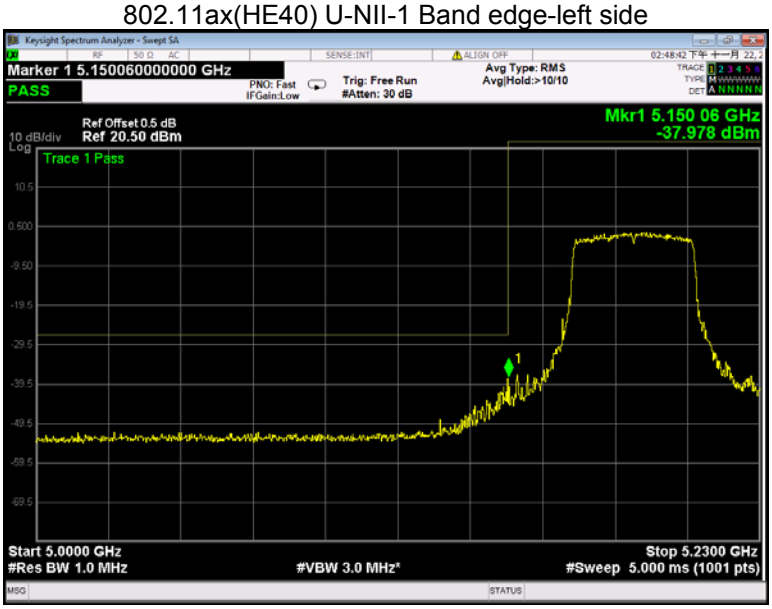
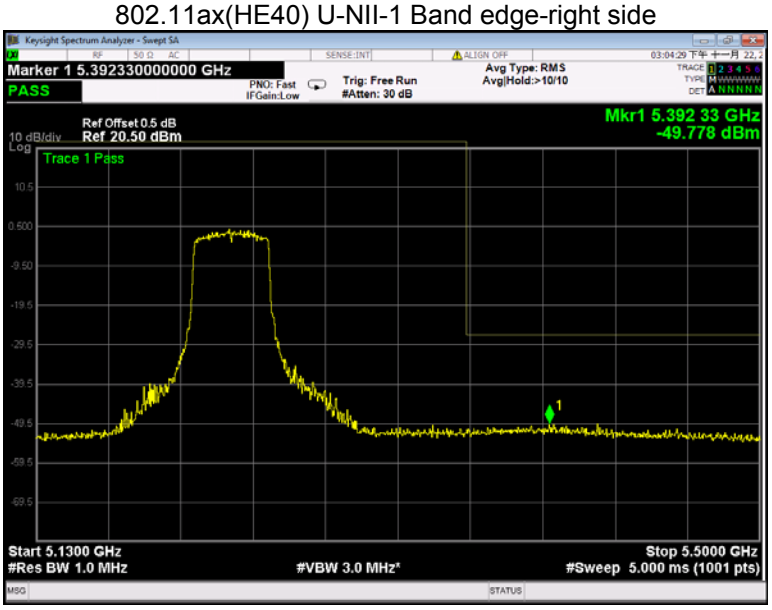
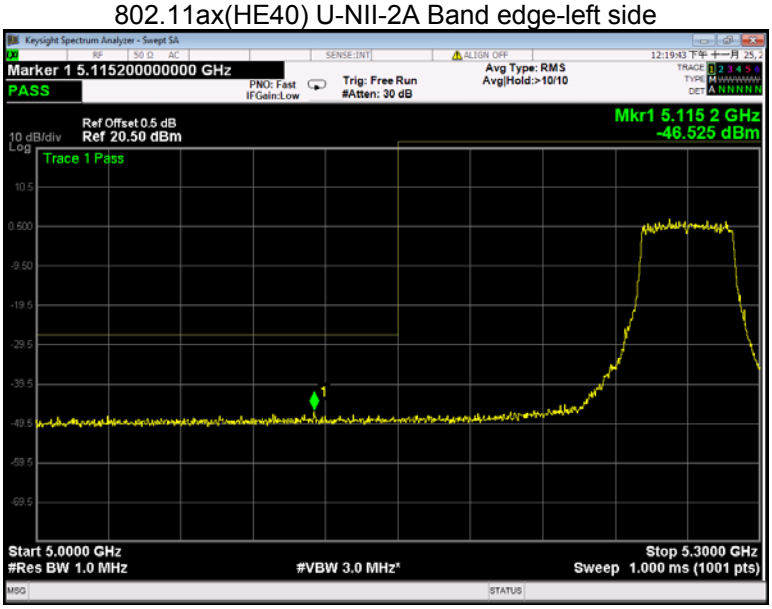
802.11ax(HE40) U-NII-1 Band edge-left side



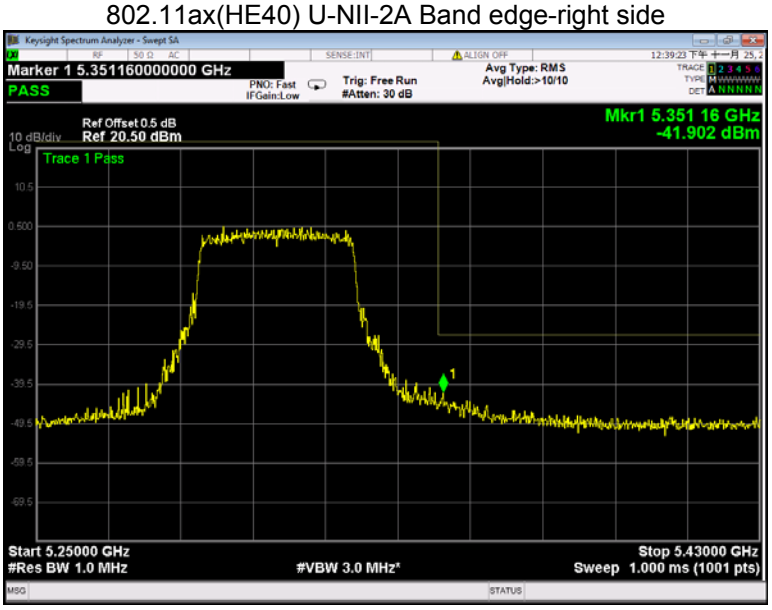
802.11ax(HE40) U-NII-1 Band edge-right side



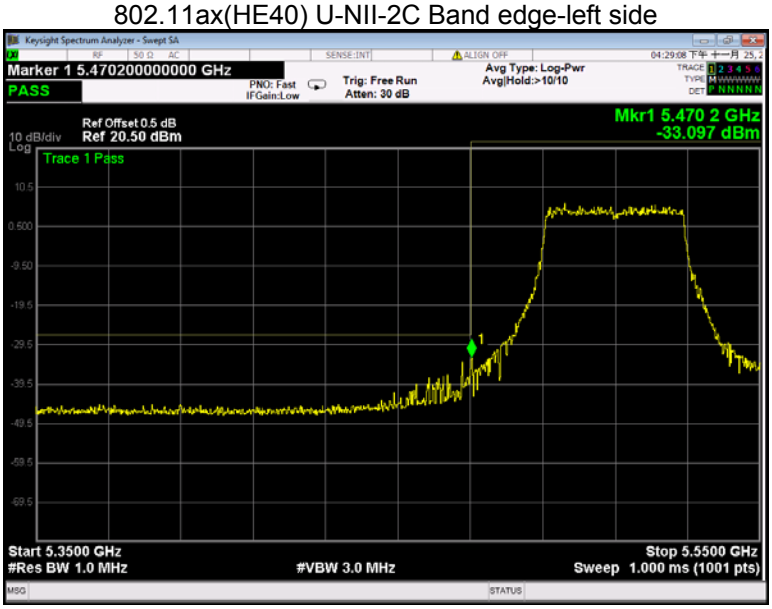
802.11ax(HE40) U-NII-2A Band edge-left side



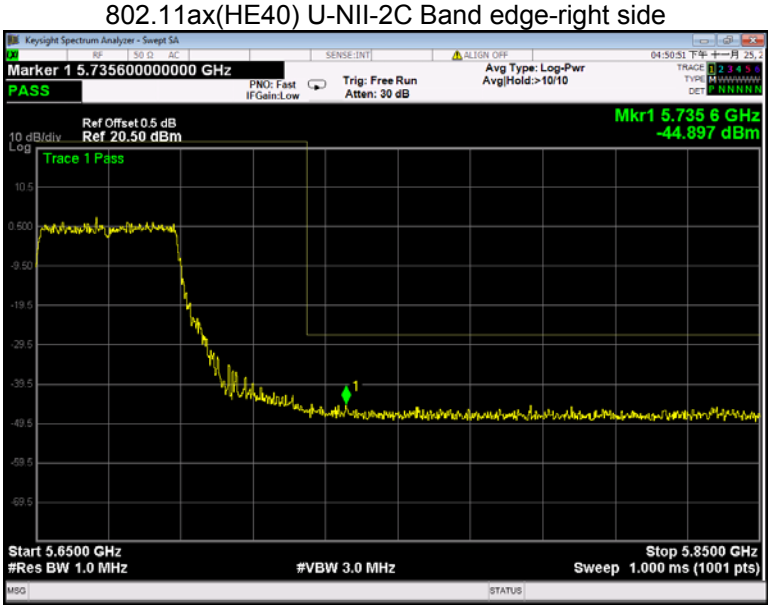
802.11ax(HE40) U-NII-2A Band edge-right side



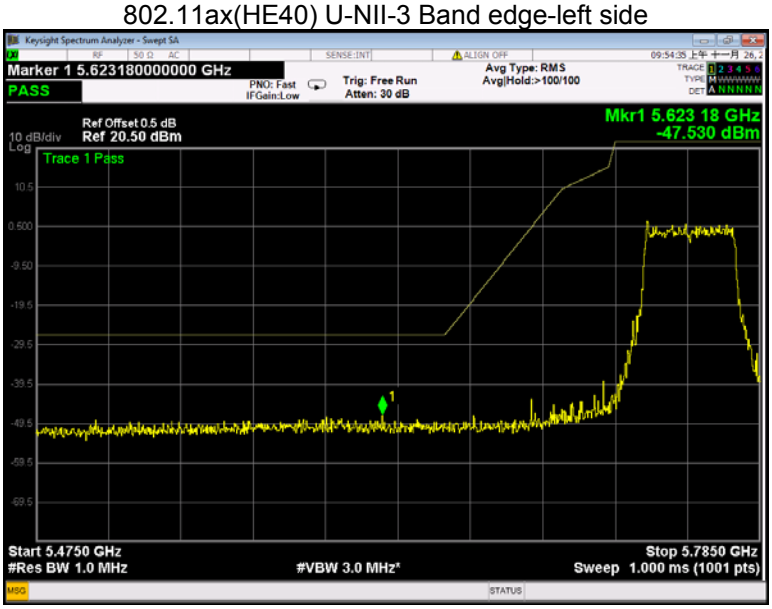
802.11ax(HE40) U-NII-2C Band edge-left side



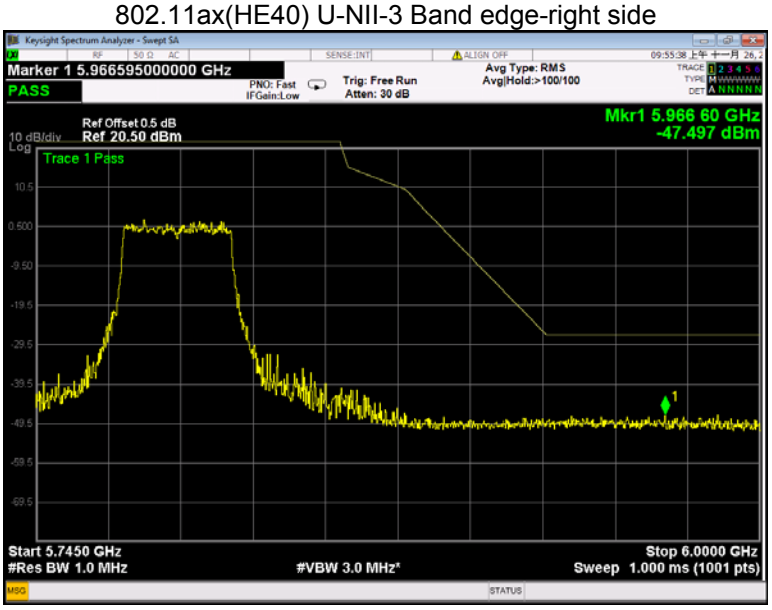
802.11ax(HE40) U-NII-2C Band edge-right side



802.11ax(HE40) U-NII-3 Band edge-left side



802.11ax(HE40) U-NII-3 Band edge-right side



11 6 dB Bandwidth

Test Requirement:	FCC 47CFR Part 15 Section 15.407(e)
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General U-NII Test Procedures New Rules v02r01 Section C
Test Limit:	≥ 500 kHz
Test Result:	PASS

11.1 Test Procedure

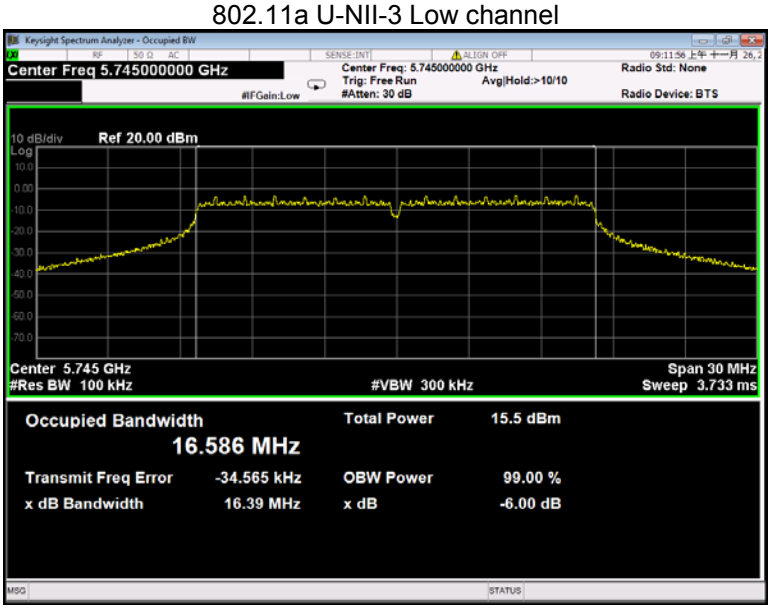
1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz

11.2 Test Result

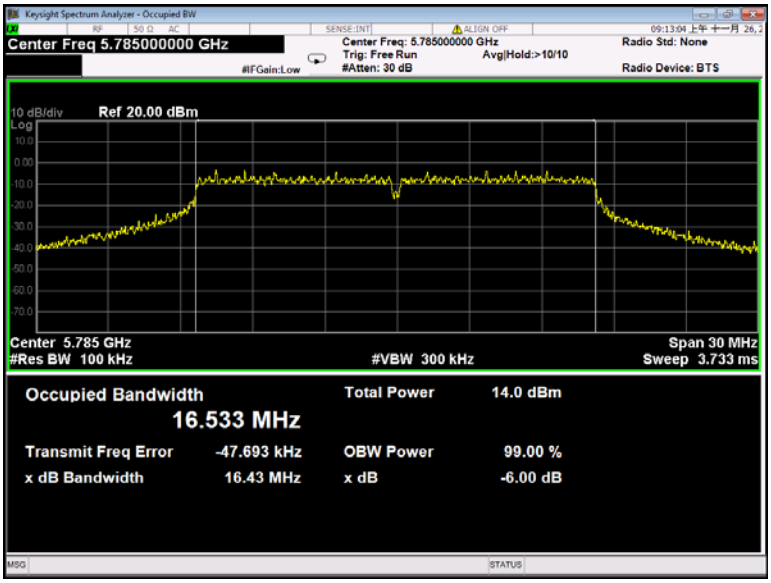
Band	Operation mode	6 dB Bandwidth (MHz)		
		Low	Middle	High
U-NII-3	802.11a	16.39	16.43	16.36
	802.11n(HT20)	17.62	17.61	17.60
	802.11n(HT40)	36.40	/	36.40
	802.11ac(VHT20)	17.62	17.60	17.62
	802.11ac(VHT40)	36.42	/	36.38
	802.11ax(HE20)	19.03	18.98	18.99
	802.11ax(HE40)	37.90	/	38.01

Test result plots shown as follows:

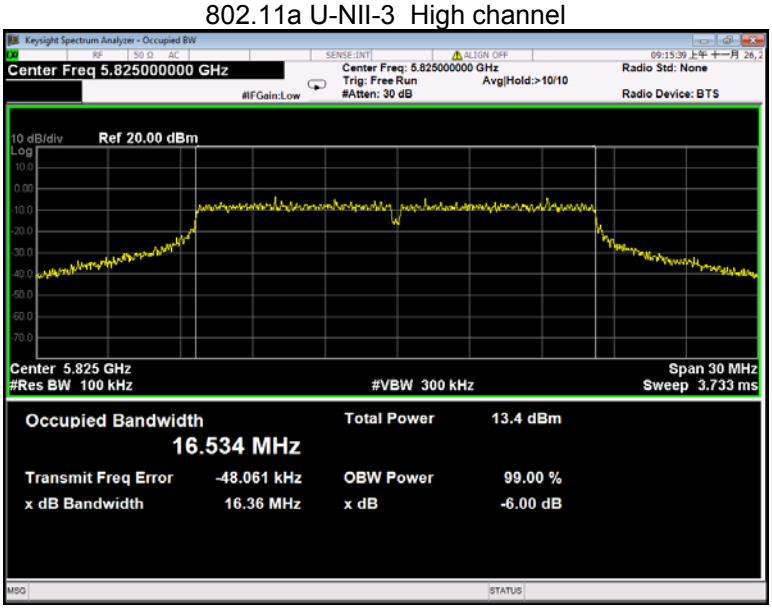
802.11a U-NII-3 Low channel



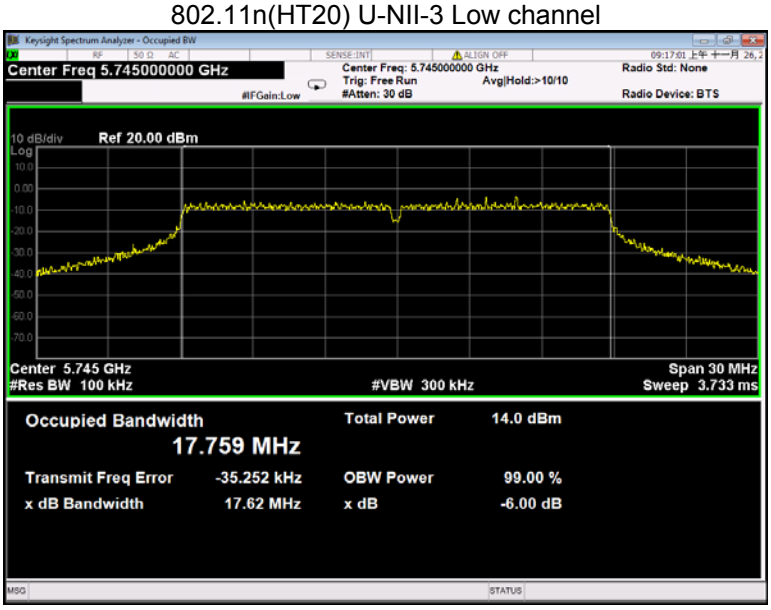
802.11a U-NII-3 Middle channel



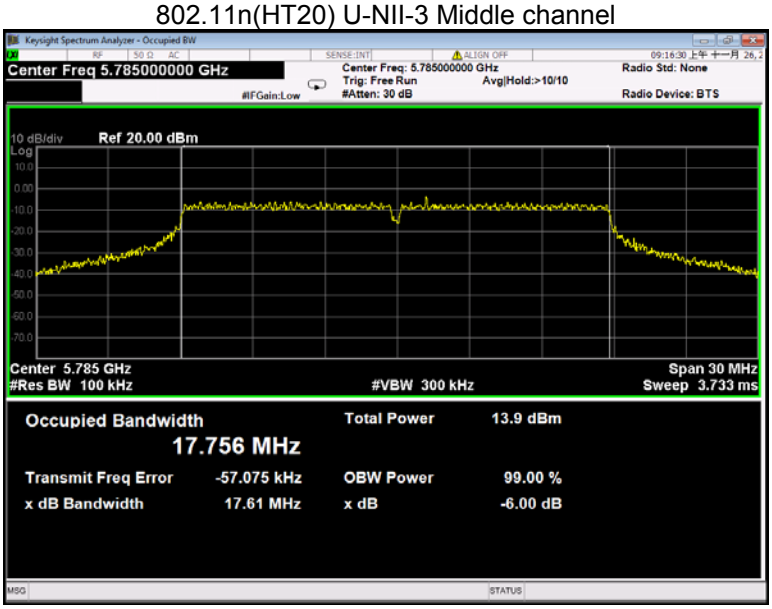
802.11a U-NII-3 High channel



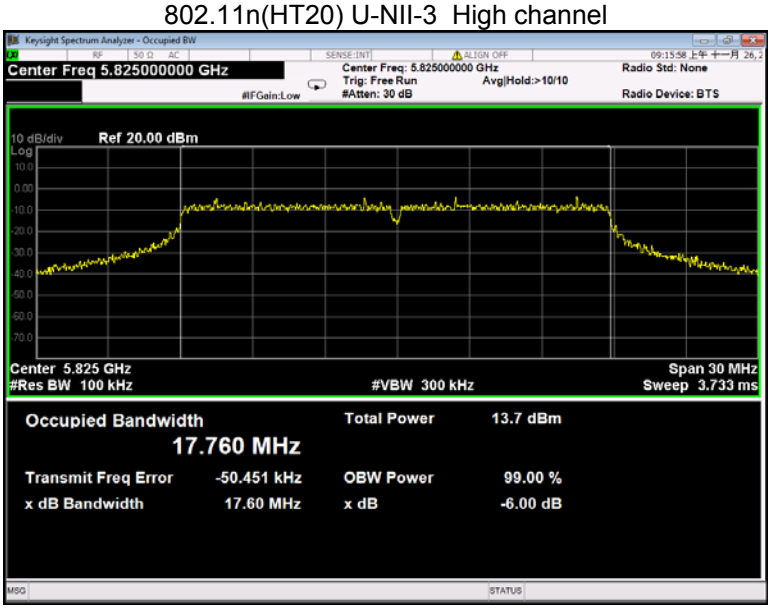
802.11n(HT20) U-NII-3 Low channel



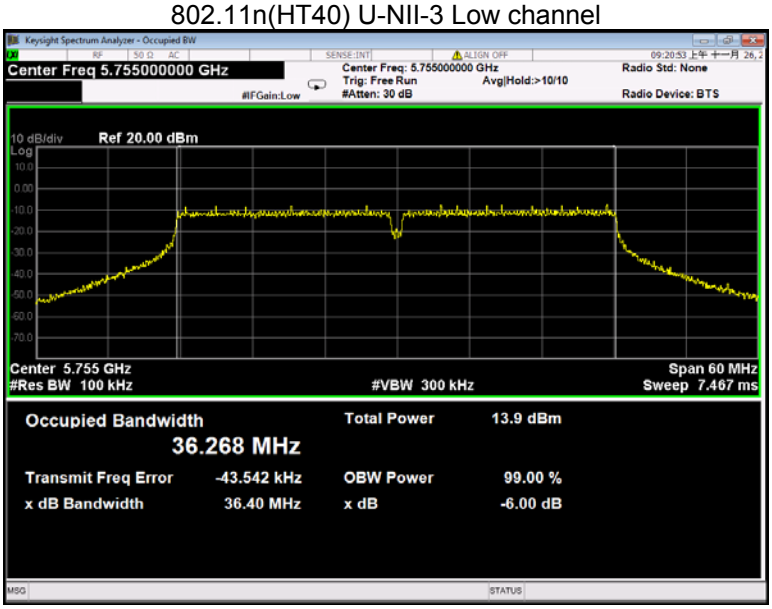
802.11n(HT20) U-NII-3 Middle channel



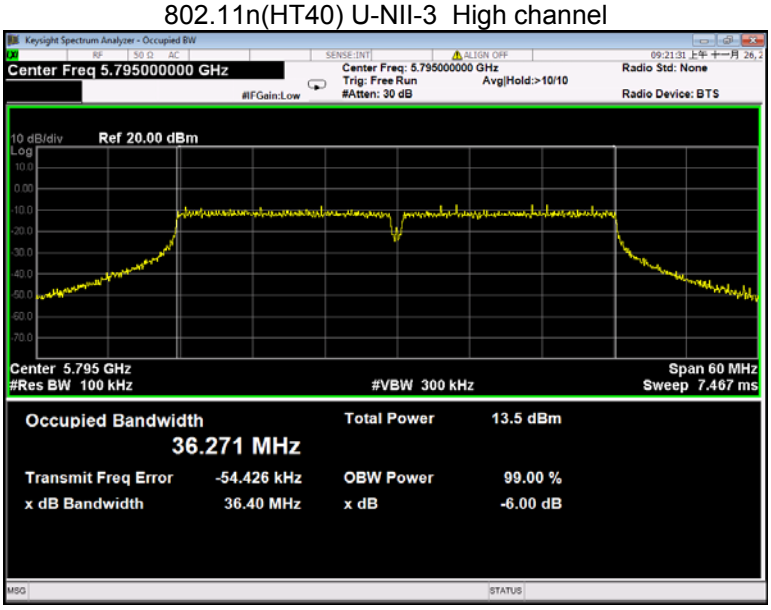
802.11n(HT20) U-NII-3 High channel



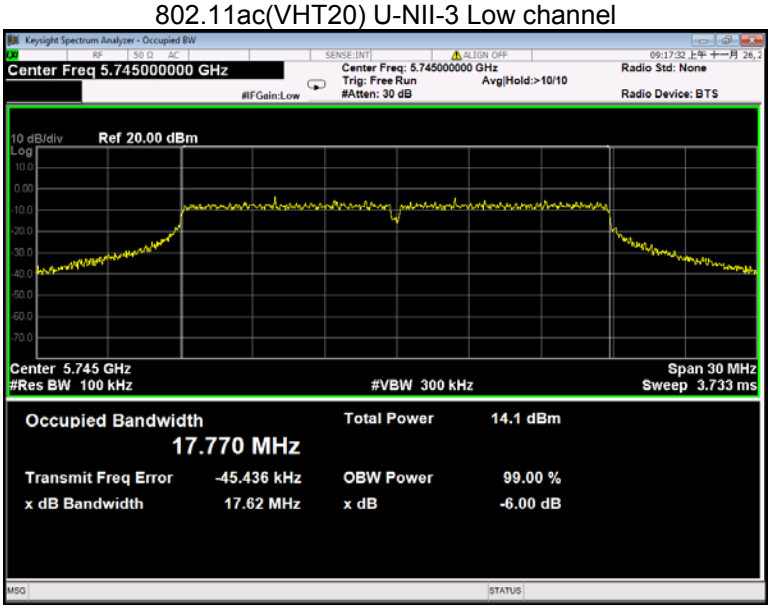
802.11n(HT40) U-NII-3 Low channel



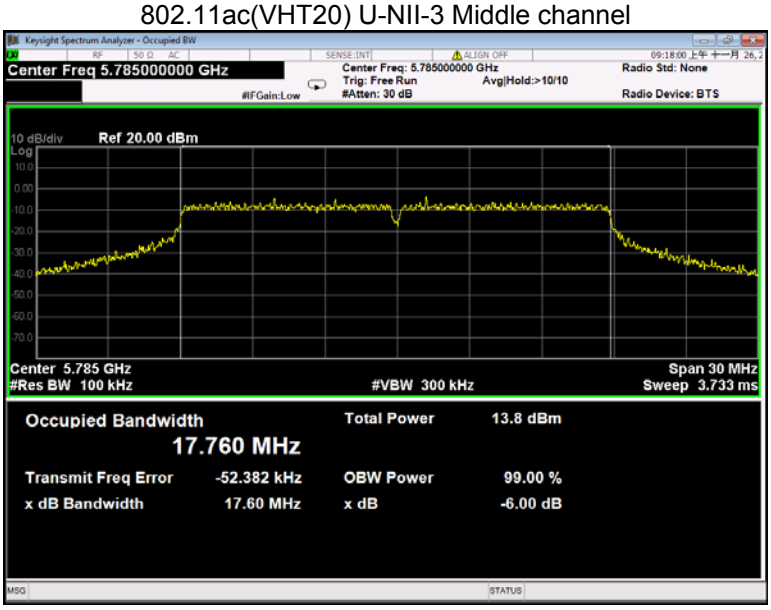
802.11n(HT40) U-NII-3 High channel



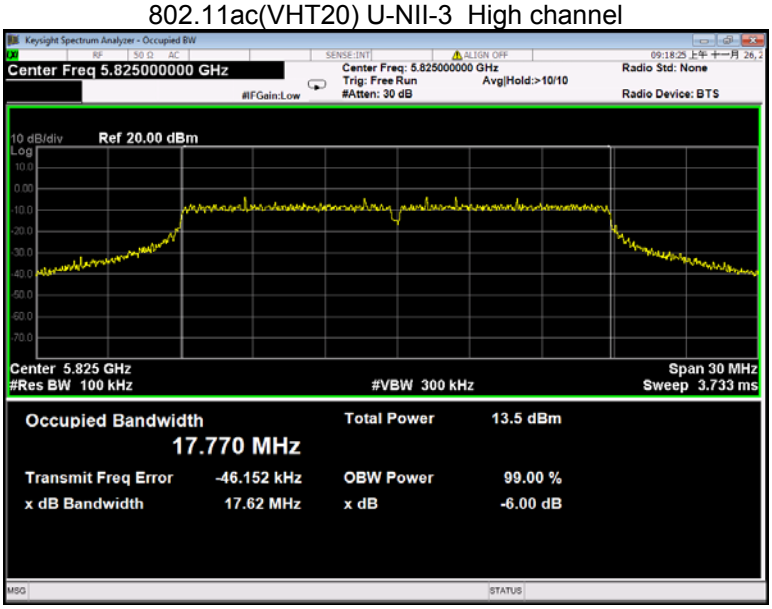
802.11ac(VHT20) U-NII-3 Low channel



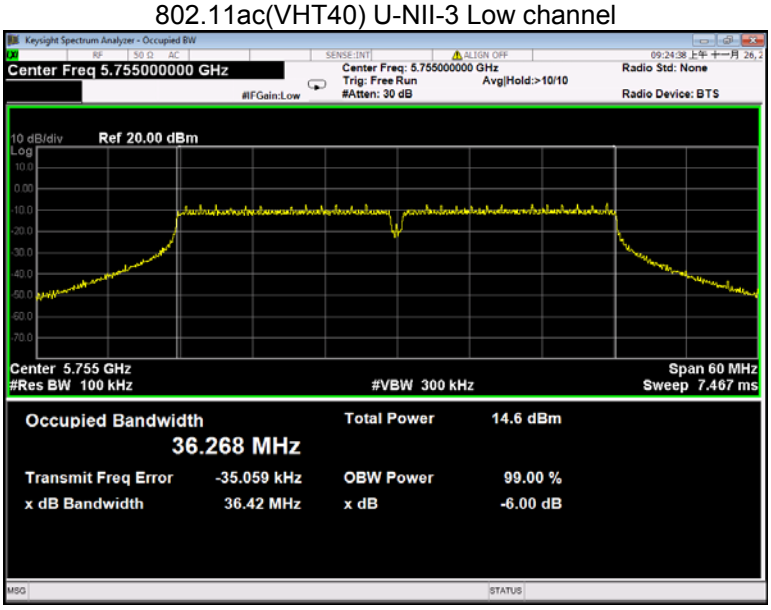
802.11ac(VHT20) U-NII-3 Middle channel



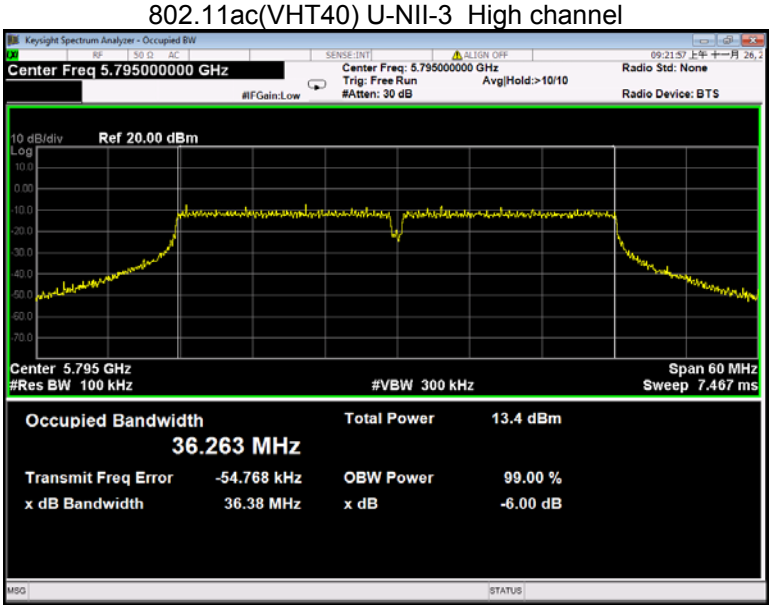
802.11ac(VHT20) U-NII-3 High channel



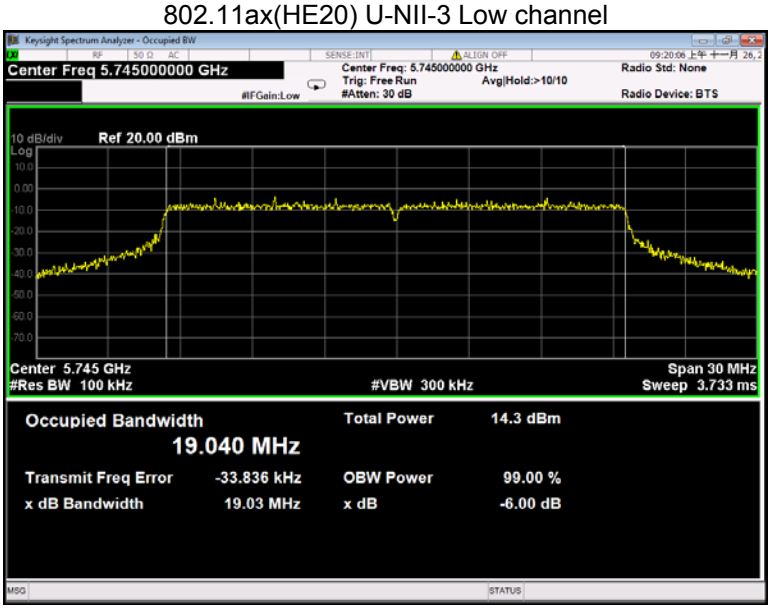
802.11ac(VHT40) U-NII-3 Low channel



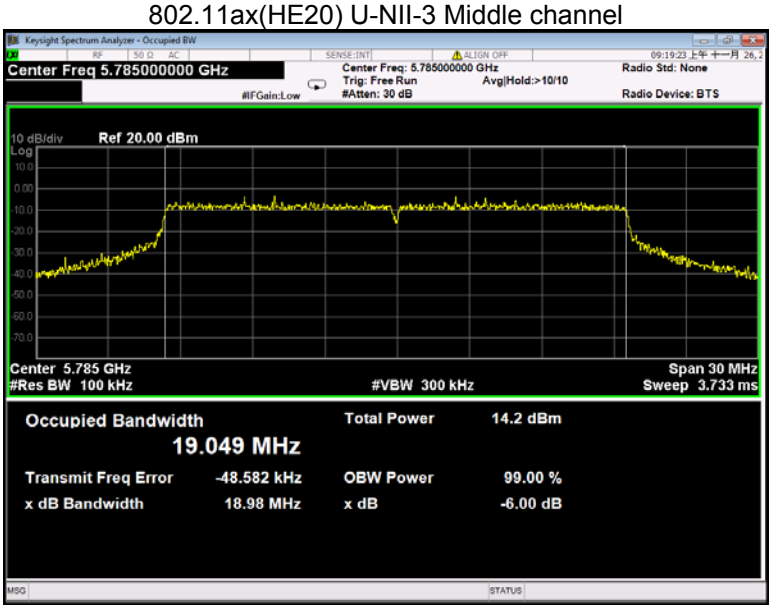
802.11ac(VHT40) U-NII-3 High channel



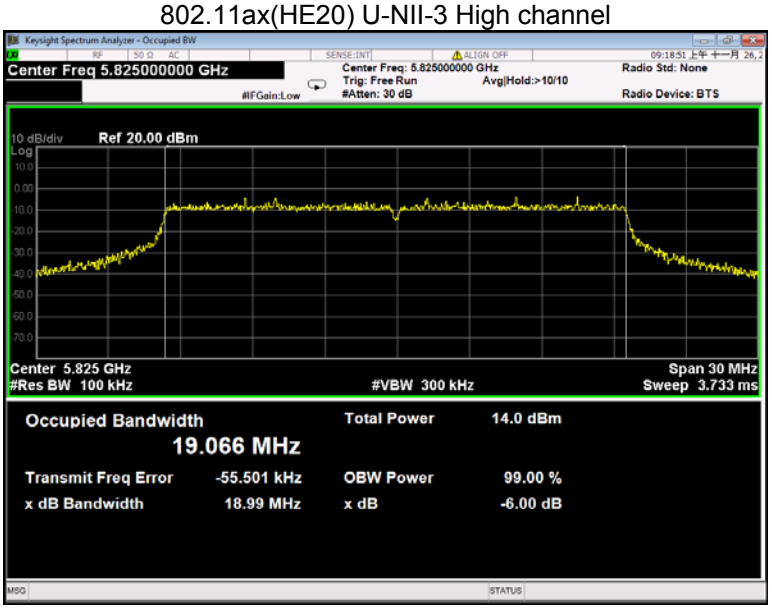
802.11ax(HE20) U-NII-3 Low channel



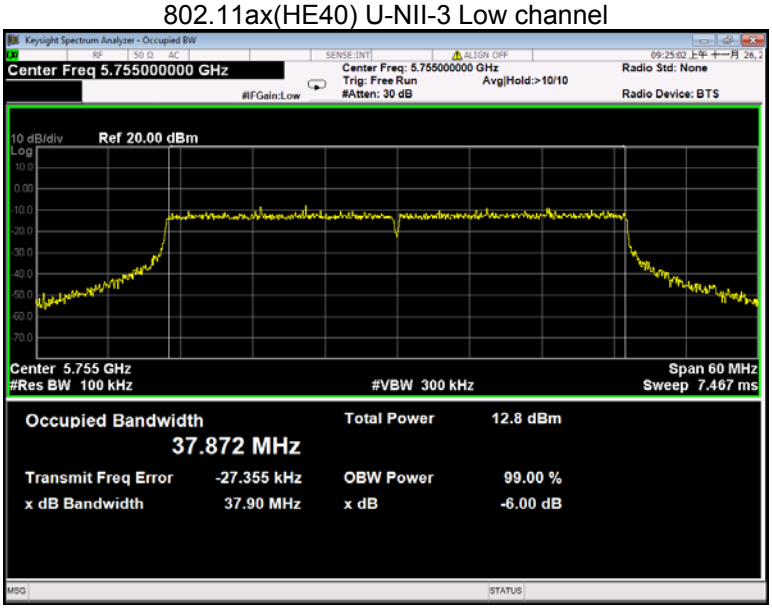
802.11ax(HE20) U-NII-3 Middle channel



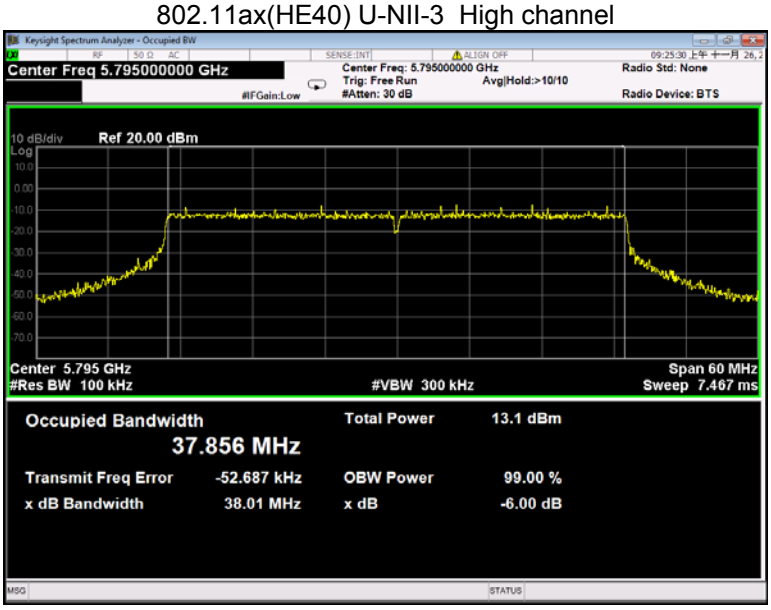
802.11ax(HE20) U-NII-3 High channel



802.11ax(HE40) U-NII-3 Low channel



802.11ax(HE40) U-NII-3 High channel



12 26 dB Bandwidth and 99% Occupied Bandwidth

Test Requirement:	FCC 47CFR Part 15 Section 15.407 (a)
Test Method:	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General U-NII Test Procedures New Rules v02r01 Section D
Test Limit:	No restriction limits
Test Result:	PASS

12.1 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% to 5% of the OBW, VBW = 3x RBW

12.2 Test Result

Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
U-NII-1	802.11a	24.67	20.29	23.29	16.734	16.552	16.632
	802.11n(HT20)	25.63	25.03	24.46	17.954	17.937	17.874
	802.11n(HT40)	44.69	/	44.46	36.358	/	36.367
	802.11ac(VHT20)	25.97	25.51	25.26	17.894	17.903	17.888
	802.11ac(VHT40)	44.35	/	44.30	36.343	/	36.368
	802.11ax(HE20)	23.82	26.04	24.54	19.023	19.042	19.082
	802.11ax(HE40)	42.32	/	43.36	37.853	/	37.866

Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
U-NII-2A	802.11a	24.48	23.32	22.92	16.695	16.664	16.647
	802.11n(HT20)	25.82	25.28	26.35	17.863	17.878	17.972
	802.11n(HT40)	44.29	/	44.90	36.365	/	36.352
	802.11ac(VHT20)	25.06	25.21	24.56	17.899	17.905	17.867
	802.11ac(VHT40)	45.46	/	45.91	36.380	/	36.477
	802.11ax(HE20)	25.83	25.13	25.56	19.148	19.132	19.099
	802.11ax(HE40)	44.42	/	44.68	37.893	/	37.855

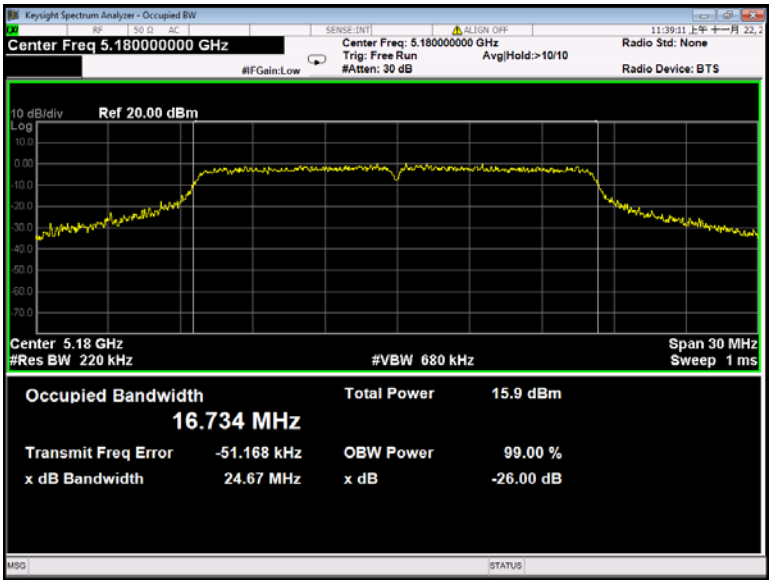
Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
U-NII-2C	802.11a	25.13	23.55	24.67	16.732	16.800	16.773
	802.11n(HT20)	25.42	26.51	25.76	17.990	17.998	18.049
	802.11n(HT40)	46.75	45.67	45.82	36.701	36.557	36.564
	802.11ac(VHT20)	24.65	26.42	24.98	18.015	17.971	17.961
	802.11ac(VHT40)	45.22	45.60	45.95	36.463	36.561	36.566
	802.11ax(HE20)	24.83	25.64	25.20	19.148	19.160	19.145
	802.11ax(HE40)	45.49	45.28	44.86	38.103	38.047	38.066

Band	Operation mode	99% Bandwidth (MHz)		
		Low	Middle	High
U-NII-3	802.11a	16.779	16.762	16.821
	802.11n(HT20)	18.029	17.951	18.035
	802.11n(HT40)	36.514	/	36.553
	802.11ac(VHT20)	18.011	18.000	18.041
	802.11ac(VHT40)	36.541	/	36.522
	802.11ax(HE20)	19.195	19.124	19.154
	802.11ax(HE40)	38.058	/	38.065

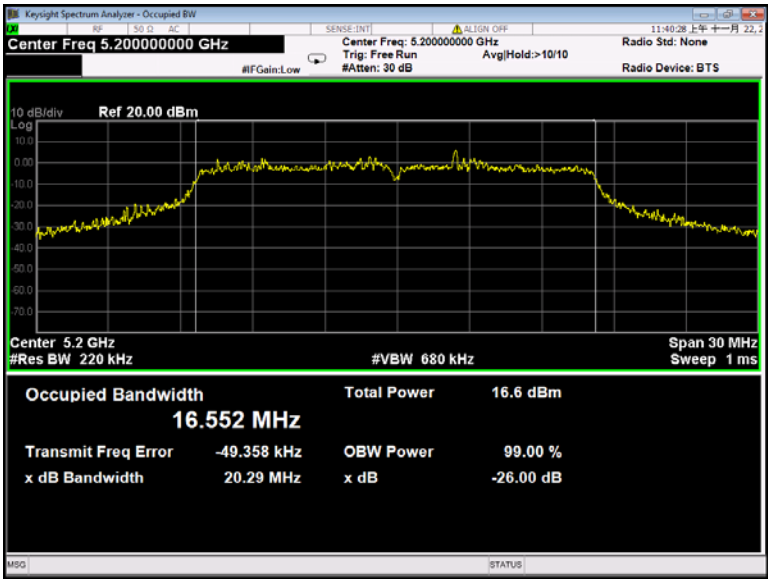
Test result plots shown as follows:

26 dB Bandwidth

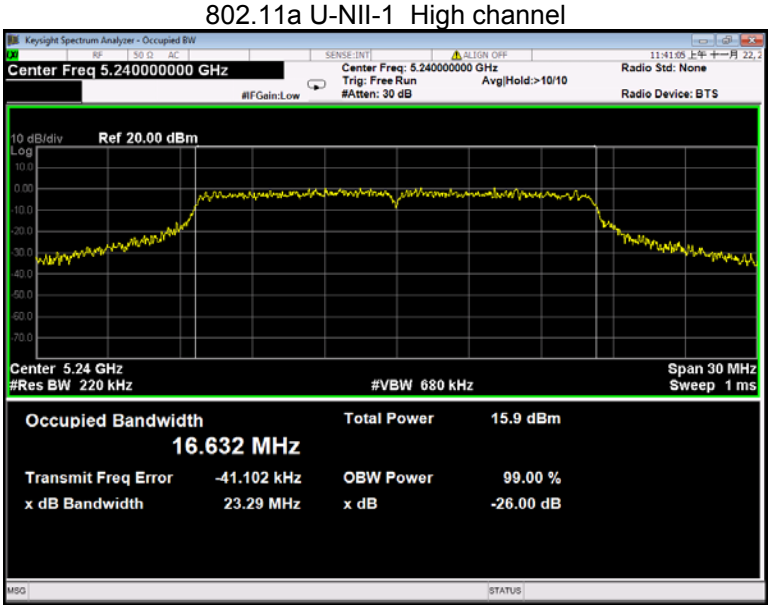
802.11a U-NII-1 Low channel



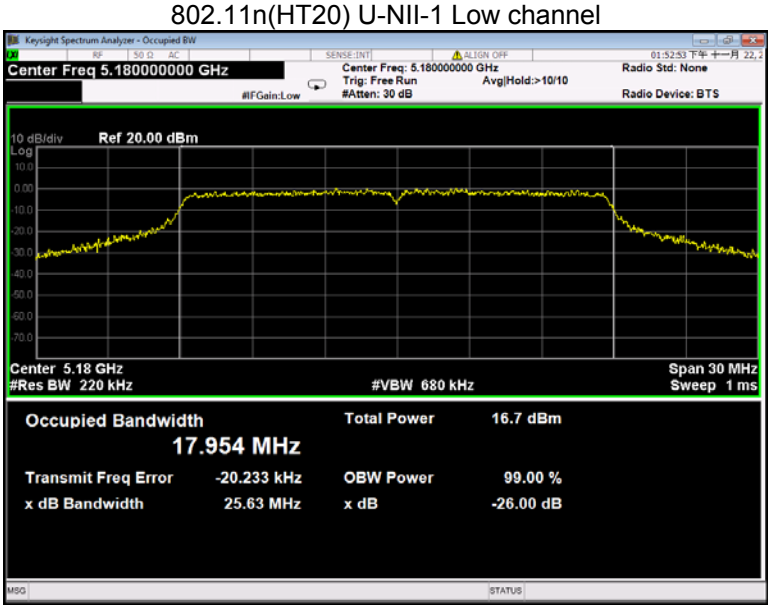
802.11a U-NII-1 Middle channel



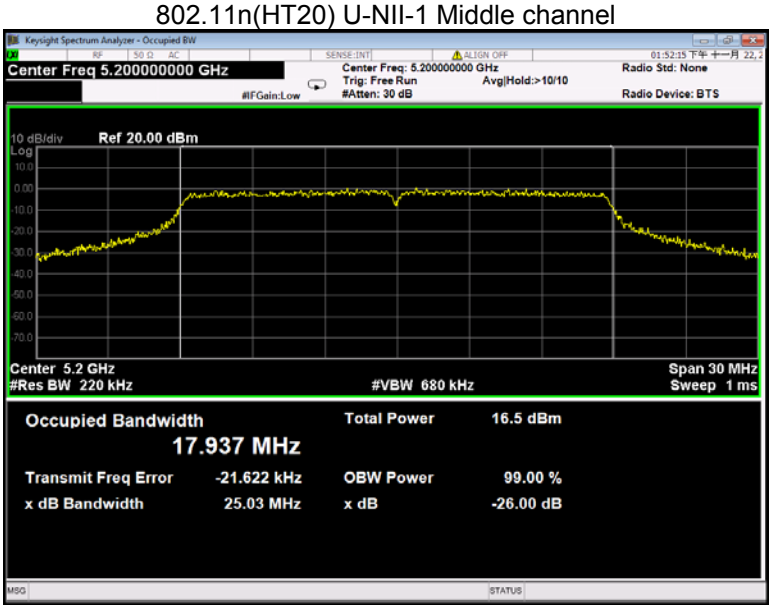
802.11a U-NII-1 High channel



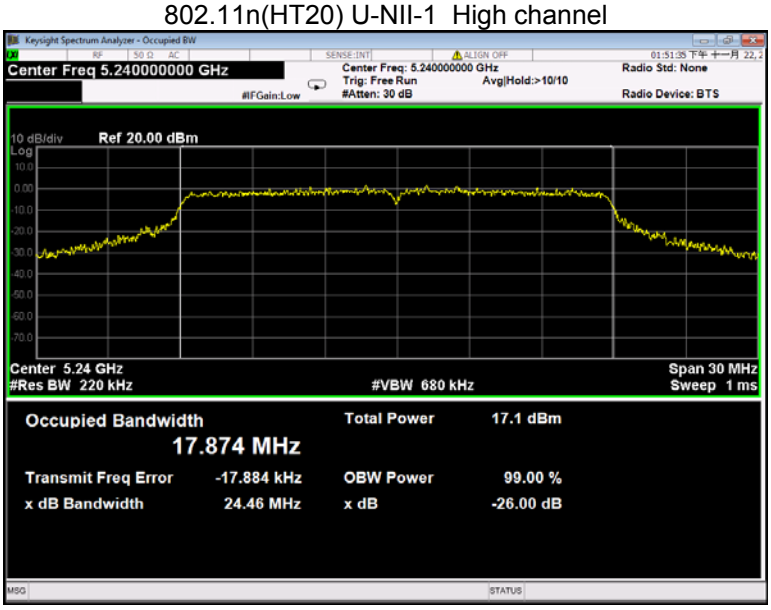
802.11n(HT20) U-NII-1 Low channel



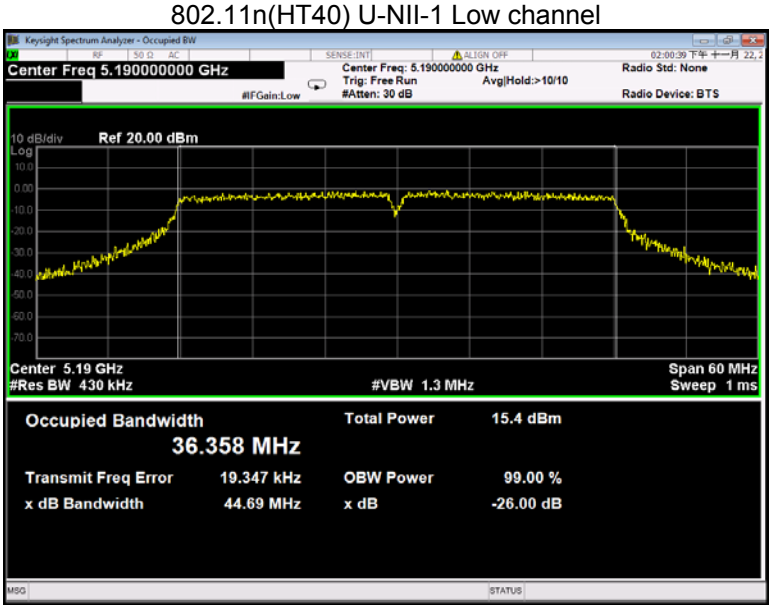
802.11n(HT20) U-NII-1 Middle channel



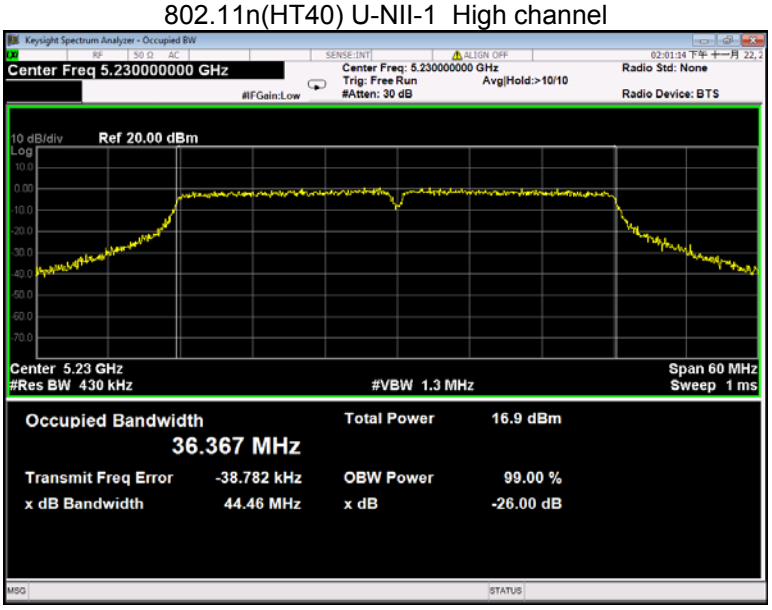
802.11n(HT20) U-NII-1 High channel



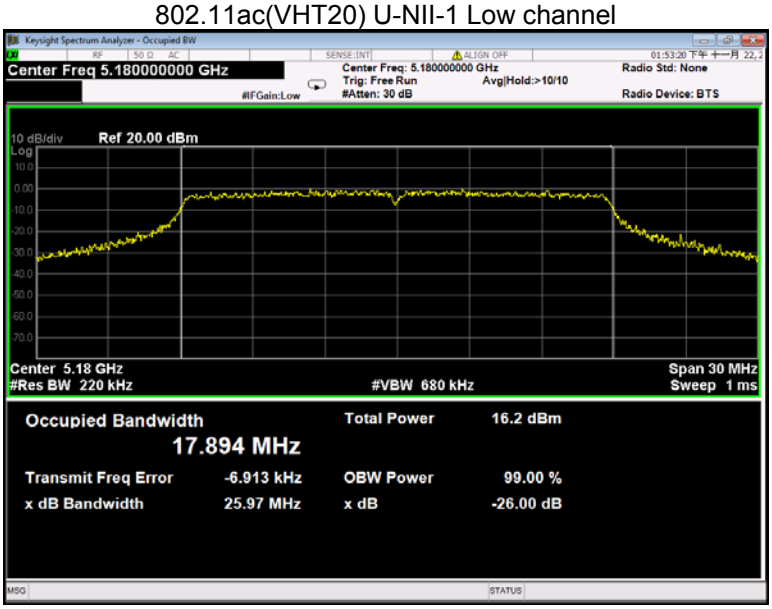
802.11n(HT40) U-NII-1 Low channel



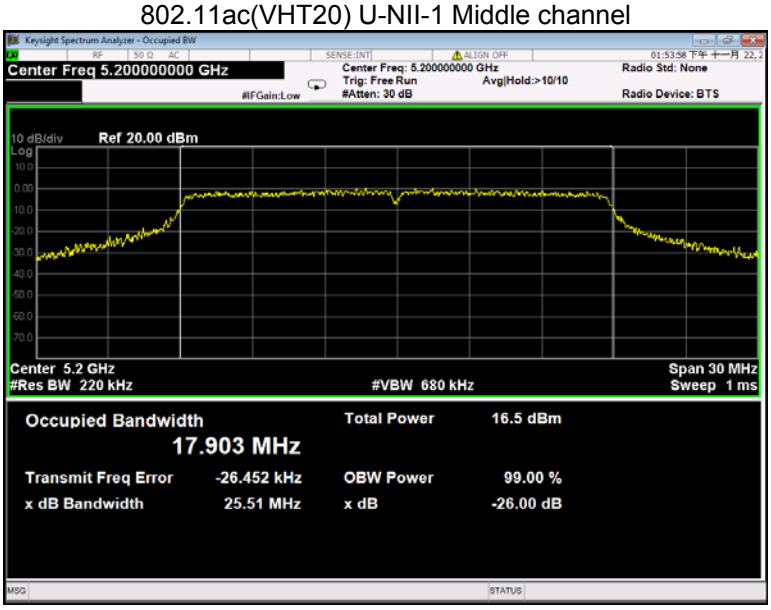
802.11n(HT40) U-NII-1 High channel



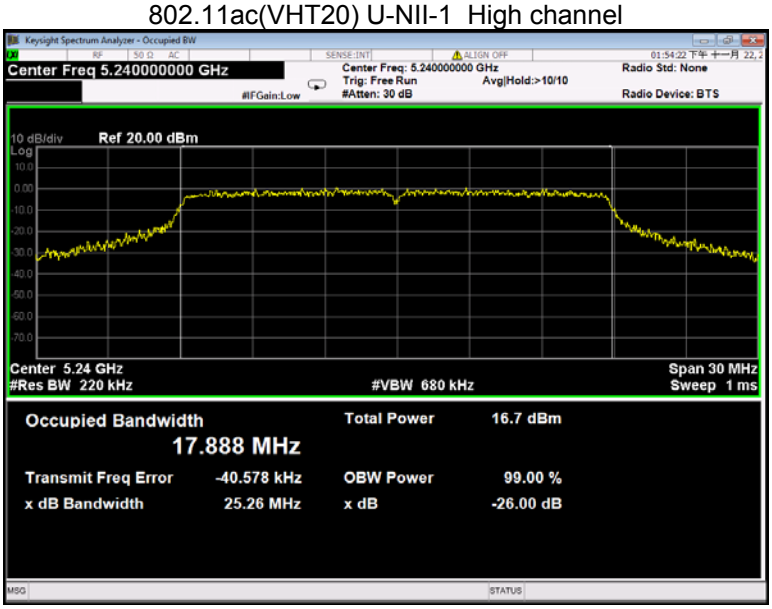
802.11ac(VHT20) U-NII-1 Low channel



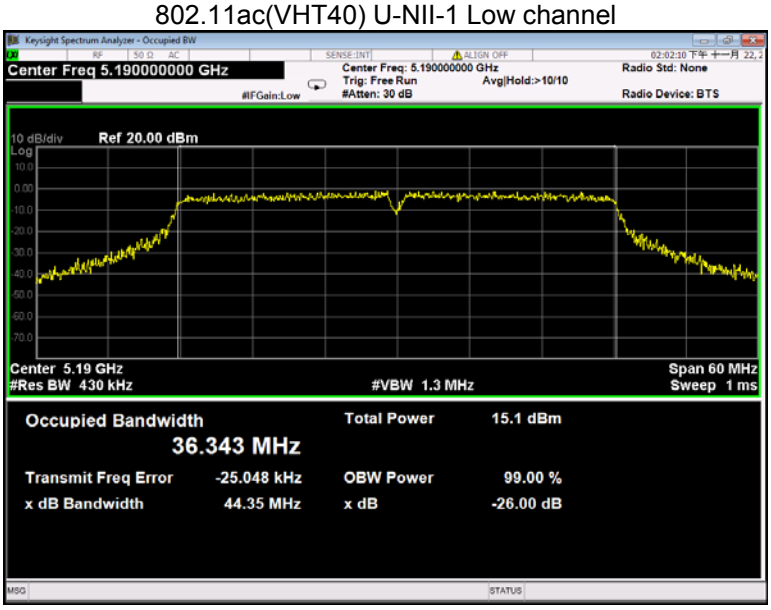
802.11ac(VHT20) U-NII-1 Middle channel



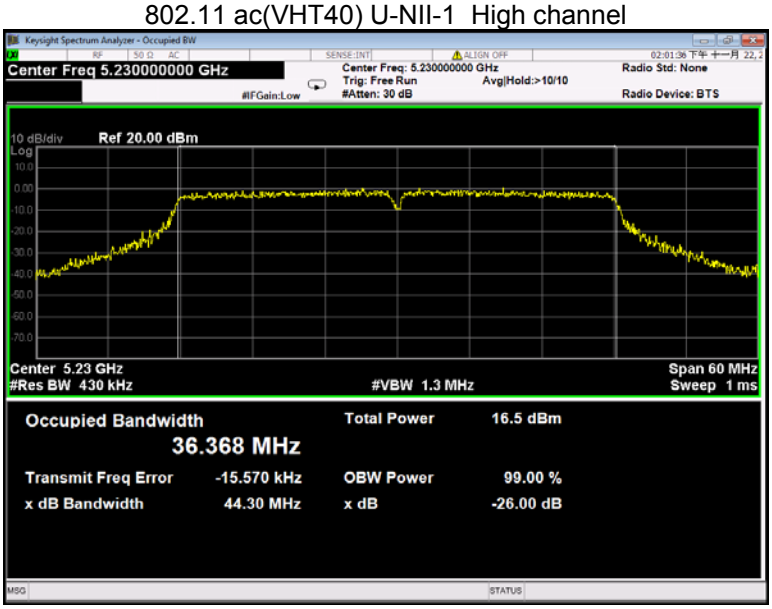
802.11ac(VHT20) U-NII-1 High channel



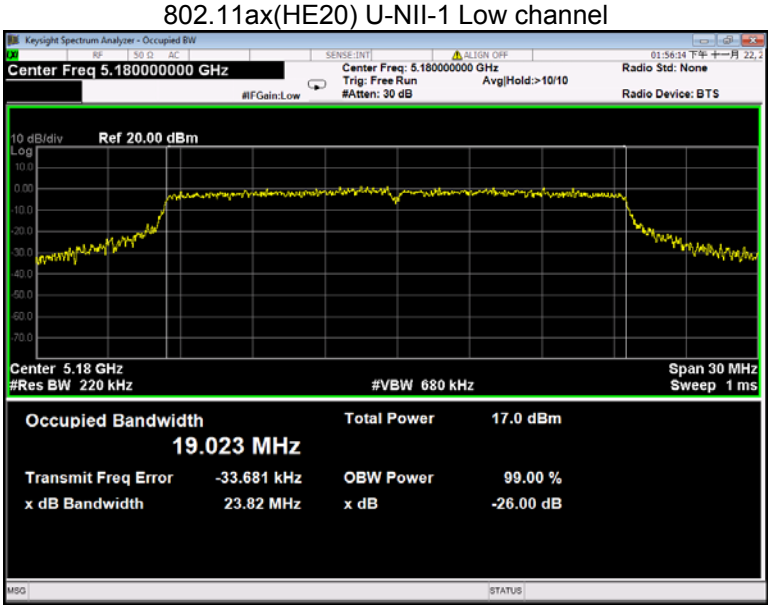
802.11ac(VHT40) U-NII-1 Low channel



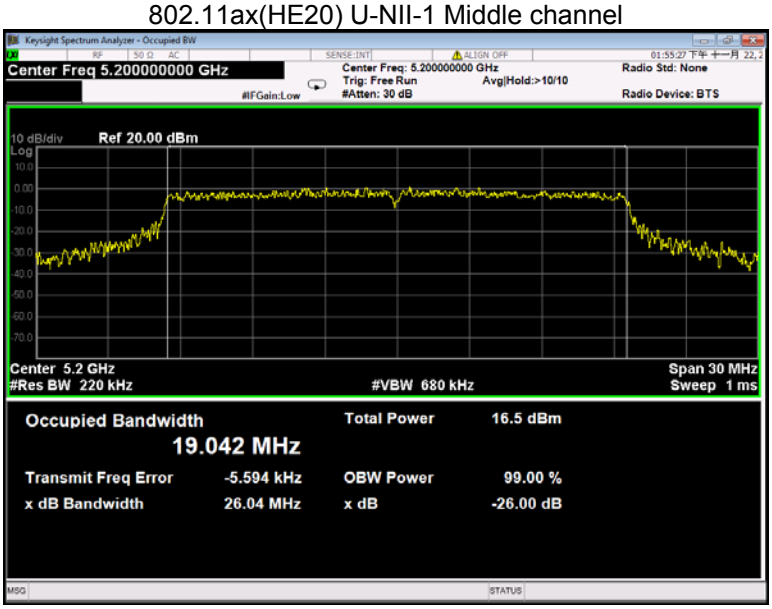
802.11 ac(VHT40) U-NII-1 High channel



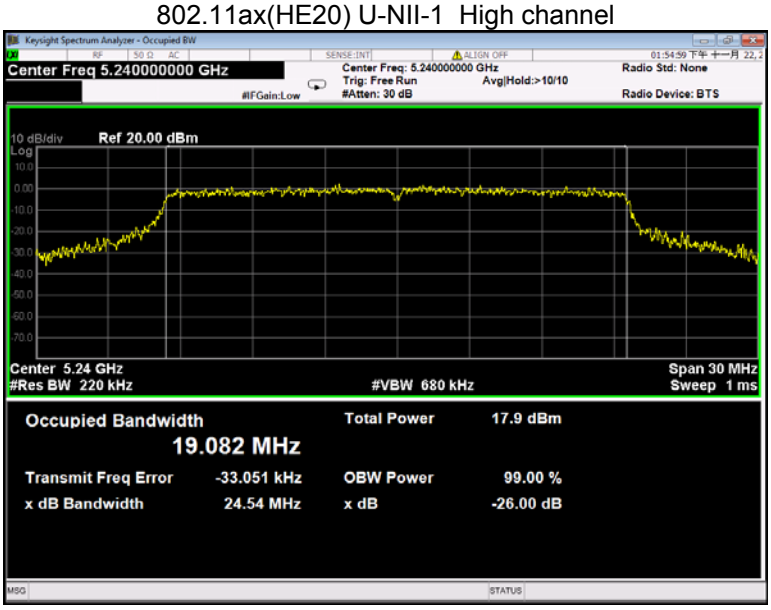
802.11ax(HE20) U-NII-1 Low channel



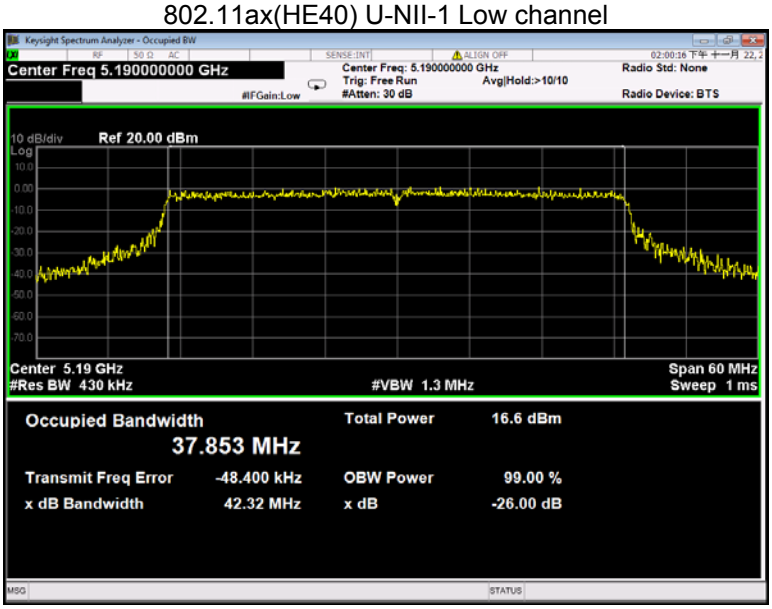
802.11ax(HE20) U-NII-1 Middle channel



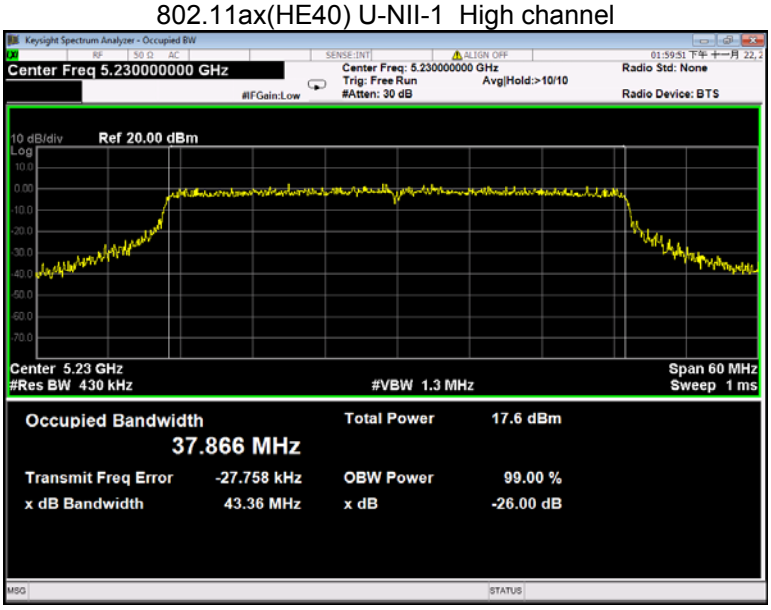
802.11ax(HE20) U-NII-1 High channel



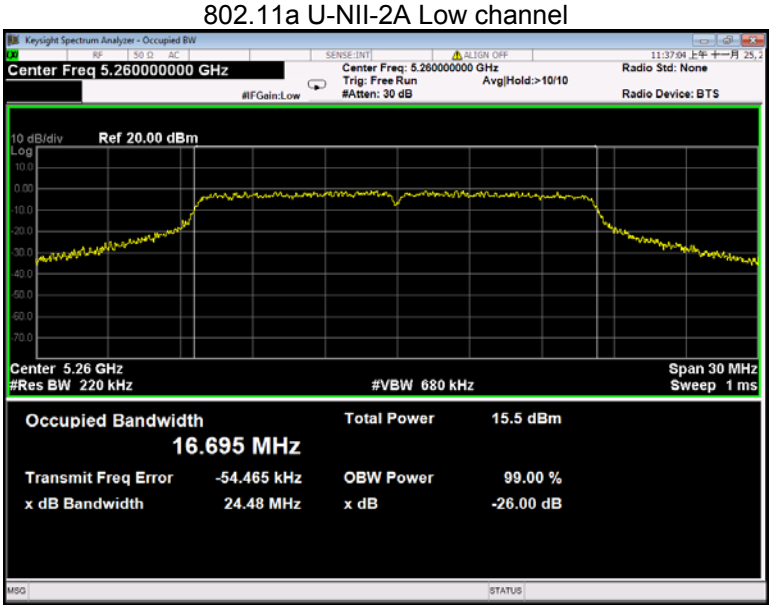
802.11ax(HE40) U-NII-1 Low channel



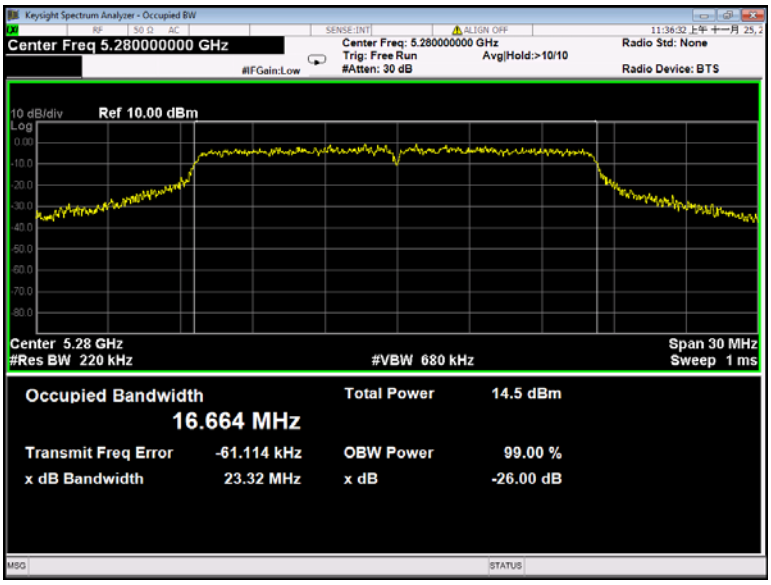
802.11ax(HE40) U-NII-1 High channel



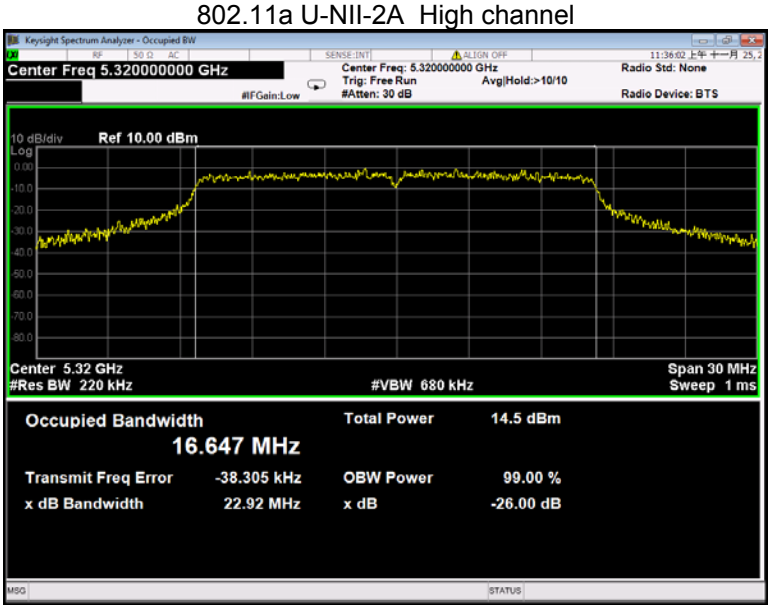
802.11a U-NII-2A Low channel



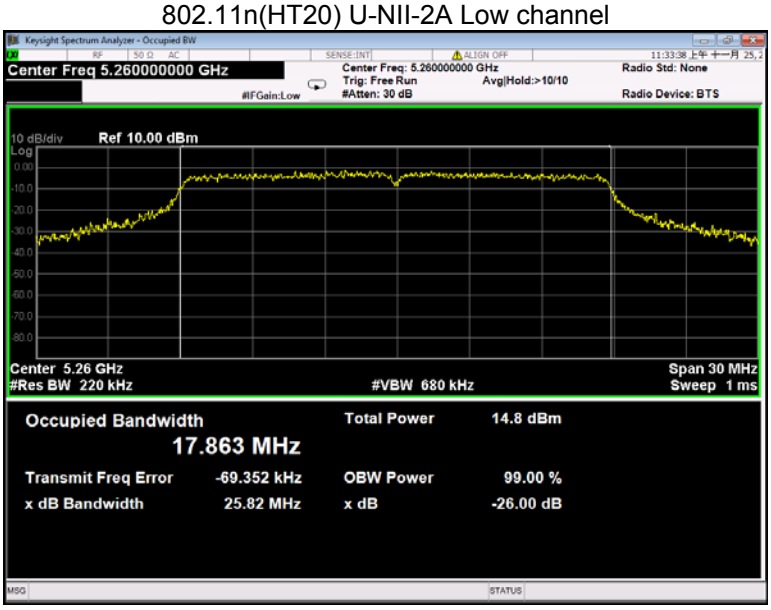
802.11a U-NII-2A Middle channel



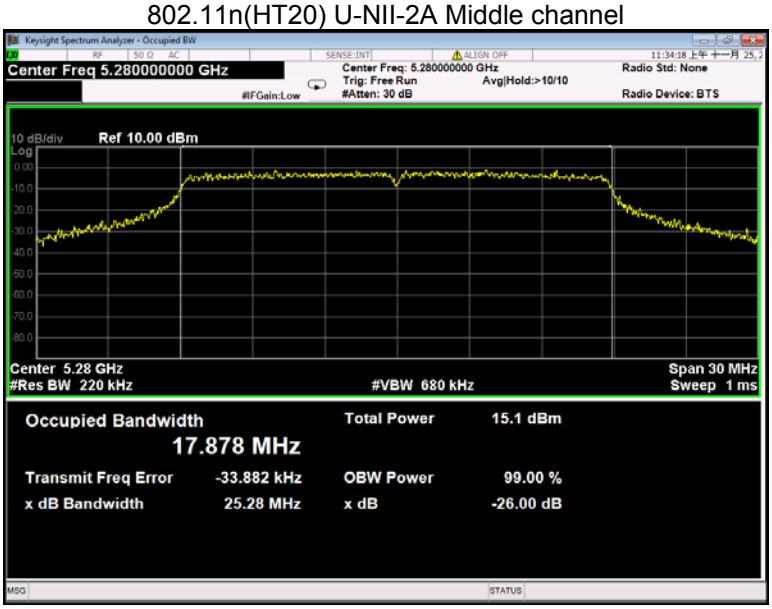
802.11a U-NII-2A High channel



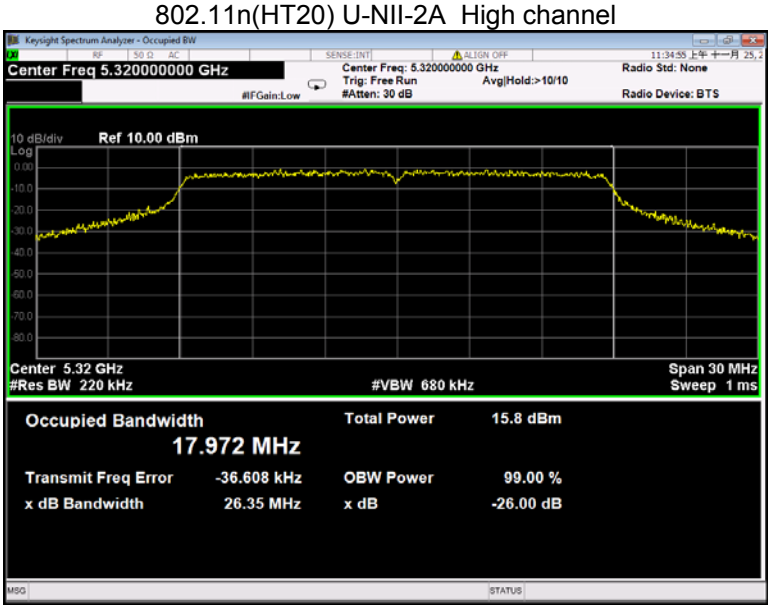
802.11n(HT20) U-NII-2A Low channel



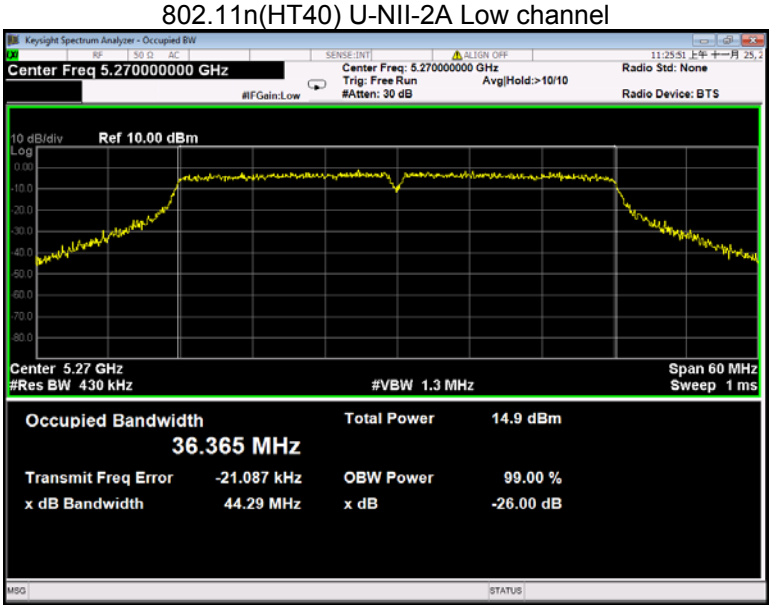
802.11n(HT20) U-NII-2A Middle channel



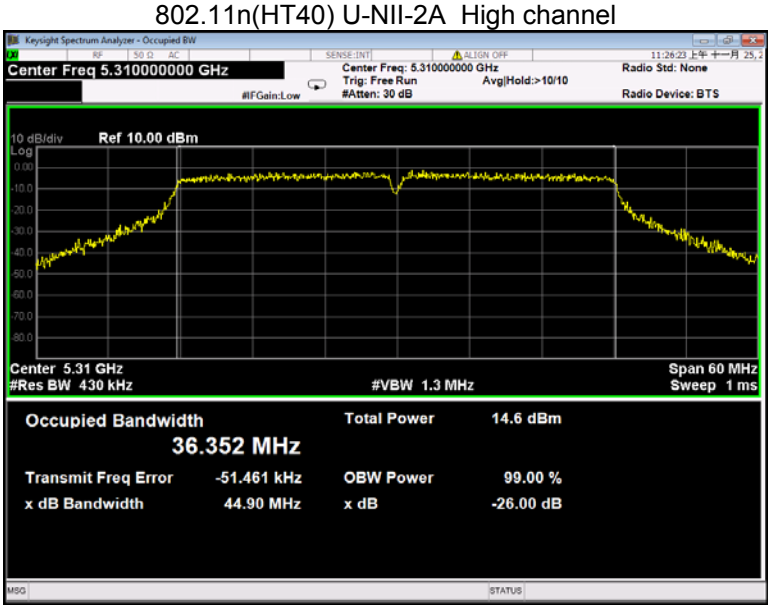
802.11n(HT20) U-NII-2A High channel



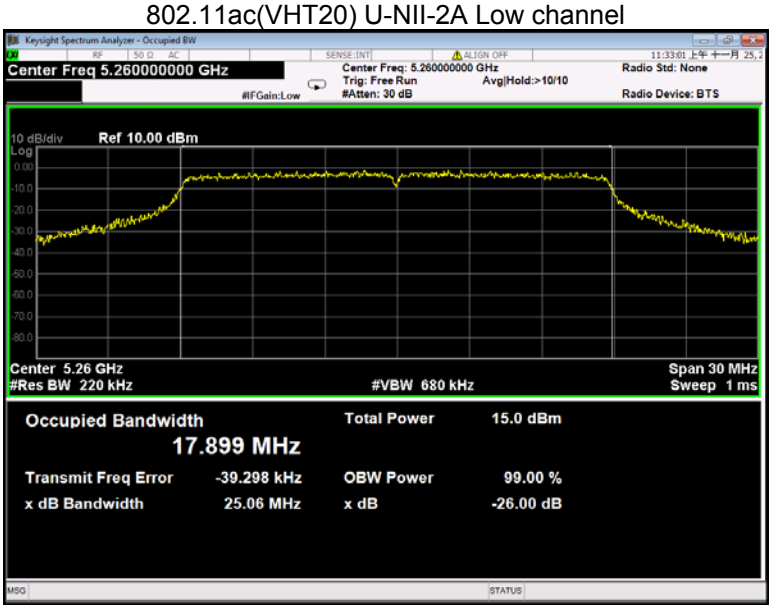
802.11n(HT40) U-NII-2A Low channel



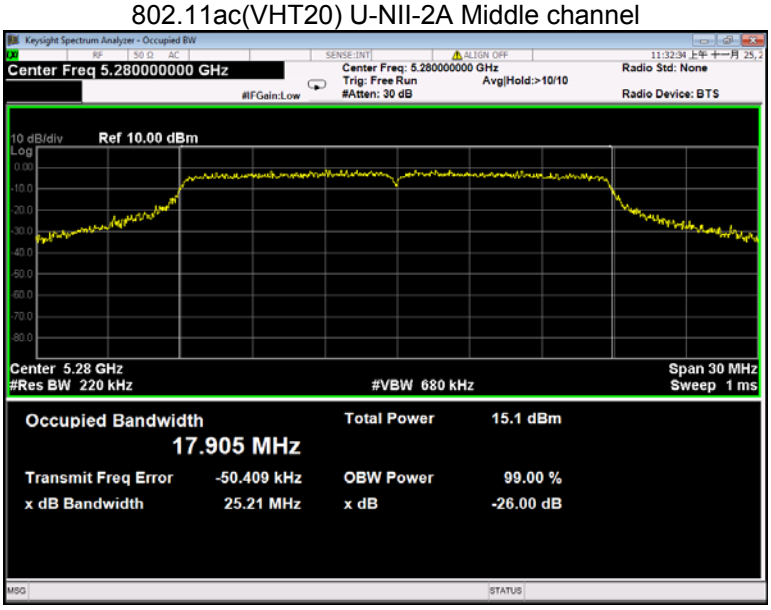
802.11n(HT40) U-NII-2A High channel



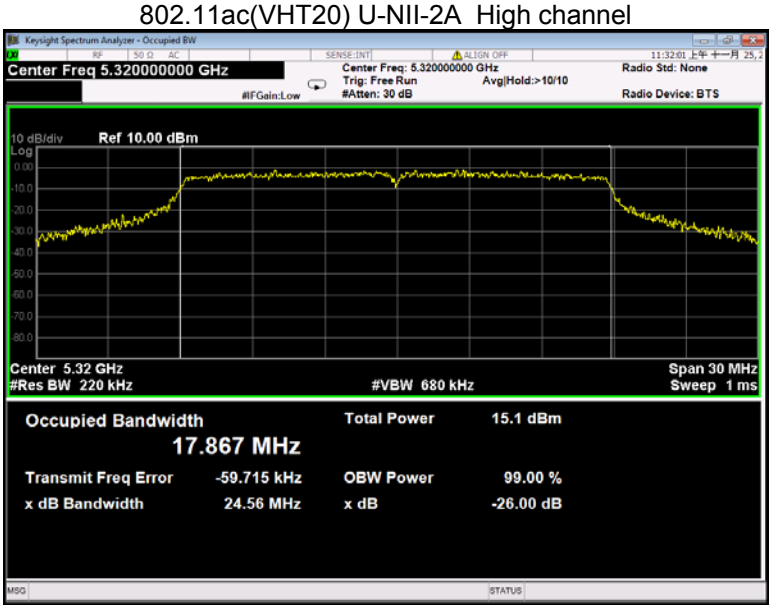
802.11ac(VHT20) U-NII-2A Low channel



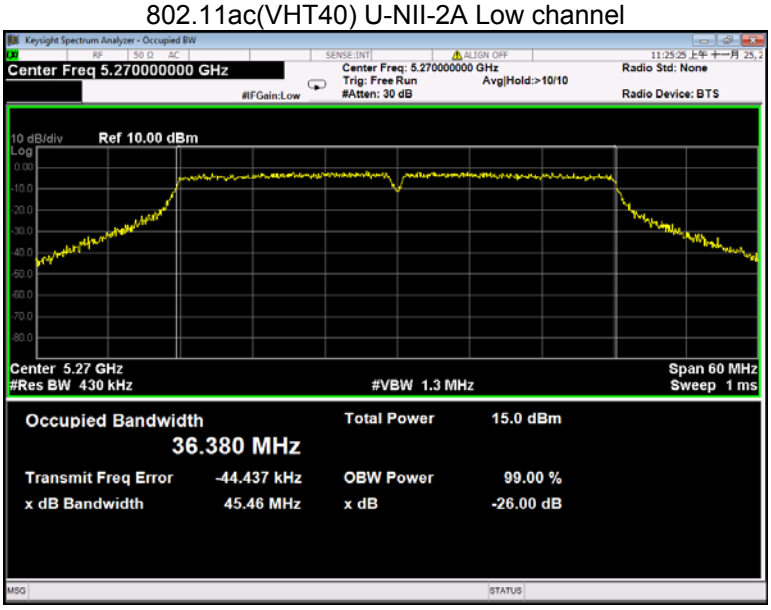
802.11ac(VHT20) U-NII-2A Middle channel



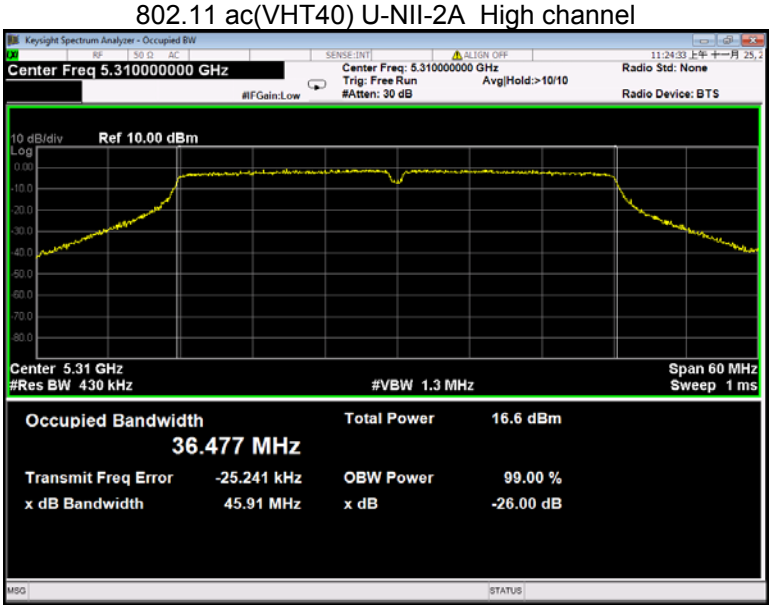
802.11ac(VHT20) U-NII-2A High channel



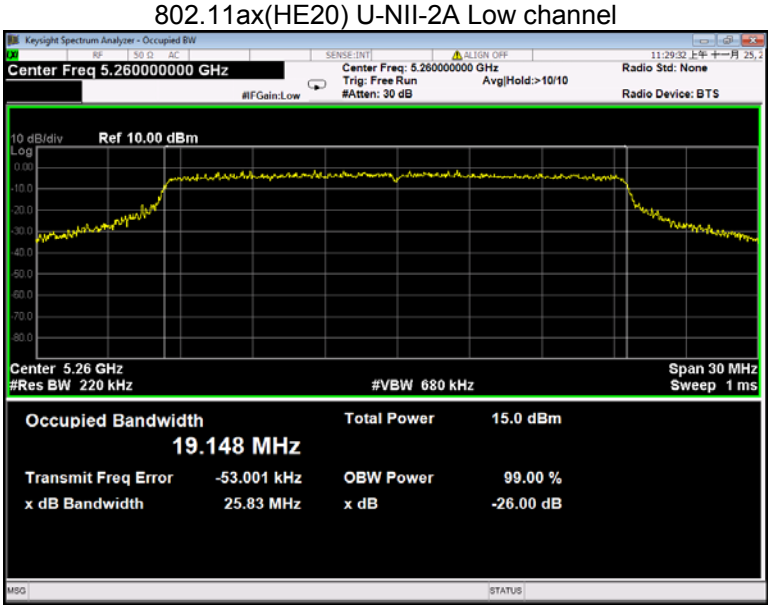
802.11ac(VHT40) U-NII-2A Low channel



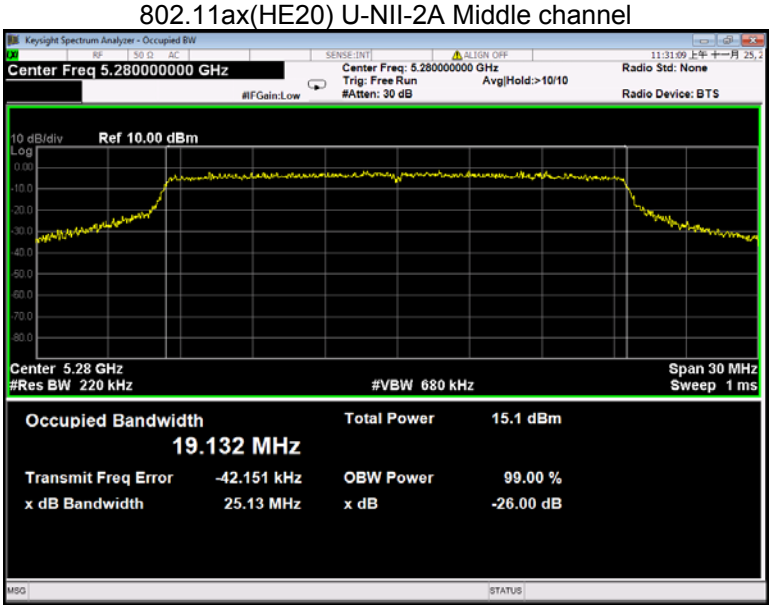
802.11 ac(VHT40) U-NII-2A High channel



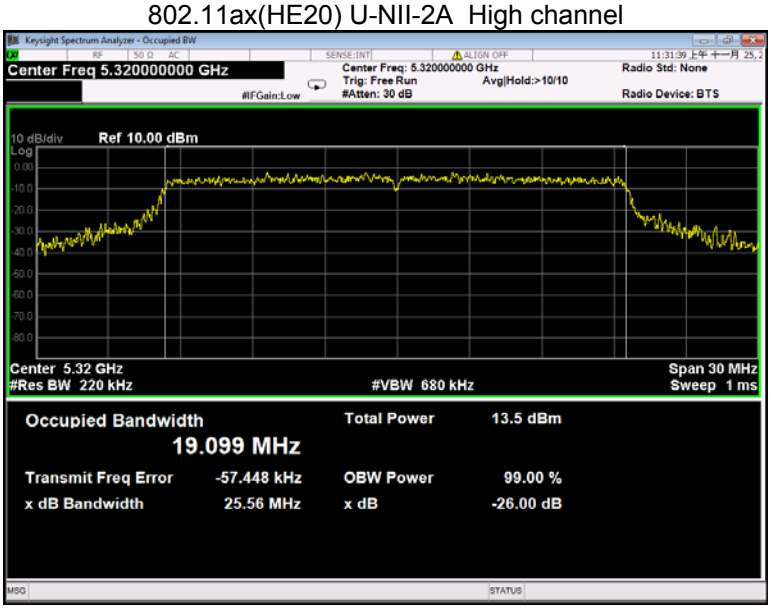
802.11ax(HE20) U-NII-2A Low channel



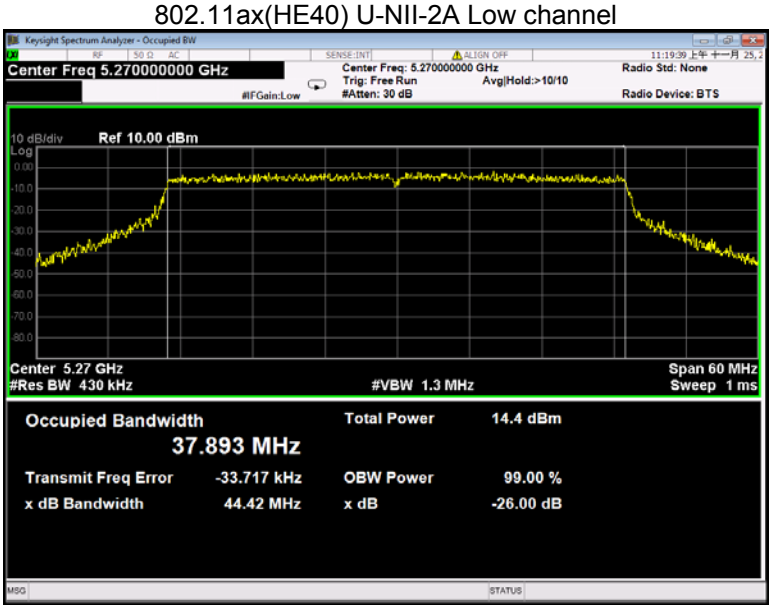
802.11ax(HE20) U-NII-2A Middle channel



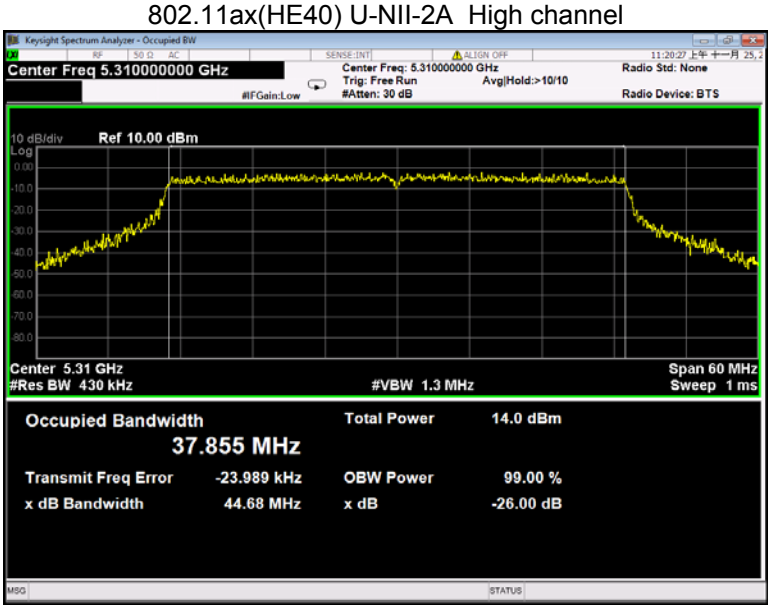
802.11ax(HE20) U-NII-2A High channel



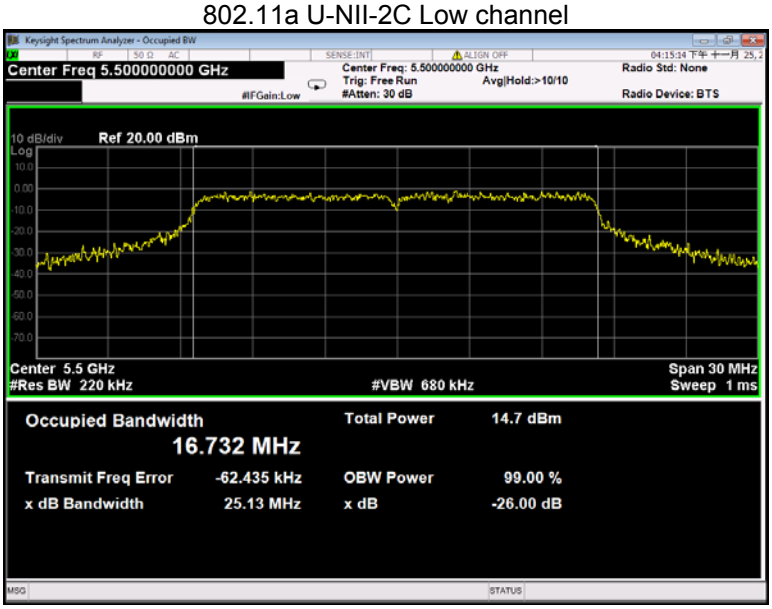
802.11ax(HE40) U-NII-2A Low channel



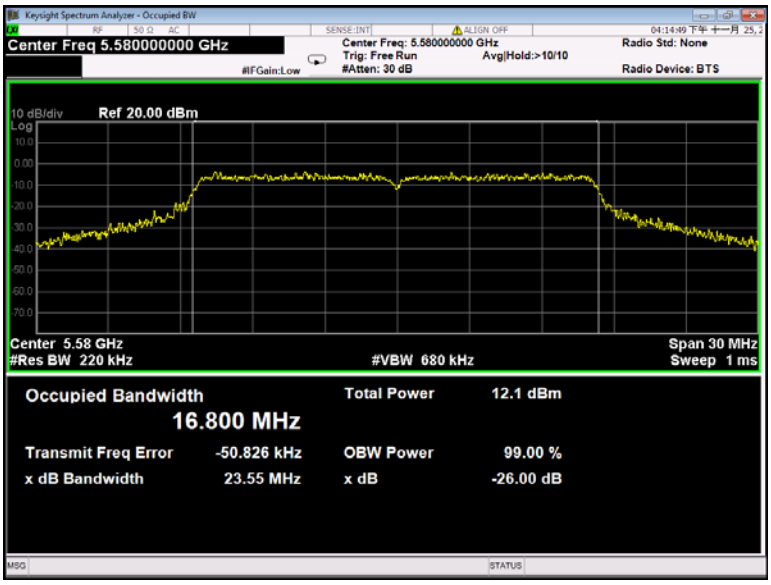
802.11ax(HE40) U-NII-2A High channel



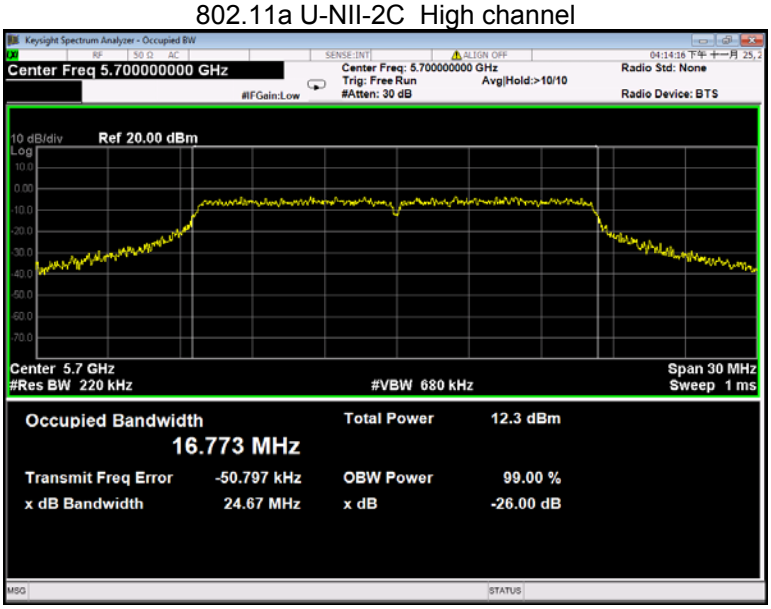
802.11a U-NII-2C Low channel



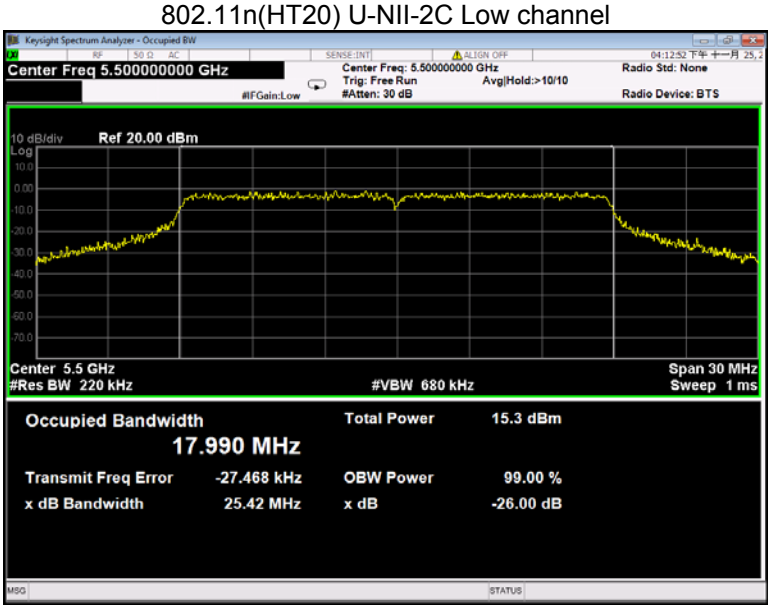
802.11a U-NII-2C Middle channel



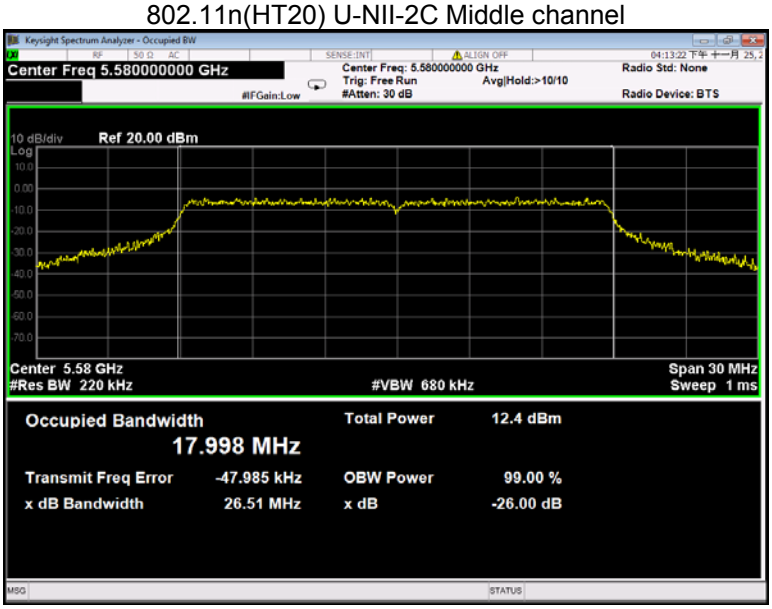
802.11a U-NII-2C High channel



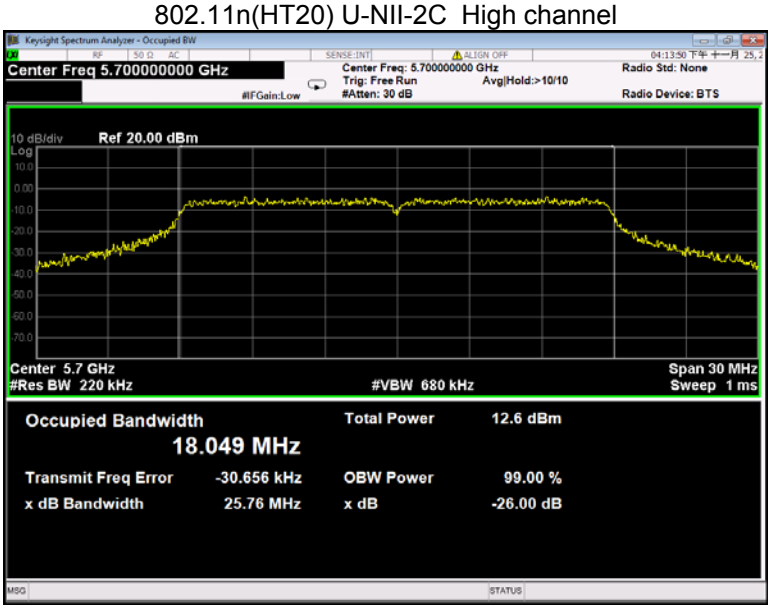
802.11n(HT20) U-NII-2C Low channel



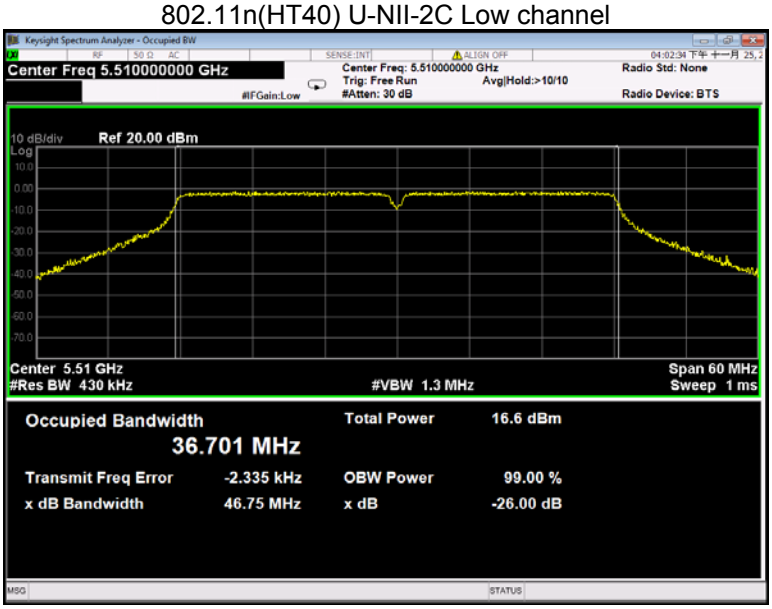
802.11n(HT20) U-NII-2C Middle channel



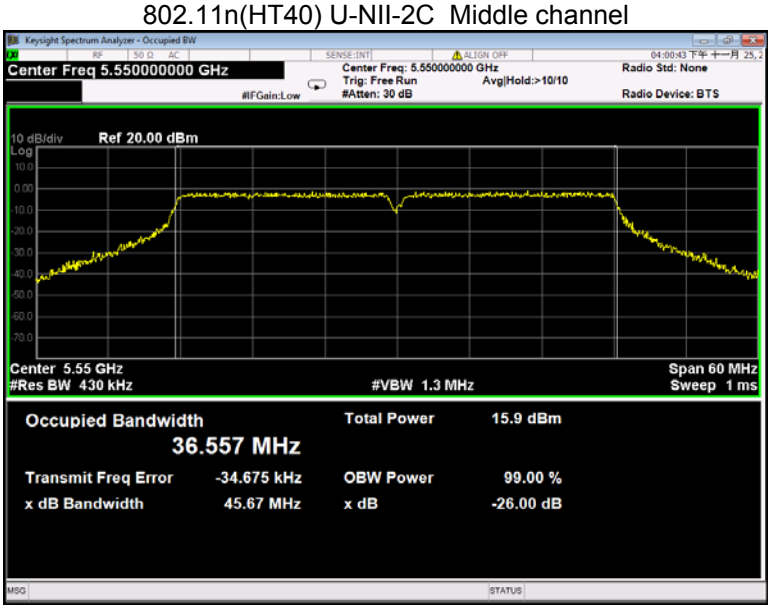
802.11n(HT20) U-NII-2C High channel



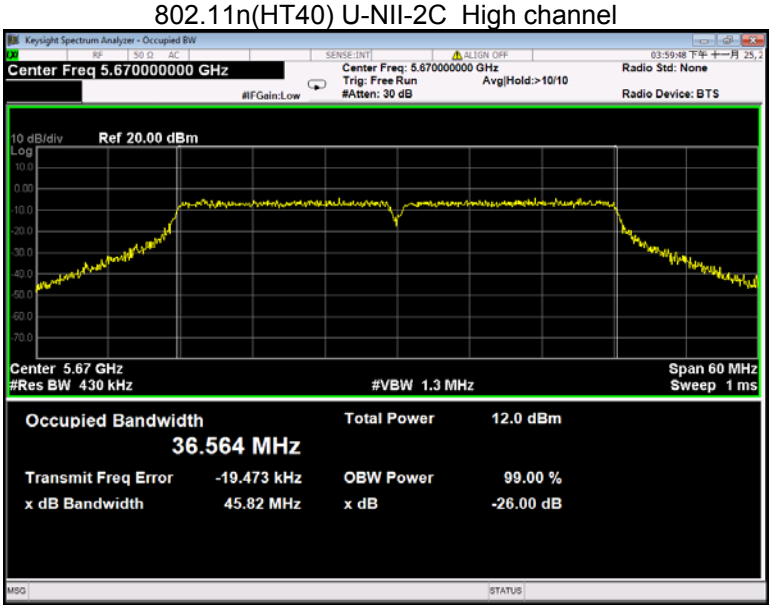
802.11n(HT40) U-NII-2C Low channel



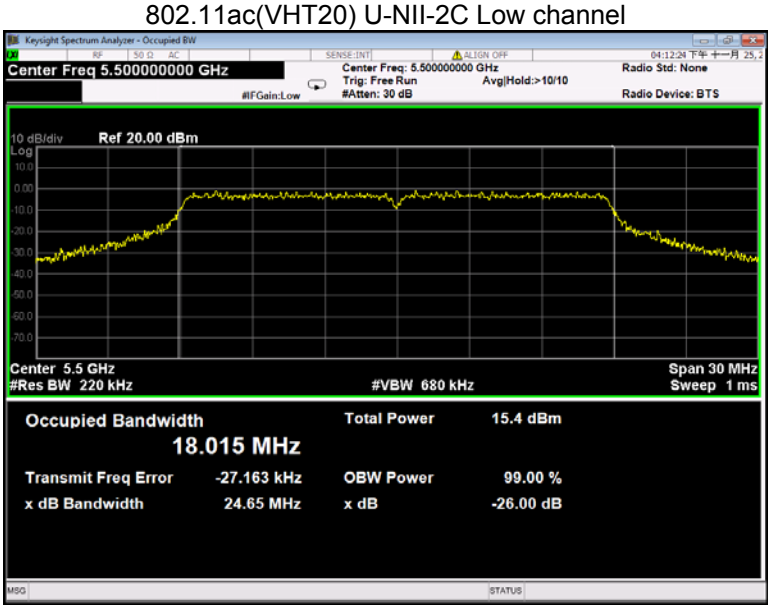
802.11n(HT40) U-NII-2C Middle channel



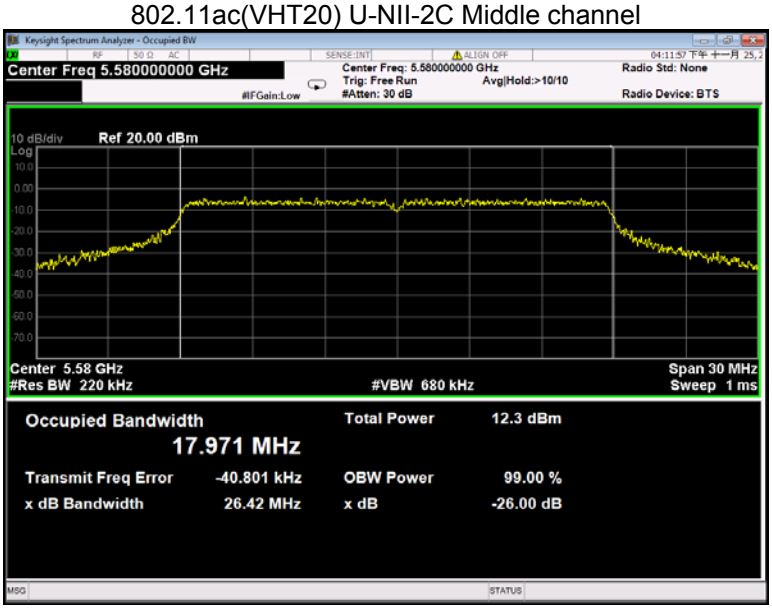
802.11n(HT40) U-NII-2C High channel



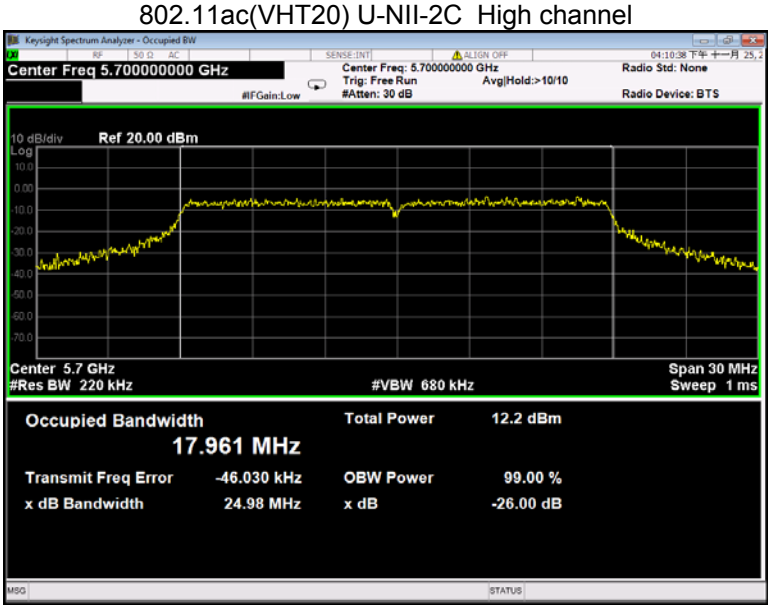
802.11ac(VHT20) U-NII-2C Low channel



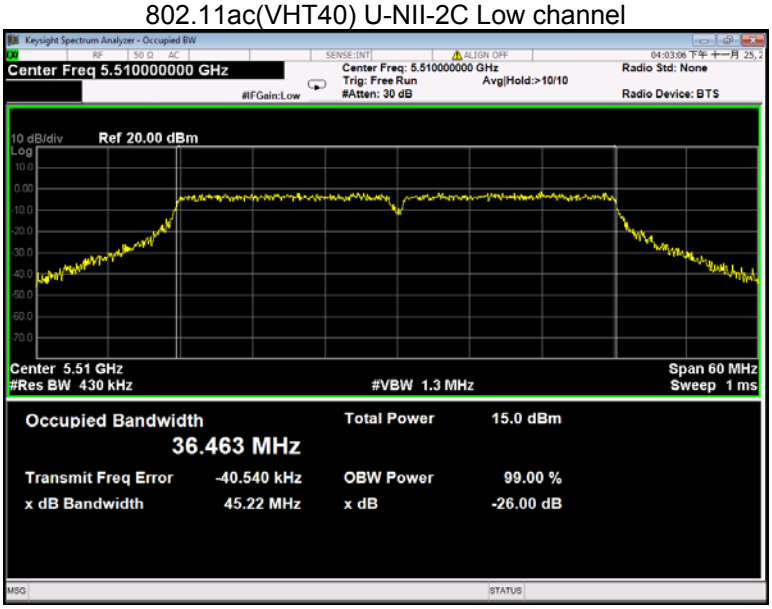
802.11ac(VHT20) U-NII-2C Middle channel



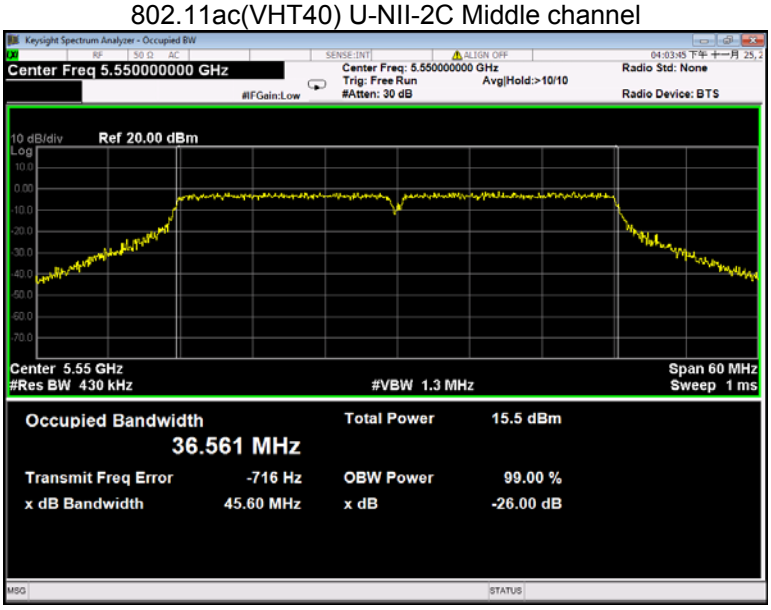
802.11ac(VHT20) U-NII-2C High channel



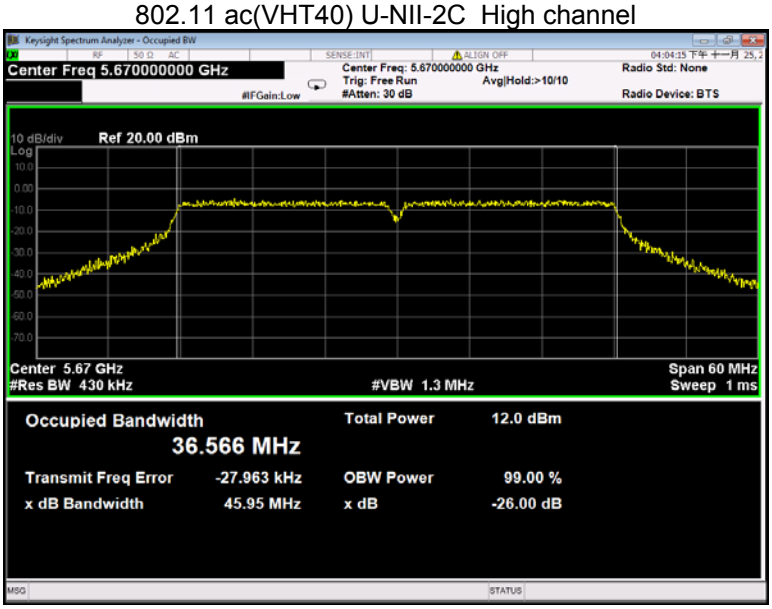
802.11ac(VHT40) U-NII-2C Low channel



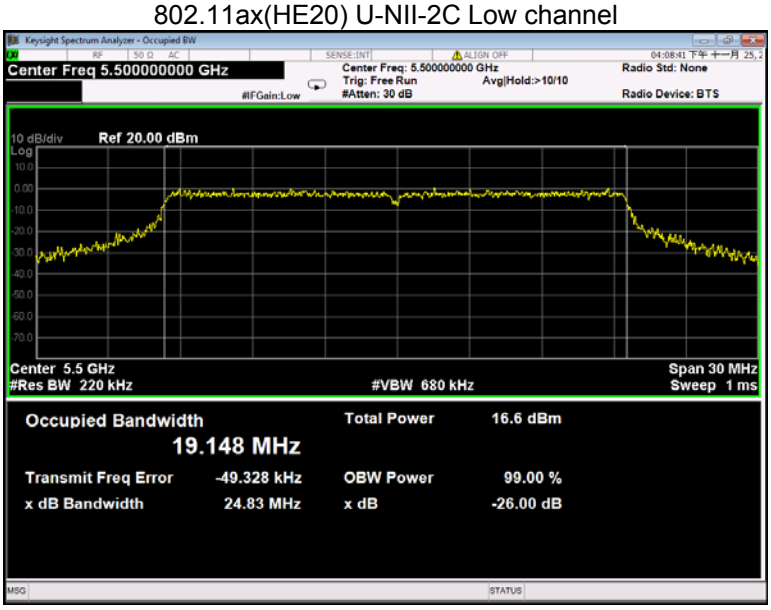
802.11ac(VHT40) U-NII-2C Middle channel



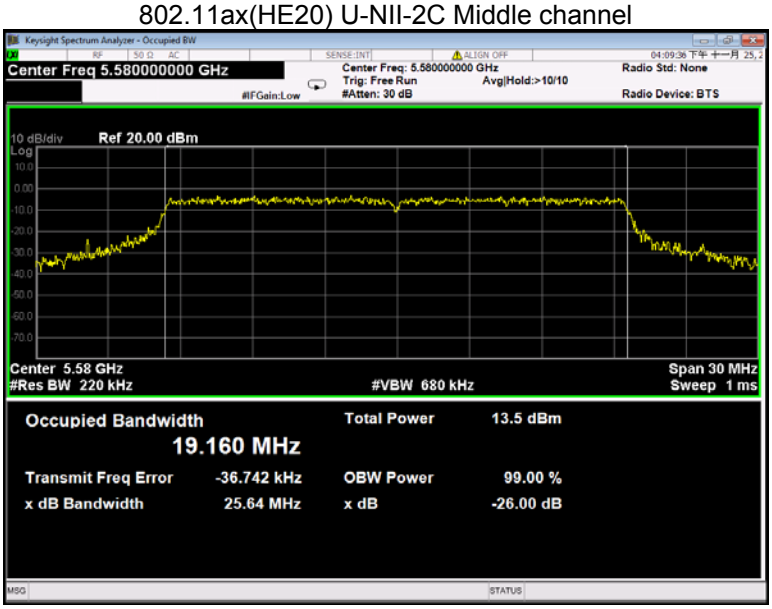
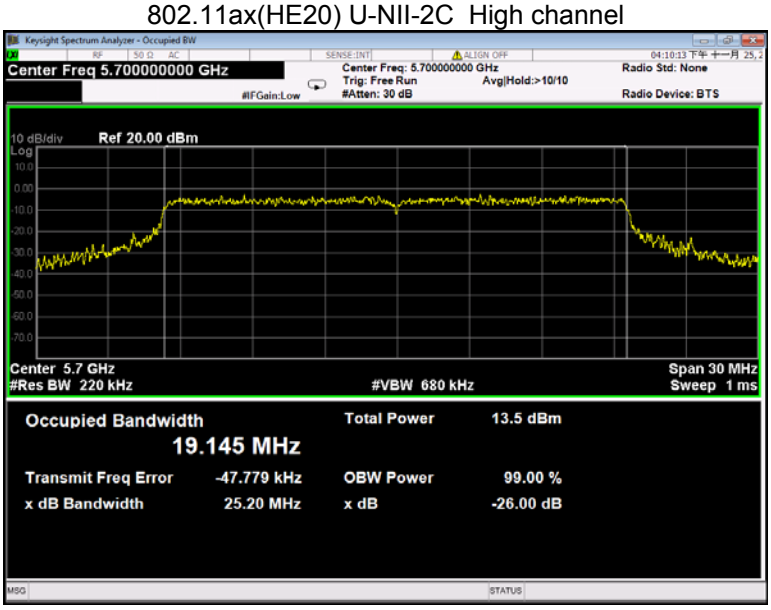
802.11 ac(VHT40) U-NII-2C High channel



802.11ax(HE20) U-NII-2C Low channel



802.11ax(HE20) U-NII-2C Middle channel



802.11ax(HE20) U-NII-2C High channel