Annex B-Test Data

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1. Duty cycle

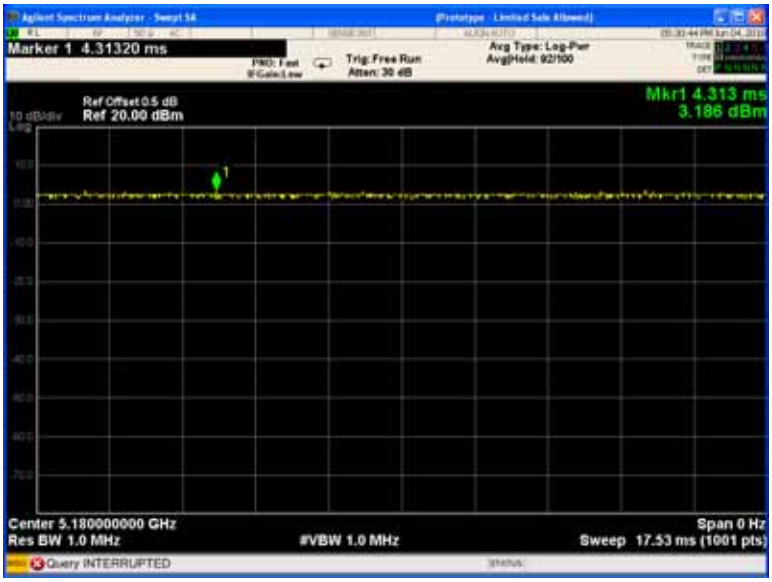
1.1. Summary of Test Results

802.11a mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	100	100	100
149	100	100	100
802.11n(HT20) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	100	100	100
149	100	100	100
802.11n(HT40) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
38	100	100	100
151	100	100	100
802.11ac(VHT20) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
36	100	100	100
149	100	100	100
802.11ac(VHT40) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
38	100	100	100
151	100	100	100
802.11ac(VHT80) mode			
channel	On time(ms)	Period(ms)	Duty Cycle(%)
42	100	100	100
155	100	100	100

Test result plots shown as follows:

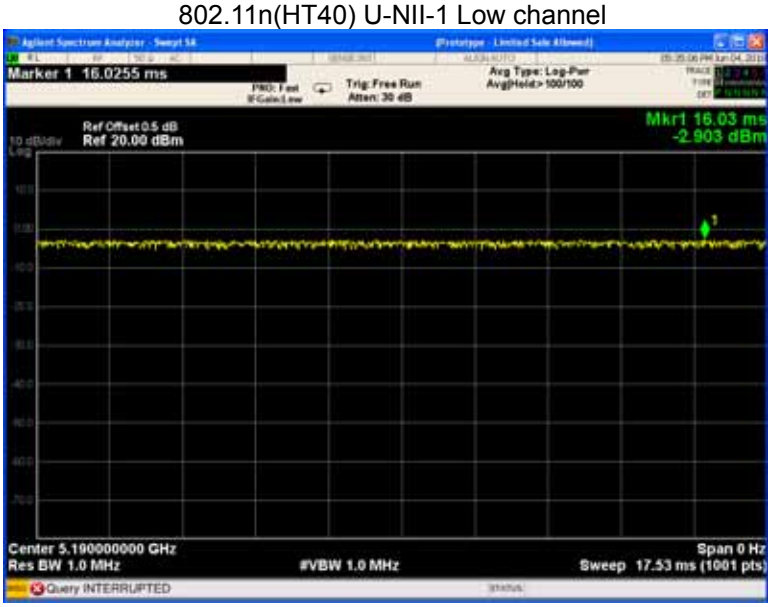
ANT3

802.11a U-NII-1 Low channel

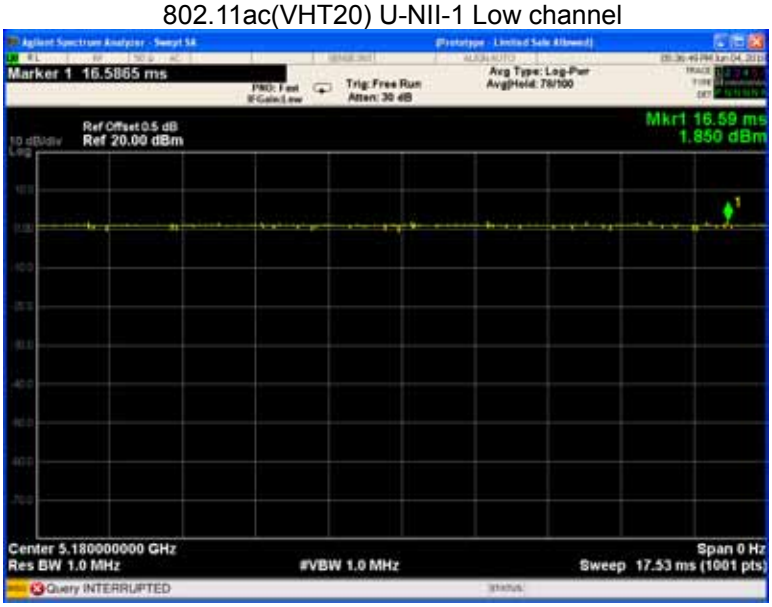


802.11n(HT20) U-NII-1 Low channel

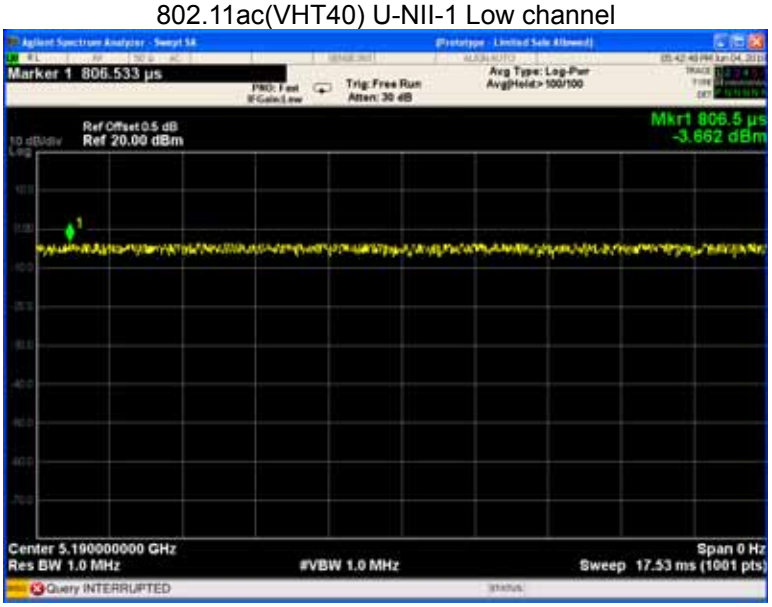
802.11n(HT40) U-NII-1 Low channel



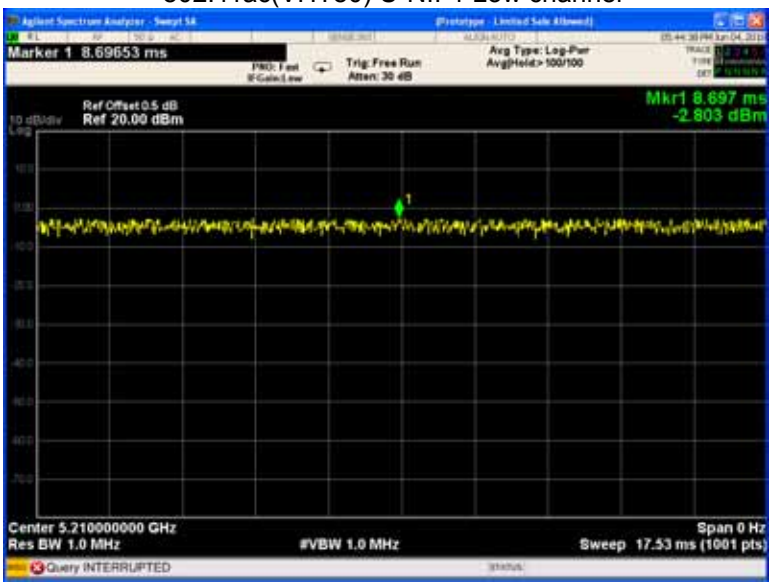
802.11ac(VHT20) U-NII-1 Low channel



802.11ac(VHT40) U-NII-1 Low channel



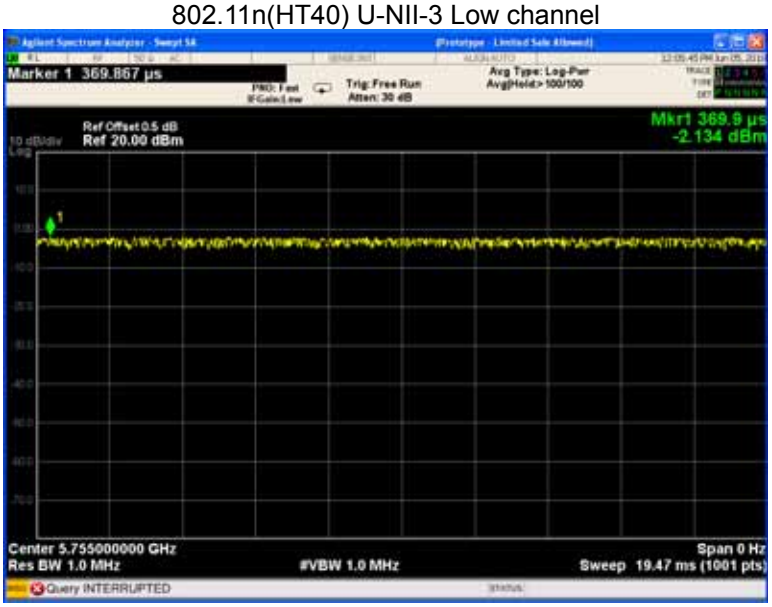
802.11ac(VHT80) U-NII-1 Low channel



802.11a U-NII-3 Low channel

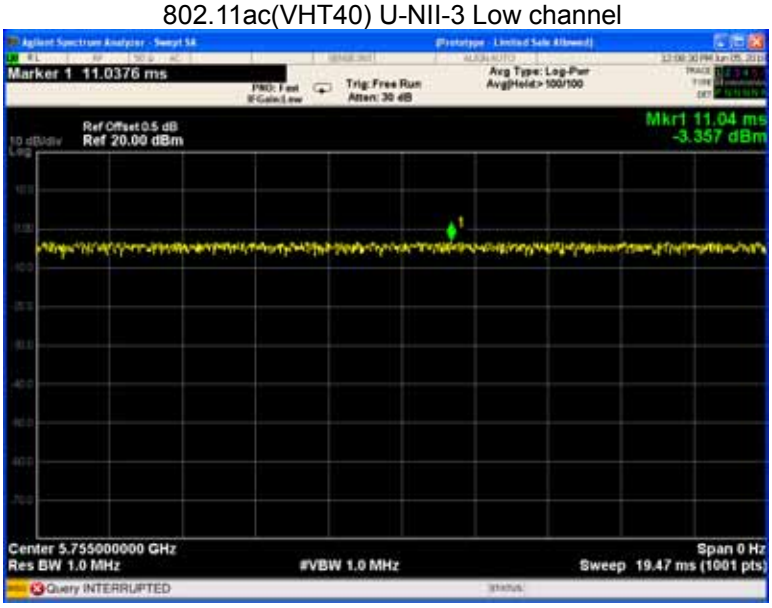
802.11n(HT20) U-NII-3 Low channel

802.11n(HT40) U-NII-3 Low channel

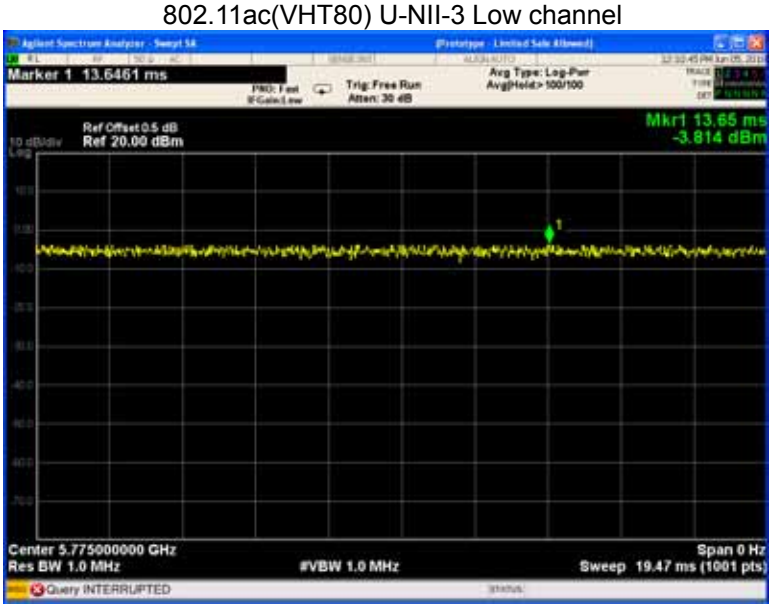


802.11ac(VHT20) U-NII-3 Low channel

802.11ac(VHT40) U-NII-3 Low channel



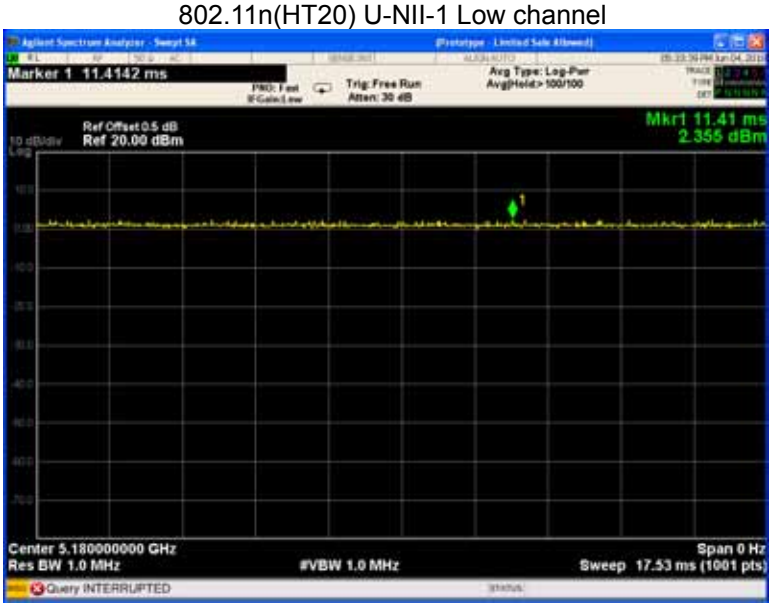
802.11ac(VHT80) U-NII-3 Low channel



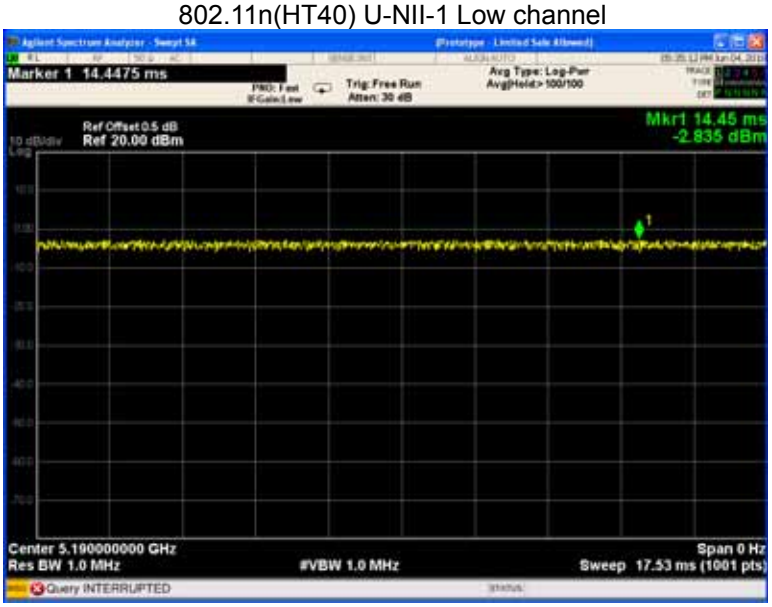
ANT4

802.11a U-NII-1 Low channel

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

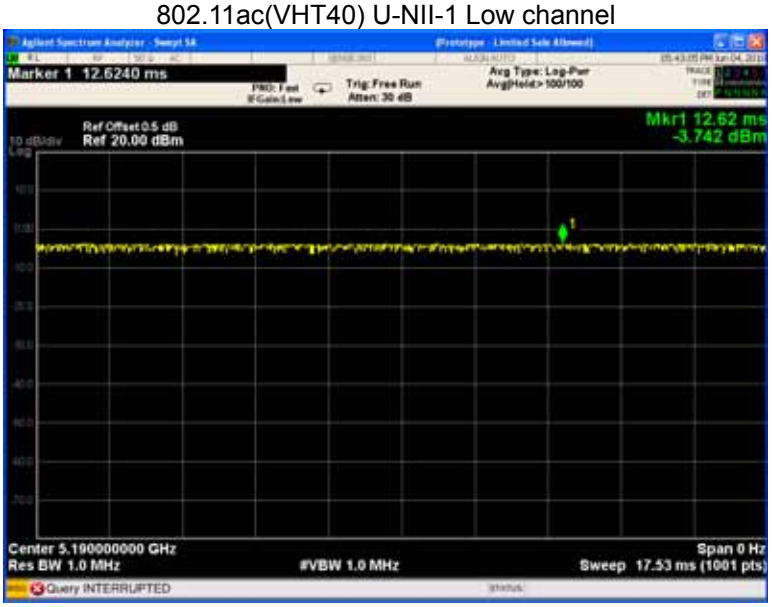


802.11n(HT40) U-NII-1 Low channel

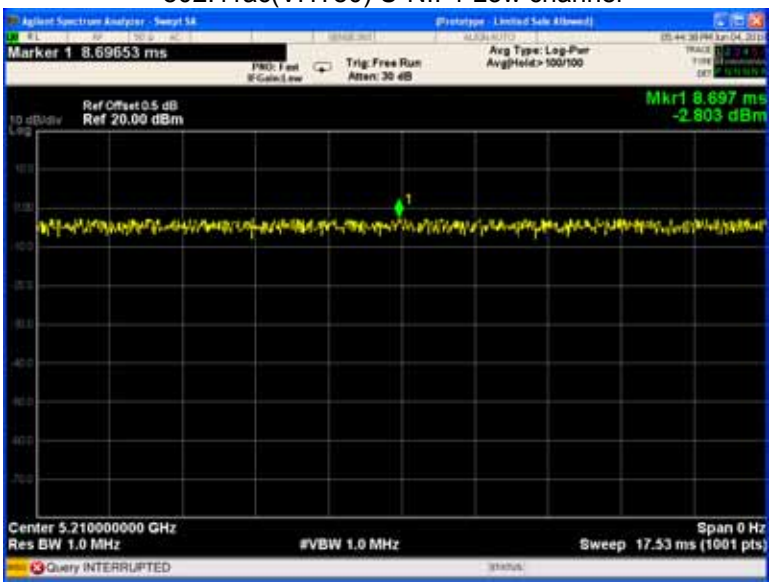


802.11ac(VHT20) U-NII-1 Low channel

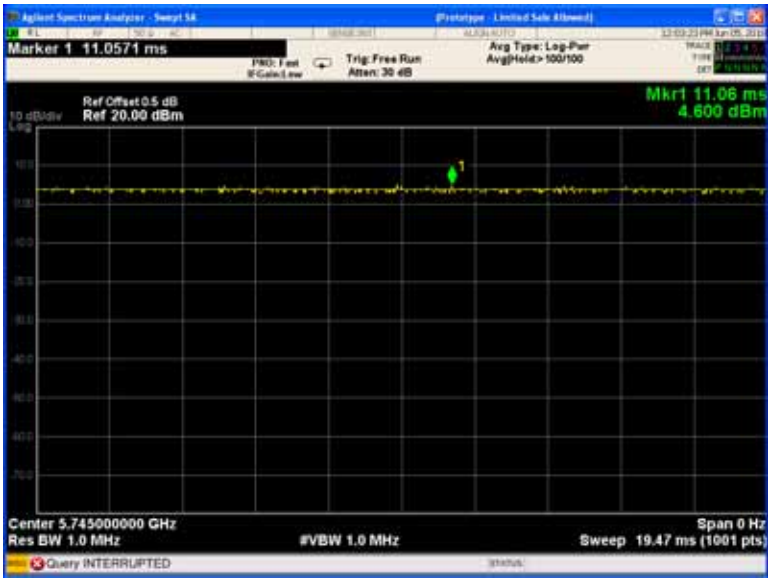
802.11ac(VHT40) U-NII-1 Low channel



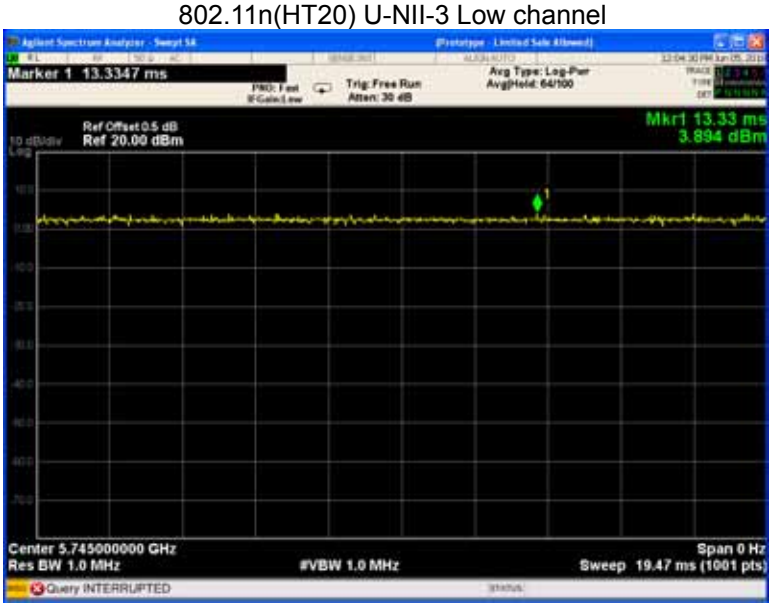
802.11ac(VHT80) U-NII-1 Low channel



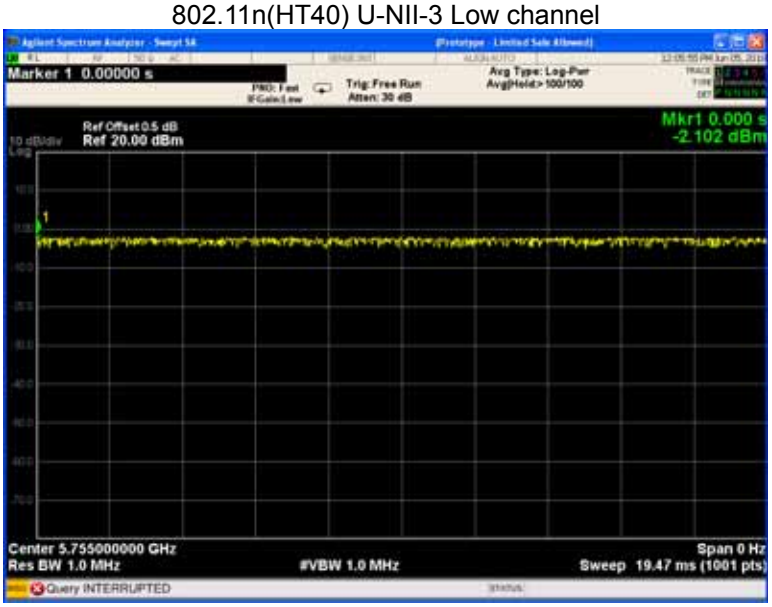
802.11a U-NII-3 Low channel



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

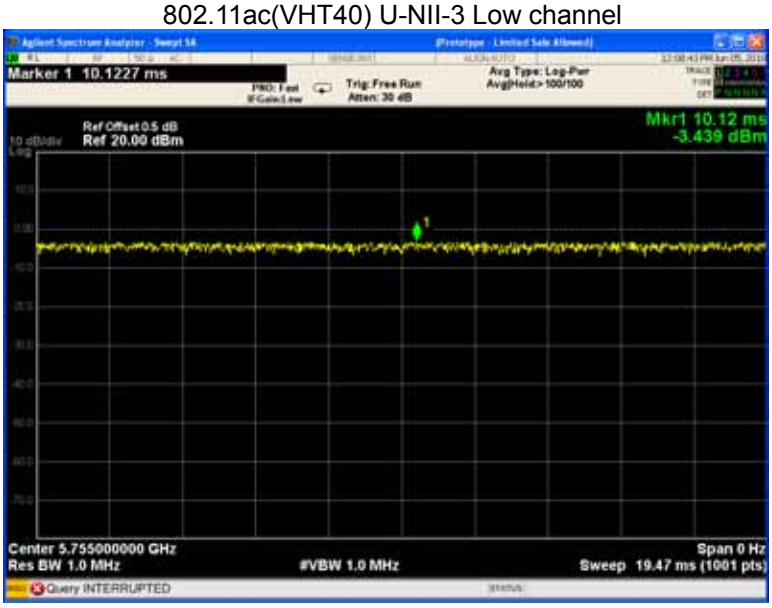


802.11n(HT40) U-NII-3 Low channel

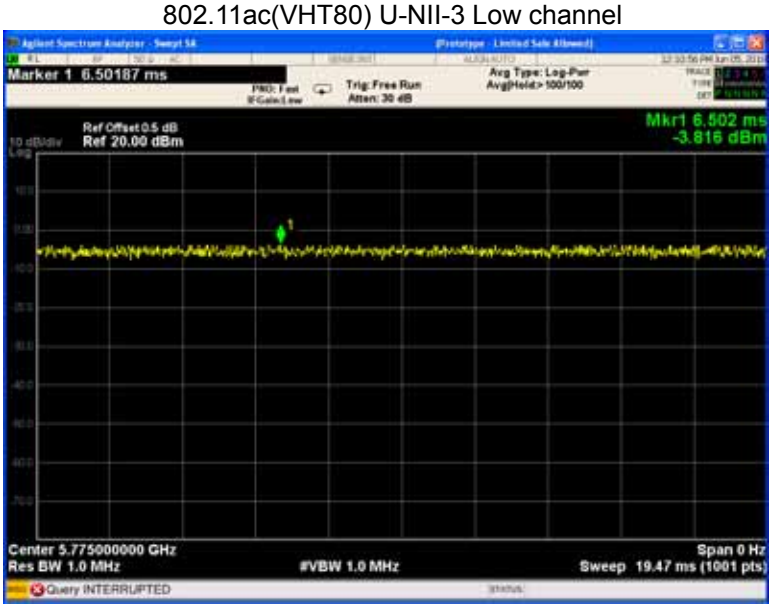


802.11ac(VHT20) U-NII-3 Low channel

802.11ac(VHT40) U-NII-3 Low channel



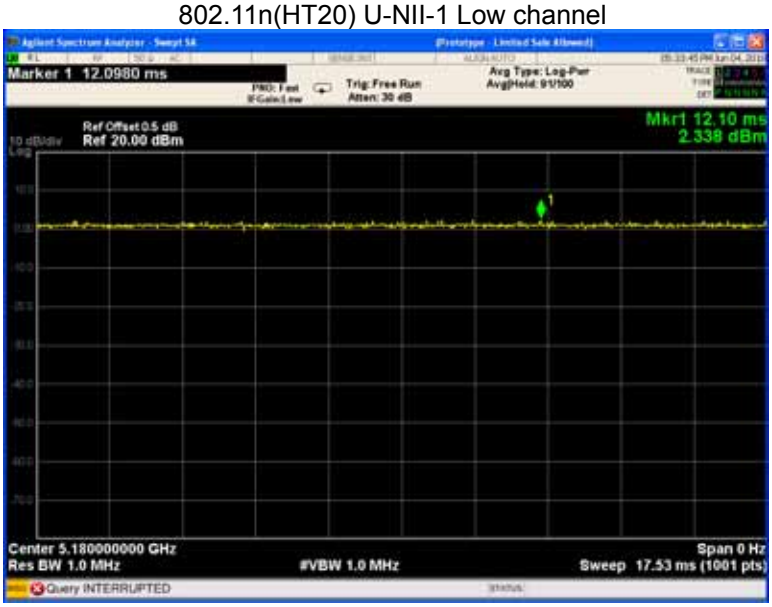
802.11ac(VHT80) U-NII-3 Low channel



ANT5

802.11a U-NII-1 Low channel

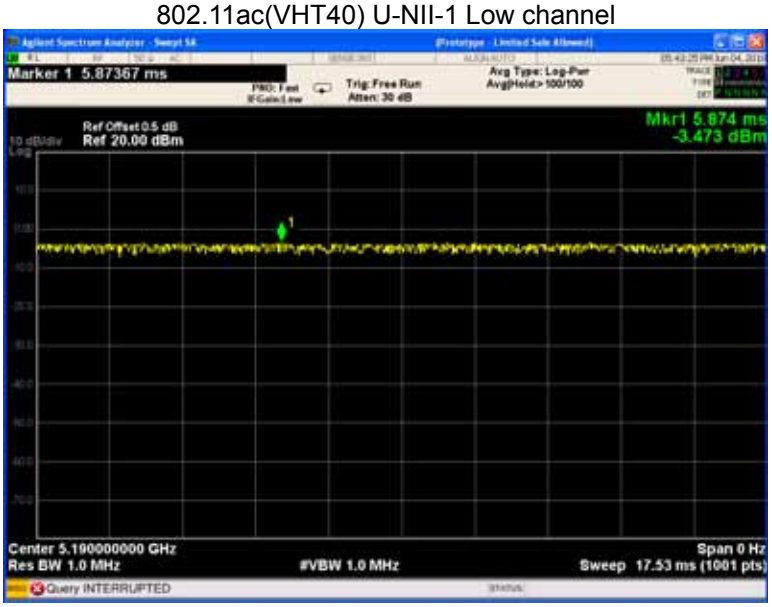
802.11n(HT20) U-NII-1 Low channel



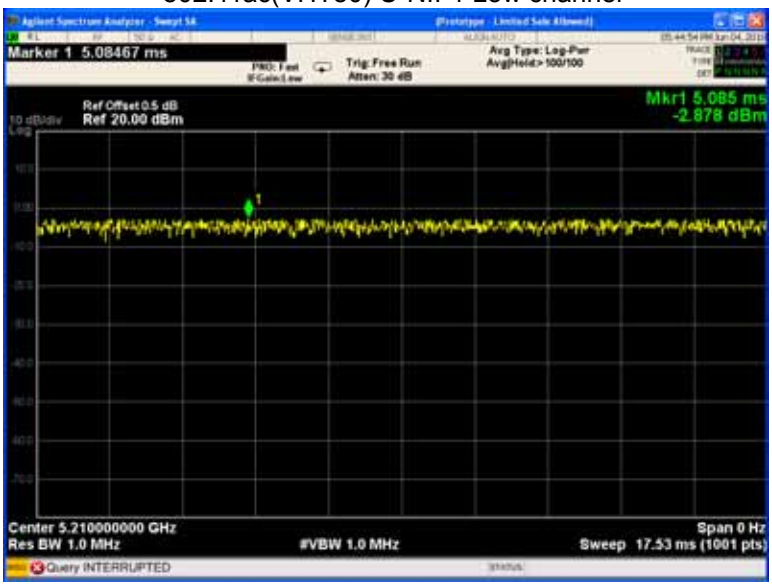
802.11n(HT40) U-NII-1 Low channel

802.11ac(VHT20) U-NII-1 Low channel

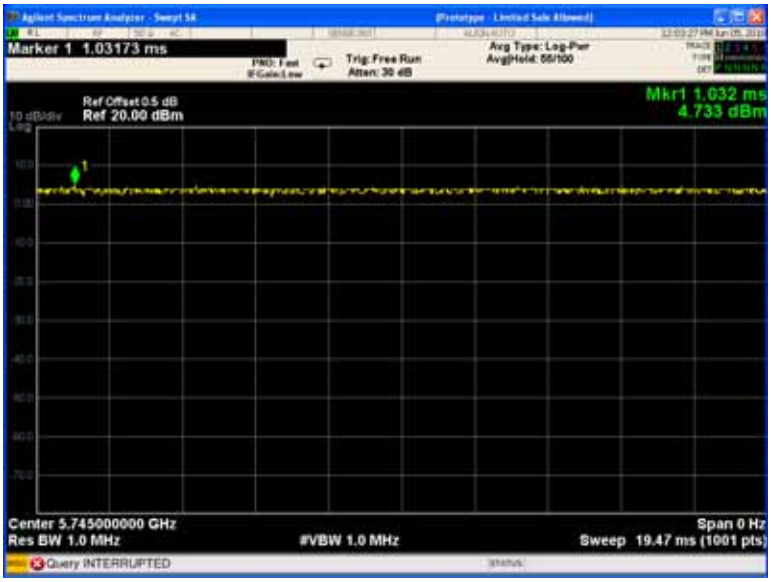
802.11ac(VHT40) U-NII-1 Low channel



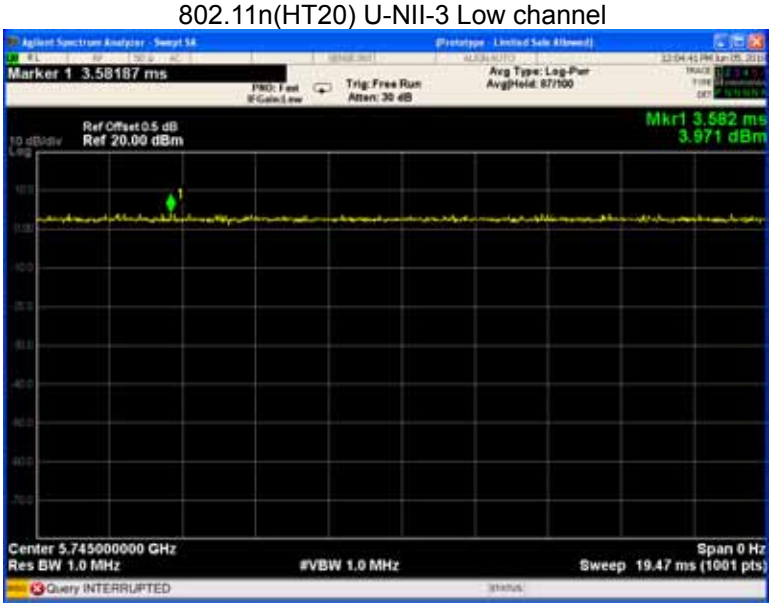
802.11ac(VHT80) U-NII-1 Low channel



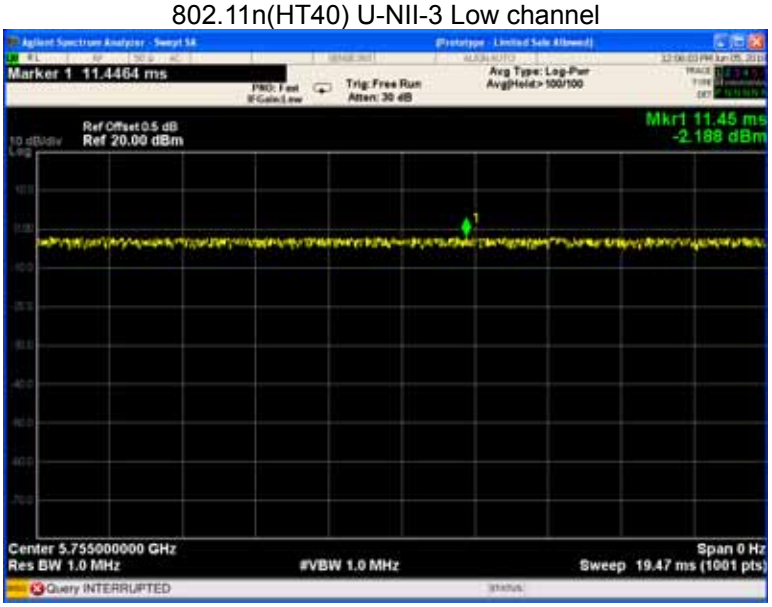
802.11a U-NII-3 Low channel



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

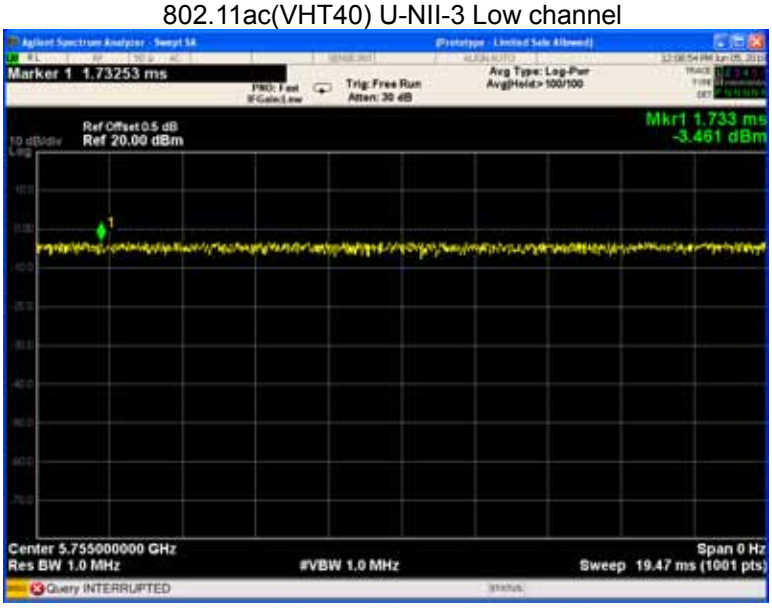


802.11n(HT40) U-NII-3 Low channel

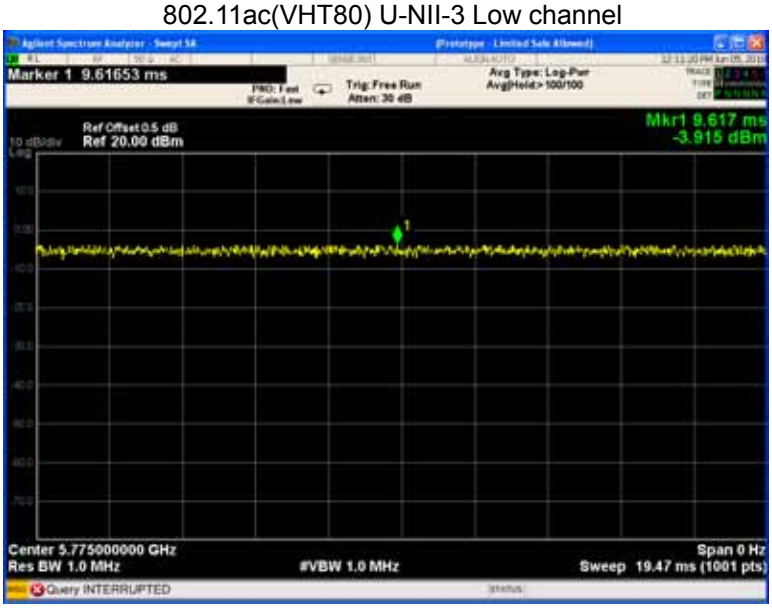


802.11ac(VHT20) U-NII-3 Low channel

802.11ac(VHT40) U-NII-3 Low channel



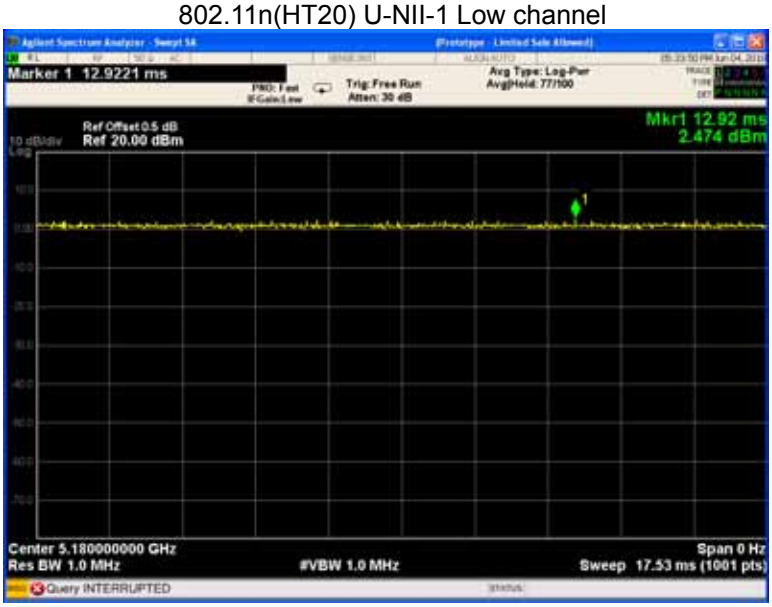
802.11ac(VHT80) U-NII-3 Low channel



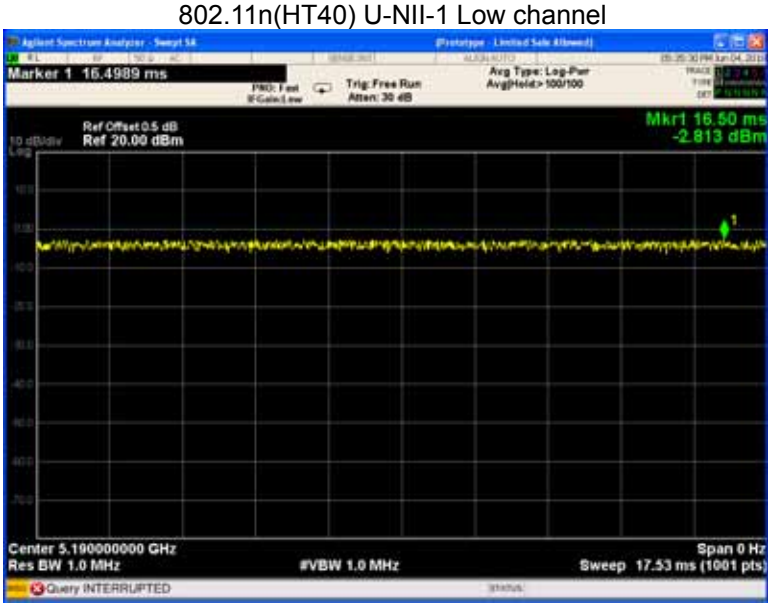
ANT6

802.11a U-NII-1 Low channel

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



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

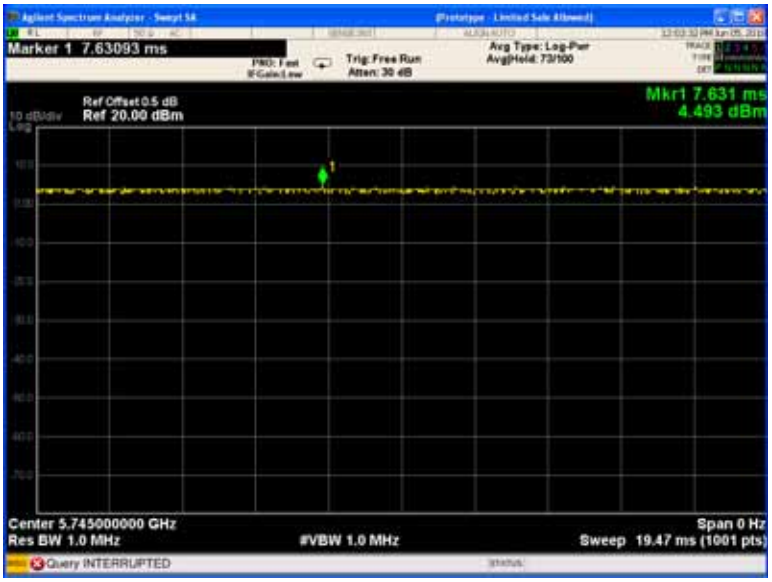


802.11ac(VHT20) U-NII-1 Low channel

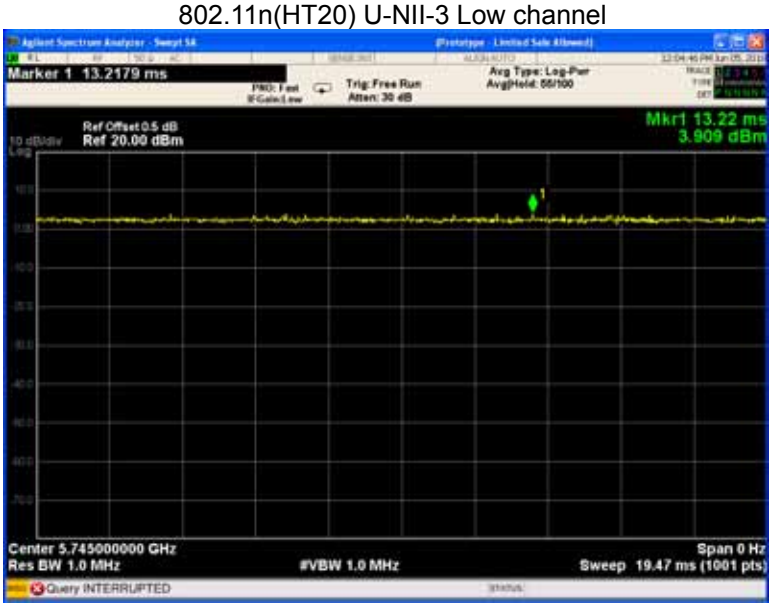
802.11ac(VHT40) U-NII-1 Low channel

802.11ac(VHT80) U-NII-1 Low channel

802.11a U-NII-3 Low channel



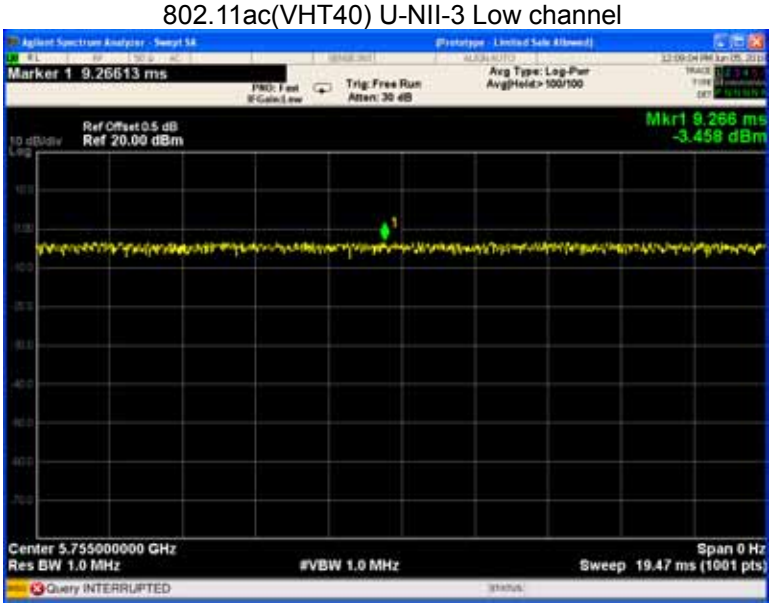
802.11n(HT20) U-NII-3 Low channel



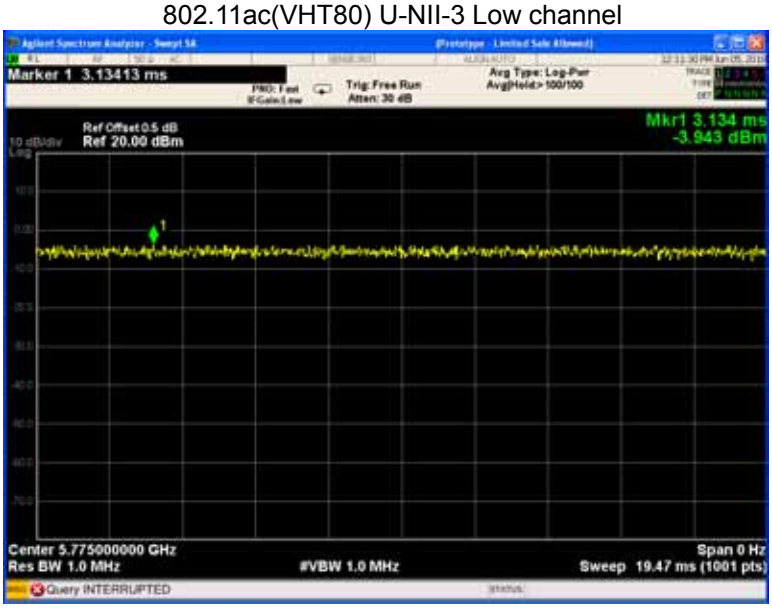
802.11n(HT40) U-NII-3 Low channel

802.11ac(VHT20) U-NII-3 Low channel

802.11ac(VHT40) U-NII-3 Low channel



802.11ac(VHT80) U-NII-3 Low channel



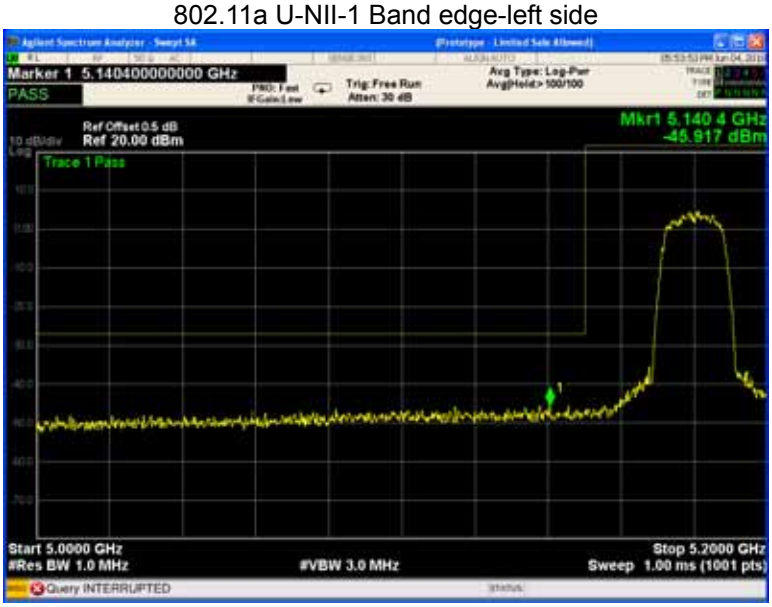
2. Band Edge

2.1. Test Result

Test result plots shown as follows:

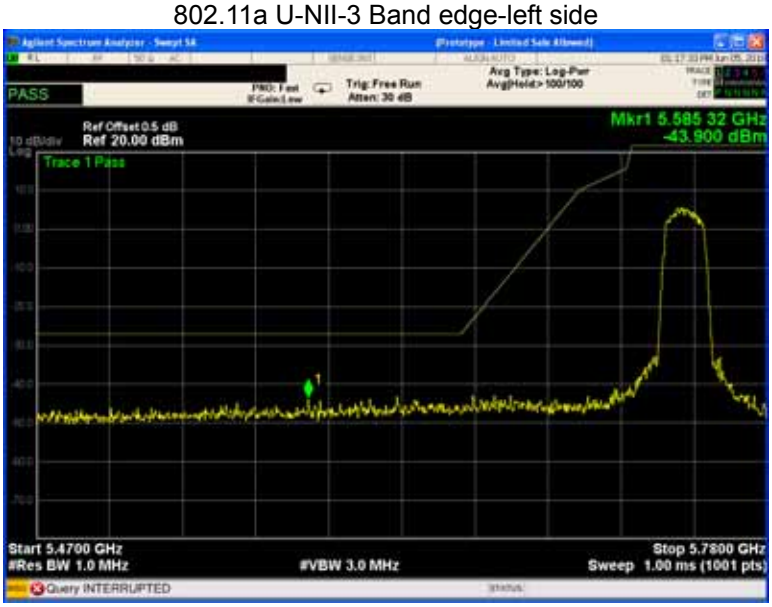
ANT3

802.11a U-NII-1 Band edge-left side

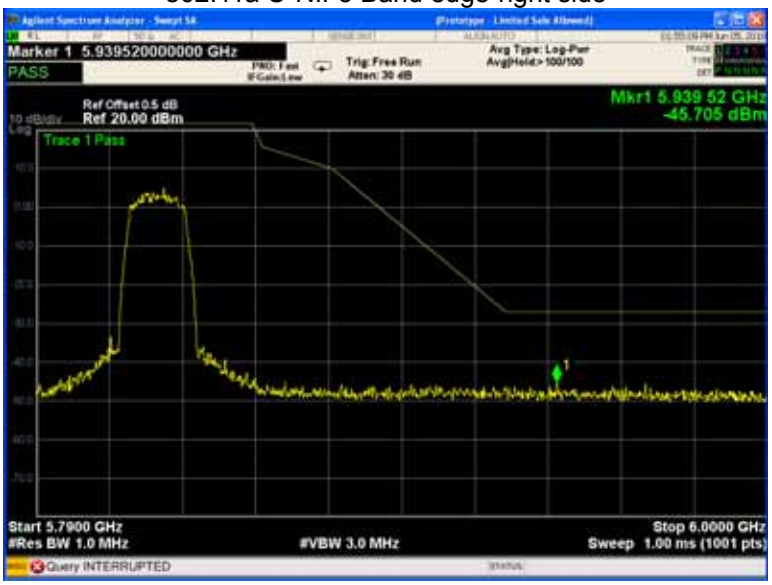


802.11a U-NII-1 Band edge-right side

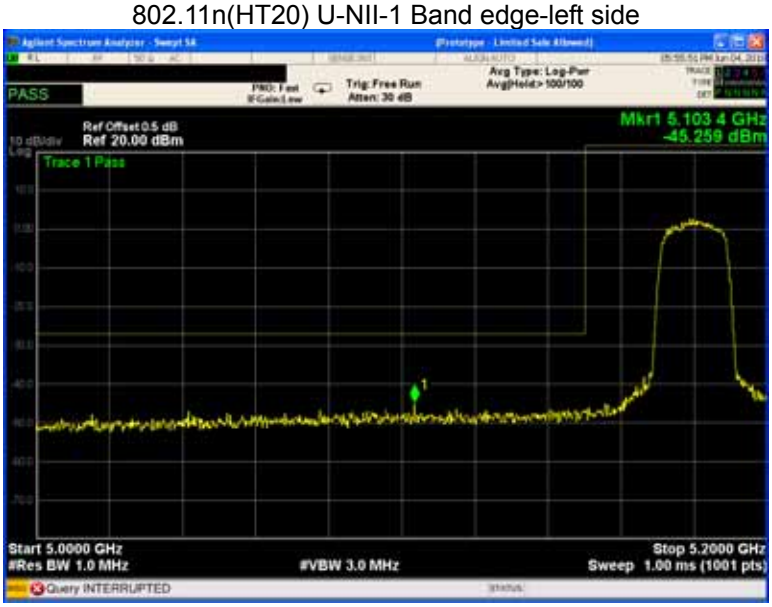
802.11a U-NII-3 Band edge-left side



802.11a U-NII-3 Band edge-right side

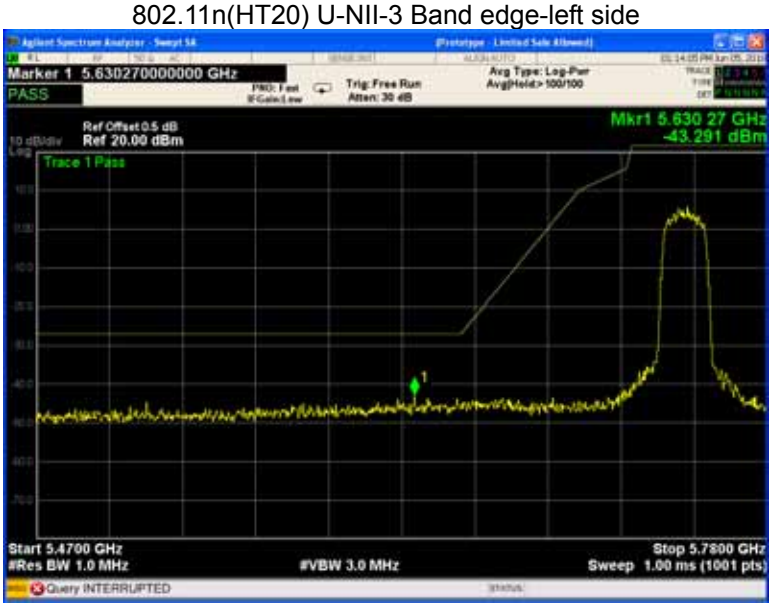


802.11n(HT20) U-NII-1 Band edge-left side

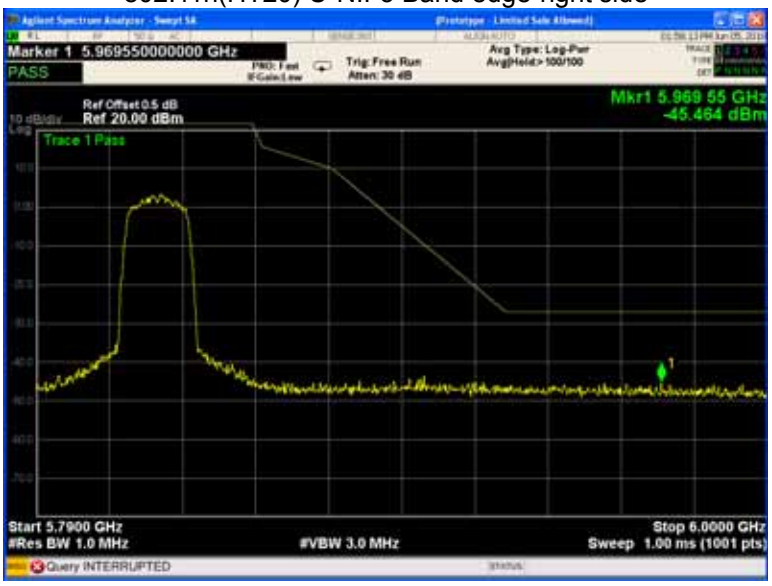


802.11n(HT20) U-NII-1 Band edge-right side

802.11n(HT20) U-NII-3 Band edge-left side

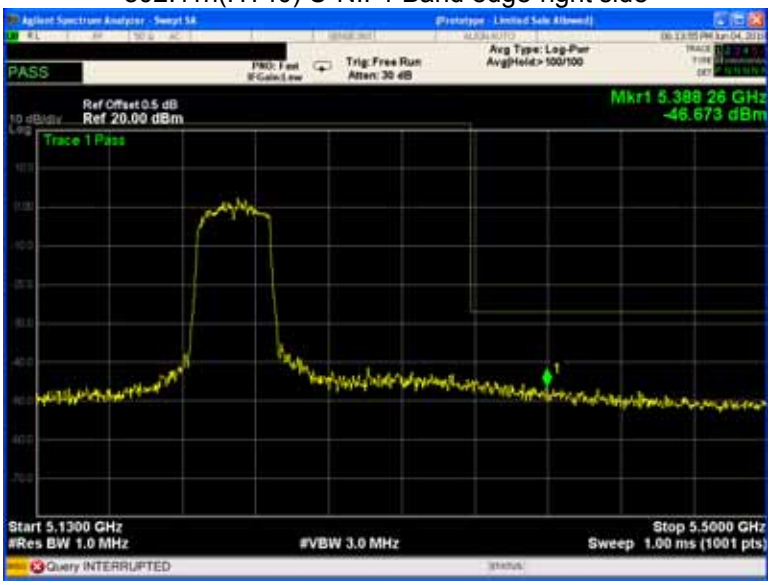


802.11n(HT20) U-NII-3 Band edge-right side

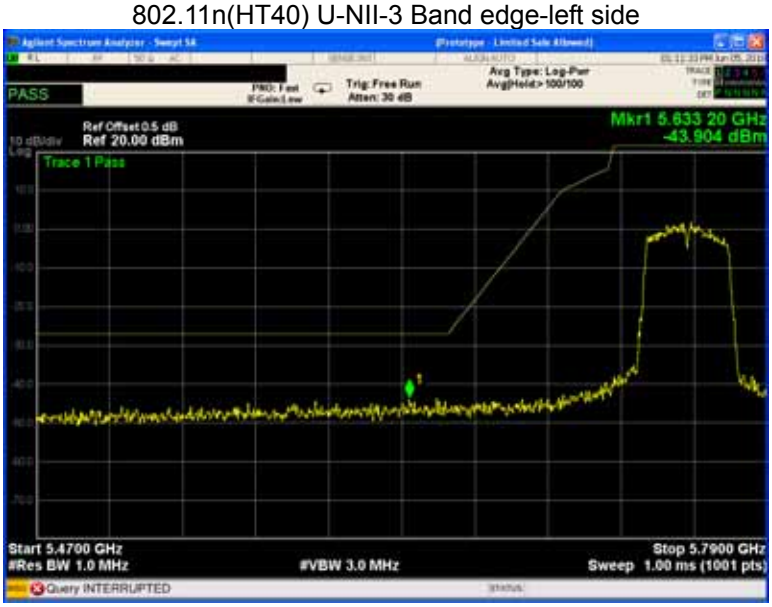


802.11n(HT40) U-NII-1 Band edge-left side

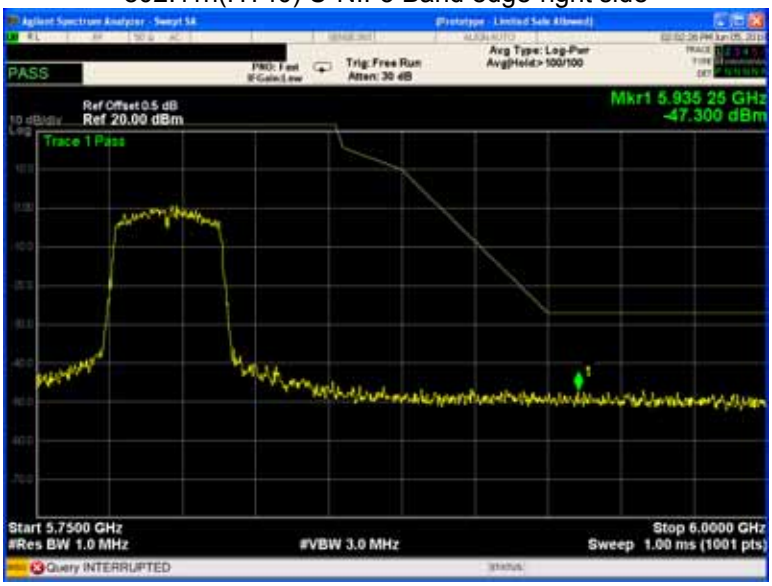
802.11n(HT40) U-NII-1 Band edge-right side



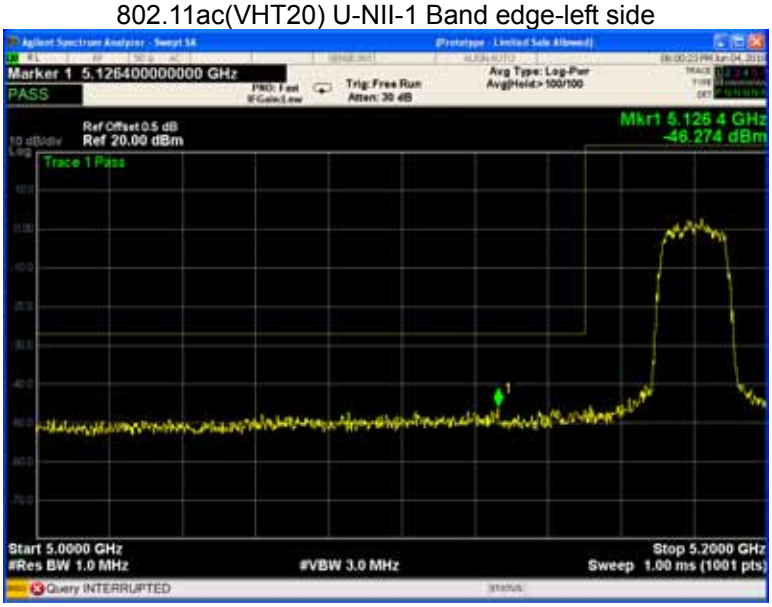
802.11n(HT40) U-NII-3 Band edge-left side



802.11n(HT40) U-NII-3 Band edge-right side

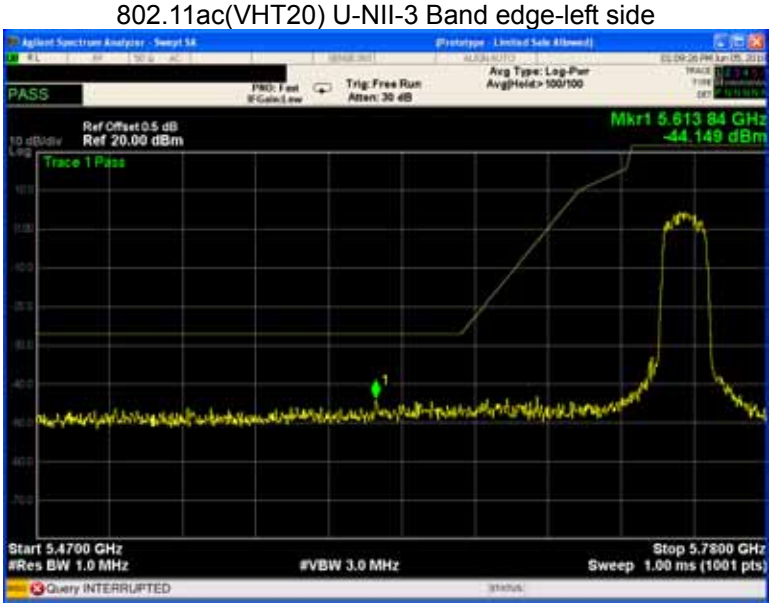


802.11ac(VHT20) U-NII-1 Band edge-left side

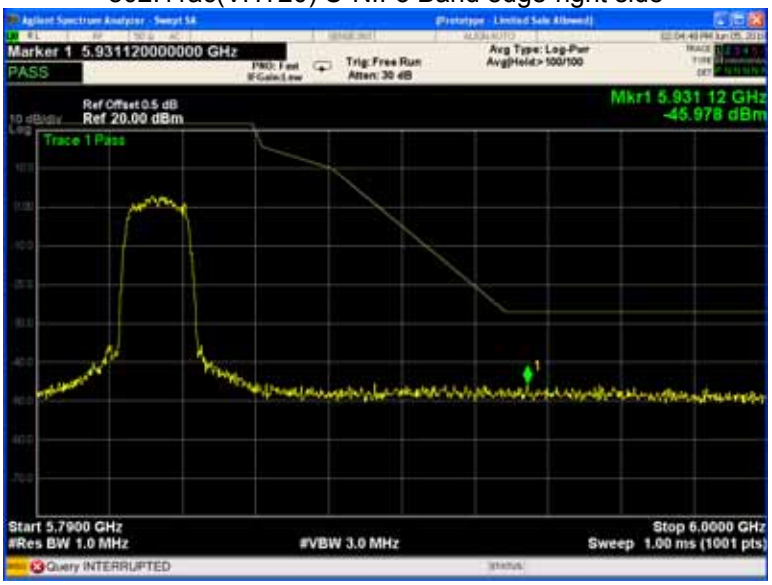


802.11ac(VHT20) U-NII-1 Band edge-right side

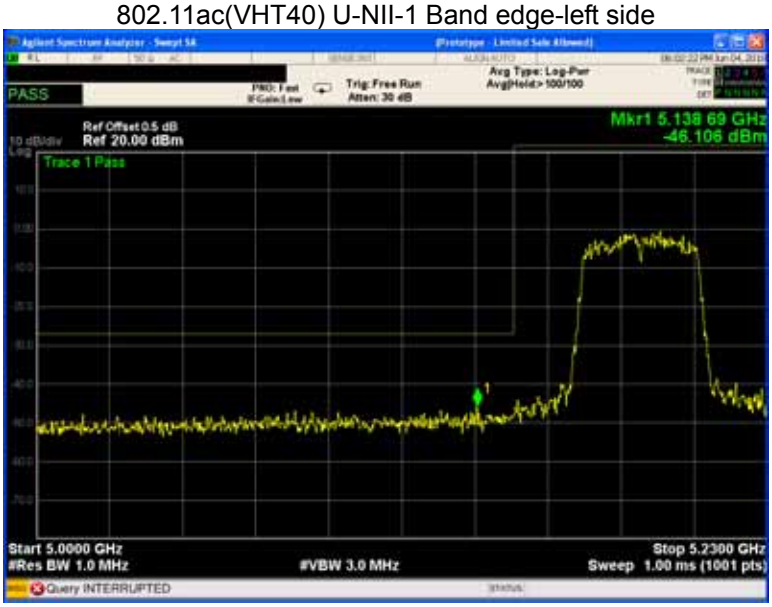
802.11ac(VHT20) U-NII-3 Band edge-left side



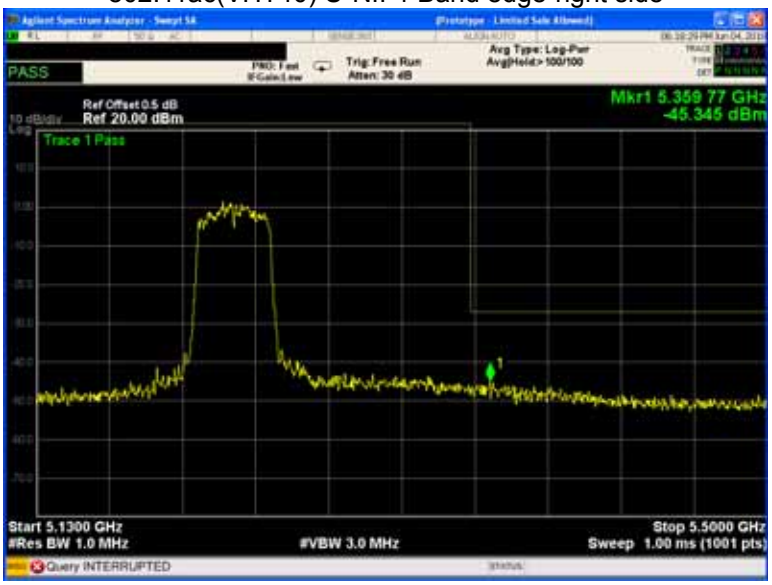
802.11ac(VHT20) U-NII-3 Band edge-right side



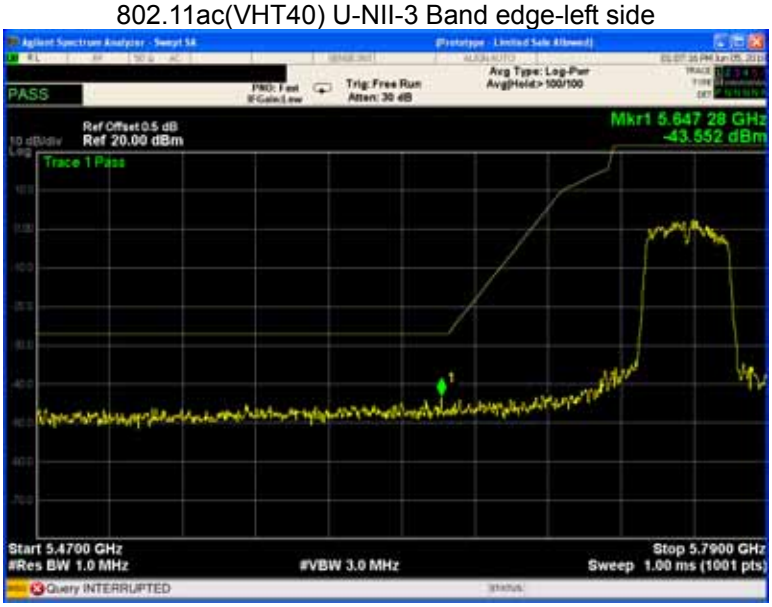
802.11ac(VHT40) U-NII-1 Band edge-left side



802.11ac(VHT40) U-NII-1 Band edge-right side

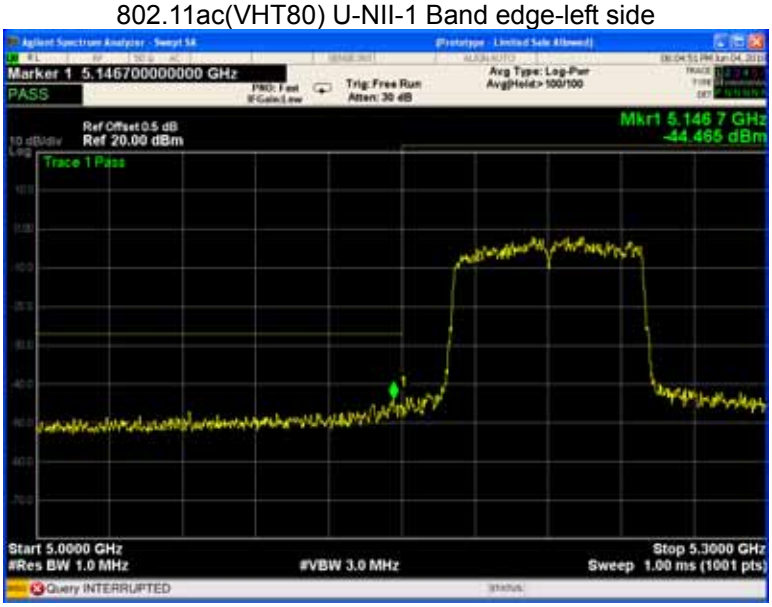


802.11ac(VHT40) U-NII-3 Band edge-left side

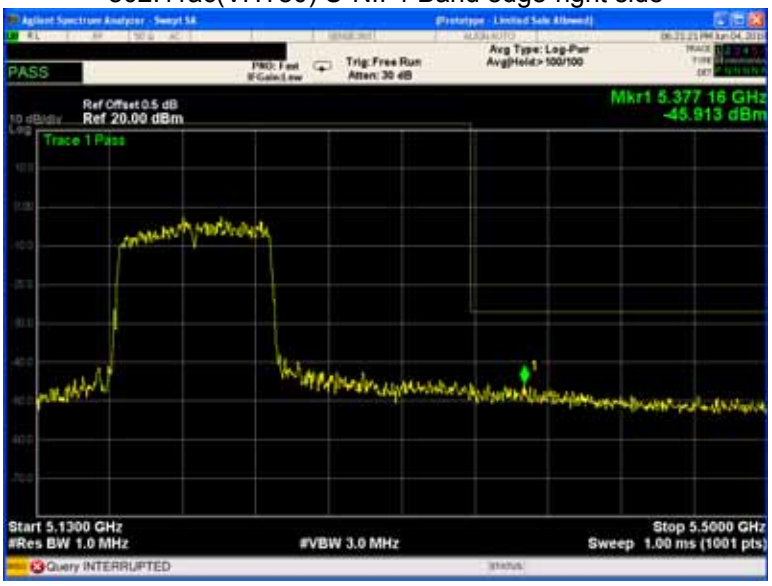


802.11ac(VHT40) U-NII-3 Band edge-right side

802.11ac(VHT80) U-NII-1 Band edge-left side



802.11ac(VHT80) U-NII-1 Band edge-right side

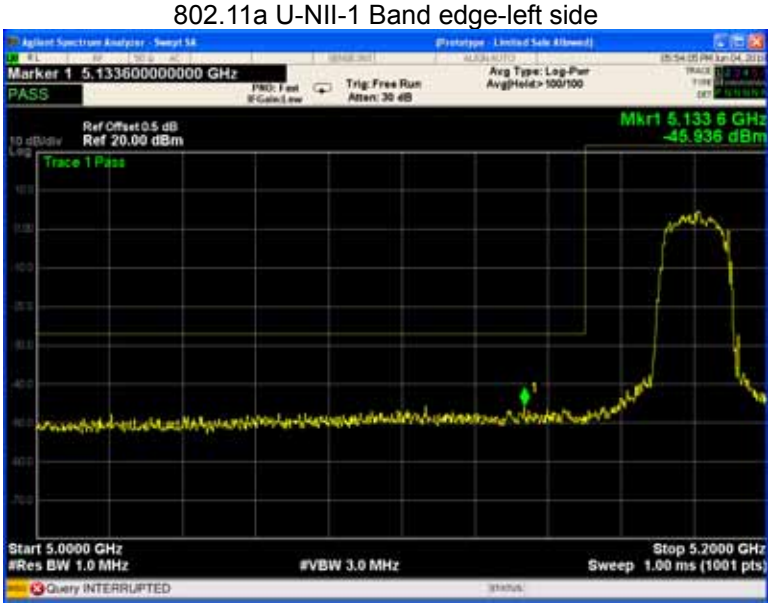


802.11ac(VHT80) U-NII-3 Band edge-left side

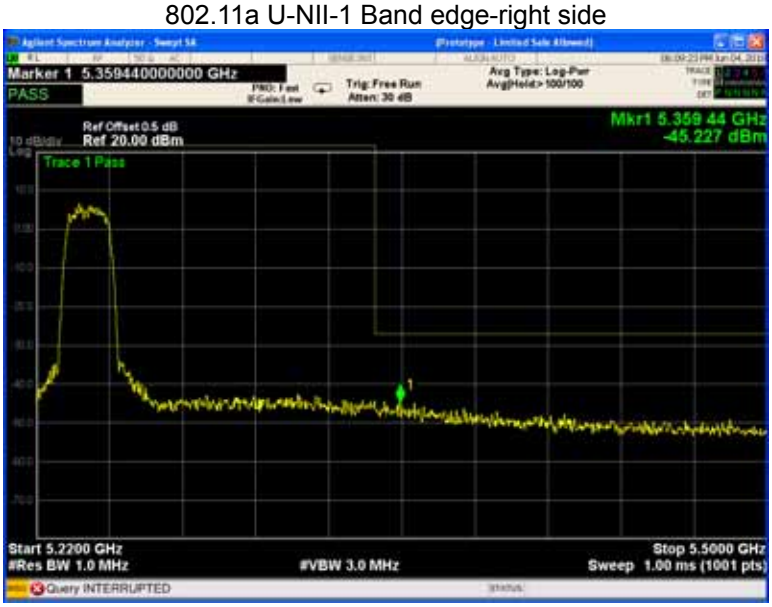
802.11ac(VHT80) U-NII-3 Band edge-right side

ANT4

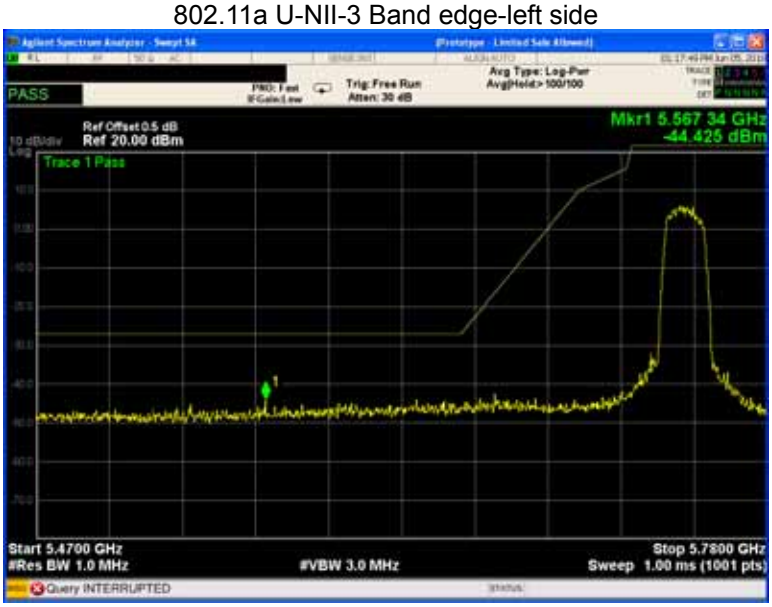
802.11a U-NII-1 Band edge-left side



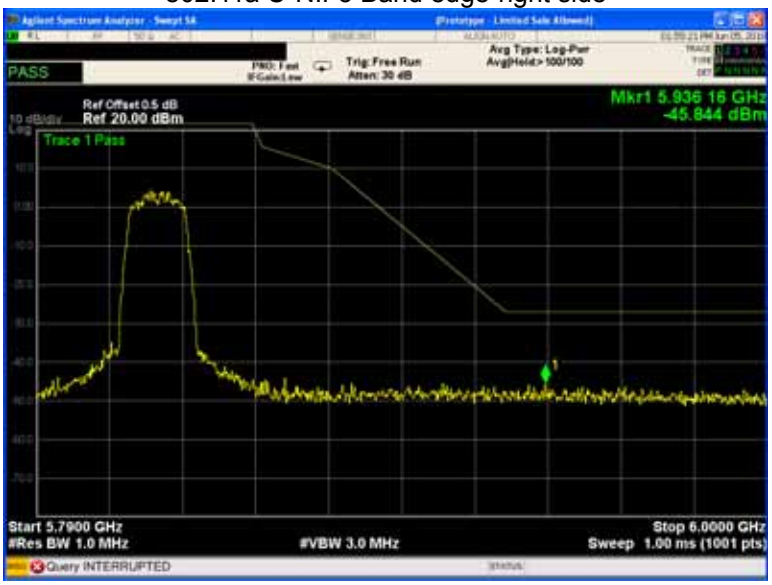
802.11a U-NII-1 Band edge-right side



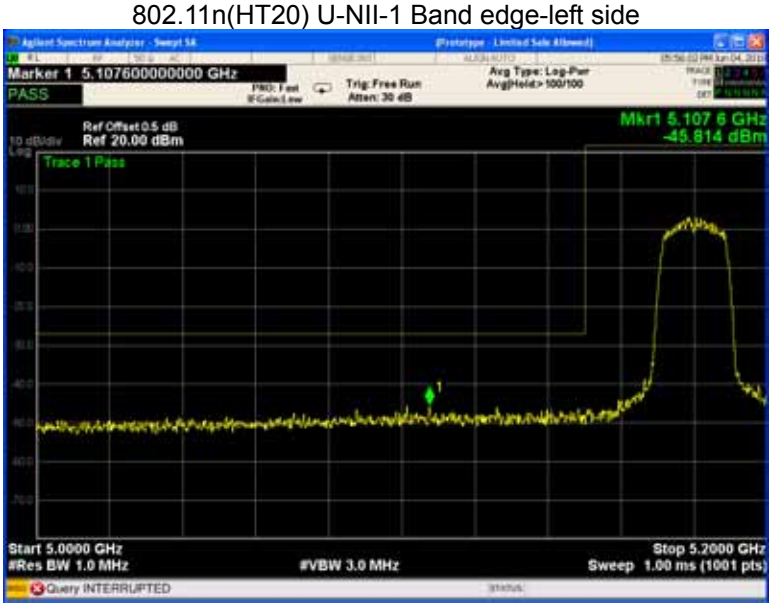
802.11a U-NII-3 Band edge-left side



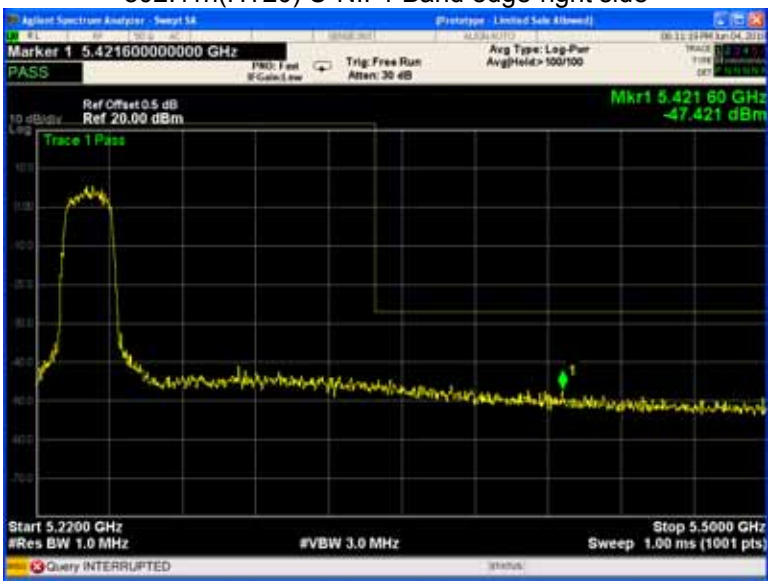
802.11a U-NII-3 Band edge-right side



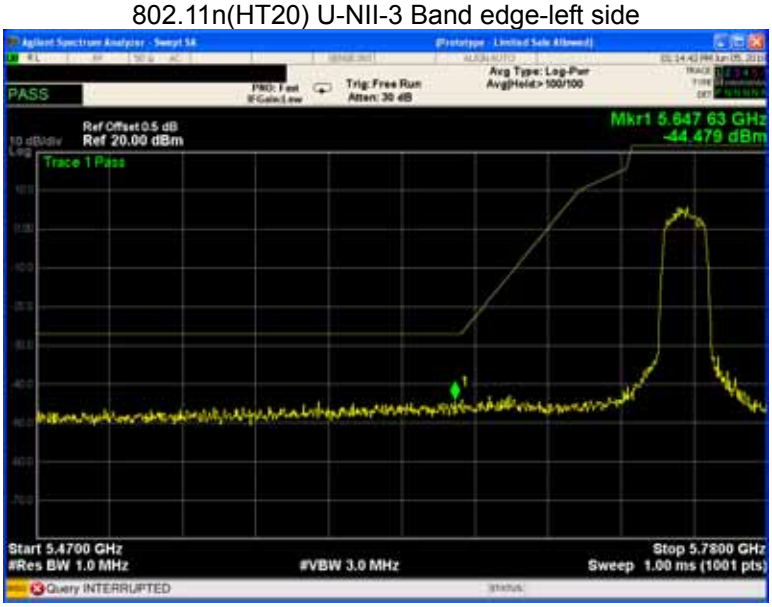
802.11n(HT20) U-NII-1 Band edge-left side



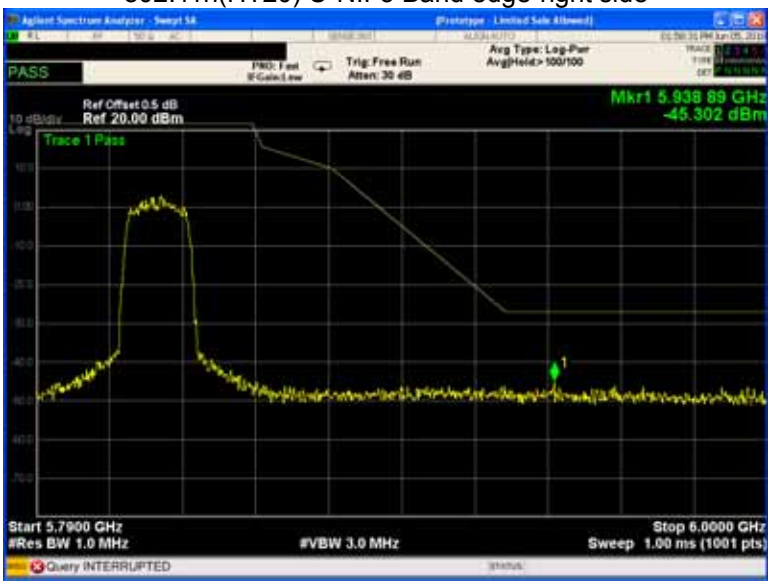
802.11n(HT20) U-NII-1 Band edge-right side



802.11n(HT20) U-NII-3 Band edge-left side

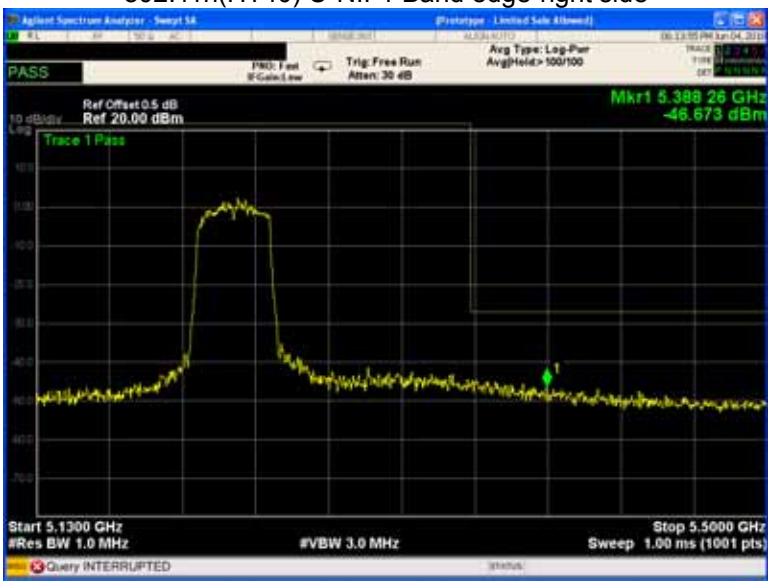


802.11n(HT20) U-NII-3 Band edge-right side

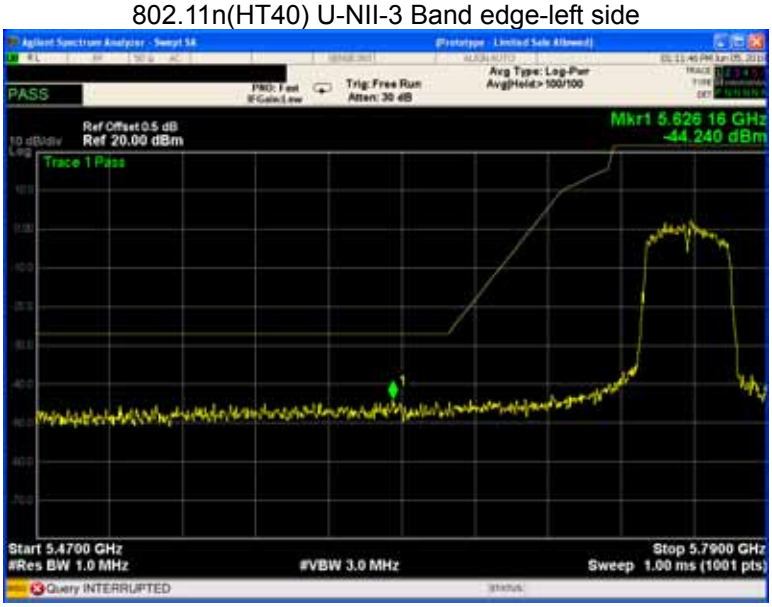


802.11n(HT40) U-NII-1 Band edge-left side

802.11n(HT40) U-NII-1 Band edge-right side

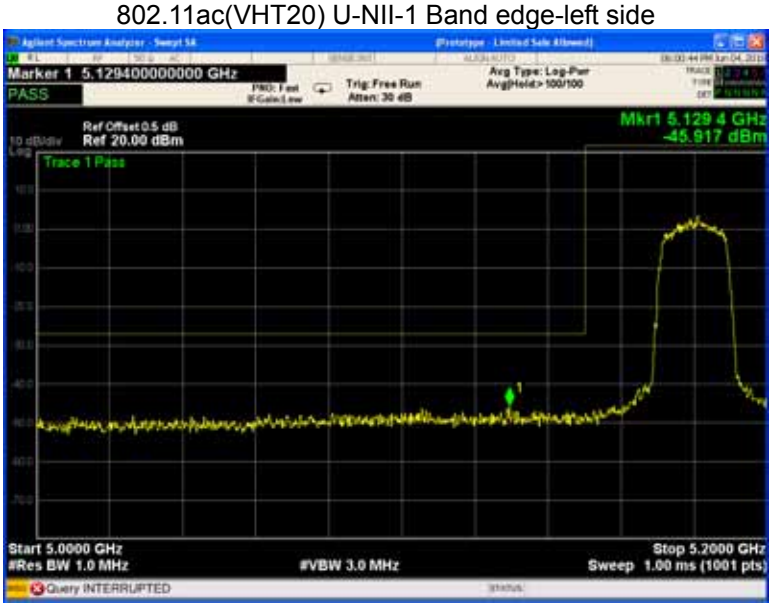


802.11n(HT40) U-NII-3 Band edge-left side



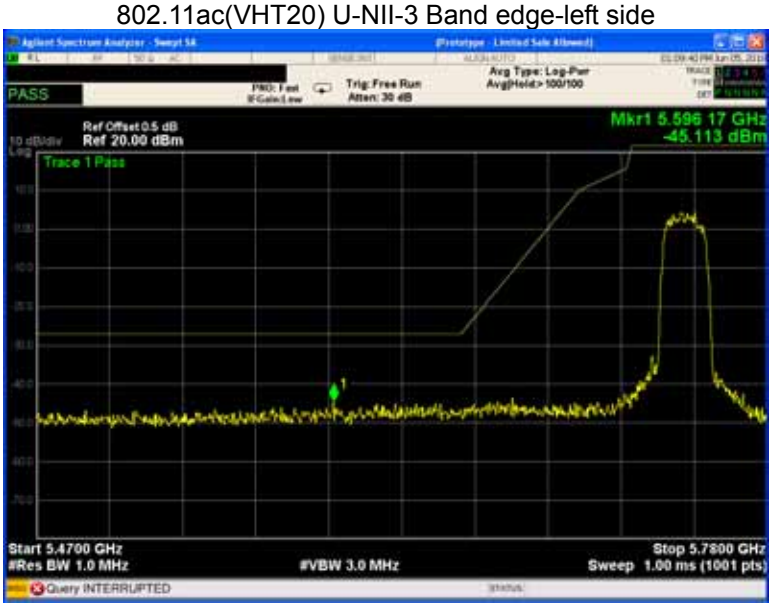
802.11n(HT40) U-NII-3 Band edge-right side

802.11ac(VHT20) U-NII-1 Band edge-left side



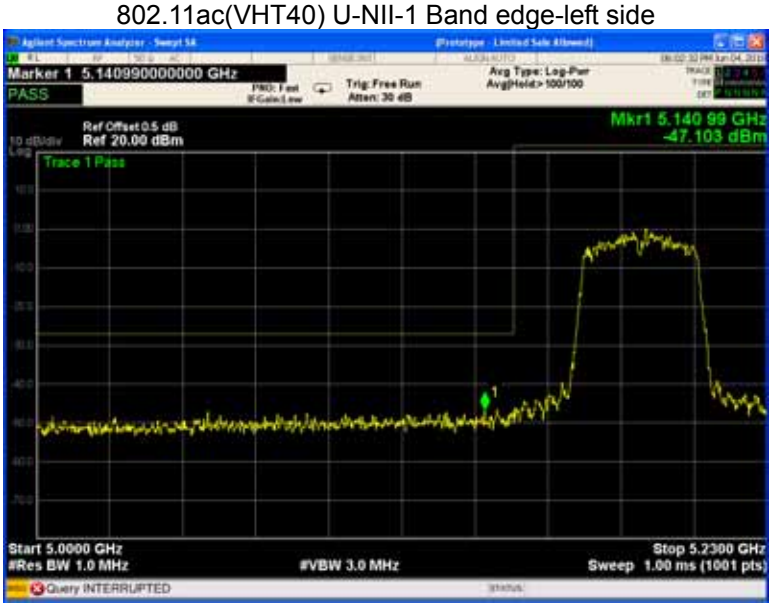
802.11ac(VHT20) U-NII-1 Band edge-right side

802.11ac(VHT20) U-NII-3 Band edge-left side

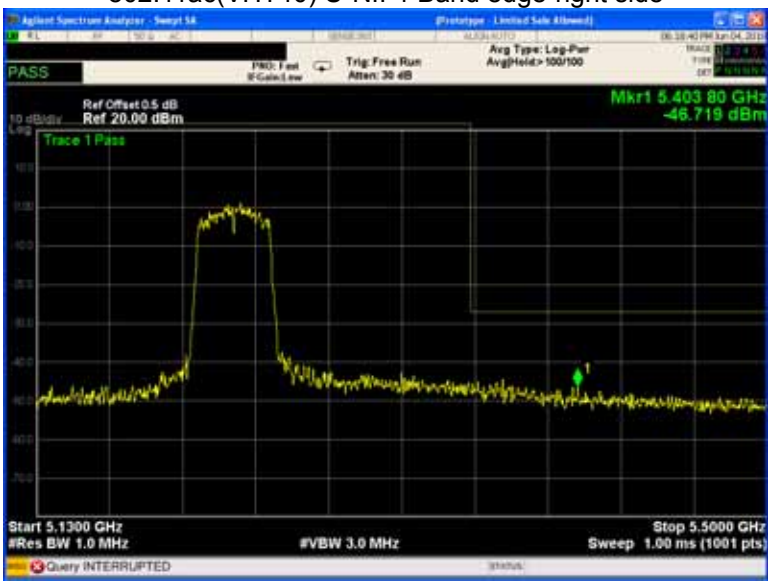


802.11ac(VHT20) U-NII-3 Band edge-right side

802.11ac(VHT40) U-NII-1 Band edge-left side



802.11ac(VHT40) U-NII-1 Band edge-right side



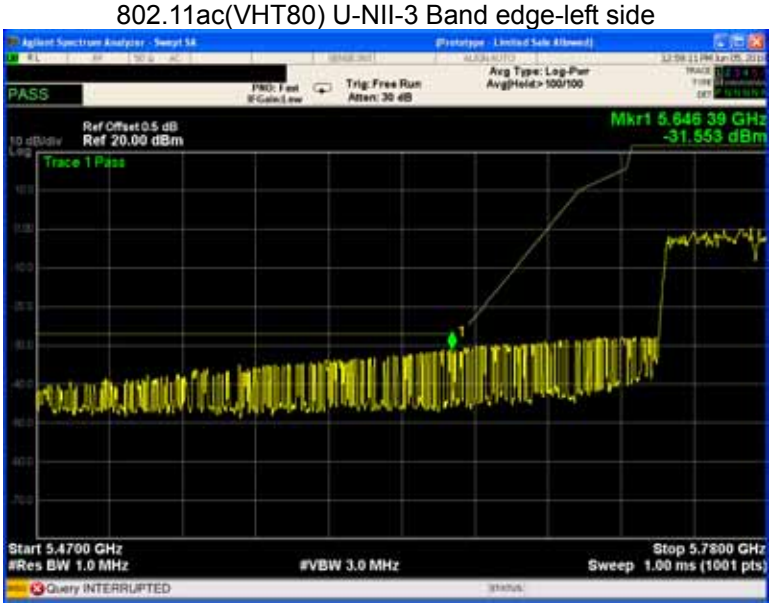
802.11ac(VHT40) U-NII-3 Band edge-left side

802.11ac(VHT40) U-NII-3 Band edge-right side

802.11ac(VHT80) U-NII-1 Band edge-left side

802.11ac(VHT80) U-NII-1 Band edge-right side

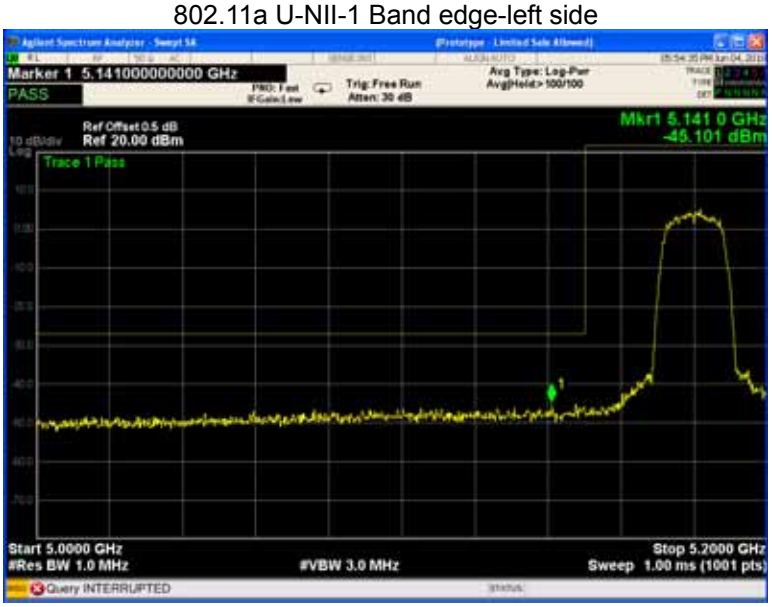
802.11ac(VHT80) U-NII-3 Band edge-left side



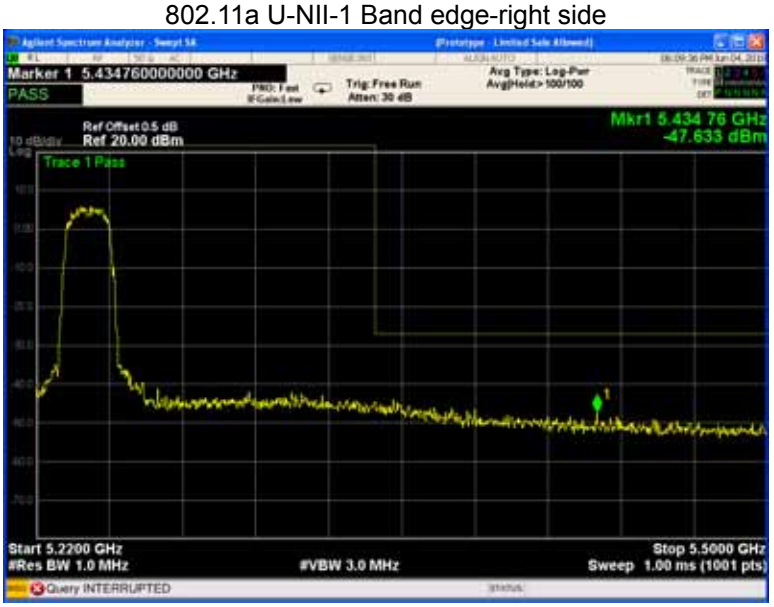
802.11ac(VHT80) U-NII-3 Band edge-right side

ANT5

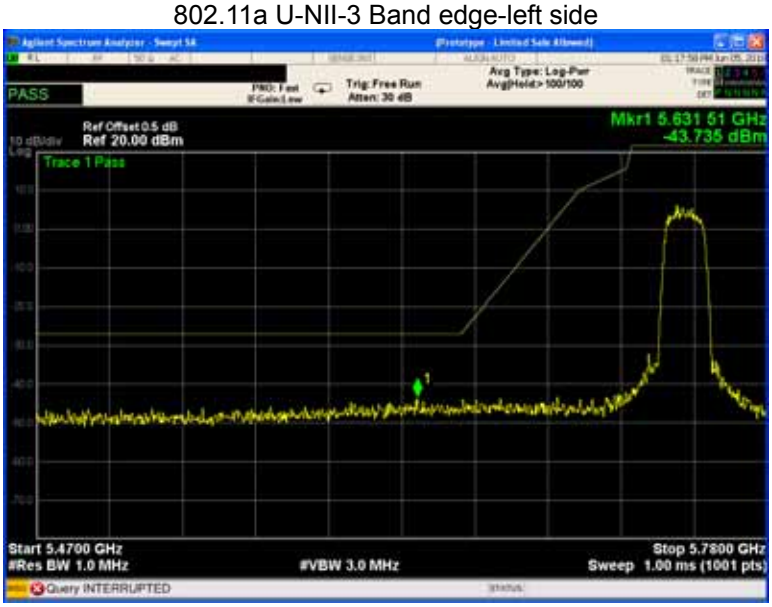
802.11a U-NII-1 Band edge-left side



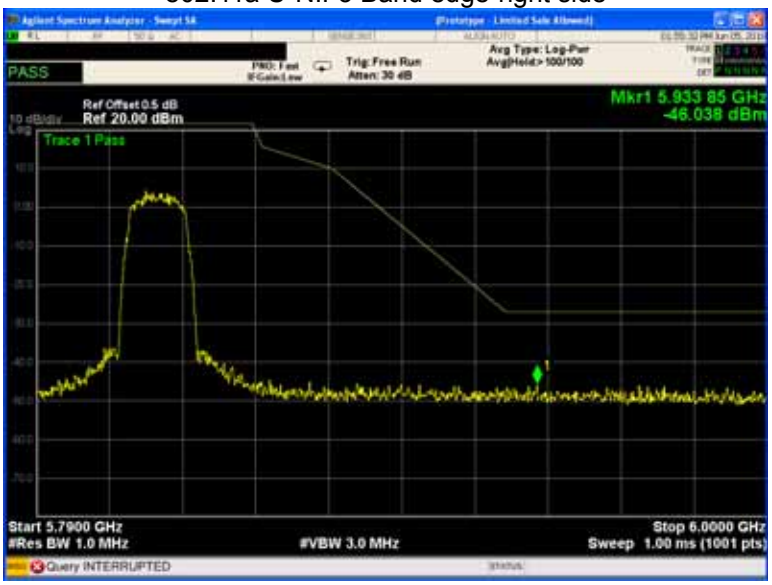
802.11a U-NII-1 Band edge-right side



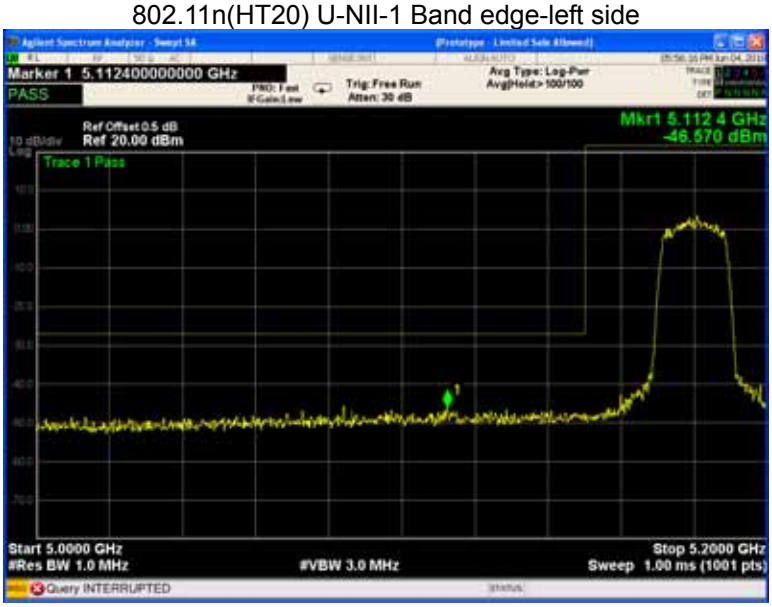
802.11a U-NII-3 Band edge-left side



802.11a U-NII-3 Band edge-right side

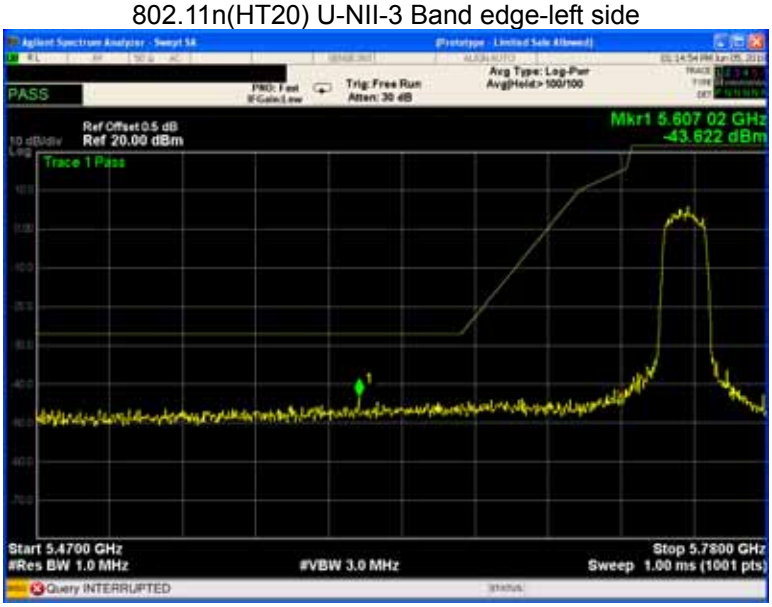


802.11n(HT20) U-NII-1 Band edge-left side

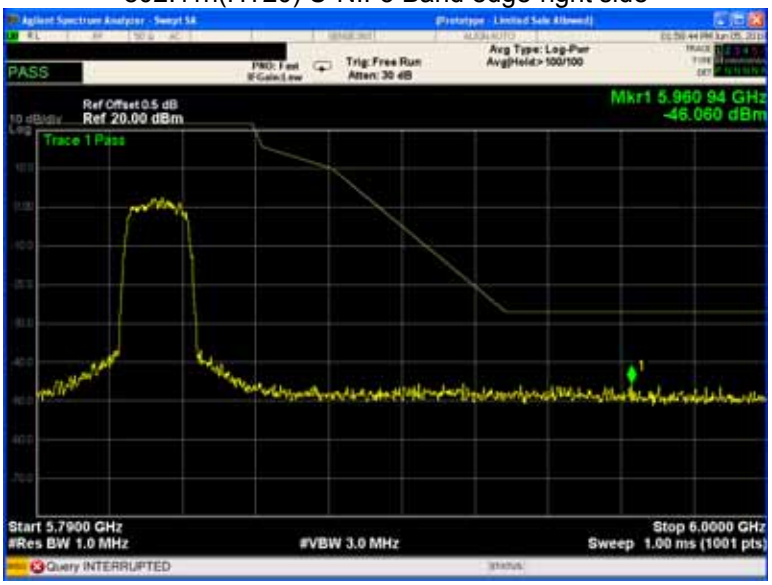


802.11n(HT20) U-NII-1 Band edge-right side

802.11n(HT20) U-NII-3 Band edge-left side

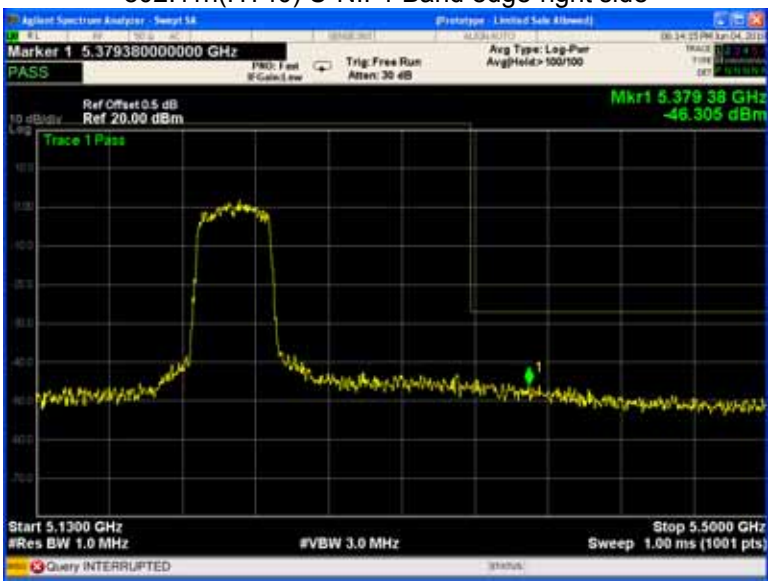


802.11n(HT20) U-NII-3 Band edge-right side

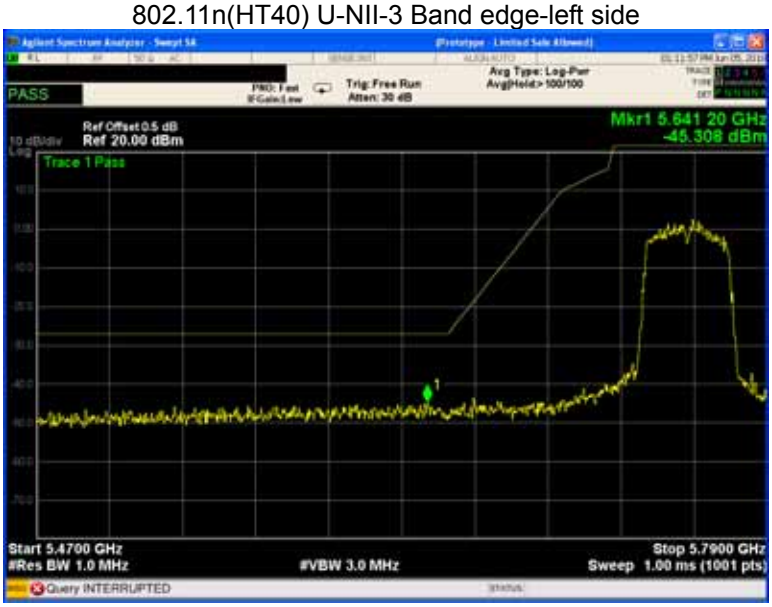


802.11n(HT40) U-NII-1 Band edge-left side

802.11n(HT40) U-NII-1 Band edge-right side

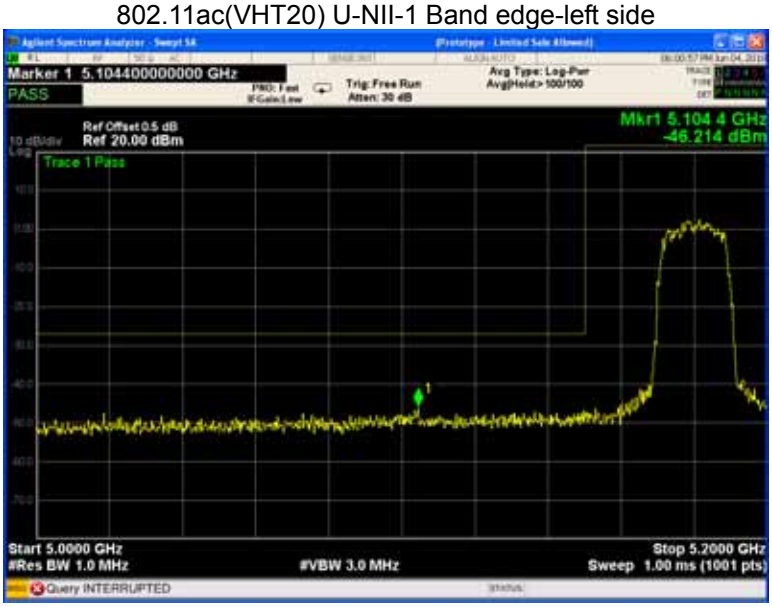


802.11n(HT40) U-NII-3 Band edge-left side



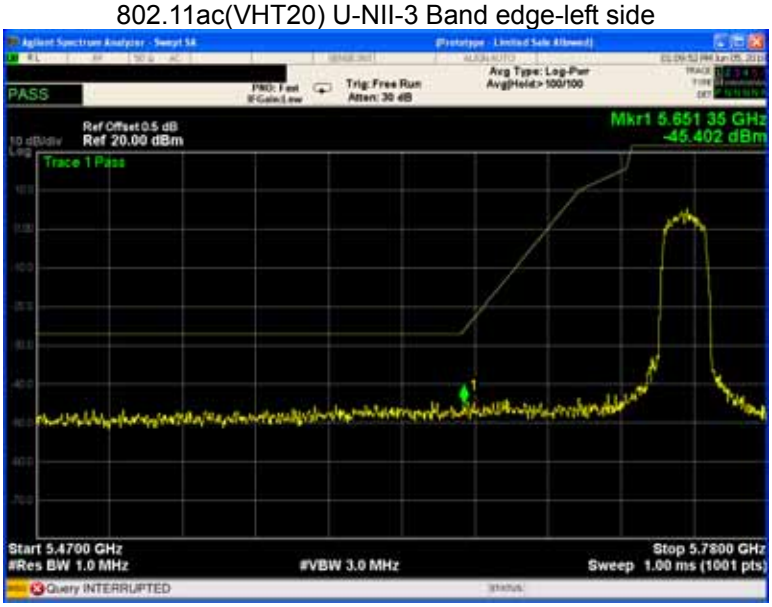
802.11n(HT40) U-NII-3 Band edge-right side

802.11ac(VHT20) U-NII-1 Band edge-left side



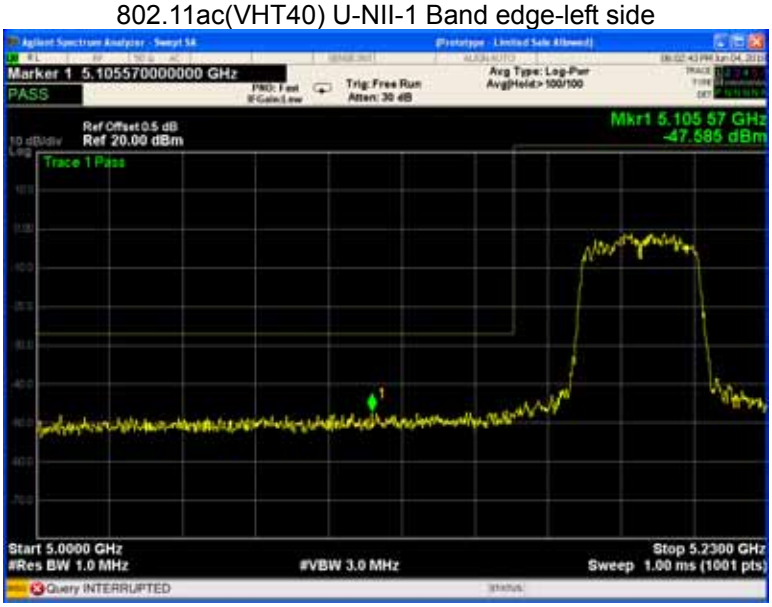
802.11ac(VHT20) U-NII-1 Band edge-right side

802.11ac(VHT20) U-NII-3 Band edge-left side

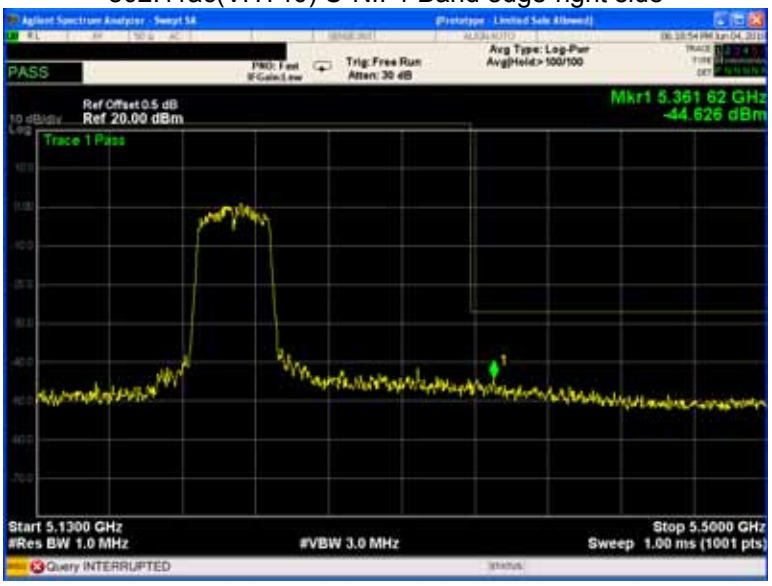


802.11ac(VHT20) U-NII-3 Band edge-right side

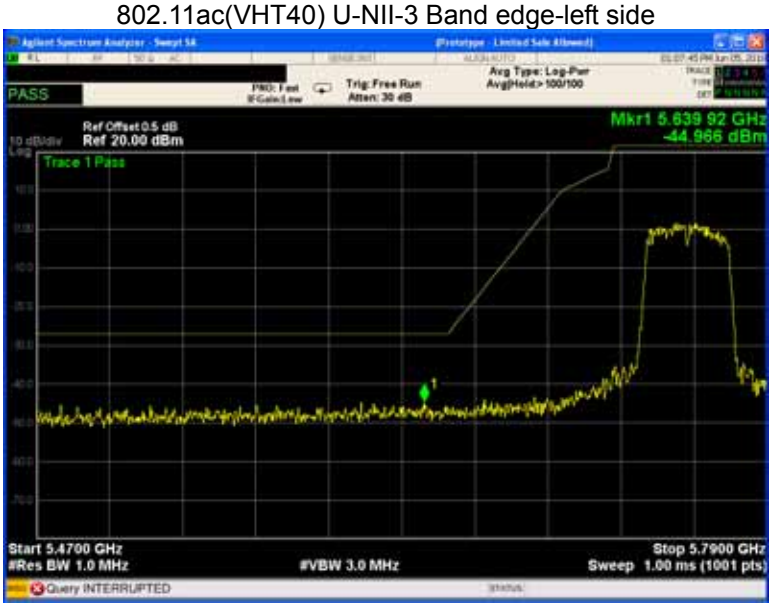
802.11ac(VHT40) U-NII-1 Band edge-left side



802.11ac(VHT40) U-NII-1 Band edge-right side



802.11ac(VHT40) U-NII-3 Band edge-left side

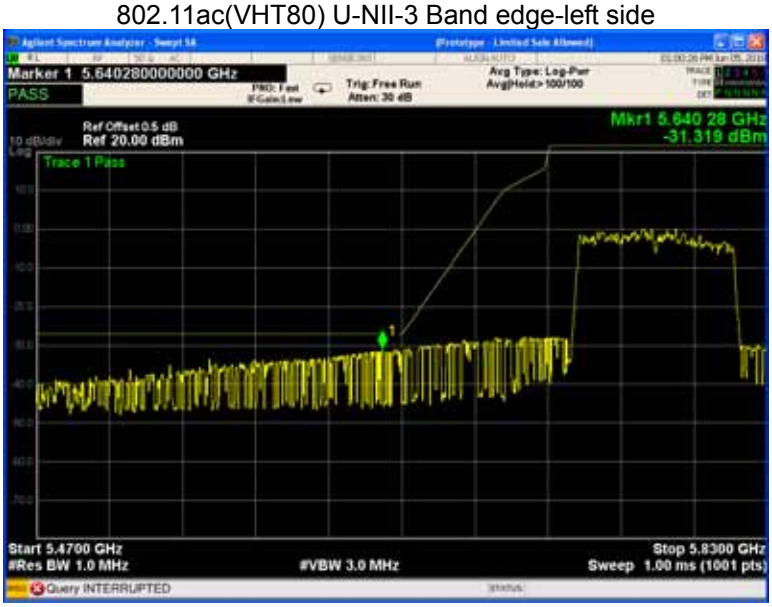


802.11ac(VHT40) U-NII-3 Band edge-right side

802.11ac(VHT80) U-NII-1 Band edge-left side

802.11ac(VHT80) U-NII-1 Band edge-right side

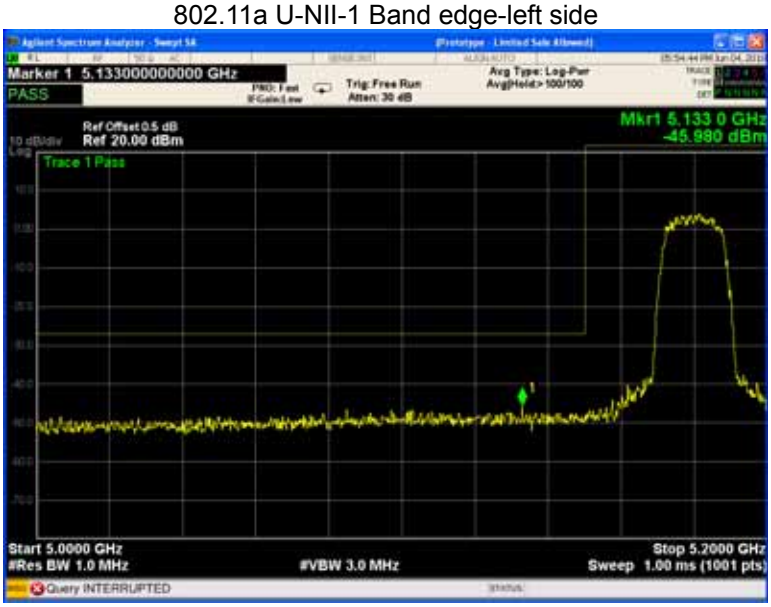
802.11ac(VHT80) U-NII-3 Band edge-left side



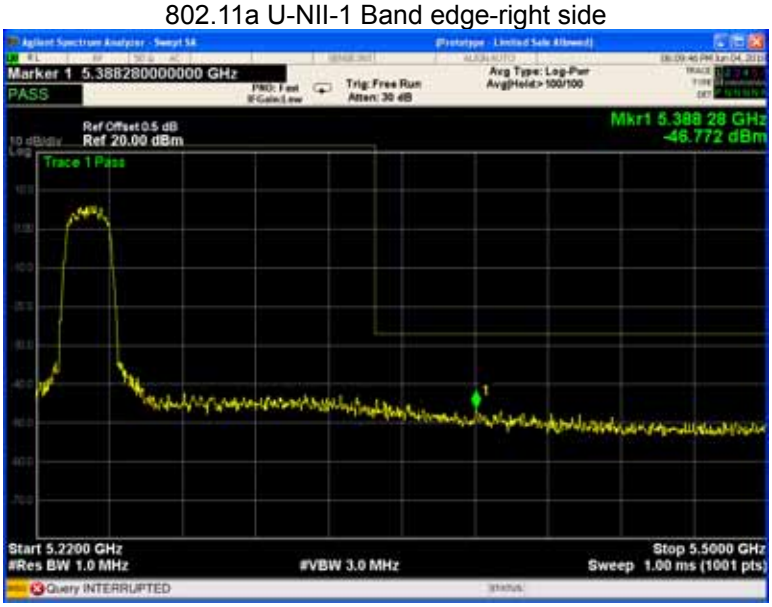
802.11ac(VHT80) U-NII-3 Band edge-right side

ANT6

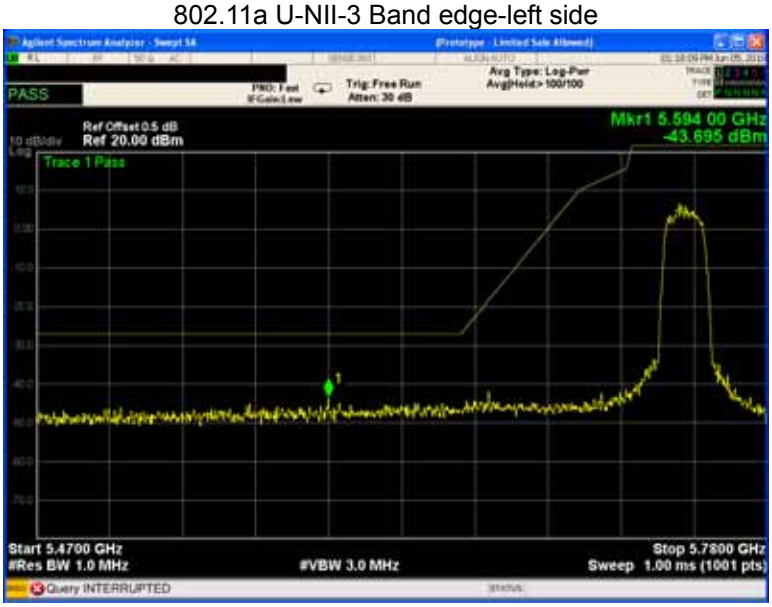
802.11a U-NII-1 Band edge-left side



802.11a U-NII-1 Band edge-right side

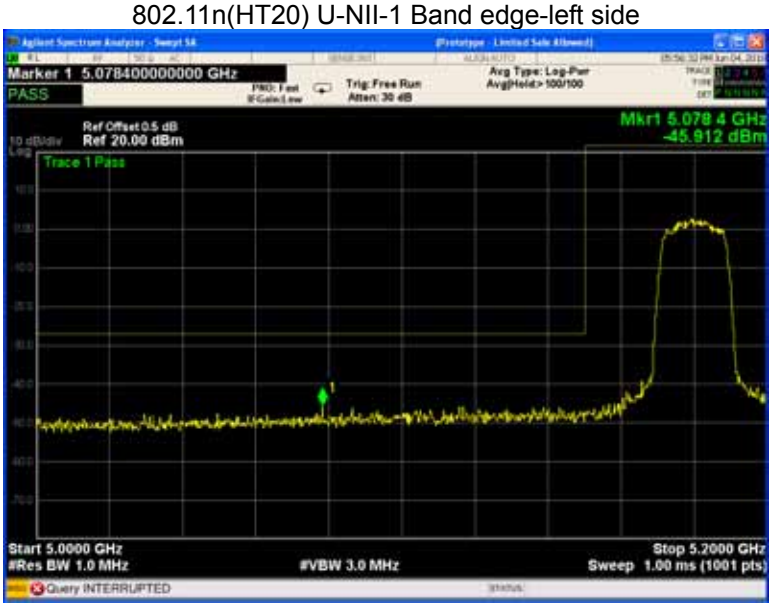


802.11a U-NII-3 Band edge-left side



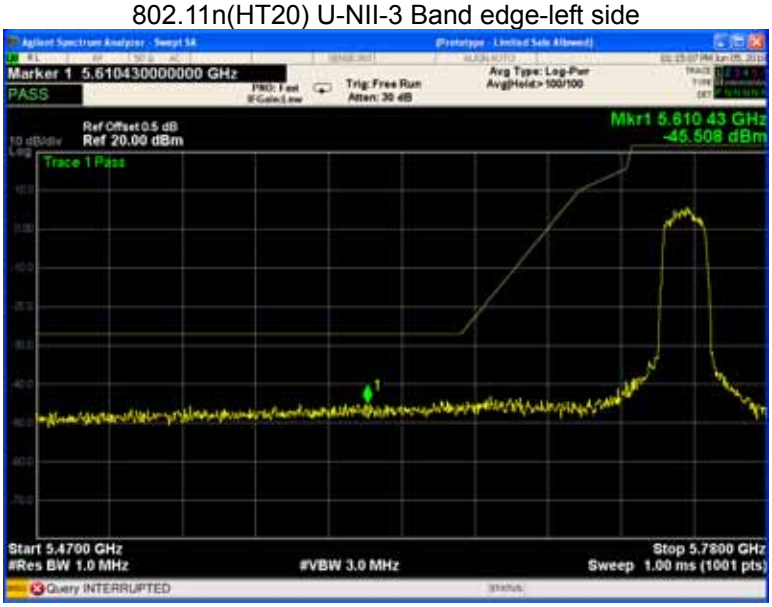
802.11a U-NII-3 Band edge-right side

802.11n(HT20) U-NII-1 Band edge-left side

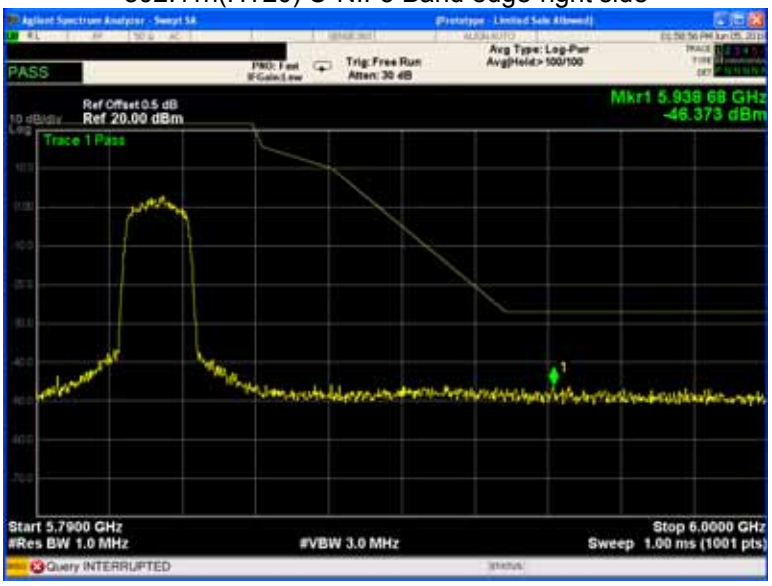


802.11n(HT20) U-NII-1 Band edge-right side

802.11n(HT20) U-NII-3 Band edge-left side

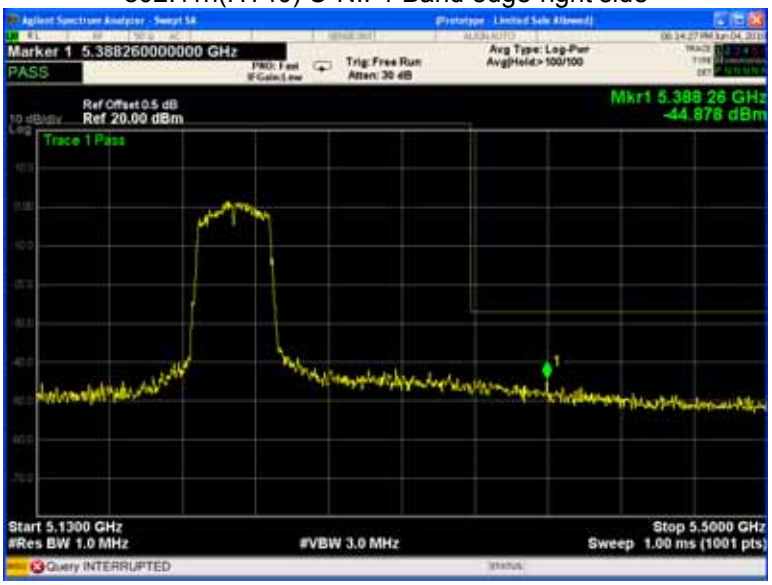


802.11n(HT20) U-NII-3 Band edge-right side

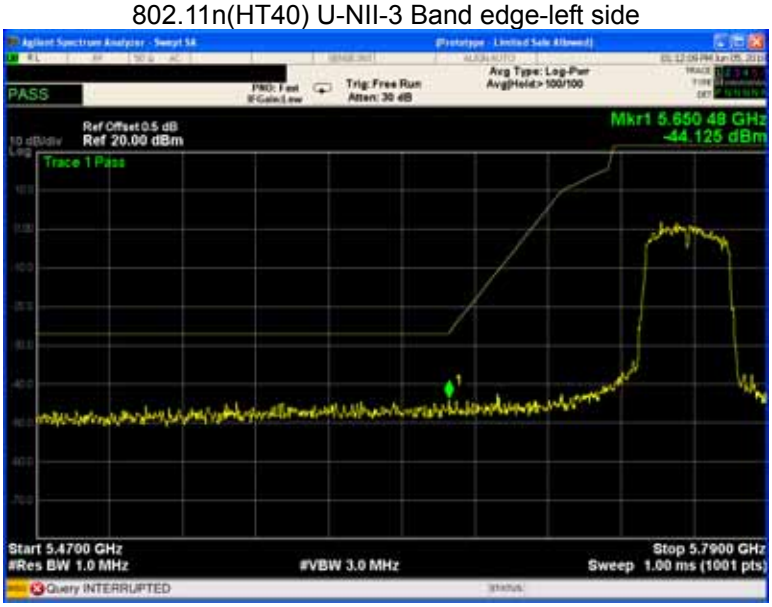


802.11n(HT40) U-NII-1 Band edge-left side

802.11n(HT40) U-NII-1 Band edge-right side

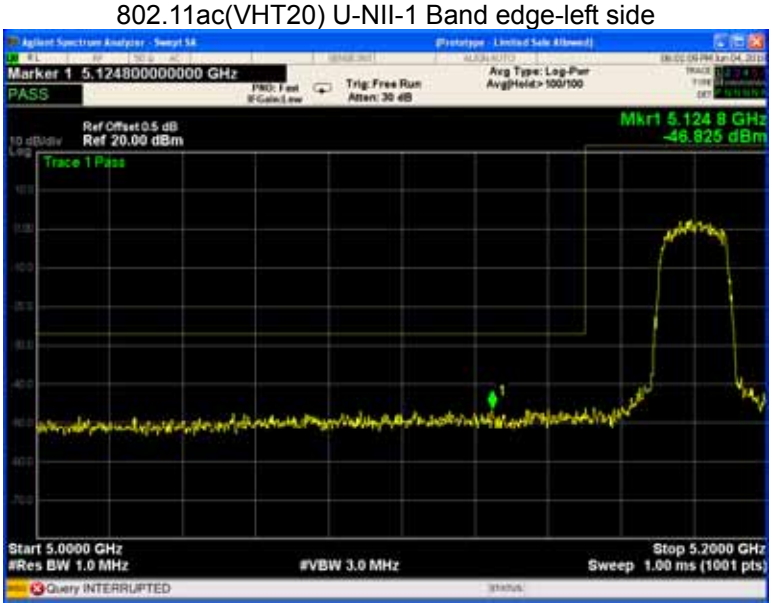


802.11n(HT40) U-NII-3 Band edge-left side

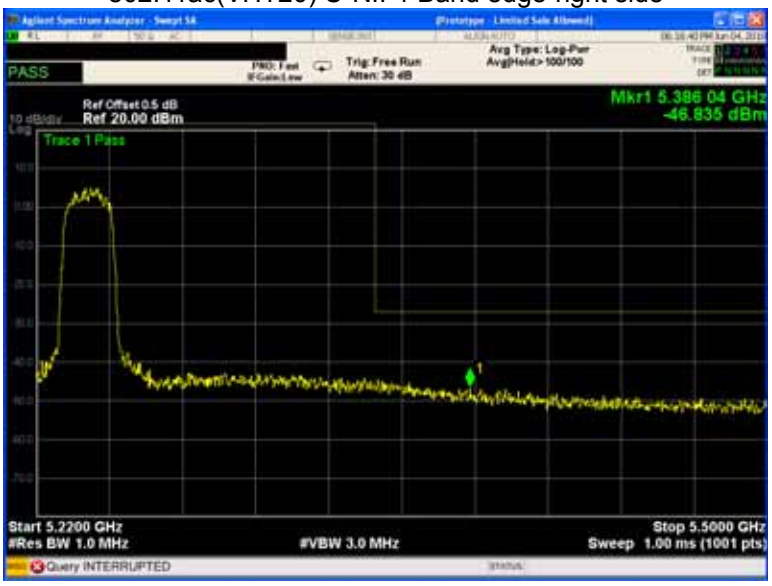


802.11n(HT40) U-NII-3 Band edge-right side

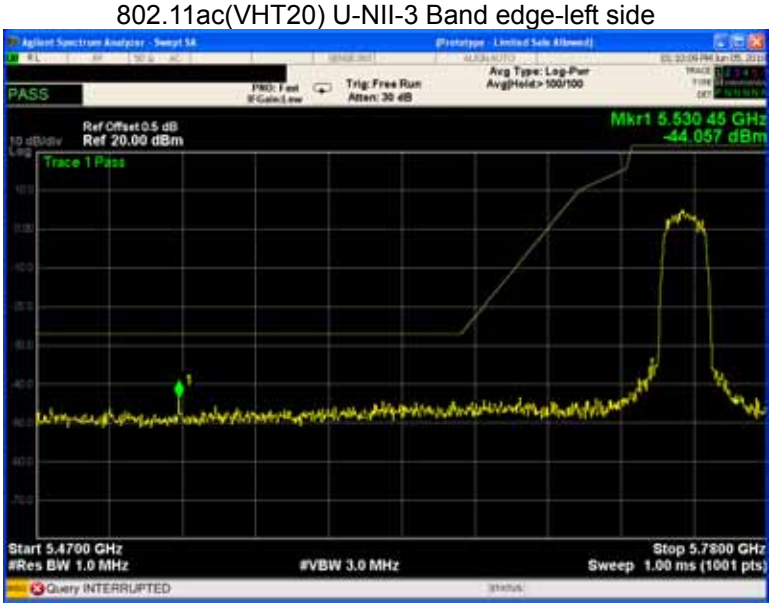
802.11ac(VHT20) U-NII-1 Band edge-left side



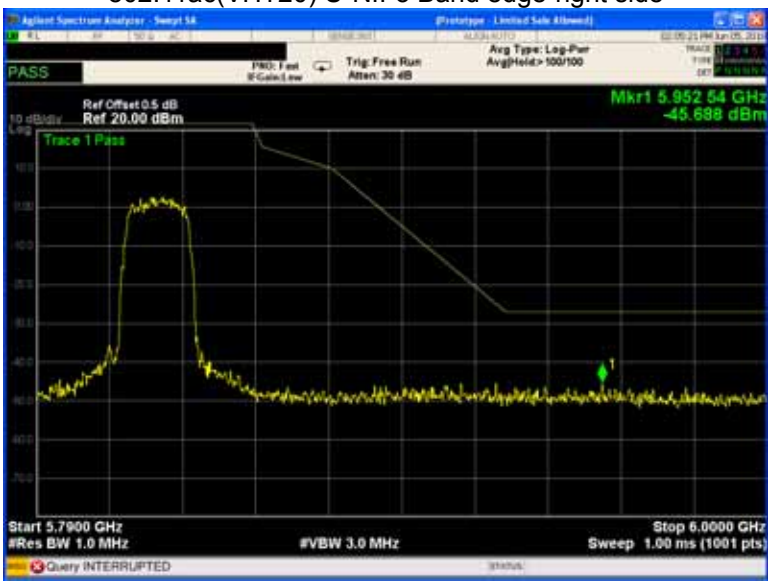
802.11ac(VHT20) U-NII-1 Band edge-right side



802.11ac(VHT20) U-NII-3 Band edge-left side

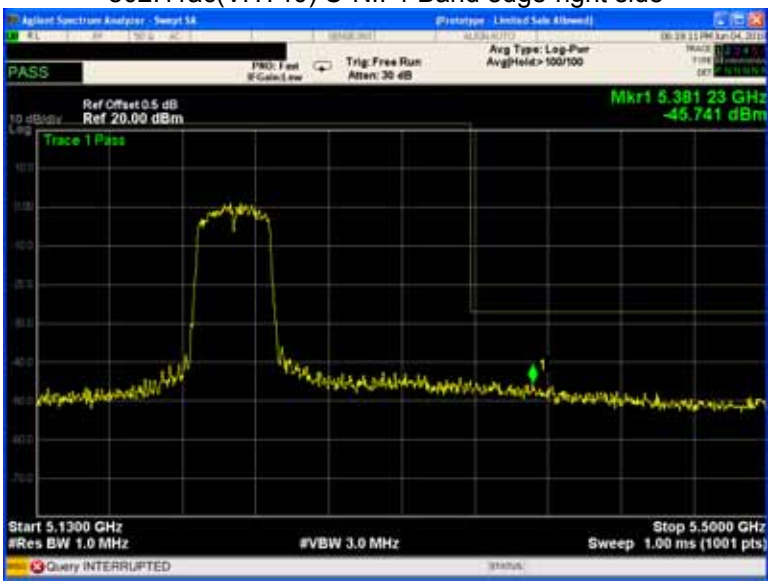


802.11ac(VHT20) U-NII-3 Band edge-right side

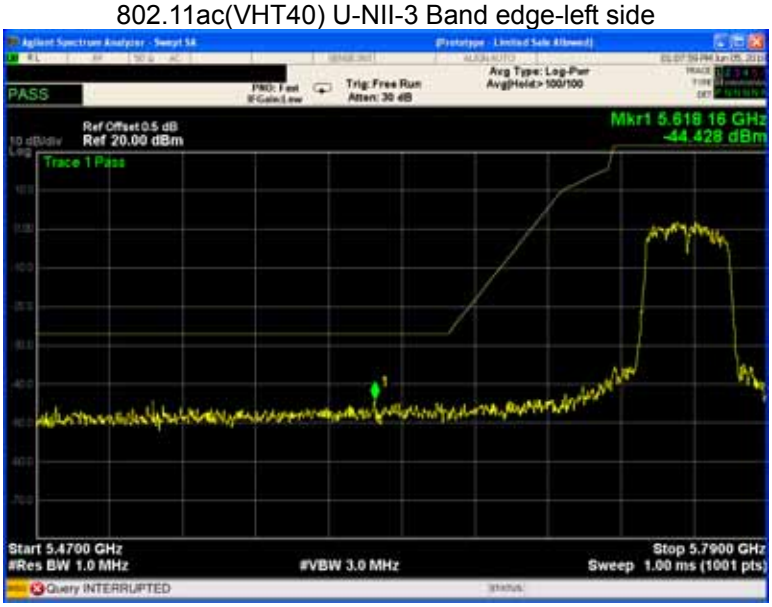


802.11ac(VHT40) U-NII-1 Band edge-left side

802.11ac(VHT40) U-NII-1 Band edge-right side

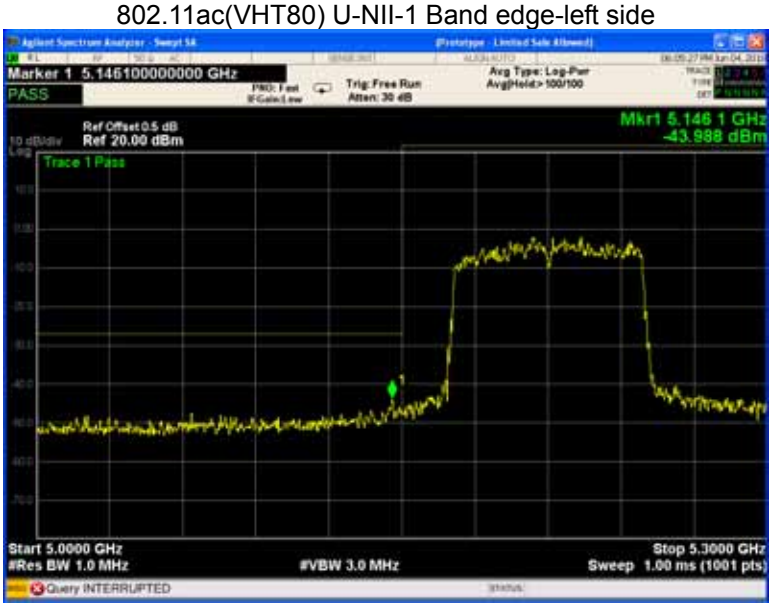


802.11ac(VHT40) U-NII-3 Band edge-left side



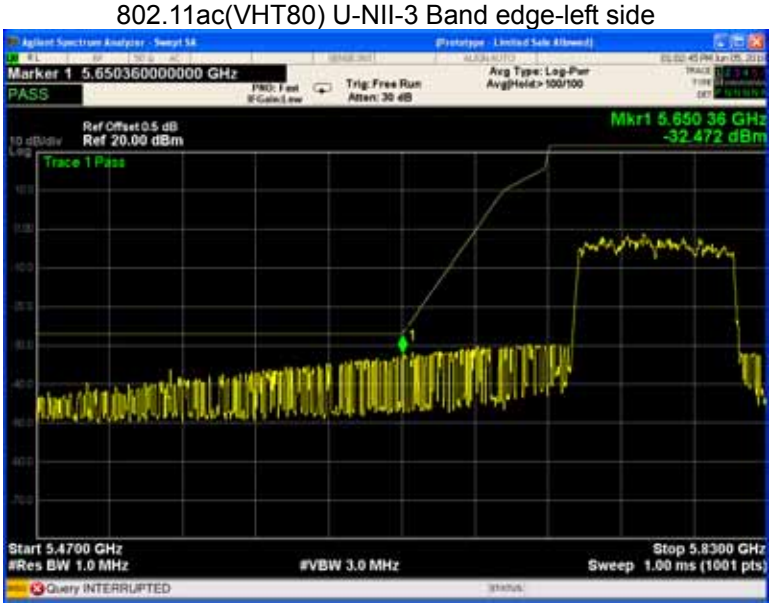
802.11ac(VHT40) U-NII-3 Band edge-right side

802.11ac(VHT80) U-NII-1 Band edge-left side



802.11ac(VHT80) U-NII-1 Band edge-right side

802.11ac(VHT80) U-NII-3 Band edge-left side



802.11ac(VHT80) U-NII-3 Band edge-right side

3. 6 dB Bandwidth

3.1. Test Result:

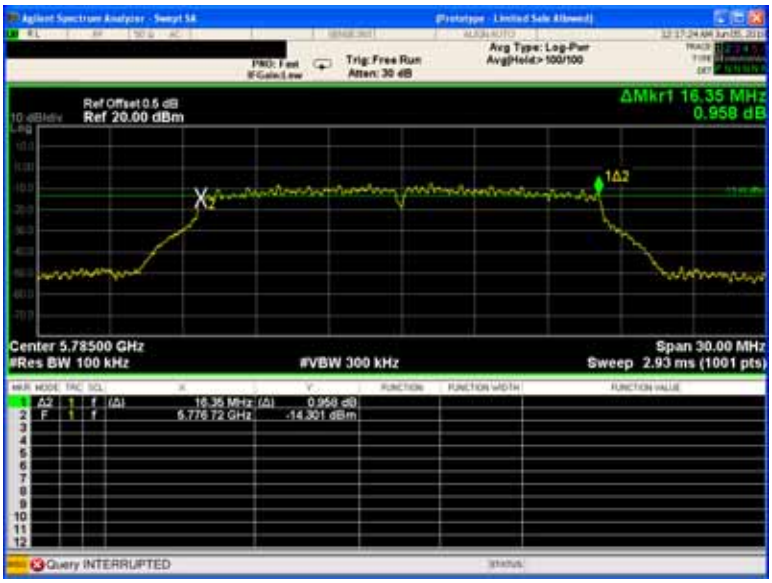
ANT3	Operation mode	6 dB Bandwidth (MHz)		
		Low	Middle	High
U-NII-3	802.11a	16.32	16.35	16.38
	802.11n(HT20)	17.46	17.46	17.16
	802.11n(HT40)	35.34	/	35.46
	802.11ac(VHT20)	16.89	16.44	15.99
	802.11ac(VHT40)	35.28	/	35.16
	802.11ac(VHT80)	75.72	/	/
ANT4	**Operation mode**	**6 dB Bandwidth (MHz)**		
		Low	Middle	High
U-NII-3	802.11a	16.32	16.41	16.35
	802.11n(HT20)	17.46	17.46	17.52
	802.11n(HT40)	35.34	/	35.22
	802.11ac(VHT20)	16.11	16.56	16.05
	802.11ac(VHT40)	35.40	/	35.22
	802.11ac(VHT80)	75.60	/	/
ANT5	**Operation mode**	**6 dB Bandwidth (MHz)**		
		Low	Middle	High
U-NII-3	802.11a	16.38	16.38	16.23
	802.11n(HT20)	17.34	17.46	16.95
	802.11n(HT40)	35.46	/	35.64
	802.11ac(VHT20)	16.35	16.32	16.65
	802.11ac(VHT40)	35.70	/	35.28
	802.11ac(VHT80)	75.60	/	/
ANT6	**Operation mode**	**6 dB Bandwidth (MHz)**		
		Low	Middle	High
U-NII-3	802.11a	16.41	16.41	16.38
	802.11n(HT20)	17.40	17.07	17.49
	802.11n(HT40)	35.70	/	35.28
	802.11ac(VHT20)	17.01	16.56	16.77
	802.11ac(VHT40)	35.28	/	35.22
	802.11ac(VHT80)	75.60	/	/

Test result plots shown as follows:

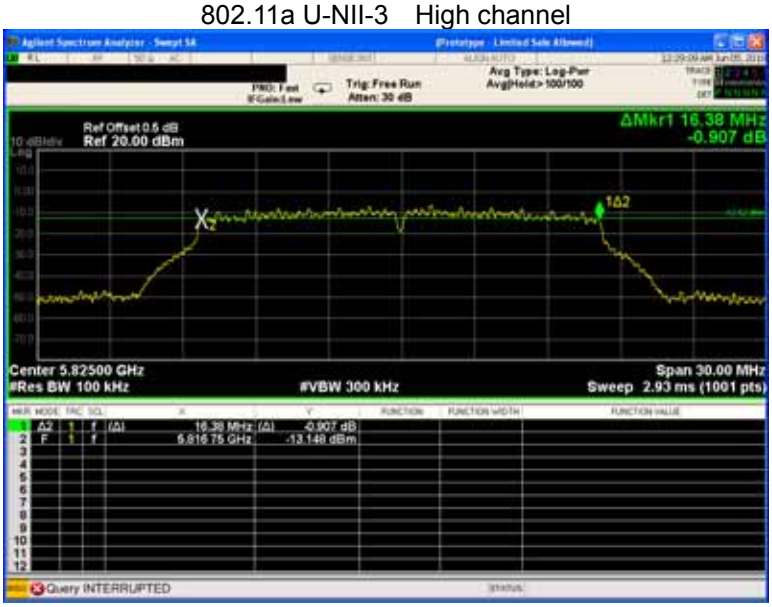
ANT3

802.11a U-NII-3 Low channel

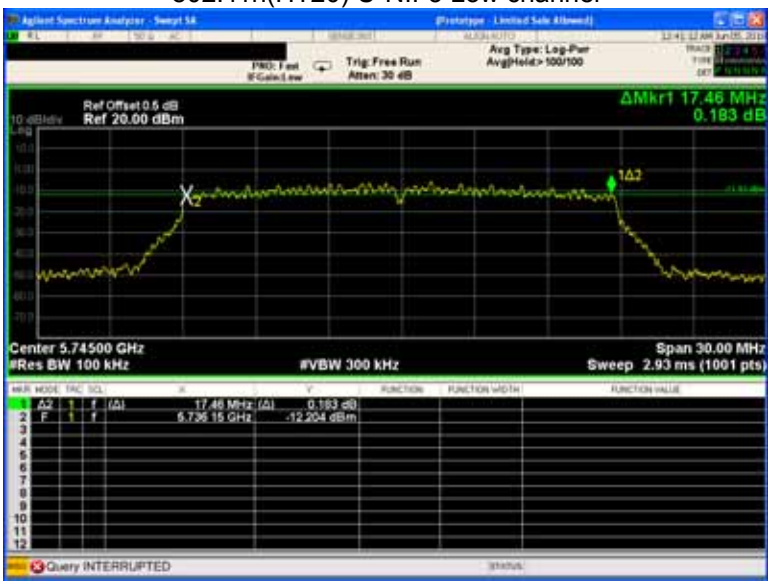
802.11a U-NII-3 Middle channel



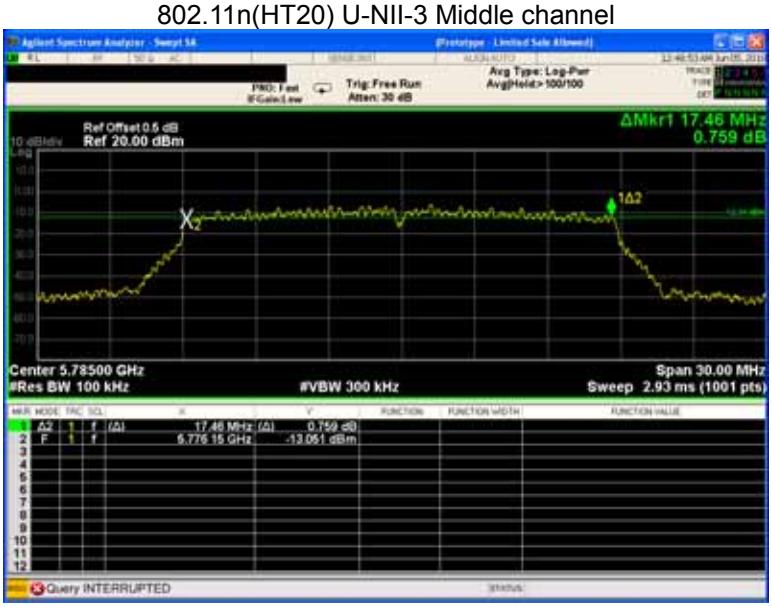
802.11a U-NII-3 High channel



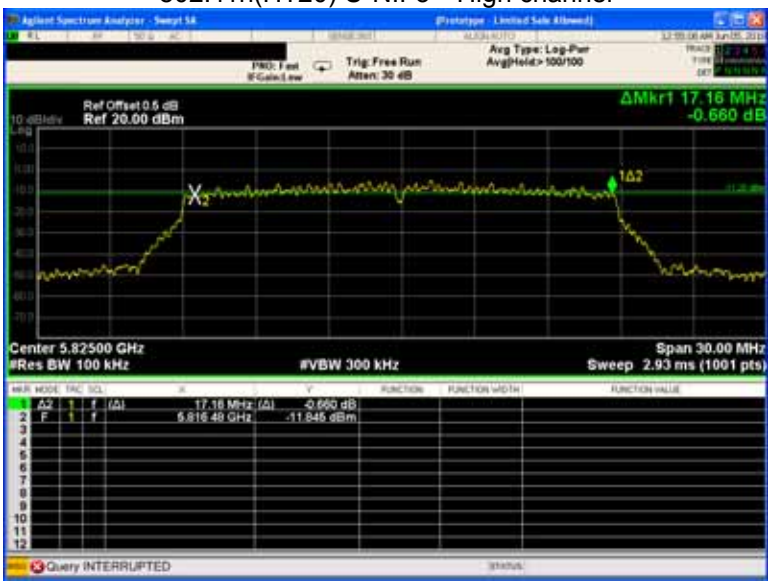
802.11n(HT20) U-NII-3 Low channel



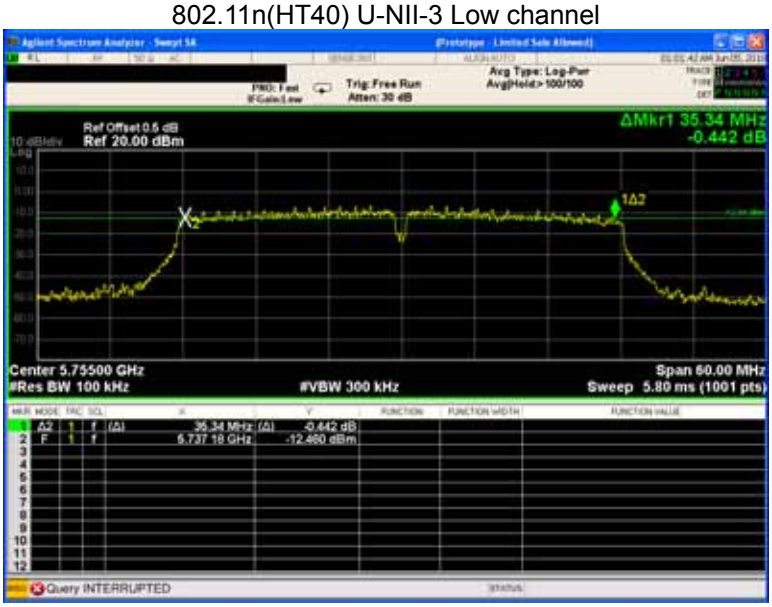
802.11n(HT20) U-NII-3 Middle channel



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

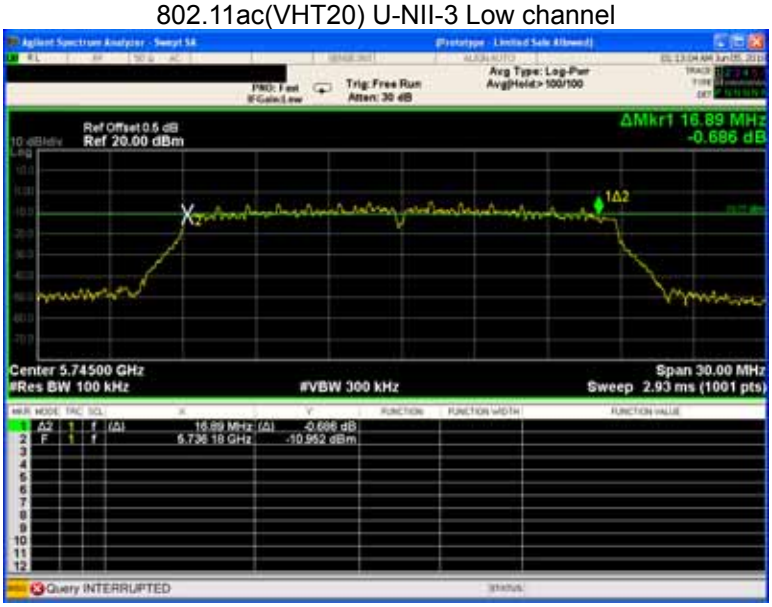


802.11n(HT40) U-NII-3 Low channel

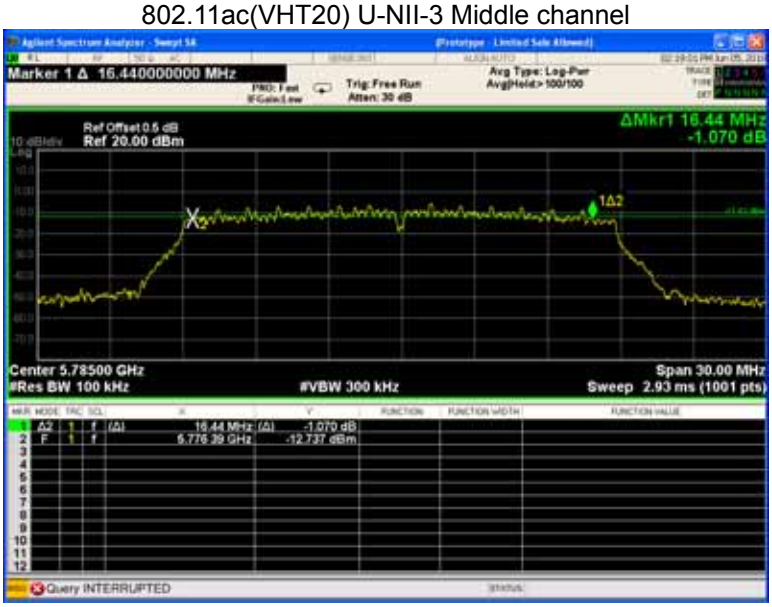


802.11n(HT40) U-NII-3 High channel

802.11ac(VHT20) U-NII-3 Low channel

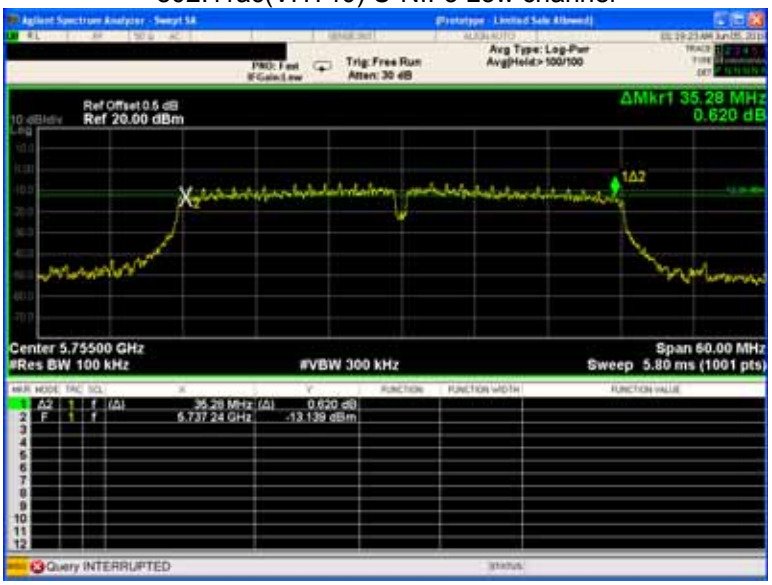


802.11ac(VHT20) U-NII-3 Middle channel

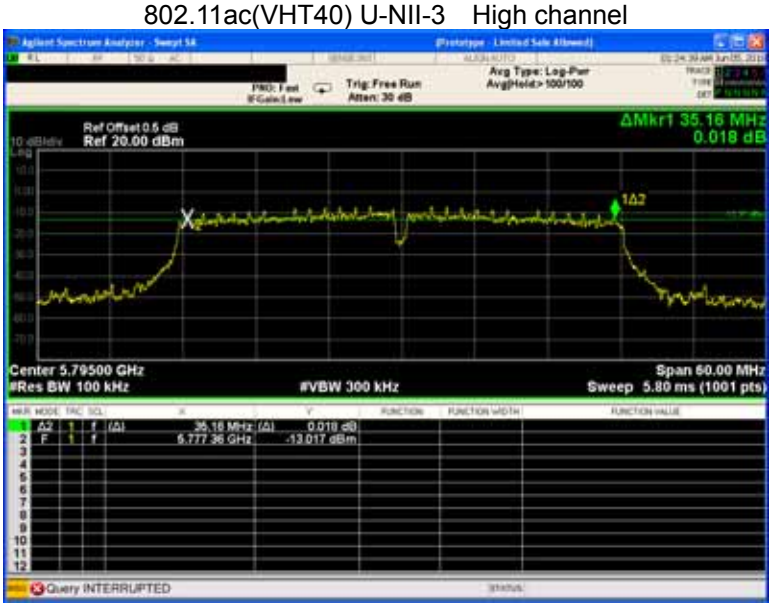


802.11ac(VHT20) U-NII-3 High channel

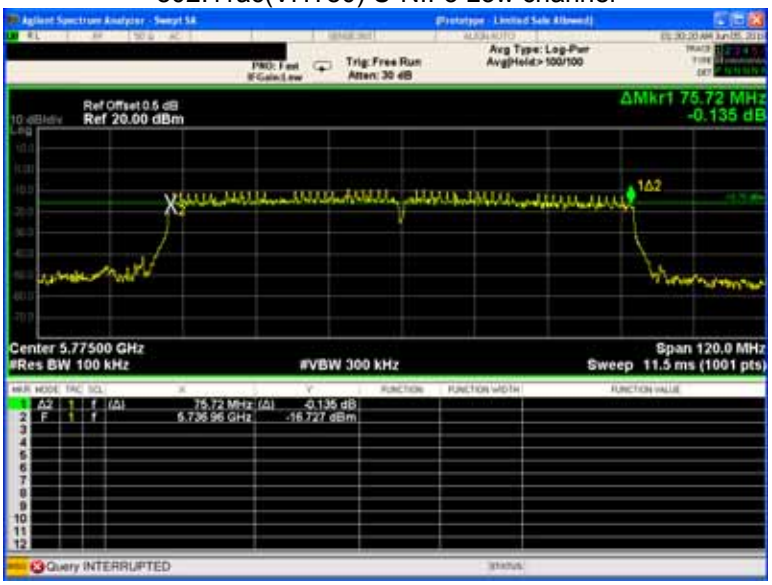
802.11ac(VHT40) U-NII-3 Low channel



802.11ac(VHT40) U-NII-3 High channel



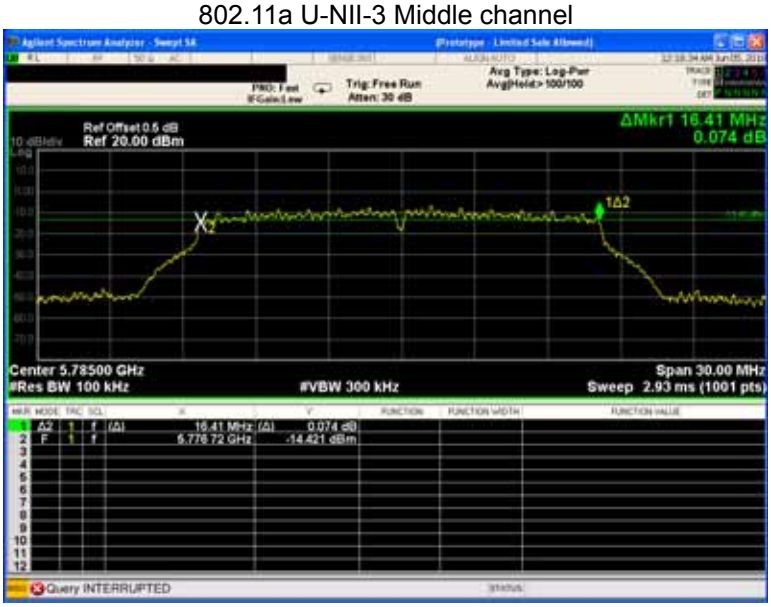
802.11ac(VHT80) U-NII-3 Low channel



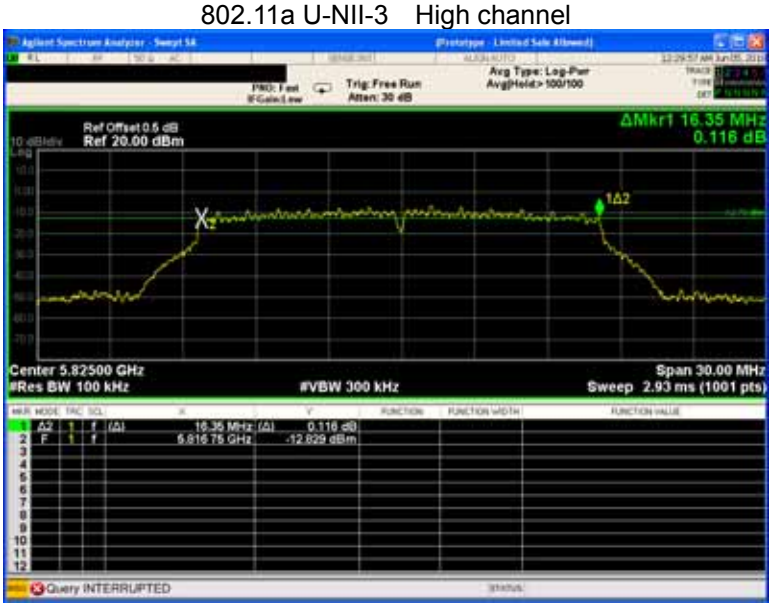
ANT4

802.11a U-NII-3 Low channel

802.11a U-NII-3 Middle channel

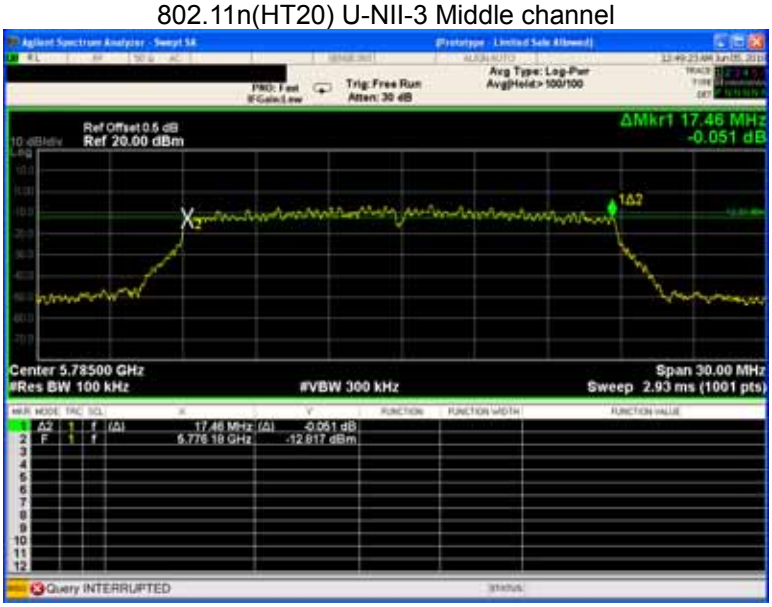


802.11a U-NII-3 High channel

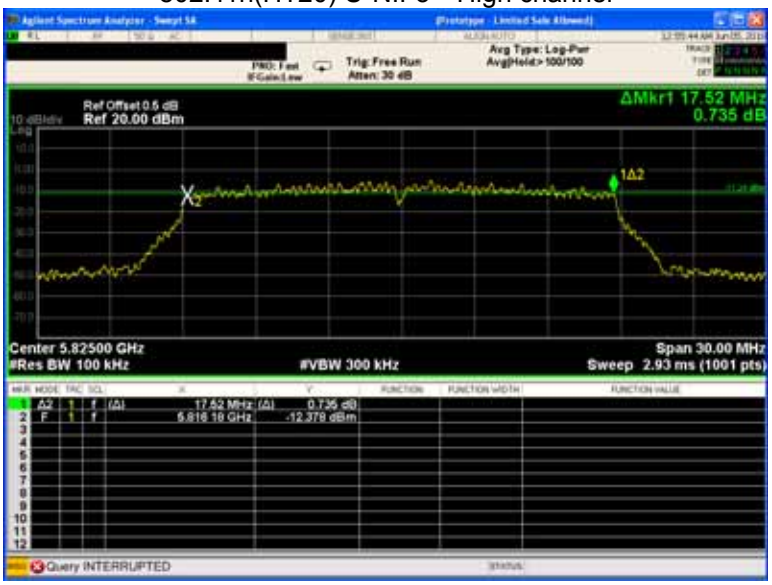


802.11n(HT20) U-NII-3 Low channel

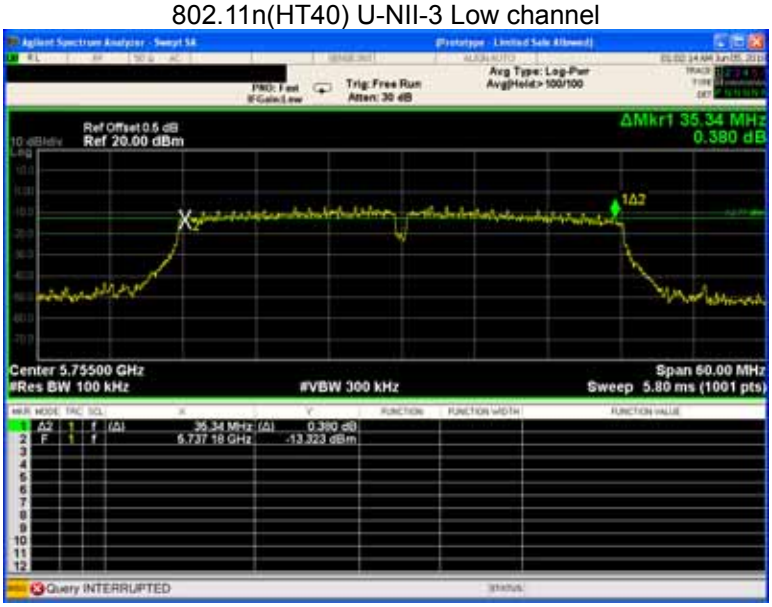
802.11n(HT20) U-NII-3 Middle channel



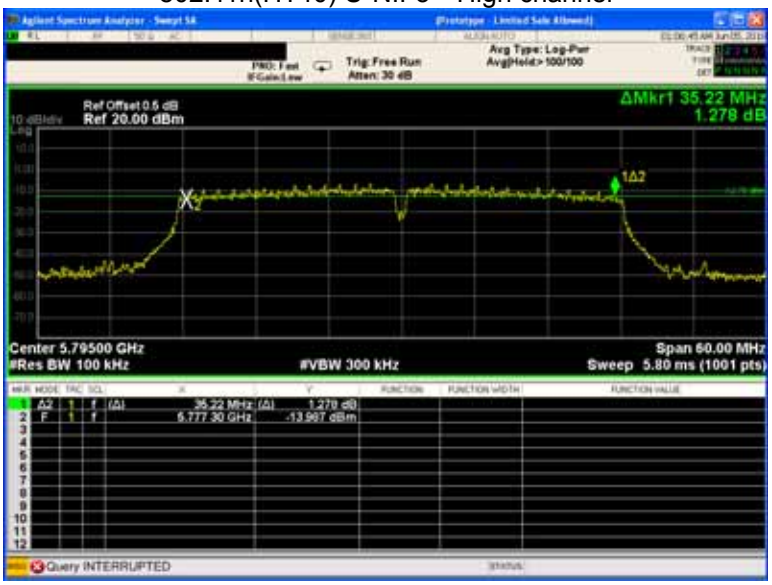
802.11n(HT20) U-NII-3 High channel



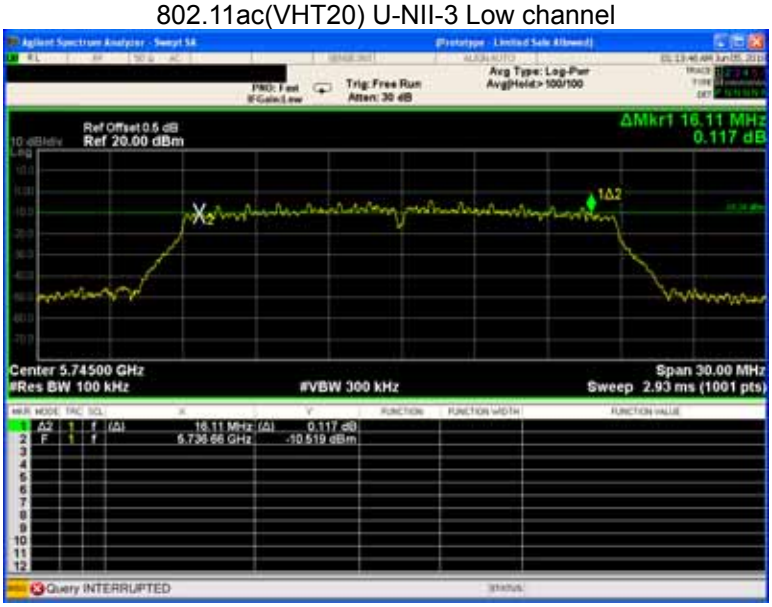
802.11n(HT40) U-NII-3 Low channel



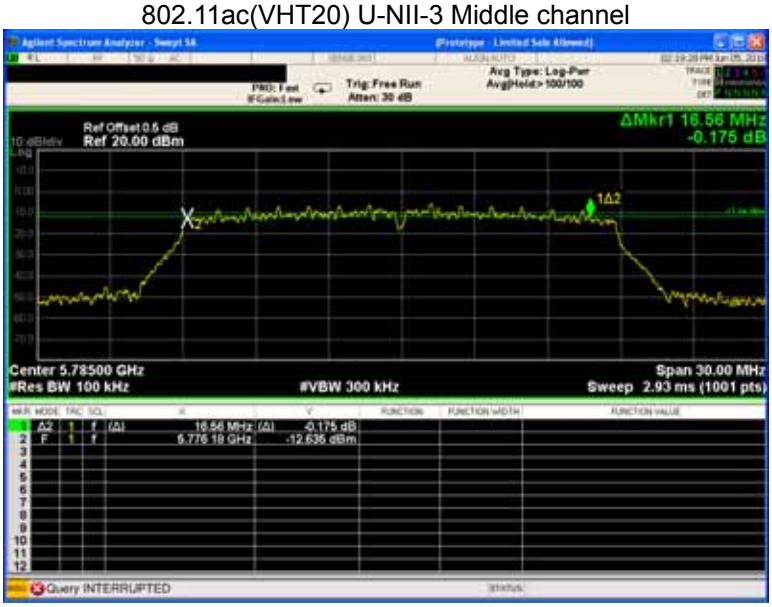
802.11n(HT40) U-NII-3 High channel



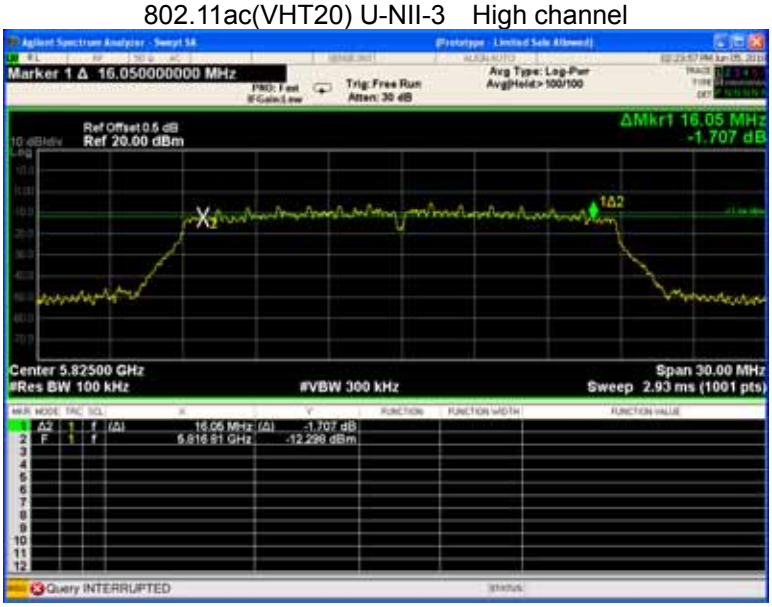
802.11ac(VHT20) U-NII-3 Low channel



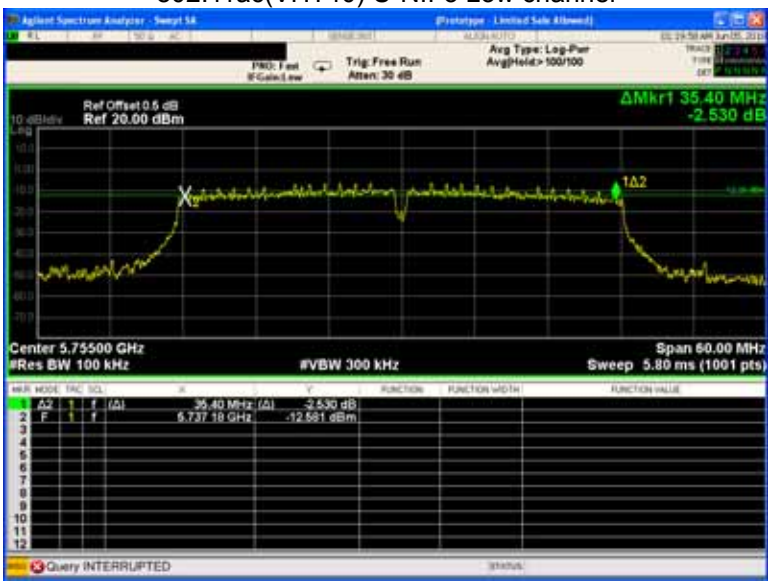
802.11ac(VHT20) U-NII-3 Middle channel



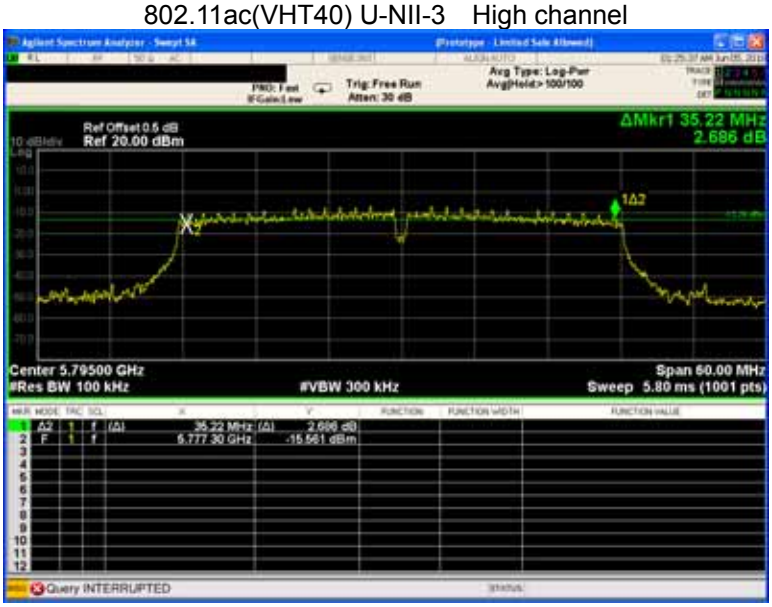
802.11ac(VHT20) U-NII-3 High channel



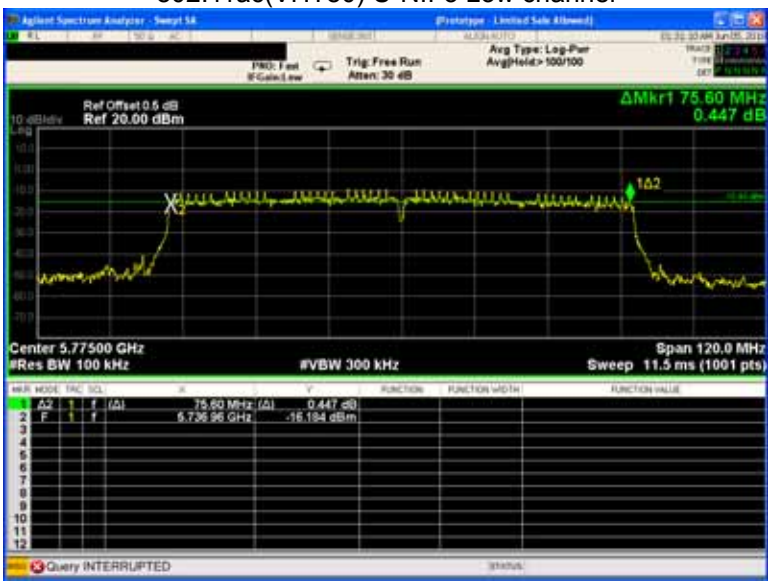
802.11ac(VHT40) U-NII-3 Low channel



802.11ac(VHT40) U-NII-3 High channel



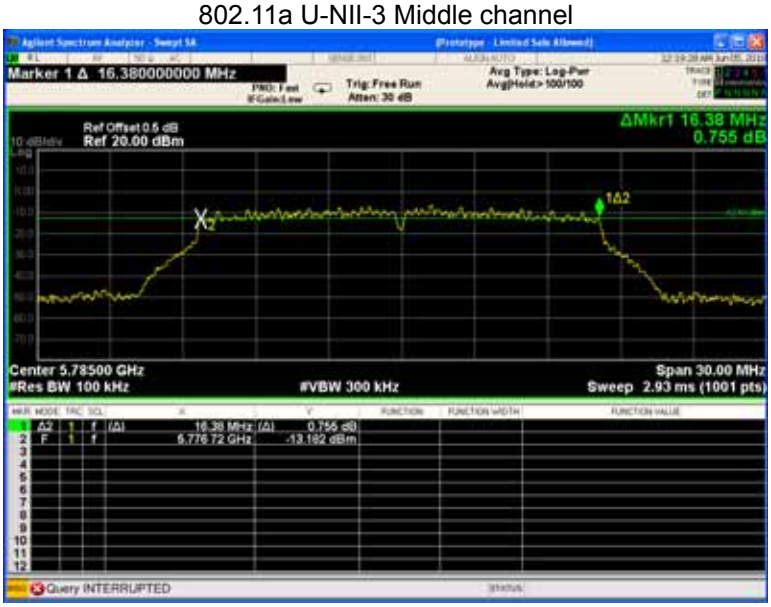
802.11ac(VHT80) U-NII-3 Low channel



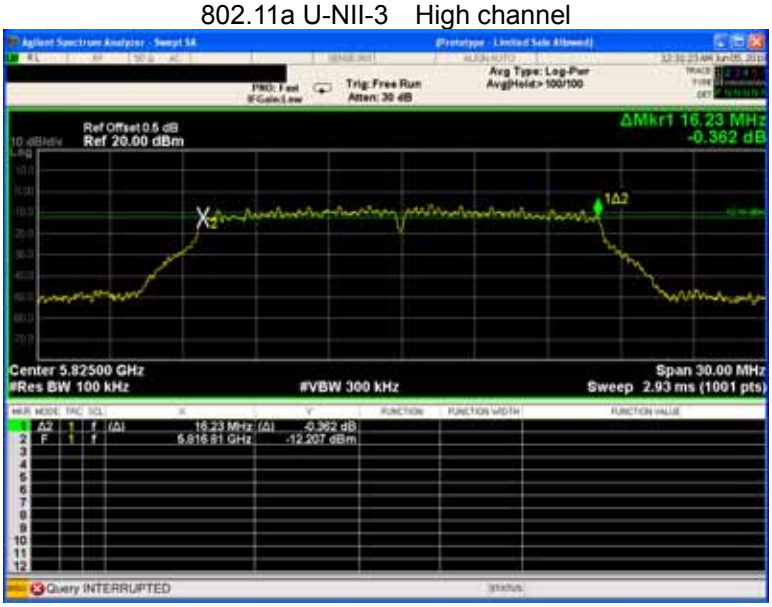
ANT5

802.11a U-NII-3 Low channel

802.11a U-NII-3 Middle channel

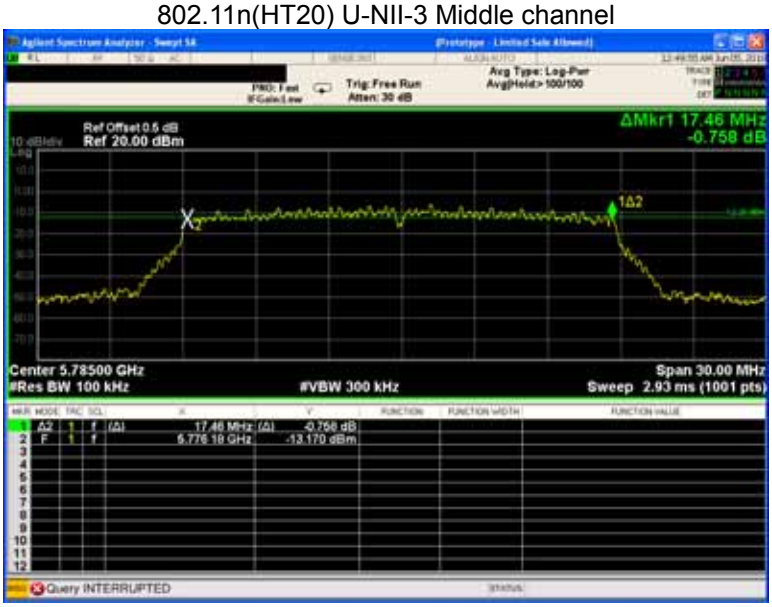


802.11a U-NII-3 High channel



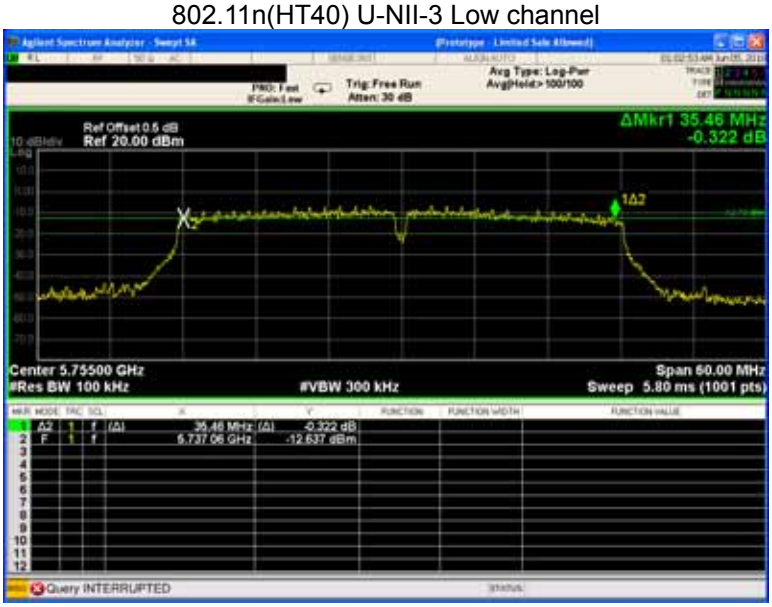
802.11n(HT20) U-NII-3 Low channel

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

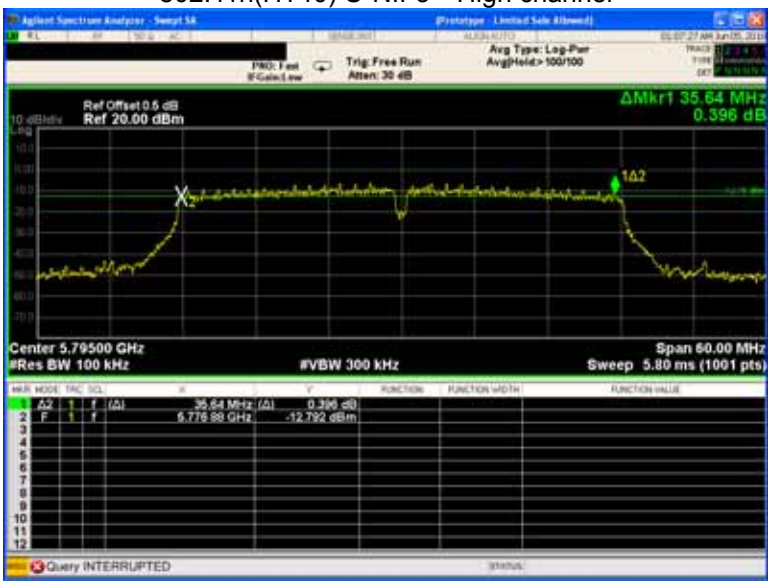


802.11n(HT20) U-NII-3 High channel

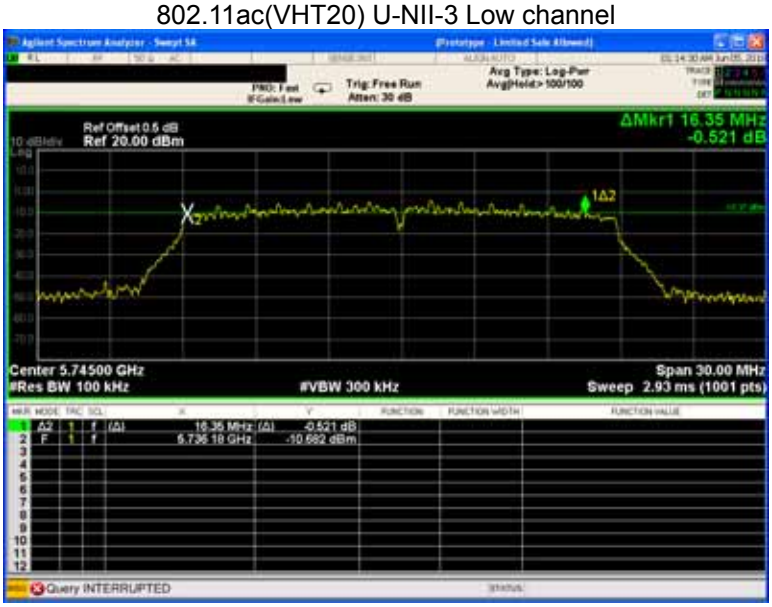
802.11n(HT40) U-NII-3 Low channel



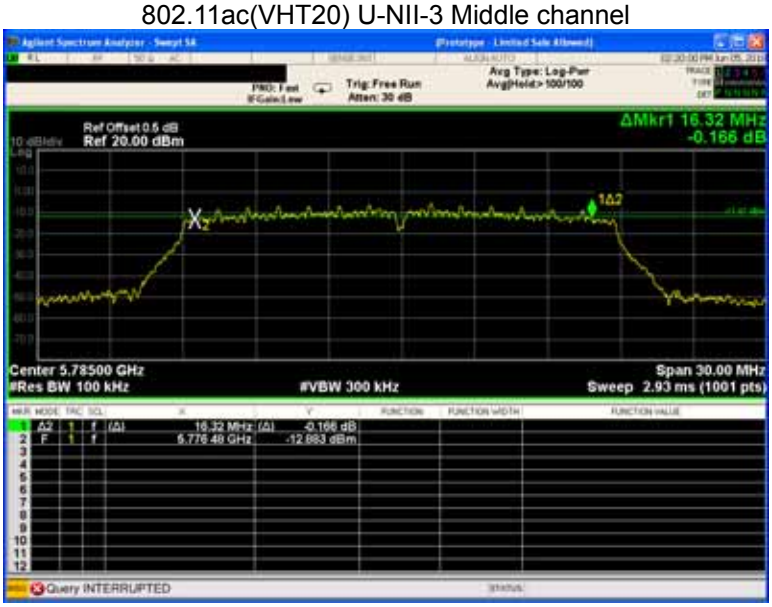
802.11n(HT40) U-NII-3 High channel



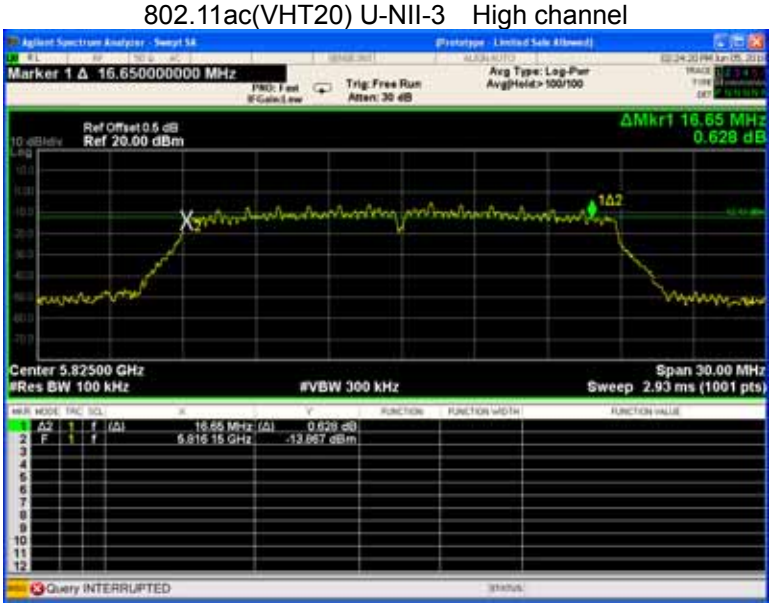
802.11ac(VHT20) U-NII-3 Low channel



802.11ac(VHT20) U-NII-3 Middle channel

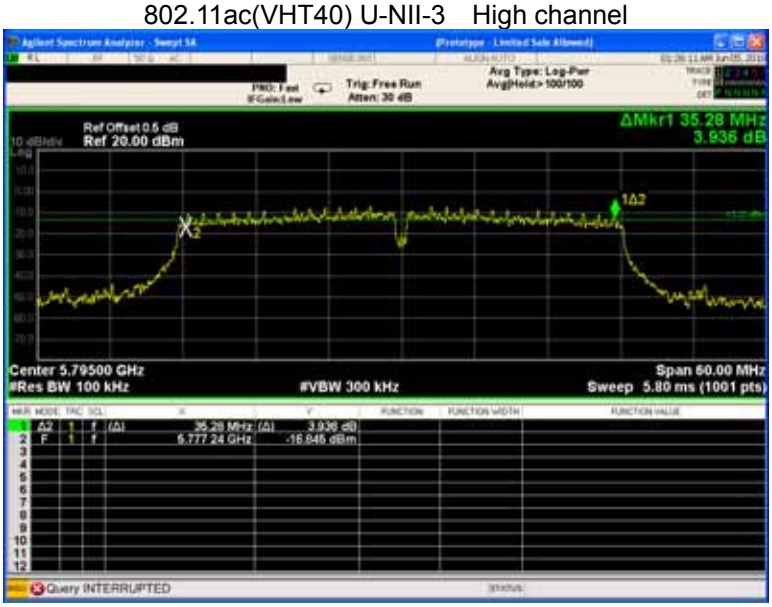


802.11ac(VHT20) U-NII-3 High channel

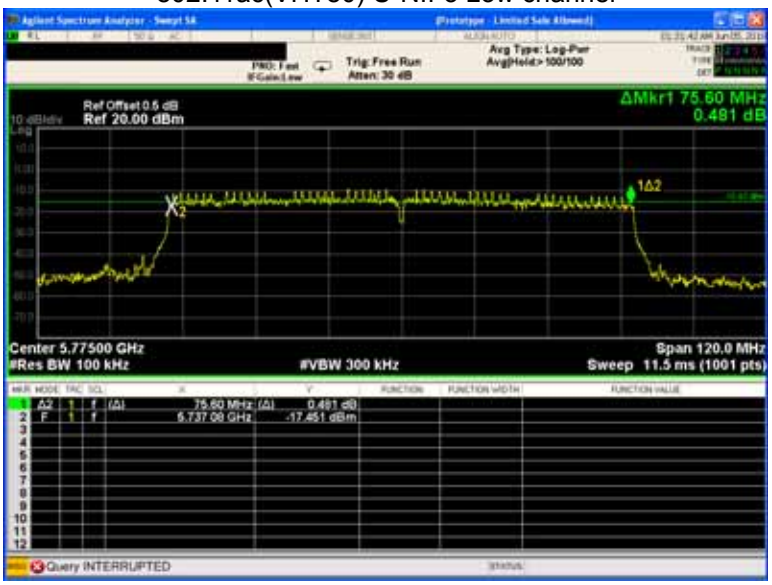


802.11ac(VHT40) U-NII-3 Low channel

802.11ac(VHT40) U-NII-3 High channel



802.11ac(VHT80) U-NII-3 Low channel

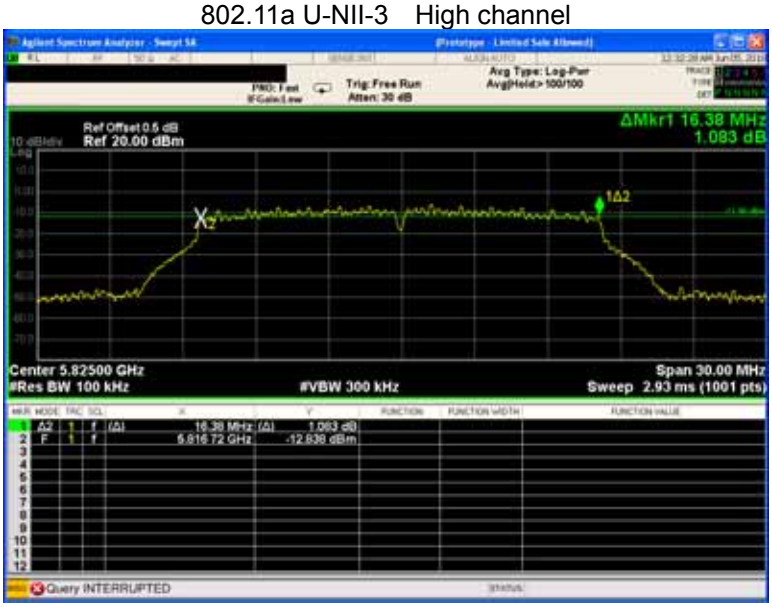


ANT6

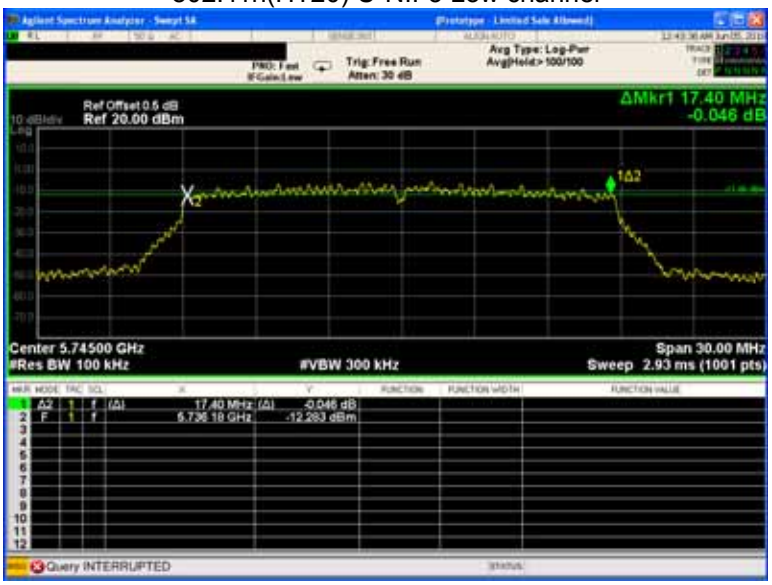
802.11a U-NII-3 Low channel

802.11a U-NII-3 Middle channel

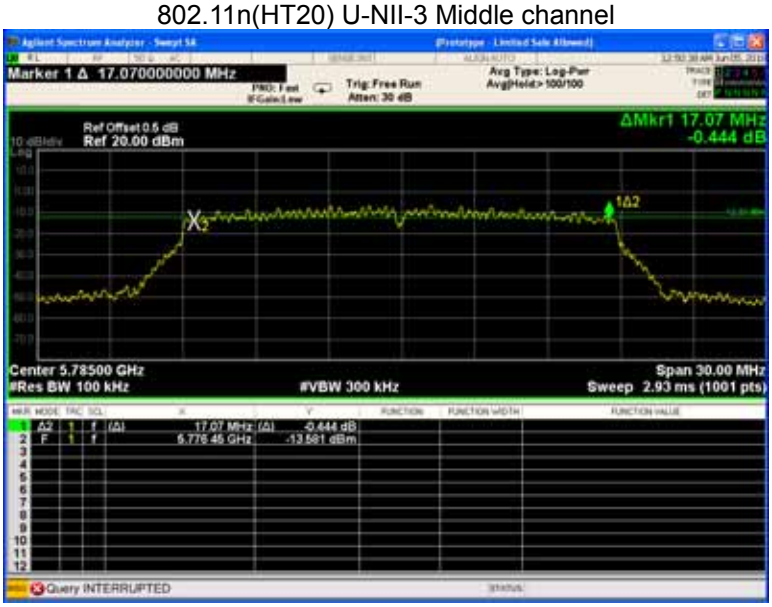
802.11a U-NII-3 High channel



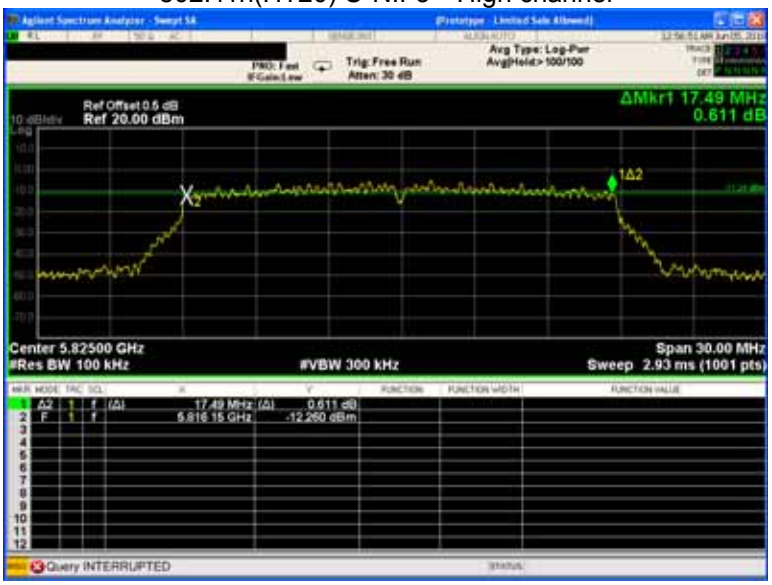
802.11n(HT20) U-NII-3 Low channel



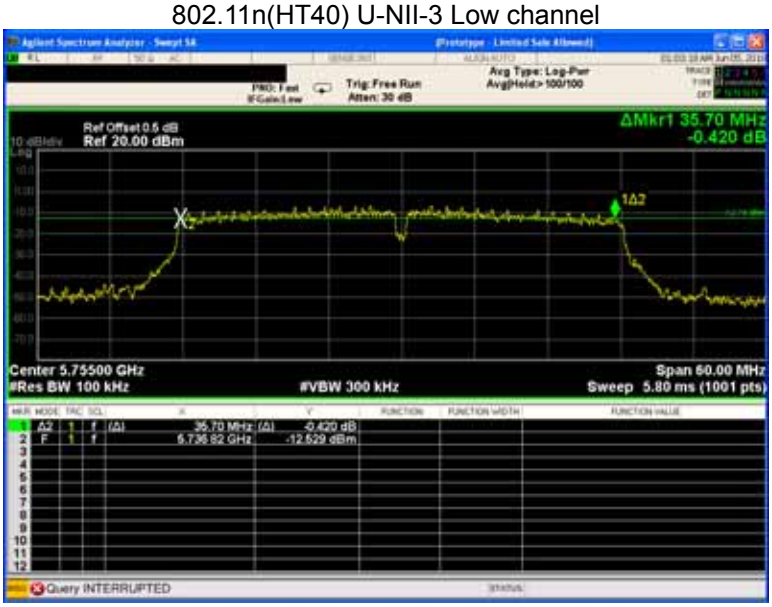
802.11n(HT20) U-NII-3 Middle channel



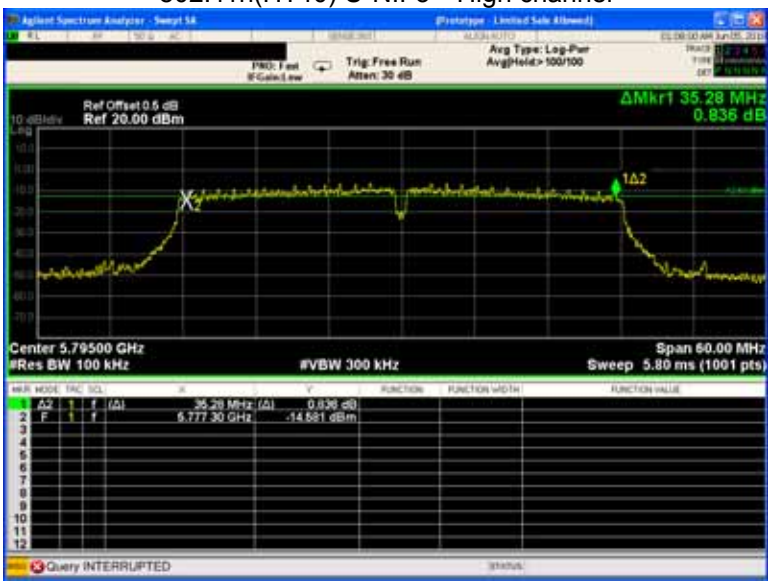
802.11n(HT20) U-NII-3 High channel



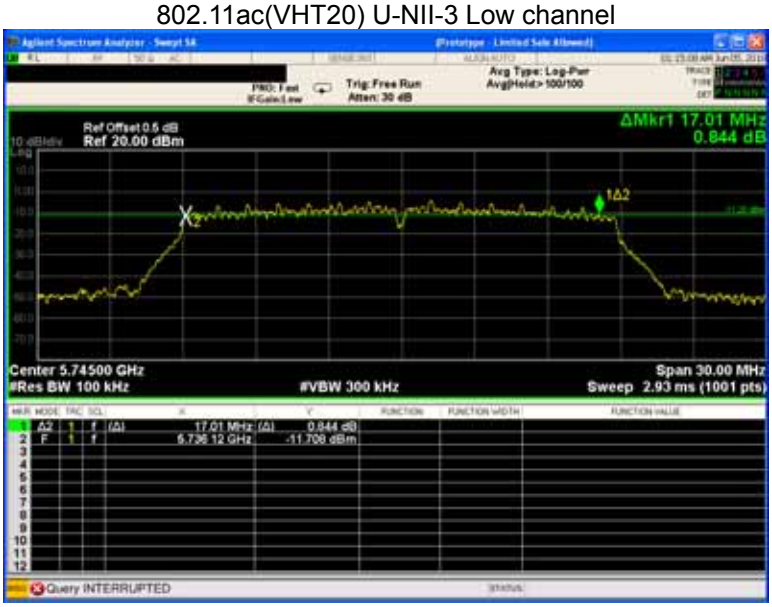
802.11n(HT40) U-NII-3 Low channel



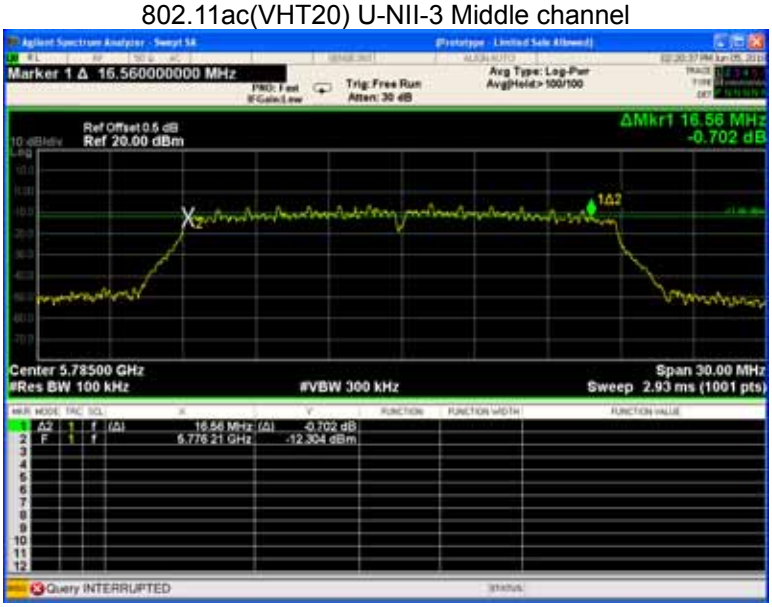
802.11n(HT40) U-NII-3 High channel



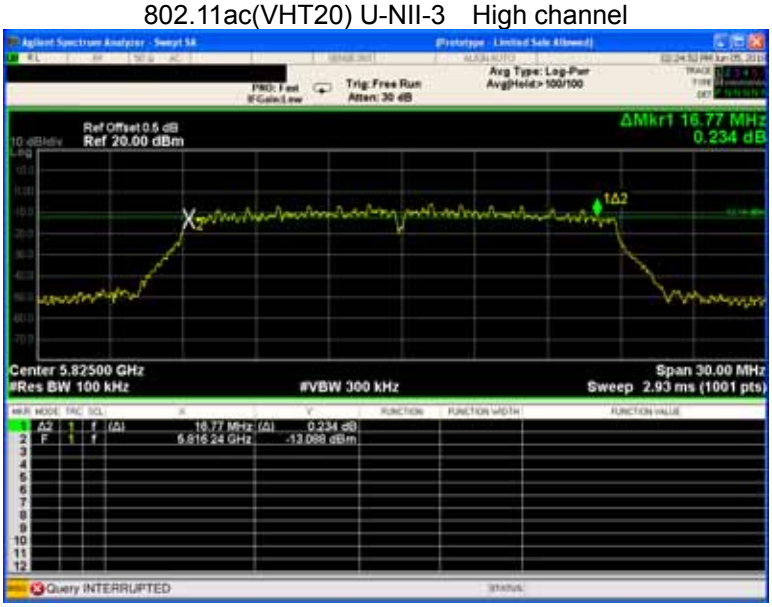
802.11ac(VHT20) U-NII-3 Low channel



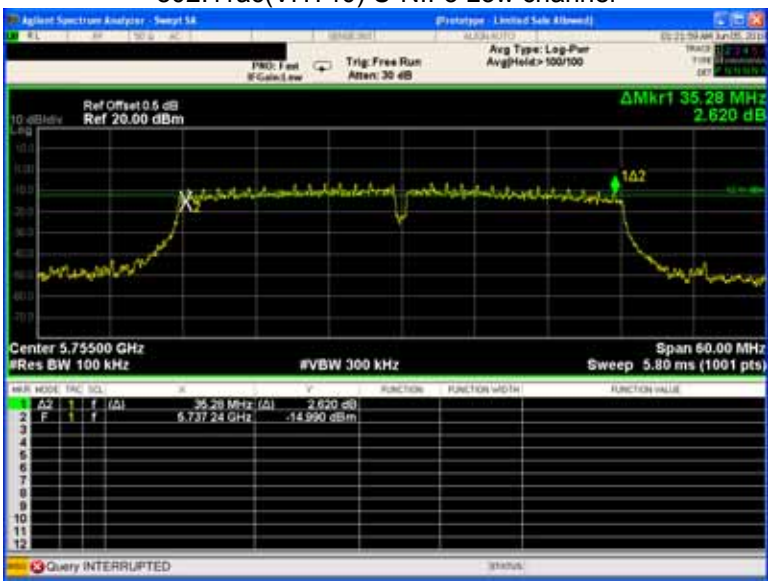
802.11ac(VHT20) U-NII-3 Middle channel



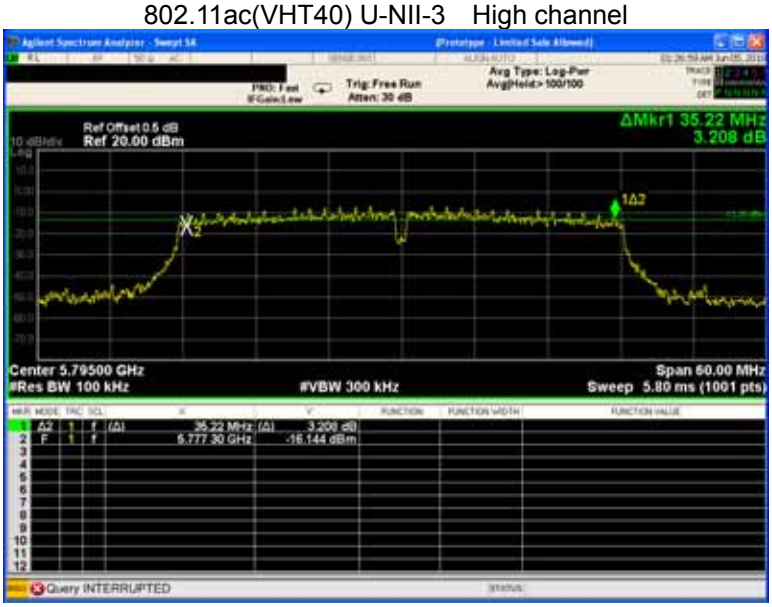
802.11ac(VHT20) U-NII-3 High channel



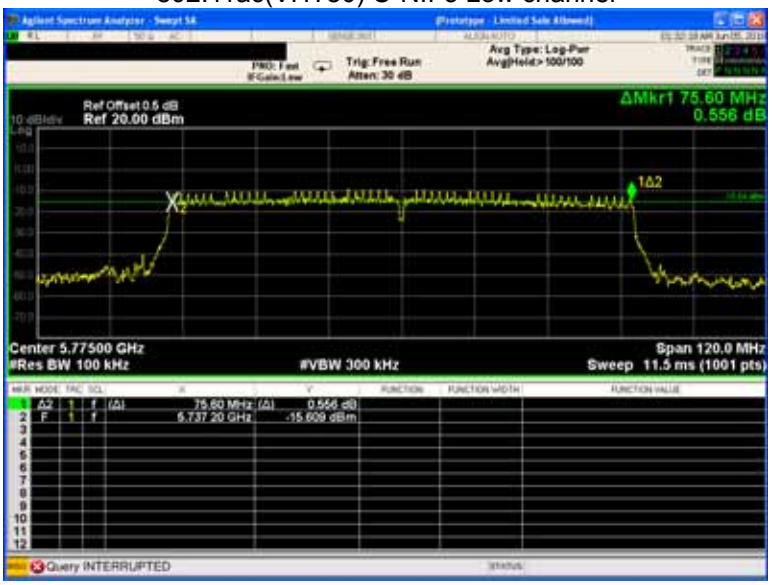
802.11ac(VHT40) U-NII-3 Low channel



802.11ac(VHT40) U-NII-3 High channel



802.11ac(VHT80) U-NII-3 Low channel



4. 26 dB Bandwidth and 99% Occupied Bandwidth

4.1. Test Result:

Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
ANT3 U-NII-1	802.11a	19.46	19.65	19.64	16.425	16.413	16.410
	802.11n(HT20)	19.80	19.87	19.81	17.583	17.544	17.577
	802.11n(HT40)	39.68	/	39.60	36.026	/	36.098
	802.11ac(VHT20)	20.13	19.95	19.98	17.656	17.613	17.613
	802.11ac(VHT40)	39.66	/	39.42	36.014	/	35.975
	802.11ac(VHT80)	81.36	/	/	75.704	/	/
ANT3 U-NII-3	802.11a	19.55	19.62	19.62	16.446	16.423	16.449
	802.11n(HT20)	20.06	19.83	19.82	17.569	17.567	17.580
	802.11n(HT40)	39.27	/	39.16	36.014	/	36.043
	802.11ac(VHT20)	19.92	20.12	20.06	17.641	17.599	17.658
	802.11ac(VHT40)	39.72	/	39.71	36.004	/	36.020
	802.11ac(VHT80)	81.42	/	/	75.858	/	/

Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
ANT4 U-NII-1	802.11a	19.57	19.58	19.53	16.431	16.427	16.460
	802.11n(HT20)	19.99	19.97	19.86	17.573	17.550	17.562
	802.11n(HT40)	39.67	/	39.88	36.078	/	36.030
	802.11ac(VHT20)	20.00	20.10	19.94	17.602	17.615	17.601
	802.11ac(VHT40)	39.21	/	39.74	35.989	/	35.963
	802.11ac(VHT80)	81.38	/	/	75.608	/	/
ANT4 U-NII-3	802.11a	19.51	19.62	19.52	16.461	16.406	16.444
	802.11n(HT20)	19.66	19.66	19.70	17.549	17.600	17.562
	802.11n(HT40)	39.75	/	39.54	35.990	/	36.075
	802.11ac(VHT20)	20.01	20.03	20.11	17.608	17.646	17.649
	802.11ac(VHT40)	39.83	/	39.39	35.982	/	35.934
	802.11ac(VHT80)	81.41	/	/	75.541	/	/

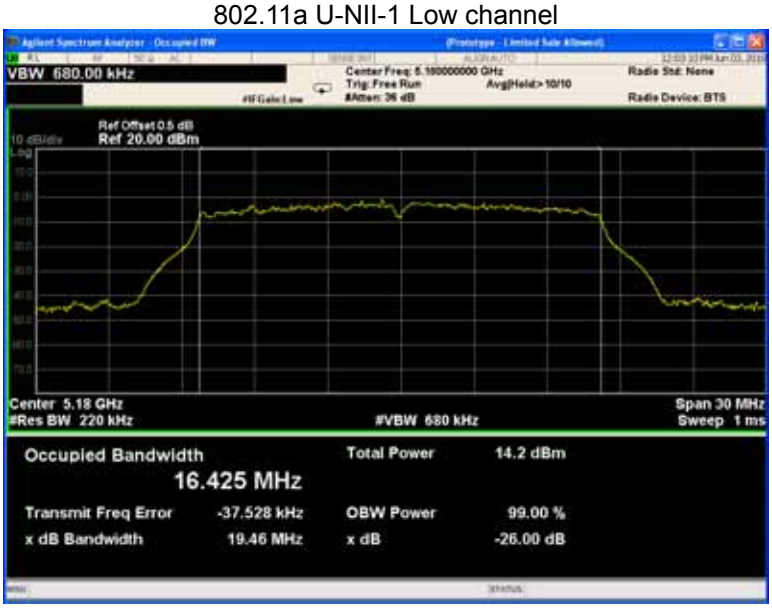
Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
ANT5 U-NII-1	802.11a	19.59	19.46	19.39	16.446	16.412	16.411
	802.11n(HT20)	19.90	19.74	19.86	17.558	17.596	17.562
	802.11n(HT40)	39.69	/	39.68	36.001	/	36.063
	802.11ac(VHT20)	20.12	20.08	20.08	17.618	17.599	17.620
	802.11ac(VHT40)	39.72	/	39.24	35.960	/	36.000
	802.11ac(VHT80)	80.96	/	/	75.761	/	/
ANT5 U-NII-3	802.11a	19.48	19.52	19.49	16.429	16.438	16.473
	802.11n(HT20)	19.67	19.95	19.90	17.477	17.555	17.543
	802.11n(HT40)	39.40	/	39.46	35.941	/	35.956
	802.11ac(VHT20)	20.03	20.14	20.12	17.540	17.631	17.611
	802.11ac(VHT40)	39.54	/	39.65	36.013	/	36.076
	802.11ac(VHT80)	81.14	/	/	75.796	/	/

Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
ANT6 U-NII-1	802.11a	19.55	19.41	19.51	16.416	16.443	16.434
	802.11n(HT20)	19.72	20.02	19.78	17.585	17.577	17.546
	802.11n(HT40)	39.59	/	39.44	36.025	/	36.052
	802.11ac(VHT20)	20.14	20.00	20.10	17.594	17.590	17.640
	802.11ac(VHT40)	39.64	/	39.74	35.970	/	36.237
	802.11ac(VHT80)	81.58	/	/	75.763	/	/
ANT6 U-NII-3	802.11a	19.42	19.39	19.66	16.411	16.436	16.427
	802.11n(HT20)	19.81	19.50	19.74	17.545	17.539	17.558
	802.11n(HT40)	39.53	/	39.38	35.977	/	36.054
	802.11ac(VHT20)	19.94	19.89	20.05	17.523	17.548	17.535
	802.11ac(VHT40)	39.39	/	40.26	36.002	/	35.965
	802.11ac(VHT80)	81.32	/	/	75.826	/	/

Test result plots shown as follows:

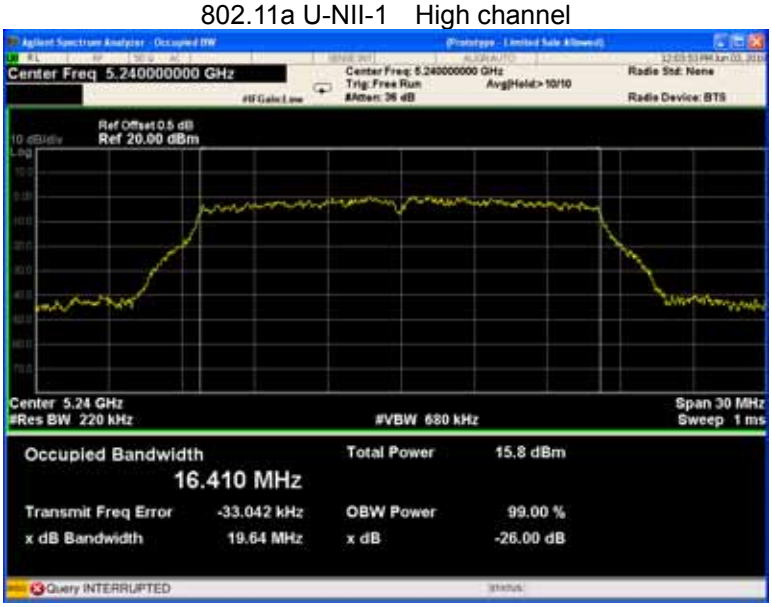
ANT3

802.11a U-NII-1 Low channel



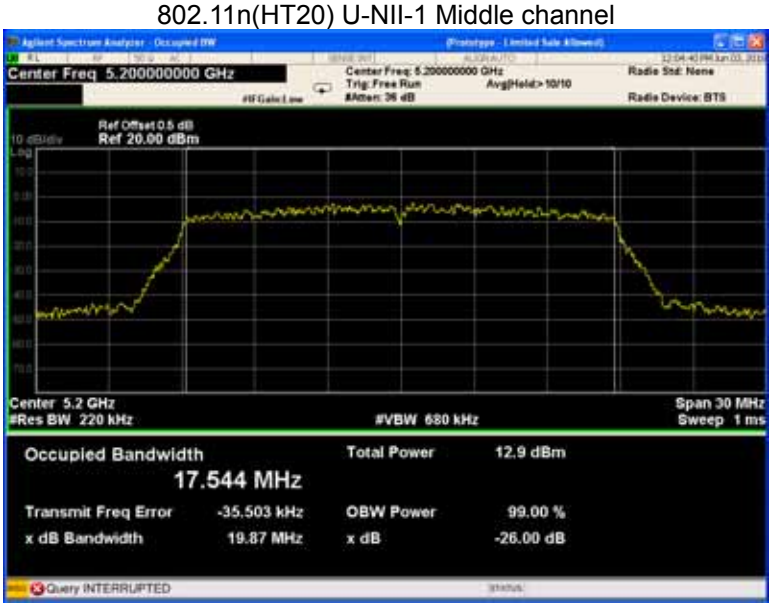
802.11a U-NII-1 Middle channel

802.11a U-NII-1 High channel



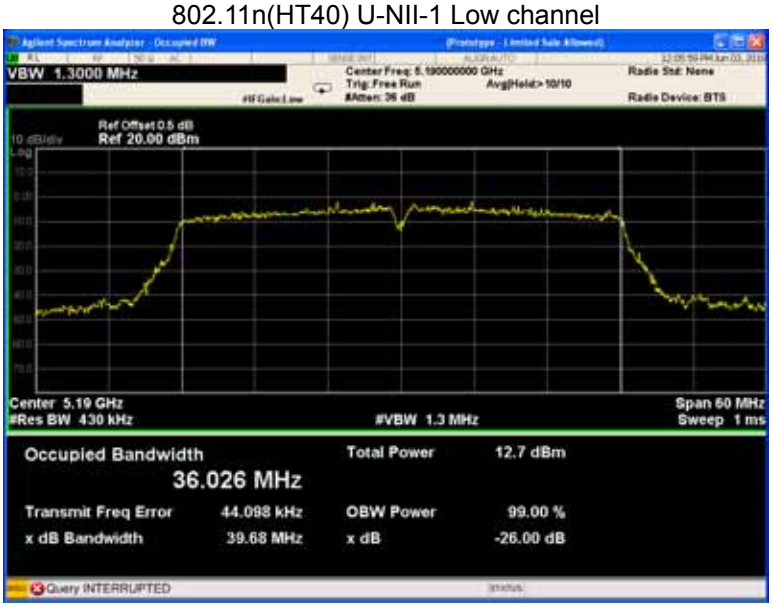
802.11n(HT20) U-NII-1 Low channel

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



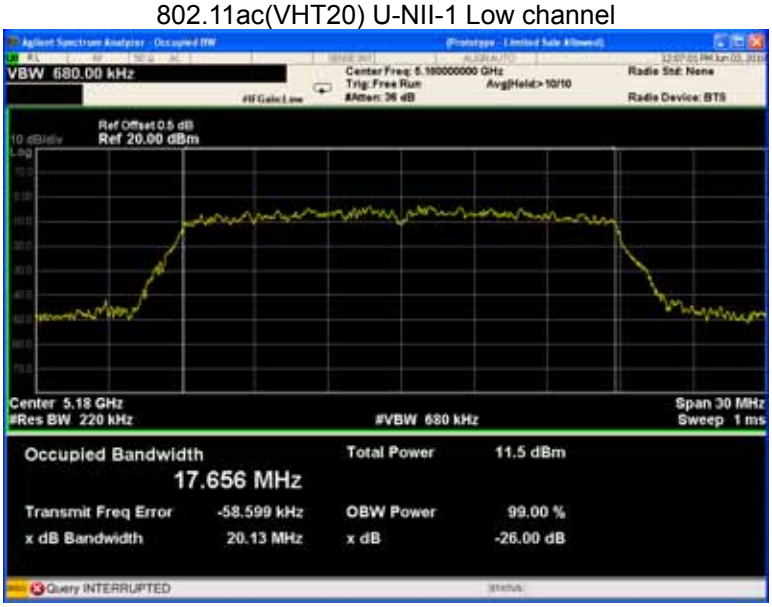
802.11n(HT20) U-NII-1 High channel

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

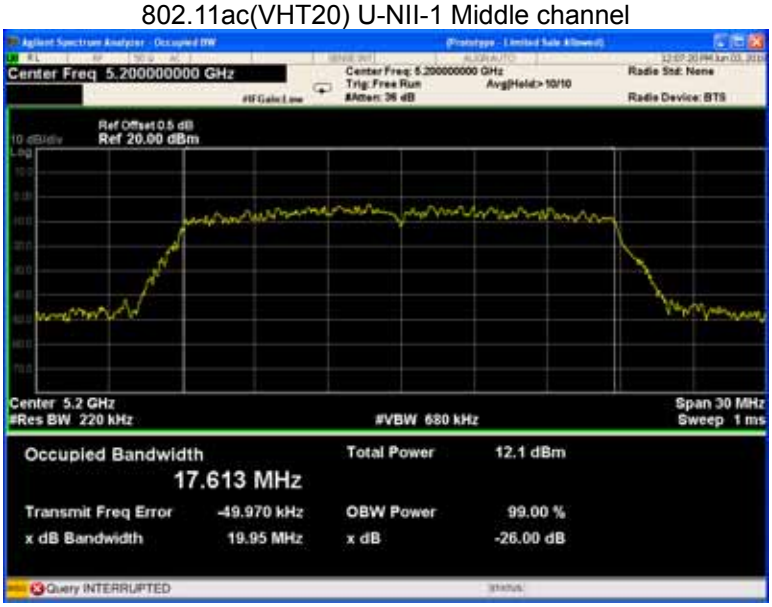


802.11n(HT40) U-NII-1 High channel

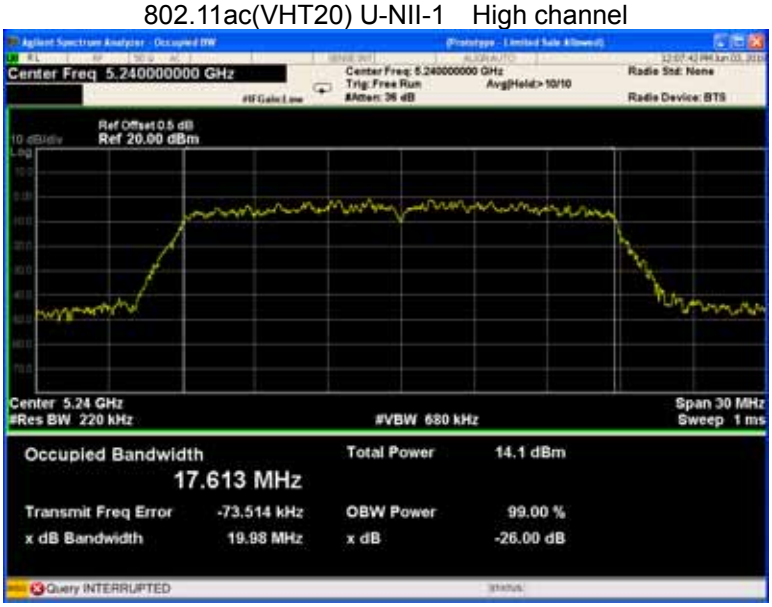
802.11ac(VHT20) U-NII-1 Low channel



802.11ac(VHT20) U-NII-1 Middle channel

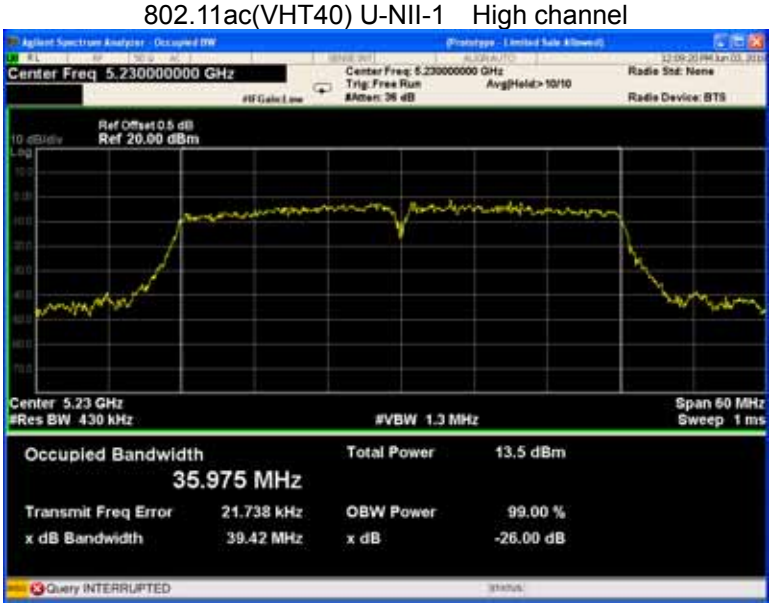


802.11ac(VHT20) U-NII-1 High channel

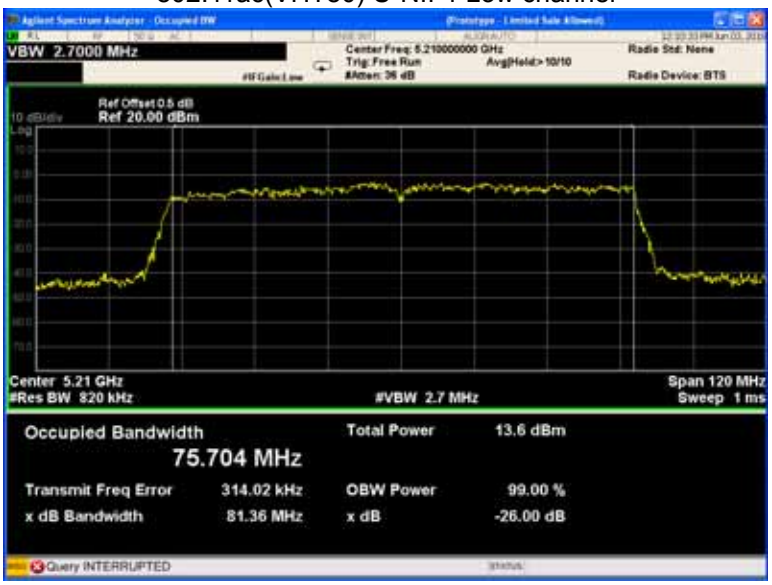


802.11ac(VHT40) U-NII-1 Low channel

802.11ac(VHT40) U-NII-1 High channel



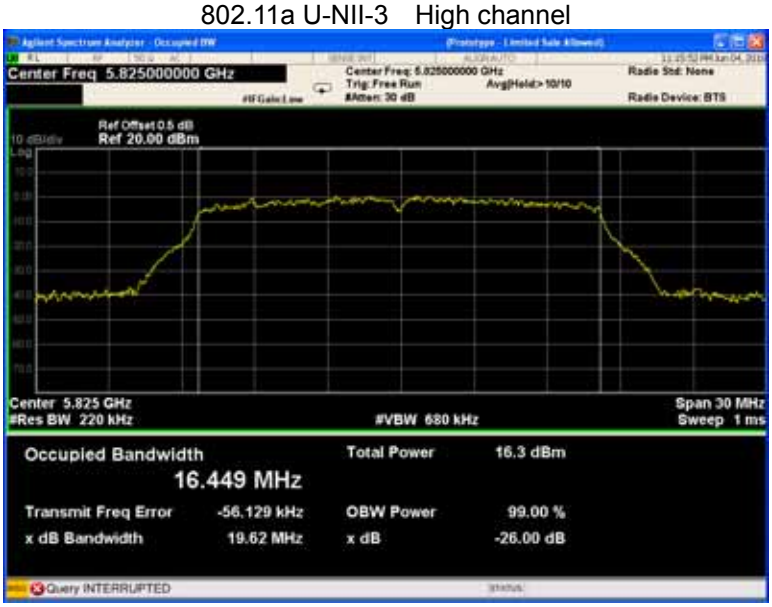
802.11ac(VHT80) U-NII-1 Low channel



802.11a U-NII-3 Low channel

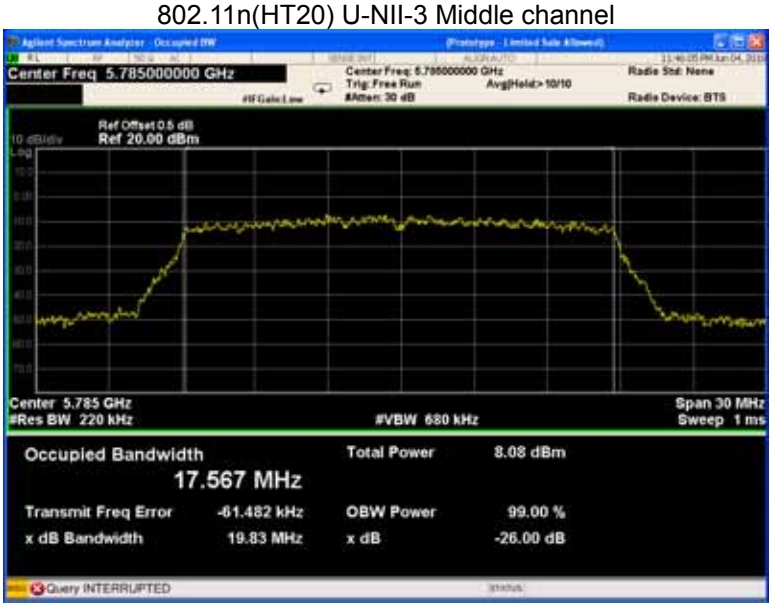
802.11a U-NII-3 Middle channel

802.11a U-NII-3 High channel



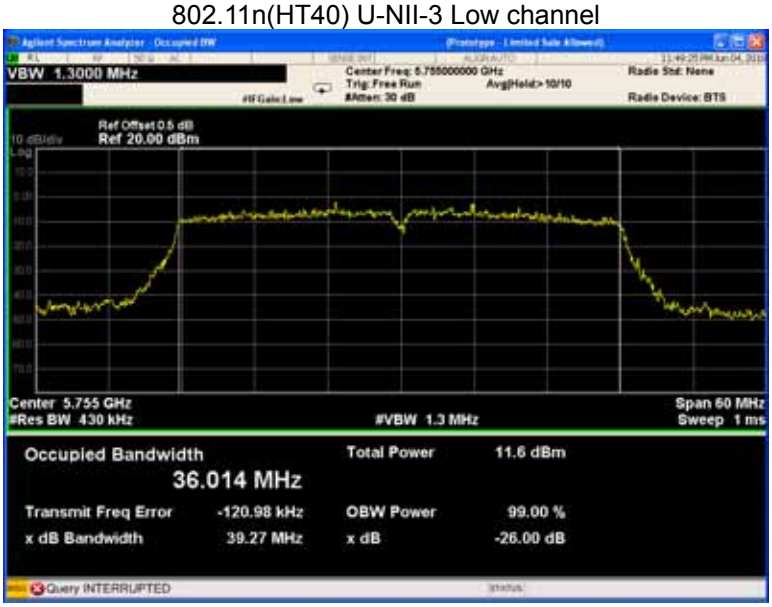
802.11n(HT20) U-NII-3 Low channel

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



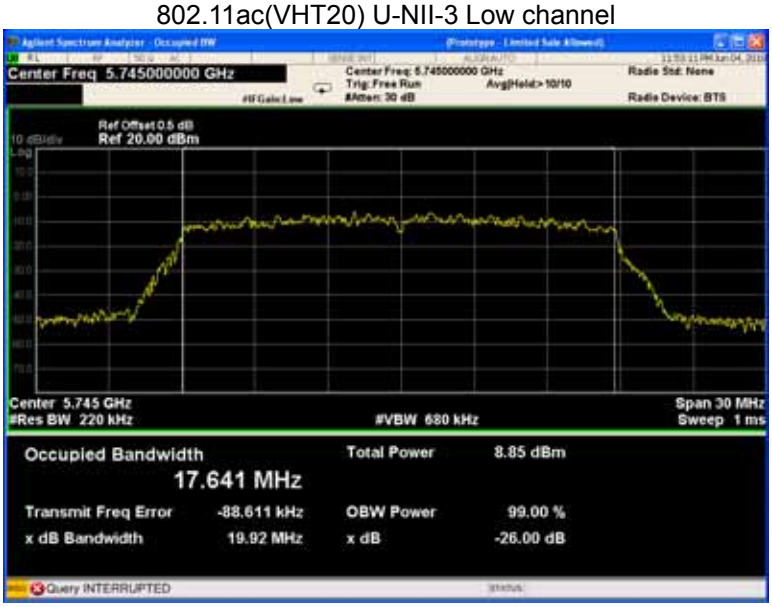
802.11n(HT20) U-NII-3 High channel

802.11n(HT40) U-NII-3 Low channel

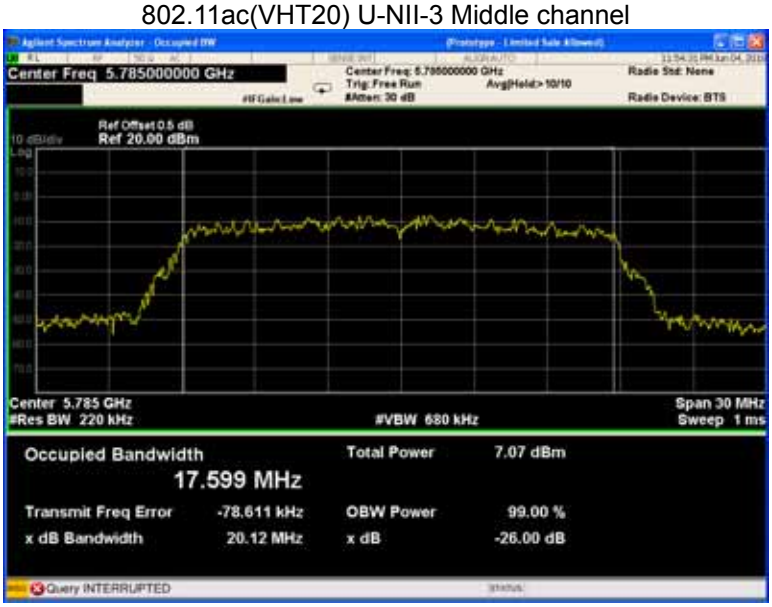


802.11n(HT40) U-NII-3 High channel

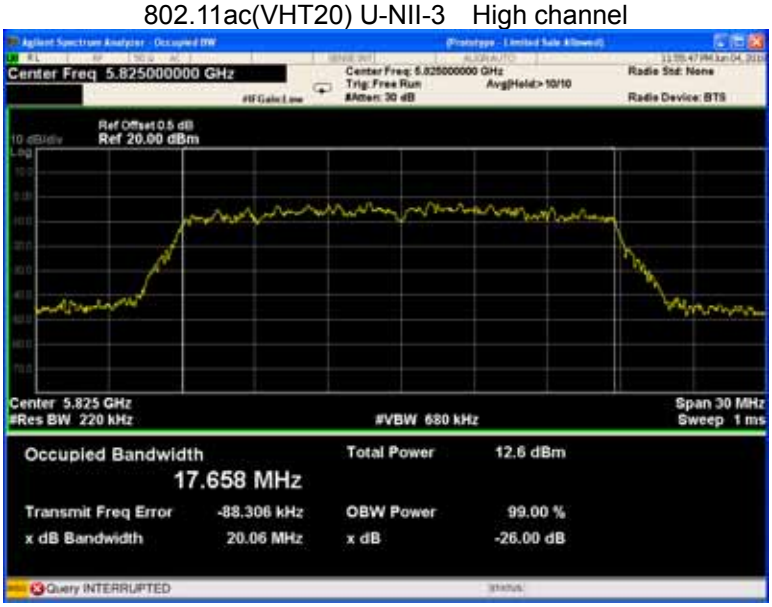
802.11ac(VHT20) U-NII-3 Low channel



802.11ac(VHT20) U-NII-3 Middle channel

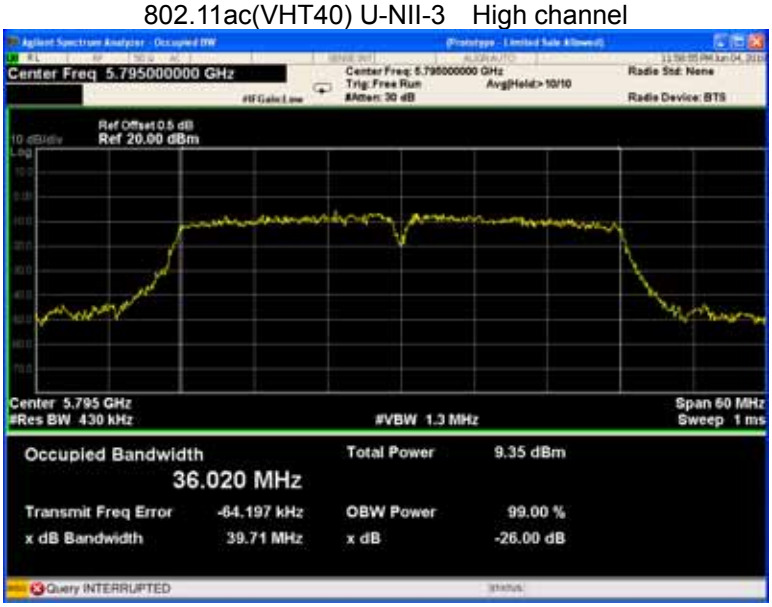


802.11ac(VHT20) U-NII-3 High channel



802.11ac(VHT40) U-NII-3 Low channel

802.11ac(VHT40) U-NII-3 High channel



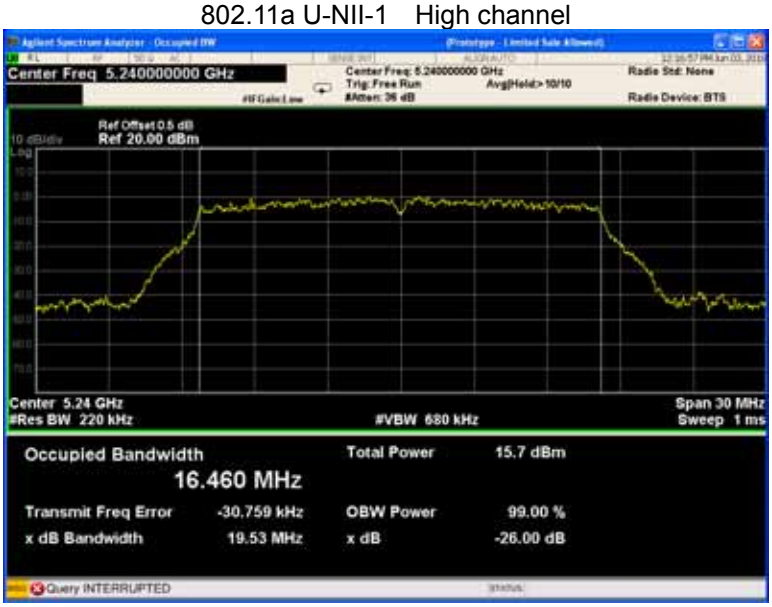
802.11ac(VHT80) U-NII-3 Low channel

ANT4

802.11a U-NII-1 Low channel

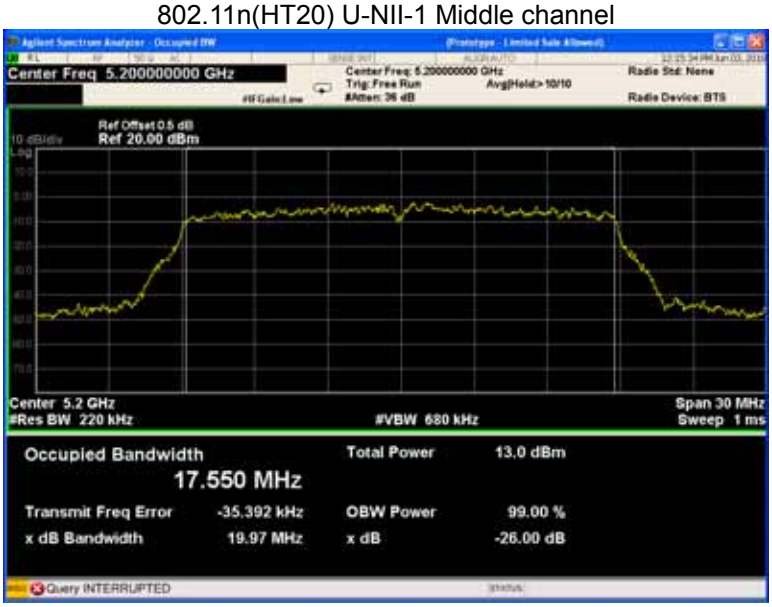
802.11a U-NII-1 Middle channel

802.11a U-NII-1 High channel



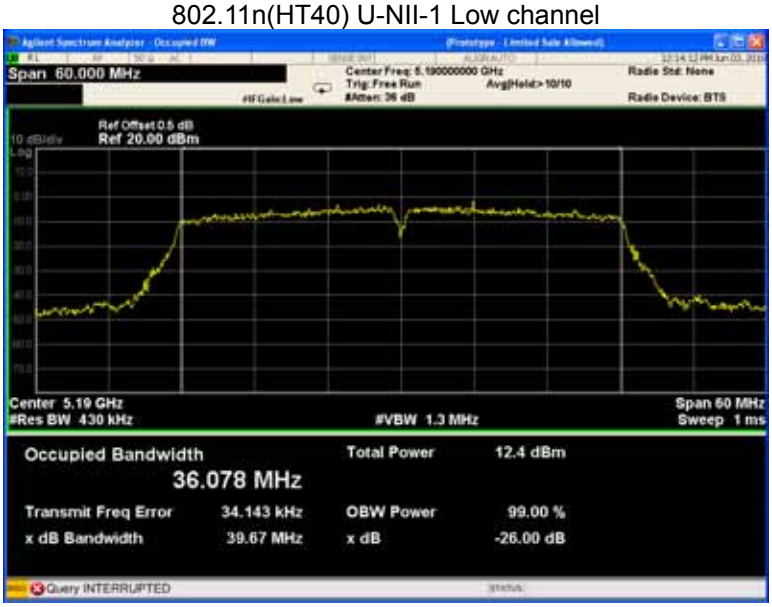
802.11n(HT20) U-NII-1 Low channel

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



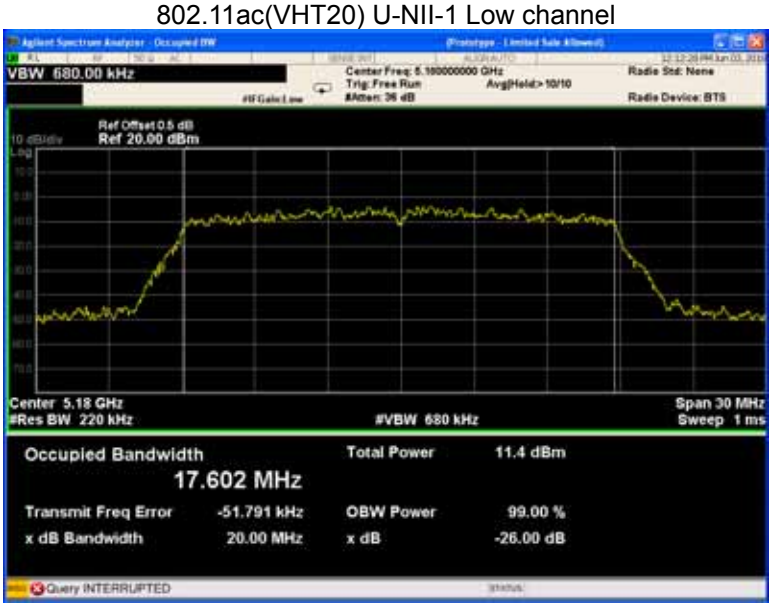
802.11n(HT20) U-NII-1 High channel

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

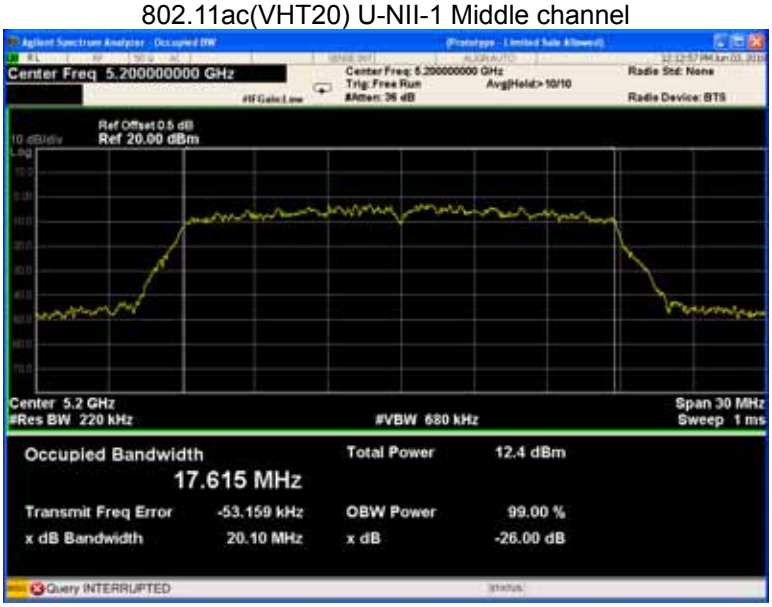


802.11n(HT40) U-NII-1 High channel

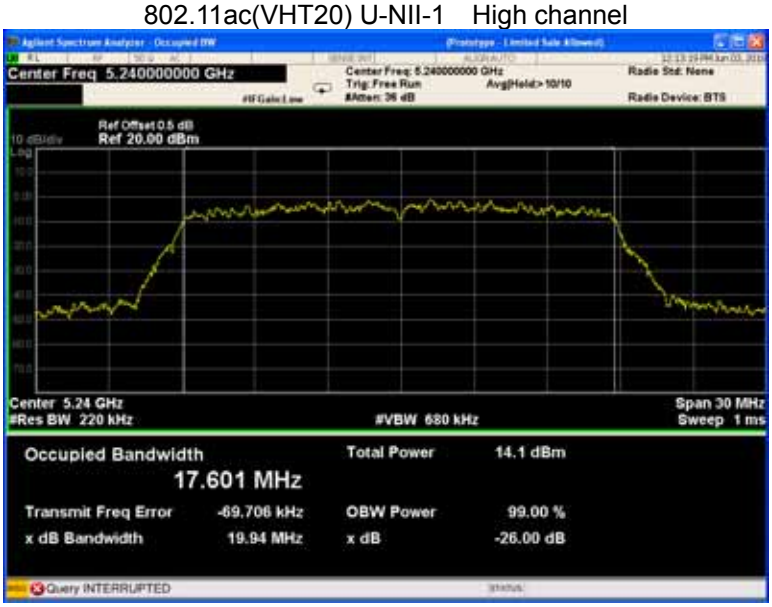
802.11ac(VHT20) U-NII-1 Low channel



802.11ac(VHT20) U-NII-1 Middle channel

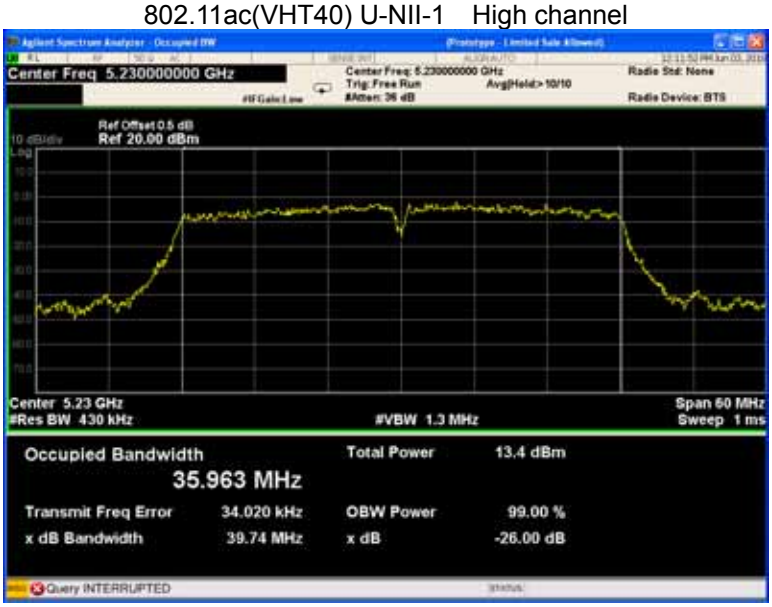


802.11ac(VHT20) U-NII-1 High channel

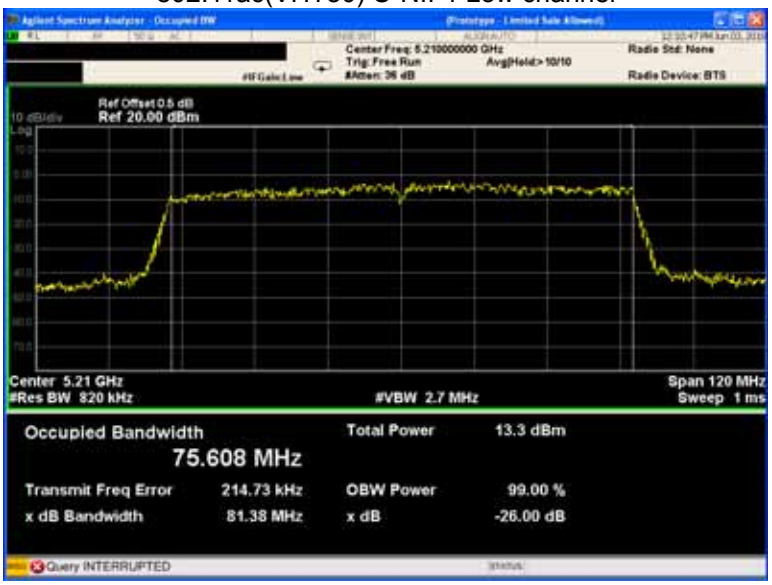


802.11ac(VHT40) U-NII-1 Low channel

802.11ac(VHT40) U-NII-1 High channel



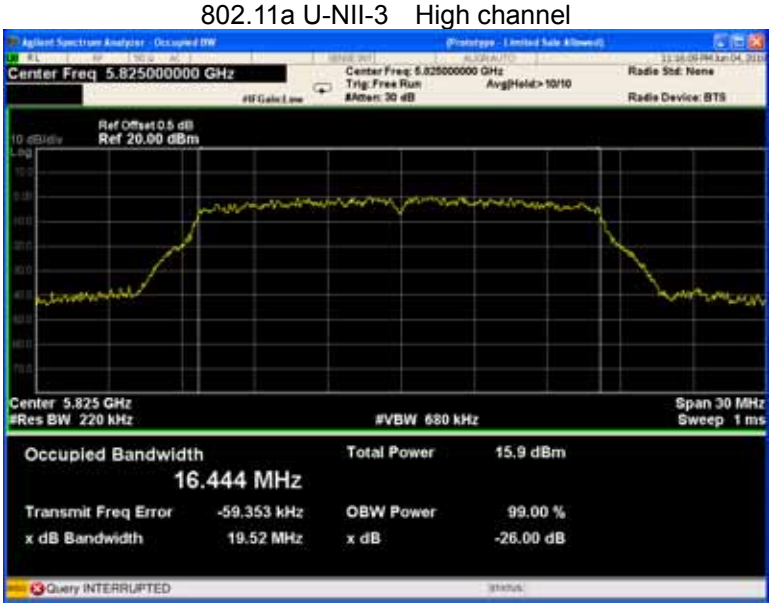
802.11ac(VHT80) U-NII-1 Low channel



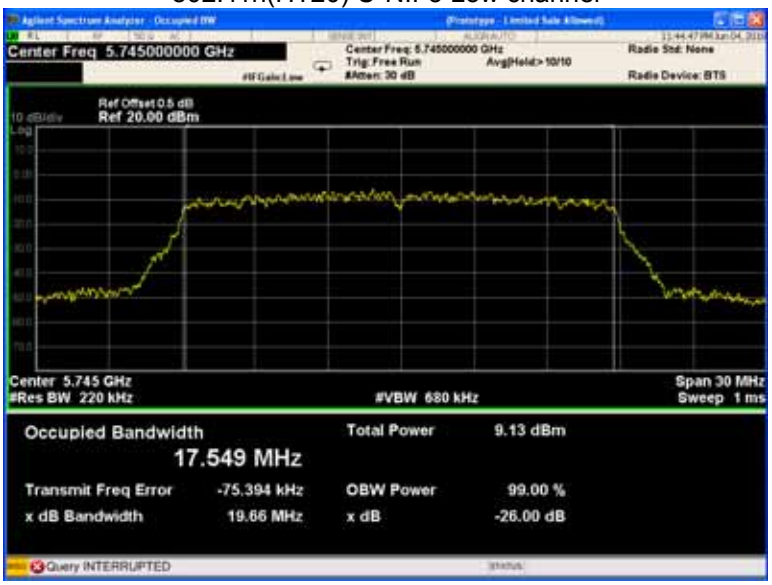
802.11a U-NII-3 Low channel

802.11a U-NII-3 Middle channel

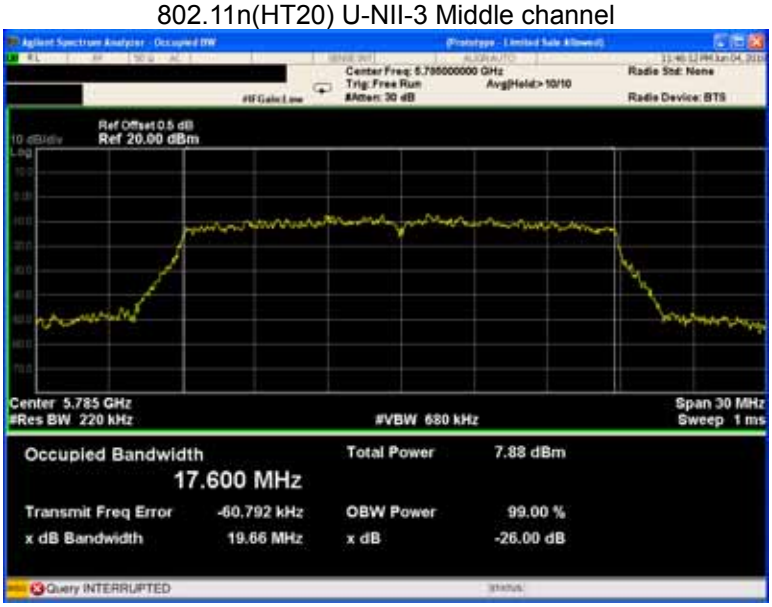
802.11a U-NII-3 High channel



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

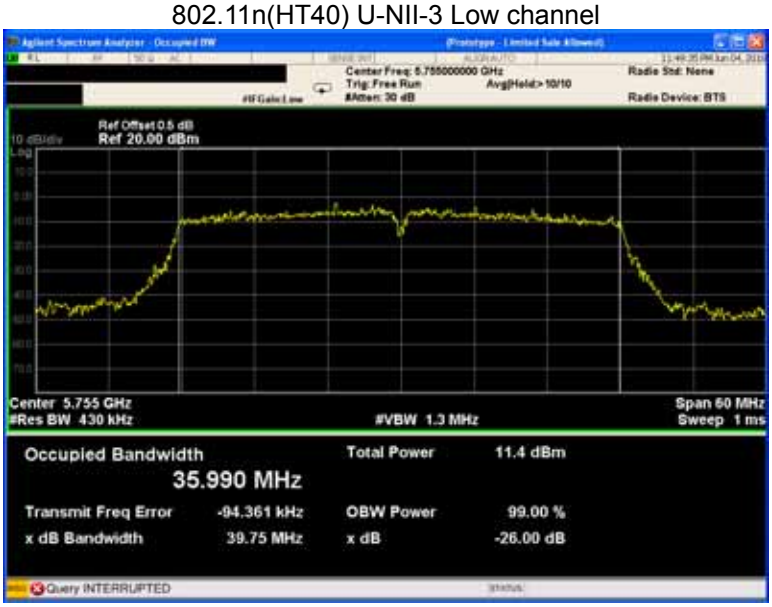


802.11n(HT20) U-NII-3 Middle channel



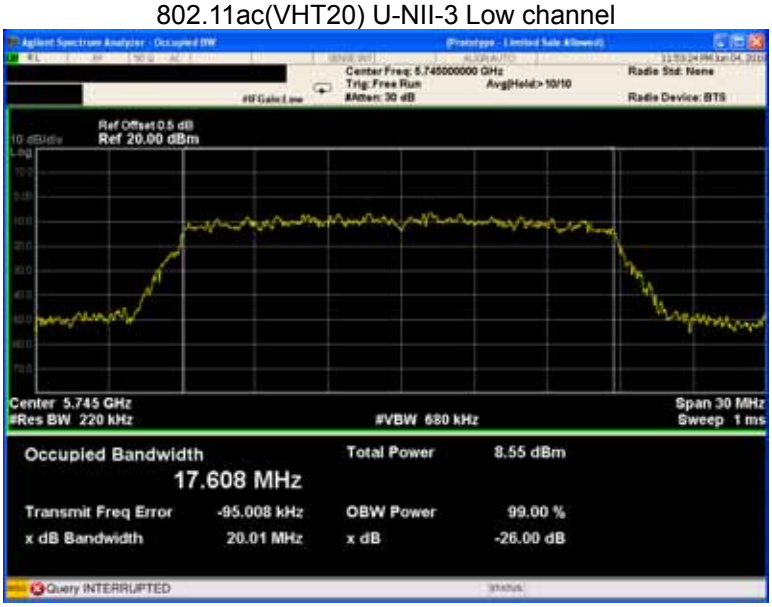
802.11n(HT20) U-NII-3 High channel

802.11n(HT40) U-NII-3 Low channel

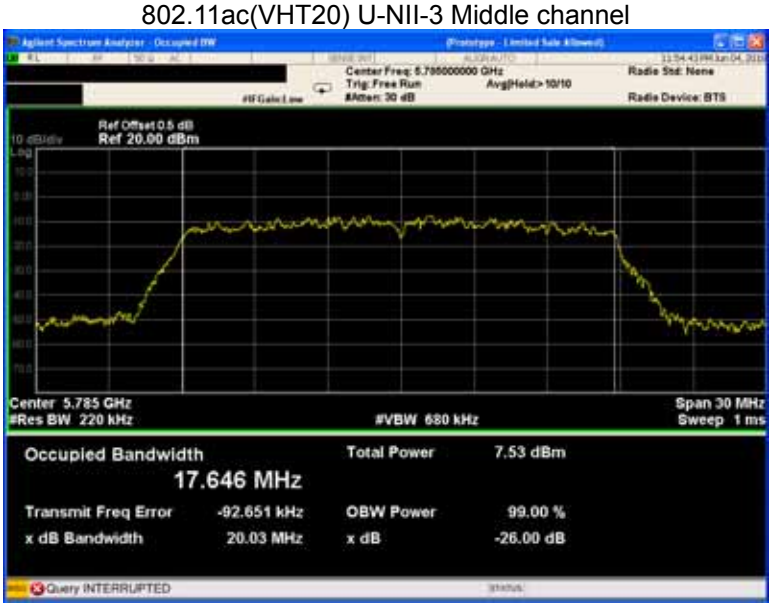


802.11n(HT40) U-NII-3 High channel

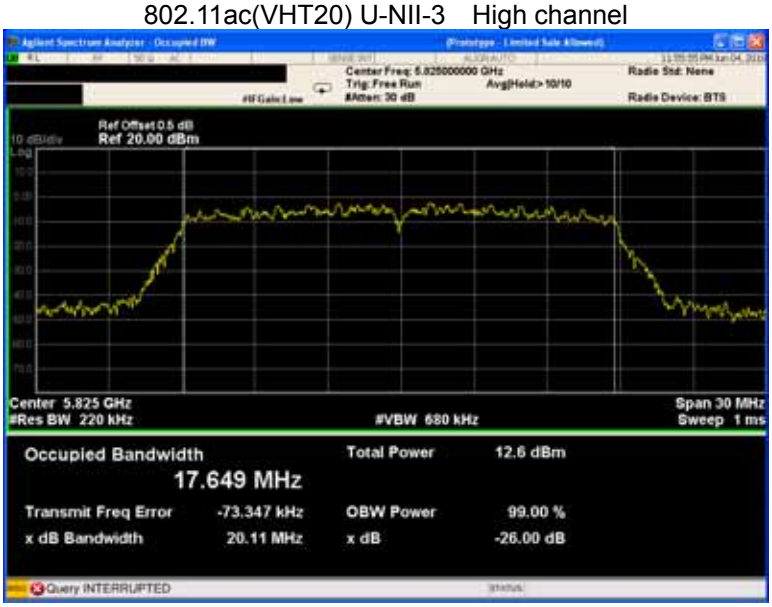
802.11ac(VHT20) U-NII-3 Low channel



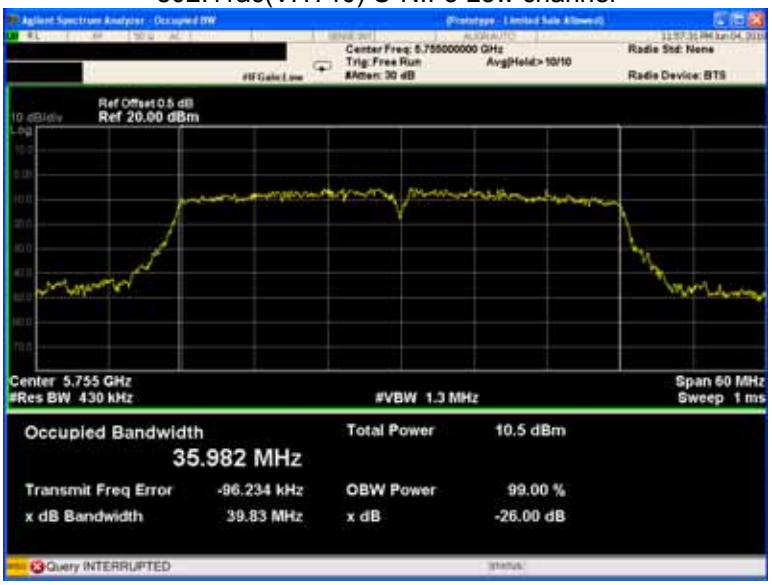
802.11ac(VHT20) U-NII-3 Middle channel



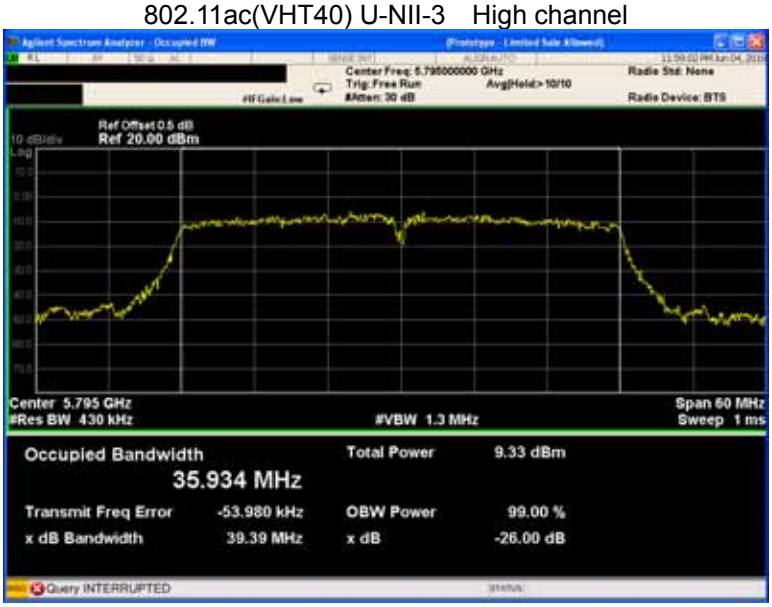
802.11ac(VHT20) U-NII-3 High channel



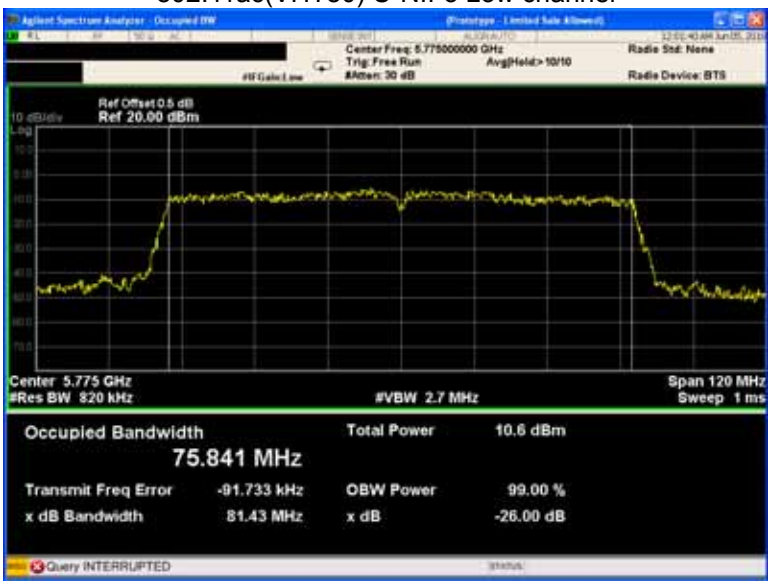
802.11ac(VHT40) U-NII-3 Low channel



802.11ac(VHT40) U-NII-3 High channel



802.11ac(VHT80) U-NII-3 Low channel

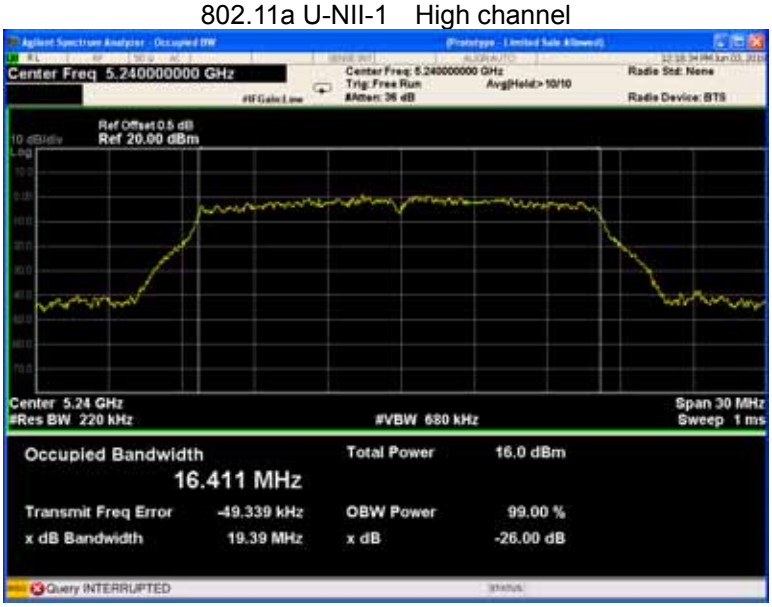


ANT5

802.11a U-NII-1 Low channel

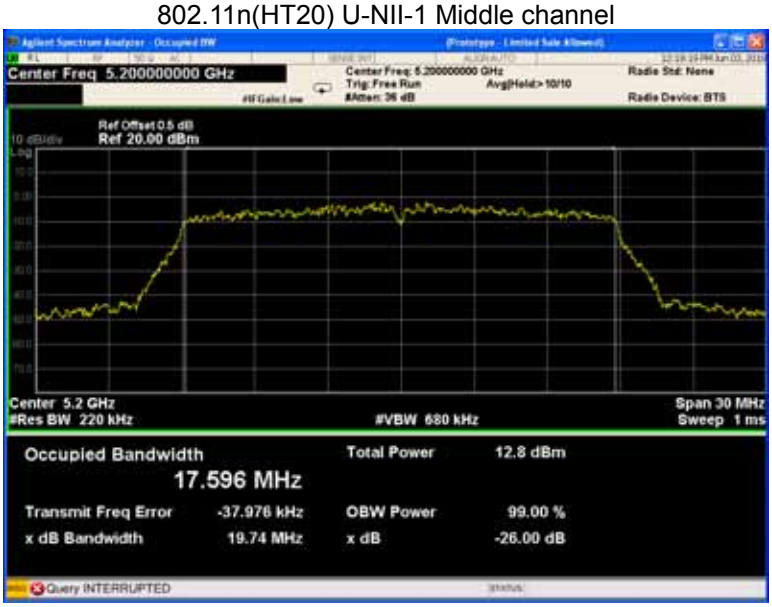
802.11a U-NII-1 Middle channel

802.11a U-NII-1 High channel



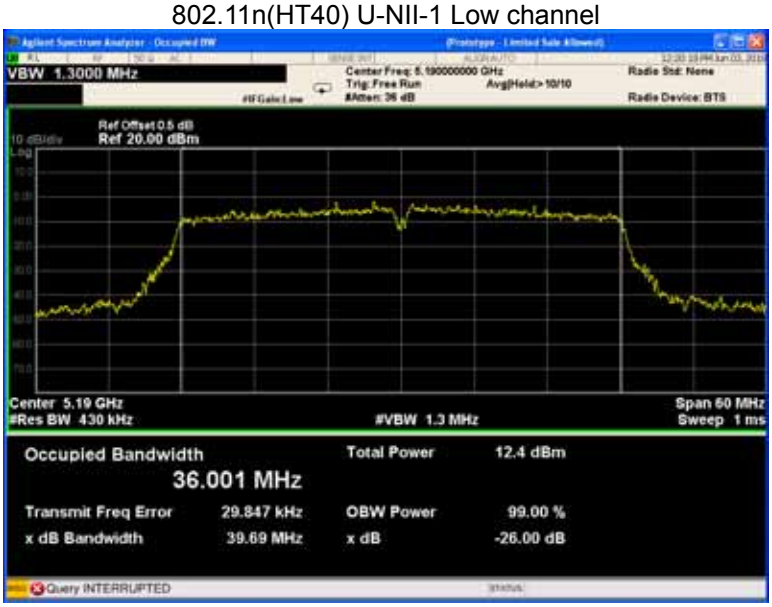
802.11n(HT20) U-NII-1 Low channel

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



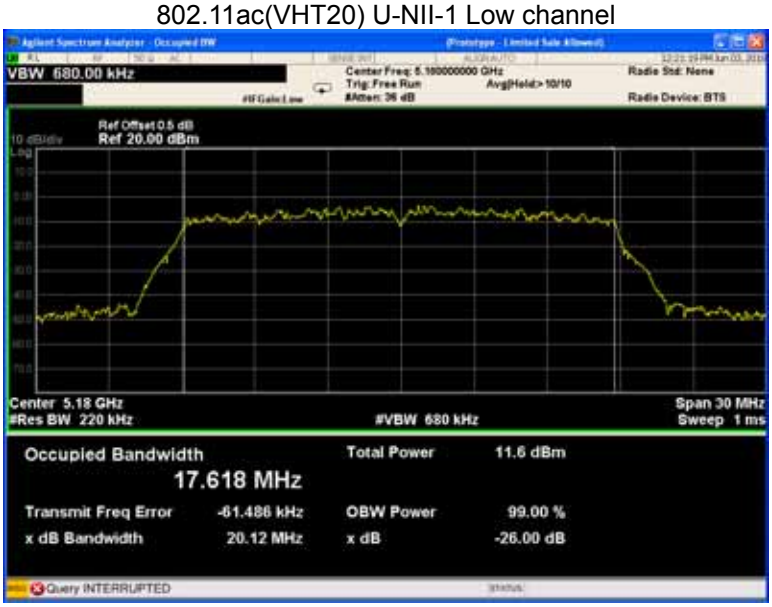
802.11n(HT20) U-NII-1 High channel

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

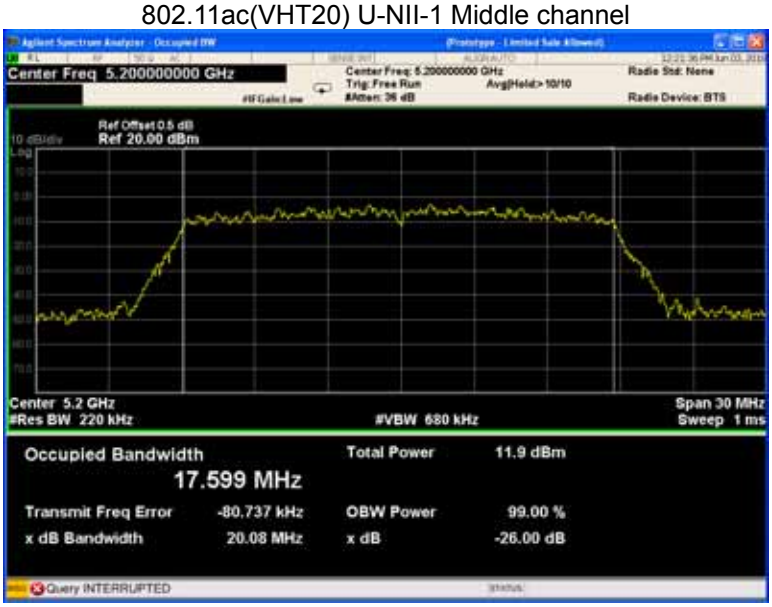


802.11n(HT40) U-NII-1 High channel

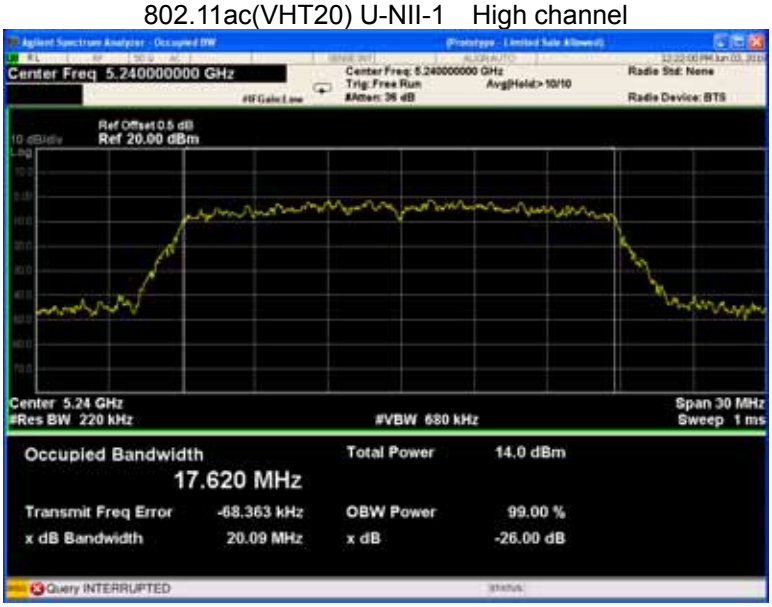
802.11ac(VHT20) U-NII-1 Low channel



802.11ac(VHT20) U-NII-1 Middle channel

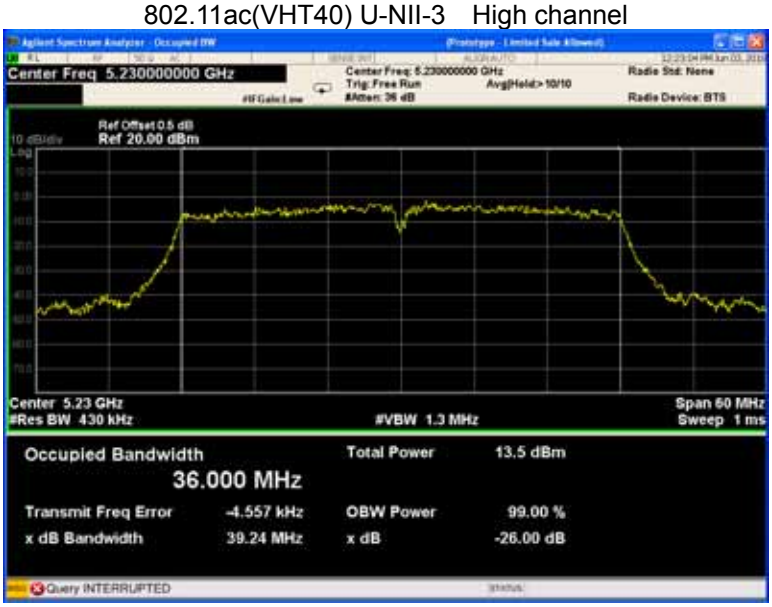


802.11ac(VHT20) U-NII-1 High channel

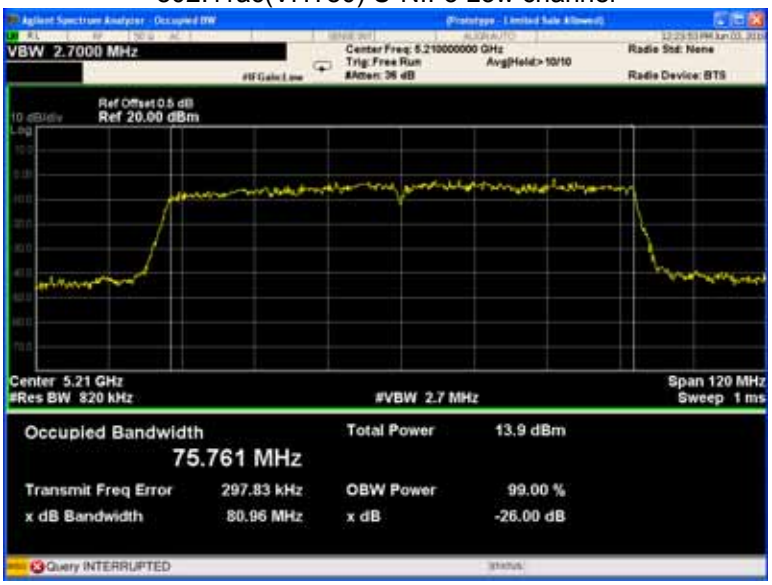


802.11ac(VHT40) U-NII-1 Low channel

802.11ac(VHT40) U-NII-3 High channel



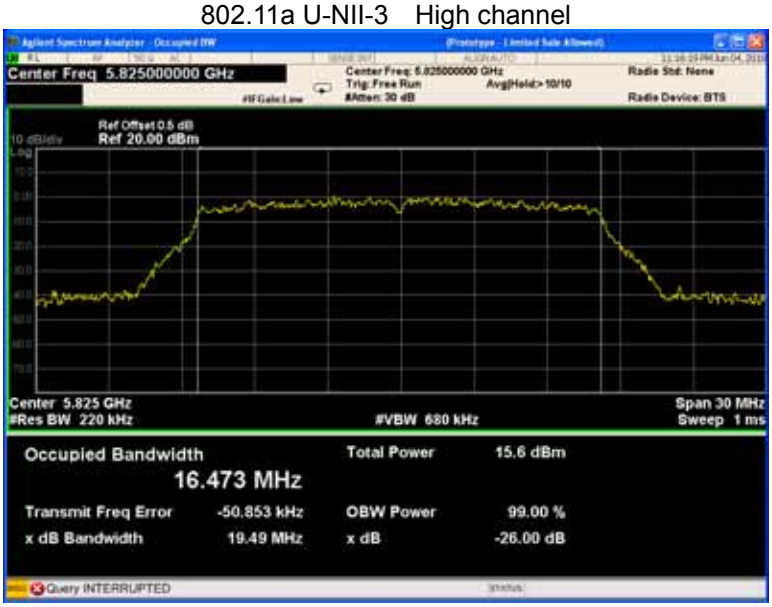
802.11ac(VHT80) U-NII-3 Low channel



802.11a U-NII-3 Low channel

802.11a U-NII-3 Middle channel

802.11a U-NII-3 High channel



802.11n(VHT20) U-NII-3 Low channel