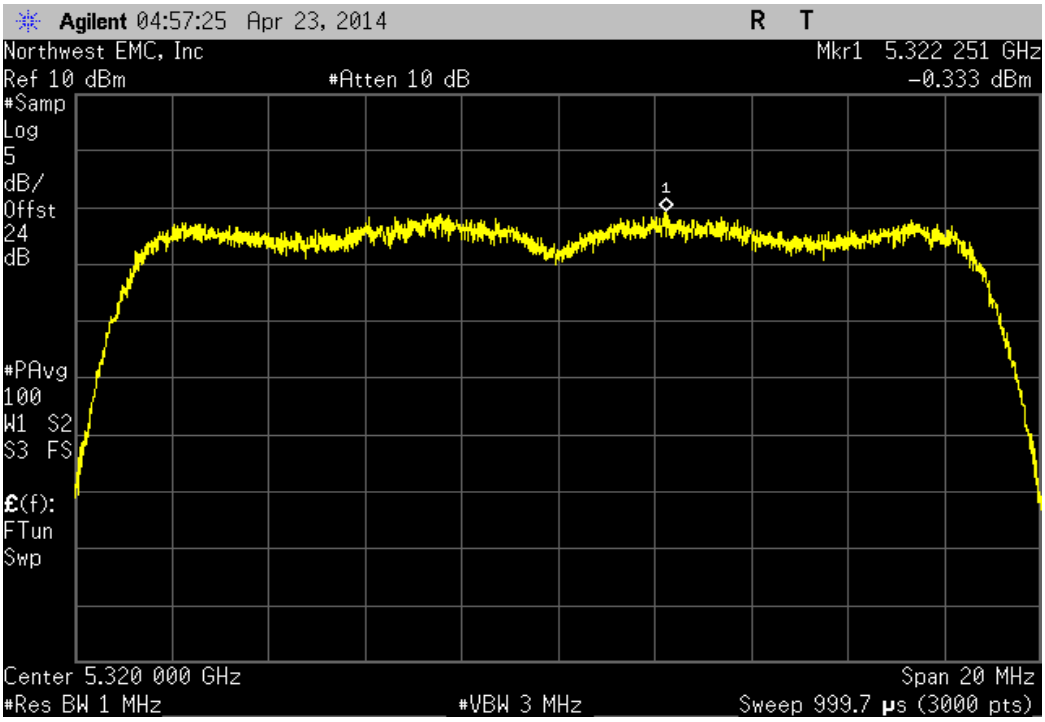


Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.706	11	Pass

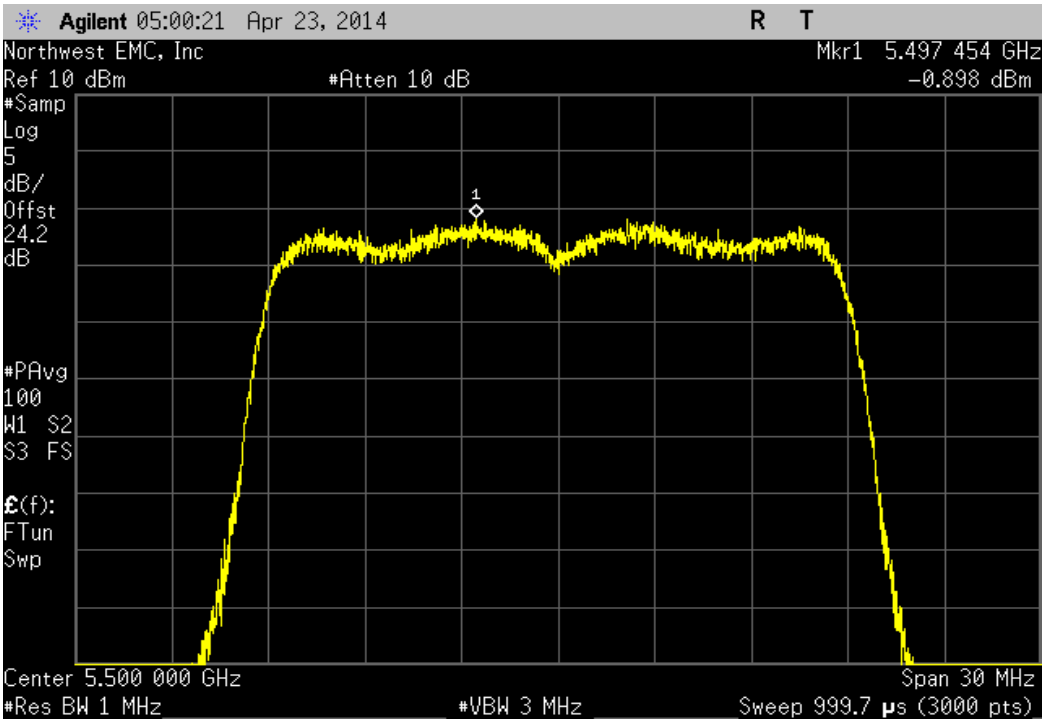


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 64, High Channel 5320 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.333	11	Pass

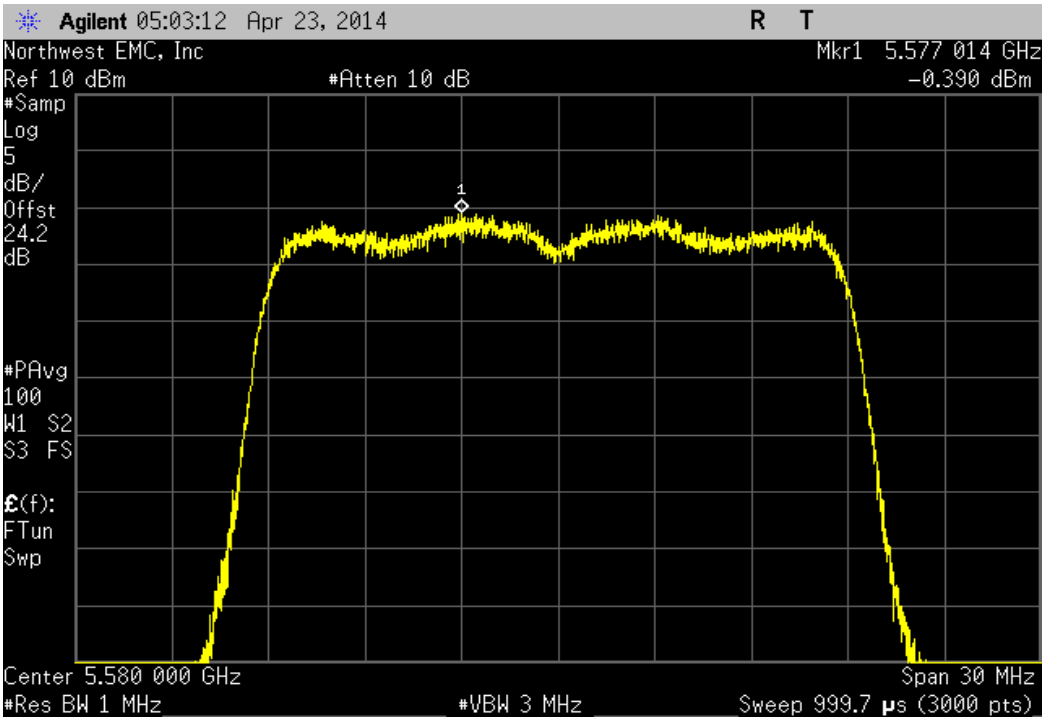


Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 100, Low Channel 5500 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.898	11	Pass



PEAK POWER SPECTRAL DENSITY

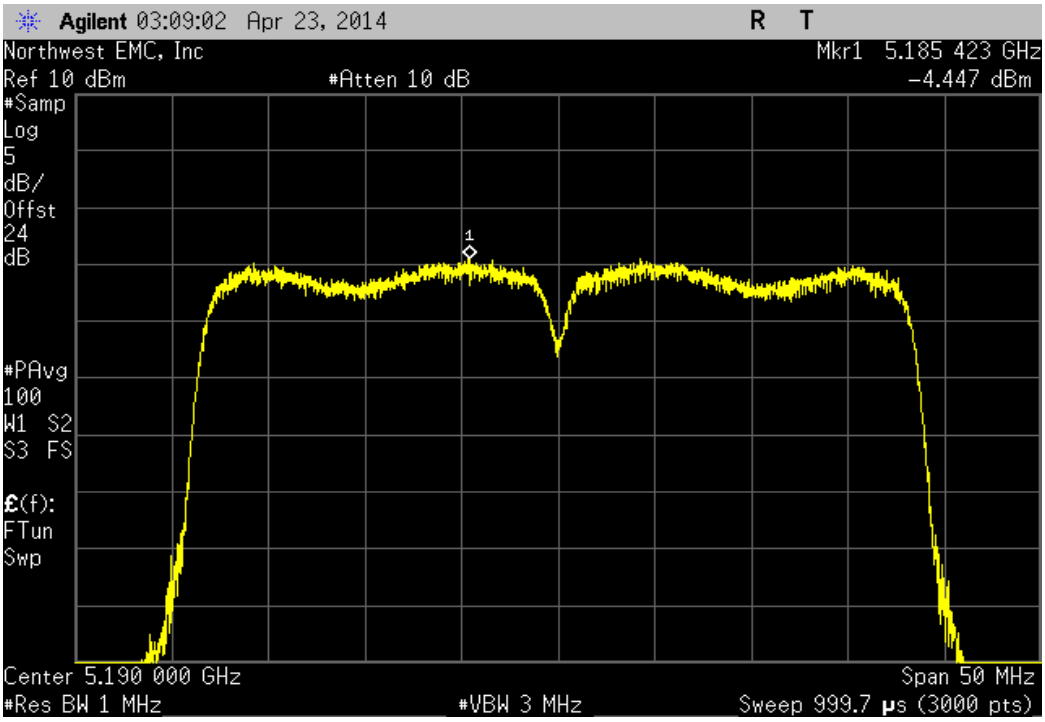
Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 116, Mid Channel 5580 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.39	11	Pass



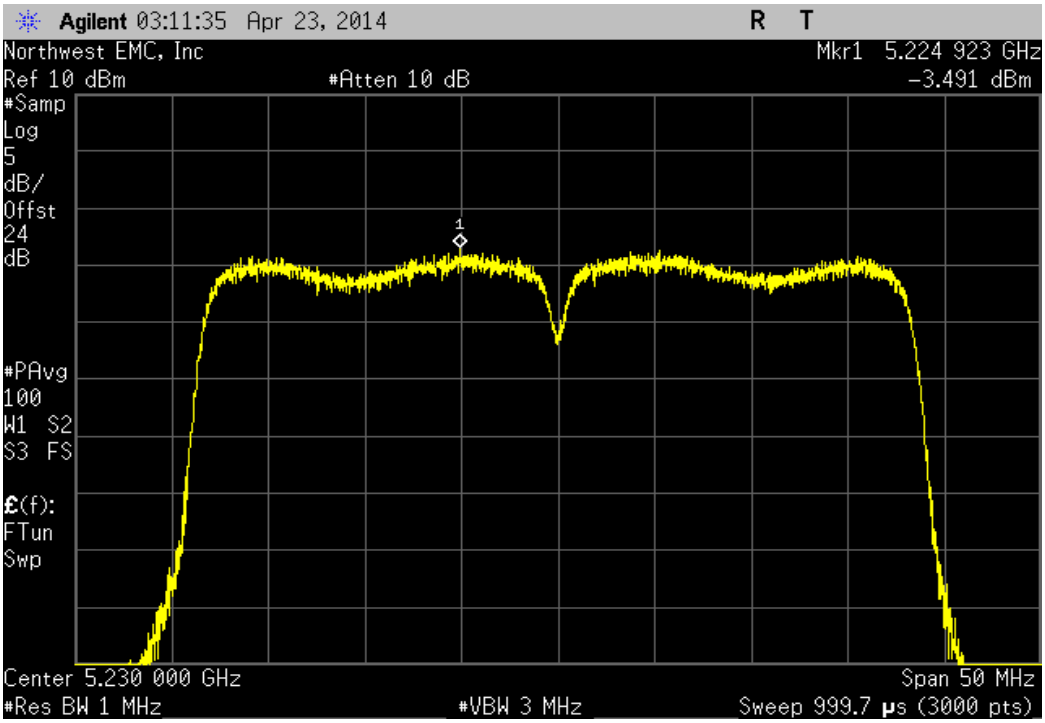
Chain B, IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 140, High Channel 5700 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.64	11	Pass

PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 36/40, Low Channel 5190 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.447	4	Pass

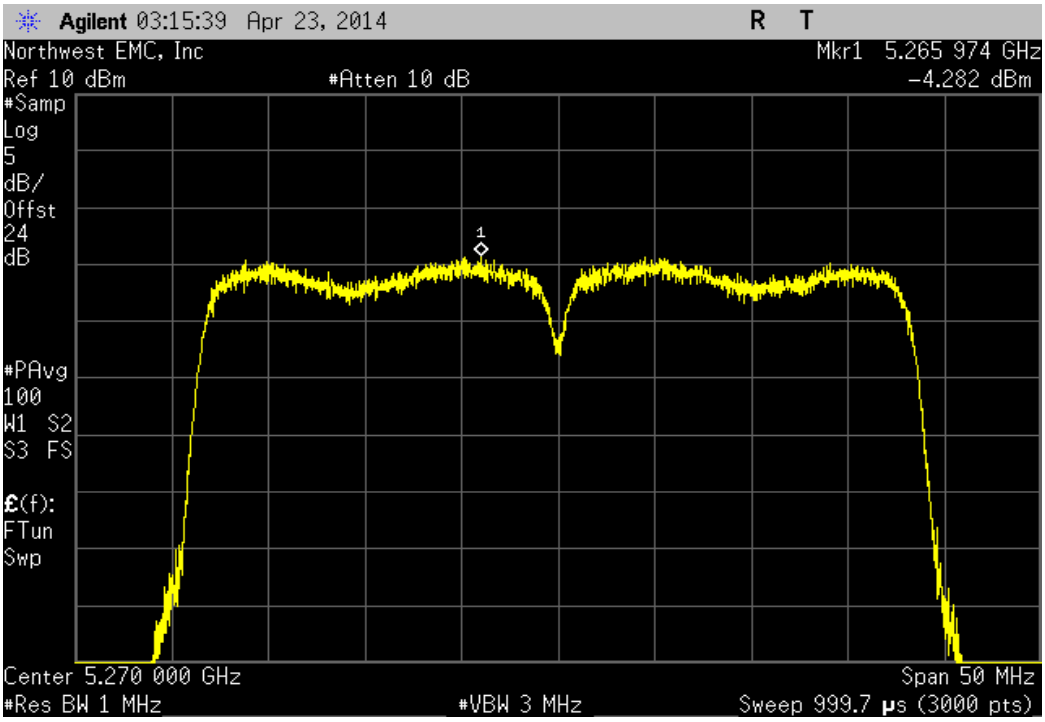


Chain B, IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 44/48, High Channel 5230 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.491	4	Pass

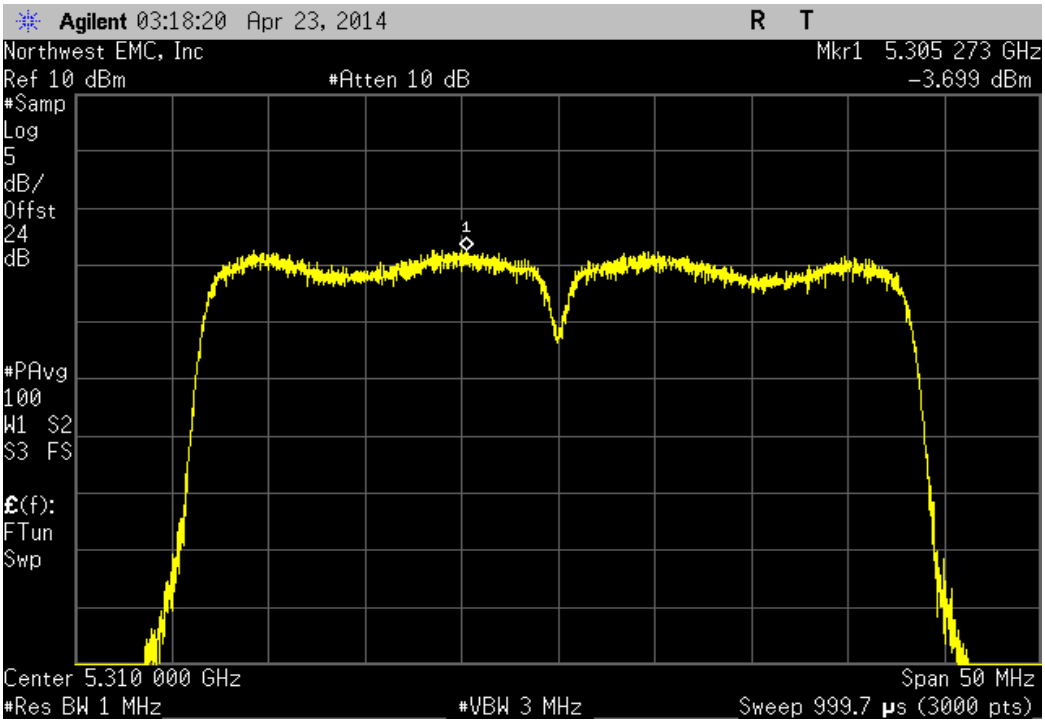


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 52/56, Low Channel 5270 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.282	11	Pass

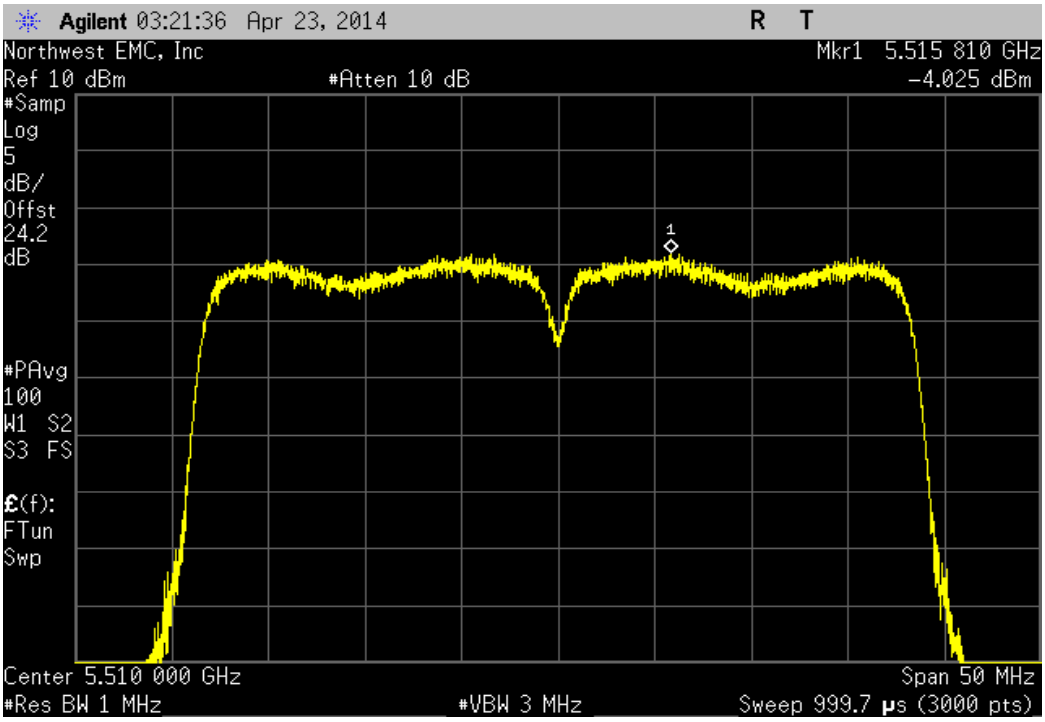


Chain B, IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 60/64, High Channel 5310 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.699	11	Pass

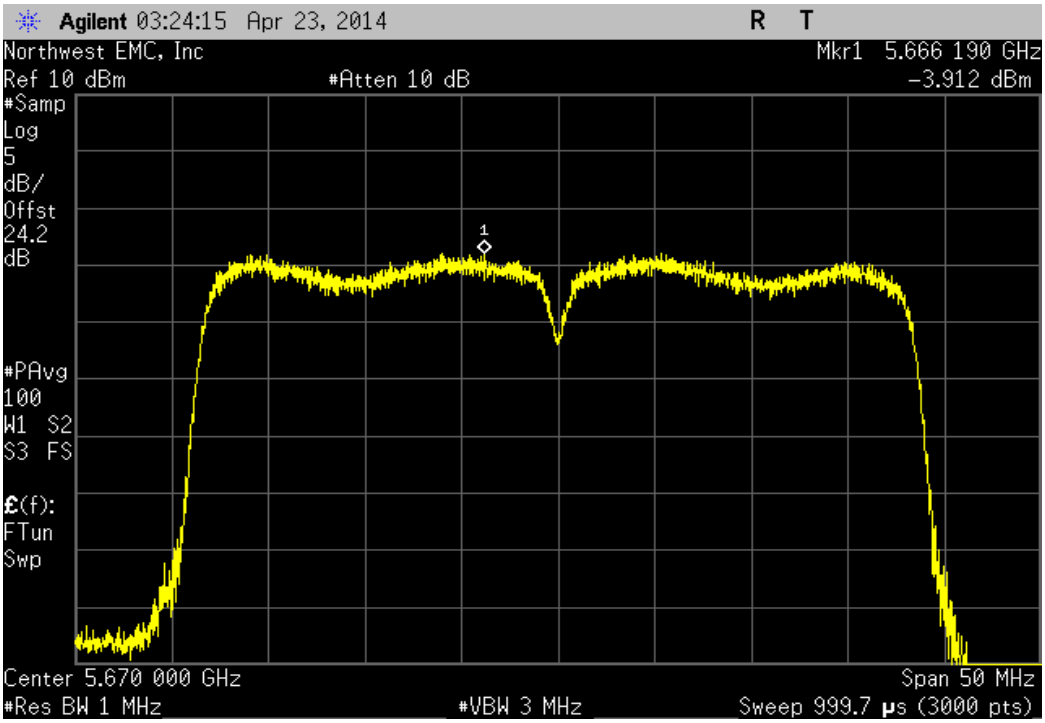


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 100/104, Low Channel 5510 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.025	11	Pass

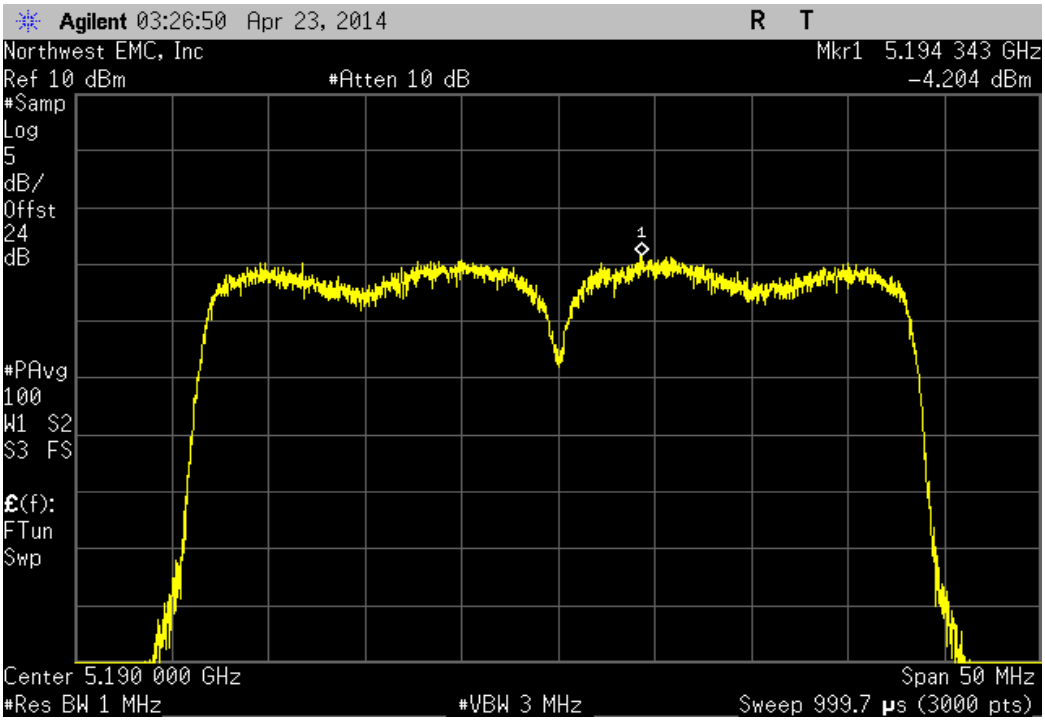


Chain B, IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 132/136, High Channel 5670 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.912	11	Pass

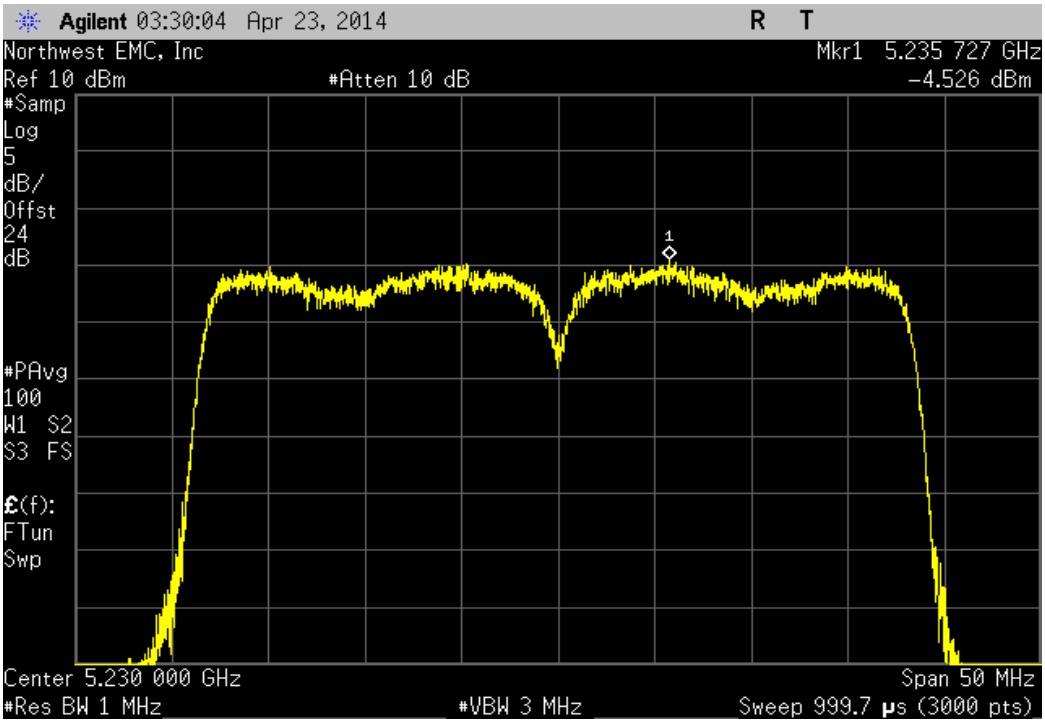


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 36/40, Low Channel 5190 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.204	4	Pass

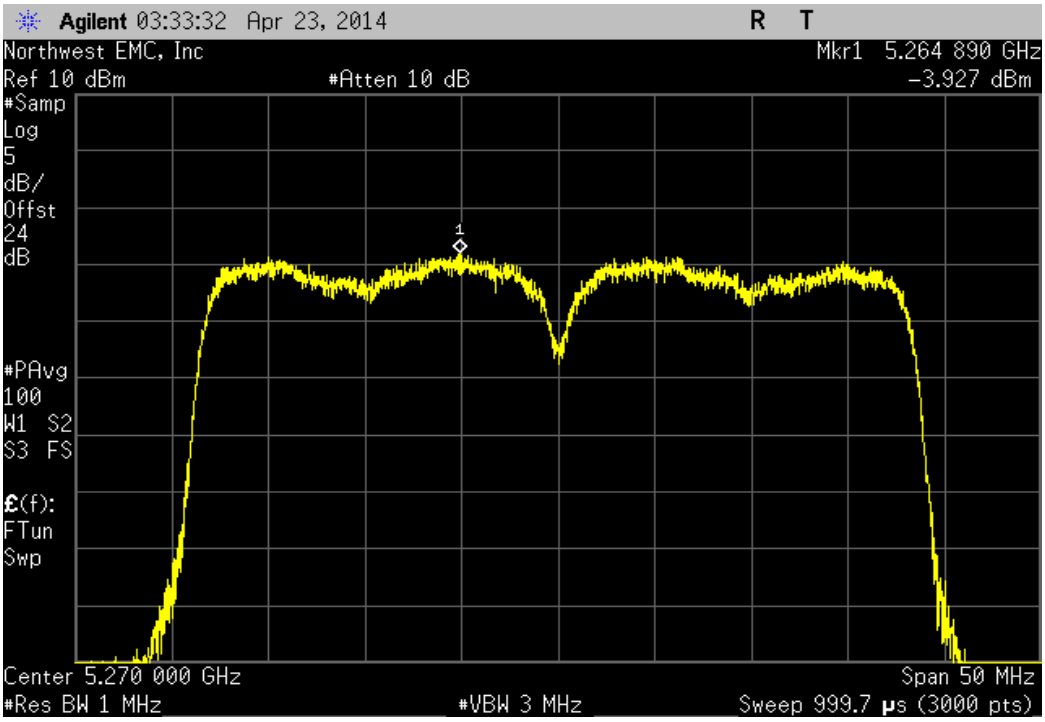


Chain B, IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 44/48, High Channel 5230 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.526	4	Pass

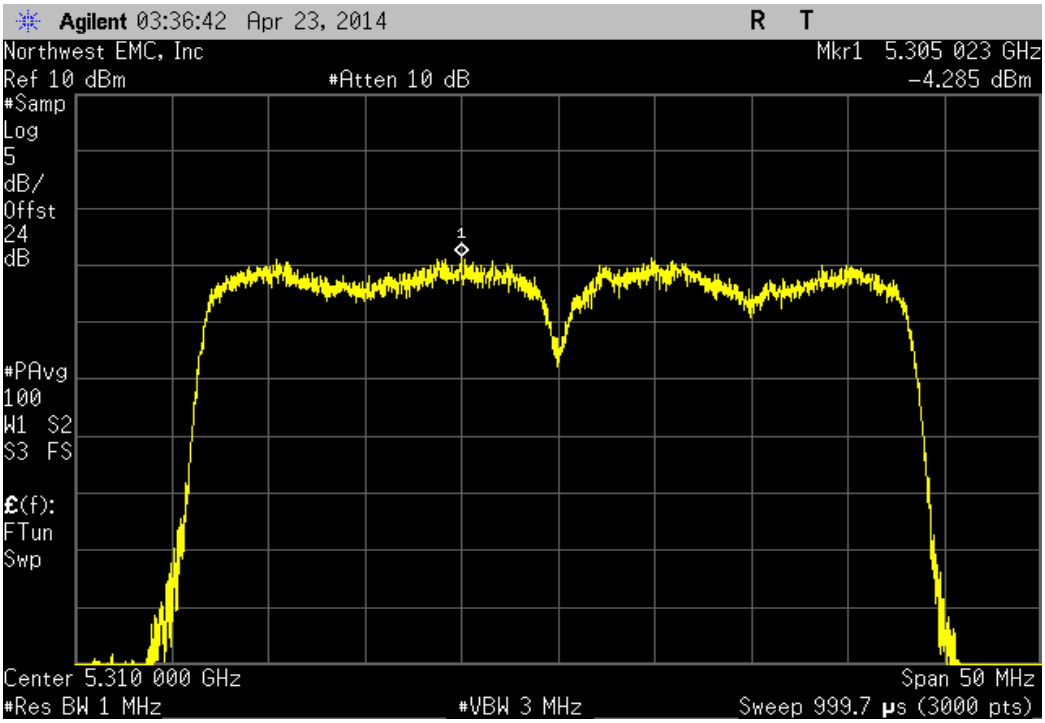


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 52/56, Low Channel 5270 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.927	11	Pass

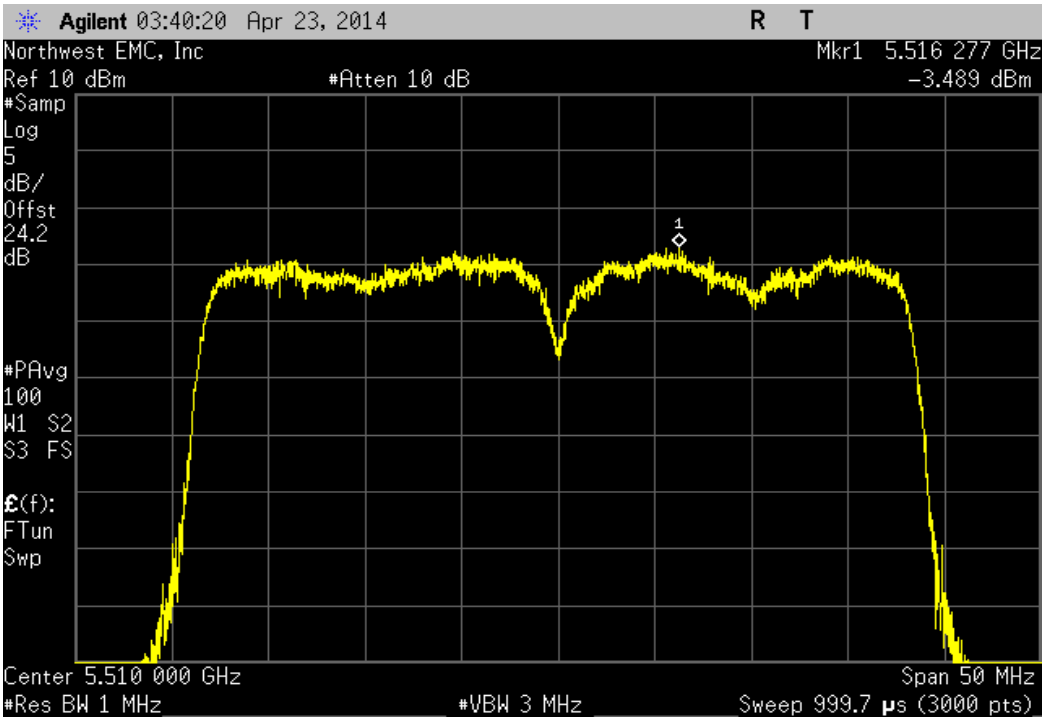


Chain B, IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 60/64, High Channel 5310 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.285	11	Pass

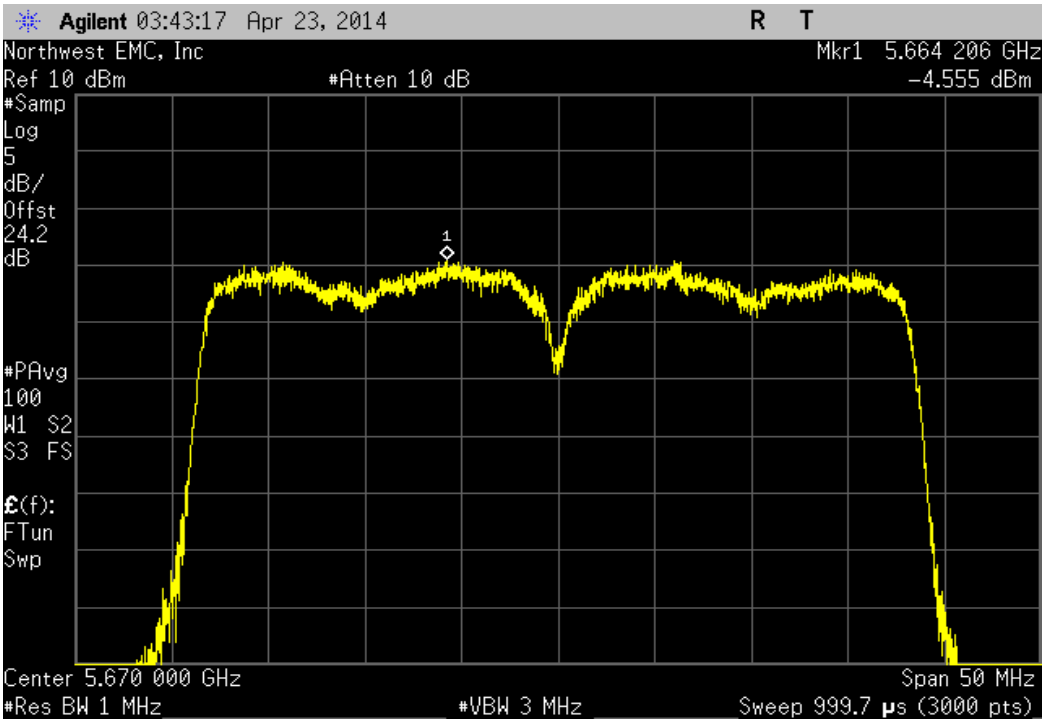


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 100/104, Low Channel 5510 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.489	11	Pass

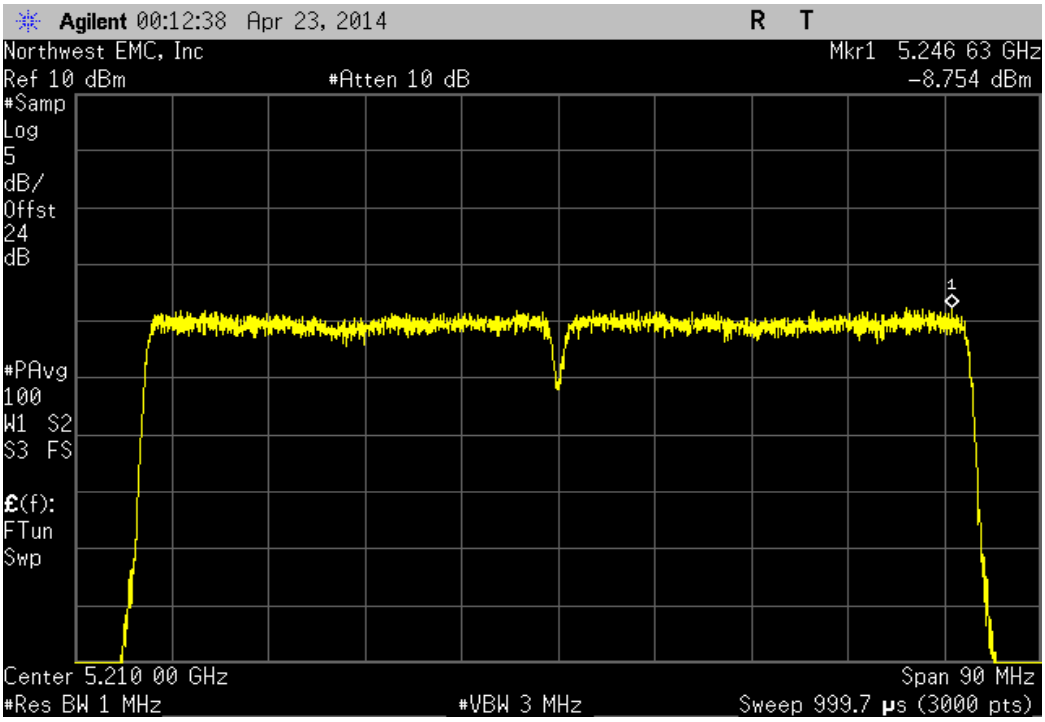


Chain B, IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 132/136, High Channel 5670 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.555	11	Pass

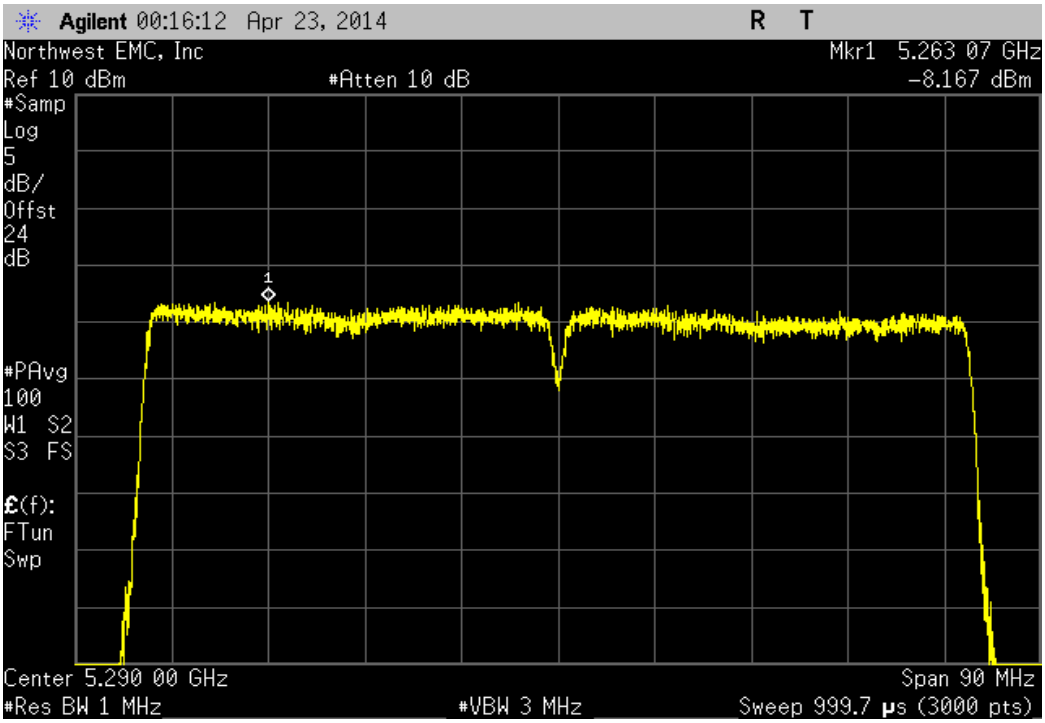


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 42, Low Channel 5210 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-8.754	4	Pass

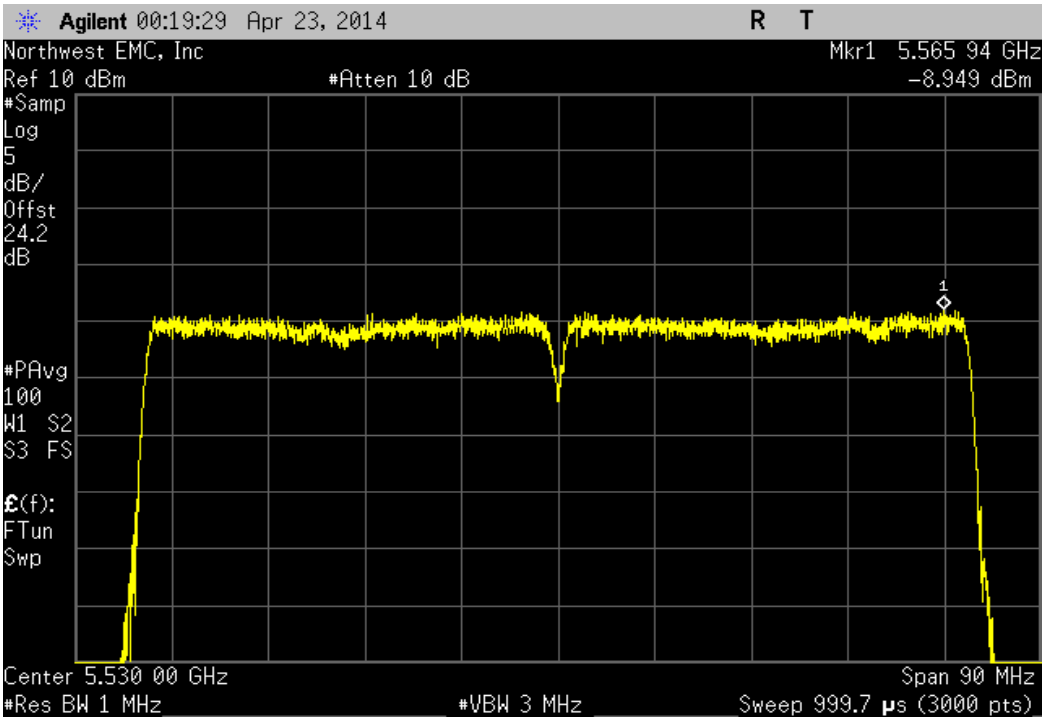


Chain B, IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 58, High Channel 5290 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-8.167	11	Pass

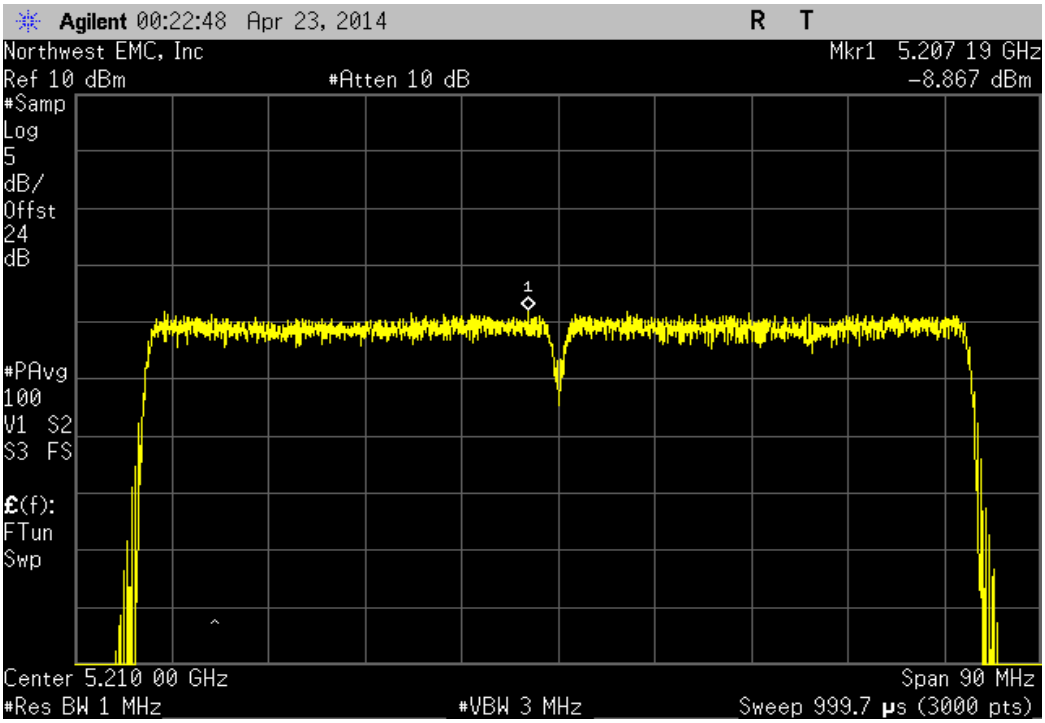


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 106, Low Channel 5530 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-8.949	11	Pass

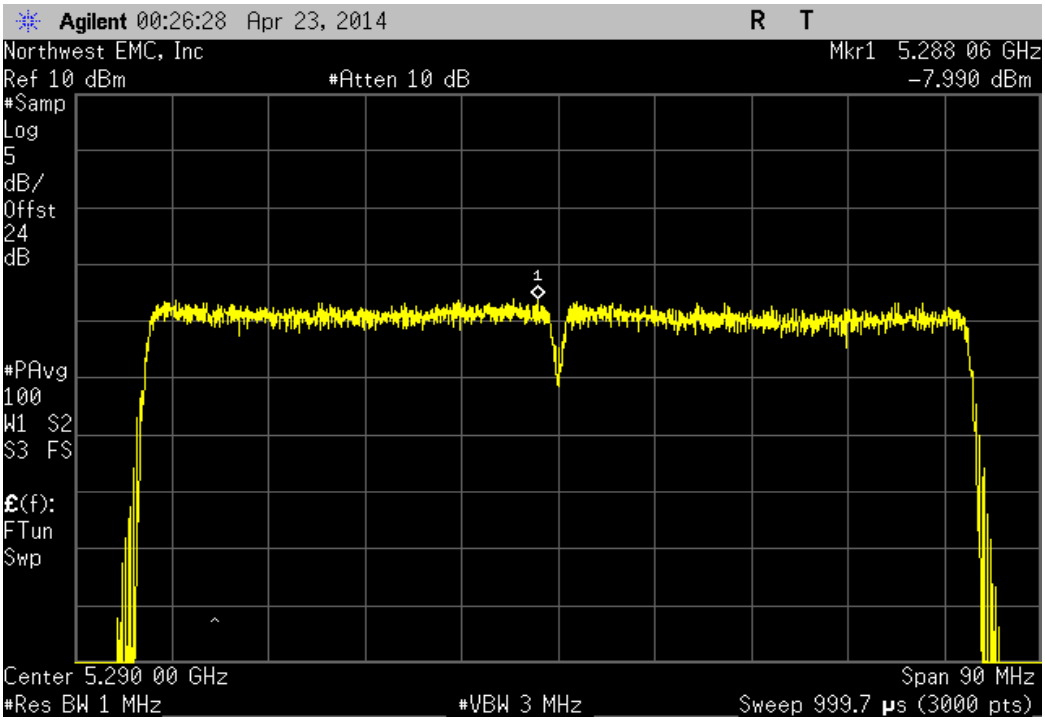


Chain B, IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 42, Low Channel 5210 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-8.867	4	Pass

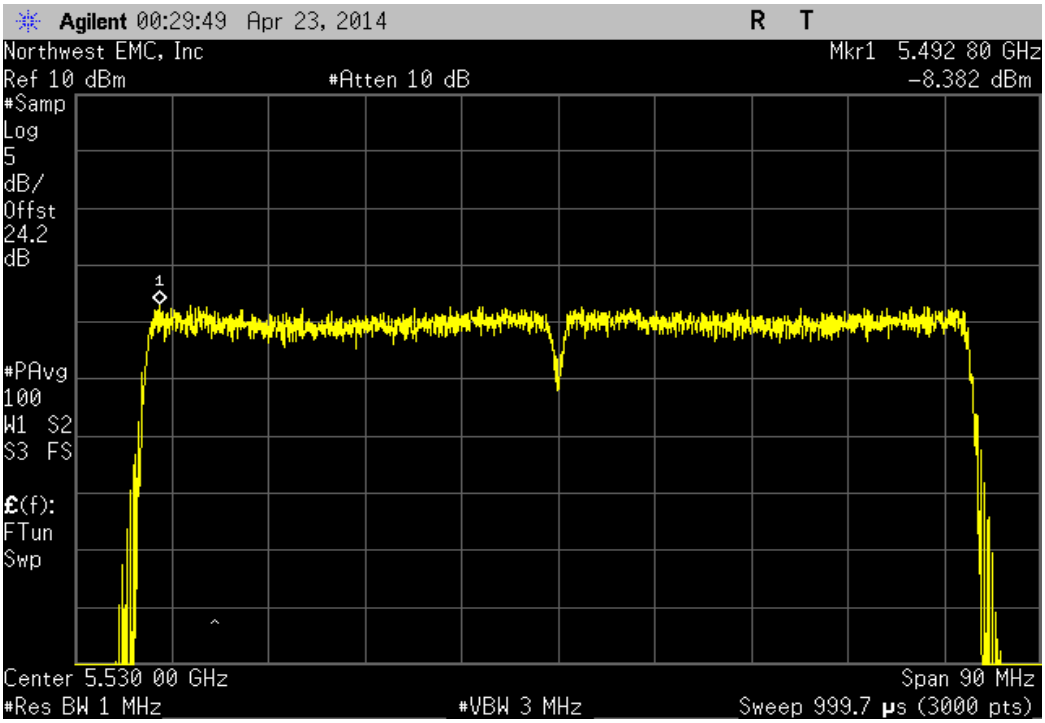


PEAK POWER SPECTRAL DENSITY

Chain B, IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 58, High Channel 5290 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-7.99	11	Pass



Chain B, IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 106, Low Channel 5530 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-8.382	11	Pass



PEAK POWER SPECTRAL DENSITY

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval (mo.)
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Power Meter	Gigatronics	8651A	SPM	11/26/2013	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	36
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
MXG Analog Signal Generator	Agilent	N5181A	TIG	3/28/2014	36
Spectrum Analyzer	Agilent	E4446A	AAQ	1/21/2014	24

TEST DESCRIPTION

FCC KDB 789033 D01 General UNII Test Procedures Section E was followed. The transmit frequency was set to the required channels in each band. The data rate(s) listed in the datasheet were tested. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input.

Prior to measuring peak power spectral density, the transmission pulse duration (T) was measured. The transmission pulse duration and the associated data are found elsewhere in this test report.

The spectrum analyzer settings were as follows:

- The span was set to encompass entire emission bandwidth (B), centered on the transmit channel.
- RBW = 1 MHz, VBW ≥ 3 MHz
- Sample detector was used because Method SA-1 Alternate was used to measure the Maximum Conducted Output Power.
- Trace average 100 traces in power averaging mode (not video averaging).

The peak power spectral density (PPSD) was determined to be the highest level found across the emission in any 1 MHz band after 100 sweeps of power averaging (not video averaging).

PEAK POWER SPECTRAL DENSITY

EUT:	Model 1631			**Work Order:**	MCSO1698
Serial Number:	006840341053			**Date:**	04/23/14
Customer:	Microsoft Corporation			**Temperature:**	22.3°C
Attendees:	None			**Humidity:**	32%
Project:	None			**Barometric Pres.:**	1014
Tested by:	Jared Ison	**Power:**	110VAC/60Hz	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.407:2014	ANSI C63.10:2009

COMMENTS

Modes of operation tested were client provided. Reference power level table for channel power setting.

DEVIATIONS FROM TEST STANDARD

None

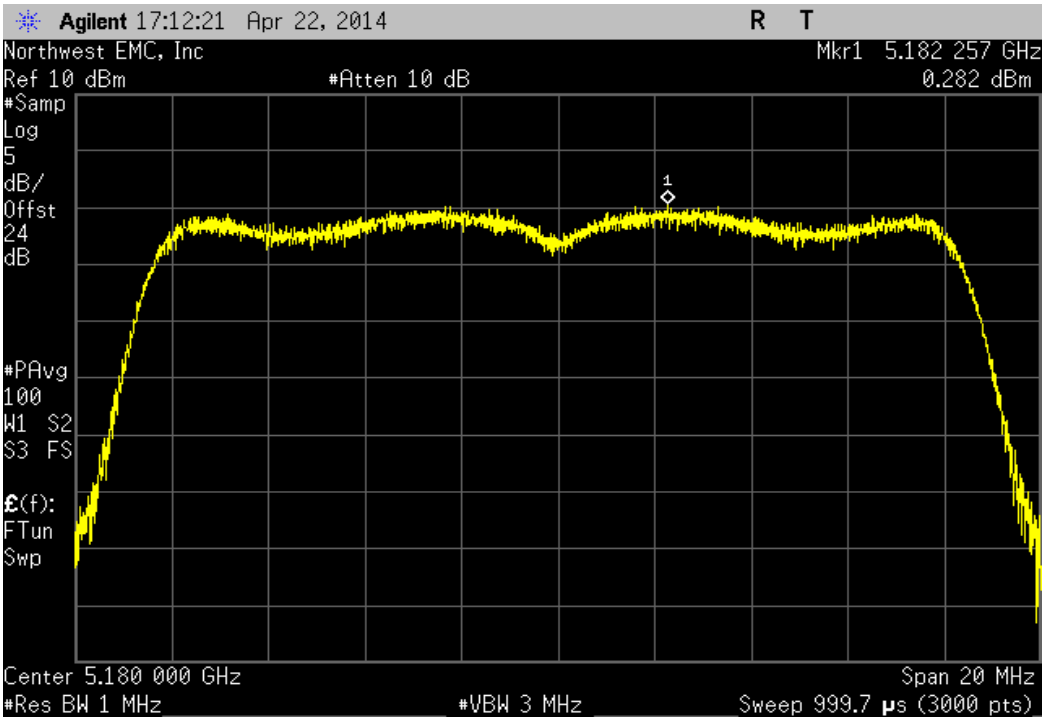
Configuration #	6	Signature

			Value (dBm / MHz)	Limit (dBm / MHz)	Result
IEEE 802.11(a)					
	20 MHz				
		6 Mbps			
		Ch. 36, Low Channel 5180MHz	0.282	4	Pass
		Ch. 48, High Channel 5240 MHz	0.074	4	Pass
		Ch. 52, Low Channel 5260 MHz	-0.25	11	Pass
		Ch. 64, High Channel 5320 MHz	0.571	11	Pass
		Ch. 100, Low Channel 5500 MHz	0.279	11	Pass
		Ch. 116, Mid Channel 5580 MHz	0.046	11	Pass
		Ch. 140, High Channel 5700 MHz	-0.267	11	Pass
		36 Mbps			
		Ch. 36, Low Channel 5180MHz	-0.402	4	Pass
		Ch. 48, High Channel 5240 MHz	-0.752	4	Pass
		Ch. 52, Low Channel 5260 MHz	-0.464	11	Pass
		Ch. 64, High Channel 5320 MHz	0.086	11	Pass
		Ch. 100, Low Channel 5500 MHz	-0.133	11	Pass
		Ch. 116, Mid Channel 5580 MHz	-0.222	11	Pass
		Ch. 140, High Channel 5700 MHz	-0.354	11	Pass
		54 Mbps			
		Ch. 36, Low Channel 5180MHz	-0.237	4	Pass
		Ch. 48, High Channel 5240 MHz	-0.143	4	Pass
		Ch. 52, Low Channel 5260 MHz	-0.485	11	Pass
		Ch. 64, High Channel 5320 MHz	-0.094	11	Pass
		Ch. 100, Low Channel 5500 MHz	-0.212	11	Pass
		Ch. 116, Mid Channel 5580 MHz	-0.489	11	Pass
		Ch. 140, High Channel 5700 MHz	-0.803	11	Pass
IEEE 802.11(n)					
	20 MHz				
		HT, MCS7			
		Ch. 36, Low Channel 5180MHz	-0.889	4	Pass
		Ch. 48, High Channel 5240 MHz	-0.772	4	Pass
		Ch. 52, Low Channel 5260 MHz	-0.882	11	Pass
		Ch. 64, High Channel 5320 MHz	-0.342	11	Pass
		Ch. 100, Low Channel 5500 MHz	-0.752	11	Pass
		Ch. 116, Mid Channel 5580 MHz	-0.536	11	Pass
		Ch. 140, High Channel 5700 MHz	-0.9	11	Pass
	40 MHz				
		HT, MCS7			
		Ch. 36/40, Low Channel 5190 MHz	-3.993	4	Pass
		Ch. 44/48, High Channel 5230 MHz	-4.125	4	Pass
		Ch. 52/56, Low Channel 5270 MHz	-3.944	11	Pass
		Ch. 60/64, High Channel 5310 MHz	-3.629	11	Pass
		Ch. 100/104, Low Channel 5510 MHz	-4.07	11	Pass
		Ch. 132/136, High Channel 5670 MHz	-3.501	11	Pass
IEEE 802.11(ac)					
	20 MHz				
		VHT, MCS0			
		Ch. 36, Low Channel 5180MHz	-0.379	4	Pass
		Ch. 48, High Channel 5240 MHz	-0.832	4	Pass
		Ch. 52, Low Channel 5260 MHz	-0.886	11	Pass
		Ch. 64, High Channel 5320 MHz	-0.333	11	Pass
		Ch. 100, Low Channel 5500 MHz	-0.567	11	Pass
		Ch. 116, Mid Channel 5580 MHz	-0.674	11	Pass
		Ch. 140, High Channel 5700 MHz	-0.815	11	Pass
		VHT, MCS8			
		Ch. 36, Low Channel 5180MHz	-0.552	4	Pass
		Ch. 48, High Channel 5240 MHz	-0.585	4	Pass
		Ch. 52, Low Channel 5260 MHz	-0.845	11	Pass
		Ch. 64, High Channel 5320 MHz	-0.312	11	Pass
		Ch. 100, Low Channel 5500 MHz	-0.145	11	Pass
		Ch. 116, Mid Channel 5580 MHz	-0.602	11	Pass
		Ch. 140, High Channel 5700 MHz	-0.749	11	Pass
	40 MHz				
		VHT, MCS0			
		Ch. 36/40, Low Channel 5190 MHz	-2.833	4	Pass
		Ch. 44/48, High Channel 5230 MHz	-3.724	4	Pass
		Ch. 52/56, Low Channel 5270 MHz	-3.607	11	Pass
		Ch. 60/64, High Channel 5310 MHz	-3.192	11	Pass
		Ch. 100/104, Low Channel 5510 MHz	-3.542	11	Pass
		Ch. 132/136, High Channel 5670 MHz	-3.34	11	Pass
		VHT, MCS9			
		Ch. 36/40, Low Channel 5190 MHz	-3.195	4	Pass
		Ch. 44/48, High Channel 5230 MHz	-4.149	4	Pass
		Ch. 52/56, Low Channel 5270 MHz	-3.841	11	Pass
		Ch. 60/64, High Channel 5310 MHz	-4.162	11	Pass
		Ch. 100/104, Low Channel 5510 MHz	-3.867	11	Pass
		Ch. 132/136, High Channel 5670 MHz	-3.747	11	Pass
	80 MHz				
		VHT, MCS0			

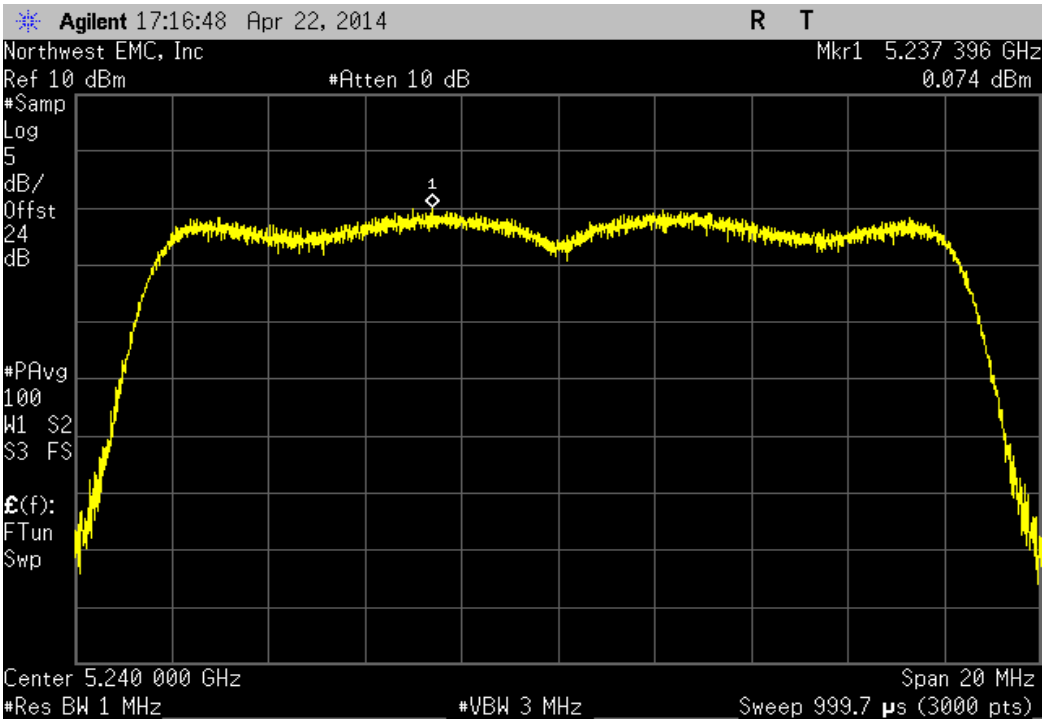
	Ch. 42, Low Channel 5210 MHz	-7.668	4	Pass
	Ch. 58, High Channel 5290 MHz	-7.849	11	Pass
	Ch. 106, Low Channel 5530 MHz	-7.926	11	Pass
VHT, MCS9				
	Ch. 42, Low Channel 5210 MHz	-8.038	4	Pass
	Ch. 58, High Channel 5290 MHz	-7.578	11	Pass
	Ch. 106, Low Channel 5530 MHz	-8.029	11	Pass

PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.282	4	Pass

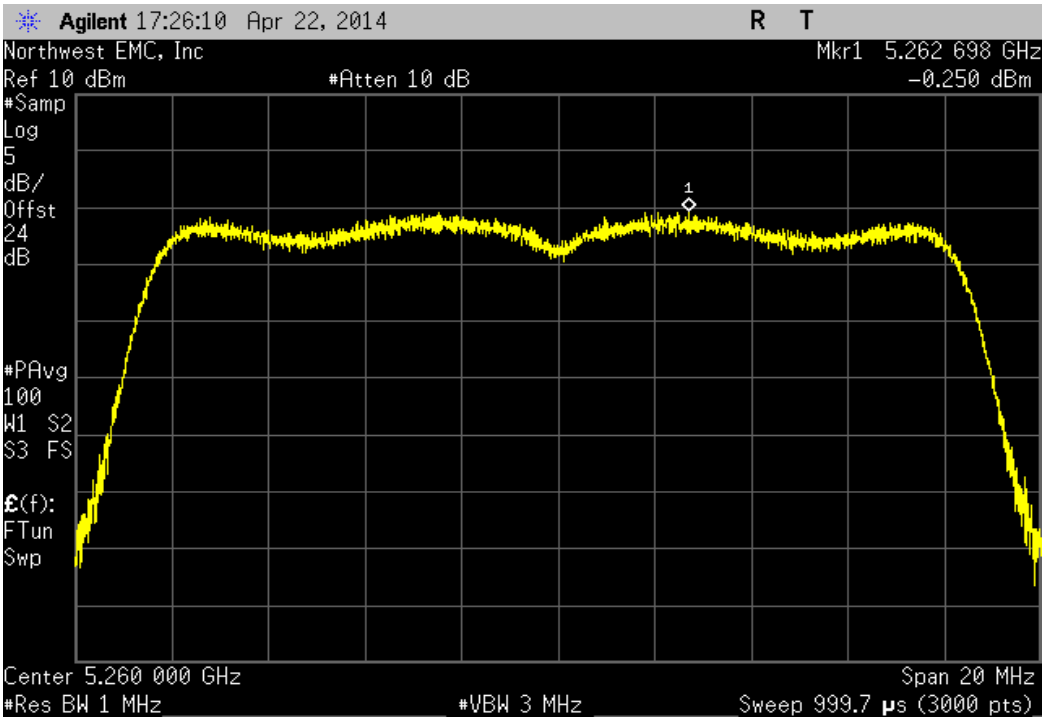


IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 48, High Channel 5240 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.074	4	Pass

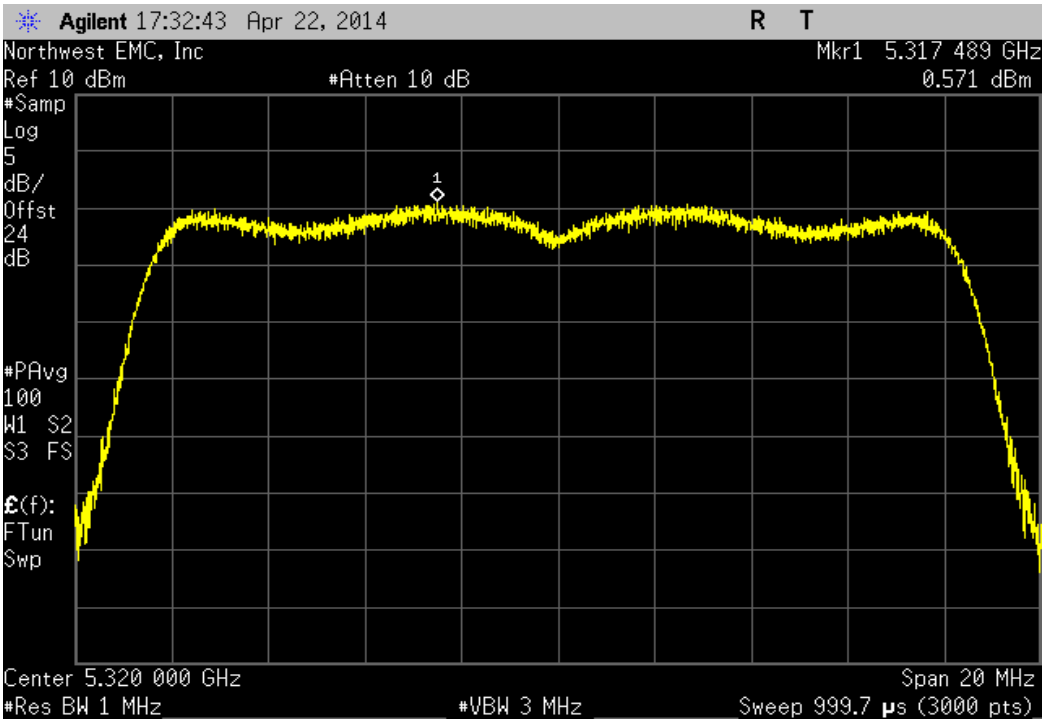


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 52, Low Channel 5260 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.25	11	Pass

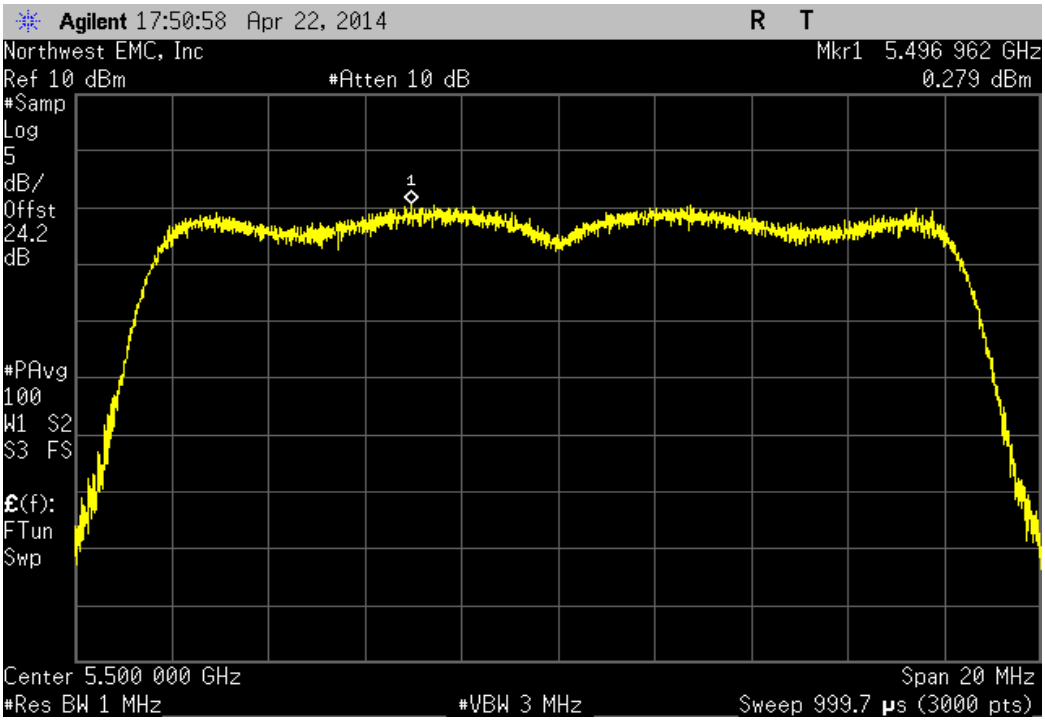


IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 64, High Channel 5320 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.571	11	Pass

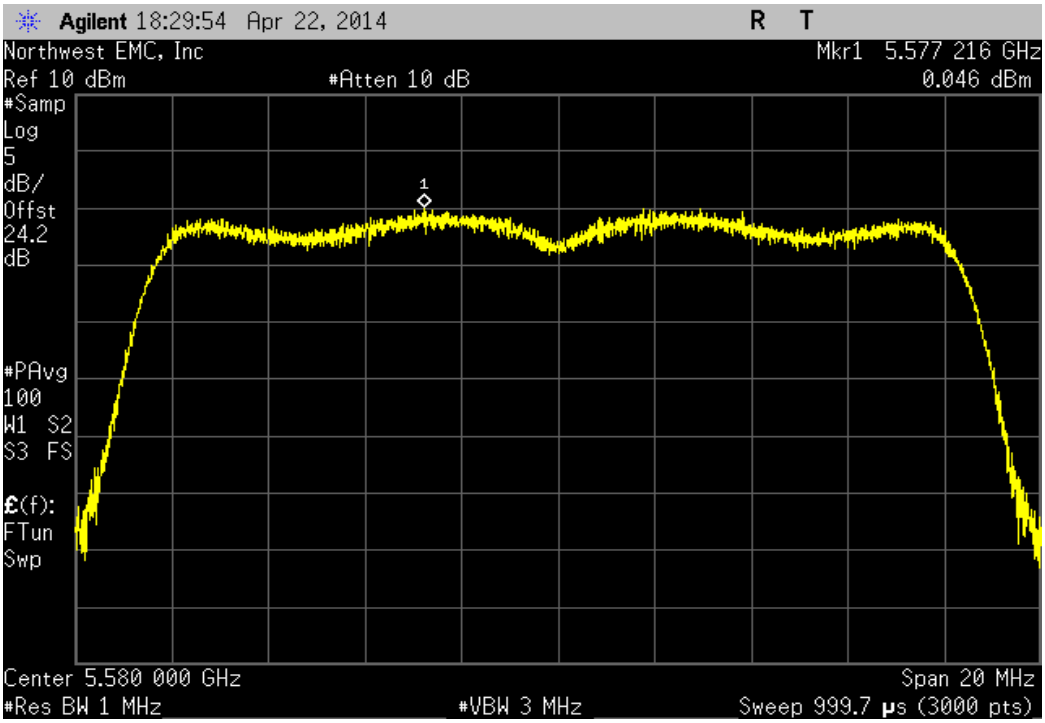


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 100, Low Channel 5500 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.279	11	Pass

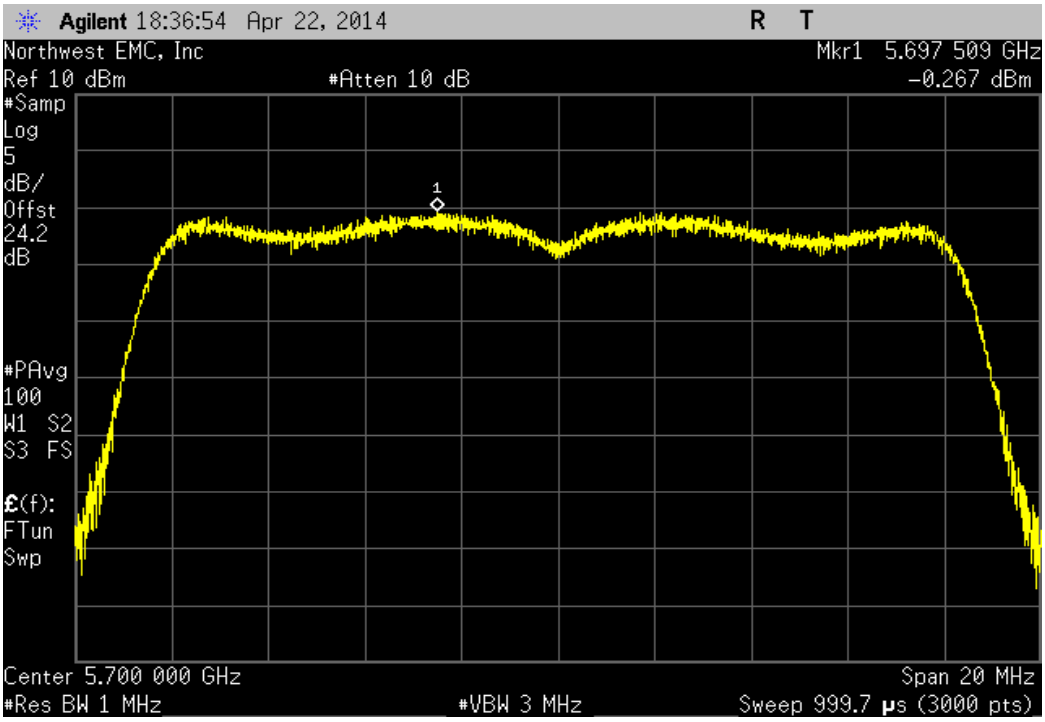


IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 116, Mid Channel 5580 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.046	11	Pass

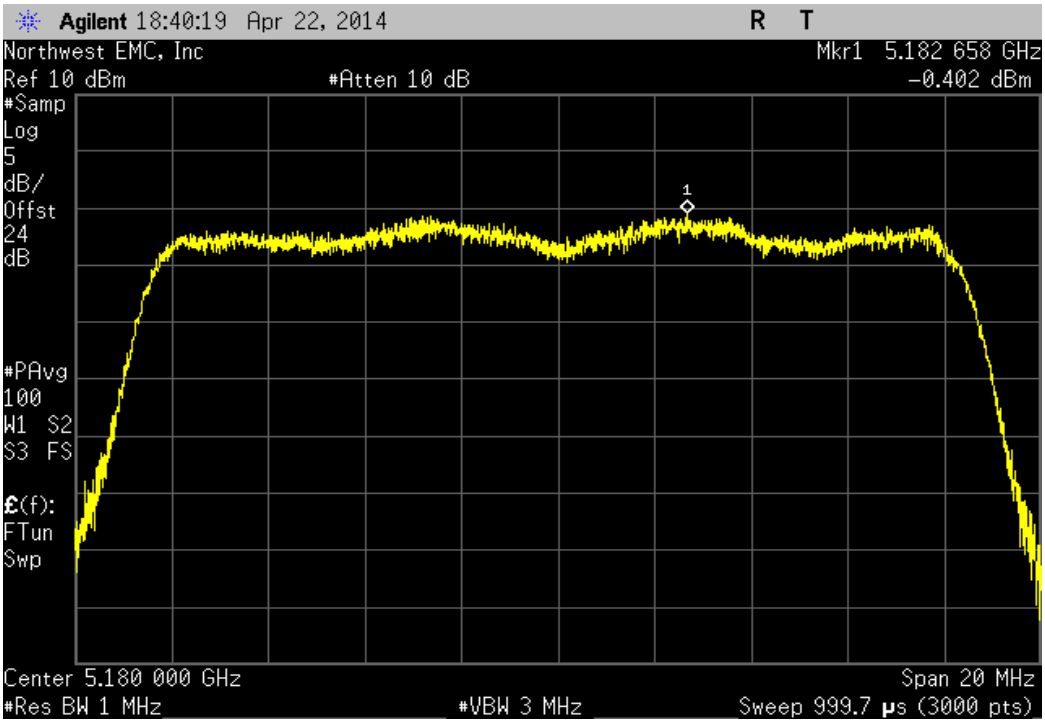


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 140, High Channel 5700 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.267	11	Pass

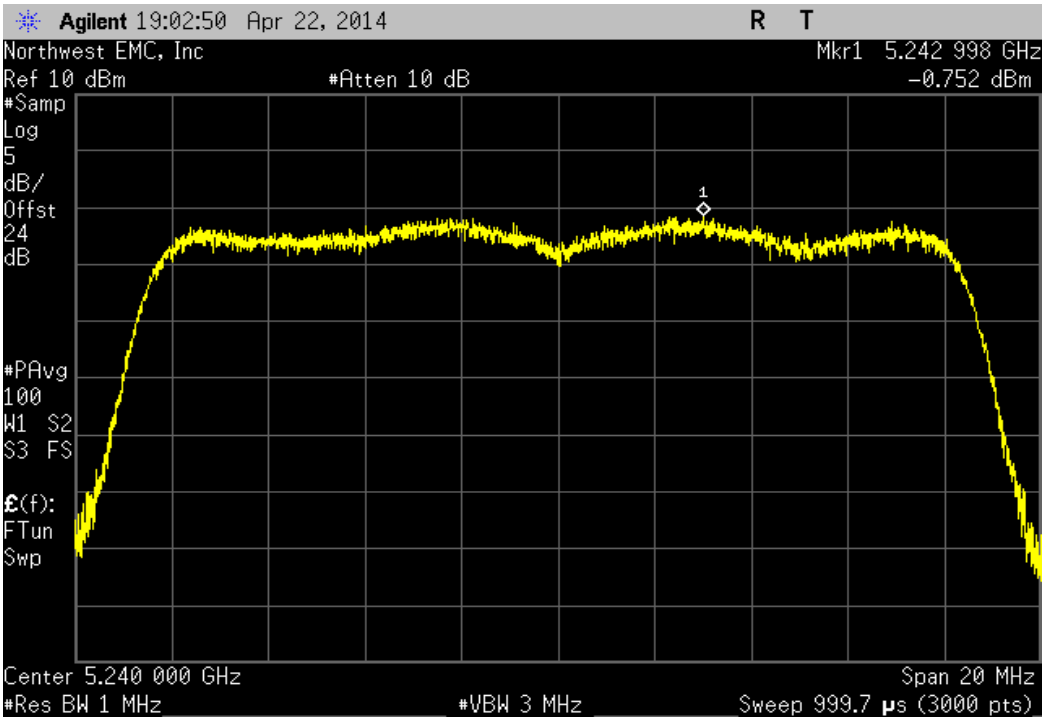


IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.402	4	Pass

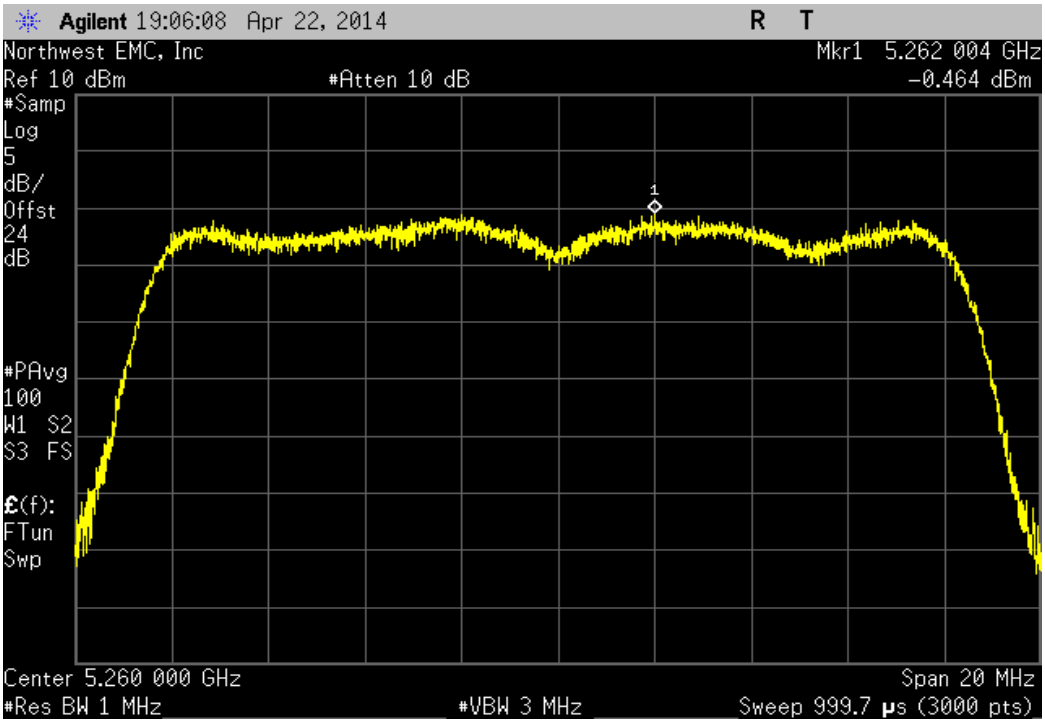


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 48, High Channel 5240 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.752	4	Pass

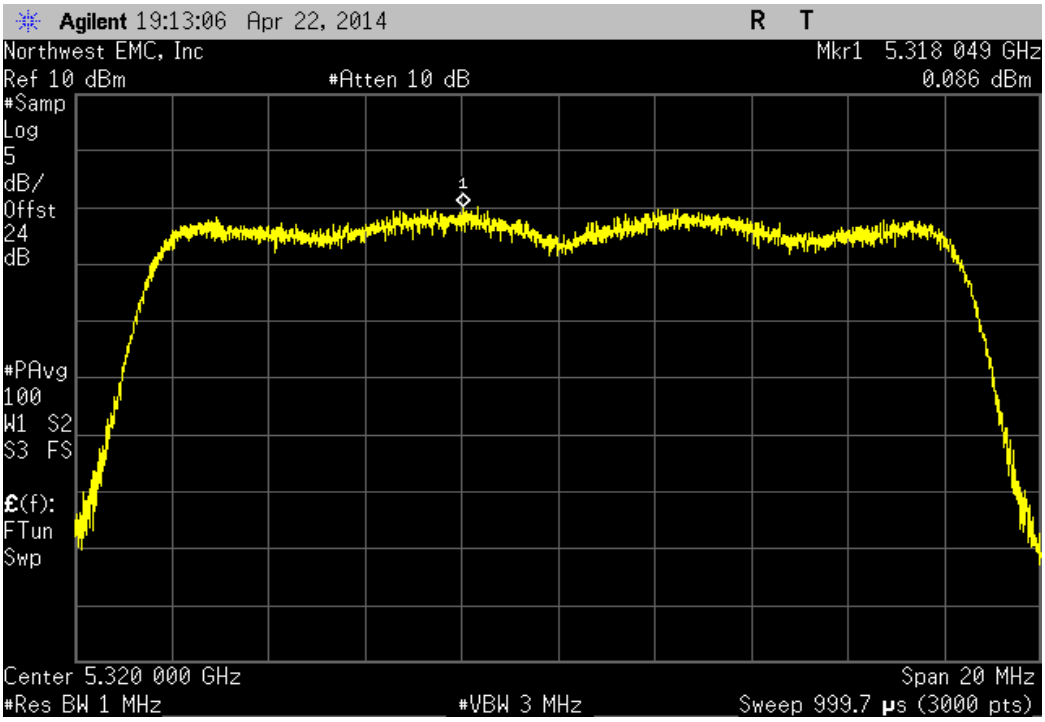


IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 52, Low Channel 5260 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.464	11	Pass

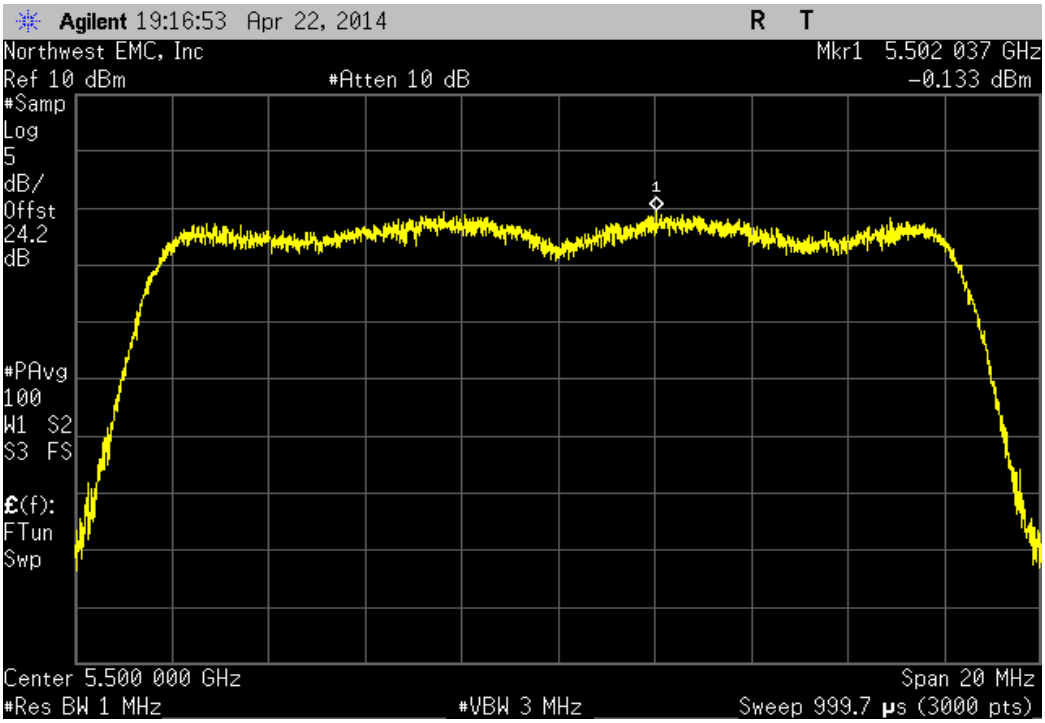


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 64, High Channel 5320 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					0.086	11	Pass

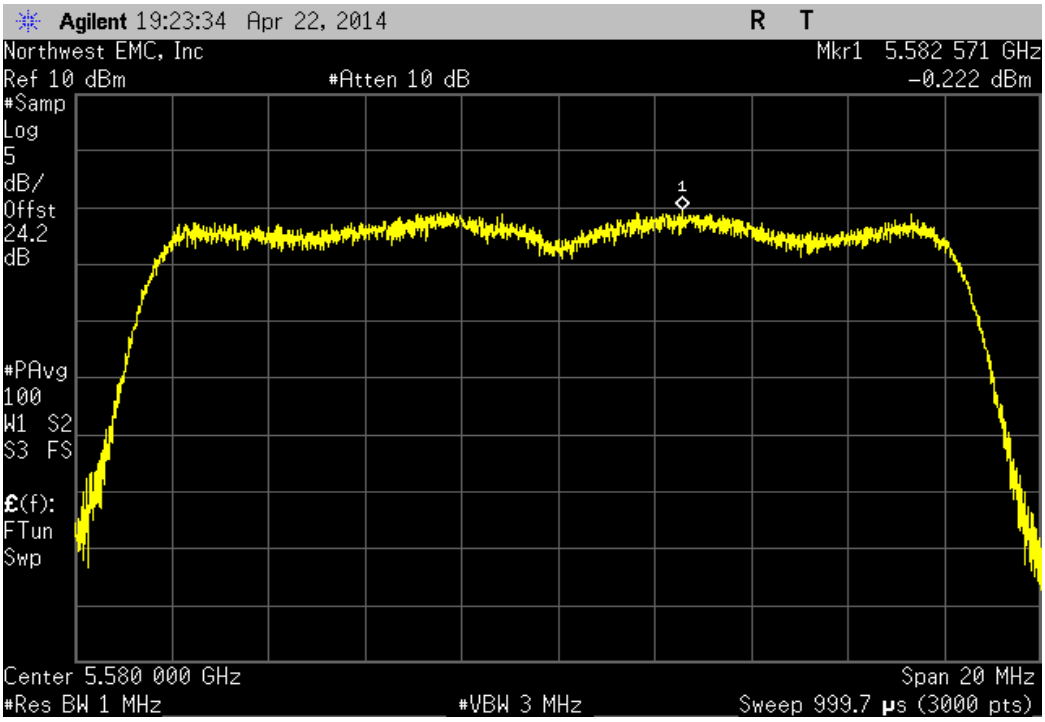


IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 100, Low Channel 5500 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.133	11	Pass

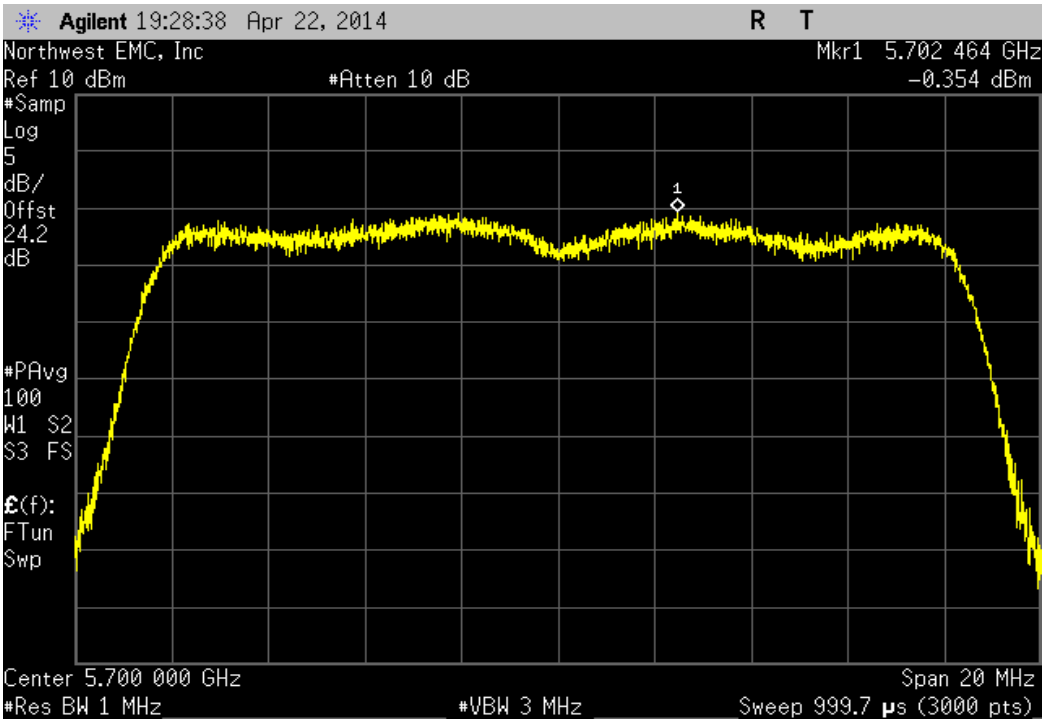


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 116, Mid Channel 5580 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.222	11	Pass

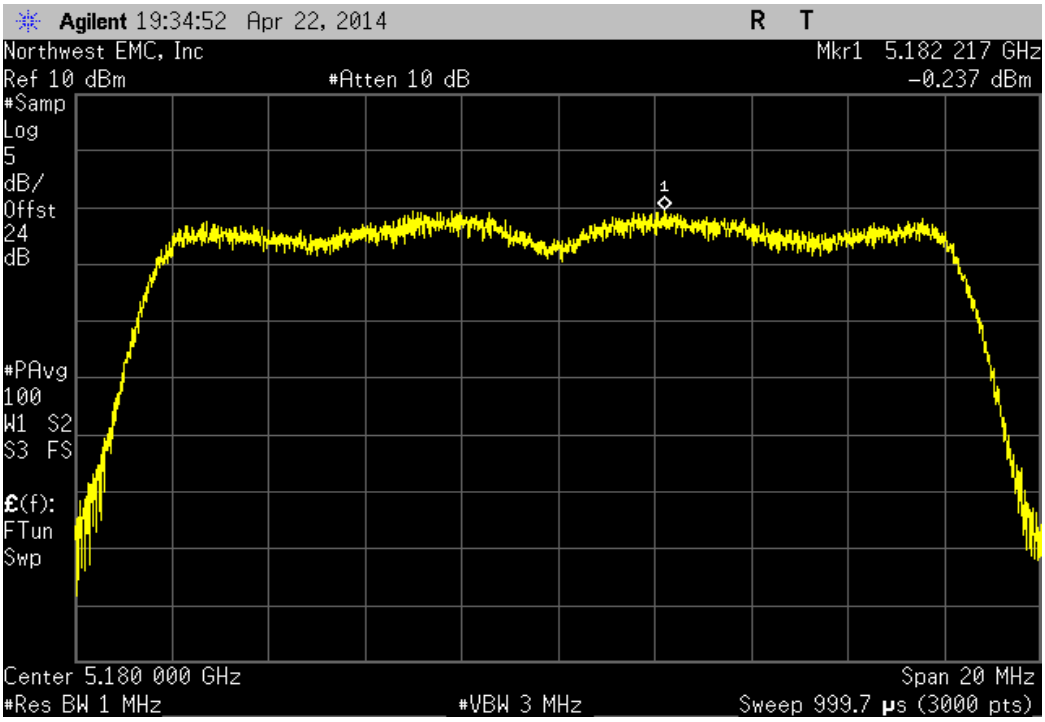


IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 140, High Channel 5700 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.354	11	Pass

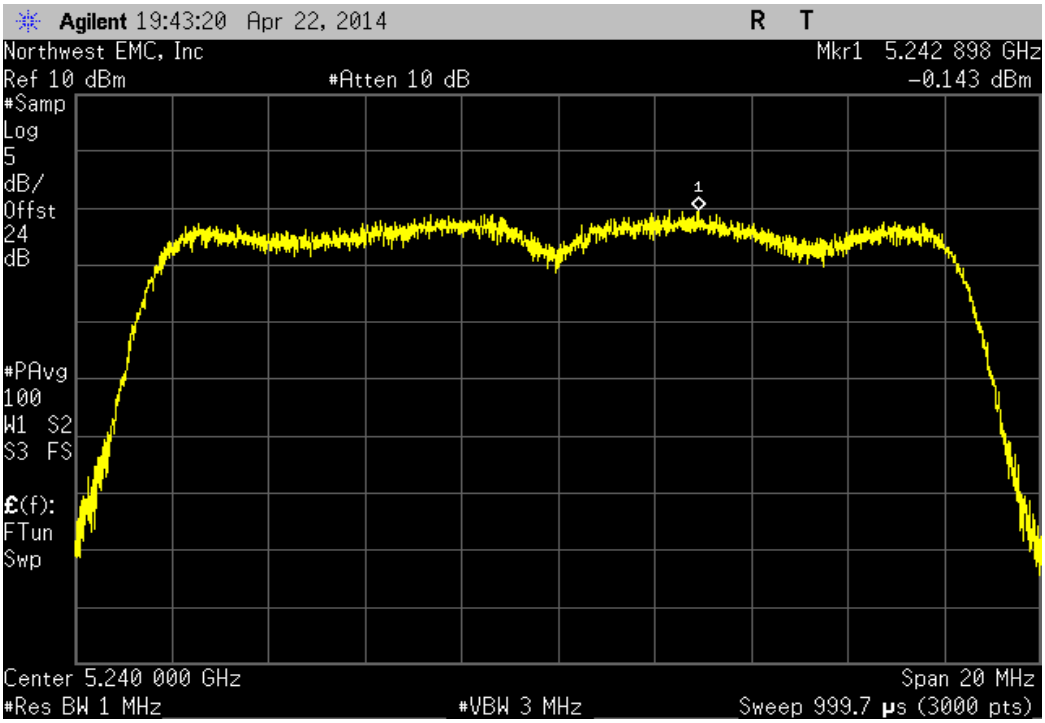


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.237	4	Pass

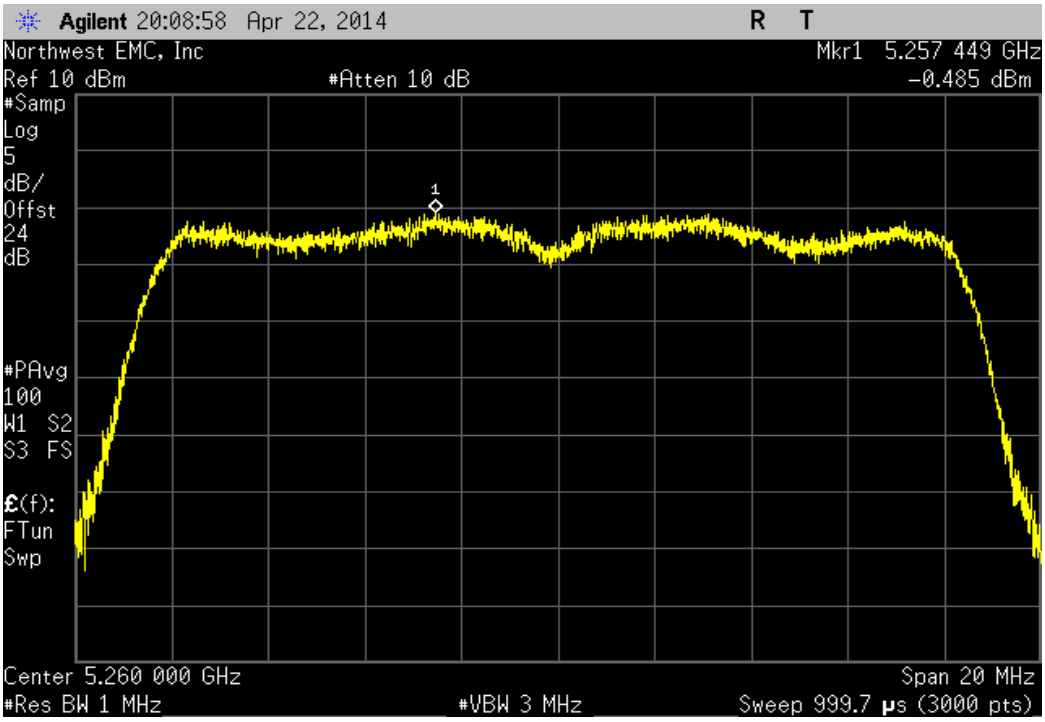


IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 48, High Channel 5240 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.143	4	Pass

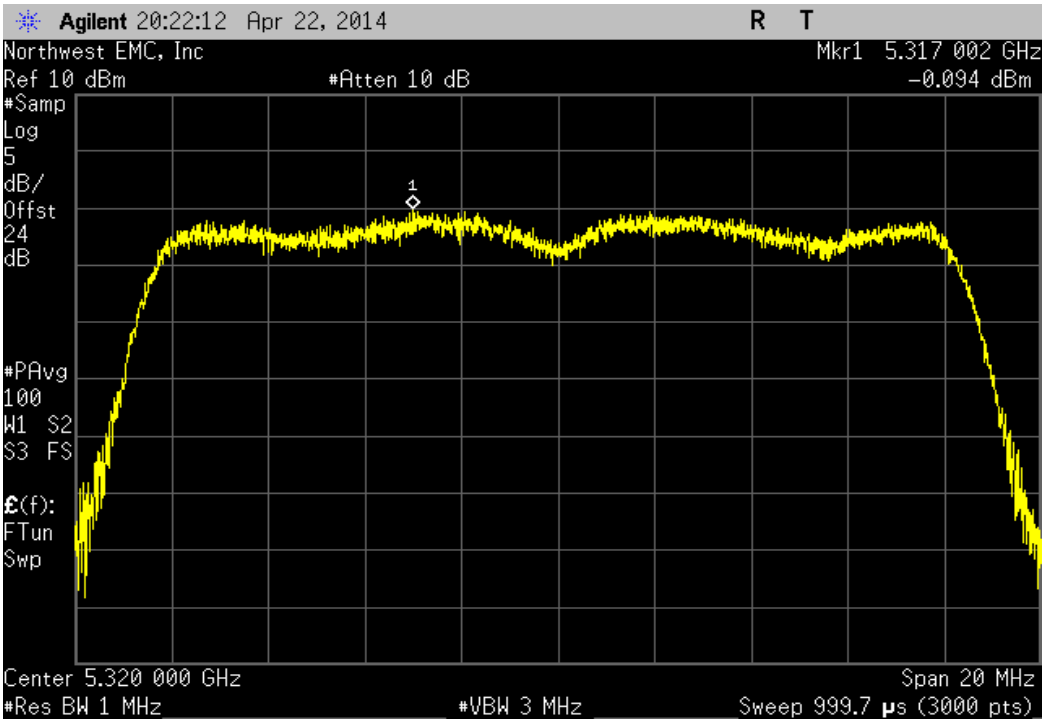


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 52, Low Channel 5260 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.485	11	Pass

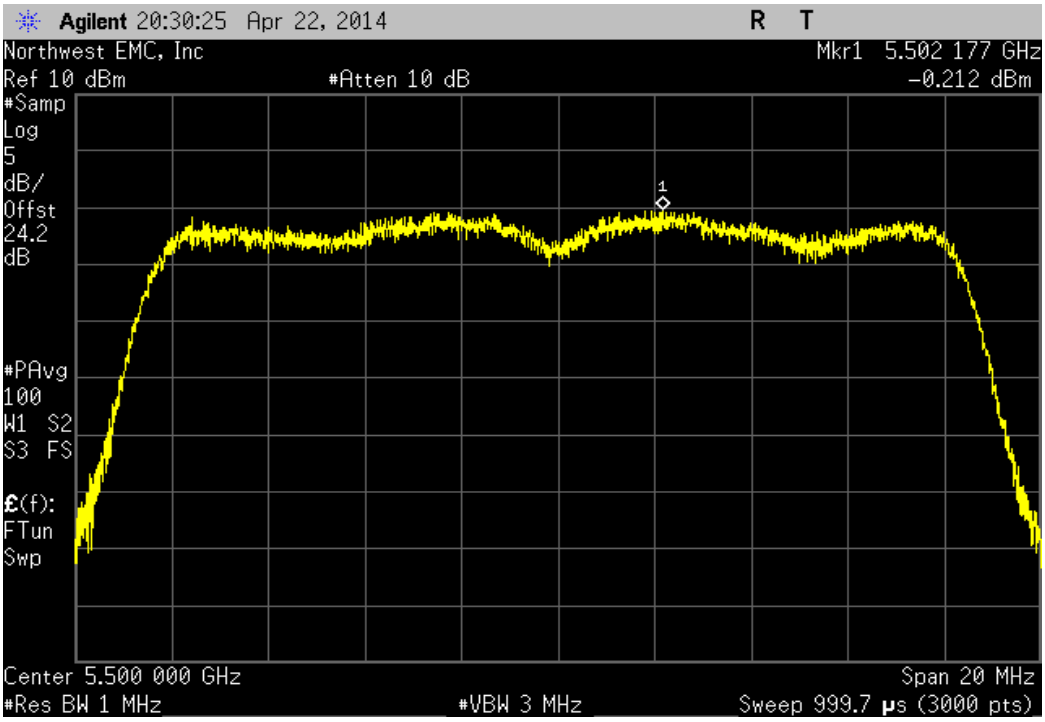


IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 64, High Channel 5320 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.094	11	Pass

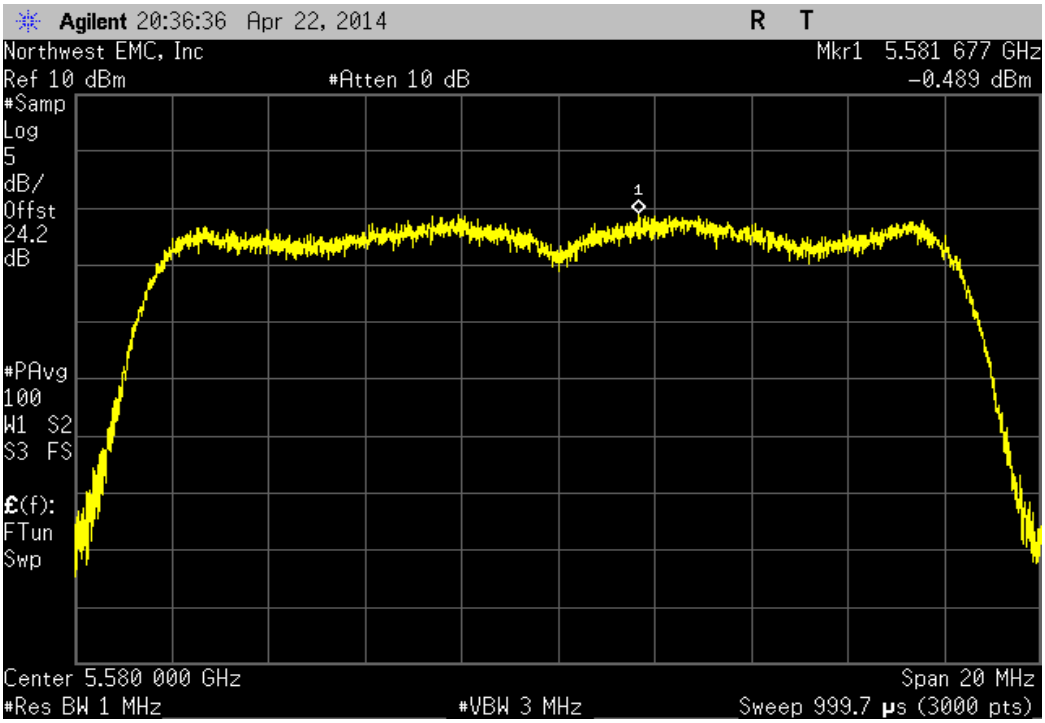


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 100, Low Channel 5500 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.212	11	Pass

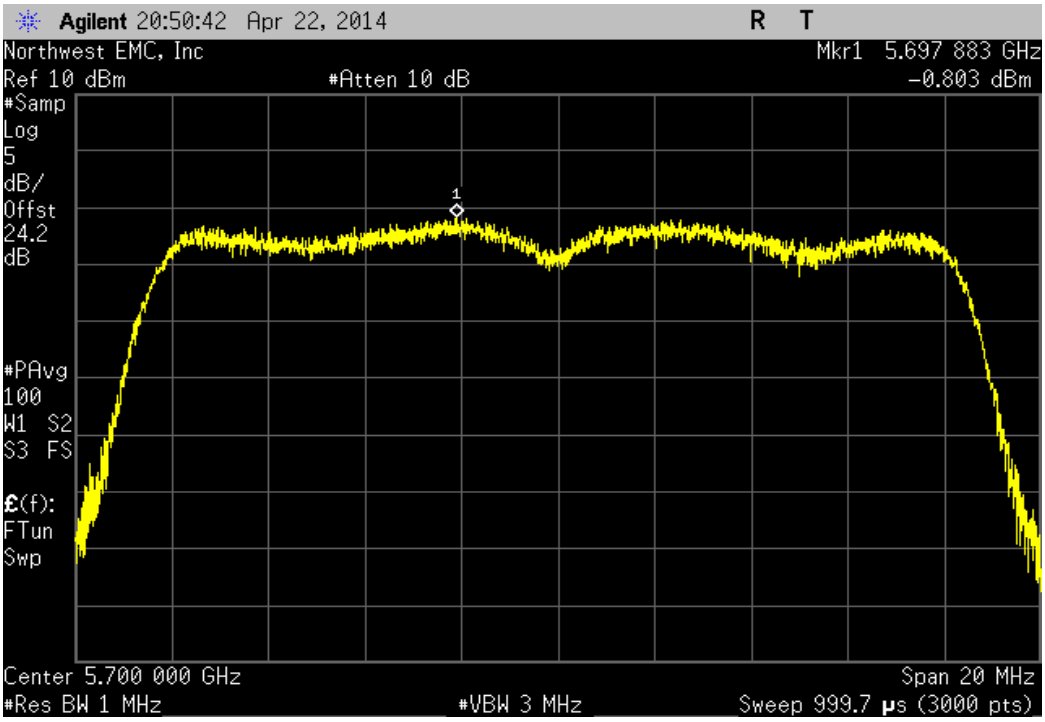


IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 116, Mid Channel 5580 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.489	11	Pass

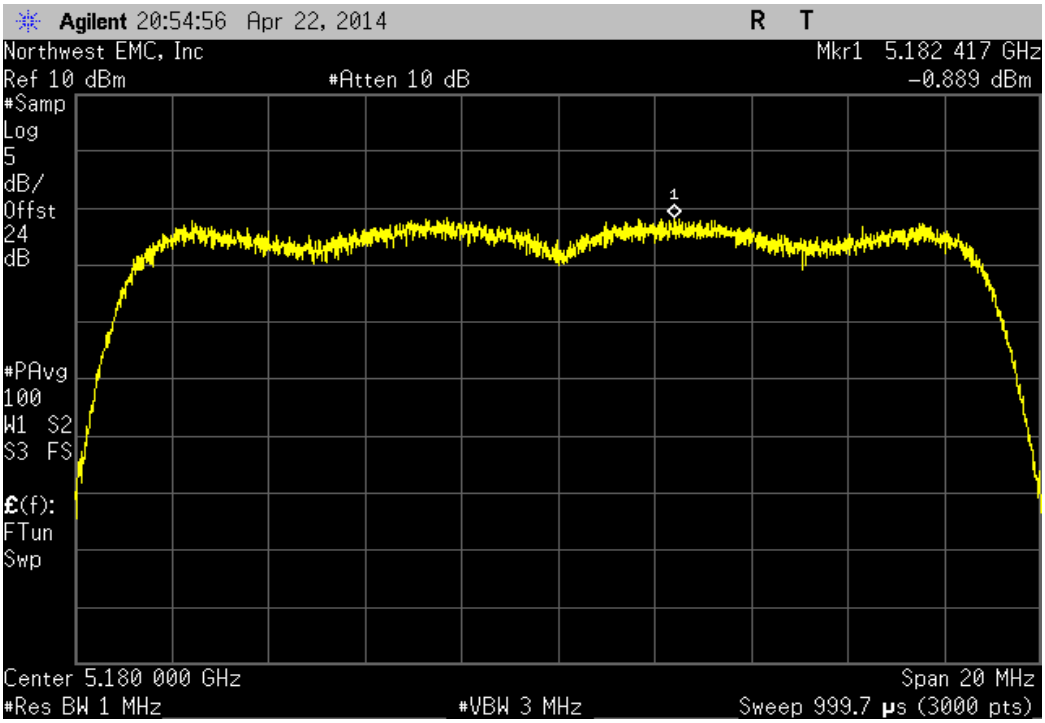


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 140, High Channel 5700 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.803	11	Pass

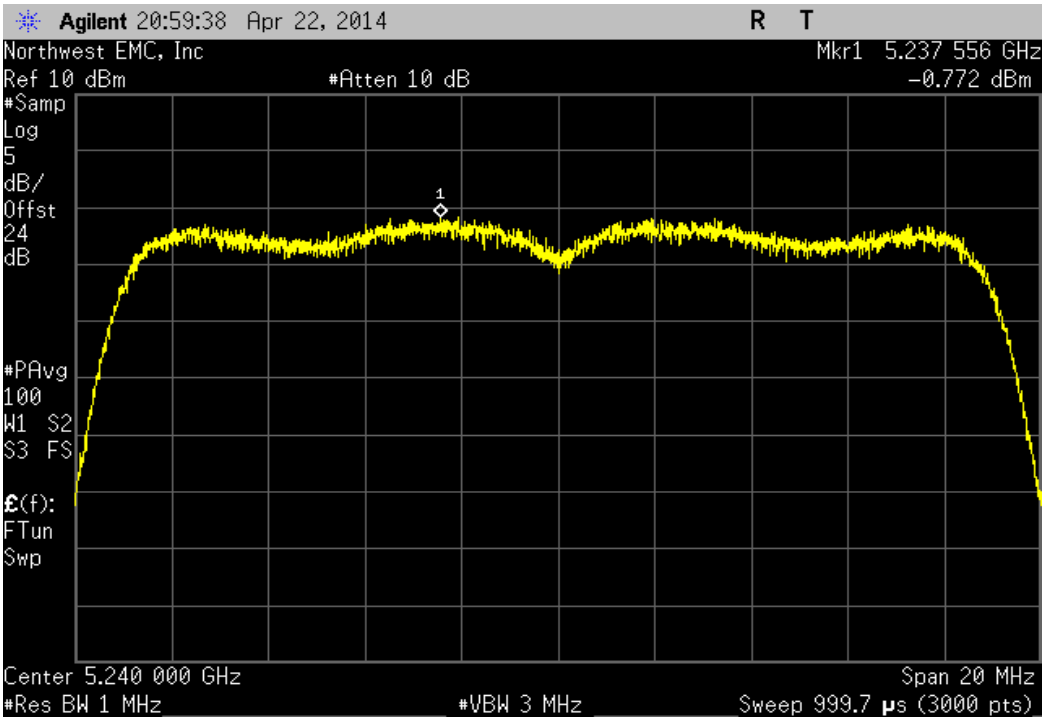


IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.889	4	Pass

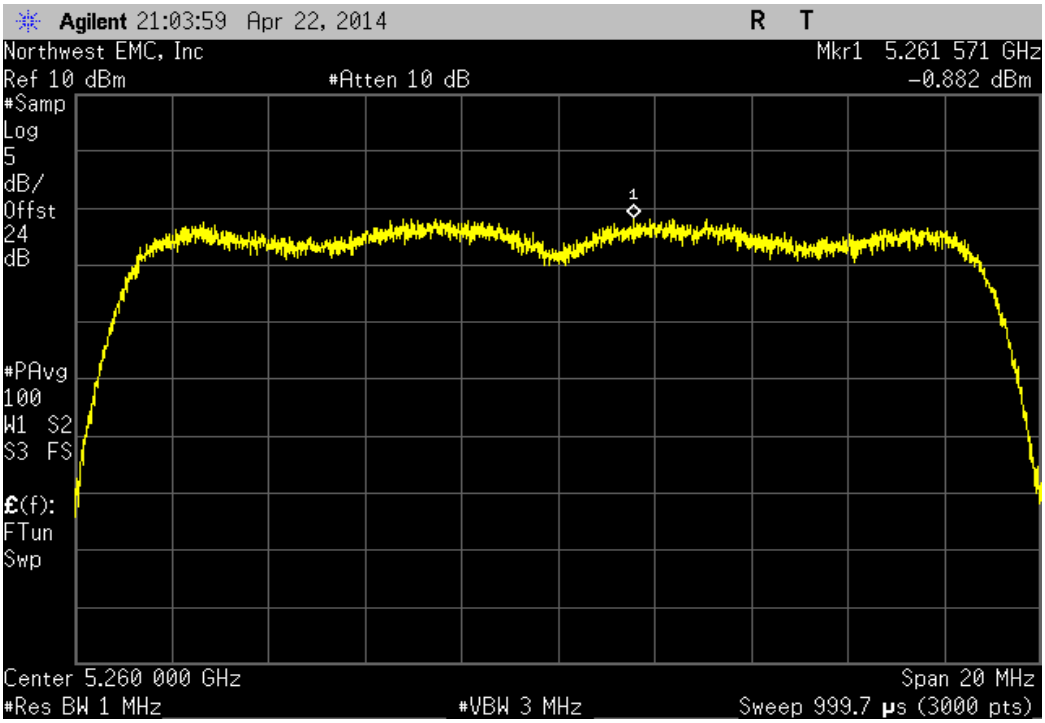


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 48, High Channel 5240 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.772	4	Pass

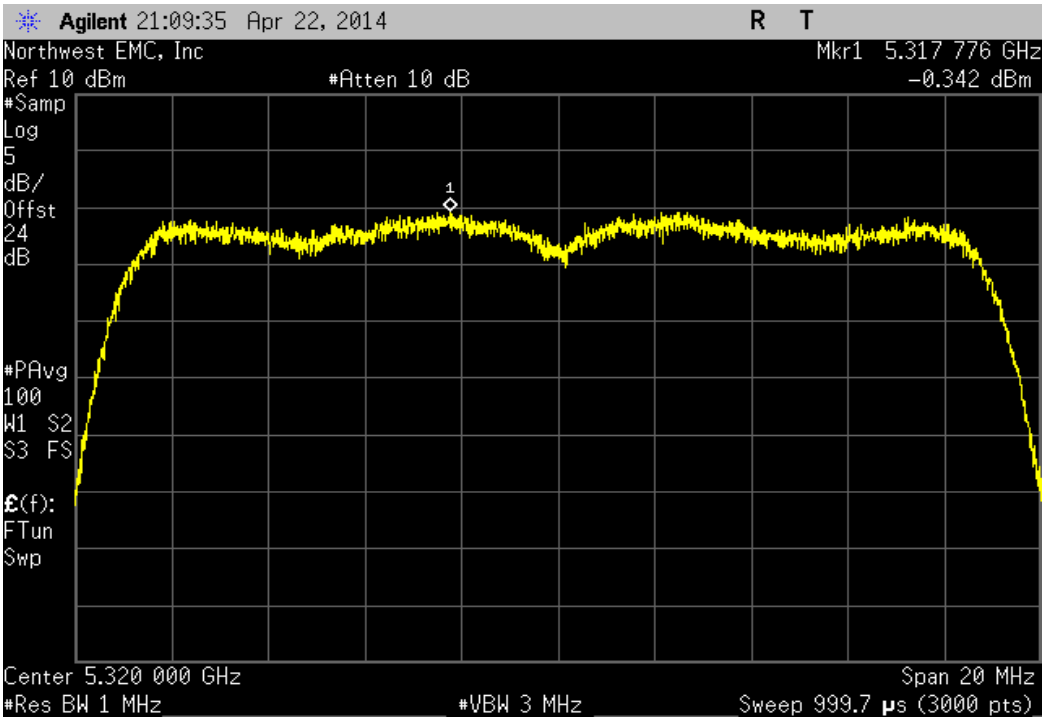


IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 52, Low Channel 5260 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.882	11	Pass

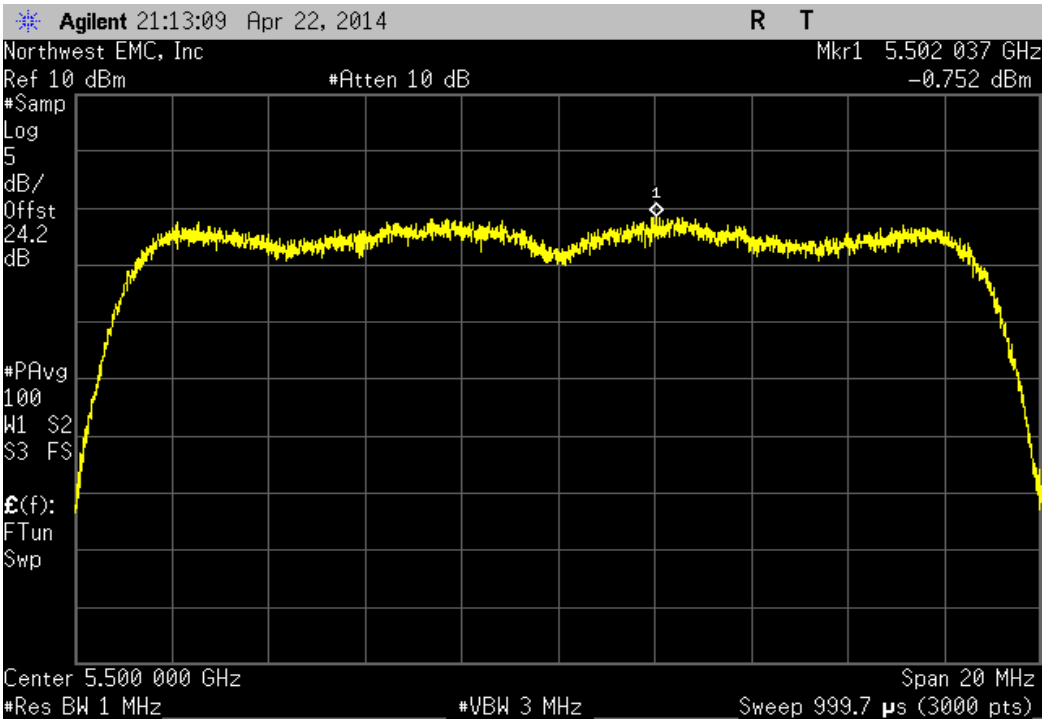


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 64, High Channel 5320 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.342	11	Pass

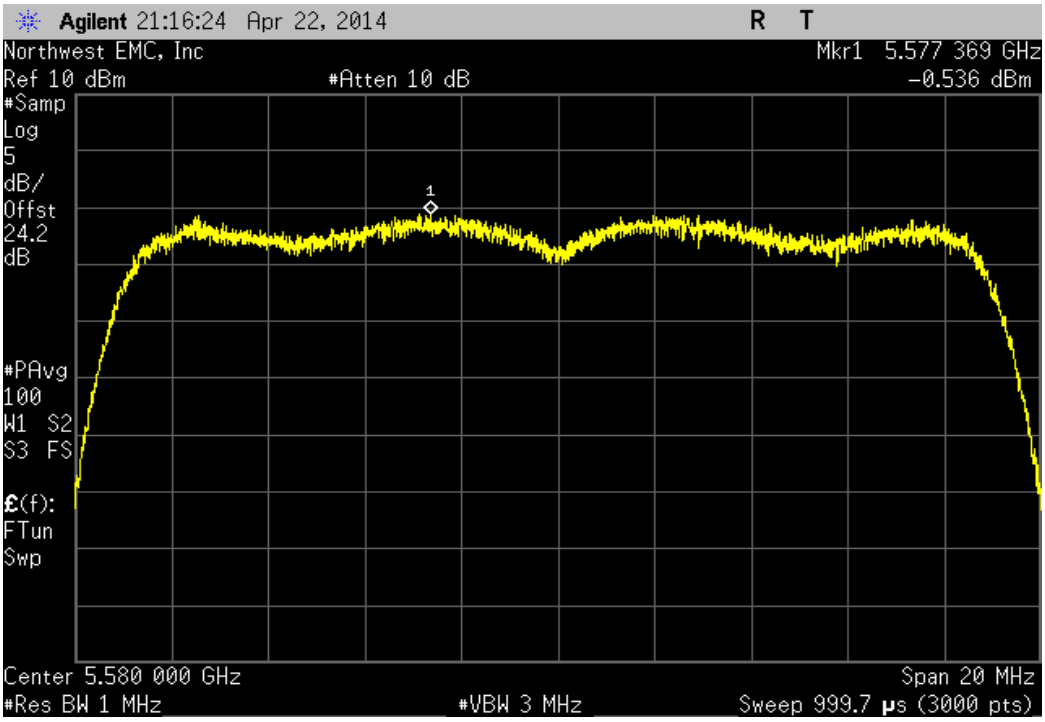


IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 100, Low Channel 5500 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.752	11	Pass

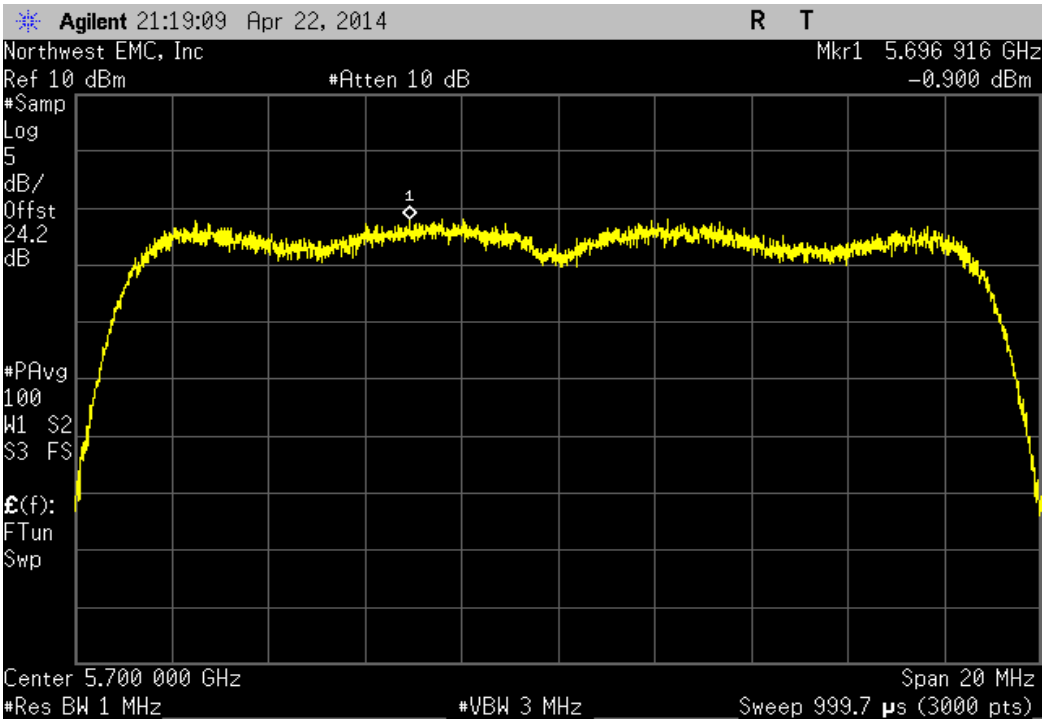


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 116, Mid Channel 5580 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.536	11	Pass

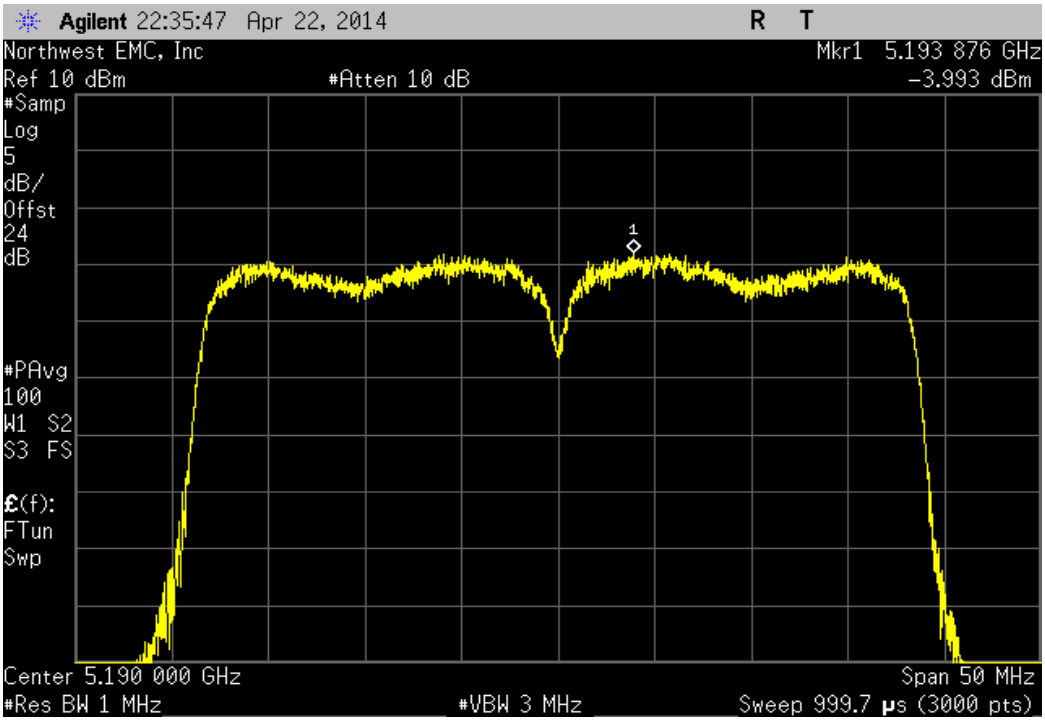


IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 140, High Channel 5700 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.9	11	Pass

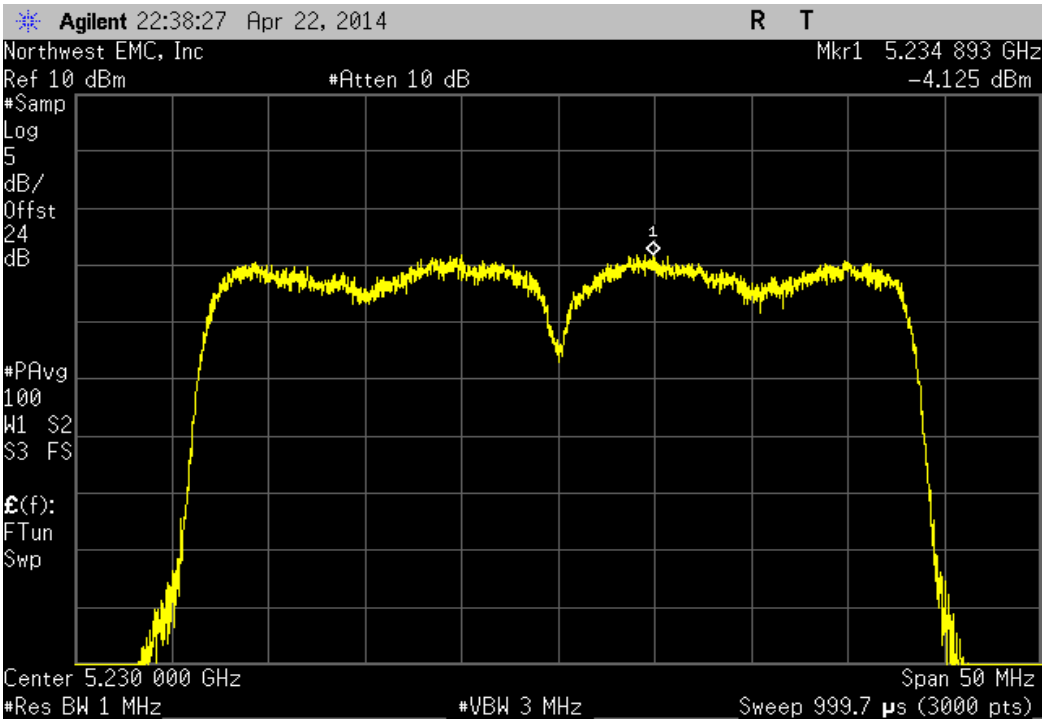


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 36/40, Low Channel 5190 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.993	4	Pass

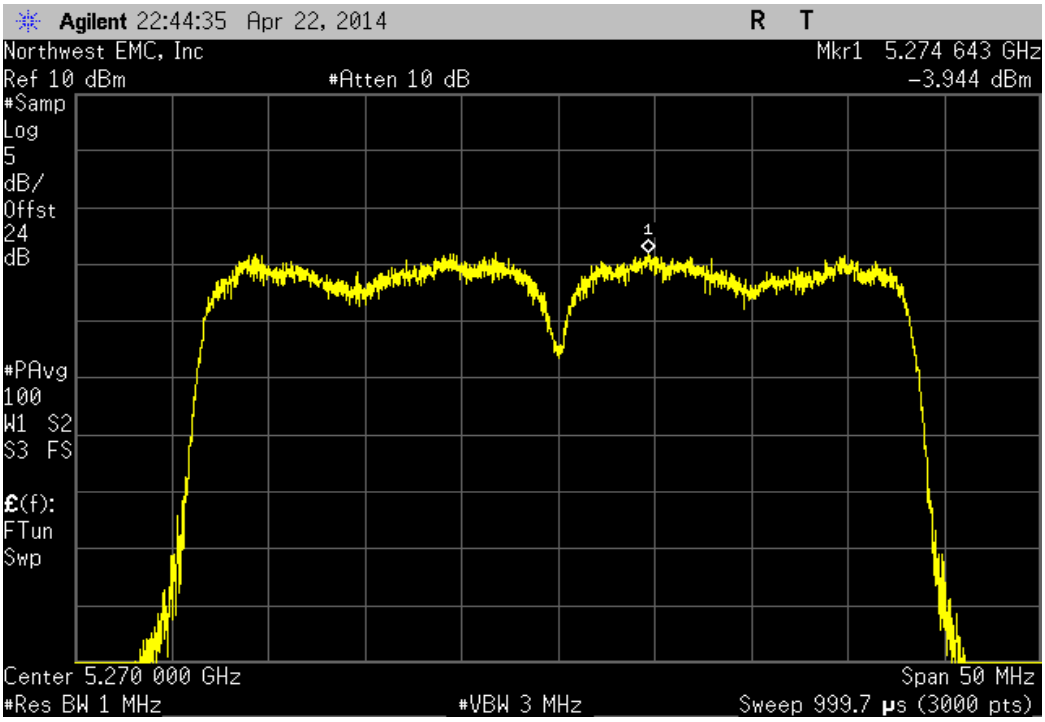


IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 44/48, High Channel 5230 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-4.125	4	Pass

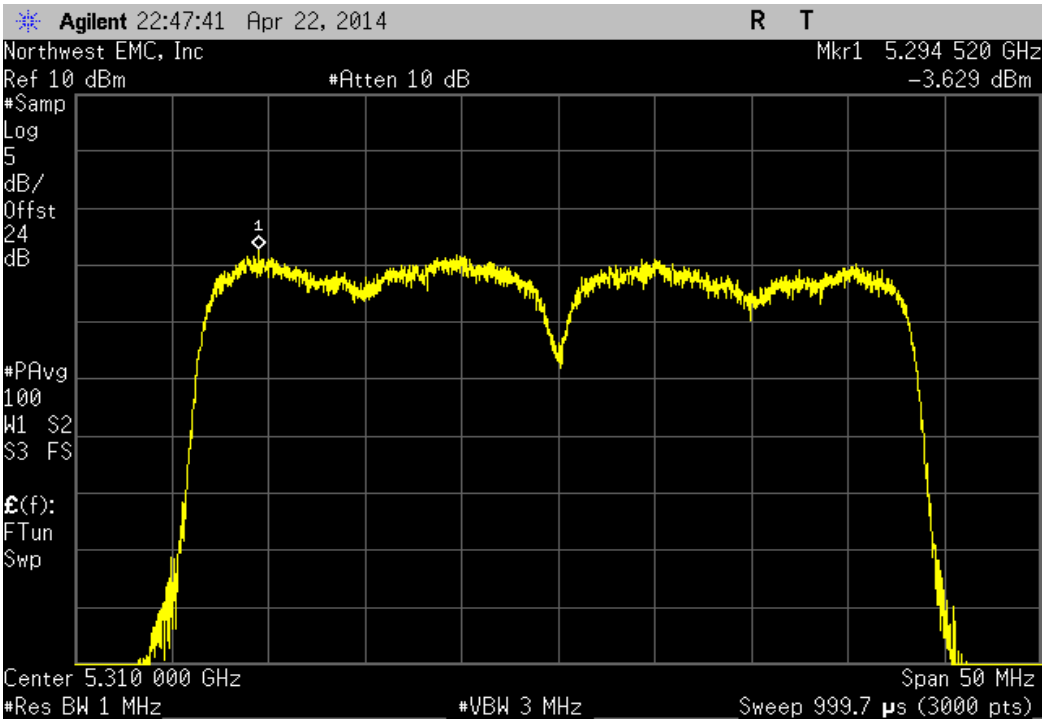


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 52/56, Low Channel 5270 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.944	11	Pass

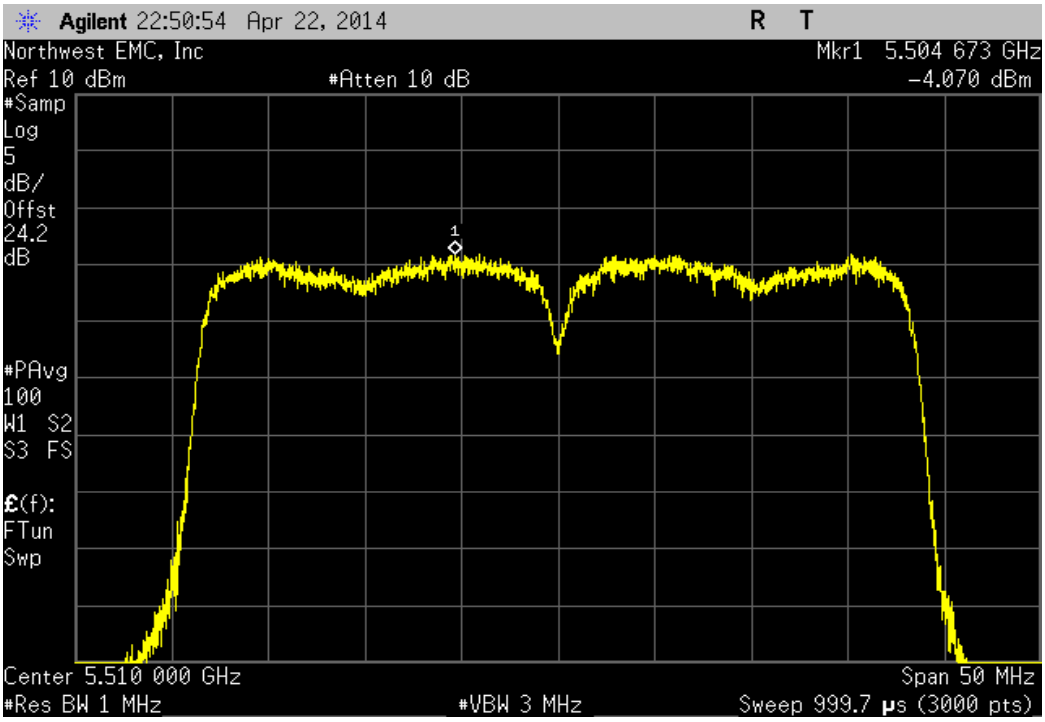


IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 60/64, High Channel 5310 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.629	11	Pass

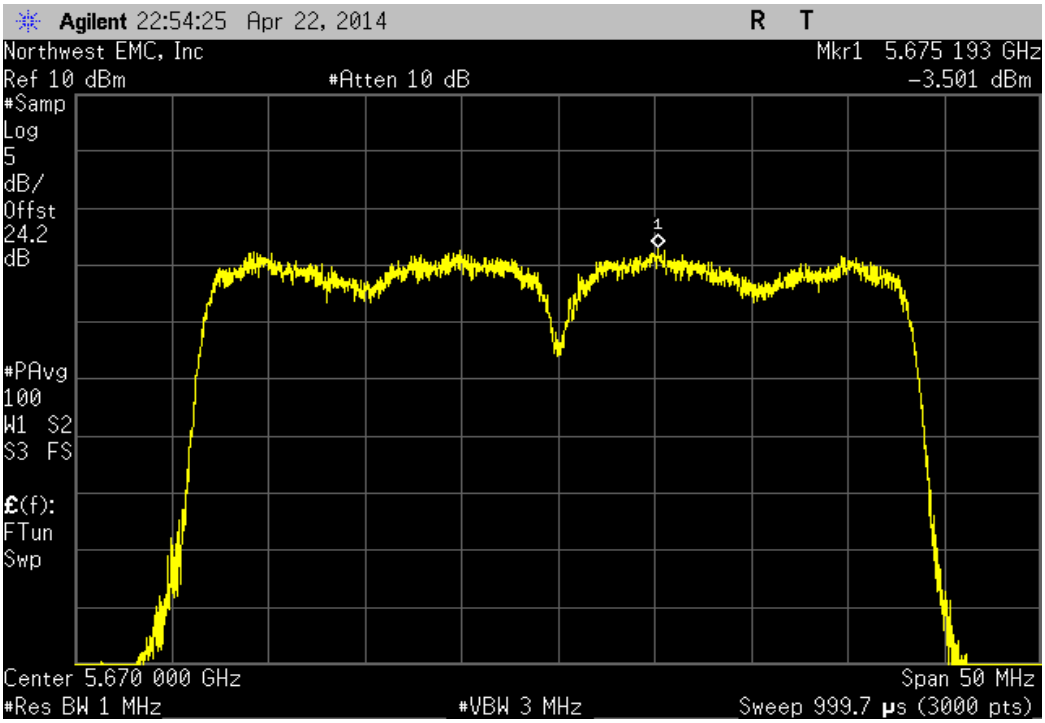


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 100/104, Low Channel 5510 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.07	11	Pass

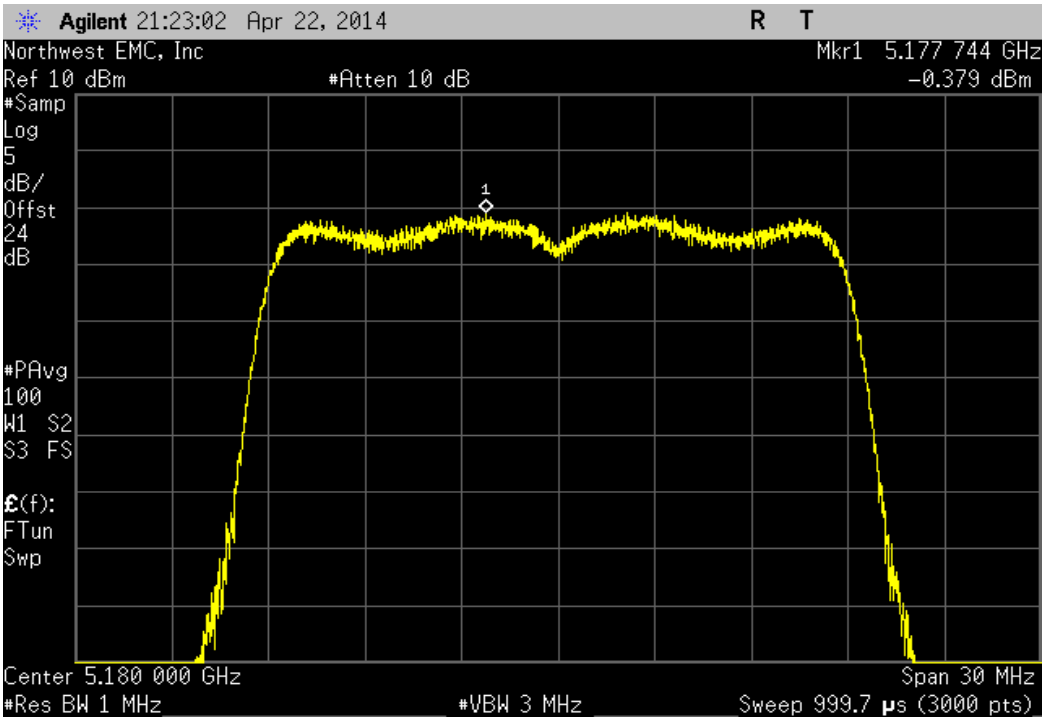


IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 132/136, High Channel 5670 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.501	11	Pass

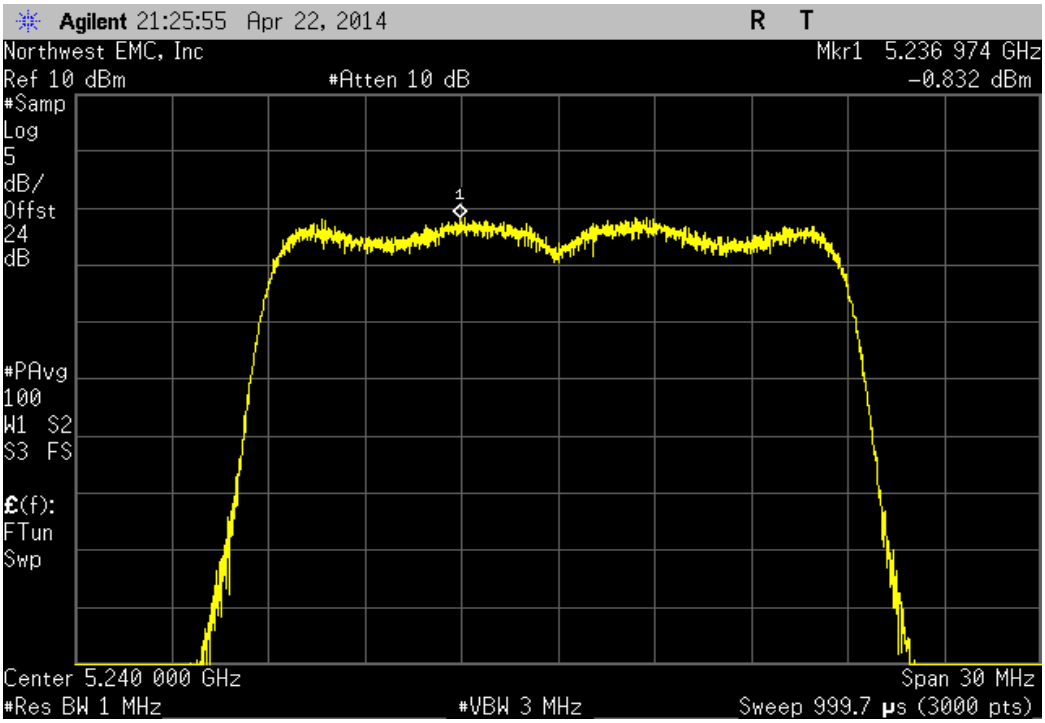


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 36, Low Channel 5180MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.379	4	Pass

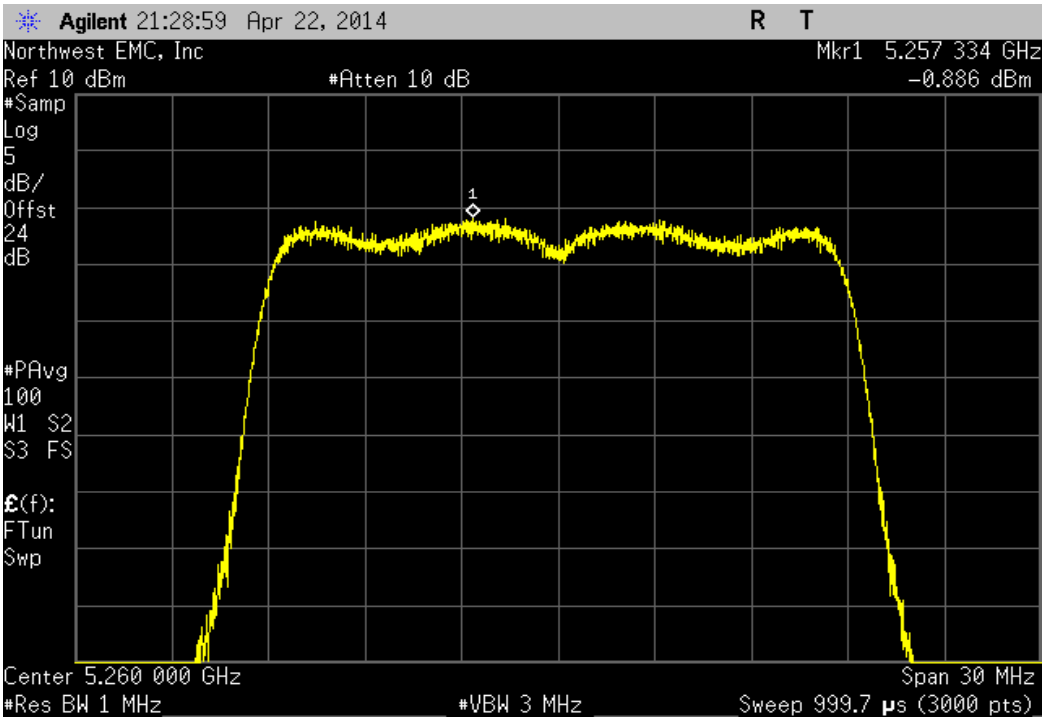


IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 48, High Channel 5240 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.832	4	Pass

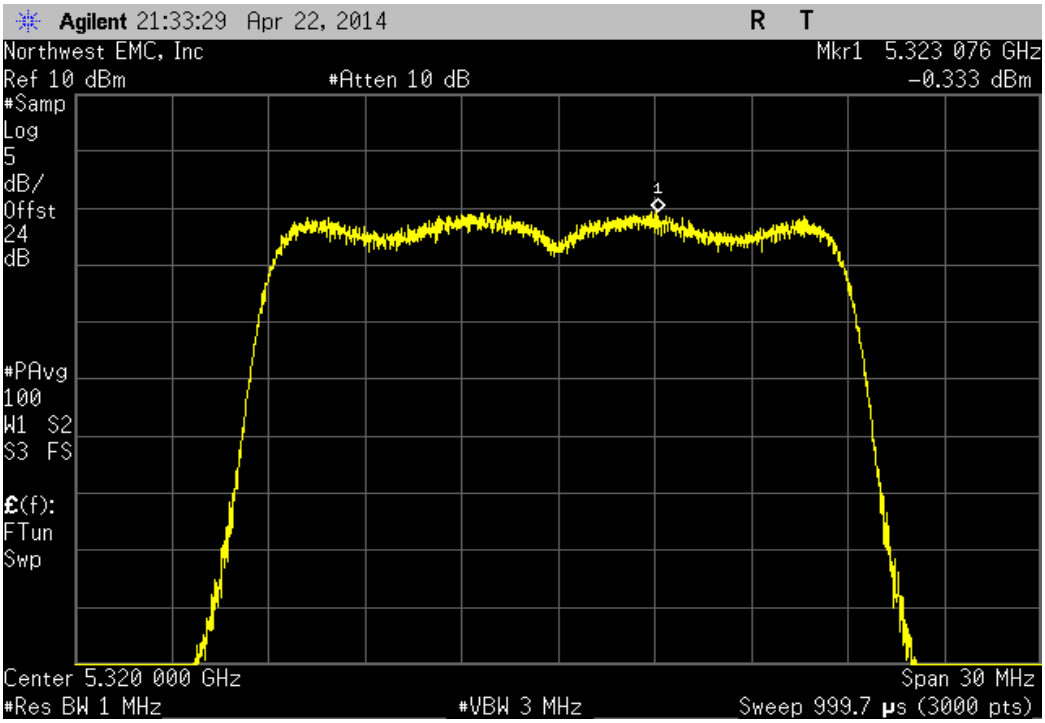


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 52, Low Channel 5260 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.886	11	Pass

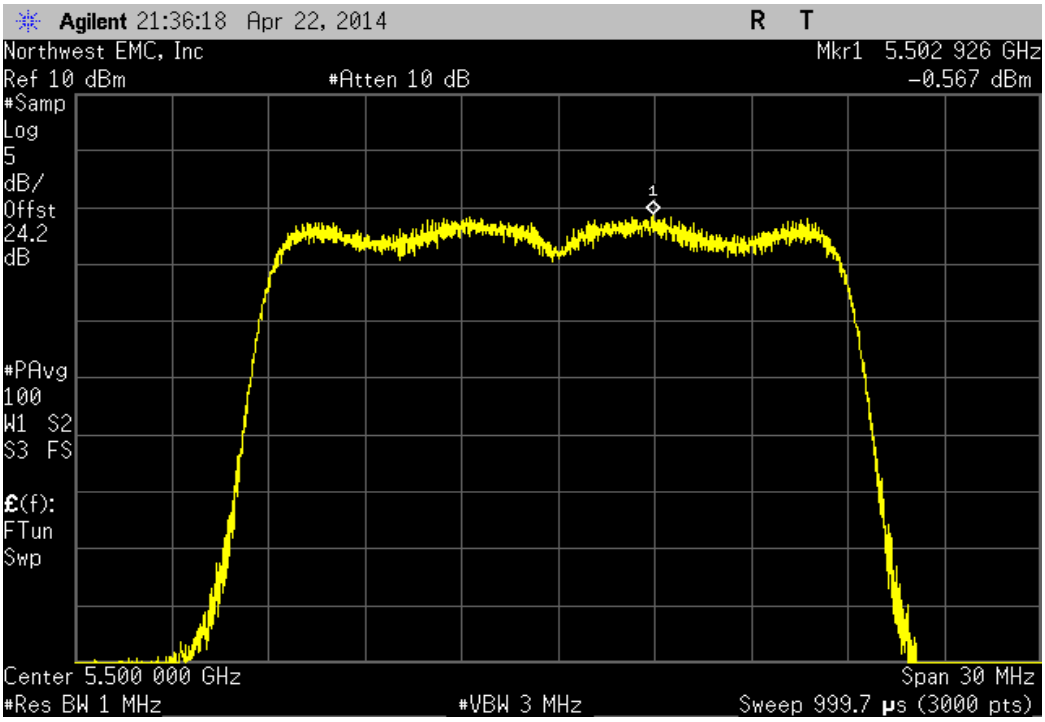


IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 64, High Channel 5320 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.333	11	Pass

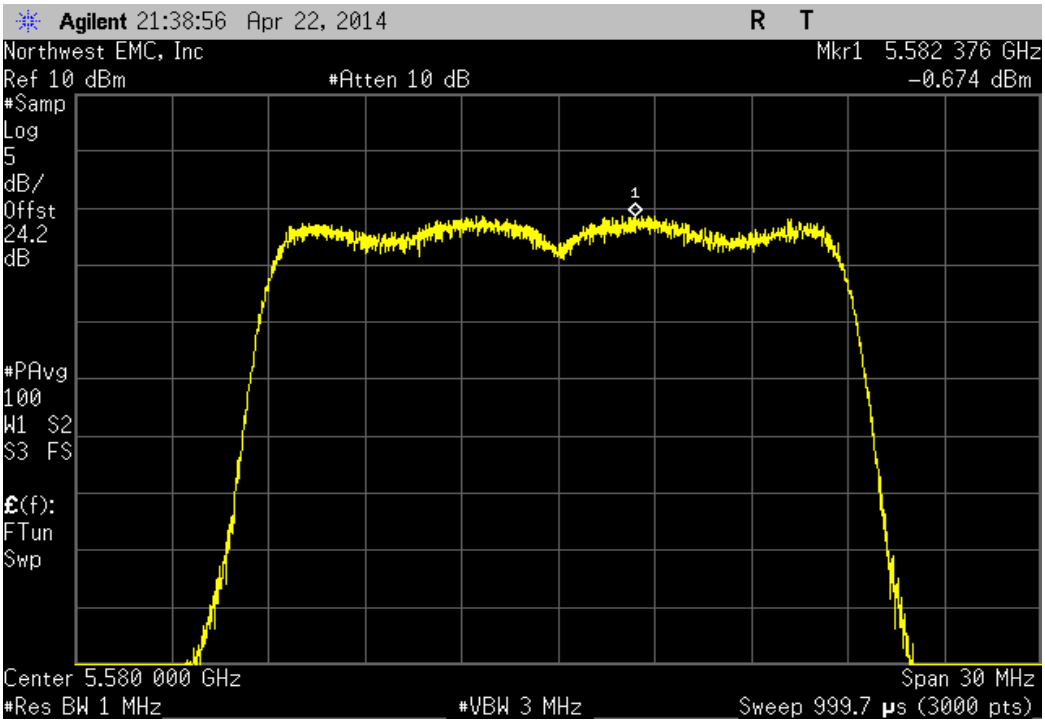


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 100, Low Channel 5500 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.567	11	Pass

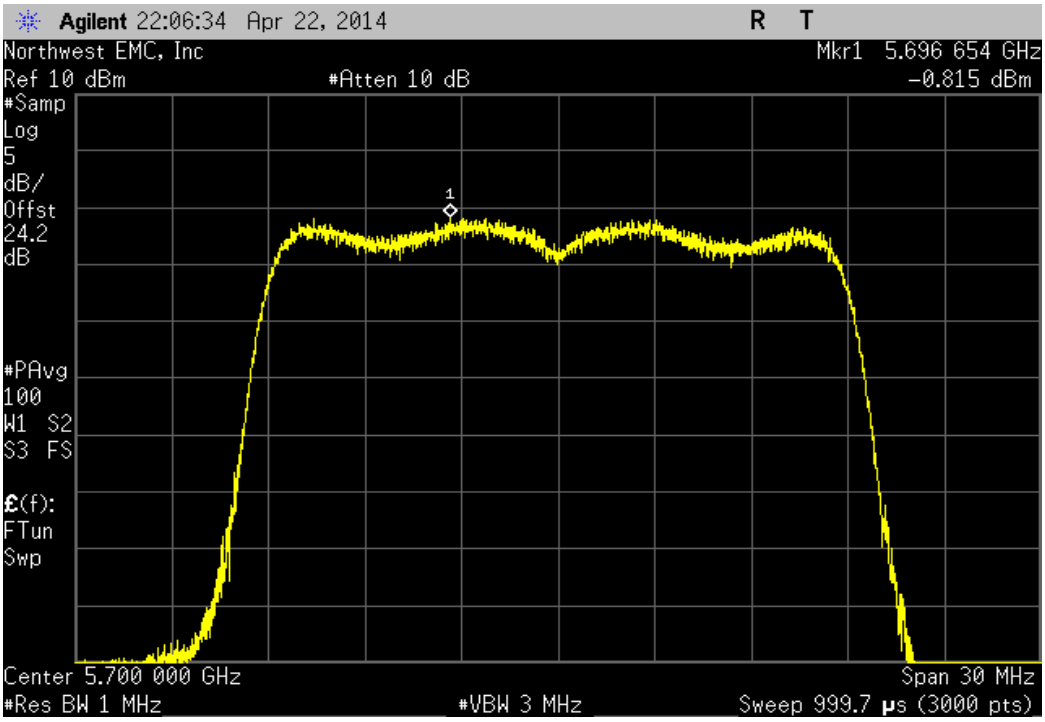


IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 116, Mid Channel 5580 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.674	11	Pass

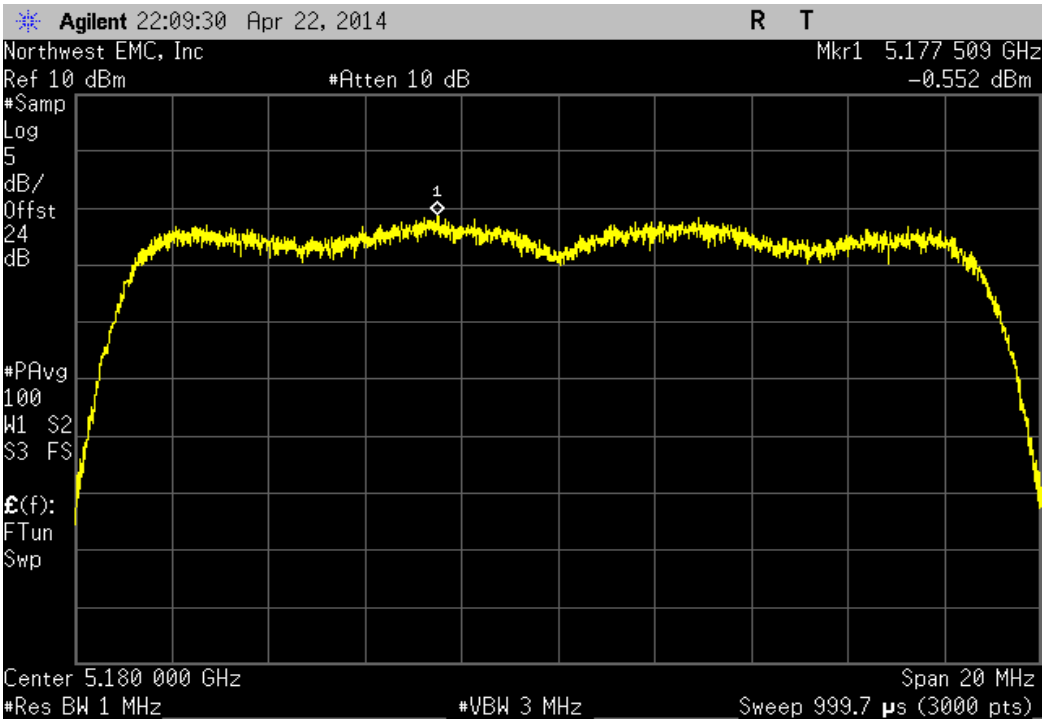


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 140, High Channel 5700 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.815	11	Pass

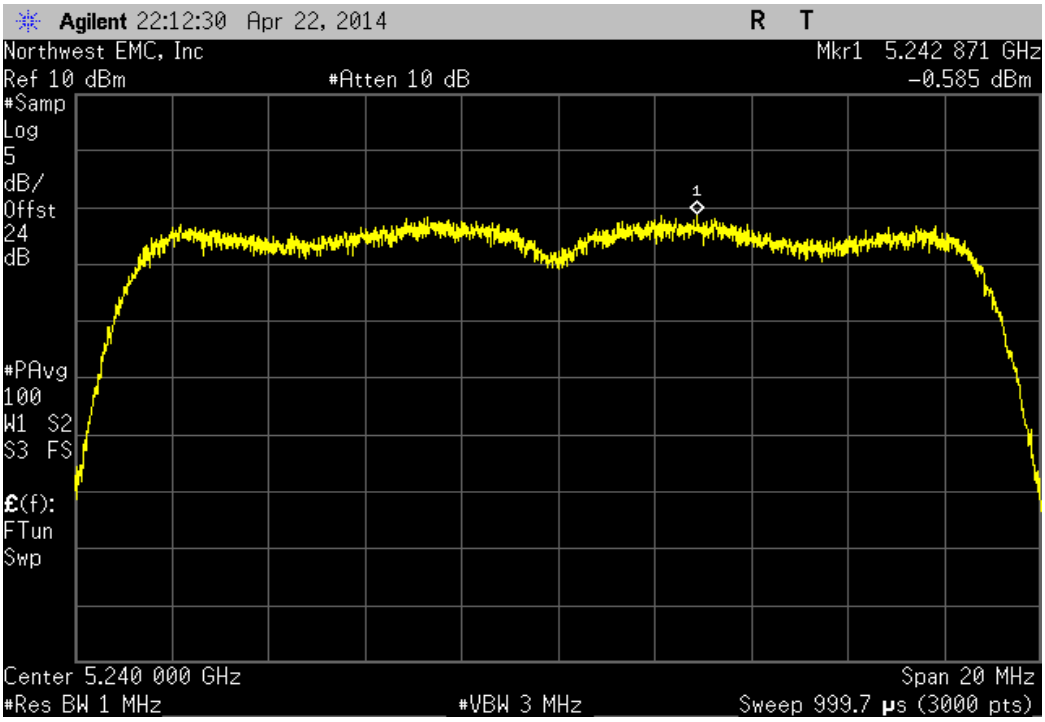


IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 36, Low Channel 5180MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.552	4	Pass

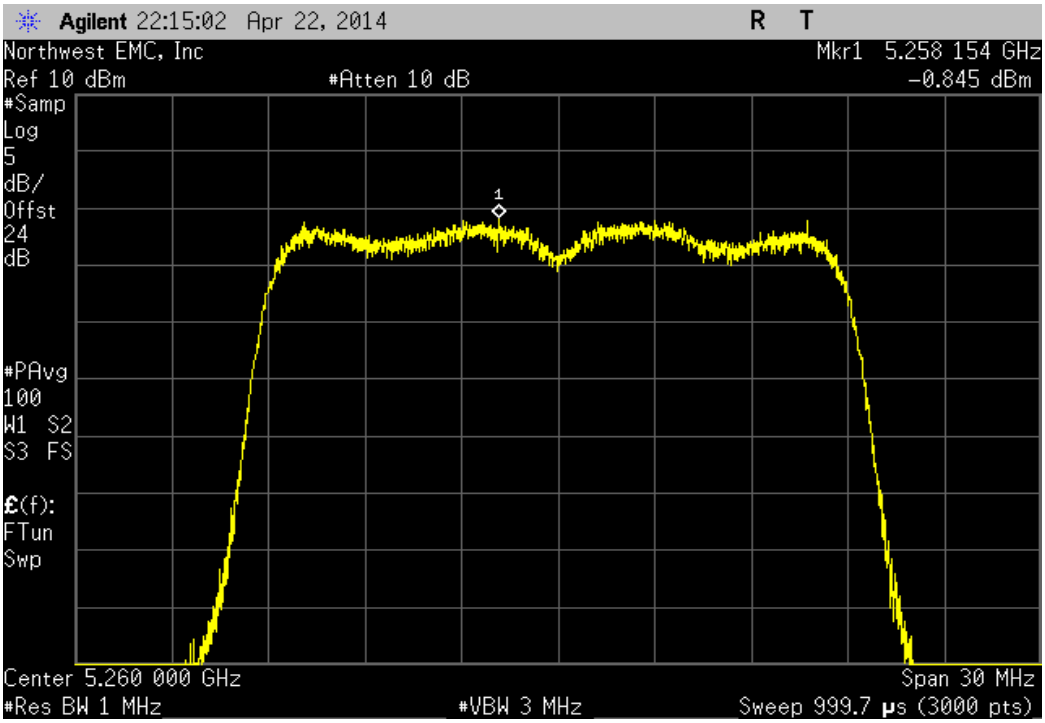


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 48, High Channel 5240 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.585	4	Pass

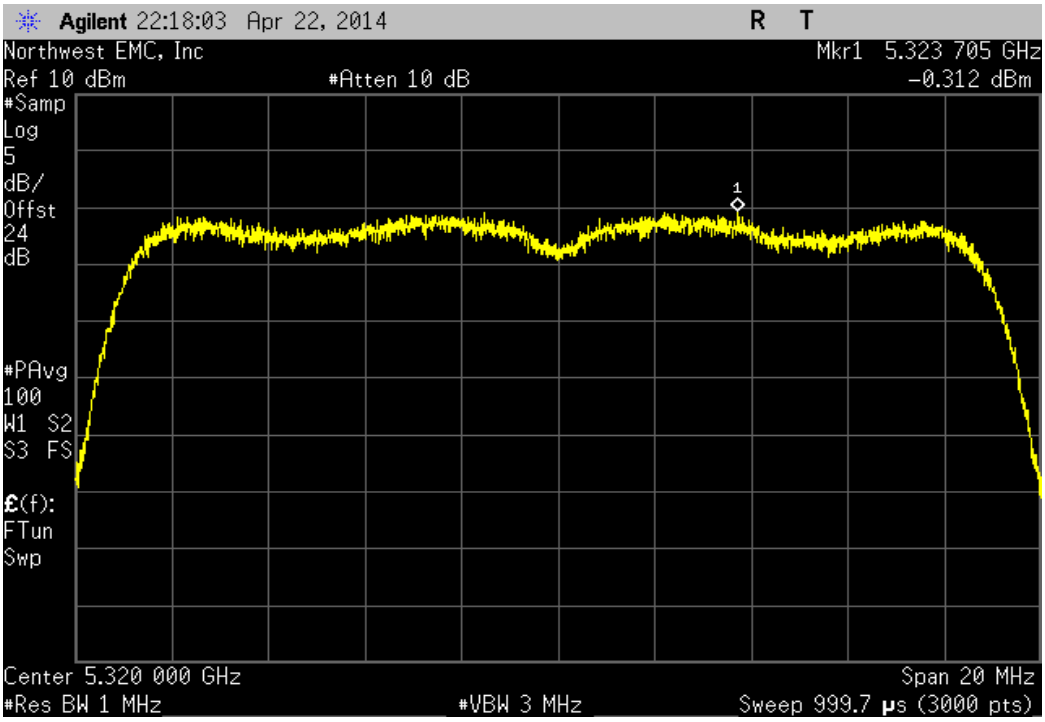


IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 52, Low Channel 5260 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-0.845	11	Pass

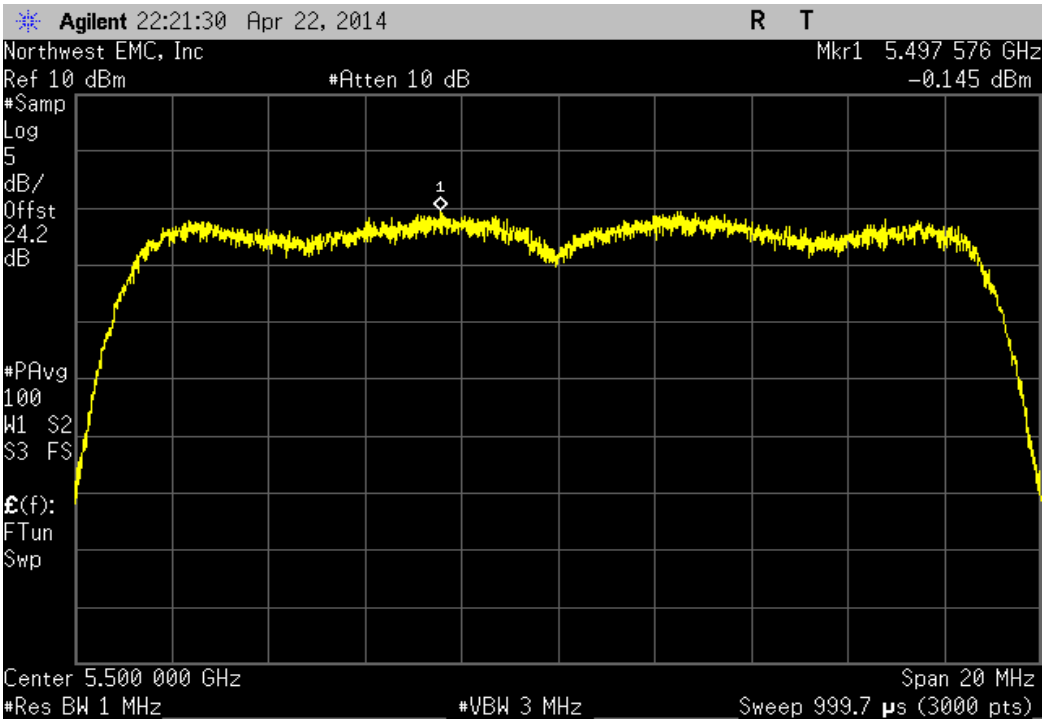


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 64, High Channel 5320 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.312	11	Pass

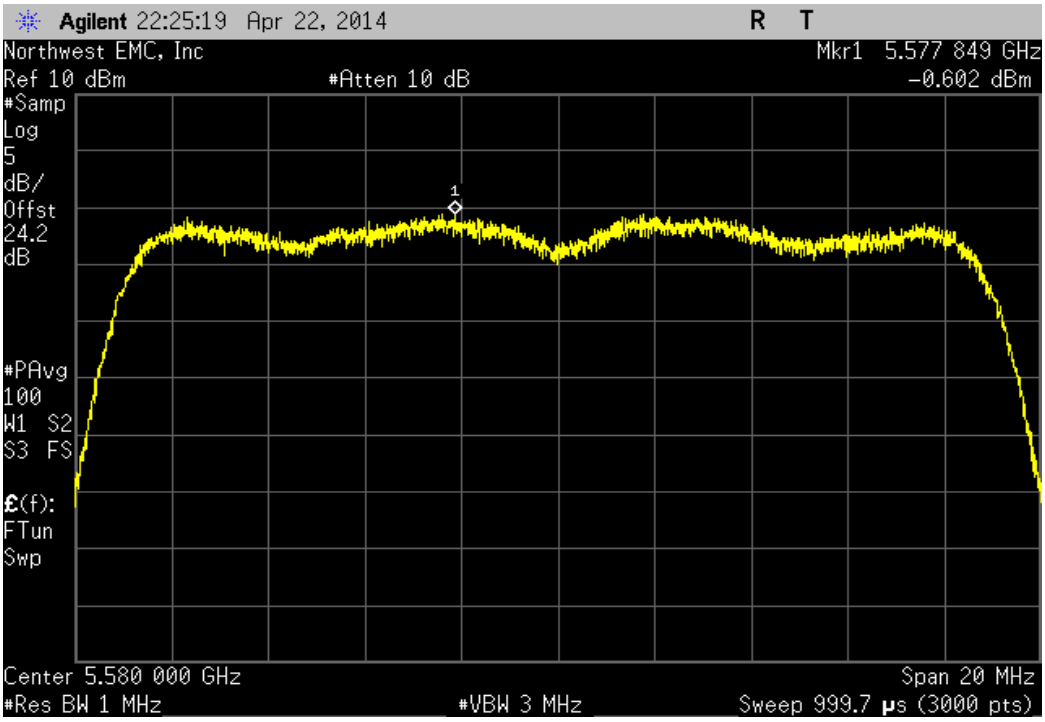


IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 100, Low Channel 5500 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.145	11	Pass

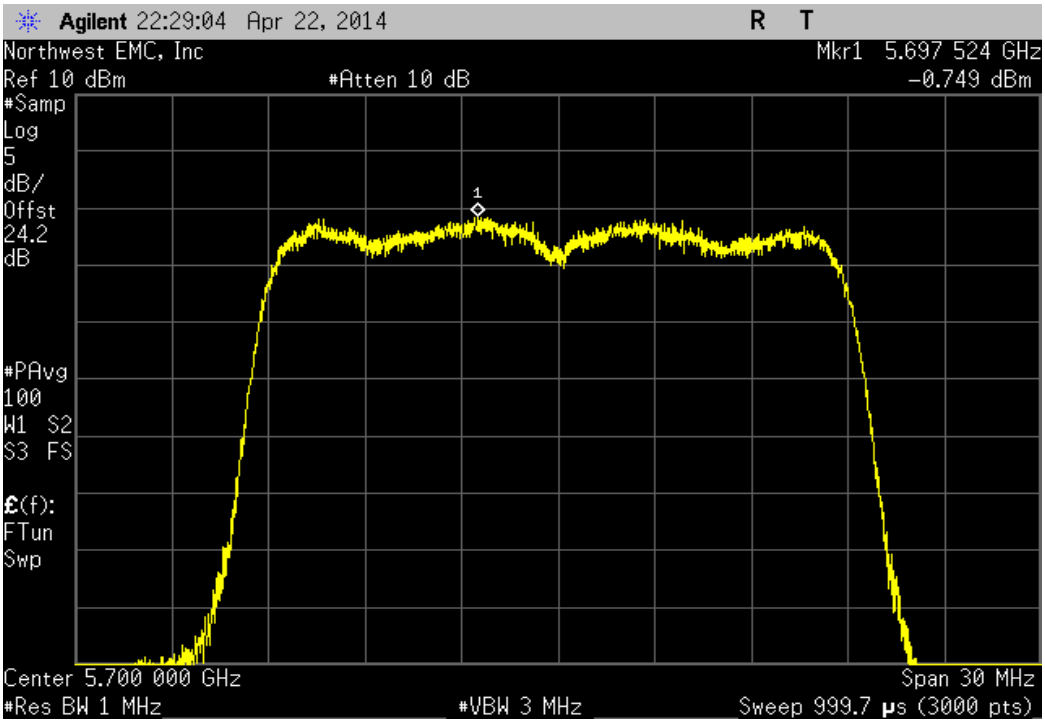


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 116, Mid Channel 5580 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.602	11	Pass

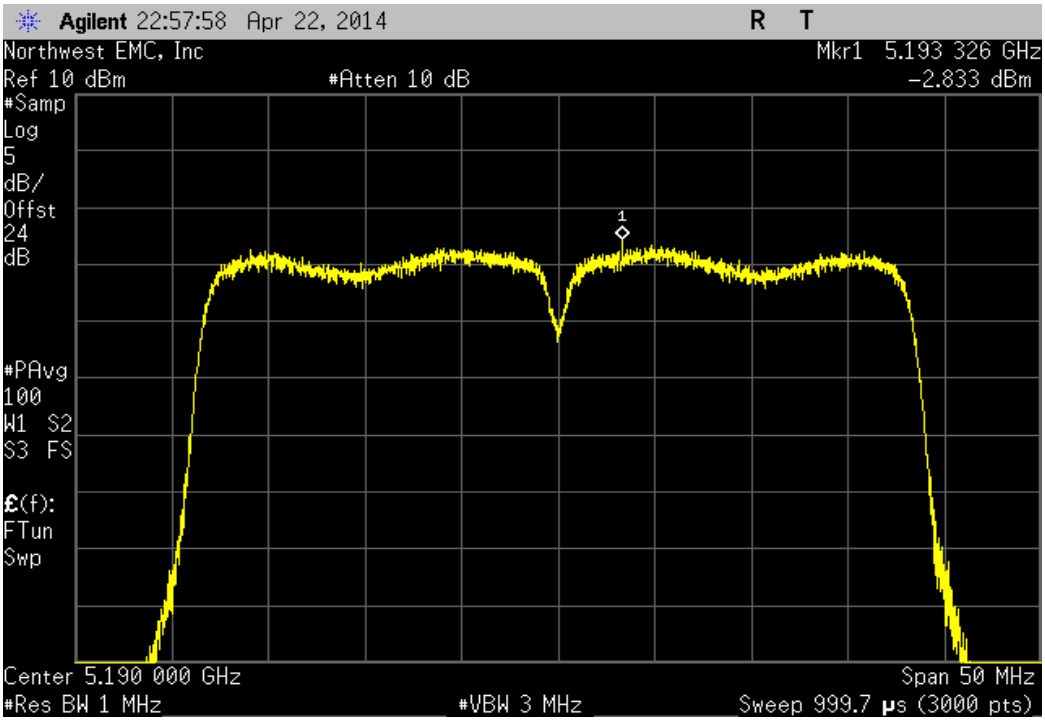


IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 140, High Channel 5700 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-0.749	11	Pass

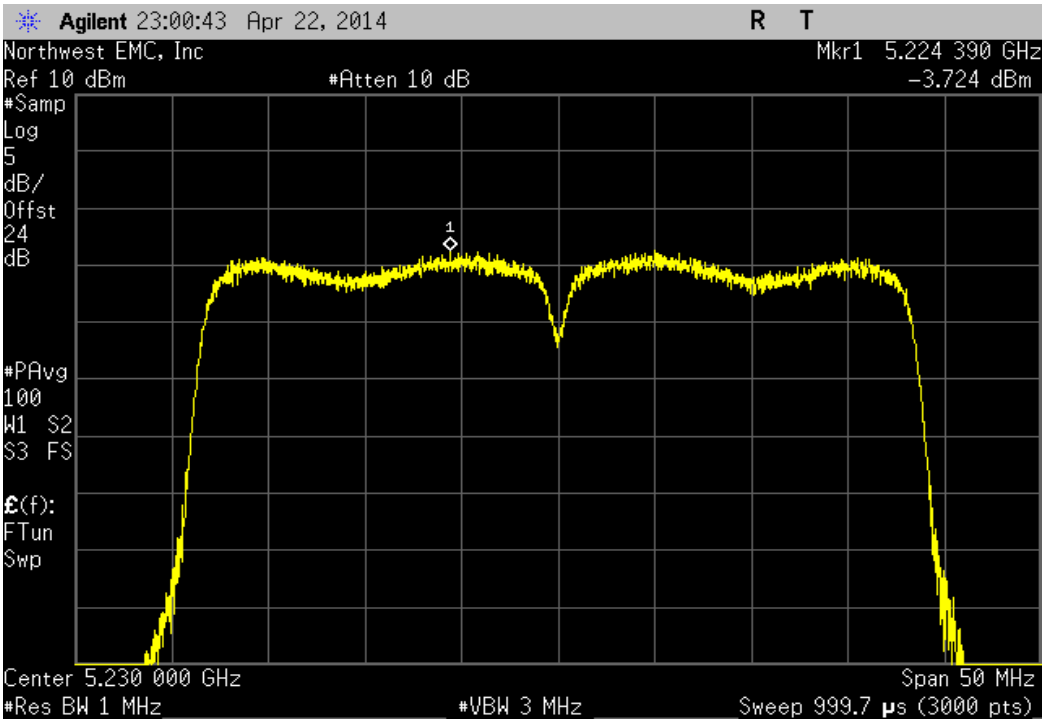


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 36/40, Low Channel 5190 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-2.833	4	Pass

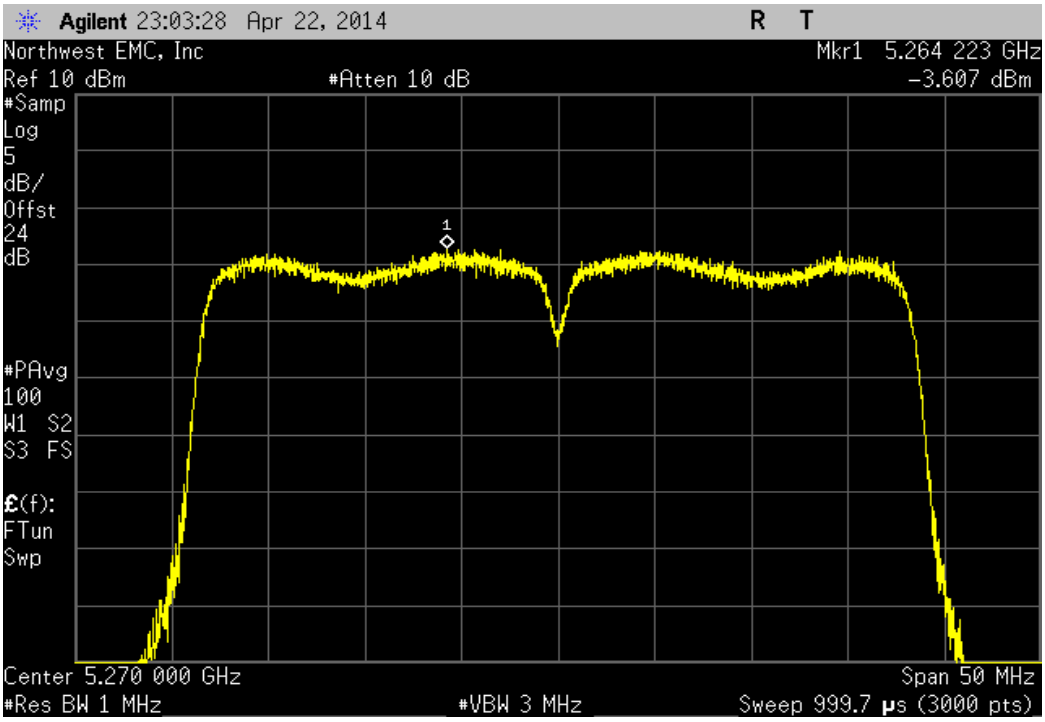


IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 44/48, High Channel 5230 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.724	4	Pass

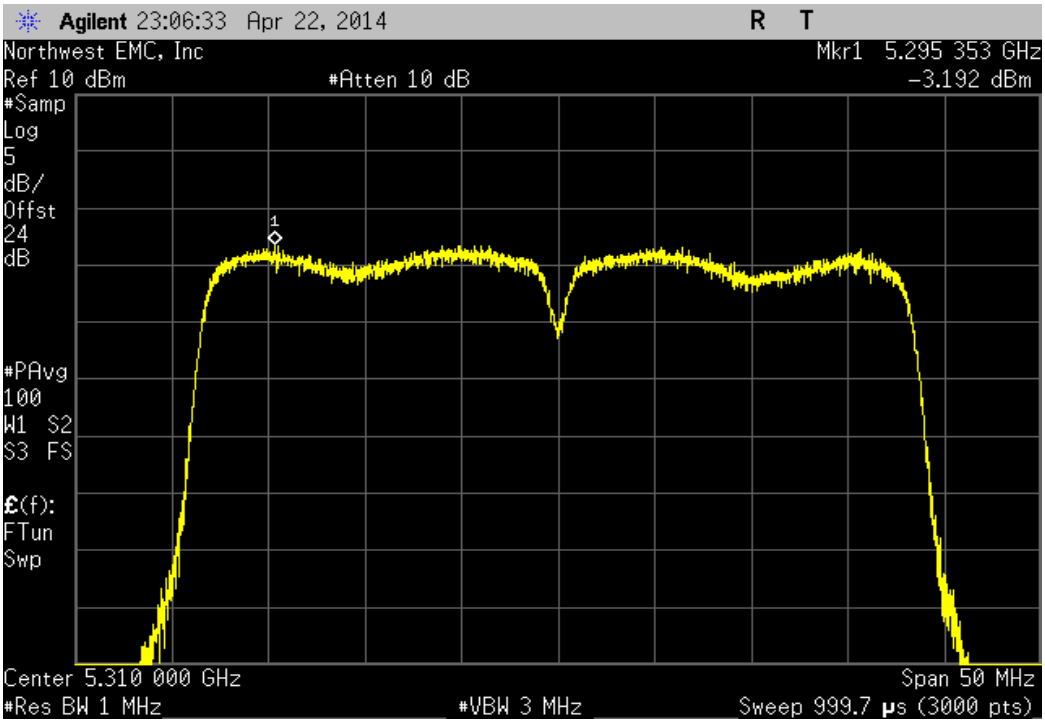


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 52/56, Low Channel 5270 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.607	11	Pass

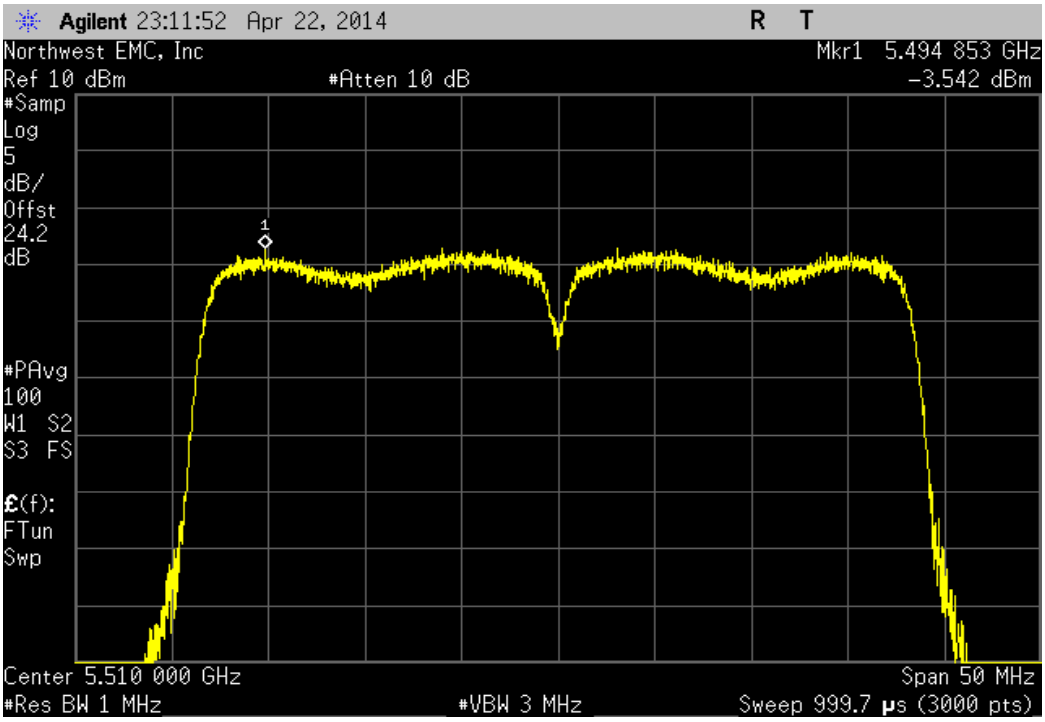


IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 60/64, High Channel 5310 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.192	11	Pass

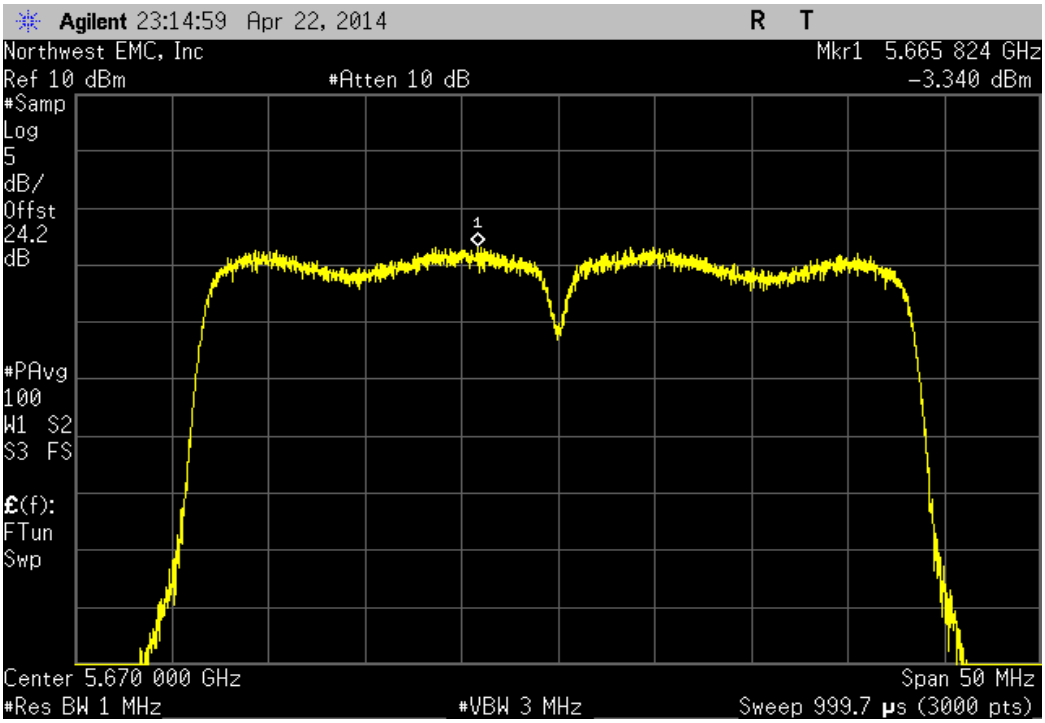


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 100/104, Low Channel 5510 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.542	11	Pass



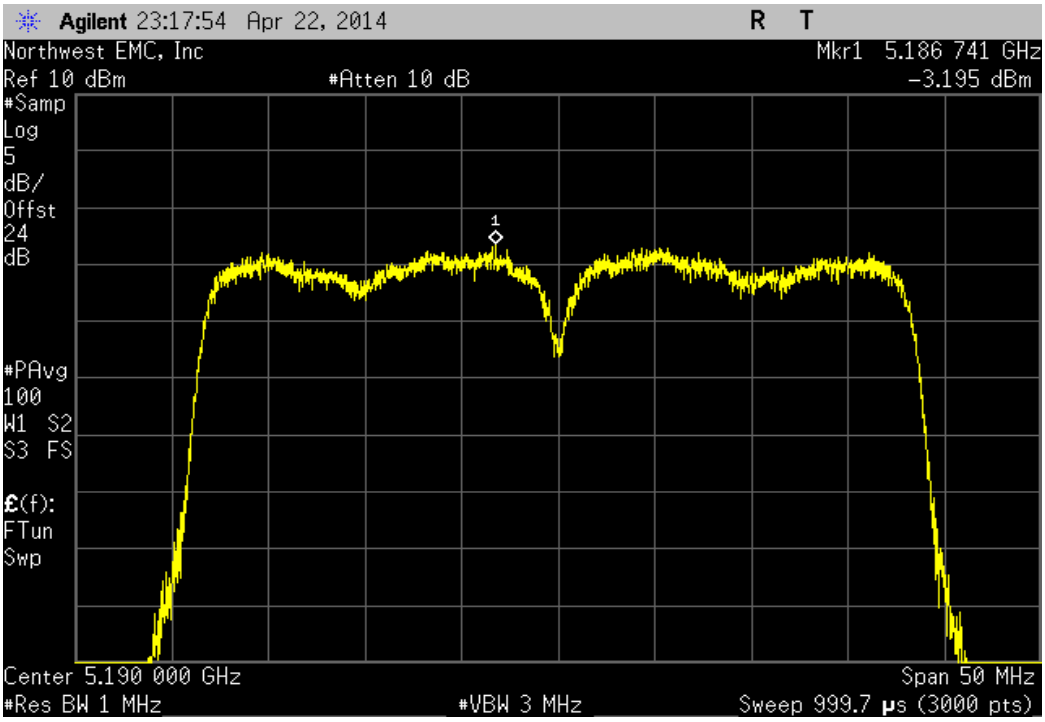
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 132/136, High Channel 5670 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.34	11	Pass



PEAK POWER SPECTRAL DENSITY

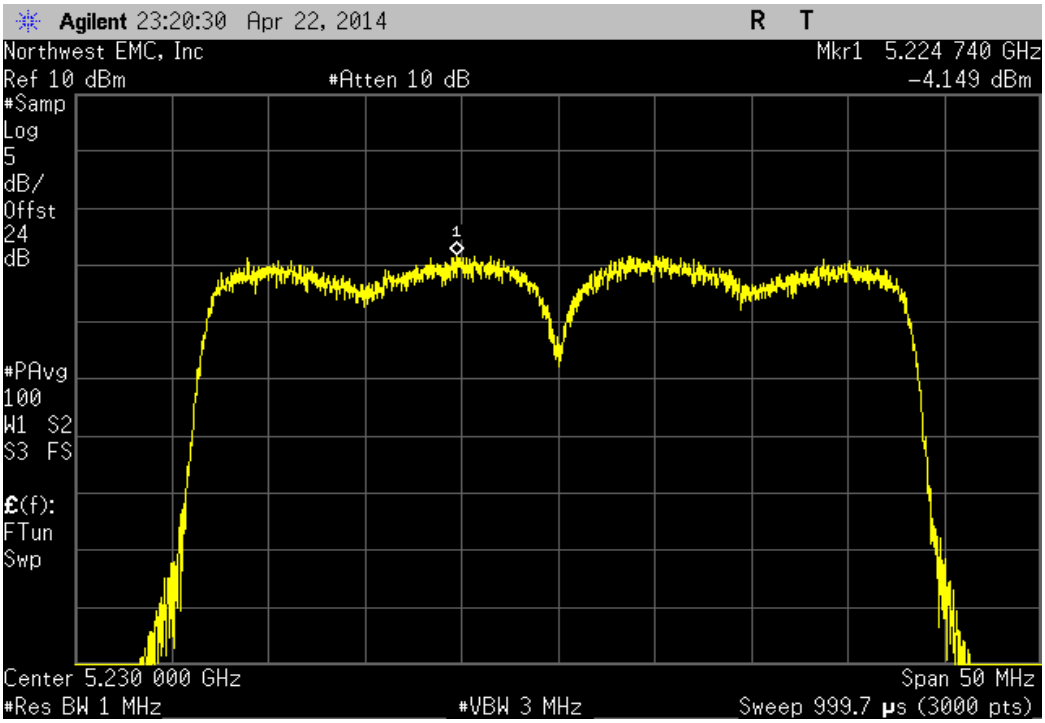
IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 36/40, Low Channel 5190 MHz

				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.195	4	Pass



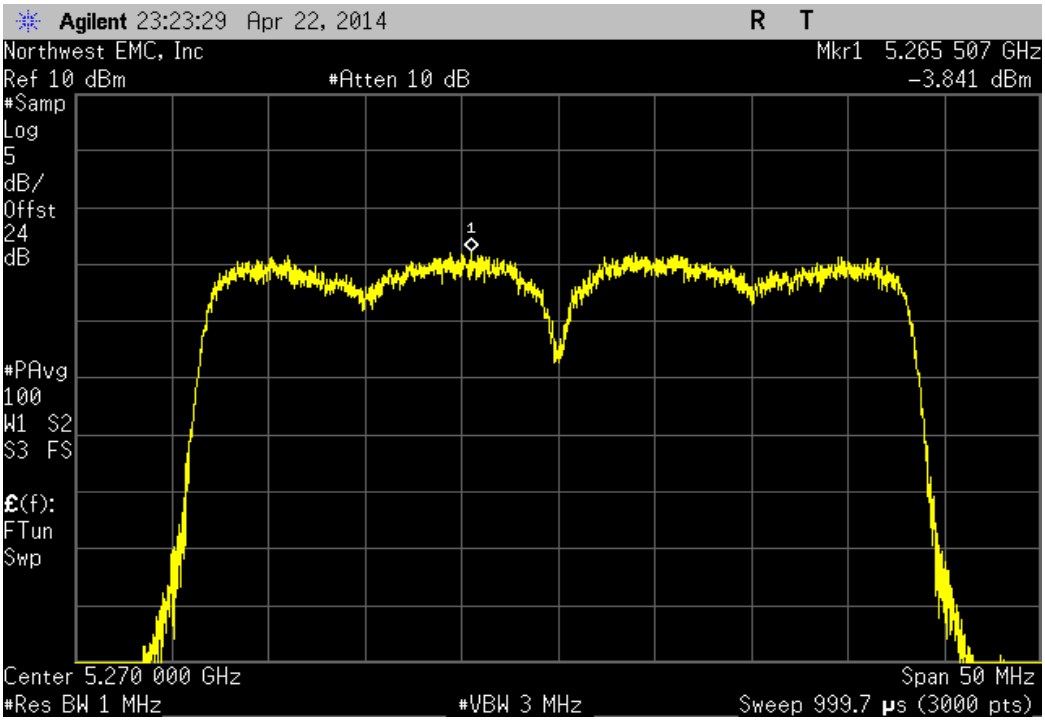
IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 44/48, High Channel 5230 MHz

				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.149	4	Pass

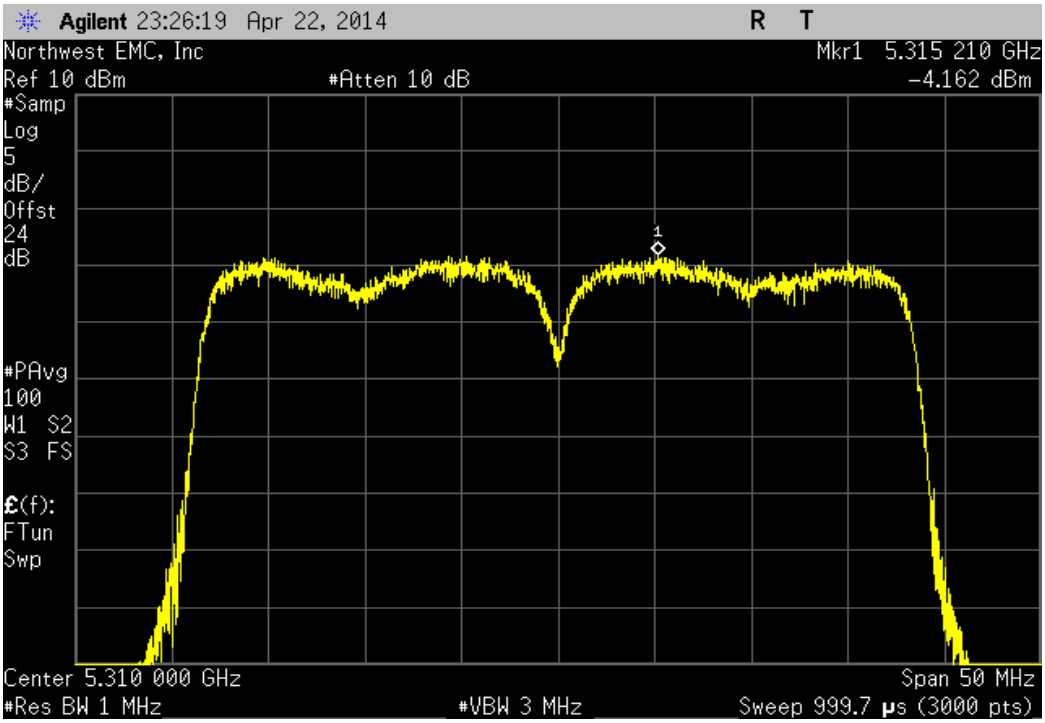


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 52/56, Low Channel 5270 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-3.841	11	Pass

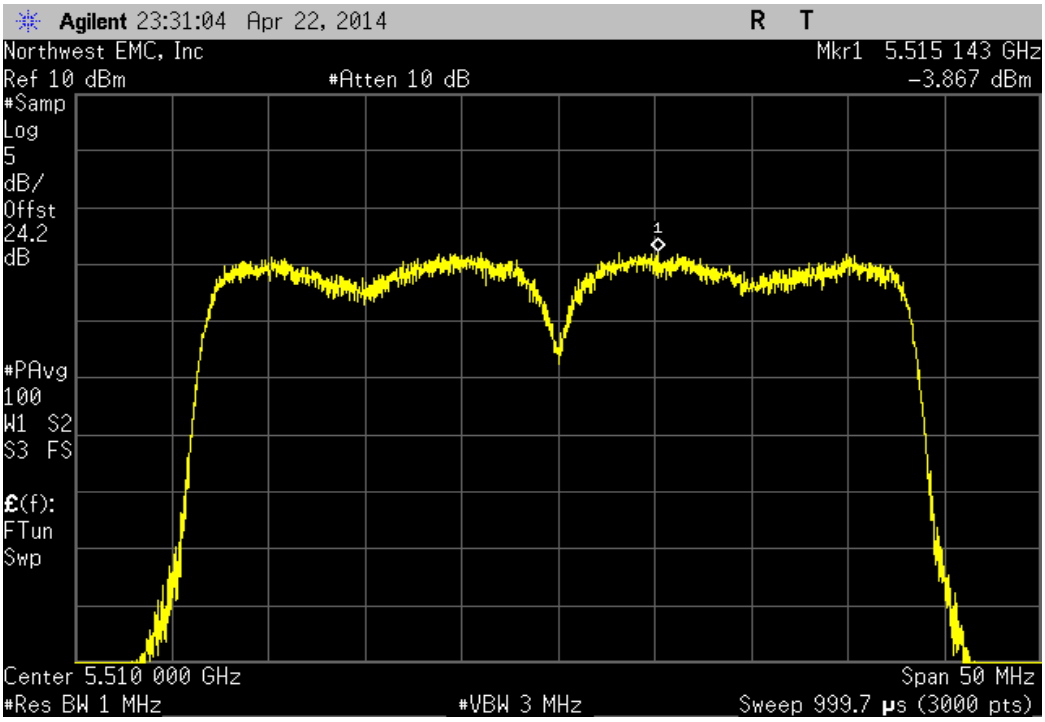


IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 60/64, High Channel 5310 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-4.162	11	Pass

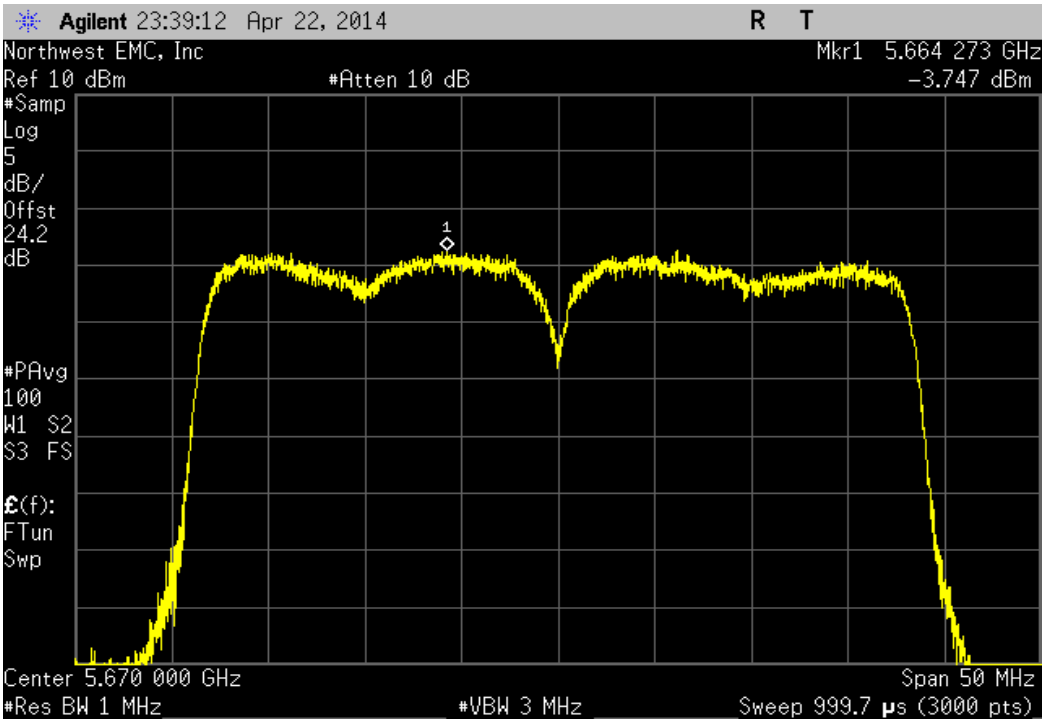


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 100/104, Low Channel 5510 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.867	11	Pass

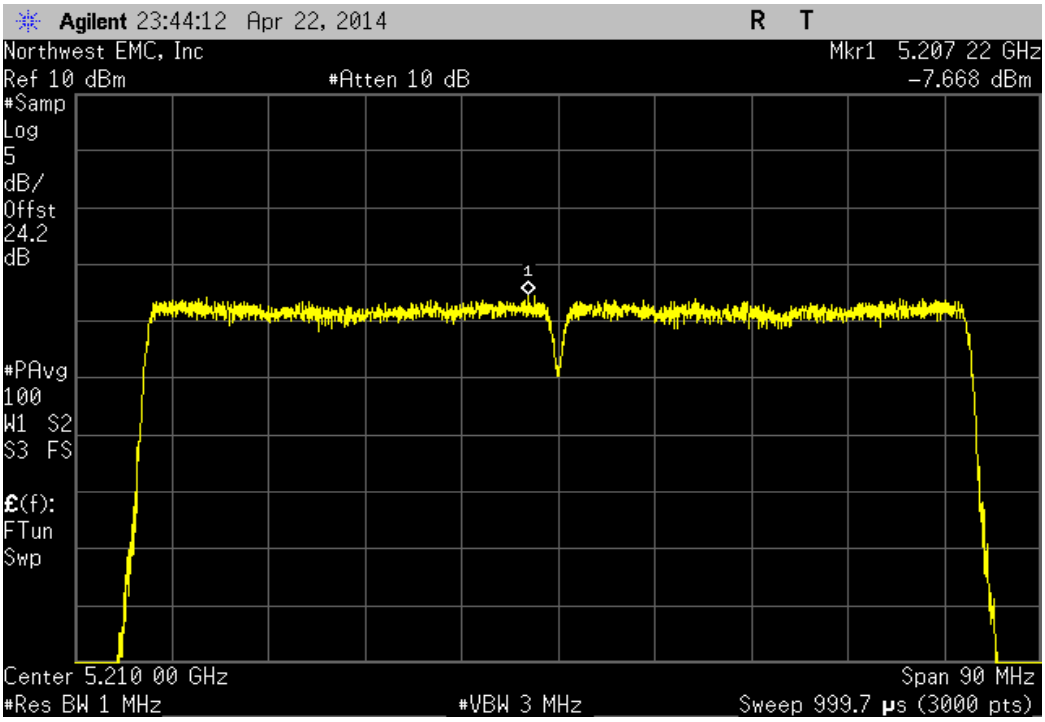


IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 132/136, High Channel 5670 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-3.747	11	Pass

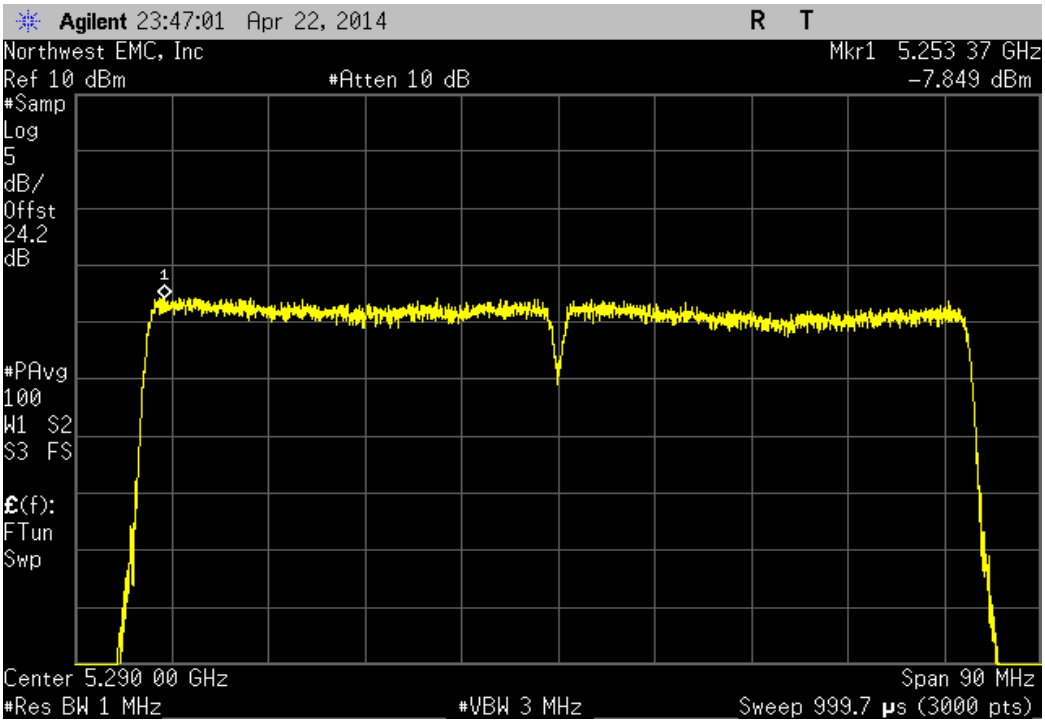


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 42, Low Channel 5210 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-7.668	4	Pass

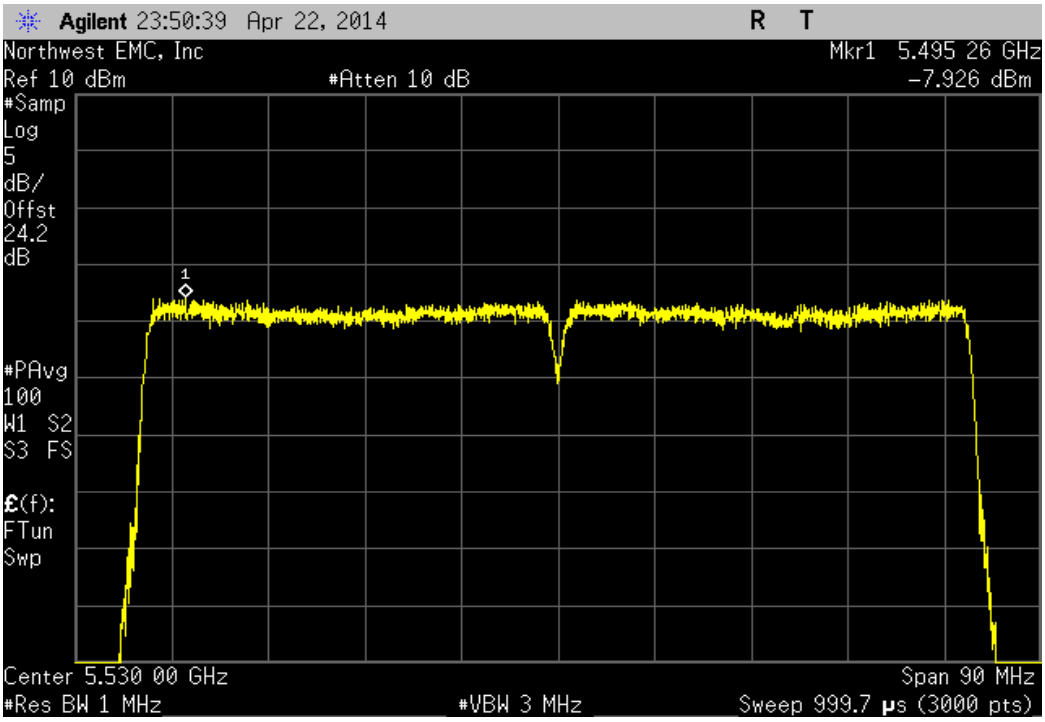


IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 58, High Channel 5290 MHz							
					Value (dBm / MHz)	Limit (dBm / MHz)	Result
					-7.849	11	Pass

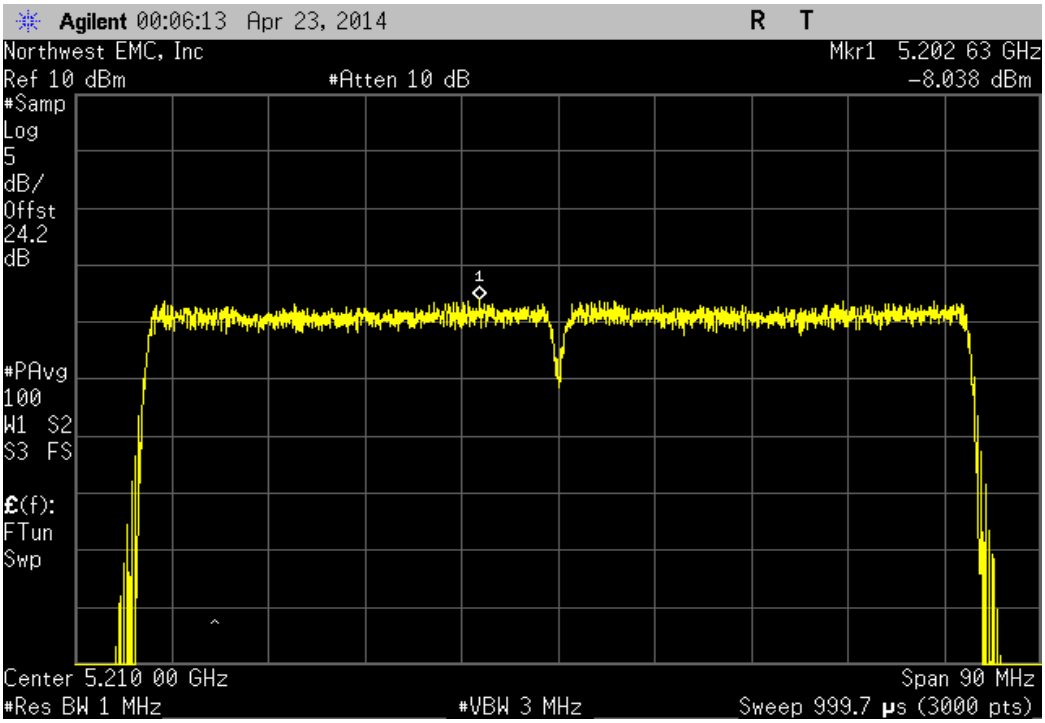


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 106, Low Channel 5530 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-7.926	11	Pass

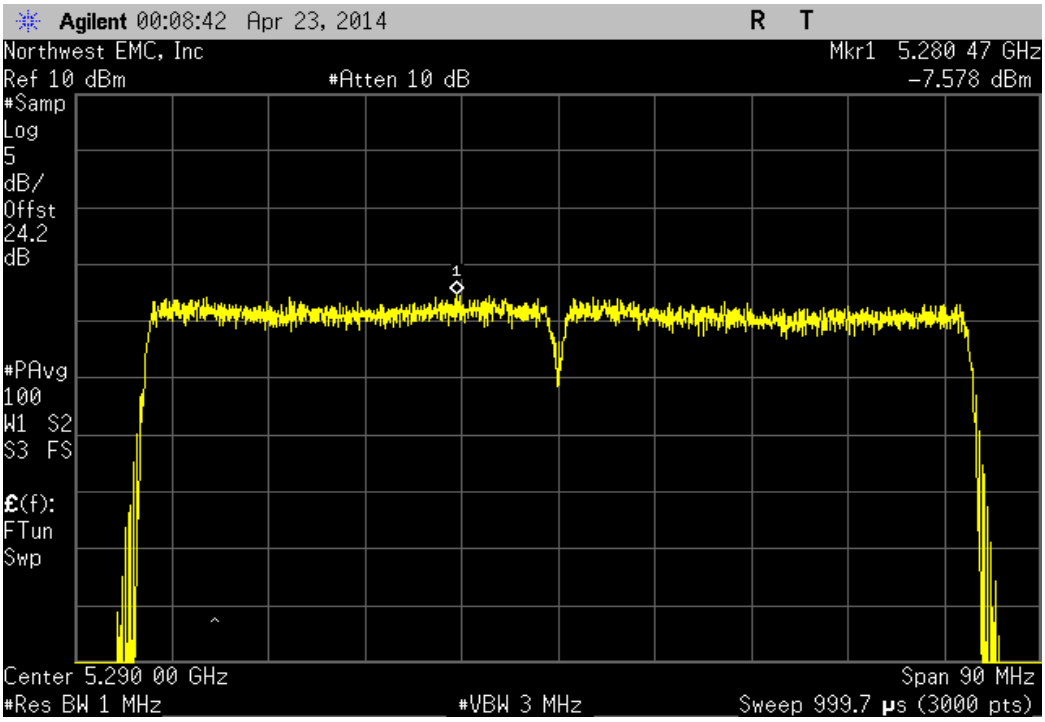


IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 42, Low Channel 5210 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-8.038	4	Pass

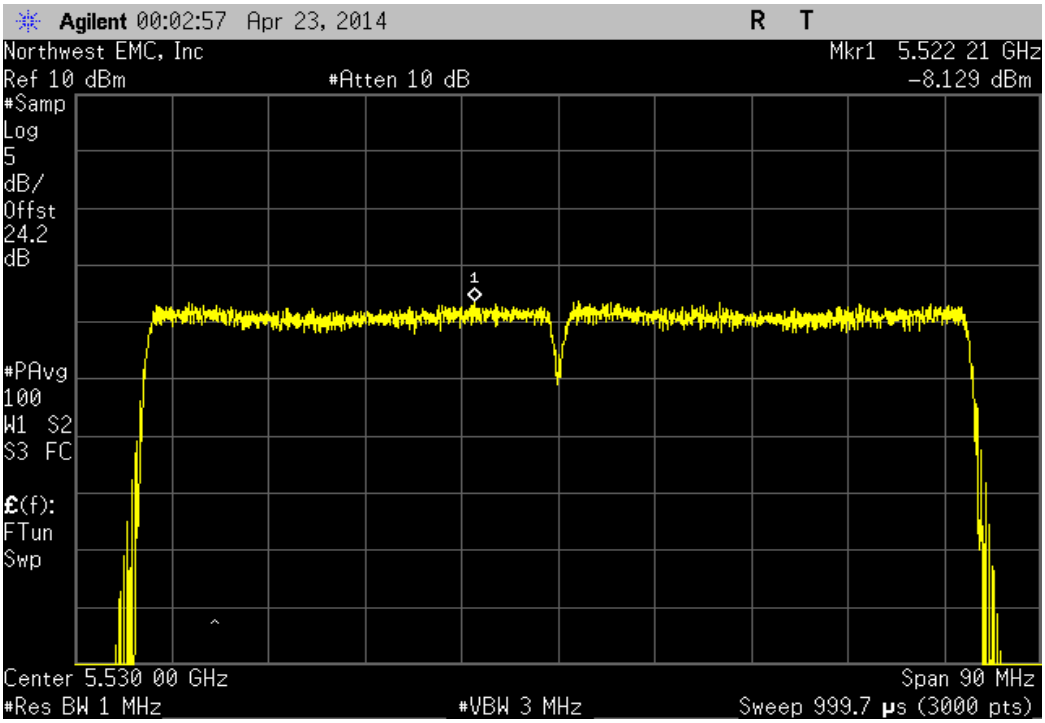


PEAK POWER SPECTRAL DENSITY

IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 58, High Channel 5290 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-7.578	11	Pass



IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 106, Low Channel 5530 MHz						
				Value (dBm / MHz)	Limit (dBm / MHz)	Result
				-8.029	11	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval (mo.)
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
RF Vector Signal Generator	Agilent	V2920A	TIH	NCR	0
Power Meter	Gigatronics	8651A	SPM	11/26/2013	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	36
Spectrum Analyzer	Agilent	E4440	AFE	11/4/2013	24

TEST DESCRIPTION

FCC KDB 789033 D01 General UNII Test Procedures Section F was followed to show that the radio of the maximum peak-max-hold spectrum to the maximum of the average spectrum does not exceed 13 dBm.

The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input.

The spectrum analyzer settings were as follows:

Span set to encompass the entire emission bandwidth (B), centered on the transmit channel.

Using the marker delta function, the largest difference between the following two traces was measured:

- 1st Trace: RBW = 1 MHz, VBW >= 3 MHz with peak detector and trace max-hold..
- 2nd Trace: The same procedure and settings as was used for peak power spectral density

PEAK EXCURSION OF THE MODULATION ENVELOPE

EUT:	Model 1631			**Work Order:**	MCSO1698
Serial Number:	041151240753			**Date:**	03/23/14
Customer:	Microsoft Corporation			**Temperature:**	21.5°C
Attendees:	None			**Humidity:**	29%
Project:	None			**Barometric Pres.:**	1007
Tested by:	Brandon Hobbs, Jared Ison	**Power:**	110VAC/60Hz	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.407:2014	ANSI C63.10:2009

COMMENTS

Modes of operation tested were client provided. Reference power level table for channel power setting.

DEVIATIONS FROM TEST STANDARD

None

Configuration #	5	Signature

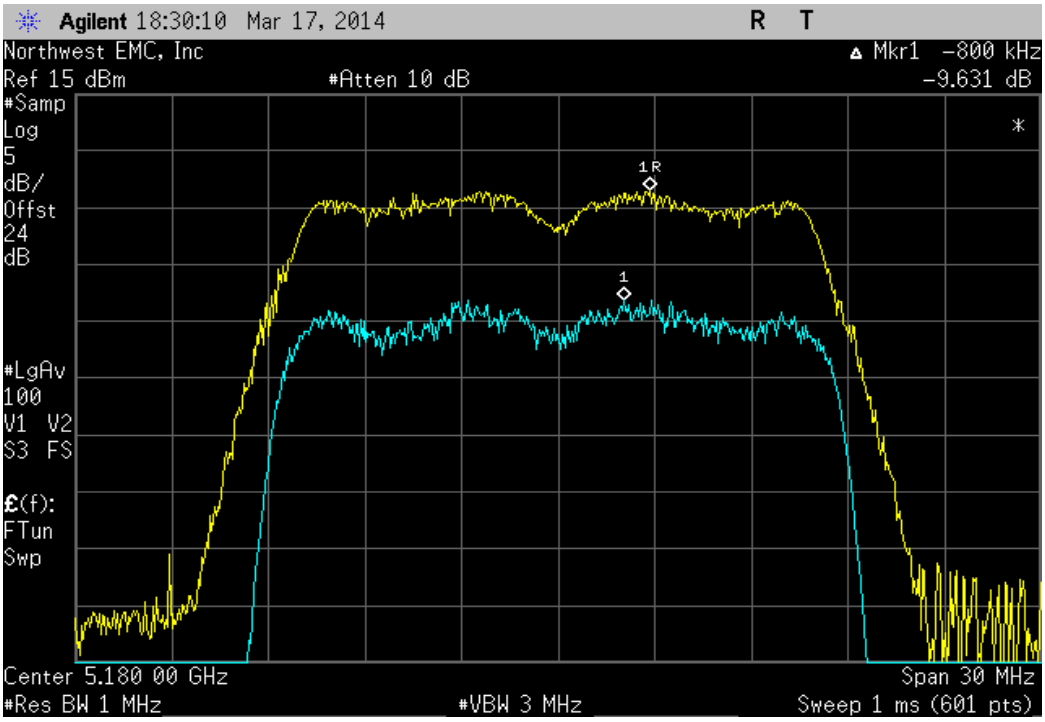
			Value	Limit	Result
IEEE 802.11(a)					
	20 MHz				
		6 Mbps			
		Ch. 36, Low Channel 5180MHz	9.631 dB	≤ 13 dB	Pass
		Ch. 48, High Channel 5240 MHz	9.418 dB	≤ 13 dB	Pass
		Ch. 52, Low Channel 5260 MHz	9.609 dB	≤ 13 dB	Pass
		Ch. 64, High Channel 5320 MHz	10.533 dB	≤ 13 dB	Pass
		Ch. 100, Low Channel 5500 MHz	9.403 dB	≤ 13 dB	Pass
		Ch. 116, Mid Channel 5580 MHz	9.218 dB	≤ 13 dB	Pass
		Ch. 140, High Channel 5700 MHz	9.353 dB	≤ 13 dB	Pass
		36 Mbps			
		Ch. 36, Low Channel 5180MHz	9.433 dB	≤ 13 dB	Pass
		Ch. 48, High Channel 5240 MHz	9.631 dB	≤ 13 dB	Pass
		Ch. 52, Low Channel 5260 MHz	8.552 dB	≤ 13 dB	Pass
		Ch. 64, High Channel 5320 MHz	9.619 dB	≤ 13 dB	Pass
		Ch. 100, Low Channel 5500 MHz	9.488 dB	≤ 13 dB	Pass
		Ch. 116, Mid Channel 5580 MHz	8.924 dB	≤ 13 dB	Pass
		Ch. 140, High Channel 5700 MHz	9.697 dB	≤ 13 dB	Pass
		54 Mbps			
		Ch. 36, Low Channel 5180MHz	9.965 dB	≤ 13 dB	Pass
		Ch. 48, High Channel 5240 MHz	9.858 dB	≤ 13 dB	Pass
		Ch. 52, Low Channel 5260 MHz	10.395 dB	≤ 13 dB	Pass
		Ch. 64, High Channel 5320 MHz	9.699 dB	≤ 13 dB	Pass
		Ch. 100, Low Channel 5500 MHz	10.048 dB	≤ 13 dB	Pass
		Ch. 116, Mid Channel 5580 MHz	10.738 dB	≤ 13 dB	Pass
		Ch. 140, High Channel 5700 MHz	10.503 dB	≤ 13 dB	Pass
IEEE 802.11(n)					
	20 MHz				
		HT, MCS7			
		Ch. 36, Low Channel 5180MHz	10.023 dB	≤ 13 dB	Pass
		Ch. 48, High Channel 5240 MHz	10.007 dB	≤ 13 dB	Pass
		Ch. 52, Low Channel 5260 MHz	10.068 dB	≤ 13 dB	Pass
		Ch. 64, High Channel 5320 MHz	9.82 dB	≤ 13 dB	Pass
		Ch. 100, Low Channel 5500 MHz	10.387 dB	≤ 13 dB	Pass
		Ch. 116, Mid Channel 5580 MHz	9.977 dB	≤ 13 dB	Pass
		Ch. 140, High Channel 5700 MHz	10.07 dB	≤ 13 dB	Pass
	40 MHz				
		HT, MCS7			
		Ch. 36/40, Low Channel 5190 MHz	10.127 dB	≤ 13 dB	Pass
		Ch. 44/48, High Channel 5230 MHz	10.272 dB	≤ 13 dB	Pass
		Ch. 52/56, Low Channel 5270 MHz	9.708 dB	≤ 13 dB	Pass
		Ch. 60/64, High Channel 5310 MHz	9.023 dB	≤ 13 dB	Pass
		Ch. 100/104, Low Channel 5510 MHz	10.261 dB	≤ 13 dB	Pass
		Ch. 132/136, High Channel 5670 MHz	9.282 dB	≤ 13 dB	Pass
IEEE 802.11(ac)					
	20 MHz				
		VHT, MCS0			
		Ch. 36, Low Channel 5180MHz	9.771 dB	≤ 13 dB	Pass
		Ch. 48, High Channel 5240 MHz	10.271 dB	≤ 13 dB	Pass
		Ch. 52, Low Channel 5260 MHz	9.111 dB	≤ 13 dB	Pass
		Ch. 64, High Channel 5320 MHz	10.339 dB	≤ 13 dB	Pass
		Ch. 100, Low Channel 5500 MHz	9.338 dB	≤ 13 dB	Pass
		Ch. 116, Mid Channel 5580 MHz	9.617 dB	≤ 13 dB	Pass
		Ch. 140, High Channel 5700 MHz	9.675 dB	≤ 13 dB	Pass
		VHT, MCS8			
		Ch. 36, Low Channel 5180MHz	9.832 dB	≤ 13 dB	Pass
		Ch. 48, High Channel 5240 MHz	9.788 dB	≤ 13 dB	Pass
		Ch. 52, Low Channel 5260 MHz	9.918 dB	≤ 13 dB	Pass
		Ch. 64, High Channel 5320 MHz	9.647 dB	≤ 13 dB	Pass
		Ch. 100, Low Channel 5500 MHz	10.454 dB	≤ 13 dB	Pass
		Ch. 116, Mid Channel 5580 MHz	10.065 dB	≤ 13 dB	Pass
		Ch. 140, High Channel 5700 MHz	9.991 dB	≤ 13 dB	Pass
	40 MHz				
		VHT, MCS0			
		Ch. 36/40, Low Channel 5190 MHz	10.182 dB	≤ 13 dB	Pass
		Ch. 44/48, High Channel 5230 MHz	10.282 dB	≤ 13 dB	Pass
		Ch. 52/56, Low Channel 5270 MHz	10.12 dB	≤ 13 dB	Pass
		Ch. 60/64, High Channel 5310 MHz	9.618 dB	≤ 13 dB	Pass
		Ch. 100/104, Low Channel 5510 MHz	10.287 dB	≤ 13 dB	Pass
		Ch. 132/136, High Channel 5670 MHz	9.75 dB	≤ 13 dB	Pass
		VHT, MCS9			
		Ch. 36/40, Low Channel 5190 MHz	10.797 dB	≤ 13 dB	Pass
		Ch. 44/48, High Channel 5230 MHz	9.873 dB	≤ 13 dB	Pass
		Ch. 52/56, Low Channel 5270 MHz	10.185 dB	≤ 13 dB	Pass
		Ch. 60/64, High Channel 5310 MHz	9.816 dB	≤ 13 dB	Pass
		Ch. 100/104, Low Channel 5510 MHz	9.722 dB	≤ 13 dB	Pass
		Ch. 132/136, High Channel 5670 MHz	9.941 dB	≤ 13 dB	Pass
	80 MHz				
		VHT, MCS0			
		Ch. 42, Low Channel 5210 MHz	9.575 dB	≤ 13 dB	Pass
		Ch. 58, High Channel 5290 MHz	10.379 dB	≤ 13 dB	Pass

	Ch. 106, Low Channel 5530 MHz	10.357 dB	≤ 13 dB	Pass
VHT, MCS9				
	Ch. 42, Low Channel 5210 MHz	9.695 dB	≤ 13 dB	Pass
	Ch. 58, High Channel 5290 MHz	10.769 dB	≤ 13 dB	Pass
	Ch. 106, Low Channel 5530 MHz	10.168 dB	≤ 13 dB	Pass

PEAK EXCURSION OF THE MODULATION ENVELOPE

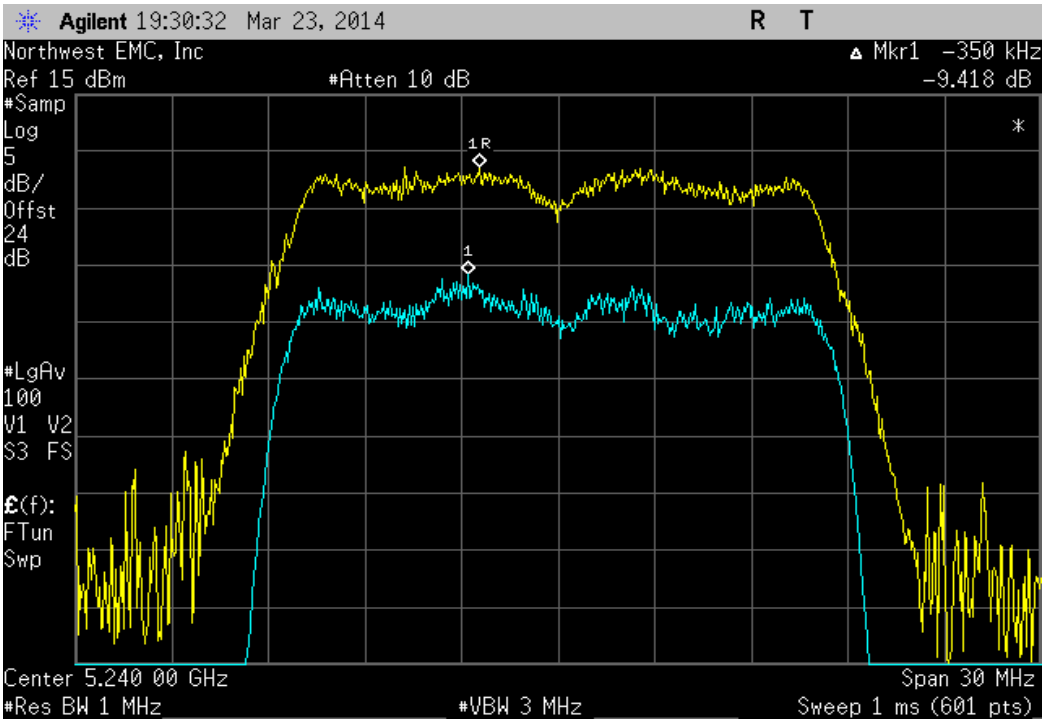
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 36, Low Channel 5180MHz

					Value	Limit	Result
					9.631 dB	≤ 13 dB	Pass



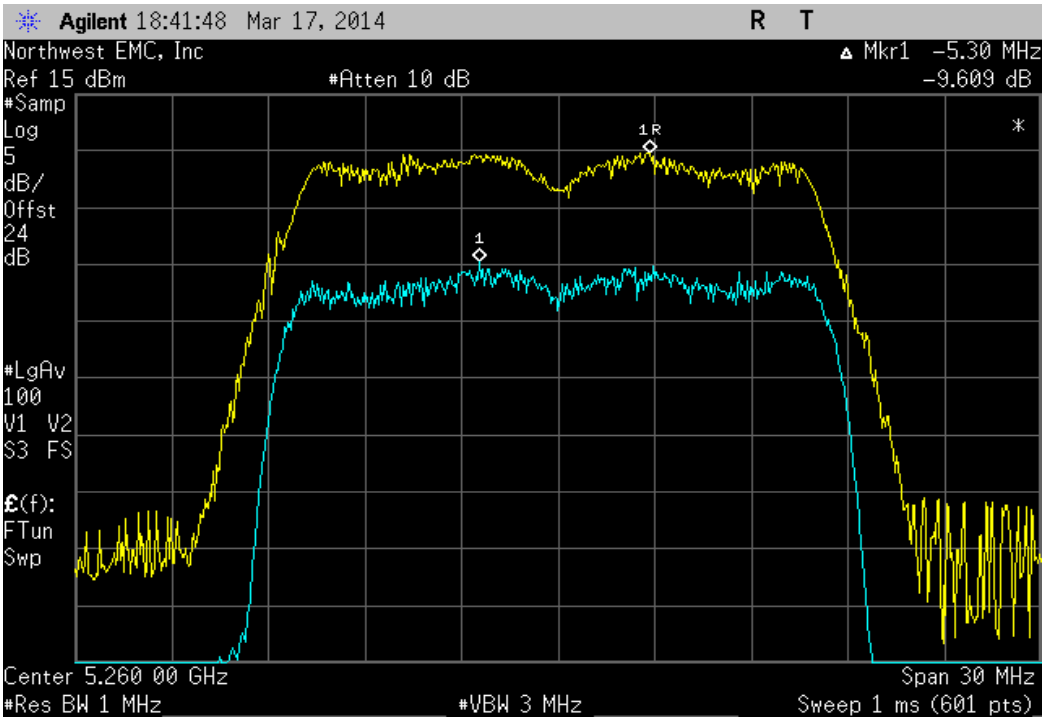
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 48, High Channel 5240 MHz

					Value	Limit	Result
					9.418 dB	≤ 13 dB	Pass



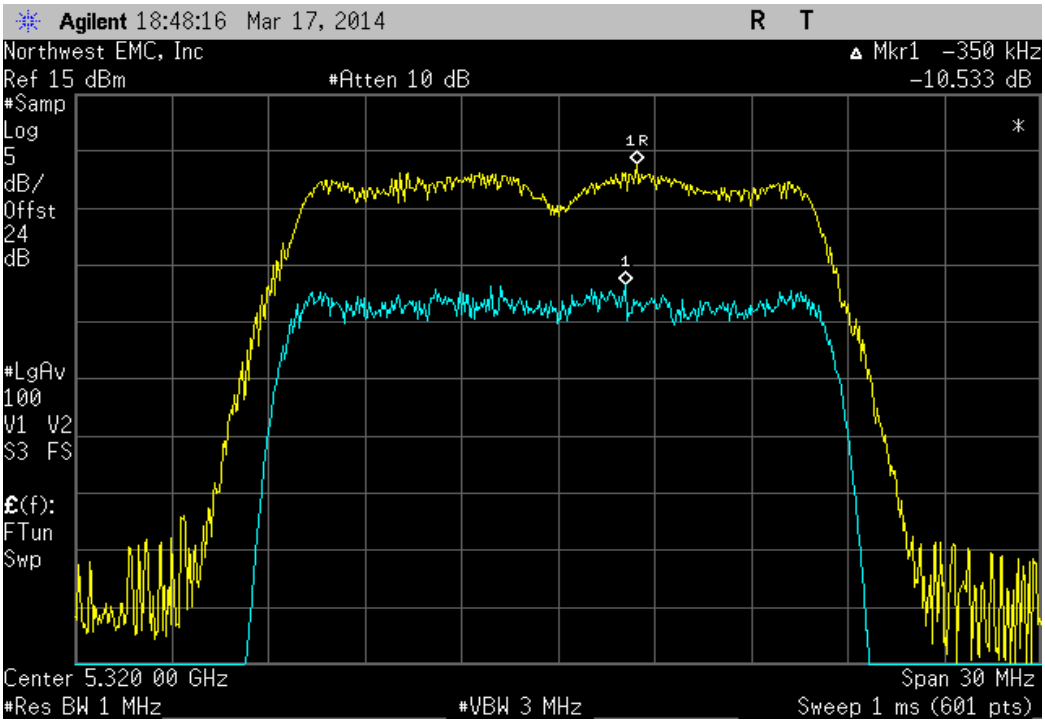
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 52, Low Channel 5260 MHz

				Value	Limit	Result
				9.609 dB	≤ 13 dB	Pass



IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 64, High Channel 5320 MHz

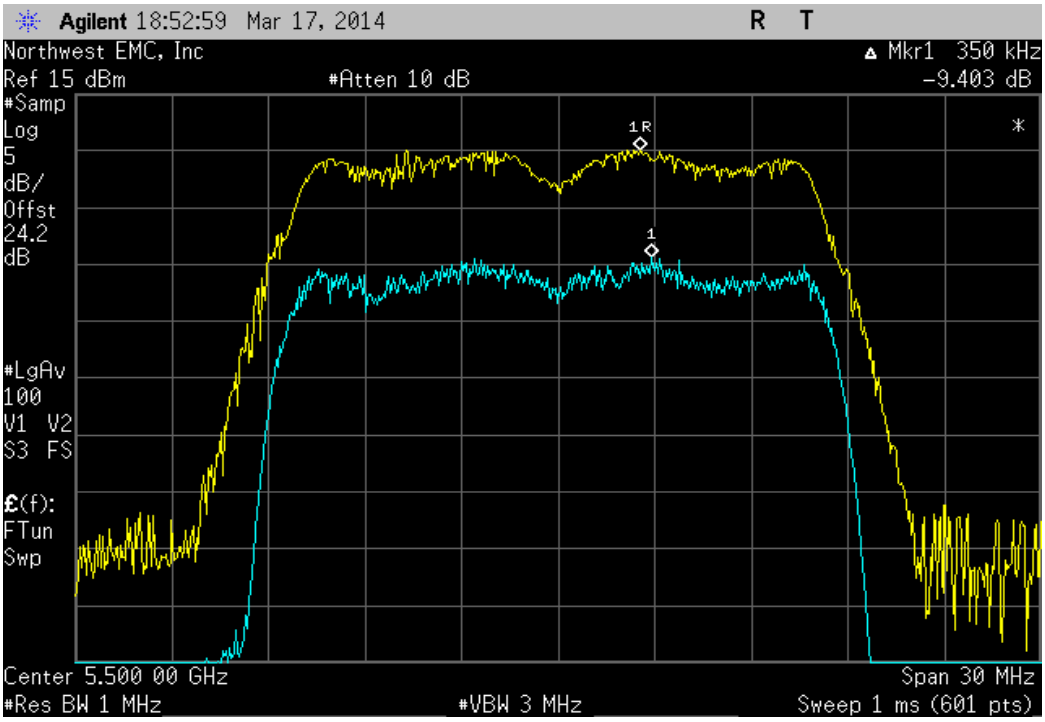
				Value	Limit	Result
				10.533 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

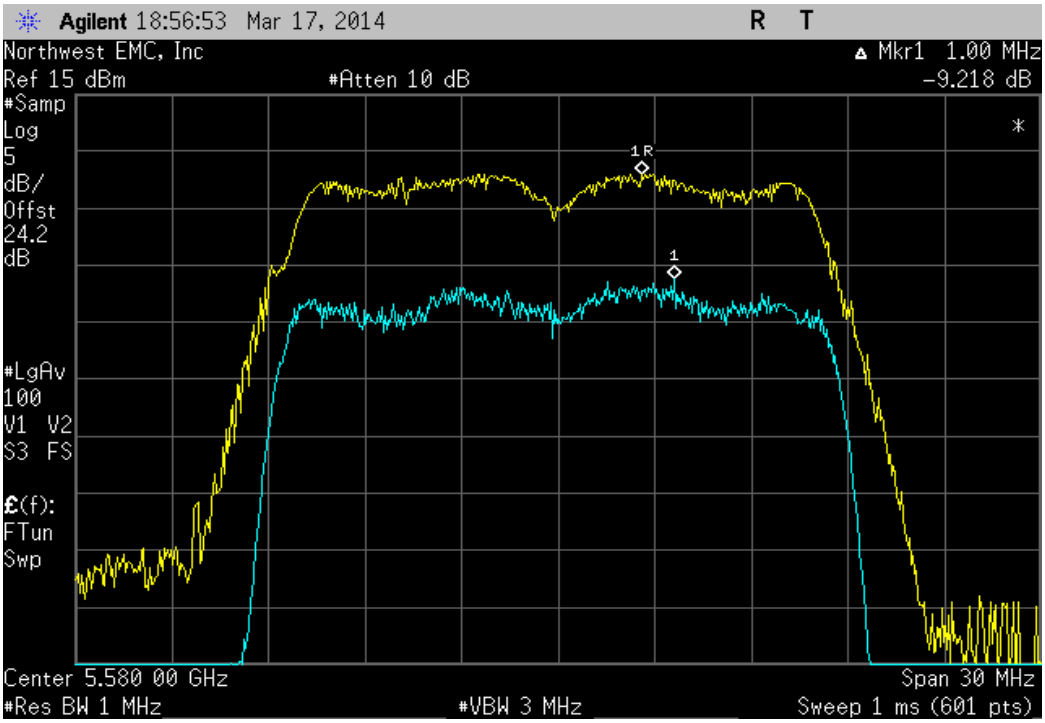
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 100, Low Channel 5500 MHz

				Value	Limit	Result
				9.403 dB	≤ 13 dB	Pass



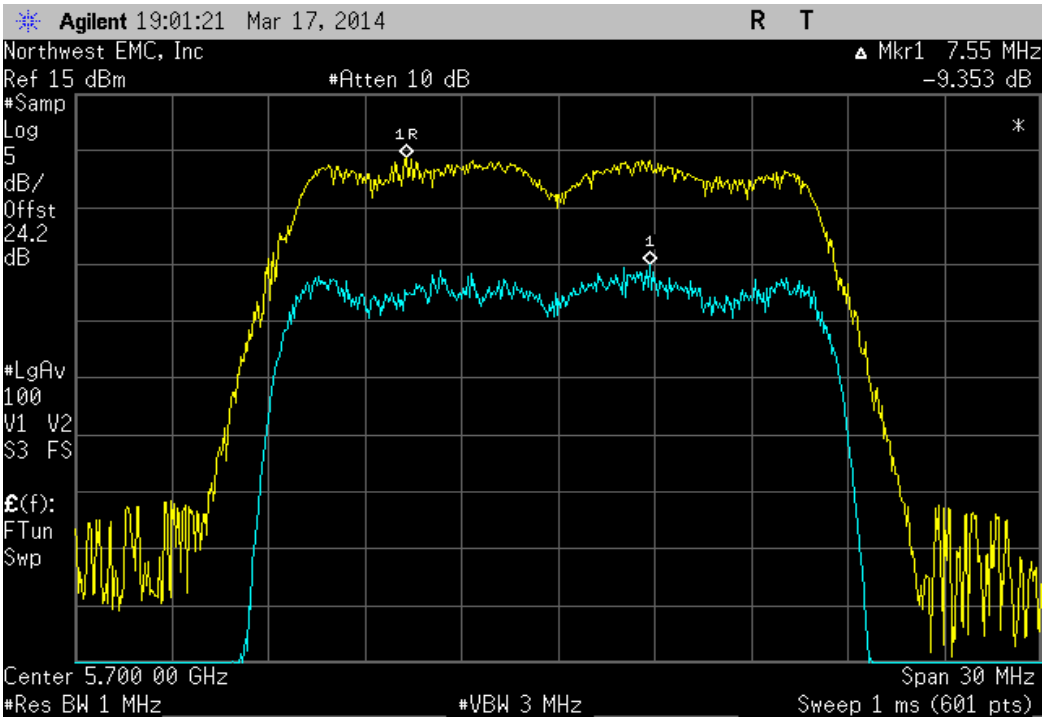
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 116, Mid Channel 5580 MHz

				Value	Limit	Result
				9.218 dB	≤ 13 dB	Pass



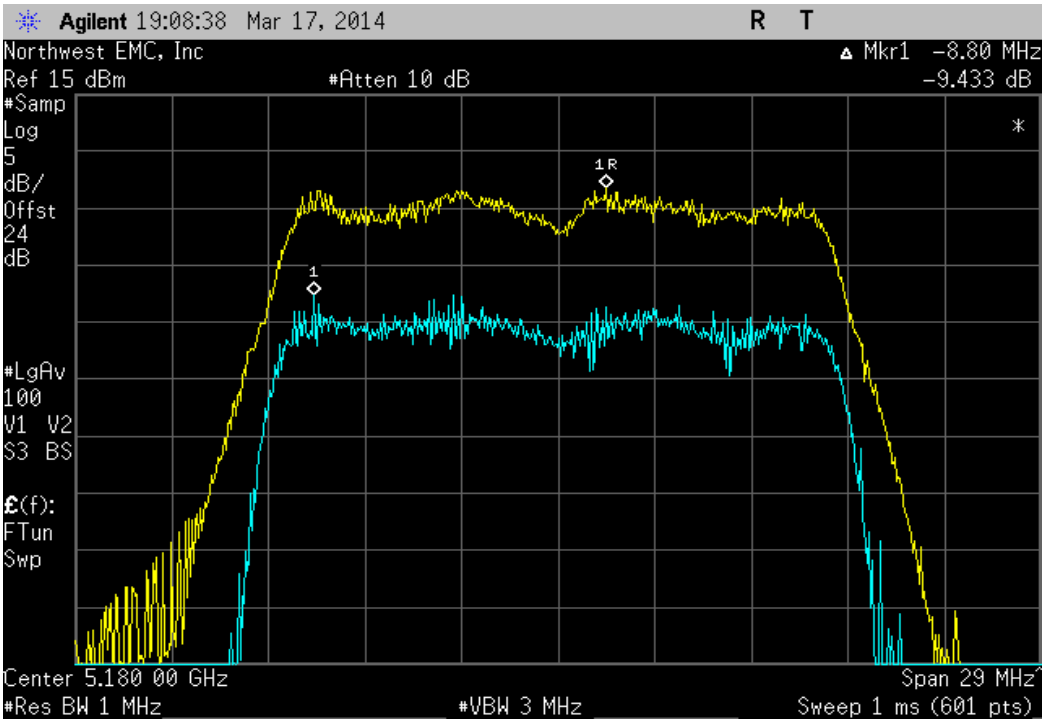
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 140, High Channel 5700 MHz

				Value	Limit	Result
				9.353 dB	≤ 13 dB	Pass



IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 36, Low Channel 5180MHz

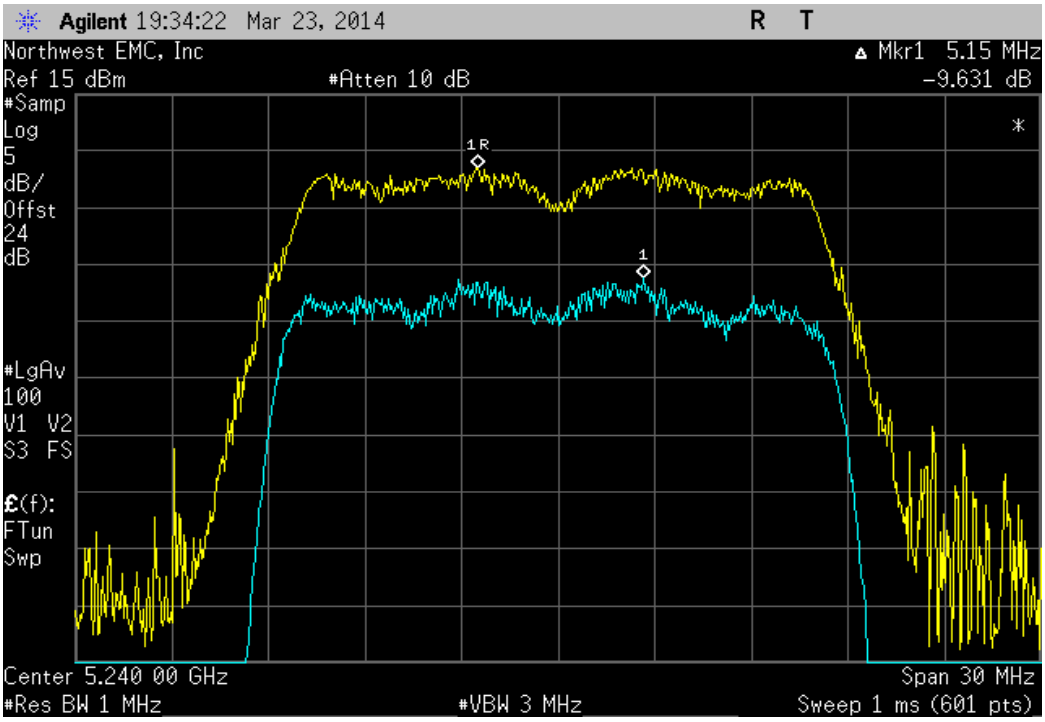
				Value	Limit	Result
				9.433 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

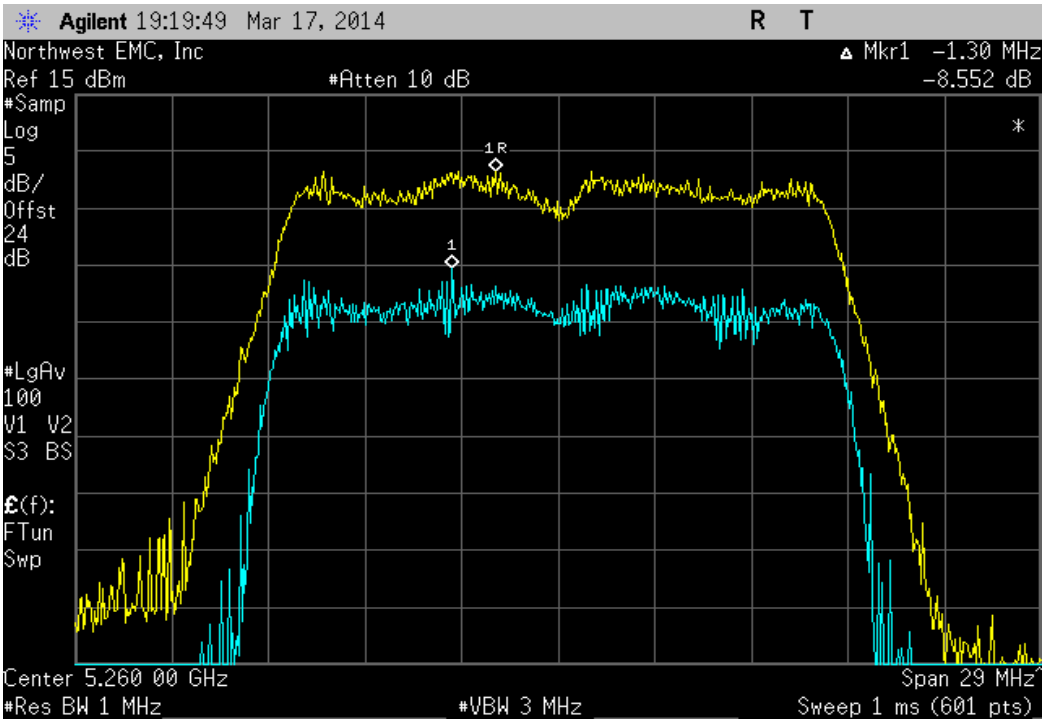
IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 48, High Channel 5240 MHz

				Value	Limit	Result
				9.631 dB	≤ 13 dB	Pass



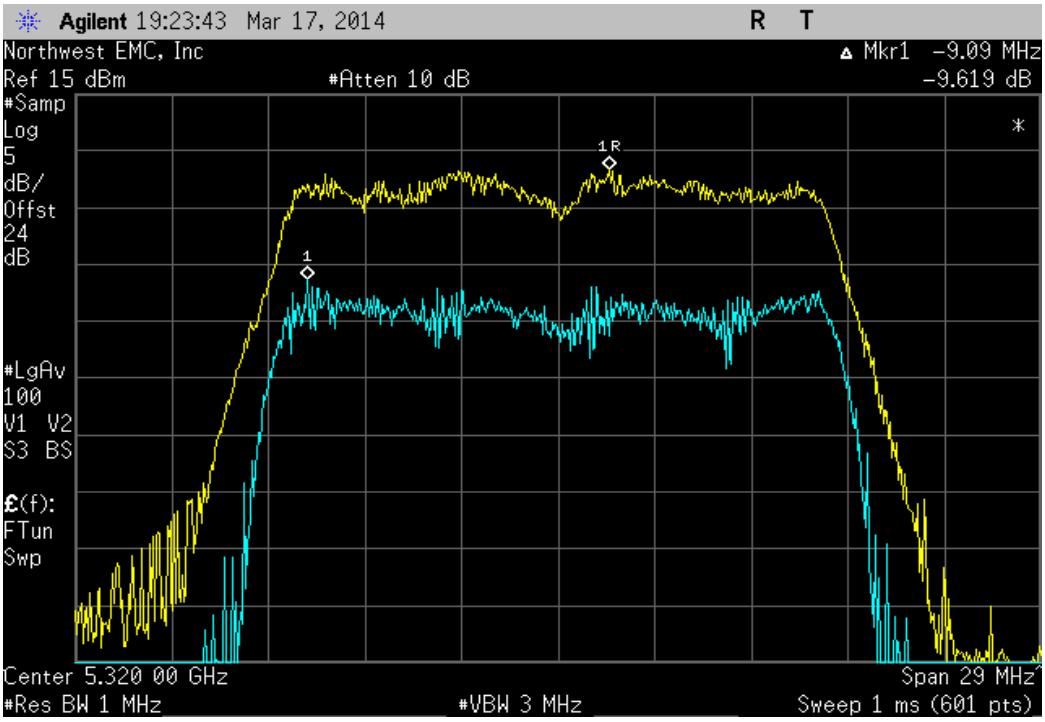
IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 52, Low Channel 5260 MHz

				Value	Limit	Result
				8.552 dB	≤ 13 dB	Pass



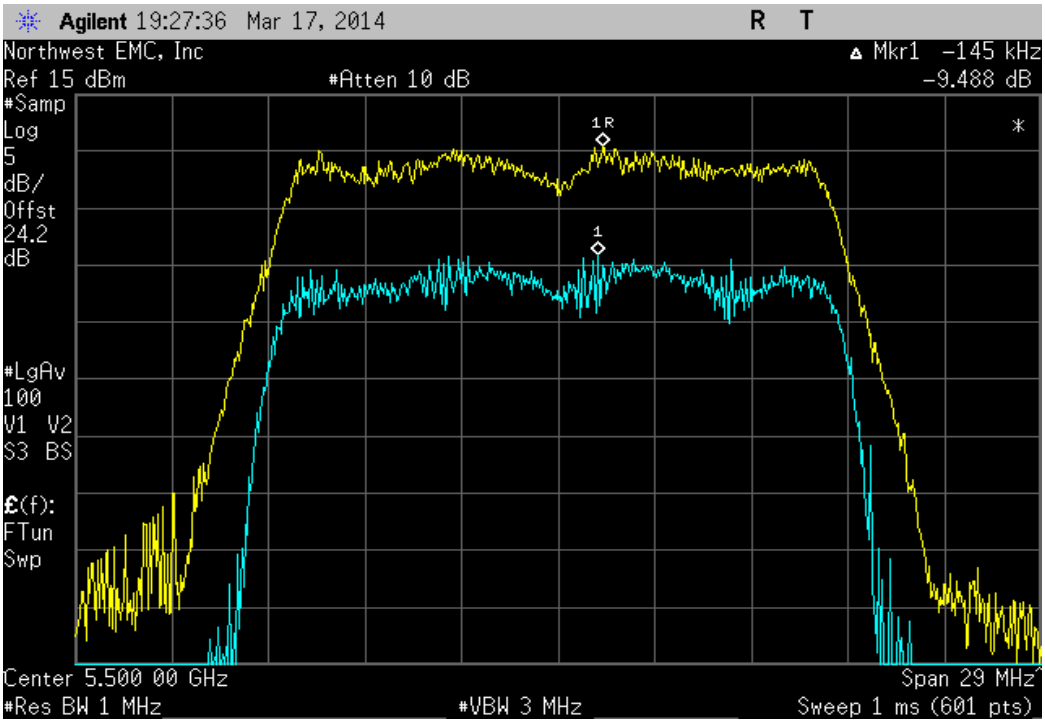
IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 64, High Channel 5320 MHz

				Value	Limit	Result
				9.619 dB	≤ 13 dB	Pass



IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 100, Low Channel 5500 MHz

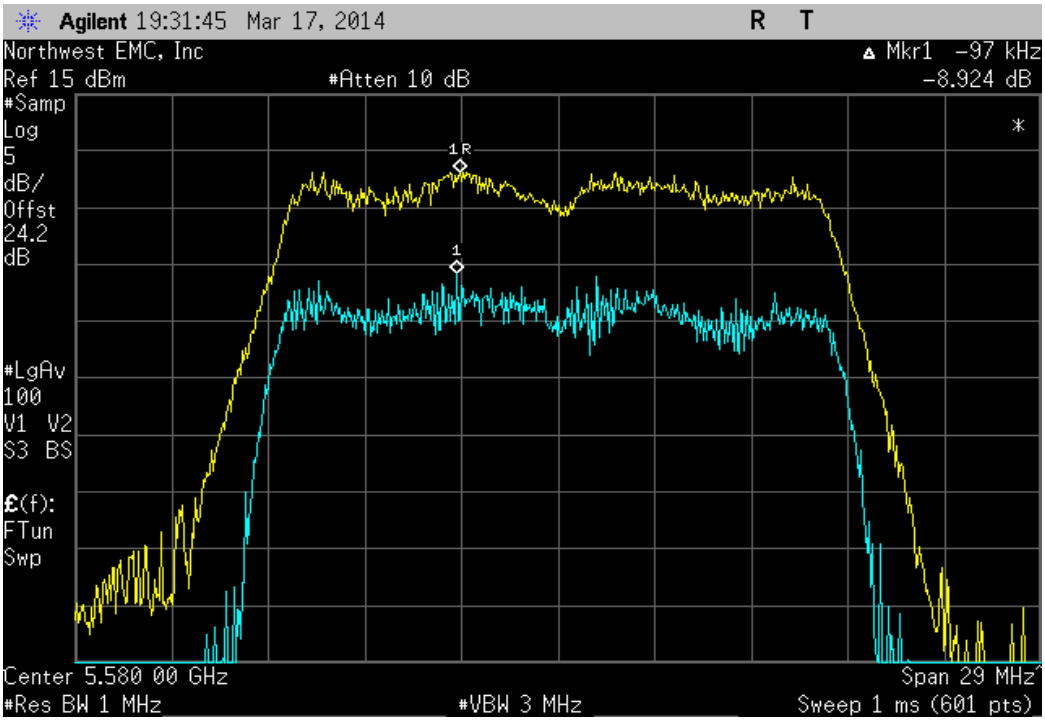
				Value	Limit	Result
				9.488 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

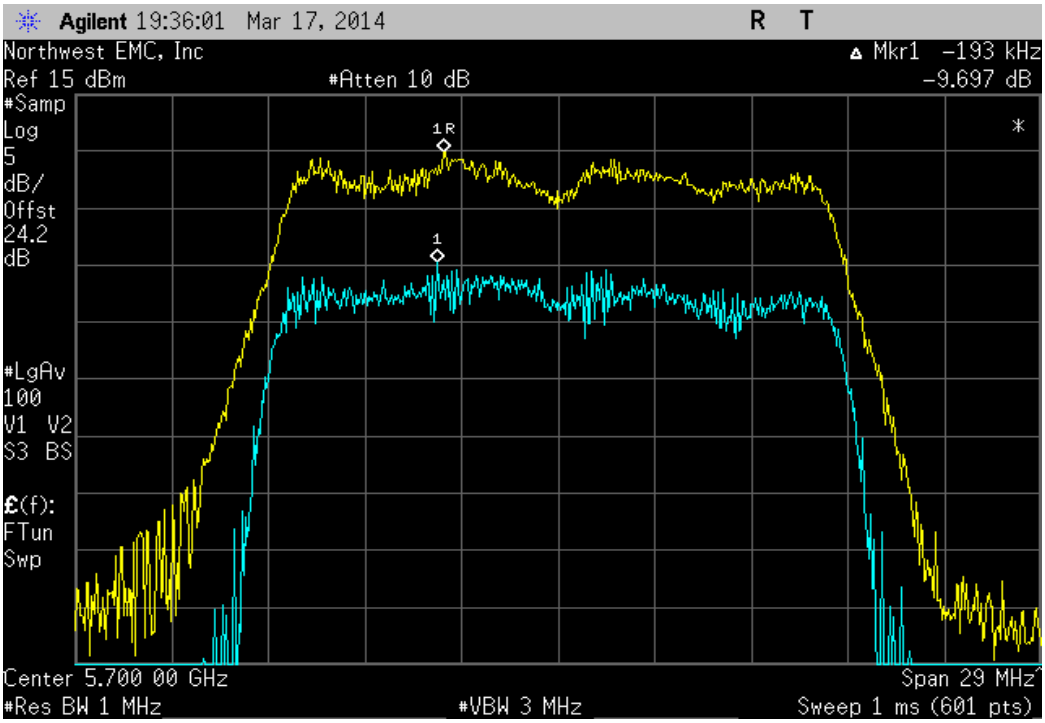
IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 116, Mid Channel 5580 MHz

				Value	Limit	Result
				8.924 dB	≤ 13 dB	Pass



IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 140, High Channel 5700 MHz

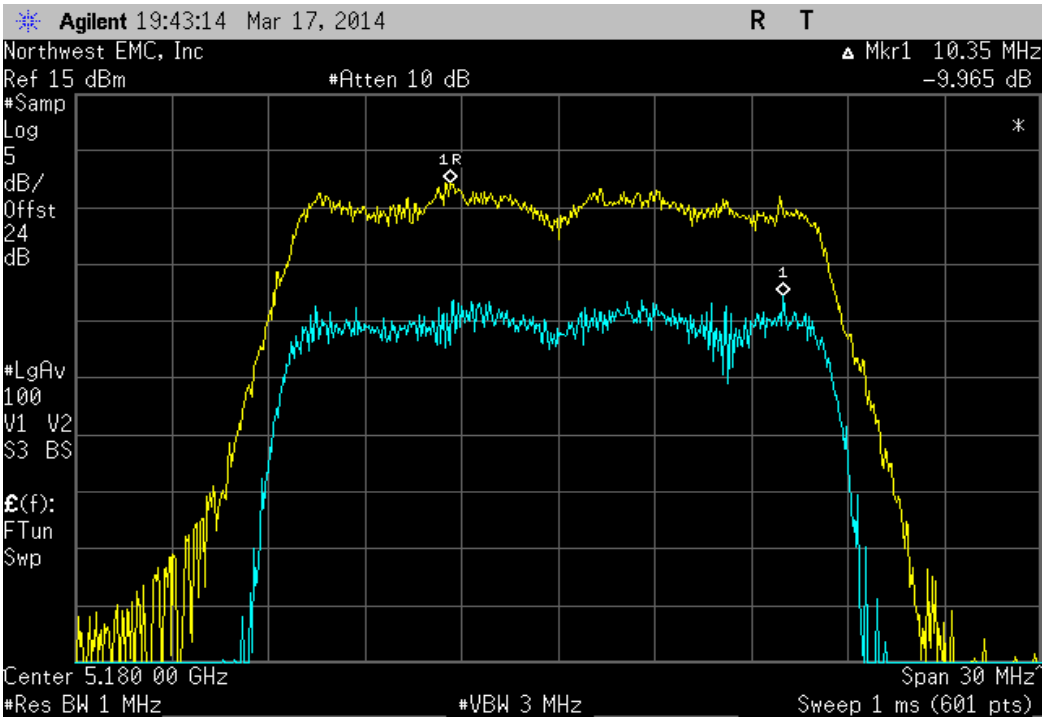
				Value	Limit	Result
				9.697 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

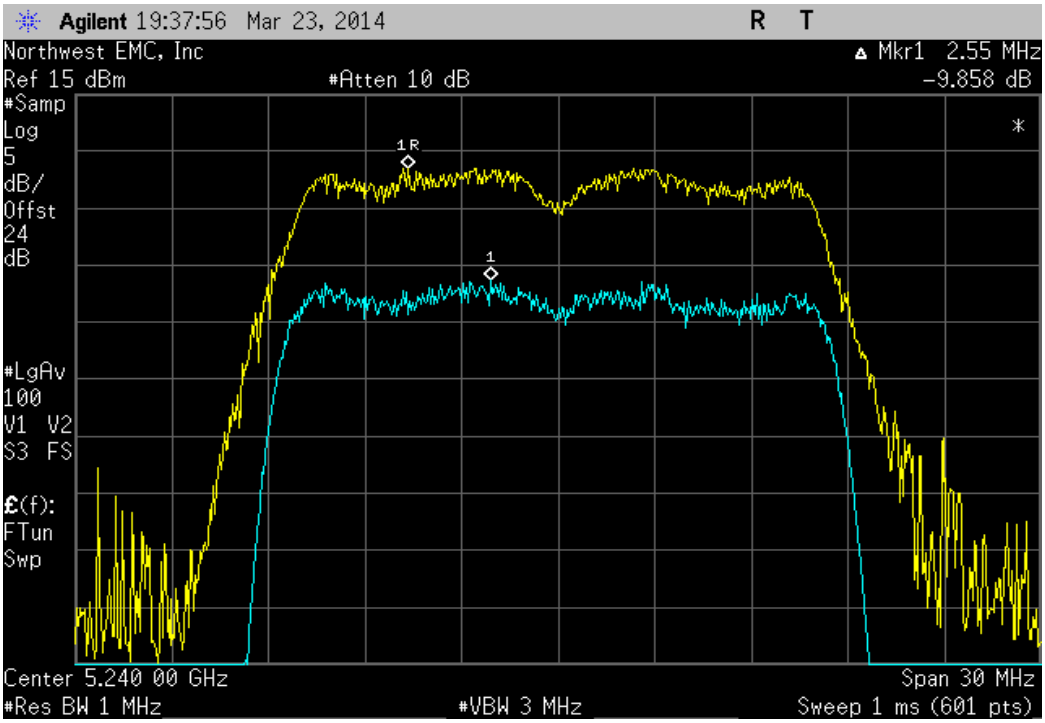
IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 36, Low Channel 5180MHz

Value	Limit	Result
9.965 dB	≤ 13 dB	Pass



IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 48, High Channel 5240 MHz

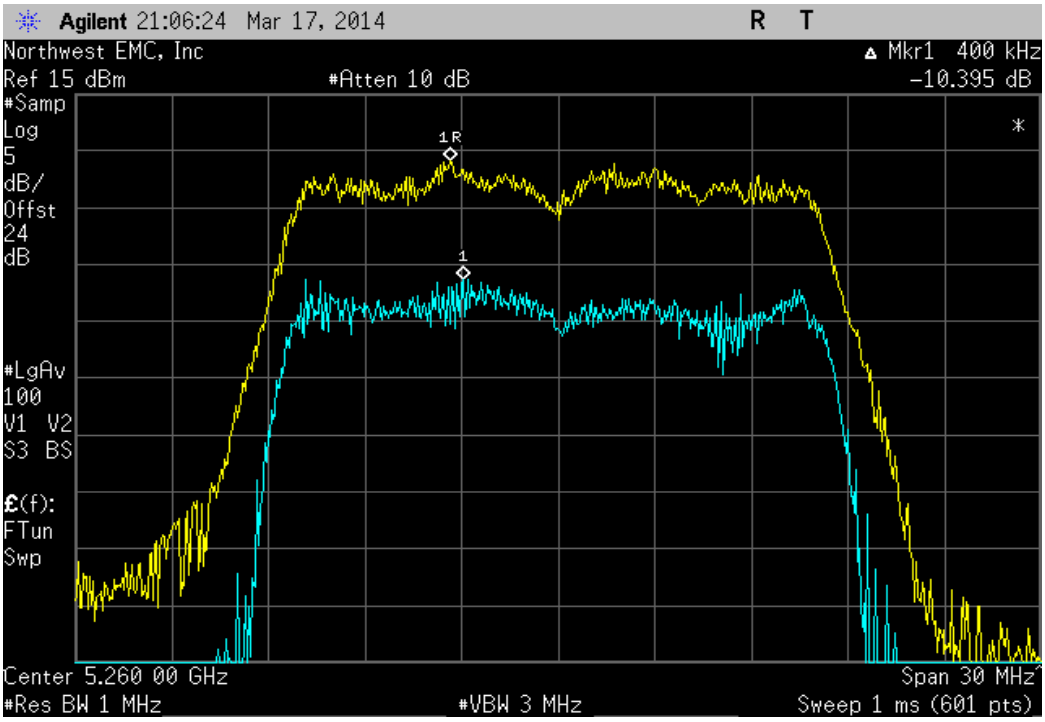
Value	Limit	Result
9.858 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

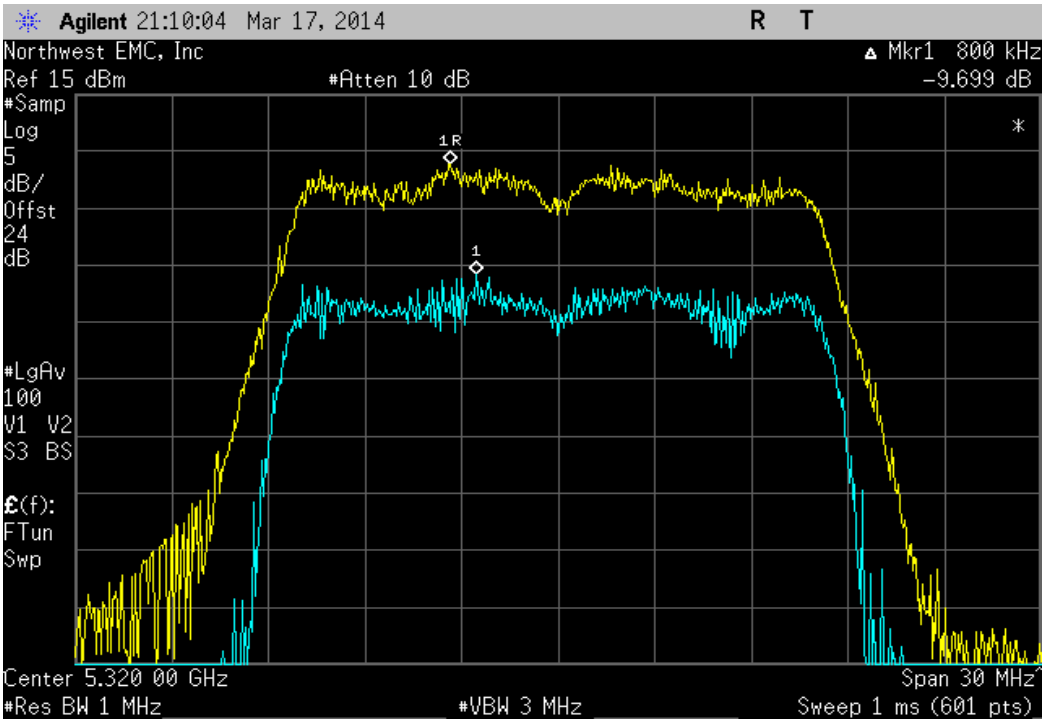
IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 52, Low Channel 5260 MHz

				Value	Limit	Result
				10.395 dB	≤ 13 dB	Pass



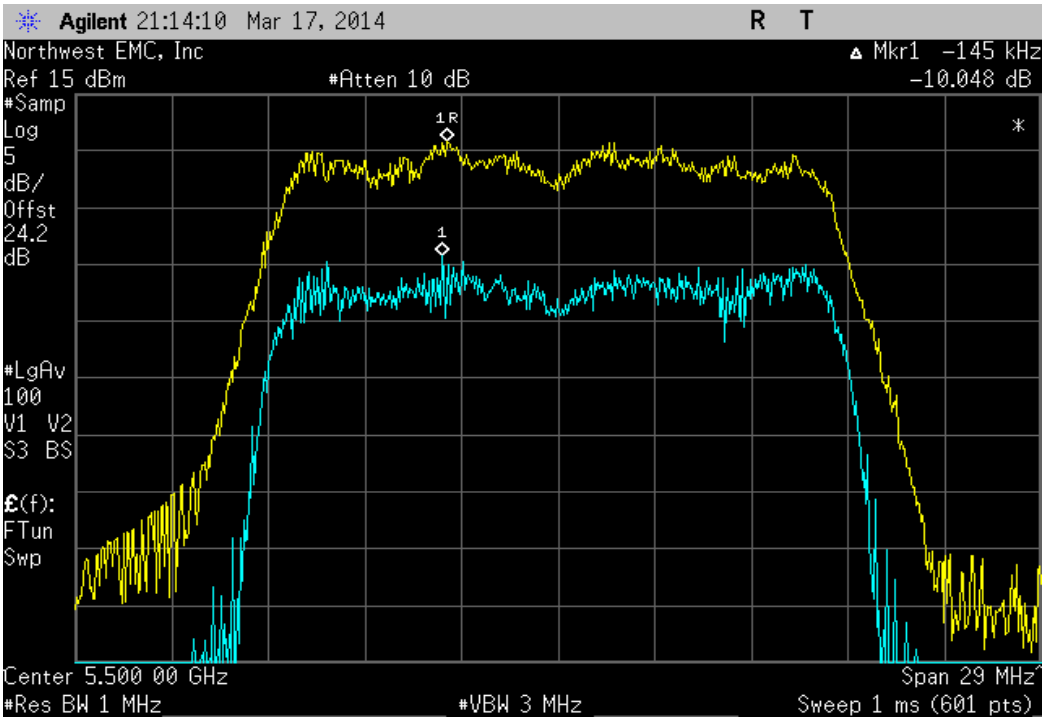
IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 64, High Channel 5320 MHz

				Value	Limit	Result
				9.699 dB	≤ 13 dB	Pass



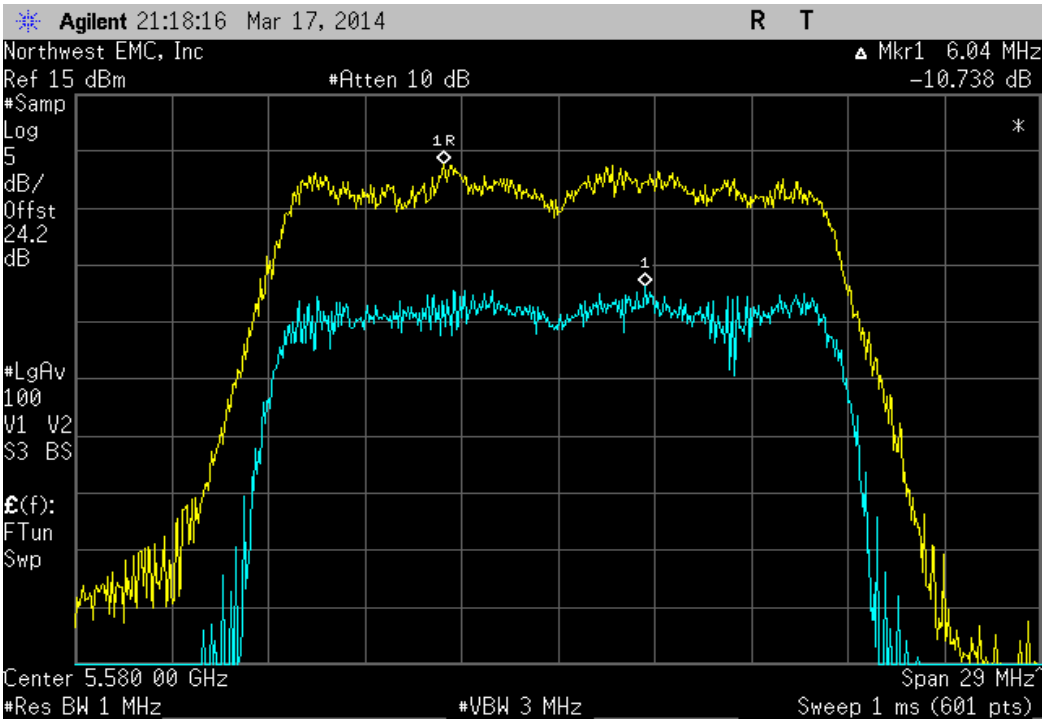
IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 100, Low Channel 5500 MHz

				Value	Limit	Result
				10.048 dB	≤ 13 dB	Pass



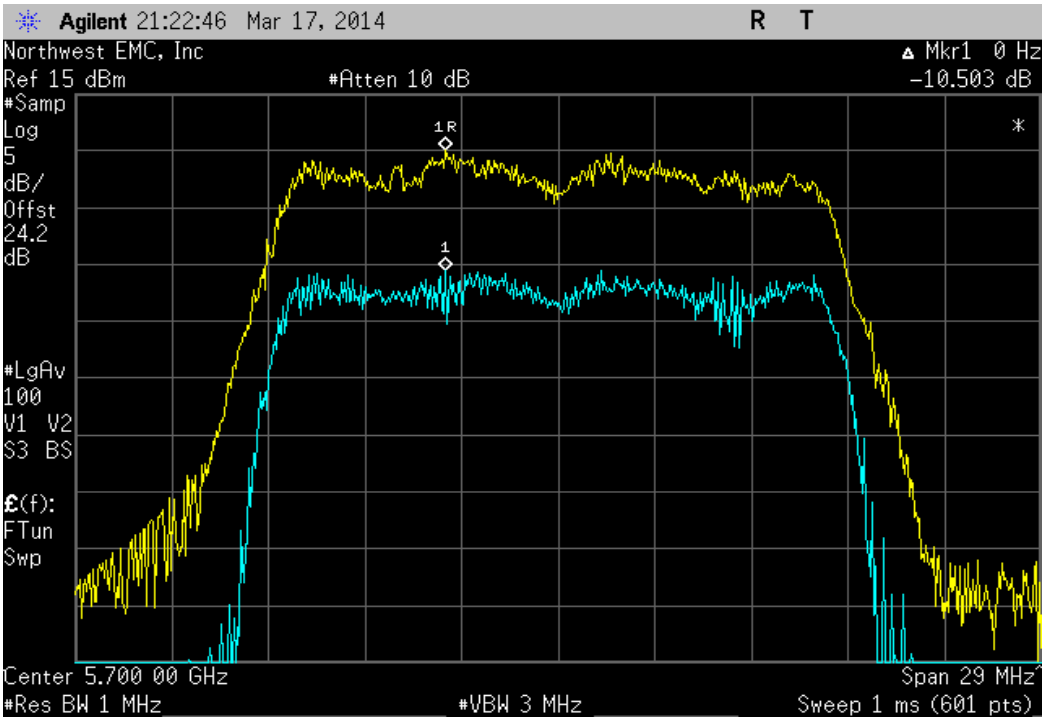
IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 116, Mid Channel 5580 MHz

				Value	Limit	Result
				10.738 dB	≤ 13 dB	Pass



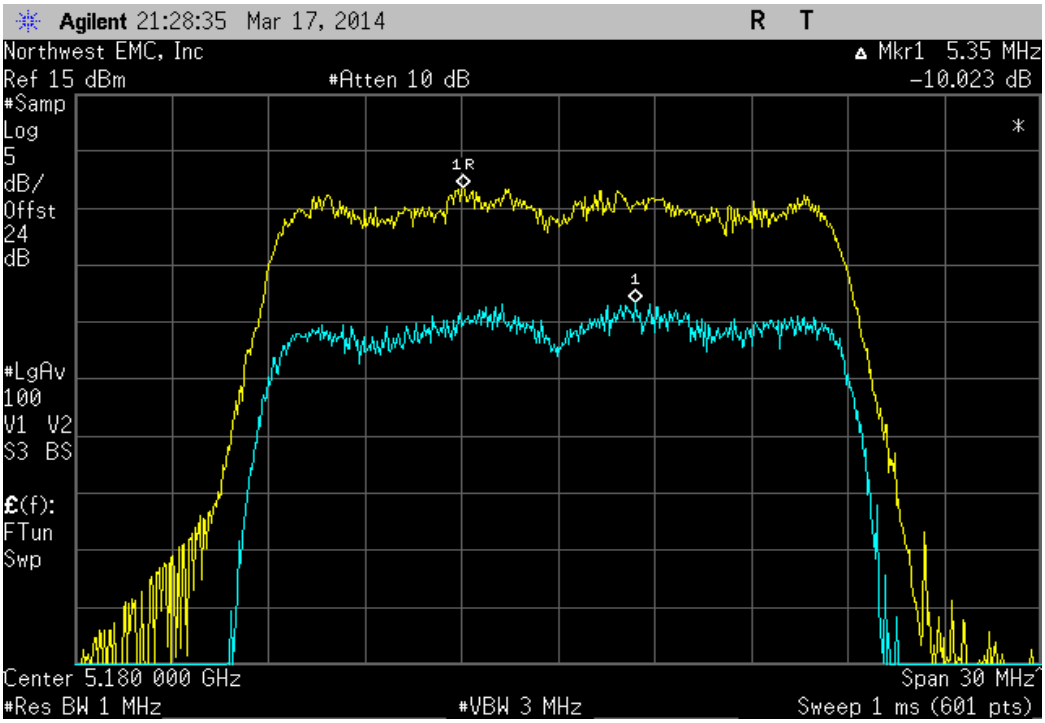
IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 140, High Channel 5700 MHz

				Value	Limit	Result
				10.503 dB	≤ 13 dB	Pass



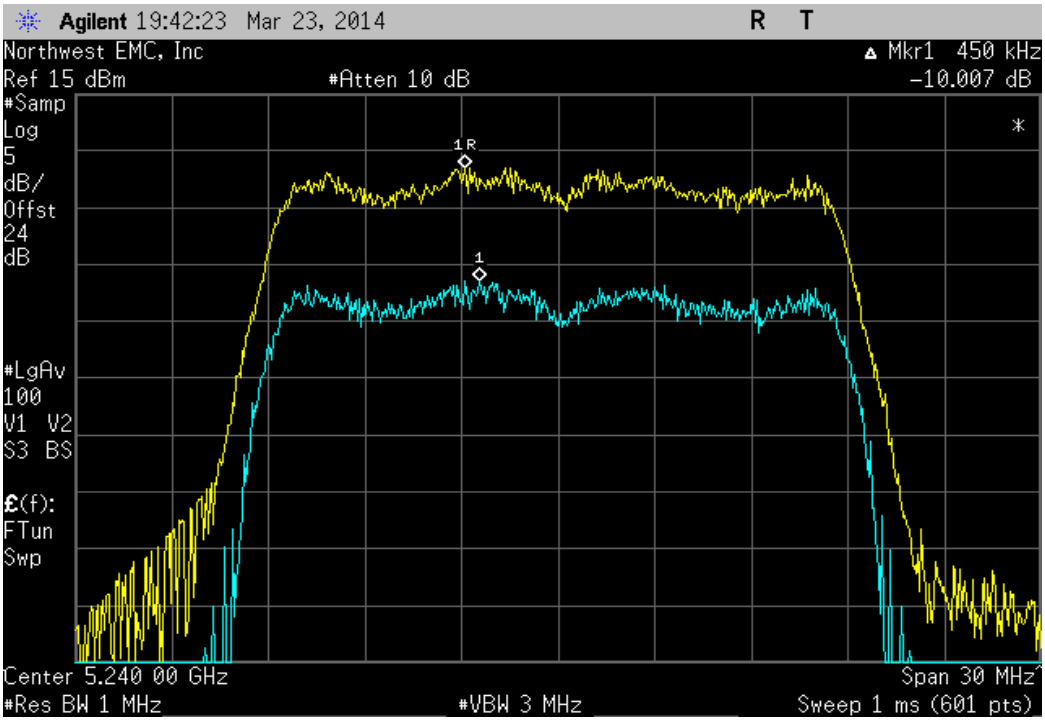
IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 36, Low Channel 5180MHz

				Value	Limit	Result
				10.023 dB	≤ 13 dB	Pass



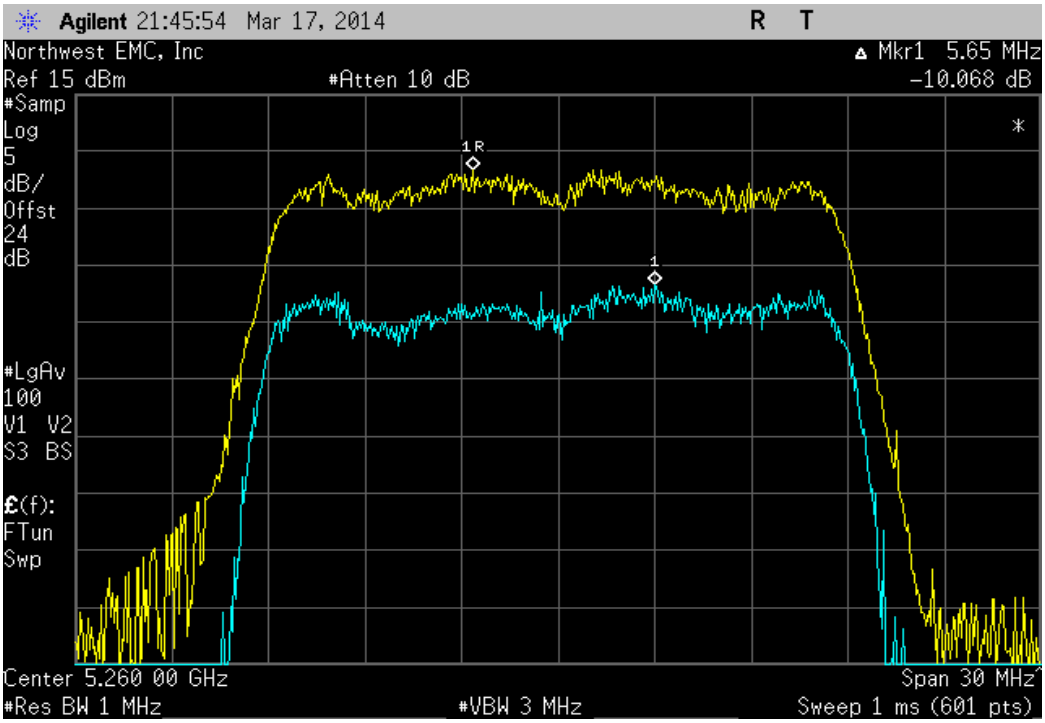
IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 48, High Channel 5240 MHz

				Value	Limit	Result
				10.007 dB	≤ 13 dB	Pass



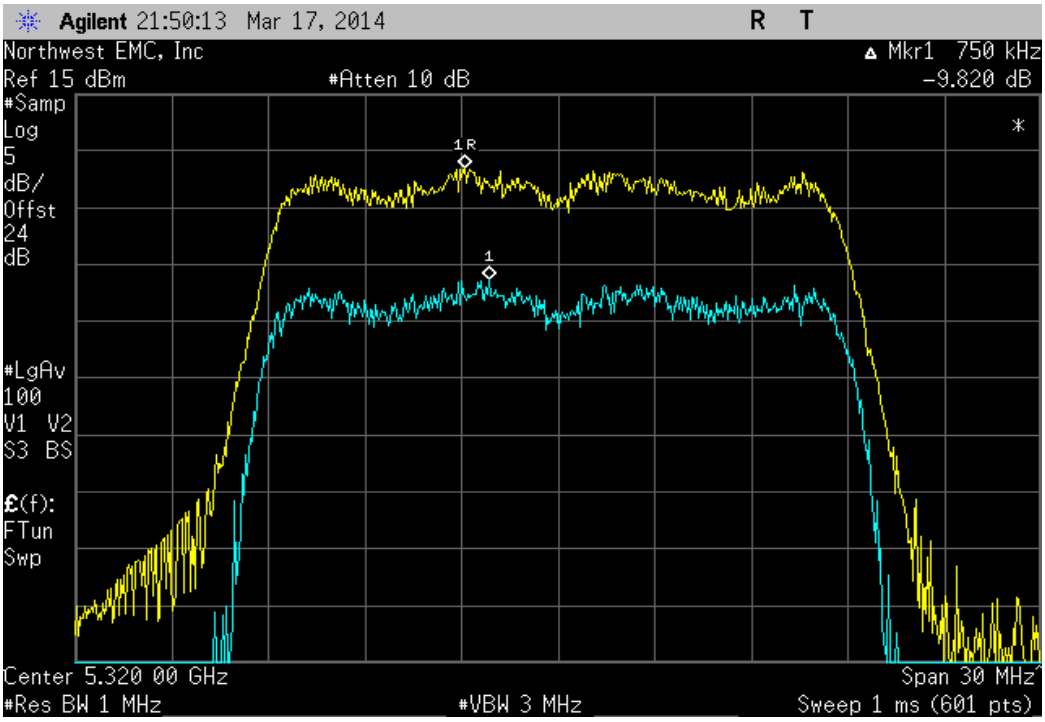
IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 52, Low Channel 5260 MHz

				Value	Limit	Result
				10.068 dB	≤ 13 dB	Pass



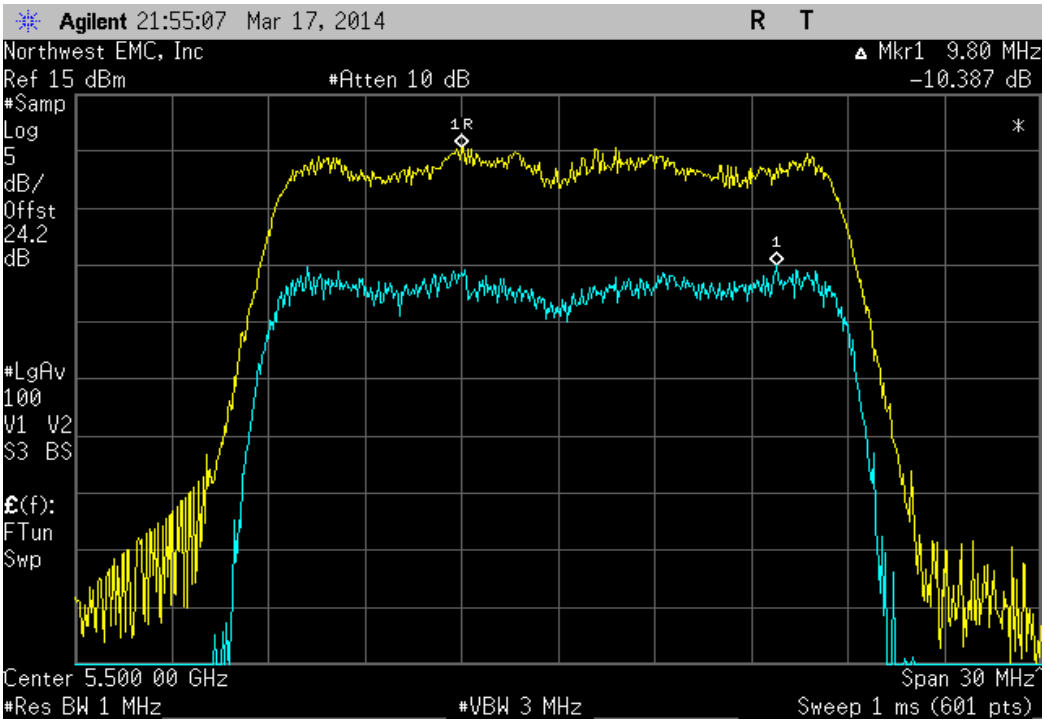
IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 64, High Channel 5320 MHz

				Value	Limit	Result
				9.82 dB	≤ 13 dB	Pass



IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 100, Low Channel 5500 MHz

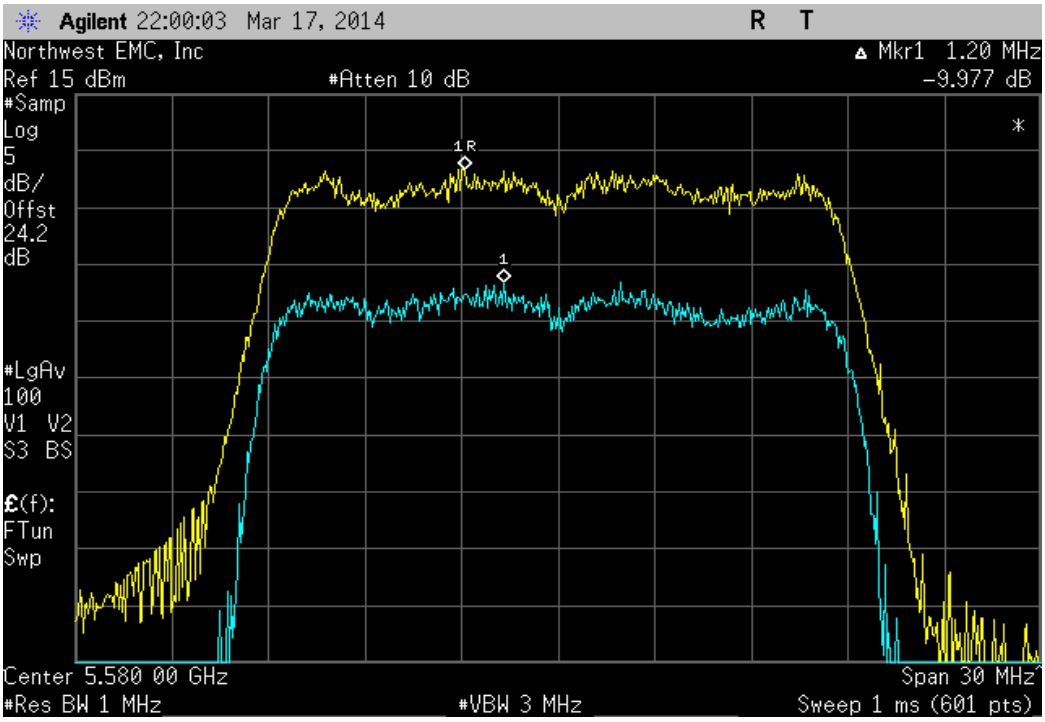
				Value	Limit	Result
				10.387 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

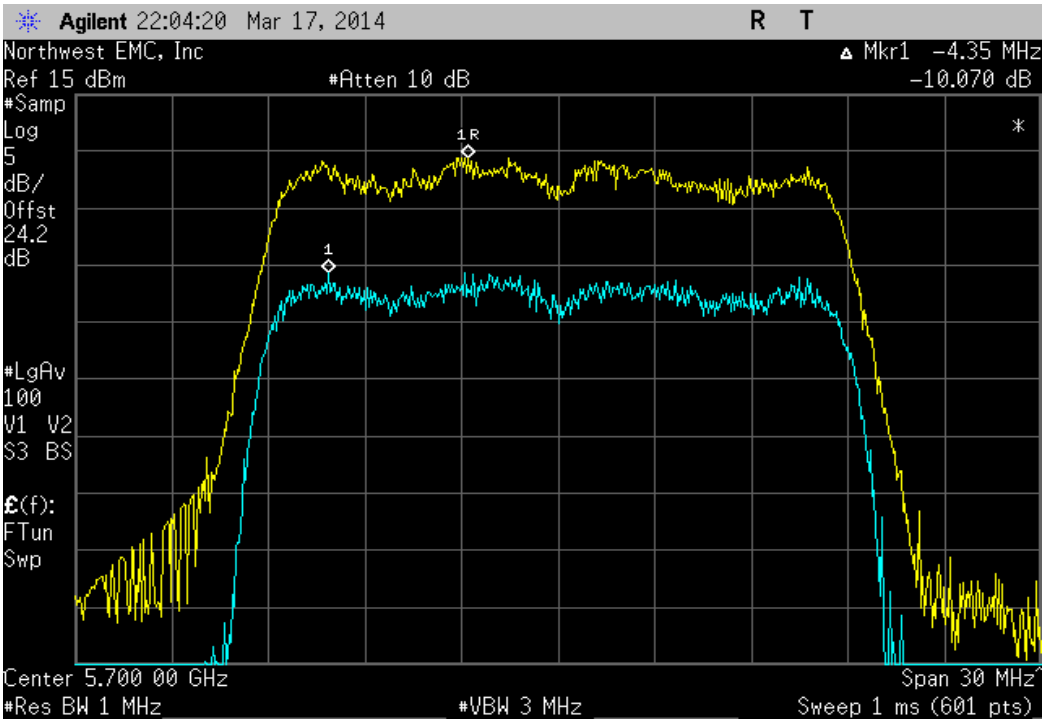
IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 116, Mid Channel 5580 MHz

				Value	Limit	Result
				9.977 dB	≤ 13 dB	Pass



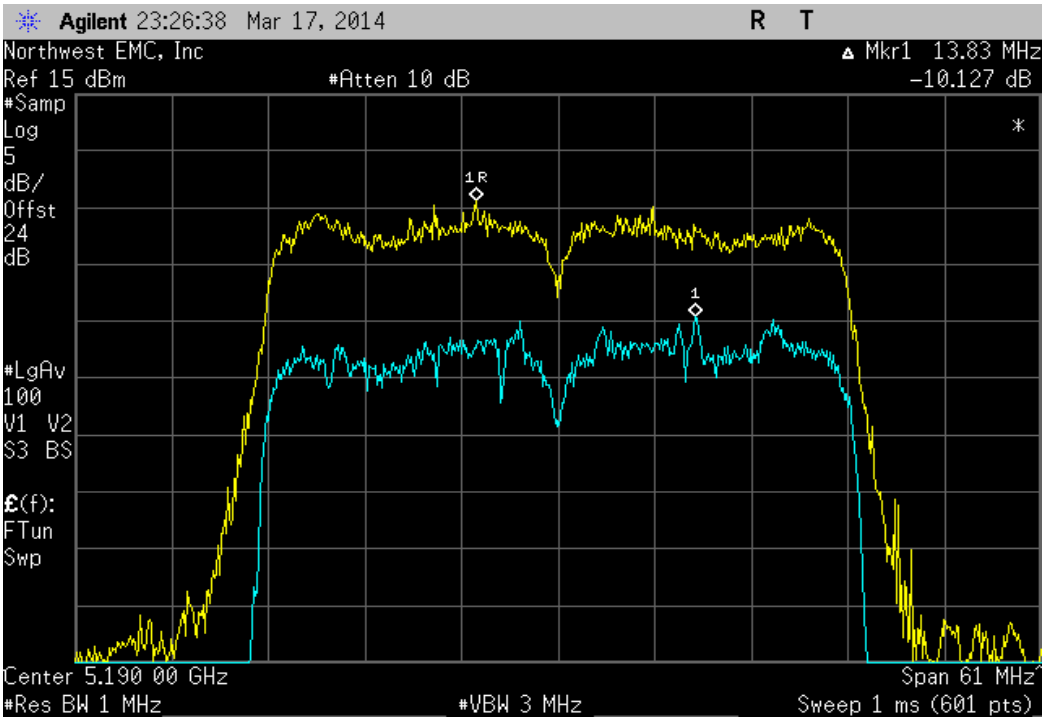
IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 140, High Channel 5700 MHz

				Value	Limit	Result
				10.07 dB	≤ 13 dB	Pass



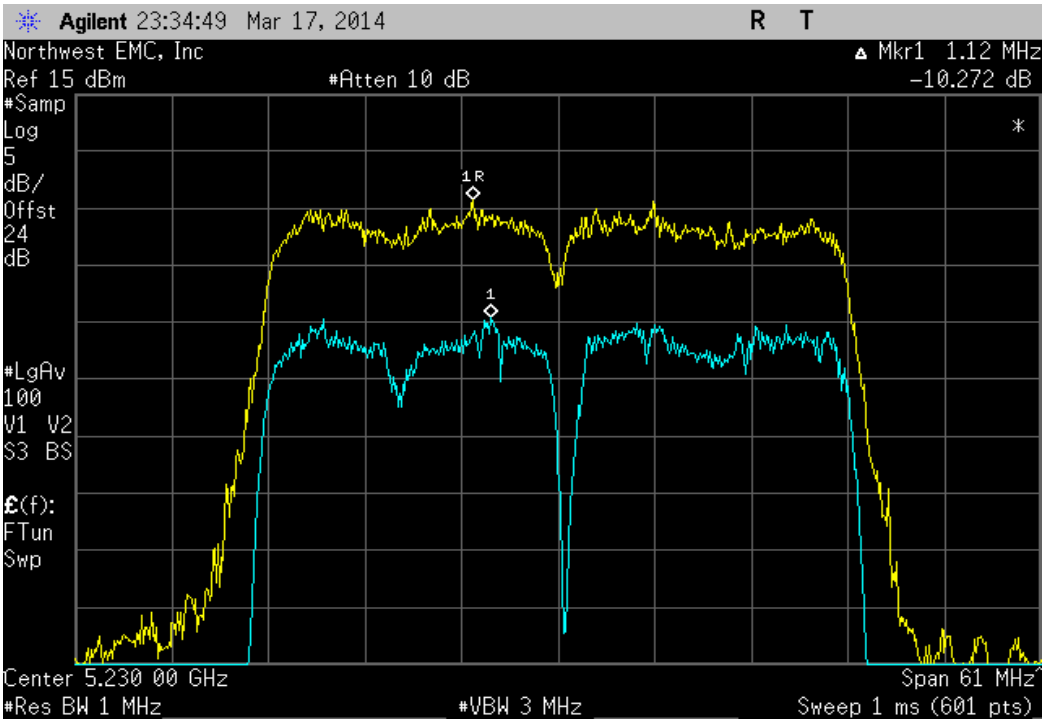
IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 36/40, Low Channel 5190 MHz

				Value	Limit	Result
				10.127 dB	≤ 13 dB	Pass



IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 44/48, High Channel 5230 MHz

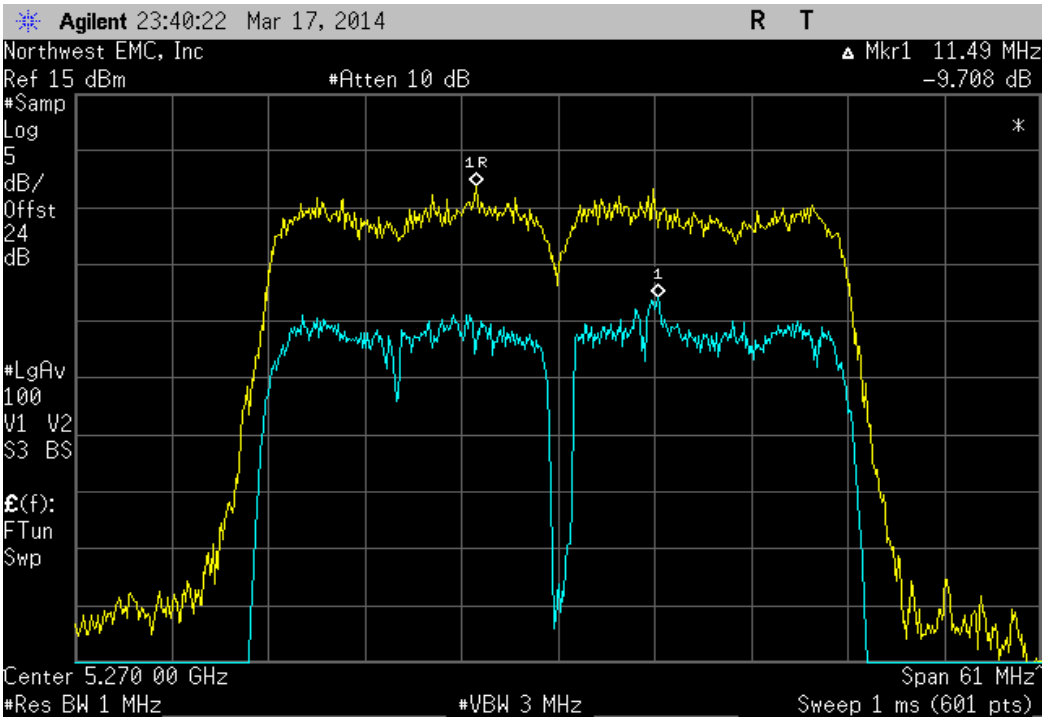
				Value	Limit	Result
				10.272 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

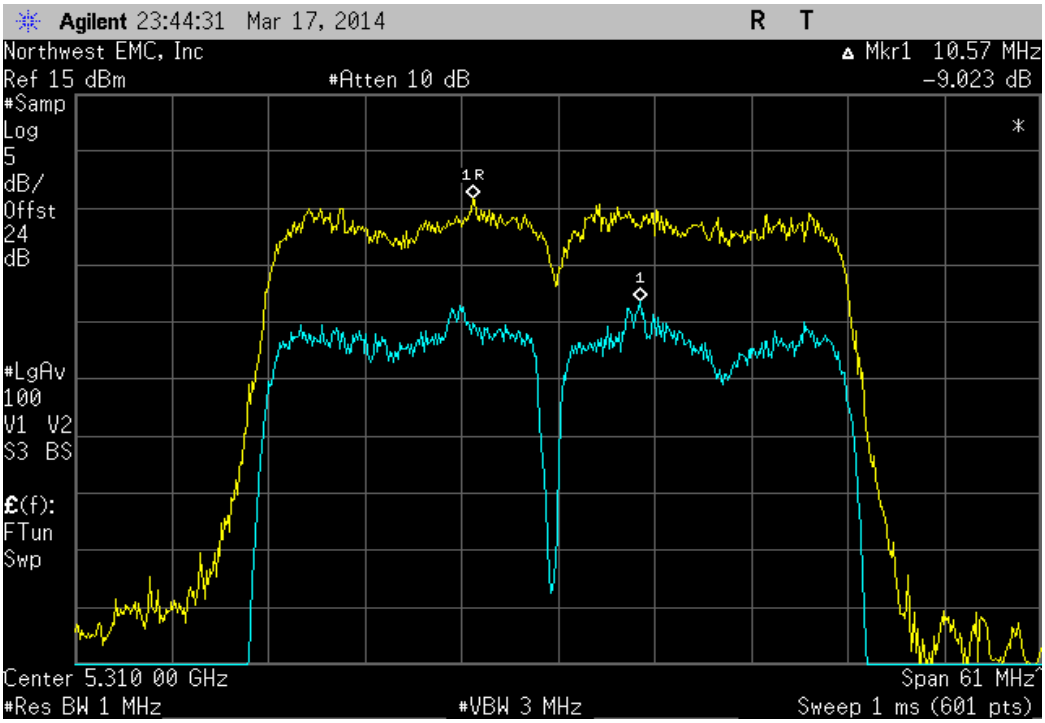
IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 52/56, Low Channel 5270 MHz

Value	Limit	Result
9.708 dB	≤ 13 dB	Pass



IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 60/64, High Channel 5310 MHz

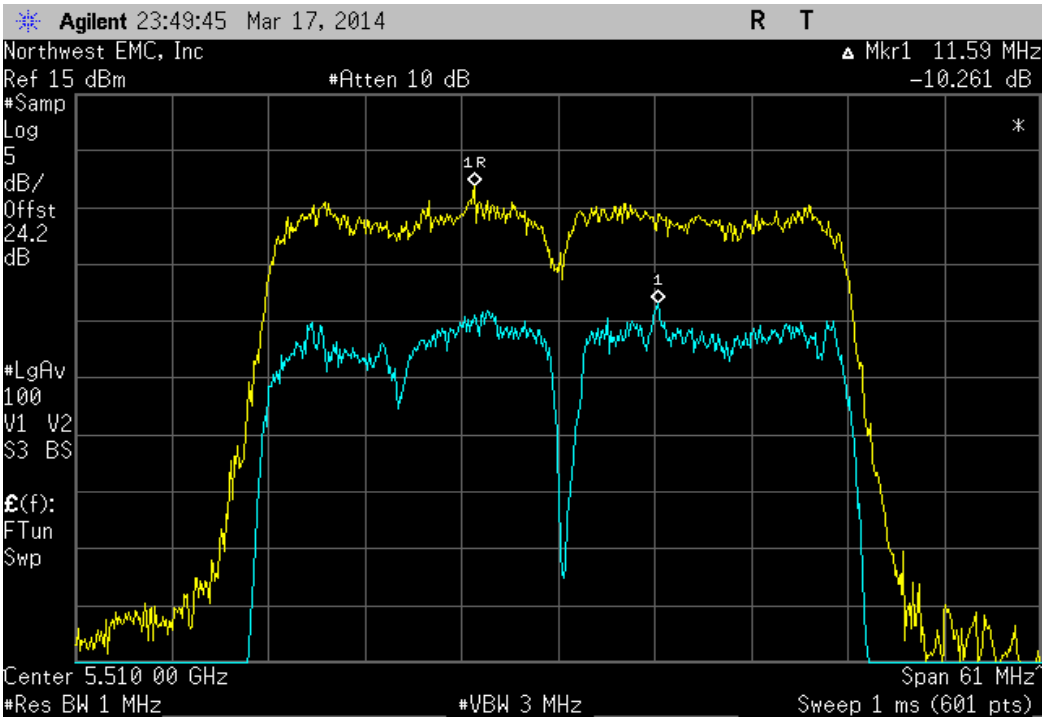
Value	Limit	Result
9.023 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

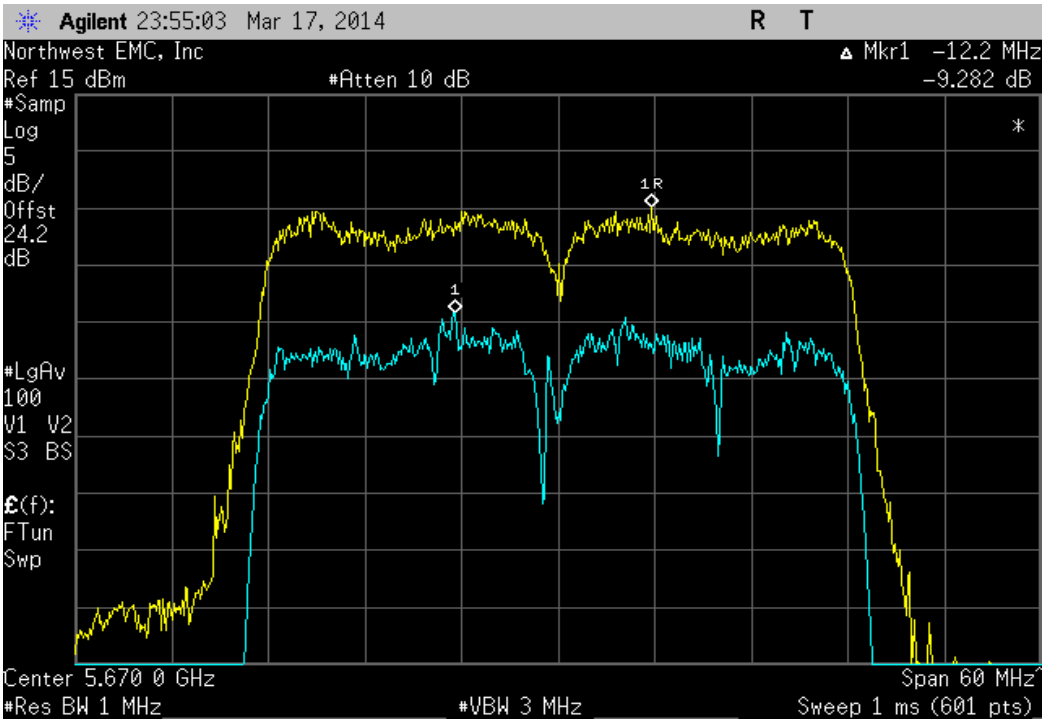
IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 100/104, Low Channel 5510 MHz

				Value	Limit	Result
				10.261 dB	≤ 13 dB	Pass



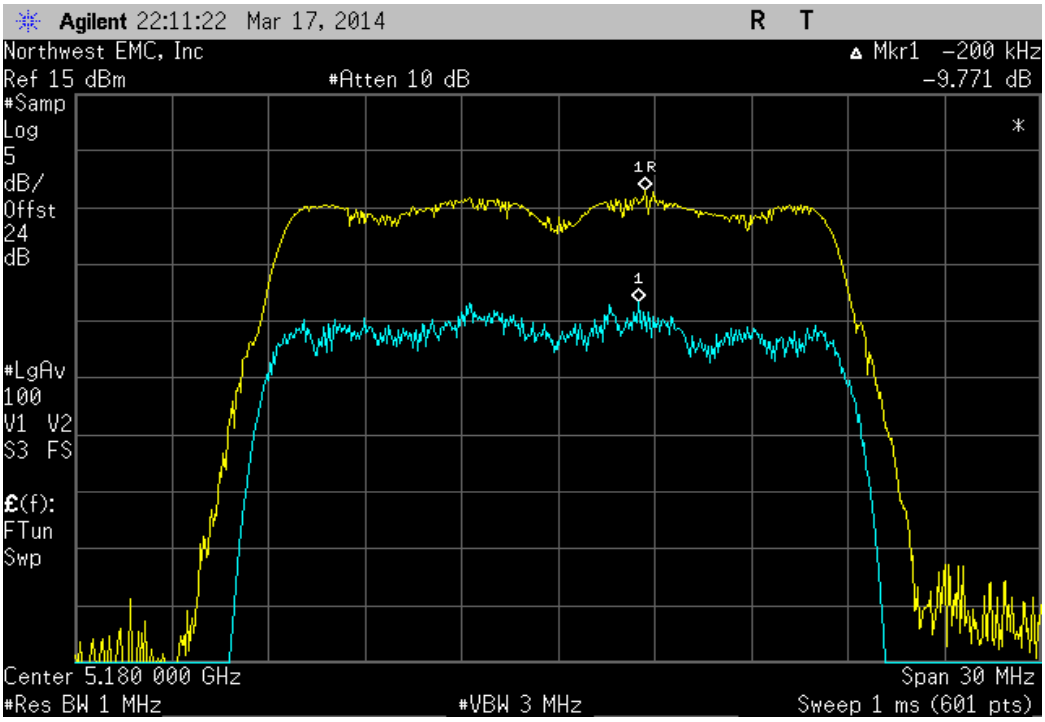
IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 132/136, High Channel 5670 MHz

				Value	Limit	Result
				9.282 dB	≤ 13 dB	Pass



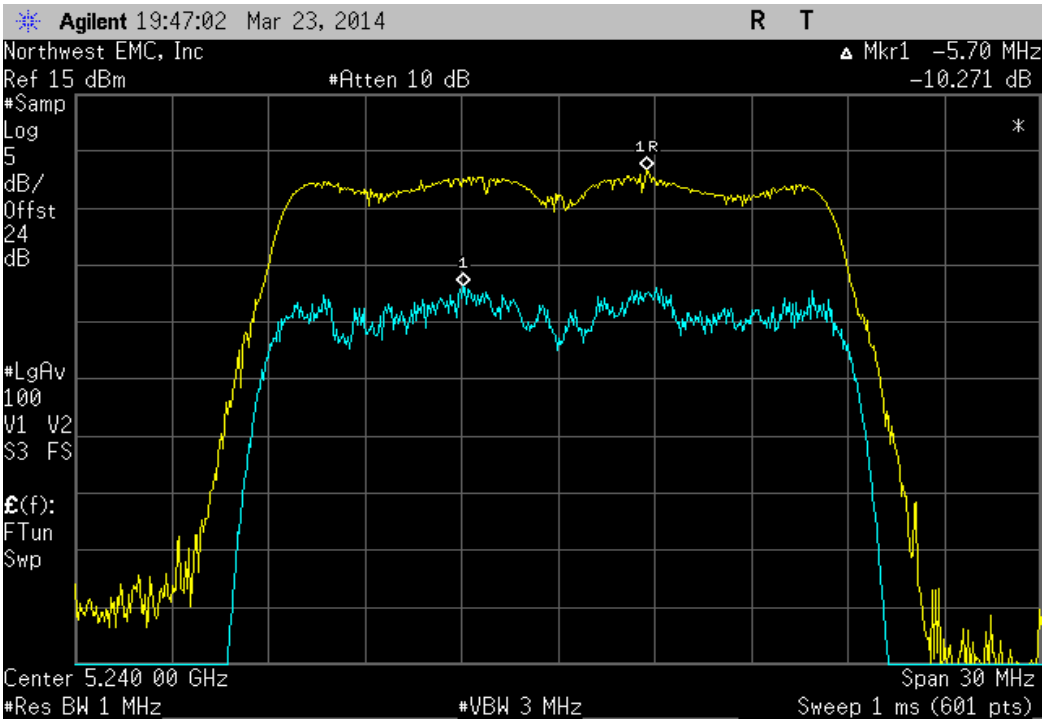
IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 36, Low Channel 5180MHz

				Value	Limit	Result
				9.771 dB	≤ 13 dB	Pass



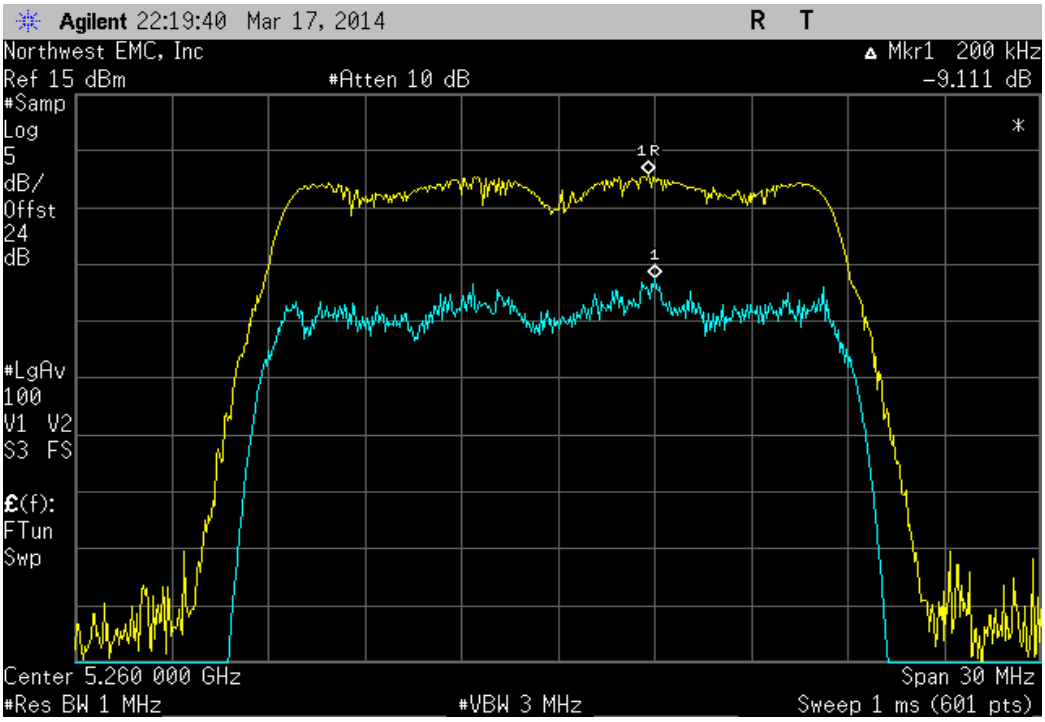
IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 48, High Channel 5240 MHz

				Value	Limit	Result
				10.271 dB	≤ 13 dB	Pass



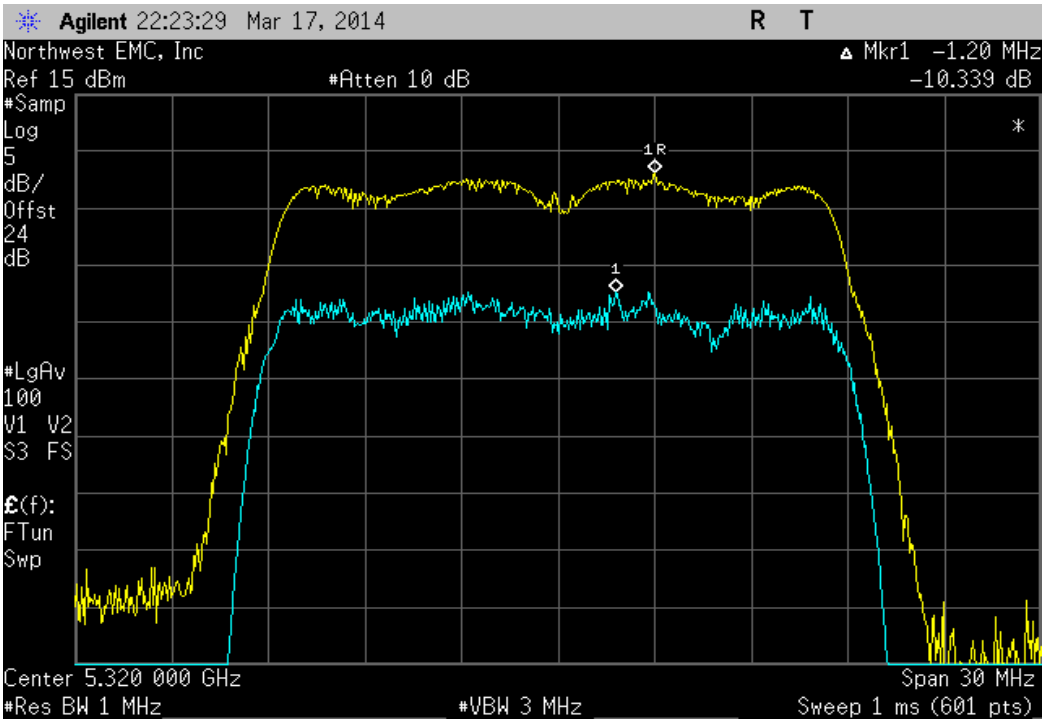
IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 52, Low Channel 5260 MHz

				Value	Limit	Result
				9.111 dB	≤ 13 dB	Pass



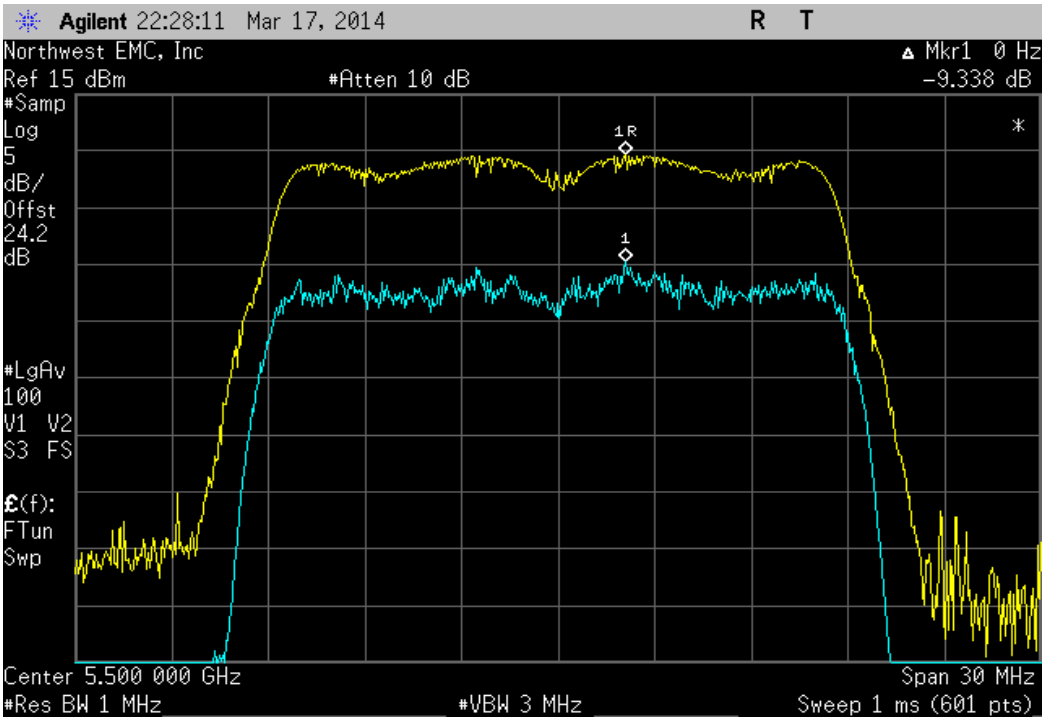
IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 64, High Channel 5320 MHz

				Value	Limit	Result
				10.339 dB	≤ 13 dB	Pass



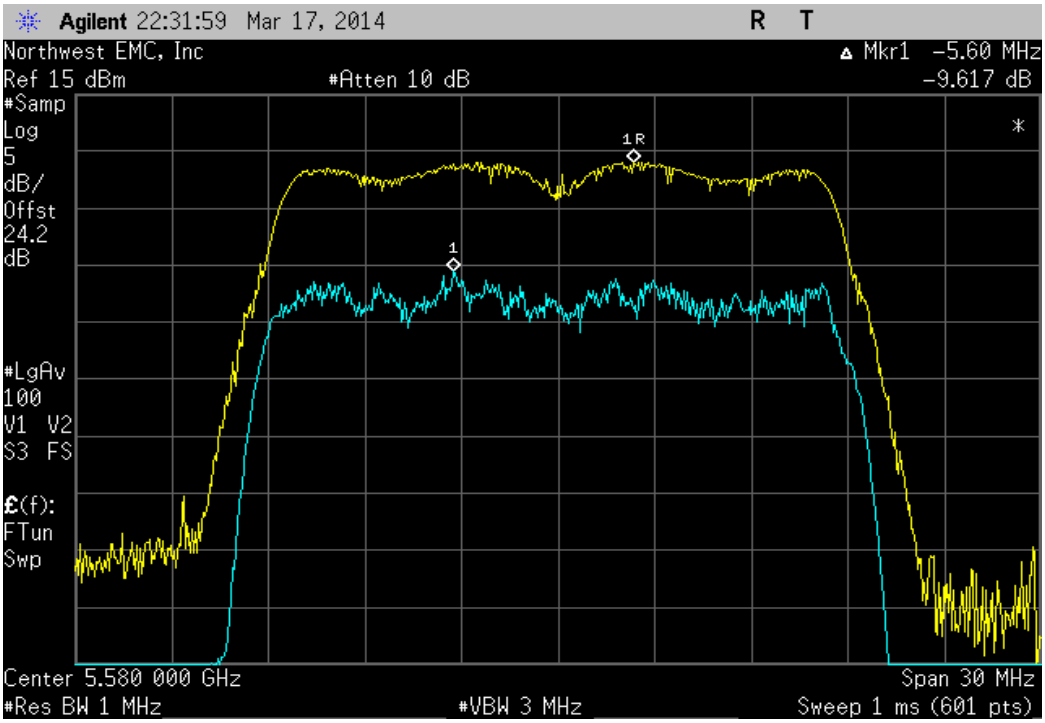
IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 100, Low Channel 5500 MHz

Value	Limit	Result
9.338 dB	≤ 13 dB	Pass



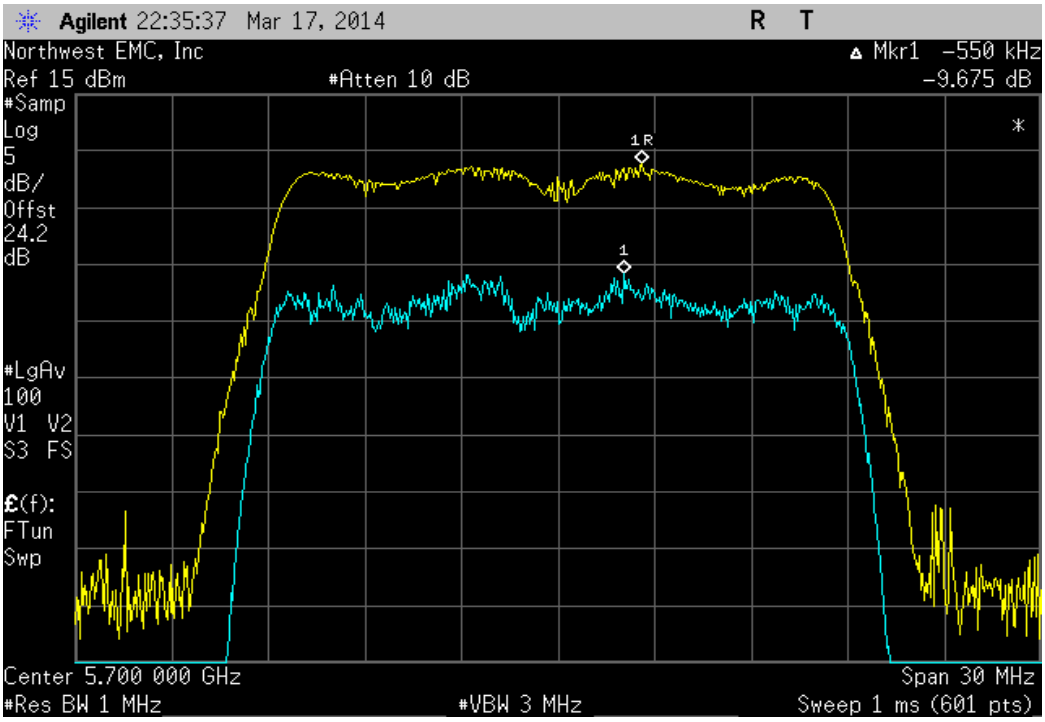
IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 116, Mid Channel 5580 MHz

Value	Limit	Result
9.617 dB	≤ 13 dB	Pass



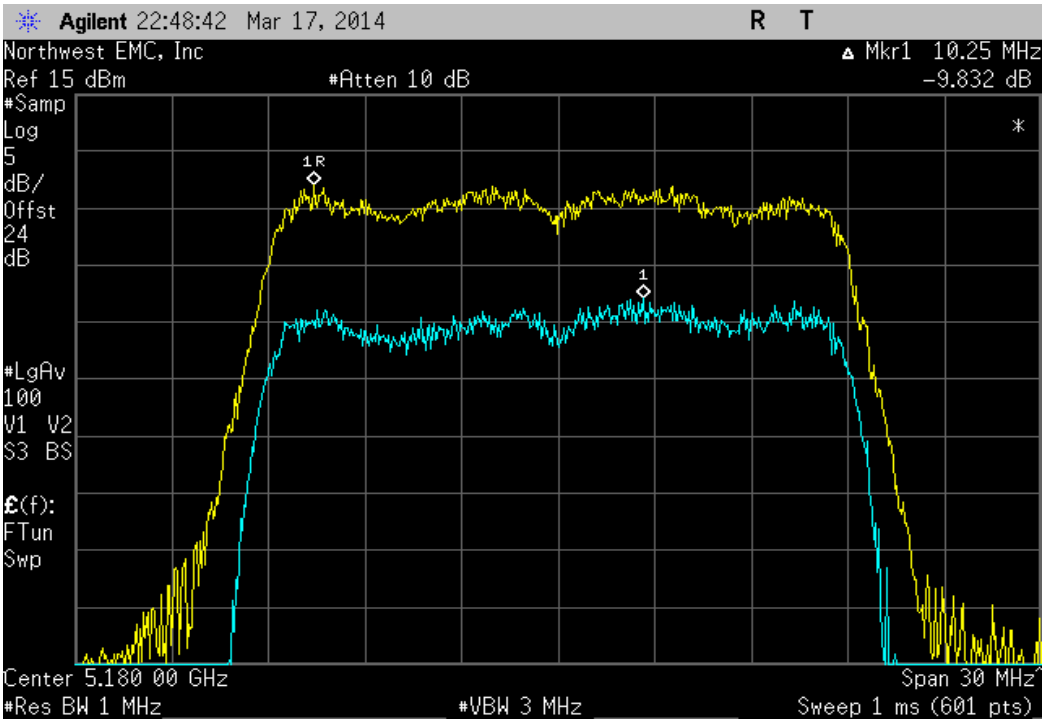
IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 140, High Channel 5700 MHz

					Value	Limit	Result
					9.675 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 36, Low Channel 5180MHz

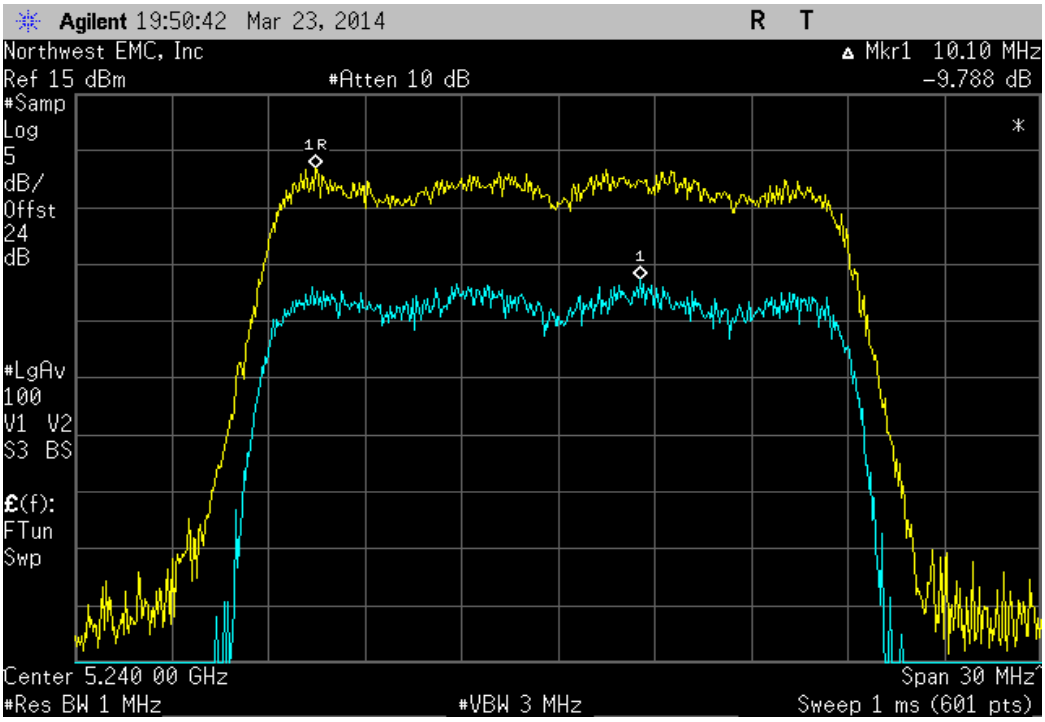
					Value	Limit	Result
					9.832 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

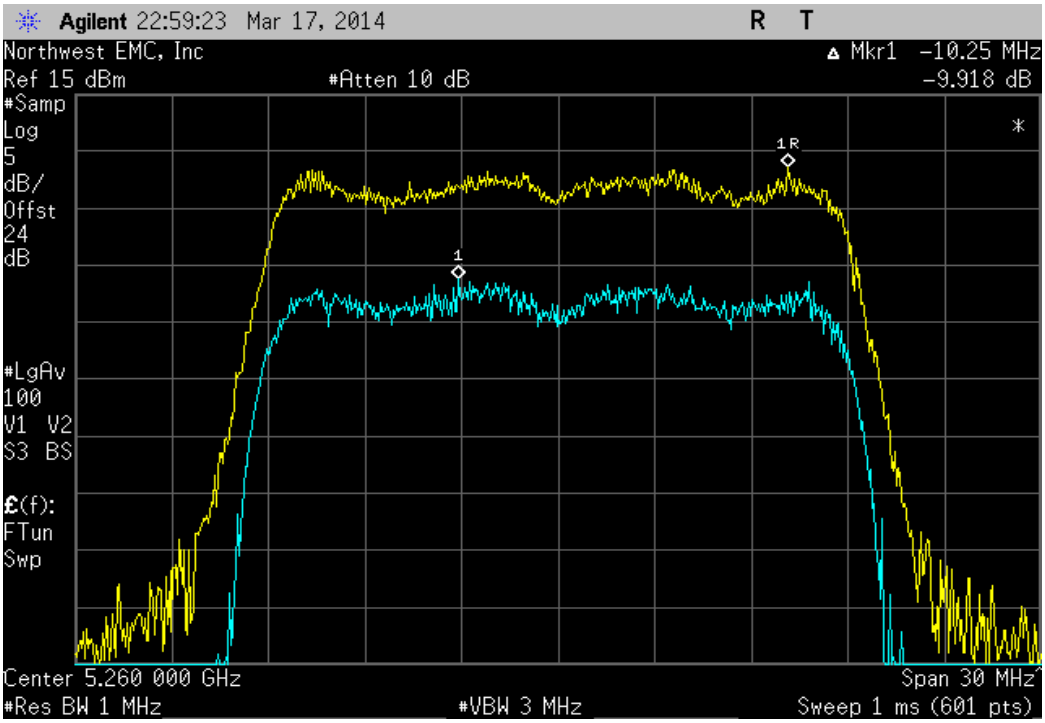
IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 48, High Channel 5240 MHz

				Value	Limit	Result
				9.788 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 52, Low Channel 5260 MHz

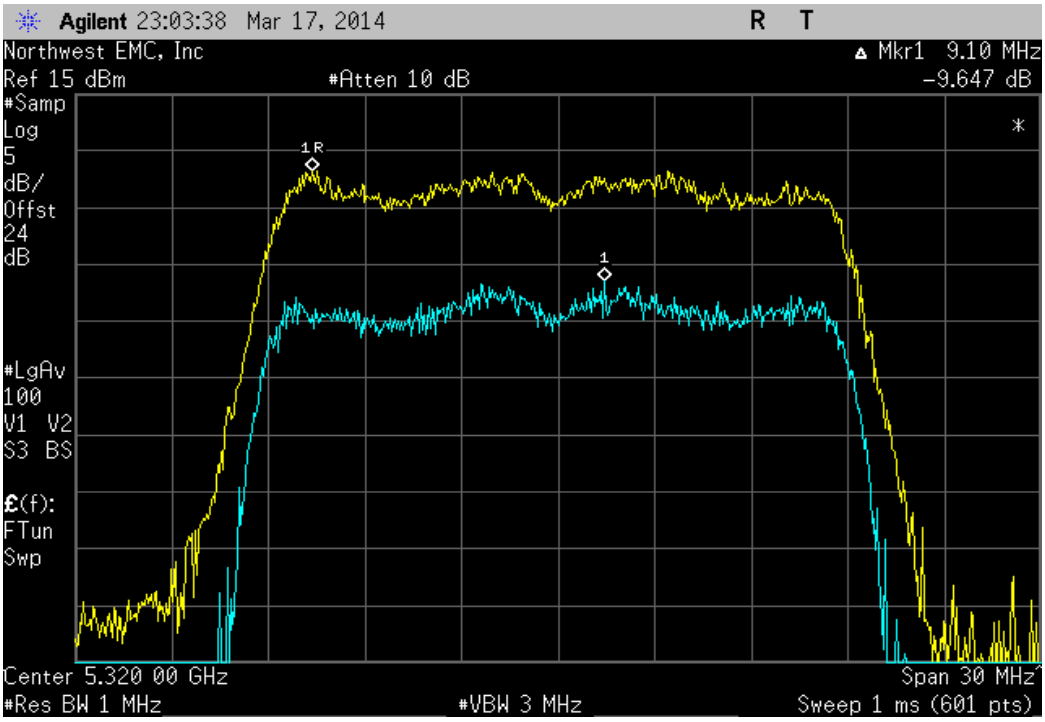
				Value	Limit	Result
				9.918 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

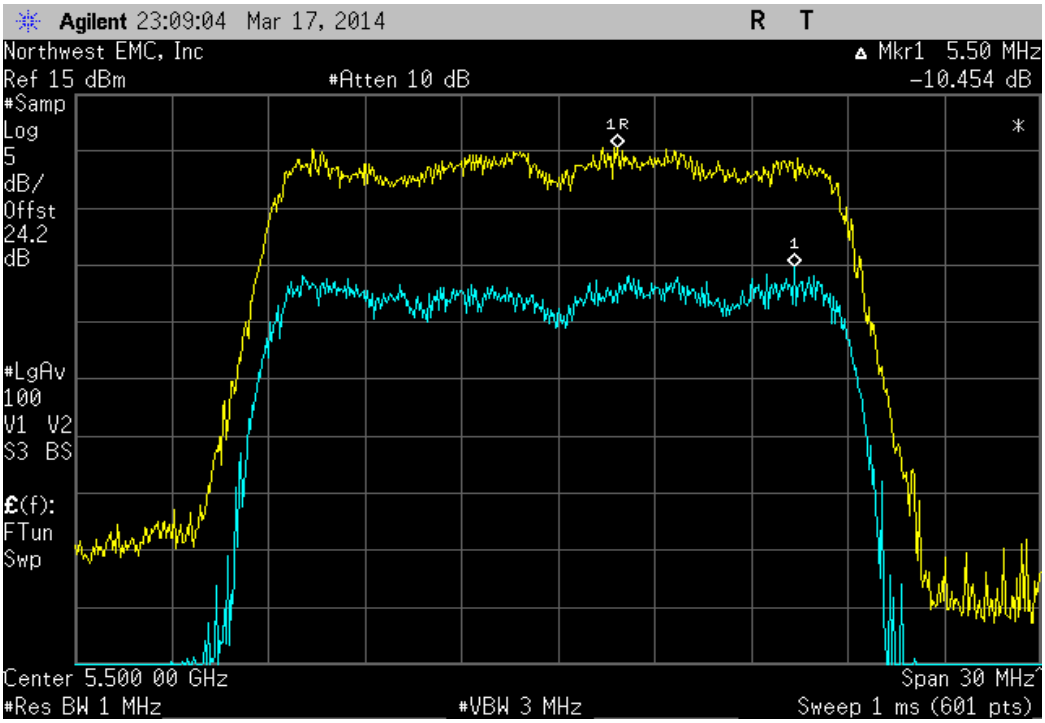
IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 64, High Channel 5320 MHz

Value	Limit	Result
9.647 dB	≤ 13 dB	Pass



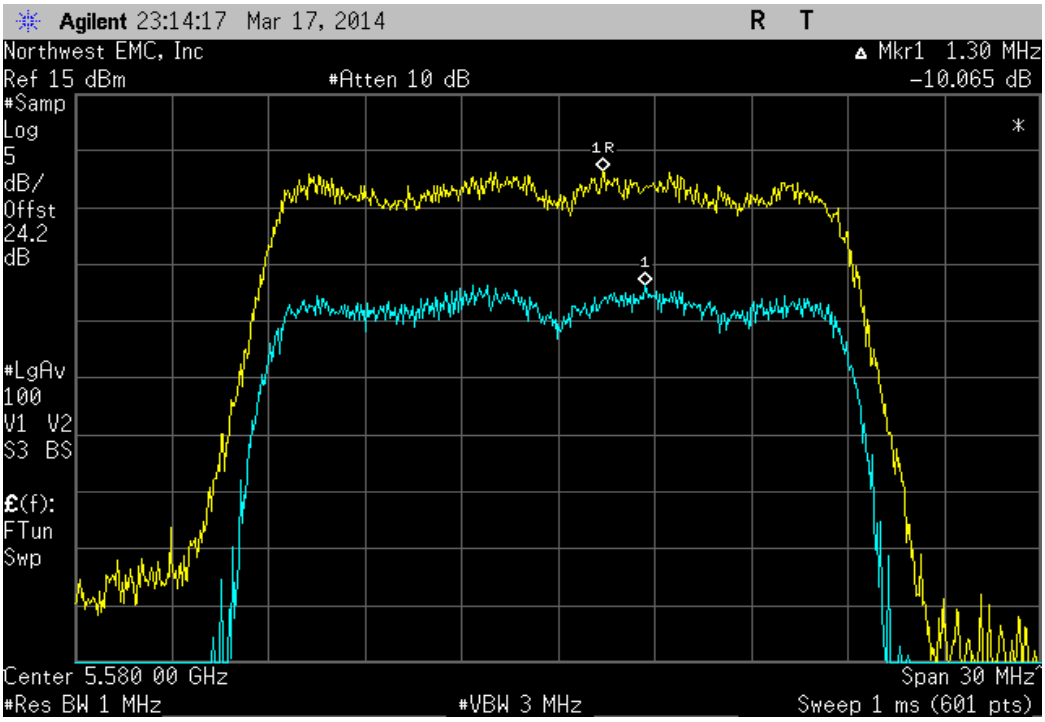
IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 100, Low Channel 5500 MHz

Value	Limit	Result
10.454 dB	≤ 13 dB	Pass



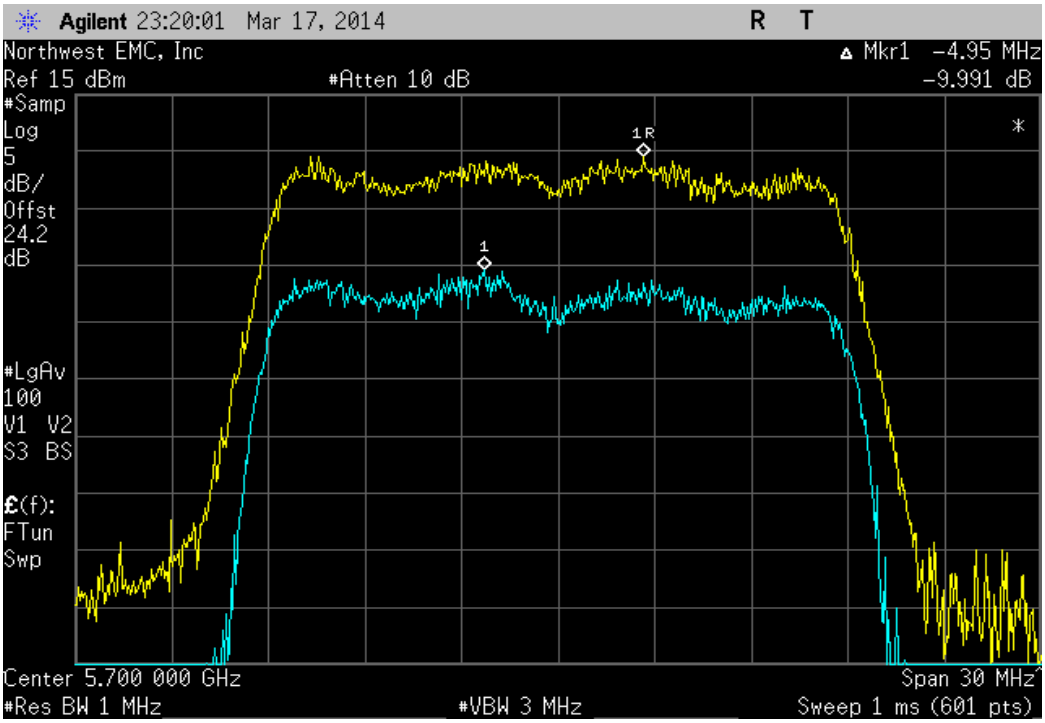
IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 116, Mid Channel 5580 MHz

				Value	Limit	Result
				10.065 dB	≤ 13 dB	Pass



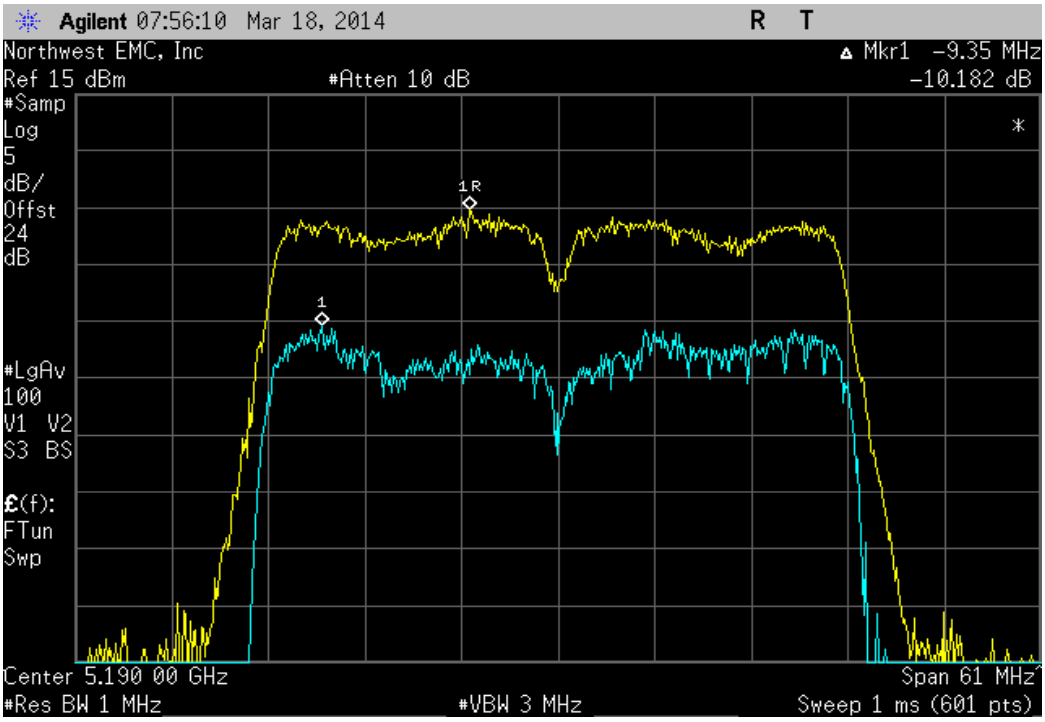
IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 140, High Channel 5700 MHz

				Value	Limit	Result
				9.991 dB	≤ 13 dB	Pass



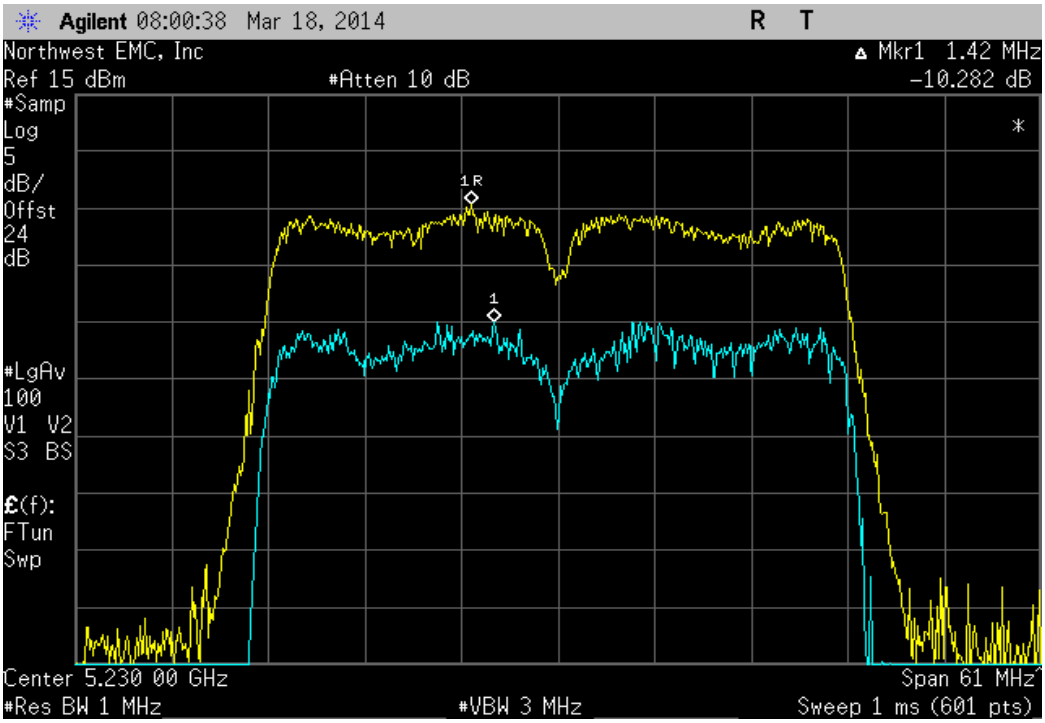
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 36/40, Low Channel 5190 MHz

					Value	Limit	Result
					10.182 dB	≤ 13 dB	Pass



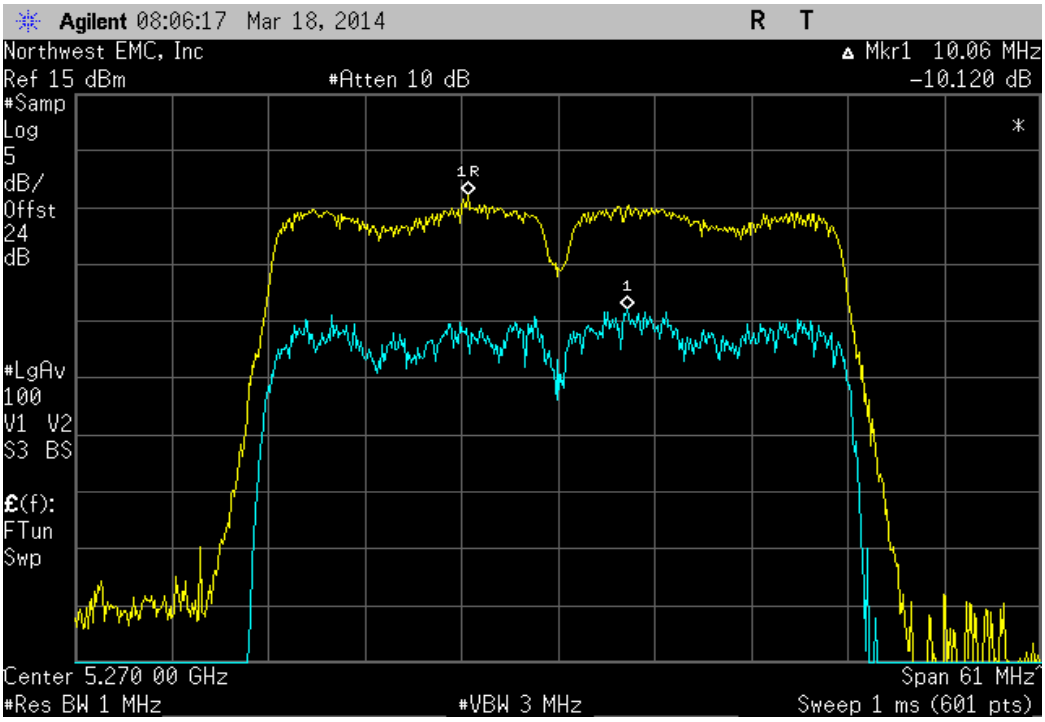
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 44/48, High Channel 5230 MHz

					Value	Limit	Result
					10.282 dB	≤ 13 dB	Pass



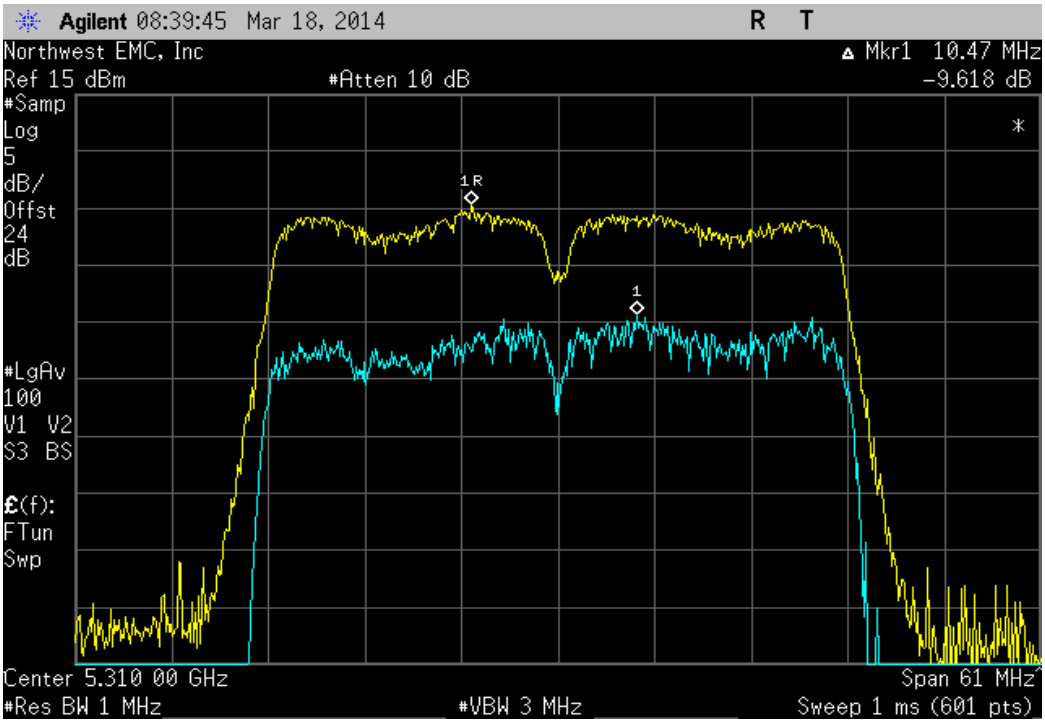
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 52/56, Low Channel 5270 MHz

					Value	Limit	Result
					10.12 dB	≤ 13 dB	Pass



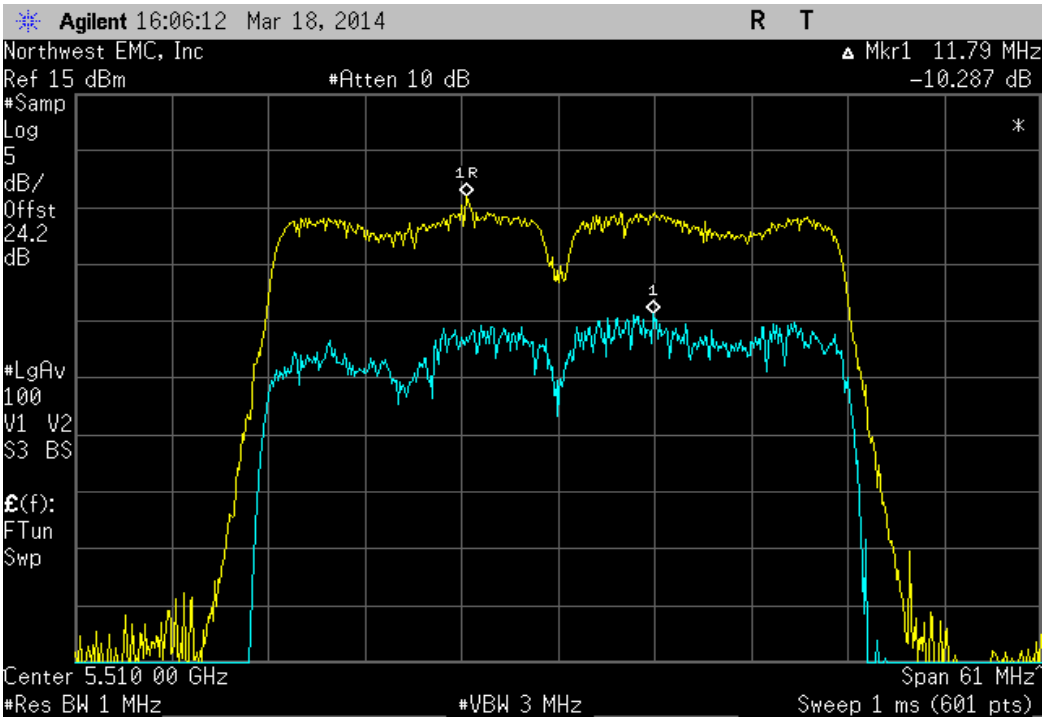
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 60/64, High Channel 5310 MHz

					Value	Limit	Result
					9.618 dB	≤ 13 dB	Pass



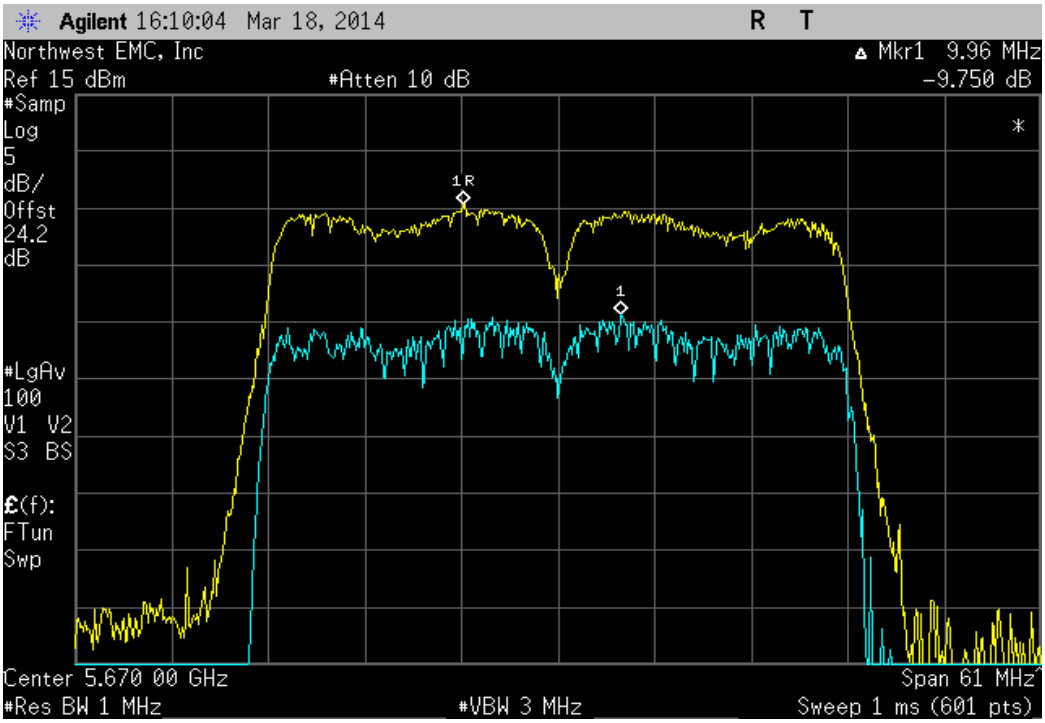
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 100/104, Low Channel 5510 MHz

Value	Limit	Result
10.287 dB	≤ 13 dB	Pass



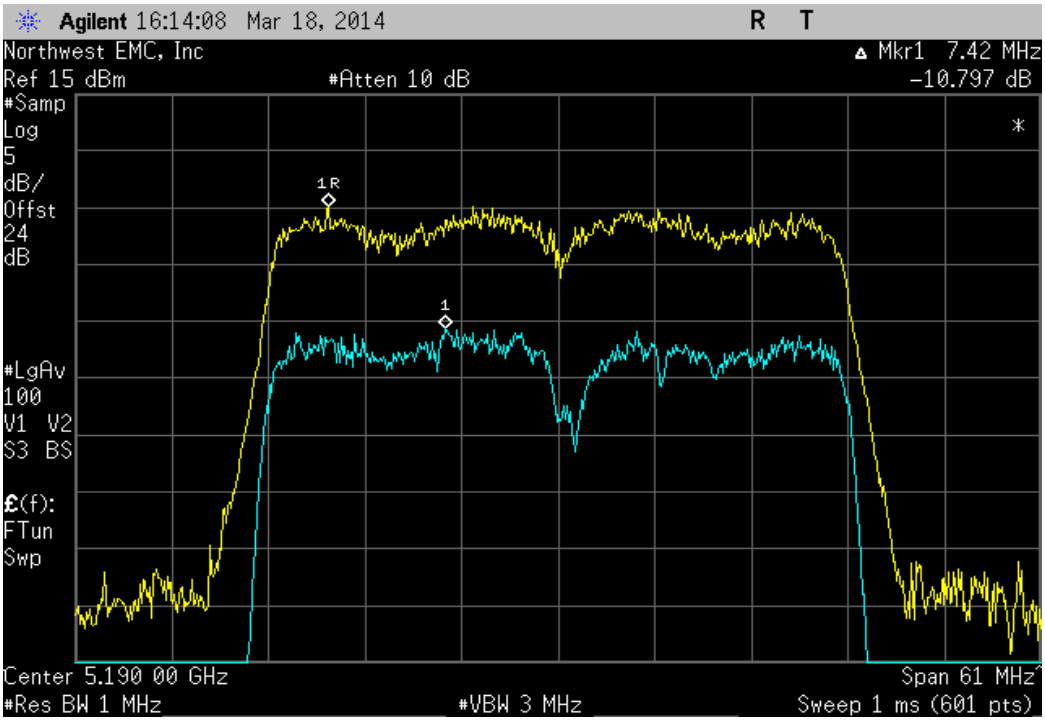
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 132/136, High Channel 5670 MHz

Value	Limit	Result
9.75 dB	≤ 13 dB	Pass



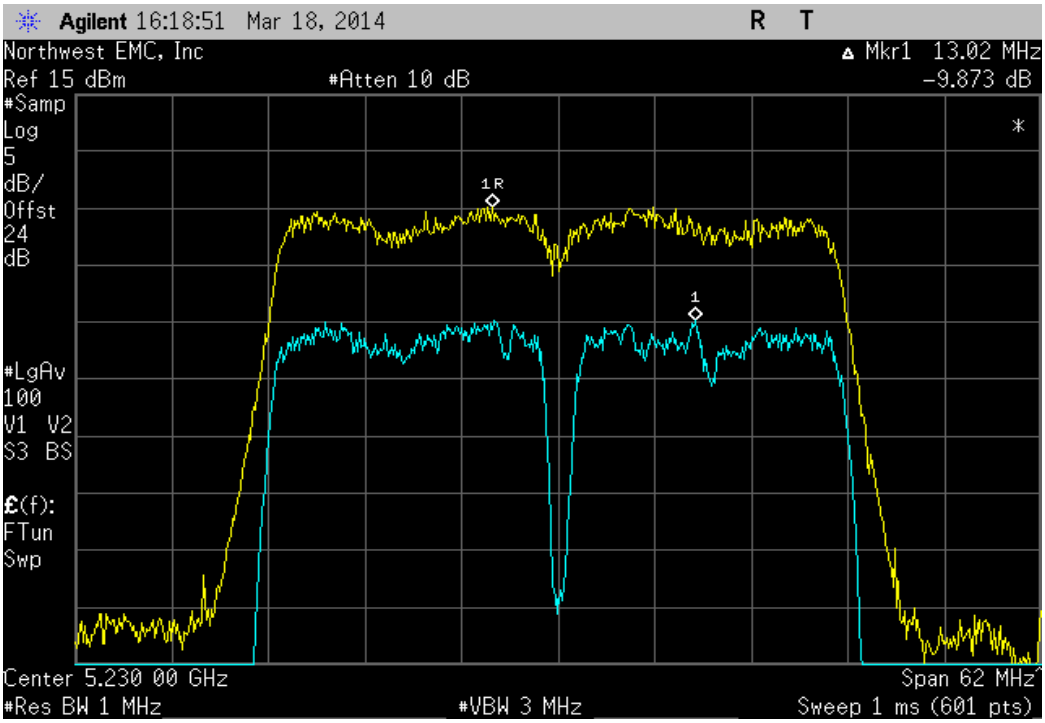
IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 36/40, Low Channel 5190 MHz

				Value	Limit	Result
				10.797 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 44/48, High Channel 5230 MHz

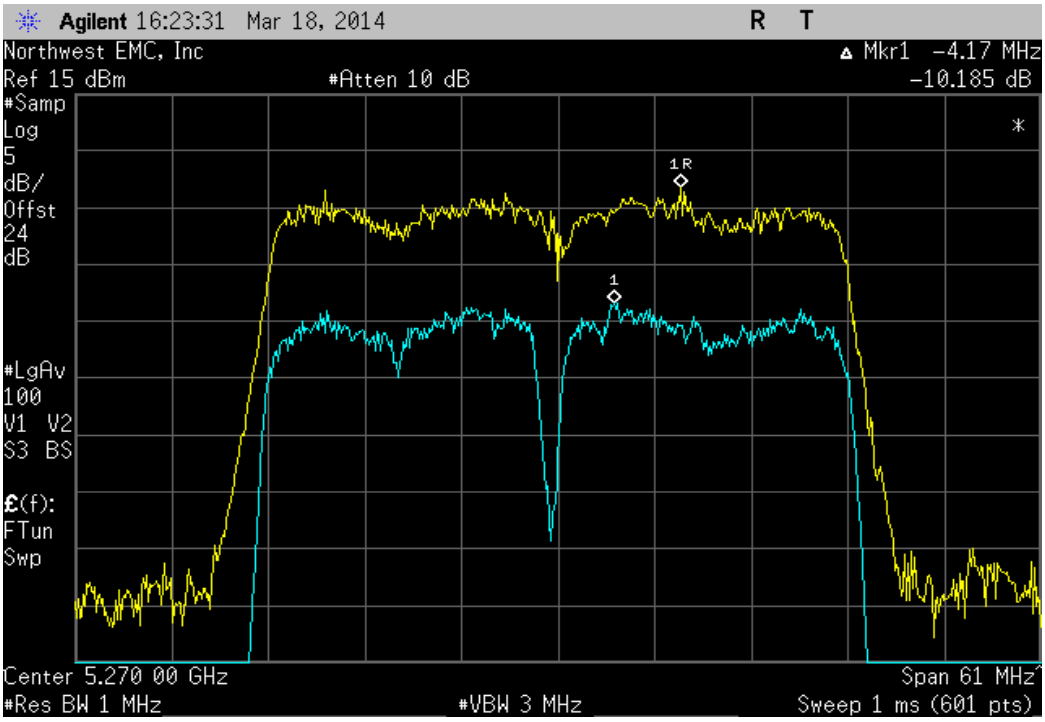
				Value	Limit	Result
				9.873 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

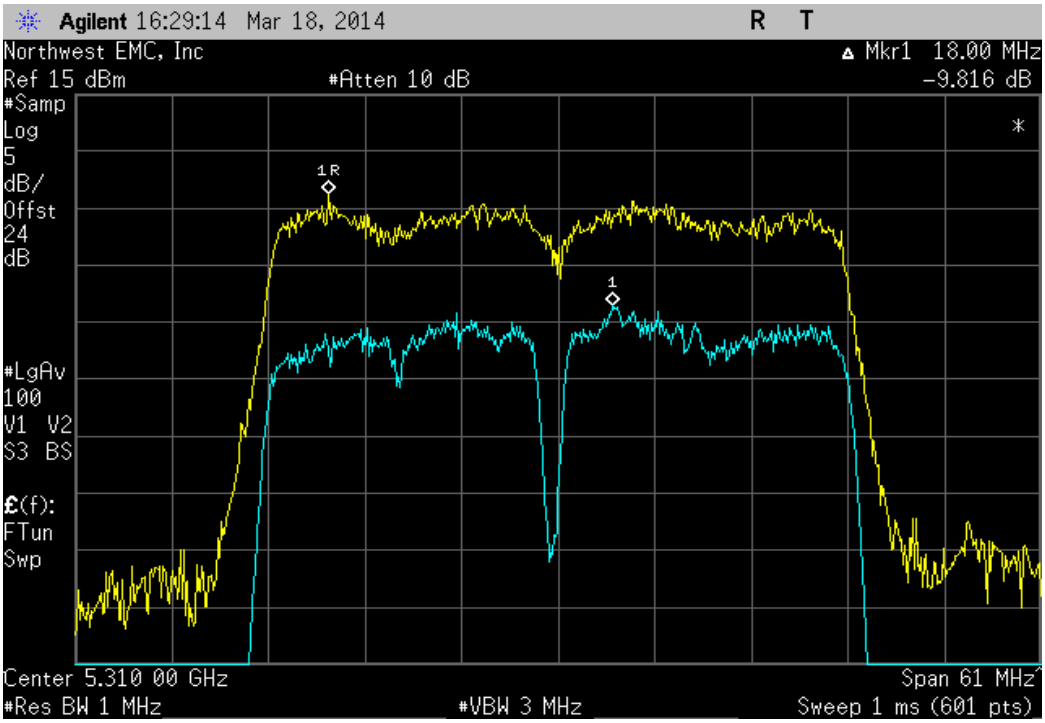
IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 52/56, Low Channel 5270 MHz

				Value	Limit	Result
				10.185 dB	≤ 13 dB	Pass



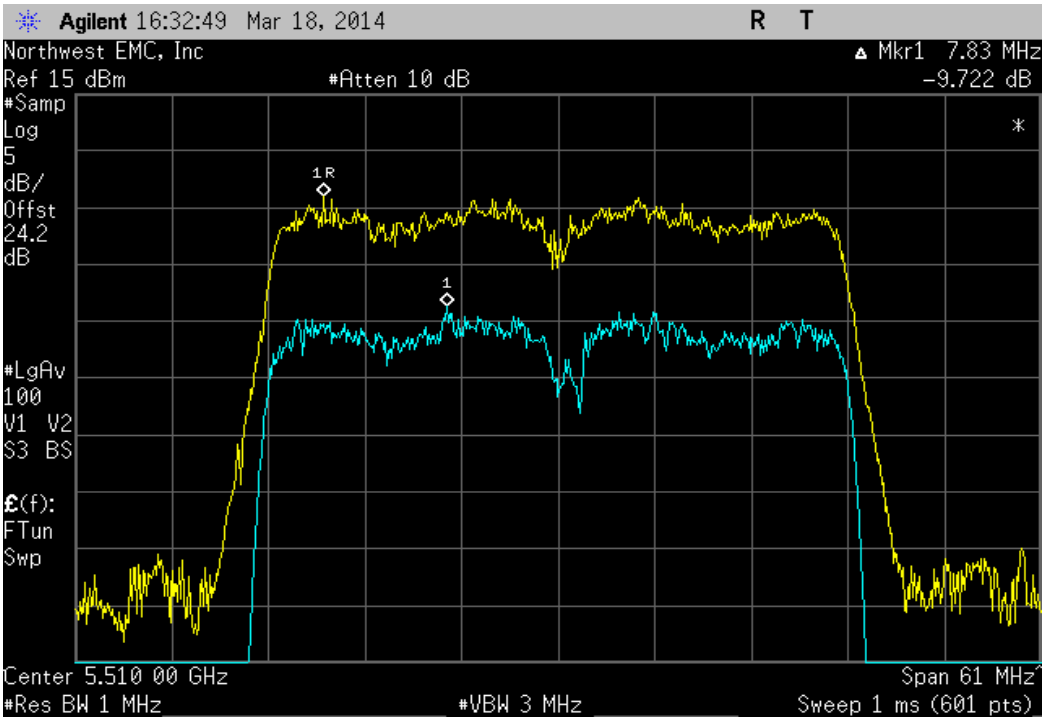
IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 60/64, High Channel 5310 MHz

				Value	Limit	Result
				9.816 dB	≤ 13 dB	Pass



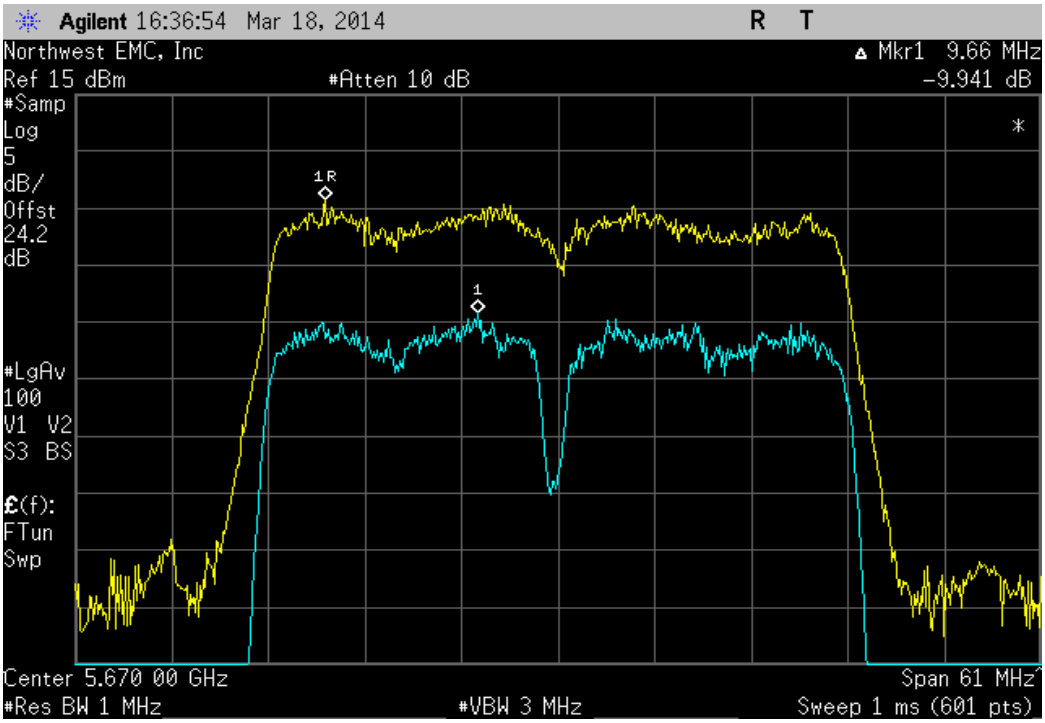
IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 100/104, Low Channel 5510 MHz

					Value	Limit	Result
					9.722 dB	≤ 13 dB	Pass



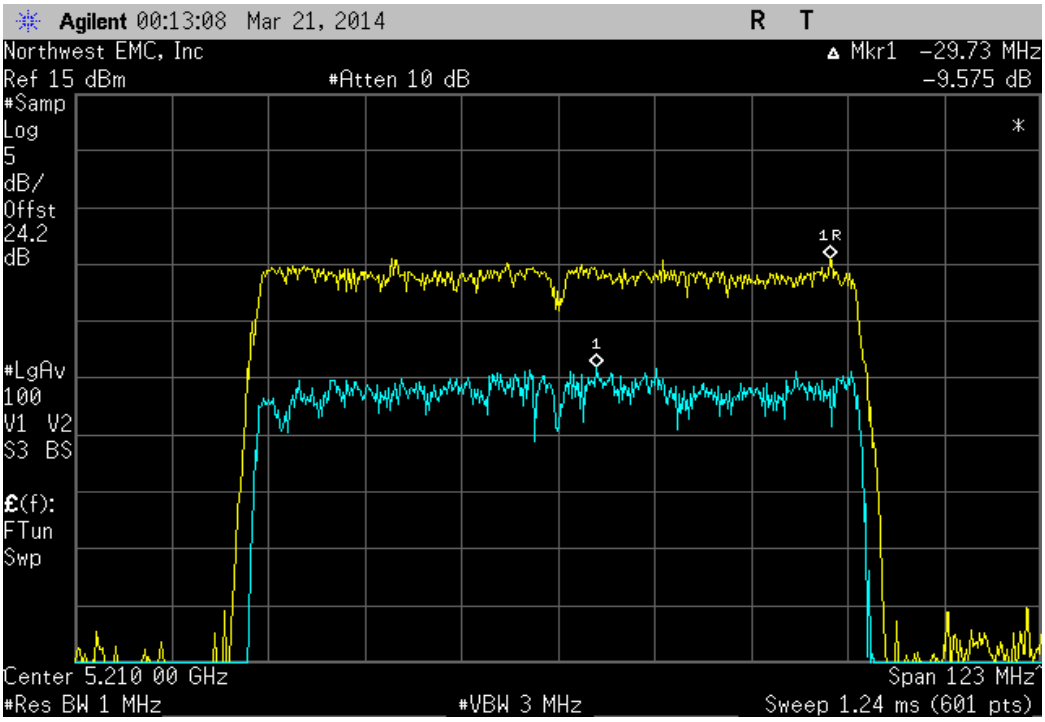
IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 132/136, High Channel 5670 MHz

					Value	Limit	Result
					9.941 dB	≤ 13 dB	Pass



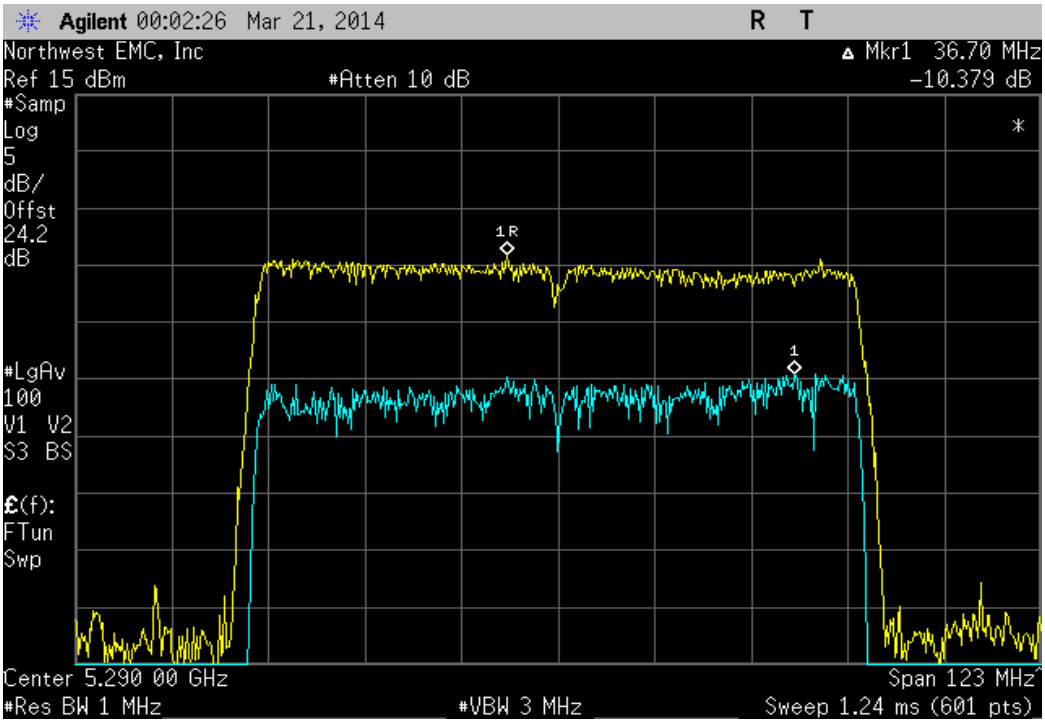
IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 42, Low Channel 5210 MHz

				Value	Limit	Result
				9.575 dB	≤ 13 dB	Pass



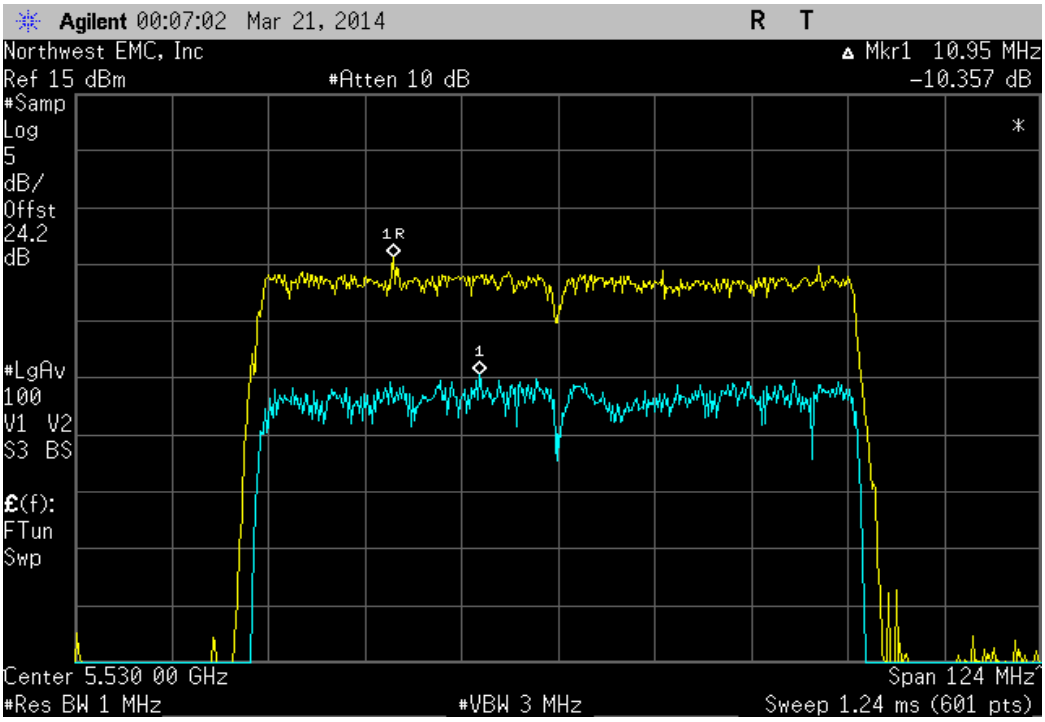
IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 58, High Channel 5290 MHz

				Value	Limit	Result
				10.379 dB	≤ 13 dB	Pass



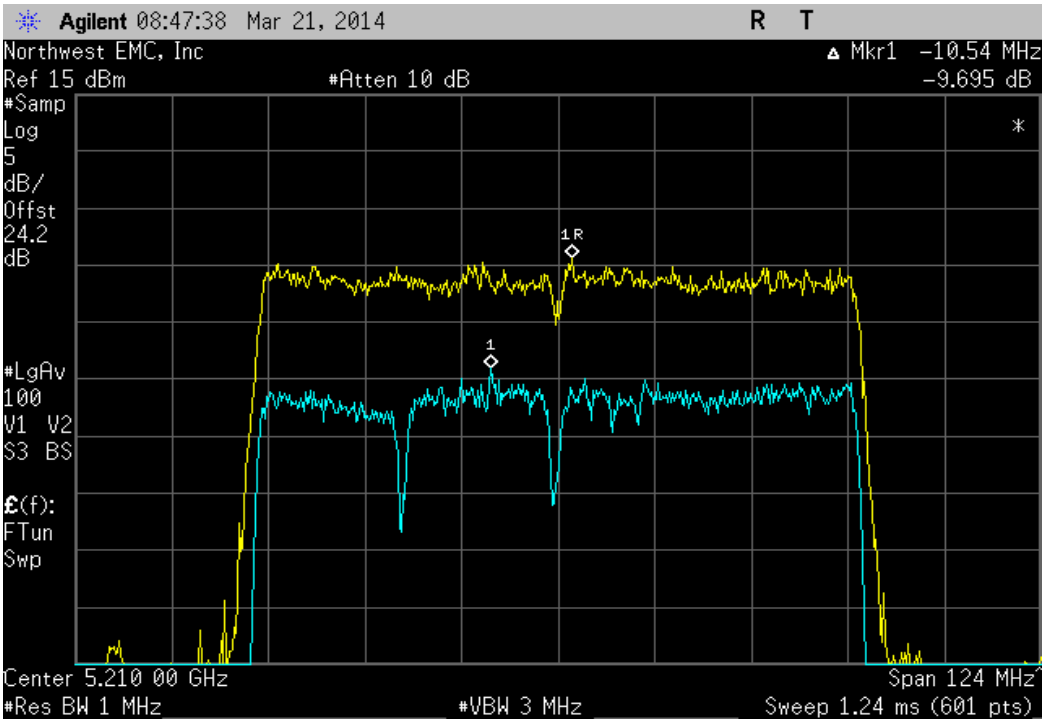
IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 106, Low Channel 5530 MHz

				Value	Limit	Result
				10.357 dB	≤ 13 dB	Pass



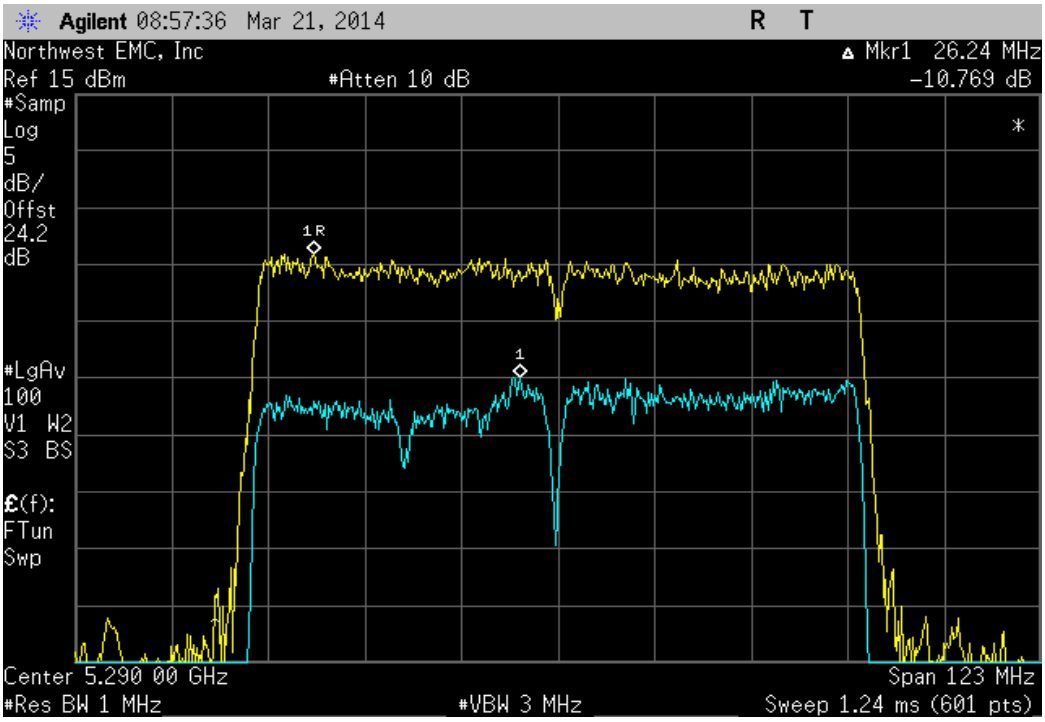
IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 42, Low Channel 5210 MHz

				Value	Limit	Result
				9.695 dB	≤ 13 dB	Pass



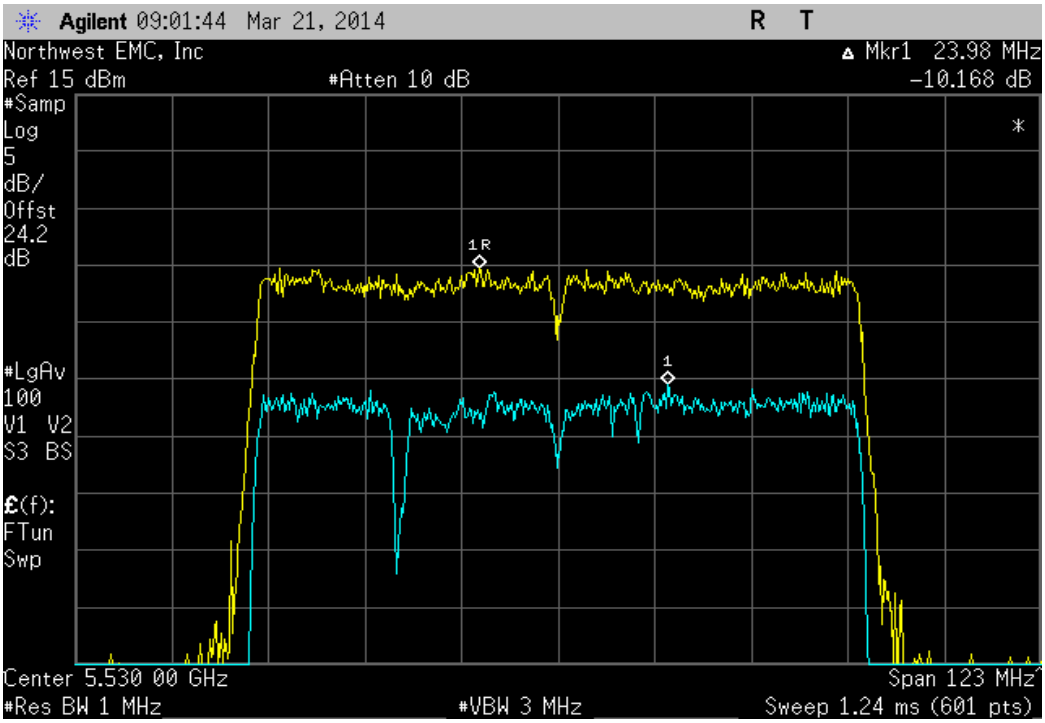
IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 58, High Channel 5290 MHz

				Value	Limit	Result
				10.769 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 106, Low Channel 5530 MHz

				Value	Limit	Result
				10.168 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval (mo.)
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
RF Vector Signal Generator	Agilent	V2920A	TIH	NCR	0
Power Meter	Gigatronics	8651A	SPM	11/26/2013	24
Power Sensor	Gigatronics	80701A	SPL	7/8/2011	36
Spectrum Analyzer	Agilent	E4440	AFE	11/4/2013	24

TEST DESCRIPTION

FCC KDB 789033 D01 General UNII Test Procedures Section F was followed to show that the radio of the maximum peak-max-hold spectrum to the maximum of the average spectrum does not exceed 13 dBm.

The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input.

The spectrum analyzer settings were as follows:

Span set to encompass the entire emission bandwidth (B), centered on the transmit channel.

Using the marker delta function, the largest difference between the following two traces was measured:

- 1st Trace: RBW = 1 MHz, VBW >= 3 MHz with peak detector and trace max-hold..
- 2nd Trace: The same procedure and settings as was used for peak power spectral density

PEAK EXCURSION OF THE MODULATION ENVELOPE

EUT:	Model 1631	Work Order:	MCSO1698
Serial Number:	041151240753	Date:	03/23/14
Customer:	Microsoft Corporation	Temperature:	21.5°C
Attendees:	None	Humidity:	29%
Project:	None	Barometric Pres.:	1007
Tested by:	Brandon Hobbs, Jared Ison	Power: 110VAC/60Hz	Job Site: EV06

TEST SPECIFICATIONS	Test Method
FCC 15.407:2014	ANSI C63.10:2009

COMMENTS

Modes of operation tested were client provided. Reference power level table for channel power setting.

DEVIATIONS FROM TEST STANDARD

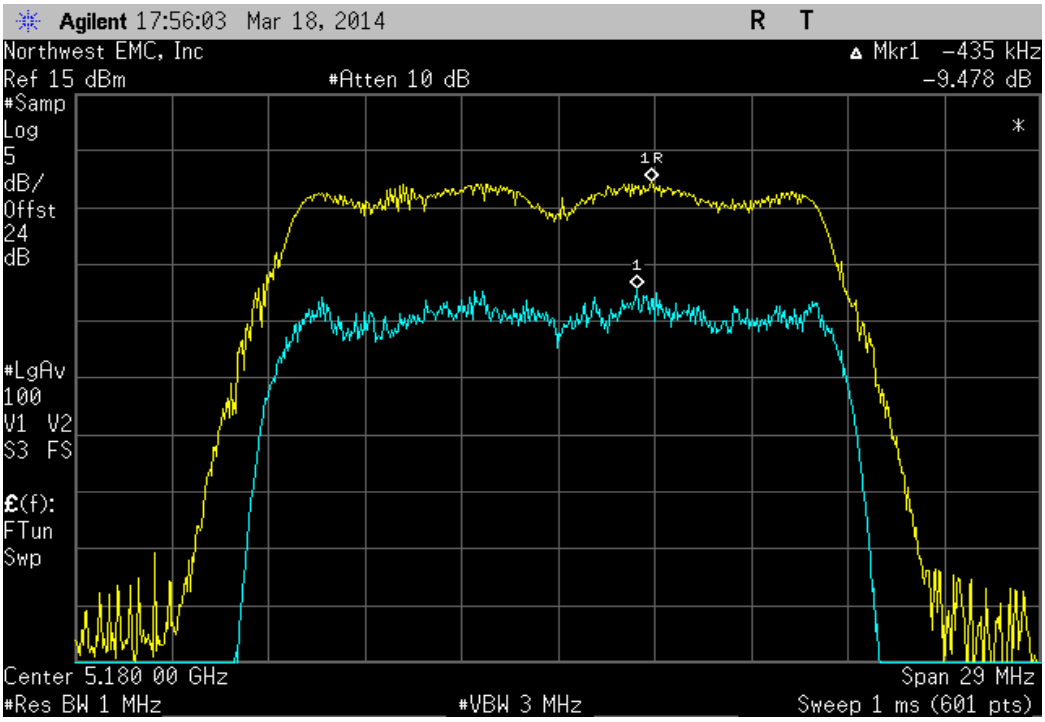
None

Configuration #	5	Signature

				Value	Limit	Result
IEEE 802.11(a)						
	20 MHz					
		6 Mbps				
			Ch. 36, Low Channel 5180MHz	9.478 dB	≤ 13 dB	Pass
			Ch. 48, High Channel 5240 MHz	9.229 dB	≤ 13 dB	Pass
			Ch. 52, Low Channel 5260 MHz	9.384 dB	≤ 13 dB	Pass
			Ch. 64, High Channel 5320 MHz	9.824 dB	≤ 13 dB	Pass
			Ch. 100, Low Channel 5500 MHz	10.492 dB	≤ 13 dB	Pass
			Ch. 116, Mid Channel 5580 MHz	9.564 dB	≤ 13 dB	Pass
			Ch. 140, High Channel 5700 MHz	9.69 dB	≤ 13 dB	Pass
		36 Mbps				
			Ch. 36, Low Channel 5180MHz	9.353 dB	≤ 13 dB	Pass
			Ch. 48, High Channel 5240 MHz	9.556 dB	≤ 13 dB	Pass
			Ch. 52, Low Channel 5260 MHz	9.692 dB	≤ 13 dB	Pass
			Ch. 64, High Channel 5320 MHz	9.125 dB	≤ 13 dB	Pass
			Ch. 100, Low Channel 5500 MHz	9.082 dB	≤ 13 dB	Pass
			Ch. 116, Mid Channel 5580 MHz	10.142 dB	≤ 13 dB	Pass
			Ch. 140, High Channel 5700 MHz	9.527 dB	≤ 13 dB	Pass
		54 Mbps				
			Ch. 36, Low Channel 5180MHz	10.149 dB	≤ 13 dB	Pass
			Ch. 48, High Channel 5240 MHz	9.408 dB	≤ 13 dB	Pass
			Ch. 52, Low Channel 5260 MHz	9.314 dB	≤ 13 dB	Pass
			Ch. 64, High Channel 5320 MHz	9.413 dB	≤ 13 dB	Pass
			Ch. 100, Low Channel 5500 MHz	9.323 dB	≤ 13 dB	Pass
			Ch. 116, Mid Channel 5580 MHz	10.061 dB	≤ 13 dB	Pass
			Ch. 140, High Channel 5700 MHz	9.988 dB	≤ 13 dB	Pass
IEEE 802.11(n)						
	20 MHz					
		HT, MCS7				
			Ch. 36, Low Channel 5180MHz	10.274 dB	≤ 13 dB	Pass
			Ch. 48, High Channel 5240 MHz	10.109 dB	≤ 13 dB	Pass
			Ch. 52, Low Channel 5260 MHz	10.459 dB	≤ 13 dB	Pass
			Ch. 64, High Channel 5320 MHz	9.979 dB	≤ 13 dB	Pass
			Ch. 100, Low Channel 5500 MHz	10.057 dB	≤ 13 dB	Pass
			Ch. 116, Mid Channel 5580 MHz	10.482 dB	≤ 13 dB	Pass
			Ch. 140, High Channel 5700 MHz	10.283 dB	≤ 13 dB	Pass
	40 MHz					
		HT, MCS7				
			Ch. 36/40, Low Channel 5190 MHz	10.168 dB	≤ 13 dB	Pass
			Ch. 44/48, High Channel 5230 MHz	9.613 dB	≤ 13 dB	Pass
			Ch. 52/56, Low Channel 5270 MHz	8.989 dB	≤ 13 dB	Pass
			Ch. 60/64, High Channel 5310 MHz	9.214 dB	≤ 13 dB	Pass
			Ch. 100/104, Low Channel 5510 MHz	10.561 dB	≤ 13 dB	Pass
			Ch. 132/136, High Channel 5670 MHz	10.66 dB	≤ 13 dB	Pass
IEEE 802.11(ac)						
	20 MHz					
		VHT, MCS0				
			Ch. 36, Low Channel 5180MHz	9.363 dB	≤ 13 dB	Pass
			Ch. 48, High Channel 5240 MHz	8.885 dB	≤ 13 dB	Pass
			Ch. 52, Low Channel 5260 MHz	10.162 dB	≤ 13 dB	Pass
			Ch. 64, High Channel 5320 MHz	9.357 dB	≤ 13 dB	Pass
			Ch. 100, Low Channel 5500 MHz	9.51 dB	≤ 13 dB	Pass
			Ch. 116, Mid Channel 5580 MHz	9.654 dB	≤ 13 dB	Pass
			Ch. 140, High Channel 5700 MHz	10.056 dB	≤ 13 dB	Pass
		VHT, MCS8				
			Ch. 36, Low Channel 5180MHz	11.031 dB	≤ 13 dB	Pass
			Ch. 48, High Channel 5240 MHz	9.723 dB	≤ 13 dB	Pass
			Ch. 52, Low Channel 5260 MHz	9.842 dB	≤ 13 dB	Pass
			Ch. 64, High Channel 5320 MHz	10.92 dB	≤ 13 dB	Pass
			Ch. 100, Low Channel 5500 MHz	9.318 dB	≤ 13 dB	Pass
			Ch. 116, Mid Channel 5580 MHz	10.078 dB	≤ 13 dB	Pass
			Ch. 140, High Channel 5700 MHz	9.788 dB	≤ 13 dB	Pass
	40 MHz					
		VHT, MCS0				
			Ch. 36/40, Low Channel 5190 MHz	10.56 dB	≤ 13 dB	Pass
			Ch. 44/48, High Channel 5230 MHz	10.591 dB	≤ 13 dB	Pass
			Ch. 52/56, Low Channel 5270 MHz	9.691 dB	≤ 13 dB	Pass
			Ch. 60/64, High Channel 5310 MHz	10.267 dB	≤ 13 dB	Pass
			Ch. 100/104, Low Channel 5510 MHz	10.308 dB	≤ 13 dB	Pass
			Ch. 132/136, High Channel 5670 MHz	10.28 dB	≤ 13 dB	Pass
		VHT, MCS9				
			Ch. 36/40, Low Channel 5190 MHz	9.127 dB	≤ 13 dB	Pass
			Ch. 44/48, High Channel 5230 MHz	9.578 dB	≤ 13 dB	Pass
			Ch. 52/56, Low Channel 5270 MHz	9.576 dB	≤ 13 dB	Pass
			Ch. 60/64, High Channel 5310 MHz	10.304 dB	≤ 13 dB	Pass
			Ch. 100/104, Low Channel 5510 MHz	10.473 dB	≤ 13 dB	Pass
			Ch. 132/136, High Channel 5670 MHz	9.96 dB	≤ 13 dB	Pass
	80 MHz					
		VHT, MCS0				
			Ch. 42, Low Channel 5210 MHz	10.364 dB	≤ 13 dB	Pass
			Ch. 58, High Channel 5290 MHz	9.728 dB	≤ 13 dB	Pass
			Ch. 106, Low Channel 5530 MHz	9.597 dB	≤ 13 dB	Pass
		VHT, MCS9				
			Ch. 42, Low Channel 5210 MHz	9.488 dB	≤ 13 dB	Pass
			Ch. 58, High Channel 5290 MHz	10.241 dB	≤ 13 dB	Pass
			Ch. 106, Low Channel 5530 MHz	9.211 dB	≤ 13 dB	Pass

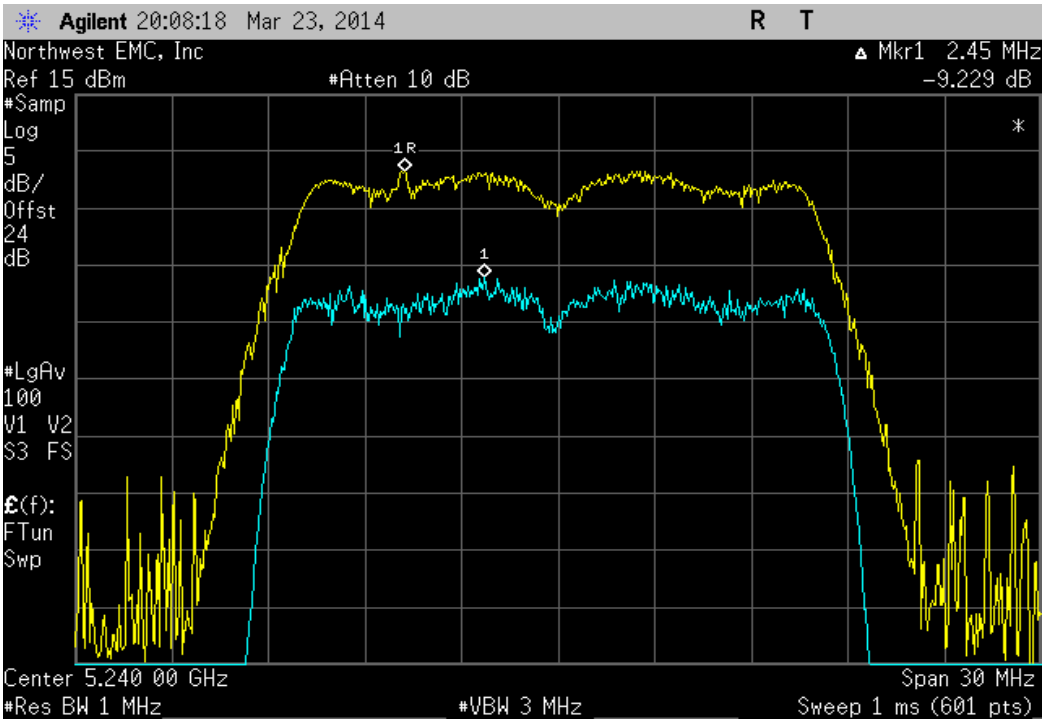
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 36, Low Channel 5180MHz

				Value	Limit	Result
				9.478 dB	≤ 13 dB	Pass



IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 48, High Channel 5240 MHz

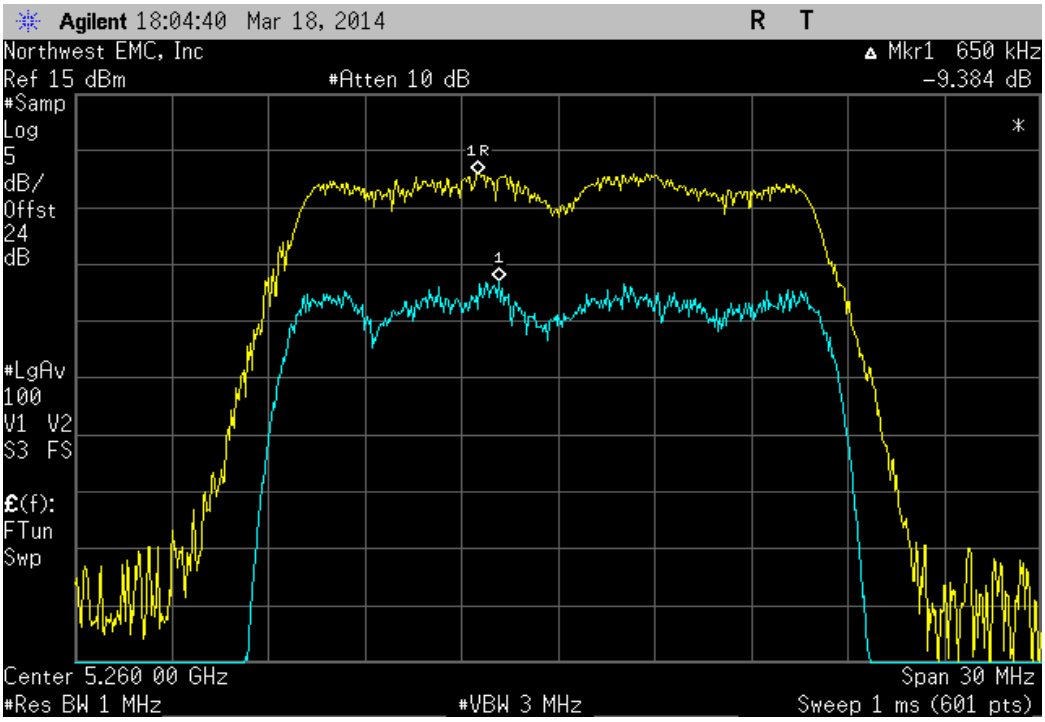
				Value	Limit	Result
				9.229 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

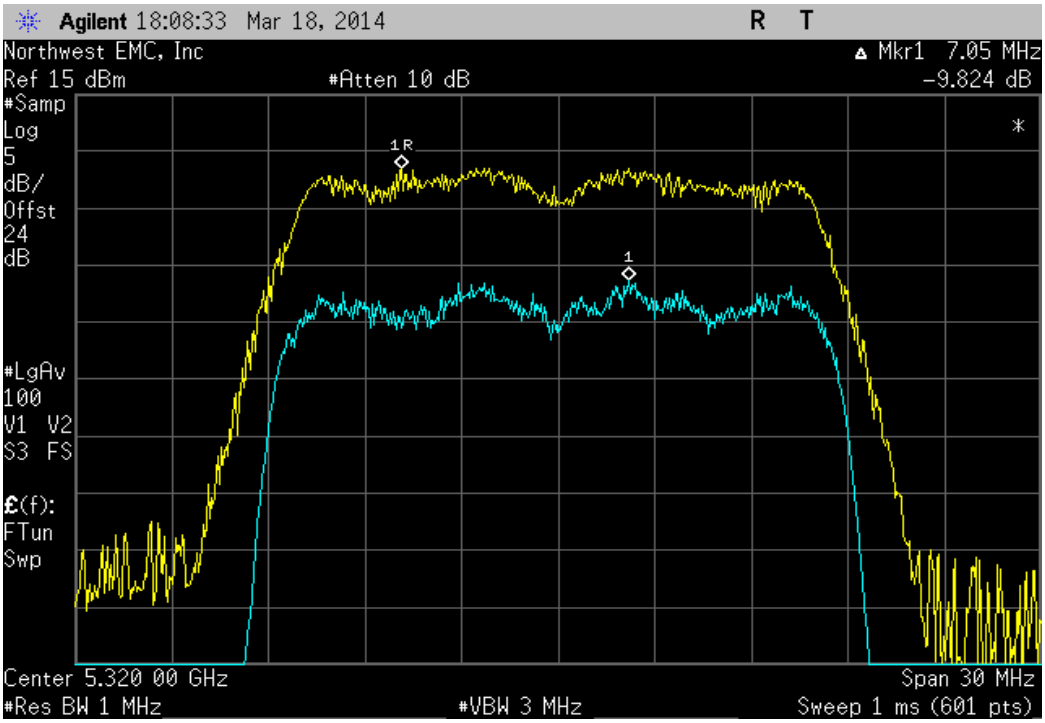
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 52, Low Channel 5260 MHz

				Value	Limit	Result
				9.384 dB	≤ 13 dB	Pass



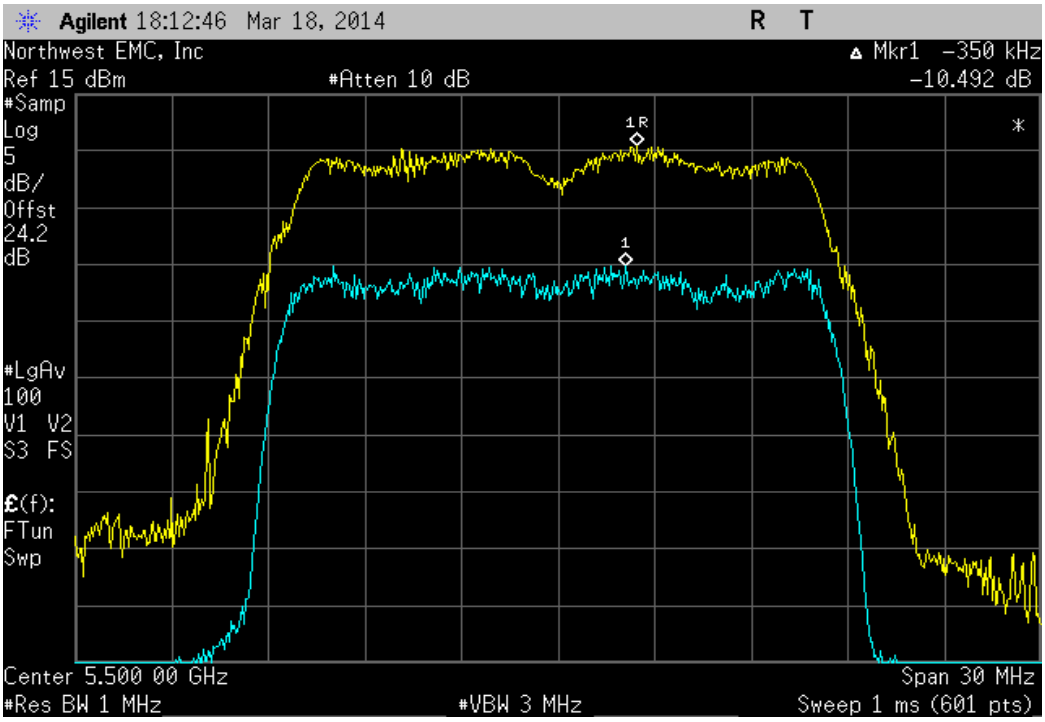
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 64, High Channel 5320 MHz

				Value	Limit	Result
				9.824 dB	≤ 13 dB	Pass



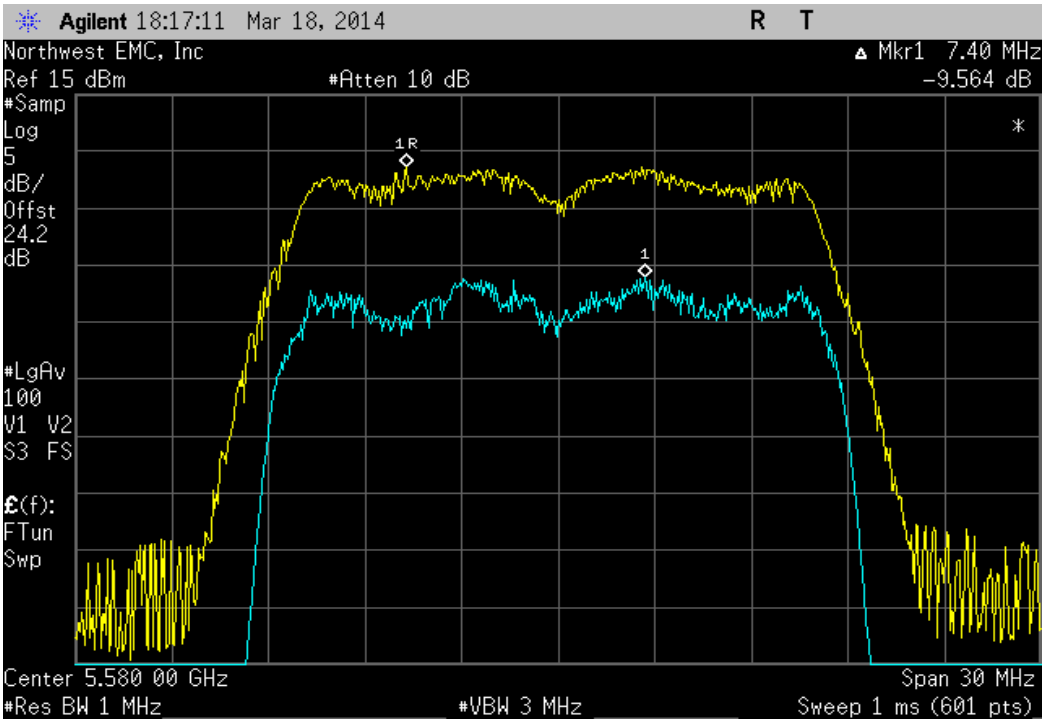
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 100, Low Channel 5500 MHz

				Value	Limit	Result
				10.492 dB	≤ 13 dB	Pass



IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 116, Mid Channel 5580 MHz

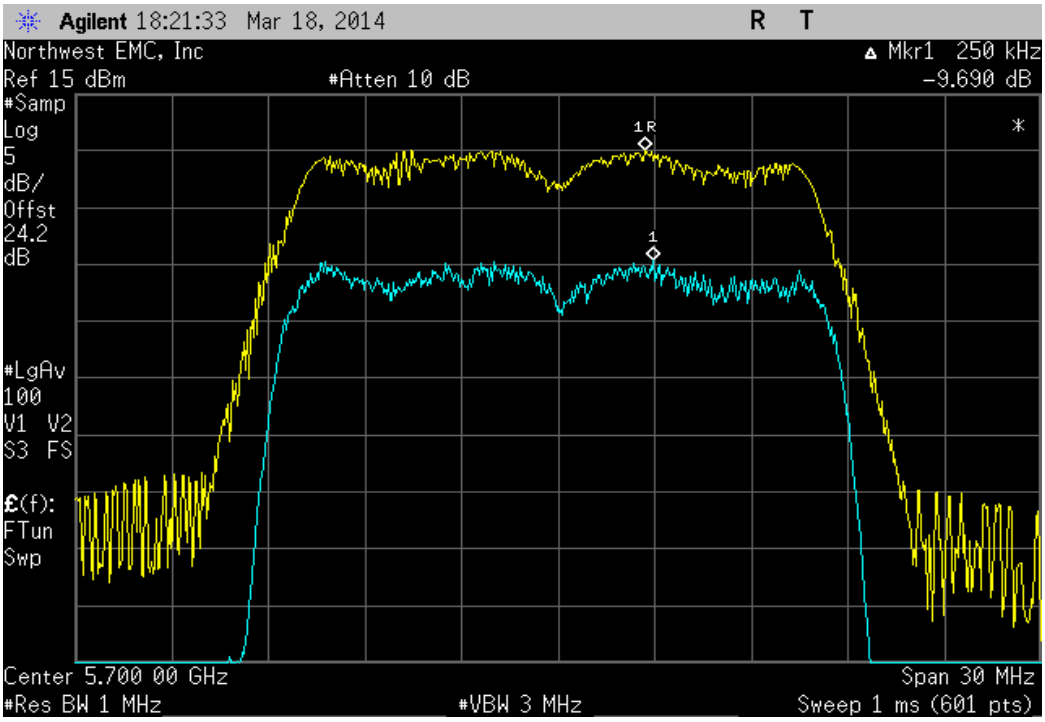
				Value	Limit	Result
				9.564 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

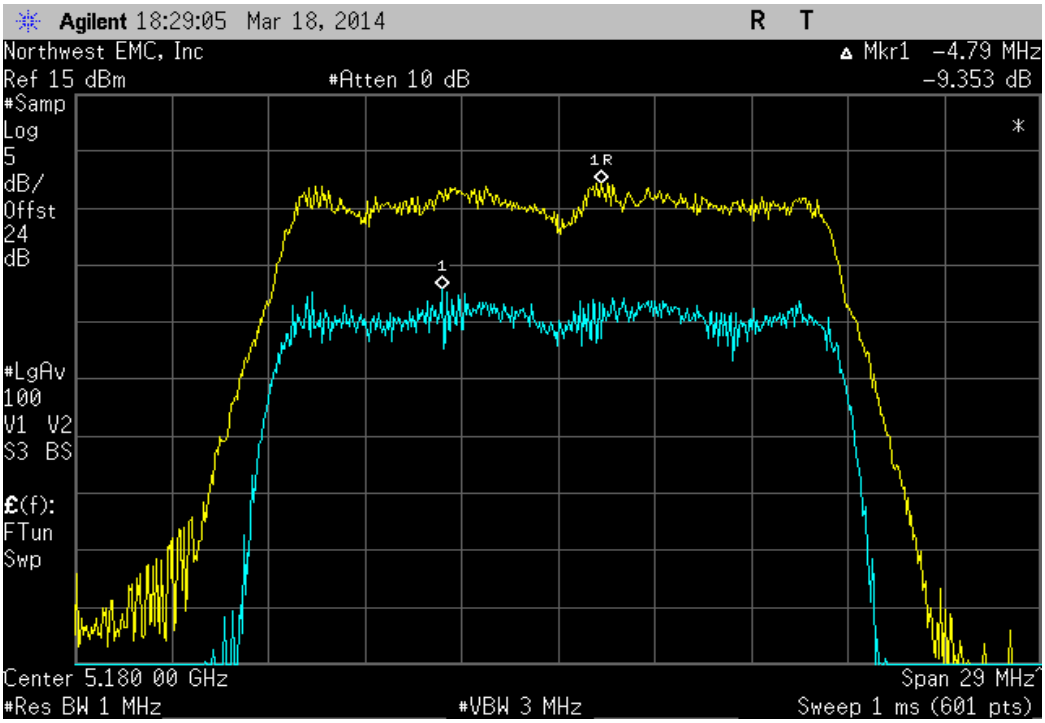
IEEE 802.11(a), 20 MHz, 6 Mbps, Ch. 140, High Channel 5700 MHz

				Value	Limit	Result
				9.69 dB	≤ 13 dB	Pass



IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 36, Low Channel 5180MHz

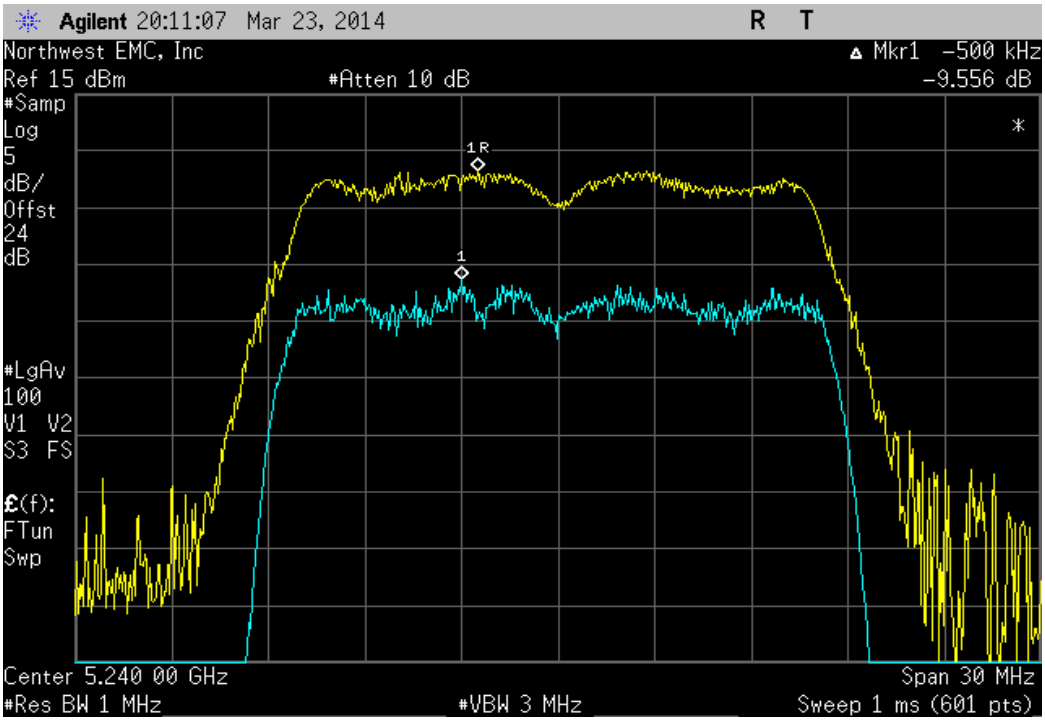
				Value	Limit	Result
				9.353 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

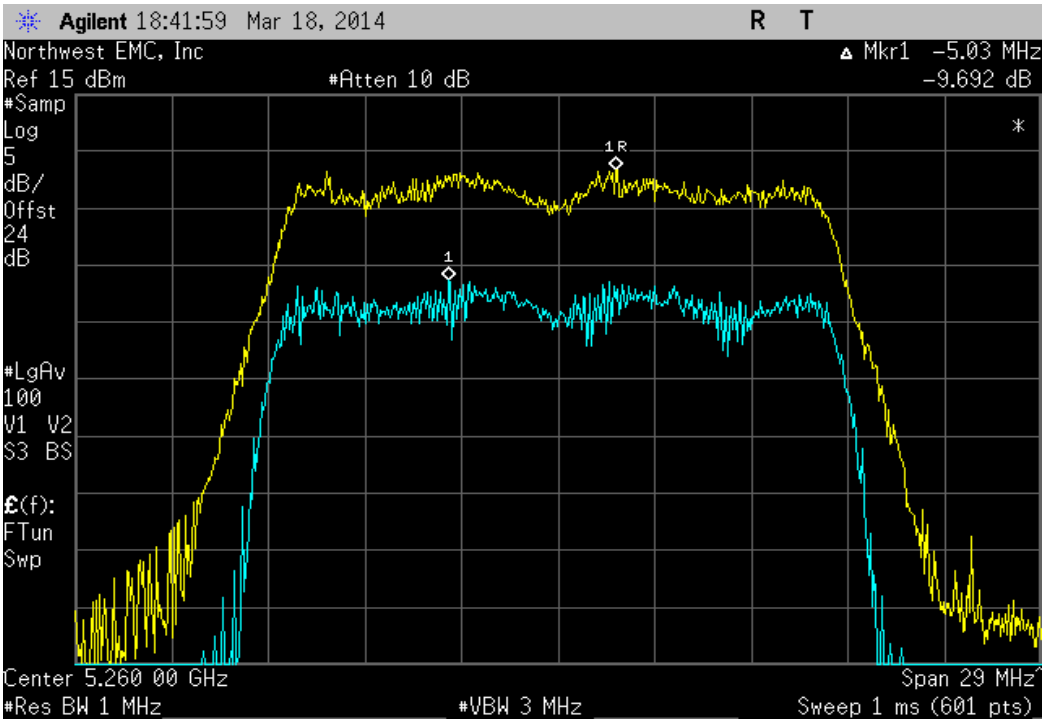
IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 48, High Channel 5240 MHz

				Value	Limit	Result
				9.556 dB	≤ 13 dB	Pass



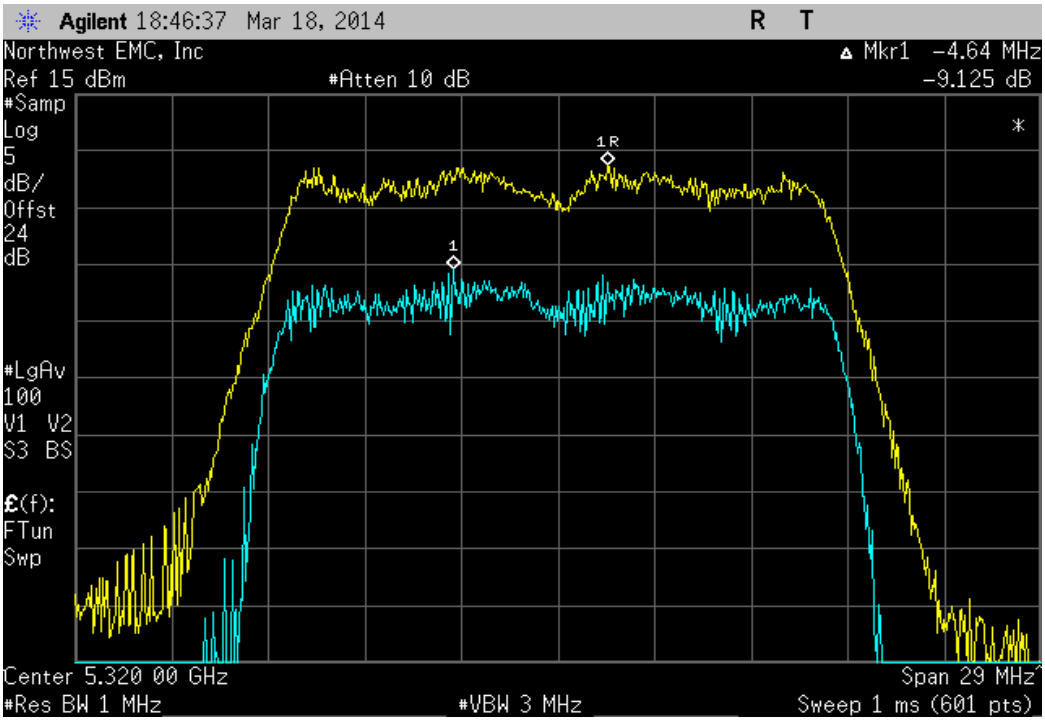
IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 52, Low Channel 5260 MHz

				Value	Limit	Result
				9.692 dB	≤ 13 dB	Pass



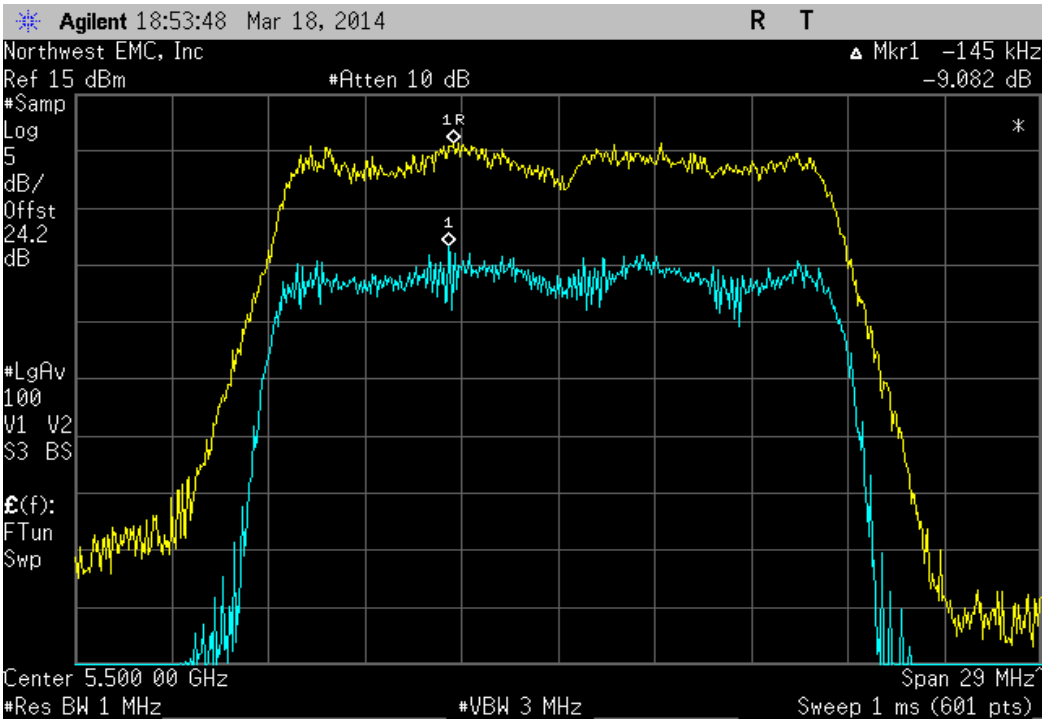
IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 64, High Channel 5320 MHz

				Value	Limit	Result
				9.125 dB	≤ 13 dB	Pass



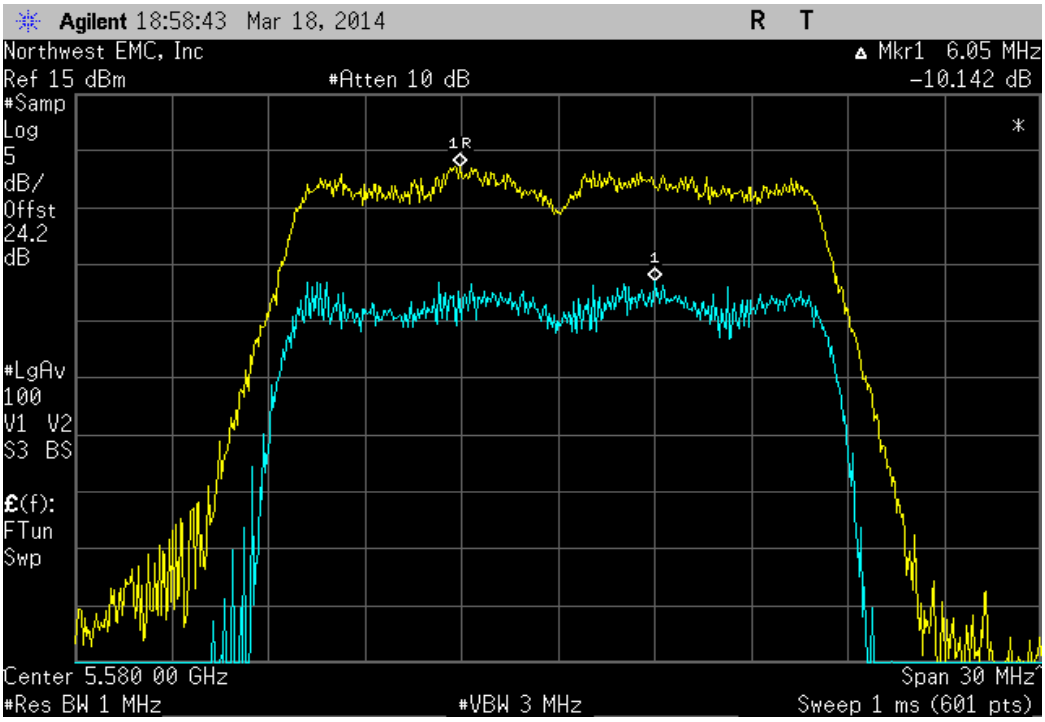
IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 100, Low Channel 5500 MHz

				Value	Limit	Result
				9.082 dB	≤ 13 dB	Pass



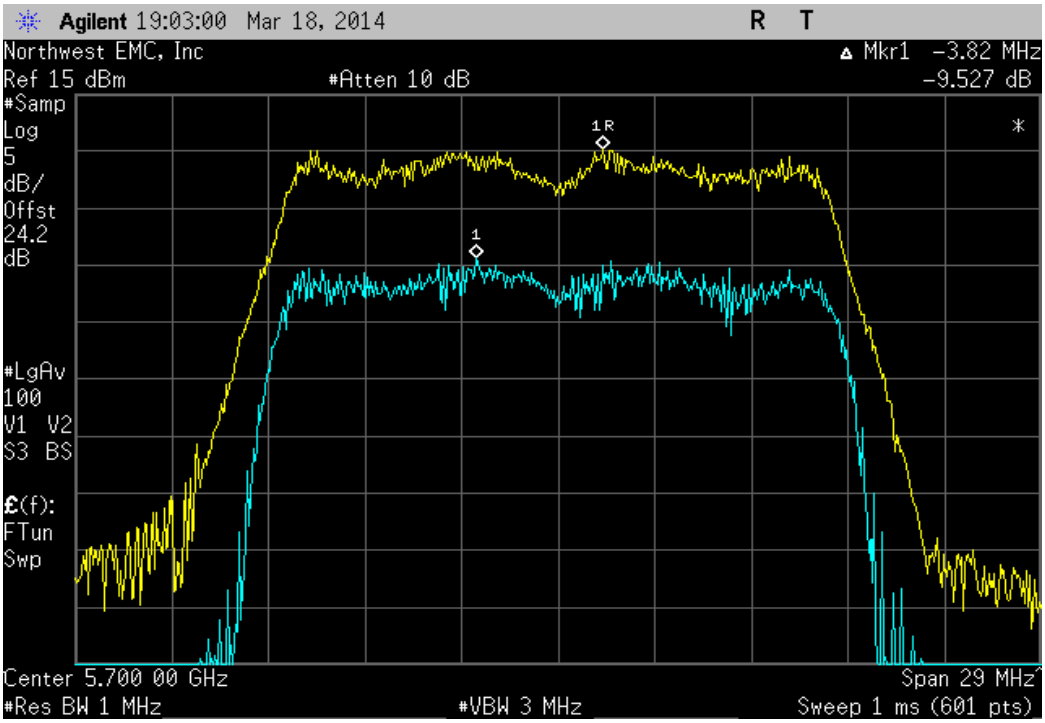
IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 116, Mid Channel 5580 MHz

				Value	Limit	Result
				10.142 dB	≤ 13 dB	Pass



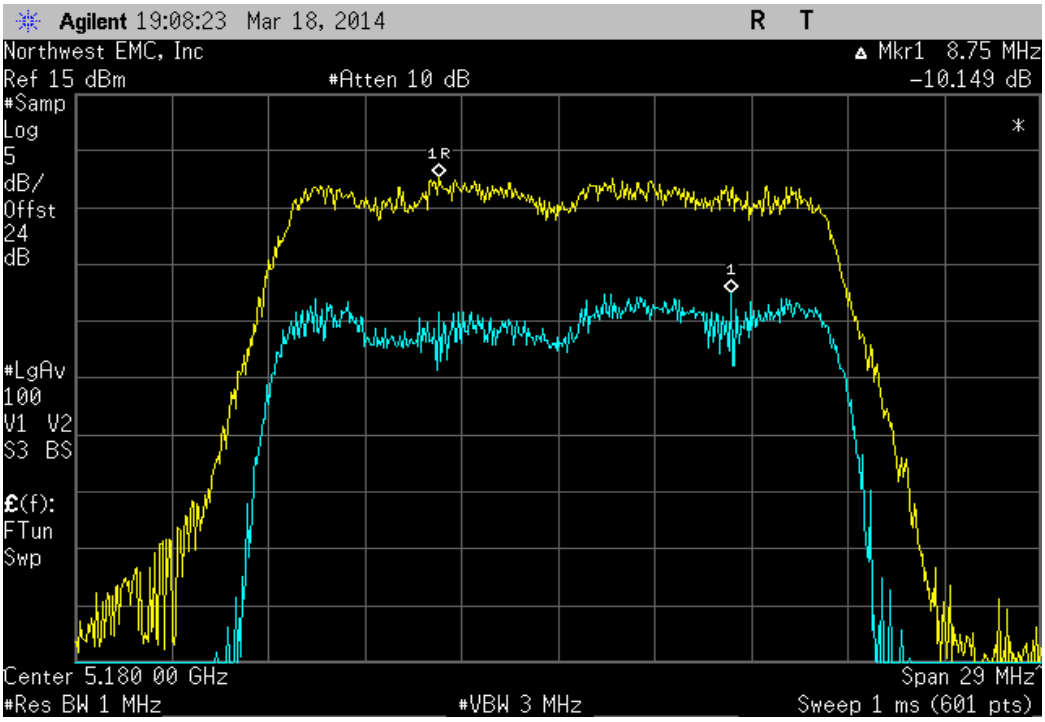
IEEE 802.11(a), 20 MHz, 36 Mbps, Ch. 140, High Channel 5700 MHz

				Value	Limit	Result
				9.527 dB	≤ 13 dB	Pass



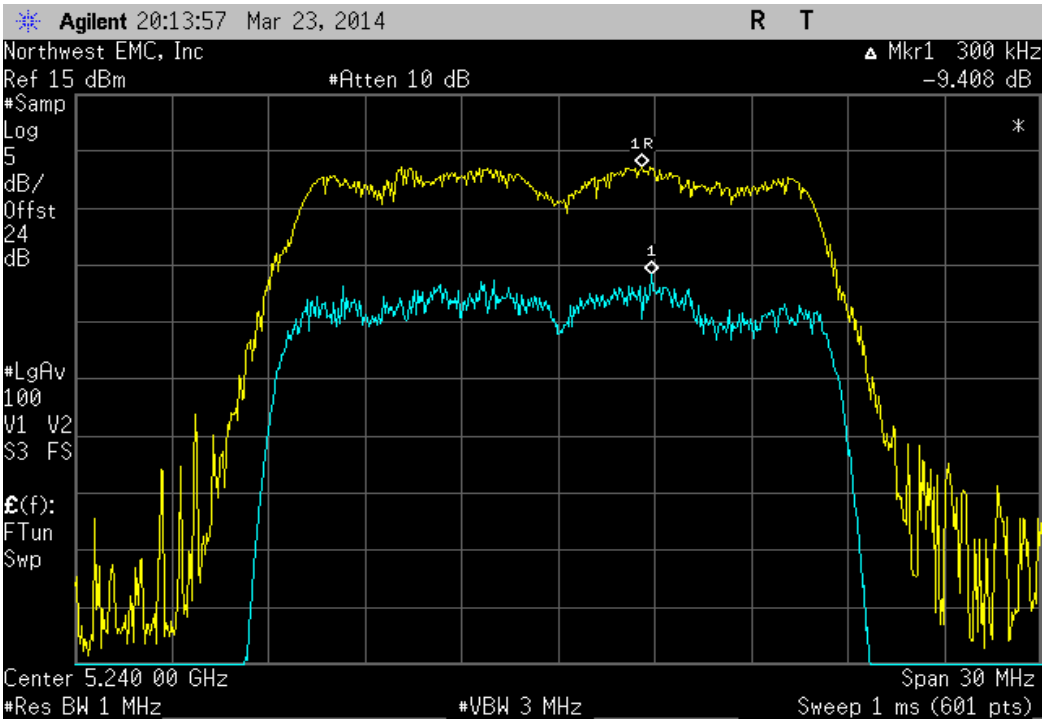
IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 36, Low Channel 5180MHz

				Value	Limit	Result
				10.149 dB	≤ 13 dB	Pass



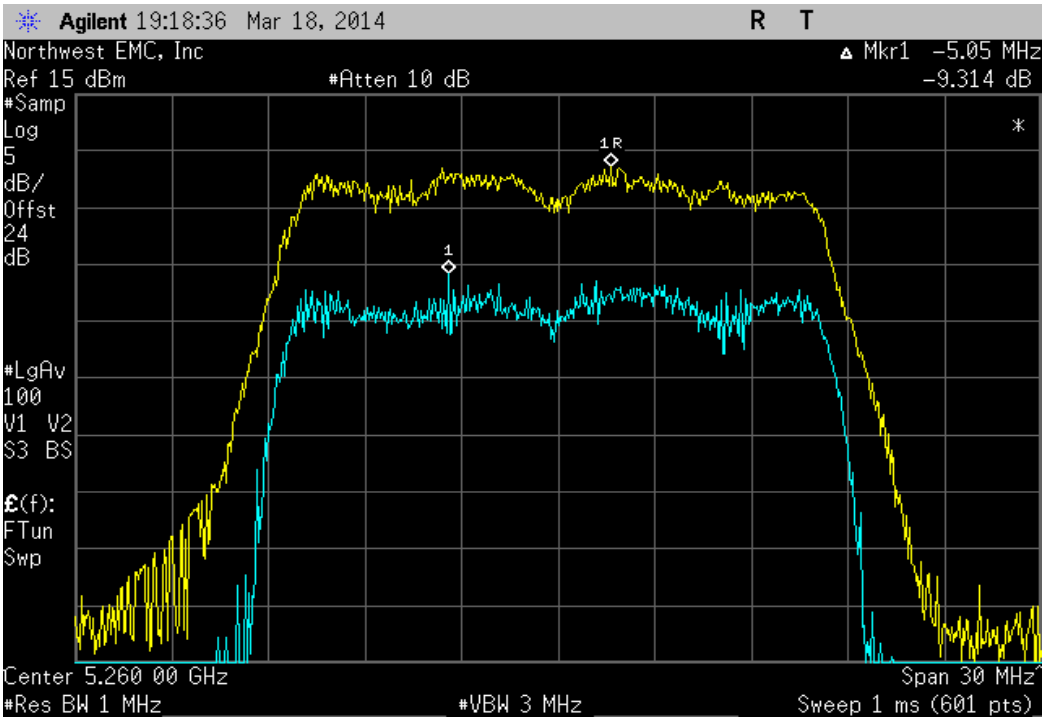
IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 48, High Channel 5240 MHz

				Value	Limit	Result
				9.408 dB	≤ 13 dB	Pass



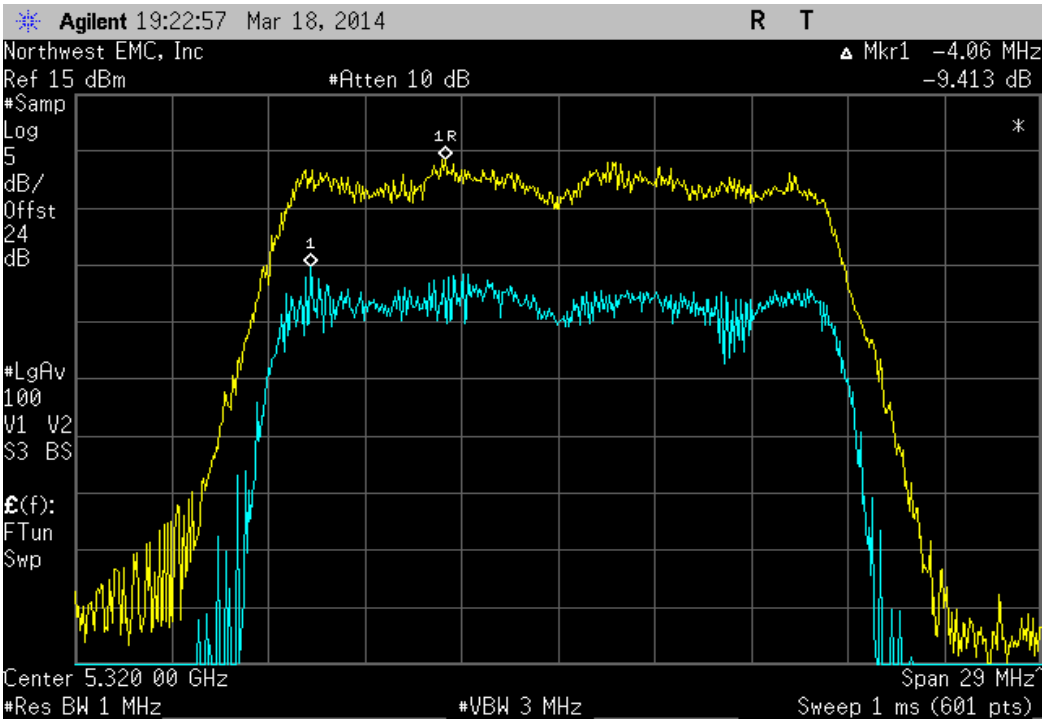
IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 52, Low Channel 5260 MHz

					Value	Limit	Result
					9.314 dB	≤ 13 dB	Pass



IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 64, High Channel 5320 MHz

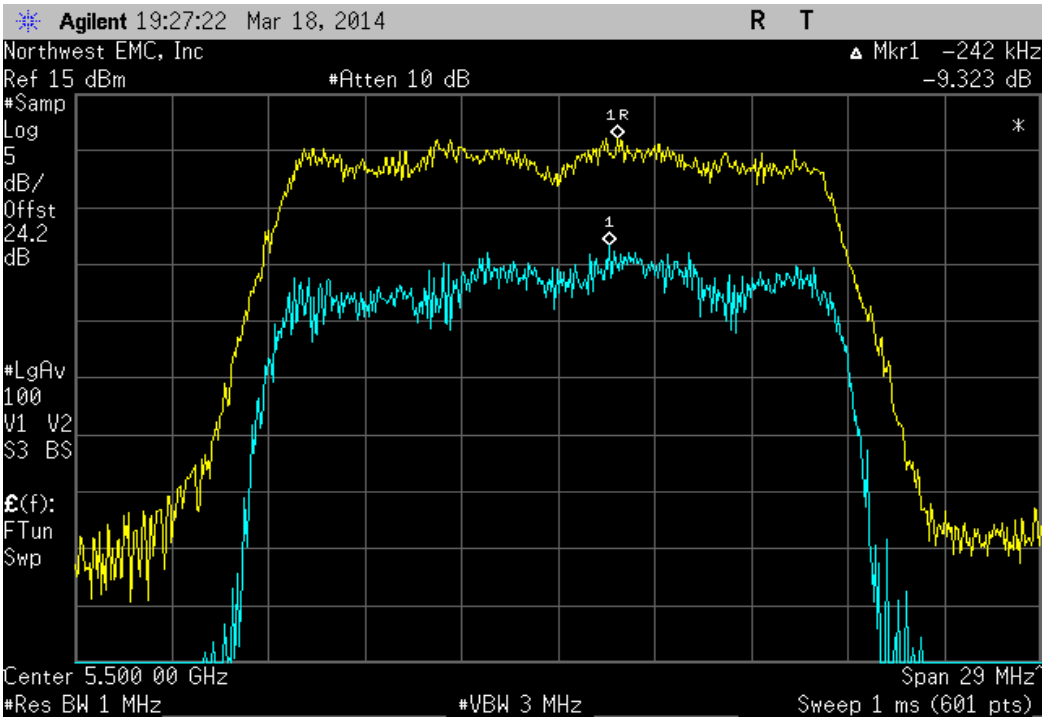
					Value	Limit	Result
					9.413 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

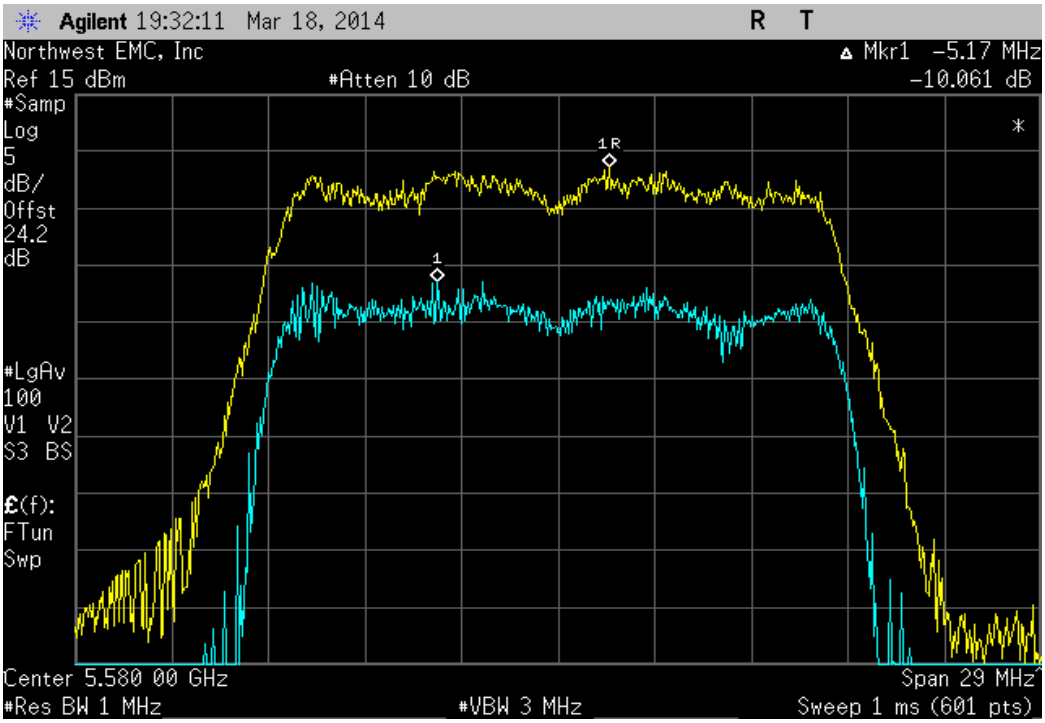
IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 100, Low Channel 5500 MHz

				Value	Limit	Result
				9.323 dB	≤ 13 dB	Pass



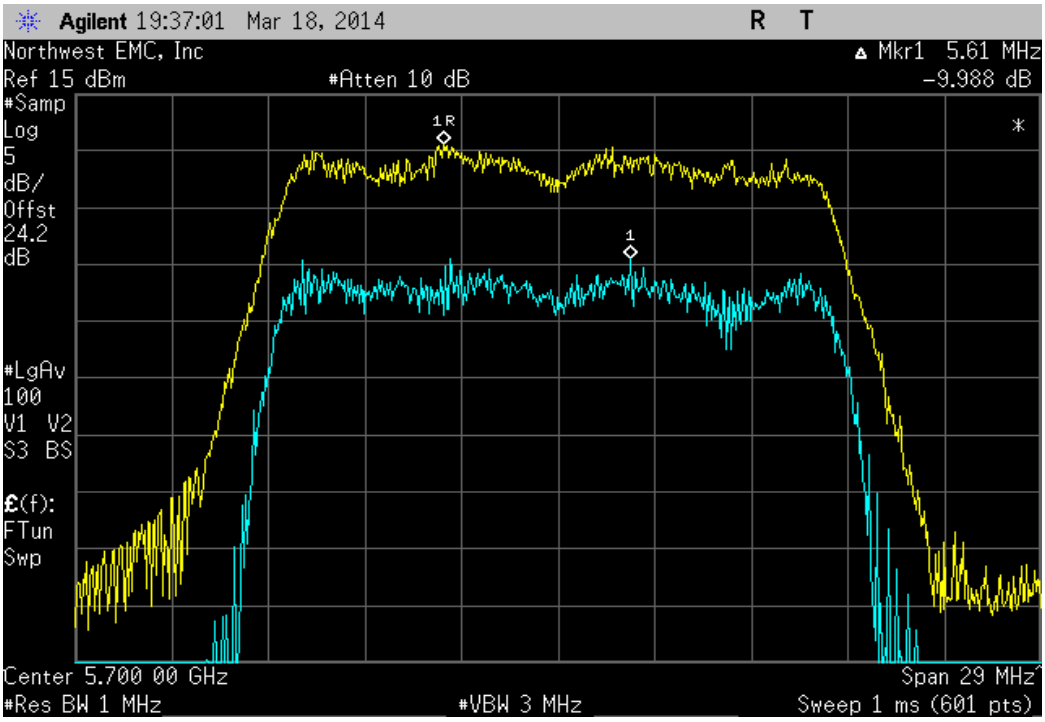
IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 116, Mid Channel 5580 MHz

				Value	Limit	Result
				10.061 dB	≤ 13 dB	Pass



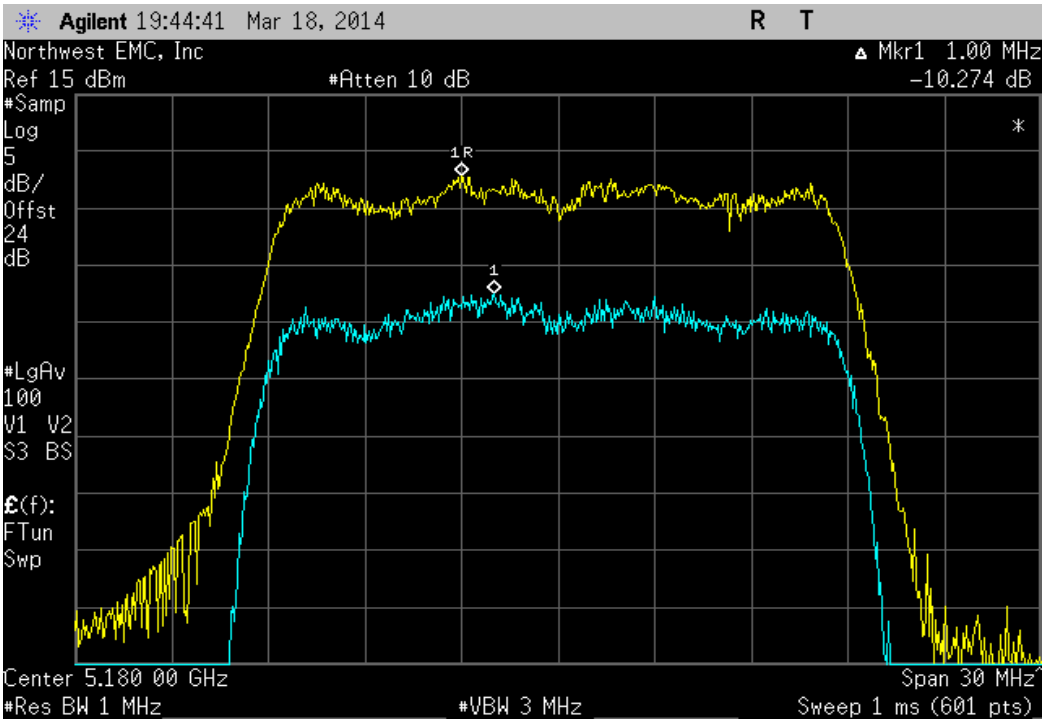
IEEE 802.11(a), 20 MHz, 54 Mbps, Ch. 140, High Channel 5700 MHz

				Value	Limit	Result
				9.988 dB	≤ 13 dB	Pass



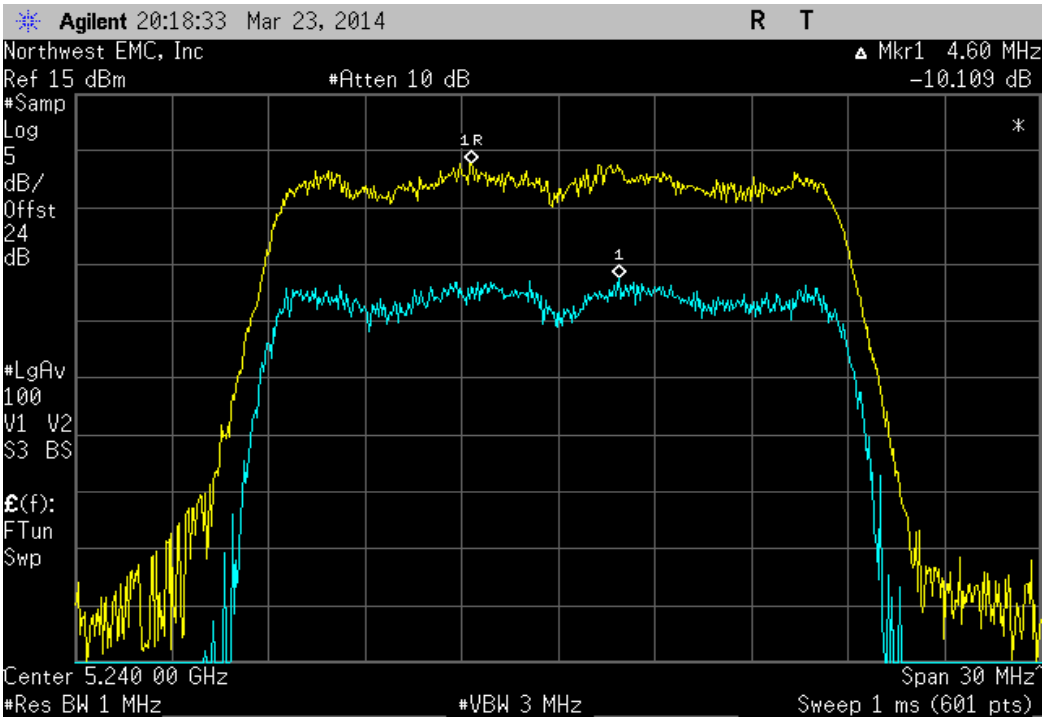
IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 36, Low Channel 5180MHz

				Value	Limit	Result
				10.274 dB	≤ 13 dB	Pass



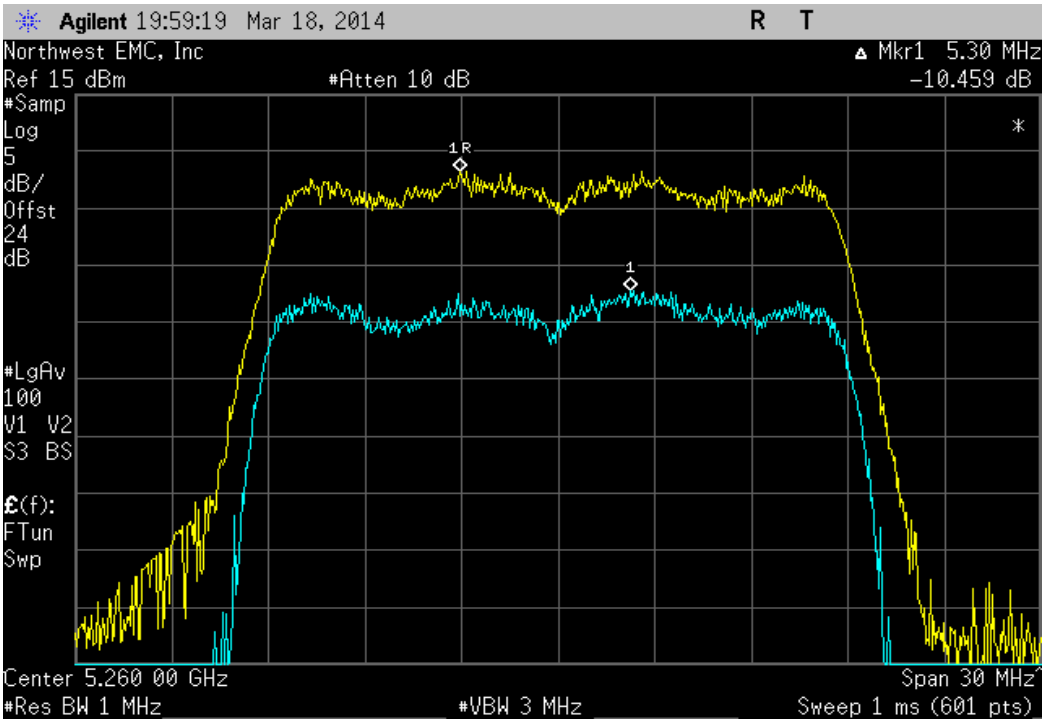
IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 48, High Channel 5240 MHz

				Value	Limit	Result
				10.109 dB	≤ 13 dB	Pass



IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 52, Low Channel 5260 MHz

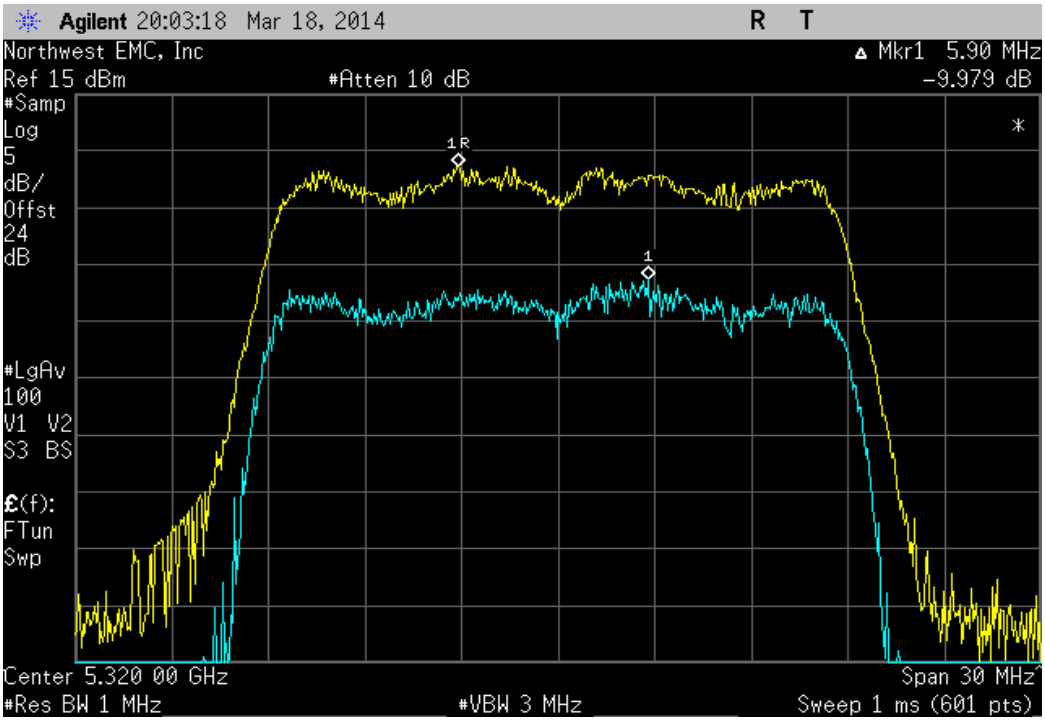
				Value	Limit	Result
				10.459 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

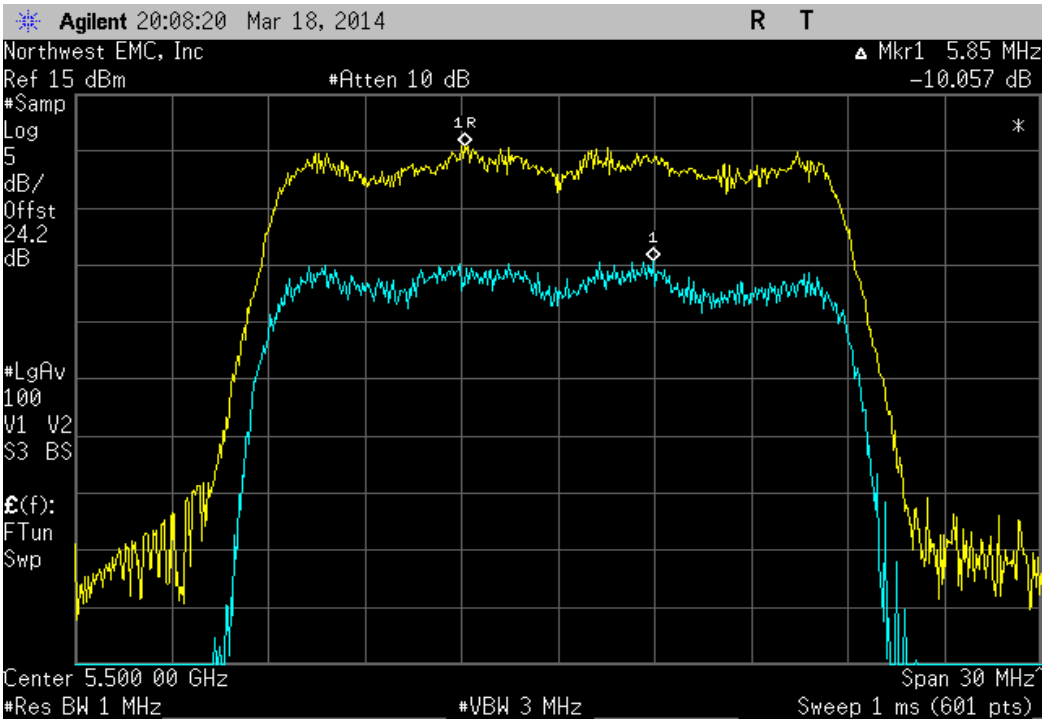
IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 64, High Channel 5320 MHz

				Value	Limit	Result
				9.979 dB	≤ 13 dB	Pass



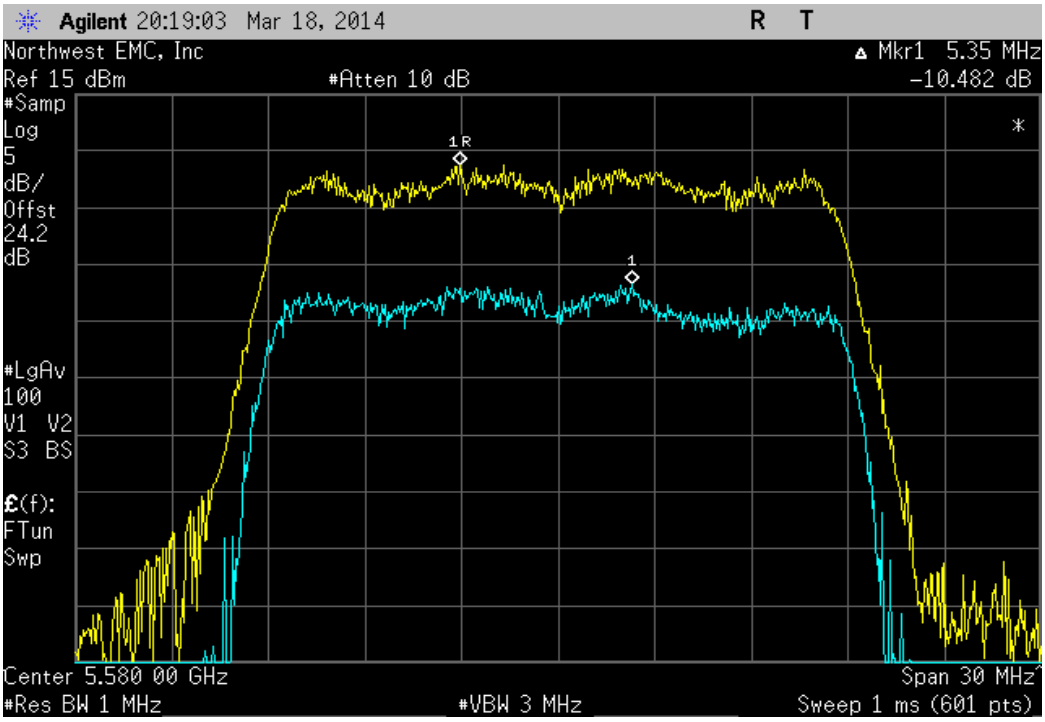
IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 100, Low Channel 5500 MHz

				Value	Limit	Result
				10.057 dB	≤ 13 dB	Pass



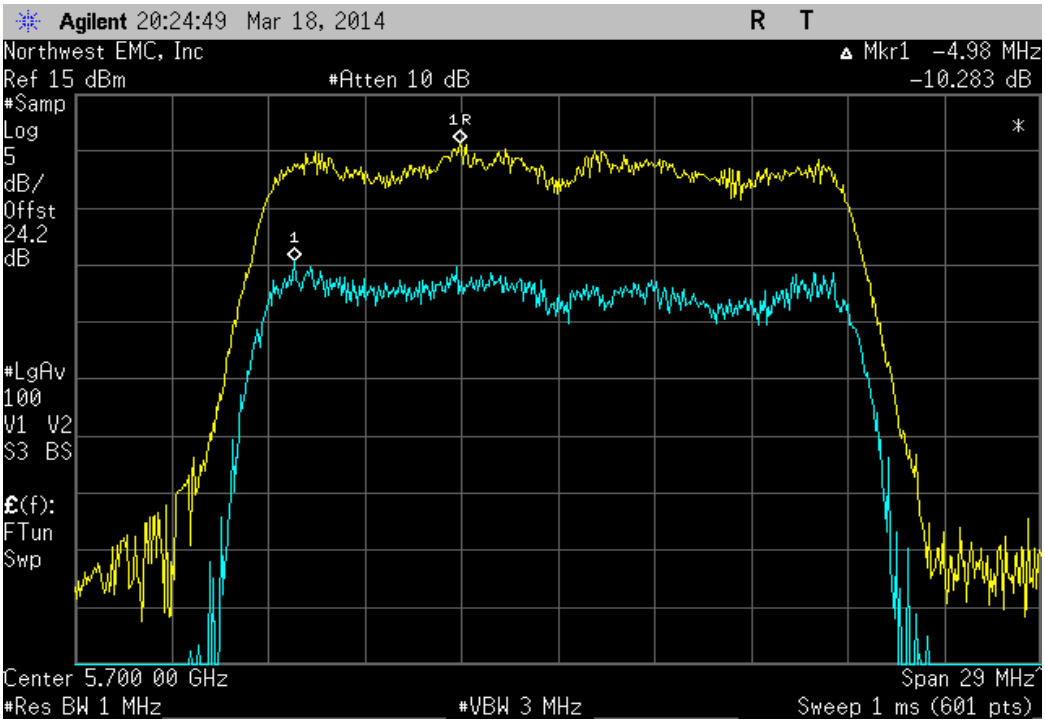
IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 116, Mid Channel 5580 MHz

				Value	Limit	Result
				10.482 dB	≤ 13 dB	Pass



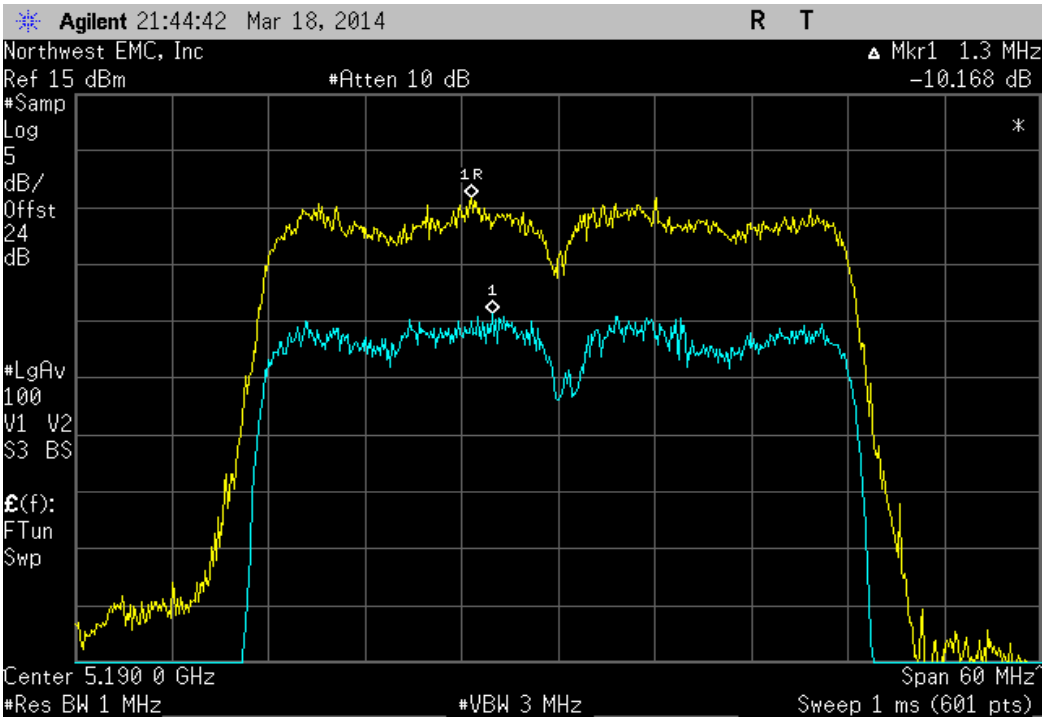
IEEE 802.11(n), 20 MHz, HT, MCS7, Ch. 140, High Channel 5700 MHz

				Value	Limit	Result
				10.283 dB	≤ 13 dB	Pass



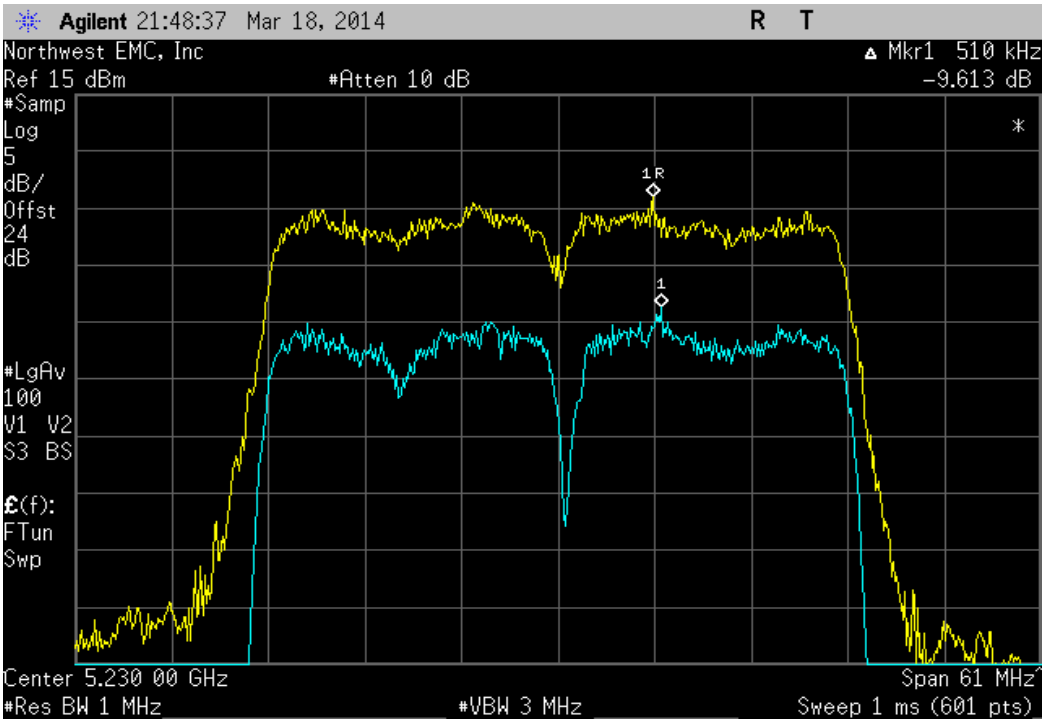
IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 36/40, Low Channel 5190 MHz

				Value	Limit	Result
				10.168 dB	≤ 13 dB	Pass



IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 44/48, High Channel 5230 MHz

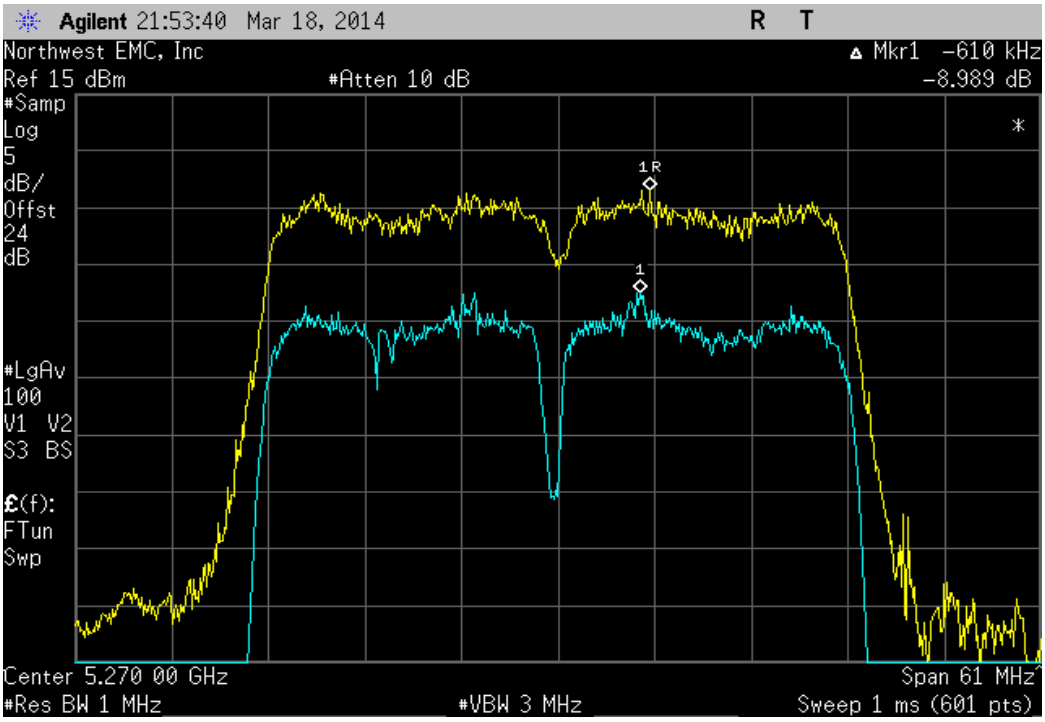
				Value	Limit	Result
				9.613 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

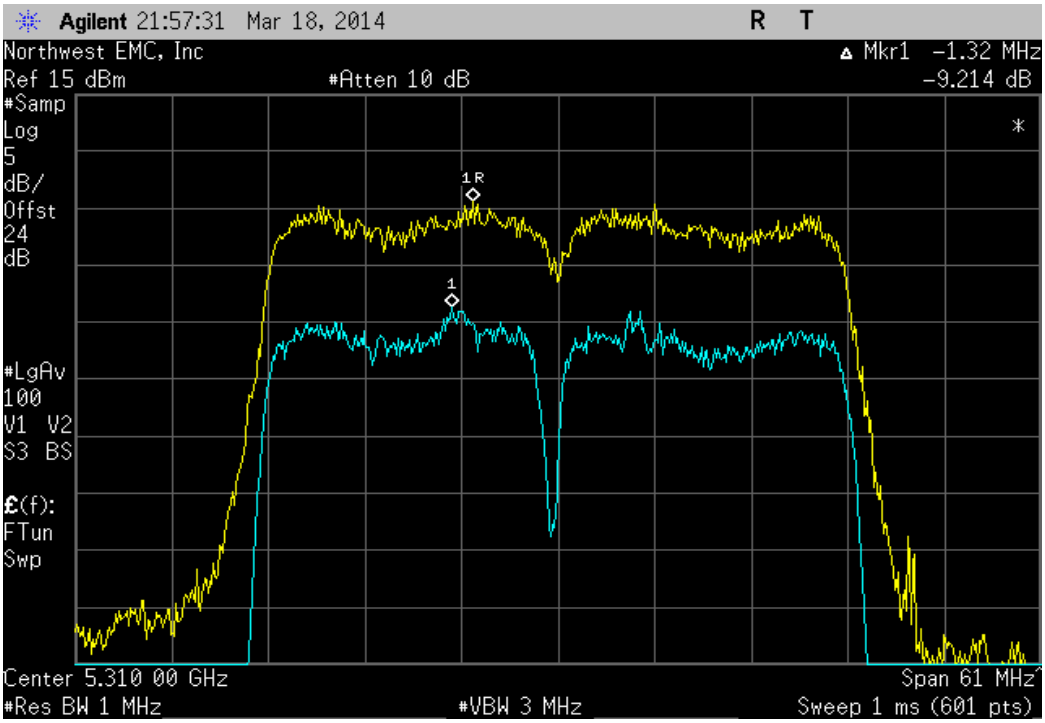
IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 52/56, Low Channel 5270 MHz

				Value	Limit	Result
				8.989 dB	≤ 13 dB	Pass



IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 60/64, High Channel 5310 MHz

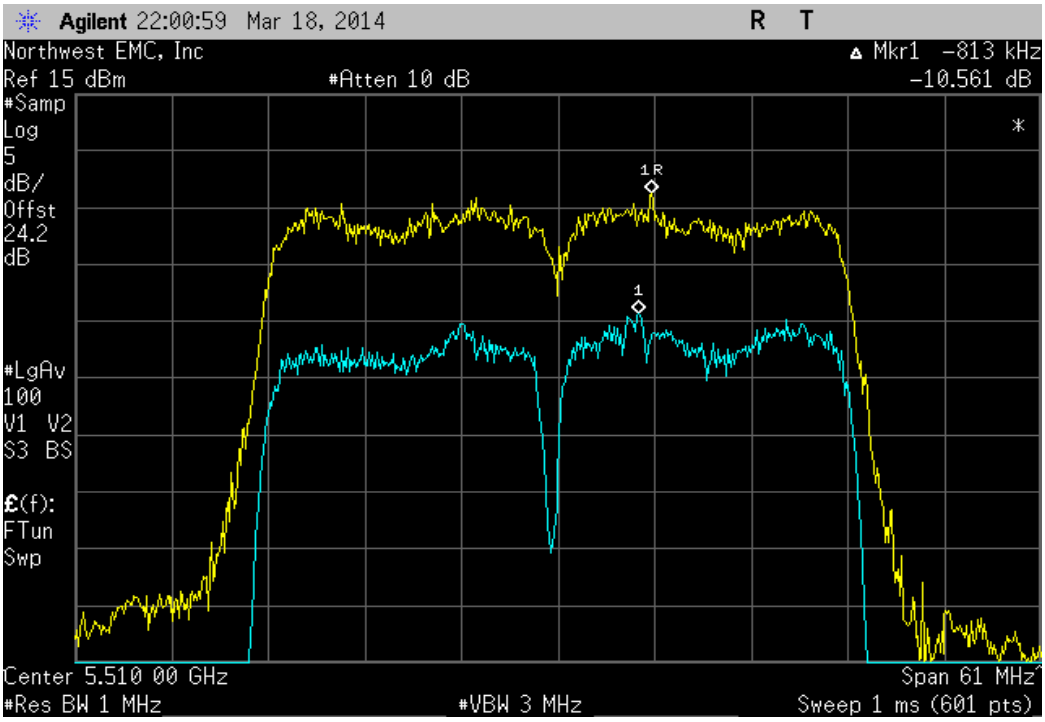
				Value	Limit	Result
				9.214 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

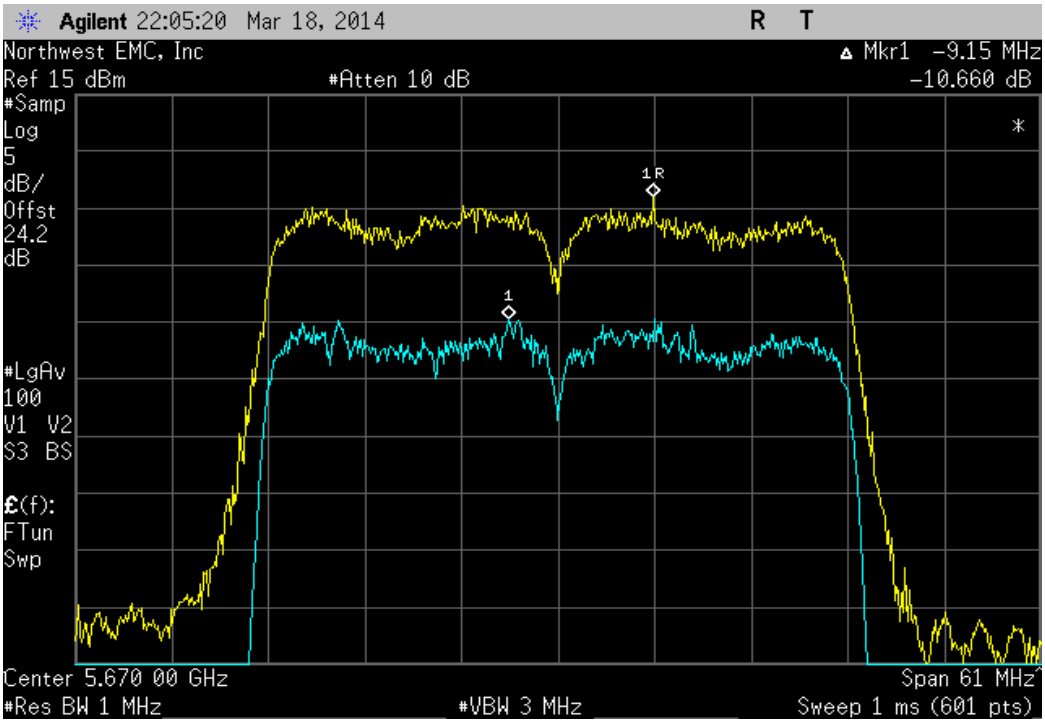
IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 100/104, Low Channel 5510 MHz

Value	Limit	Result
10.561 dB	≤ 13 dB	Pass



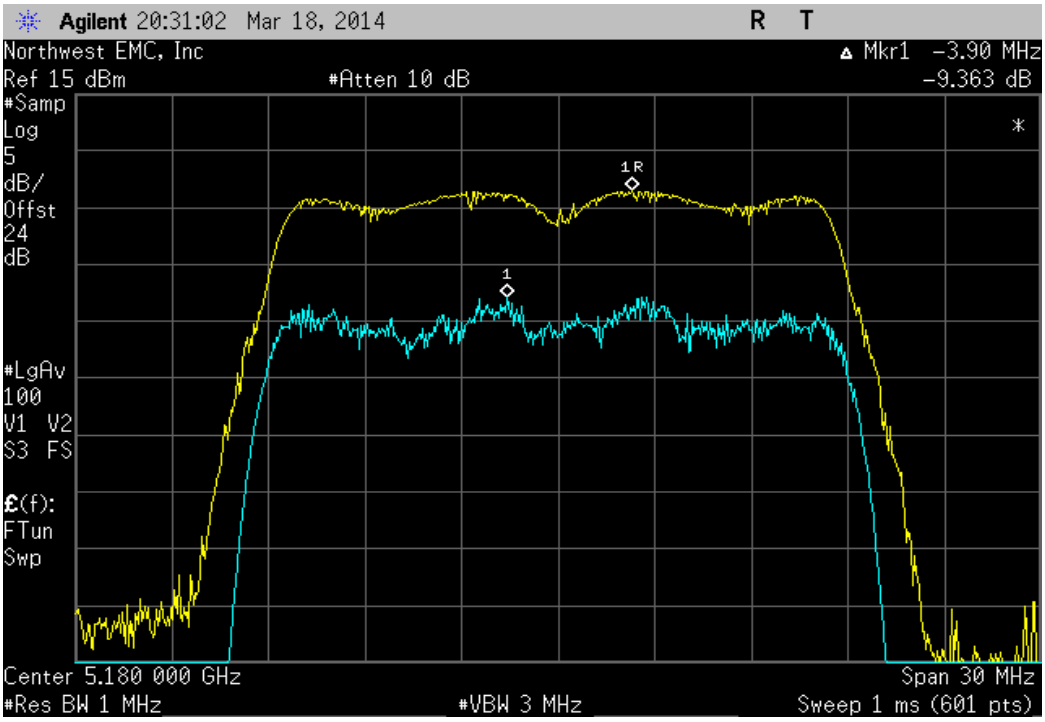
IEEE 802.11(n), 40 MHz, HT, MCS7, Ch. 132/136, High Channel 5670 MHz

Value	Limit	Result
10.66 dB	≤ 13 dB	Pass



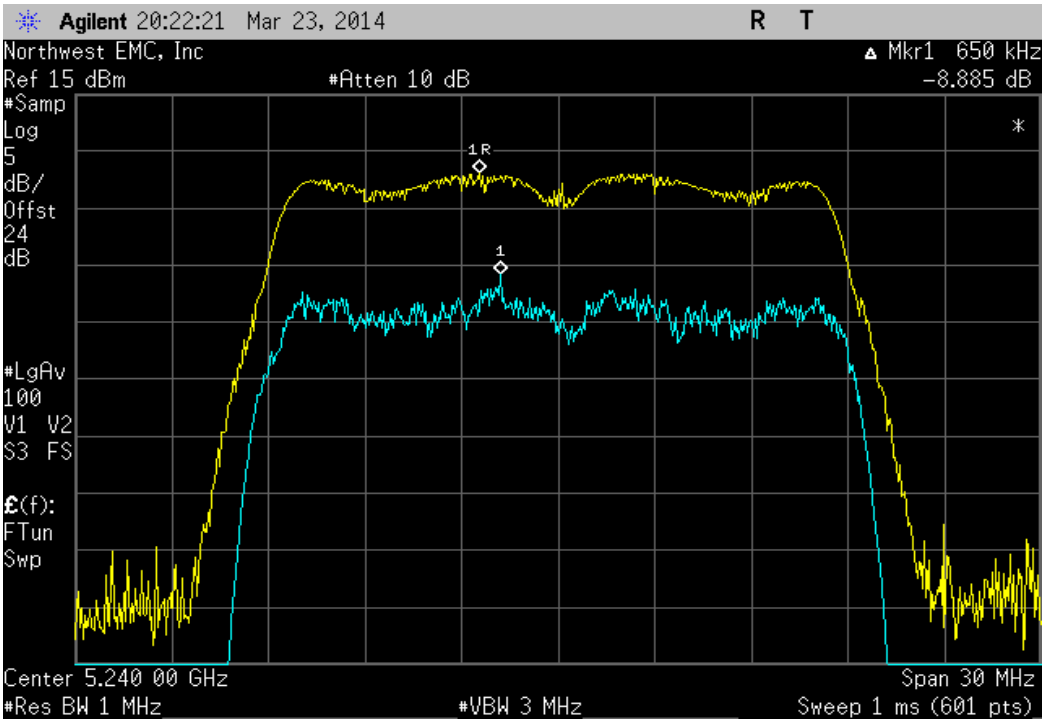
IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 36, Low Channel 5180MHz

				Value	Limit	Result
				9.363 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 48, High Channel 5240 MHz

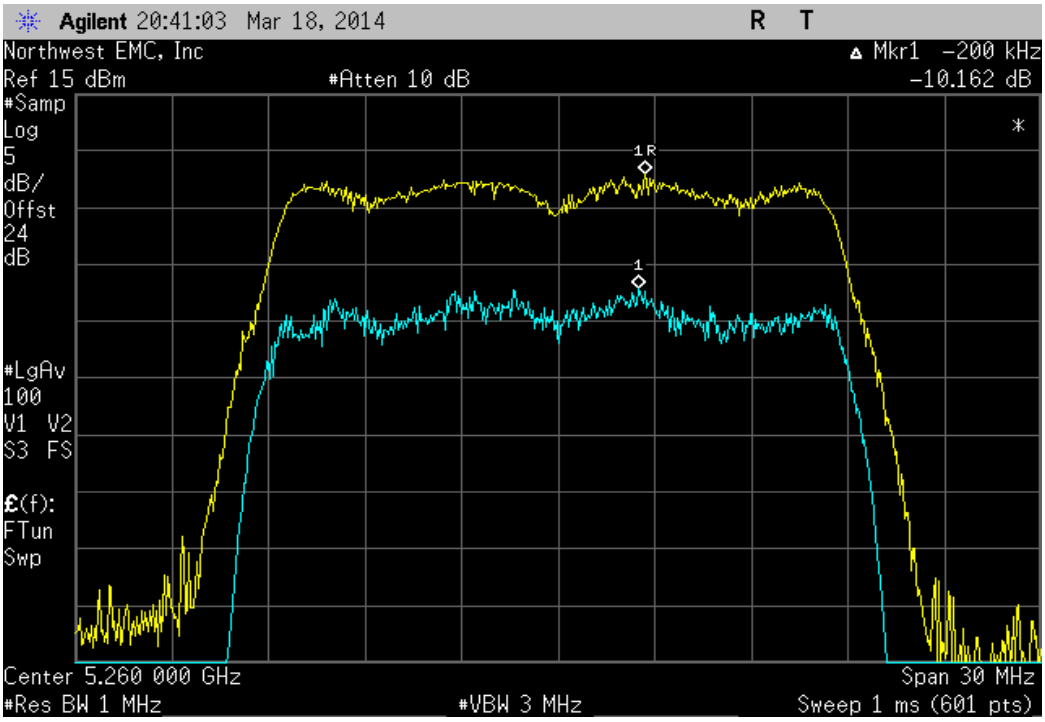
				Value	Limit	Result
				8.885 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

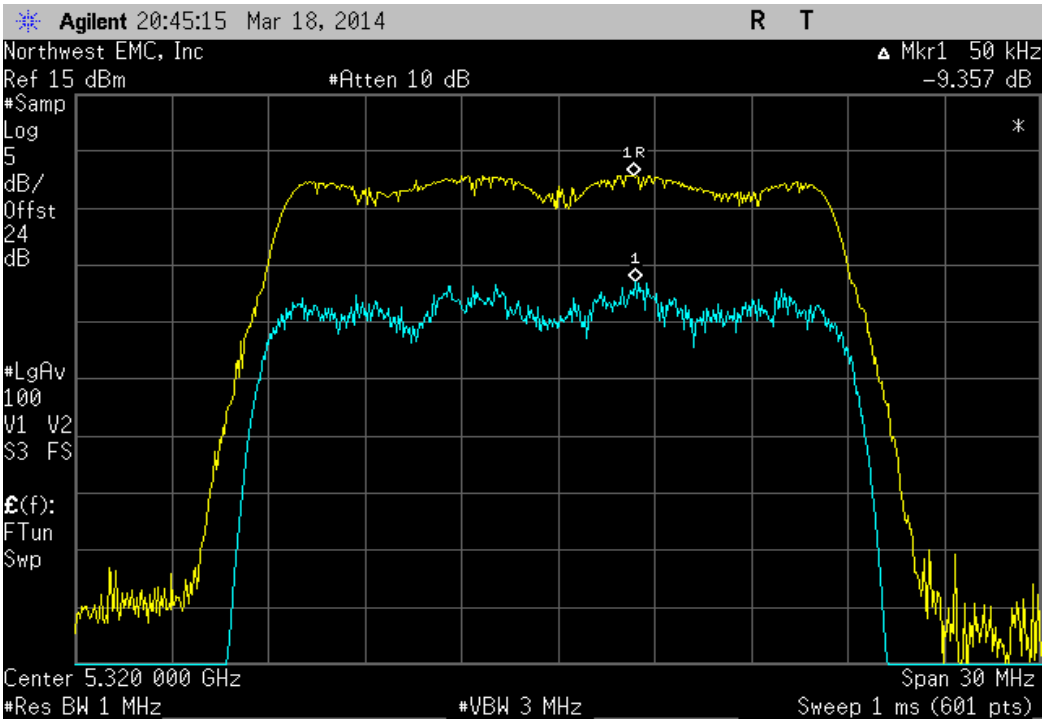
IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 52, Low Channel 5260 MHz

				Value	Limit	Result
				10.162 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 64, High Channel 5320 MHz

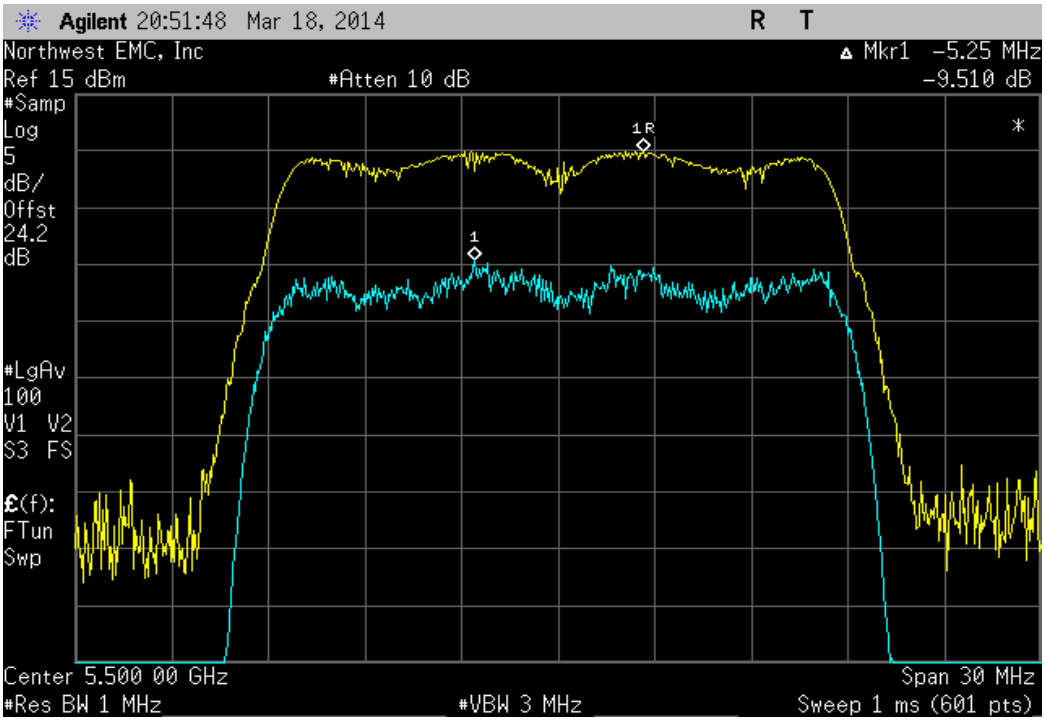
				Value	Limit	Result
				9.357 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

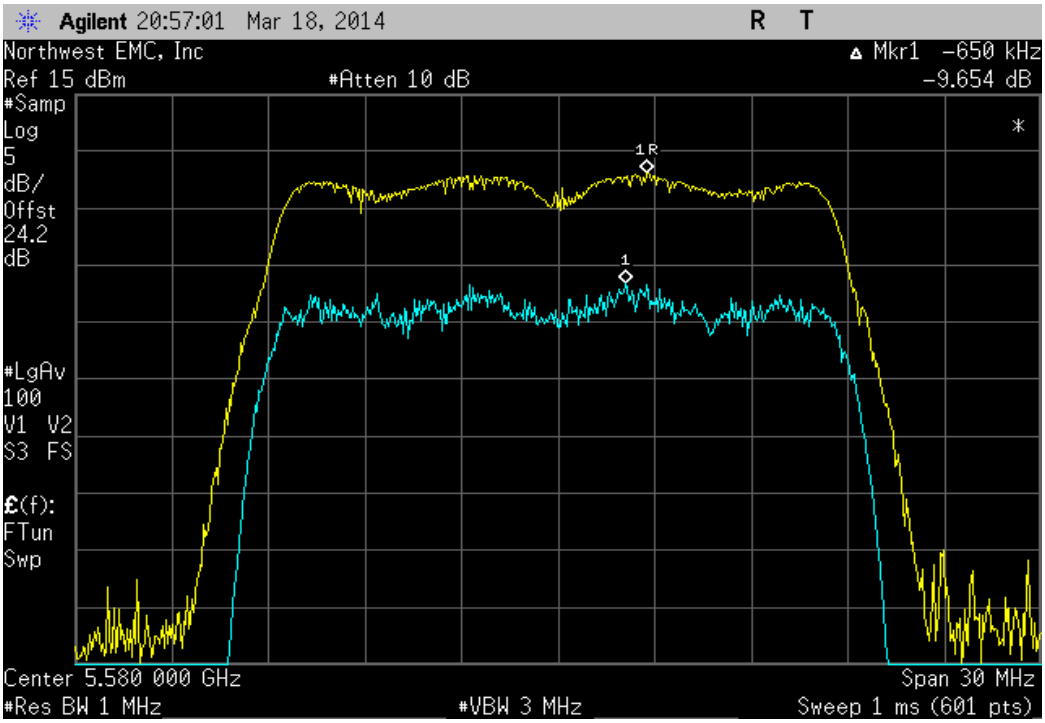
IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 100, Low Channel 5500 MHz

				Value	Limit	Result
				9.51 dB	≤ 13 dB	Pass



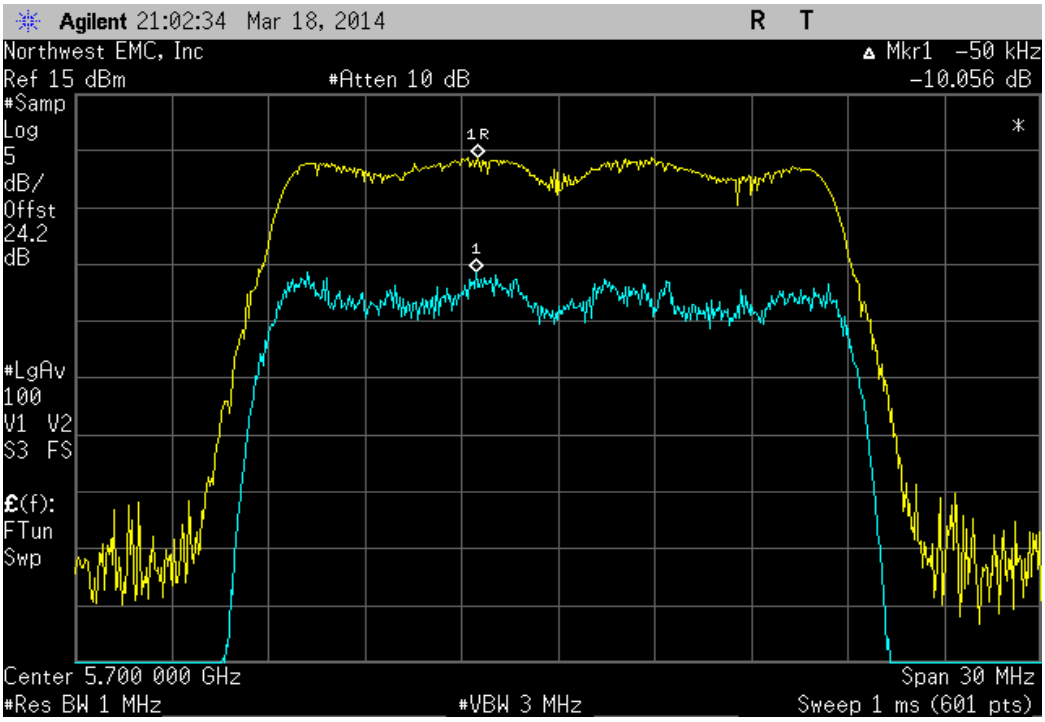
IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 116, Mid Channel 5580 MHz

				Value	Limit	Result
				9.654 dB	≤ 13 dB	Pass



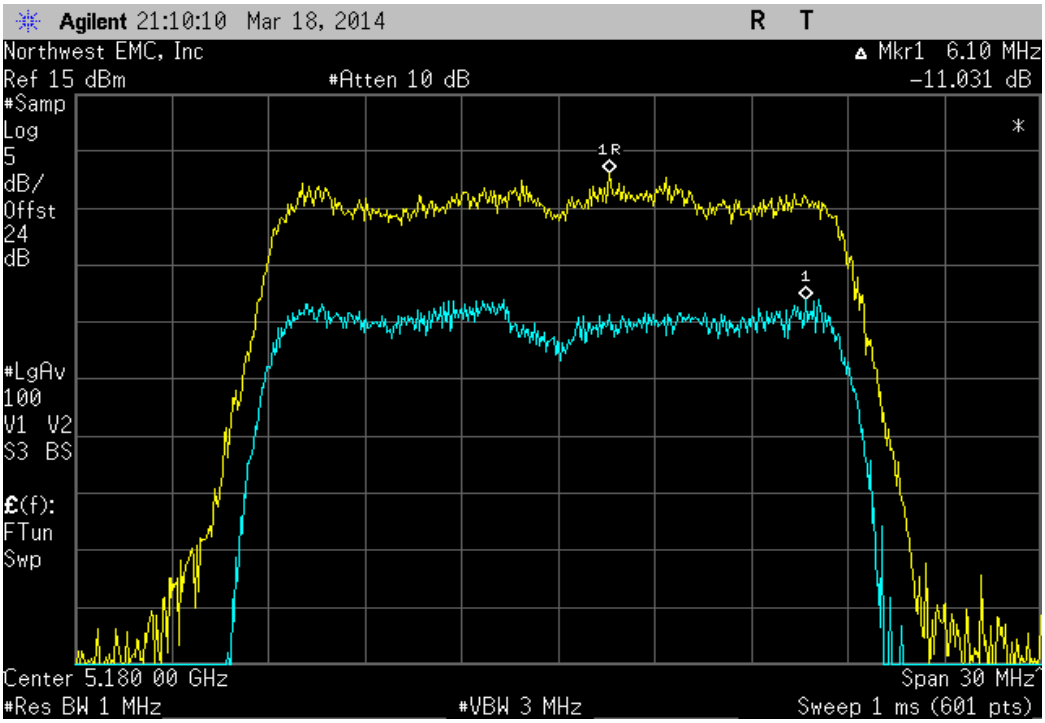
IEEE 802.11(ac), 20 MHz, VHT, MCS0, Ch. 140, High Channel 5700 MHz

				Value	Limit	Result
				10.056 dB	≤ 13 dB	Pass



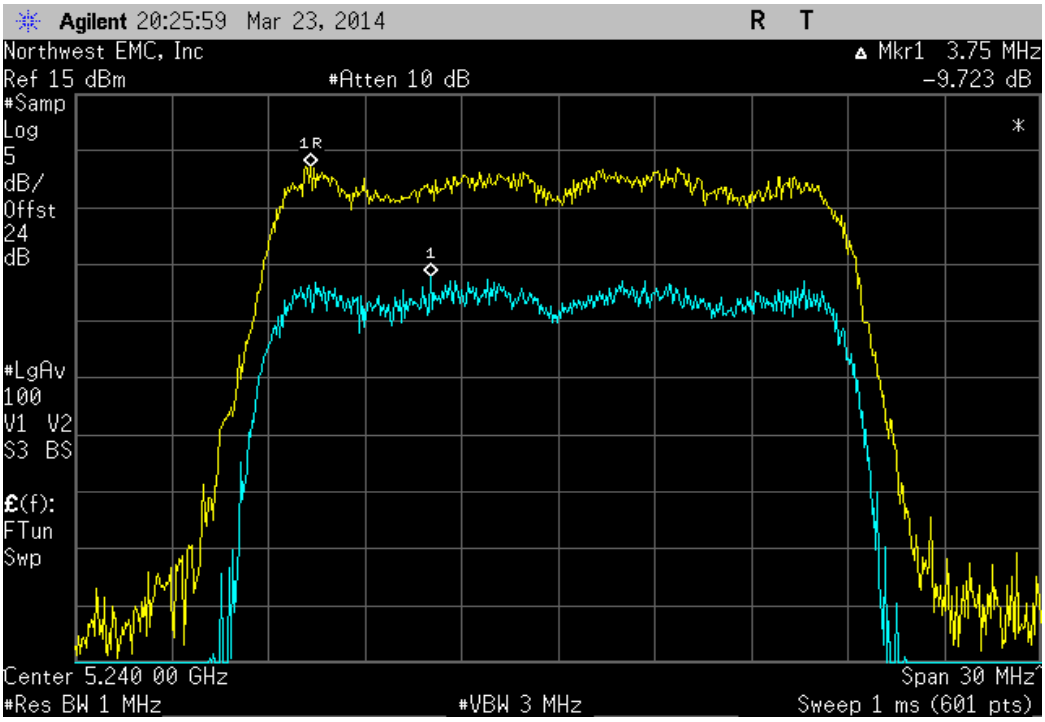
IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 36, Low Channel 5180MHz

				Value	Limit	Result
				11.031 dB	≤ 13 dB	Pass



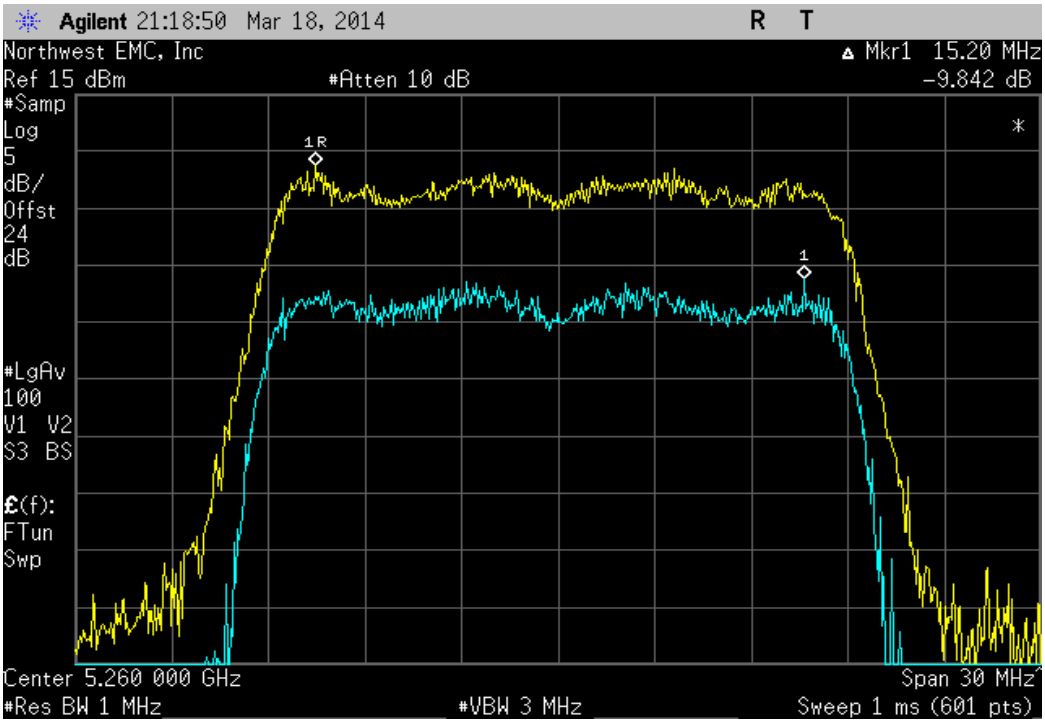
IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 48, High Channel 5240 MHz

				Value	Limit	Result
				9.723 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 52, Low Channel 5260 MHz

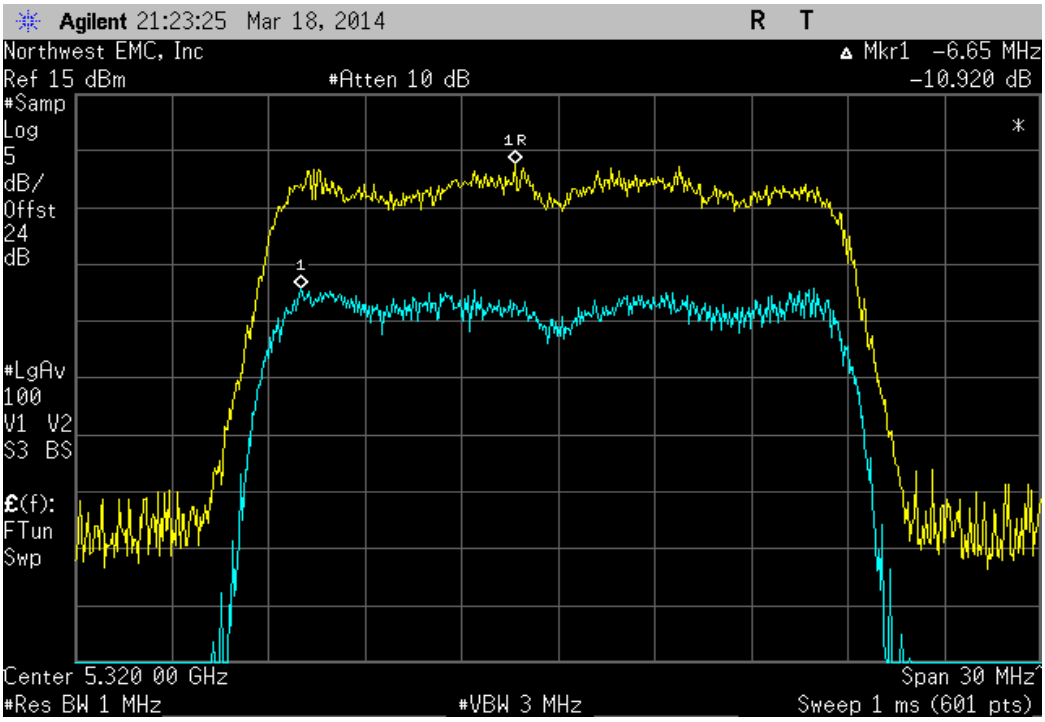
				Value	Limit	Result
				9.842 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

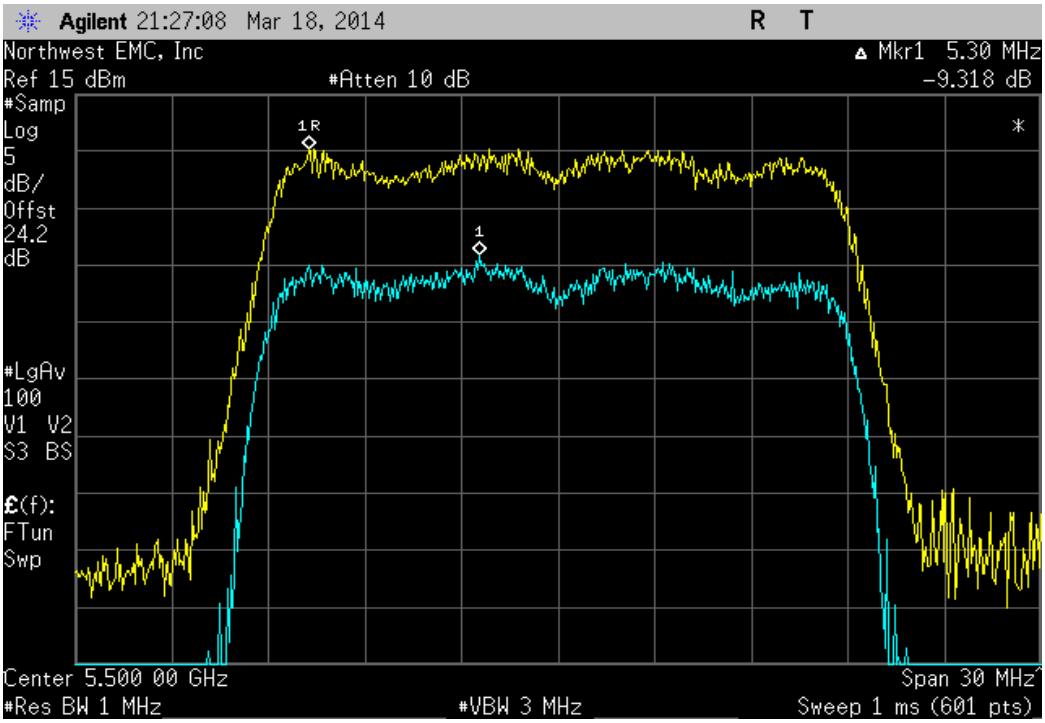
IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 64, High Channel 5320 MHz

Value	Limit	Result
10.92 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 100, Low Channel 5500 MHz

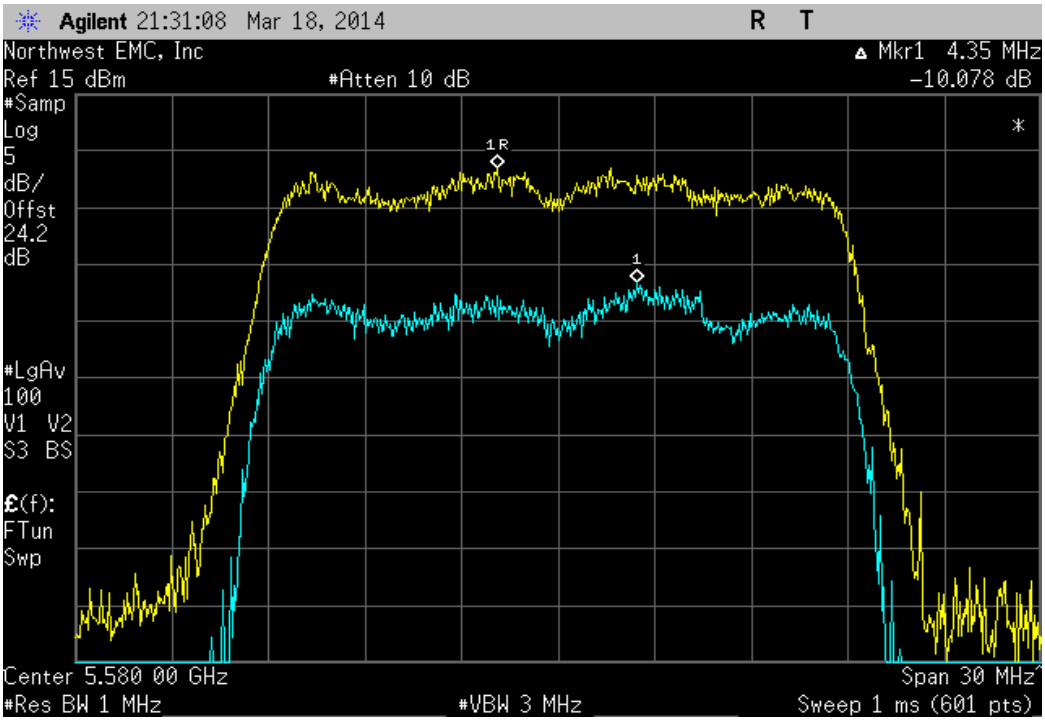
Value	Limit	Result
9.318 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

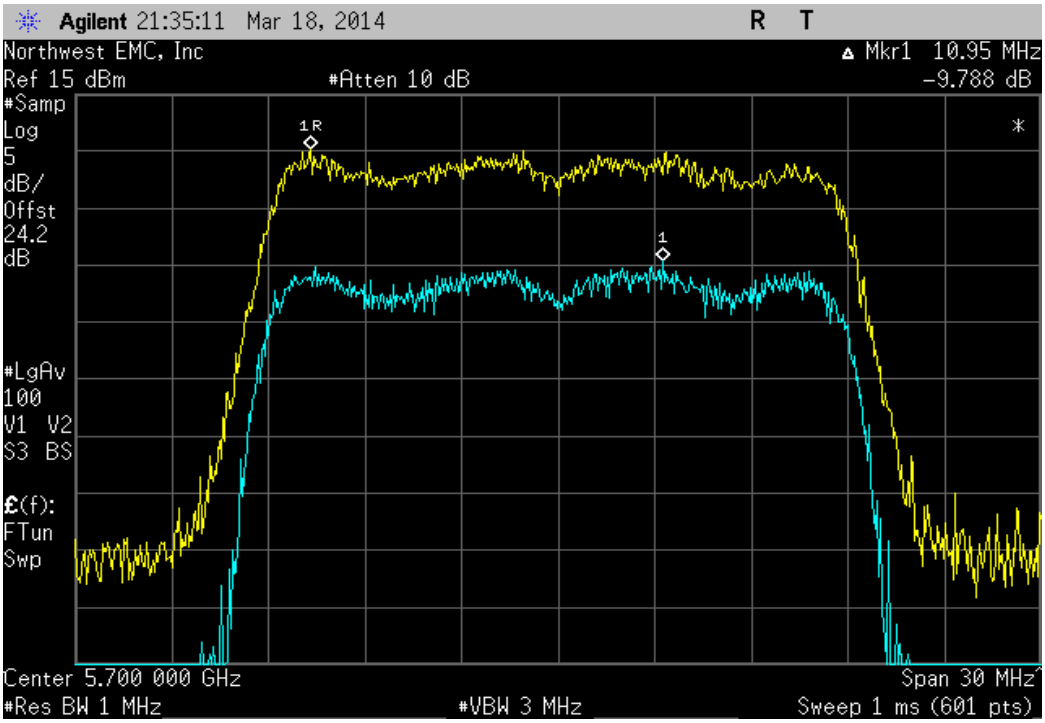
IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 116, Mid Channel 5580 MHz

Value	Limit	Result
10.078 dB	≤ 13 dB	Pass



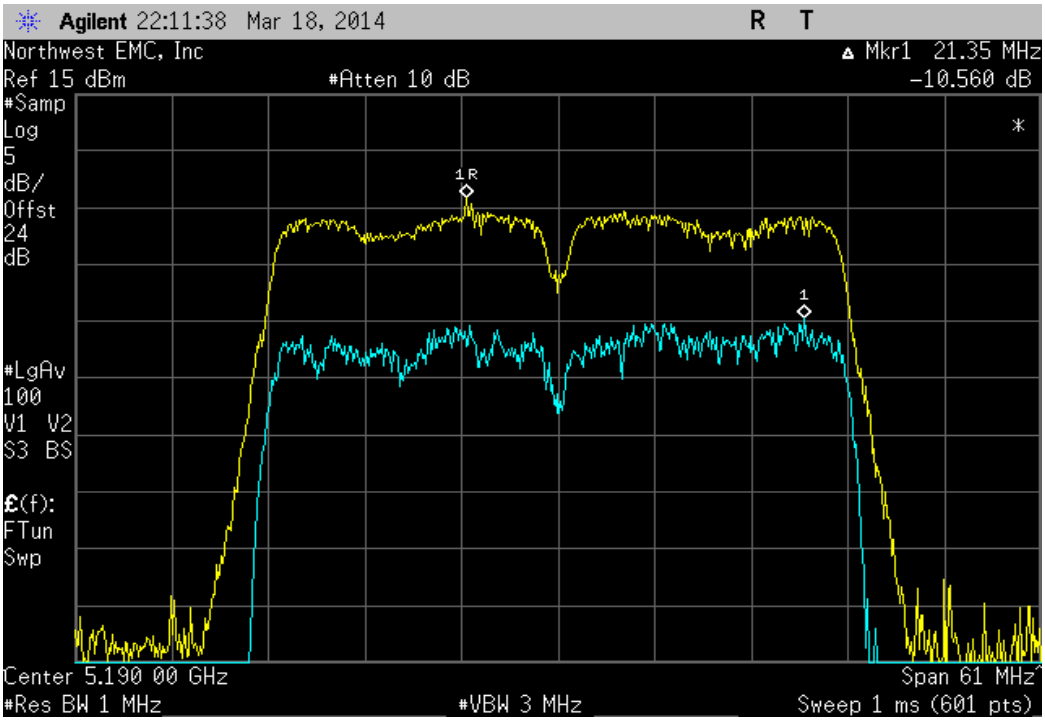
IEEE 802.11(ac), 20 MHz, VHT, MCS8, Ch. 140, High Channel 5700 MHz

Value	Limit	Result
9.788 dB	≤ 13 dB	Pass



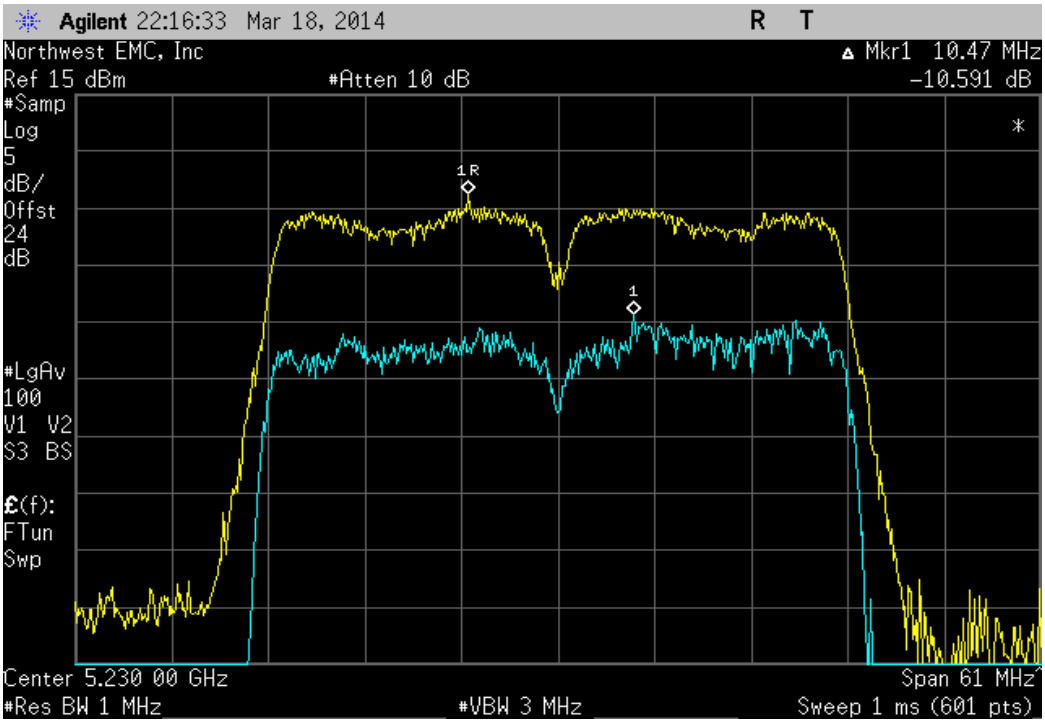
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 36/40, Low Channel 5190 MHz

				Value	Limit	Result
				10.56 dB	≤ 13 dB	Pass



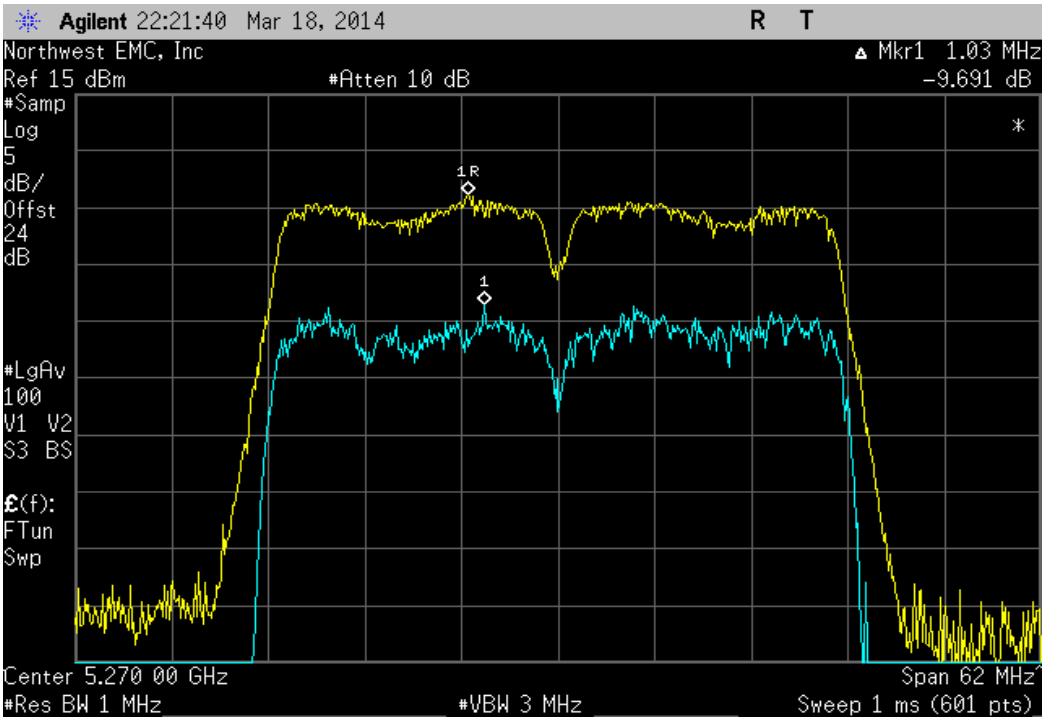
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 44/48, High Channel 5230 MHz

				Value	Limit	Result
				10.591 dB	≤ 13 dB	Pass



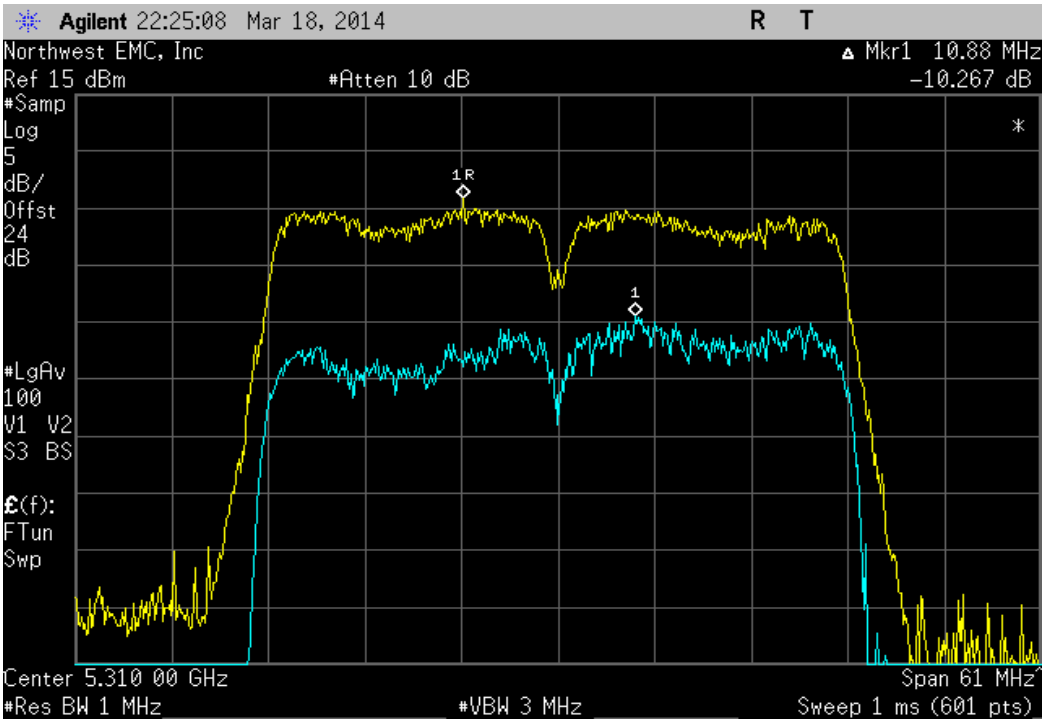
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 52/56, Low Channel 5270 MHz

Value	Limit	Result
9.691 dB	≤ 13 dB	Pass



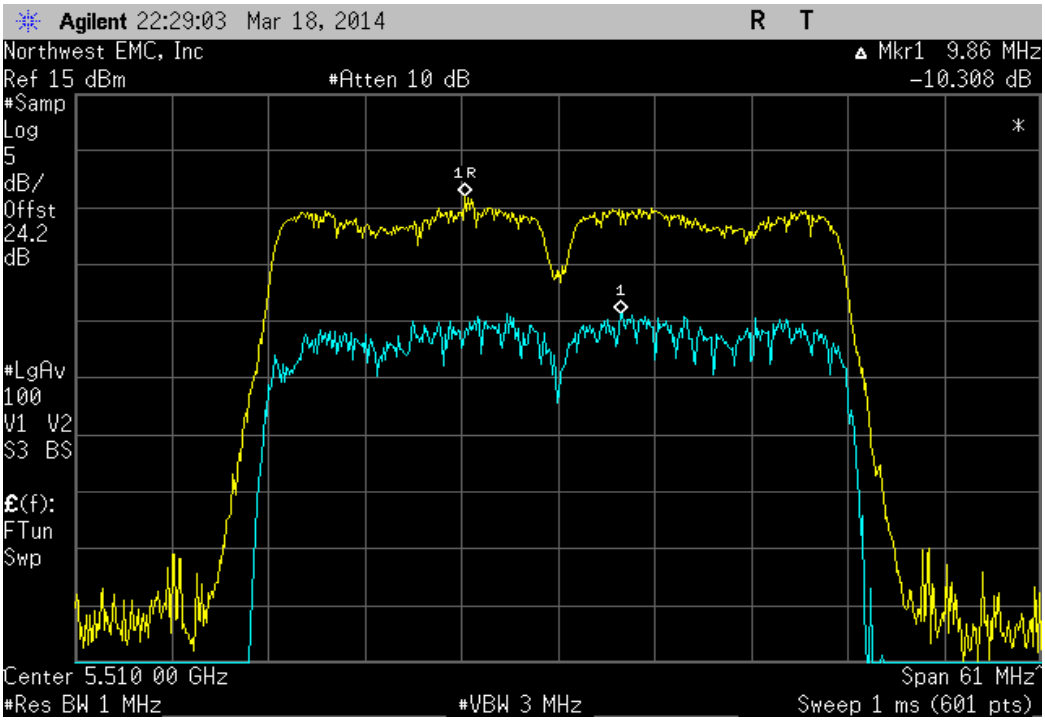
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 60/64, High Channel 5310 MHz

Value	Limit	Result
10.267 dB	≤ 13 dB	Pass



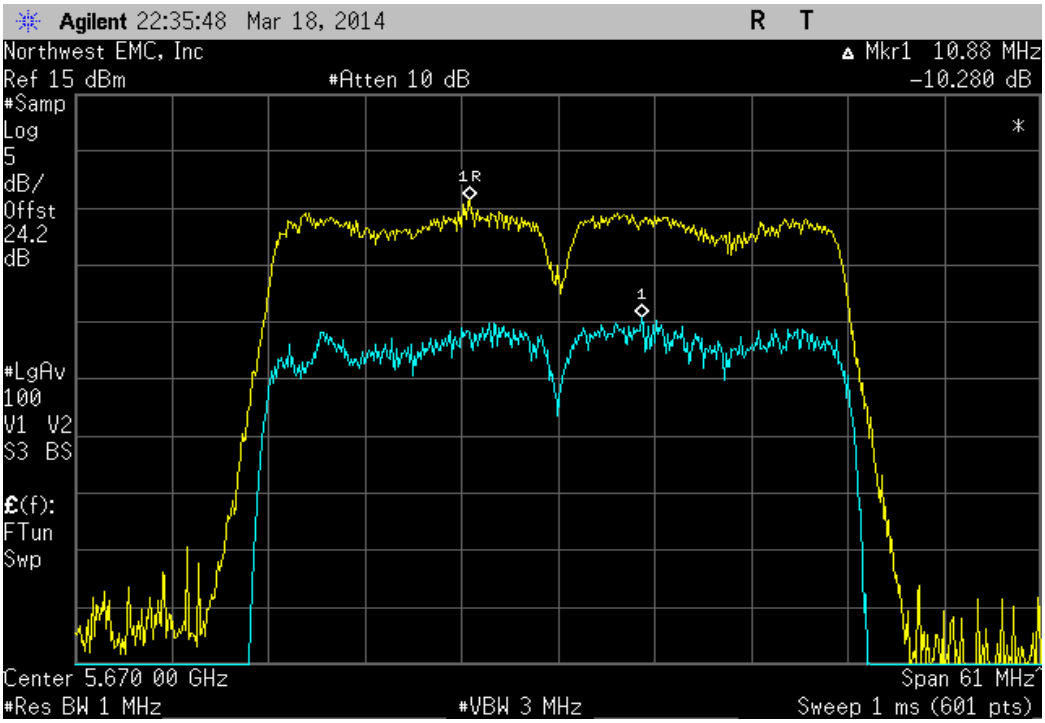
IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 100/104, Low Channel 5510 MHz

				Value	Limit	Result
				10.308 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 40 MHz, VHT, MCS0, Ch. 132/136, High Channel 5670 MHz

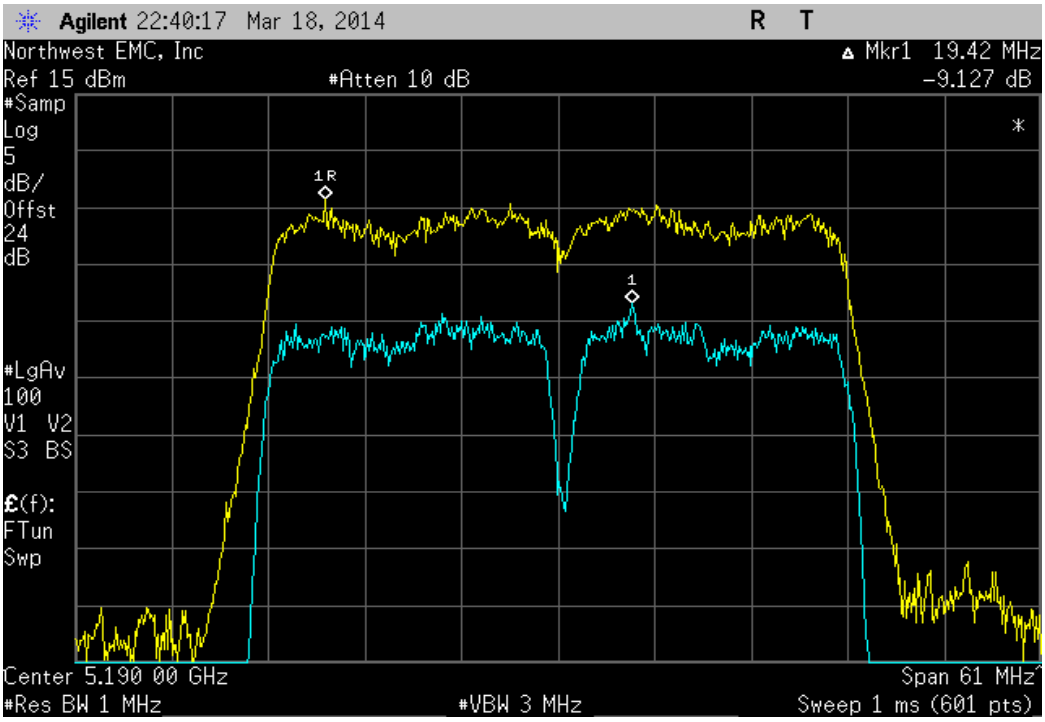
				Value	Limit	Result
				10.28 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

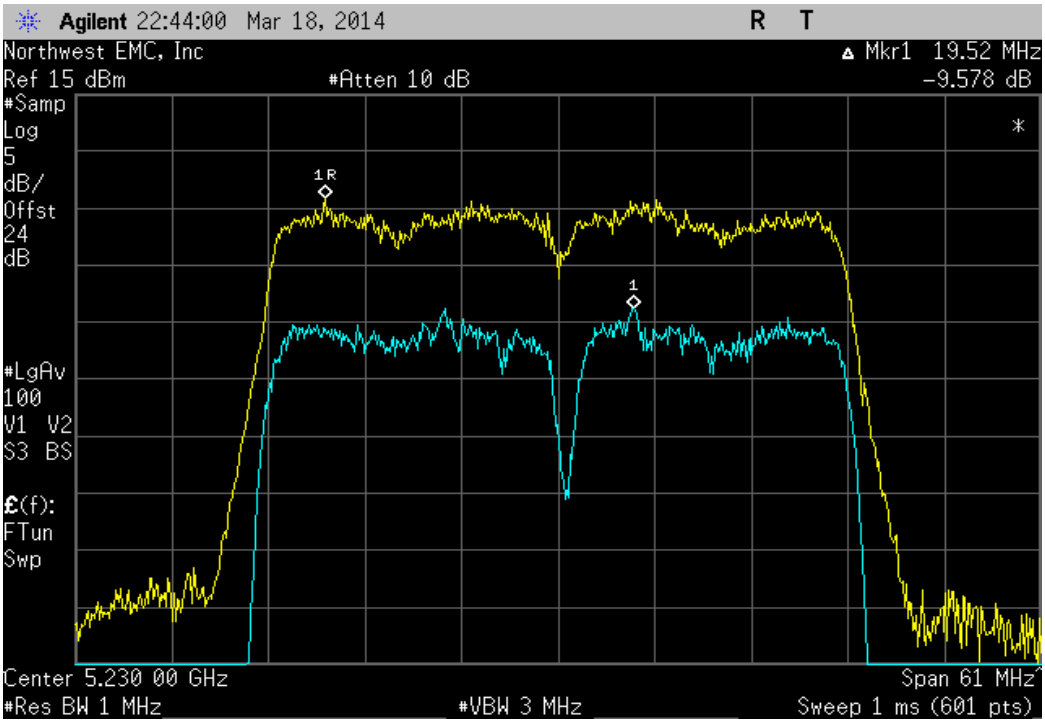
IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 36/40, Low Channel 5190 MHz

				Value	Limit	Result
				9.127 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 44/48, High Channel 5230 MHz

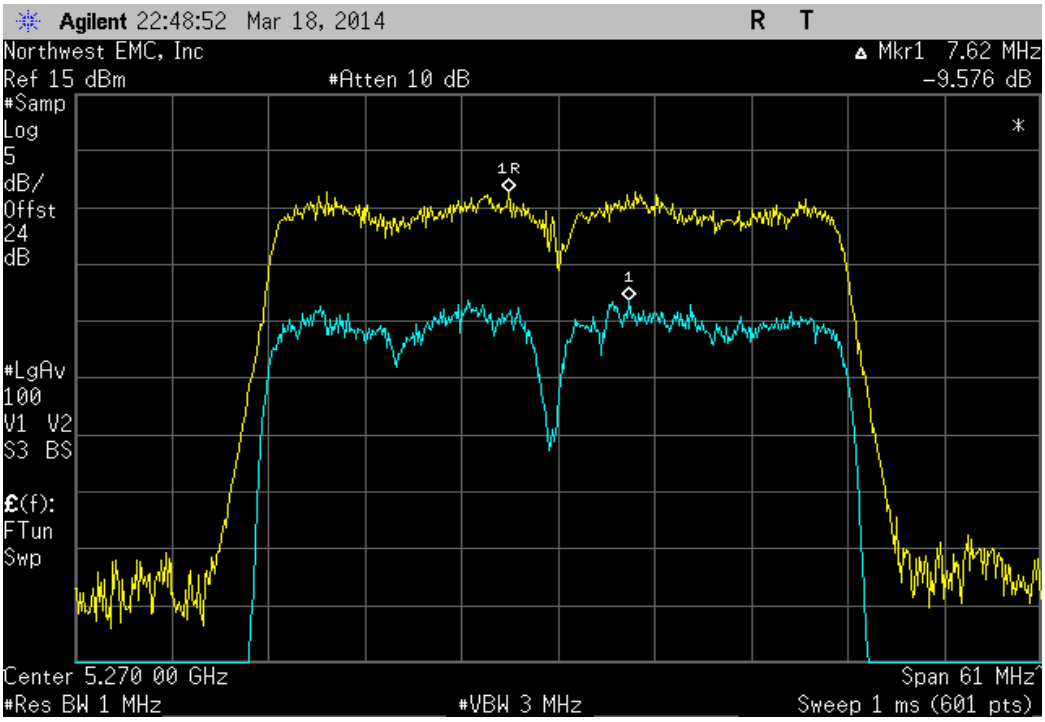
				Value	Limit	Result
				9.578 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

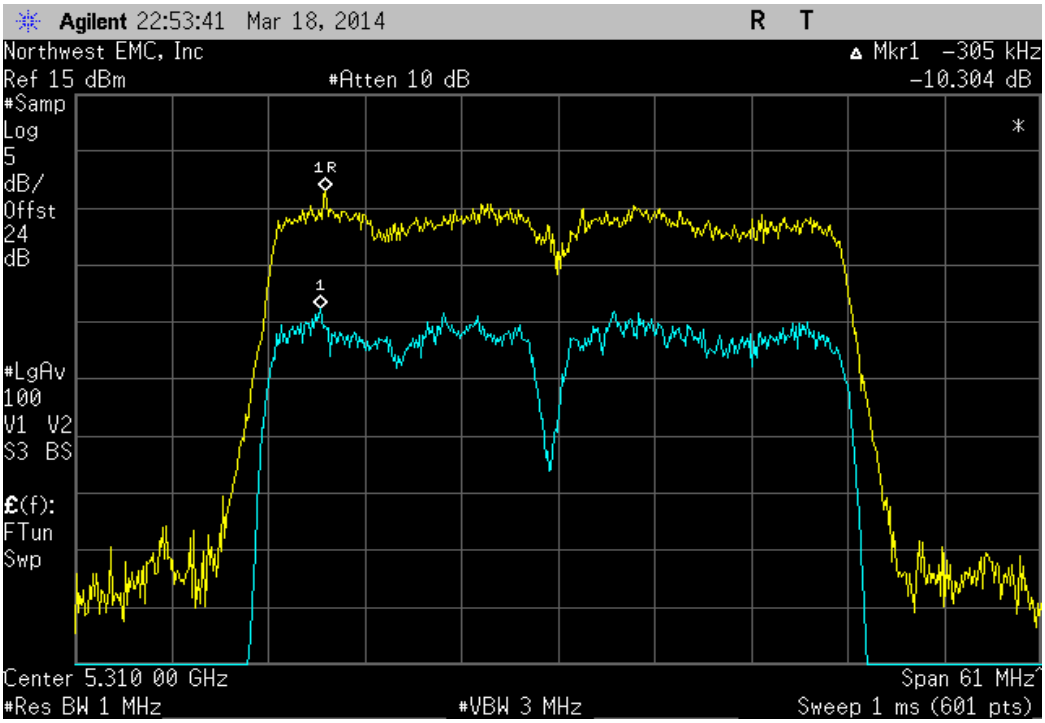
IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 52/56, Low Channel 5270 MHz

Value	Limit	Result
9.576 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 60/64, High Channel 5310 MHz

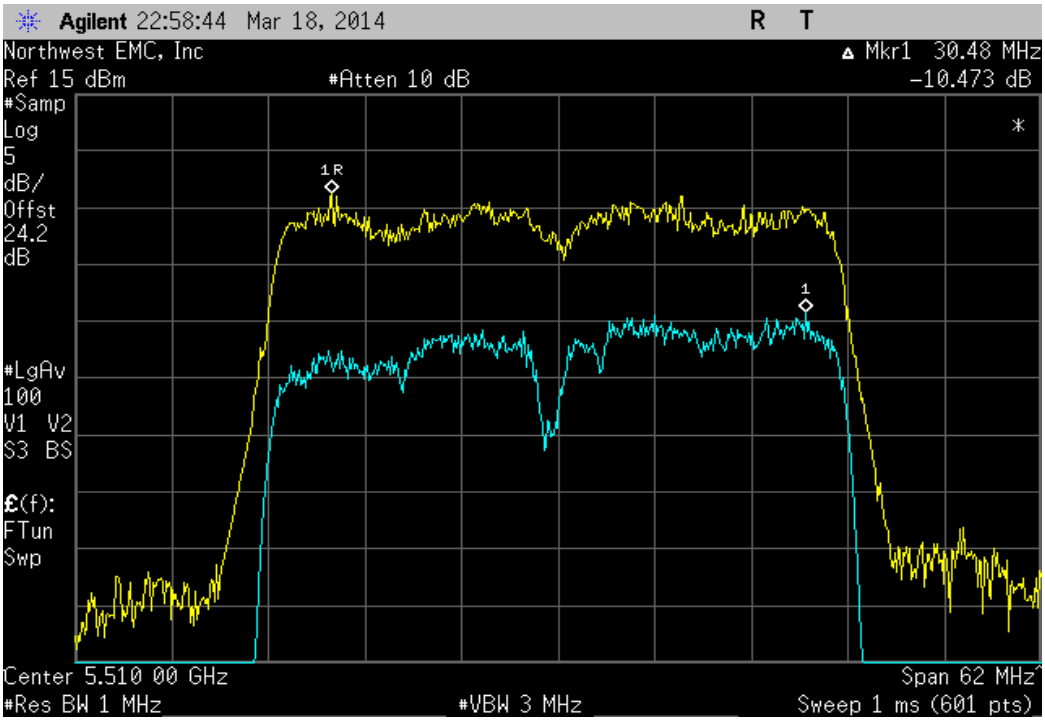
Value	Limit	Result
10.304 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

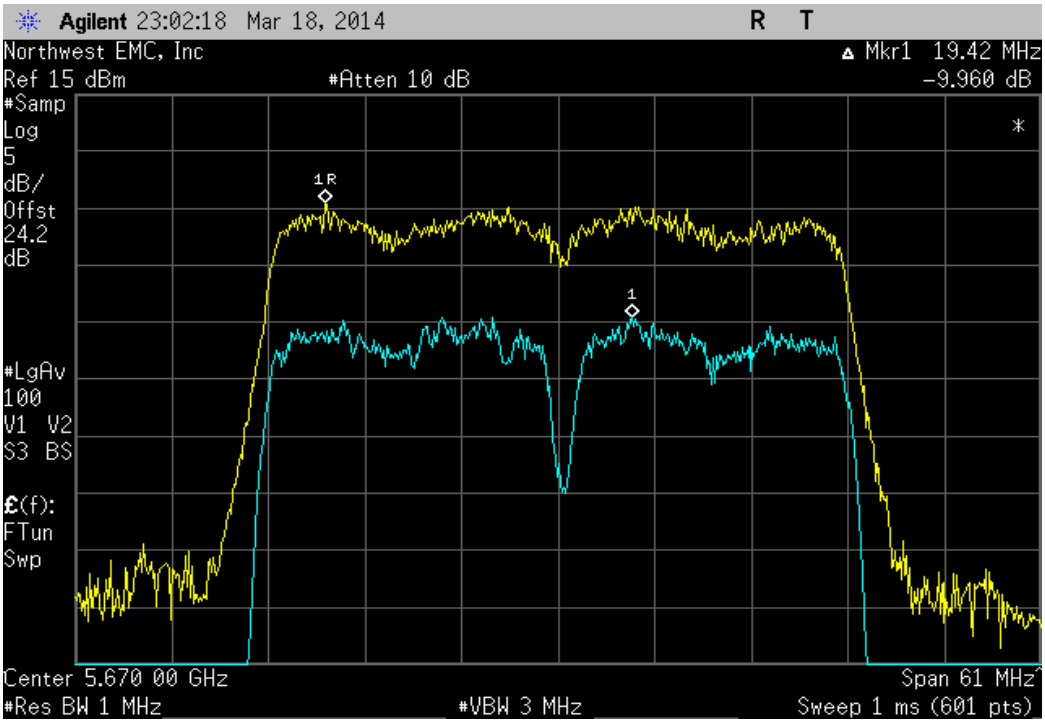
IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 100/104, Low Channel 5510 MHz

				Value	Limit	Result
				10.473 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 40 MHz, VHT, MCS9, Ch. 132/136, High Channel 5670 MHz

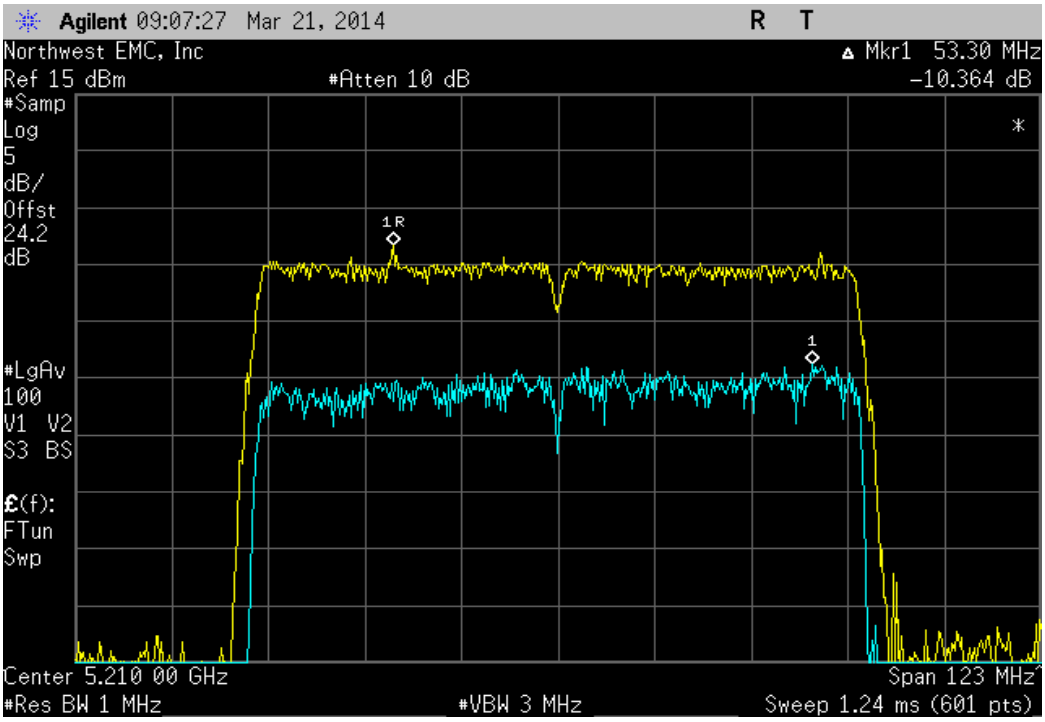
				Value	Limit	Result
				9.96 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

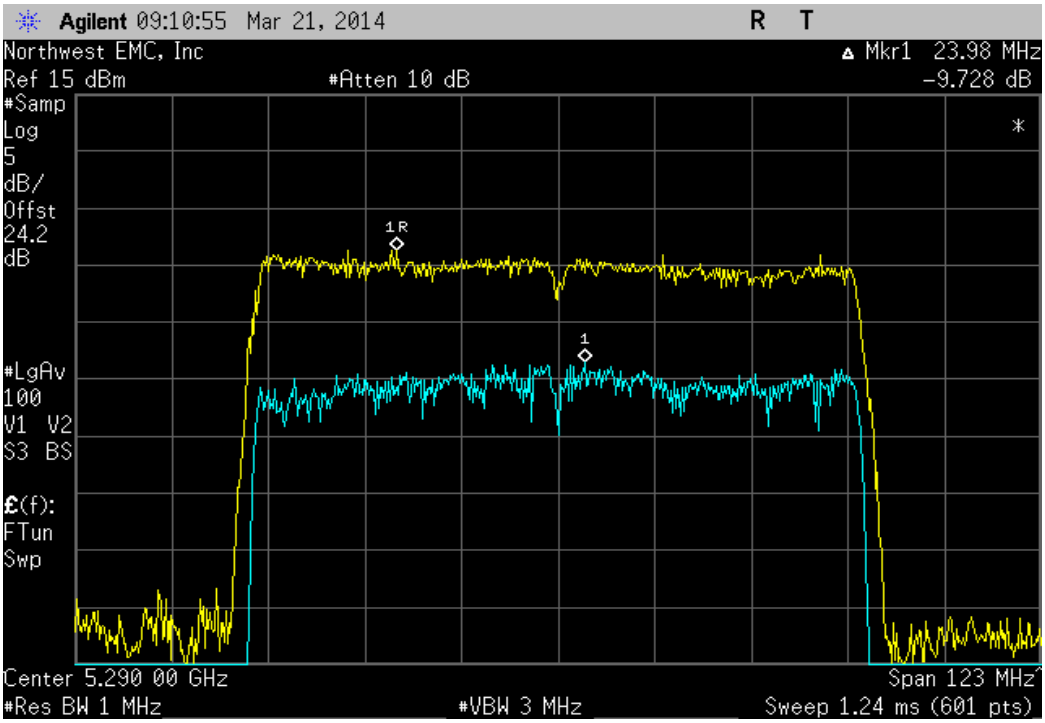
IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 42, Low Channel 5210 MHz

				Value	Limit	Result
				10.364 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 58, High Channel 5290 MHz

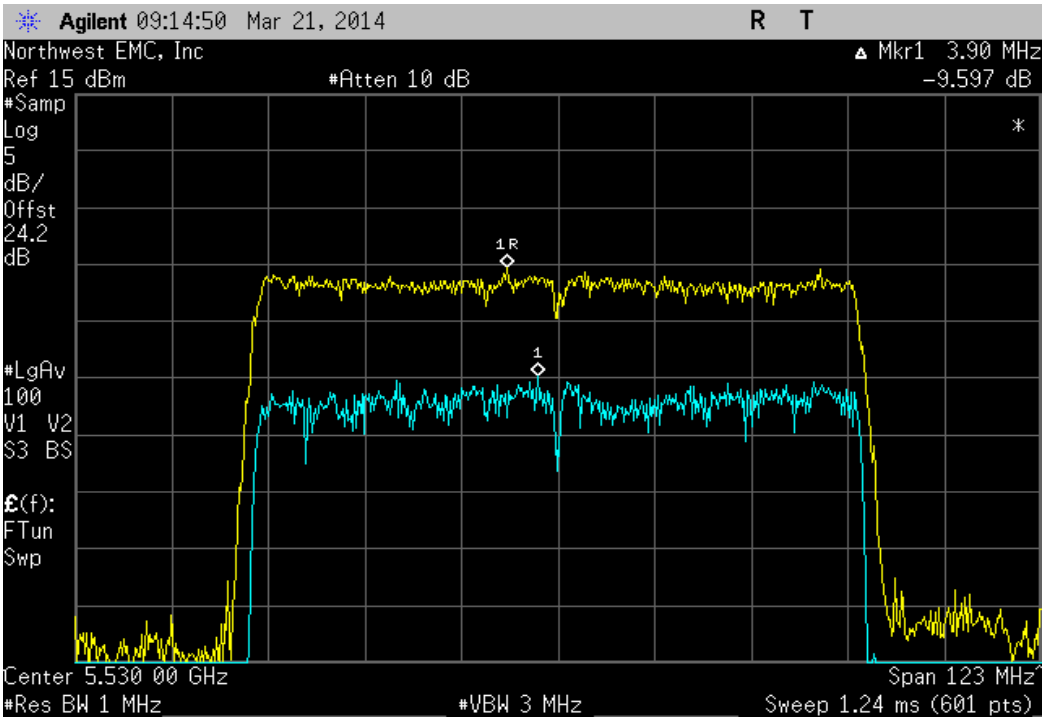
				Value	Limit	Result
				9.728 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

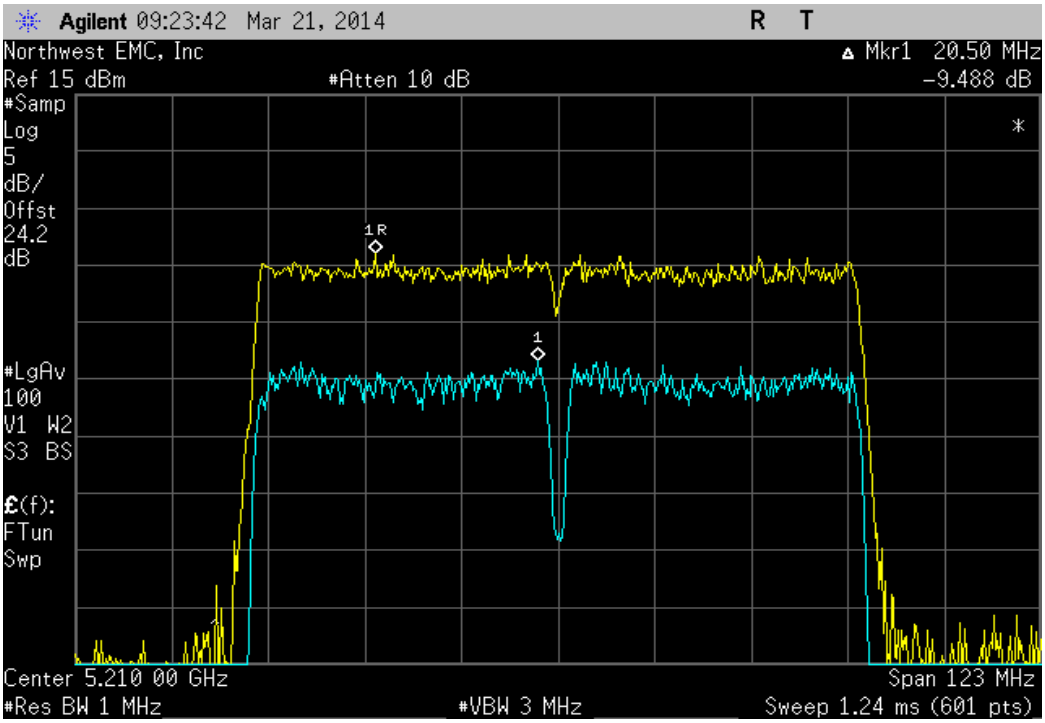
IEEE 802.11(ac), 80 MHz, VHT, MCS0, Ch. 106, Low Channel 5530 MHz

				Value	Limit	Result
				9.597 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 42, Low Channel 5210 MHz

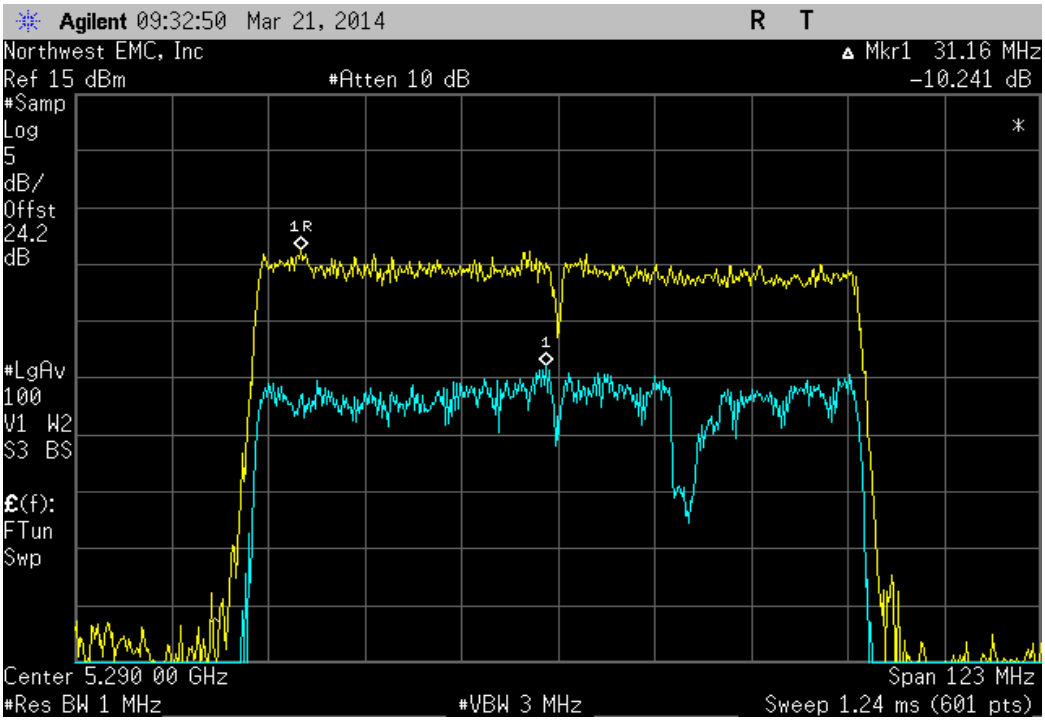
				Value	Limit	Result
				9.488 dB	≤ 13 dB	Pass



PEAK EXCURSION OF THE MODULATION ENVELOPE

IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 58, High Channel 5290 MHz

				Value	Limit	Result
				10.241 dB	≤ 13 dB	Pass



IEEE 802.11(ac), 80 MHz, VHT, MCS9, Ch. 106, Low Channel 5530 MHz

				Value	Limit	Result
				9.211 dB	≤ 13 dB	Pass