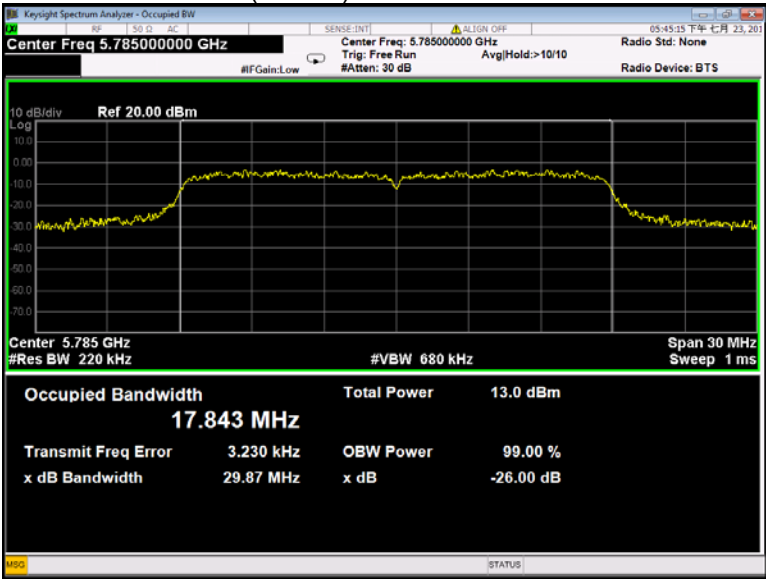
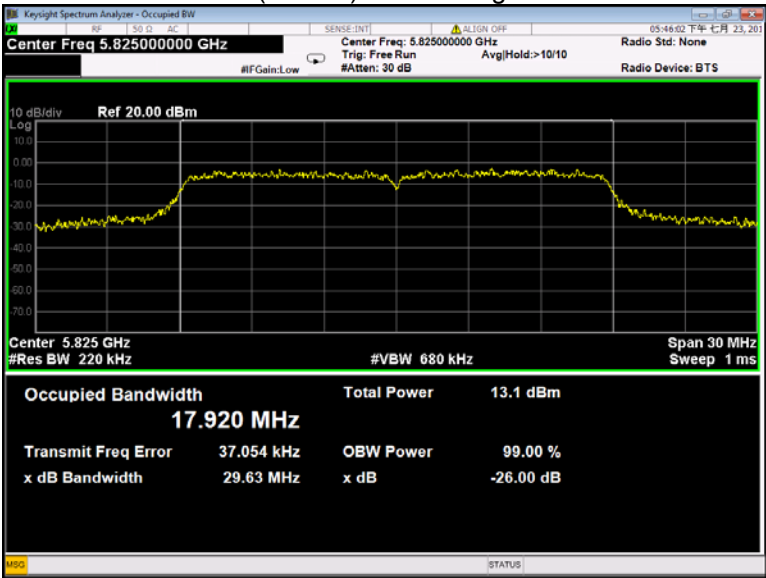


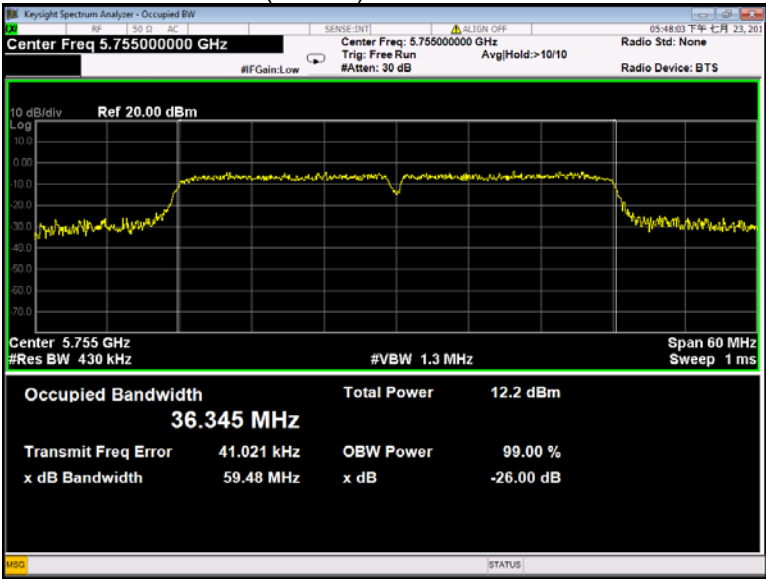
802.11ac(VHT20) U-NII-3 Middle channel



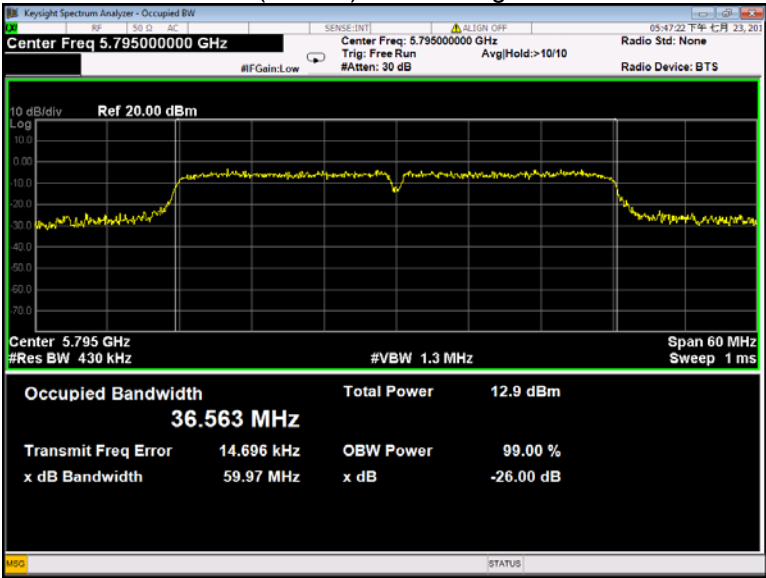
802.11ac(VHT20) U-NII-3 High channel

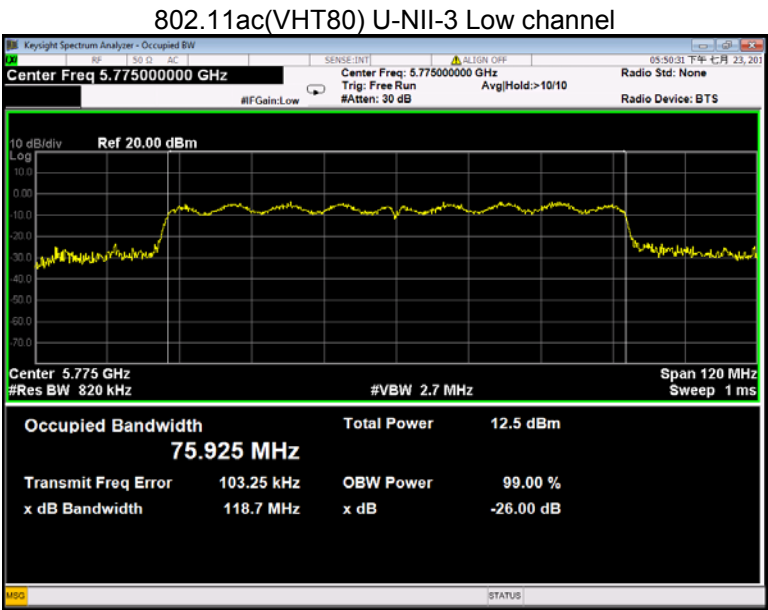


802.11ac(VHT40) U-NII-3 Low channel



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





13 Conducted Output Power

Test Requirement:	FCC 47CFR Part 15 Section 15.407(a) KDB662911 D01 Multiple Transmitter Output v02r01
Test Method:	KDB789033 D02 General U-NII Test Procedures New Rules v02r01 Section E
Test Limit:	U-NII-1 250mW(24dBm) U-NII-2A 250mW(24dBm) U-NII-2C 250mW(24dBm) U-NII-3 1W(30dBm)
Test Result:	PASS
Remark:	Conducted output power= measurement power+10log(1/x) Conducted output power= measurement power

13.1 Test Procedure

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

13.2 Test Result

Band	Operation mode	Conducted Output Power (dBm)		
		Low	Middle	High
U-NII-1	802.11a	13.55	13.76	14.83
	802.11n(HT20)	13.34	13.60	14.52
	802.11n(HT40)	15.21	/	16.38
	802.11ac(VHT20)	13.14	13.49	14.33
	802.11ac(VHT40)	15.34	/	16.48
	802.11ac(VHT80)	17.21	/	/

Band	Operation mode	Conducted Output Power (dBm)		
		Low	Middle	High
U-NII-2A	802.11a	13.38	13.36	15.16
	802.11n(HT20)	13.40	13.56	14.67
	802.11n(HT40)	15.14	/	16.19
	802.11ac(VHT20)	13.56	13.49	14.24
	802.11ac(VHT40)	15.38	/	16.23
	802.11ac(VHT80)	17.54	/	/

Note : 802.11a Low channel power limit:23.99dbm

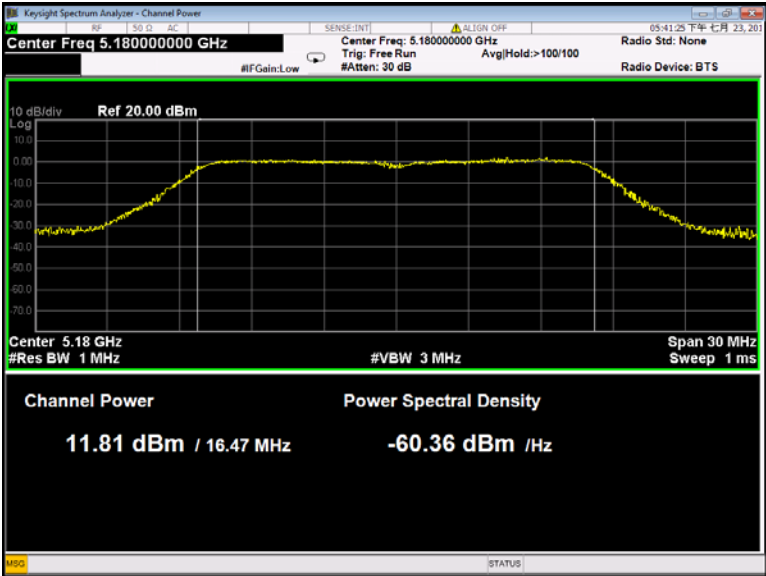
Band	Operation mode	Conducted Output Power (dBm)		
		Low	Middle	High
U-NII-2C	802.11a	15.69	15.52	15.59
	802.11n(HT20)	14.91	15.73	15.52
	802.11n(HT40)	17.40	17.65	17.15
	802.11ac(VHT20)	15.38	15.52	16.24
	802.11ac(VHT40)	17.48	17.67	17.12
	802.11ac(VHT80)	19.47	/	18.48

Note : 802.11a Low channel power limit:23.90dbm

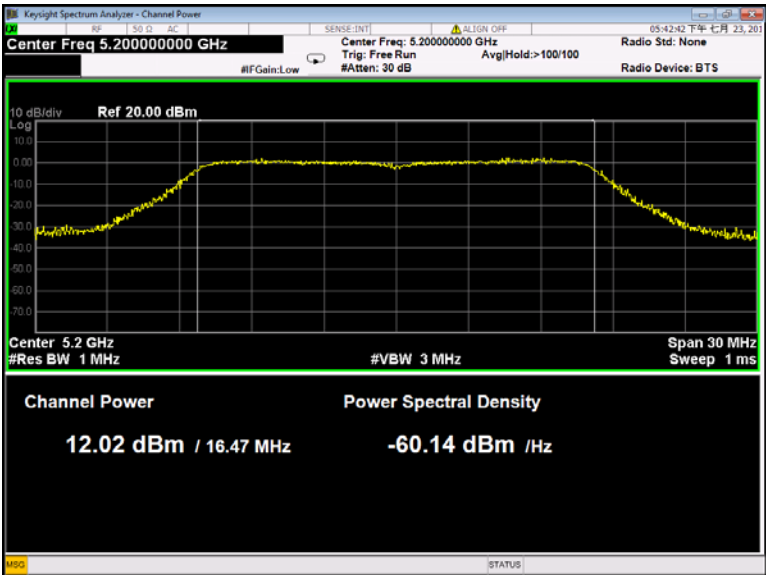
Band	Operation mode	Conducted Output Power (dBm)		
		Low	Middle	High
U-NII-3	802.11a	12.52	12.29	13.25
	802.11n(HT20)	12.64	13.11	14.06
	802.11n(HT40)	14.72	/	14.87
	802.11ac(VHT20)	12.78	12.94	13.62
	802.11ac(VHT40)	14.79	/	14.59
	802.11ac(VHT80)	17.09	/	/

Test result plots shown as follows:

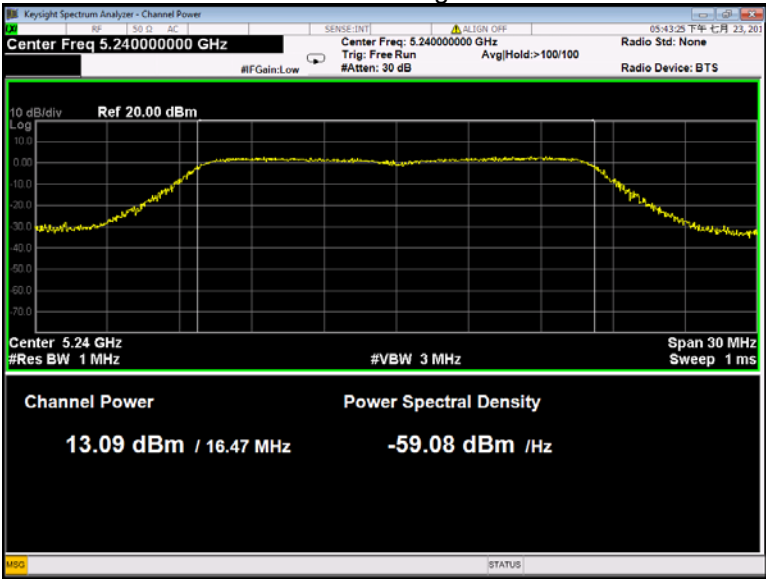
802.11a U-NII-1 Low channel



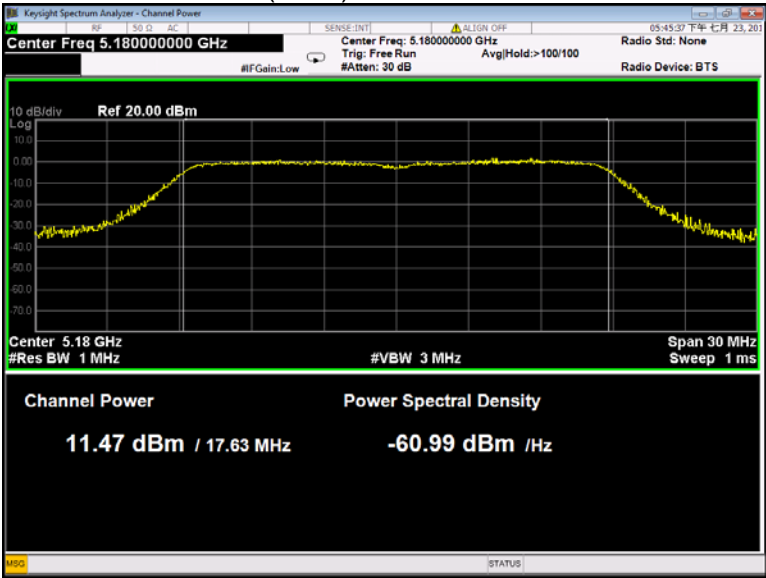
802.11a U-NII-1 Middle channel



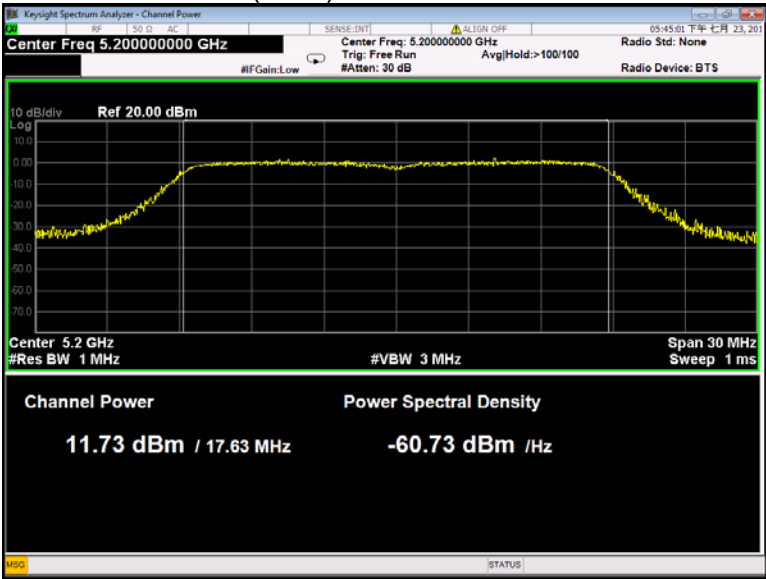
802.11a U-NII-1 High channel



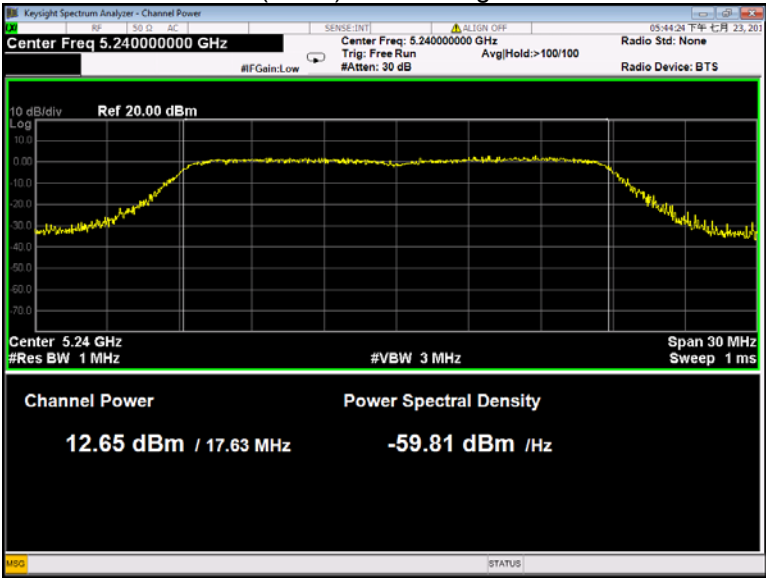
802.11n(HT20) U-NII-1 Low channel



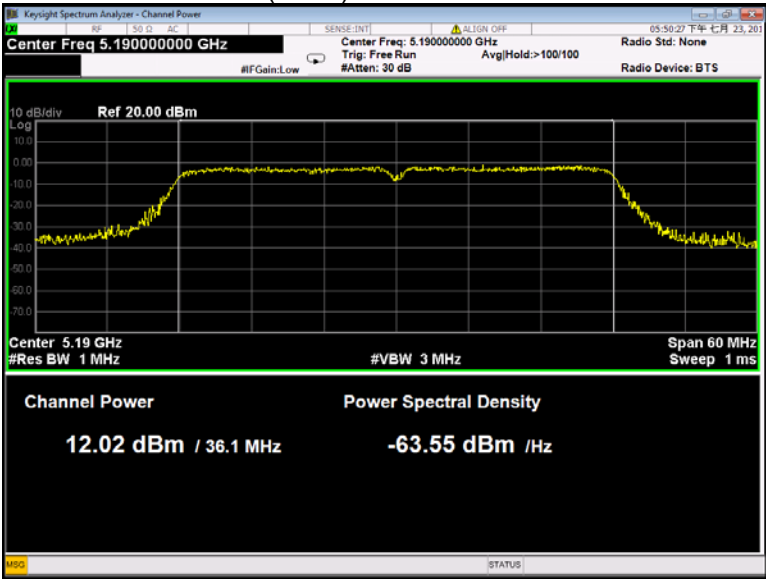
802.11n(HT20) U-NII-1 Middle channel



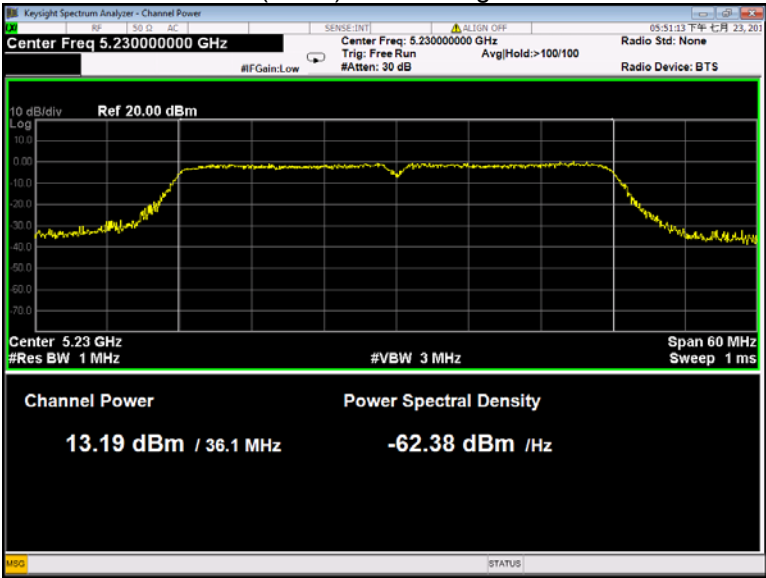
802.11n(HT20) U-NII-1 High channel



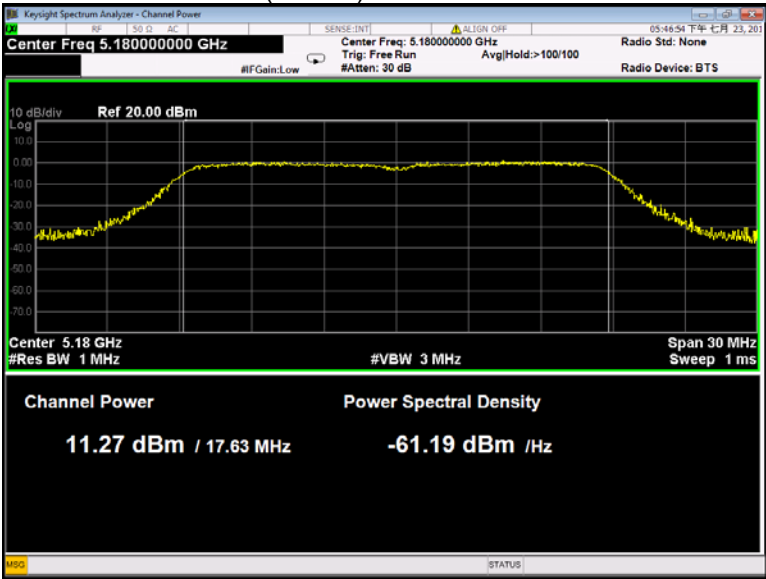
802.11n(HT40) U-NII-1 Low channel



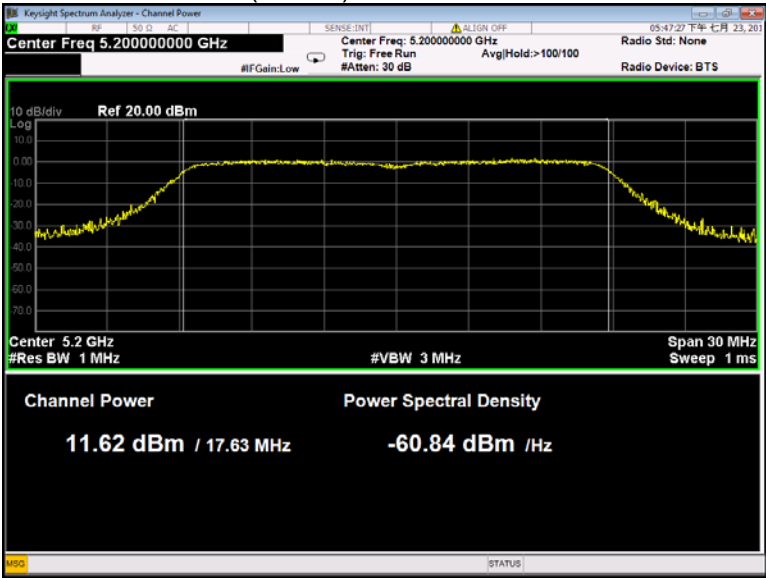
802.11n(HT40) U-NII-1 High channel



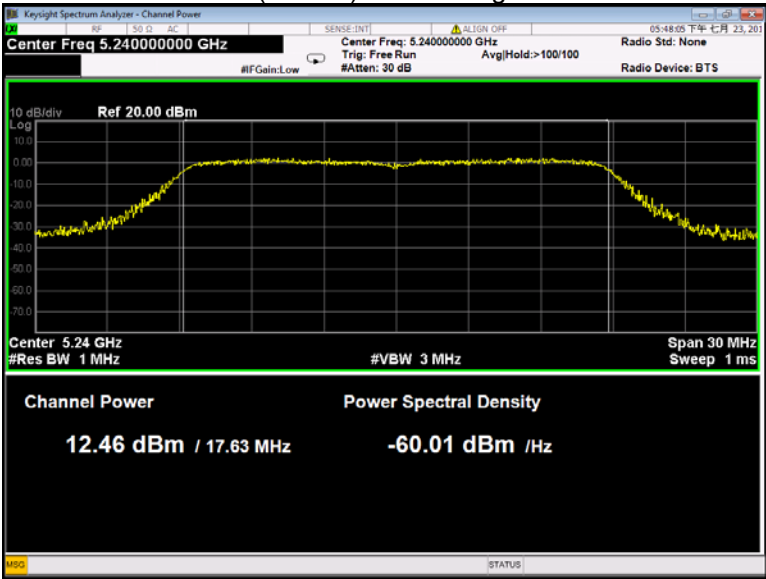
802.11ac(VHT20) U-NII-1 Low channel



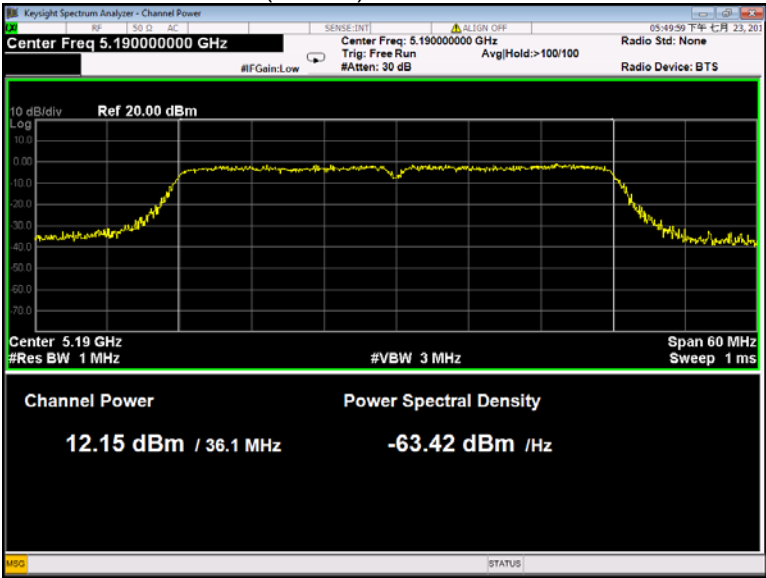
802.11ac(VHT20) U-NII-1 Middle channel



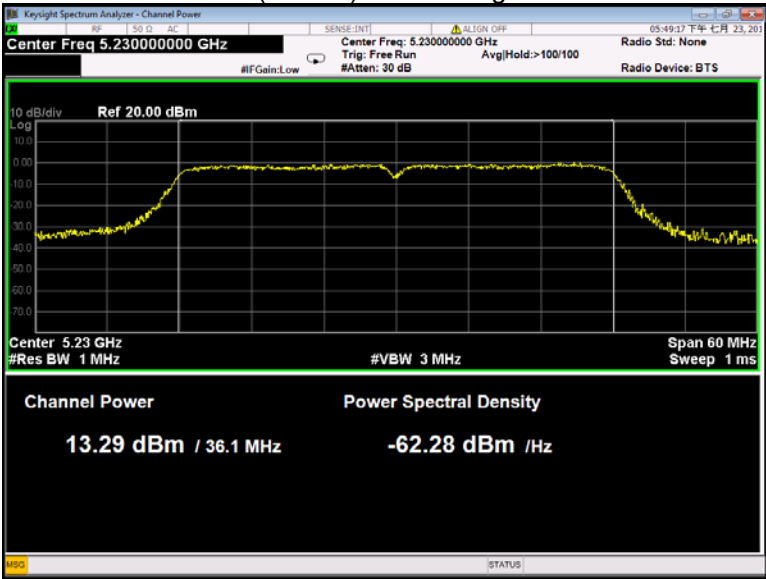
802.11ac(VHT20) U-NII-1 High channel



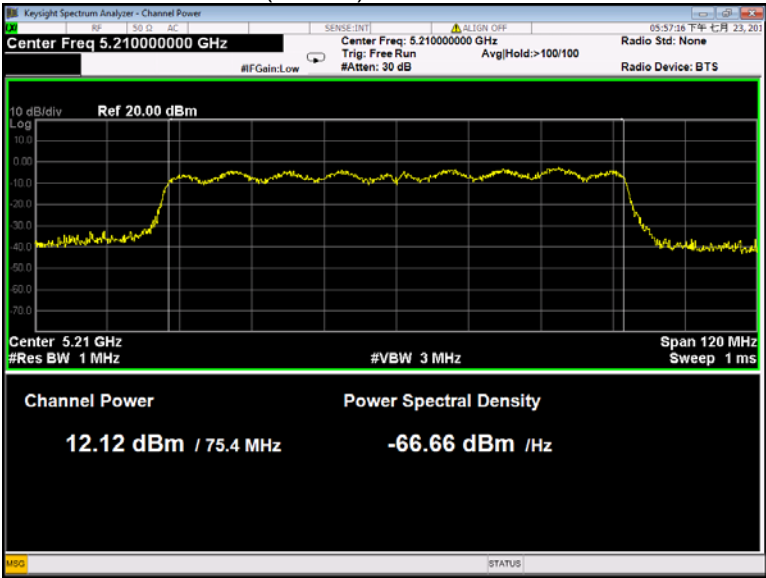
802.11ac(VHT40) U-NII-1 Low channel



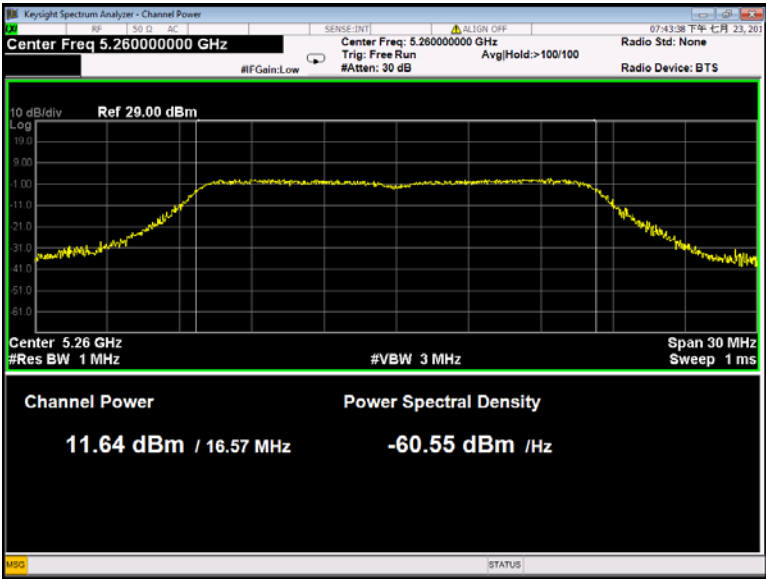
802.11ac(VHT40) U-NII-1 High channel



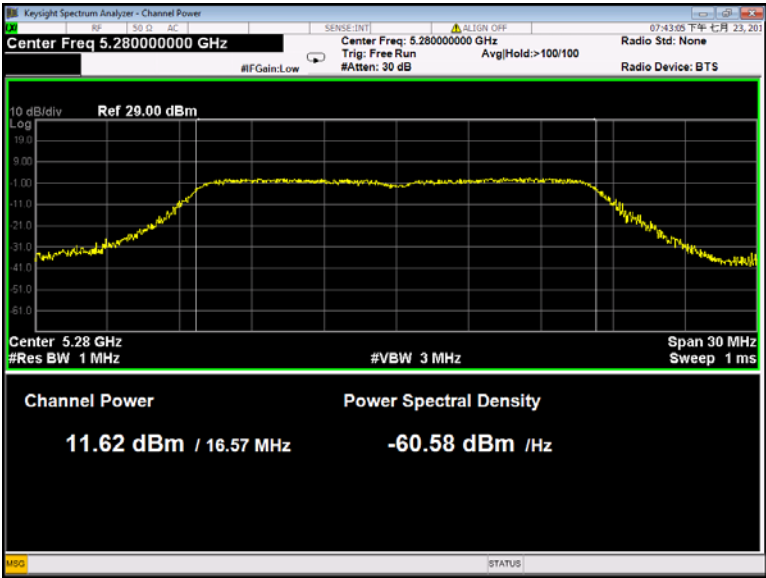
802.11ac(VHT80) U-NII-1 Low channel



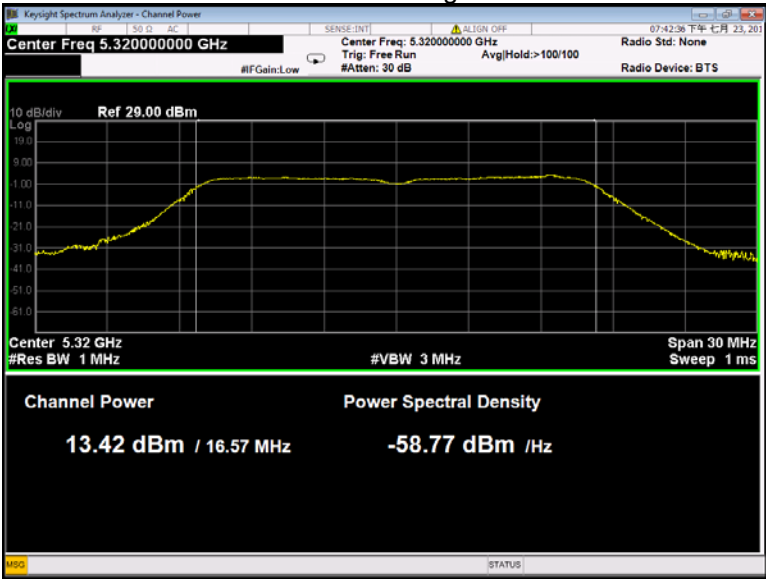
802.11a U-NII-2A Low channel



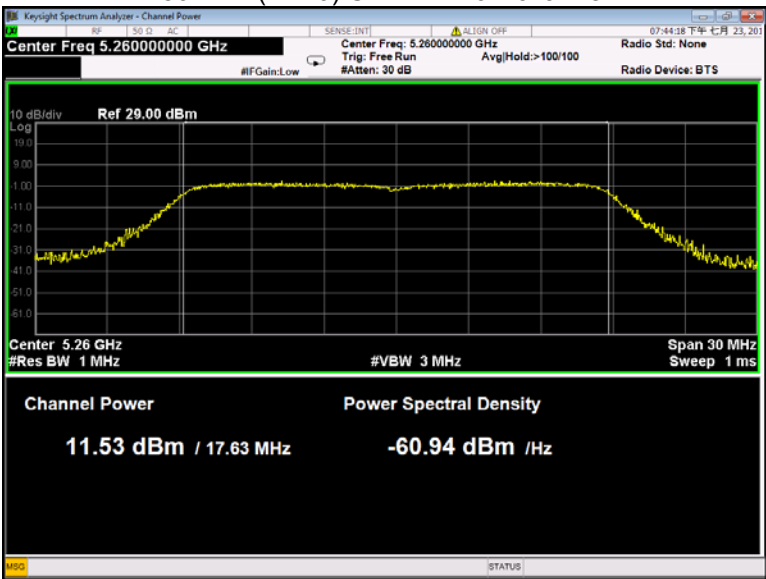
802.11a U-NII-2A Middle channel



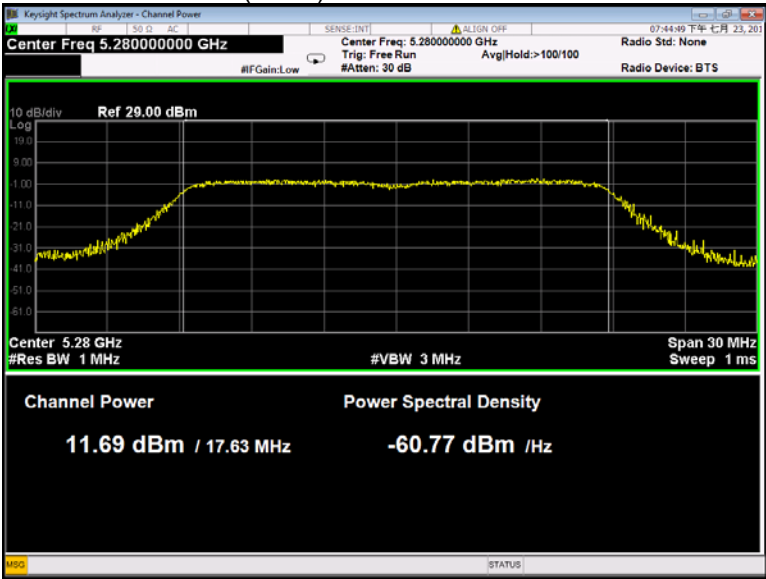
802.11a U-NII-2A High channel



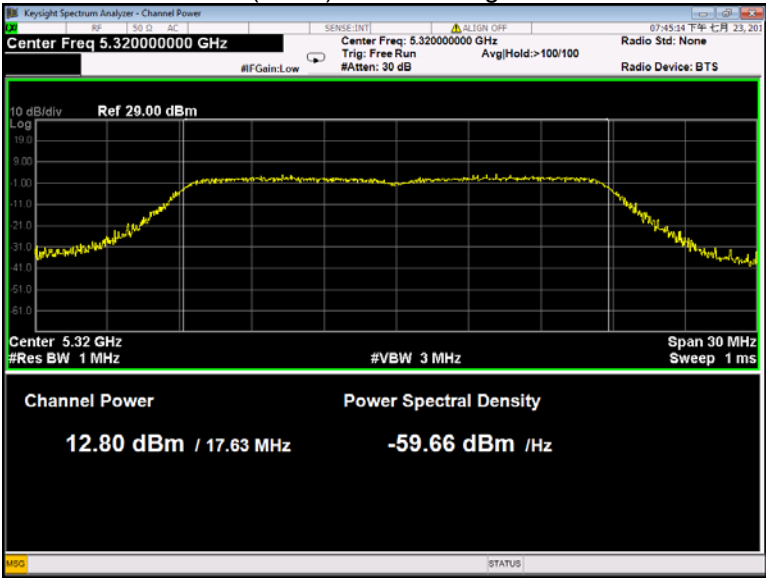
802.11n(HT20) U-NII-2A Low channel



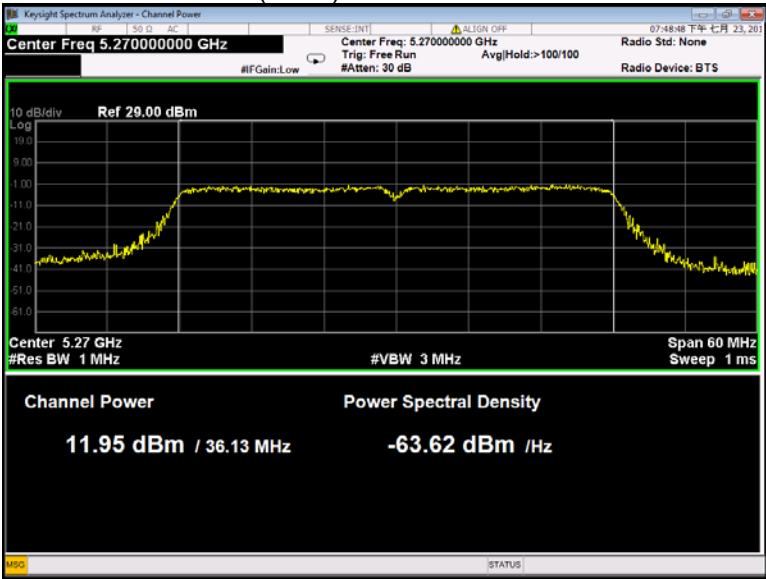
802.11n(HT20) U-NII-2A Middle channel



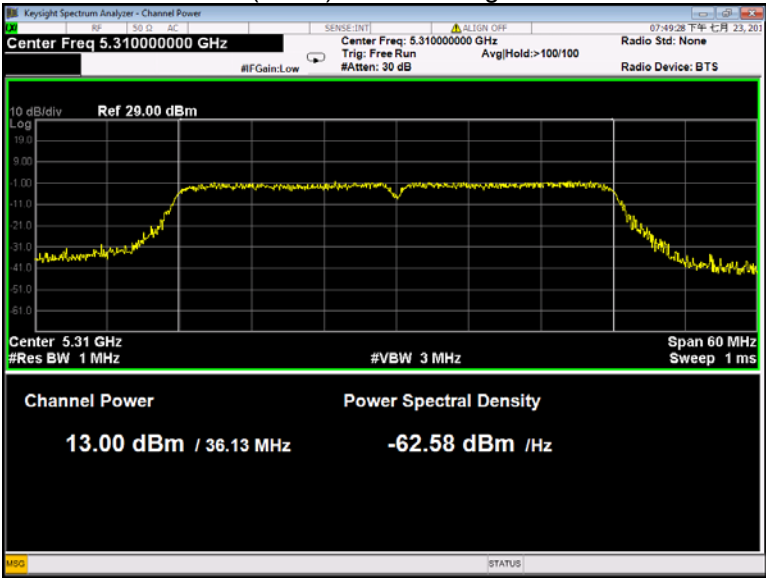
802.11n(HT20) U-NII-2A High channel



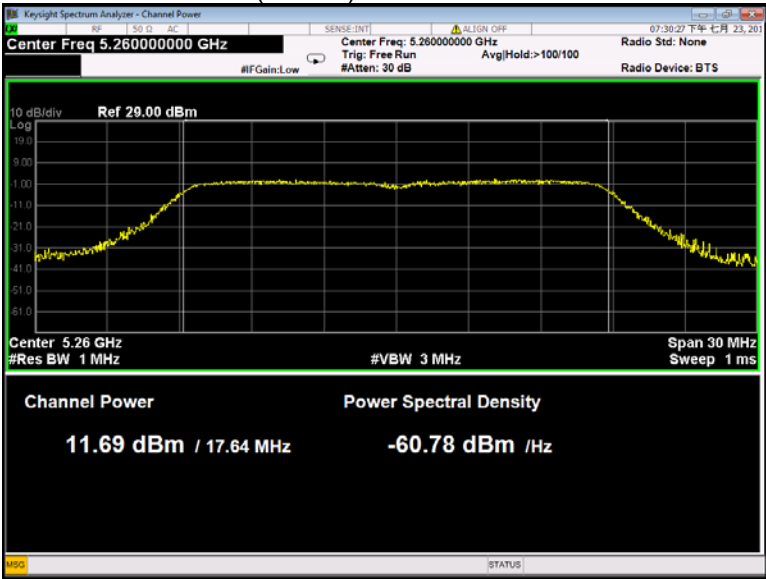
802.11n(HT40) U-NII-2A Low channel



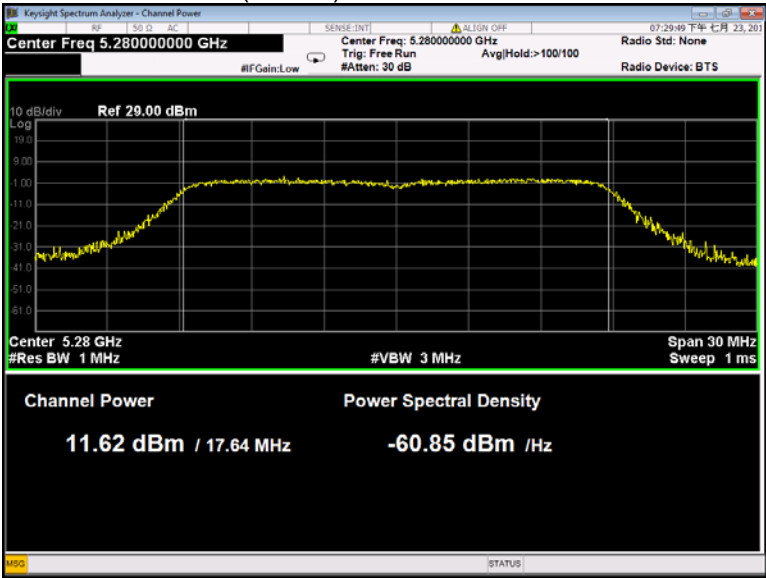
802.11n(HT40) U-NII-2A High channel



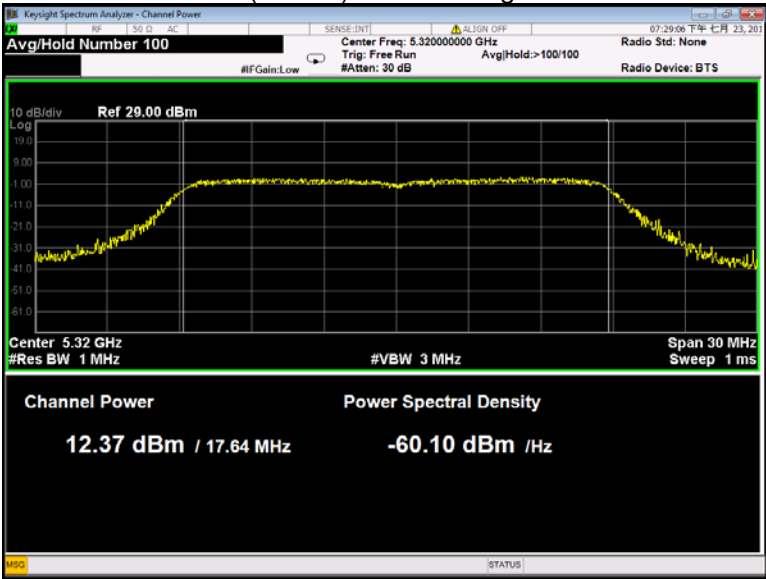
802.11ac(VHT20) U-NII-2A Low channel



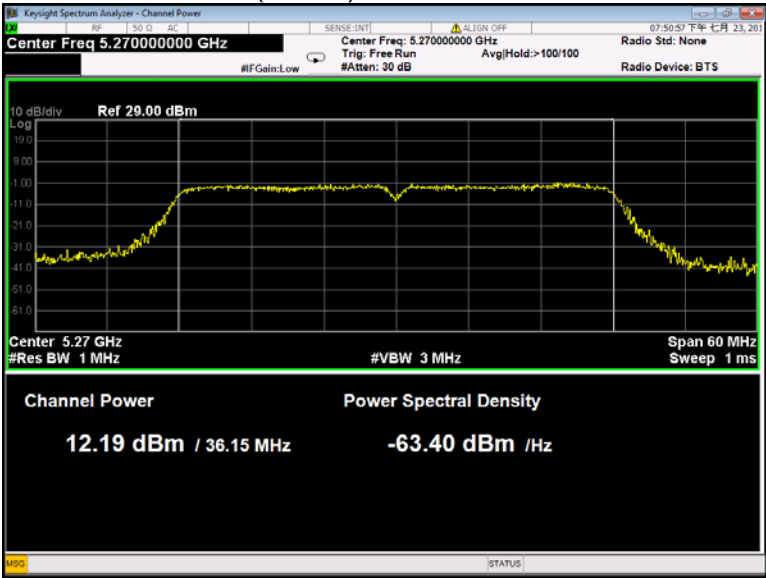
802.11ac(VHT20) U-NII-2A Middle channel



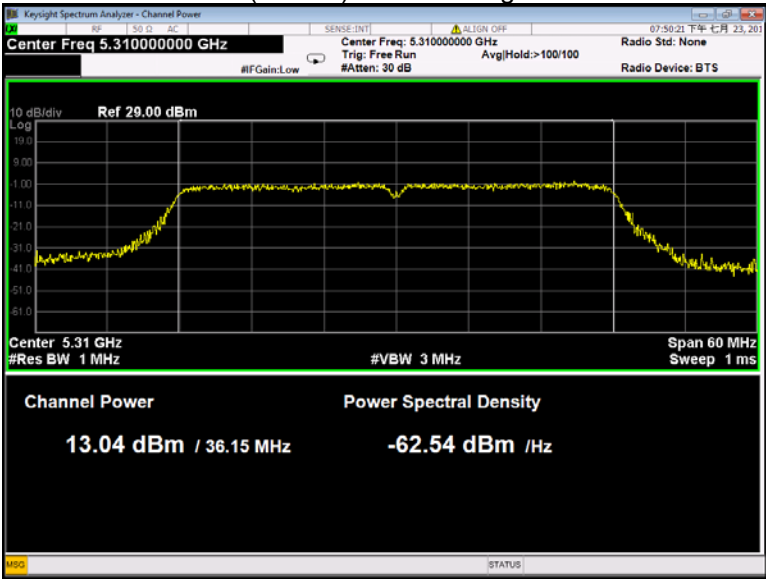
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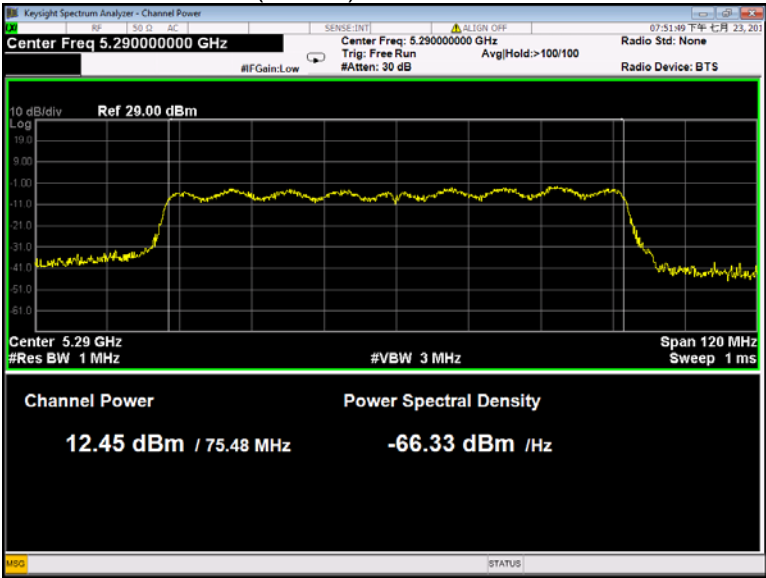
802.11ac(VHT40) U-NII-2A Low channel



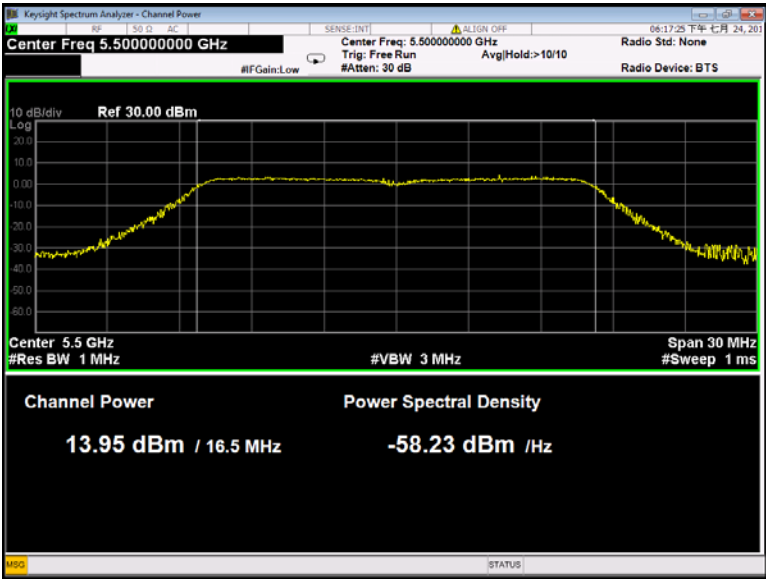
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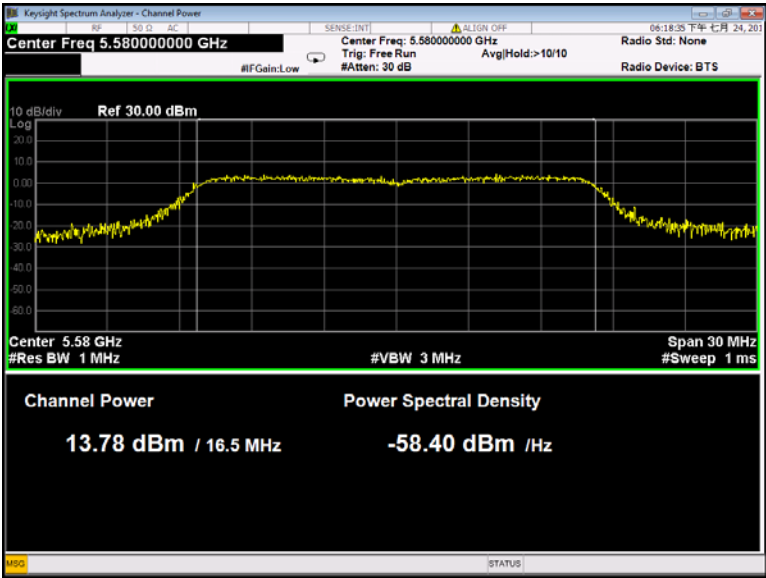
802.11ac(VHT80) U-NII-2A Low channel



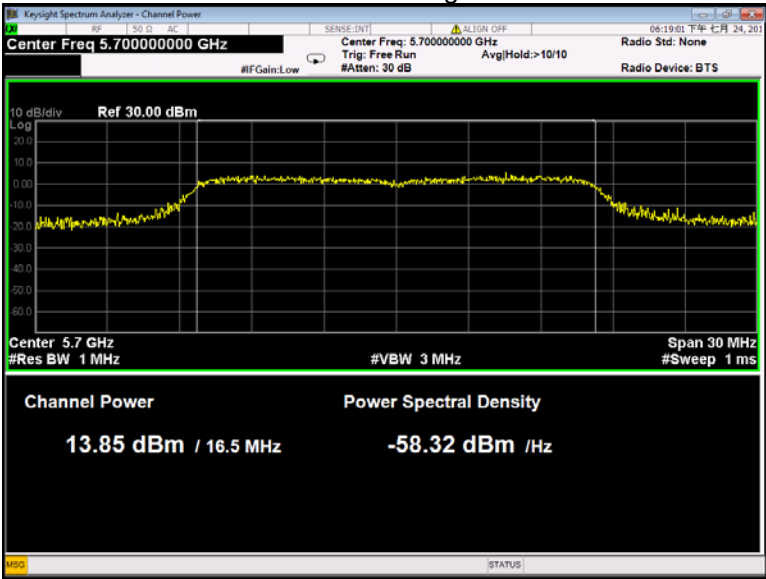
802.11a U-NII-2C Low channel



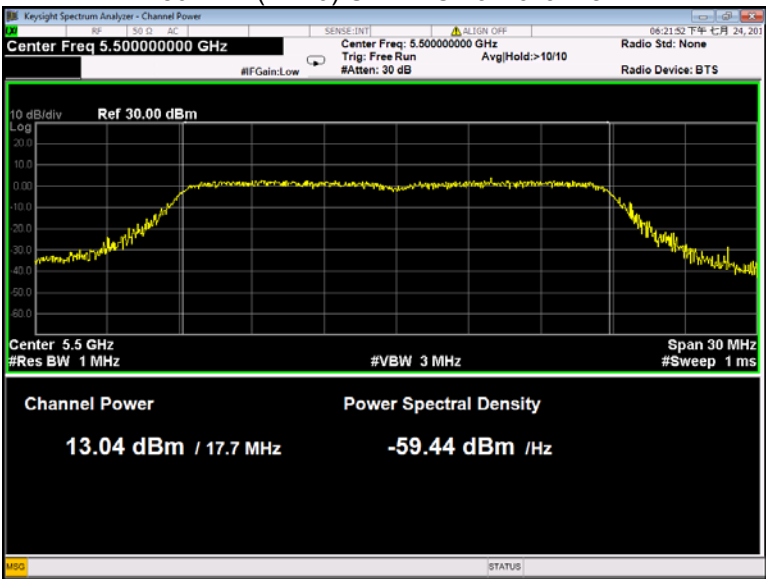
802.11a U-NII-2C Middle channel



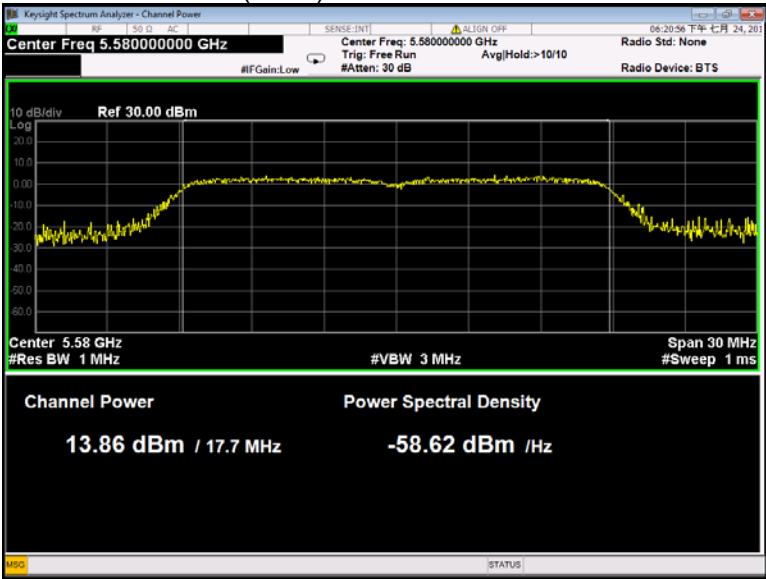
802.11a U-NII-2C High channel



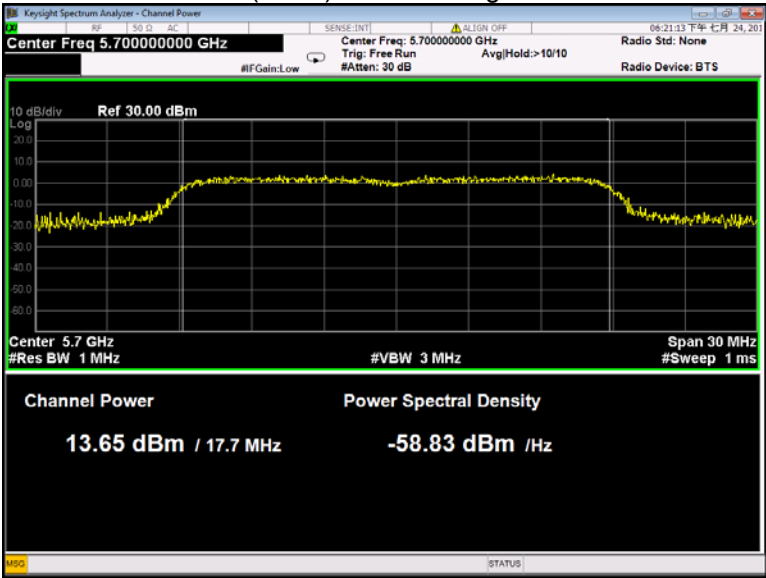
802.11n(HT20) U-NII-2C Low channel



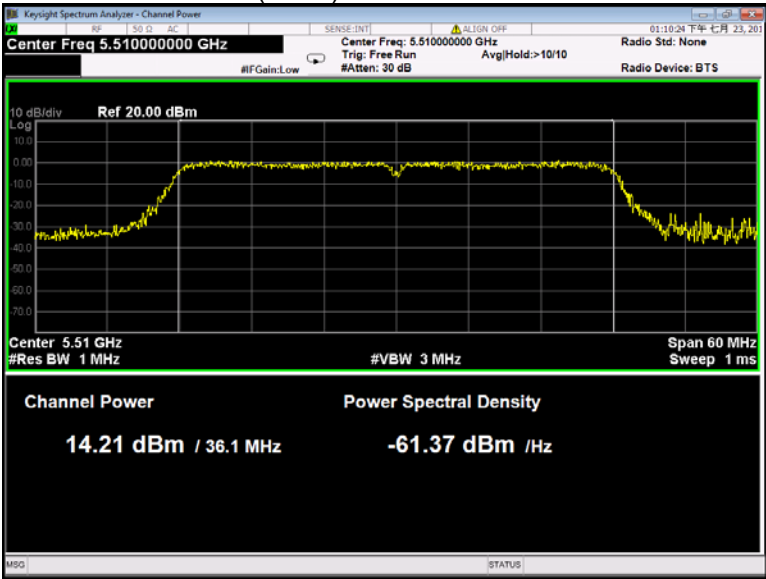
802.11n(HT20) U-NII-2C Middle channel



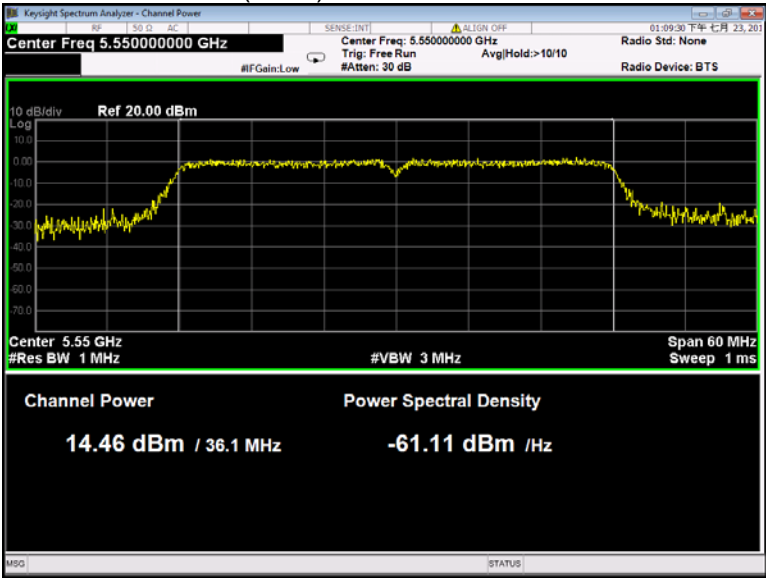
802.11n(HT20) U-NII-2C High channel



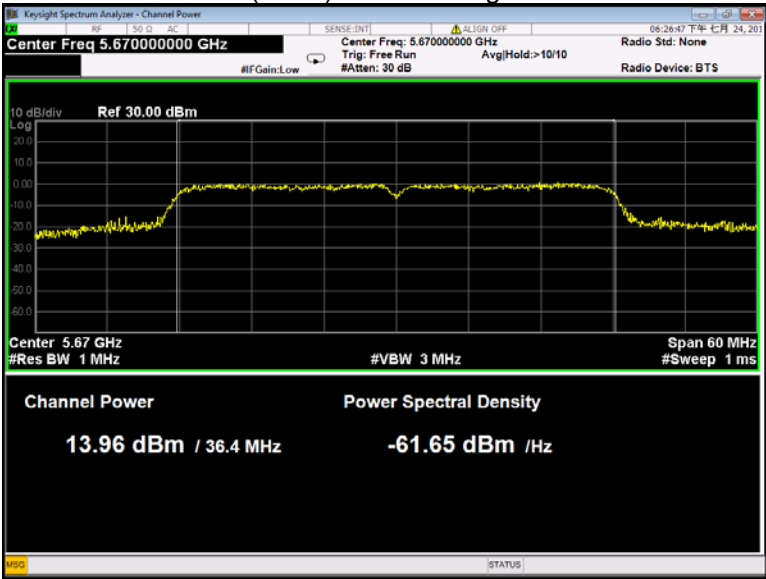
802.11n(HT40) U-NII-2C Low channel



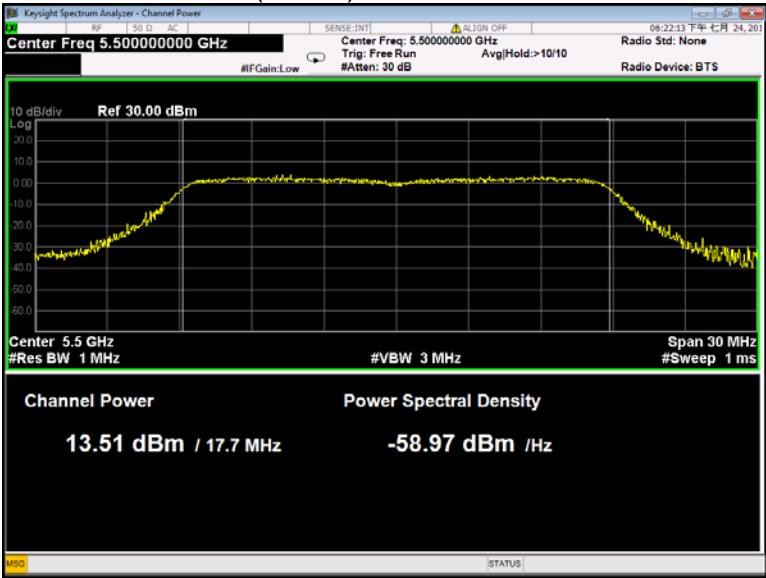
802.11n(HT40) U-NII-2C Middle channel



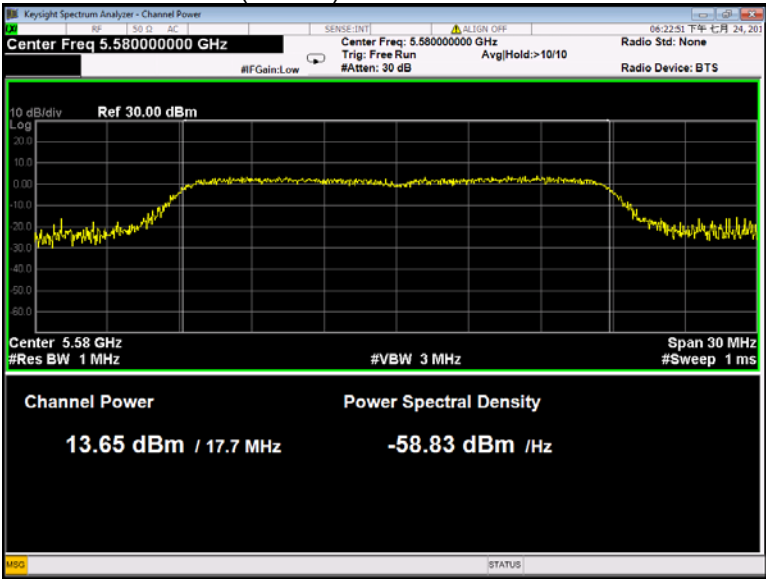
802.11n(HT40) U-NII-2C High channel



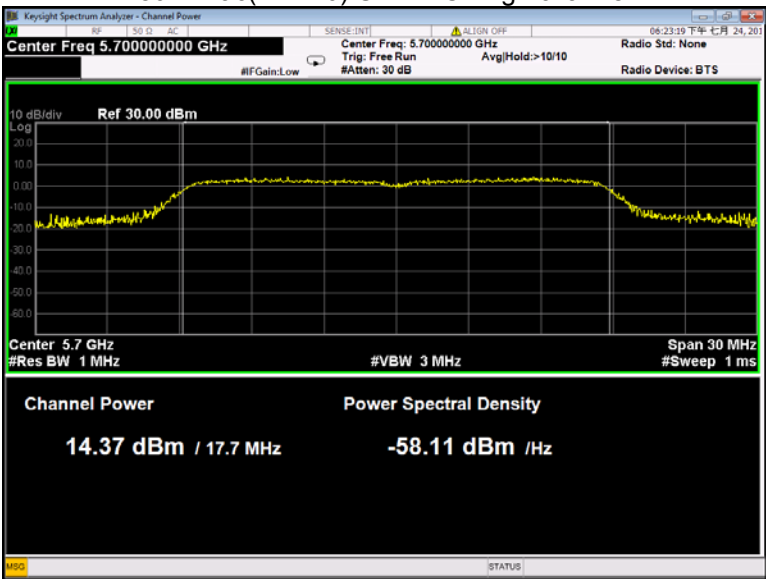
802.11ac(VHT20) U-NII-2C Low channel



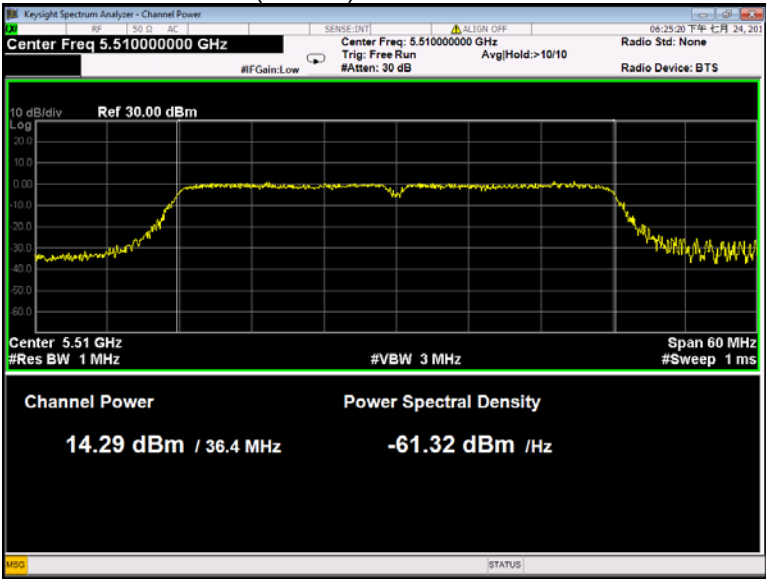
802.11ac(VHT20) U-NII-2C Middle channel



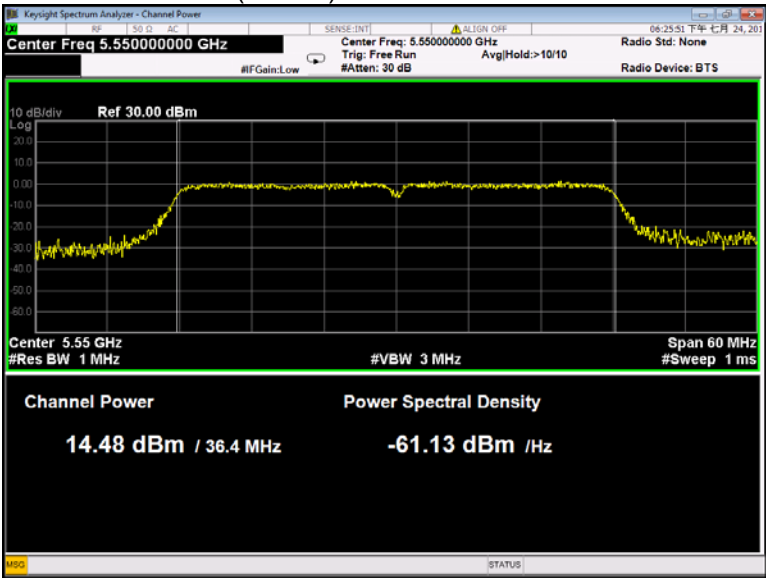
802.11ac(VHT20) U-NII-2C High channel



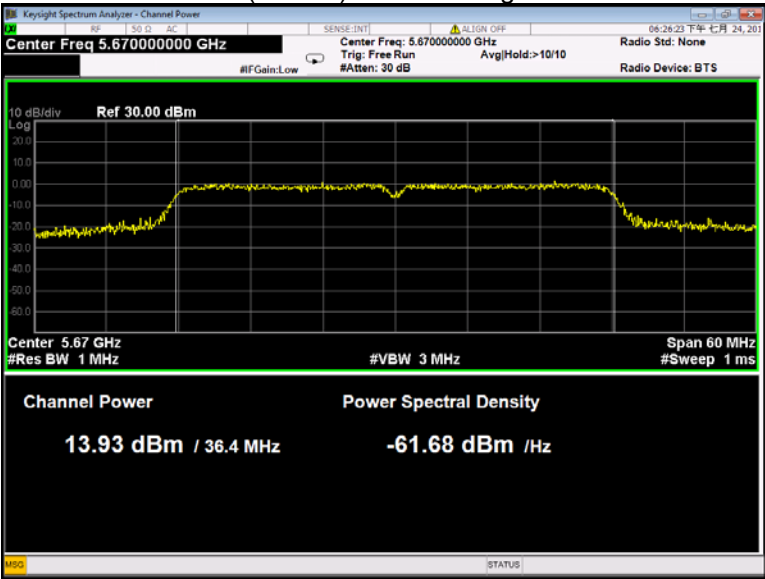
802.11ac(VHT40) U-NII-2C Low channel



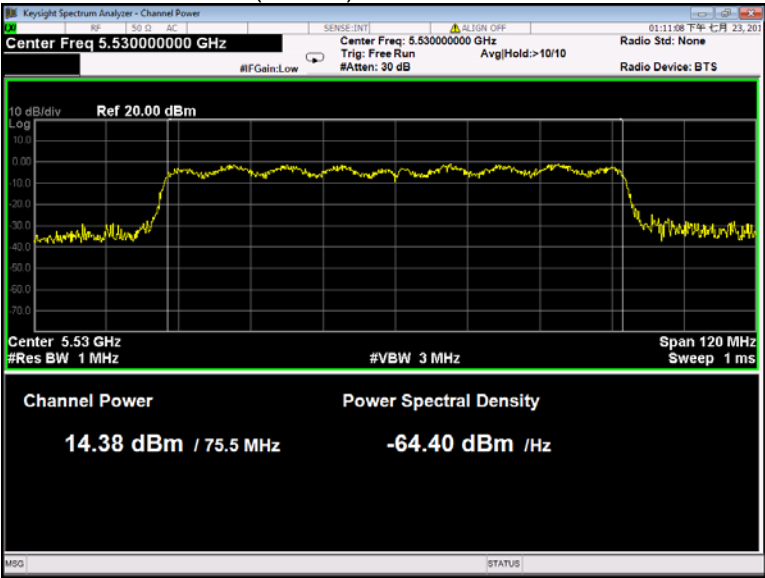
802.11ac(VHT40) U-NII-2C Middle channel



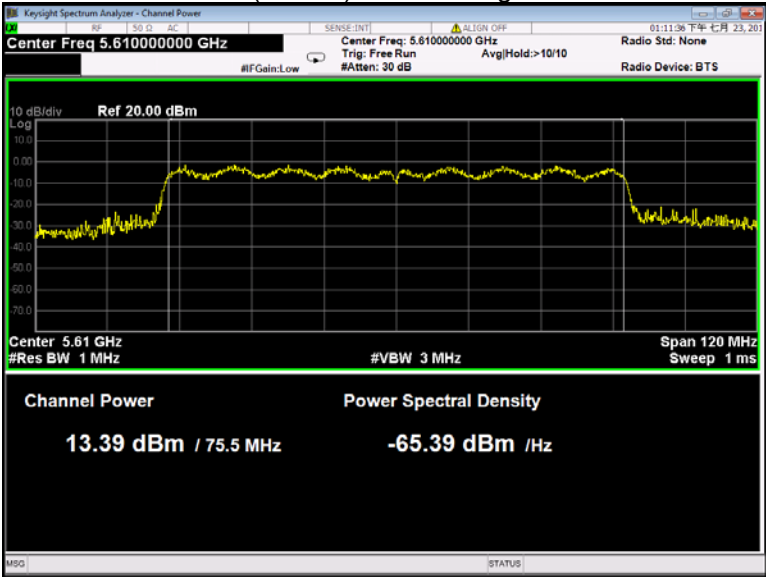
802.11ac(VHT40) U-NII-2C High channel



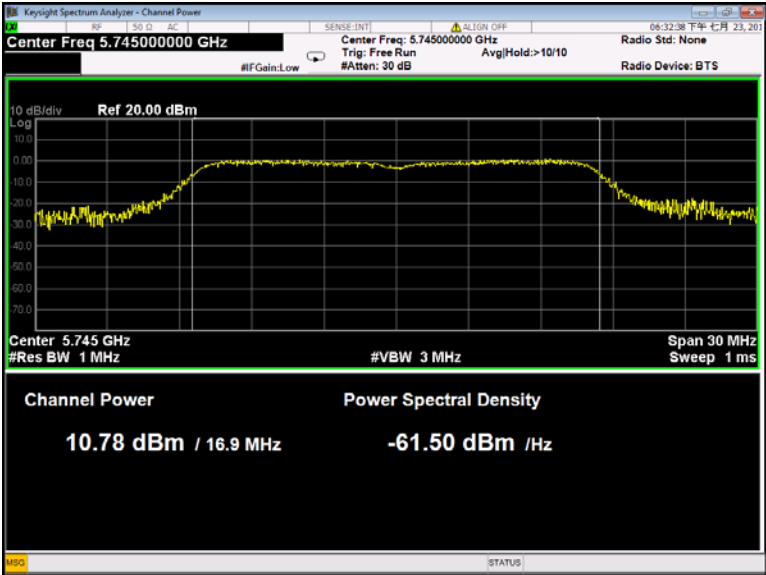
802.11ac(VHT80) U-NII-2C Low channel



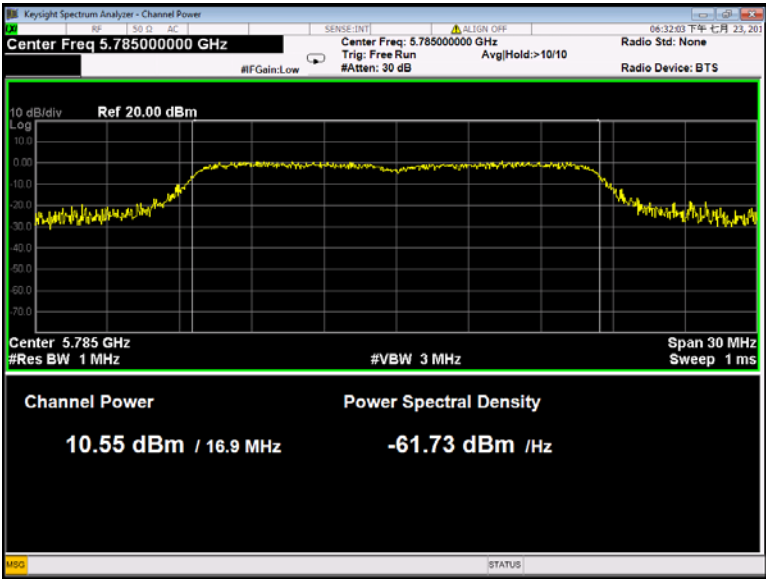
802.11ac(VHT80) U-NII-2C High channel



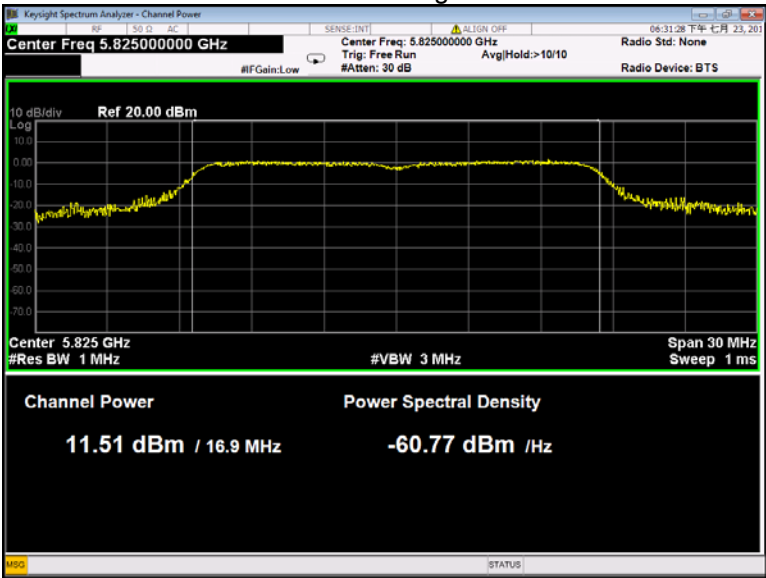
802.11a U-NII-3 Low channel



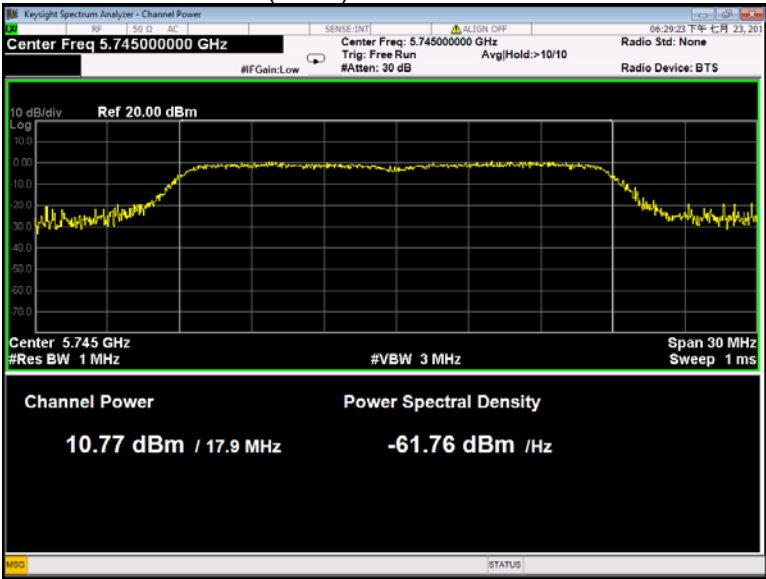
802.11a U-NII-3 Middle channel



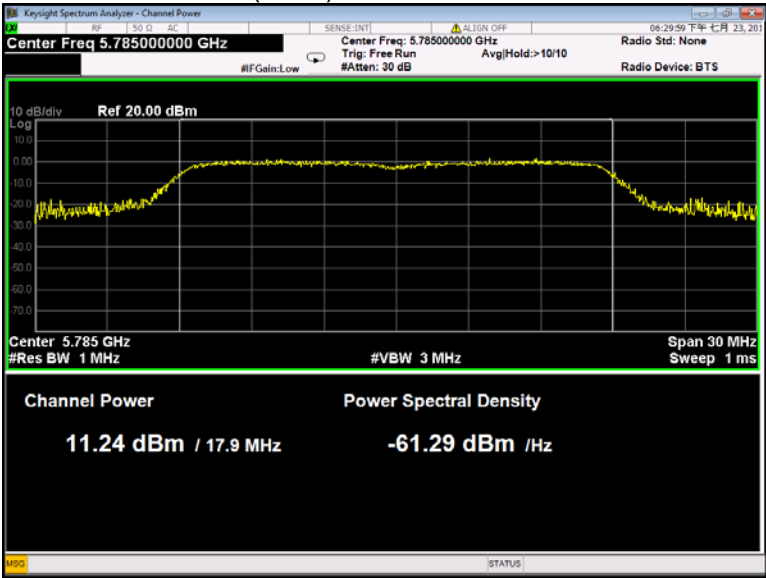
802.11a U-NII-3 High channel



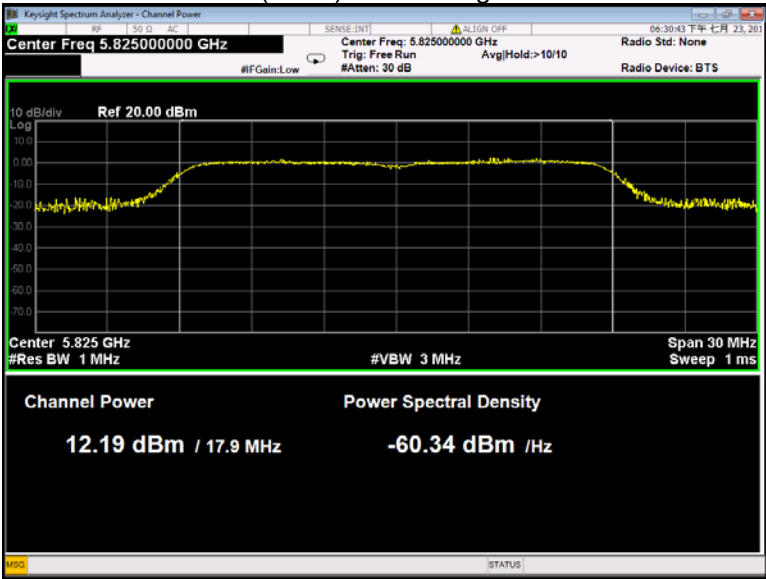
802.11n(HT20) U-NII-3 Low channel



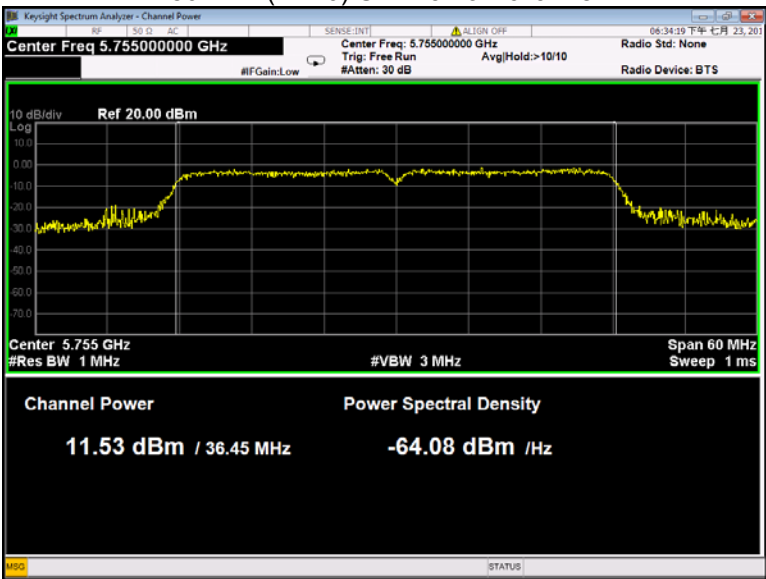
802.11n(HT20) U-NII-3 Middle channel



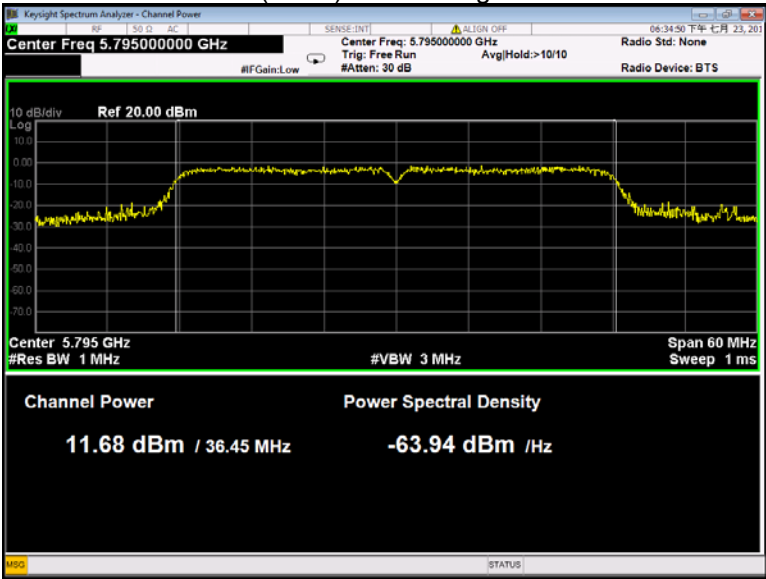
802.11n(HT20) U-NII-3 High channel



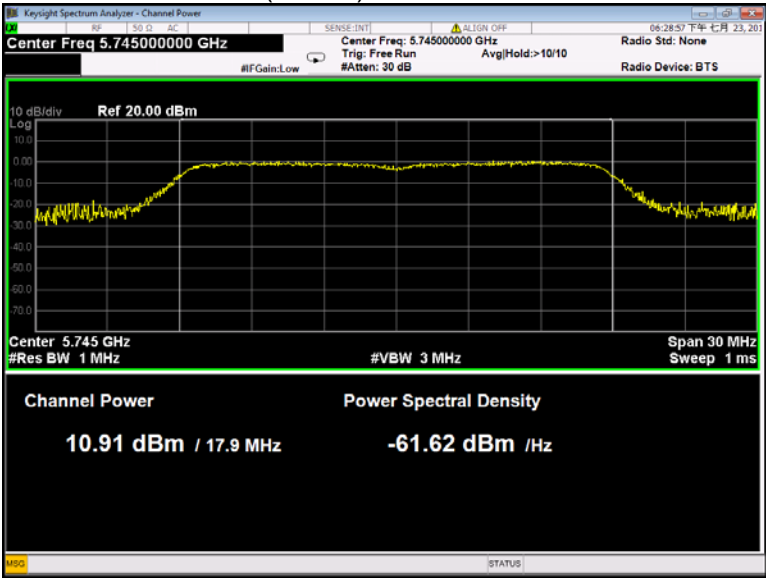
802.11n(HT40) U-NII-3 Low channel



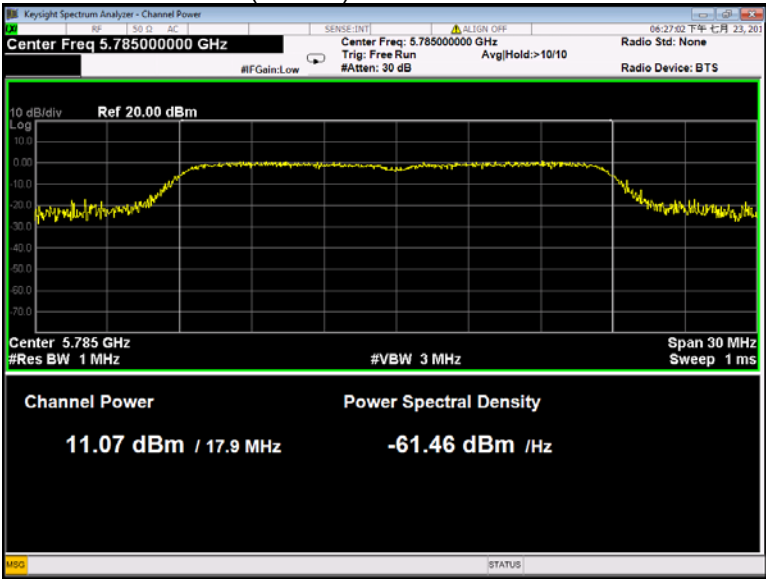
802.11n(HT40) U-NII-3 High channel



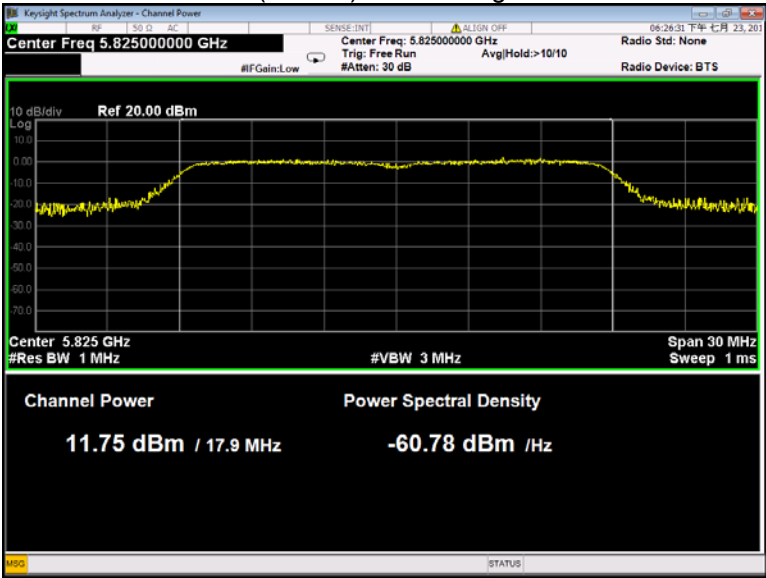
802.11ac(VHT20) U-NII-3 Low channel

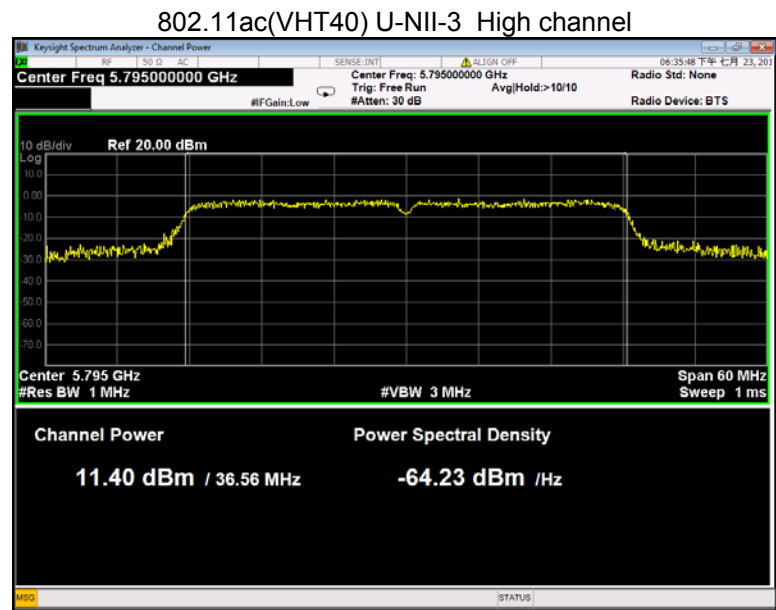
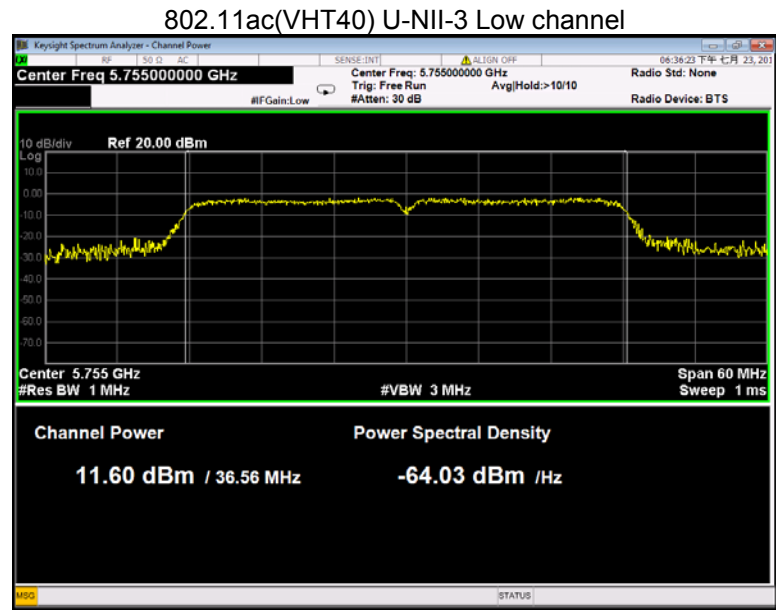


802.11ac(VHT20) U-NII-3 Middle channel

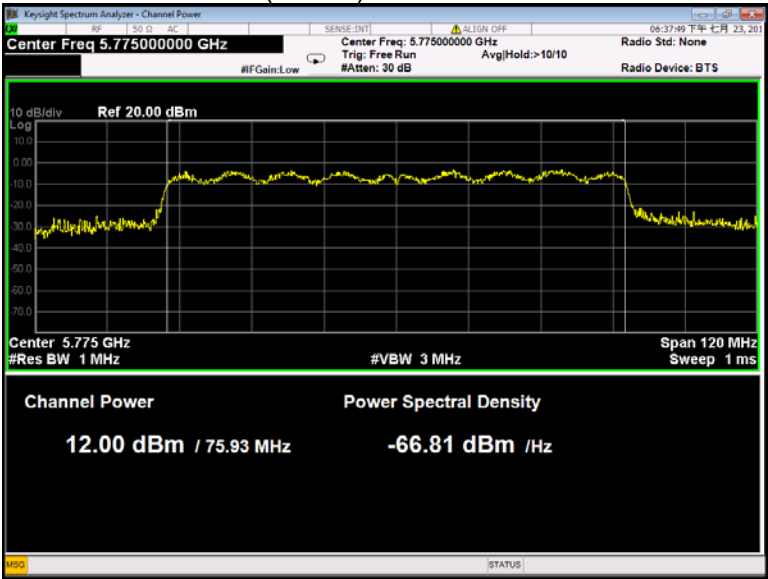


802.11ac(VHT20) U-NII-3 High channel





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



14 Power Spectral density

Test Requirement:	FCC 47CFR Part 15 Section 15.407(a)
Test Method:	KDB 789033 D02 General U-NII Test Procedures New Rules v02r01
Test Limit:	$\leq 11\text{dBm/MHz}$ for Operation in the U-NII-1(5150MHz-5250MHz,5250-5350MHz and 5470-5725MHz)of device; $\leq 30\text{dBm/500kHz}$ for Operation in the U-NII-3(5725MHz-5850MHz)of device
Test Result:	PASS

14.1 Test Procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer:
U-NII-1
RBW = 1MHz, VBW $\geq 3 \times$ RBW Sweep = auto; Detector Function = Peak. Trace = Max hold.
U-NII-3
RBW = 510KHz, VBW $\geq 3 \times$ RBW Sweep = auto; Detector Function = Peak. Trace = Max hold.
3. Allow the trace to stabilize. Use the marker-delta function to determine the separation between the peaks of the adjacent channels. The limit is specified in one of the subparagraphs of this Section
Submit this plot.

14.2 Test Result

Band	Operation mode	Power Spectral Density (dBm/MHz)		
		Low	Middle	High
U-NII-1	802.11a	1.759	2.185	3.217
	802.11n(HT20)	1.713	2.392	3.127
	802.11n(HT40)	-0.508	/	0.215
	802.11ac(VHT20)	1.419	1.444	2.734
	802.11ac(VHT40)	-0.431	/	0.464
	802.11ac(VHT80)	-2.684	/	/
	Limit	≤11.00dBm/MHz		

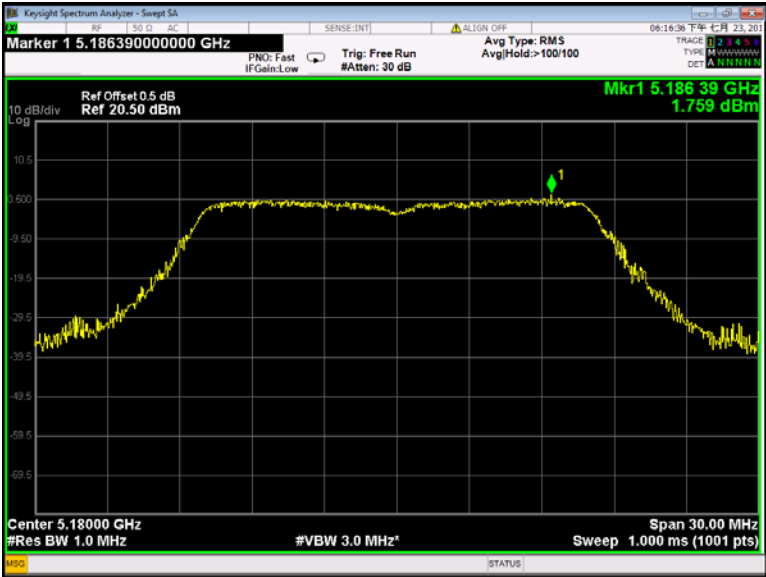
Band	Operation mode	Power Spectral Density (dBm/MHz)		
		Low	Middle	High
U-NII-2A	802.11a	1.958	2.090	3.202
	802.11n(HT20)	1.084	2.576	3.079
	802.11n(HT40)	-0.827	/	0.670
	802.11ac(VHT20)	1.706	1.839	2.405
	802.11ac(VHT40)	-0.828	/	0.448
	802.11ac(VHT80)	-2.501	/	/
	Limit	≤11.00dBm/MHz		

Band	Operation mode	Power Spectral Density (dBm/MHz)		
		Low	Middle	High
U-NII-2C	802.11a	4.148	4.907	4.880
	802.11n(HT20)	4.119	4.659	5.126
	802.11n(HT40)	1.667	1.993	1.187
	802.11ac(VHT20)	4.095	4.526	4.797
	802.11ac(VHT40)	1.847	2.133	1.609
	802.11ac(VHT80)	-0.594	/	-0.815
	Limit	≤11.00dBm/MHz		

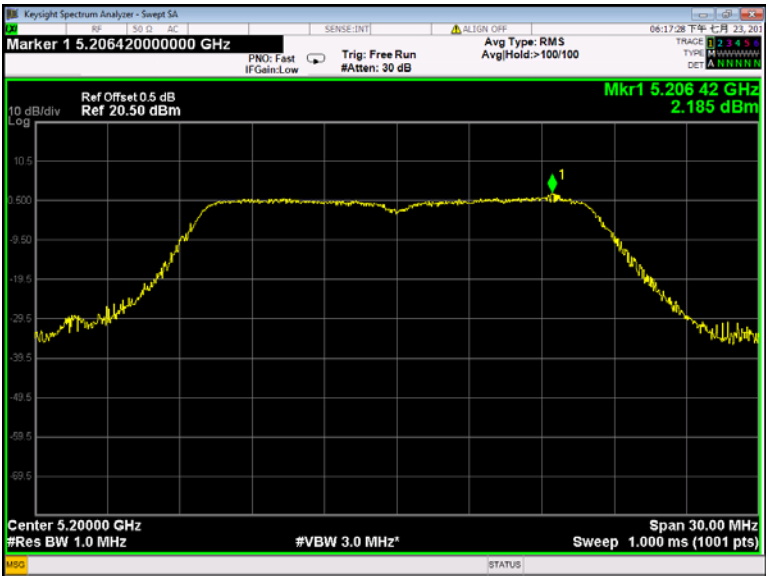
Band	Operation mode	Power Spectral Density (dBm/MHz)		
		Low	Middle	High
U-NII-3	802.11a	-1.335	-0.519	0.190
	802.11n(HT20)	-0.857	0.058	0.940
	802.11n(HT40)	-3.768	/	-3.474
	802.11ac(VHT20)	-0.682	-0.015	0.162
	802.11ac(VHT40)	-3.848	/	-3.034
	802.11ac(VHT80)	-5.178	/	/
	Limit	≤30.00dBm/500kHz		

Test result plots shown as follows:

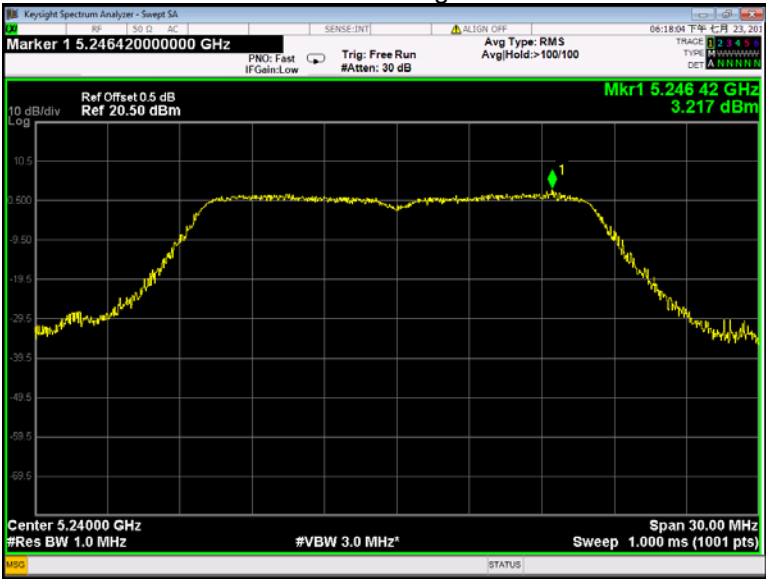
802.11a U-NII-1 Low channel



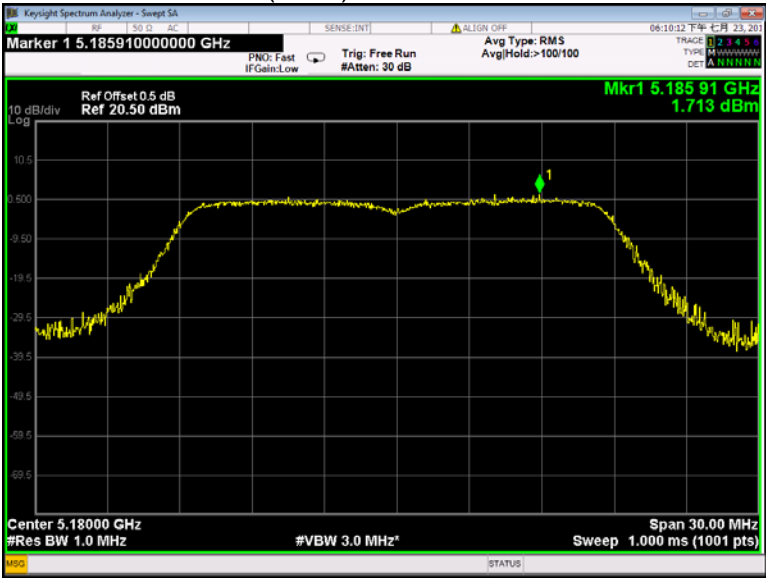
802.11a U-NII-1 Middle channel



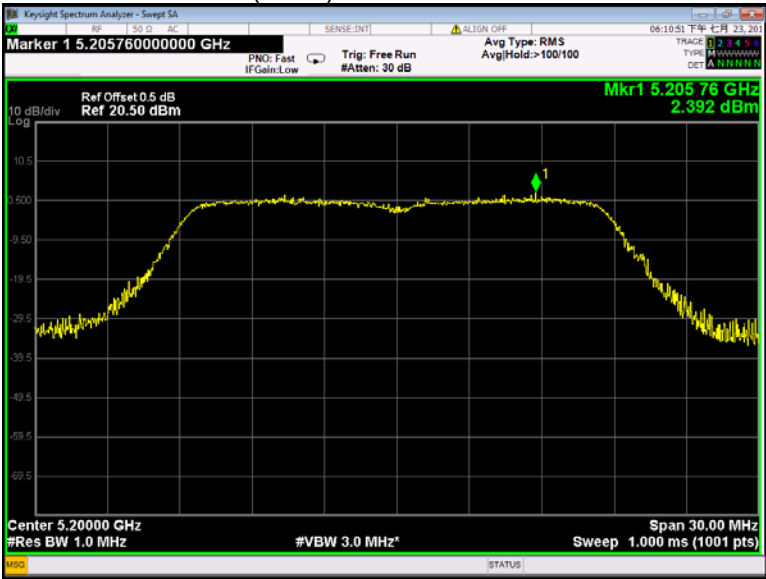
802.11a U-NII-1 High channel



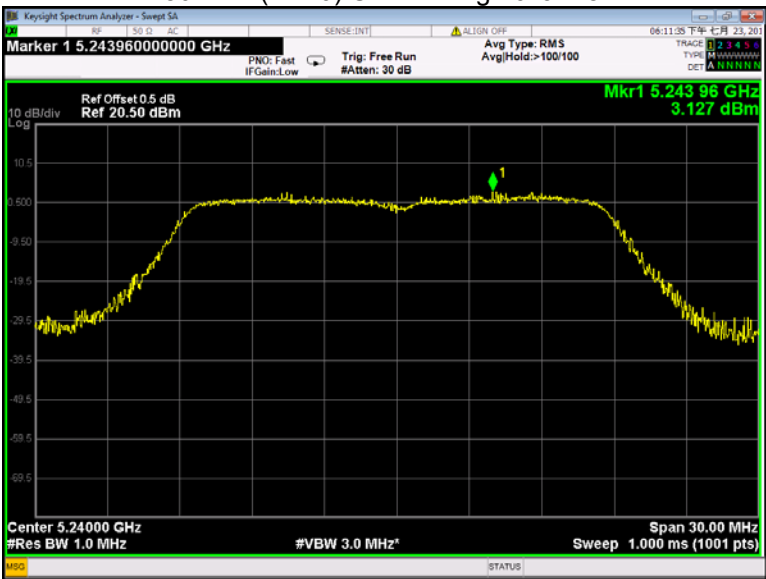
802.11n(HT20) U-NII-1 Low channel



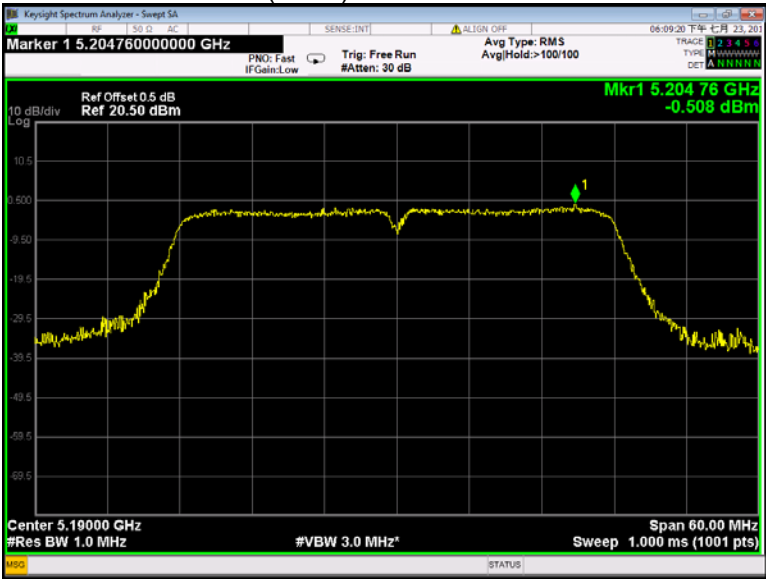
802.11n(HT20) U-NII-1 Middle channel



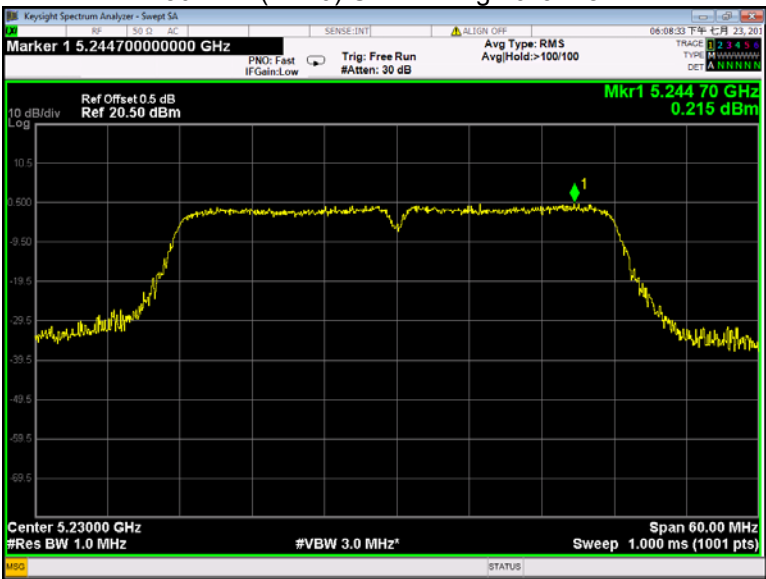
802.11n(HT20) U-NII-1 High channel



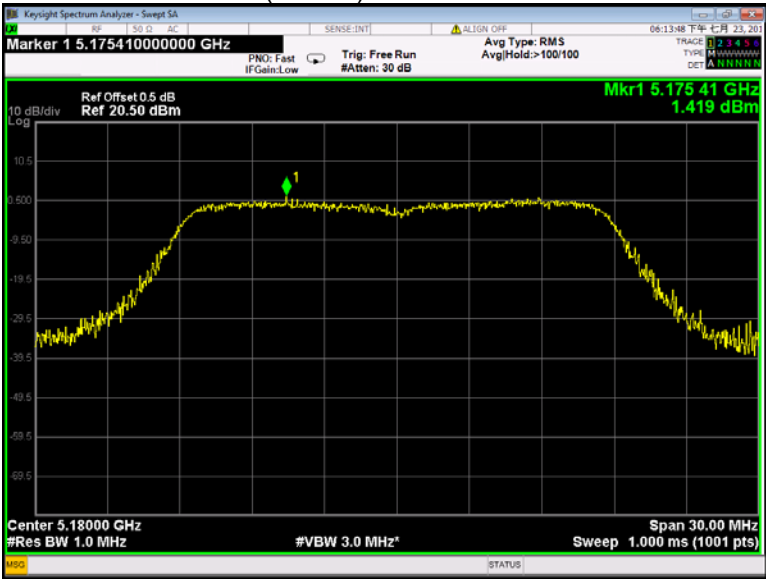
802.11n(HT40) U-NII-1 Low channel



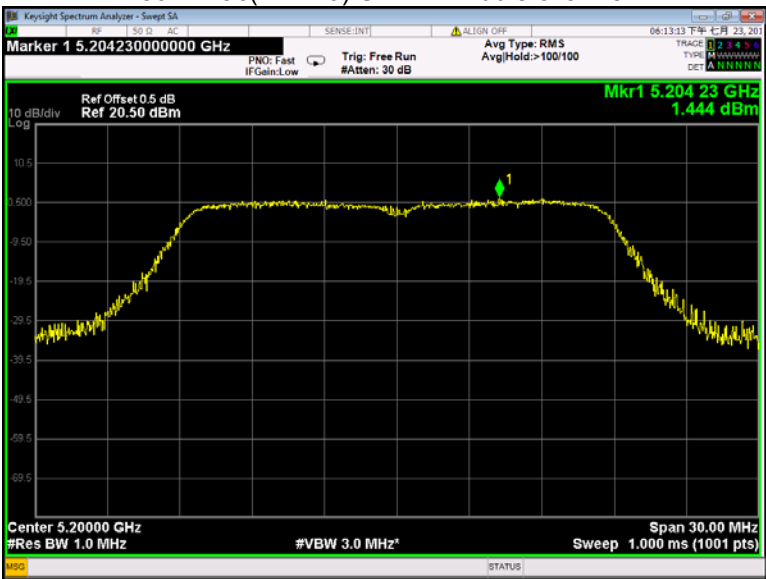
802.11n(HT40) U-NII-1 High channel



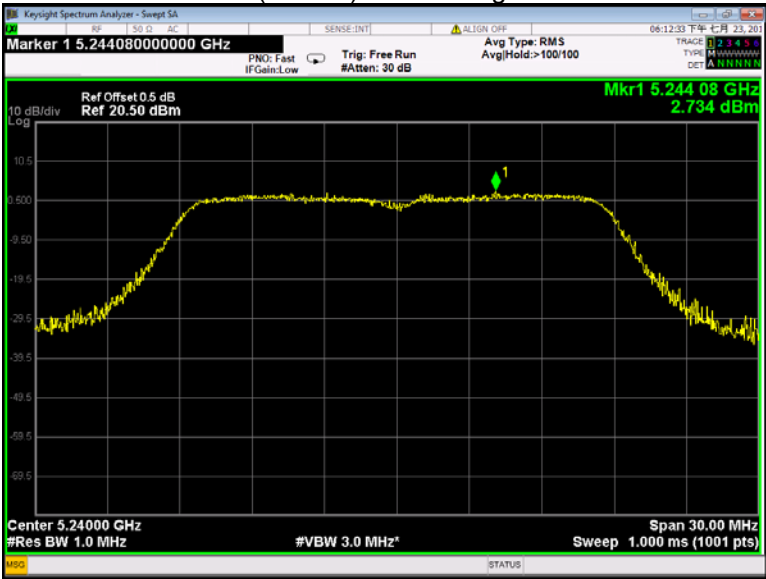
802.11ac(VHT20) U-NII-1 Low channel



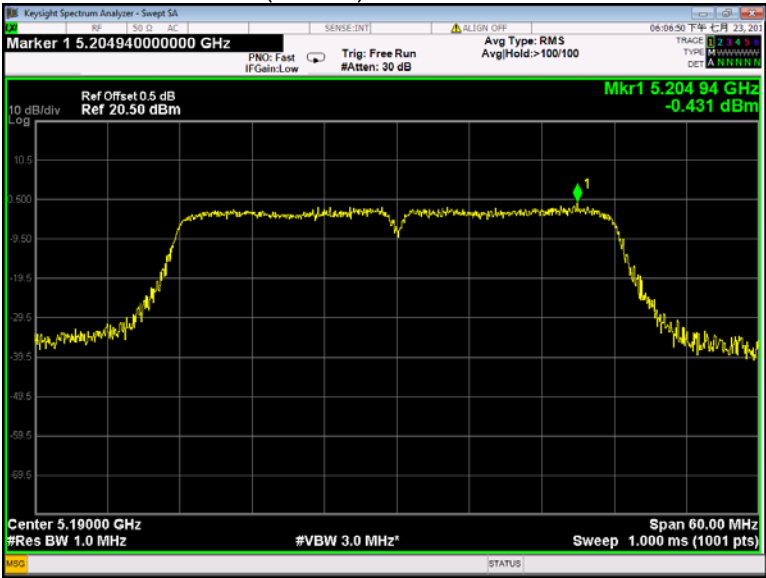
802.11ac(VHT20) U-NII-1 Middle channel



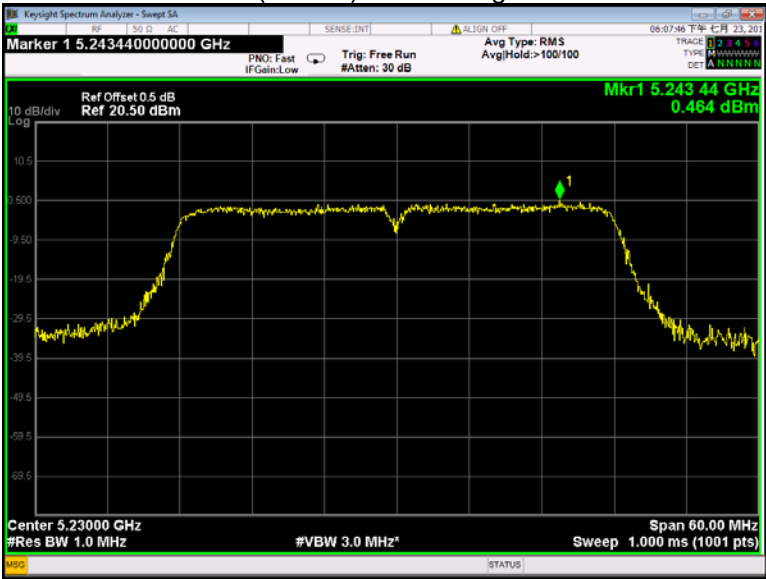
802.11ac(VHT20) U-NII-1 High channel



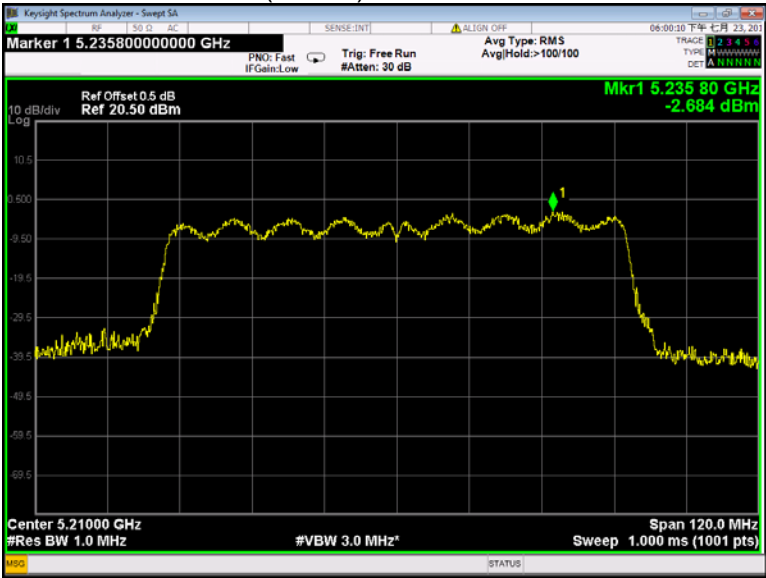
802.11ac(VHT40) U-NII-1 Low channel



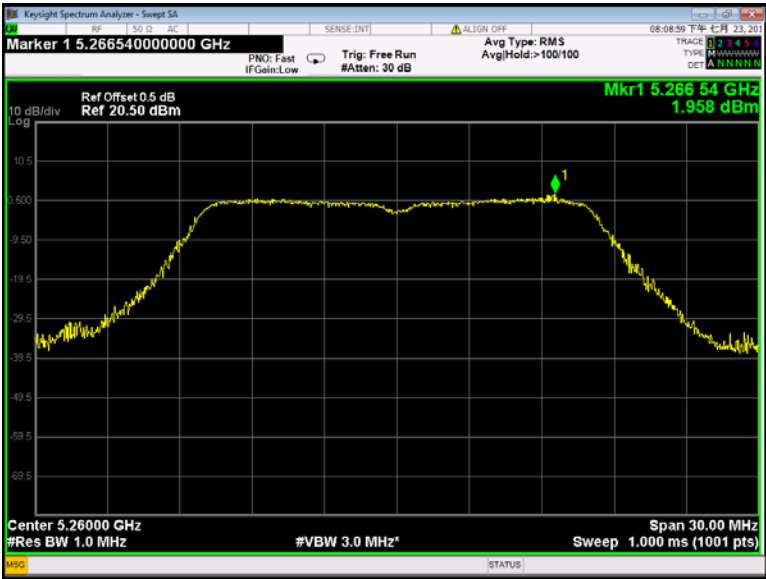
802.11ac(VHT40) U-NII-1 High channel



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



802.11a U-NII-2A Low channel



802.11a U-NII-2A Middle channel

