Annex B-Test Data

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1. Duty cycle

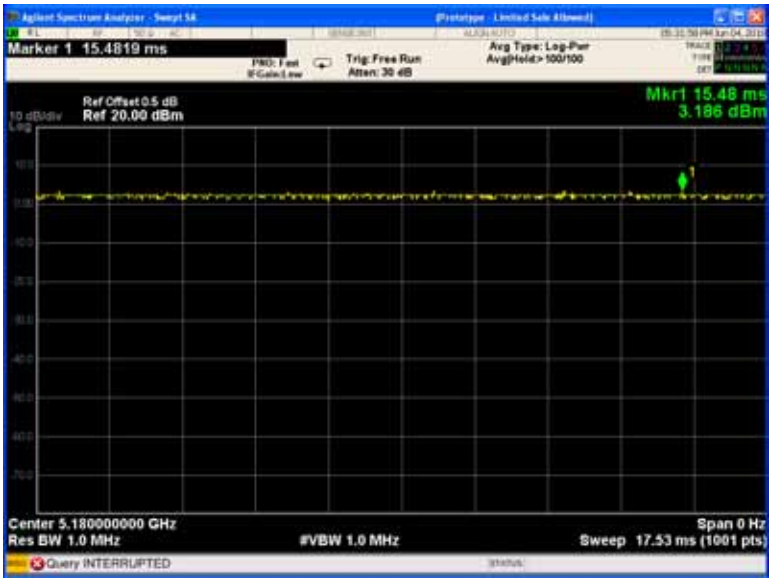
1.1. Summary of Test Results

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

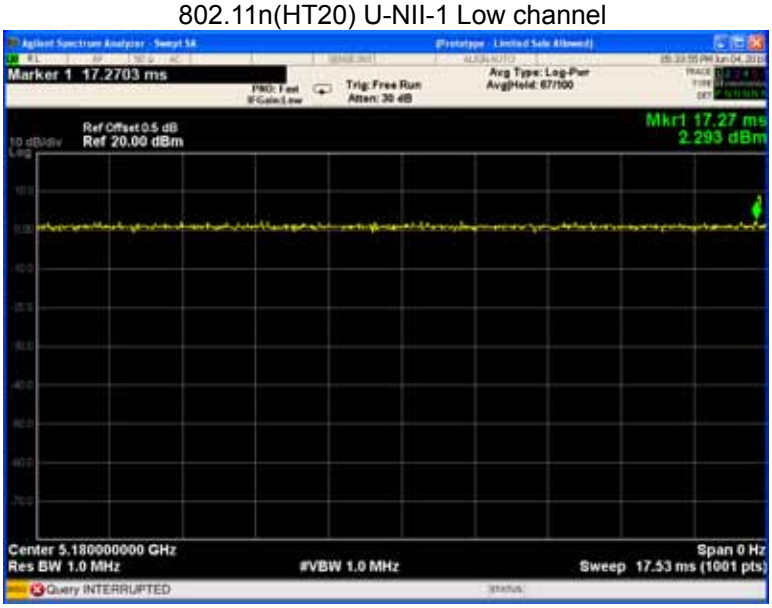
Test result plots shown as follows:

ANT3

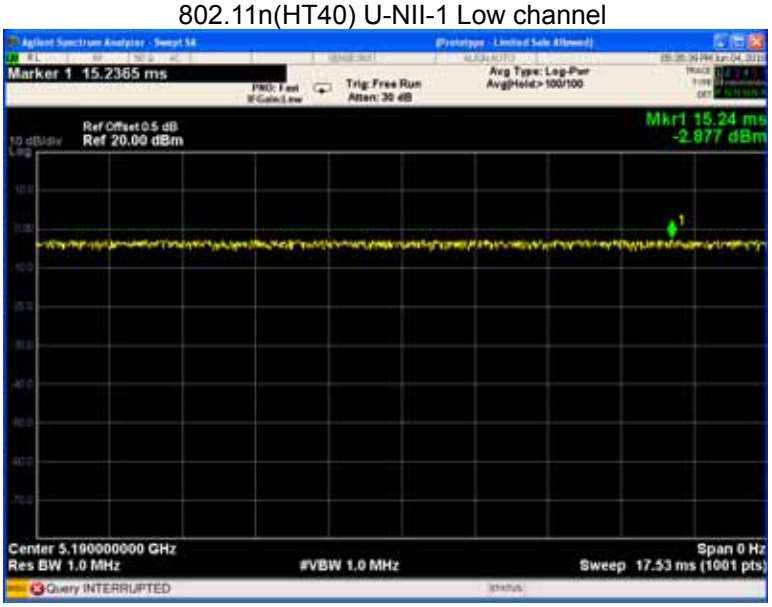
802.11a U-NII-1 Low channel



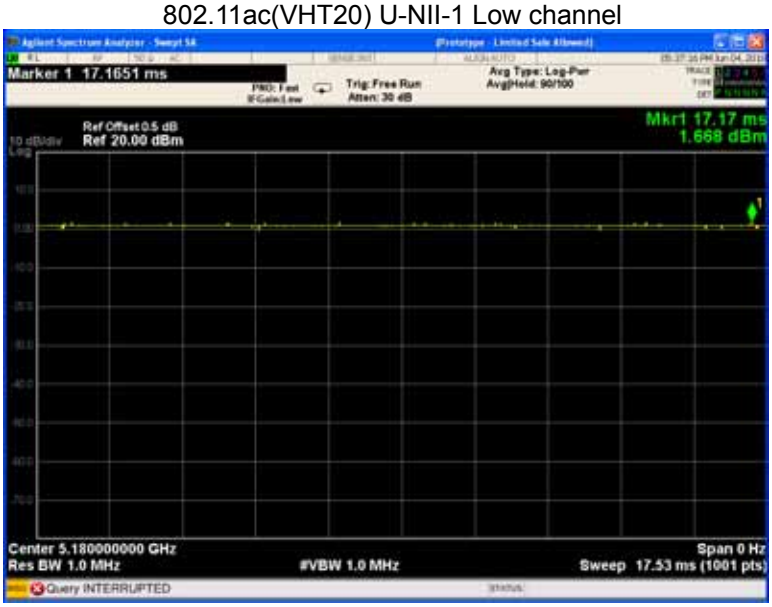
802.11n(HT20) U-NII-1 Low channel



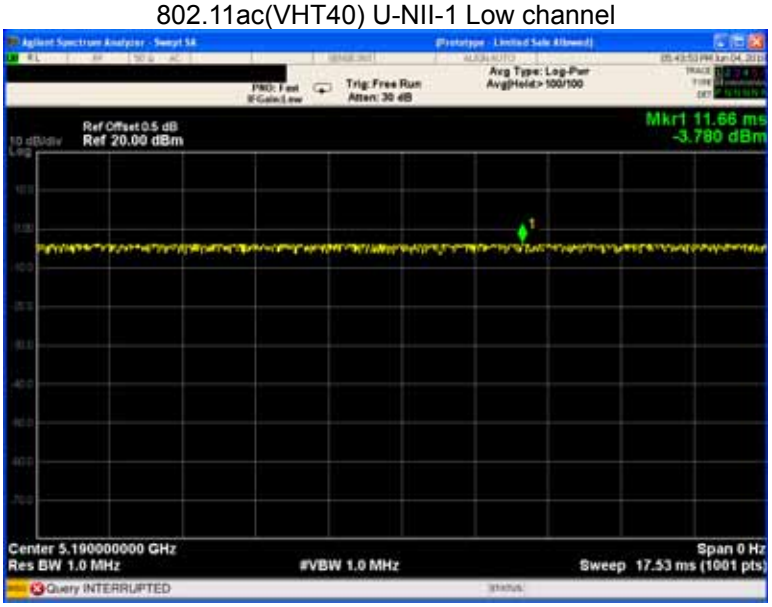
802.11n(HT40) U-NII-1 Low channel



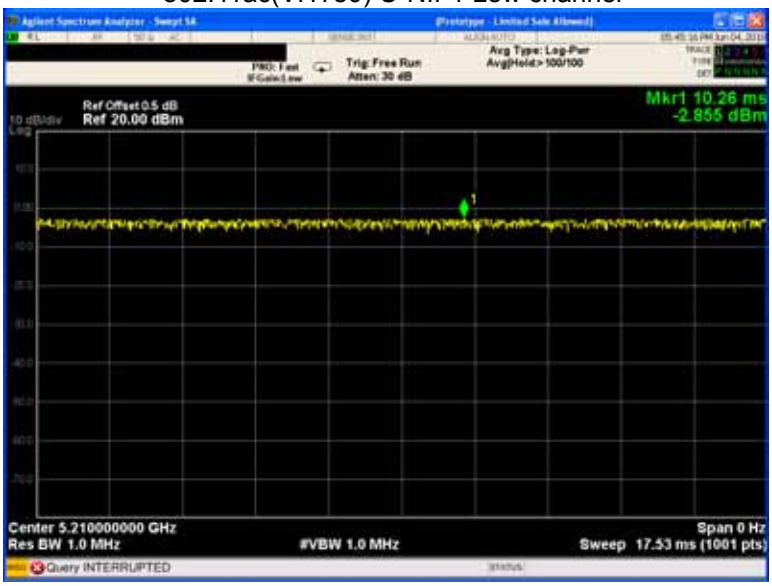
802.11ac(VHT20) U-NII-1 Low channel



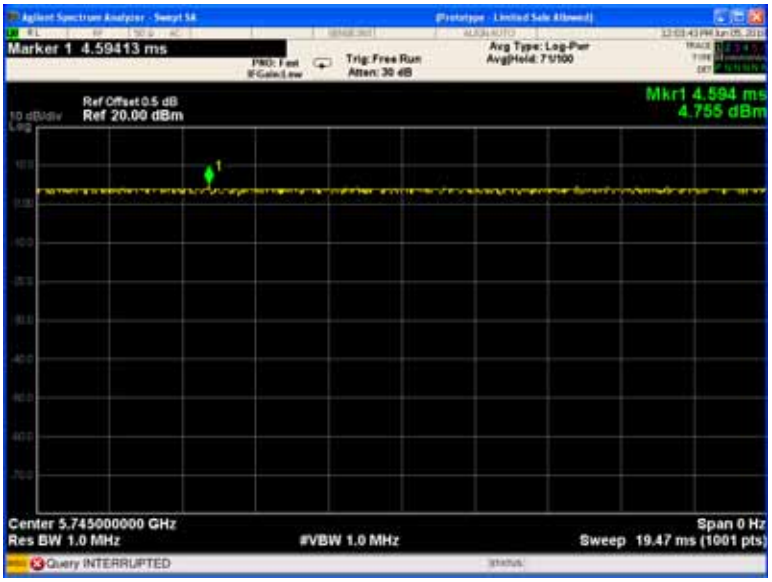
802.11ac(VHT40) U-NII-1 Low channel



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

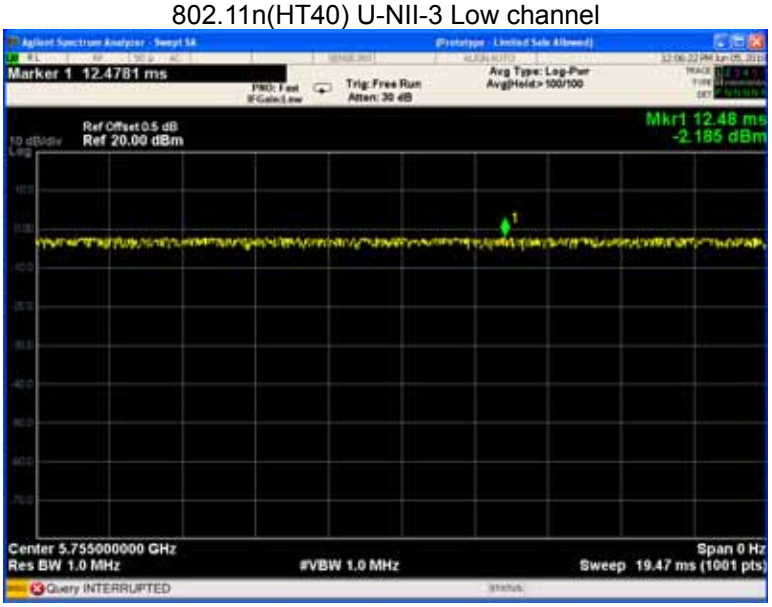


802.11a U-NII-3 Low channel



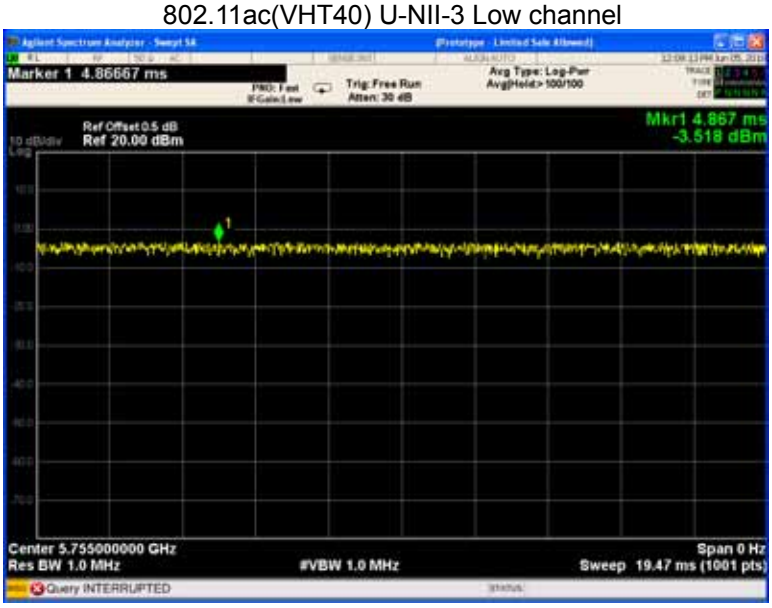
802.11n(HT20) U-NII-3 Low channel

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

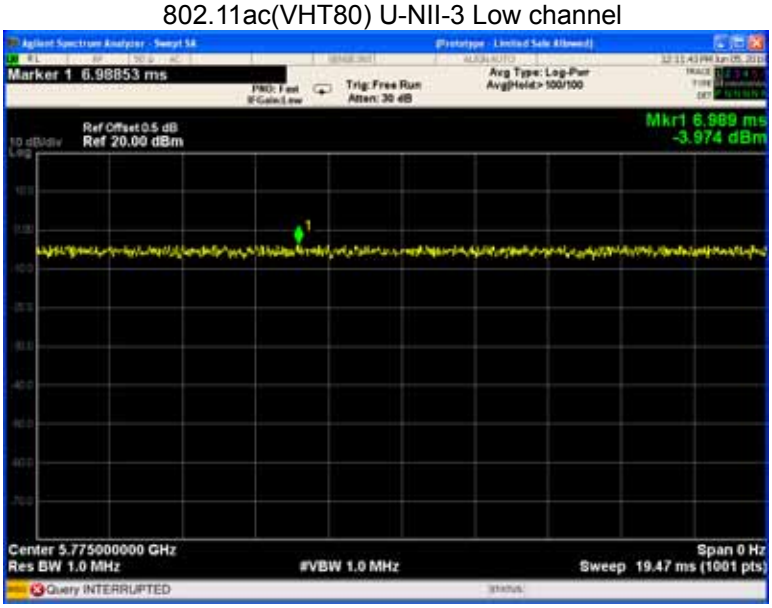


802.11ac(VHT20) U-NII-3 Low channel

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



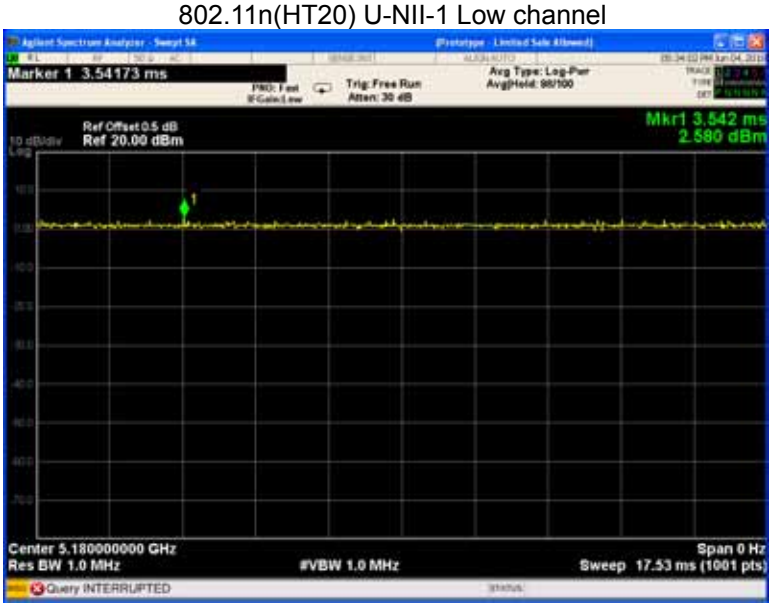
802.11ac(VHT80) U-NII-3 Low channel



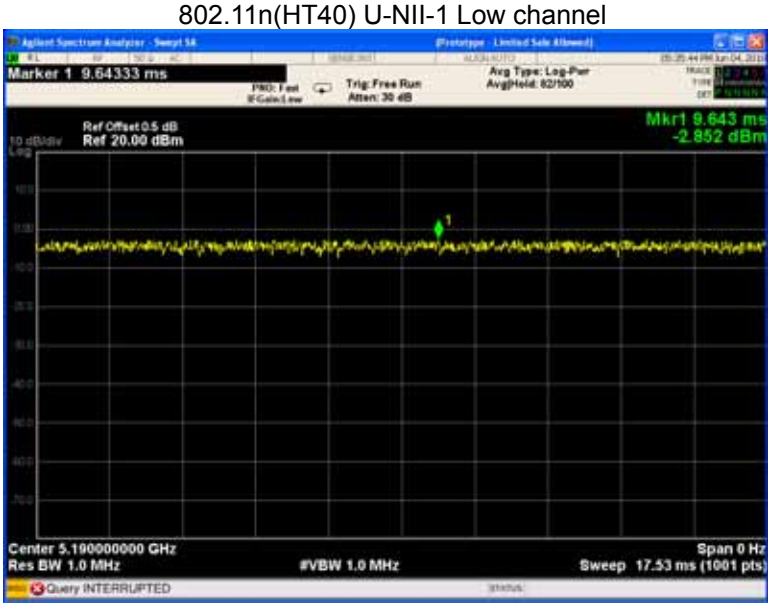
ANT4

802.11a U-NII-1 Low channel

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

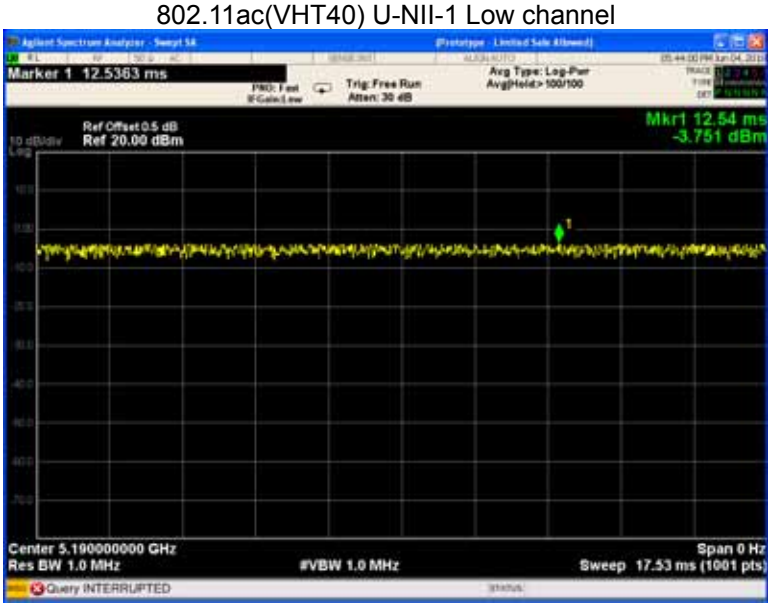


802.11n(HT40) U-NII-1 Low channel



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

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

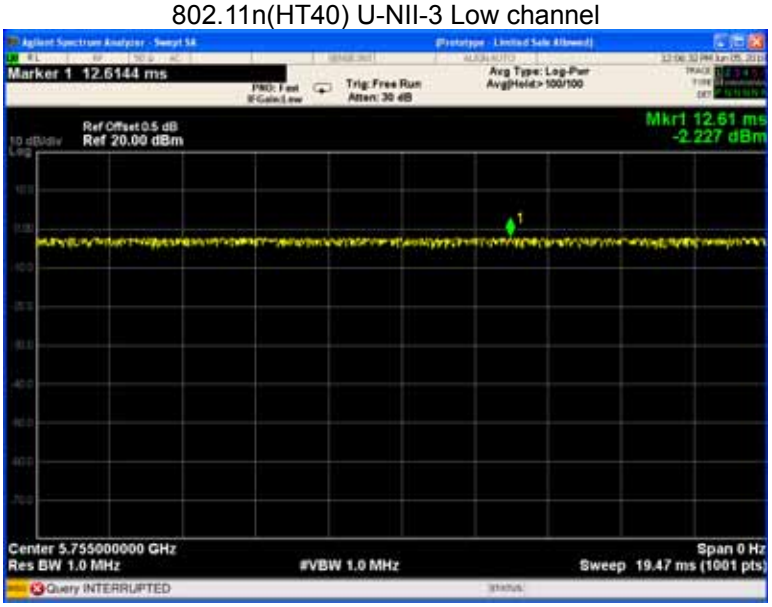


802.11ac(VHT80) U-NII-1 Low channel

802.11a U-NII-3 Low channel

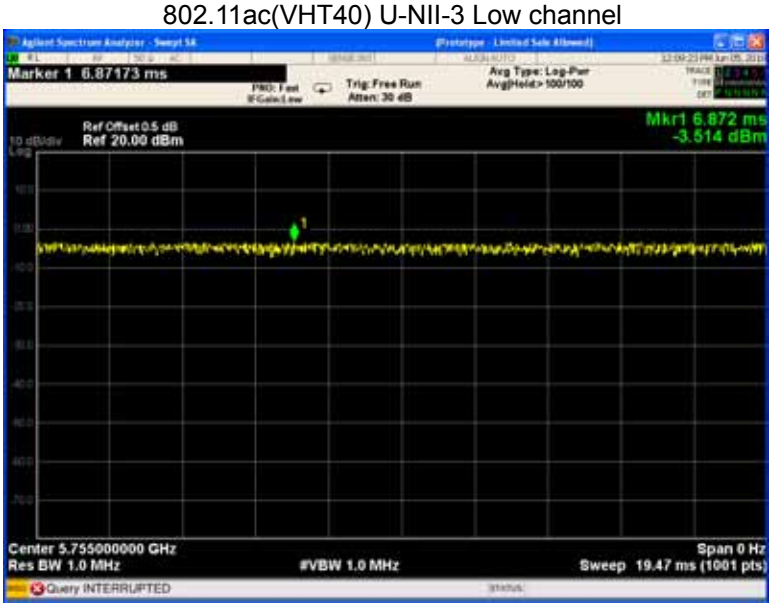
802.11n(HT20) U-NII-3 Low channel

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



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

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



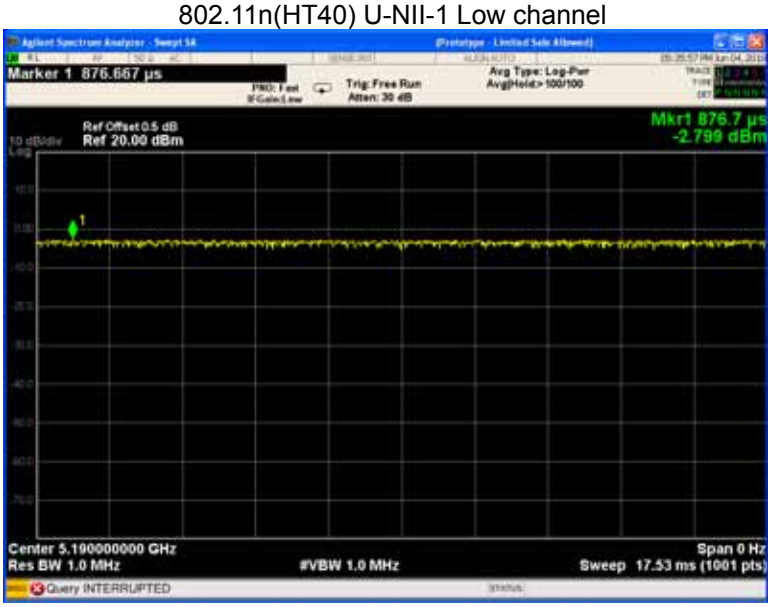
802.11ac(VHT80) U-NII-3 Low channel

ANT5

802.11a U-NII-1 Low channel

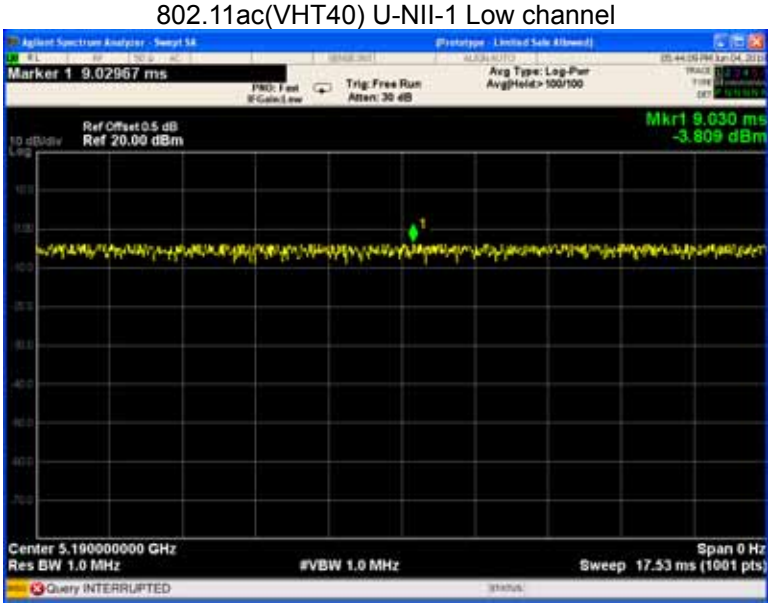
802.11n(HT20) U-NII-1 Low channel

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

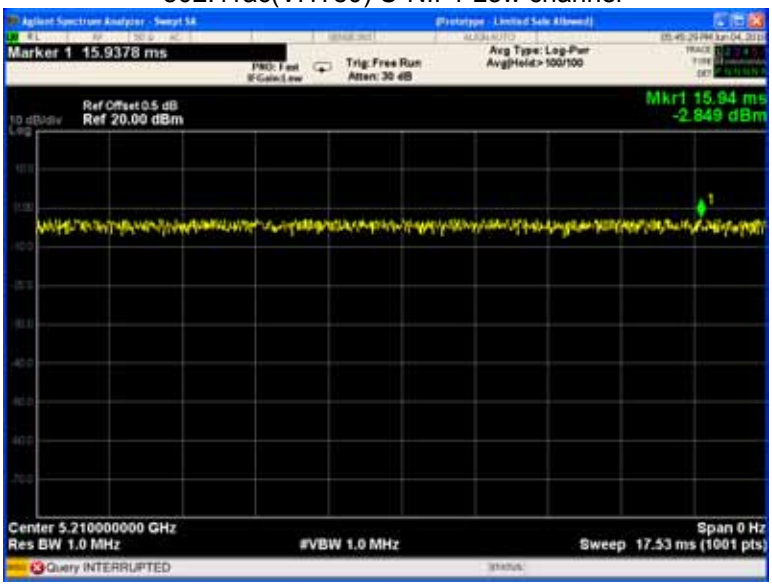


802.11ac(VHT20) U-NII-1 Low channel

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

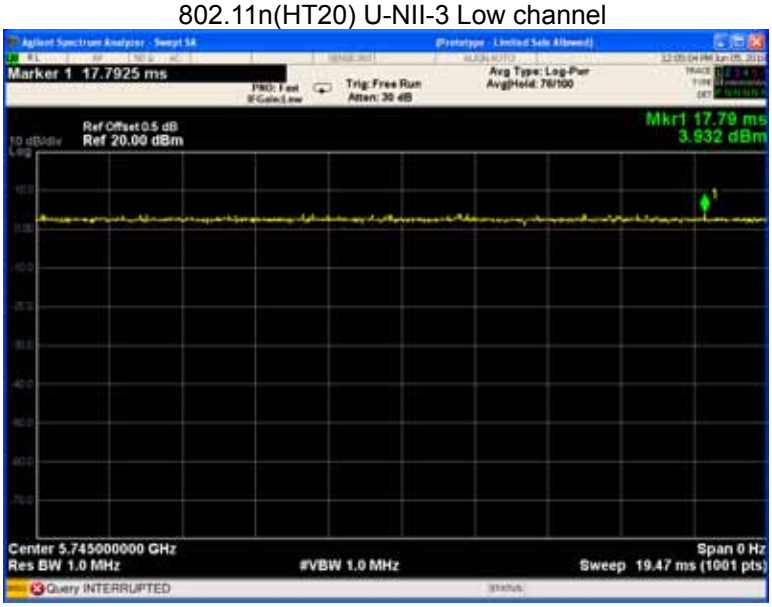


802.11ac(VHT80) U-NII-1 Low channel

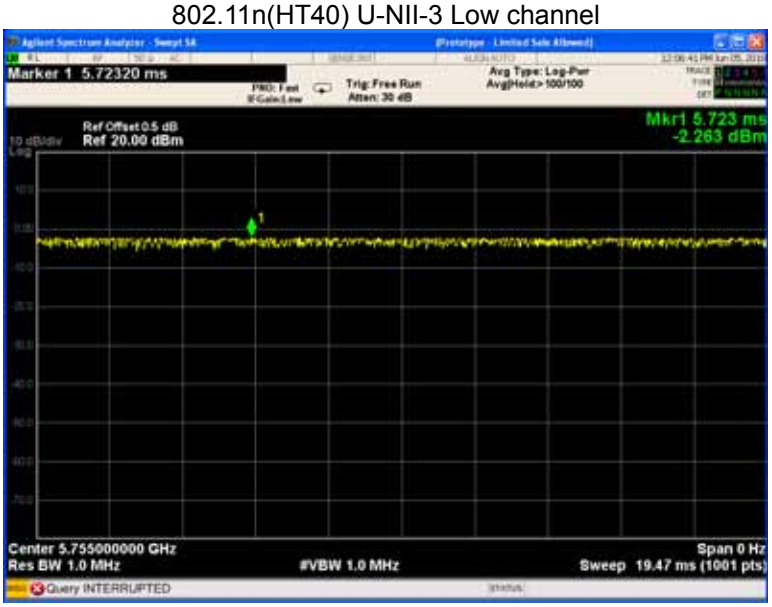


802.11a U-NII-3 Low channel

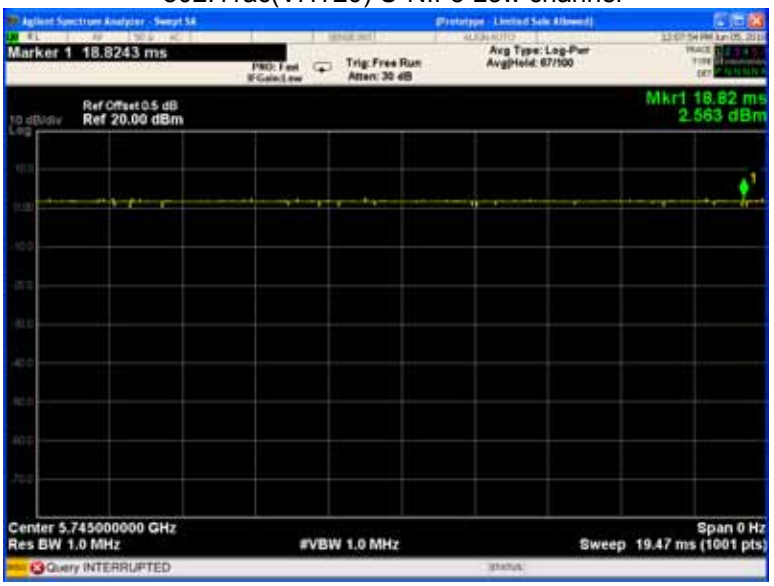
802.11n(HT20) U-NII-3 Low channel



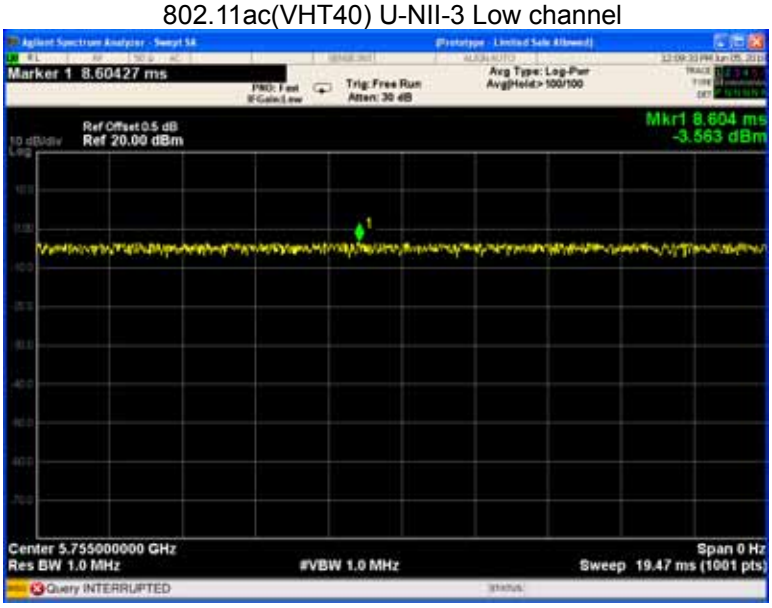
802.11n(HT40) U-NII-3 Low channel



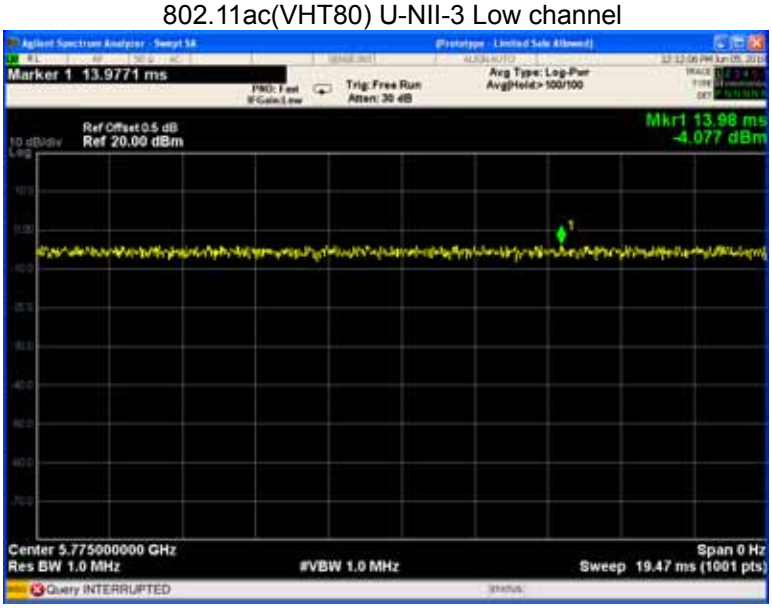
802.11ac(VHT20) U-NII-3 Low channel



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



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



ANT6

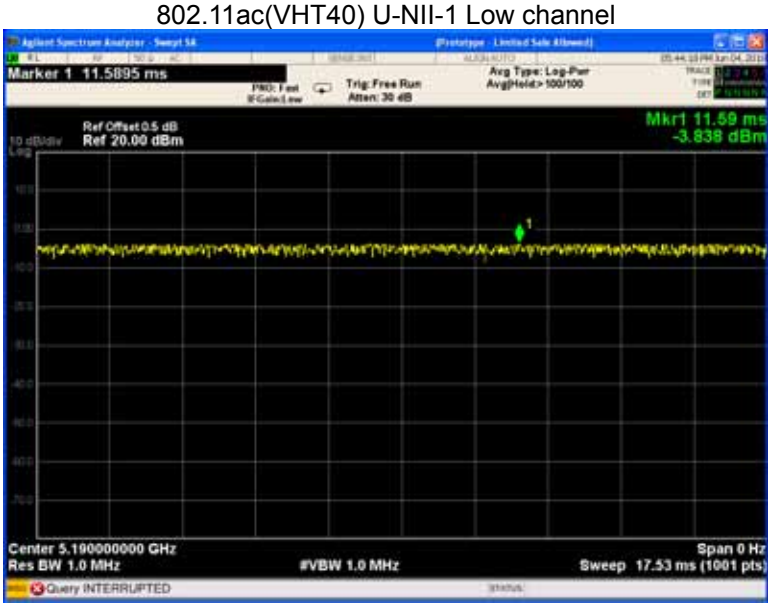
802.11a U-NII-1 Low channel

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

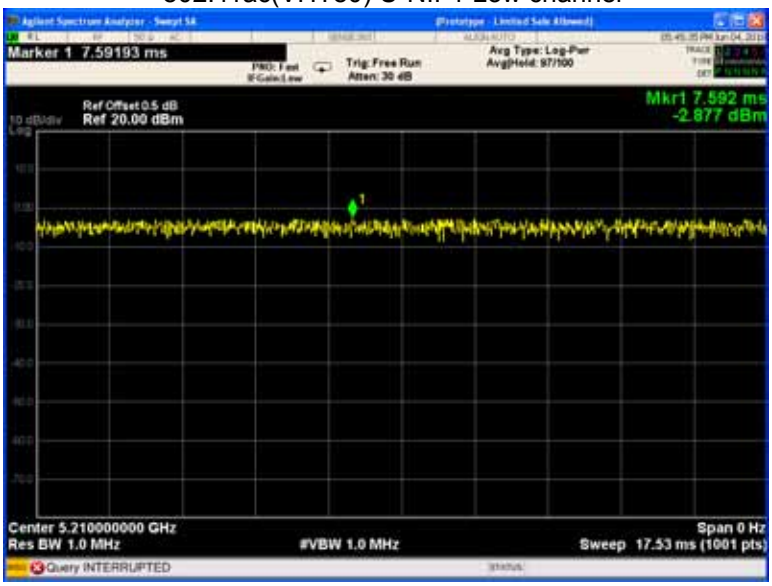
802.11n(HT40) U-NII-1 Low channel

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

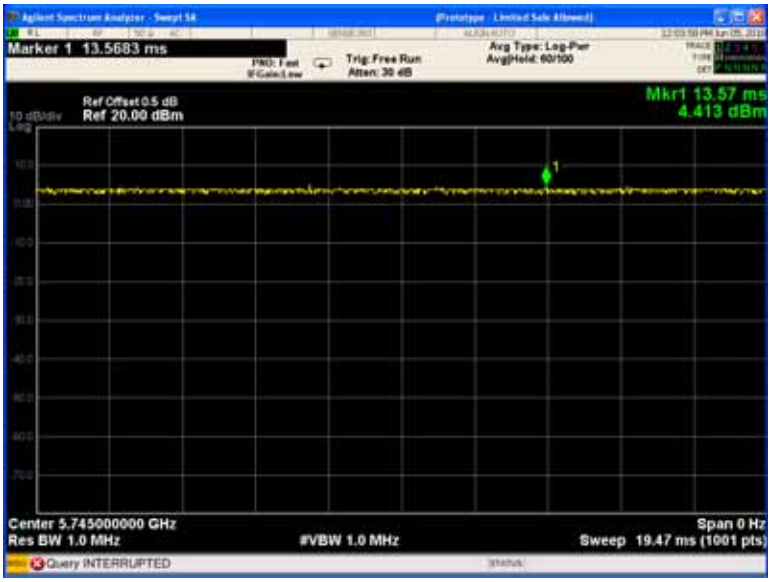
802.11ac(VHT40) U-NII-1 Low channel



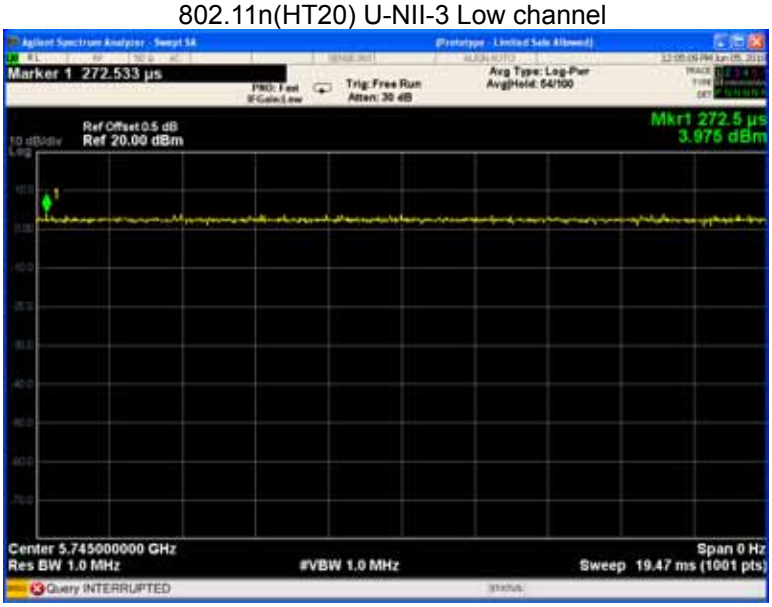
802.11ac(VHT80) U-NII-1 Low channel



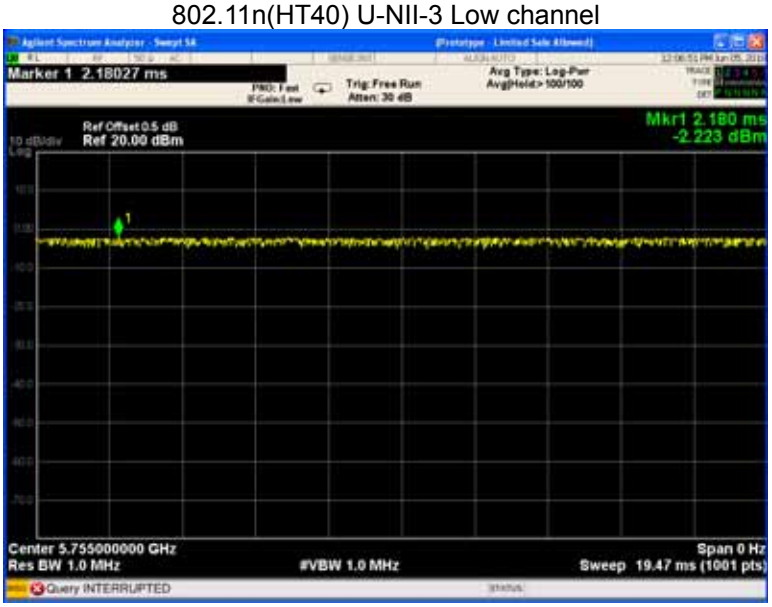
802.11a U-NII-3 Low channel



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

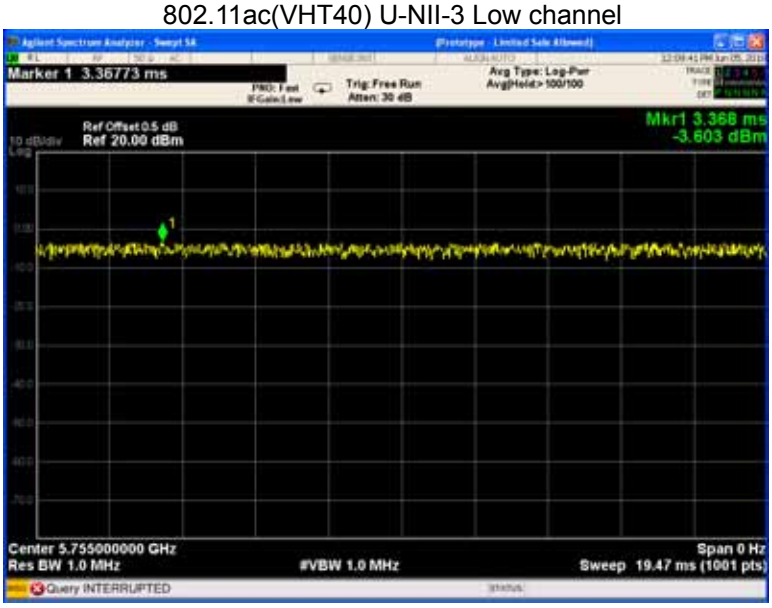


802.11n(HT40) U-NII-3 Low channel

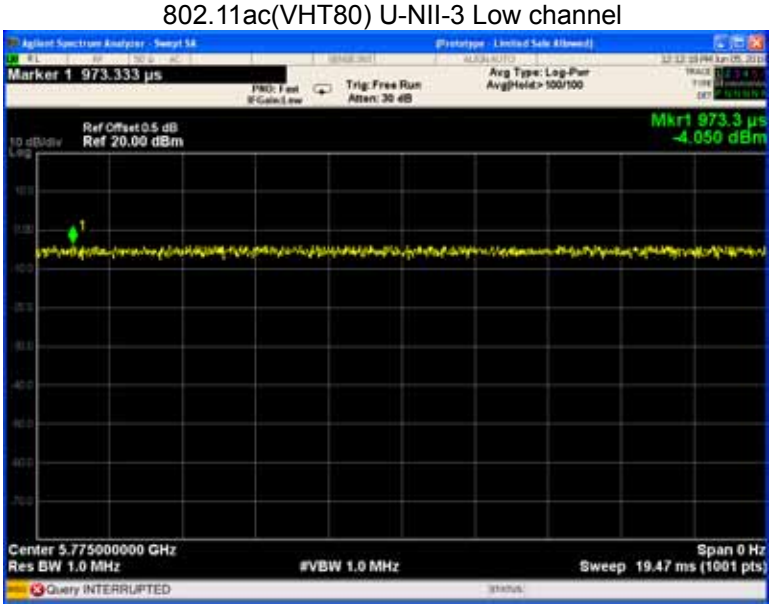


802.11ac(VHT20) U-NII-3 Low channel

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



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



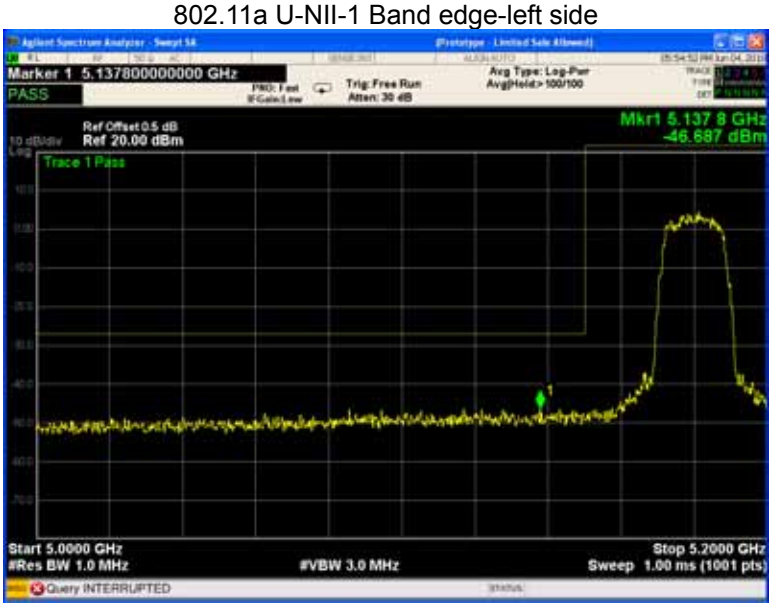
2. Band Edge

2.1. Test Result

Test result plots shown as follows:

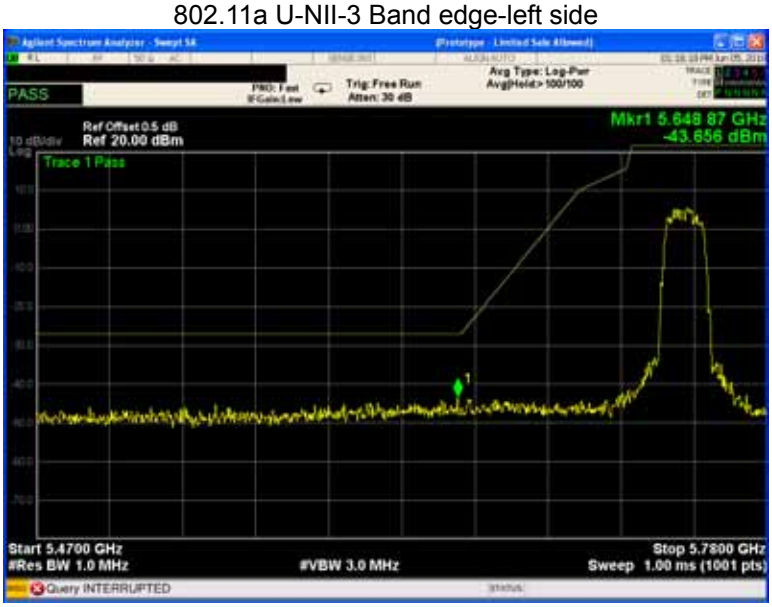
ANT3

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

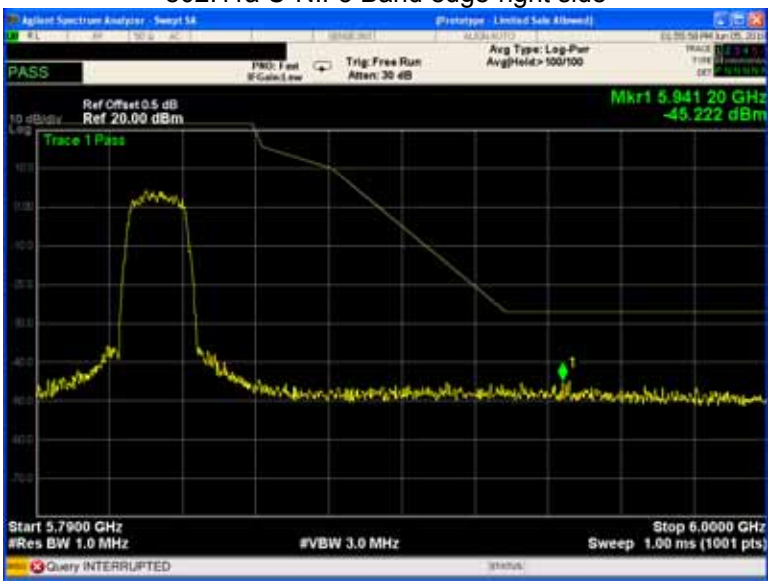


802.11a U-NII-1 Band edge-right side

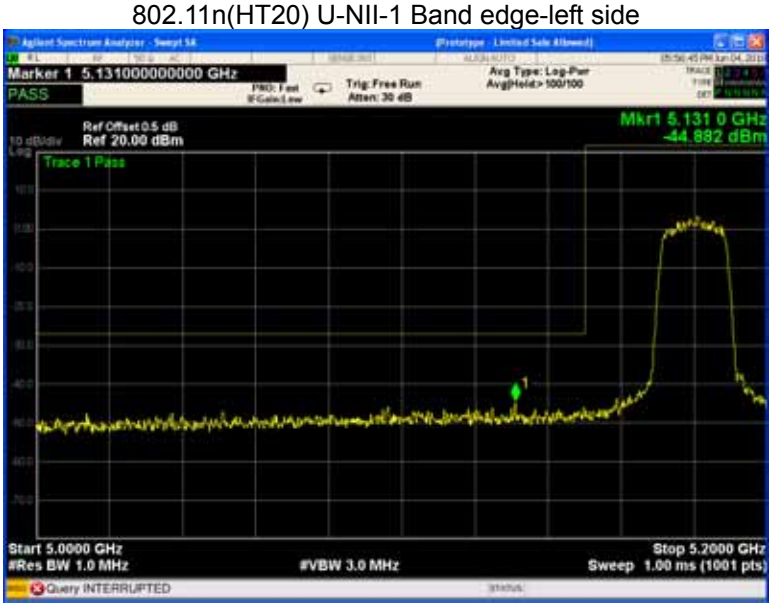
802.11a U-NII-3 Band edge-left side



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

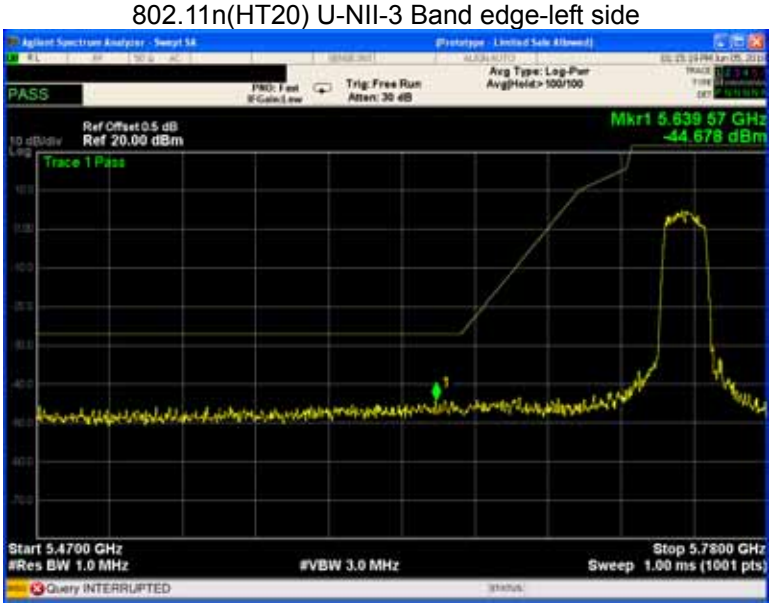


802.11n(HT20) U-NII-1 Band edge-left side

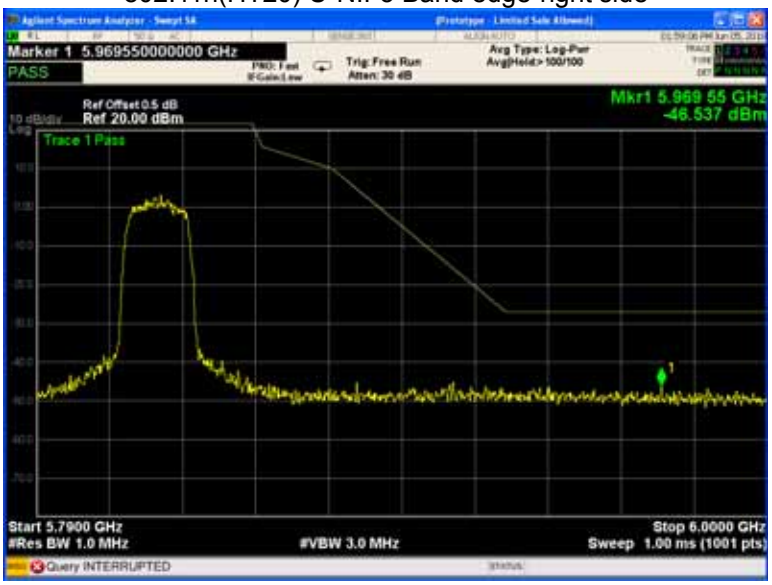


802.11n(HT20) U-NII-1 Band edge-right side

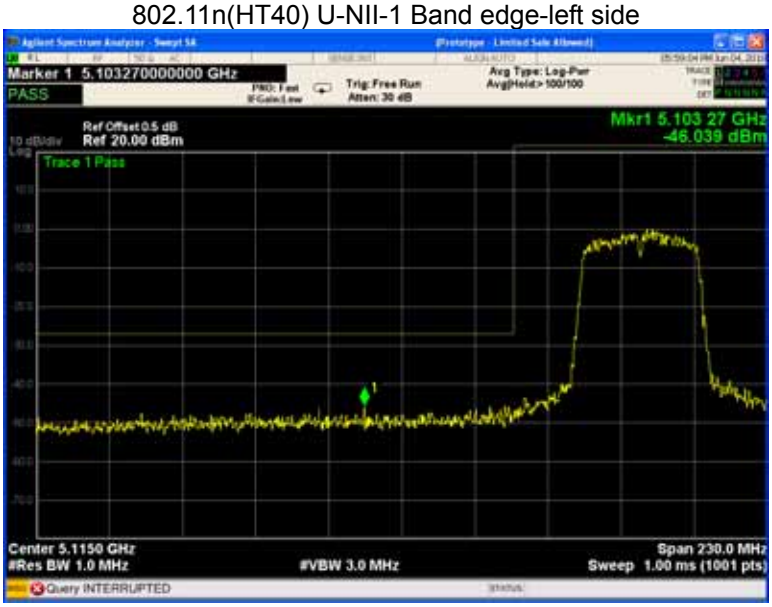
802.11n(HT20) U-NII-3 Band edge-left side



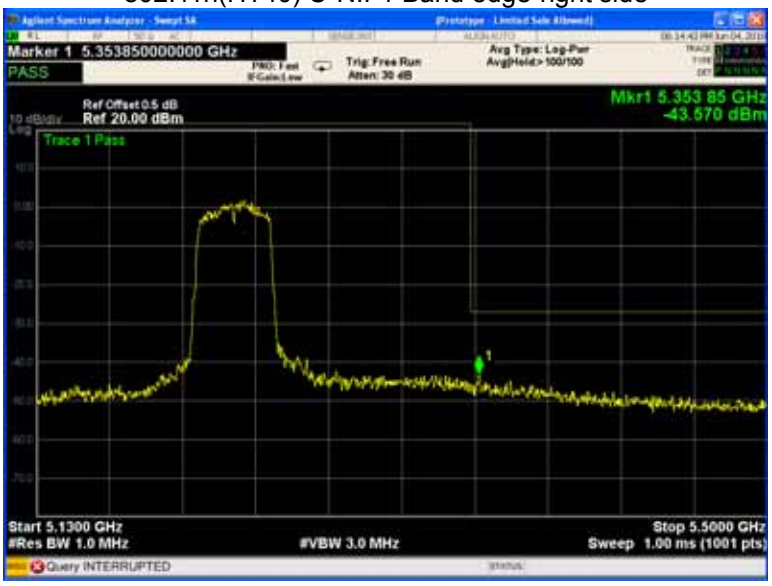
802.11n(HT20) U-NII-3 Band edge-right side



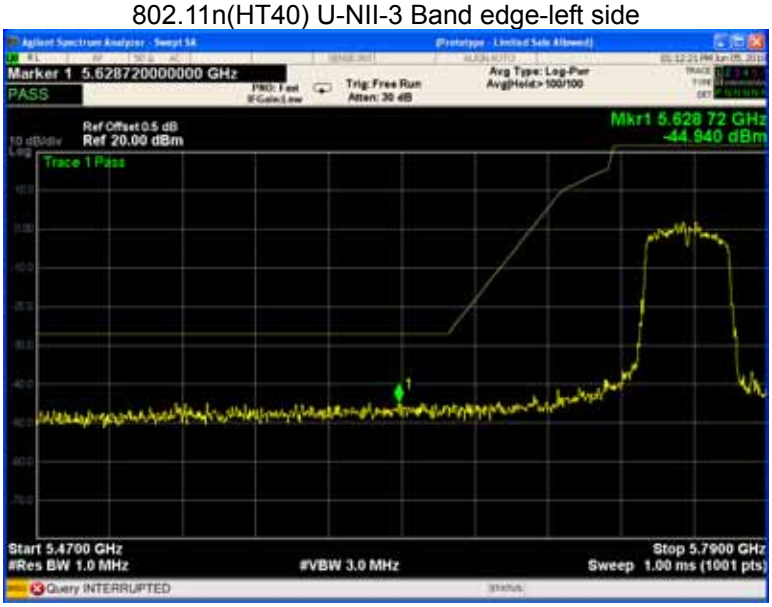
802.11n(HT40) U-NII-1 Band edge-left side



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

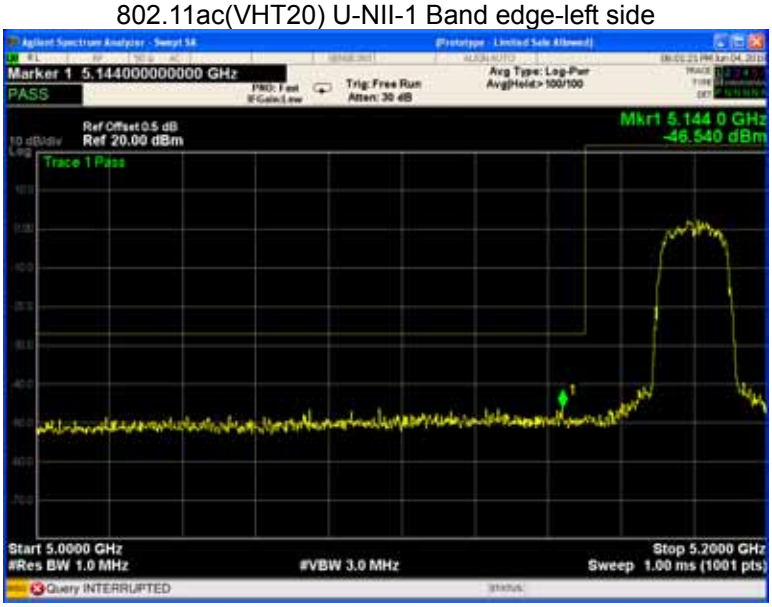


802.11n(HT40) U-NII-3 Band edge-left side

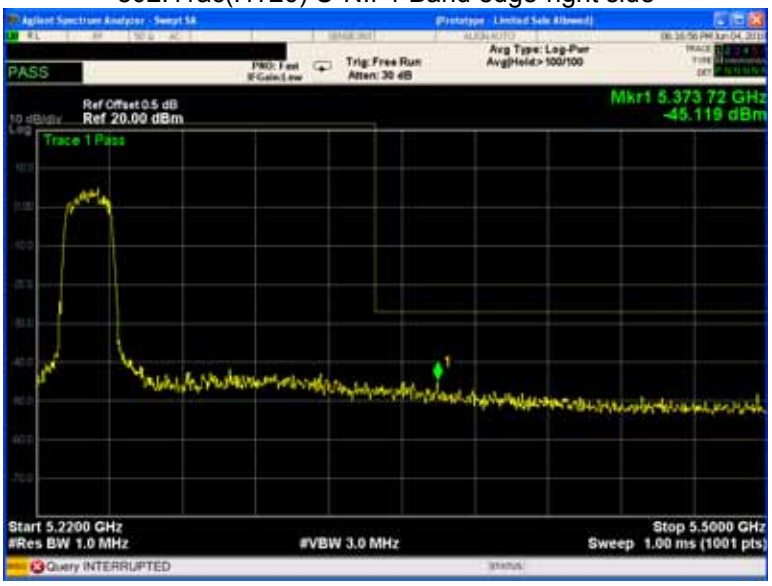


802.11n(HT40) U-NII-3 Band edge-right side

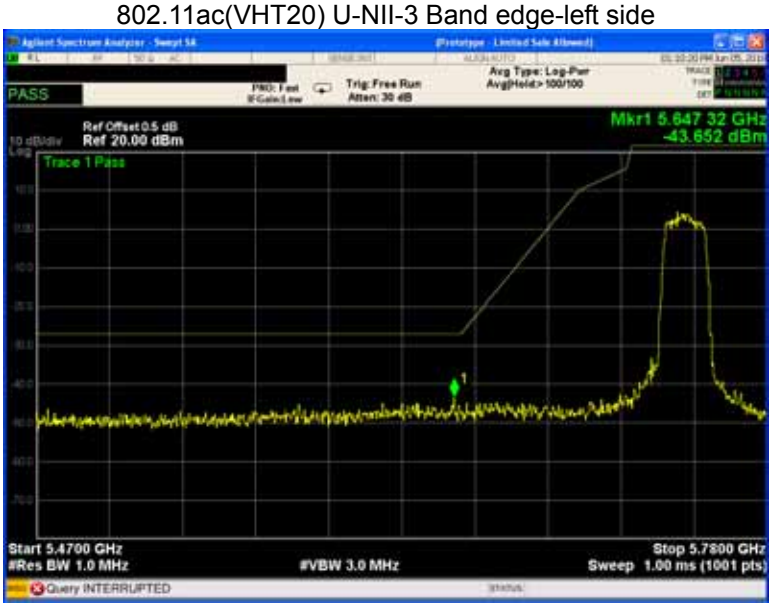
802.11ac(VHT20) U-NII-1 Band edge-left side



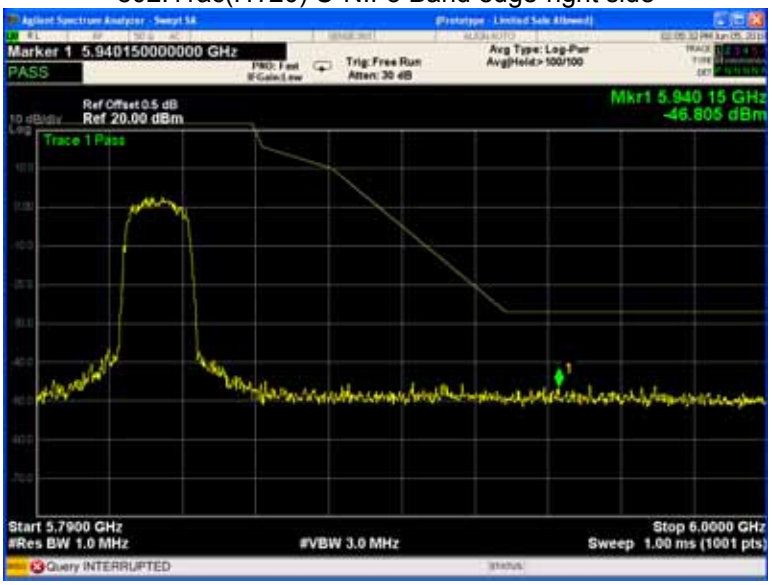
802.11ac(HT20) U-NII-1 Band edge-right side



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

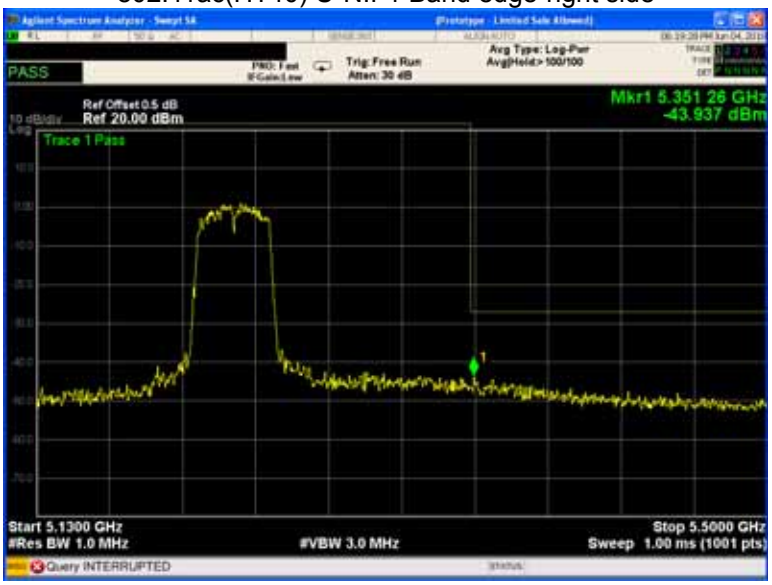


802.11ac(HT20) U-NII-3 Band edge-right side

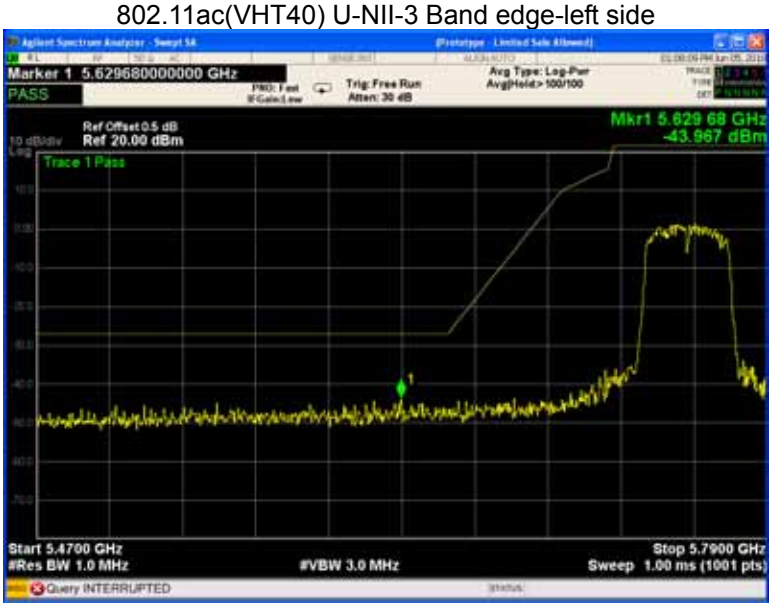


802.11ac(VHT40) U-NII-1 Band edge-left side

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

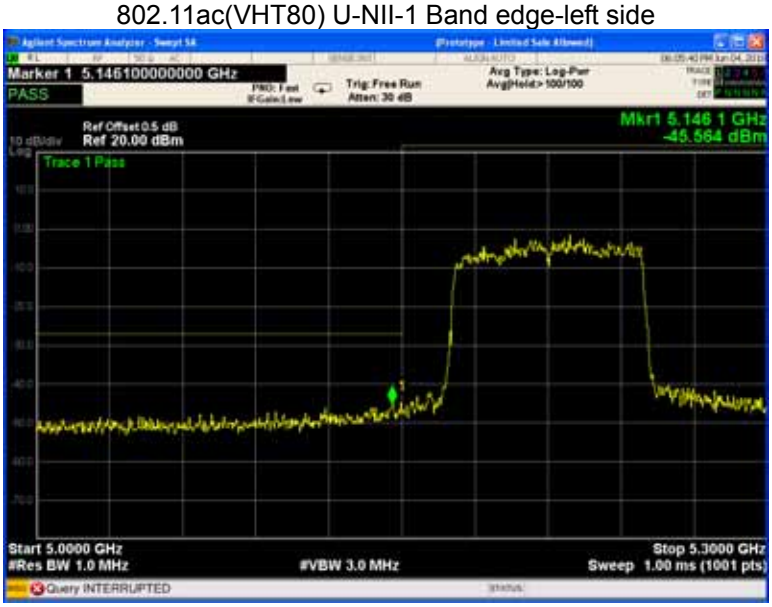


802.11ac(VHT40) U-NII-3 Band edge-left side



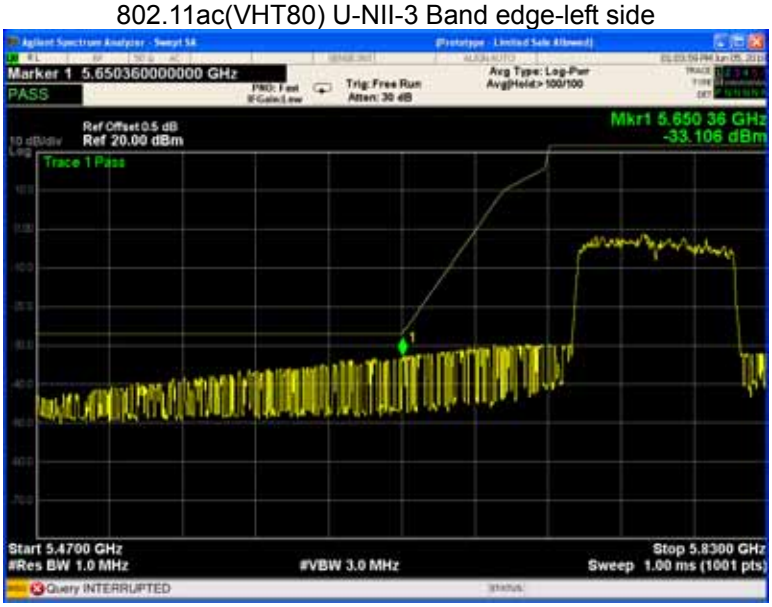
802.11ac(HT40) U-NII-3 Band edge-right side

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



802.11ac(HT80) U-NII-1 Band edge-right side

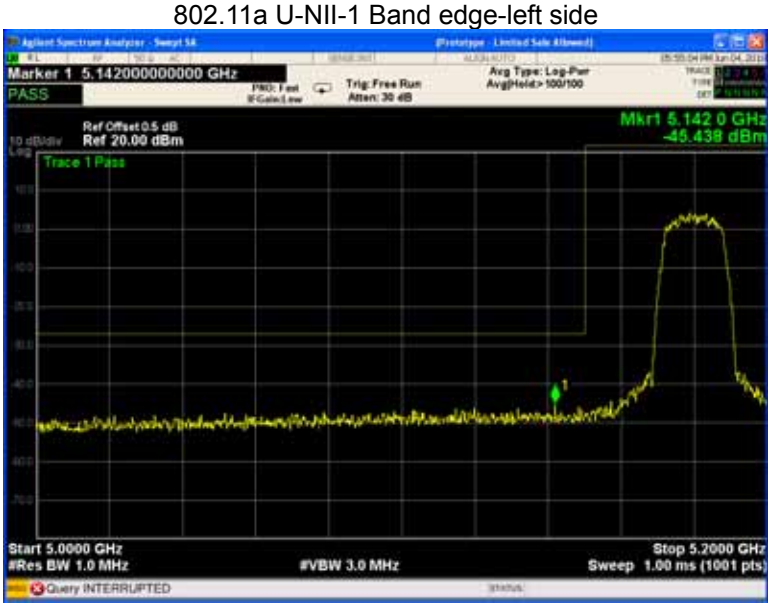
802.11ac(VHT80) U-NII-3 Band edge-left side



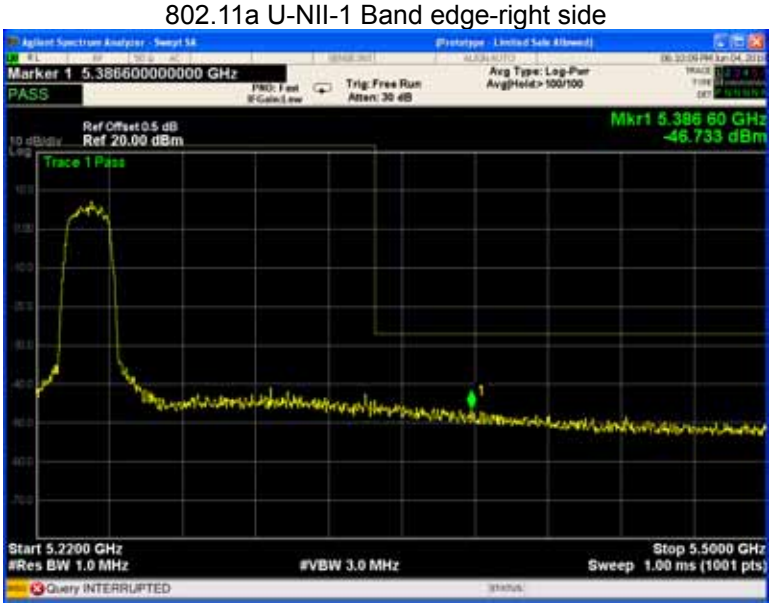
802.11ac(HT80) U-NII-3 Band edge-right side

ANT4

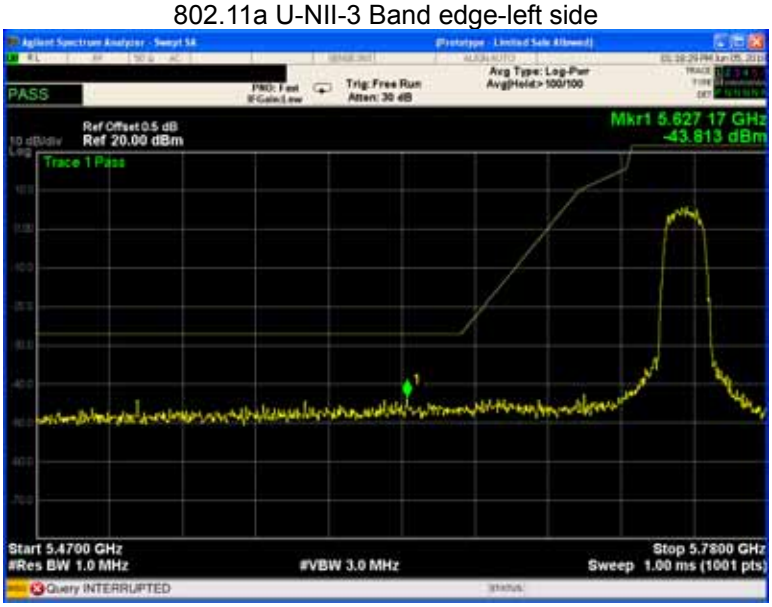
802.11a U-NII-1 Band edge-left side



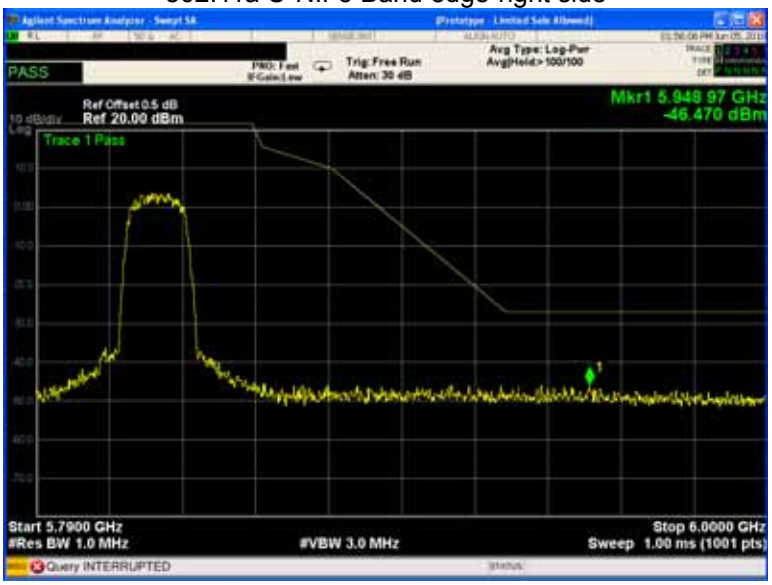
802.11a U-NII-1 Band edge-right side



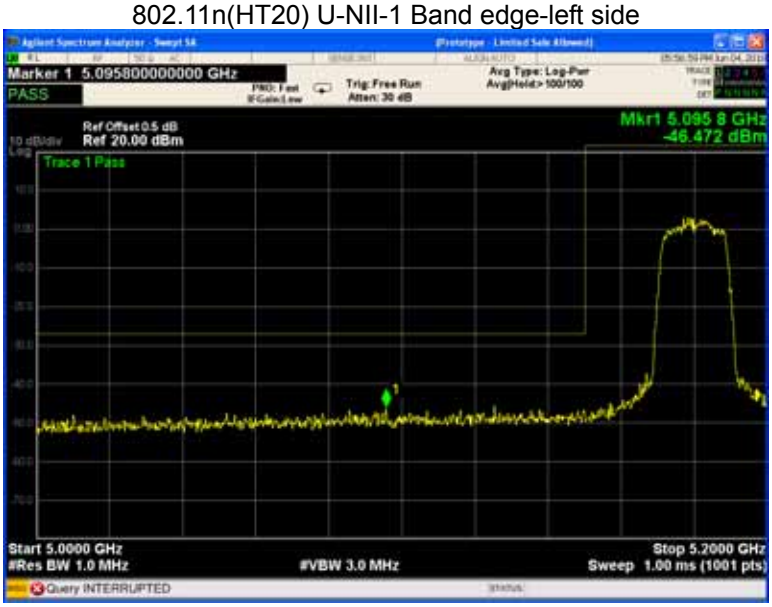
802.11a U-NII-3 Band edge-left side



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



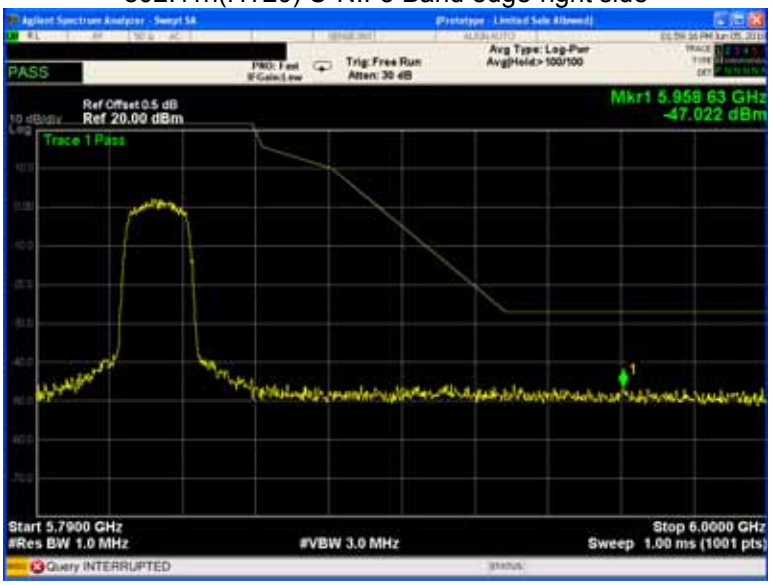
802.11n(HT20) U-NII-1 Band edge-left side



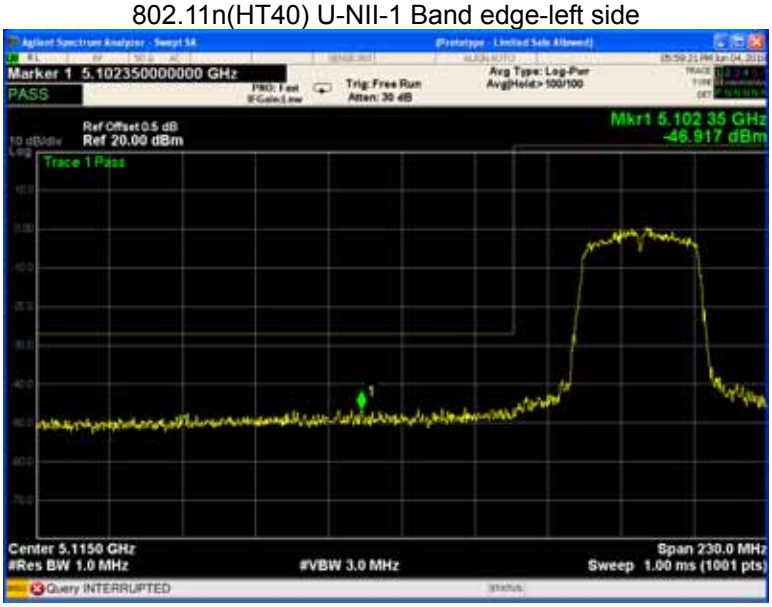
802.11n(HT20) U-NII-1 Band edge-right side

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

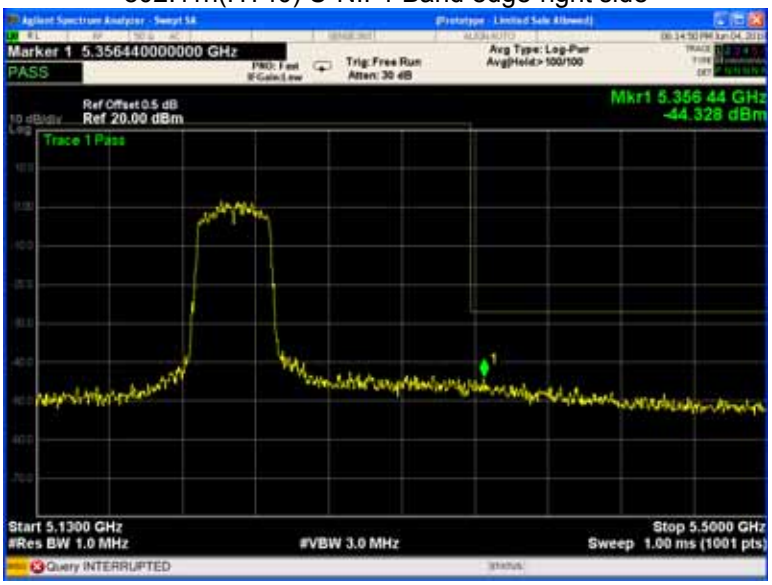
802.11n(HT20) U-NII-3 Band edge-right side



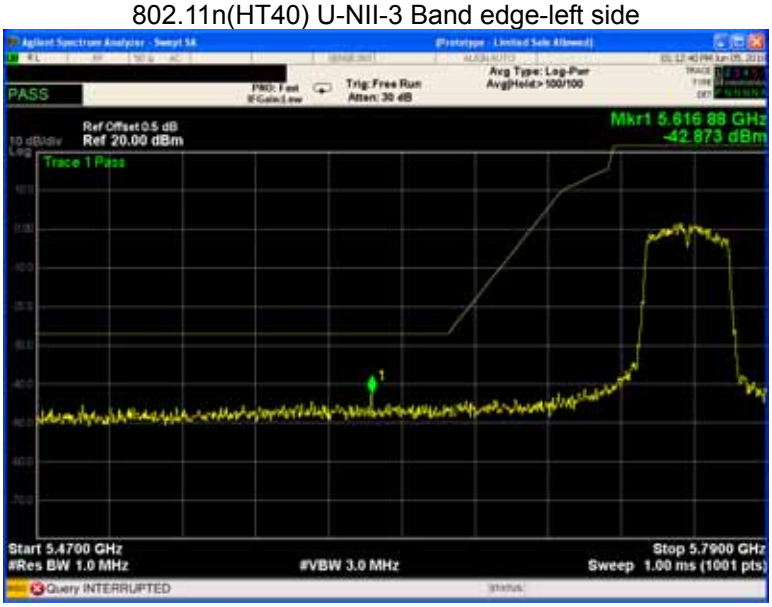
802.11n(HT40) U-NII-1 Band edge-left side



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

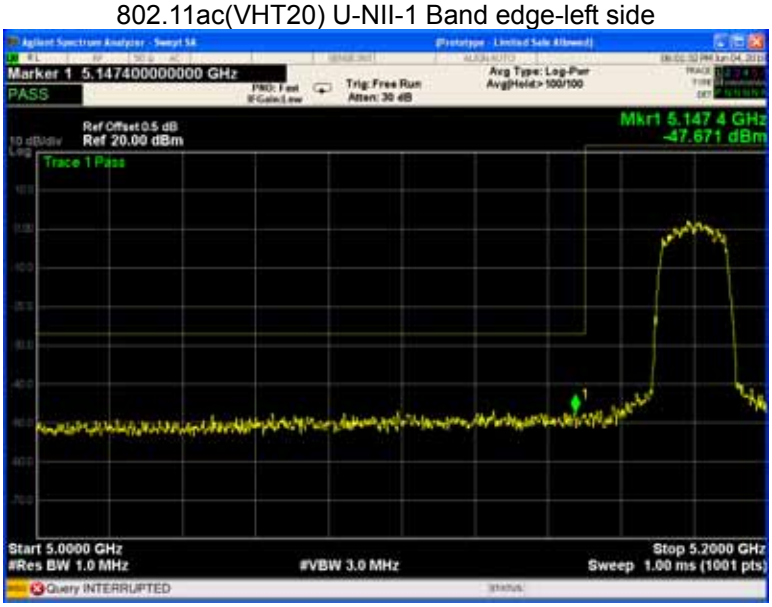


802.11n(HT40) U-NII-3 Band edge-left side



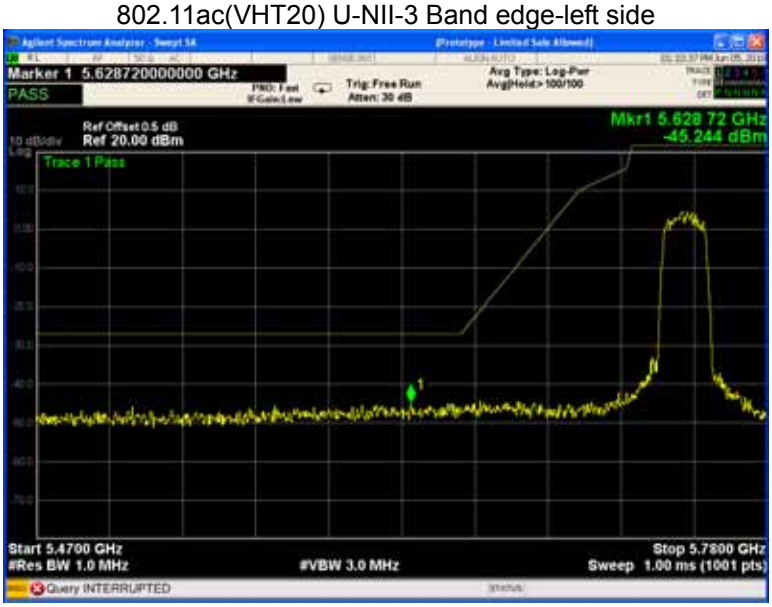
802.11n(HT40) U-NII-3 Band edge-right side

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



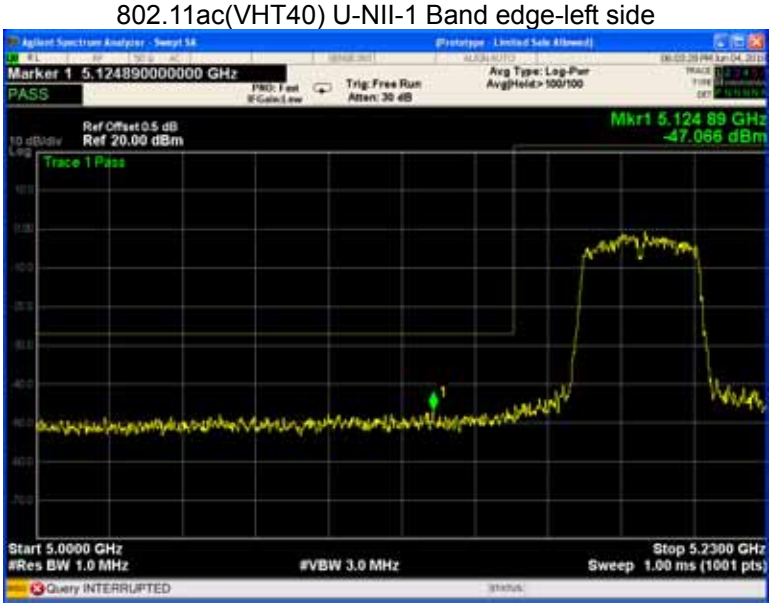
802.11ac(HT20) U-NII-1 Band edge-right side

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

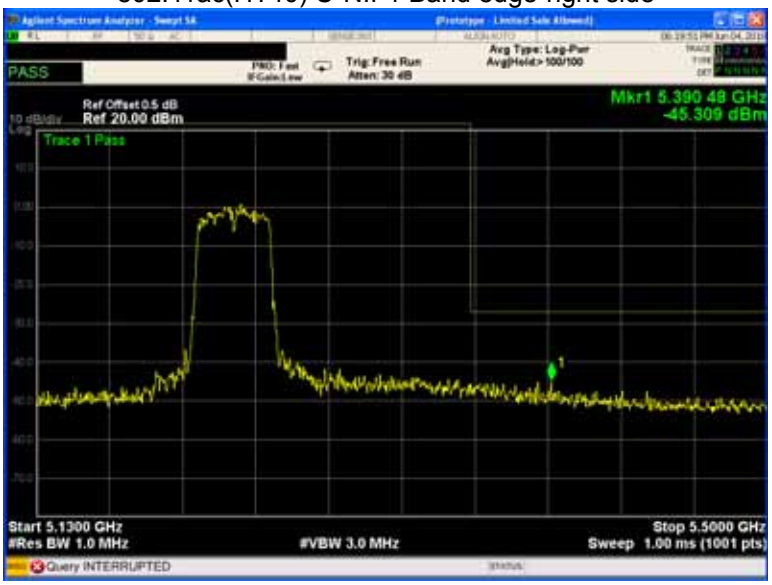


802.11ac(HT20) U-NII-3 Band edge-right side

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



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



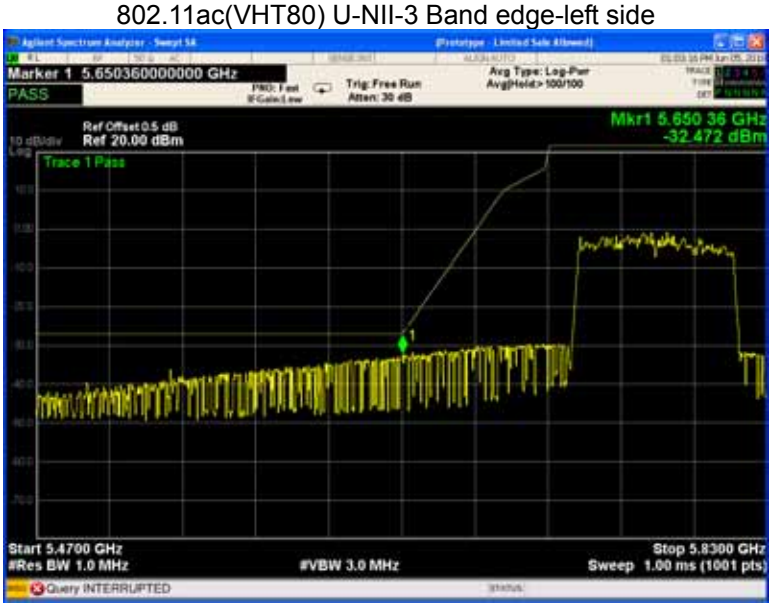
802.11ac(VHT40) U-NII-3 Band edge-left side

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

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

802.11ac(HT80) U-NII-1 Band edge-right side

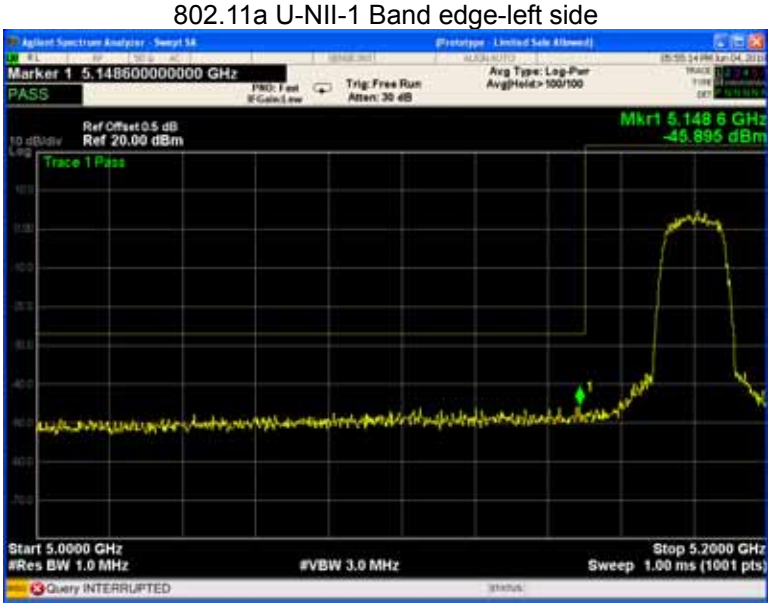
802.11ac(VHT80) U-NII-3 Band edge-left side



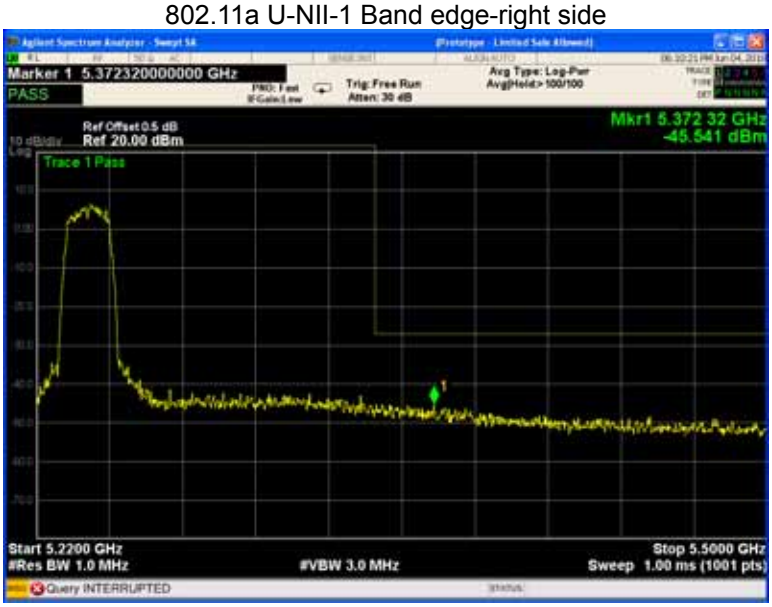
802.11ac(HT80) U-NII-3 Band edge-right side

ANT5

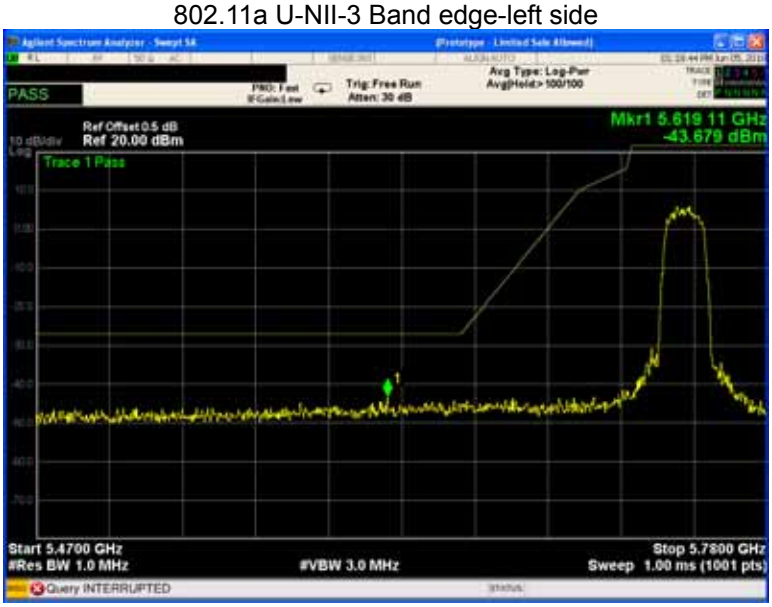
802.11a U-NII-1 Band edge-left side



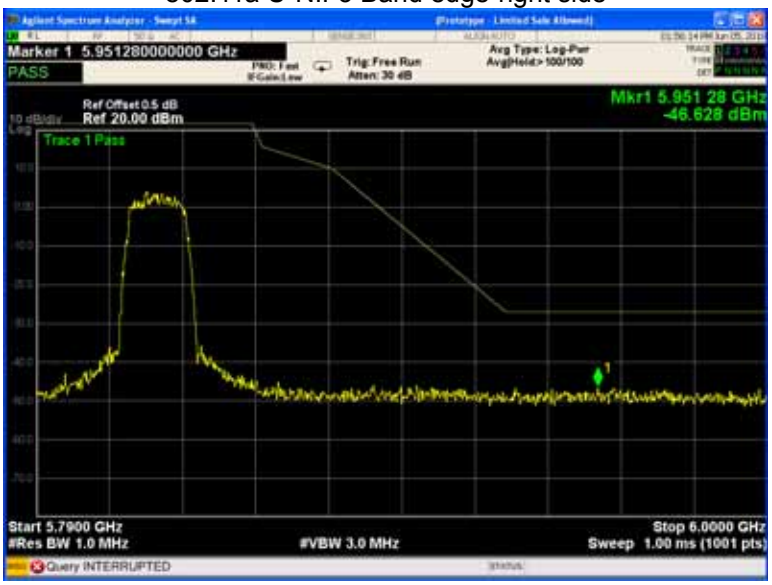
802.11a U-NII-1 Band edge-right side



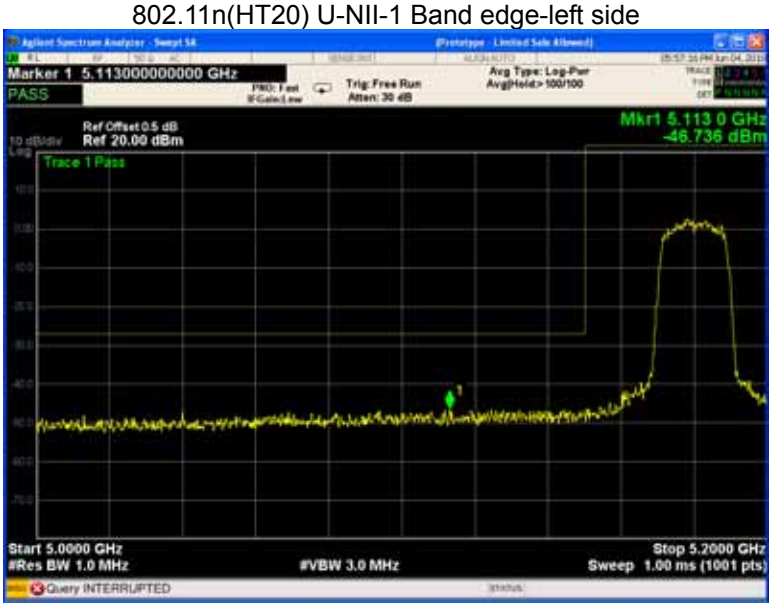
802.11a U-NII-3 Band edge-left side



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

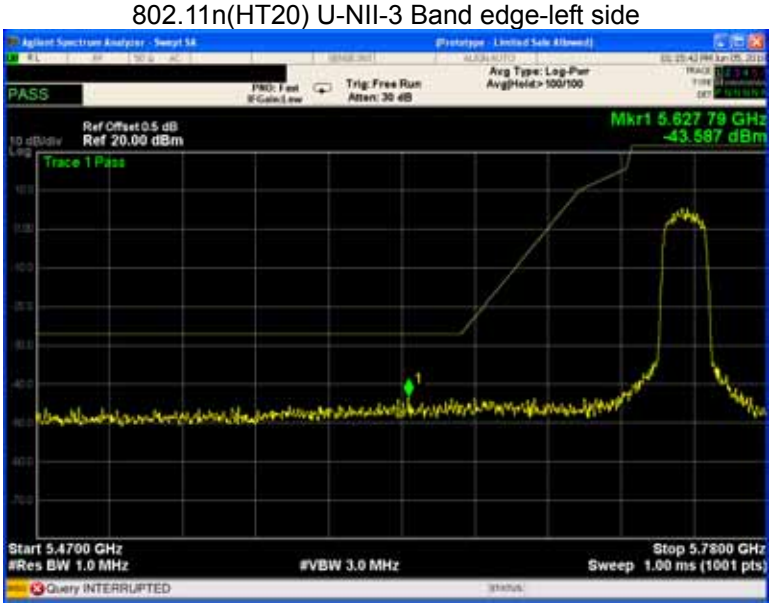


802.11n(HT20) U-NII-1 Band edge-left side

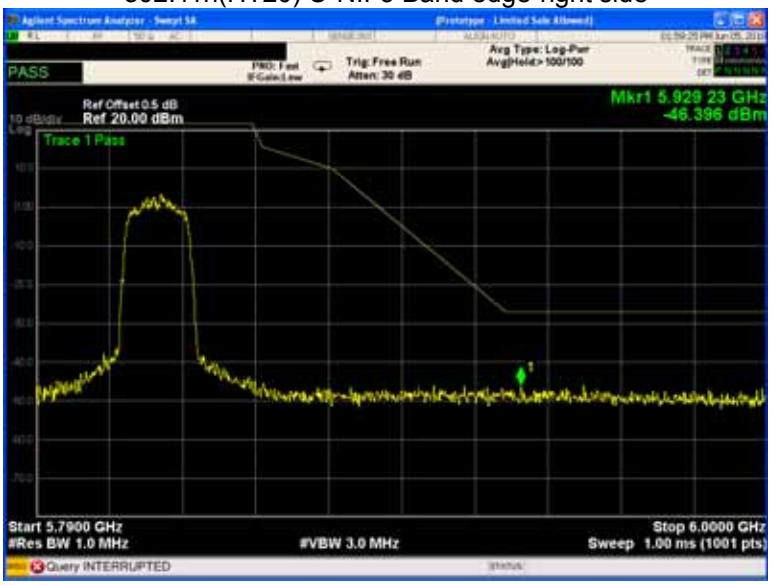


802.11n(HT20) U-NII-1 Band edge-right side

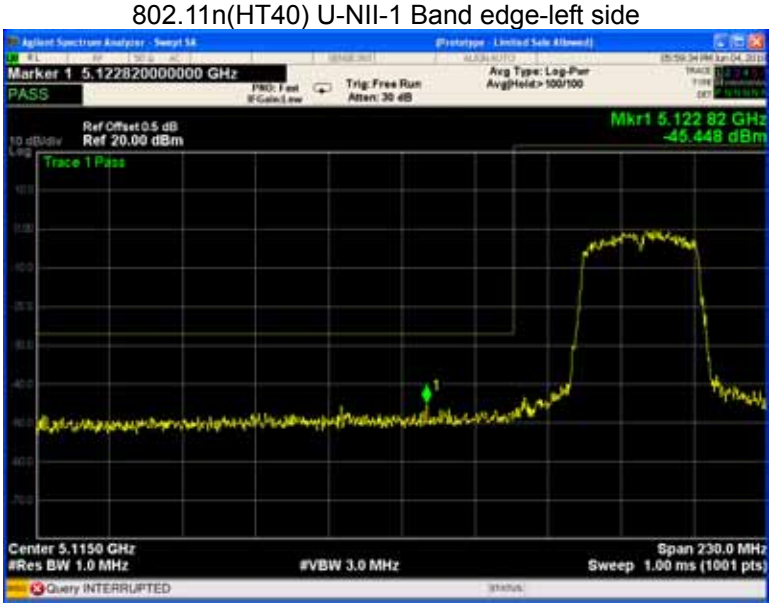
802.11n(HT20) U-NII-3 Band edge-left side



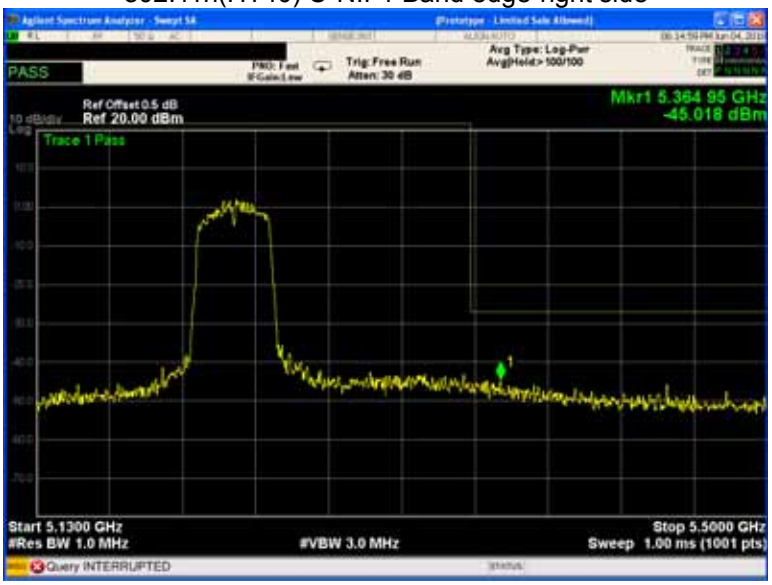
802.11n(HT20) U-NII-3 Band edge-right side



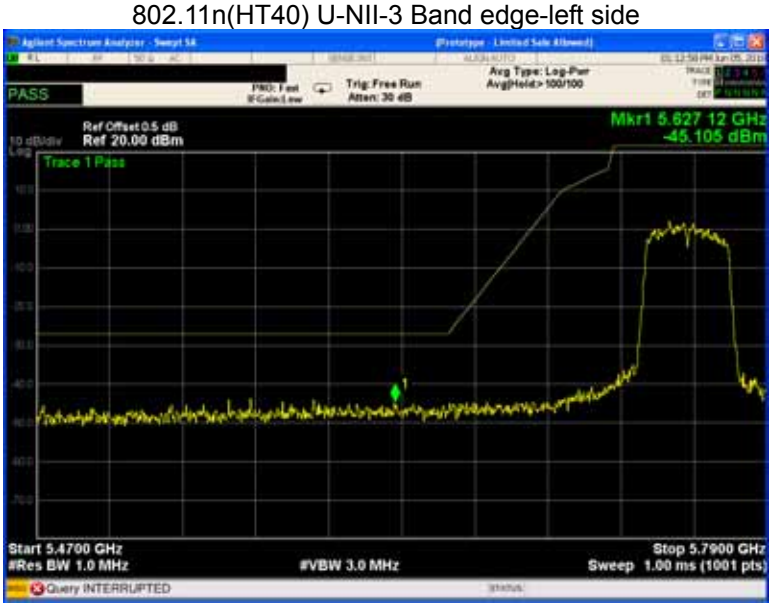
802.11n(HT40) U-NII-1 Band edge-left side



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

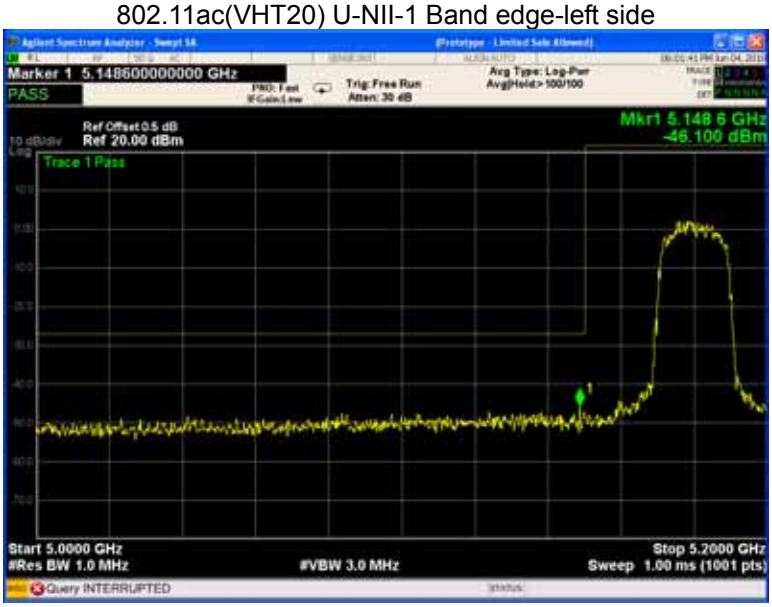


802.11n(HT40) U-NII-3 Band edge-left side

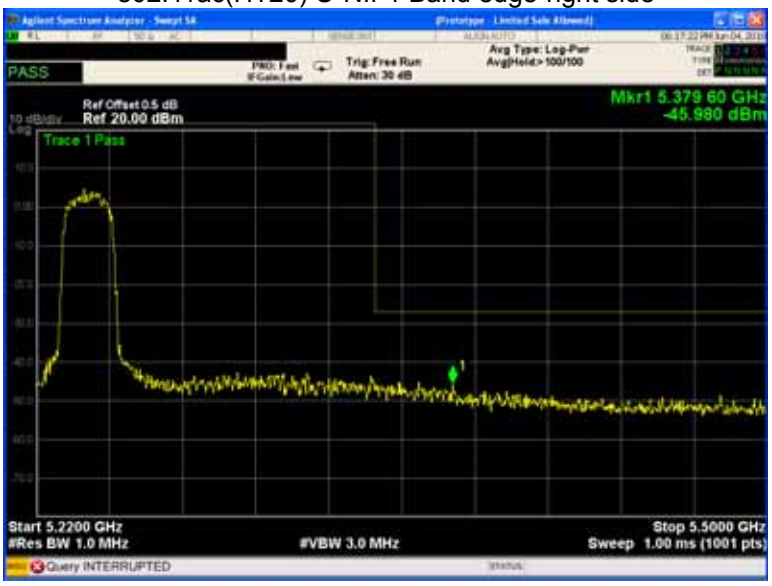


802.11n(HT40) U-NII-3 Band edge-right side

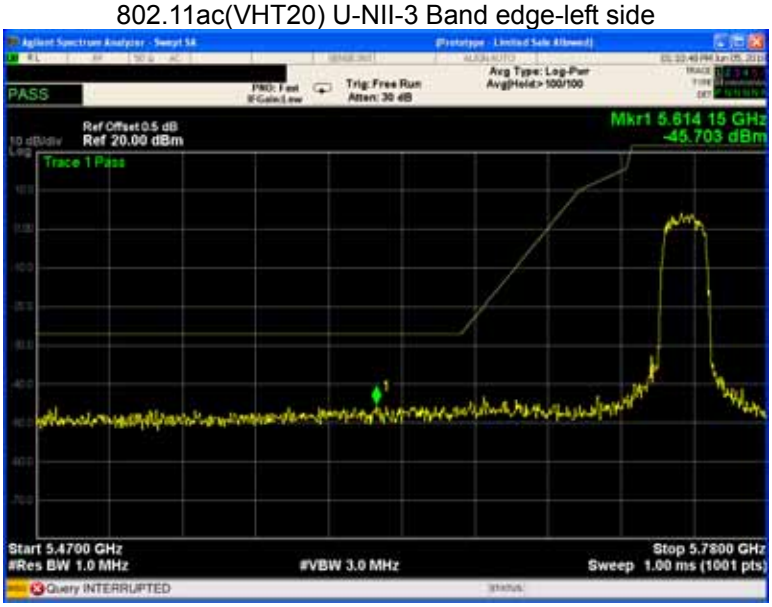
802.11ac(VHT20) U-NII-1 Band edge-left side



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

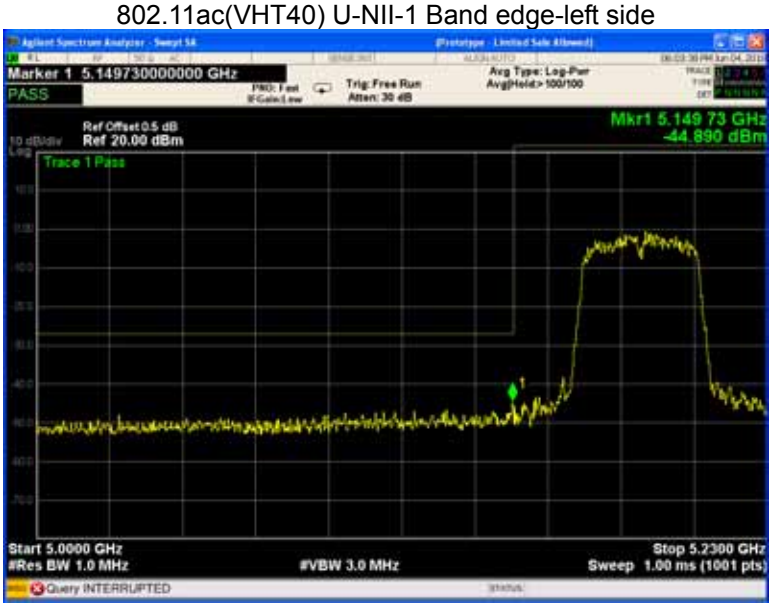


802.11ac(VHT20) U-NII-3 Band edge-left side

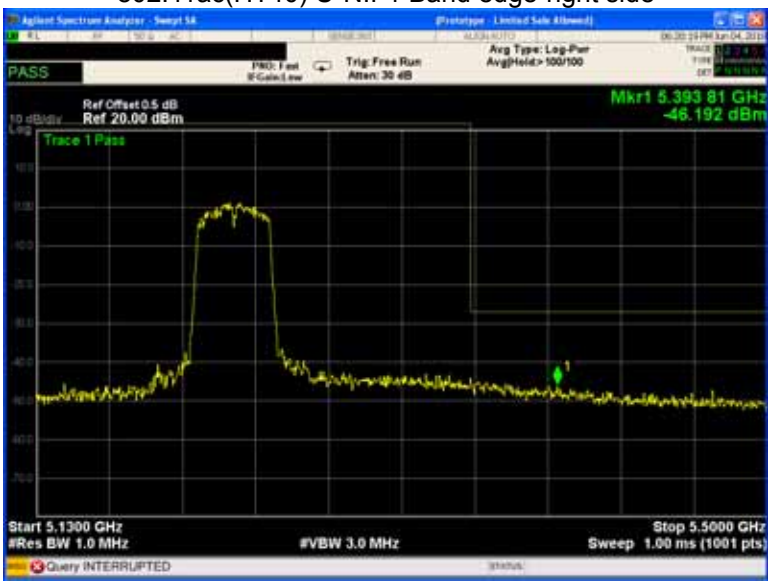


802.11ac(HT20) U-NII-3 Band edge-right side

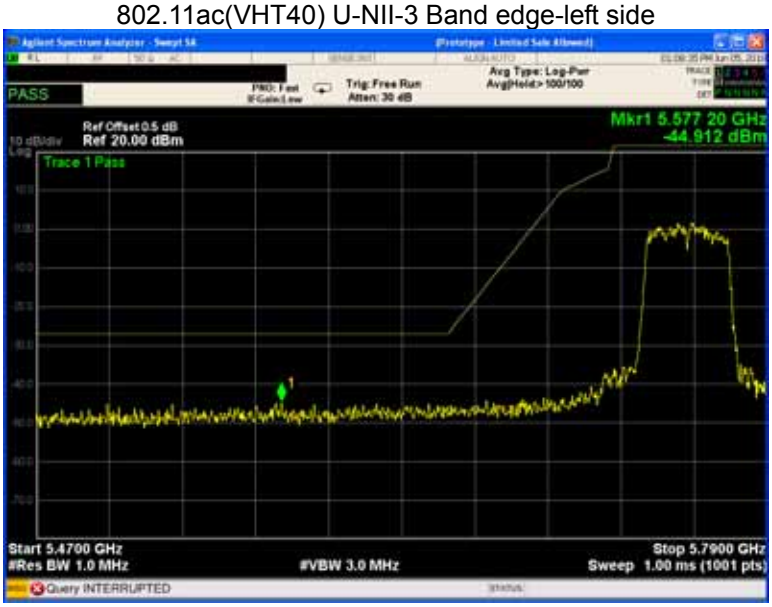
802.11ac(VHT40) U-NII-1 Band edge-left side



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



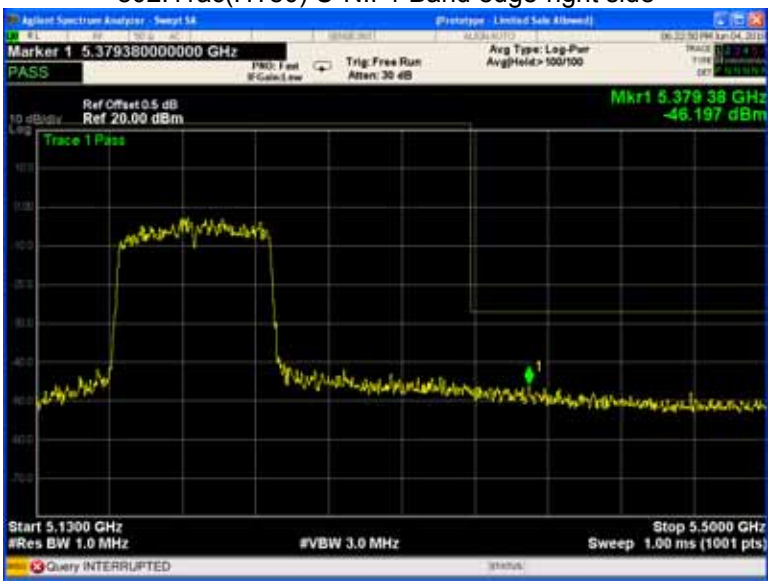
802.11ac(VHT40) U-NII-3 Band edge-left side



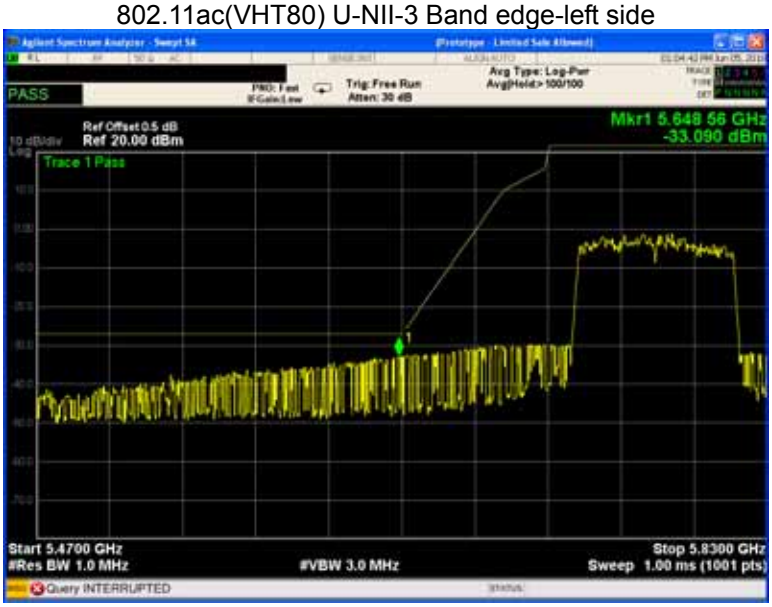
802.11ac(HT40) U-NII-3 Band edge-right side

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

802.11ac(HT80) U-NII-1 Band edge-right side



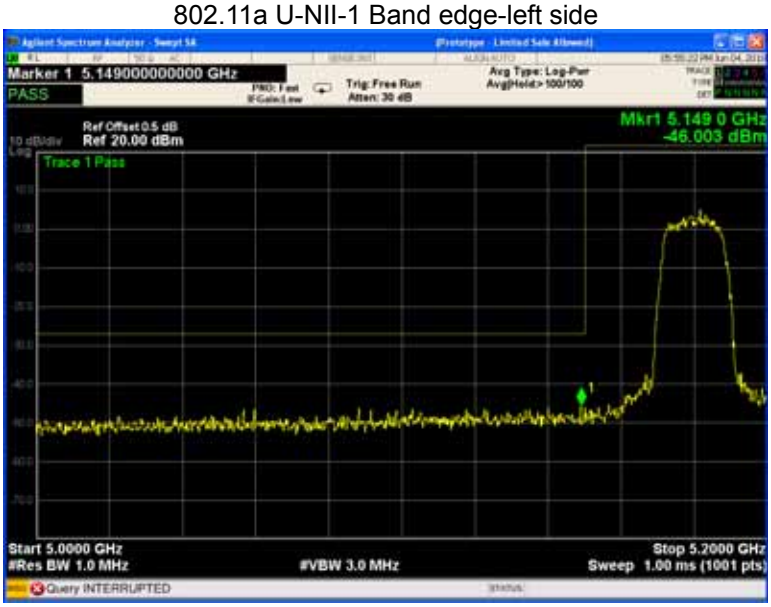
802.11ac(VHT80) U-NII-3 Band edge-left side



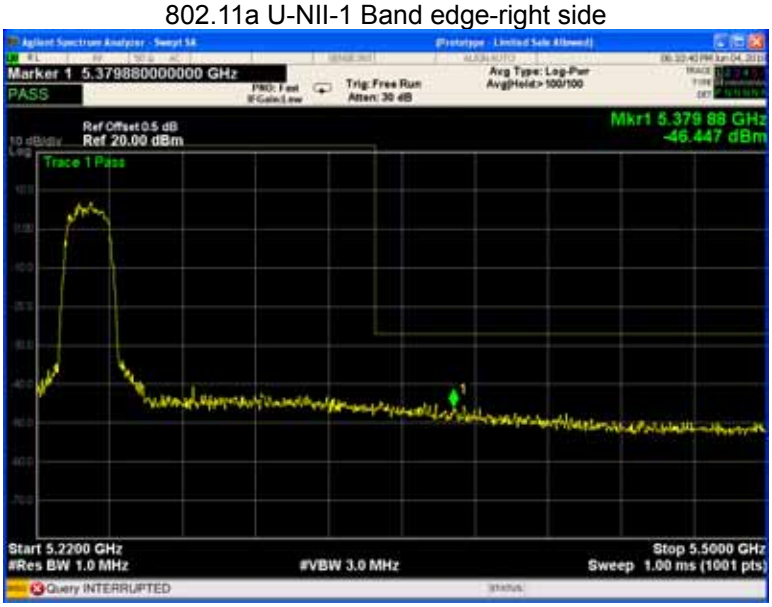
802.11ac(HT80) U-NII-3 Band edge-right side

ANT6

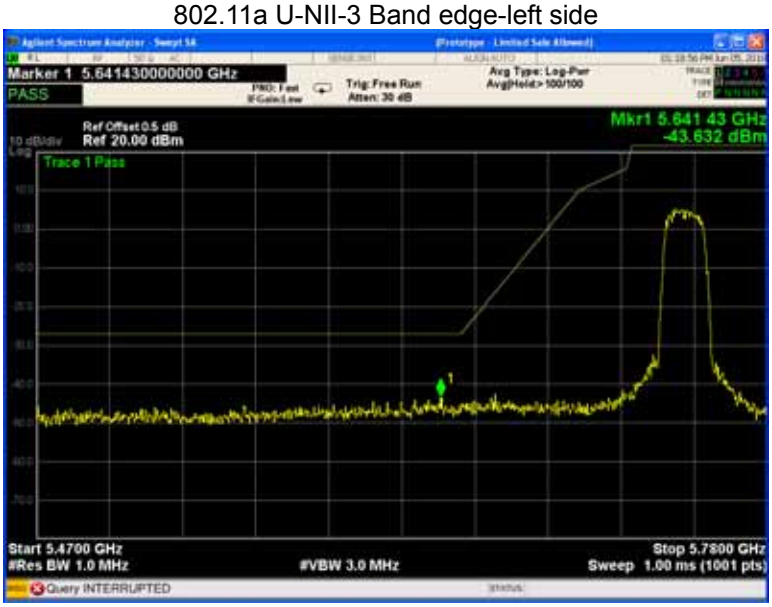
802.11a U-NII-1 Band edge-left side



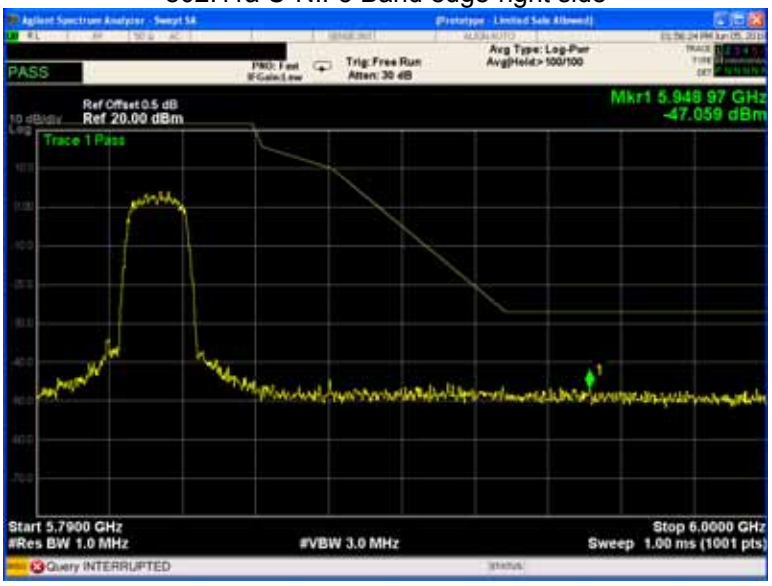
802.11a U-NII-1 Band edge-right side



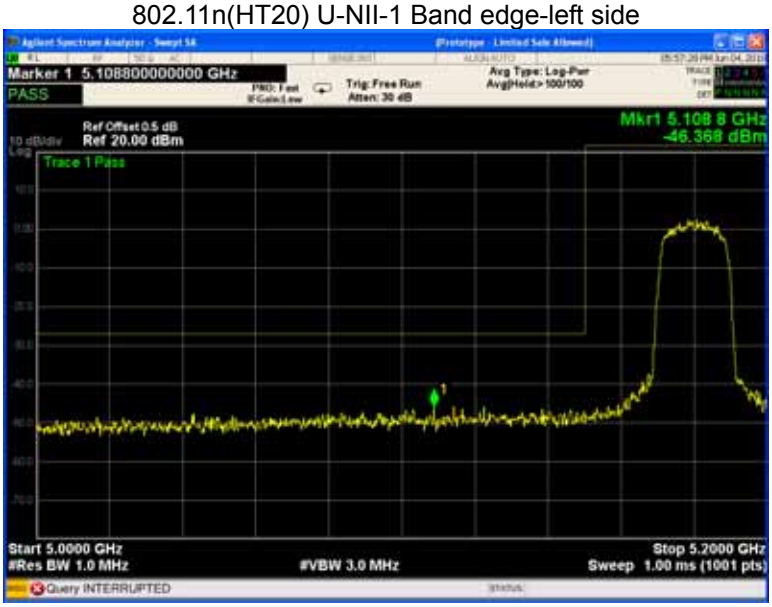
802.11a U-NII-3 Band edge-left side



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

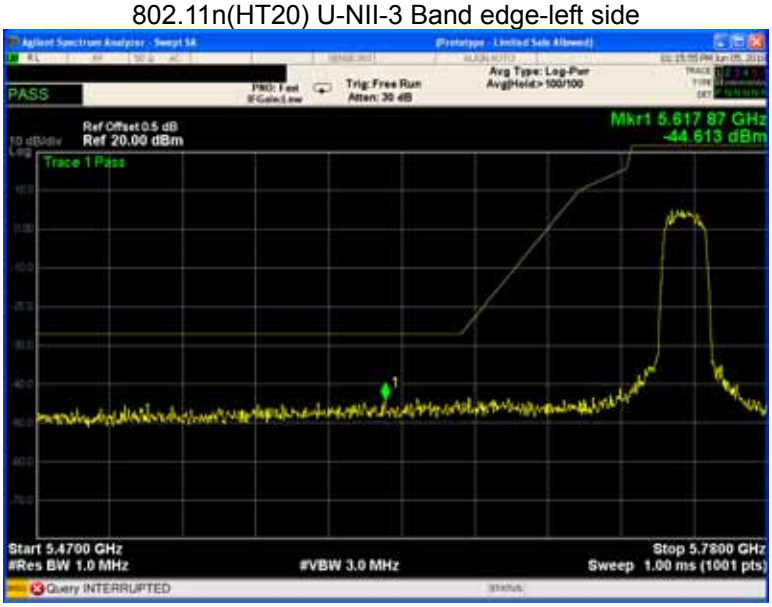


802.11n(HT20) U-NII-1 Band edge-left side

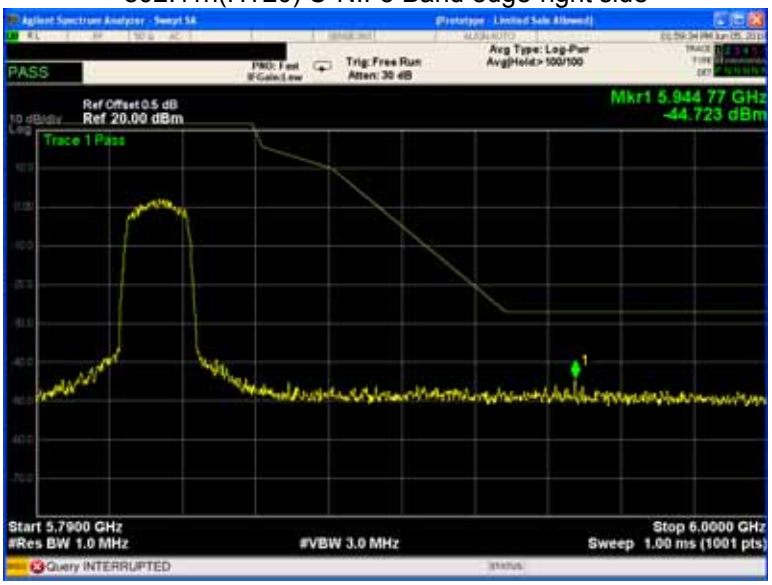


802.11n(HT20) U-NII-1 Band edge-right side

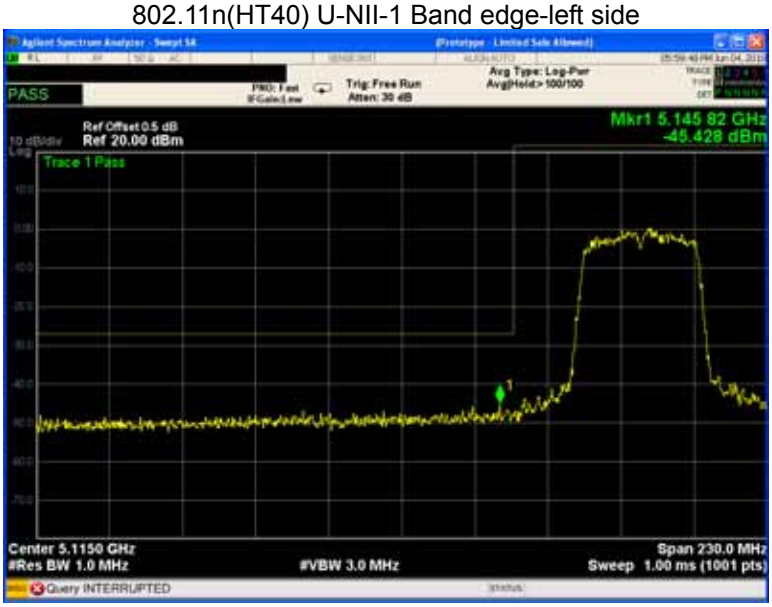
802.11n(HT20) U-NII-3 Band edge-left side



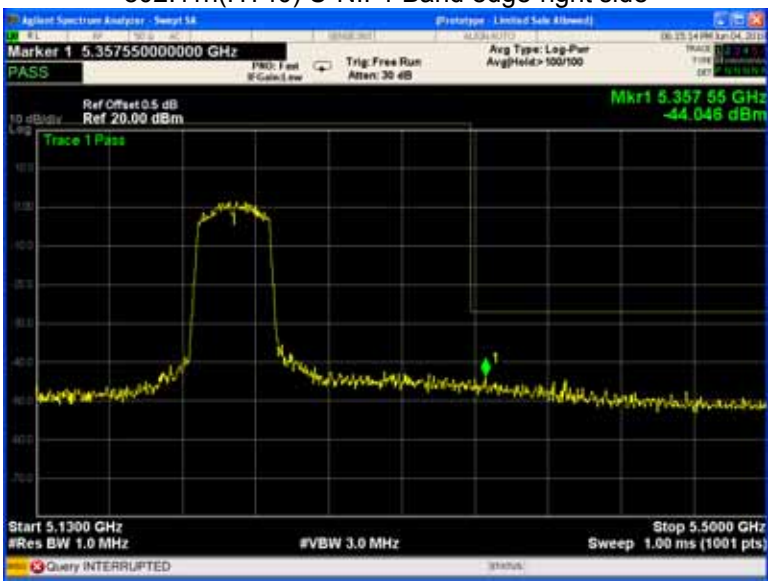
802.11n(HT20) U-NII-3 Band edge-right side



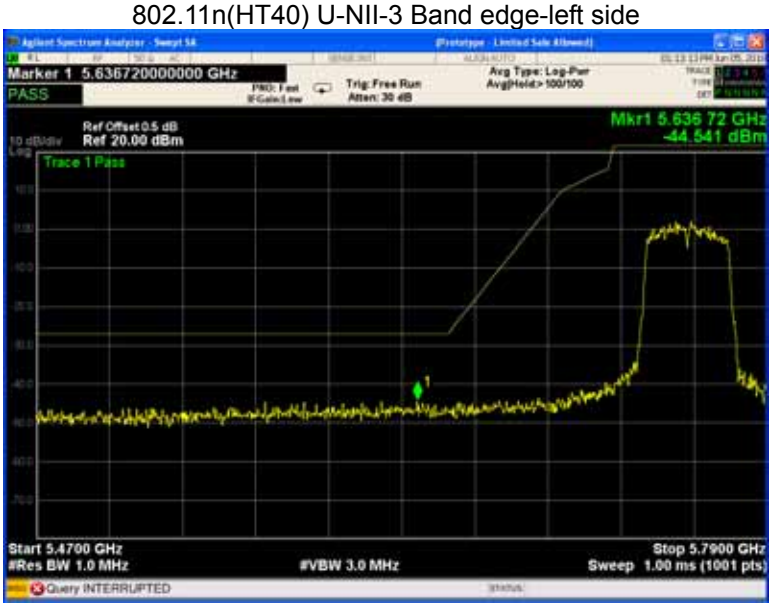
802.11n(HT40) U-NII-1 Band edge-left side



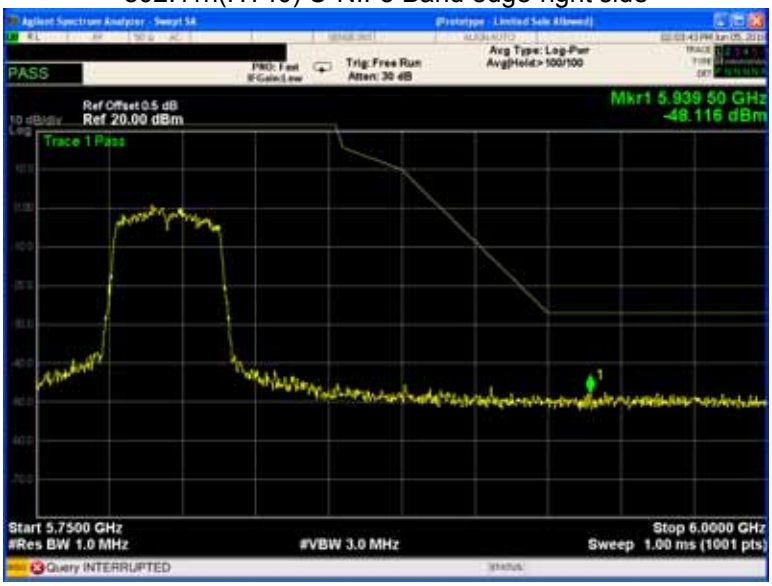
802.11n(HT40) U-NII-1 Band edge-right side



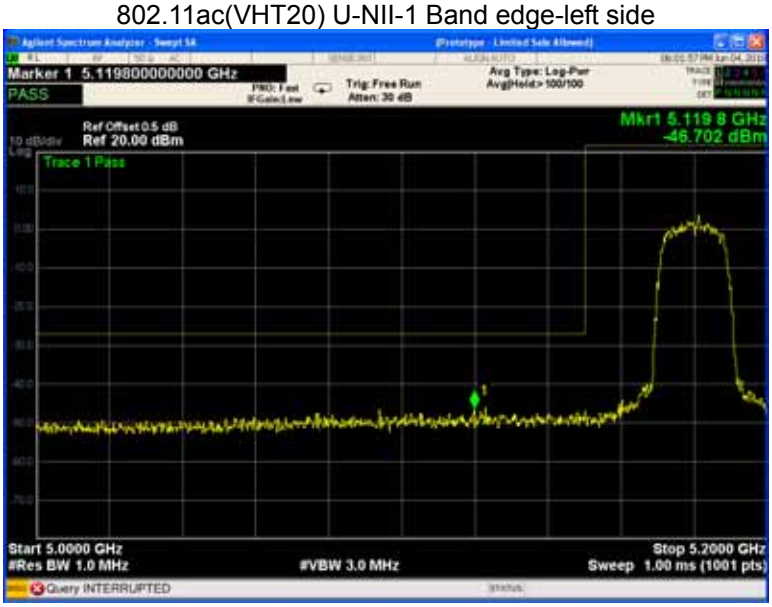
802.11n(HT40) U-NII-3 Band edge-left side



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

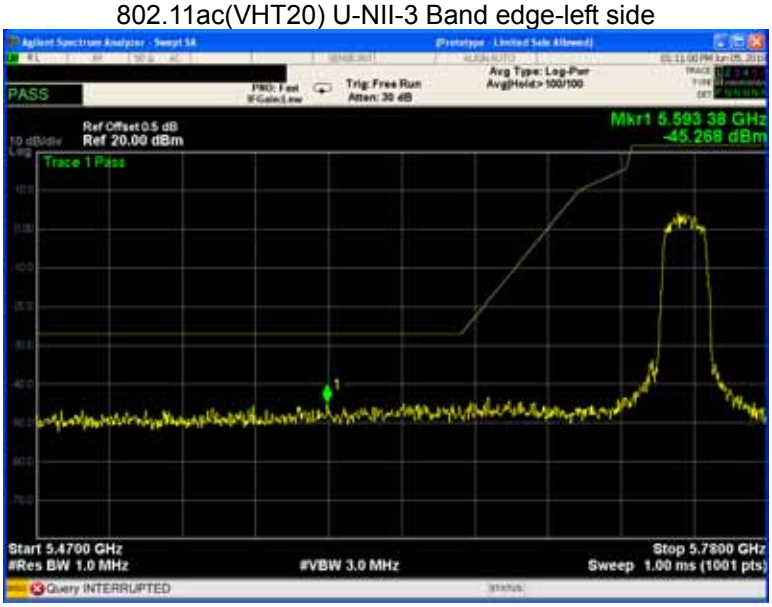


802.11ac(VHT20) U-NII-1 Band edge-left side

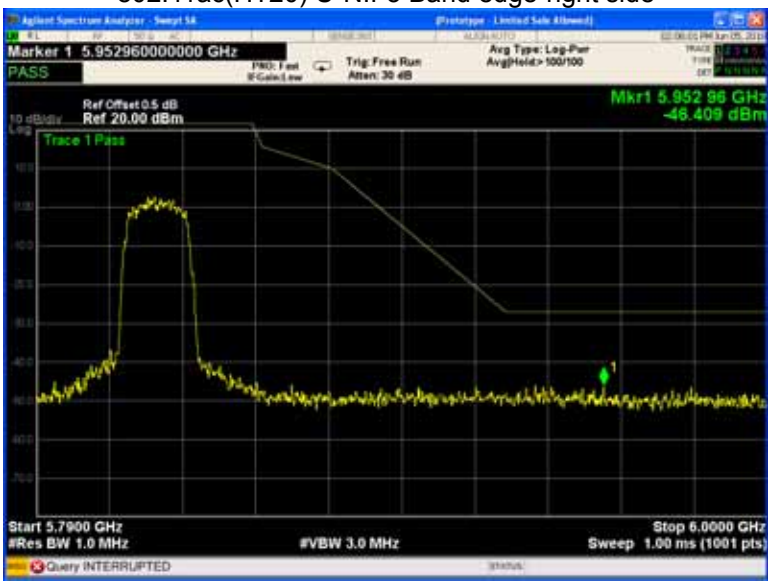


802.11ac(HT20) U-NII-1 Band edge-right side

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

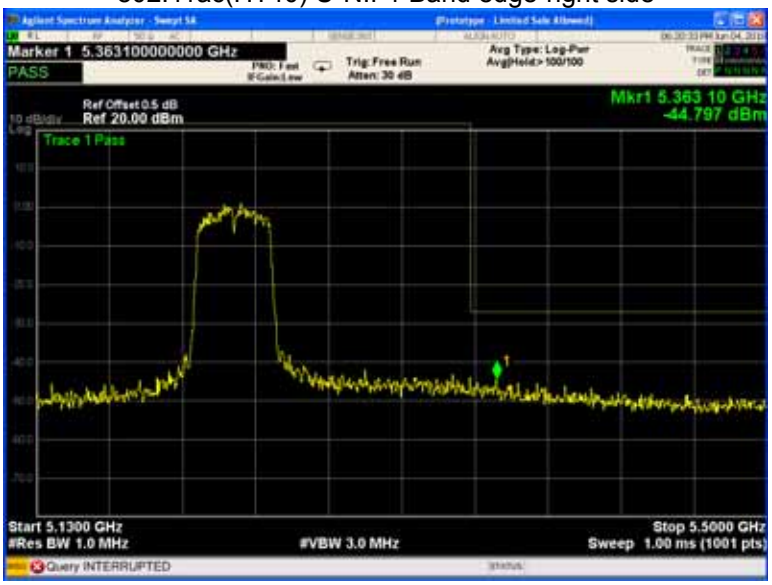


802.11ac(HT20) U-NII-3 Band edge-right side



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

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



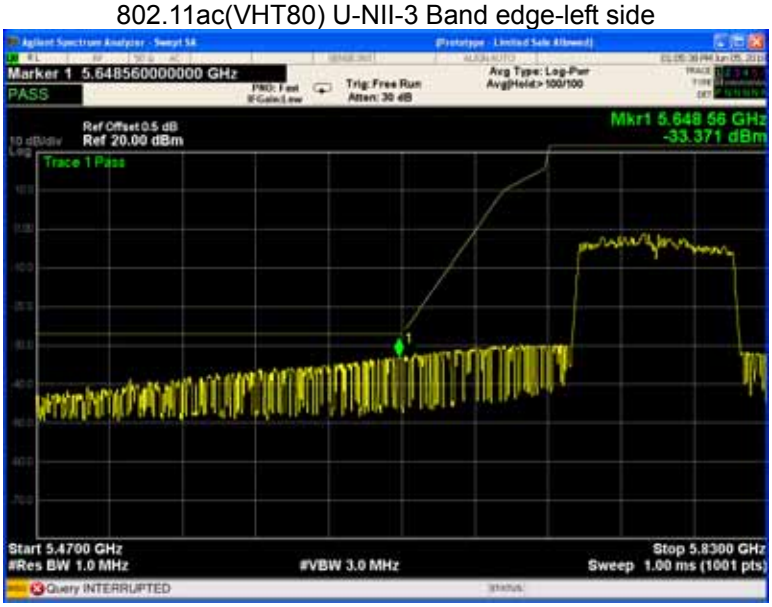
802.11ac(VHT40) U-NII-3 Band edge-left side

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

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

802.11ac(HT80) U-NII-1 Band edge-right side

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



802.11ac(HT80) 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. 44	16.38	16.38
	802.11n(HT20)	17.49	17.46	16.92
	802.11n(HT40)	35.7	/	35.52
	802.11ac(VHT20)	16.11	16.59	16.56
	802.11ac(VHT40)	35.28	/	35.16
	802.11ac(VHT80)	75.36	/	/
ANT4	**Operation mode**	**6 dB Bandwidth (MHz)**		
		Low	Middle	High
U-NII-3	802.11a	16.32	16.35	15.81
	802.11n(HT20)	17.25	17.10	17.22
	802.11n(HT40)	35.46	/	35.28
	802.11ac(VHT20)	16.47	16.68	16.92
	802.11ac(VHT40)	35.34	/	35.34
	802.11ac(VHT80)	75.36	/	/
ANT5	**Operation mode**	**6 dB Bandwidth (MHz)**		
		Low	Middle	High
U-NII-3	802.11a	16.38	16.38	16.38
	802.11n(HT20)	17.34	17.25	17.19
	802.11n(HT40)	35.64	/	35.40
	802.11ac(VHT20)	16.53	16.20	16.35
	802.11ac(VHT40)	35.22	/	35.46
	802.11ac(VHT80)	75.48	/	/
ANT6	**Operation mode**	**6 dB Bandwidth (MHz)**		
		Low	Middle	High
U-NII-3	802.11a	16.38	16.41	16.29
	802.11n(HT20)	17.25	17.55	17.25
	802.11n(HT40)	35.46	/	35.28
	802.11ac(VHT20)	16.50	16.44	15.42
	802.11ac(VHT40)	35.22	/	35.22
	802.11ac(VHT80)	75.36	/	/

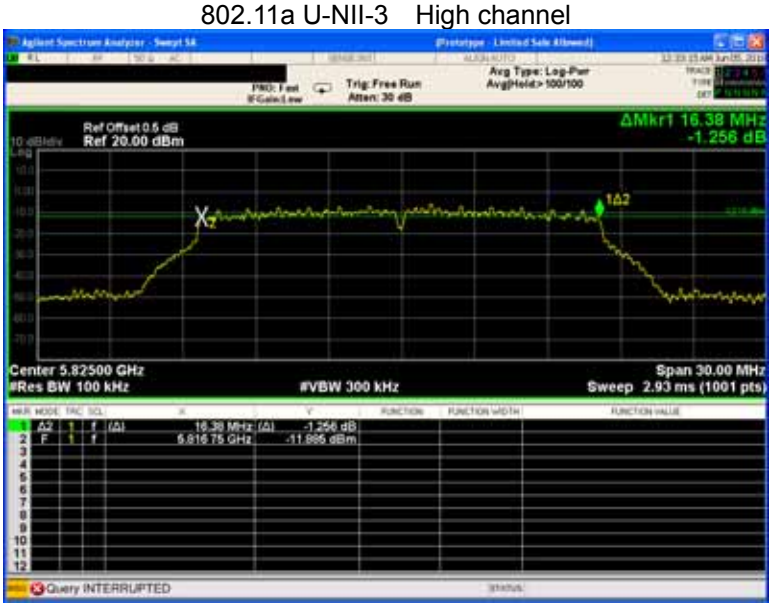
Test result plots shown as follows:

ANT3

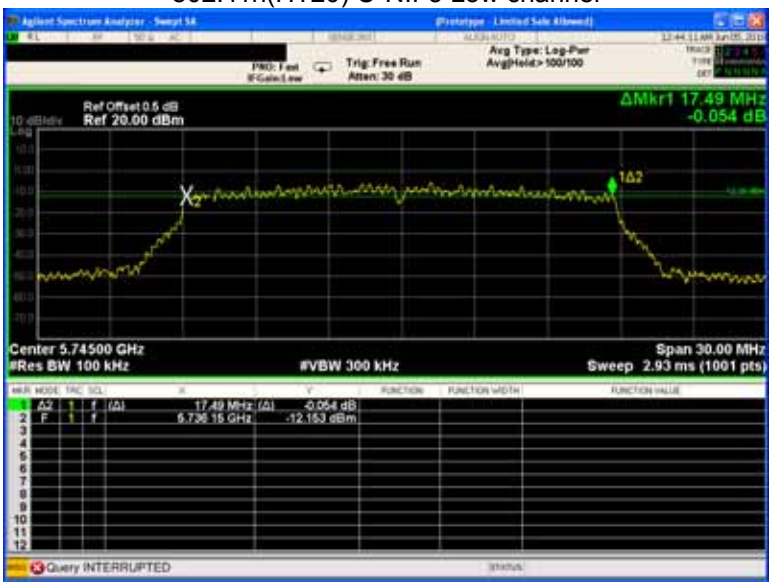
802.11a U-NII-3 Low channel

802.11a U-NII-3 Middle channel

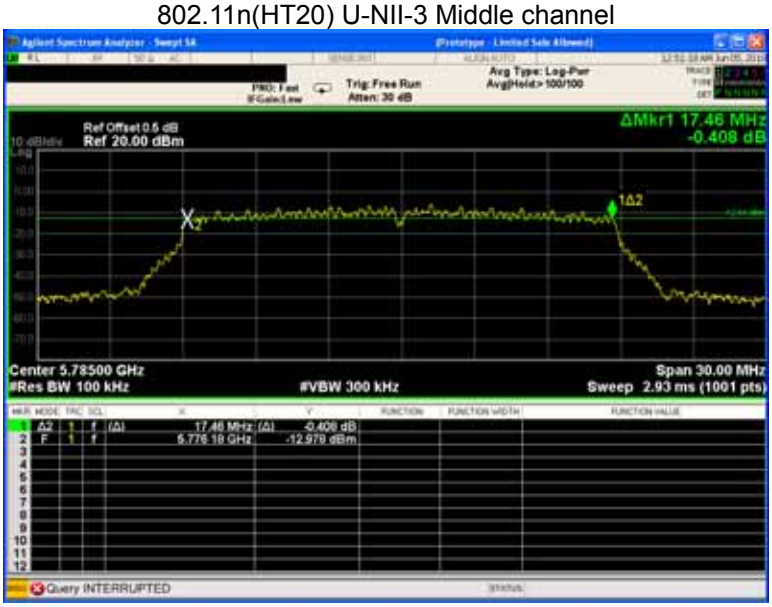
802.11a U-NII-3 High channel



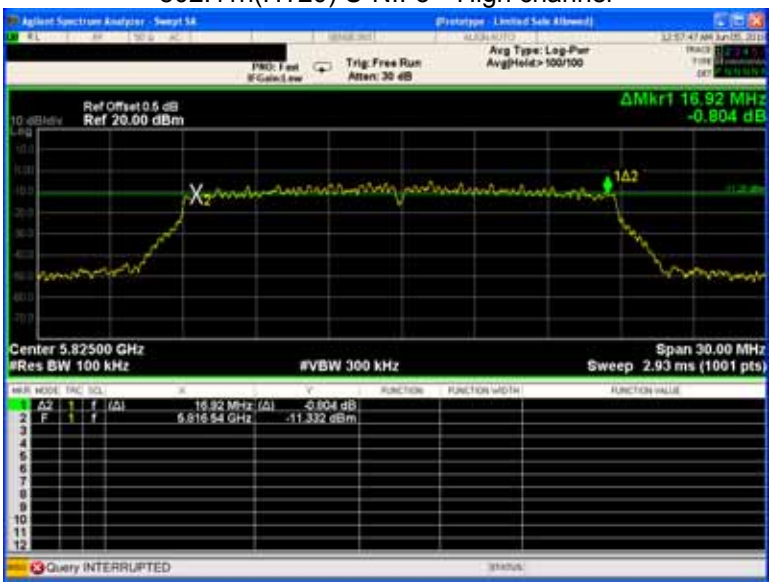
802.11n(HT20) U-NII-3 Low channel



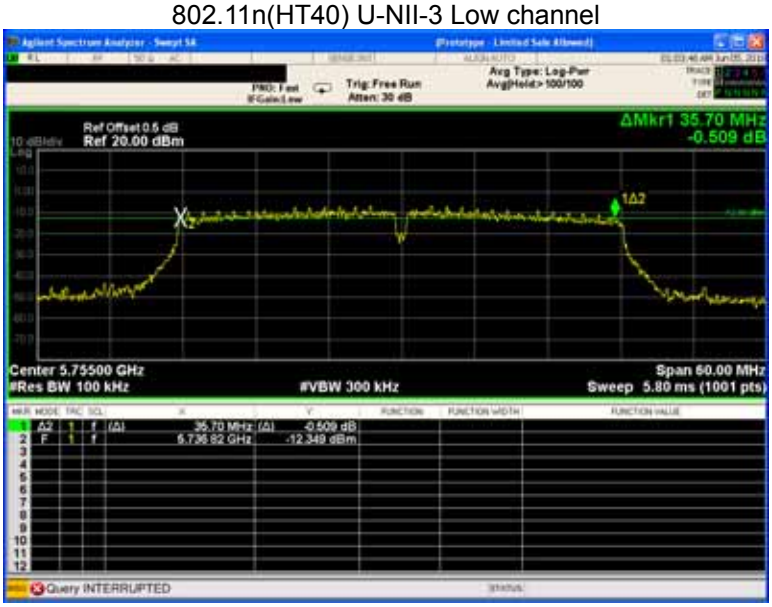
802.11n(HT20) U-NII-3 Middle channel



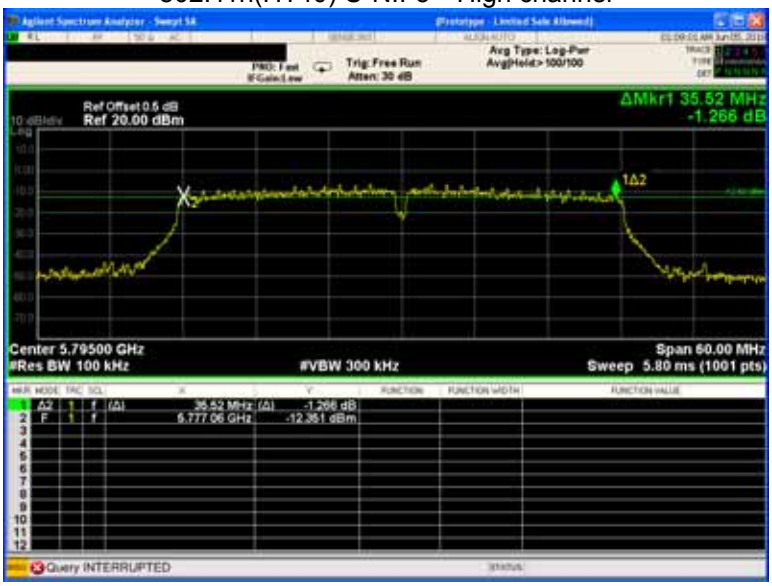
802.11n(HT20) U-NII-3 High channel



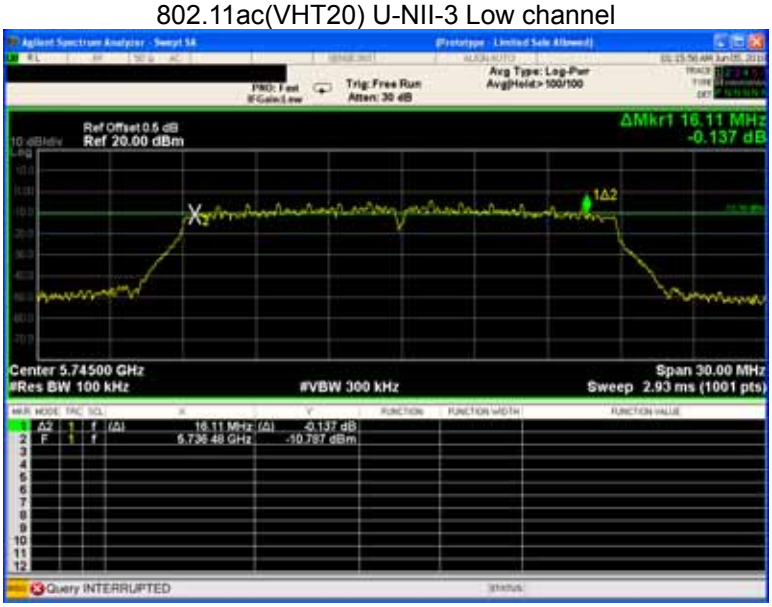
802.11n(HT40) U-NII-3 Low channel



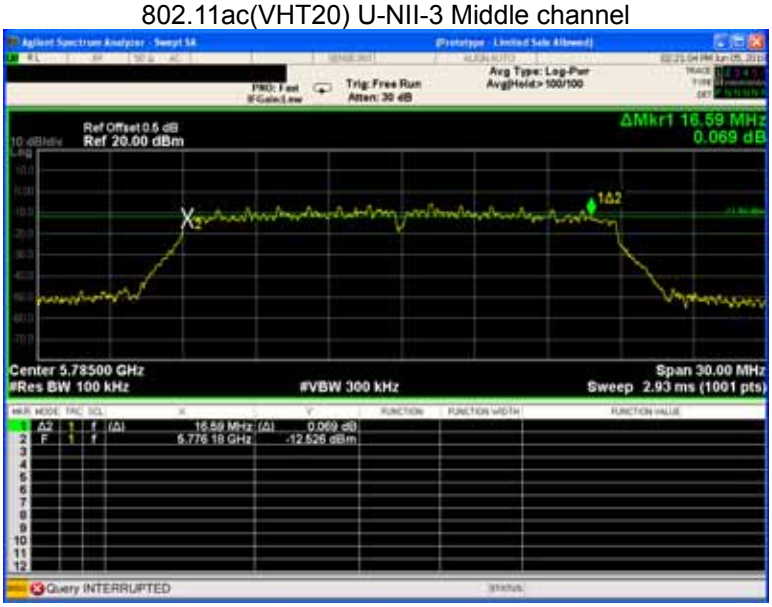
802.11n(HT40) U-NII-3 High channel



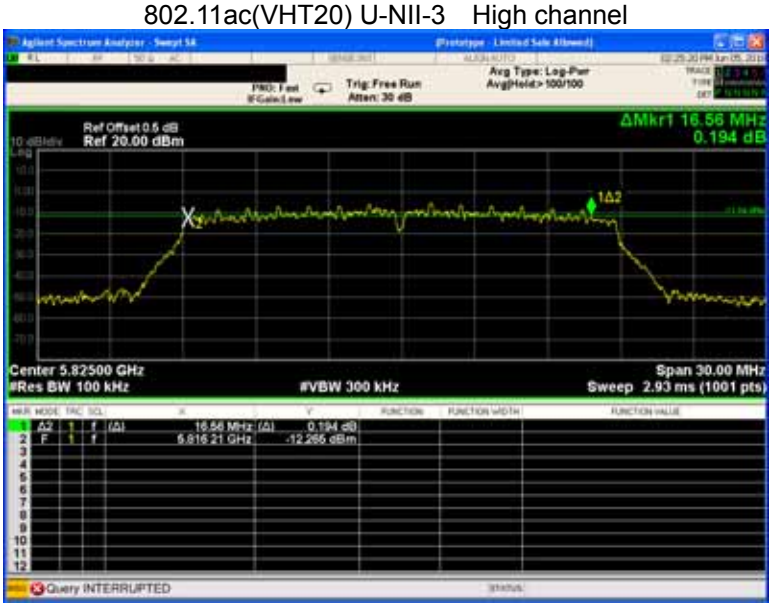
802.11ac(VHT20) U-NII-3 Low channel



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

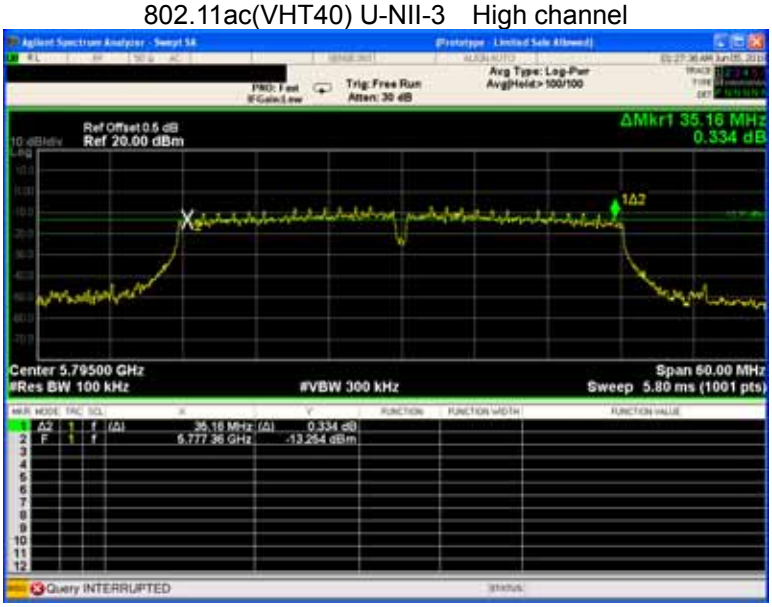


802.11ac(VHT20) U-NII-3 High channel

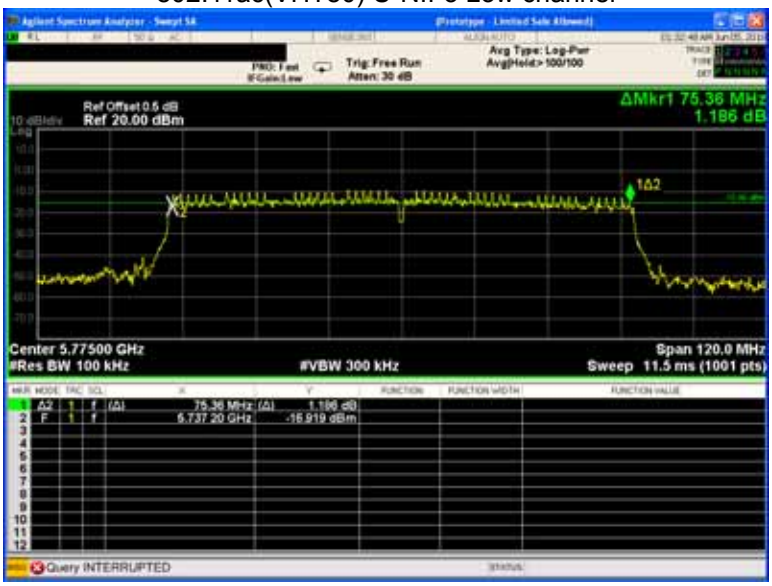


802.11ac(VHT40) U-NII-3 Low channel

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



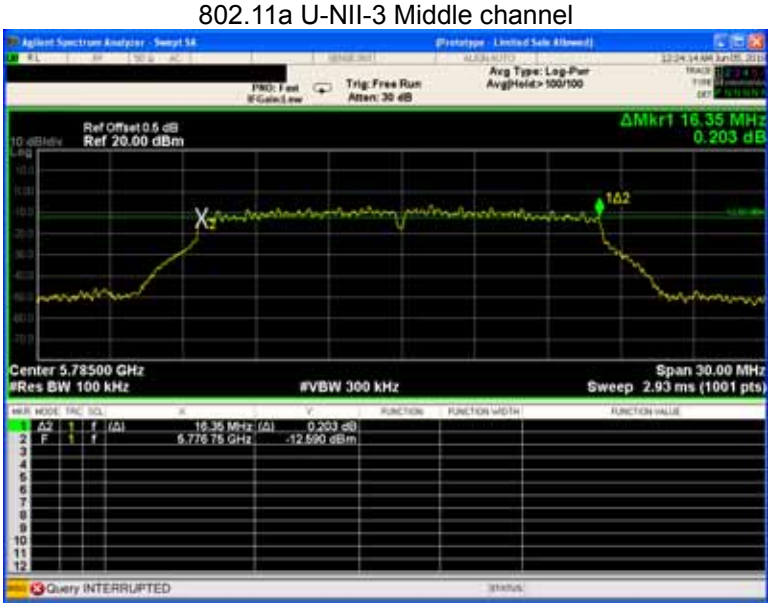
802.11ac(VHT80) U-NII-3 Low channel



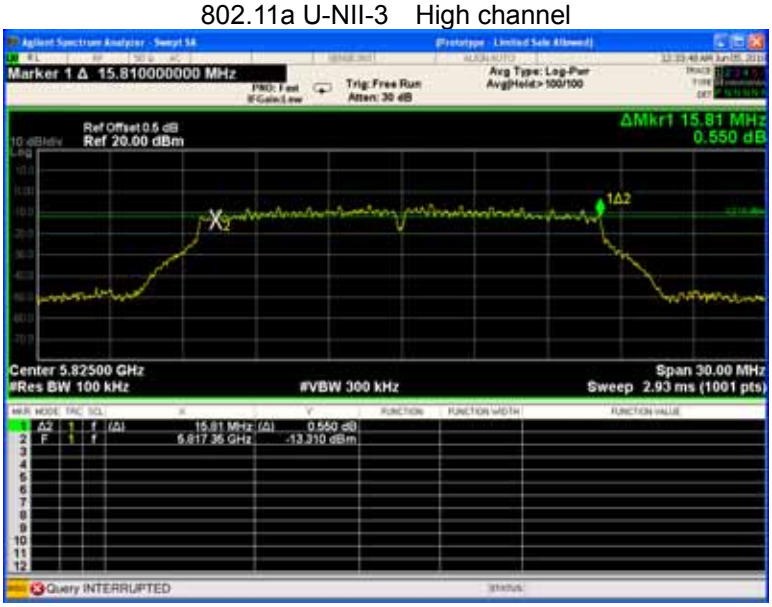
ANT4

802.11a U-NII-3 Low channel

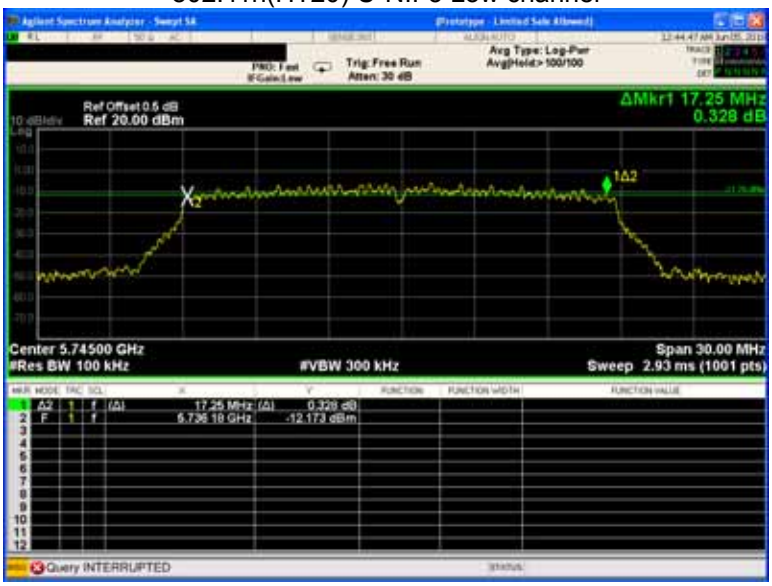
802.11a U-NII-3 Middle channel



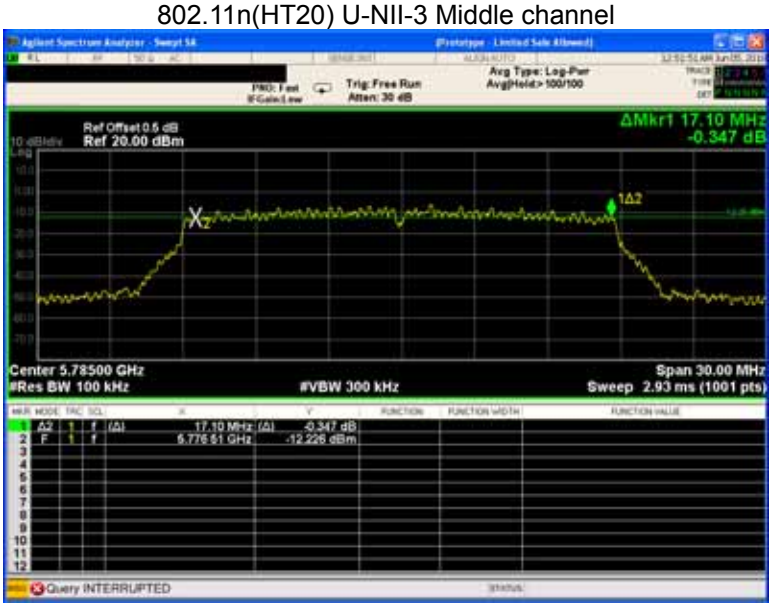
802.11a U-NII-3 High channel



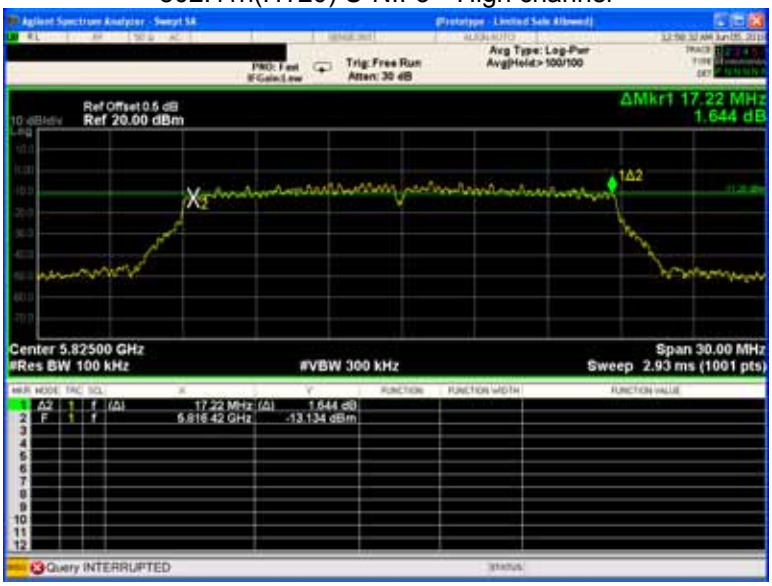
802.11n(HT20) U-NII-3 Low channel



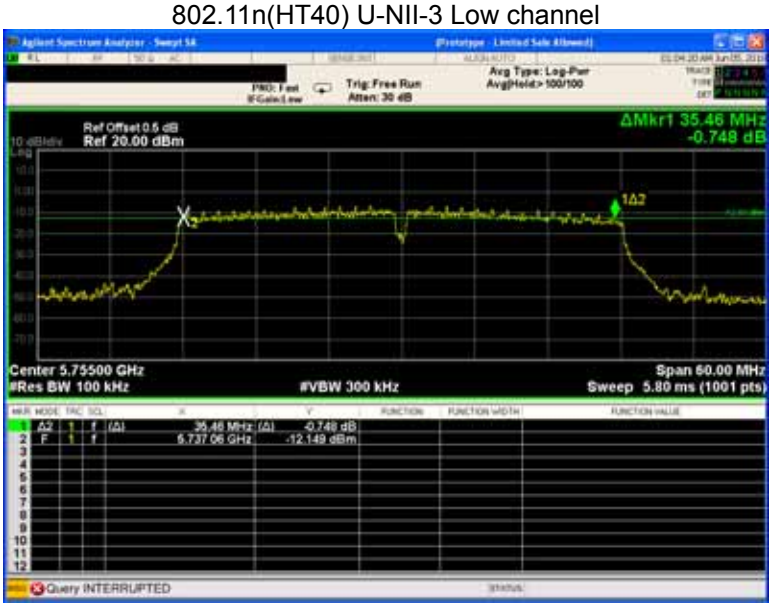
802.11n(HT20) U-NII-3 Middle channel



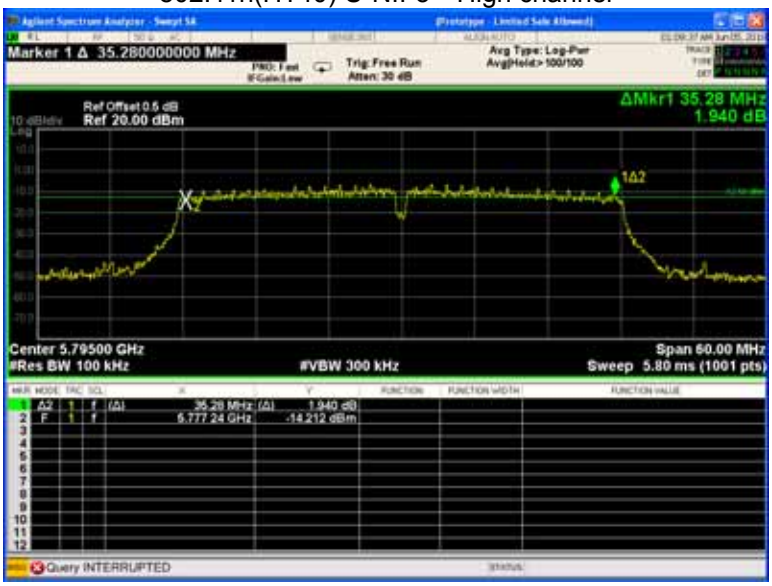
802.11n(HT20) U-NII-3 High channel



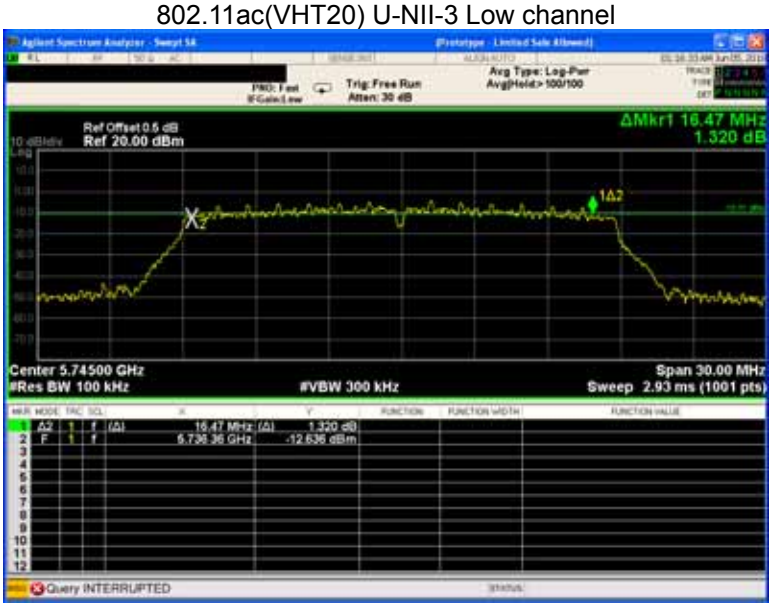
802.11n(HT40) U-NII-3 Low channel



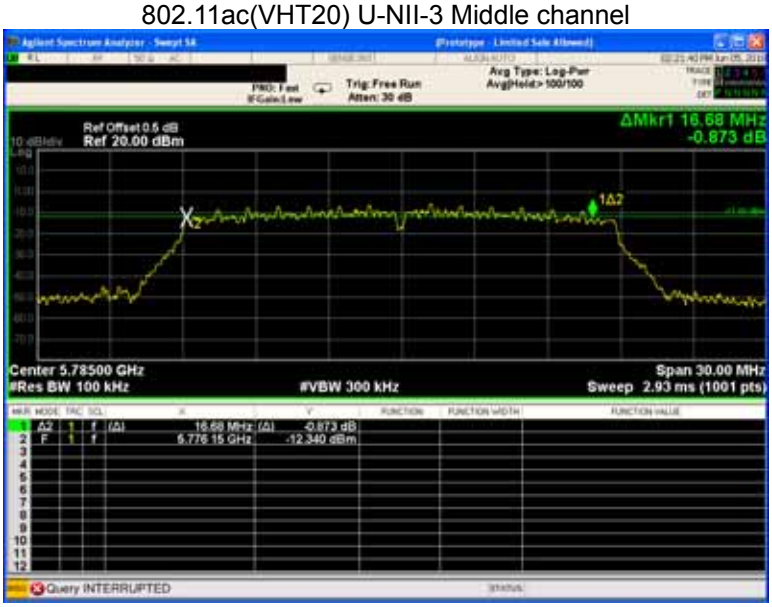
802.11n(HT40) U-NII-3 High channel



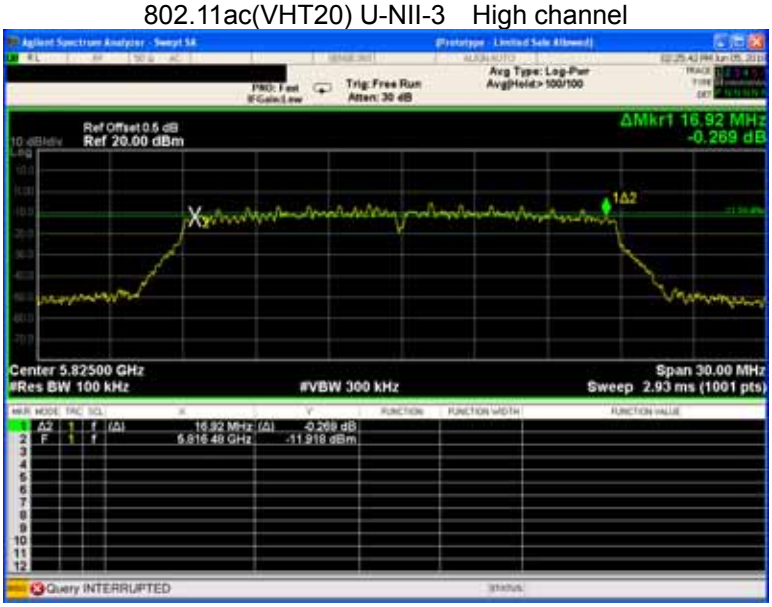
802.11ac(VHT20) U-NII-3 Low channel



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

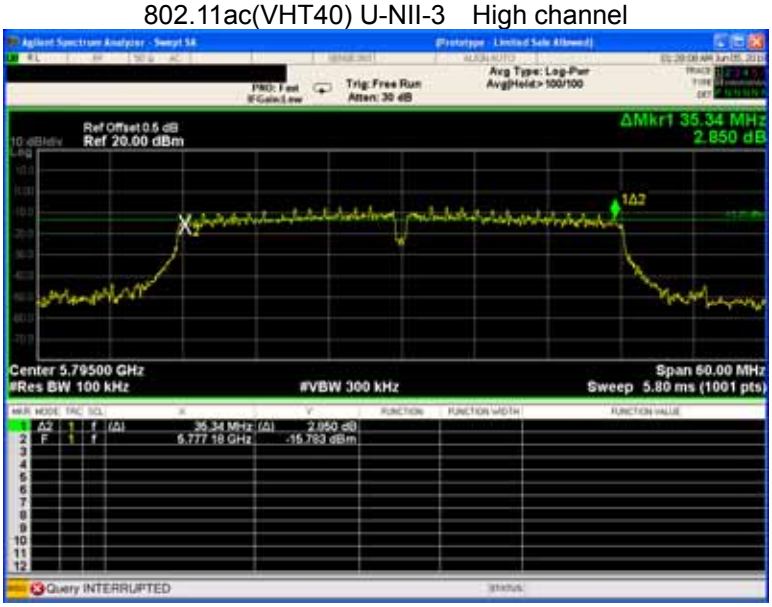


802.11ac(VHT20) U-NII-3 High channel

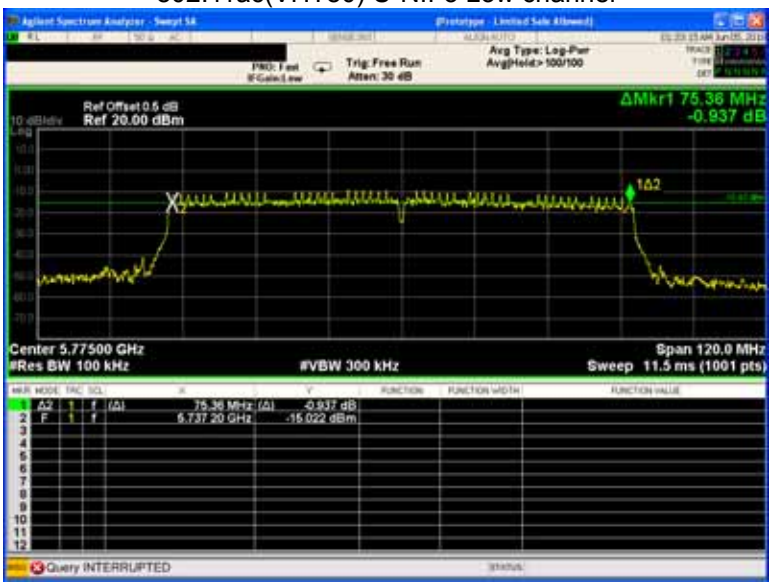


802.11ac(VHT40) U-NII-3 Low channel

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



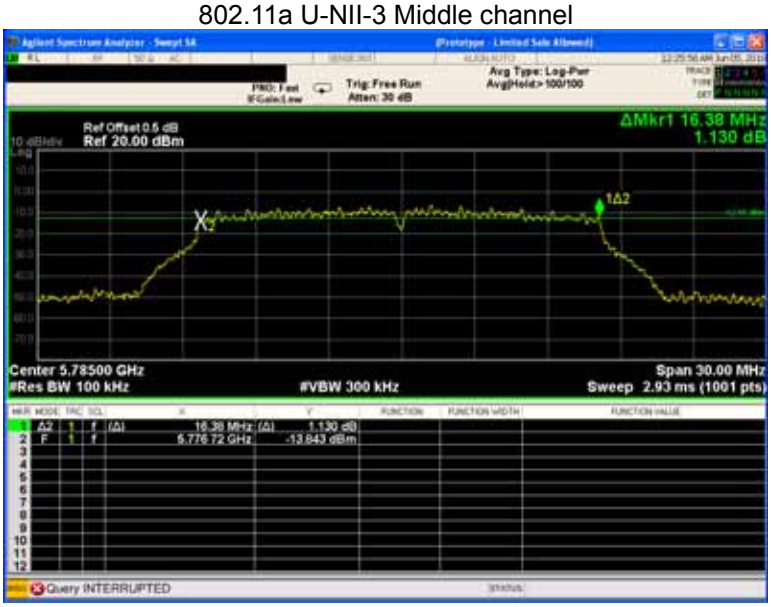
802.11ac(VHT80) U-NII-3 Low channel



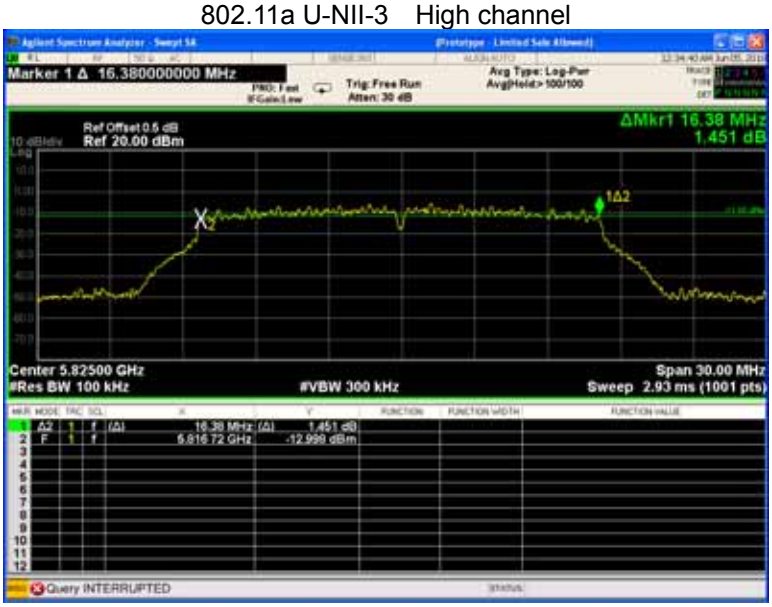
ANT5

802.11a U-NII-3 Low channel

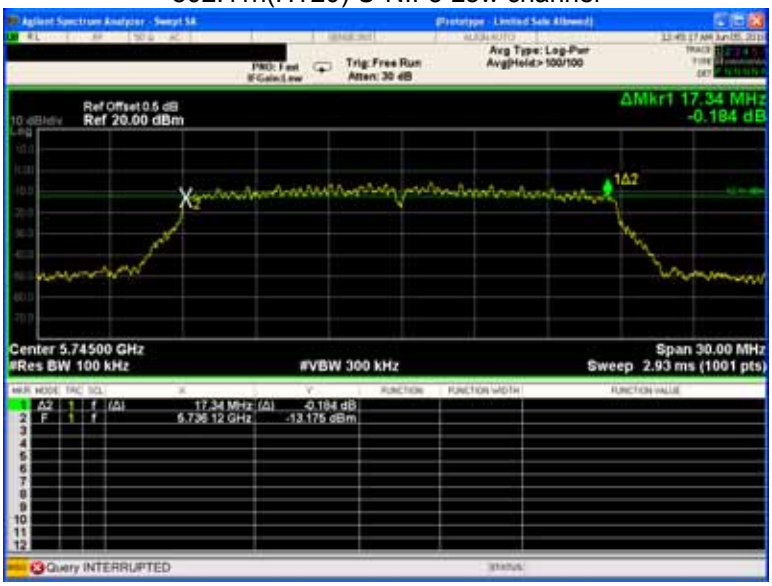
802.11a U-NII-3 Middle channel



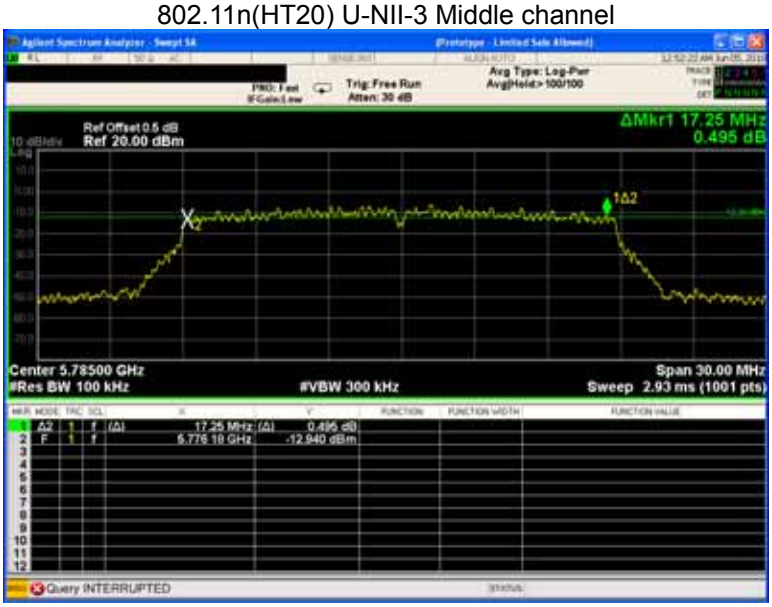
802.11a U-NII-3 High channel



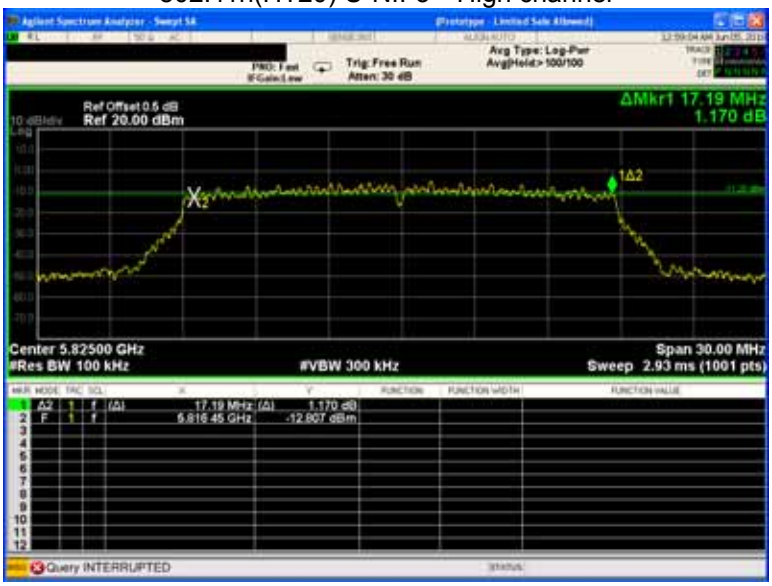
802.11n(HT20) U-NII-3 Low channel



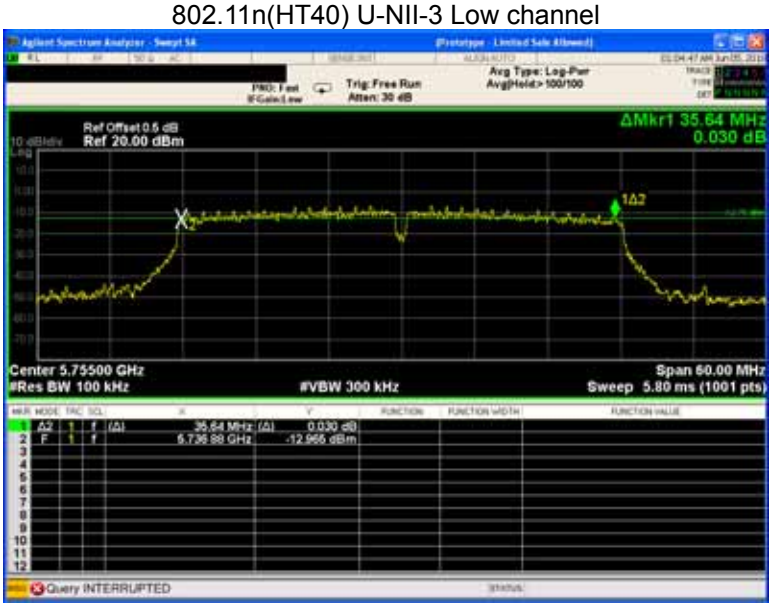
802.11n(HT20) U-NII-3 Middle channel



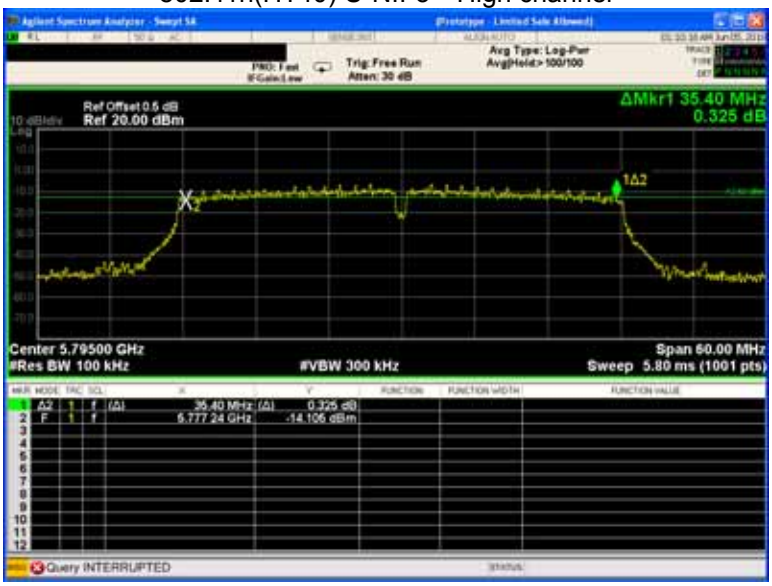
802.11n(HT20) U-NII-3 High channel



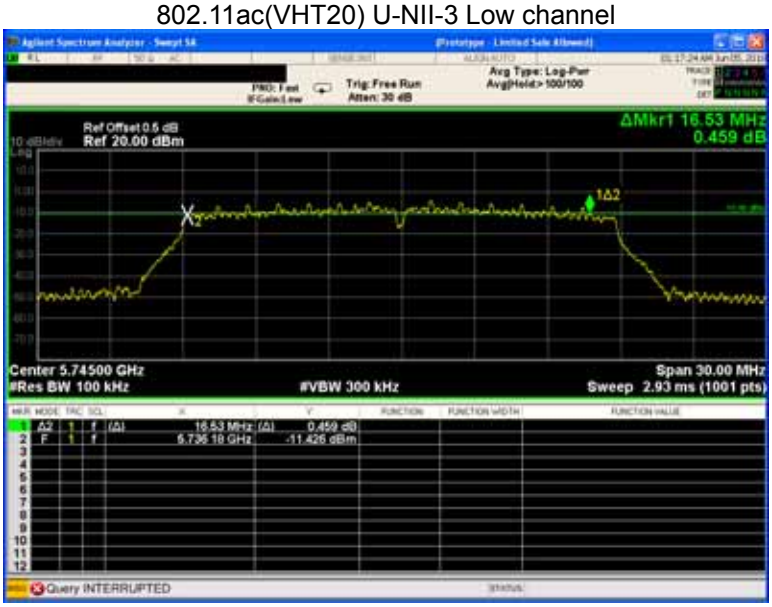
802.11n(HT40) U-NII-3 Low channel



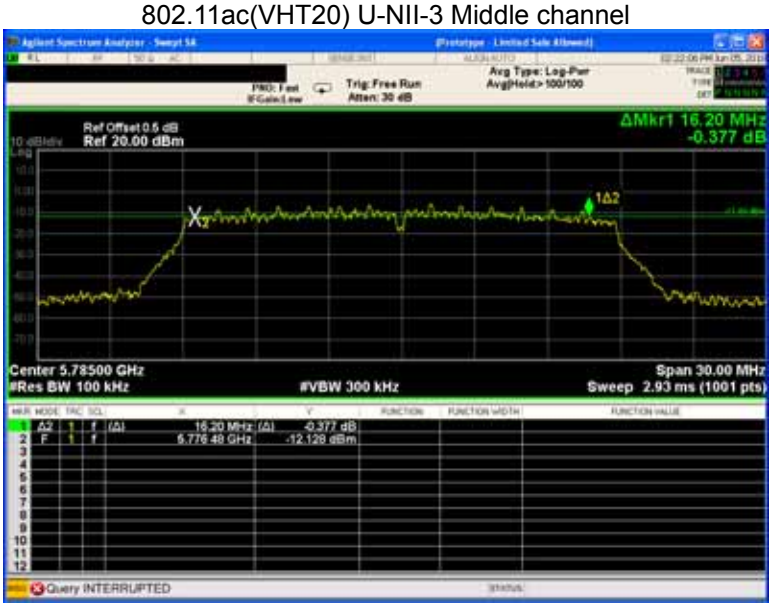
802.11n(HT40) U-NII-3 High channel



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



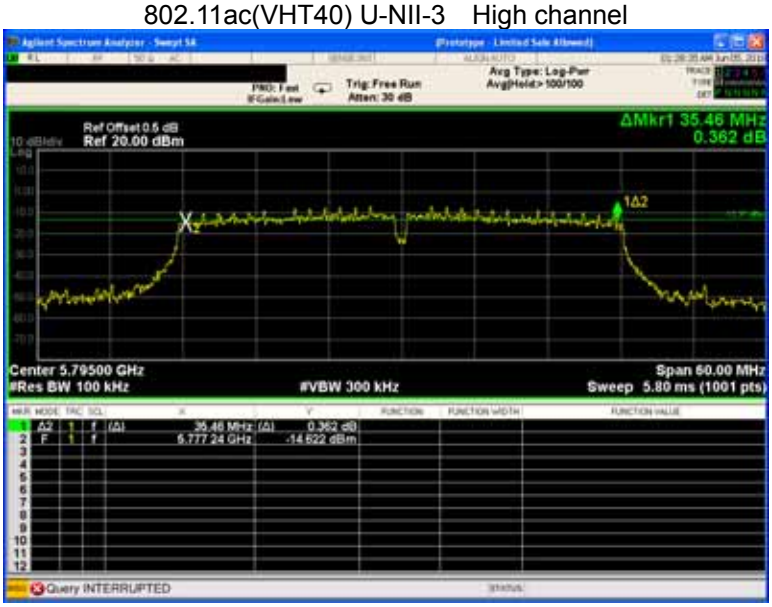
802.11ac(VHT20) U-NII-3 Middle channel



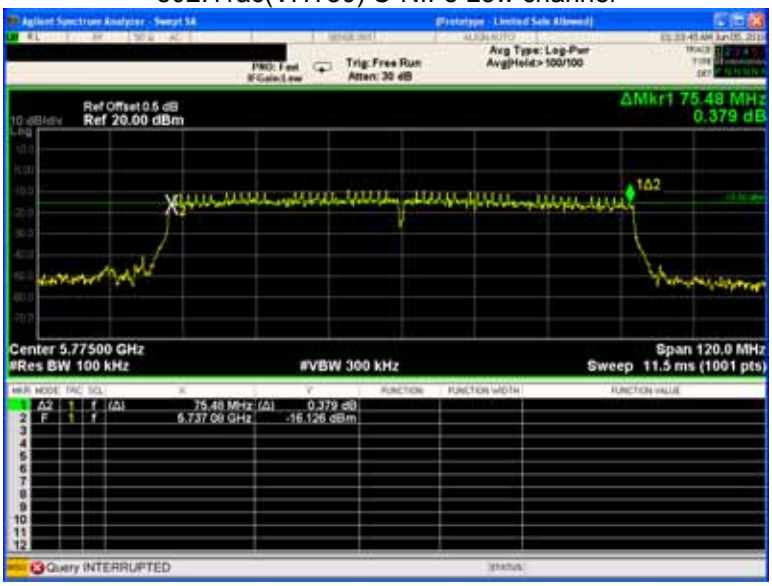
802.11ac(VHT20) U-NII-3 High channel

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

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



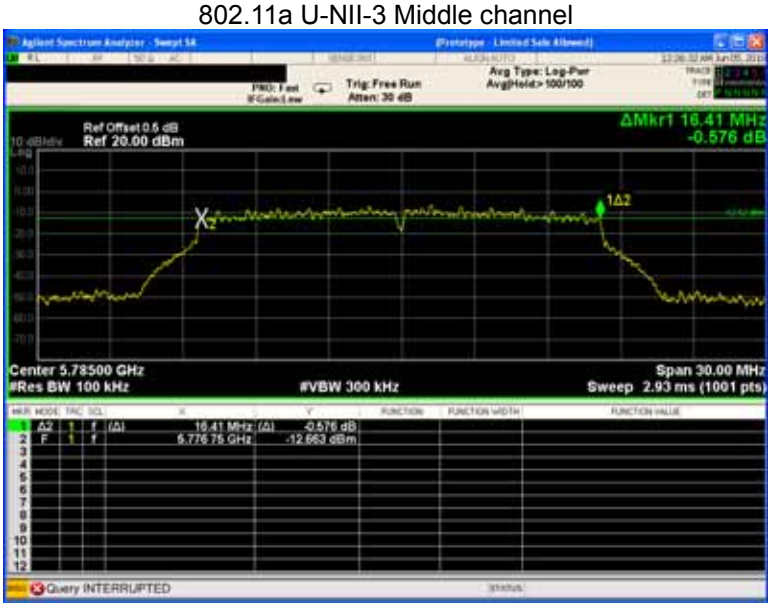
802.11ac(VHT80) U-NII-3 Low channel



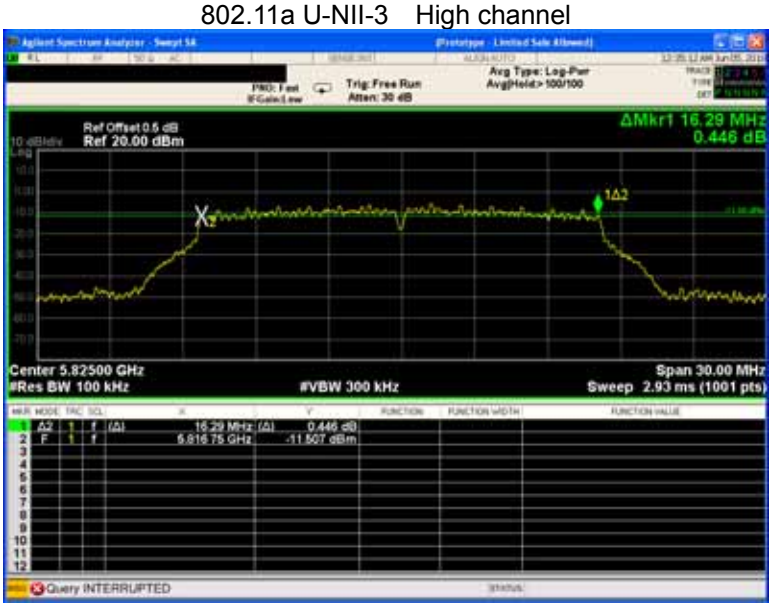
ANT6

802.11a U-NII-3 Low channel

802.11a U-NII-3 Middle channel

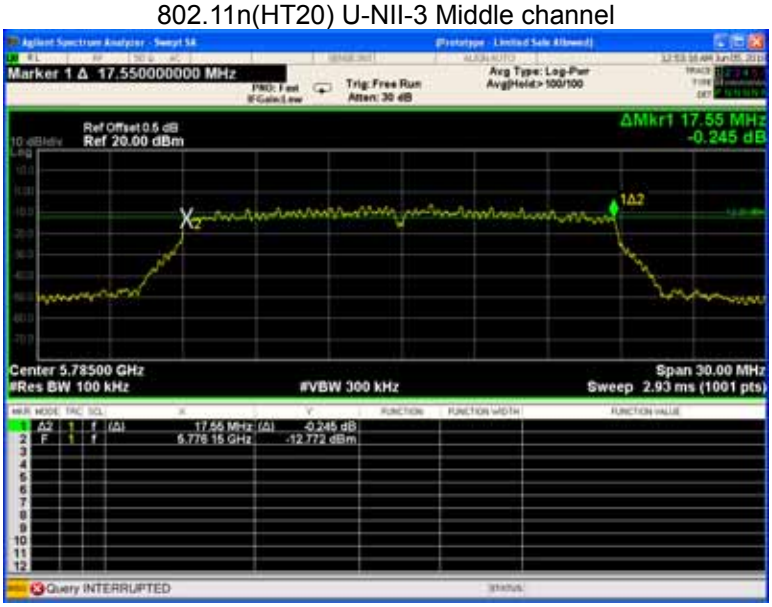


802.11a U-NII-3 High channel



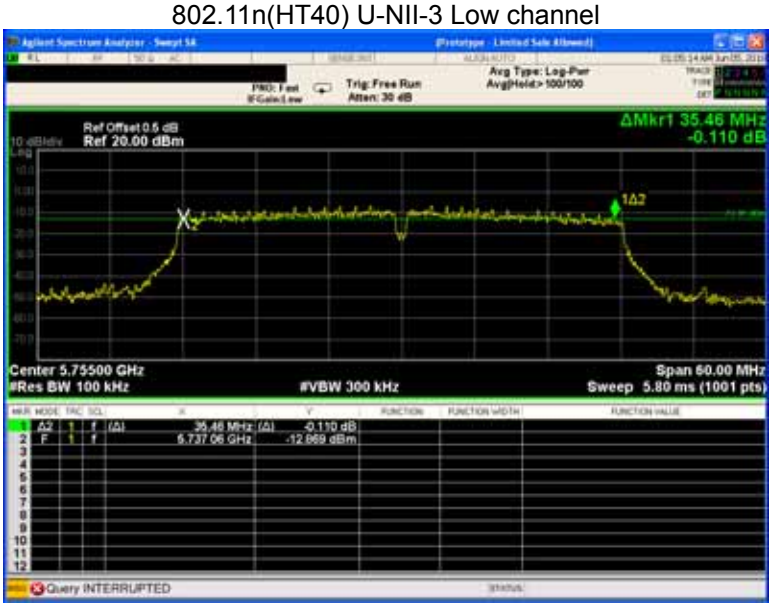
802.11n(HT20) U-NII-3 Low channel

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



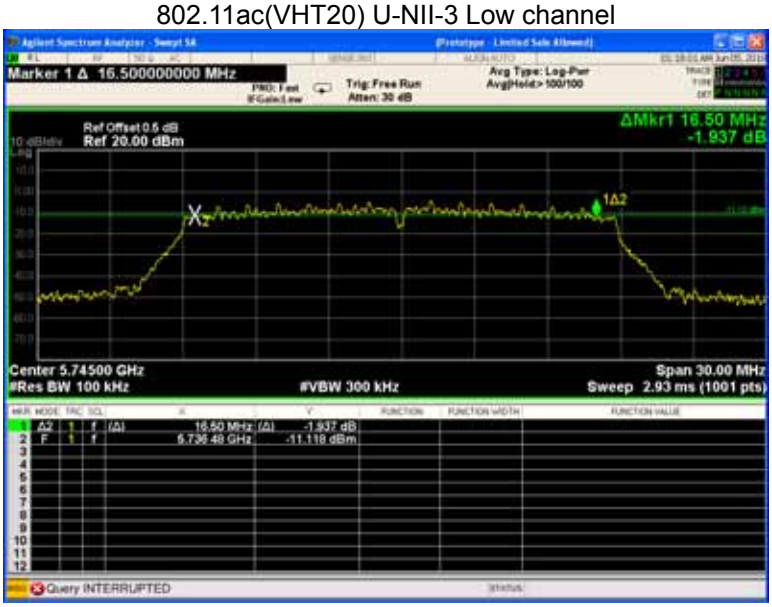
802.11n(HT20) U-NII-3 High channel

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

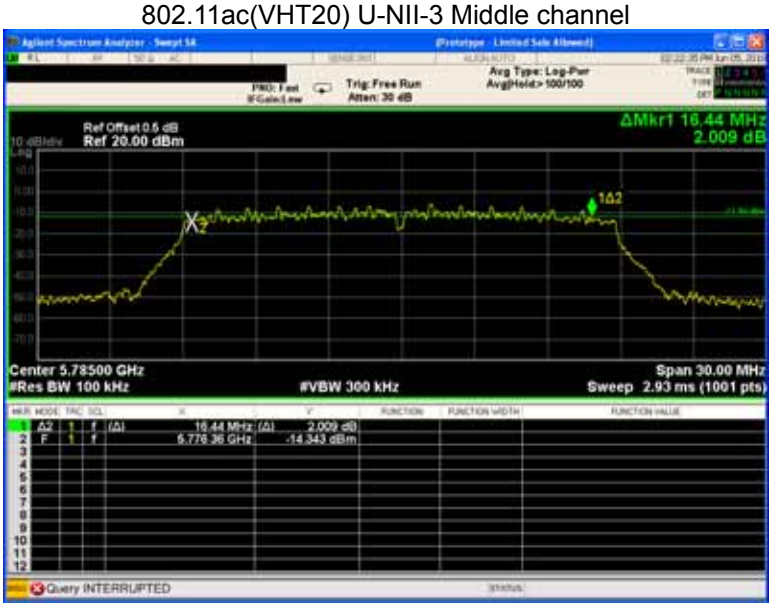


802.11n(HT40) U-NII-3 High channel

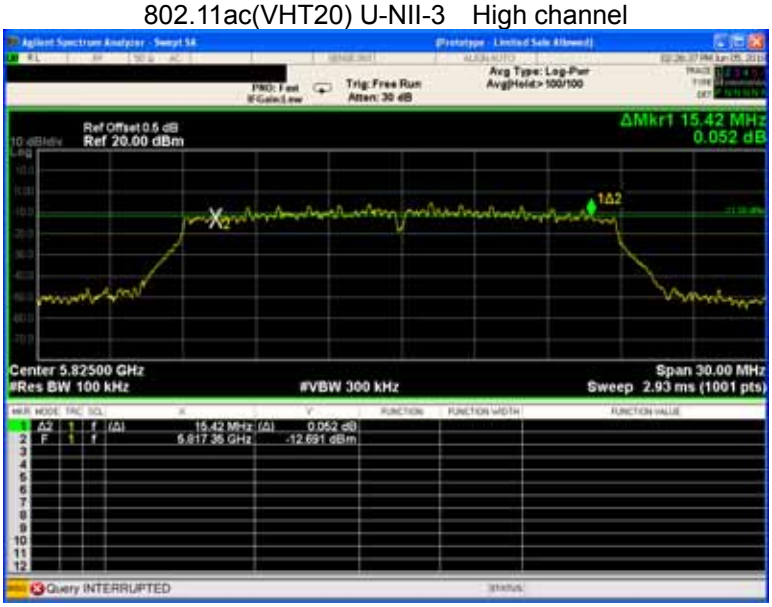
802.11ac(VHT20) U-NII-3 Low channel



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

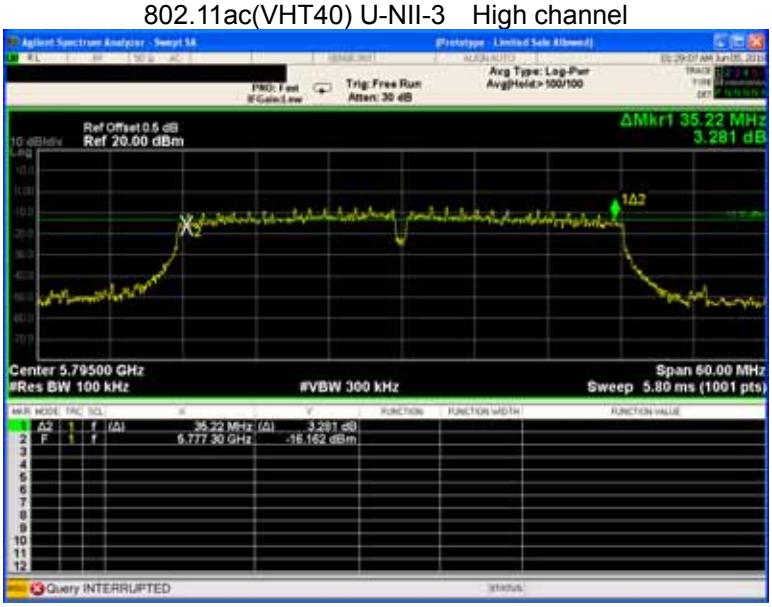


802.11ac(VHT20) U-NII-3 High channel

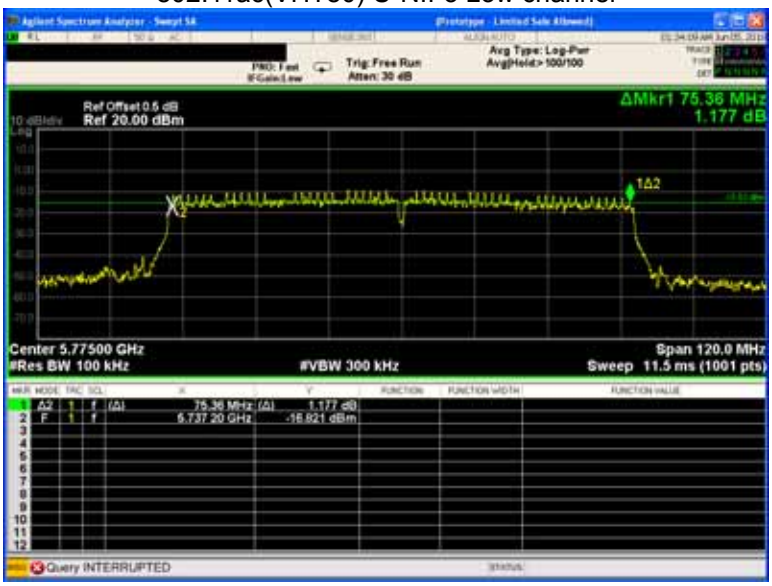


802.11ac(VHT40) U-NII-3 Low channel

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	19.44	19.65	19.30	16.413	16.437	16.407
	802.11n(HT20)	19.88	19.67	20.05	17.596	17.542	17.603
	802.11n(HT40)	39.70	/	39.80	36.054	/	35.990
	802.11ac(VHT20)	20.13	20.12	20.15	17.635	17.596	17.577
	802.11ac(VHT40)	39.82	/	39.51	35.967	/	36.057
	802.11ac(VHT80)	81.61	/	/	75.664	/	/
ANT3 U-NII-3	802.11a	19.35	19.61	19.46	16.425	16.451	16.448
	802.11n(HT20)	19.65	19.87	19.54	17.558	17.580	17.614
	802.11n(HT40)	39.43	/	40.03	36.014	/	35.970
	802.11ac(VHT20)	19.90	20.09	19.98	17.612	17.549	17.578
	802.11ac(VHT40)	40.12	/	39.46	36.050	/	36.031
	802.11ac(VHT80)	81.08	/	/	75.716	/	/

Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
ANT4 U-NII-1	802.11a	19.53	19.51	19.62	16.420	16.430	16.421
	802.11n(HT20)	20.03	19.99	19.64	17.570	17.551	17.521
	802.11n(HT40)	39.57	/	39.37	36.025	/	36.045
	802.11ac(VHT20)	20.02	20.15	20.11	17.642	17.628	17.628
	802.11ac(VHT40)	39.62	/	39.53	35.998	/	35.991
	802.11ac(VHT80)	81.32	/	/	75.724	/	/
ANT4 U-NII-3	802.11a	19.64	19.49	19.45	16.418	16.369	16.447
	802.11n(HT20)	19.69	19.84	19.81	17.559	17.579	17.556
	802.11n(HT40)	39.93	/	39.59	35.978	/	35.903
	802.11ac(VHT20)	20.12	20.12	20.03	17.575	17.642	17.554
	802.11ac(VHT40)	39.62	/	39.67	35.968	/	35.975
	802.11ac(VHT80)	81.25	/	/	75.896	/	/

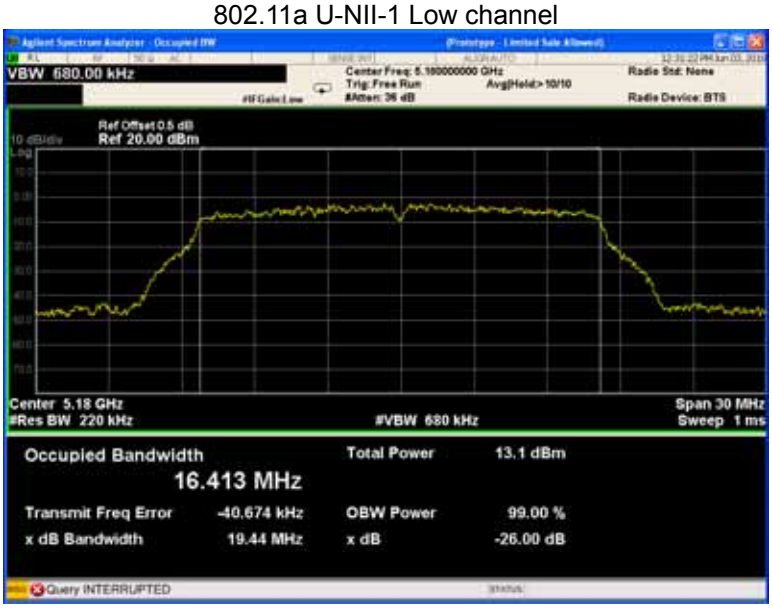
Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
ANT5 U-NII-1	802.11a	19.54	19.36	19.49	16.437	16.444	16.460
	802.11n(HT20)	20.01	19.92	19.59	17.531	17.553	17.571
	802.11n(HT40)	39.76	/	39.66	36.019	/	36.018
	802.11ac(VHT20)	20.10	20.13	20.08	17.596	17.626	17.598
	802.11ac(VHT40)	39.96	/	39.64	35.931	/	36.006
	802.11ac(VHT80)	81.35	/	/	75.783	/	/
ANT5 U-NII-3	802.11a	19.41	19.46	19.59	16.441	16.422	16.450
	802.11n(HT20)	19.56	19.63	19.86	17.531	17.543	17.567
	802.11n(HT40)	39.12	/	39.43	35.980	/	36.101
	802.11ac(VHT20)	20.09	20.06	20.10	17.602	17.637	17.626
	802.11ac(VHT40)	39.40	/	40.26	35.955	/	35.967
	802.11ac(VHT80)	80.58	/	/	75.792	/	/

Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
ANT6 U-NII-1	802.11a	19.55	19.57	19.57	16.397	16.436	16.427
	802.11n(HT20)	19.80	19.92	19.94	17.554	17.579	17.570
	802.11n(HT40)	39.73	/	39.67	36.040	/	36.018
	802.11ac(VHT20)	20.02	20.08	19.99	17.607	17.577	17.617
	802.11ac(VHT40)	39.73	/	40.11	35.964	/	35.953
	802.11ac(VHT80)	81.15	/	/	75.784	/	/
ANT6 U-NII-3	802.11a	19.41	19.47	24.57	16.444	16.426	16.746
	802.11n(HT20)	20.08	19.71	19.75	17.560	17.532	17.575
	802.11n(HT40)	39.46	/	39.41	35.987	/	35.988
	802.11ac(VHT20)	19.95	20.05	20.11	17.637	17.590	17.645
	802.11ac(VHT40)	39.62	/	39.44	36.013	/	36.027
	802.11ac(VHT80)	81.08	/	/	75.848	/	/

Test result plots shown as follows:

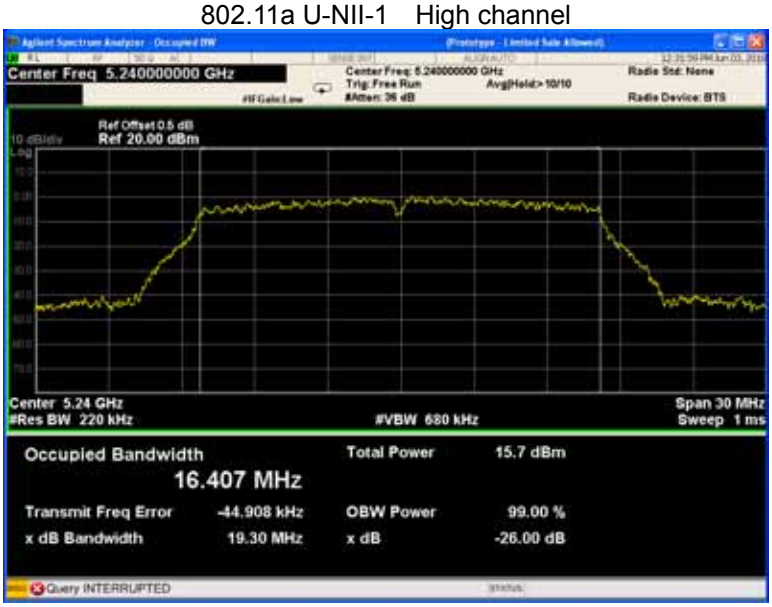
ANT3

802.11a U-NII-1 Low channel



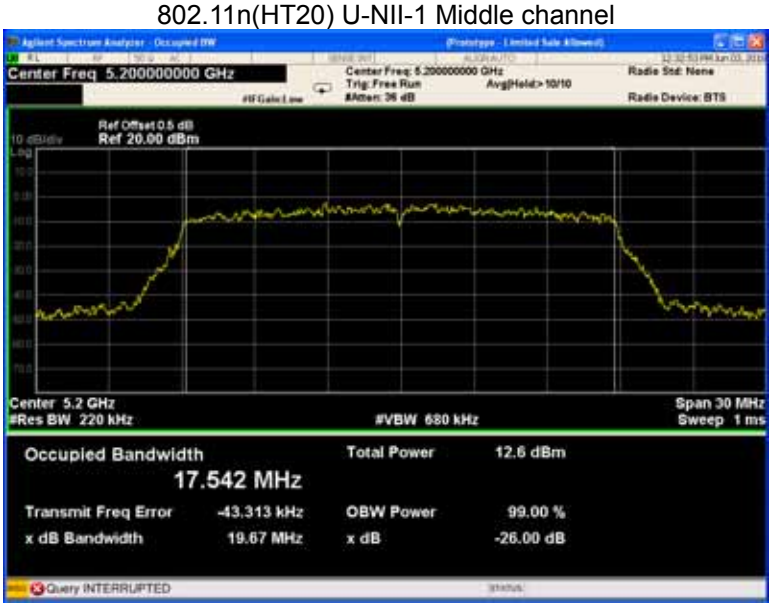
802.11a U-NII-1 Middle channel

802.11a U-NII-1 High channel



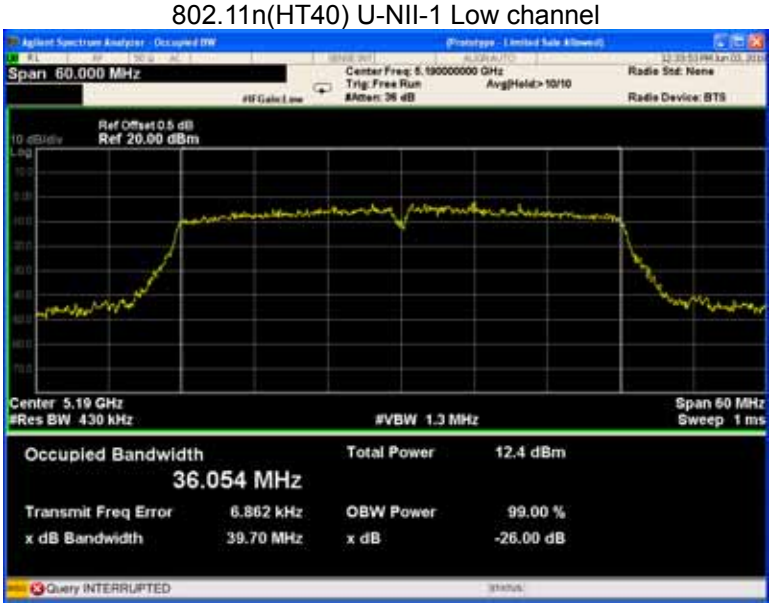
802.11n(HT20) U-NII-1 Low channel

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



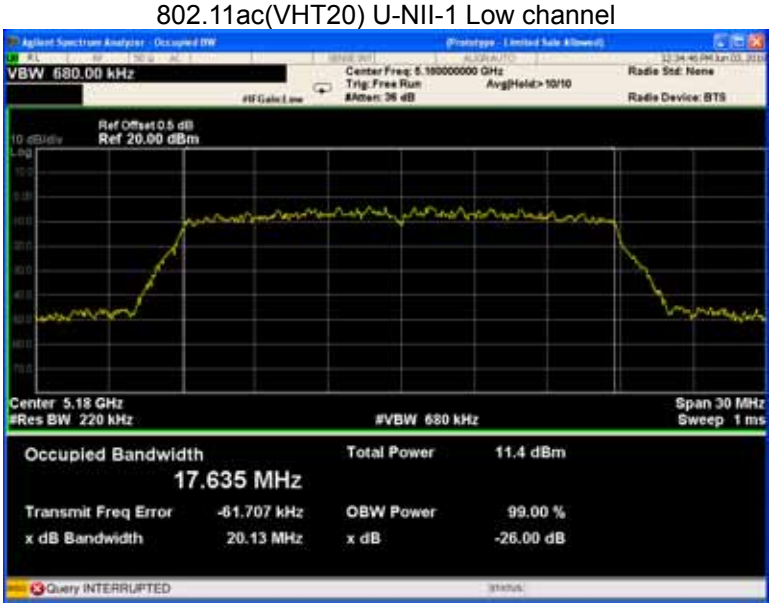
802.11n(HT20) U-NII-1 High channel

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

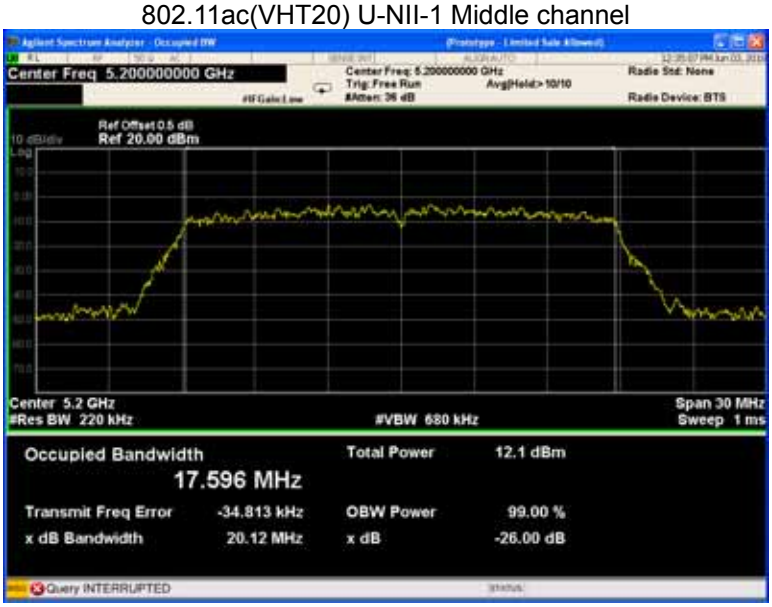


802.11n(HT40) U-NII-1 High channel

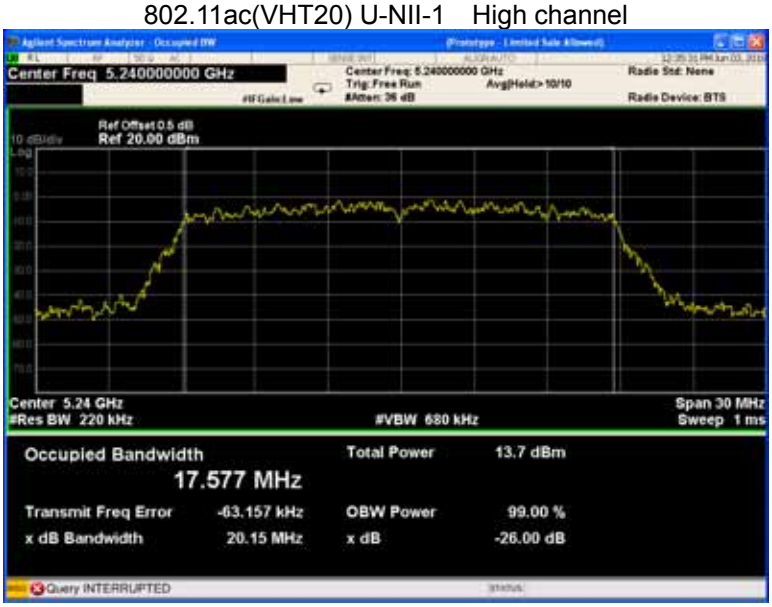
802.11ac(VHT20) U-NII-1 Low channel



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

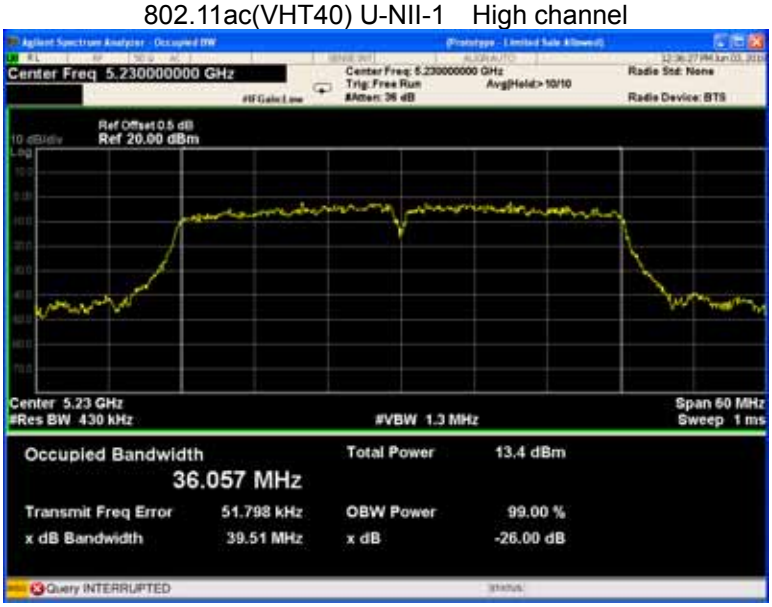


802.11ac(VHT20) U-NII-1 High channel

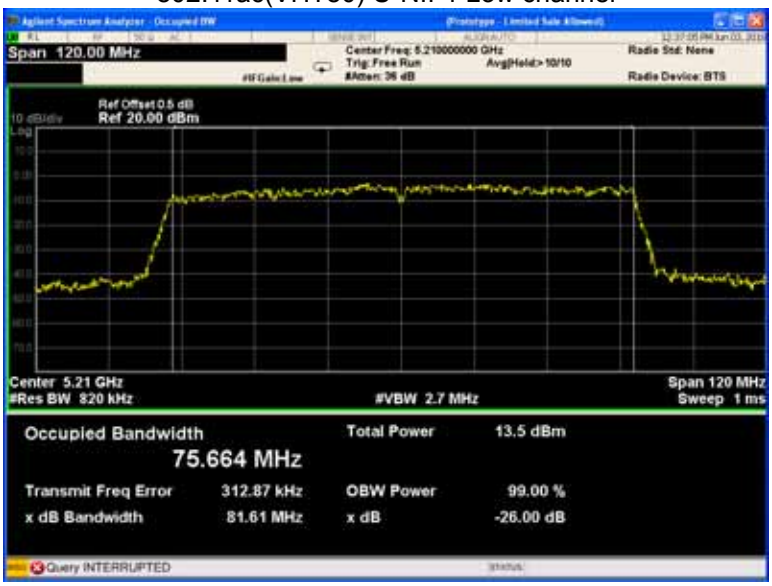


802.11ac(VHT40) U-NII-1 Low channel

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



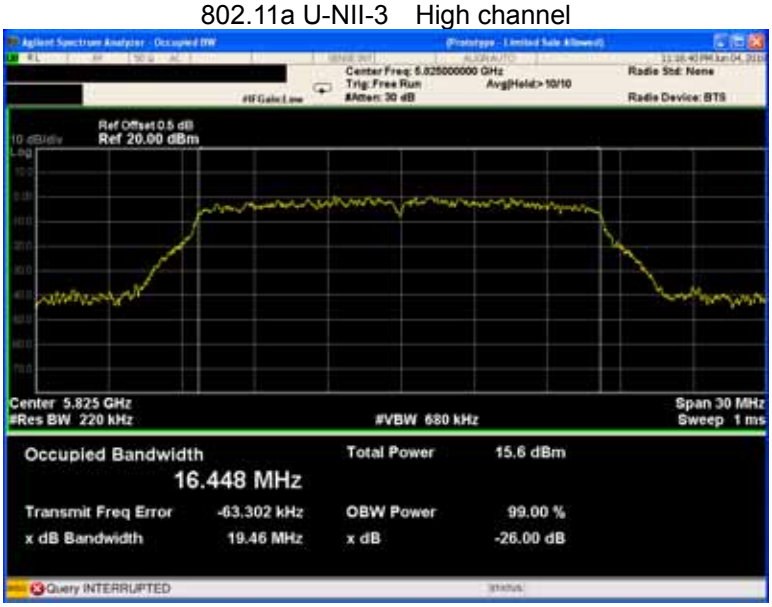
802.11ac(VHT80) U-NII-1 Low channel



802.11a U-NII-3 Low channel

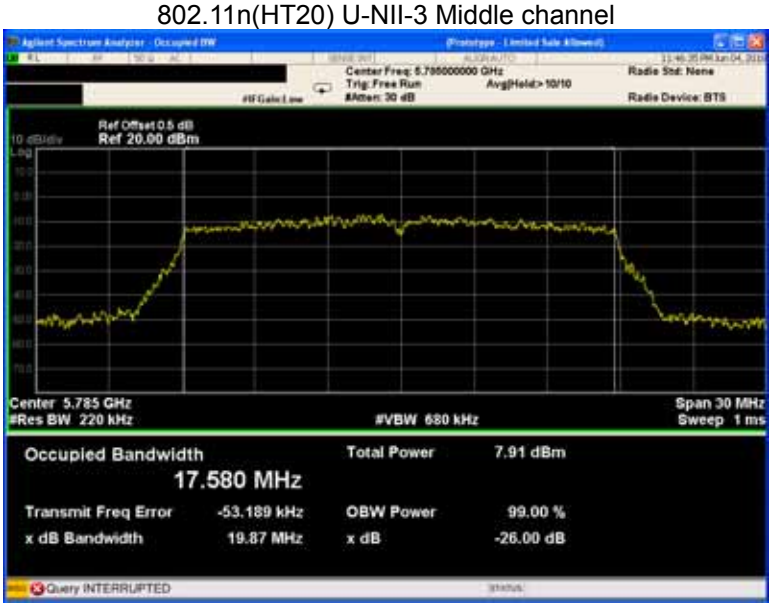
802.11a U-NII-3 Middle channel

802.11a U-NII-3 High channel



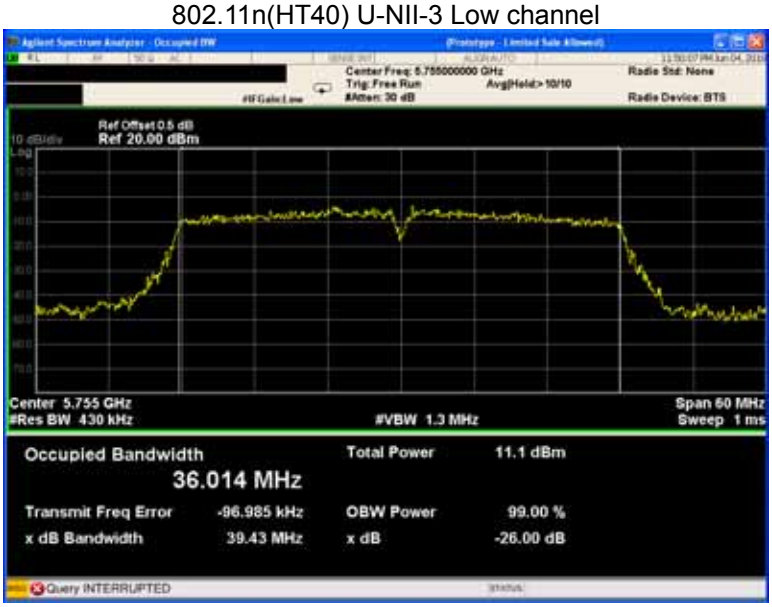
802.11n(HT20) U-NII-3 Low channel

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

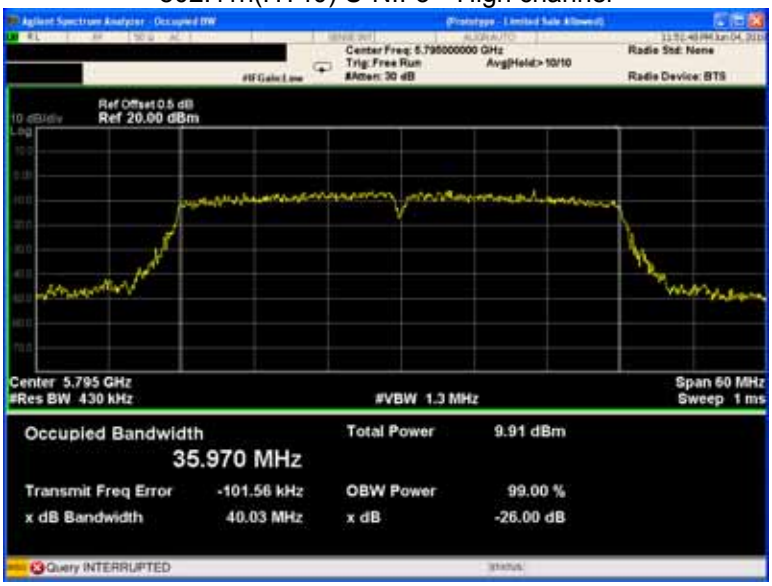


802.11n(HT20) U-NII-3 High channel

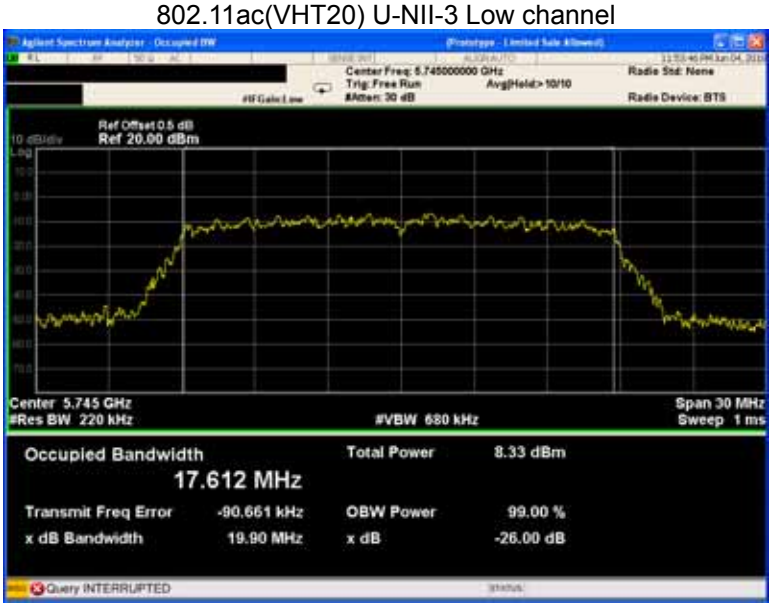
802.11n(HT40) U-NII-3 Low channel



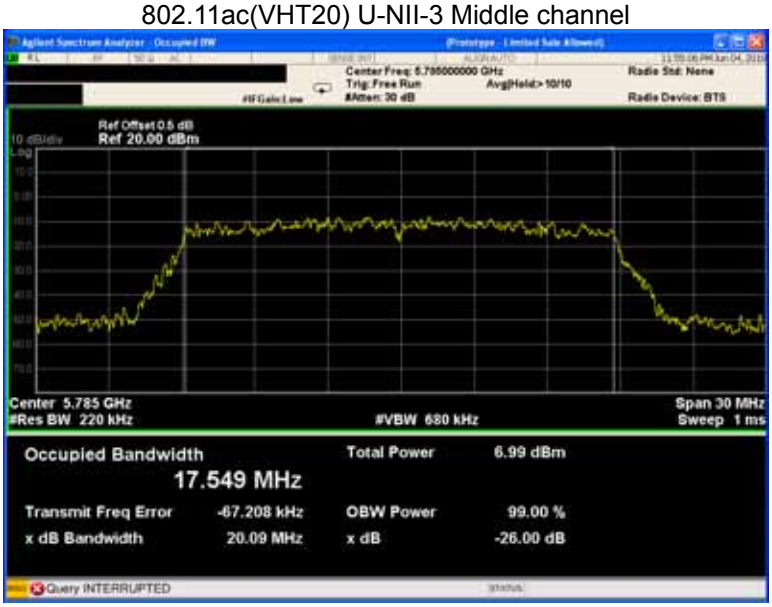
802.11n(HT40) U-NII-3 High channel



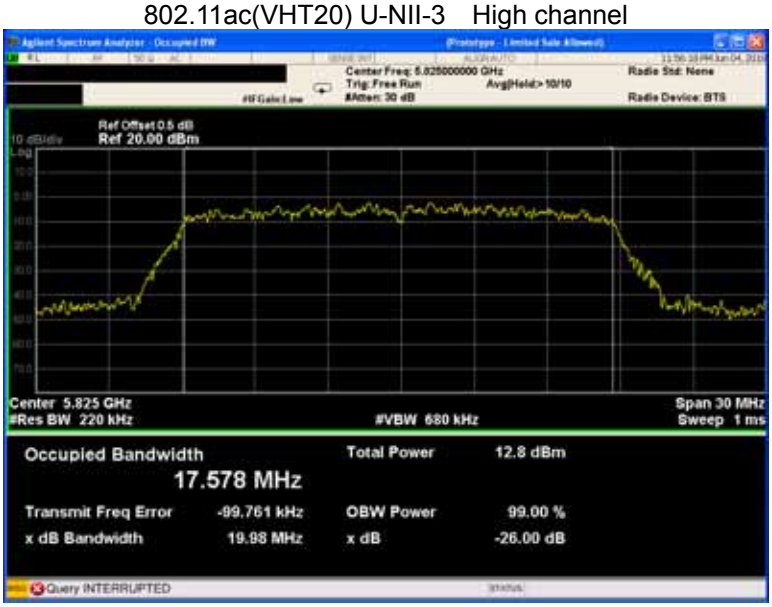
802.11ac(VHT20) U-NII-3 Low channel



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

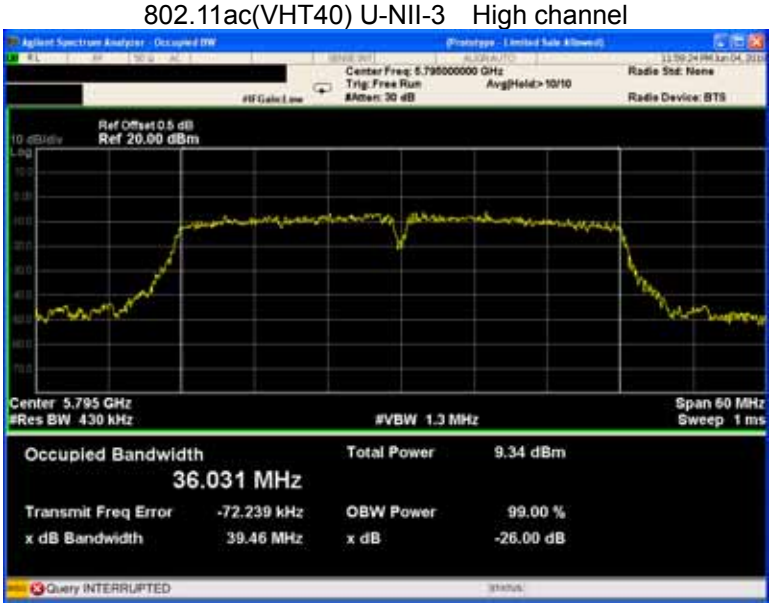


802.11ac(VHT20) U-NII-3 High channel



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

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



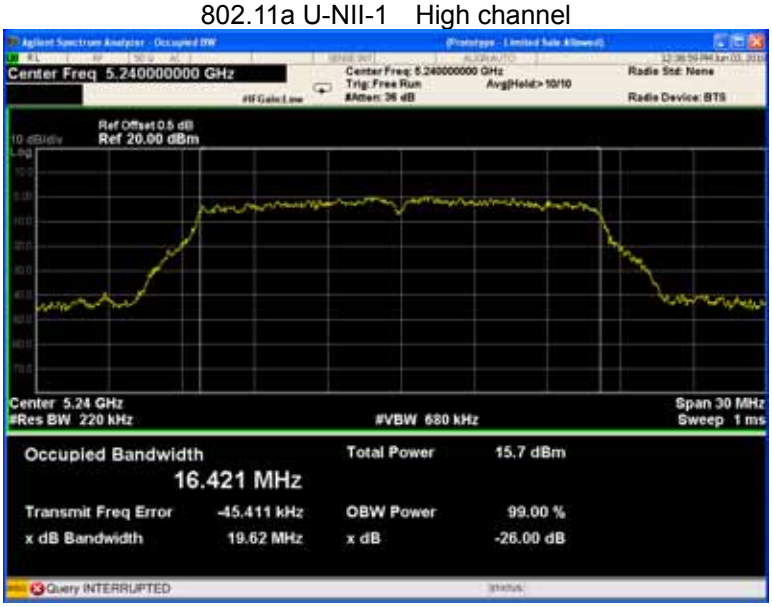
802.11ac(VHT80) U-NII-3 Low channel

ANT4

802.11a U-NII-1 Low channel

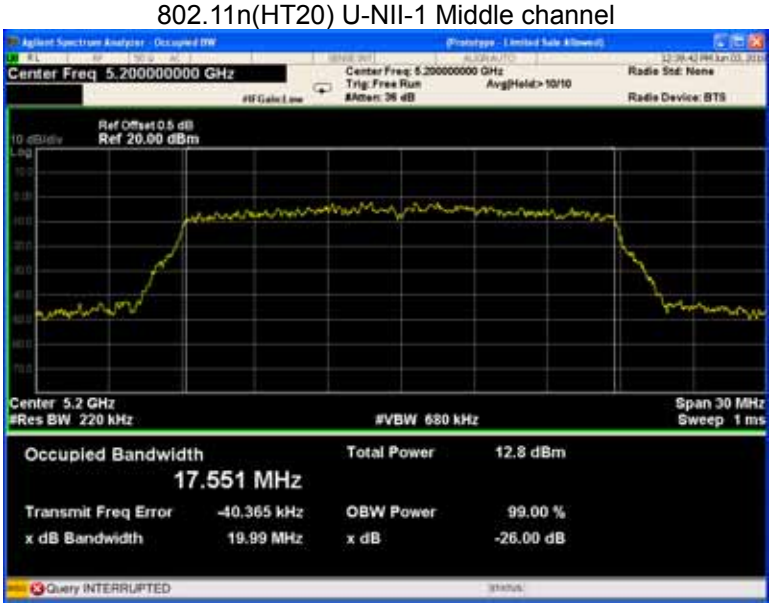
802.11a U-NII-1 Middle channel

802.11a U-NII-1 High channel



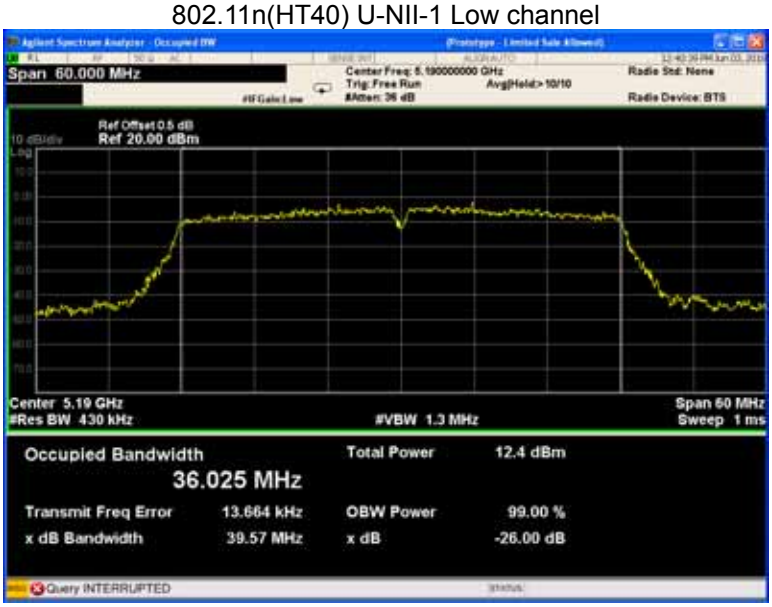
802.11n(HT20) U-NII-1 Low channel

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



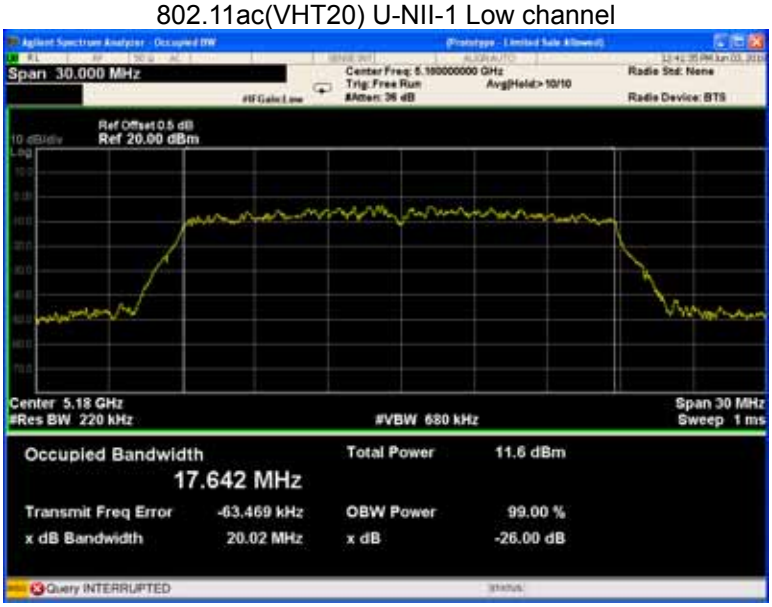
802.11n(HT20) U-NII-1 High channel

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

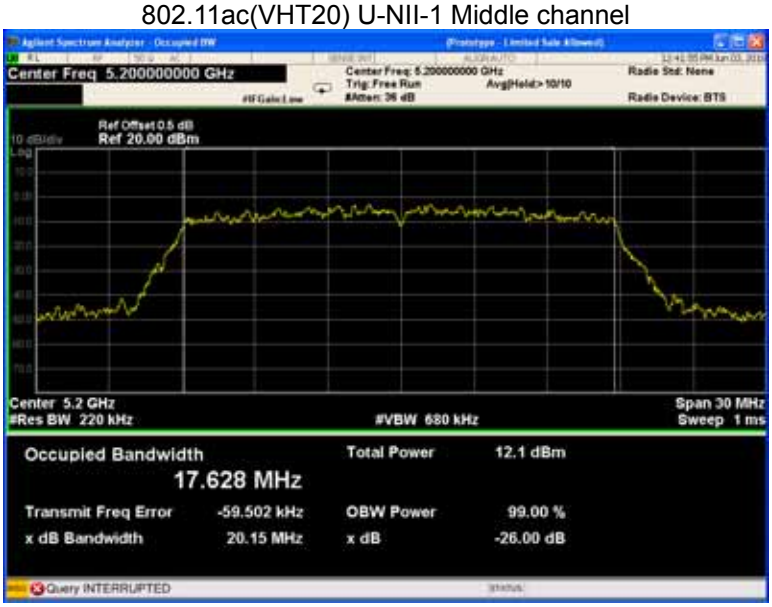


802.11n(HT40) U-NII-1 High channel

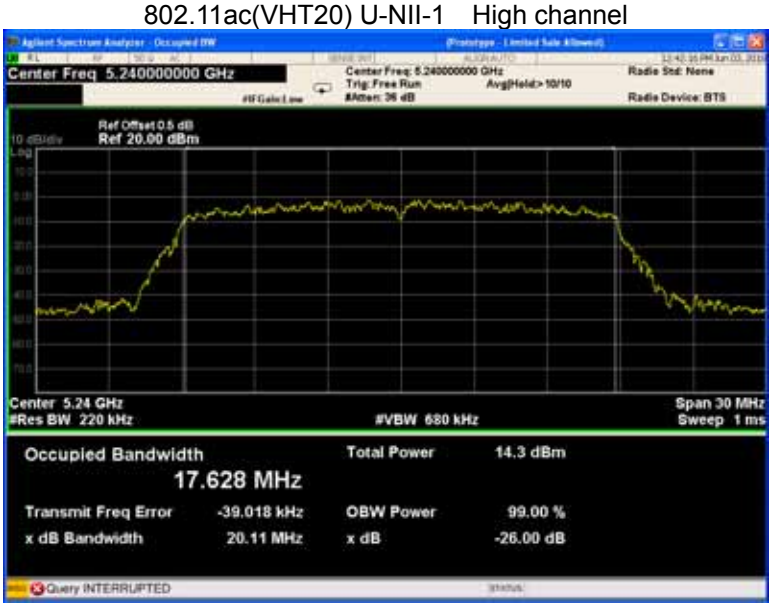
802.11ac(VHT20) U-NII-1 Low channel



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

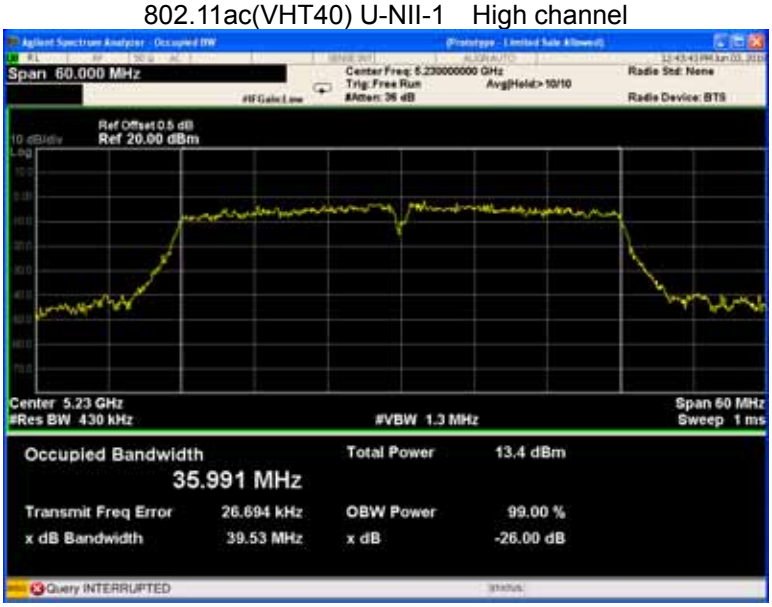


802.11ac(VHT20) U-NII-1 High channel

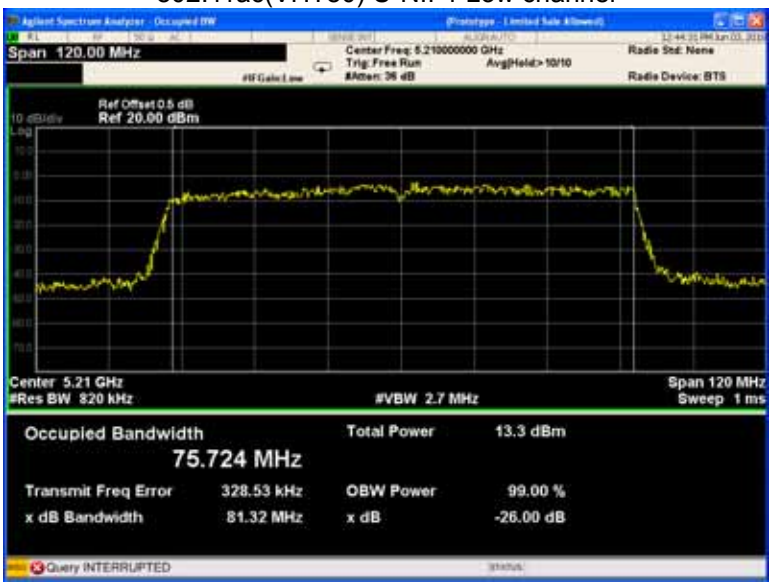


802.11ac(VHT40) U-NII-1 Low channel

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



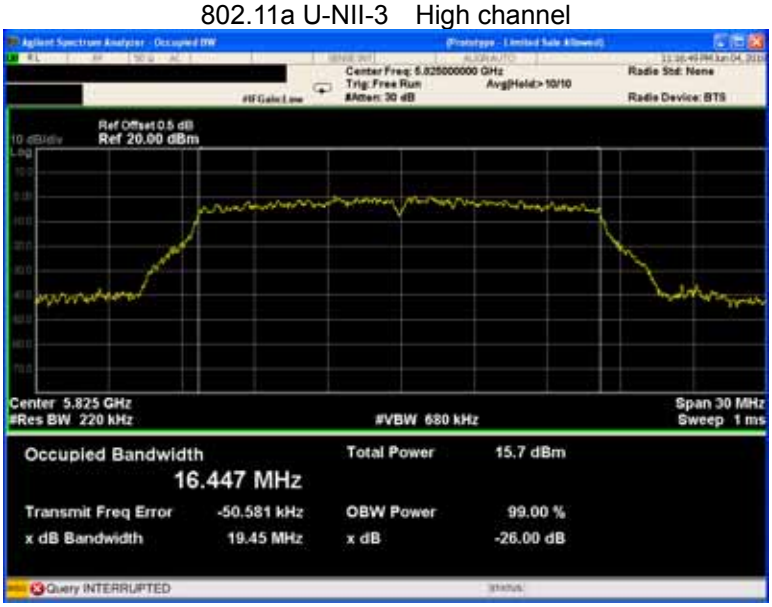
802.11ac(VHT80) U-NII-1 Low channel



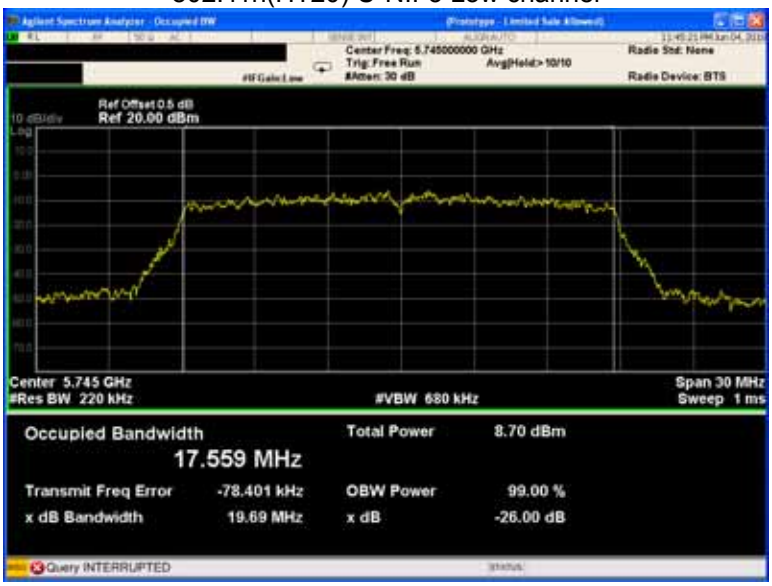
802.11a U-NII-3 Low channel

802.11a U-NII-3 Middle channel

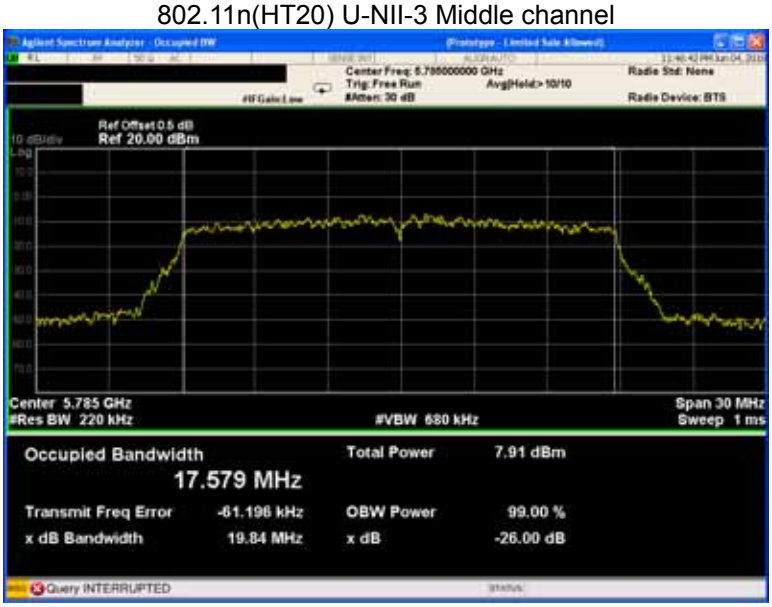
802.11a U-NII-3 High channel



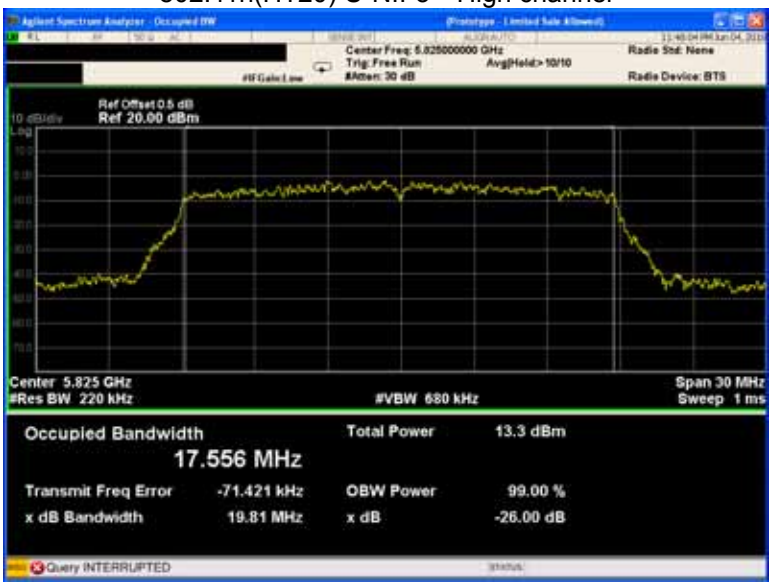
802.11n(HT20) U-NII-3 Low channel



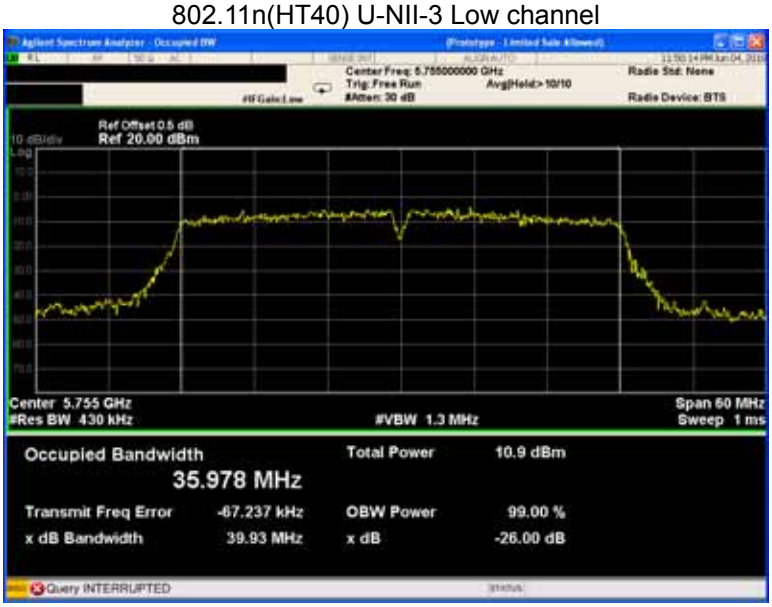
802.11n(HT20) U-NII-3 Middle channel



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

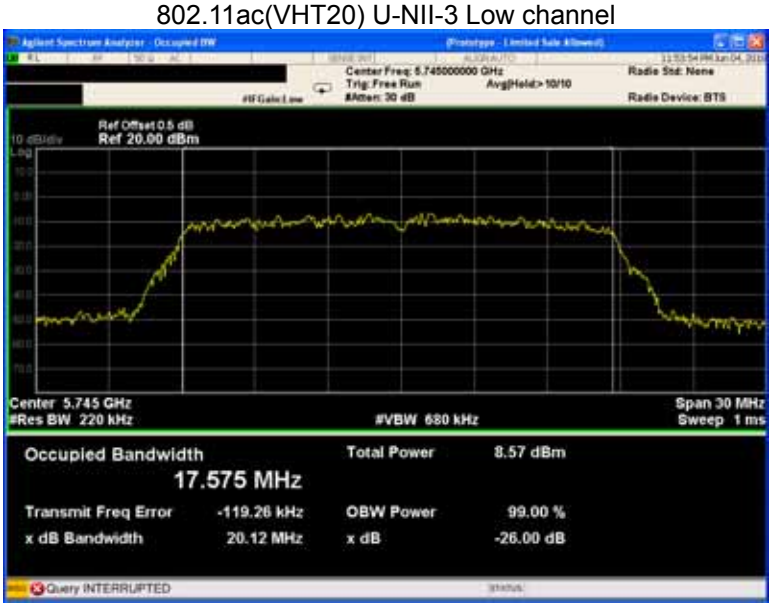


802.11n(HT40) U-NII-3 Low channel

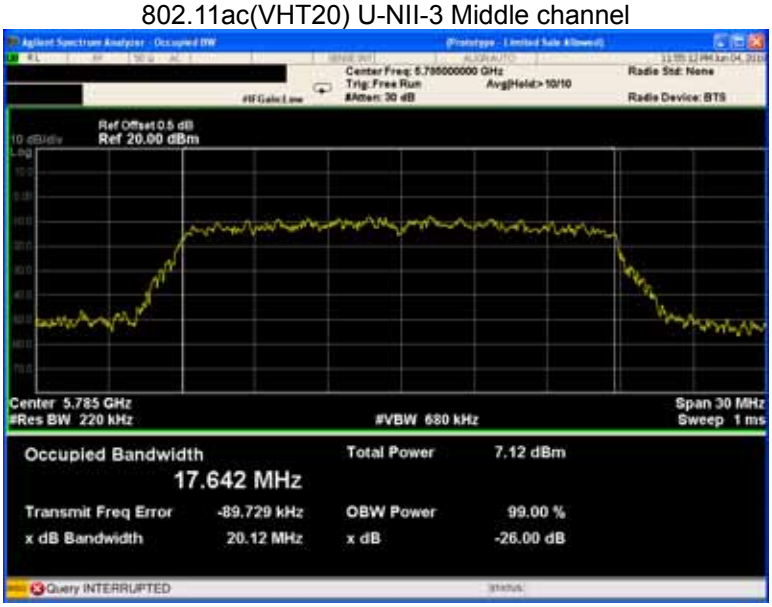


802.11n(HT40) U-NII-3 High channel

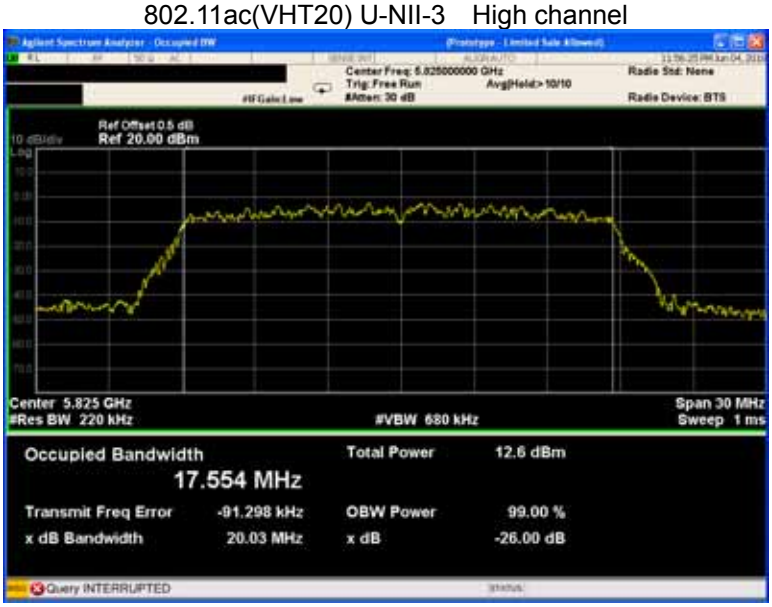
802.11ac(VHT20) U-NII-3 Low channel



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

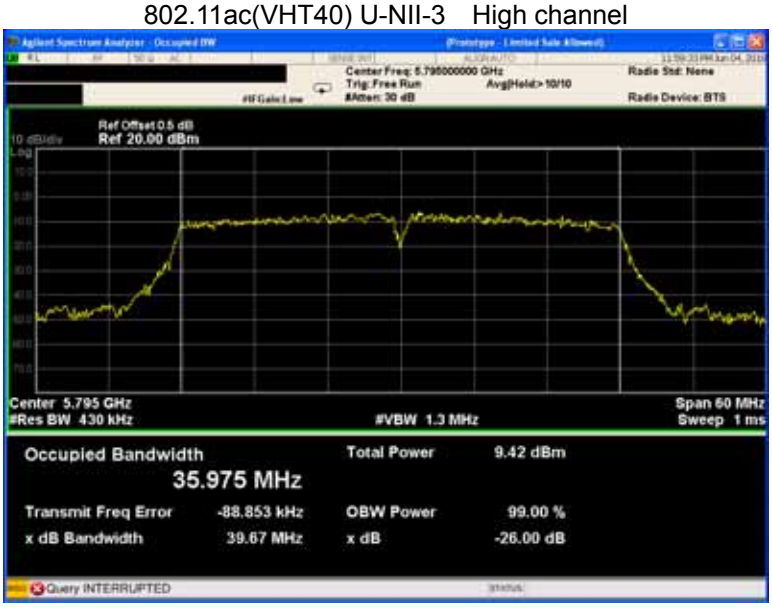


802.11ac(VHT20) U-NII-3 High channel



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

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



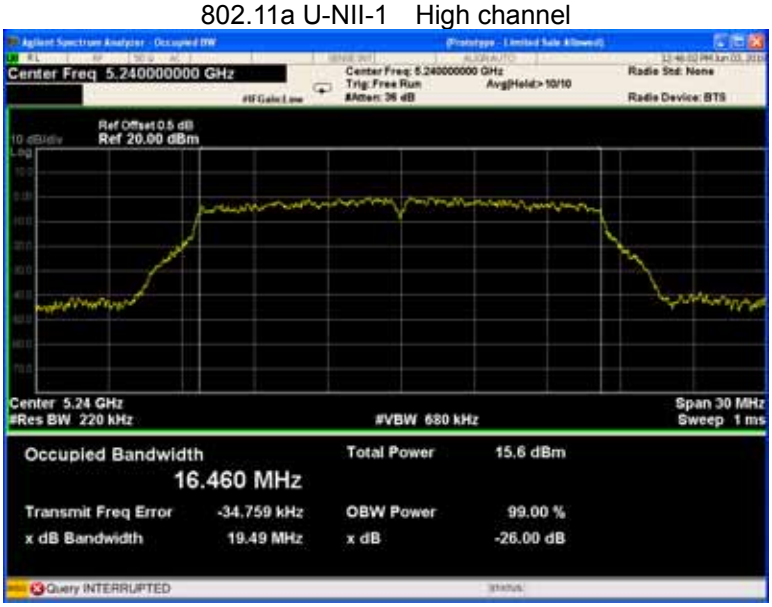
802.11ac(VHT80) U-NII-3 Low channel

ANT5

802.11a U-NII-1 Low channel

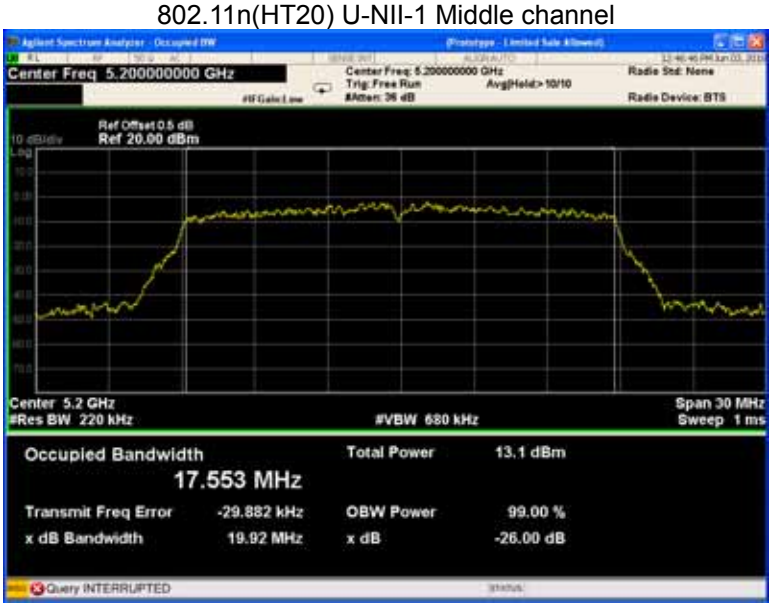
802.11a U-NII-1 Middle channel

802.11a U-NII-1 High channel



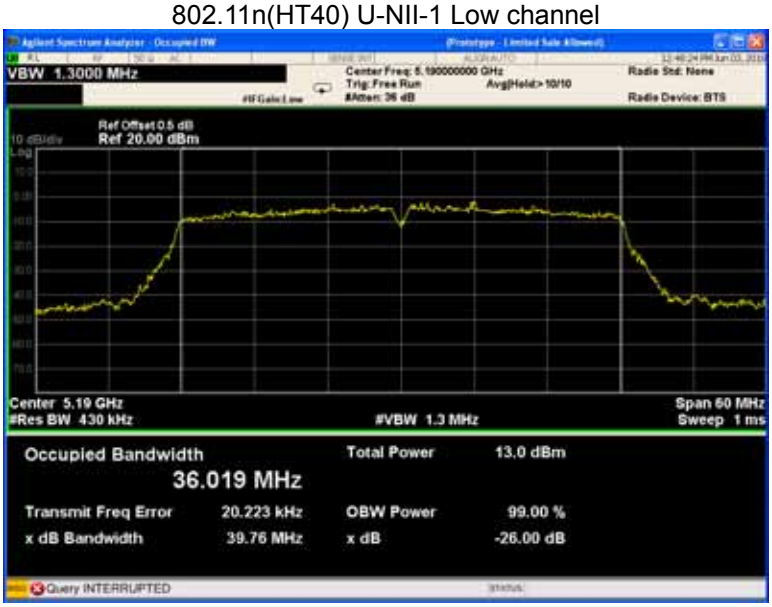
802.11n(HT20) U-NII-1 Low channel

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



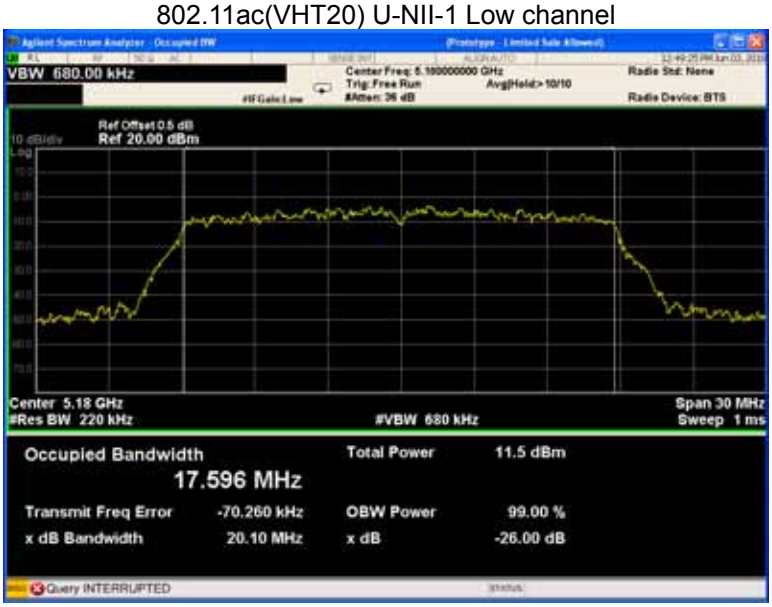
802.11n(HT20) U-NII-1 High channel

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

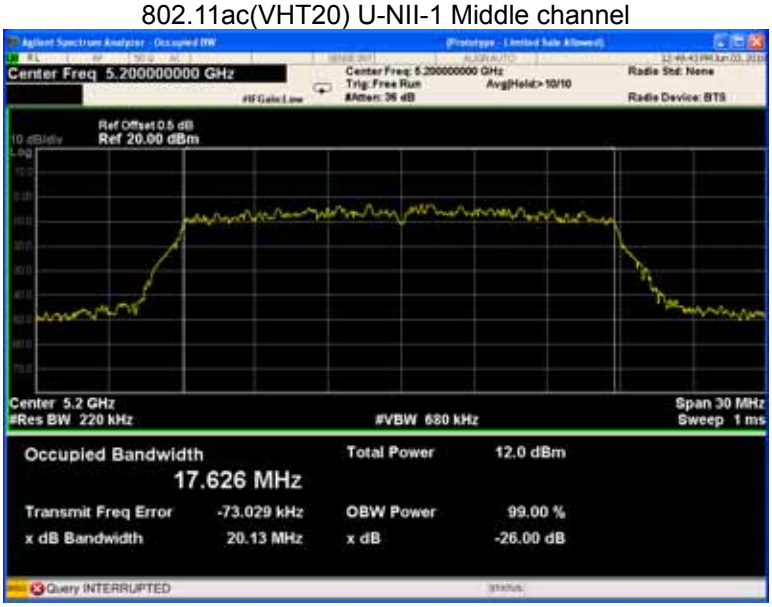


802.11n(HT40) U-NII-1 High channel

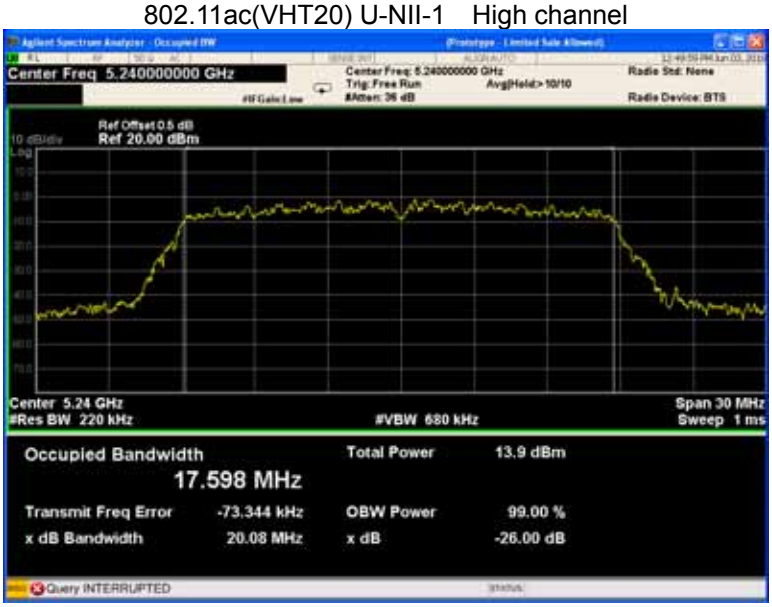
802.11ac(VHT20) U-NII-1 Low channel



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

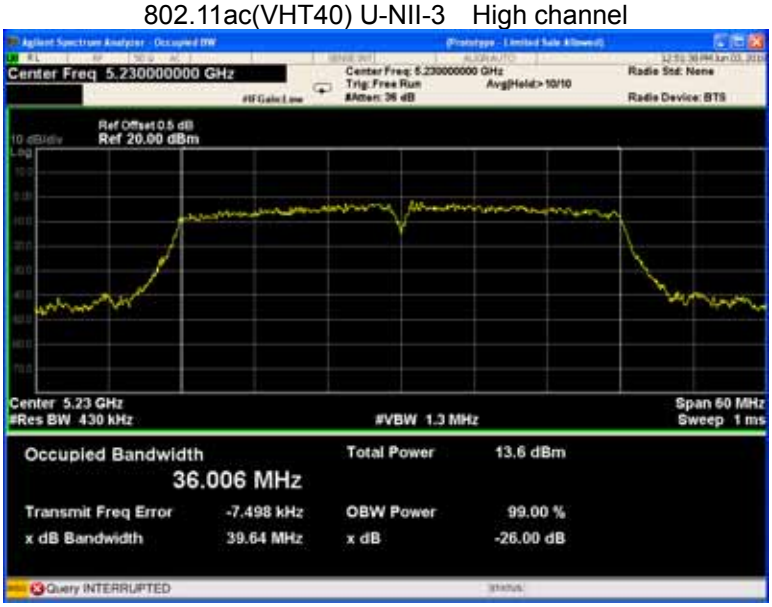


802.11ac(VHT20) U-NII-1 High channel

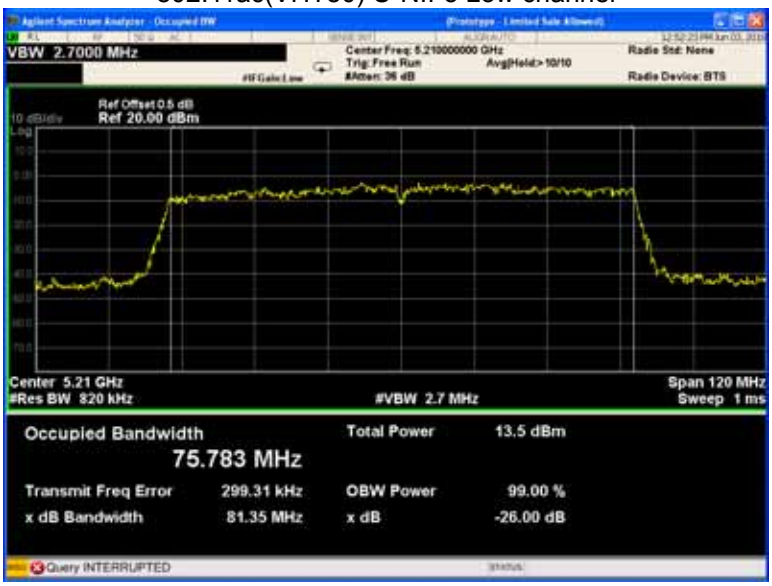


802.11ac(VHT40) U-NII-1 Low channel

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



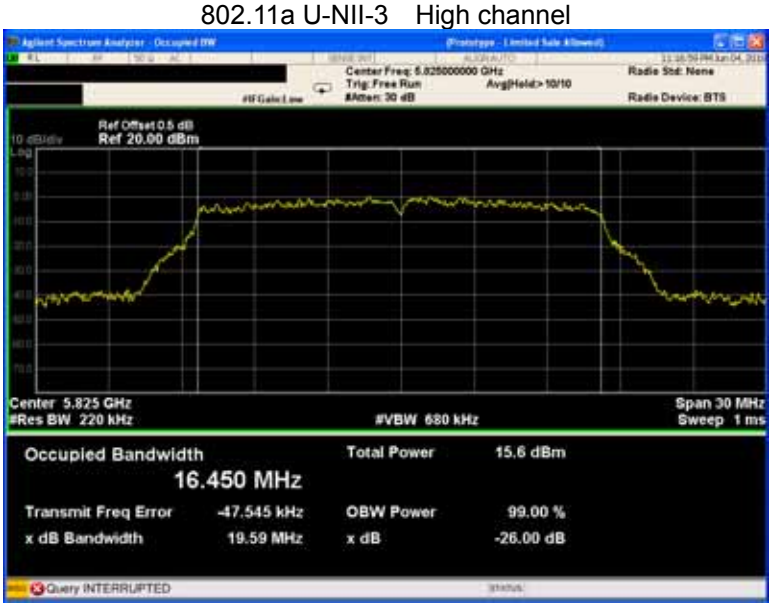
802.11ac(VHT80) U-NII-3 Low channel



802.11a U-NII-3 Low channel

802.11a U-NII-3 Middle channel

802.11a U-NII-3 High channel



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