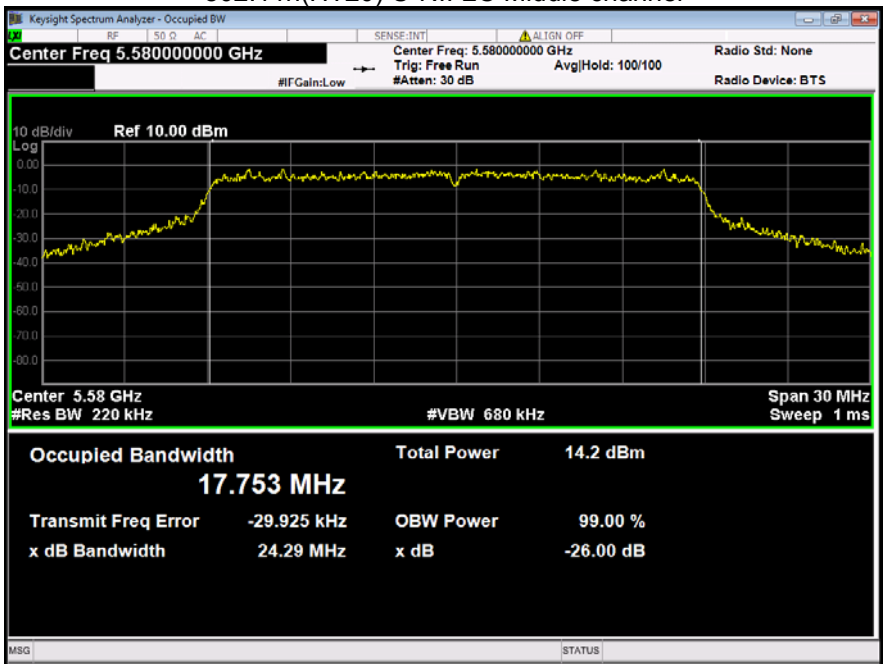
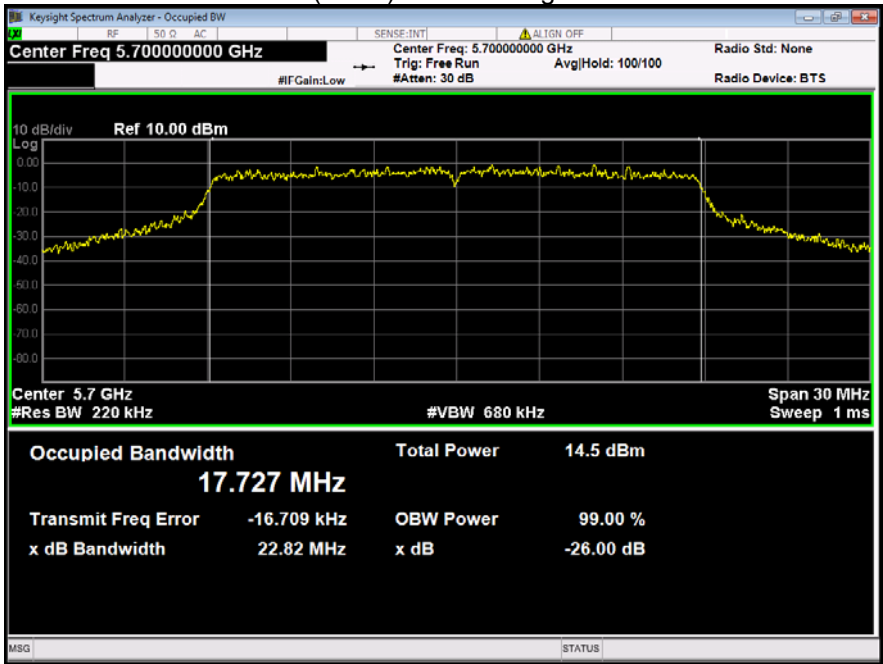


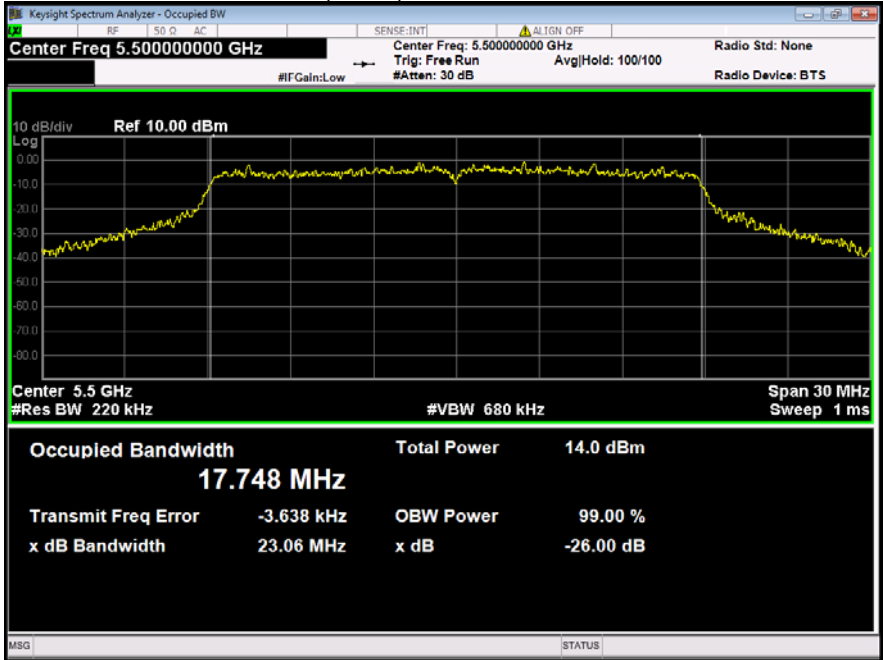
802.11n(HT20) U-NII-2C Middle channel



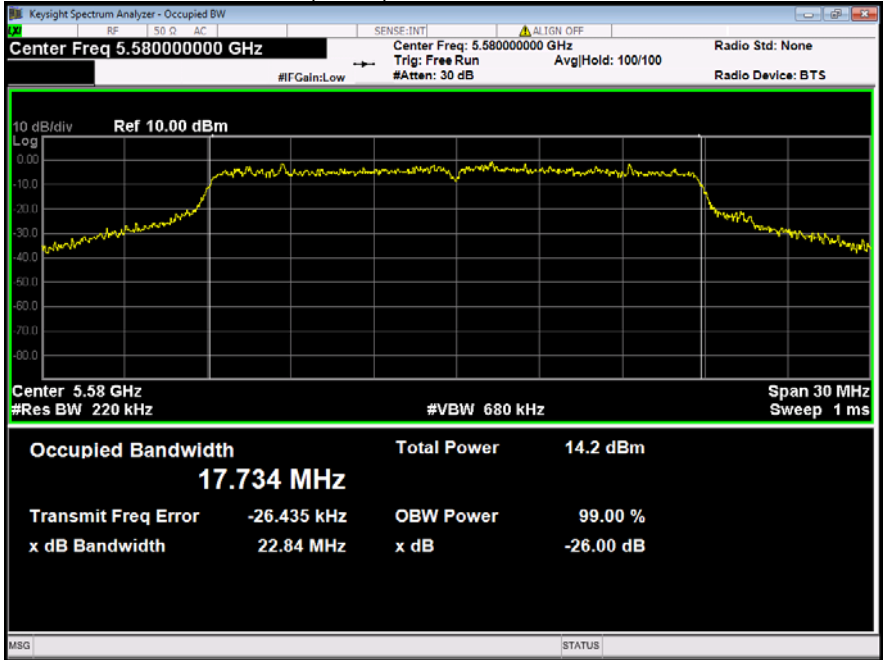
802.11n(HT20) U-NII-2C High channel



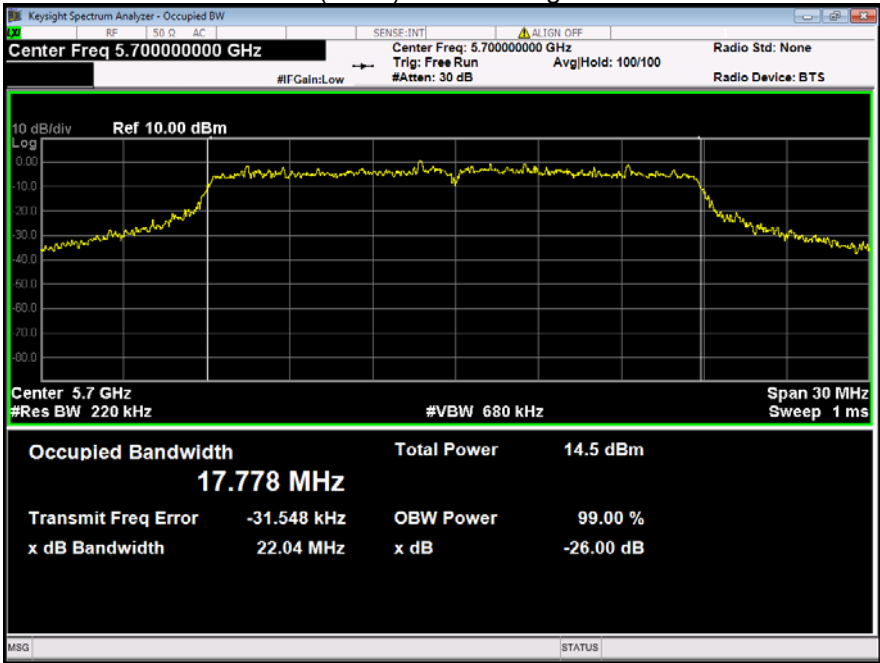
802.11ac(HT20) U-NII-2C Low channel



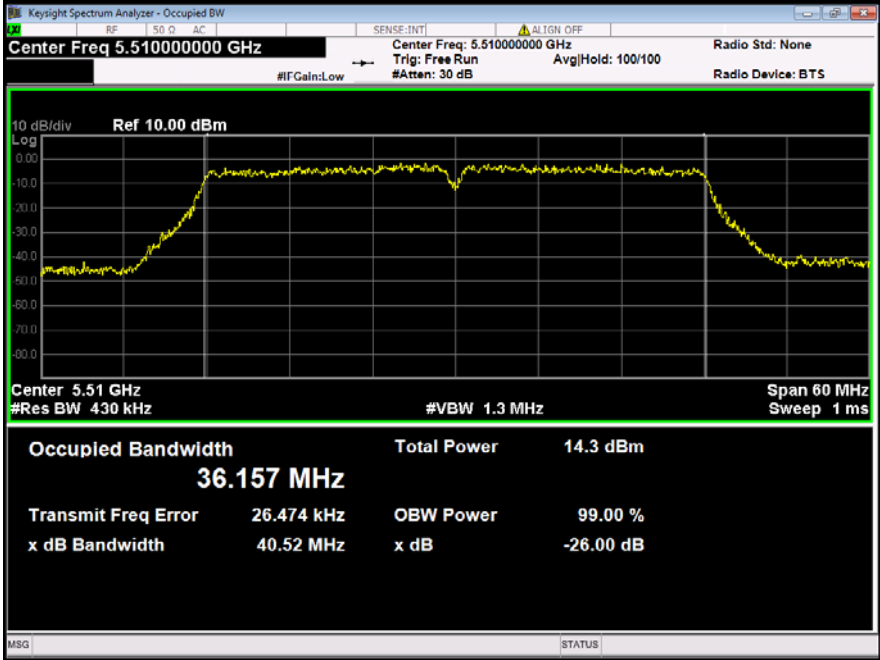
802.11ac(HT20) U-NII-2C Middle channel



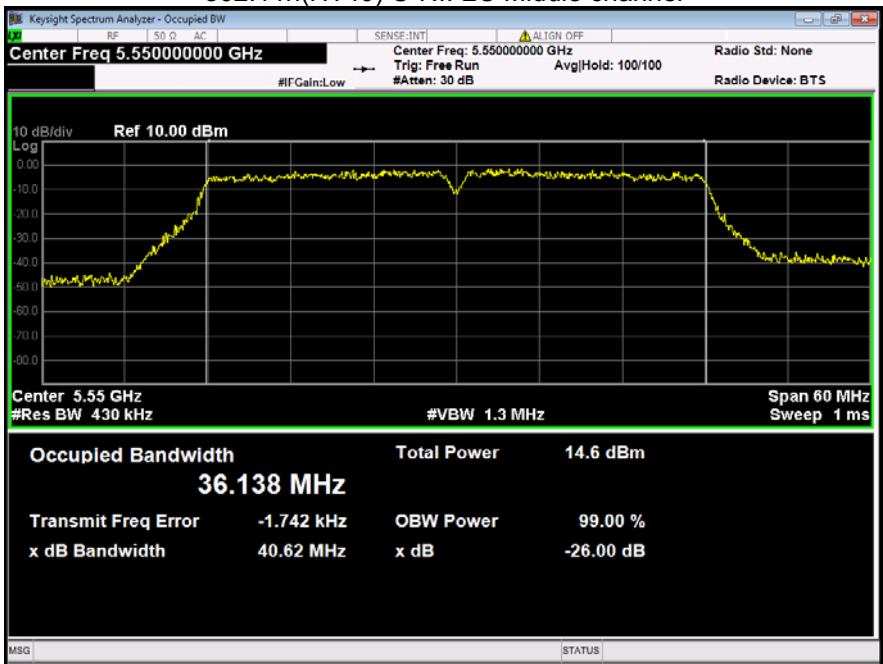
802.11ac(HT20) U-NII-2C High channel



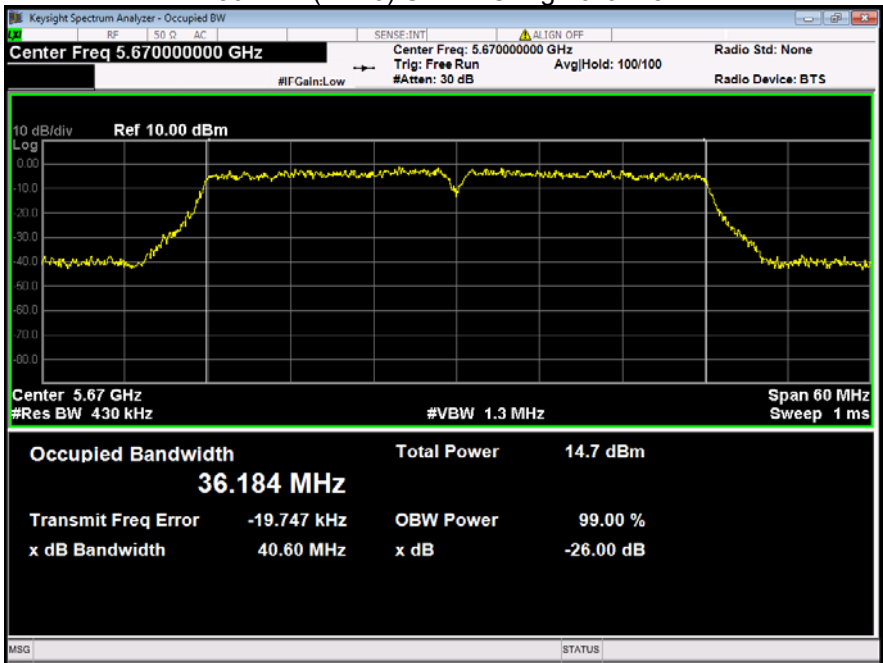
802.11n(HT40) U-NII-2C Low channel



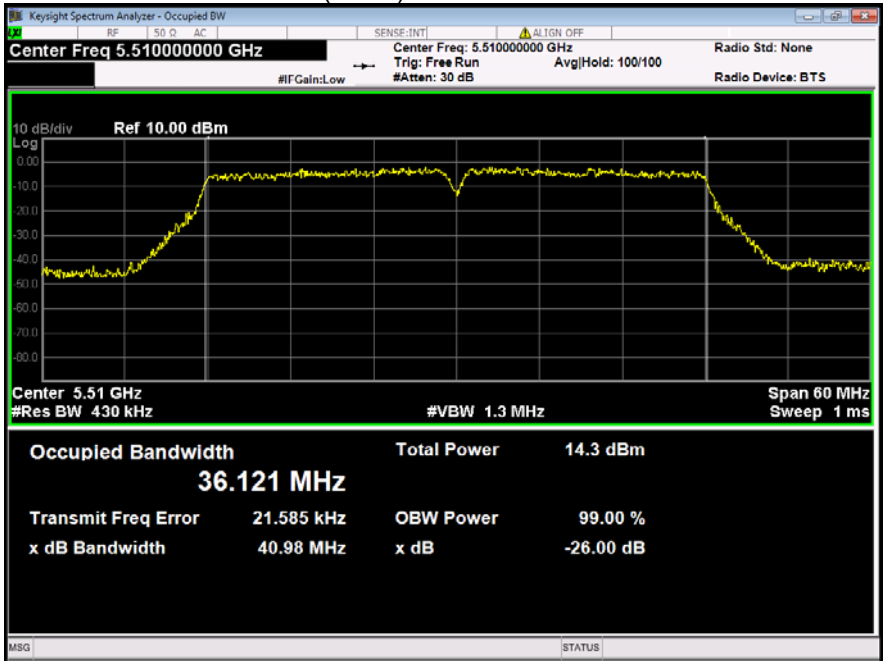
802.11n(HT40) U-NII-2C Middle channel



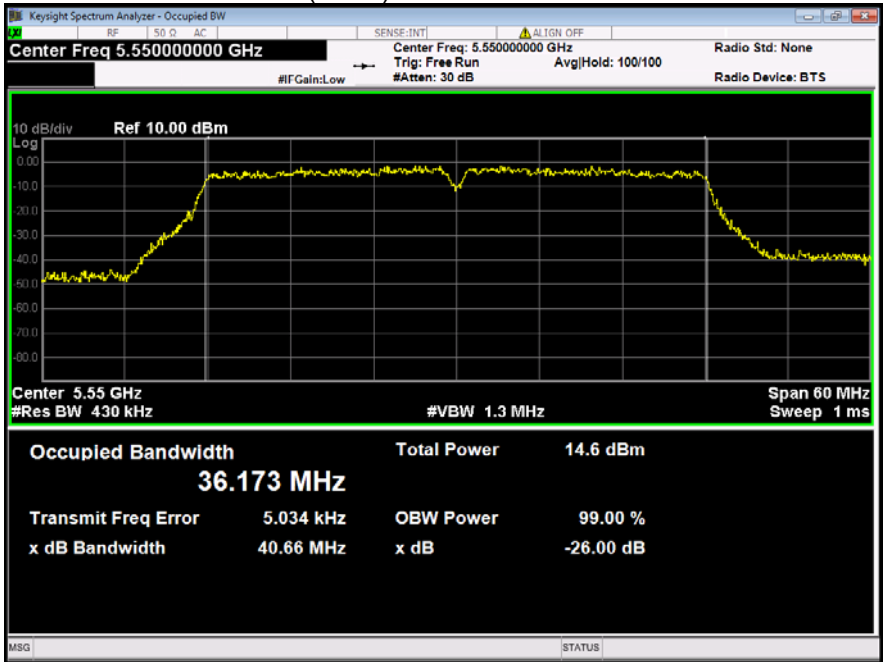
802.11n(HT40) U-NII-2C High channel



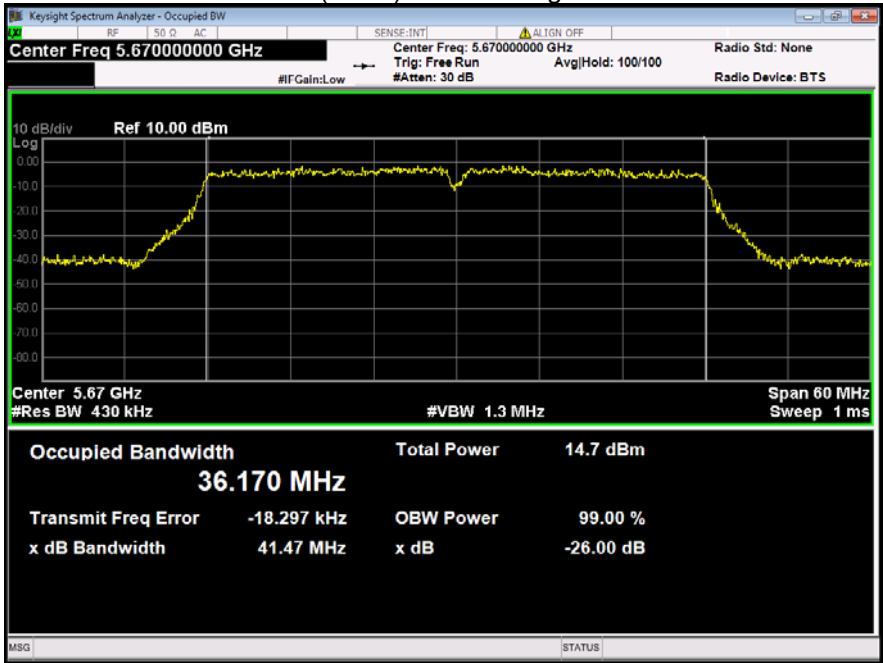
802.11ac(HT40) U-NII-2C Low channel



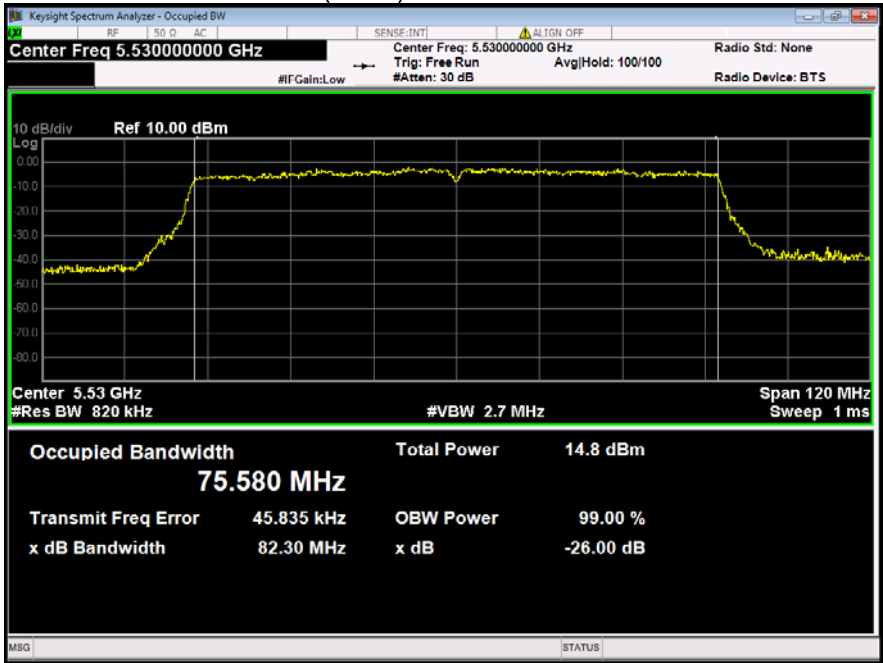
802.11ac(HT40) U-NII-2C Middle channel



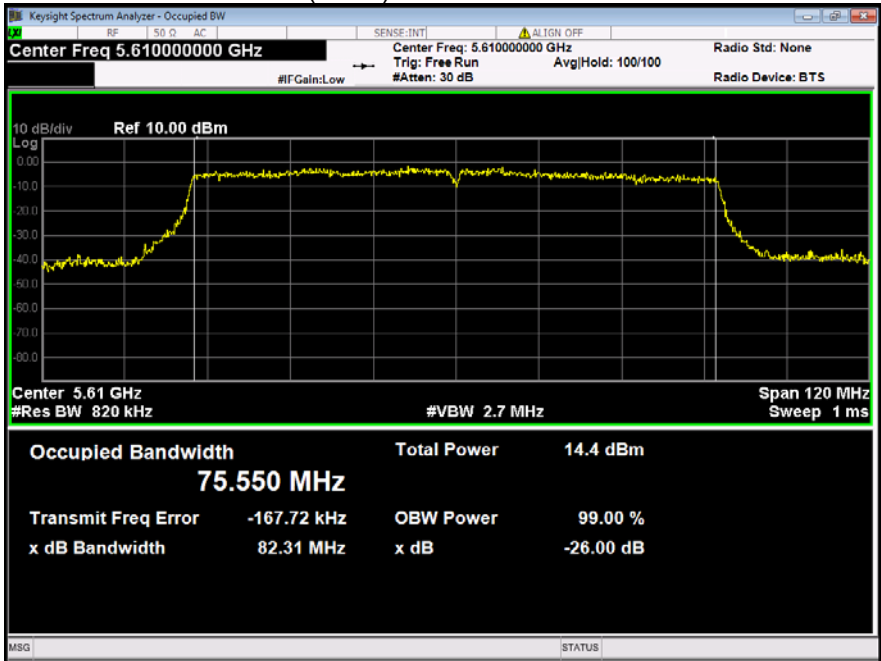
802.11ac(HT40) U-NII-2C High channel



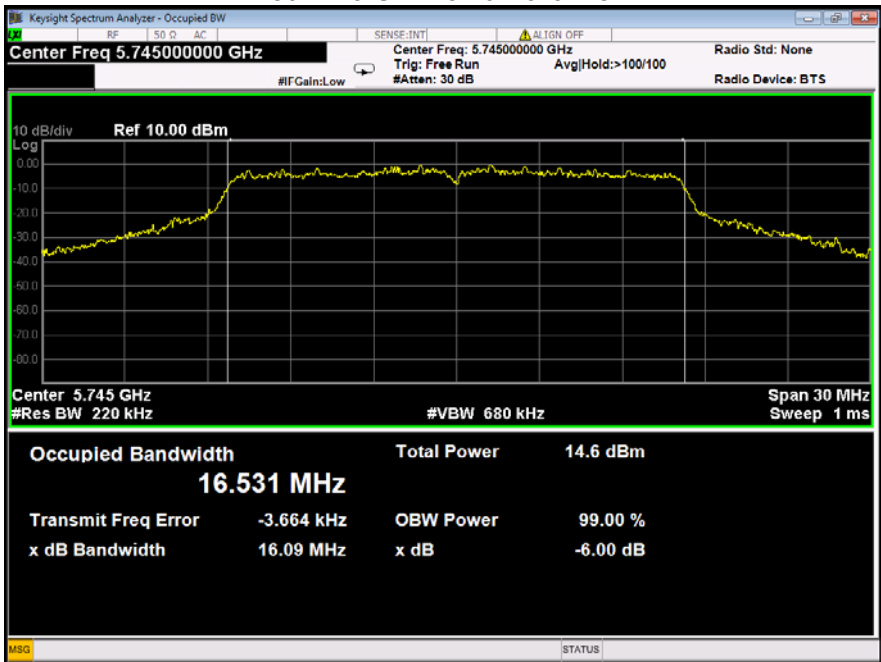
802.11ac(HT80) U-NII-2C Low channel



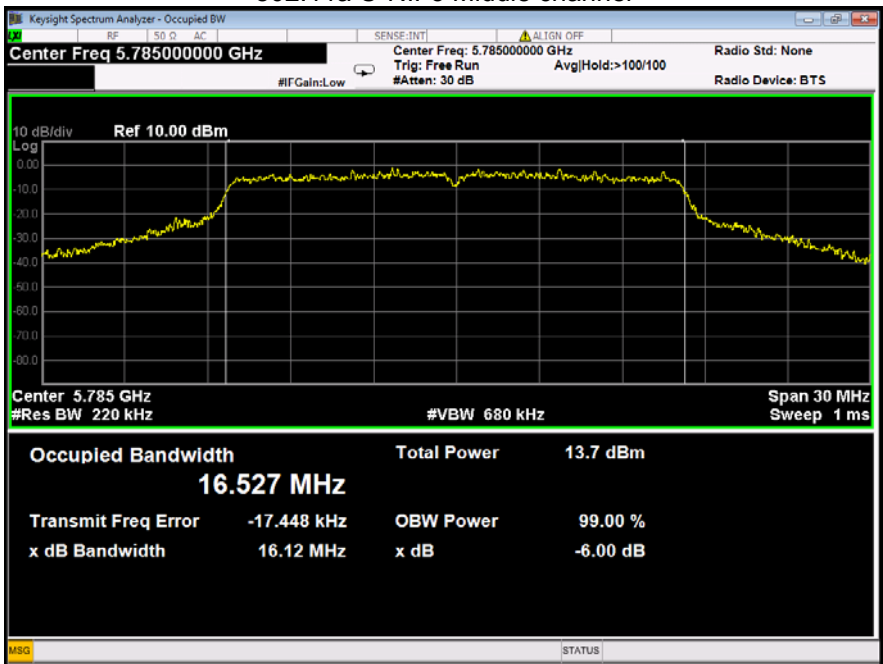
802.11ac(HT80) U-NII-2C Middle channel



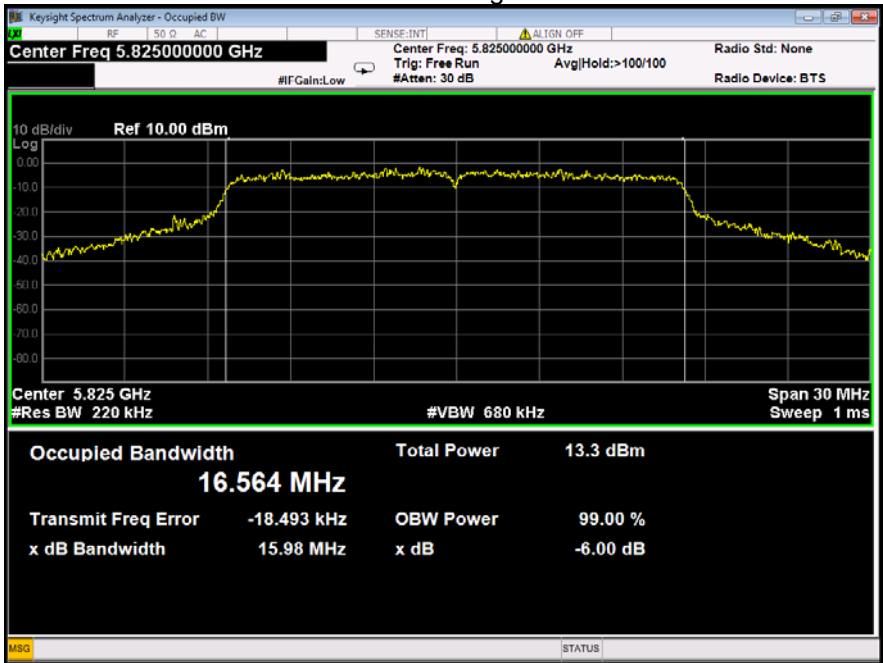
802.11a U-NII-3 Low channel



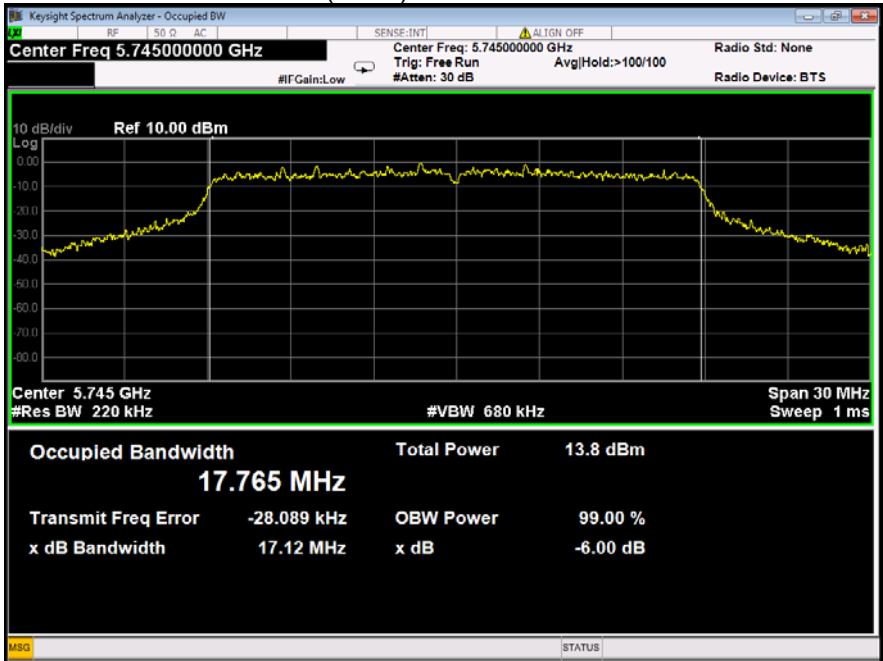
802.11a U-NII-3 Middle channel



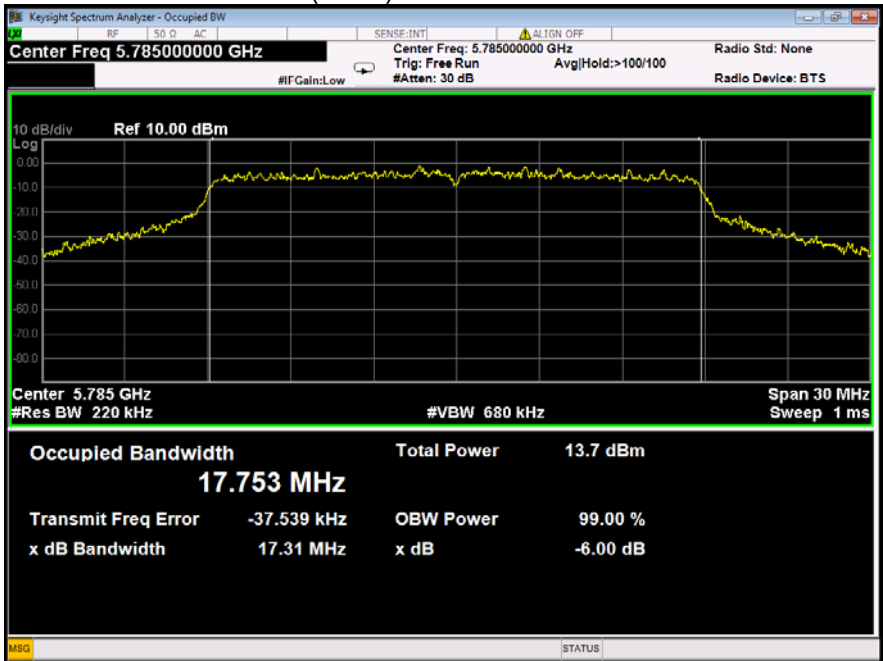
802.11a U-NII-3 High channel



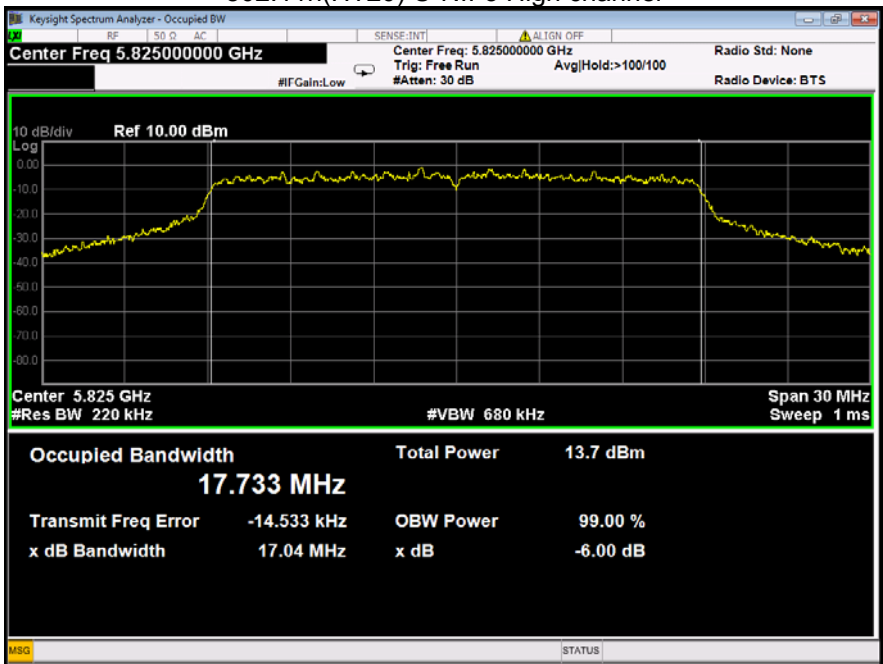
802.11n(HT20) U-NII-3 Low channel



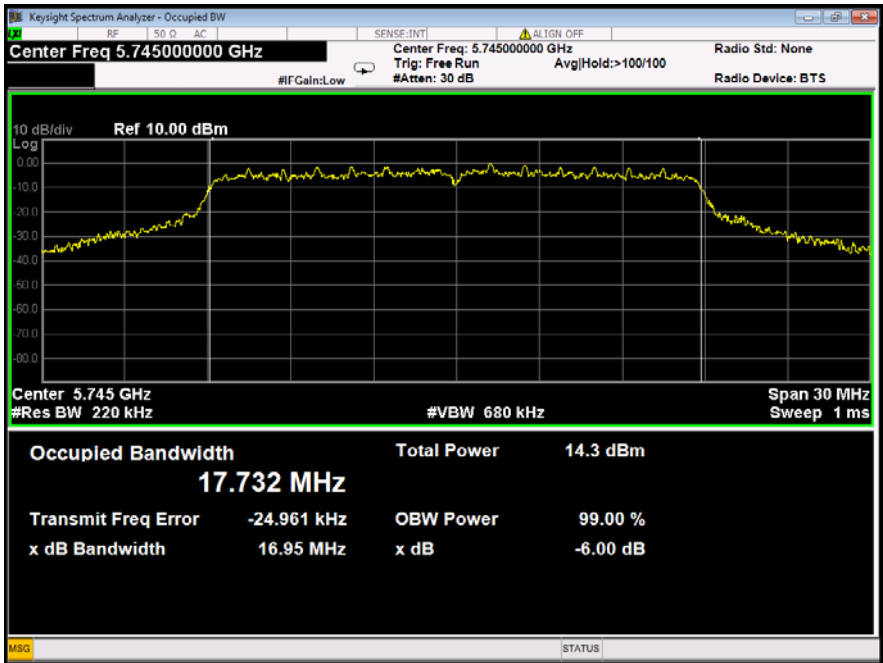
802.11n(HT20) U-NII-3 Middle channel



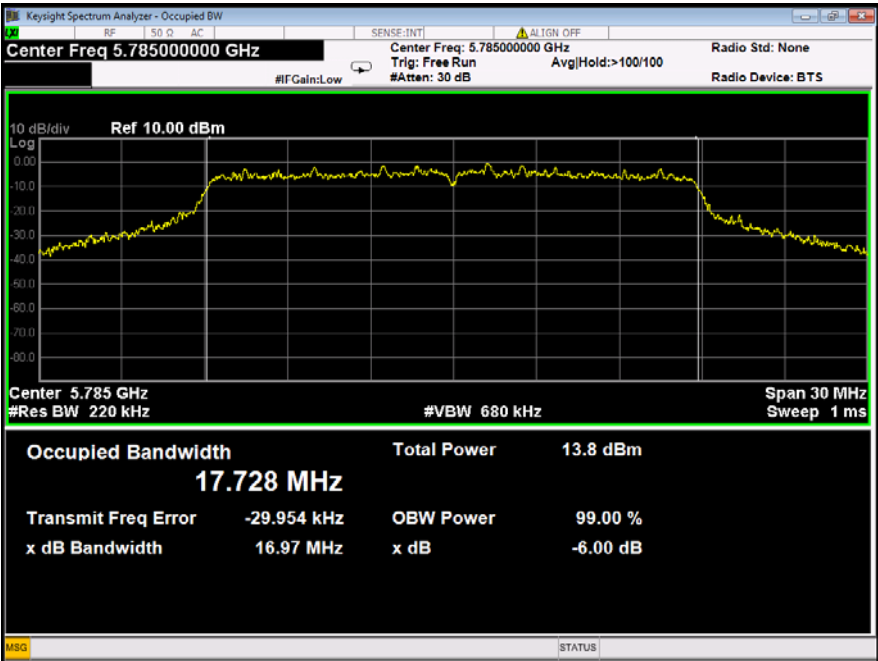
802.11n(HT20) U-NII-3 High channel



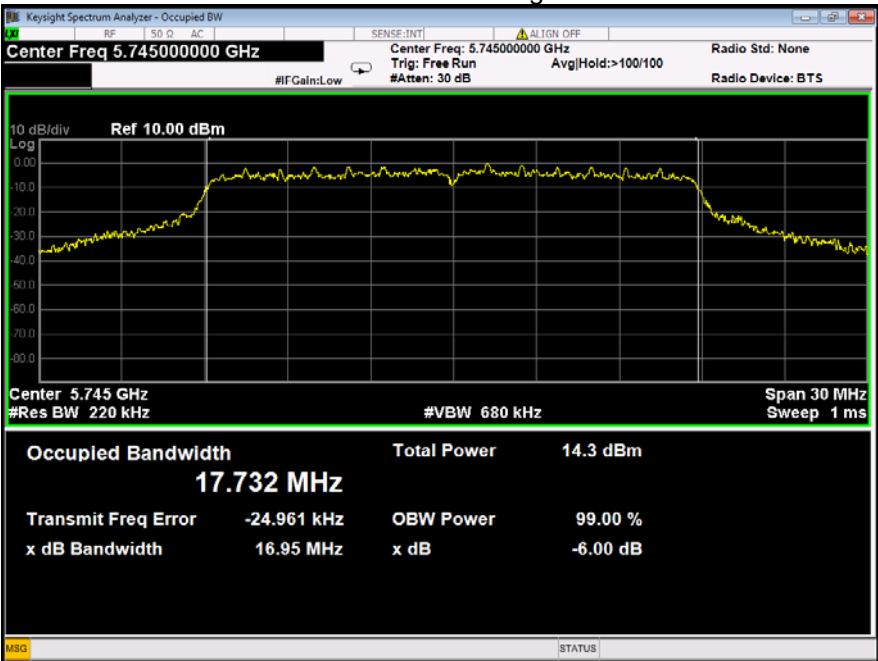
802.11ac HT20 U-NII-3 Low channel



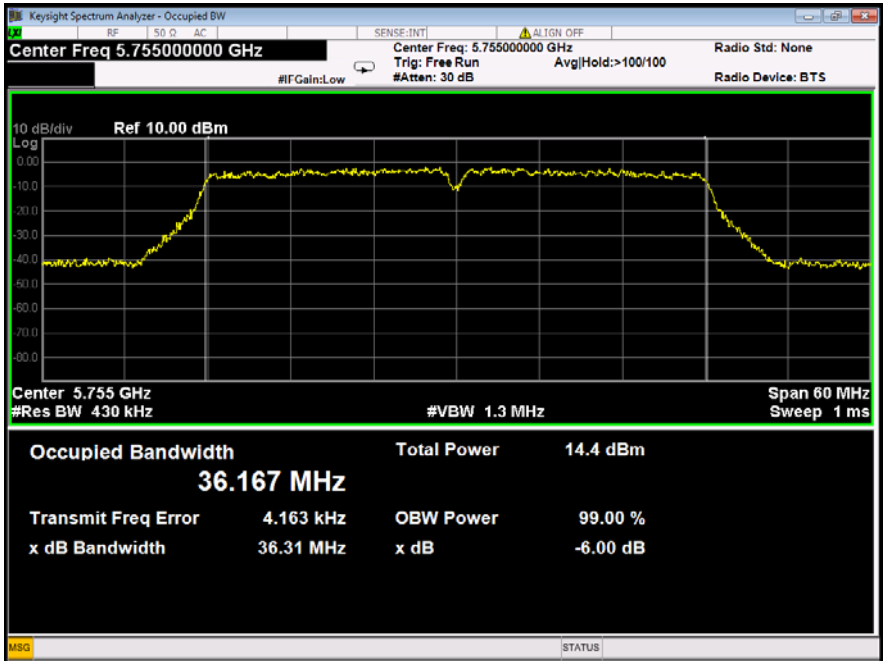
802.11ac HT20 U-NII-3 Middle channel



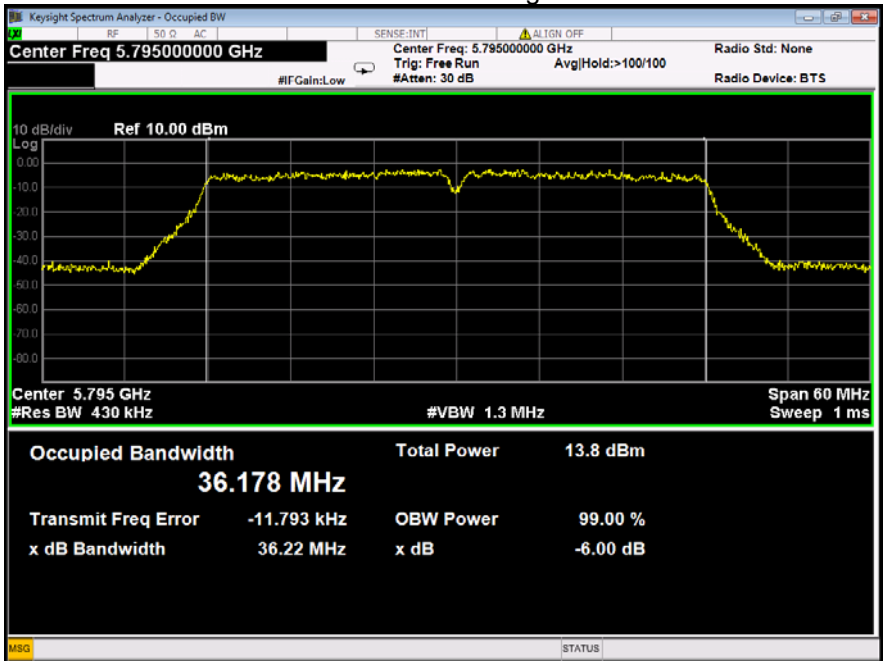
802.11ac HT20 U-NII-3 High channel



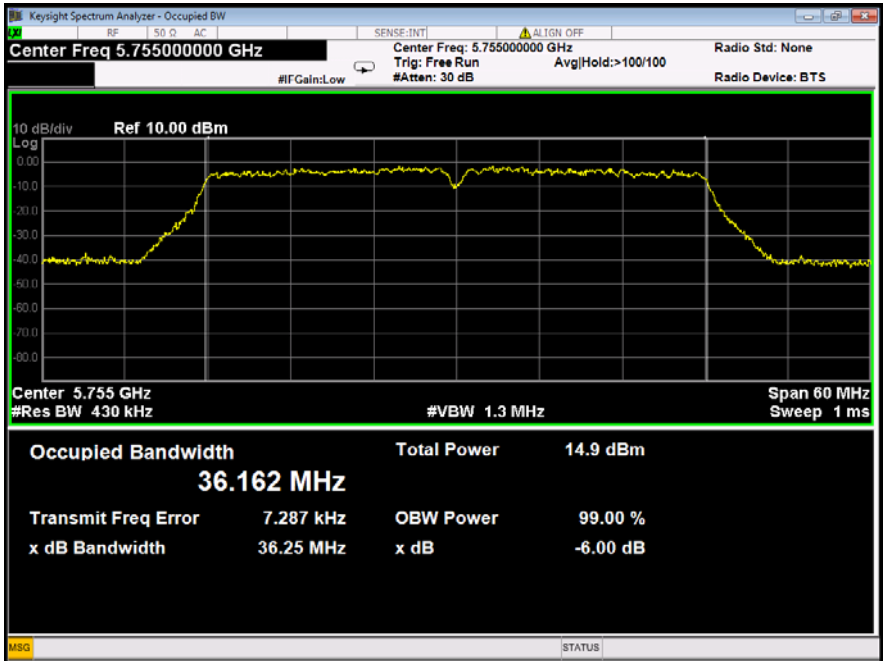
802.11n HT40 U-NII-3 Low channel



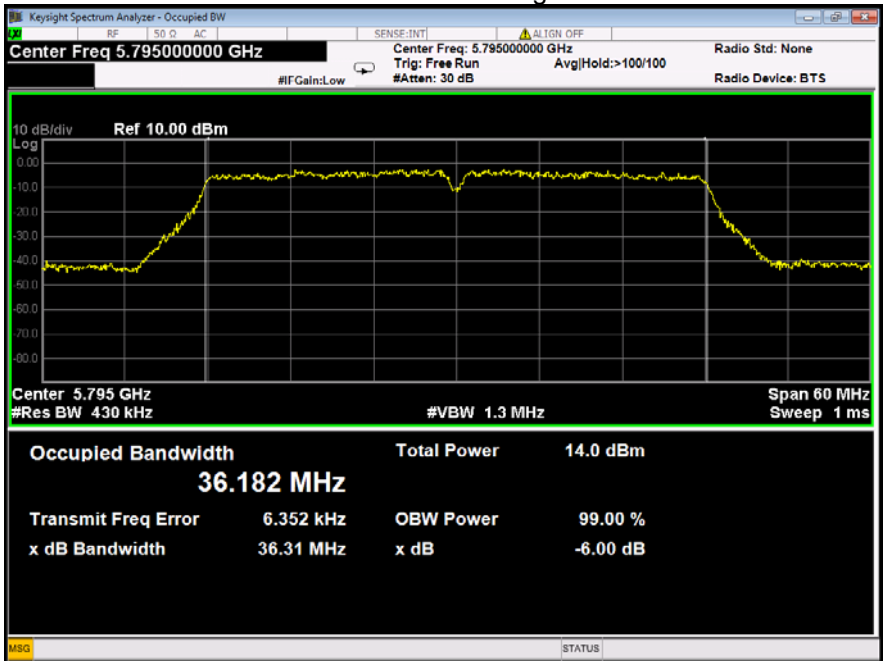
802.11n HT40 U-NII-3 High channel



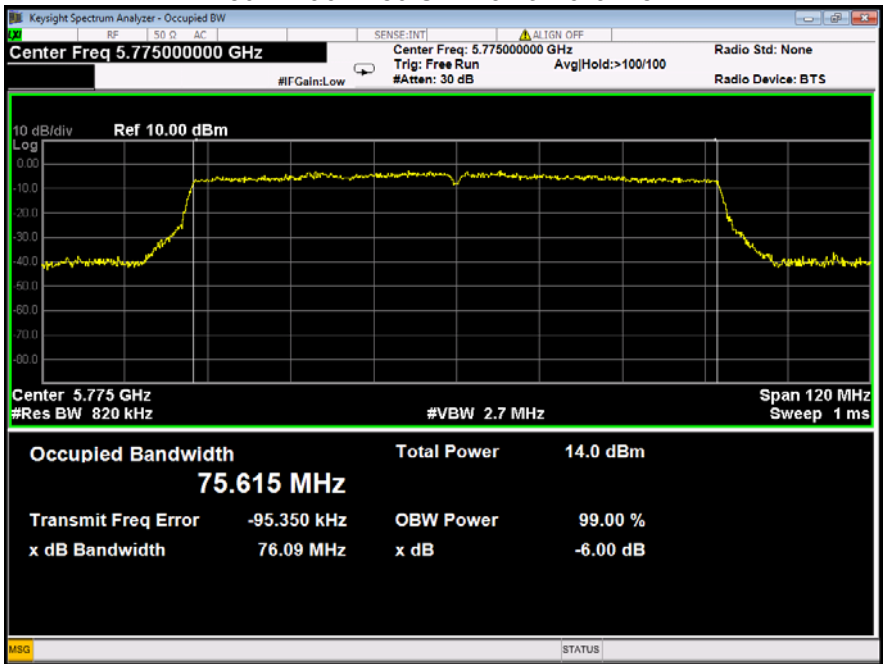
802.11ac HT40 U-NII-3 Low channel



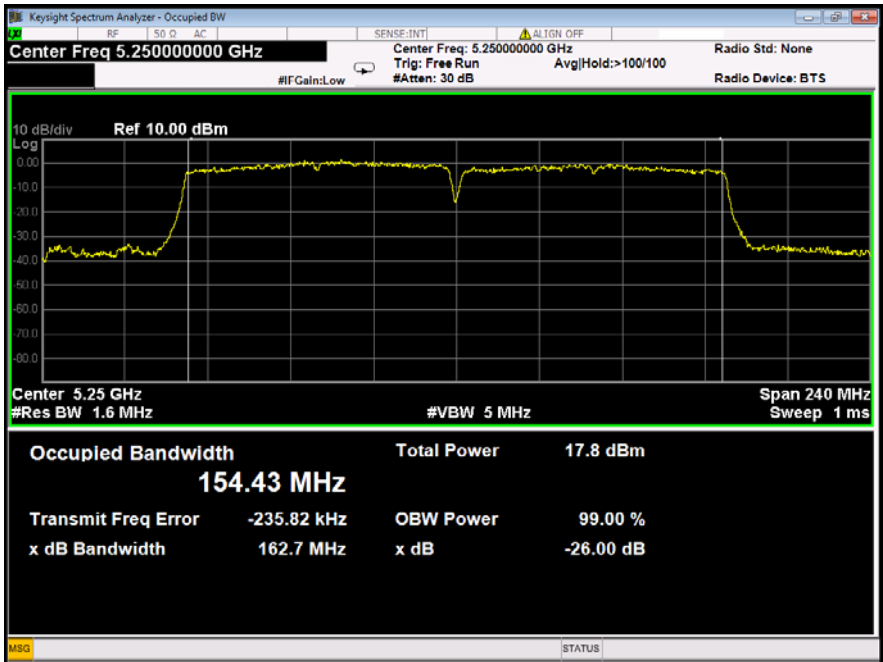
802.11ac HT40 U-NII-3 High channel



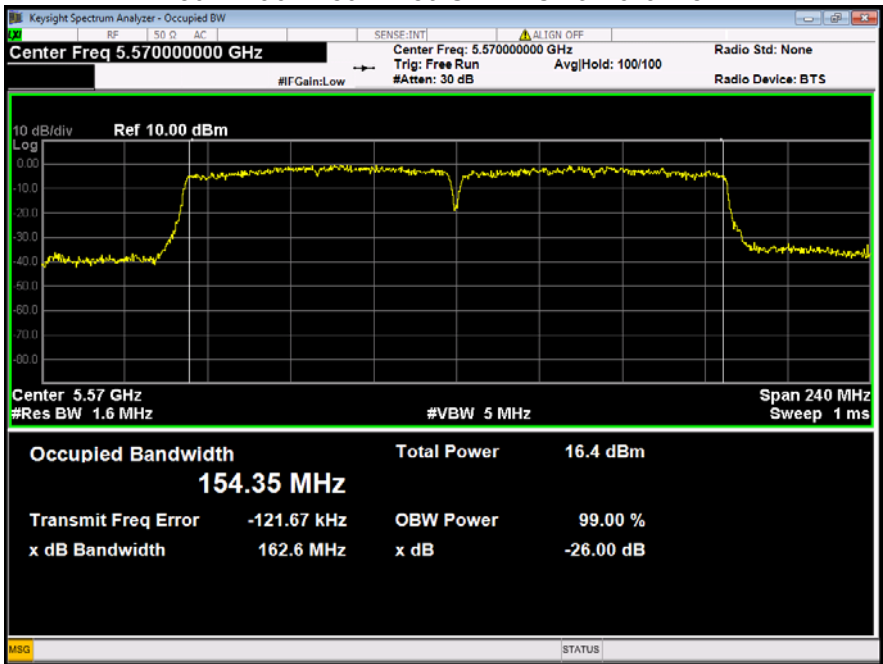
802.11ac HT80 U-NII-3 Low channel



802.11ac HT80+HT80 U-NII-1 Low channel

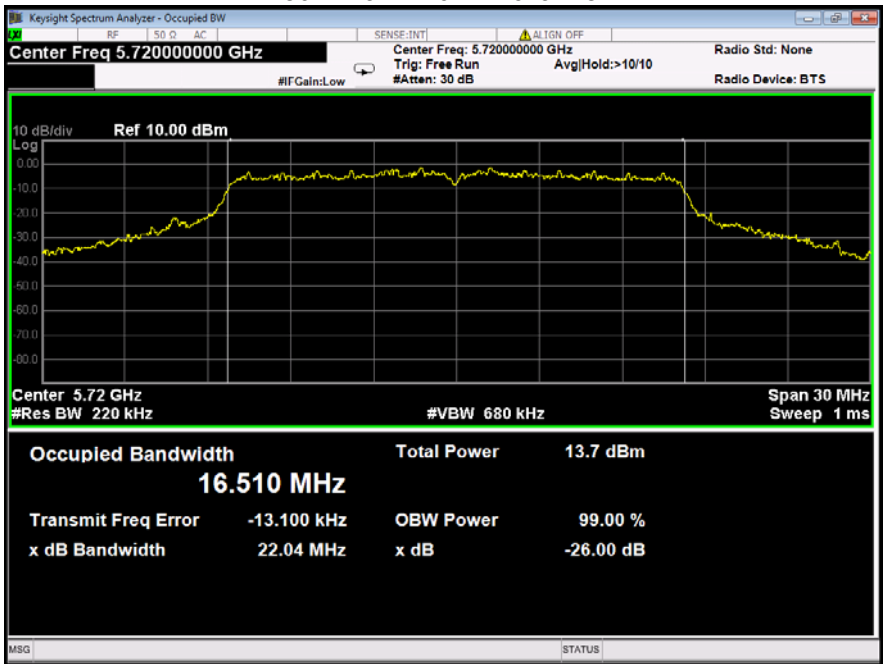


802.11ac HT80+HT80 U-NII-2C Low channel

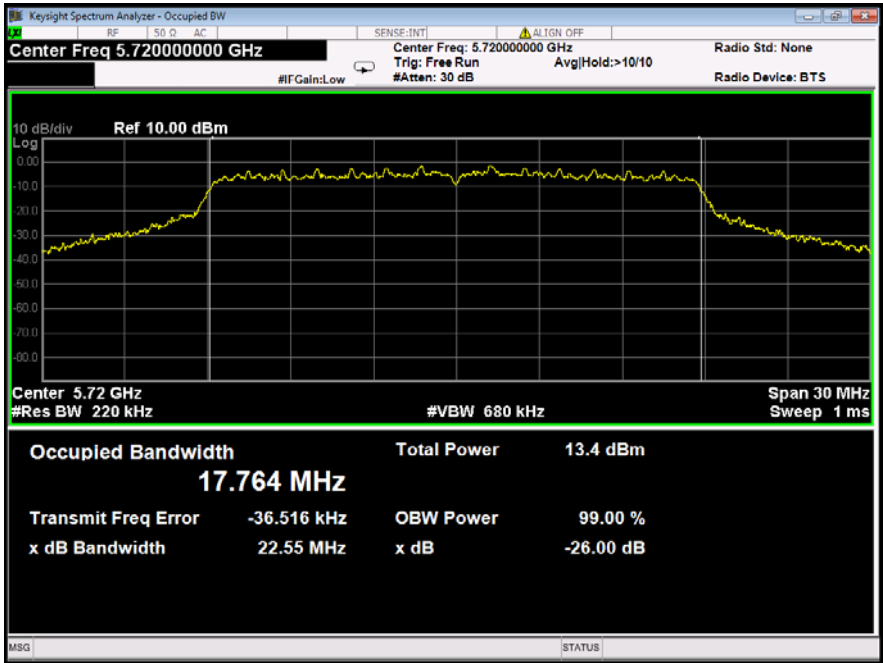


Ant 0

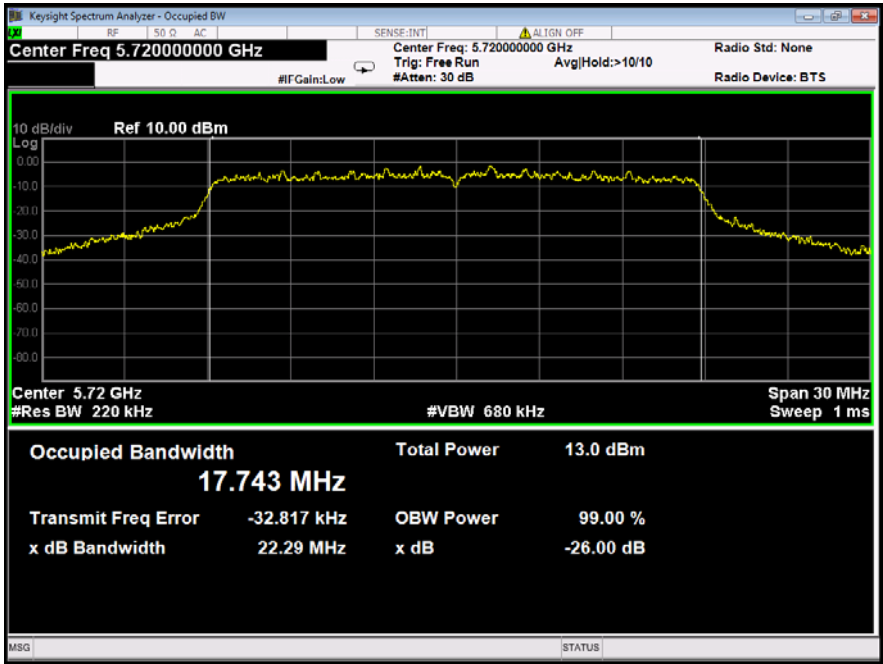
802.11a HT20 144 channel



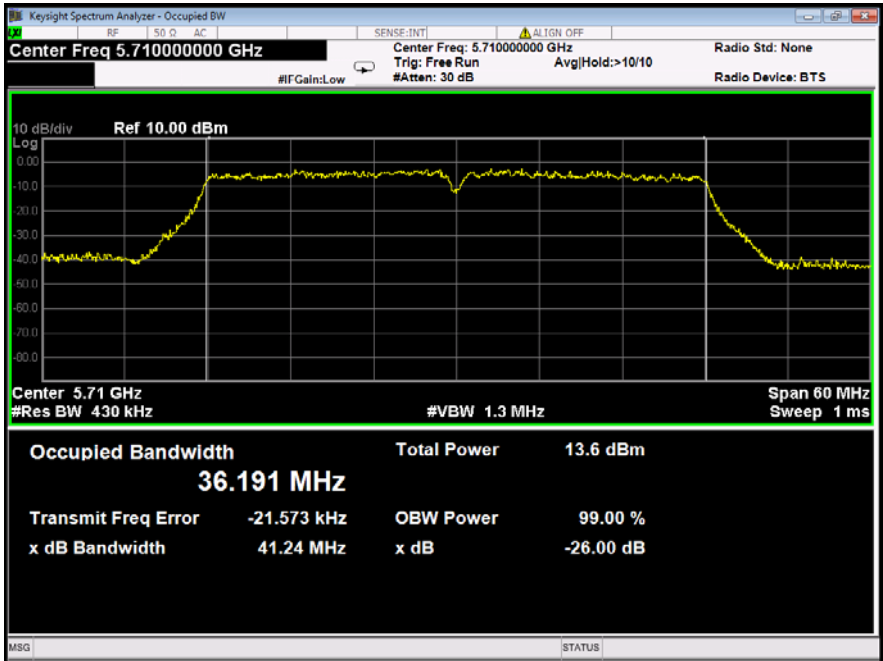
802.11n HT20 144 channel



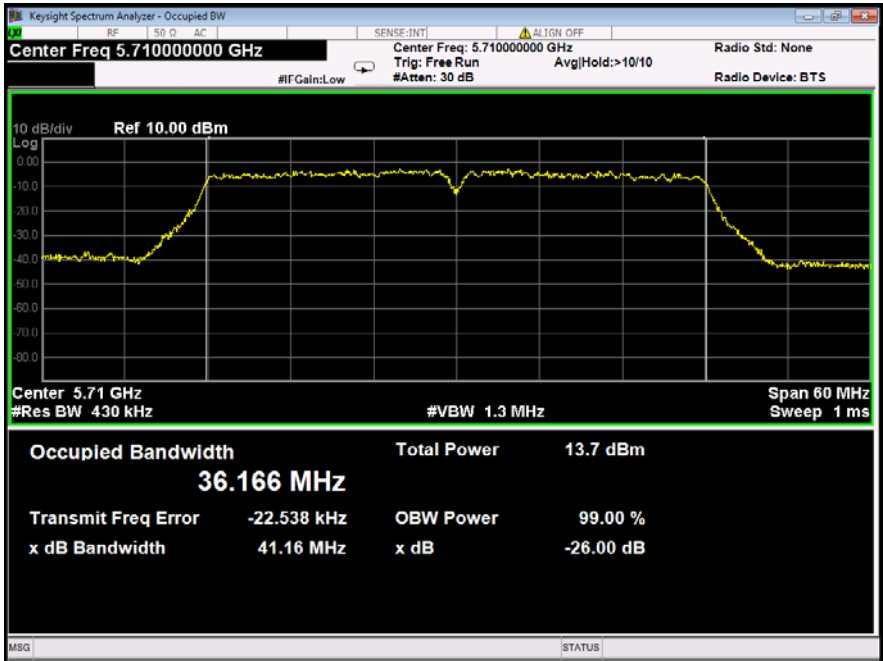
802.11ac HT20 144 channel



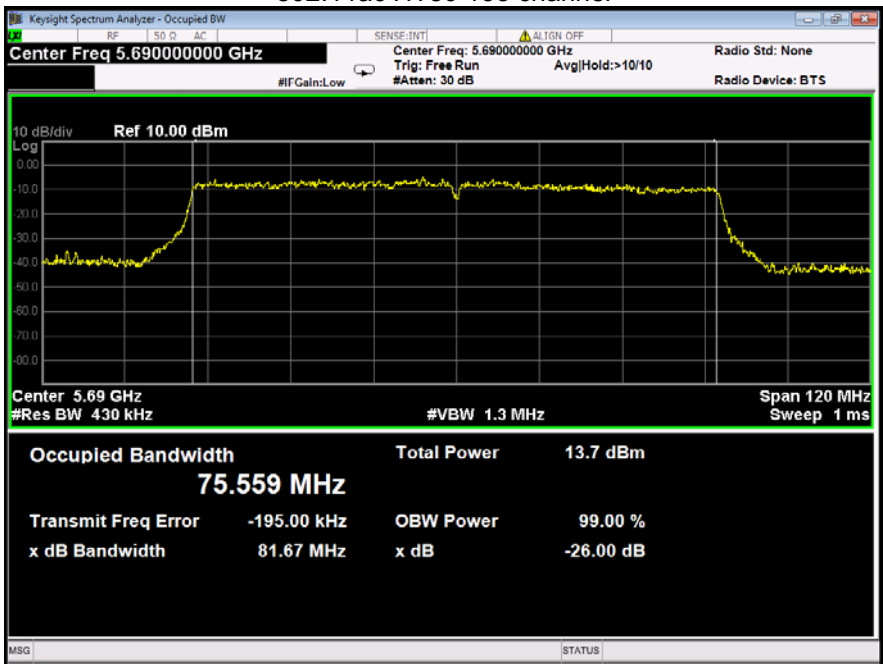
802.11n HT40 142 channel



802.11ac HT40 142 channel

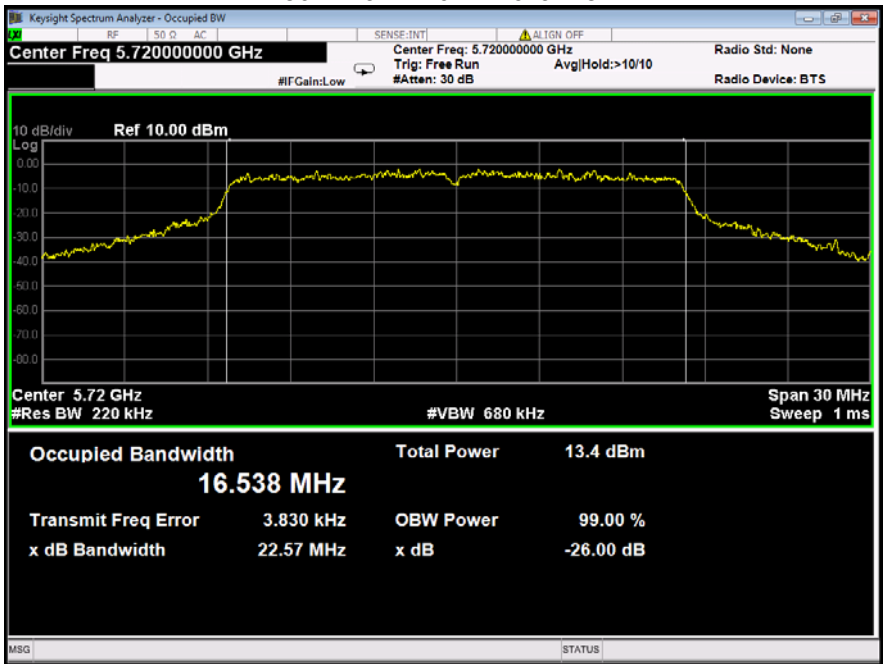


802.11ac HT80 138 channel

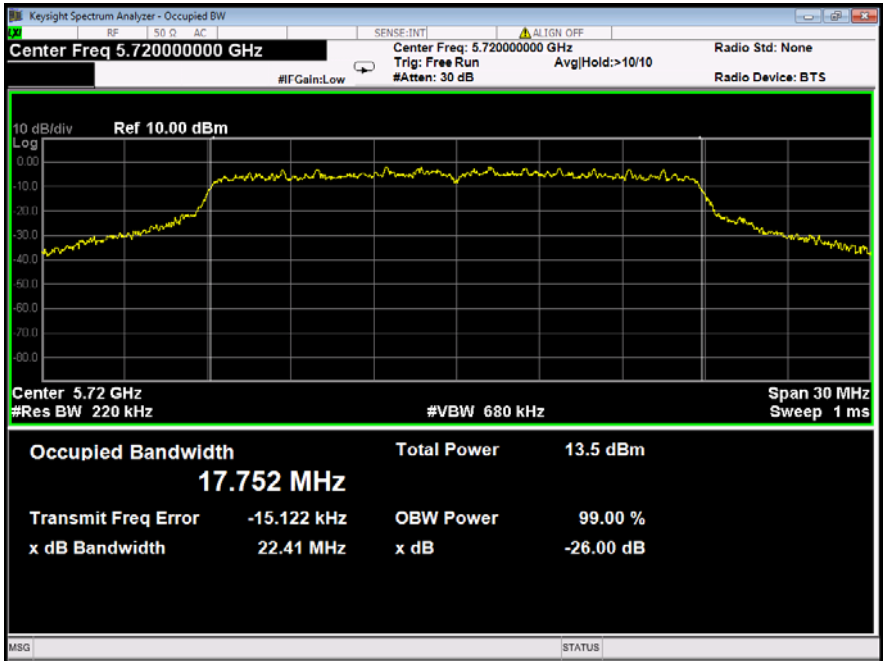


Ant 1

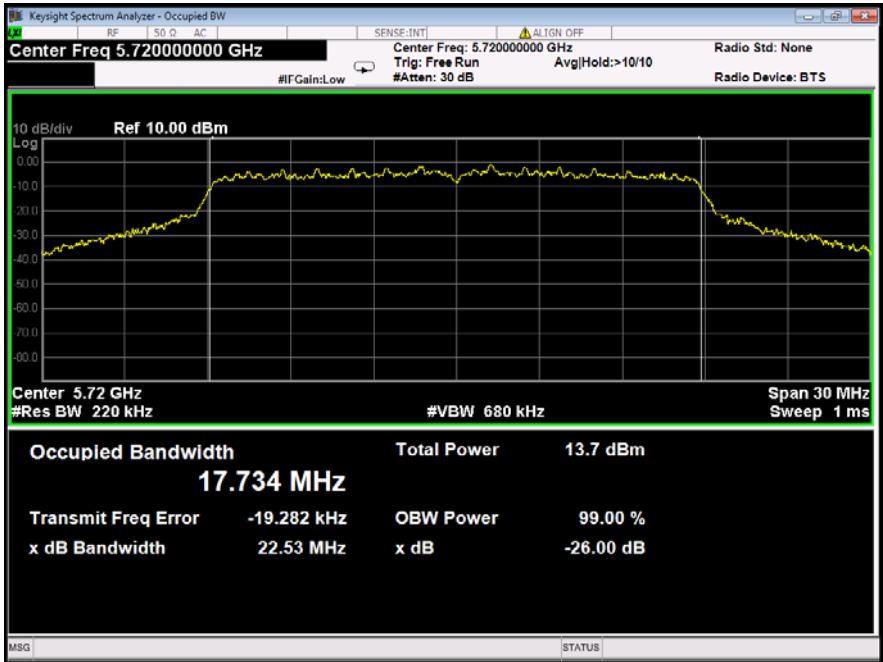
802.11a HT20 144 channel



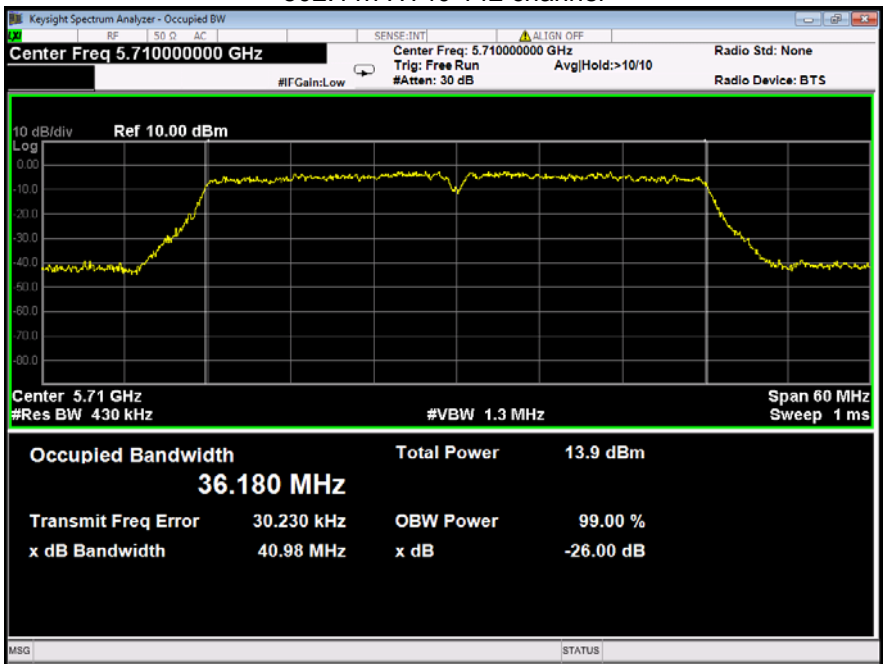
802.11n HT20 144 channel



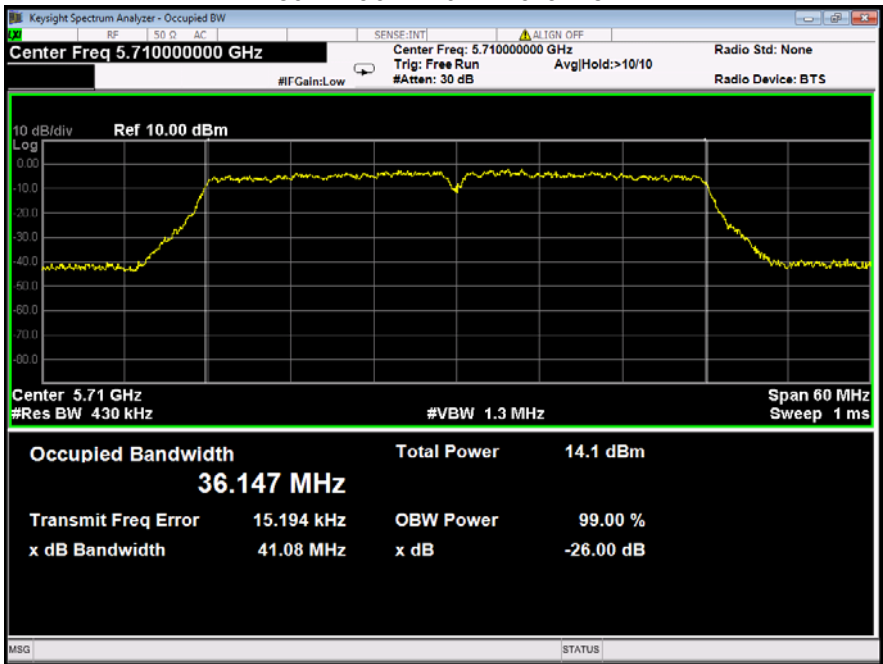
802.11ac HT20 144 channel



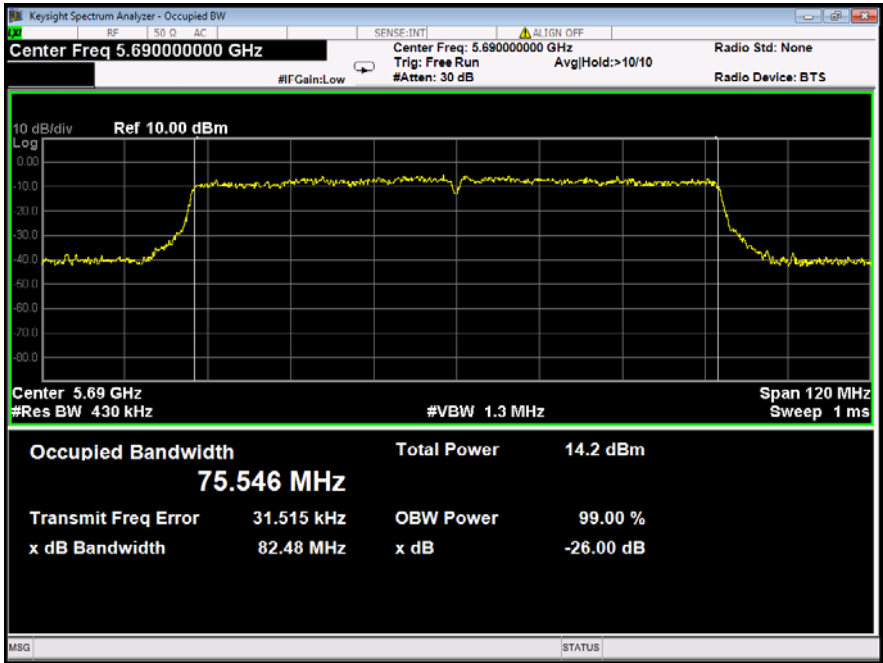
802.11n HT40 142 channel



802.11ac HT40 142 channel



802.11ac HT80 138 channel



13 Conducted Output Power

Test Requirement:	FCC CFR47 Part 15 Section 15.407(a) KDB662911 D01 Multiple Transmitter Output v02r01
Test Method:	KDB789033 D02 General U-NII Test Procedures New Rules v02r01 Section E
Test Limit:	U-NII-1 250mW(24dBm) U-NII-2A 250mW(24dBm) or 11 dBm + 10 log B U-NII-2C 250mW(24dBm) or 11 dBm + 10 log B U-NII-3 1W(30dBm) U-NII-2C: 5720MHz Limit is 23.24 dBm 5710MHz Limit is 23.54 dBm 5690MHz Limit is 23.87 dBm U-NII-3: 5720MHz Limit is 25.37 dBm 5710MHz Limit is 21.88dBm 5690MHz Limit is 19.12 dBm
Test Result:	PASS Conducted output power= measurement power+10log(1/x) X is duty cycle=1, so 10log(1/1)=0
Remark:	Conducted output power= measurement power where B is the 26 dB emission bandwidth in megahertz

13.1 Test Procedure:

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer: RBW = 1 MHz. VBW = 3 MHz. Sweep = auto; Detector Function = Peak, Set the span to fully encompass the DTS bandwidth.
3. Keep the EUT in transmitting at lowest, medium and highest channel individually. Record the max value.

13.2 Test Result :

Band	Operation mode	CH	Conducted Output Power (dBm)		
			ANT0	ANT1	Total
U-NII-1	802.11a	Low	12.52	12.50	/
		Middle	12.60	12.52	/
		High	12.59	12.53	/
	802.11n(HT20)	Low	12.36	12.44	15.41
		Middle	12.46	12.44	15.46
		High	12.42	12.47	15.46
	802.11n(HT40)	Low	13.23	13.24	16.25
		Middle	/	/	/
		High	13.23	13.19	16.22
	802.11ac(HT20)	Low	12.47	12.42	15.46
		Middle	12.46	12.46	15.47
		High	12.41	12.44	15.44
	802.11ac(HT40)	Low	13.27	13.27	16.28
		Middle	/	/	/
		High	13.30	13.29	16.31
	802.11ac(HT80)	Low	/	/	/
		Middle	13.21	13.33	16.28
		High	/	/	/
U-NII-2A	802.11a	Low	12.55	12.46	/
		Middle	12.41	12.43	/
		High	12.19	12.26	/
	802.11n(HT20)	Low	12.40	12.39	15.41
		Middle	12.36	12.31	15.35
		High	12.07	12.08	15.09
	802.11n(HT40)	Low	13.18	13.17	16.19
		Middle	/	/	/
		High	13.07	13.06	16.08
	802.11ac(HT20)	Low	12.36	12.37	15.38
		Middle	12.32	12.34	15.34
		High	12.05	12.14	15.11
	802.11ac(HT40)	Low	13.20	13.14	16.18
		Middle	/	/	/
		High	12.96	12.99	15.99
	802.11ac(HT80)	Low	/	/	/

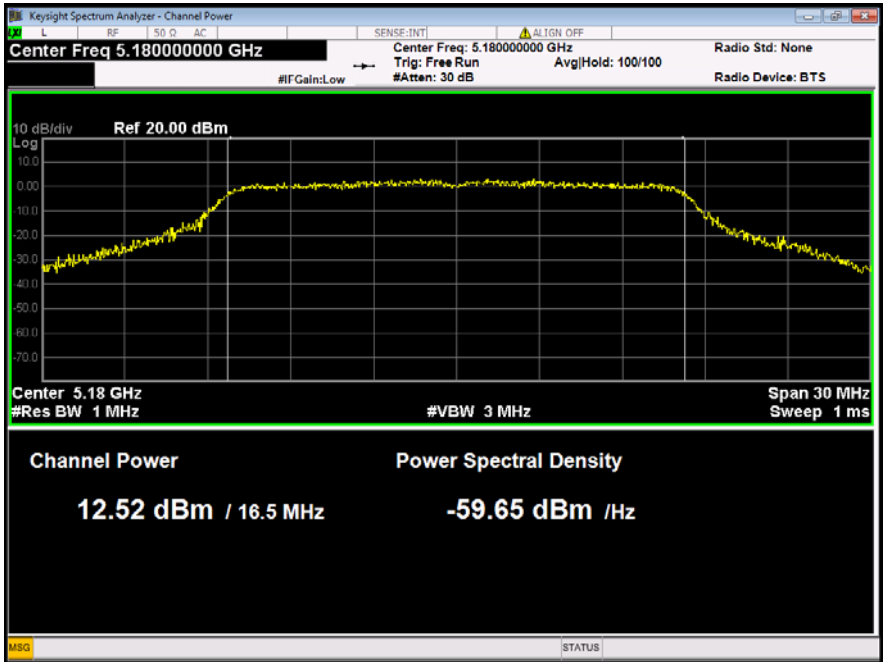
		Middle	13.10	13.12	16.12
		High	/	/	/
U-NII-2C	802.11a	Low	12.64	12.56	/
		Middle	12.93	13.04	/
		High	13.57	13.03	/
	802.11n(HT20)	Low	12.65	12.59	15.63
		Middle	13.06	13.06	16.07
		High	13.36	13.28	16.33
	802.11n(HT40)	Low	13.60	13.50	16.56
		Middle	13.84	13.98	16.92
		High	14.05	13.96	17.02
	802.11ac(HT20)	Low	12.58	12.60	15.60
		Middle	13.05	13.09	16.08
		High	13.16	13.27	16.23
	802.11ac(HT40)	Low	13.29	13.73	16.53
		Middle	14.02	13.95	17.00
		High	14.19	14.07	17.14
	802.11ac(HT80)	Low	13.93	13.86	16.91
		Middle	13.88	13.49	16.70
		High	/	/	/
U-NII-3	802.11a	Low	13.19	13.48	/
		Middle	12.75	13.03	/
		High	12.76	12.79	/
	802.11n(HT20)	Low	13.46	13.44	16.46
		Middle	12.82	12.86	15.85
		High	12.69	13.04	15.88
	802.11n(HT40)	Low	13.91	14.04	16.99
		Middle	/	/	/
		High	13.53	13.66	16.61
	802.11ac(HT20)	Low	13.28	13.29	16.30
		Middle	12.87	13.04	15.97
		High	12.67	12.85	15.77
	802.11ac(HT40)	Low	13.83	14.55	17.22
		Middle	/	/	/
		High	13.97	14.06	17.03
	802.11ac(HT80)	Low	/	/	/
		Middle	13.81	14.25	17.05

		High	/	/	/
U-NII-1/2A	802.11ac(HT80+HT80)	Low	18.84	/	/
		Middle	/	/	/
		High	/	/	/
U-NII-2C	802.11ac(HT80+HT80)	Low	18.09	/	/
		Middle	/	/	/
		High	/	/	/
overlapping channels, U-NII-2C (144,142,138)	802.11a	High	13.847	13.910	/
	802.11n(HT20)	High	13.214	14.094	16.69
	802.11n(HT40)	High	14.972	15.503	18.26
	802.11ac(HT20)	High	13.419	13.723	16.58
	802.11ac(HT40)	High	15.097	16.092	18.63
	802.11ac(HT80)	High	15.161	16.020	18.62
overlapping channels, U-NII-3 (144,142,138)	802.11a	Low	6.220	7.688	/
	802.11n(HT20)	Low	6.246	7.129	9.72
	802.11n(HT40)	Low	2.886	3.627	6.28
	802.11ac(HT20)	Low	6.851	7.206	10.04
	802.11ac(HT40)	Low	2.698	3.686	6.23
	802.11ac(HT80)	Low	-0.865	1.010	3.18

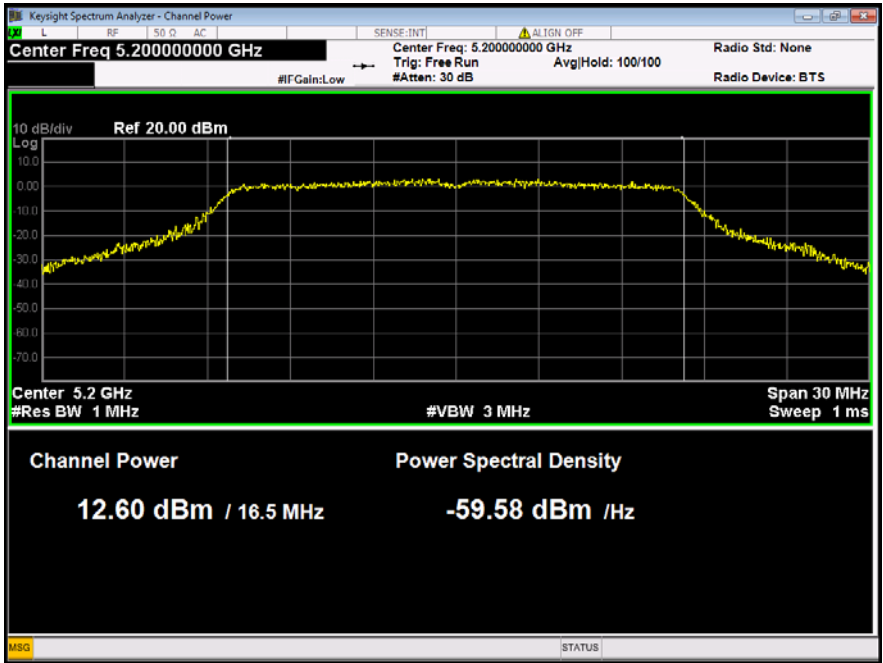
* All transmit signals are completely uncorrelated with each other, Directional gain = G_{ANT} which is less than 6dBi. So the limit does not be reduced.

Test result plots shown as follows: Antenna 0

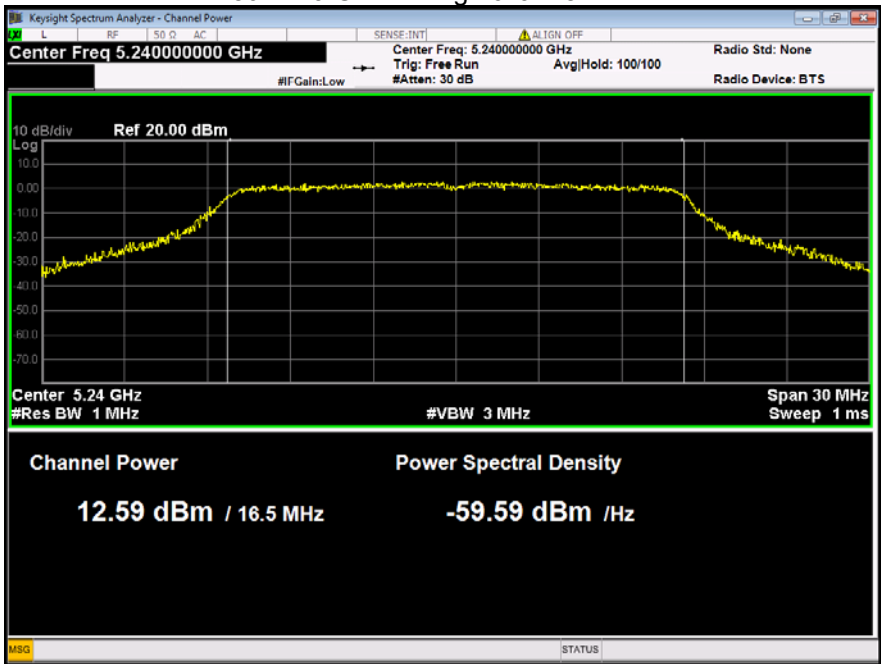
802.11a U-NII-1 Low channel



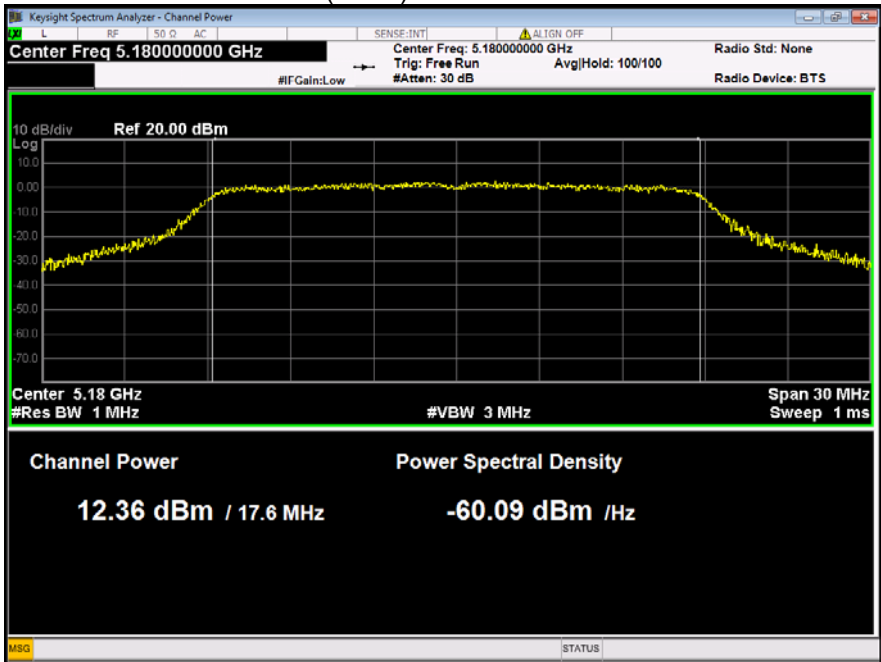
802.11a U-NII-1 Middle channel



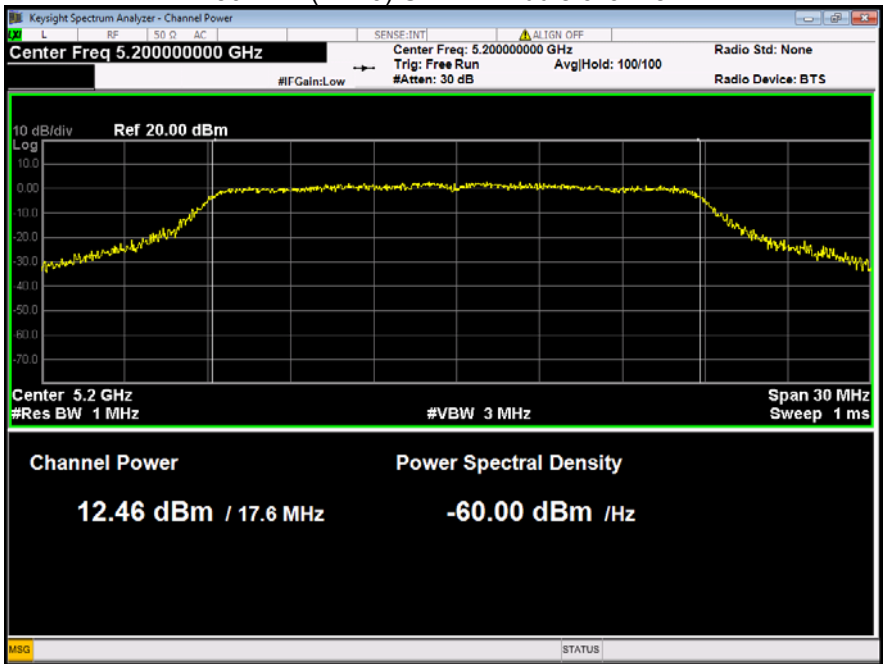
802.11a U-NII-1 High channel



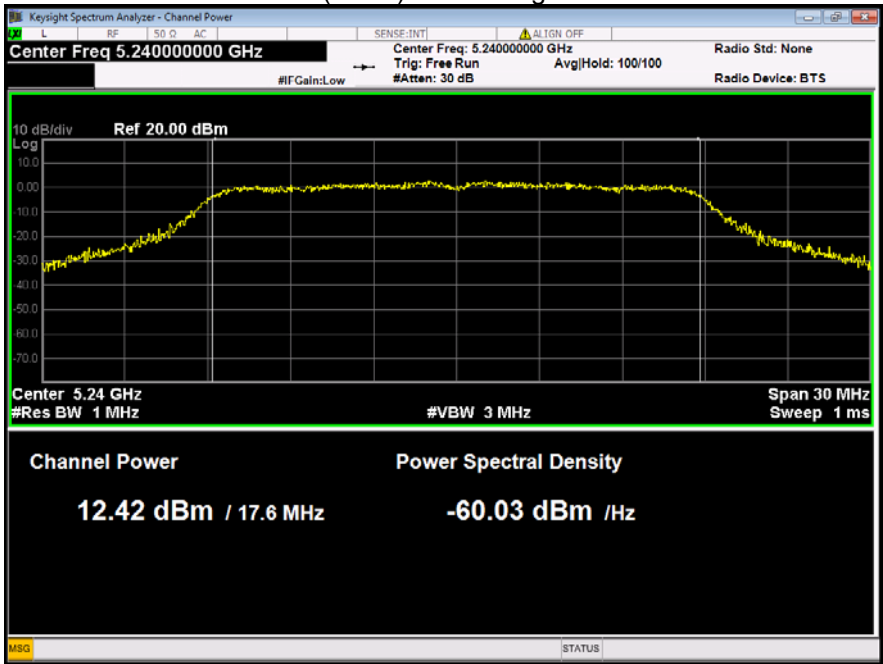
802.11n(HT20) U-NII-1 Low channel



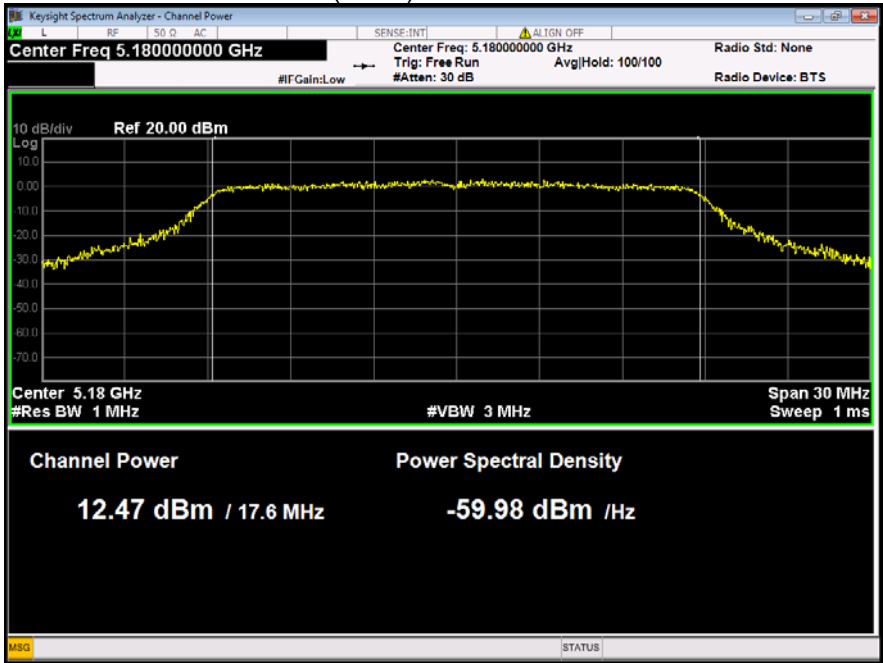
802.11n(HT20) U-NII-1 Middle channel



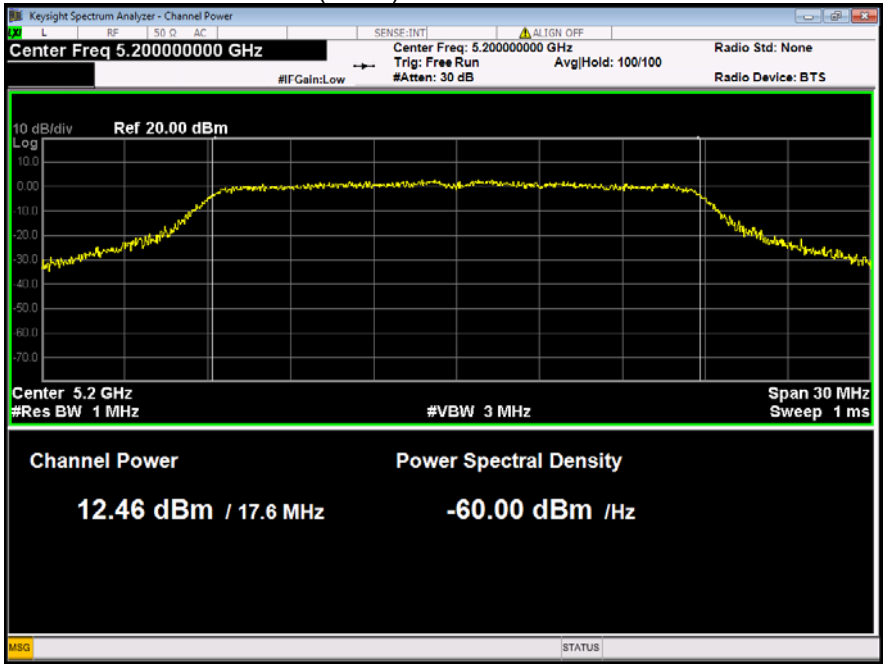
802.11n(HT20) U-NII-1 High channel



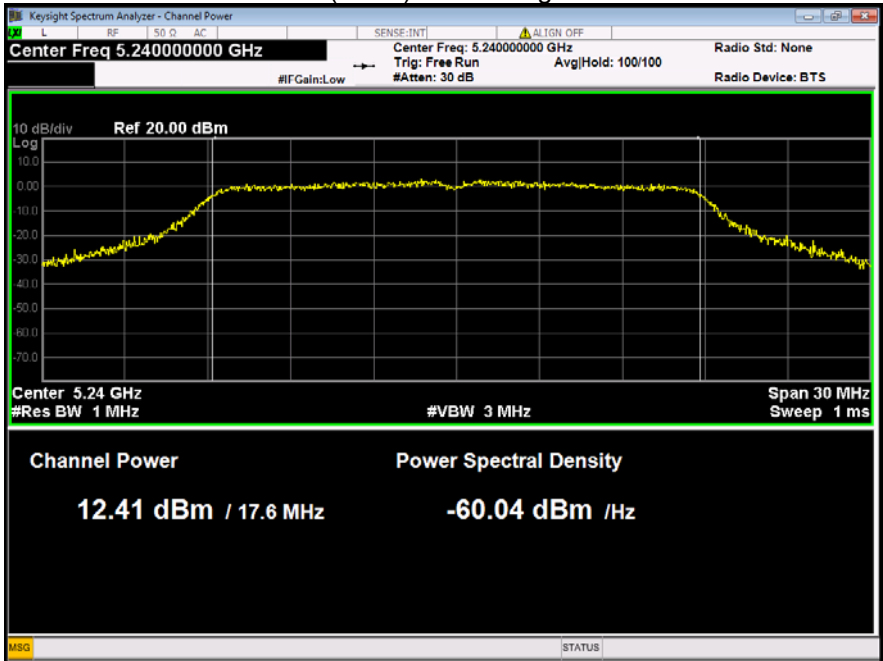
802.11ac(HT20) U-NII-1 Low channel



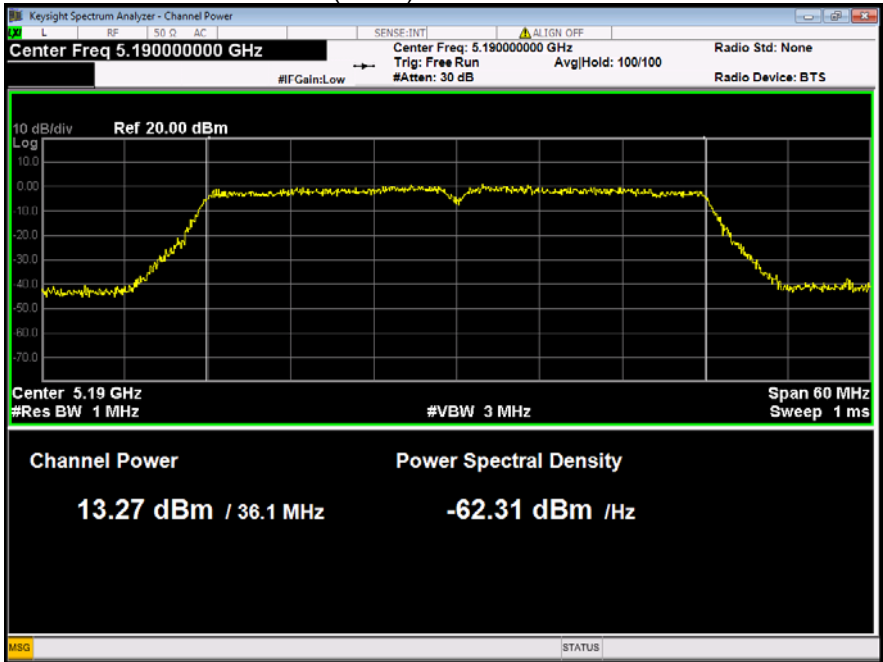
802.11ac(HT20) U-NII-1 Middle channel



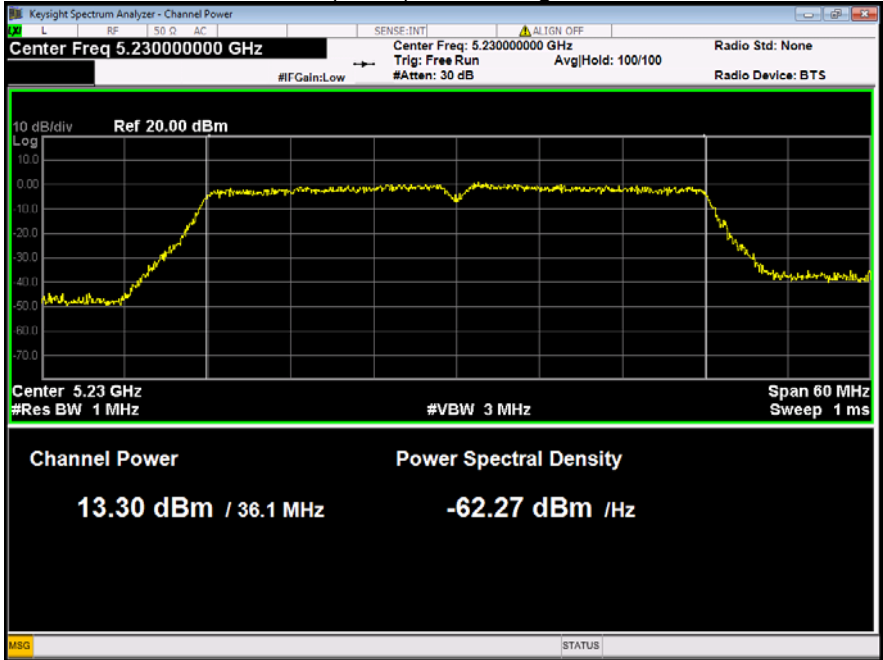
802.11ac(HT20) U-NII-1 High channel



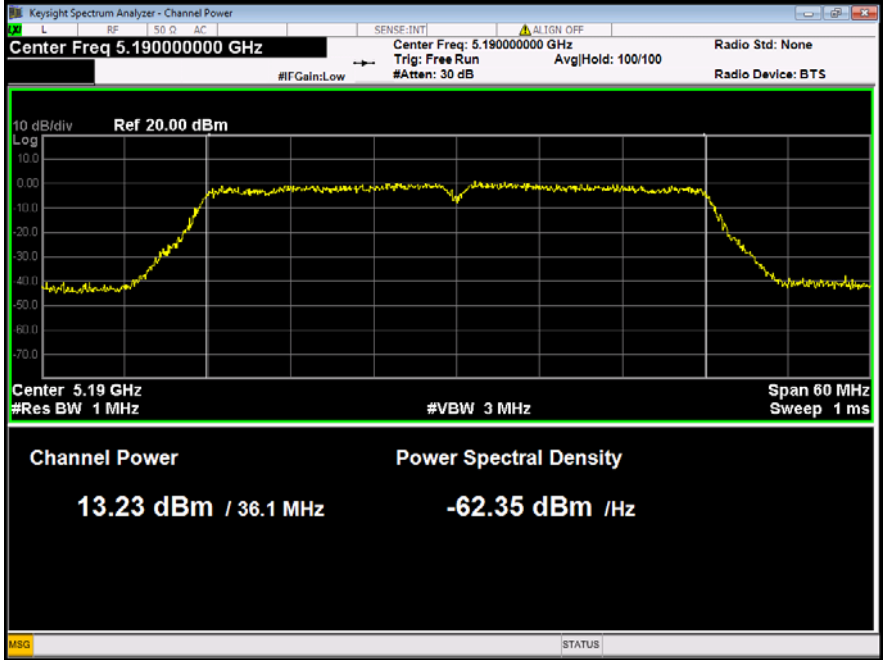
802.11ac(HT40) U-NII-1 Low channel



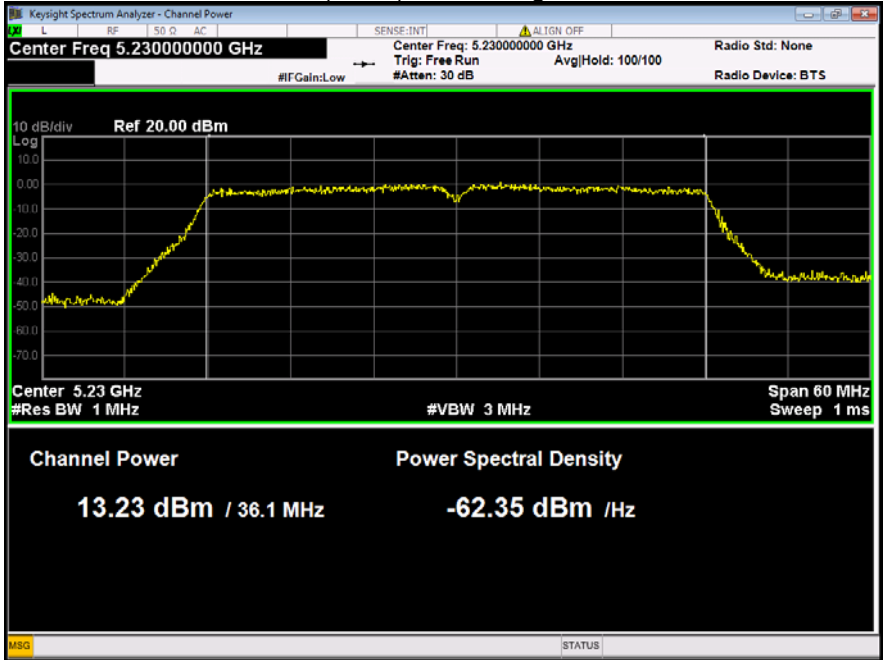
802.11ac(HT40) U-NII-1 High channel



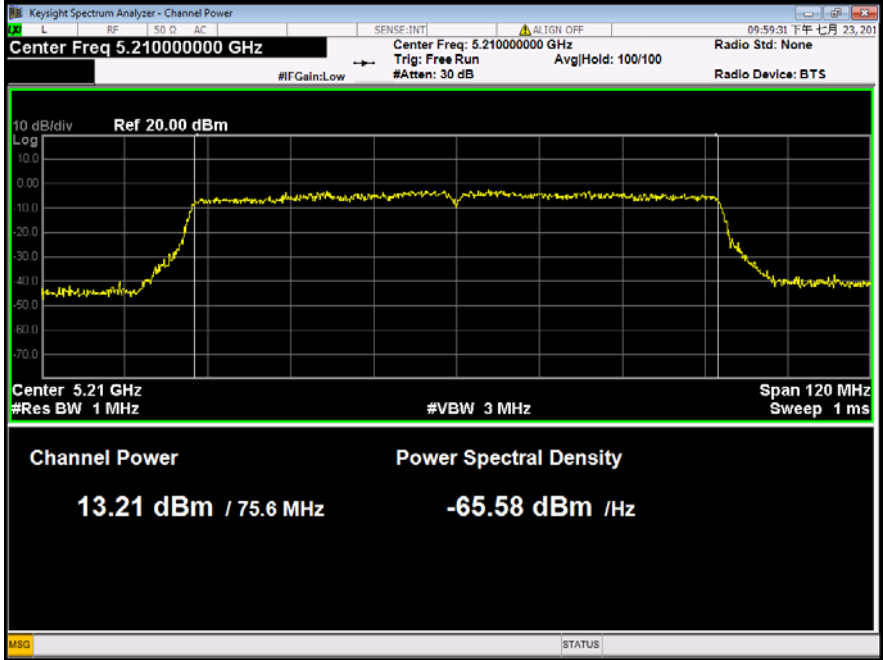
802.11n(HT40) U-NII-1 Low channel



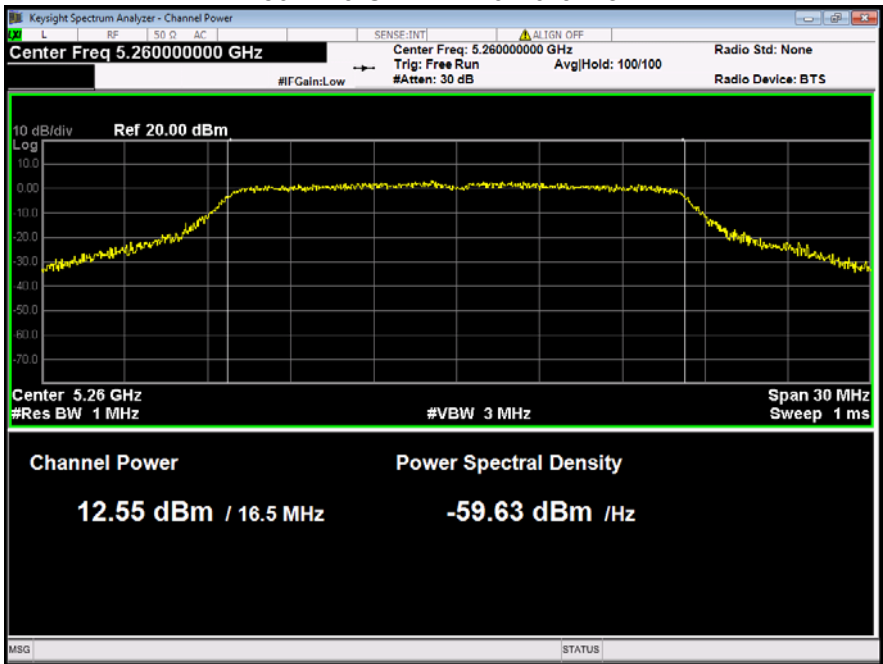
802.11n(HT40) U-NII-1 High channel



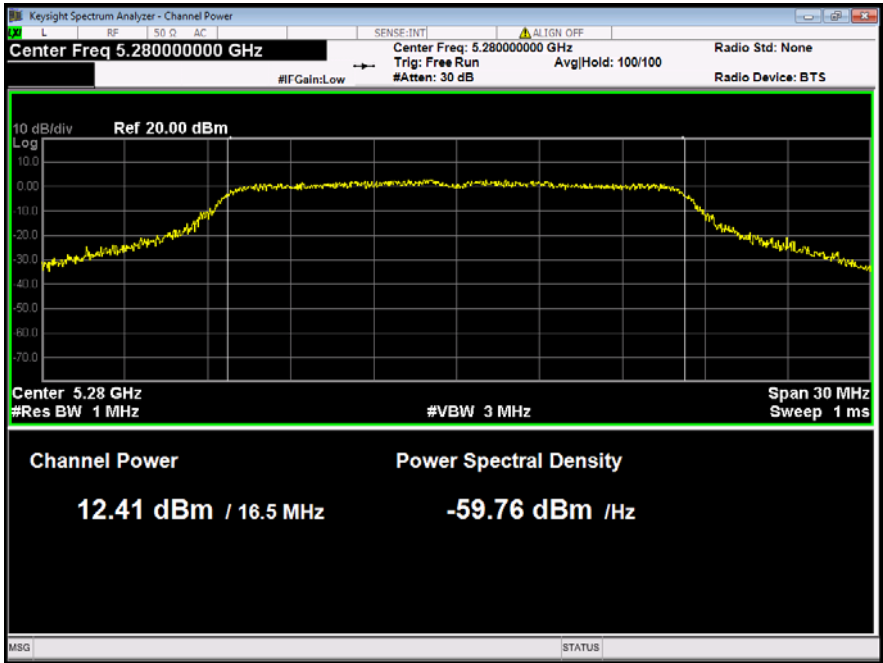
802.11n(HT80) U-NII-1 Middle channel



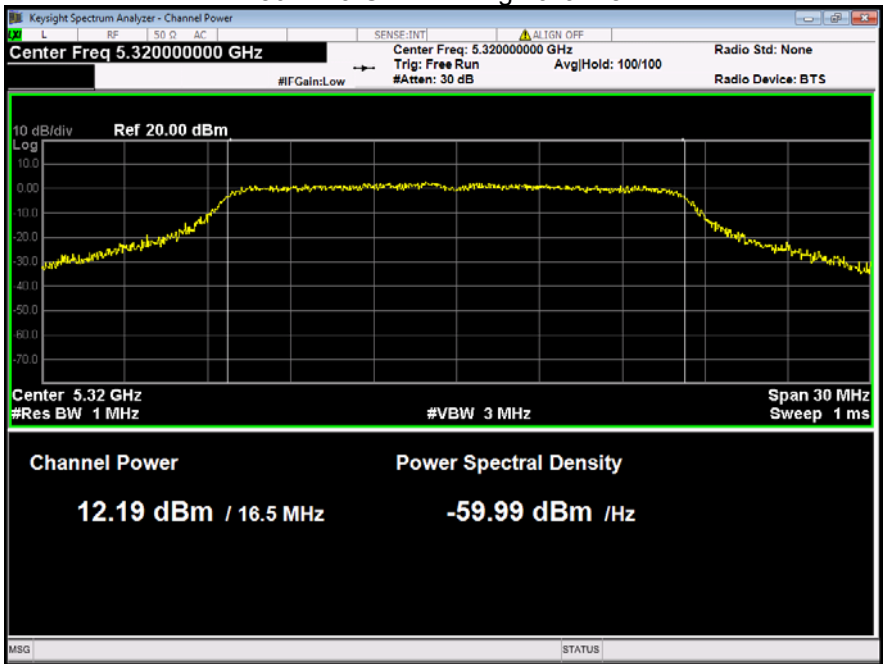
802.11a U-NII-2A Low channel



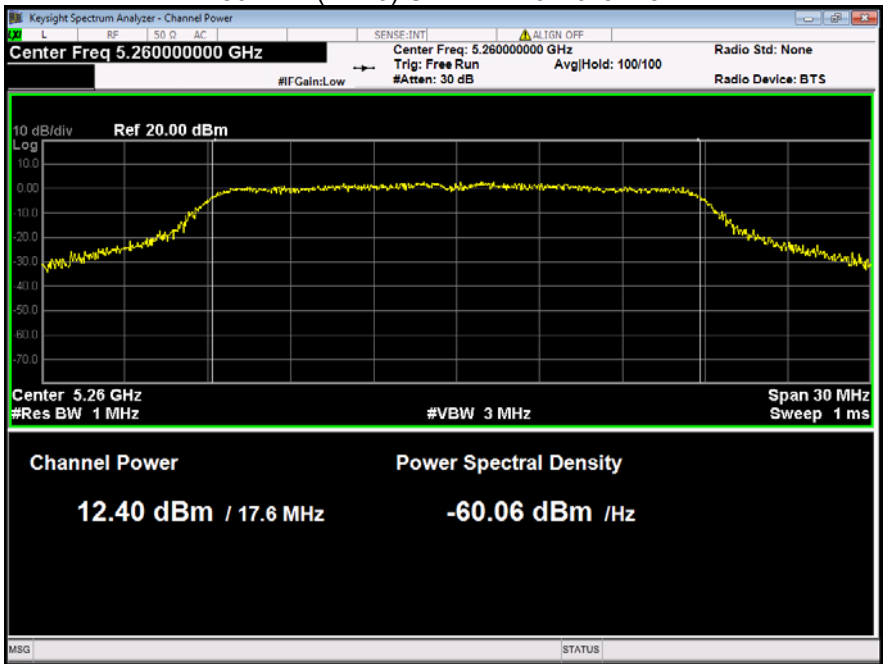
802.11a U-NII-2A Middle channel



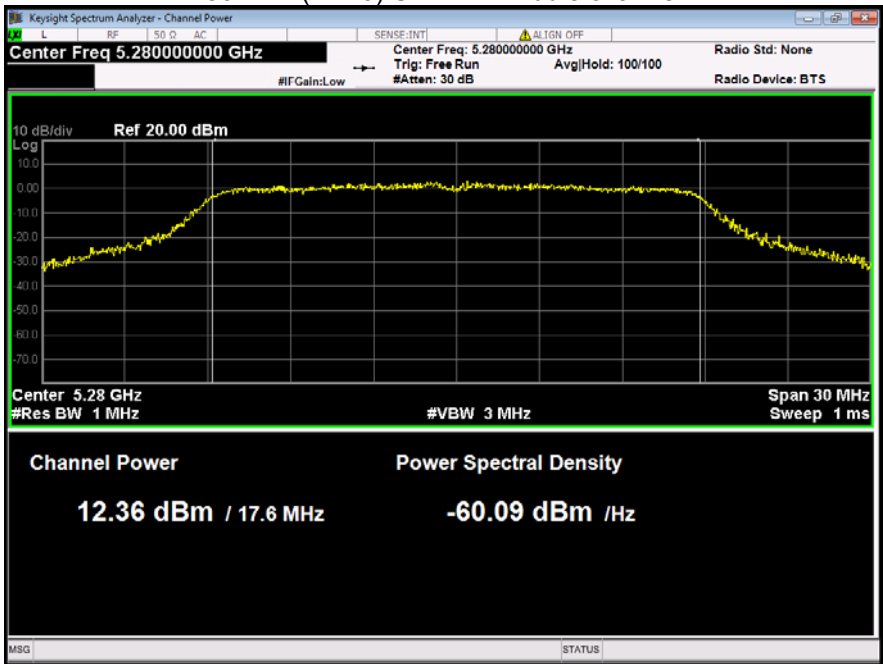
802.11a U-NII-2A High channel



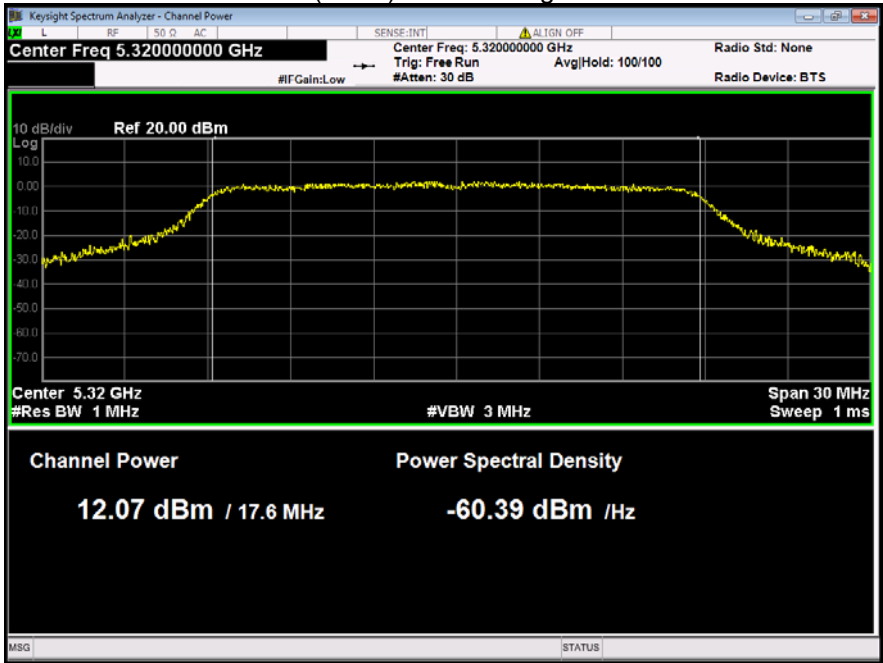
802.11n(HT20) U-NII-2A Low channel



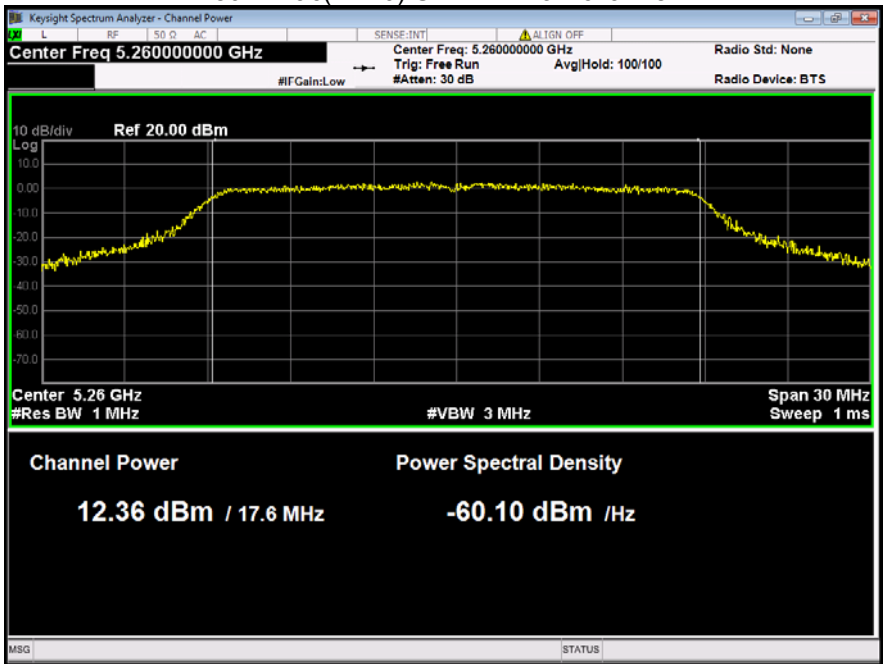
802.11n(HT20) U-NII-2A Middle channel



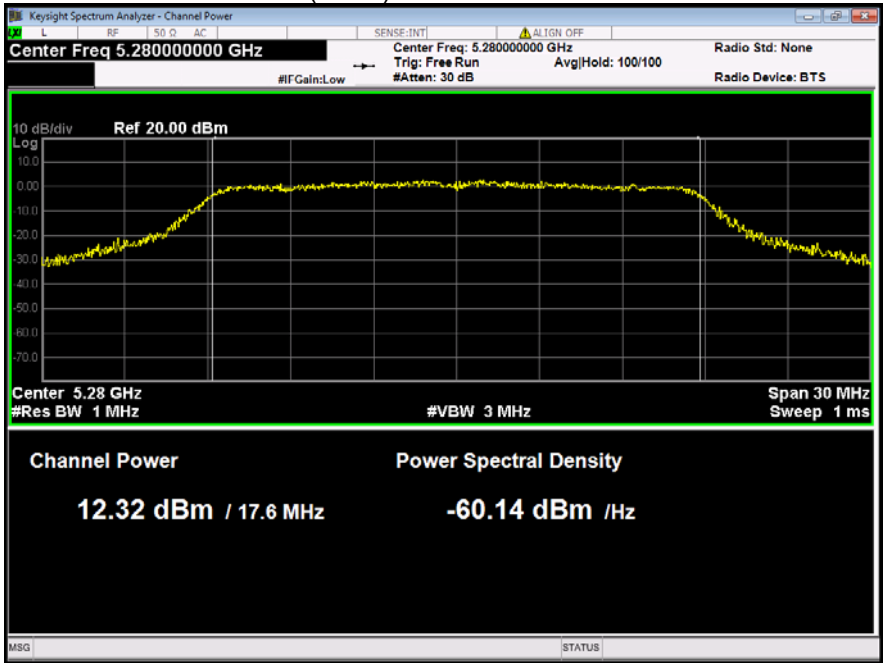
802.11n(HT20) U-NII-2A High channel



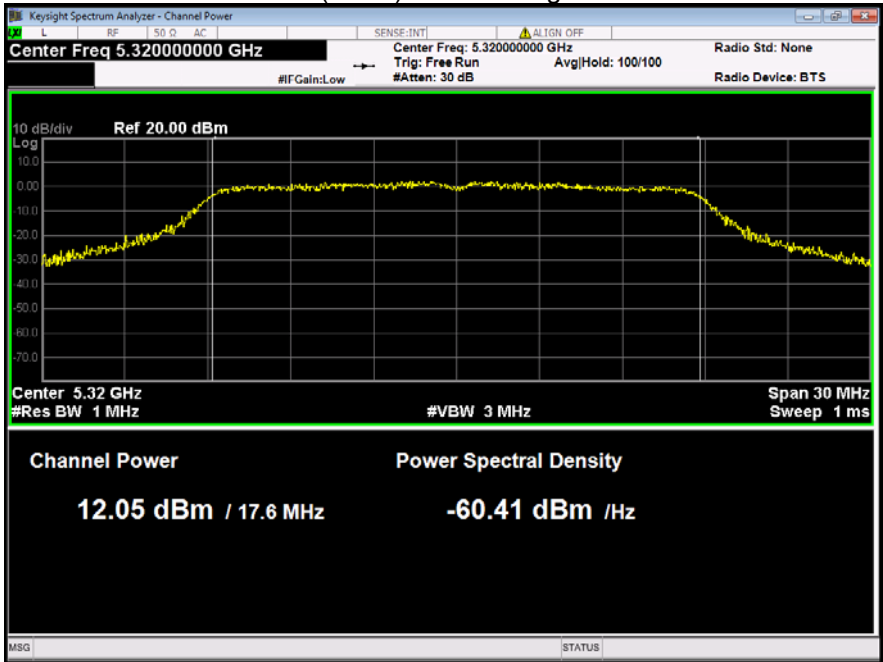
802.11ac(HT20) U-NII-2A Low channel



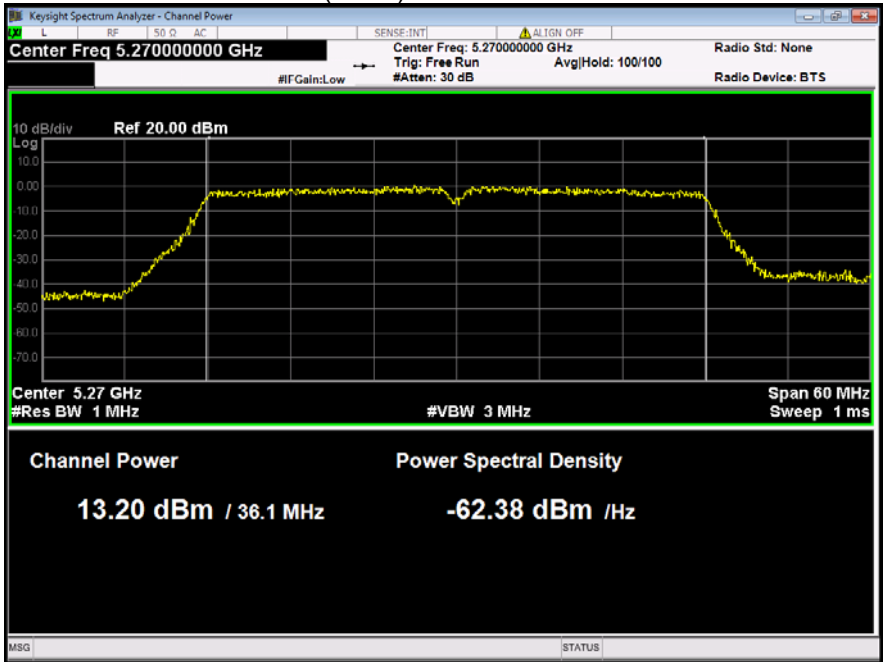
802.11ac(HT20) U-NII-2A Middle channel



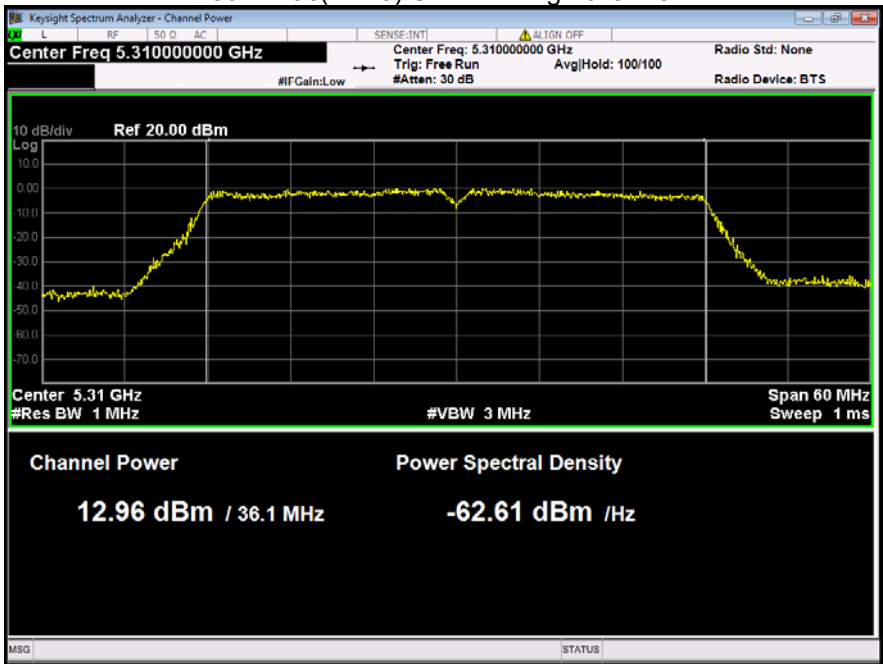
802.11ac(HT20) U-NII-2A High channel



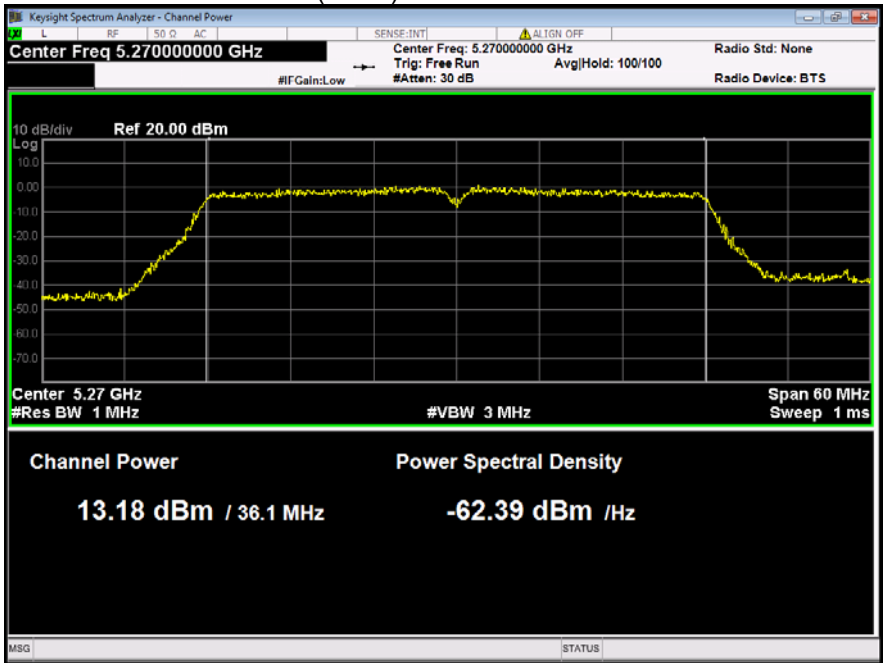
802.11ac(HT40) U-NII-2A Low channel



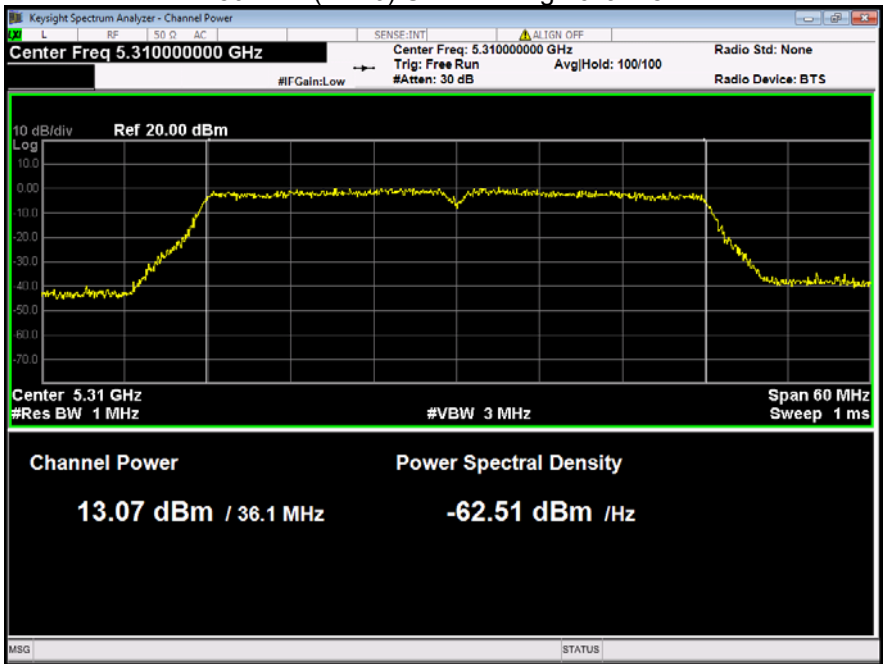
802.11ac(HT40) U-NII-2A High channel



802.11n(HT40) U-NII-2A Low channel



802.11n(HT40) U-NII-2A High channel



802.11ac(HT80) U-NII-2A Middle channel

