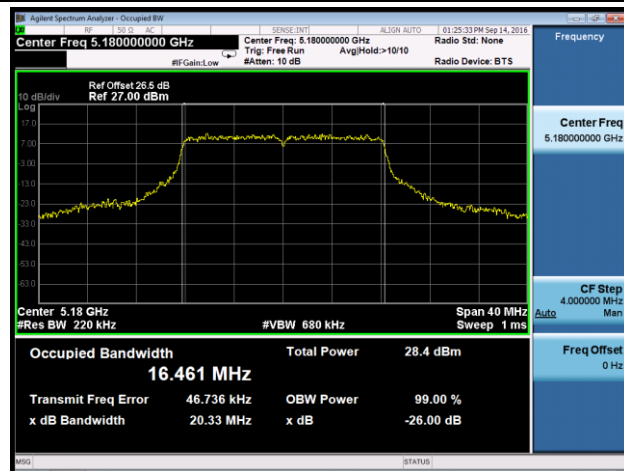
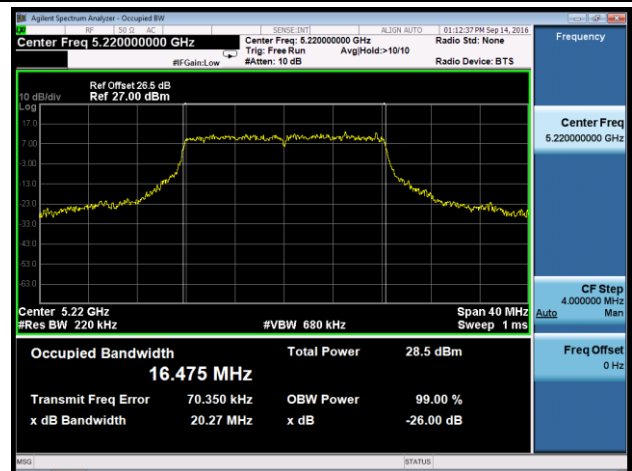


802.11a 26dB Bandwidth & 99% Bandwidth - Ant 2

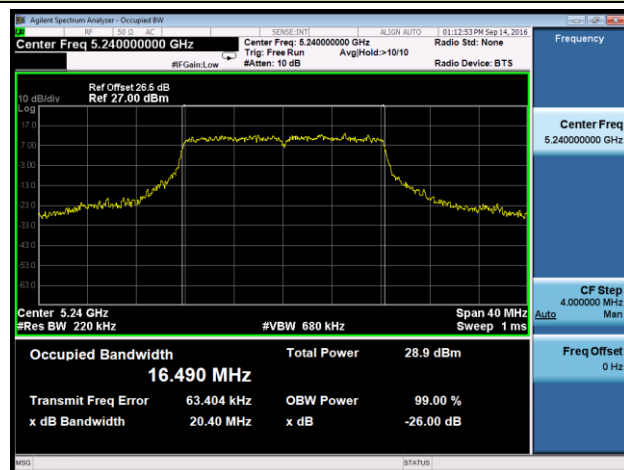
Channel 36 (5180MHz)



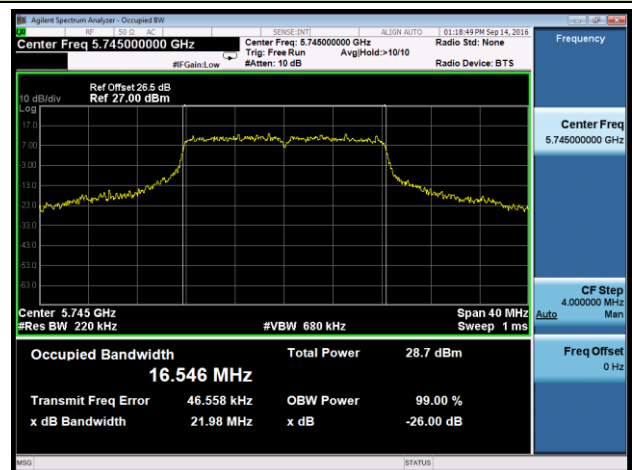
Channel 44 (5220MHz)



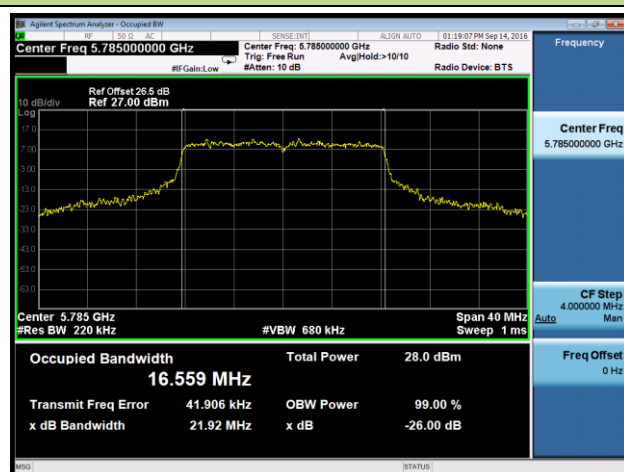
Channel 48 (5240MHz)



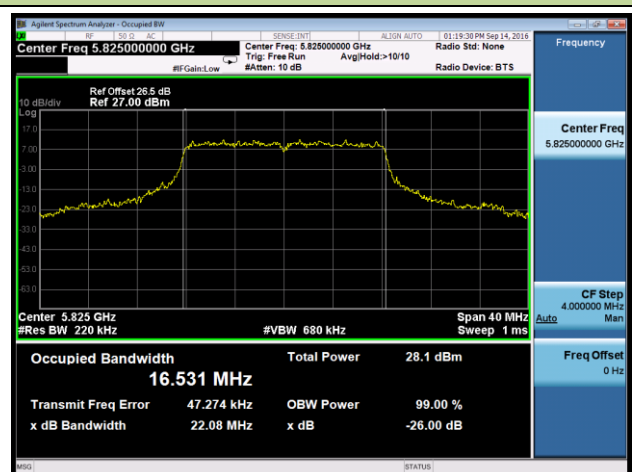
Channel 149 (5745MHz)



Channel 157 (5785MHz)

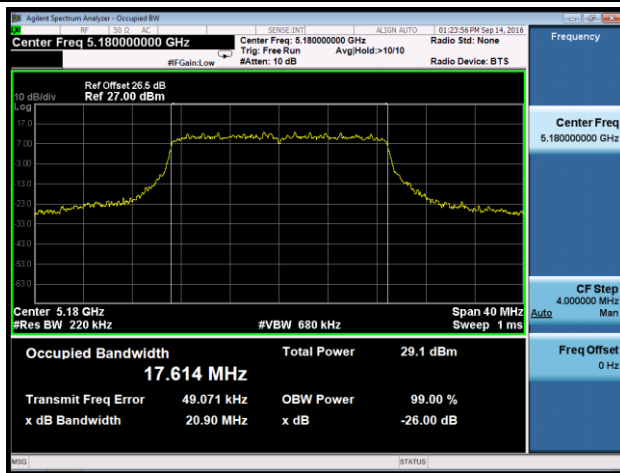


Channel 165 (5825MHz)

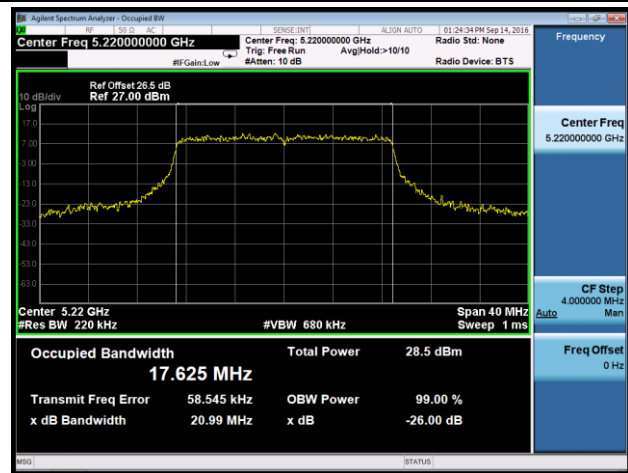


802.11n-HT20 26dB Bandwidth & 99% Bandwidth - Ant 2

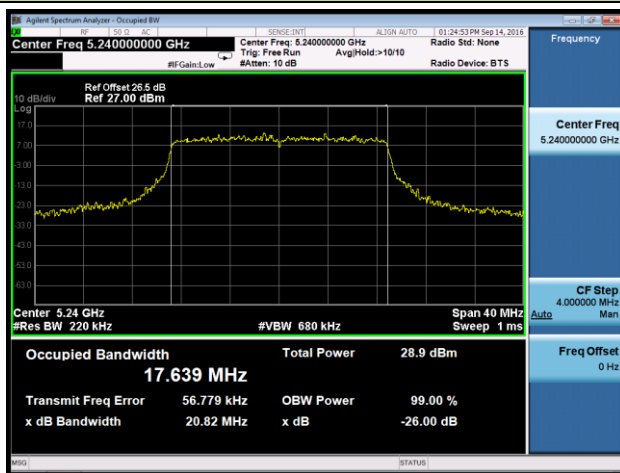
Channel 36 (5180MHz)



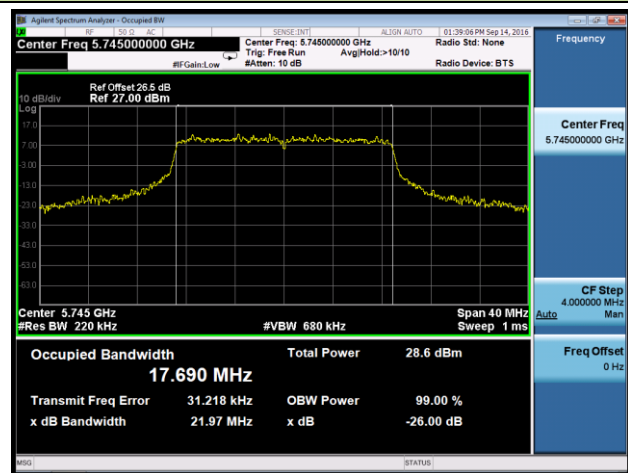
Channel 44 (5220MHz)



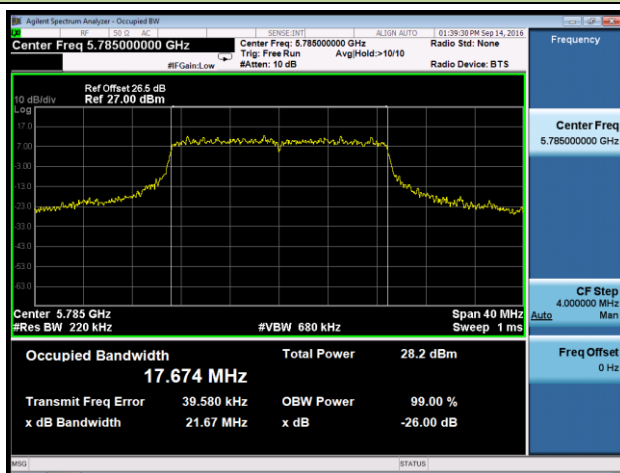
Channel 48 (5240MHz)



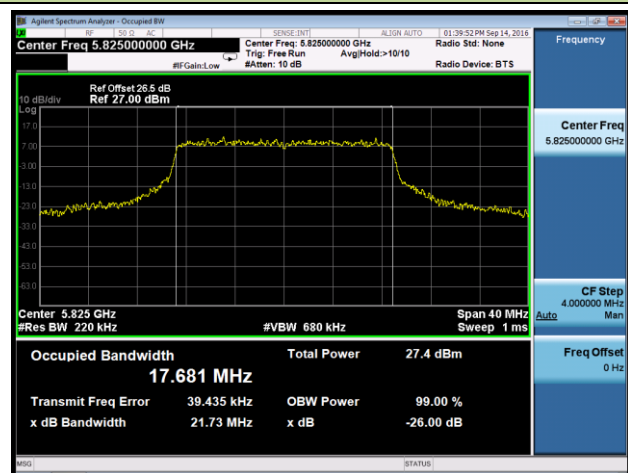
Channel 149 (5745MHz)



Channel 157 (5785MHz)

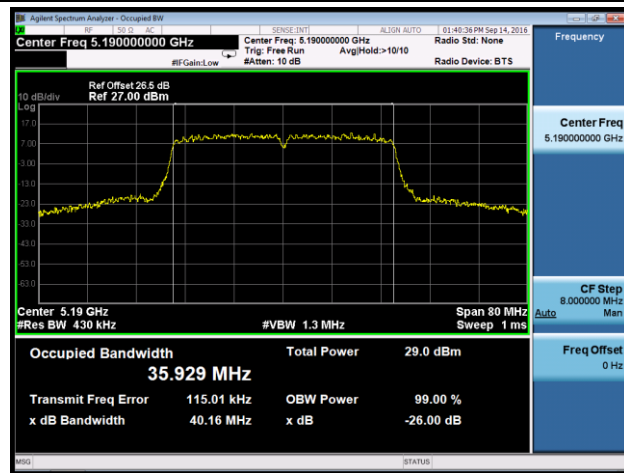


Channel 165 (5825MHz)

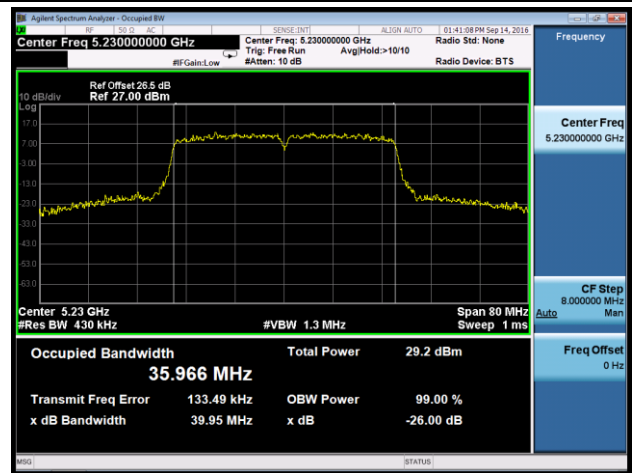


**802.11n-HT40 26dB Bandwidth & 99% Bandwidth - Ant 2**

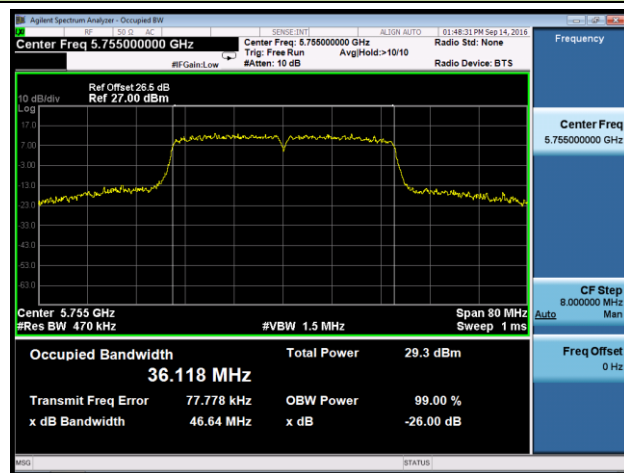
**Channel 38 (5190MHz)**



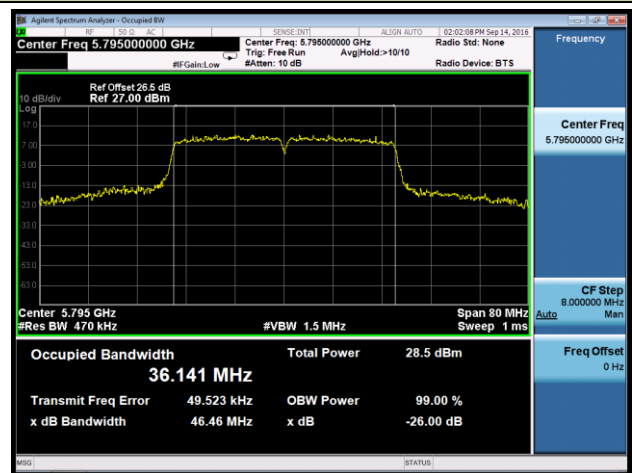
**Channel 46 (5230MHz)**



**Channel 151 (5755MHz)**

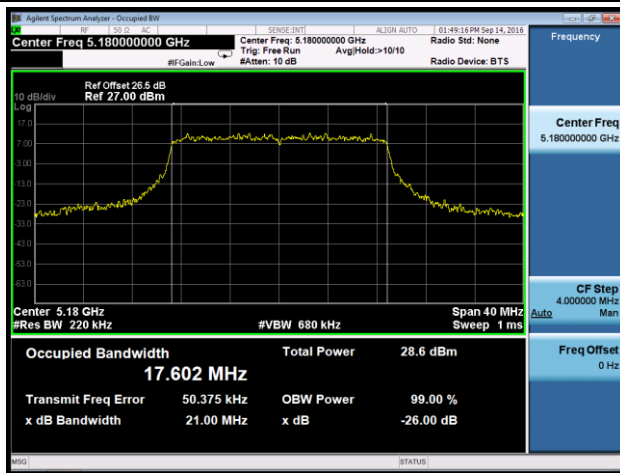


**Channel 159 (5795MHz)**

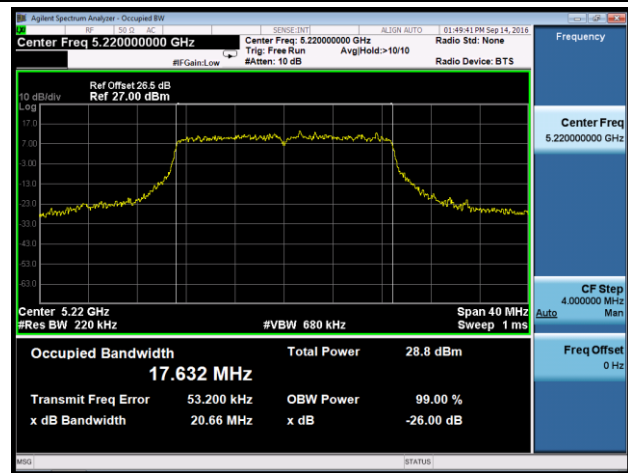


802.11ac-VHT20 26dB Bandwidth & 99% Bandwidth - Ant 2

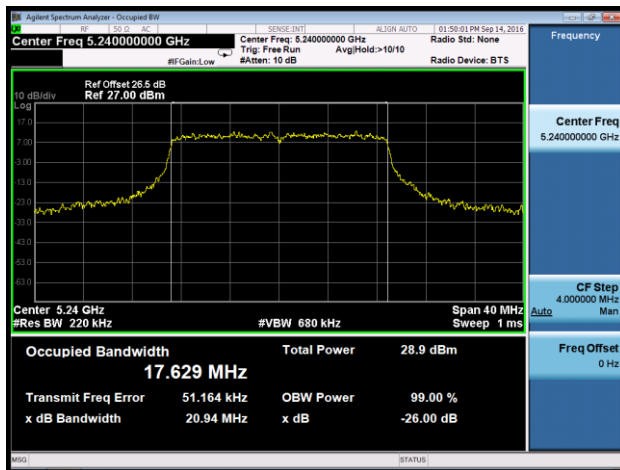
Channel 36 (5180MHz)



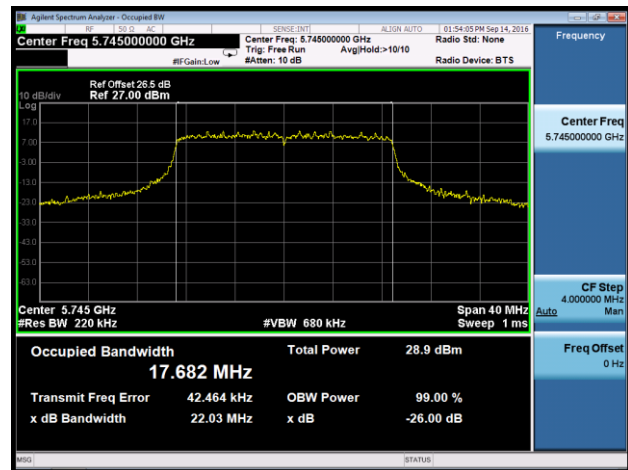
Channel 44 (5220MHz)



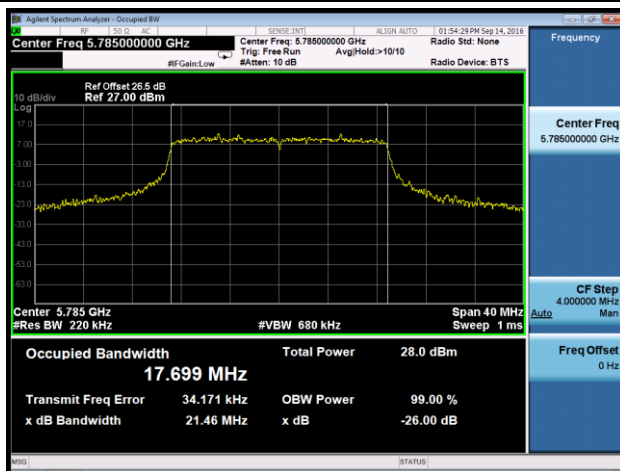
Channel 48 (5240MHz)



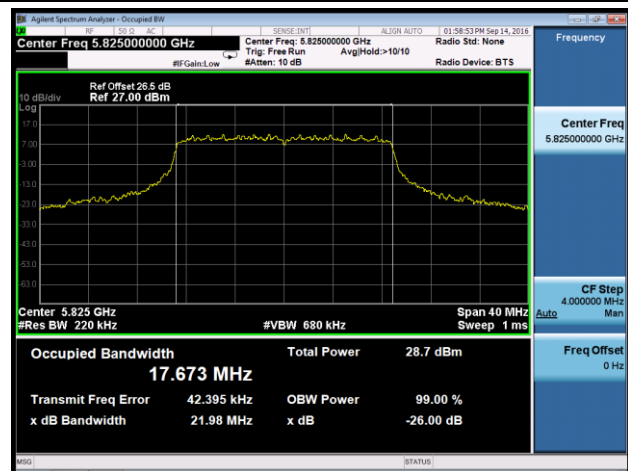
Channel 149 (5745MHz)



Channel 157 (5785MHz)

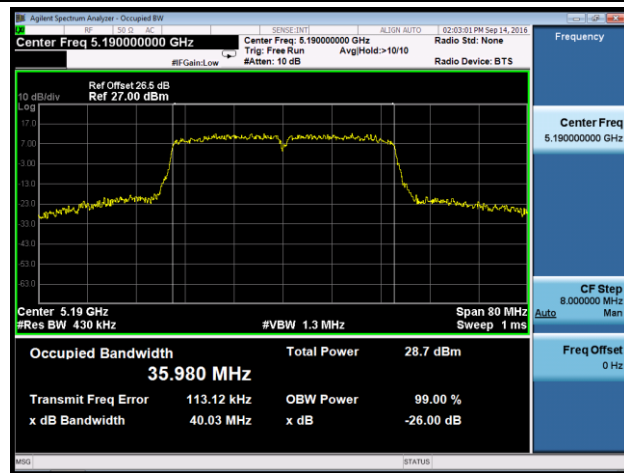


Channel 165 (5825MHz)

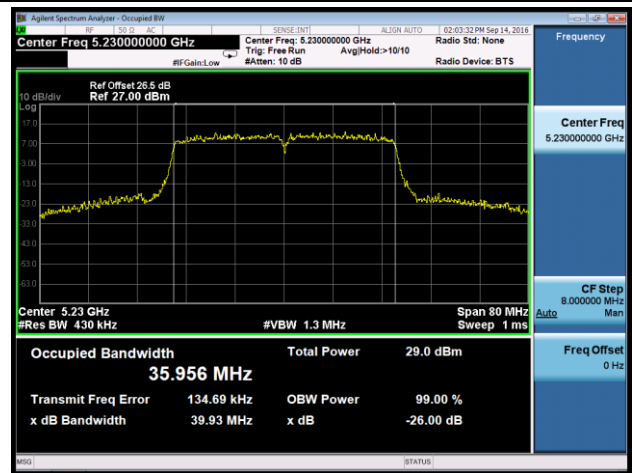


**802.11ac-VHT40 26dB Bandwidth & 99% Bandwidth - Ant 2**

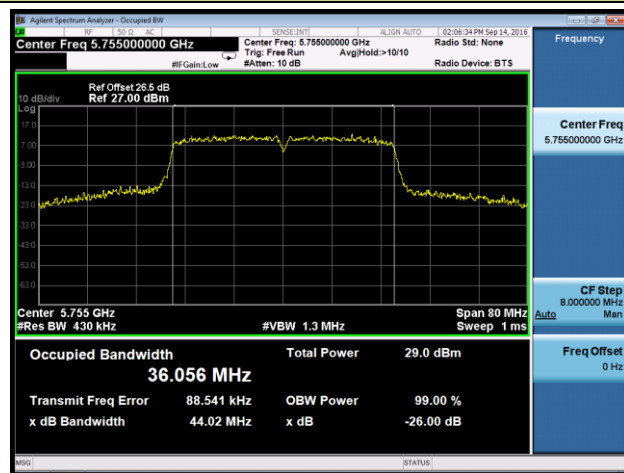
**Channel 38 (5190MHz)**



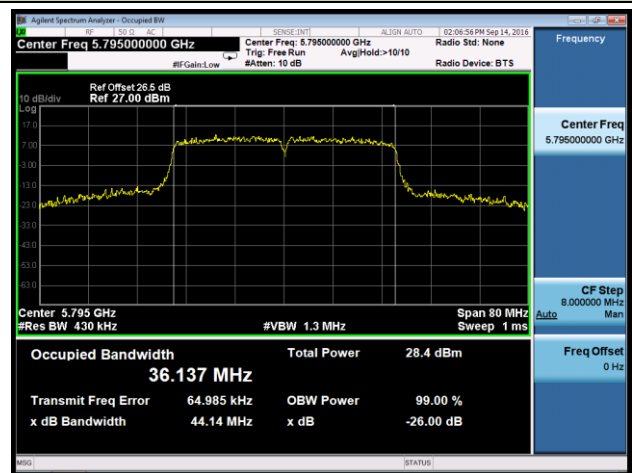
**Channel 46 (5230MHz)**



**Channel 151 (5755MHz)**



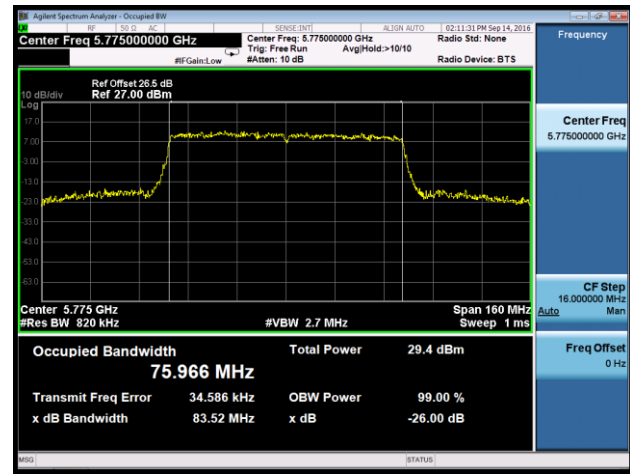
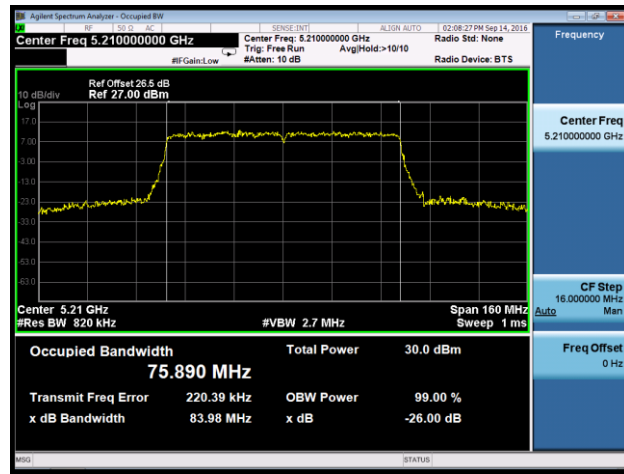
**Channel 159 (5795MHz)**



**802.11ac-VHT80 26dB Bandwidth & 99% Bandwidth - Ant 2**

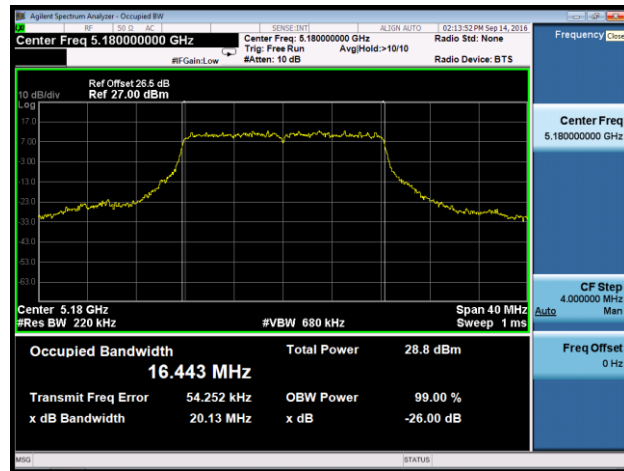
**Channel 42 (5210MHz)**

**Channel 155 (5755MHz)**

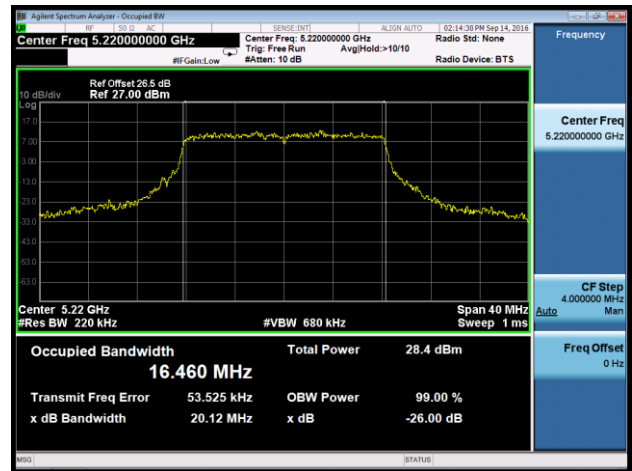


802.11a 26dB Bandwidth & 99% Bandwidth - Ant 3

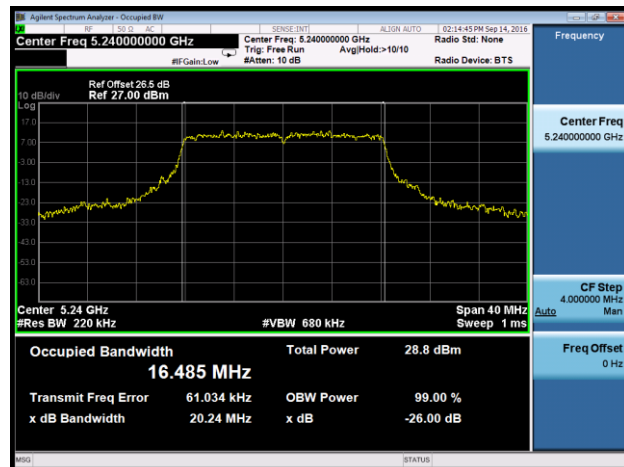
Channel 36 (5180MHz)



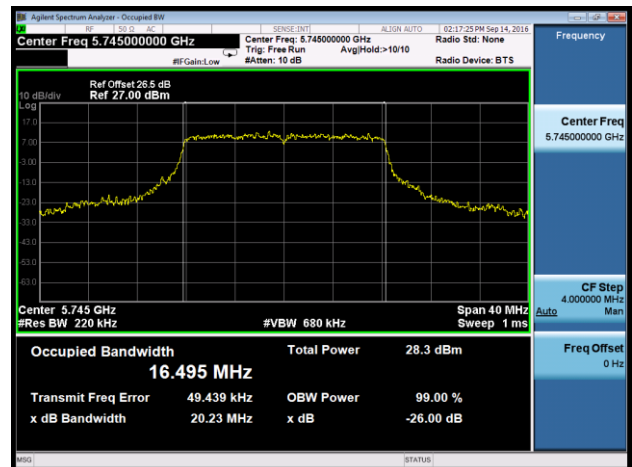
Channel 44 (5220MHz)



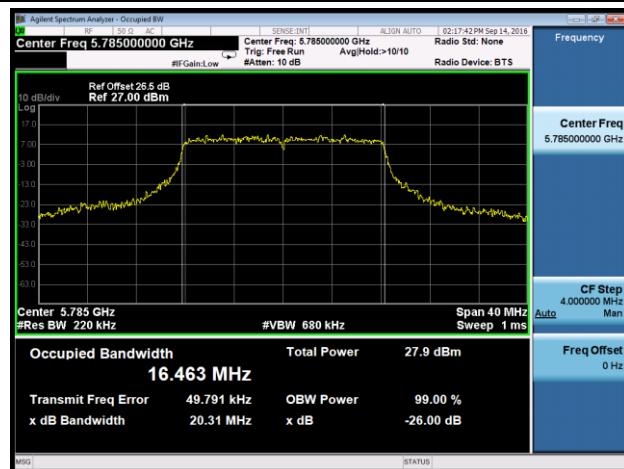
Channel 48 (5240MHz)



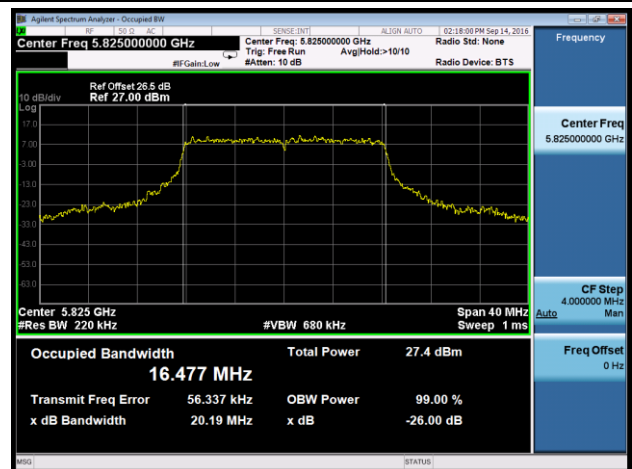
Channel 149 (5745MHz)

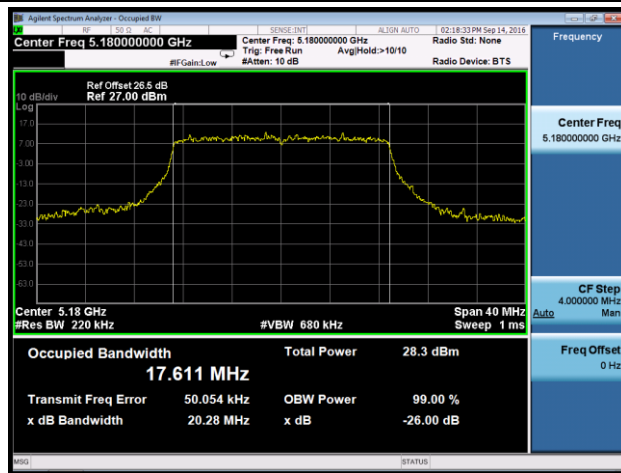
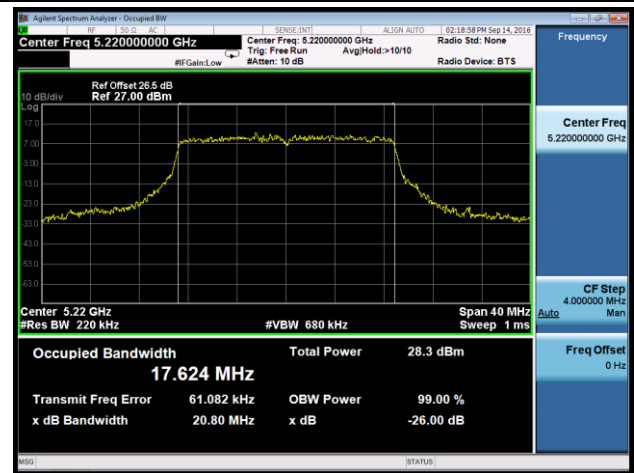
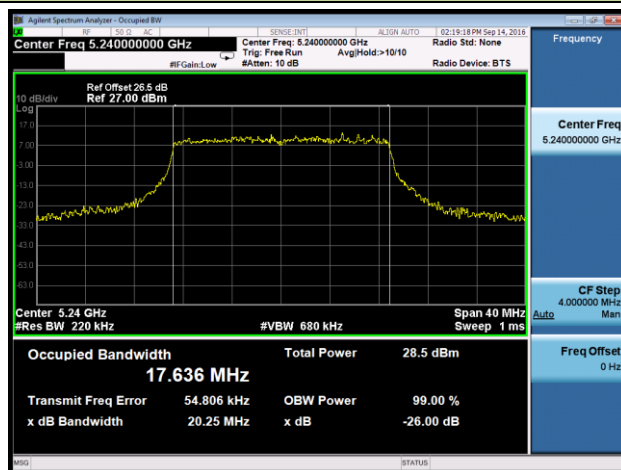
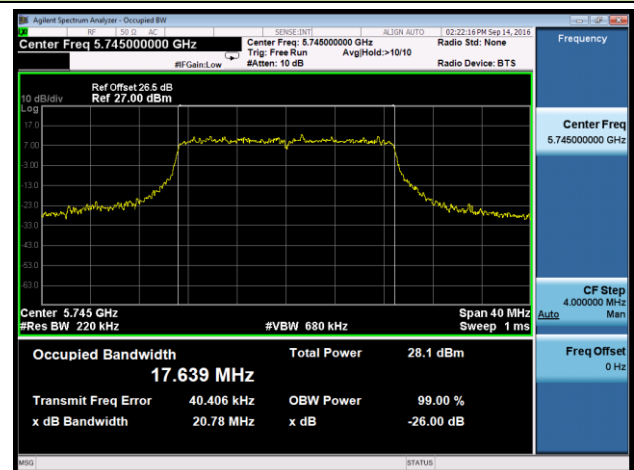
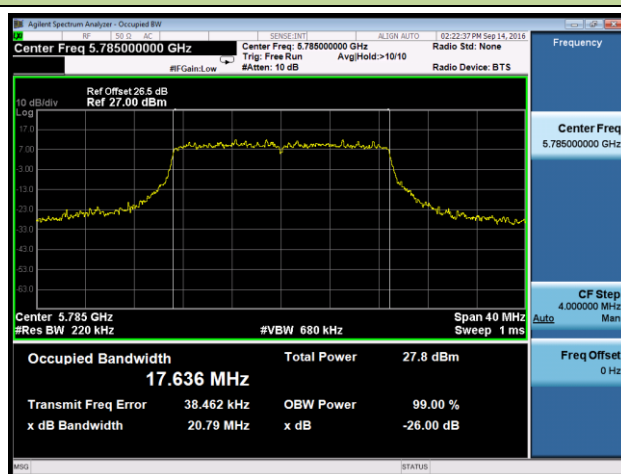
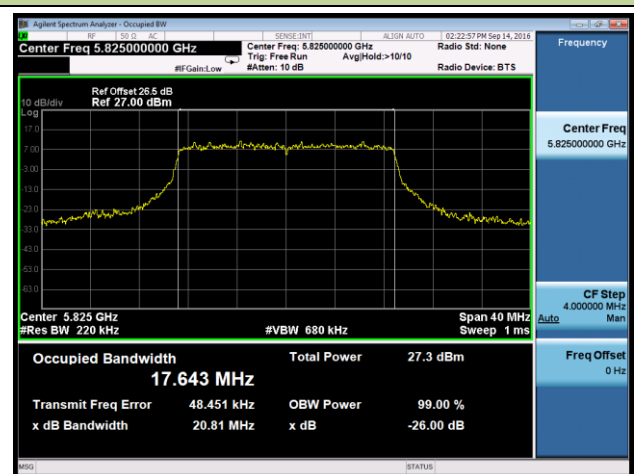


Channel 157 (5785MHz)



Channel 165 (5825MHz)

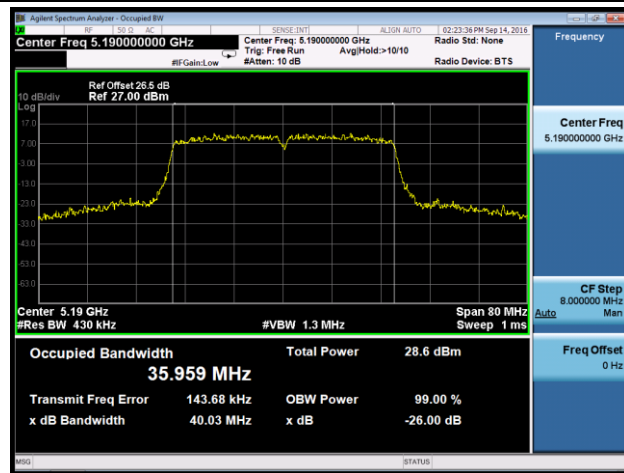


**802.11n-HT20 26dB Bandwidth & 99% Bandwidth - Ant 3**
**Channel 36 (5180MHz)**

**Channel 44 (5220MHz)**

**Channel 48 (5240MHz)**

**Channel 149 (5745MHz)**

**Channel 157 (5785MHz)**

**Channel 165 (5825MHz)**


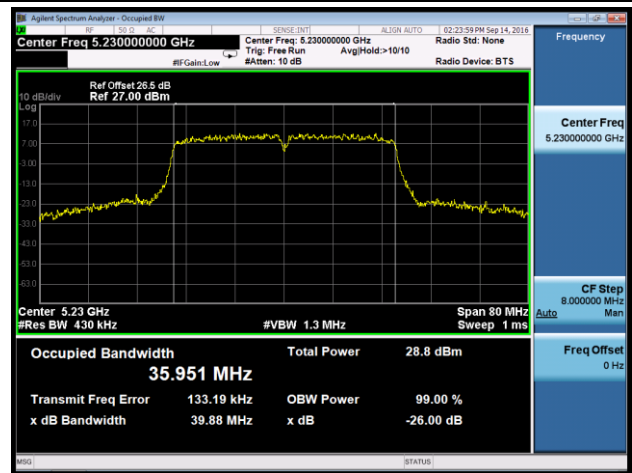


**802.11n-HT40 26dB Bandwidth & 99% Bandwidth - Ant 3**

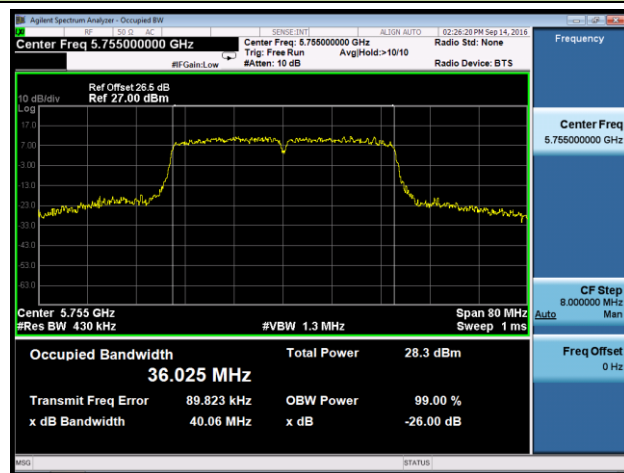
**Channel 38 (5190MHz)**



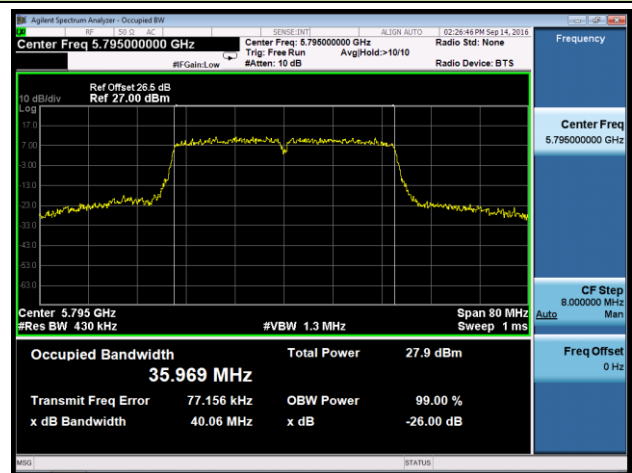
**Channel 46 (5230MHz)**



**Channel 151 (5755 MHz)**

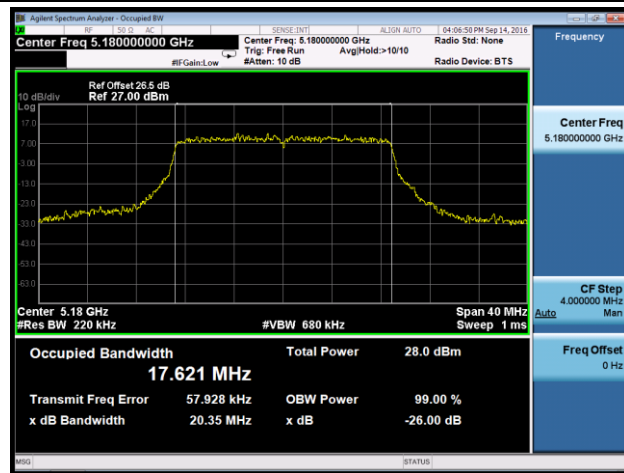


**Channel 159 (5795 MHz)**

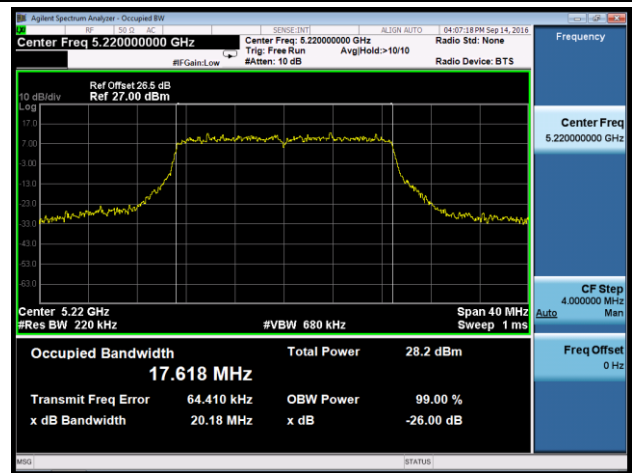


802.11ac-VHT20 26dB Bandwidth & 99% Bandwidth - Ant 3

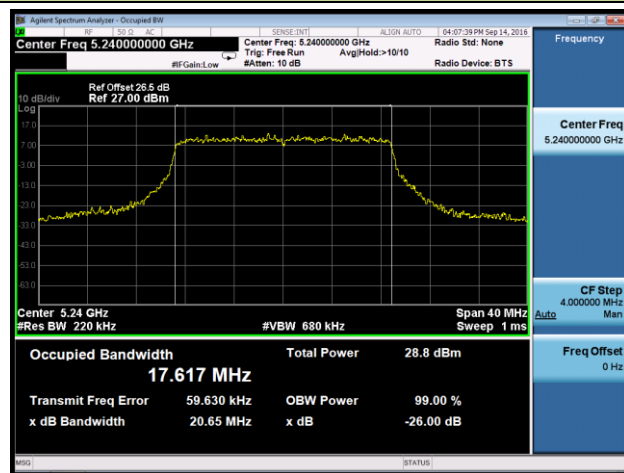
Channel 36 (5180MHz)



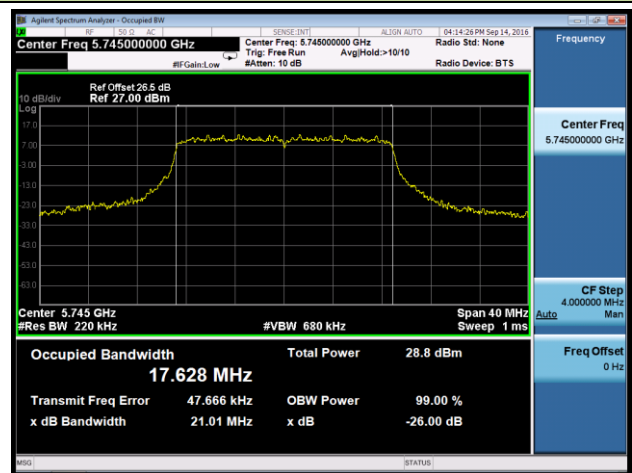
Channel 44 (5220MHz)



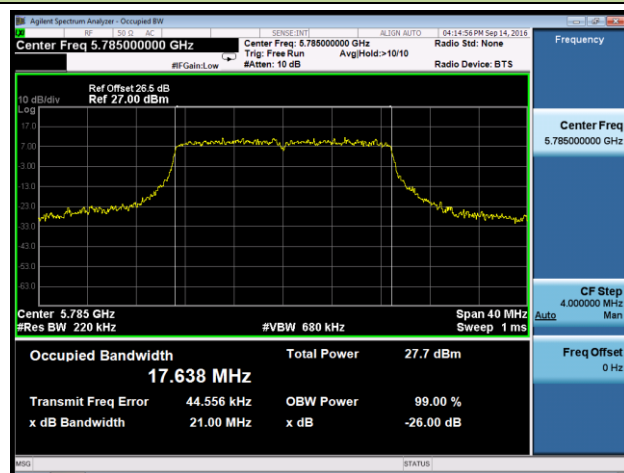
Channel 48 (5240MHz)



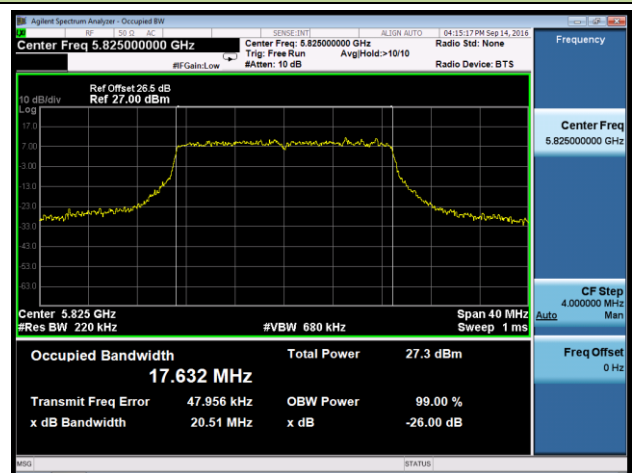
Channel 149 (5745MHz)



Channel 157 (5785MHz)

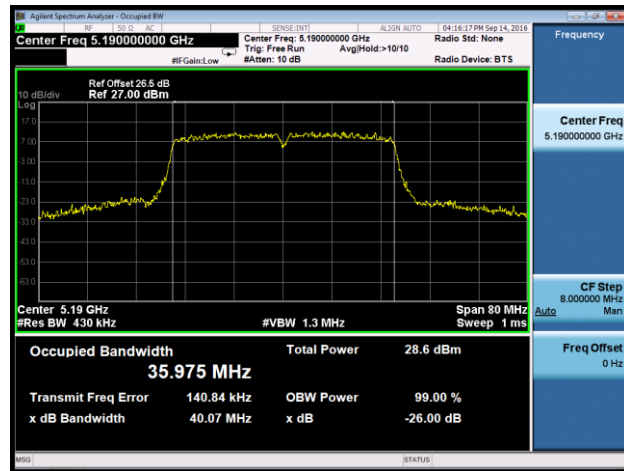


Channel 165 (5825MHz)

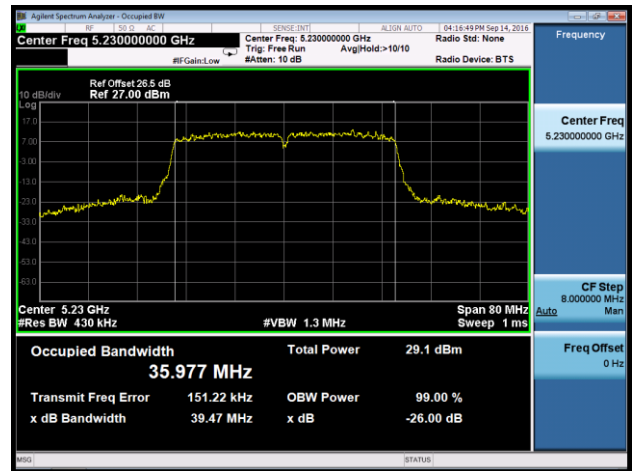


802.11ac-VHT40 26dB Bandwidth & 99% Bandwidth - Ant 3

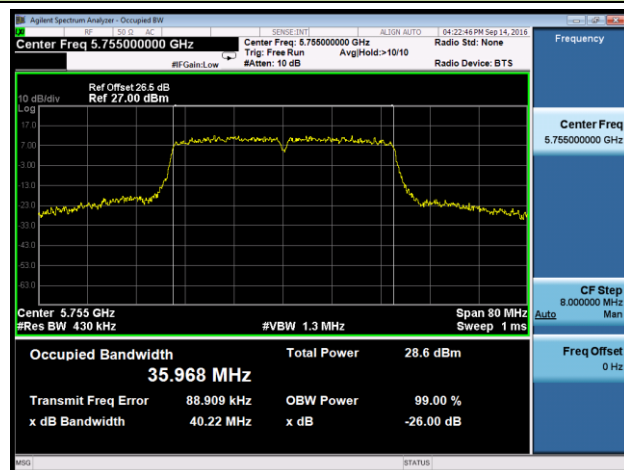
Channel 38 (5190MHz)



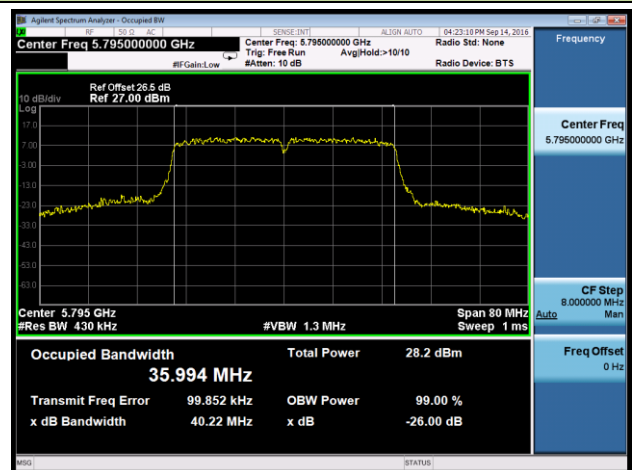
Channel 46 (5230MHz)



Channel 151 (5755MHz)

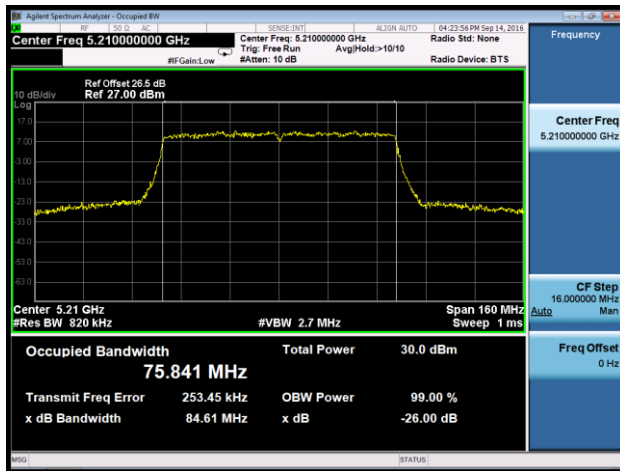


Channel 159 (5795MHz)

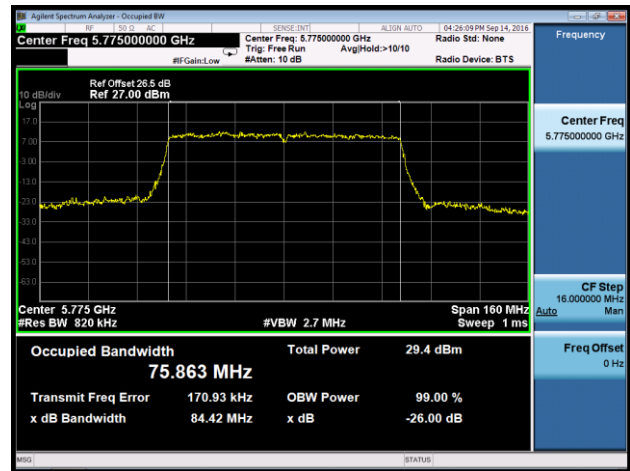


**802.11ac-VHT80 26dB Bandwidth & 99% Bandwidth - Ant 3**

**Channel 42 (5210MHz)**

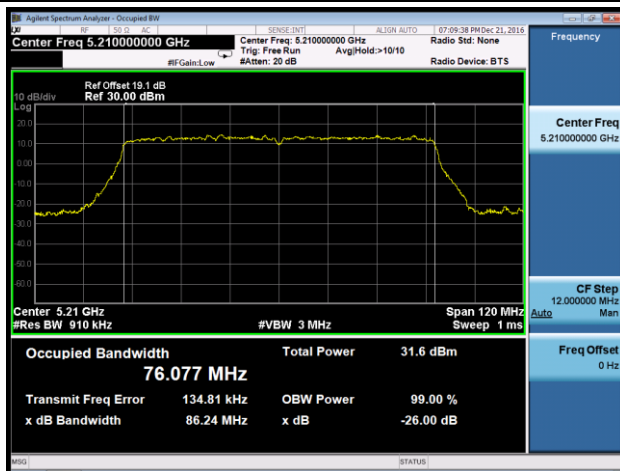


**Channel 155 (5755MHz)**

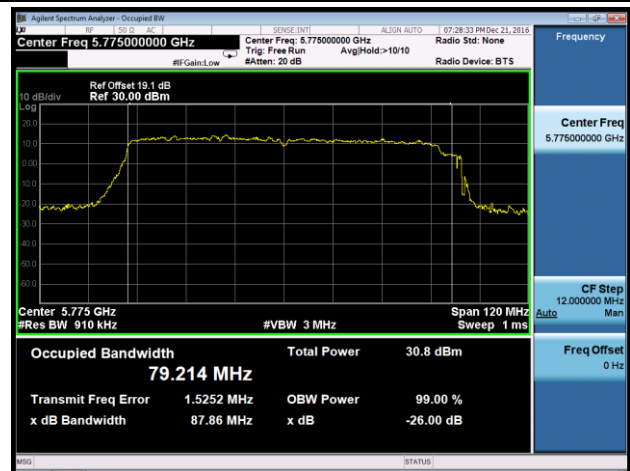


**802.11ac-VHT80+80 26dB Bandwidth & 99% Bandwidth - Ant 0+1+2+3**

**Channel 42+155 - Ant 0 (5210MHz)**



**Channel 42+155 - Ant 2 (5755MHz)**



**6dB Bandwidth Measurement Test Result**

Product	US WI-FI AP 4X4 OD ext. antenna	Temperature	25°C
Test Engineer	Johnson Liao	Relative Humidity	50 ~ 58%
Test Site	SR2	Test Date	2016/09/21
Test Item	6dB Bandwidth	Antenna Model No.	FPMI2458-DP2RPSMA

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
<b>Ant 0</b>						
802.11a	6	149	5745	16.33	≥ 0.5	Pass
802.11a	6	157	5785	16.33	≥ 0.5	Pass
802.11a	6	165	5825	16.31	≥ 0.5	Pass
802.11n-HT20	6.5	149	5745	17.19	≥ 0.5	Pass
802.11n-HT20	6.5	157	5785	17.56	≥ 0.5	Pass
802.11n-HT20	6.5	165	5825	17.57	≥ 0.5	Pass
802.11n-HT40	13.5	151	5755	34.95	≥ 0.5	Pass
802.11n-HT40	13.5	159	5795	34.44	≥ 0.5	Pass
802.11ac-VHT20	6.5	149	5745	17.54	≥ 0.5	Pass
802.11ac-VHT20	6.5	157	5785	17.64	≥ 0.5	Pass
802.11ac-VHT20	6.5	165	5825	17.61	≥ 0.5	Pass
802.11ac-VHT40	13.5	151	5755	35.45	≥ 0.5	Pass
802.11ac-VHT40	13.5	159	5795	34.07	≥ 0.5	Pass
802.11ac-VHT80	29.3	155	5775	75.29	≥ 0.5	Pass
<b>Ant 1</b>						
802.11a	6	149	5745	16.32	≥ 0.5	Pass
802.11a	6	157	5785	16.33	≥ 0.5	Pass
802.11a	6	165	5825	16.34	≥ 0.5	Pass
802.11n-HT20	6.5	149	5745	17.21	≥ 0.5	Pass
802.11n-HT20	6.5	157	5785	17.17	≥ 0.5	Pass
802.11n-HT20	6.5	165	5825	17.54	≥ 0.5	Pass
802.11n-HT40	13.5	151	5755	35.10	≥ 0.5	Pass
802.11n-HT40	13.5	159	5795	34.45	≥ 0.5	Pass
802.11ac-VHT20	6.5	149	5745	17.33	≥ 0.5	Pass
802.11ac-VHT20	6.5	157	5785	17.19	≥ 0.5	Pass
802.11ac-VHT20	6.5	165	5825	17.19	≥ 0.5	Pass

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Ant 1						
802.11ac-VHT40	13.5	151	5755	35.17	$\geq 0.5$	Pass
802.11ac-VHT40	13.5	159	5795	35.15	$\geq 0.5$	Pass
802.11ac-VHT80	29.3	155	5775	75.46	$\geq 0.5$	Pass



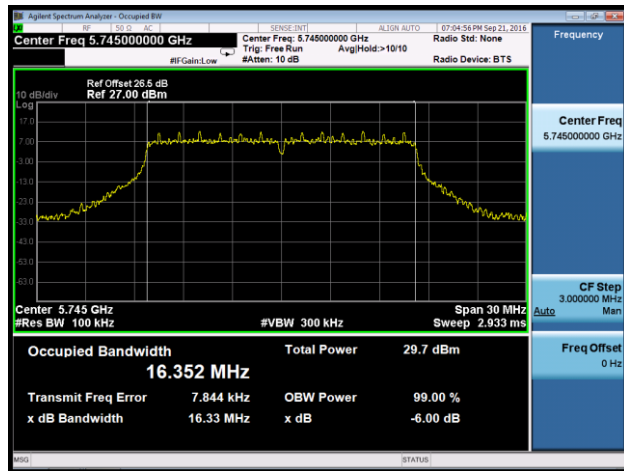
Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Ant 2						
802.11a	6	149	5745	16.33	$\geq 0.5$	Pass
802.11a	6	157	5785	16.33	$\geq 0.5$	Pass
802.11a	6	165	5825	16.34	$\geq 0.5$	Pass
802.11n-HT20	6.5	149	5745	17.18	$\geq 0.5$	Pass
802.11n-HT20	6.5	157	5785	17.20	$\geq 0.5$	Pass
802.11n-HT20	6.5	165	5825	16.84	$\geq 0.5$	Pass
802.11n-HT40	13.5	151	5755	35.15	$\geq 0.5$	Pass
802.11n-HT40	13.5	159	5795	35.10	$\geq 0.5$	Pass
802.11ac-VHT20	6.5	149	5745	17.30	$\geq 0.5$	Pass
802.11ac-VHT20	6.5	157	5785	17.35	$\geq 0.5$	Pass
802.11ac-VHT20	6.5	165	5825	17.57	$\geq 0.5$	Pass
802.11ac-VHT40	13.5	151	5755	35.14	$\geq 0.5$	Pass
802.11ac-VHT40	13.5	159	5795	35.16	$\geq 0.5$	Pass
802.11ac-VHT80	29.3	155	5775	75.18	$\geq 0.5$	Pass
Ant 3						
802.11a	6	149	5745	16.33	$\geq 0.5$	Pass
802.11a	6	157	5785	16.36	$\geq 0.5$	Pass
802.11a	6	165	5825	16.31	$\geq 0.5$	Pass
802.11n-HT20	6.5	149	5745	17.20	$\geq 0.5$	Pass
802.11n-HT20	6.5	157	5785	17.20	$\geq 0.5$	Pass
802.11n-HT20	6.5	165	5825	17.56	$\geq 0.5$	Pass
802.11n-HT40	13.5	151	5755	35.06	$\geq 0.5$	Pass
802.11n-HT40	13.5	159	5795	35.09	$\geq 0.5$	Pass
802.11ac-VHT20	6.5	149	5745	17.57	$\geq 0.5$	Pass
802.11ac-VHT20	6.5	157	5785	17.53	$\geq 0.5$	Pass
802.11ac-VHT20	6.5	165	5825	17.29	$\geq 0.5$	Pass
802.11ac-VHT40	13.5	151	5755	35.13	$\geq 0.5$	Pass
802.11ac-VHT40	13.5	159	5795	35.15	$\geq 0.5$	Pass
802.11ac-VHT80	29.3	155	5775	75.48	$\geq 0.5$	Pass

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Ant 2 / Ant 0+1+2+3						
802.11ac-VHT80+80	117.2	155	5775	74.22	$\geq 0.5$	Pass

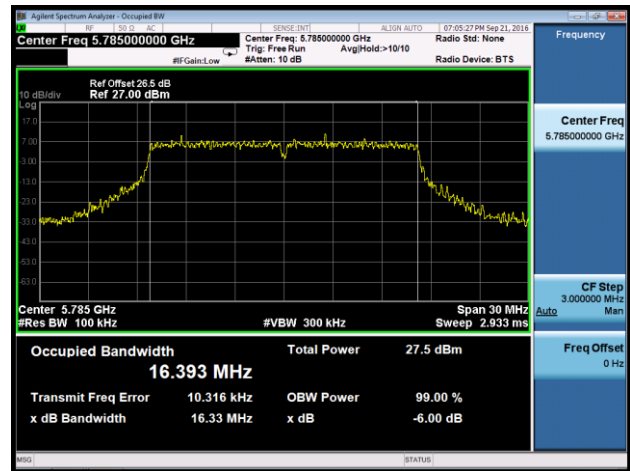


802.11a 6dB Bandwidth - Ant 0

Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)

