

InnoComm Mobile Technology Corp.

TEST REPORT

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Radio Spectrum TEST REPORT

Applicant:	InnoComm Mobile Technology Corp. 3F, No. 6, Hsin Ann Rd., Hsinchu Science Park, Hsinchu 30078, Taiwan
Product:	Wireless console module
Model No.:	Foenix_AN, Foenix_A, Foenix_N, Foenix
Brand Name:	InnoComm
FCC ID:	YAI-CIC22101
Test Method/ Standard:	47 CFR FCC Part 15.407 KDB 789033 D02 v02r01 ANSI C63.10 2013 KDB 662911 D01 v02r01
Test By:	Intertek Testing Services Taiwan Ltd., Hsinchu Laboratory No. 11, Lane 275, Ko-Nan 1 Street, Chia-Tung Li, Shiang-Shan District, Hsinchu City, Taiwan



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Revision History

Report No.	Issue Date	Revision Summary
181200218TWN-001	Jan. 28, 2019	Original report

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Summary of Test Data

Test Requirement	Applicable Rule (Section 15.407)	Result
Maximum Conducted Output Power	15.407 (a)(1)/(2)/(3) KDB 789033 D02 v01r02	Pass
Power Spectrum Density	15.407 (a)(1)/(2)/(3) KDB 789033 D02 v01r02	Pass
Minimum Emission Bandwidth	15.407(a)(5), 15.407(e) KDB 789033 D02 v01r02	Pass
Emissions In Restricted Frequency Bands (Radiated emission measurements)	15.407(b), 15.209	Pass
Emission on The Band Edge	15.407(b), 15.209	Pass
AC Line Conducted Emission	15.407(b)(6) 15.207	Pass
Antenna requirement	15.203	Pass

1. General Information

1.1 Identification of the EUT

Product:	Wireless console module
Model No.:	Foenix_AN
Operating Frequency:	1. 5180MHz~5240MHz 2. 5745MHz~5825MHz
Channel Number:	1. 4 channels for 5180MHz~5240MHz 2. 2 channels for 5745MHz~5825MHz
Access scheme:	OFDM
Rated Power:	DC 12V from adapter
Power Cord:	N/A
Sample receiving date:	Dec. 20, 2018
Sample condition:	Workable
Test Date(s):	Jul. 12, 2018 ~ Jul. 26, 2018

1.2 Description of the EUT

The customer confirmed the models listed as below were series model to model Foenix_AN (EUT), the difference between main model and series model are listed as below.

Model Number	Different
Foenix_AN	Wi-Fi 2.4G(2T2R)/5G (B1+B4 2T2R) / BT 2.1+4.2 / ANT+ / NFC
Foenix_A	Wi-Fi 2.4G(2T2R)/5G (B1+B4 2T2R) / BT 2.1+4.2 /ANT+
Foenix_N	Wi-Fi 2.4G(2T2R)/5G (B1+B4 2T2R) / BT 2.1+4.2 /NFC
Foenix	Wi-Fi 2.4G(2T2R)/5G (B1+B4 2T2R) / BT 2.1+4.2

Modulation mode	Transmit path	
	Chain 0 / Main	Chain 1 / AUX
802.11 a	V	V
802.11 ac (VHT20)	V	V
802.11 ac (VHT40)	V	V
802.11 ac (VHT80)	V	V

1.3 Antenna description

Antenna 1

Antenna Gain : 3.68 dBi
Antenna Type : PCB antenna
Connector Type : I-Pex

Antenna 2

Antenna Gain : 4.41dBi
Antenna Type : PCB antenna
Connector Type : I-Pex

1.4 Peripherals equipment

No.	Model no.	Specification
Adapter	EA10681G-120	I/P: 100-240V~, 2.0A,50-60Hz O/P: 12V, 4.16A

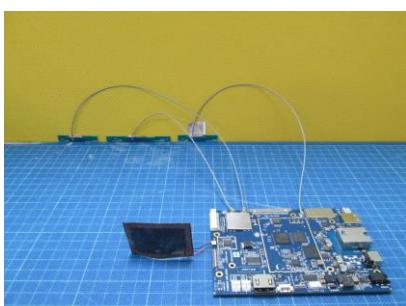
1.5 Operation mode

- (1) TX mode: EUT use cmd.exe entering test mode , and write down different cmd to change different channel.
- (2) With individual verifying, the maximum output power were found out 6 Mbps data rate for 802.11a mode, 6.5 Mbps data rate for 802.11ac(VHT20) mode , 13.5 Mbps data rate for 802.11ac(VHT40) mode , 29.3 Mbps data rate for 802.11ac(VHT80) mode , the final tests were executed under these conditions recorded in this report individually.

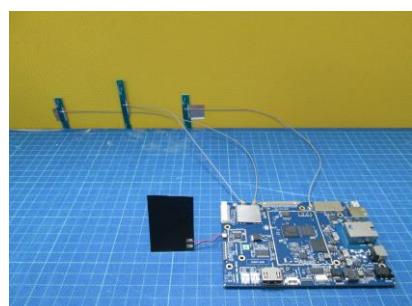
The signal is maximized through rotation and placement in the three orthogonal axes.



X axis



Y axis



Z axis

After verifying three axes, we found the maximum electromagnetic field was occurred at Y axis. The final test data was executed under this configuration.

802.11a Ch44 Chain0		802.11a Ch157 Chain0	
Data rate	AV (dBm)	Data rate	AV (dBm)
6	12.31	6	12.67
9	12.28	9	12.63
12	12.23	12	12.58
18	12.17	18	12.54
24	12.15	24	12.49
36	12.11	36	12.47
48	12.06	48	12.41
54	12.02	54	12.38

802.11a Ch44 Chain1		802.11a Ch157 Chain1	
Data rate	AV (dBm)	Data rate	AV (dBm)
6	12.13	6	11.75
9	12.07	9	11.73
12	12.02	12	11.68
18	11.96	18	11.66
24	11.91	24	11.61
36	11.86	36	11.56
48	11.85	48	11.53
54	11.78	54	11.51

802.11ac(VHT20) Ch44 Chain0		802.11ac(VHT20) Ch157 Chain0	
Data rate	AV (dBm)	Data rate	AV (dBm)
6.5	12.80	6.5	13.89
13	12.79	13	13.81
19.5	12.76	19.5	13.78
26	12.73	26	13.76
39	12.68	39	13.71
52	12.65	52	13.67
58.5	12.61	58.5	13.64
65	12.57	65	13.59

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802.11ac(VHT20) Ch44 Chain1		802.11ac(VHT20) Ch157 Chain1	
Data rate	AV (dBm)	Data rate	AV (dBm)
6.5	12.53	6.5	12.59
13	12.51	13	12.56
19.5	12.48	19.5	12.53
26	12.44	26	12.47
39	12.37	39	12.45
52	12.36	52	12.38
58.5	12.32	58.5	12.33
65	12.29	65	12.31

802.11ac(VHT20) Ch44 Chain0+1		802.11ac(VHT20) Ch157 Chain0+1	
Data rate	AV (dBm)	Data rate	AV (dBm)
13	15.68	13	16.30
26	15.61	26	16.26
39	15.58	39	16.23
52	15.54	52	16.21
78	15.52	78	16.18
104	15.47	104	16.13
117	15.45	117	16.11
130	15.40	130	16.06

802.11ac(VHT40) Ch38 Chain0		802.11ac(VHT40) Ch151 Chain0	
Data rate	AV (dBm)	Data rate	AV (dBm)
13.5	10.50	13.5	11.87
27	10.46	27	11.83
40.5	10.43	40.5	11.79
54	10.38	54	11.76
81	10.35	81	11.72
108	10.32	108	11.68
121	10.27	121	11.66
135	10.24	135	11.61

802.11ac(VHT40) Ch38 Chain1		802.11ac(VHT40) Ch151 Chain1	
Data rate	AV (dBm)	Data rate	AV (dBm)
13.5	9.97	13.5	10.97
27	9.96	27	10.92
40.5	9.94	40.5	10.88
54	9.93	54	10.85
81	9.89	81	10.80
108	9.87	108	10.76
121	9.83	121	10.74
135	9.80	135	10.69

802.11ac(VHT40) Ch38 Chain0+1		802.11ac(VHT40) Ch151 Chain0+1	
Data rate	AV (dBm)	Data rate	AV (dBm)
27	13.25	27	14.45
54	13.23	54	14.43
81	13.17	81	14.40
108	13.15	108	14.37
162	13.11	162	14.35
216	13.08	216	14.31
243	13.06	243	14.28
270	13.03	270	14.22

802.11ac(VHT80) Ch42 Chain0		802.11ac(VHT80) Ch155 Chain0	
Data rate	AV (dBm)	Data rate	AV (dBm)
29.3	9.90	29.3	10.92
58.5	9.86	58.5	10.90
87.8	9.84	87.8	10.86
117	9.81	117	10.81
175.5	9.78	175.5	10.77
234	9.75	234	10.75
263.3	9.71	263.3	10.72
292.5	9.67	292.5	10.67

802.11ac(VHT80) Ch42 Chain1		802.11ac(VHT80) Ch155 Chain1	
Data rate	AV (dBm)	Data rate	AV (dBm)
29.3	9.83	29.3	10.04
58.5	9.81	58.5	9.98
87.8	9.76	87.8	9.96
117	9.74	117	9.91
175.5	9.71	175.5	9.87
234	9.68	234	9.83
263.3	9.65	263.3	9.76
292.5	9.64	292.5	9.74

802.11ac(VHT80) Ch42 Chain0+1		802.11ac(VHT80) Ch155 Chain0+1	
Data rate	AV (dBm)	Data rate	AV (dBm)
58.5	12.87	58.5	13.51
117	12.82	117	13.48
175.5	12.78	175.5	13.46
234	12.74	234	13.43
351	12.71	351	13.37
468	12.65	468	13.32
526.5	12.62	526.5	13.29
585	12.60	585	13.25

2. Maximum Conducted Output Power

2.1 Operating environment

Temperature:	25	°C
Relative Humidity:	50	%
Atmospheric Pressure	1008	hPa

2.2 Limit for maximum output power

Operating Frequency (MHz)	Conducted output power limit
5150~5725	< 0.25 W (24 dBm)
5725~5850	< 1 W (30 dBm)

Operating Frequency (MHz)	Maximum E.I.R.P. limit
5150~5725	< 1 W (30 dBm)
5725~5850	< 4 W (36 dBm)

2.3 Measuring instrument setting

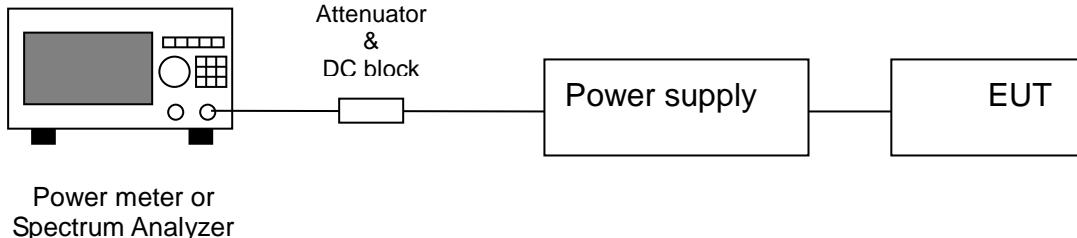
Spectrum Analyzer function	Setting
Detector	Average

2.4 Test procedure

Test procedures refer to clause E) 3) b) measurement using a gated RF average Spectrum analyzer of KDB 789033 D02 v01r02

Test procedures refer to clause E) 2) b) Method SA-1 of KDB 789033 D02 v01r02

2.5 Test diagram



2.6 Test results

SISO

Mode	Channel	Frequency (MHz)	Output Power (AV)		Antenna Gain (dBi)	E.I.R.P. (dBm)	Limit of Conducted Power (dBm)	Margin (dB)	Limit of E.I.R.P. (dBm)	Margin (dB)
			dBm	mW						
802.11a (Chain0)	36	5180	10.83	12.11	3.68	14.51	24.00	-13.17	30.00	-15.49
	44	5220	12.31	17.01	3.68	15.99	24.00	-11.69	30.00	-14.01
	48	5240	12.12	16.29	3.68	15.80	24.00	-11.88	30.00	-14.20
	149	5745	12.07	16.11	3.68	15.75	30.00	-17.93	36.00	-20.25
	157	5785	12.67	18.48	3.68	16.35	30.00	-17.33	36.00	-19.65
	165	5825	13.36	21.68	3.68	17.04	30.00	-16.64	36.00	-18.96
802.11a (Chain1)	36	5180	12.07	16.12	4.41	16.48	24.00	-11.93	30.00	-13.52
	44	5220	12.13	16.33	4.41	16.54	24.00	-11.87	30.00	-13.46
	48	5240	12.22	16.66	4.41	16.63	24.00	-11.78	30.00	-13.37
	149	5745	11.64	14.60	4.41	16.05	30.00	-18.36	36.00	-19.95
	157	5785	11.75	14.95	4.41	16.16	30.00	-18.25	36.00	-19.84
	165	5825	11.78	15.06	4.41	16.19	30.00	-18.22	36.00	-19.81

MIMO

Mode	Ch	Freq (MHz)	Output Power (AV)		Total Power (AV)		Antenna 0 Gain (dBi)	Antenna 1 Gain (dBi)	E.I.R.P. (dBm)	Limit of Conducted Power (dBm)	Margin (dB)	Limit of E.I.R.P. (dBm)	Margin (dB)
			Chain 0	Chain 1									
			dBm	dBm	mW	dBm							
802.11ac (VHT20)	36	5180	11.36	11.29	27.13	14.33	3.68	4.41	18.39	24.00	-9.67	30.00	-11.61
	44	5220	12.80	12.53	36.98	15.68	3.68	4.41	19.73	24.00	-8.32	30.00	-10.27
	48	5240	12.84	12.48	36.92	15.67	3.68	4.41	19.72	24.00	-8.33	30.00	-10.28
	149	5745	12.83	12.08	35.33	15.48	3.68	4.41	19.51	30.00	-14.52	36.00	-16.49
	157	5785	13.89	12.59	42.66	16.30	3.68	4.41	20.31	30.00	-13.70	36.00	-15.69
	165	5825	14.66	12.66	47.66	16.78	3.68	4.41	20.76	30.00	-13.22	36.00	-15.24
802.11ac (VHT40)	38	5190	10.50	9.97	21.15	13.25	3.68	4.41	17.29	24.00	-10.75	30.00	-12.71
	46	5230	10.89	10.45	23.35	13.68	3.68	4.41	17.73	24.00	-10.32	30.00	-12.27
	151	5755	11.87	10.97	27.89	14.45	3.68	4.41	18.48	24.00	-9.55	30.00	-11.52
	159	5795	12.60	11.42	32.05	15.06	3.68	4.41	19.07	30.00	-14.94	36.00	-16.93
802.11ac (VHT80)	42	5210	9.90	9.83	19.37	12.87	3.68	4.41	16.93	30.00	-17.13	36.00	-19.07
	155	5775	10.92	10.04	22.46	13.51	3.68	4.41	17.54	30.00	-16.49	36.00	-18.46

3. Power Spectrum Density

3.1 Operating environment

Temperature:	25	°C
Relative Humidity:	50	%
Atmospheric Pressure	1008	hPa

3.2 Limit for power spectrum density

Operating Frequency (MHz)	Power density limit
5150~5725	< 11 dBm/1MHz
5725~5850	< 30 dBm/500kHz

3.3 Measuring instrument setting

Spectrum analyzer settings (5150~5725MHz)	
Spectrum Analyzer function	Setting
Detector	RMS
RBW	=1MHz
VBW	≥ 3 MHz
Sweep	Auto couple
Trace	Average
Span	Encompass the 26 dB EBW
Attenuation	Auto
Sweep point	≥ 2 Span / RBW

Spectrum analyzer settings (5725~5850MHz)	
Spectrum Analyzer function	Setting
Detector	RMS
RBW	=100kHz
VBW	≥ 300 kHz
Sweep	Auto couple
Trace	Average
Span	Encompass the 6 dB EBW
Attenuation	Auto
Sweep point	≥ 2 Span / RBW

3.4 Test procedure

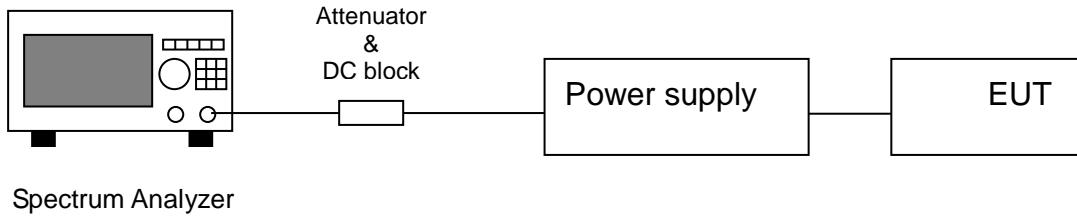
Set relevant parameter according to clause 4.3.

Trace average at least 100 traces in power averaging mode.

Compute power by integrating the spectrum across the 26 dB or 6dB EBW of the signal using the instrument's band power measurement function with band limits set equal to the EBW band edges.

If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/\text{RBW})$ to the measured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement. The RBW is 100 kHz. So, we will add 6.99 to the results.

3.5 Test diagram



3.6 Test results

Mode	Channel	Frequency (MHz)	PSD		Result	Limit (dBm)	Margin (dB)
			(dBm)	(mw)			
802.11a (Chain0)	36	5180	1.16	1.30	1.156	11	-9.84
	44	5220	2.31	1.70	2.309	11	-8.69
	48	5240	2.51	1.78	2.51	11	-8.49
802.11a (Chain1)	36	5180	2.41	1.74	2.405	11	-8.60
	44	5220	2.31	1.70	2.31	11	-8.69
	48	5240	2.49	1.77	2.489	11	-8.51

Mode	Channel	Frequency (MHz)	RBW factor	PSD in 100kHz	PSD in 500kHz		Result	Limit (dBm)	Margin (dB)
					(dBm)	(mw)			
802.11a (Chain0)	149	5745	-6.99	0.04	7.03	5.04	7.027	30	-22.97
	157	5785	-6.99	0.55	7.54	5.67	7.537	30	-22.46
	165	5825	-6.99	1.51	8.50	7.08	8.498	30	-21.50
802.11a (Chain1)	149	5745	-6.99	-0.43	6.56	4.53	6.561	30	-23.44
	157	5785	-6.99	-0.42	6.57	4.54	6.573	30	-23.43
	165	5825	-6.99	-0.11	6.88	4.88	6.884	30	-23.12

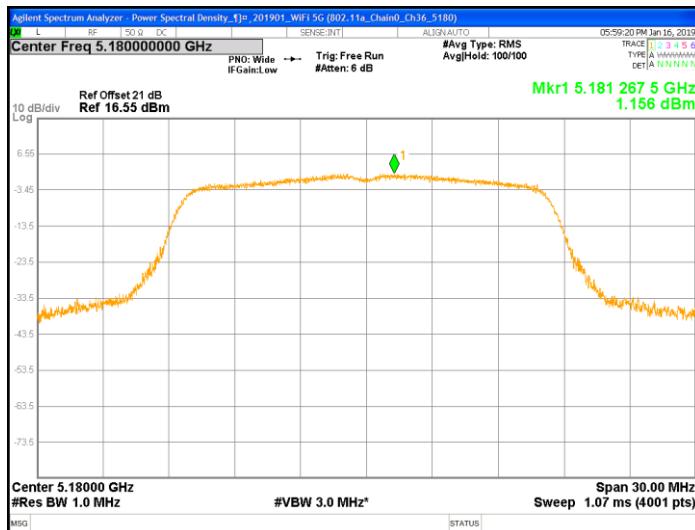
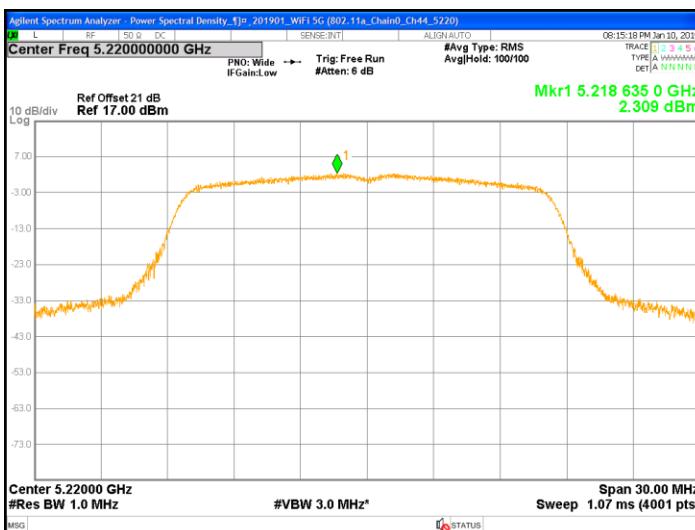
MIMO

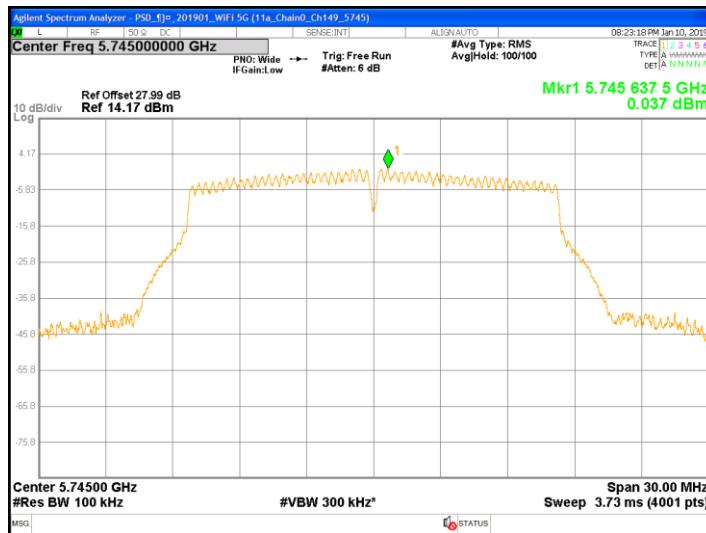
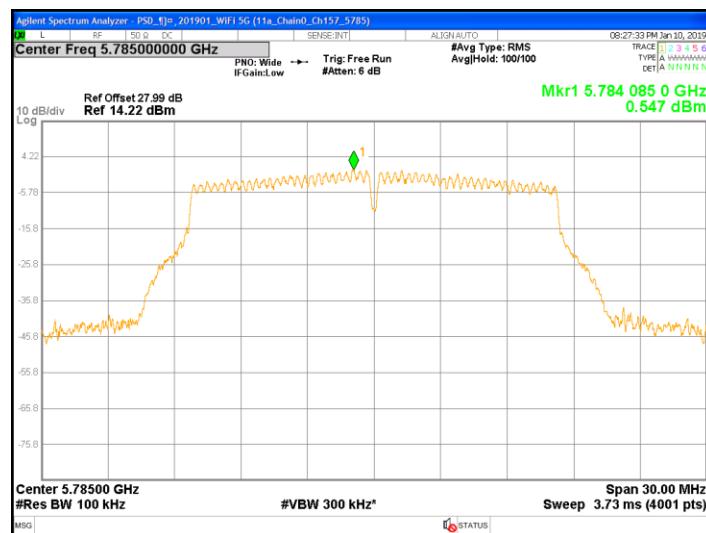
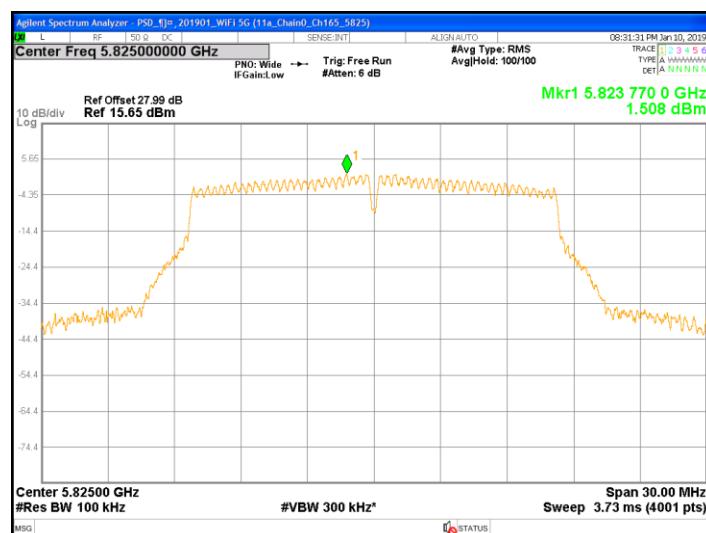
Mode	Channel	Frequency (MHz)	PSD (dBm)		Total PSD		MIMO Correction	Result	Limit (dBm)	Margin (dB)
			chain0	chain1	mW	dBm				
802.11ac(VHT20)	36	5180	1.52	1.59	2.86	4.56	3.01	7.57	11	-3.43
	44	5220	2.80	2.44	3.66	5.63	3.01	8.64	11	-2.36
	48	5240	3.05	2.77	3.91	5.92	3.01	8.93	11	-2.07
802.11ac(VHT40)	38	5190	-2.64	-3.15	1.03	0.12	3.01	3.13	11	-7.87
	46	5230	-2.54	-2.73	1.09	0.37	3.01	3.38	11	-7.62
802.11ac(VHT80)	42	5210	-6.51	-7.05	0.42	-3.76	3.01	-0.75	11	-11.75

Mode	Channel	Frequency (MHz)	RBW factor	PSD in 100kHz (dBm)		PSD in 500kHz (dBm)		Total PSD		MIMO	Result	Limit (dBm)	Margin (dB)
				chain0	chain1	chain0	chain1	mW	dBm	Correction			
802.11ac (VHT20)	149	5745	-6.99	0.49	-0.26	7.48	6.73	10.31	10.13	3.01	13.14	30	-16.86
	157	5785	-6.99	1.43	0.26	8.42	7.25	12.25	10.88	3.01	13.89	30	-16.11
	165	5825	-6.99	2.79	0.22	9.78	7.21	14.75	11.69	3.01	14.70	30	-15.30
802.11ac (VHT40)	151	5755	-6.99	-2.49	-3.53	4.50	3.46	5.04	7.02	3.01	10.03	30	-19.97
	159	5795	-6.99	-2.52	-3.29	4.48	3.70	5.15	7.12	3.01	10.13	30	-19.87
802.11ac (VHT80)	155	5775	-6.99	-6.37	-7.48	0.62	-0.49	2.05	3.11	3.01	6.12	30	-23.88

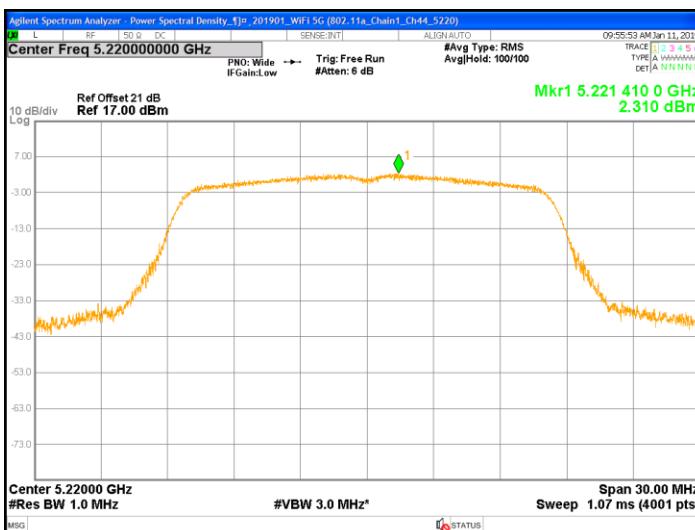
Note: MIMO Correction: $10\log(N_{ant})$

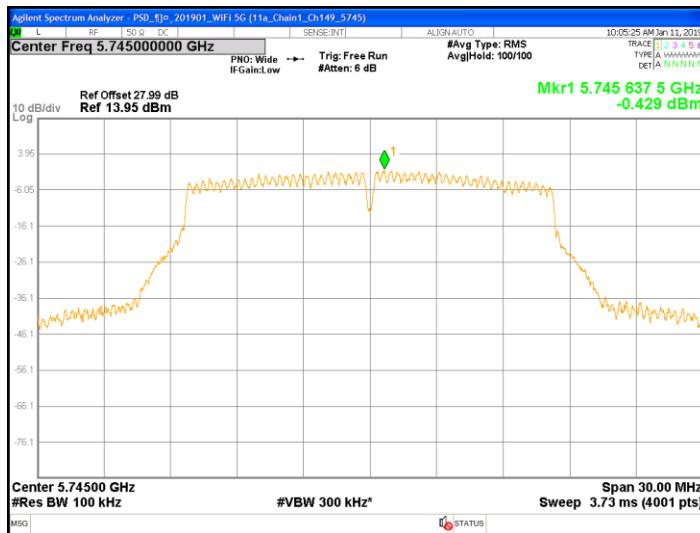
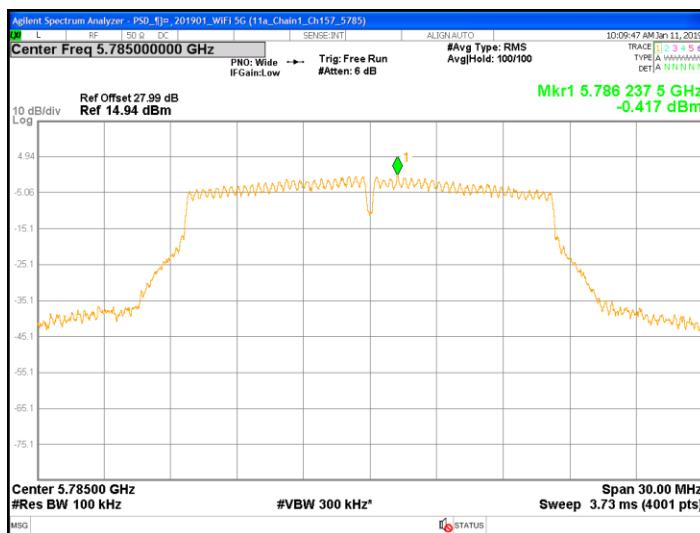
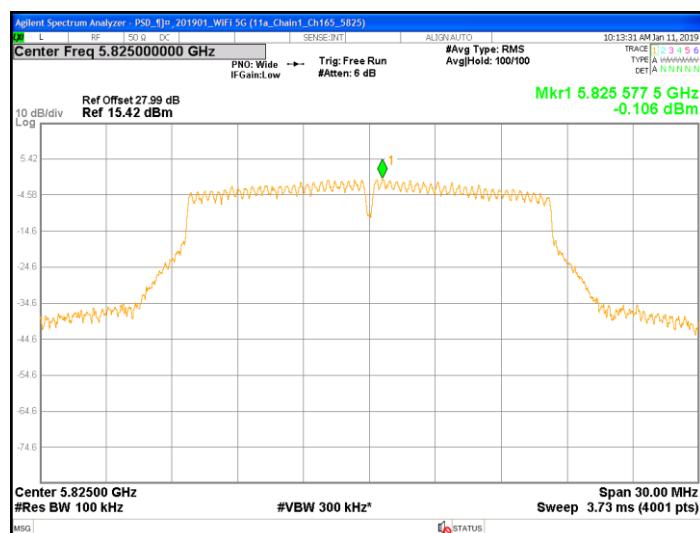
RBW Correction: $10\log(100\text{kHz}/500\text{kHz})$

Chain0 : Power Spectral Density @ 802.11a Mode Ch36

Chain0 : Power Spectral Density @ 802.11a Mode Ch44

Chain0 : Power Spectral Density @ 802.11a Mode Ch48

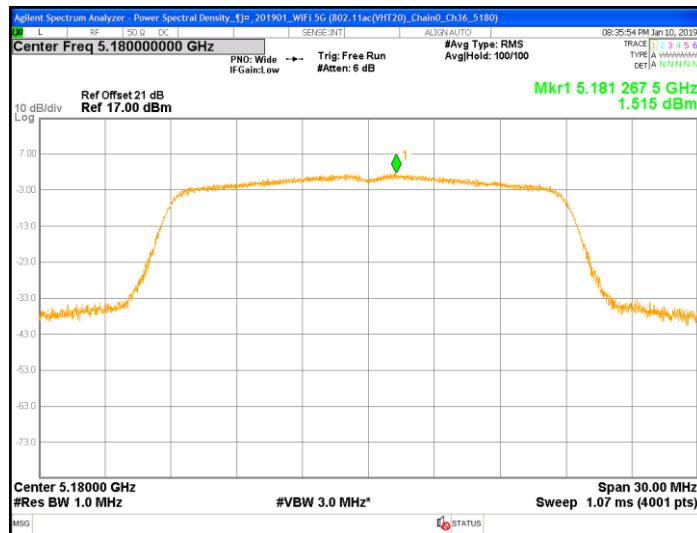

Chain0 : Power Spectral Density @ 802.11a Mode Ch149

Chain0 : Power Spectral Density @ 802.11a Mode Ch157

Chain0 : Power Spectral Density @ 802.11a Mode Ch165


Chain1 : Power Spectral Density @ 802.11a Mode Ch36

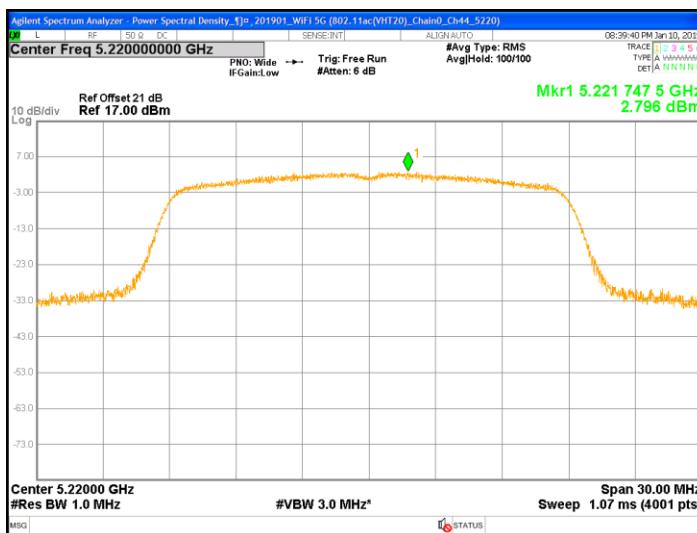
Chain1 : Power Spectral Density @ 802.11a Mode Ch44

Chain1 : Power Spectral Density @ 802.11a Mode Ch48


Chain1 : Power Spectral Density @ 802.11a Mode Ch149

Chain1 : Power Spectral Density @ 802.11a Mode Ch157

Chain1 : Power Spectral Density @ 802.11a Mode Ch165


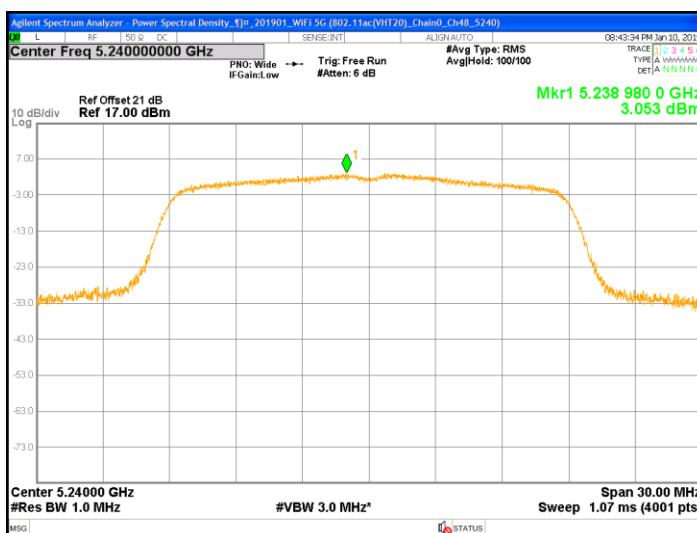
Chain0 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch36

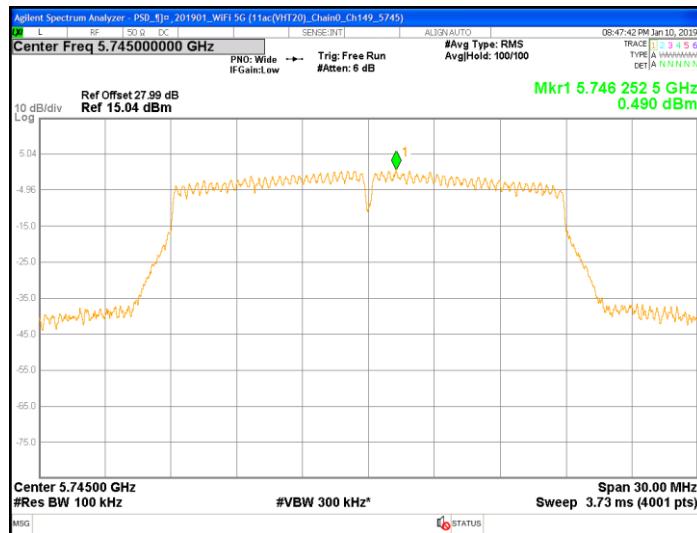
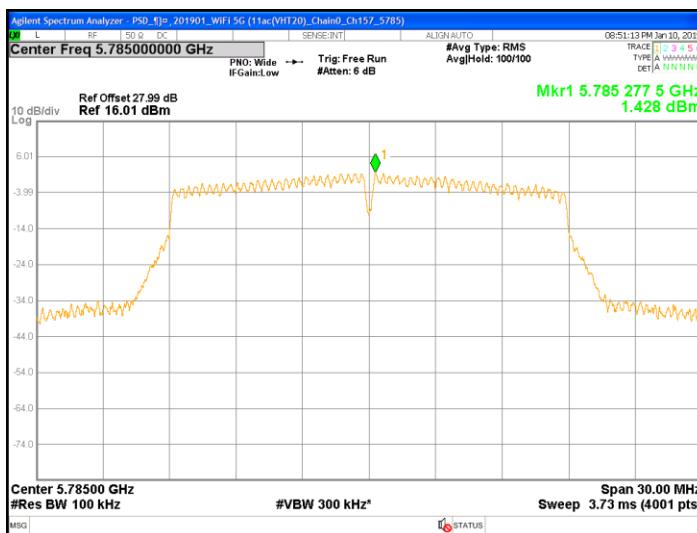
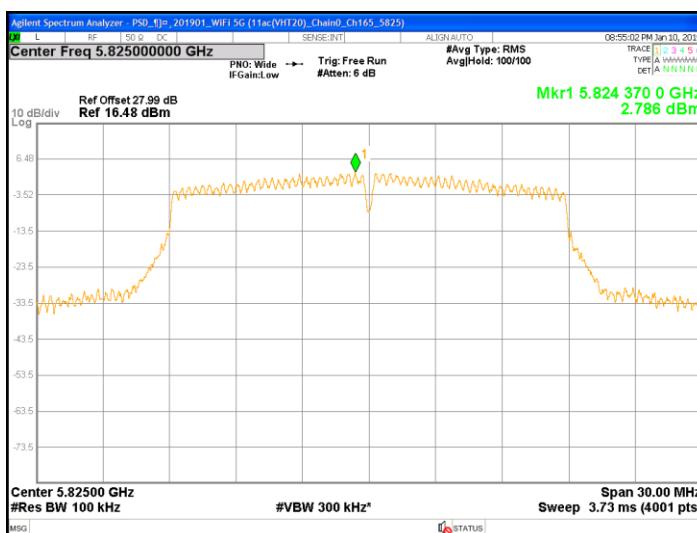


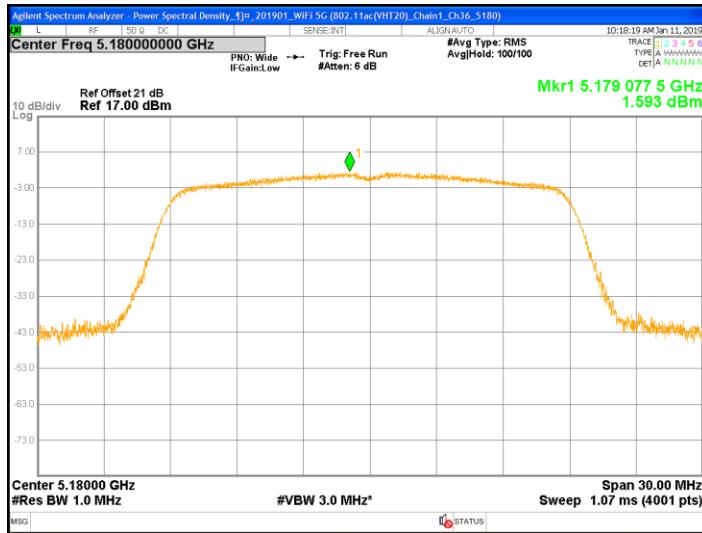
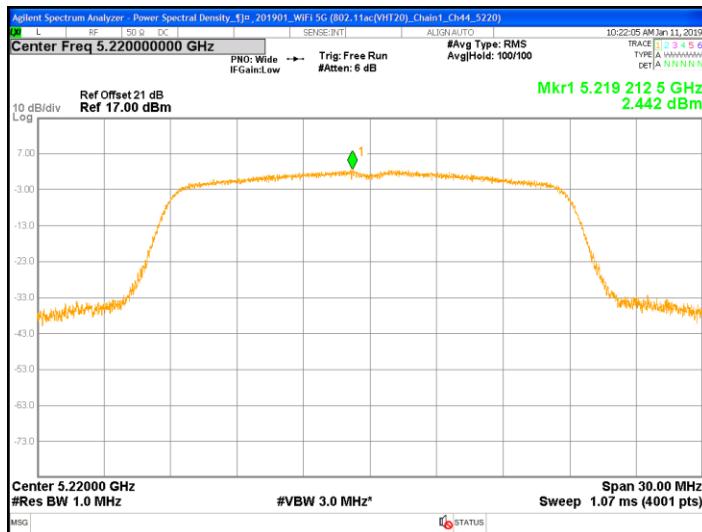
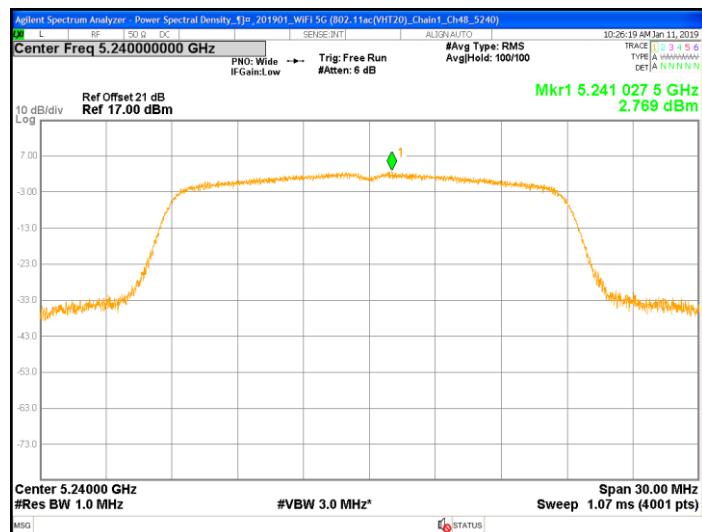
Chain0 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch44

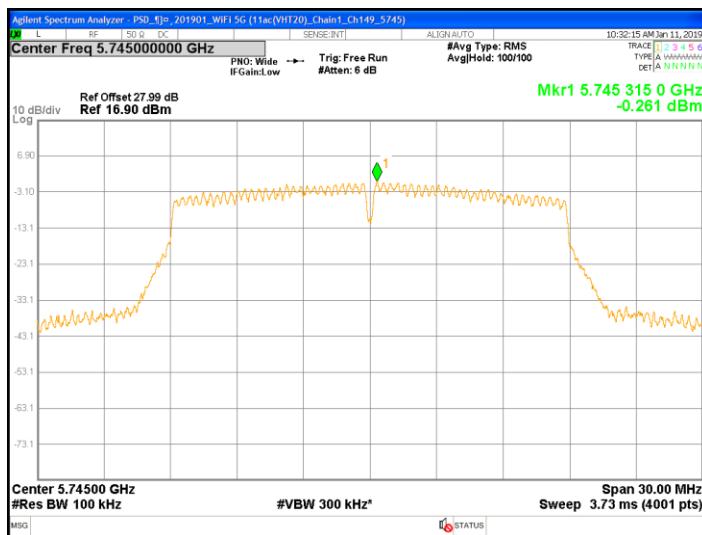
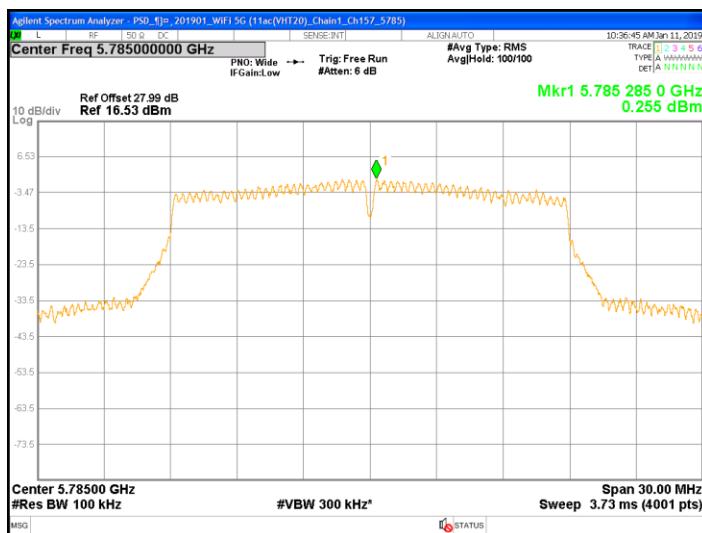
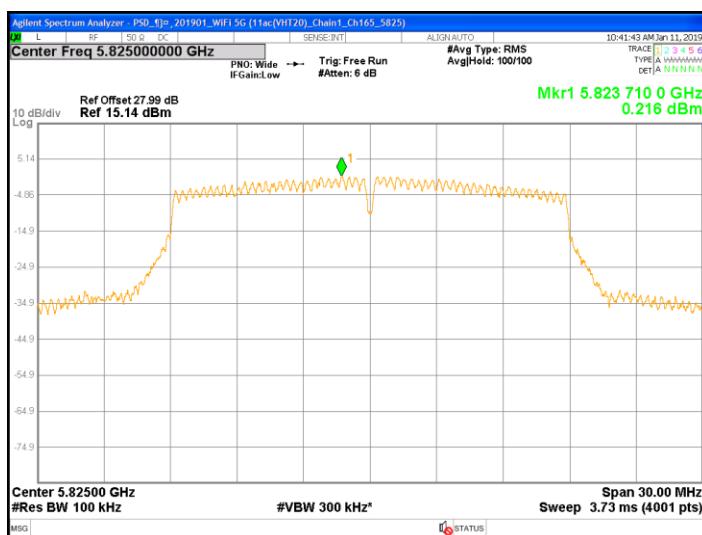


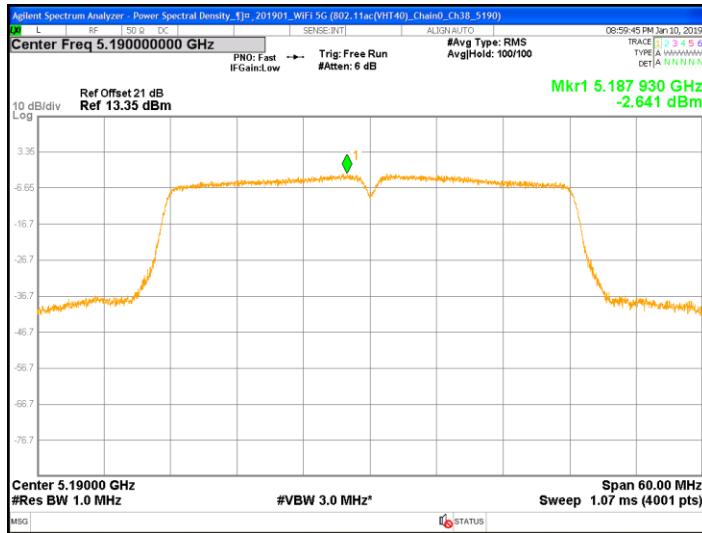
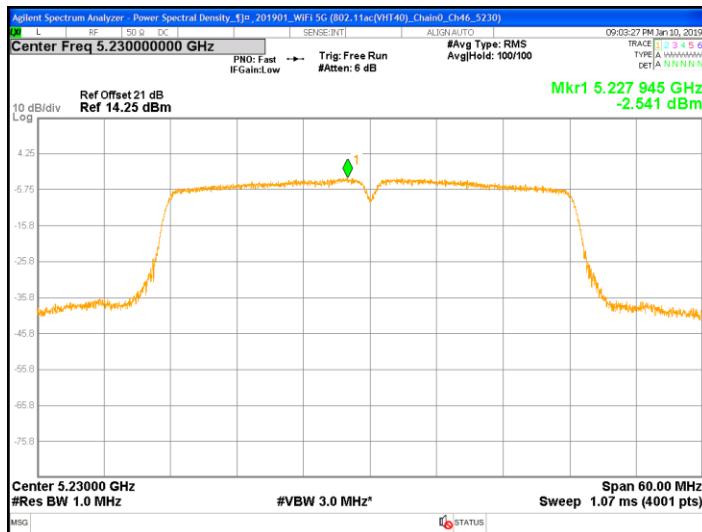
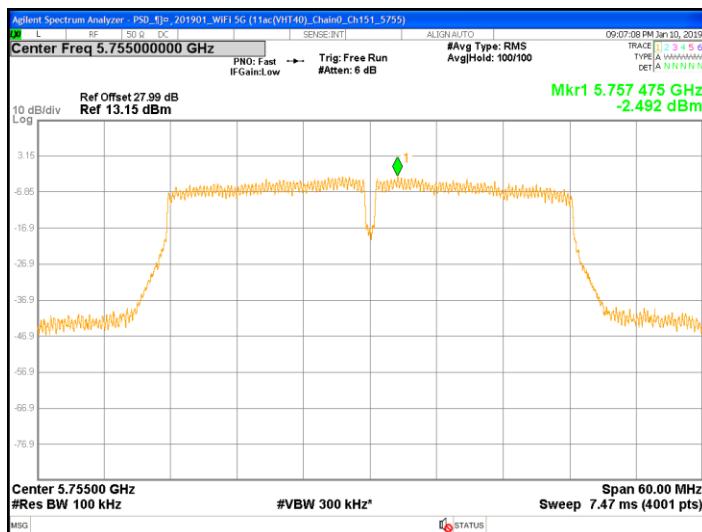
Chain0 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch48

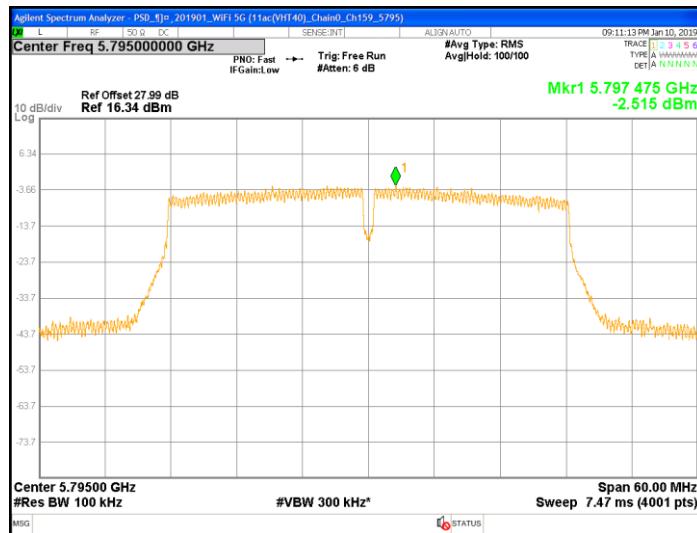


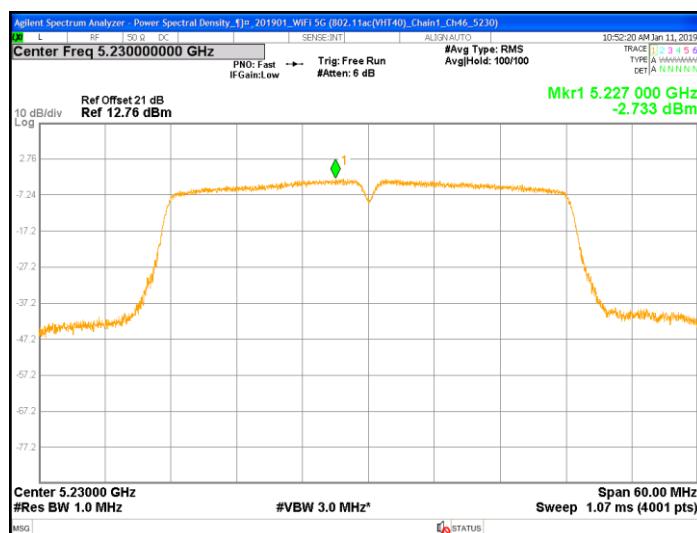
Chain0 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch149

Chain0 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch157

Chain0 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch165


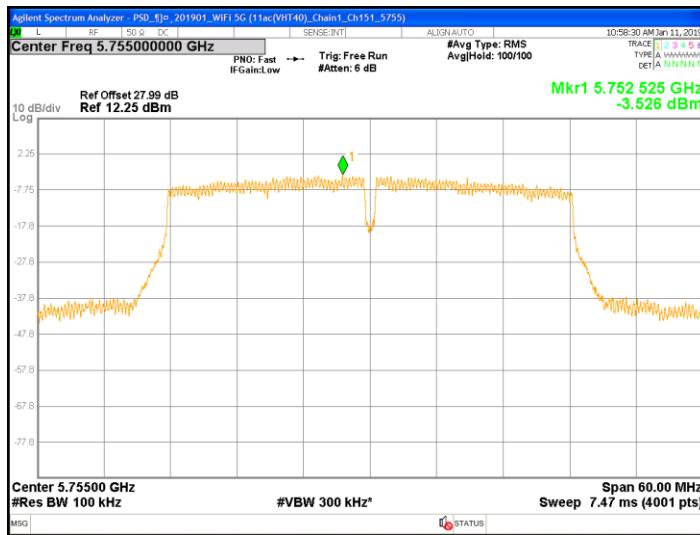
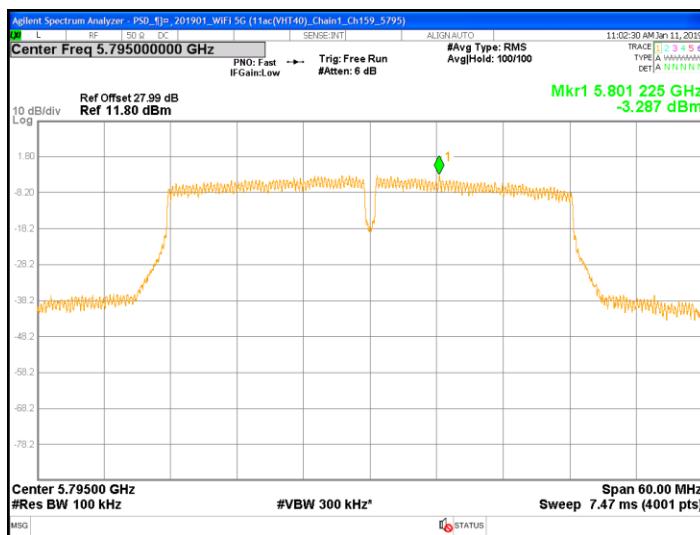
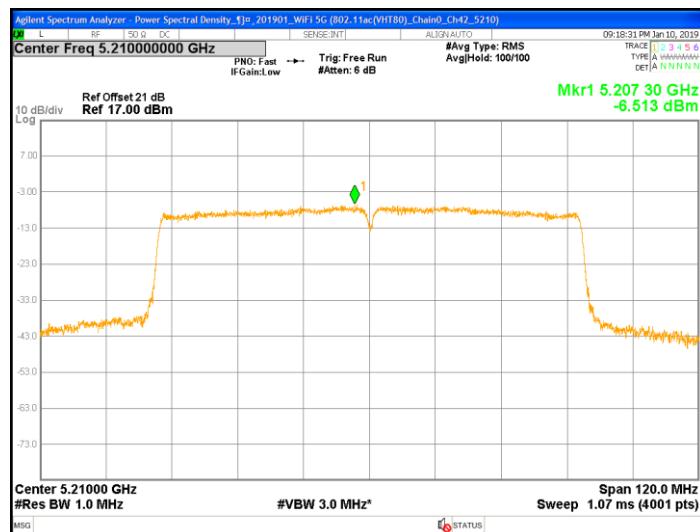
TEST REPORT
Chain1 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch36

Chain1 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch44

Chain1 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch48


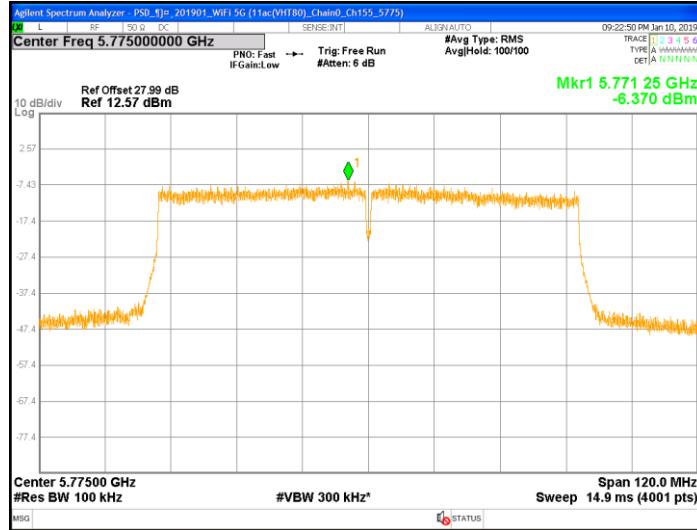
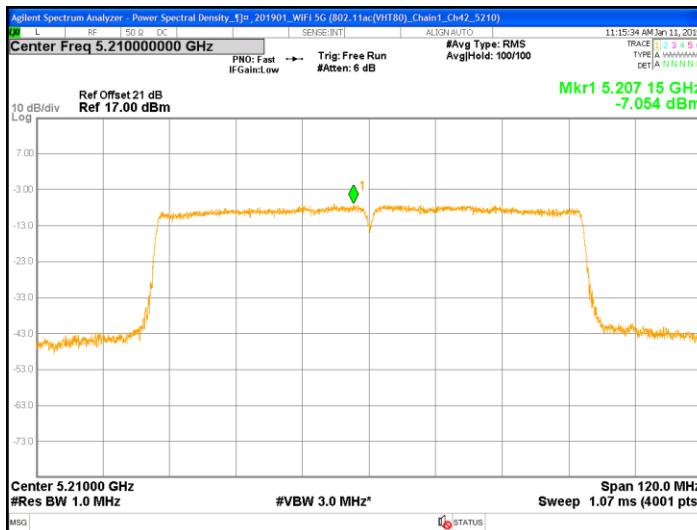
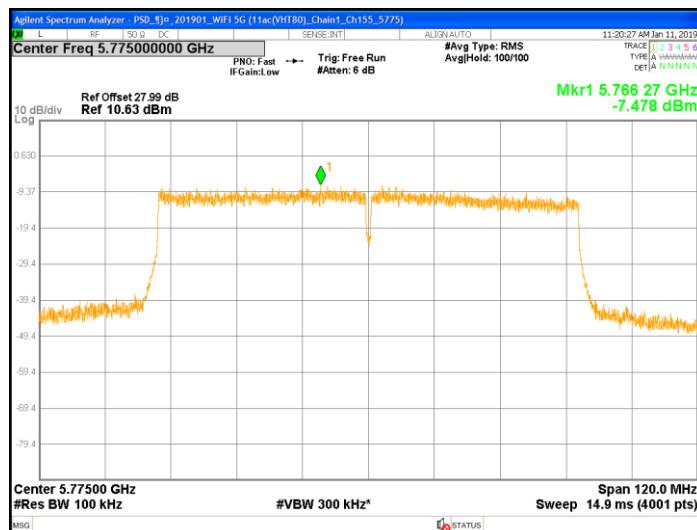
Chain1 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch149

Chain1 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch157

Chain1 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch165


TEST REPORT
Chain0 : Power Spectral Density @ 802.11ac(VHT40) Mode Ch38

Chain0 : Power Spectral Density @ 802.11ac(VHT40) Mode Ch46

Chain0 : Power Spectral Density @ 802.11ac(VHT40) Mode Ch151


Chain0 : Power Spectral Density @ 802.11ac(VHT40) Mode Ch159

Chain1 : Power Spectral Density @ 802.11ac(VHT40) Mode Ch38

Chain1 : Power Spectral Density @ 802.11ac(VHT40) Mode Ch46


Chain1 : Power Spectral Density @ 802.11ac(VHT40) Mode Ch151

Chain1 : Power Spectral Density @ 802.11ac(VHT40) Mode Ch159

Chain0 : Power Spectral Density @ 802.11ac(VHT80) Mode Ch42


TEST REPORT
Chain0 : Power Spectral Density @ 802.11ac(VHT80) Mode Ch155

Chain1 : Power Spectral Density @ 802.11ac(VHT80) Mode Ch42

Chain1 : Power Spectral Density @ 802.11ac(VHT80) Mode Ch155


4. Minimum Bandwidth

4.1 Operating environment

Temperature:	25	°C
Relative Humidity:	50	%
Atmospheric Pressure	1008	hPa
Requirement & Test method	15.407(a)(5) 15.407(e) KDB 789033 D02 v01r02	

4.2 Limit for minimum emission bandwidth.

Within the 5.15-5.25 GHz, the 26 dB bandwidth is for reporting purpose only.

Within the 5.725-5.85 GHz, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz..

4.3 Measuring instrument setting

For 5.15-5.25 GHz

Spectrum analyzer settings	
Spectrum Analyzer function	Setting
Detector	Peak
RBW	Approximately 1% of the EBW
VBW	> RBW
Trace mode	Max hold

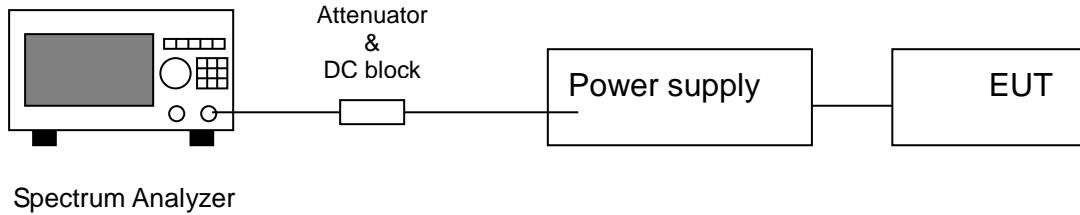
For 5.725-5.85 GHz

Spectrum analyzer settings	
Spectrum Analyzer function	Setting
Detector	Peak
RBW	100kHz
VBW	$\geq 3 \times$ RBW
Sweep	Auto couple
Trace mode	Max hold

4.4 Test procedure

1. The transmitter output was connected to the spectrum analyzer.
2. Test was performed in accordance with section C of KDB 789033 D02 v01r02.
3. For the 5.725-5.85 GHz, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.
4. For the 5.15-5.25 GHz and 5.725-5.85 GHz, measure the maximum width of the emission that is 26 dB down from the maximum of the emission.

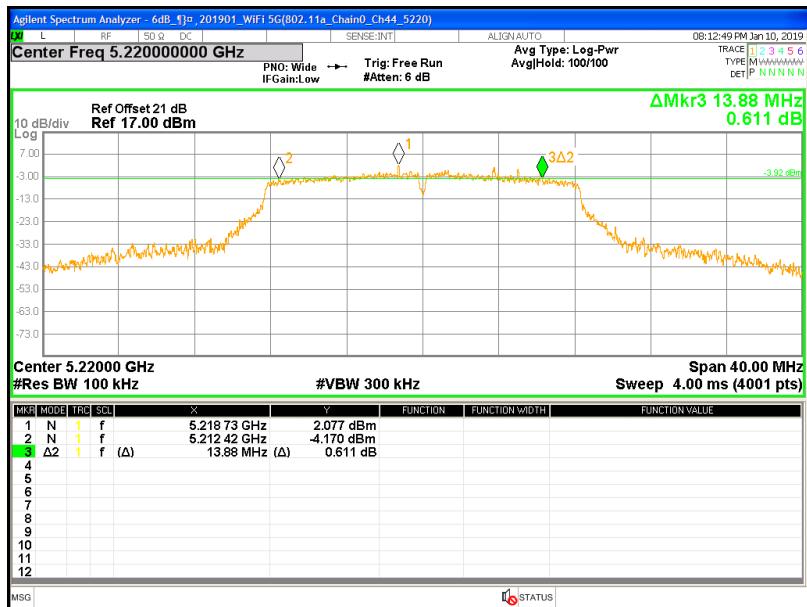
4.5 Test diagram



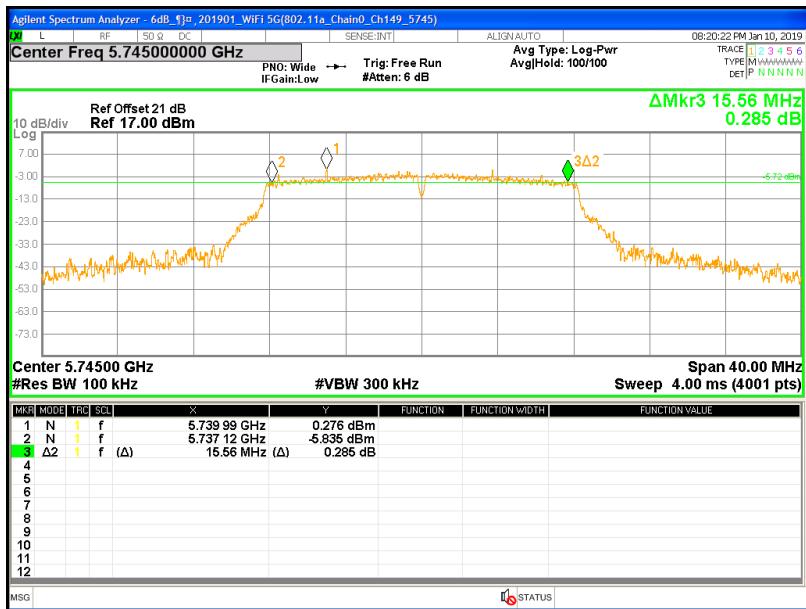
4.6 Test results

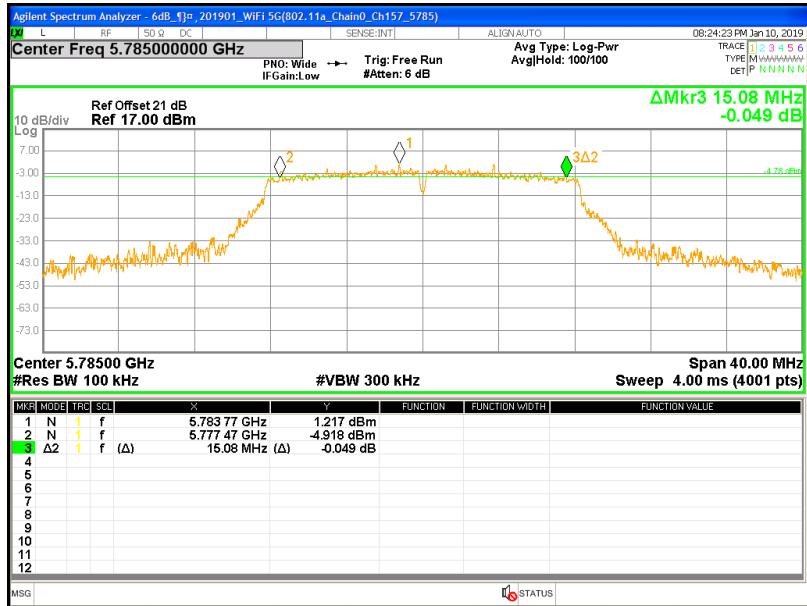
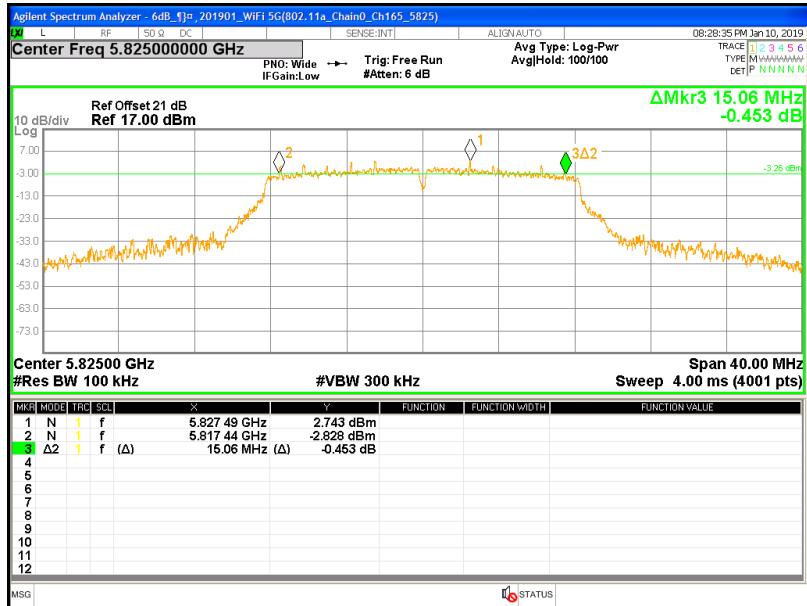
Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Result
802.11a Chain0	36	5180		20.49	N/A	Pass
	44	5220		20.42		Pass
	48	5240		20.49		Pass
	149	5745	15.56		>0.5	Pass
	157	5785	15.08			Pass
	165	5825	15.06			Pass
802.11a Chain1	36	5180		20.36	N/A	Pass
	44	5220		20.38		Pass
	48	5240		20.14		Pass
	149	5745	13.90		>0.5	Pass
	157	5785	15.05			Pass
	165	5825	11.61			Pass
802.11ac(VHT20) Chain0	36	5180		21.25	N/A	Pass
	44	5220		24.35		Pass
	48	5240		27.78		Pass
	149	5745	15.12		>0.5	Pass
	157	5785	15.06			Pass
	165	5825	15.14			Pass
802.11ac(VHT20)Chain1	36	5180		20.71	N/A	Pass
	44	5220		21.57		Pass
	48	5240		23.30		Pass
	149	5745	13.88		>0.5	Pass
	157	5785	12.75			Pass
	165	5825	15.07			Pass
802.11ac(VHT40) Chain0	38	5190		41.26	N/A	Pass
	46	5230		41.19		Pass
	151	5755	35.11		>0.5	Pass
	159	5795	35.08			Pass
802.11ac(VHT40) Chain1	38	5190		41.18	N/A	Pass
	46	5230		41.06		Pass
	151	5755	35.14		>0.5	Pass
	159	5795	35.15			Pass
802.11ac(VHT80) Chain0	42	5210		81.40	N/A	Pass
	155	5775	75.30		>0.5	Pass
802.11ac(VHT80) Chain1	42	5210		81.01	N/A	Pass
	155	5775	75.75		>0.5	Pass

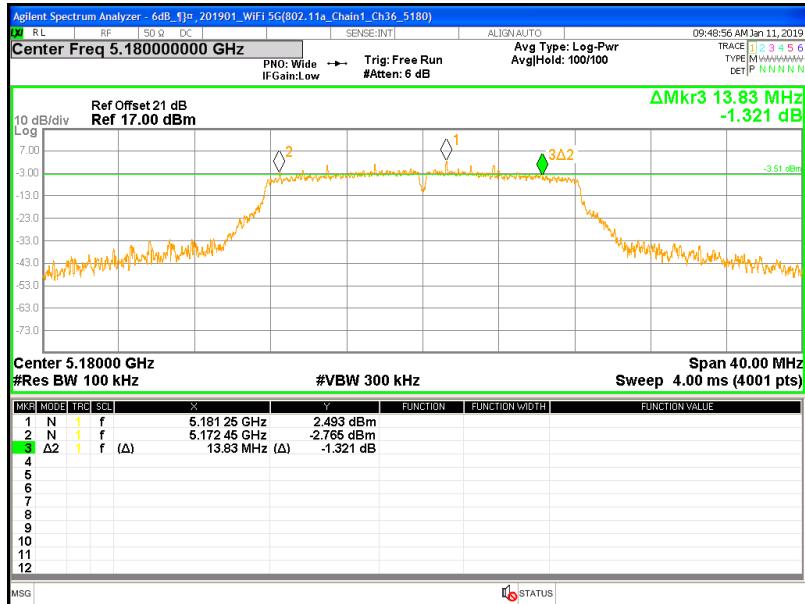
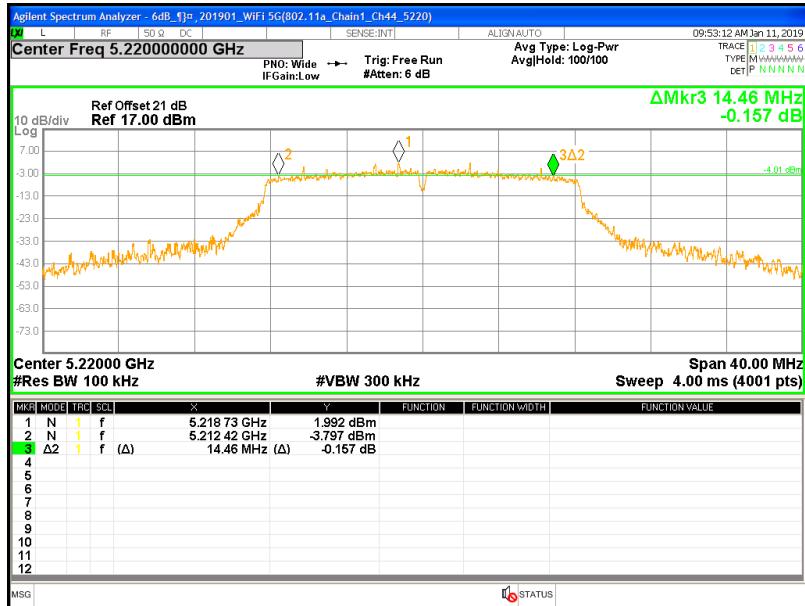
Chain0 : 6dB Bandwidth @ 802.11a Mode Ch36

Chain0 : 6dB Bandwidth @ 802.11a Mode Ch44


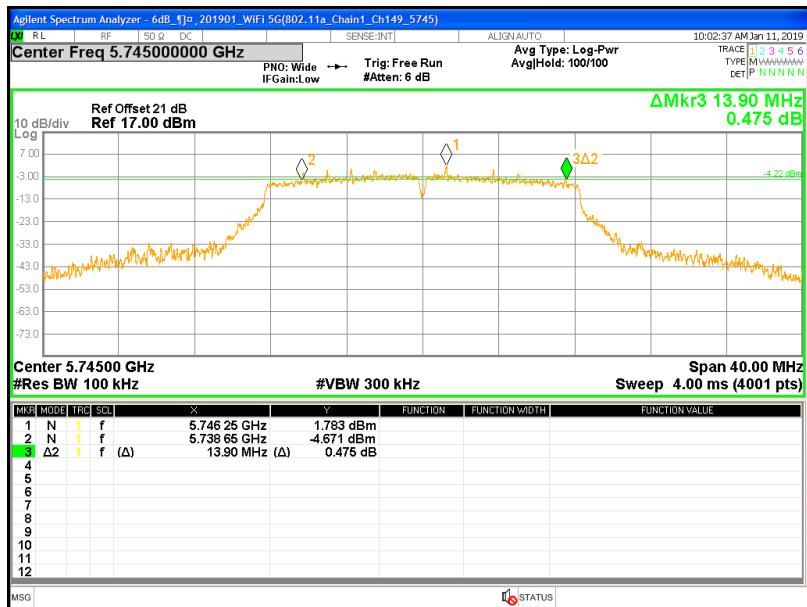
Chain0 : 6dB Bandwidth @ 802.11a Mode Ch48

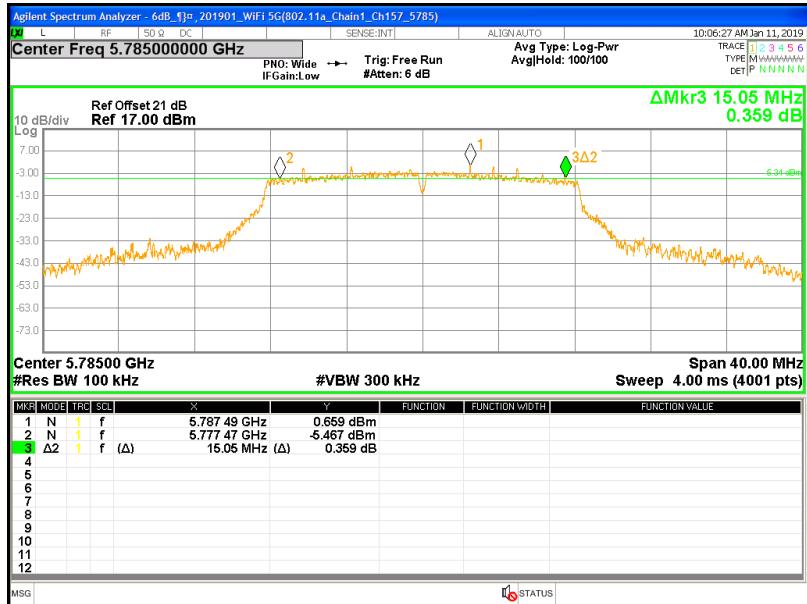
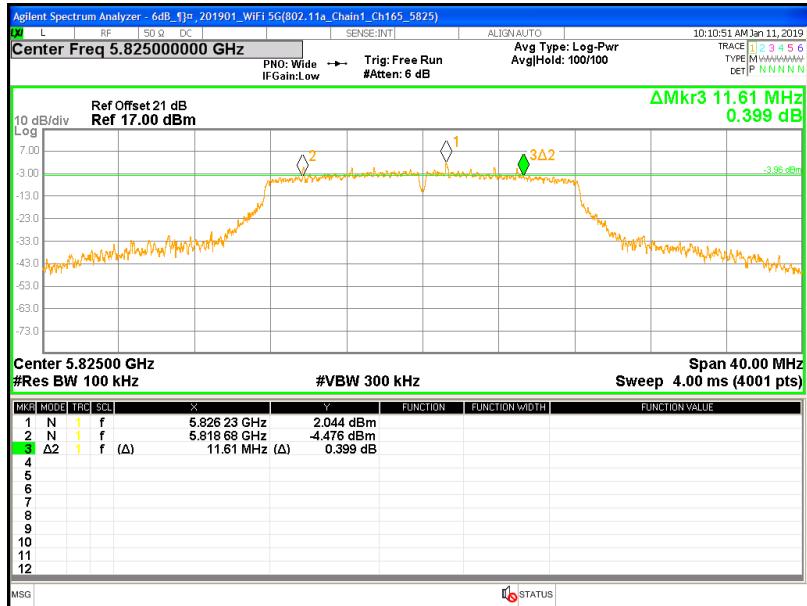
Chain0 : 6dB Bandwidth @ 802.11a Mode Ch149


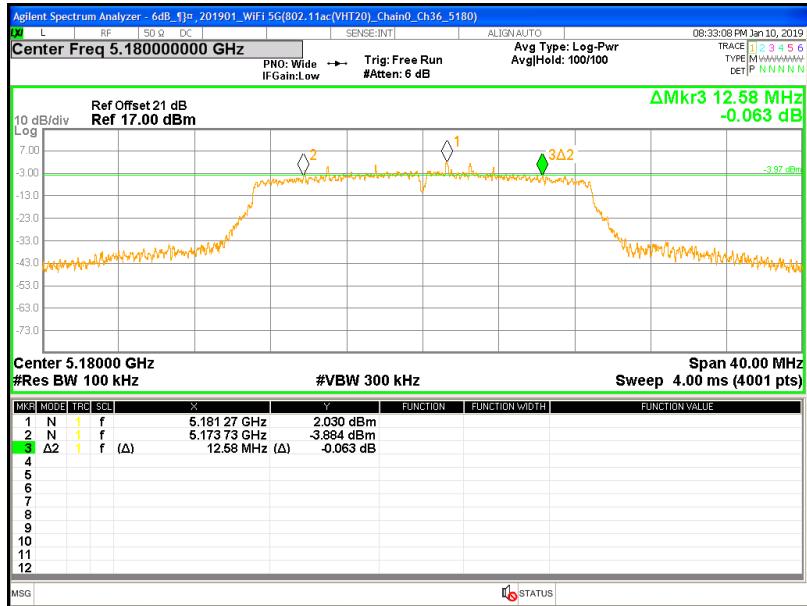
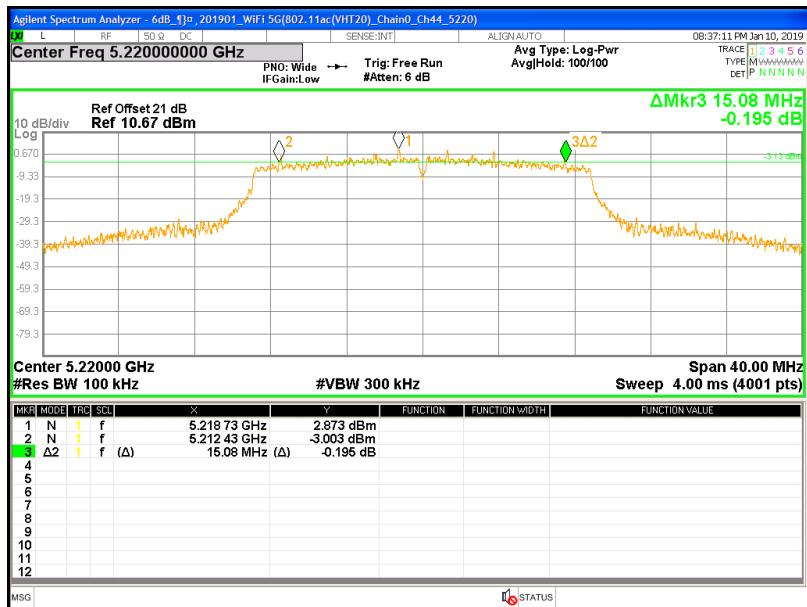
Chain0 : 6dB Bandwidth @ 802.11a Mode Ch157

Chain0 : 6dB Bandwidth @ 802.11a Mode Ch165


Chain1 : 6dB Bandwidth @ 802.11a Mode Ch36

Chain1 : 6dB Bandwidth @ 802.11a Mode Ch44


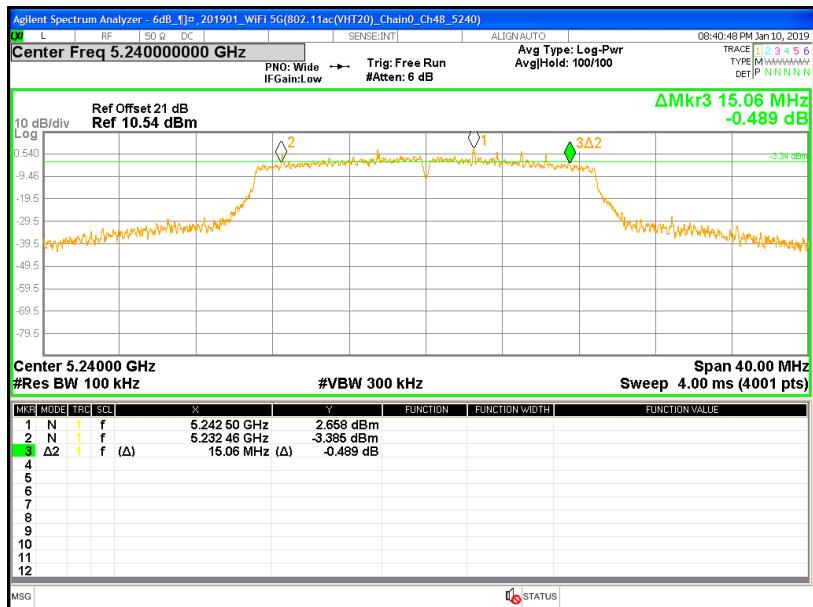
Chain1 : 6dB Bandwidth @ 802.11a Mode Ch48

Chain1 : 6dB Bandwidth @ 802.11a Mode Ch149


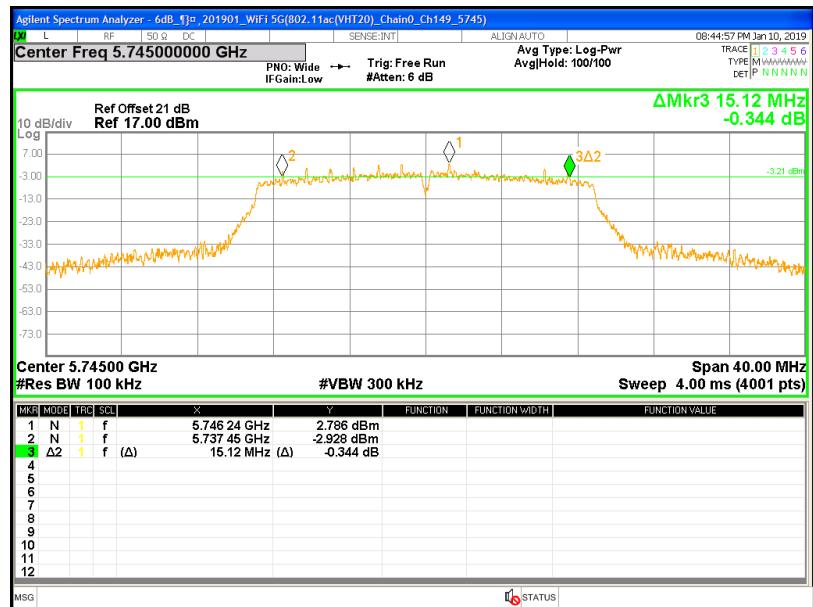
Chain1 : 6dB Bandwidth @ 802.11a Mode Ch157

Chain1 : 6dB Bandwidth @ 802.11a Mode Ch165


Chain0 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch36

Chain0 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch44


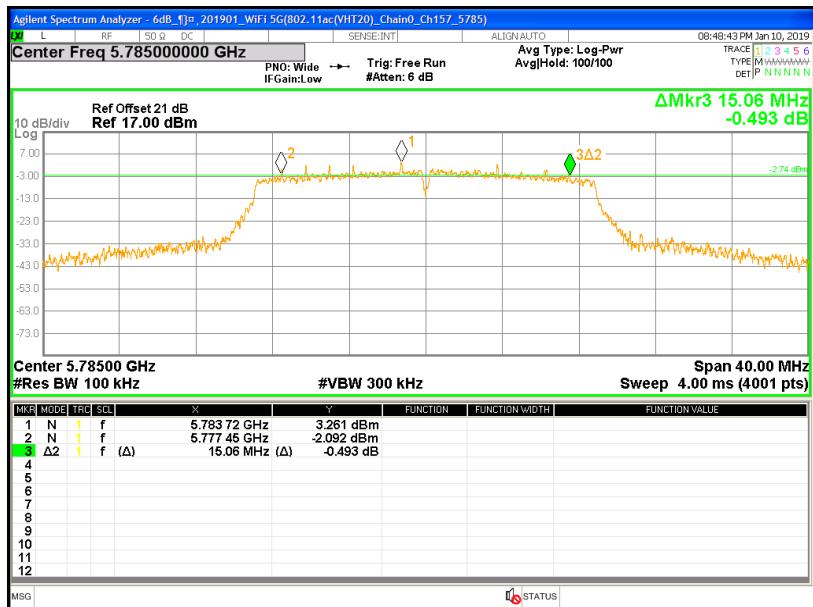
Chain0 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch48



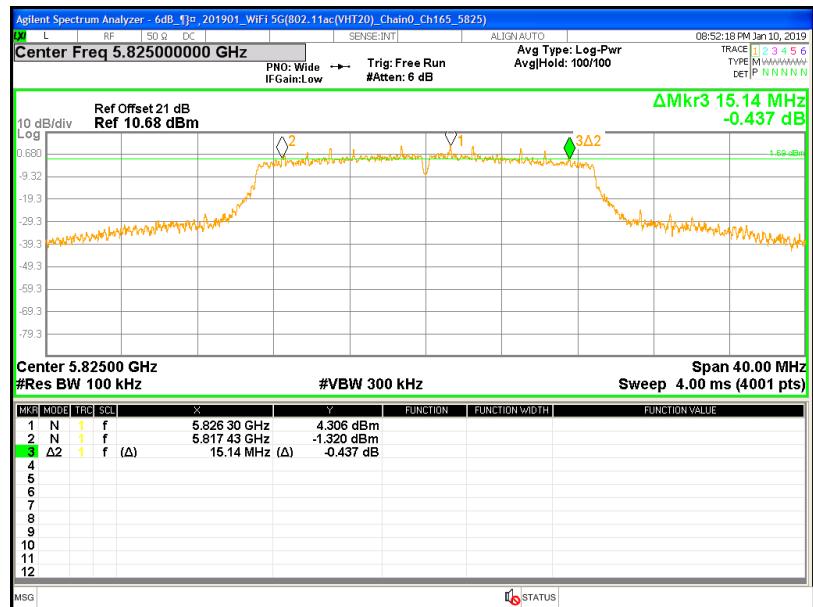
Chain0 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch149

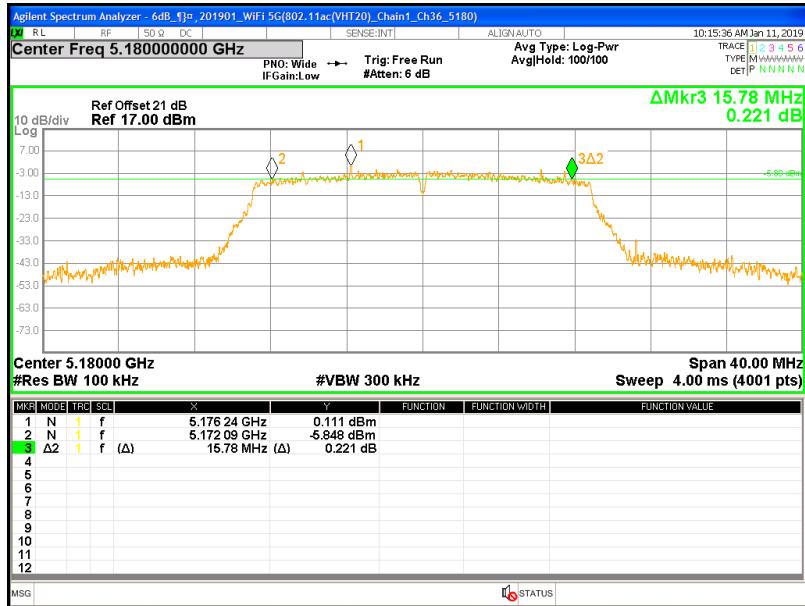


Chain0 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch157

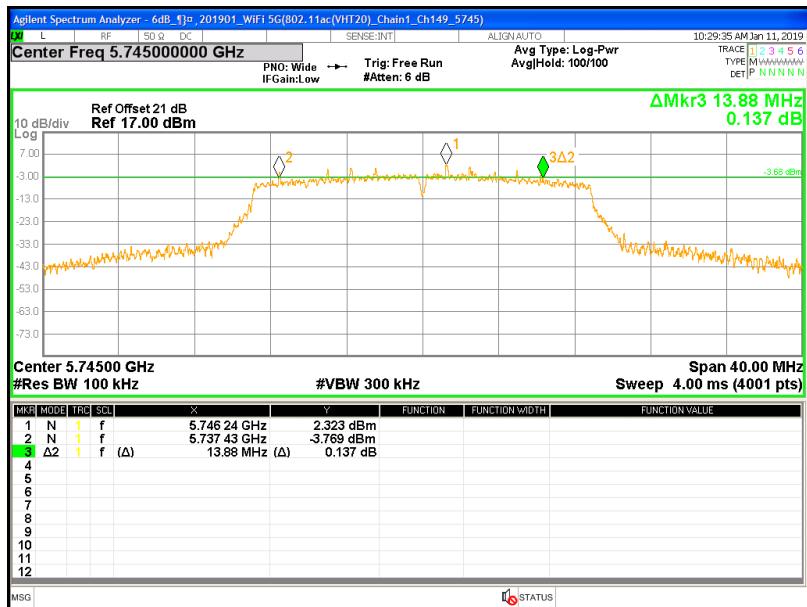


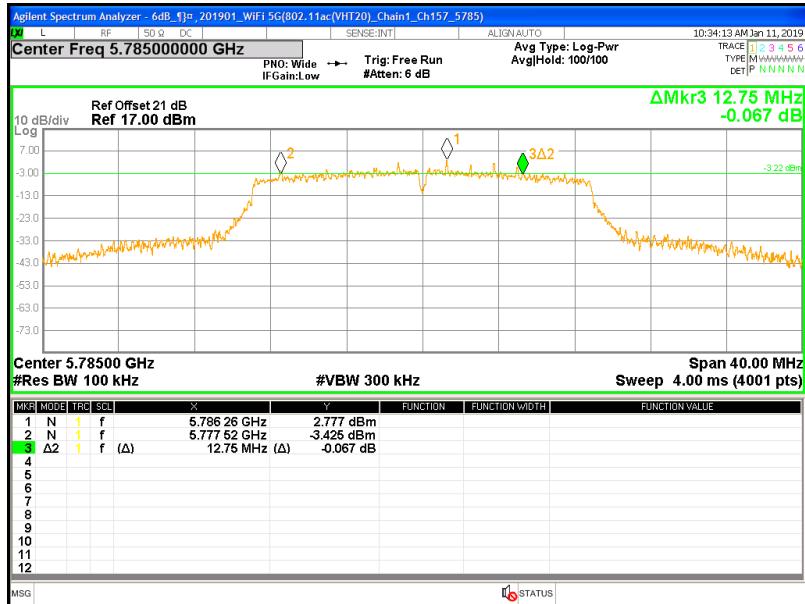
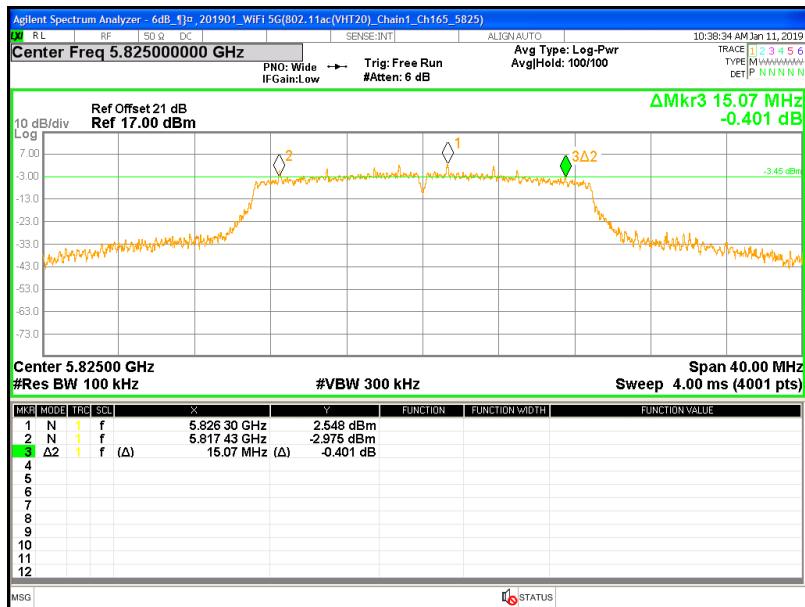
Chain0 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch165

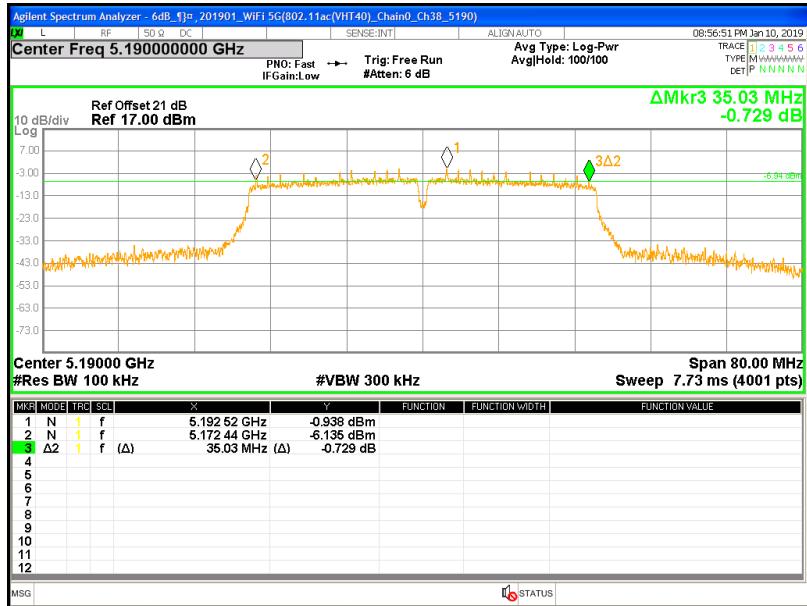
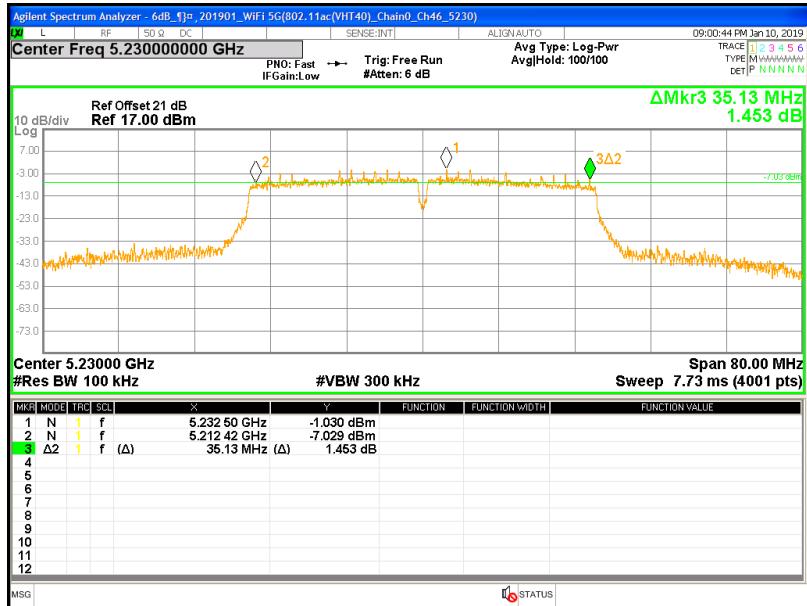


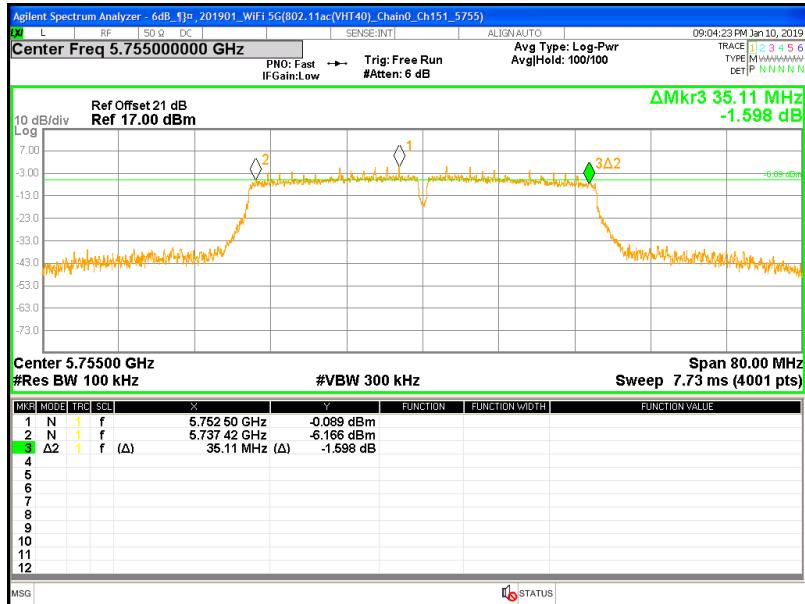
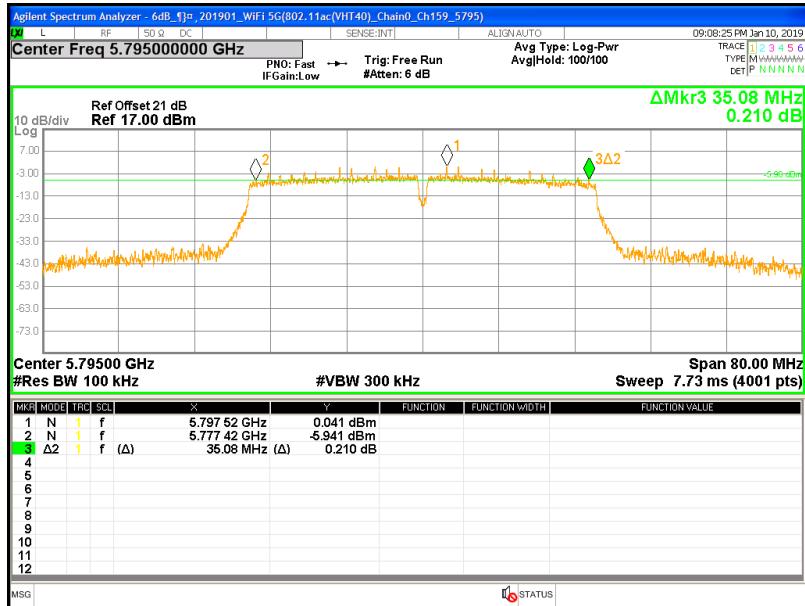
Chain1 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch36

Chain1 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch44


Chain1 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch48

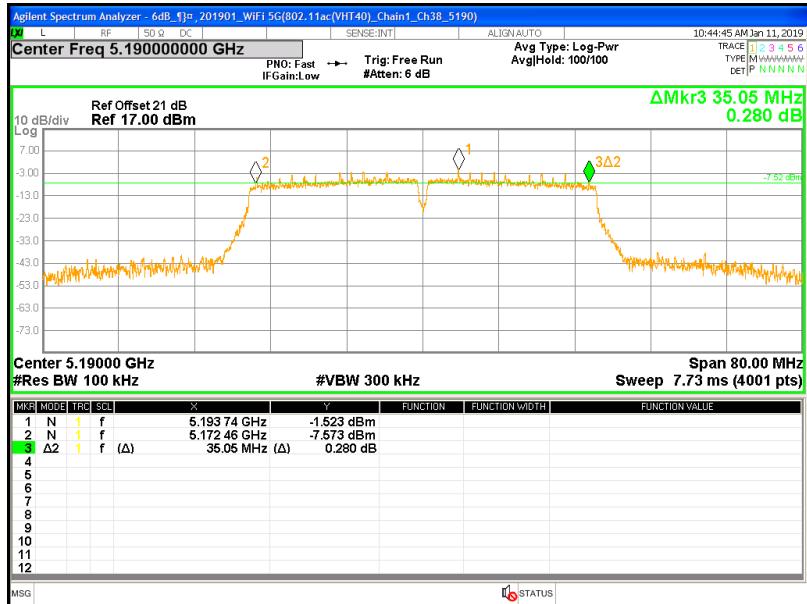
Chain1 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch149


Chain1 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch157

Chain1 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch165


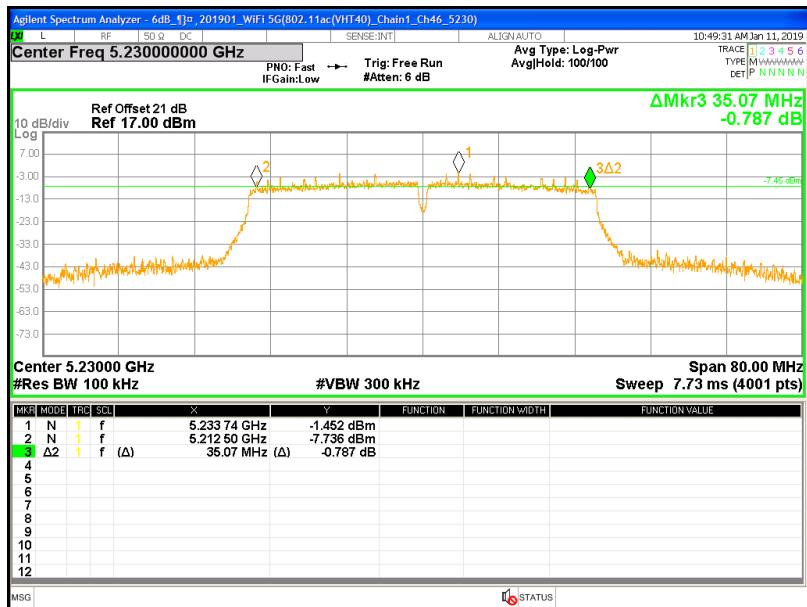
Chain0 : 6dB Bandwidth @ 802.11ac(VHT40) Mode Ch38

Chain0 : 6dB Bandwidth @ 802.11ac(VHT40) Mode Ch46


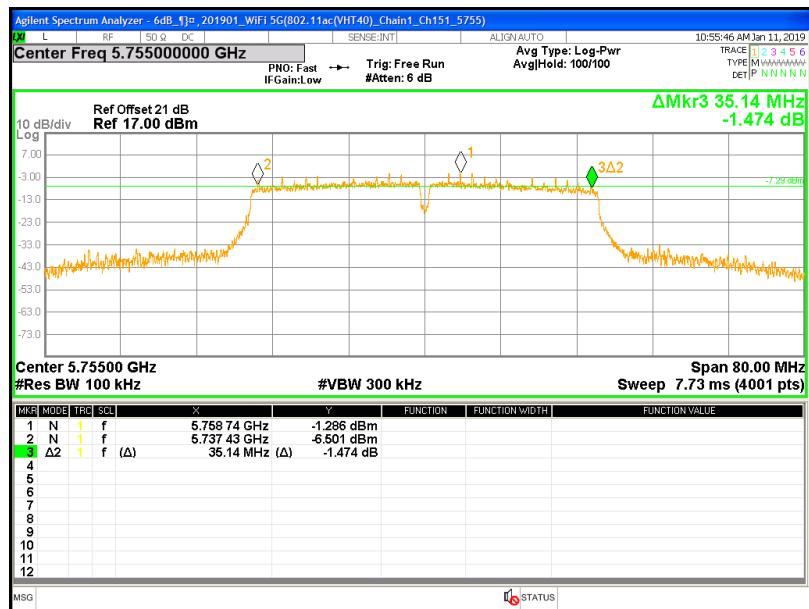
Chain0 : 6dB Bandwidth @ 802.11ac(VHT40) Mode Ch151

Chain0 : 6dB Bandwidth @ 802.11ac(VHT40) Mode Ch159


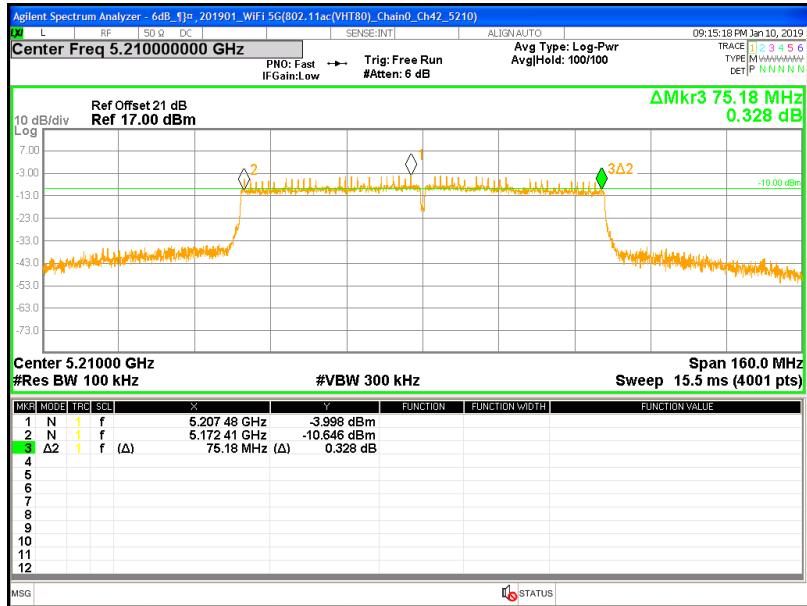
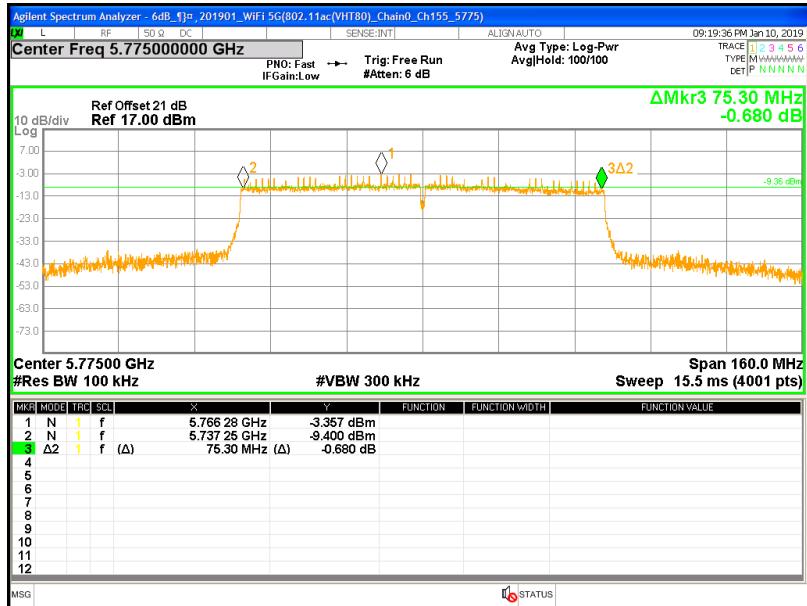
Chain1 : 6dB Bandwidth @ 802.11ac(VHT40) Mode Ch38



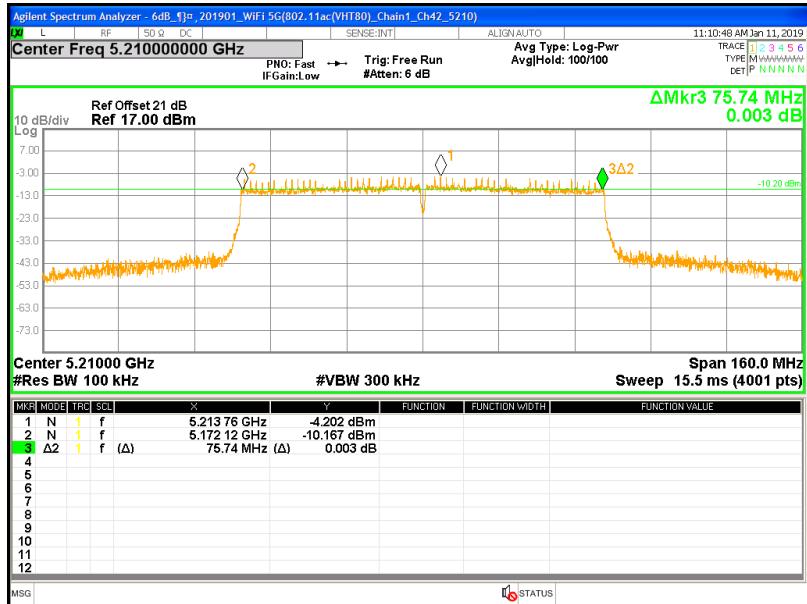
Chain1 : 6dB Bandwidth @ 802.11ac(VHT40) Mode Ch46



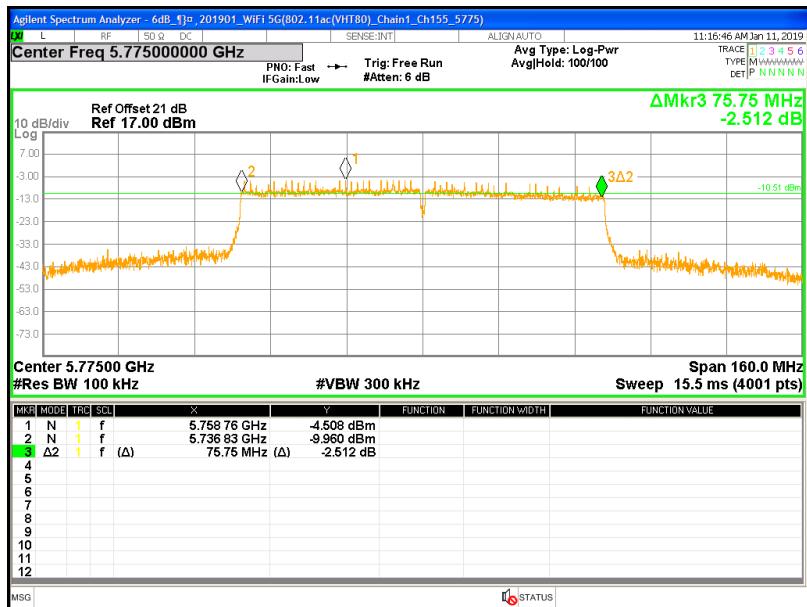
TEST REPORT
Chain1 : 6dB Bandwidth @ 802.11ac(VHT40) Mode Ch151

Chain1 : 6dB Bandwidth @ 802.11ac(VHT40) Mode Ch159


Chain0 : 6dB Bandwidth @ 802.11ac(VHT80) Mode Ch42

Chain0 : 6dB Bandwidth @ 802.11ac(VHT80) Mode Ch155


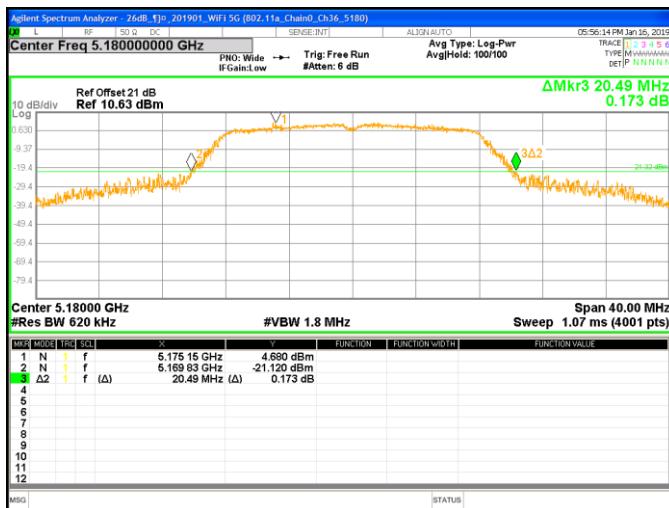
Chain1 : 6dB Bandwidth @ 802.11ac(VHT80) Mode Ch42



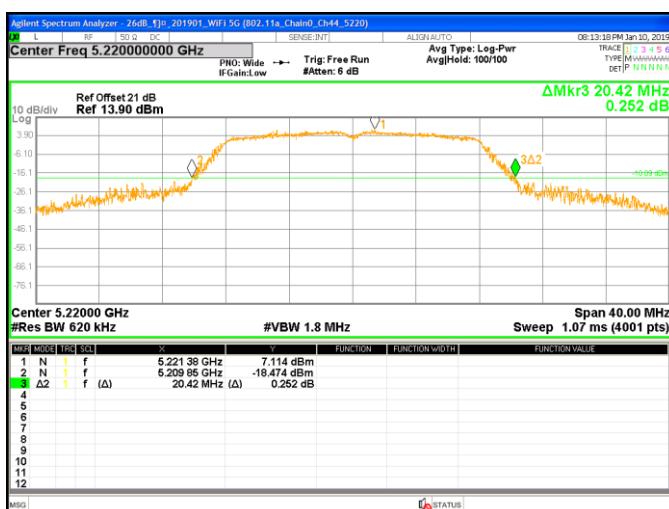
Chain1 : 6dB Bandwidth @ 802.11ac(VHT80) Mode Ch155



Chain0 : 26dB Bandwidth @ 802.11a Mode Ch36

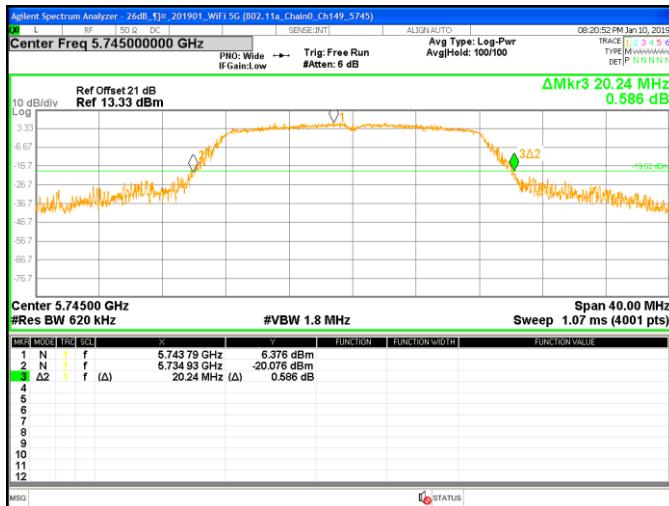
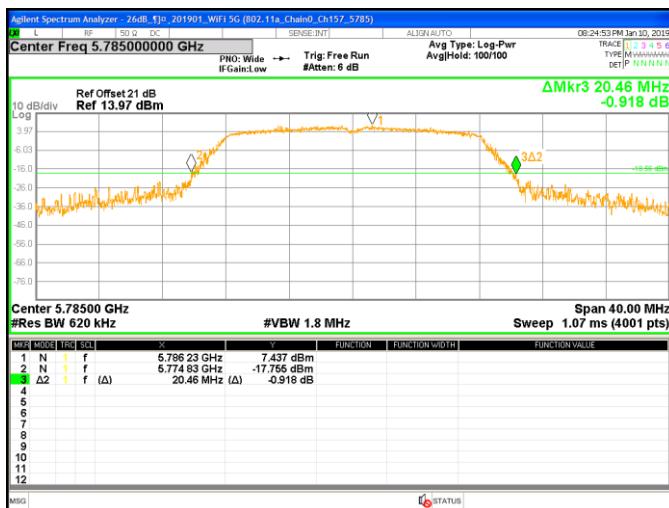
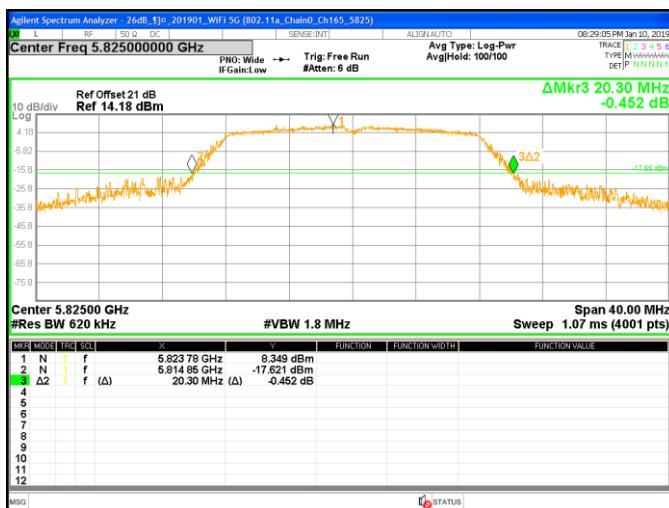


Chain0 : 26dB Bandwidth @ 802.11a Mode Ch44

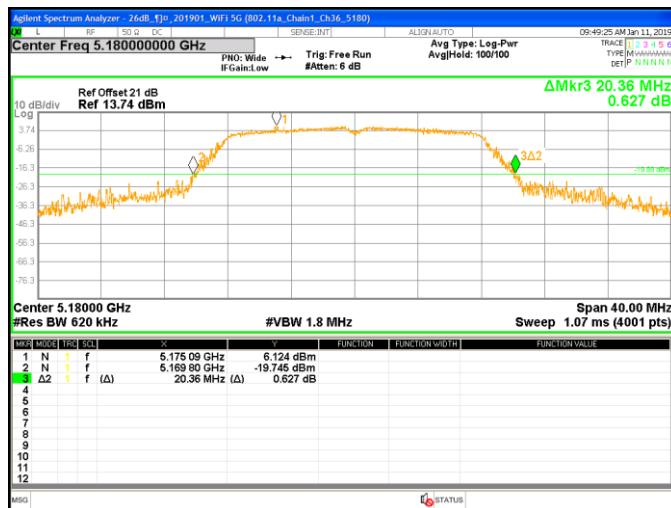


Chain0 : 26dB Bandwidth @ 802.11a Mode Ch48



Chain0 : 26dB Bandwidth @ 802.11a Mode Ch149

Chain0 : 26dB Bandwidth @ 802.11a Mode Ch157

Chain0 : 26dB Bandwidth @ 802.11a Mode Ch165


Chain1 : 26dB Bandwidth @ 802.11a Mode Ch36



Chain1 : 26dB Bandwidth @ 802.11a Mode Ch44



Chain1 : 26dB Bandwidth @ 802.11a Mode Ch48

