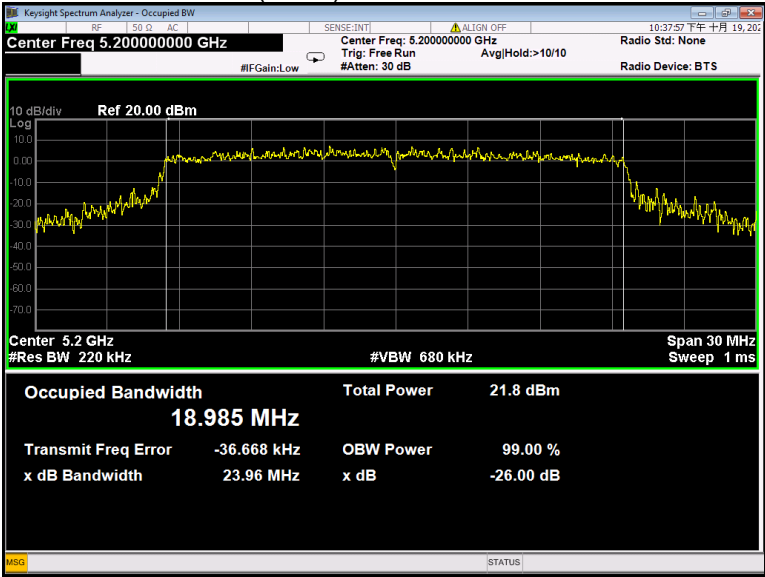
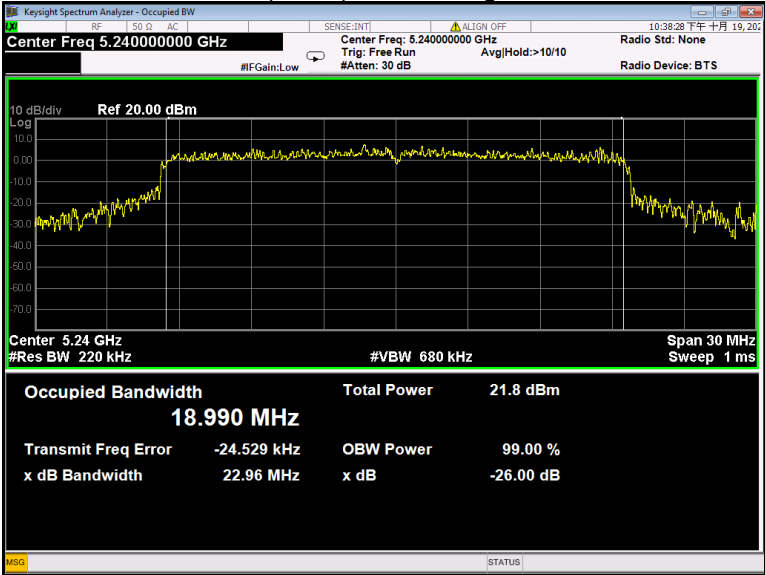


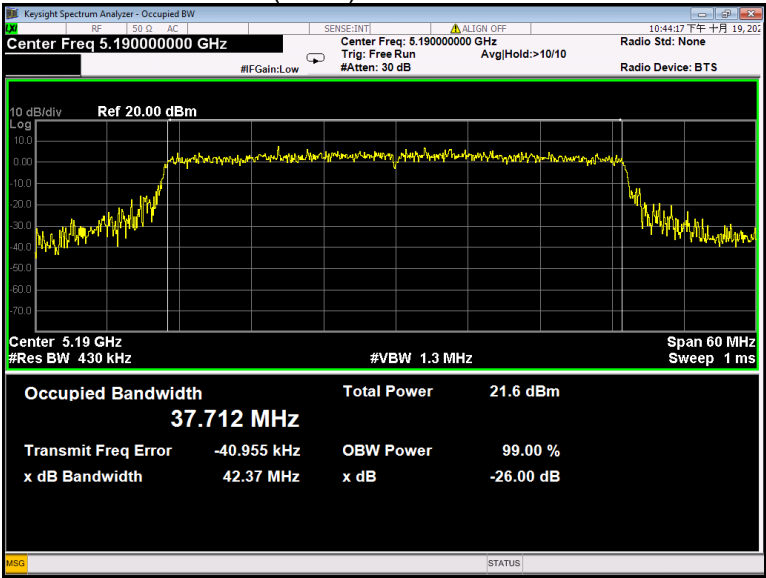
802.11ax(HE20) U-NII-1 Middle channel



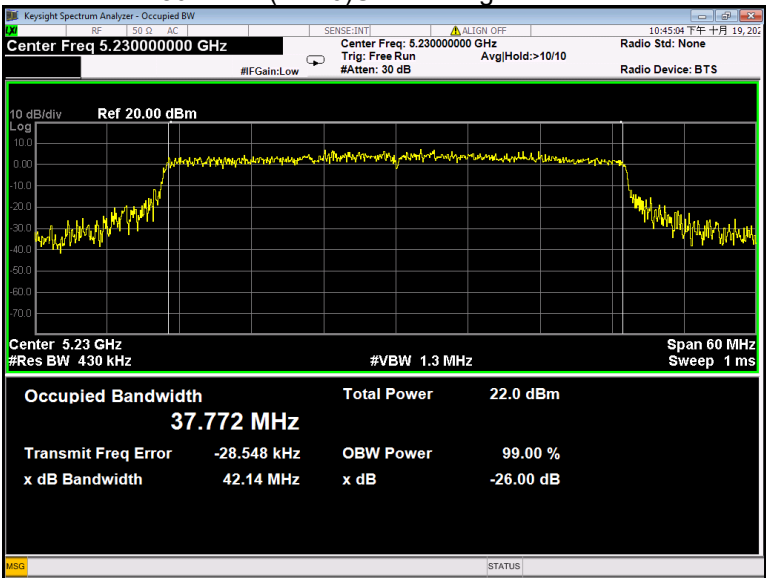
802.11ax(HE20) U-NII-1 High channel



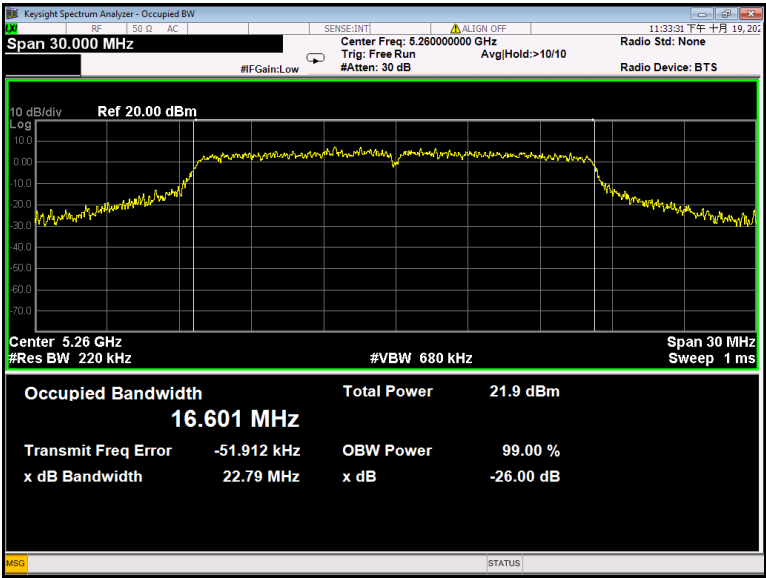
802.11ax(HE40) U-NII-1 Low channel



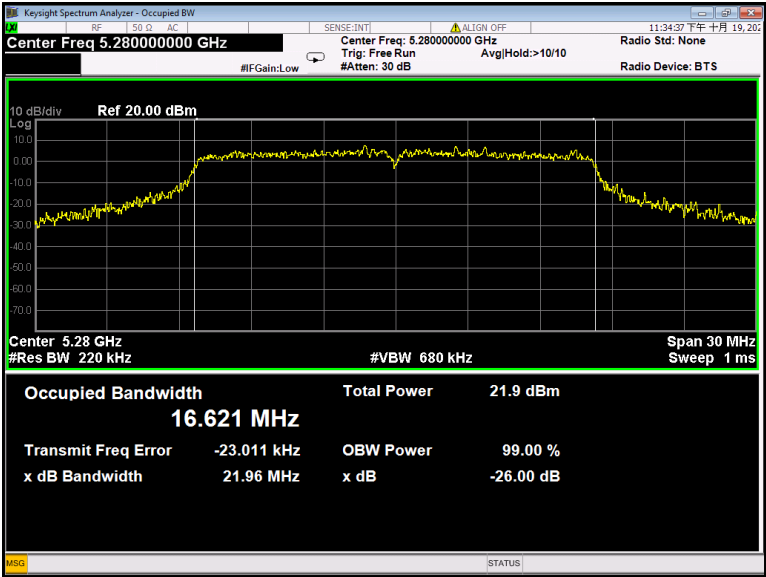
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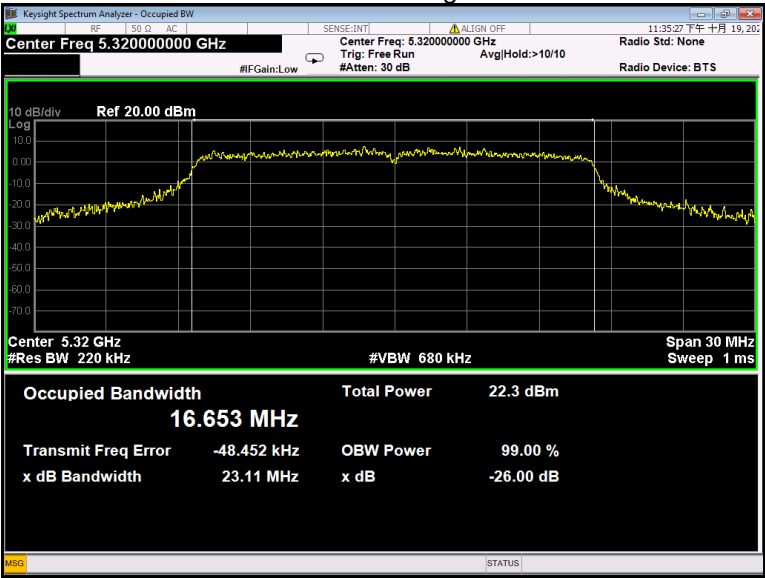
802.11a U-NII-2A Low channel



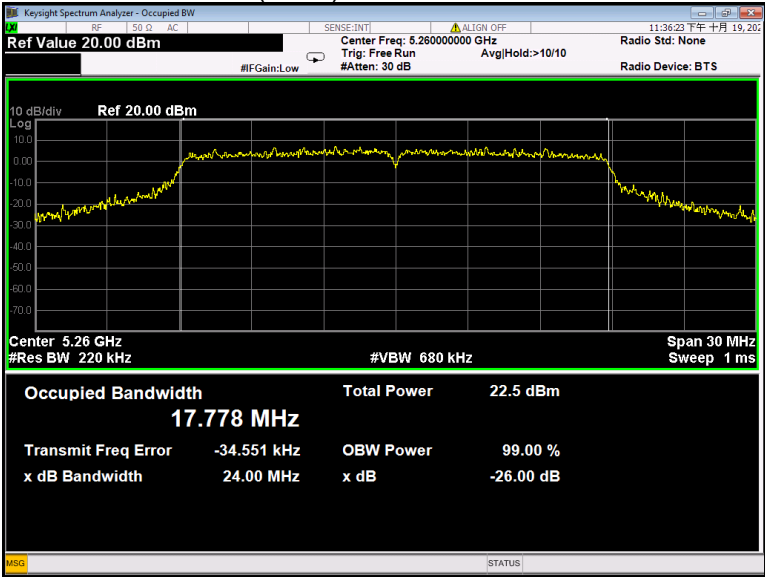
802.11a U-NII-2A Middle channel



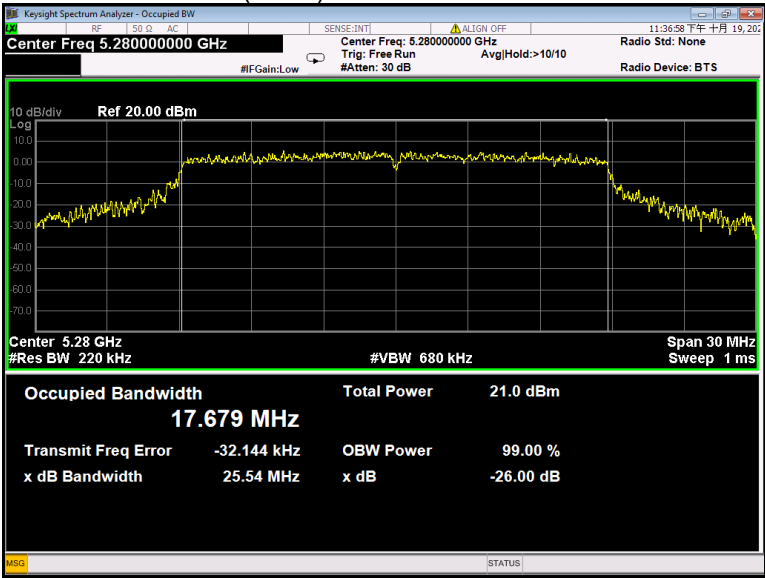
802.11a U-NII-2A High channel



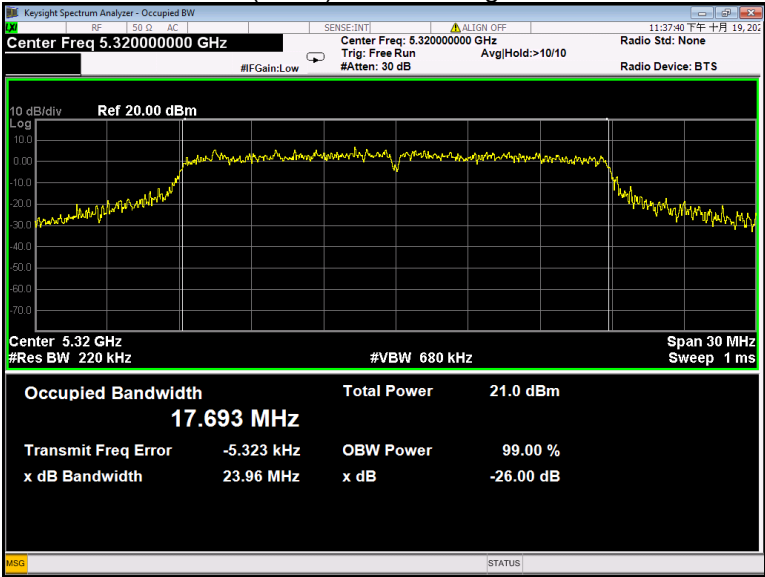
802.11n(HT20) U-NII-2A Low channel



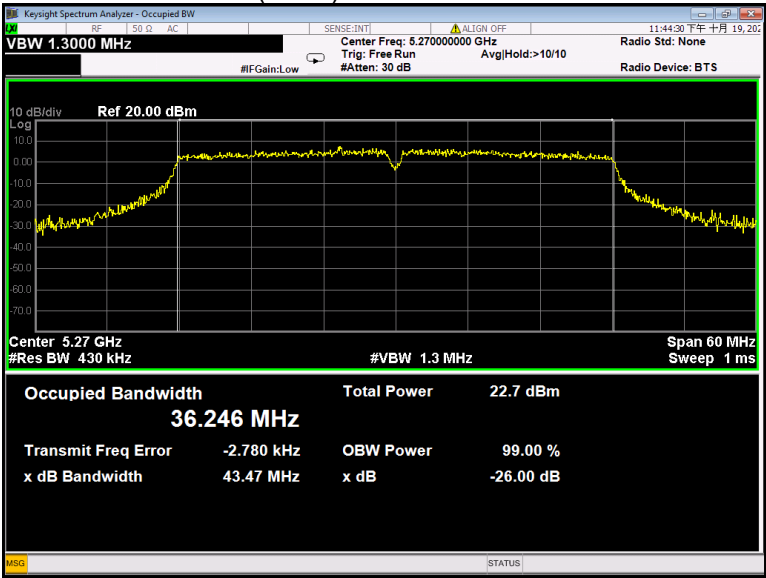
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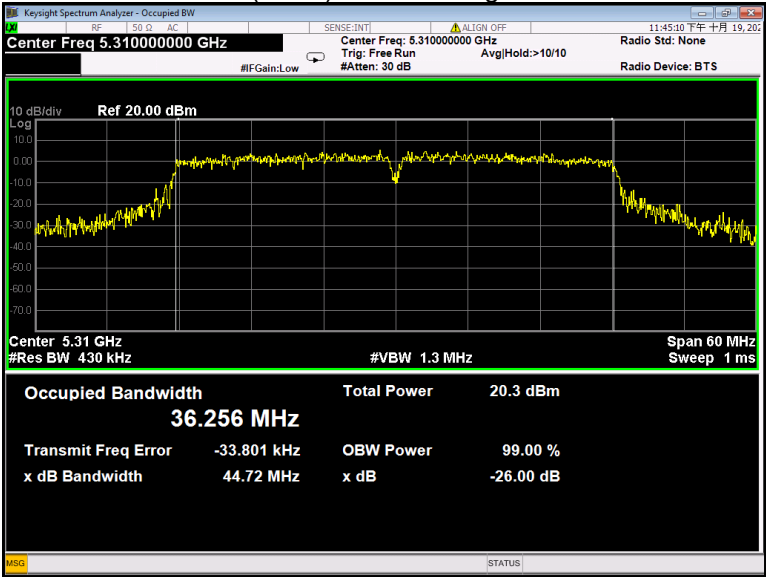
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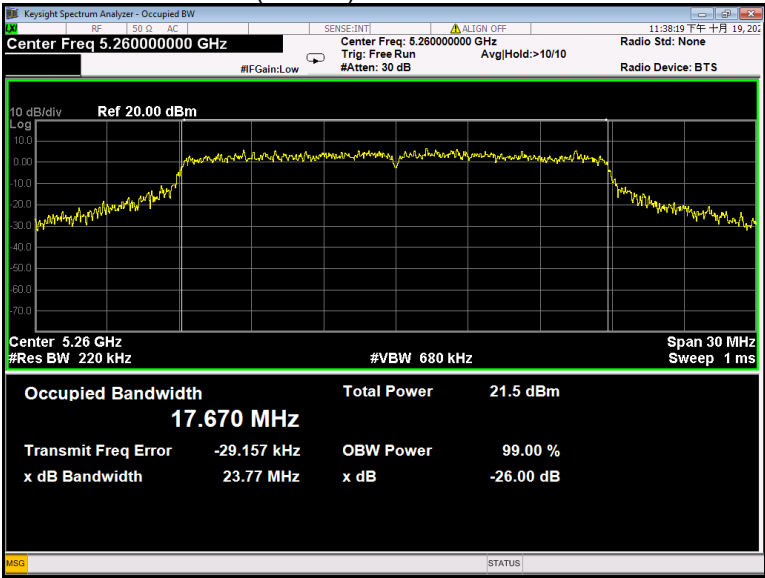
802.11n(HT40) U-NII-2A Low channel



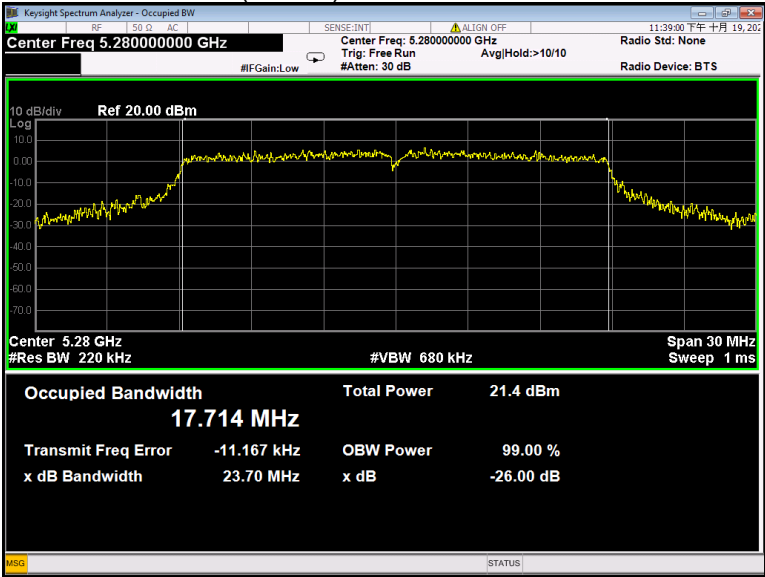
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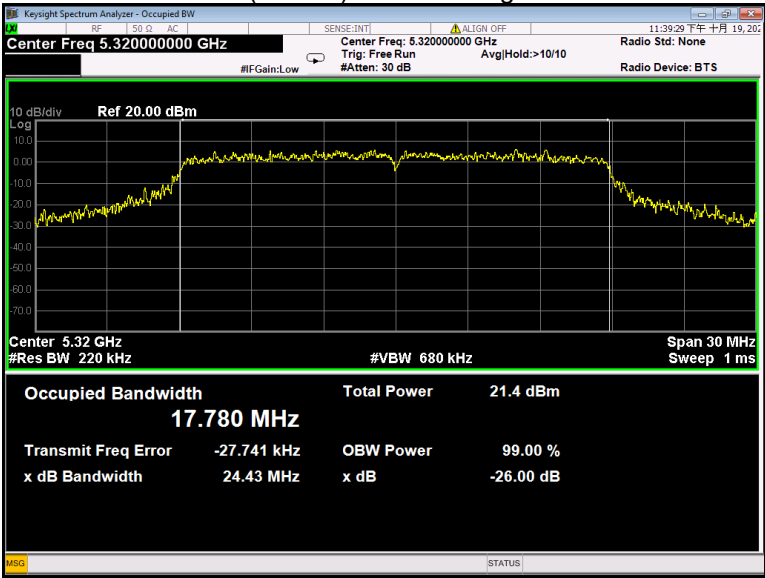
802.11ac(VHT20) U-NII-2A Low channel



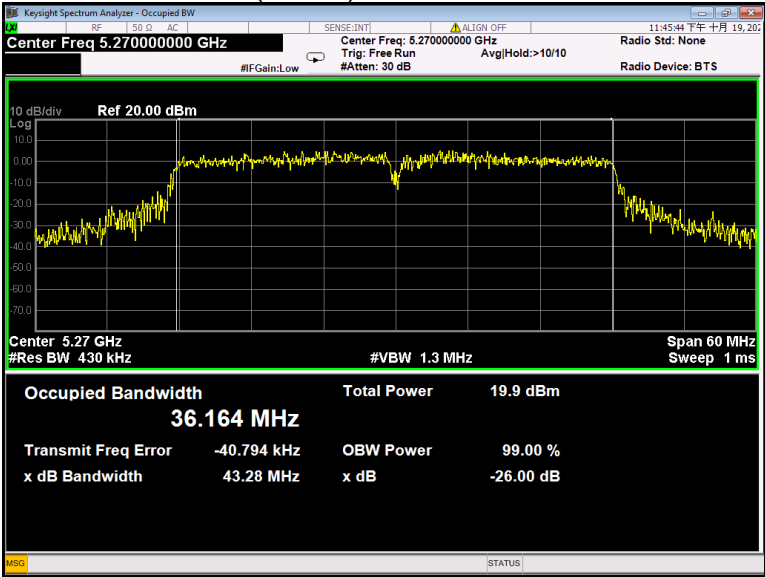
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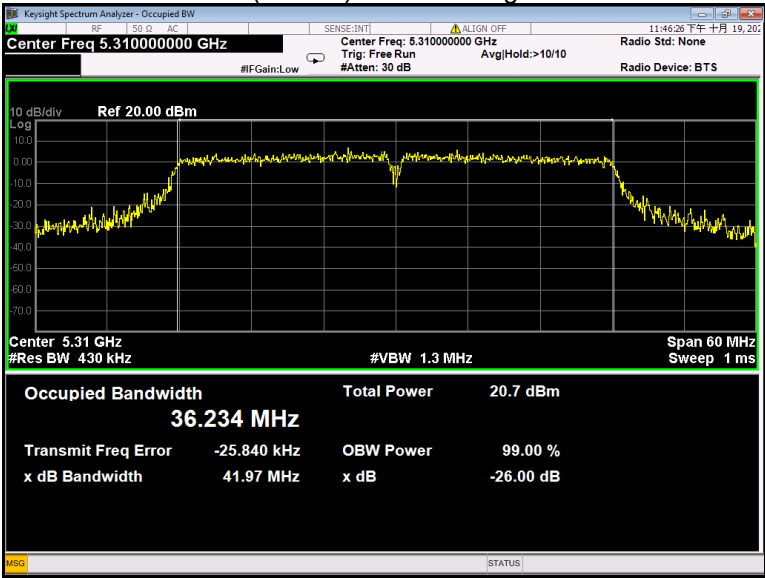
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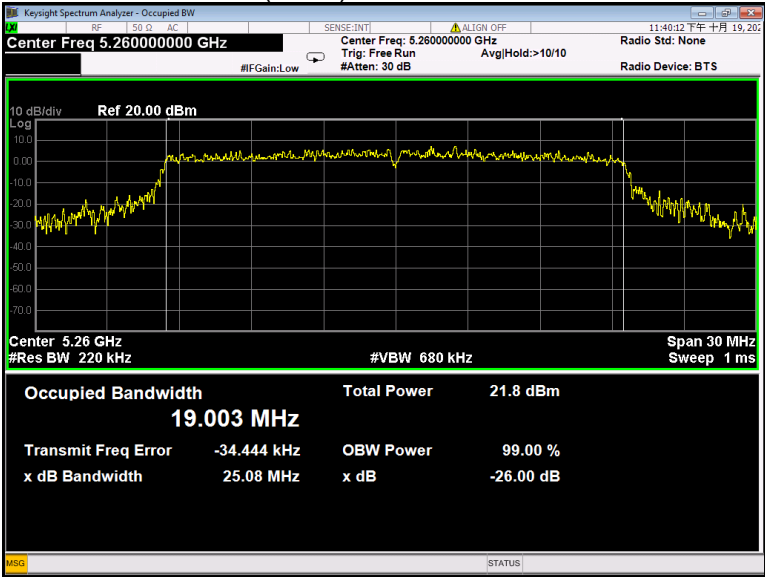
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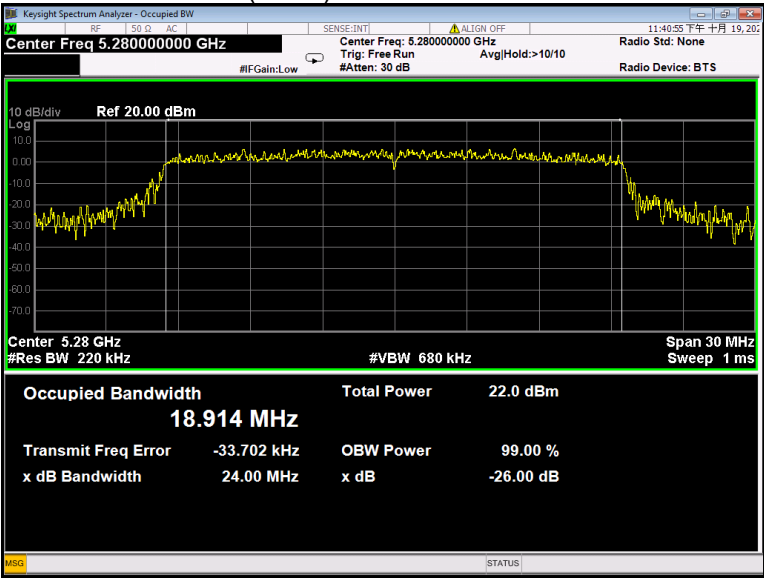
802.11 ac(VHT40) U-NII-2A High channel



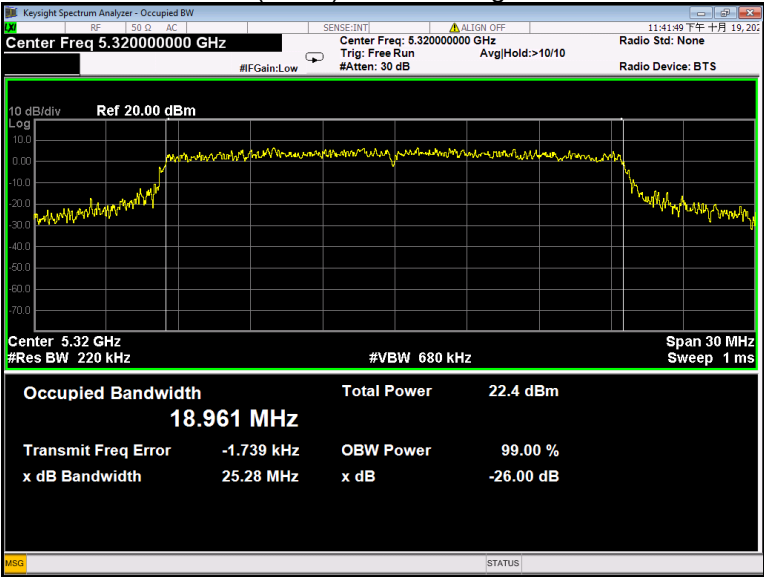
802.11ax(HE20) U-NII-2A Low channel

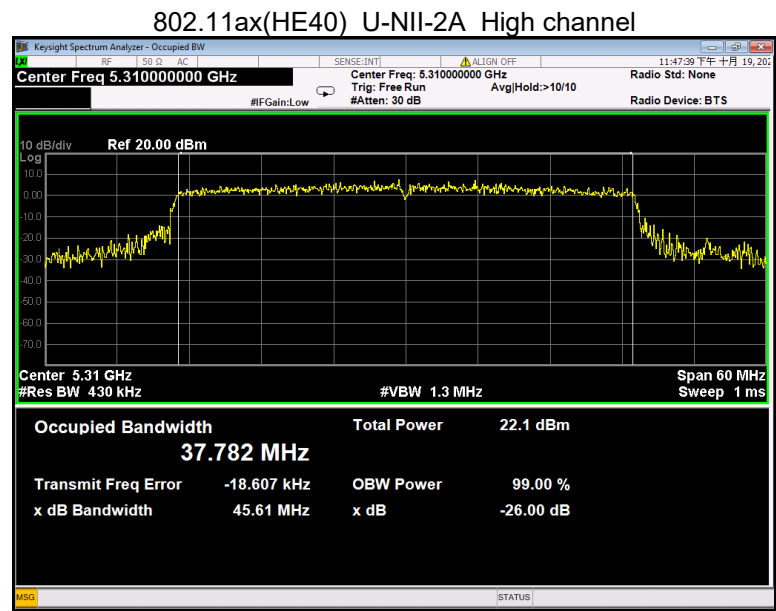
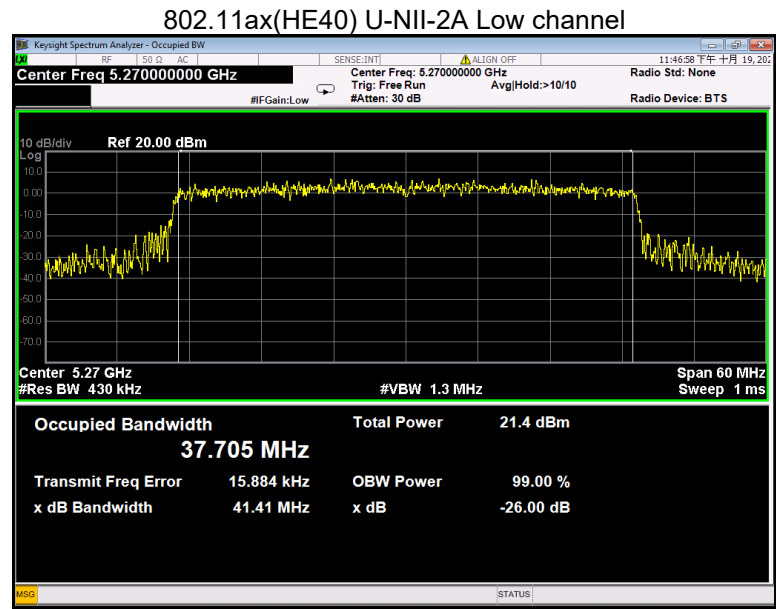


802.11ax(HE20) U-NII-2A Middle channel

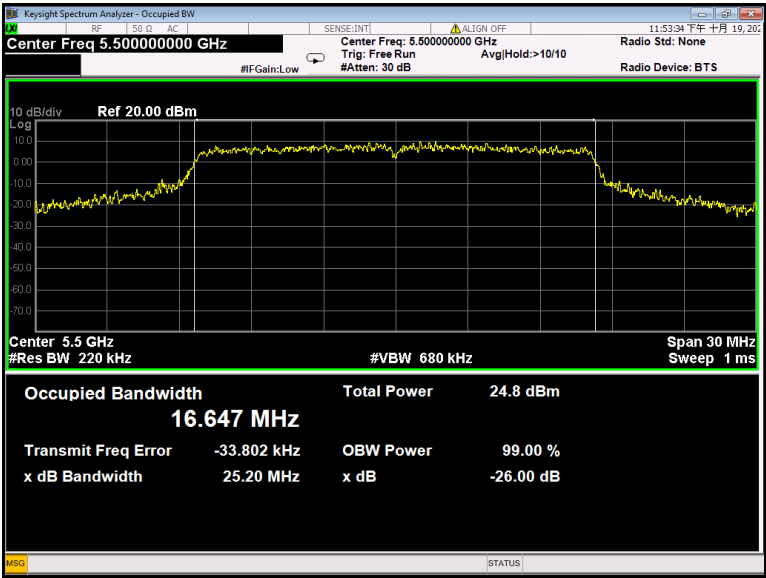


802.11ax(HE20) U-NII-2A High channel

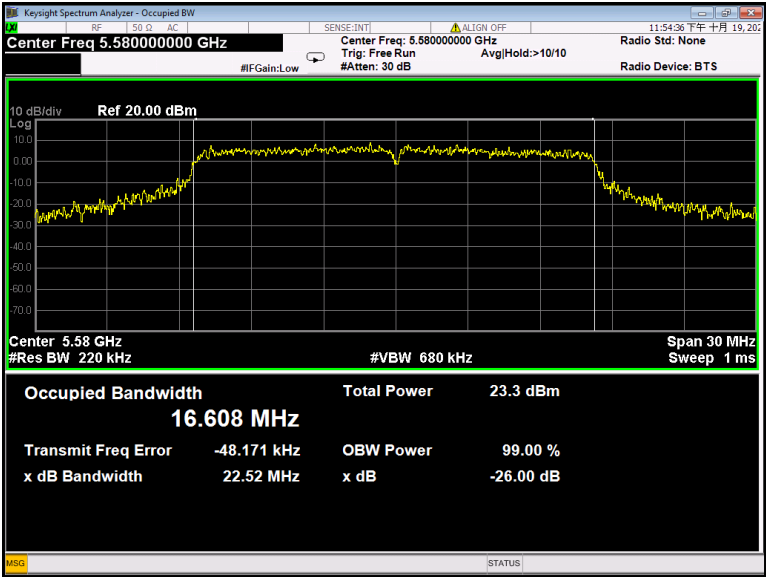




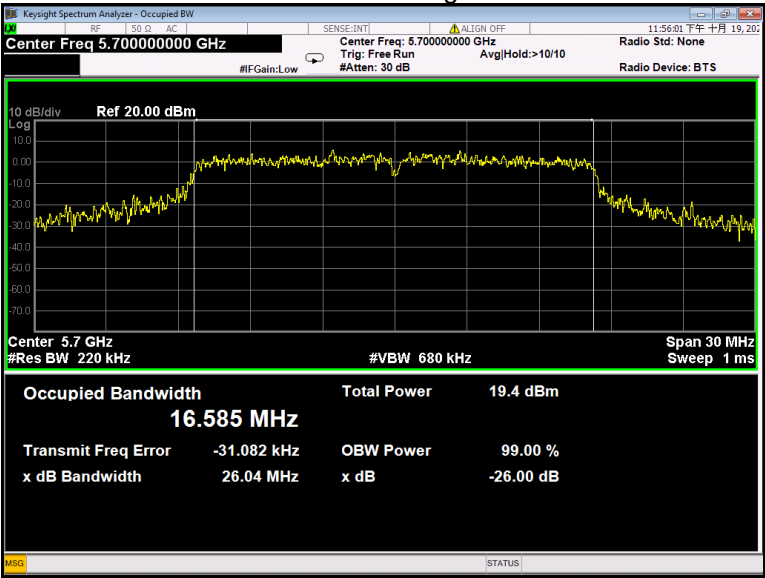
802.11a U-NII-2C Low channel



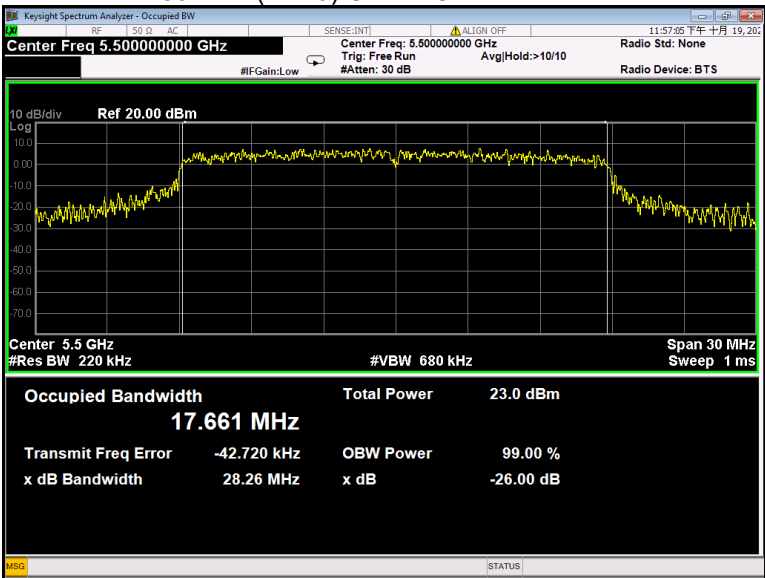
802.11a U-NII-2C Middle channel



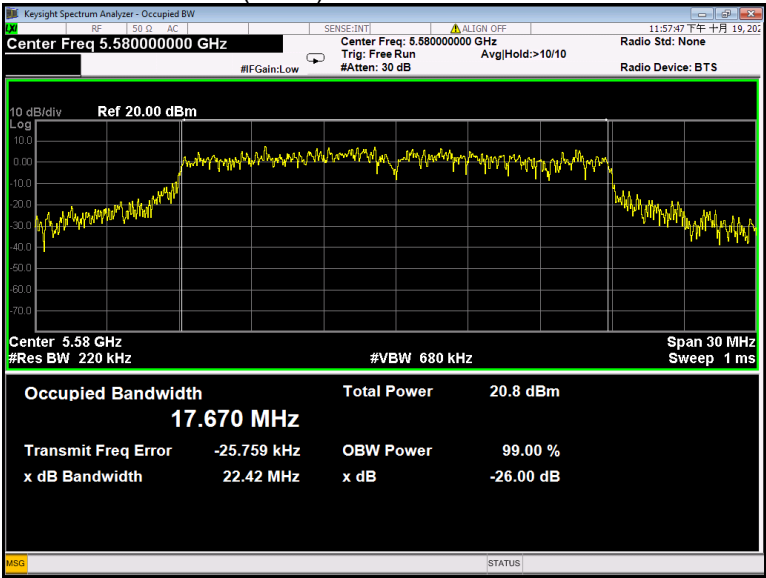
802.11a U-NII-2C High channel



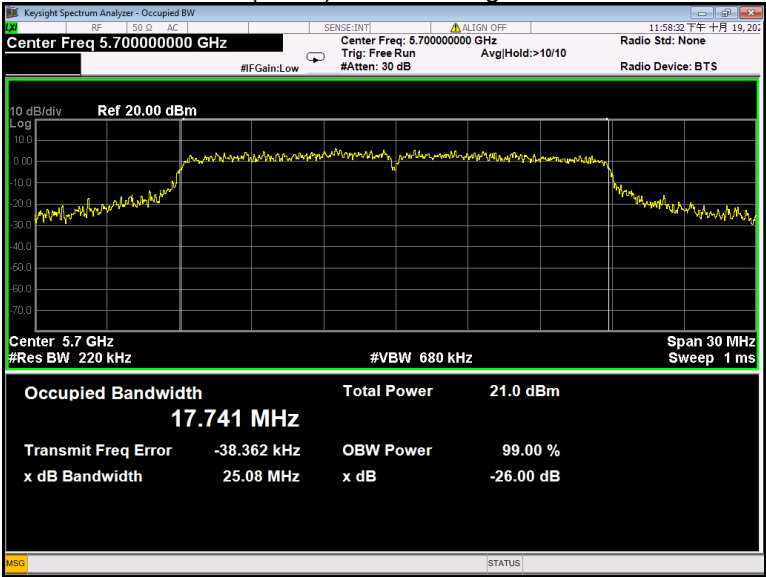
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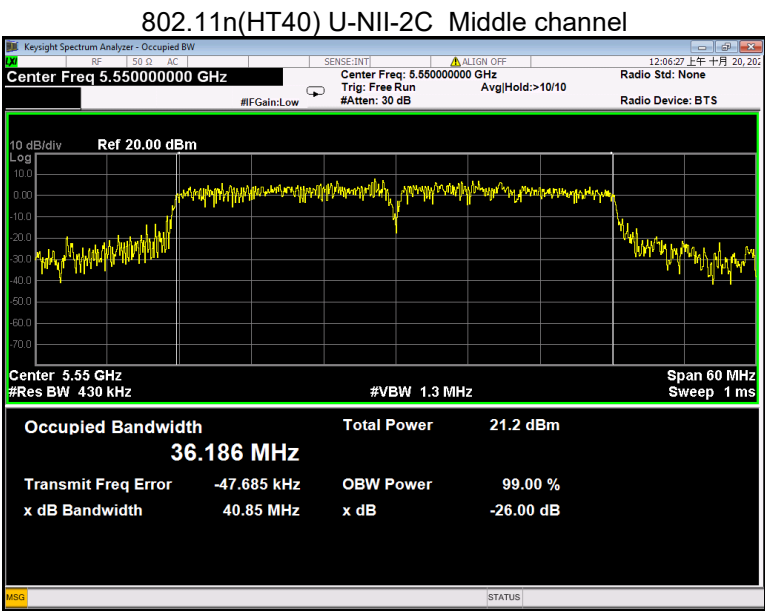
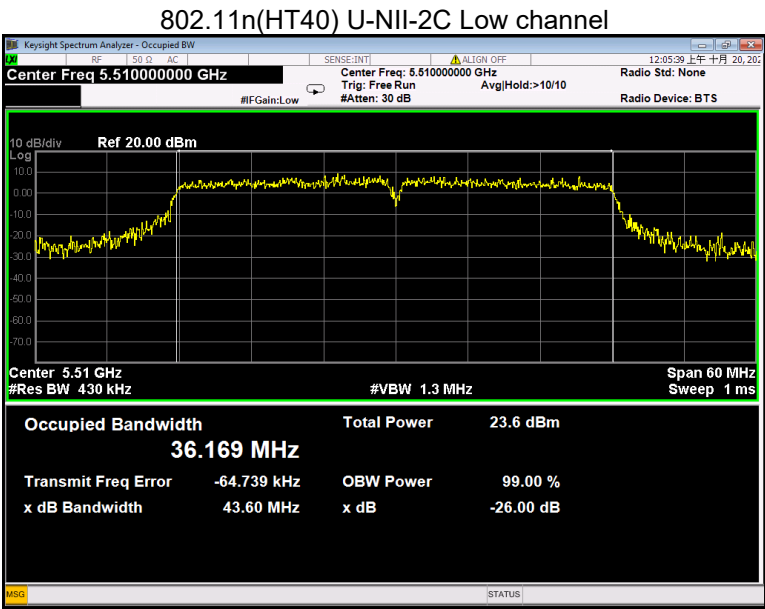


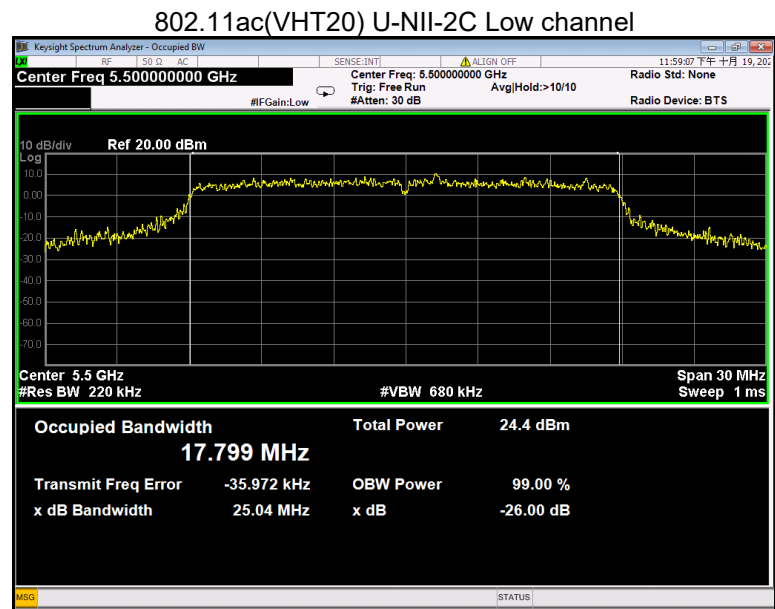
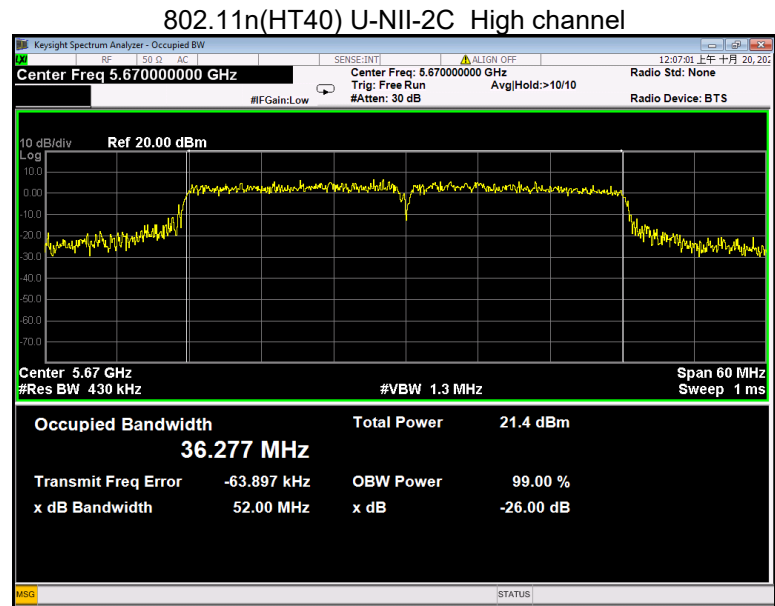
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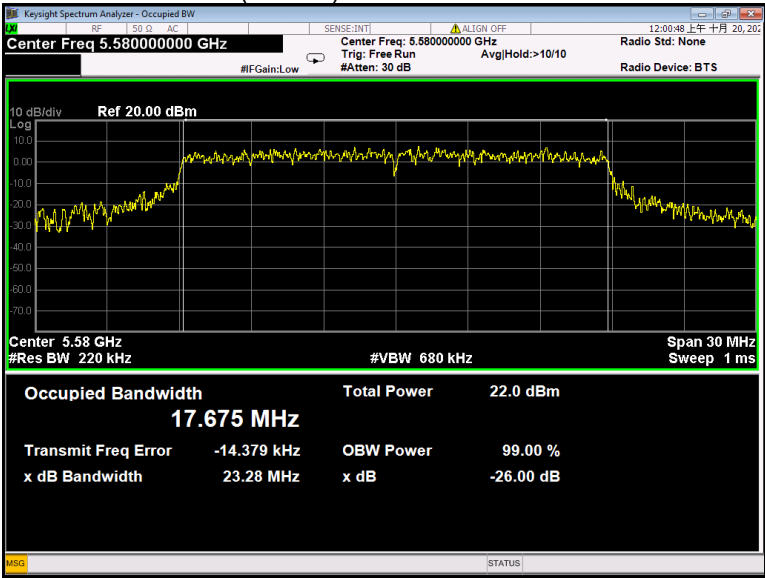
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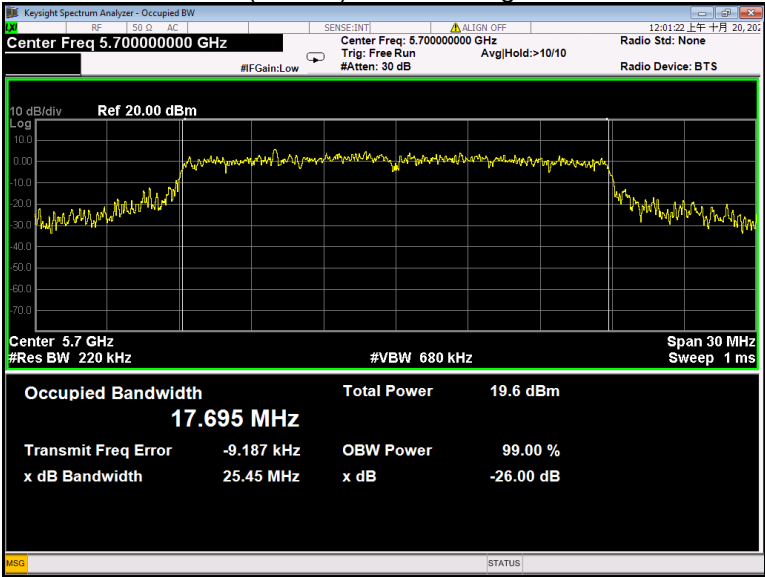




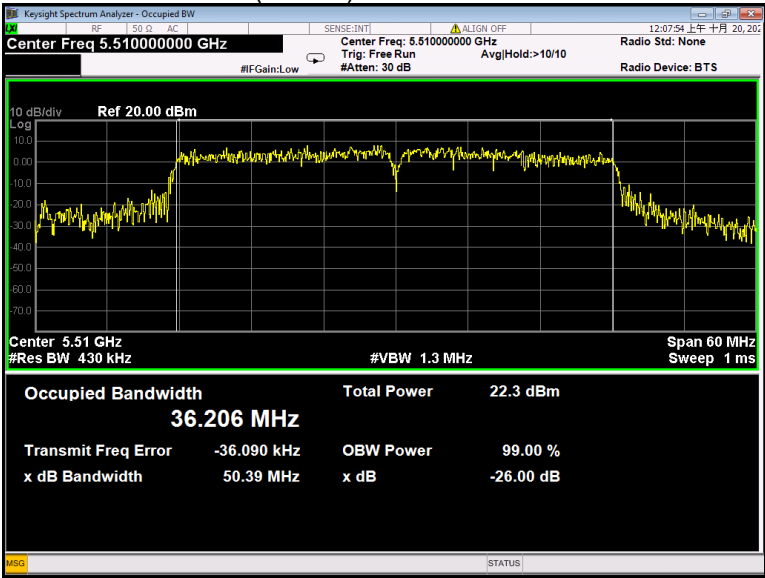
802.11ac(VHT20) U-NII-2C Middle channel



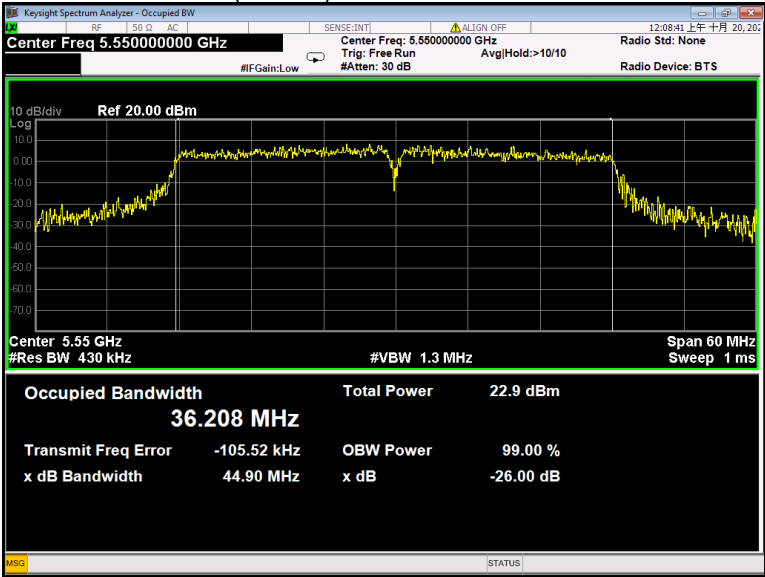
802.11ac(VHT20) U-NII-2C High channel



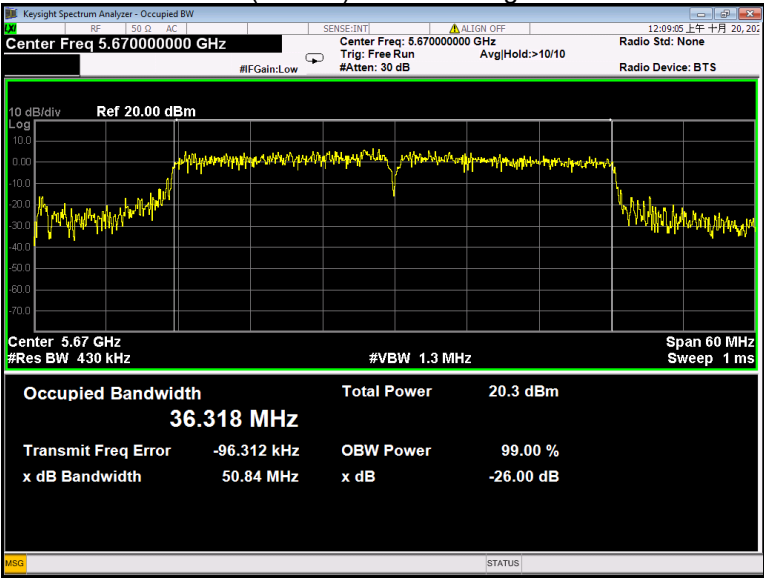
802.11ac(VHT40) U-NII-2C Low channel



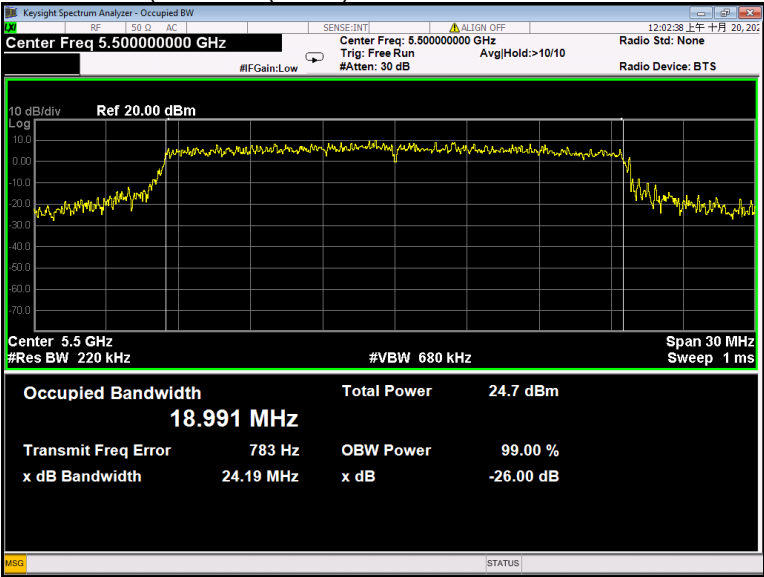
02.11ac(VHT40) U-NII-2C Middle channel



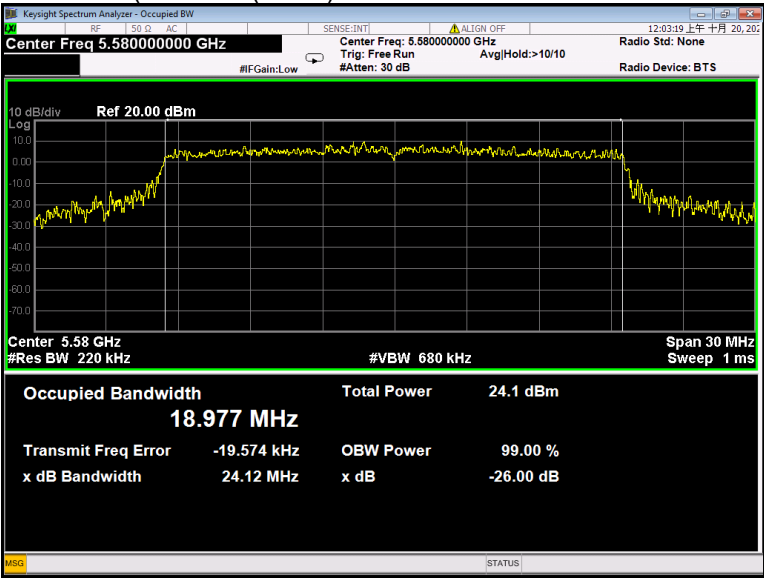
802.11ac(VHT40) U-NII-2C High channel



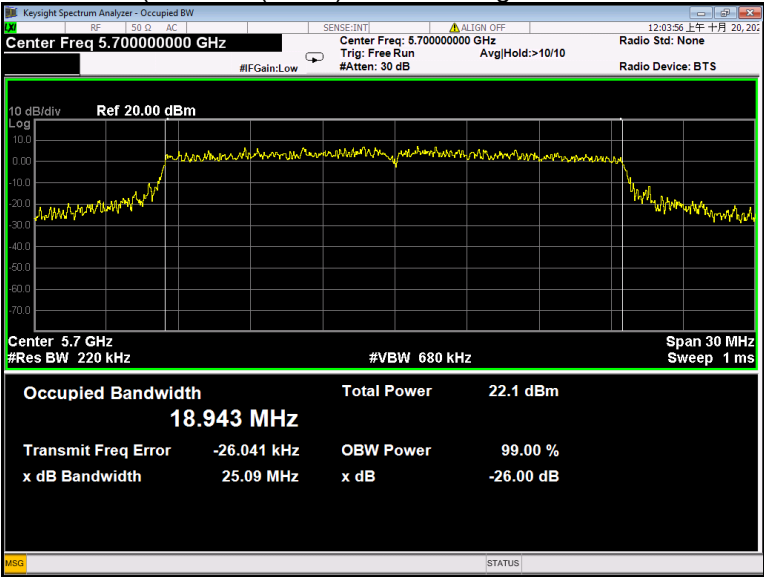
(802.11ax(HE20) U-NII-2C Low channel



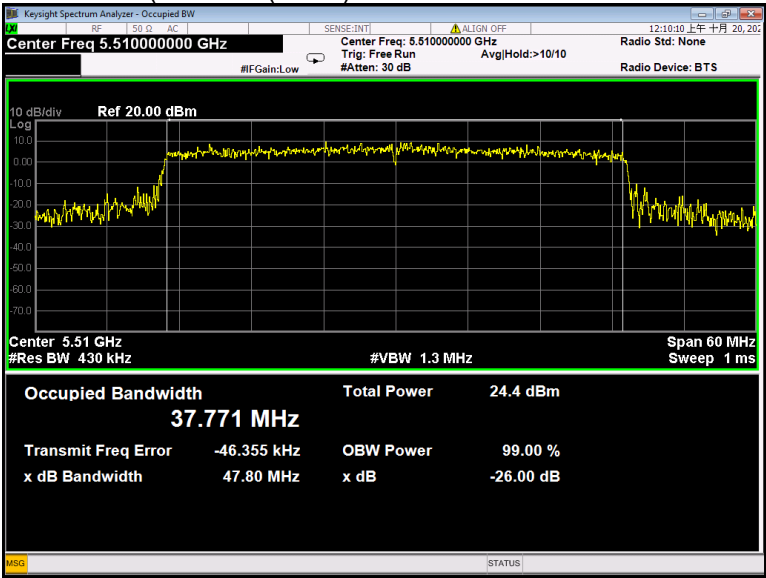
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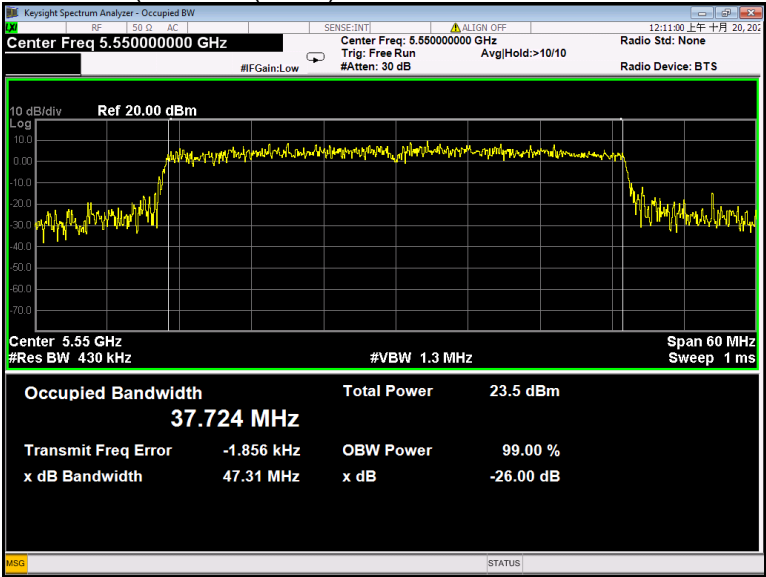
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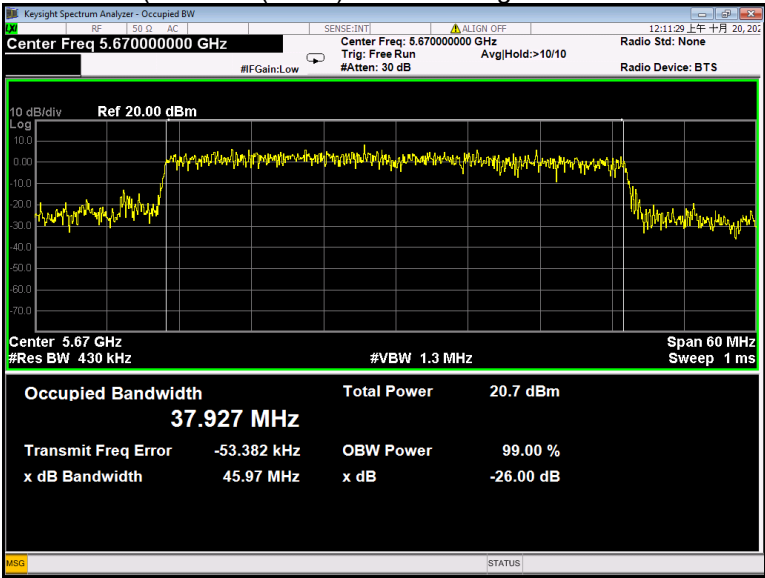
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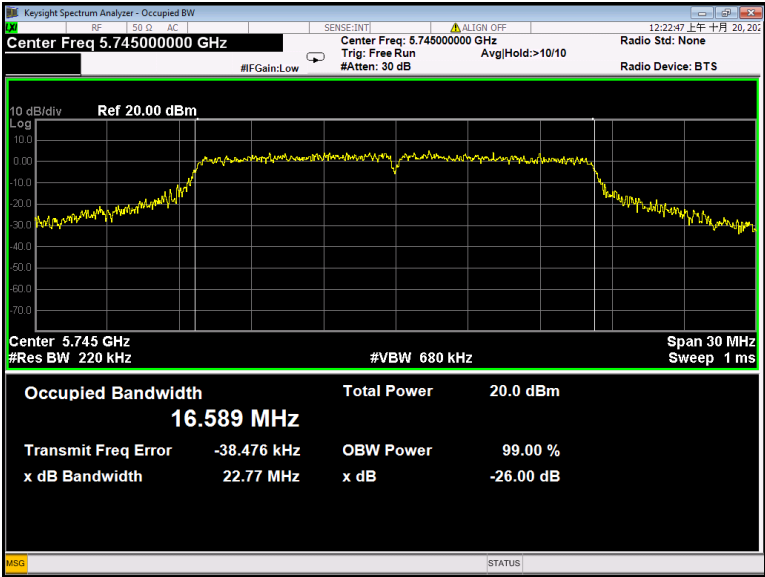
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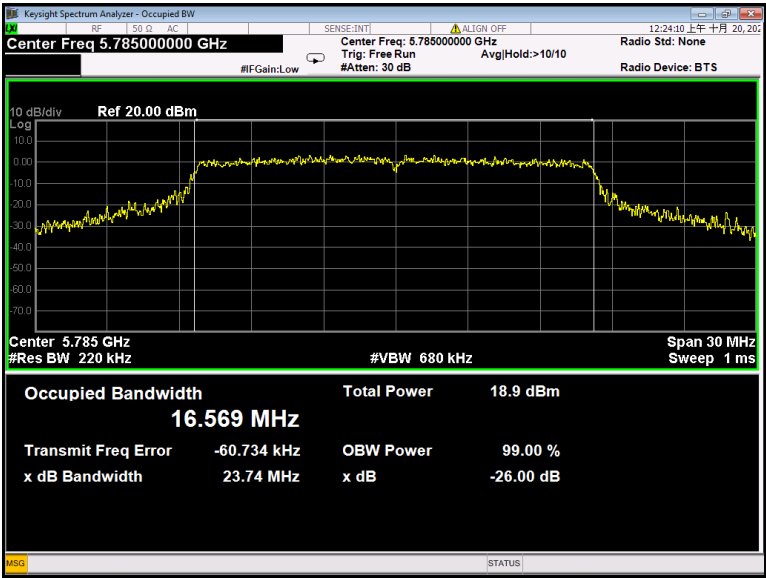
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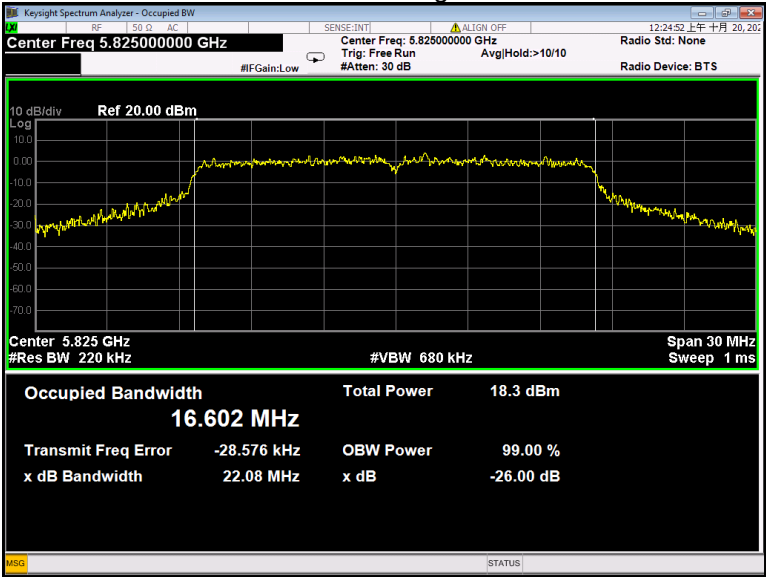
802.11a U-NII-3 Low channel



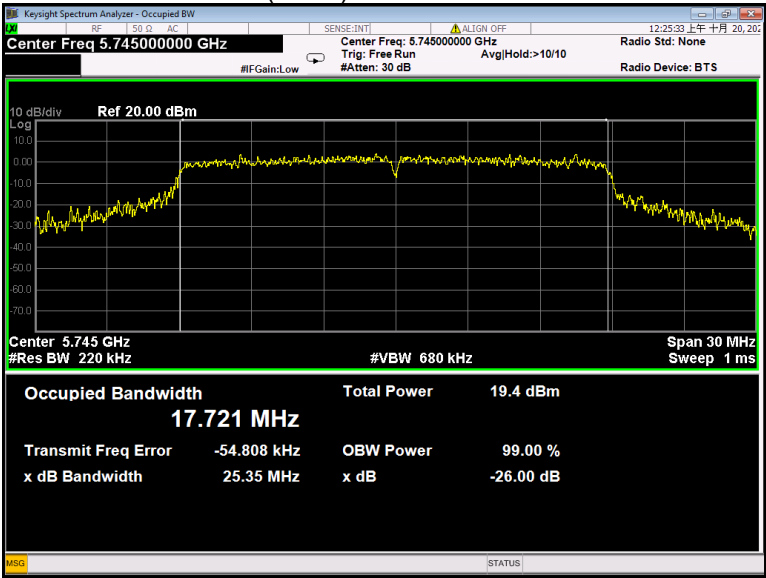
802.11a U-NII-3 Middle channel



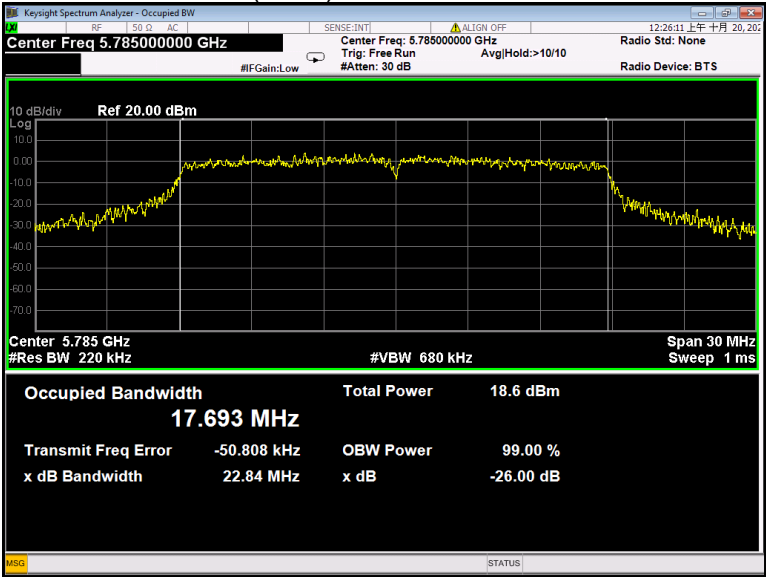
802.11a U-NII-3 High channel



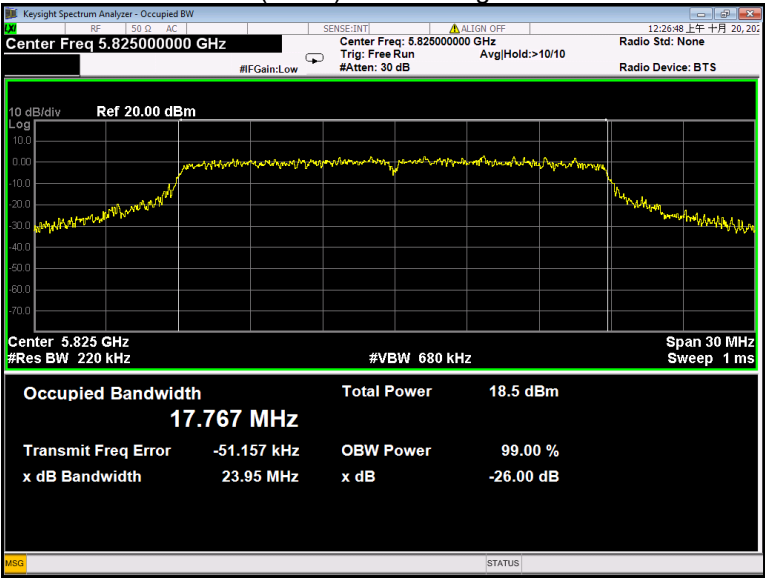
802.11n(HT20) U-NII-3 Low channel



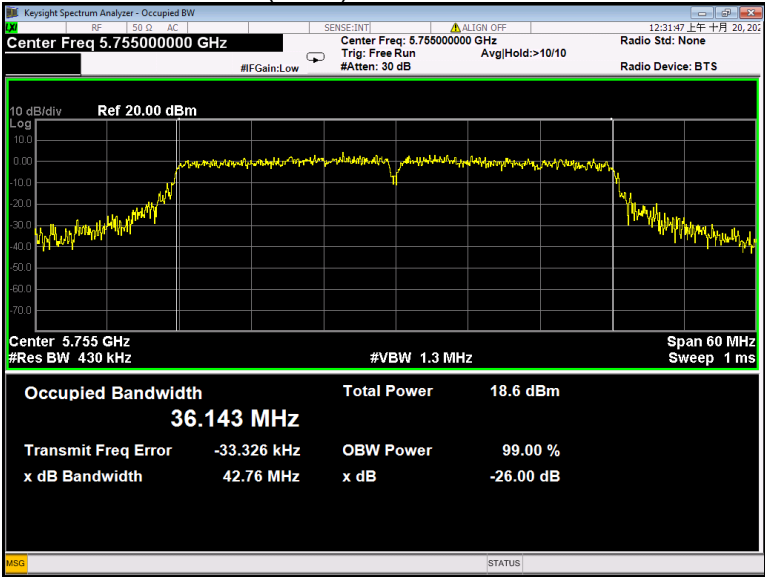
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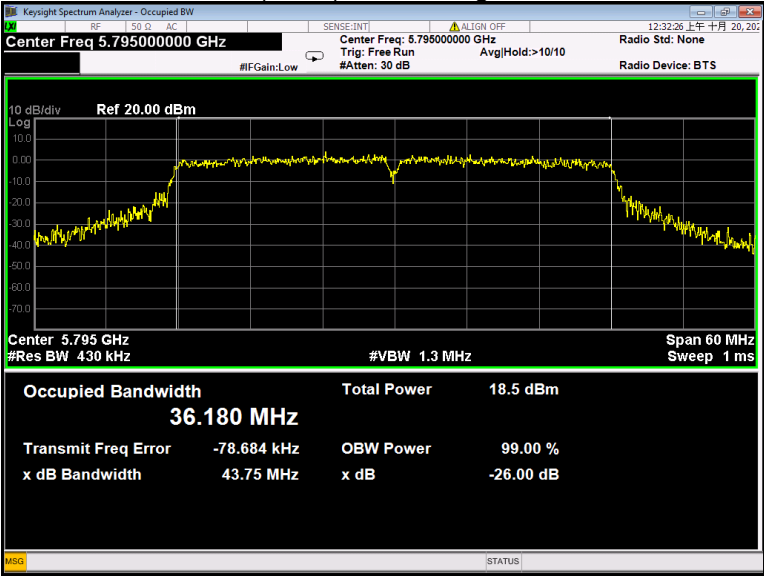
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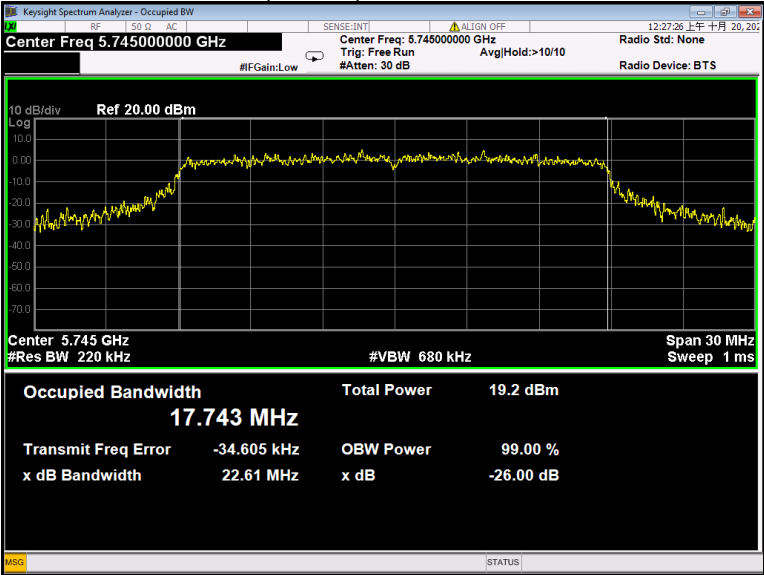
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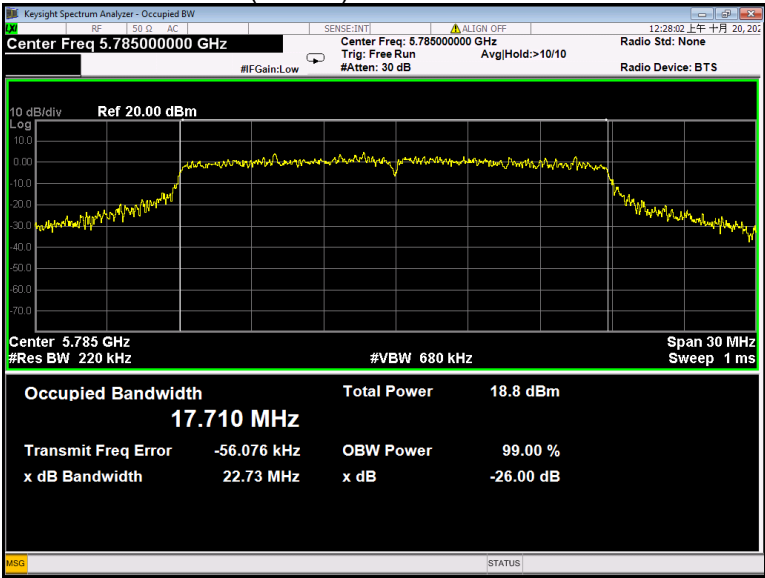
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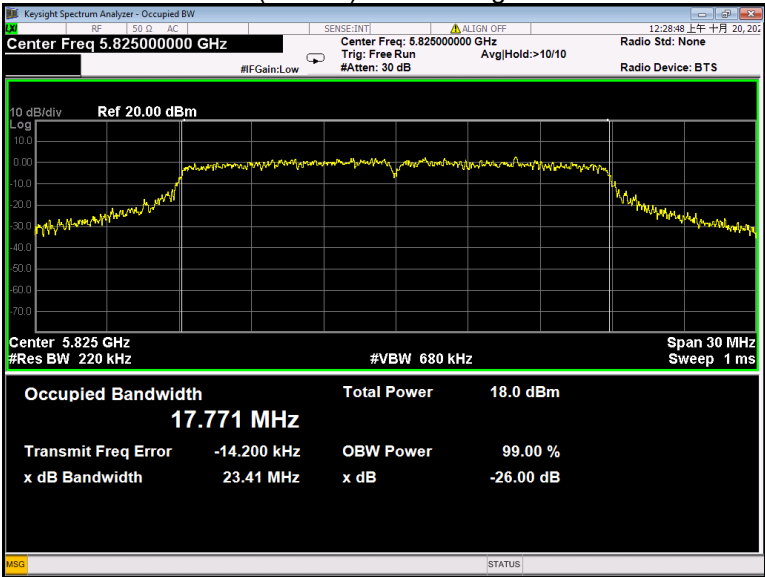
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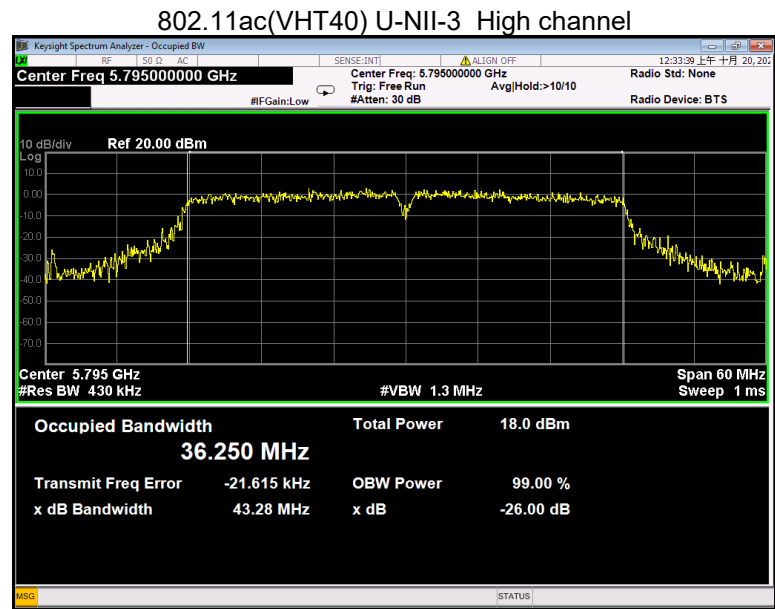
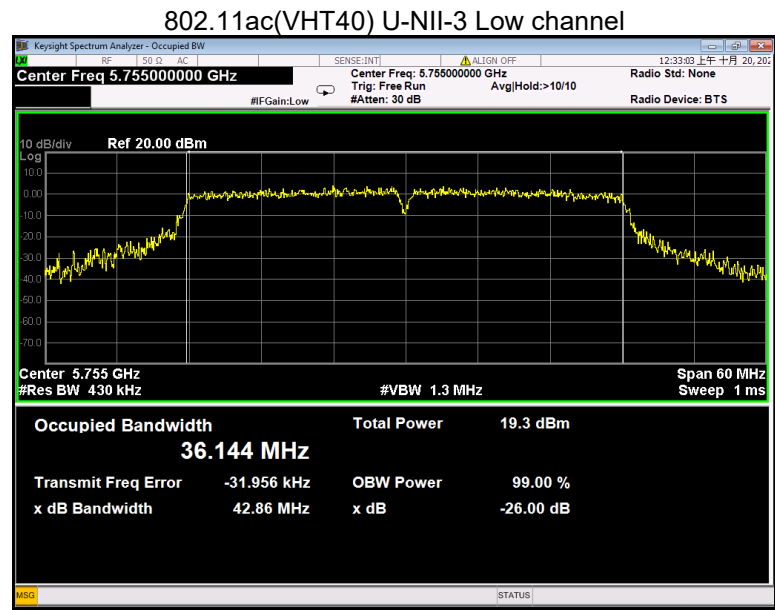


802.11ac(VHT20) U-NII-3 Middle channel

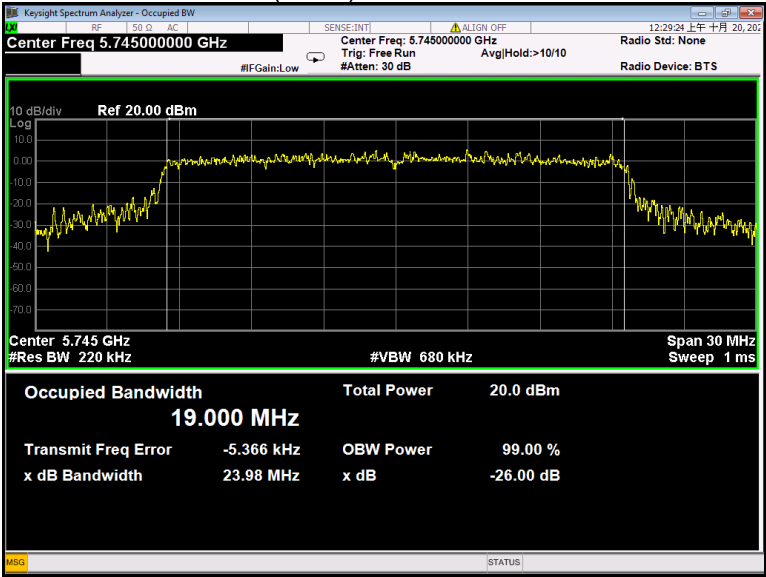


802.11ac(VHT20) U-NII-3 High channel

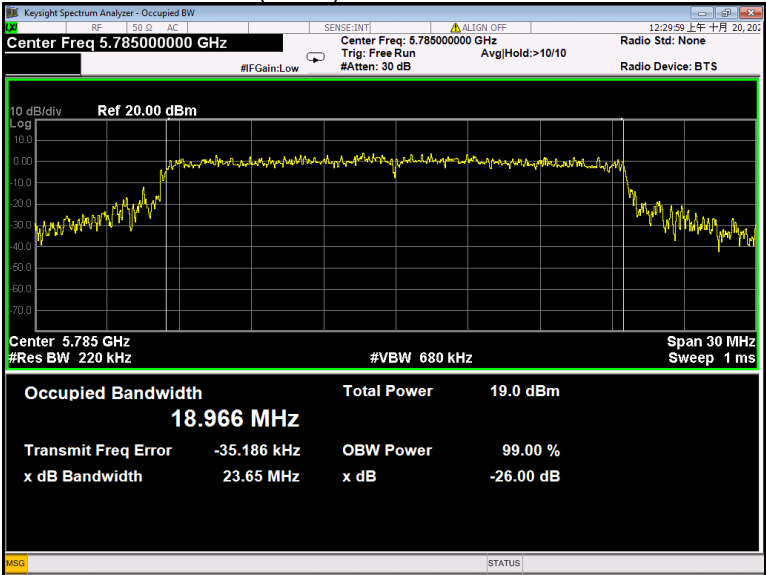


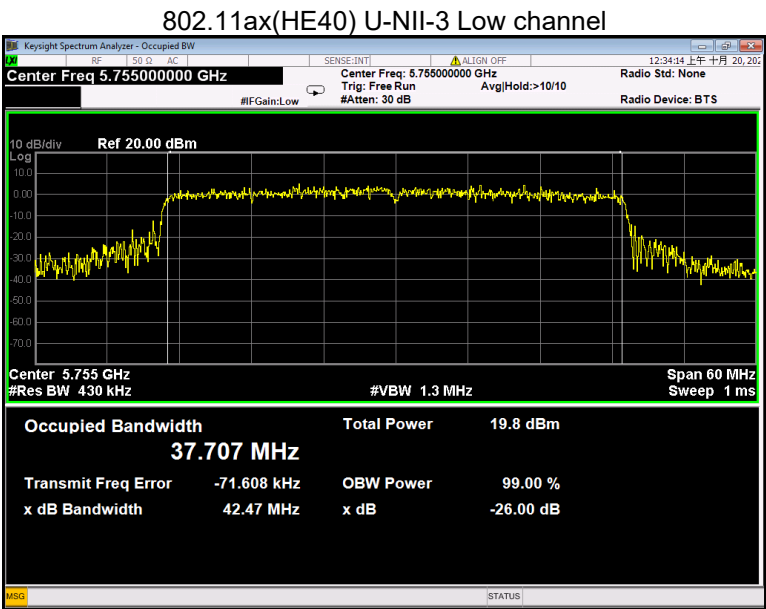
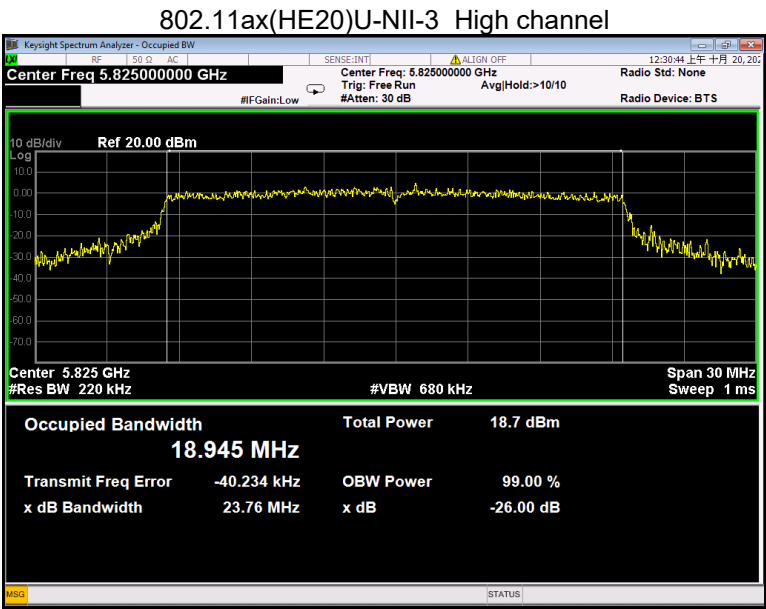


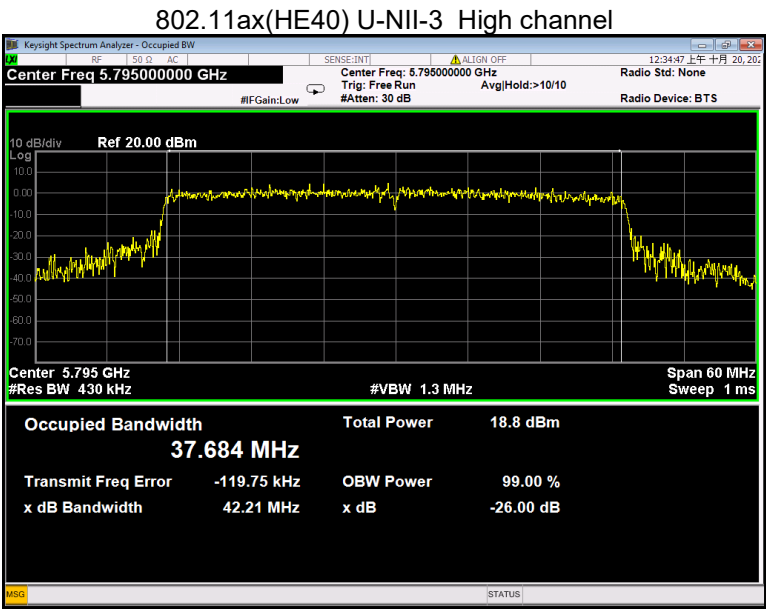
802.11ax(HE20) U-NII-3 Low channel



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







13 Conducted Output Power

Test Requirement:	FCC 47CFR Part 15 Section 15.407(a) KDB789033 D02 General U-NII Test Procedures New Rules v02r01
Test Method:	Section E ANSI C63.10-2020+A1-2024
Test Limit:	For the band 5.15-5.25 GHz For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. For the band 5.725-5.850 GHz For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.
Test Result:	PASS

13.1 Test Procedure

Note: the method used in this report is Method SA-1.

The procedure for this method is as follows:

- Set span to encompass the entire 99% OBW of the signal.
- Set RBW = 1 MHz.
- Set VBW $\geq$ 3 MHz.
- Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto.
- Detector = Power averaging (rms), if available. Otherwise, use sample detector mode.
- If transmit duty cycle $< 98\%$, use a video trigger with the trigger level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no OFF intervals) or at duty

cycle $\geq 98\%$, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to “free run.”

- h) Trace average at least 100 traces in power averaging (rms) mode.
- i) Compute power by integrating the spectrum across the 99% OBW of the signal using the instrument's band-power measurement function, with band limits set equal to the OBW band-edges. If the instrument does not have a band-power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 99% OBW of the spectrum.

13.2 Test Result

Band	Operation mode	Channel	Measurements (dBm)	Limit
U-NII-1	802.11a	Low	11.81	250mW / 24dBm
		Middle	11.55	
		High	11.26	
	802.11n(HT20)	Low	11.55	
		Middle	11.18	
		High	11.10	
	802.11n(HT40)	Low	11.21	
		Middle	/	
		High	10.88	
	802.11ac(VHT20)	Low	11.52	
		Middle	11.10	
		High	11.19	
	802.11ac(VHT40)	Low	11.35	
		Middle	/	
		High	10.97	
	802.11ax(HE20)	Low	11.54	
		Middle	11.25	
		High	11.09	
	802.11ax(HE40)	Low	11.36	
		Middle	/	
		High	10.98	

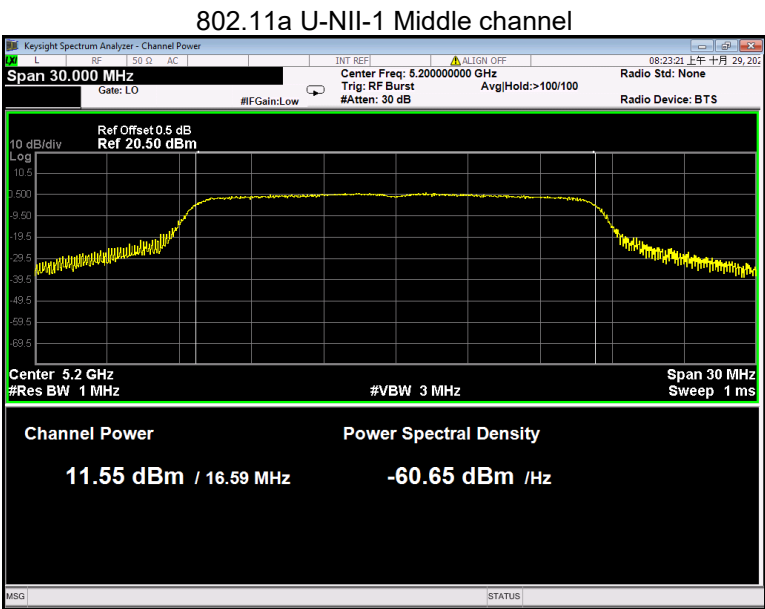
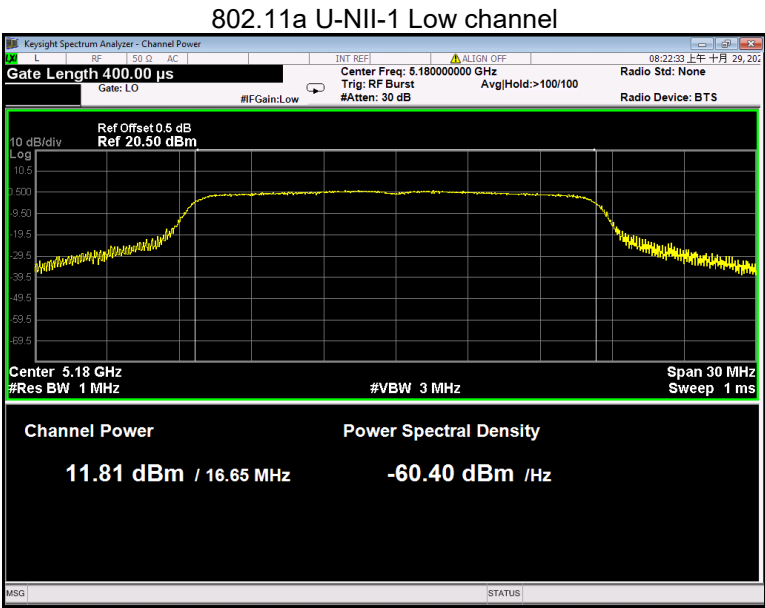
Band	Operation mode	Channel	Measurements (dBm)	Limit
U-NII-2A	802.11a	Low	11.26	250mW / 24dBm
		Middle	11.44	
		High	11.29	
	802.11n(HT20)	Low	11.03	
		Middle	11.14	
		High	11.13	
	802.11n(HT40)	Low	11.20	
		Middle	/	
		High	11.29	
	802.11ac(VHT20)	Low	11.14	
		Middle	11.16	
		High	11.17	
	802.11ac(VHT40)	Low	11.26	
		Middle	/	
		High	11.30	
	802.11ax(HE20)	Low	11.20	
		Middle	11.17	
		High	11.14	
	802.11ax(HE40)	Low	11.21	
		Middle	/	
		High	11.28	

Band	Operation mode	Channel	Measurements (dBm)	Limit
U-NII-2C	802.11a	Low	13.69	250mW / 24dBm
		Middle	12.54	
		High	10.50	
	802.11n(HT20)	Low	13.60	
		Middle	12.99	
		High	10.24	
	802.11n(HT40)	Low	13.85	
		Middle	13.69	
		High	12.15	
	802.11ac(VHT20)	Low	12.34	
		Middle	13.00	
		High	10.31	
	802.11ac(VHT40)	Low	13.95	
		Middle	13.71	
		High	12.07	
	802.11ax(HE20)	Low	13.89	
		Middle	13.20	
		High	10.30	
	802.11ax(HE40)	Low	13.92	
		Middle	13.69	
		High	12.07	

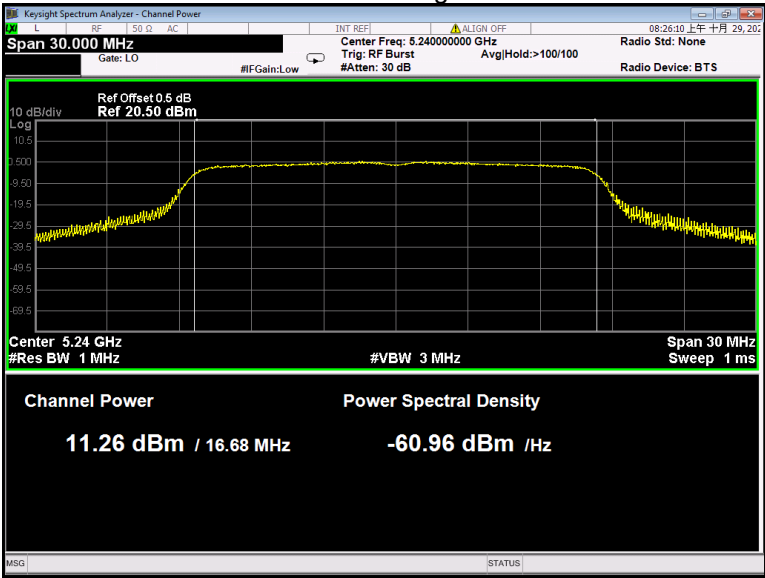
Band	Operation mode	Channel	Measurements (dBm)	Limit
U-NII-3	802.11a	Low	9.34	1W / 30dBm
		Middle	9.17	
		High	8.70	
	802.11n(HT20)	Low	9.27	
		Middle	9.07	
		High	8.54	
	802.11n(HT40)	Low	9.32	
		Middle	/	
		High	8.99	
	802.11ac(VHT20)	Low	9.29	
		Middle	9.03	
		High	8.59	
	802.11ac(VHT40)	Low	9.27	
		Middle	/	
		High	8.96	
	802.11ax(HE20)	Low	9.30	
		Middle	9.09	
		High	8.56	
	802.11ax(HE40)	Low	9.30	
		Middle	/	
		High	9.04	

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

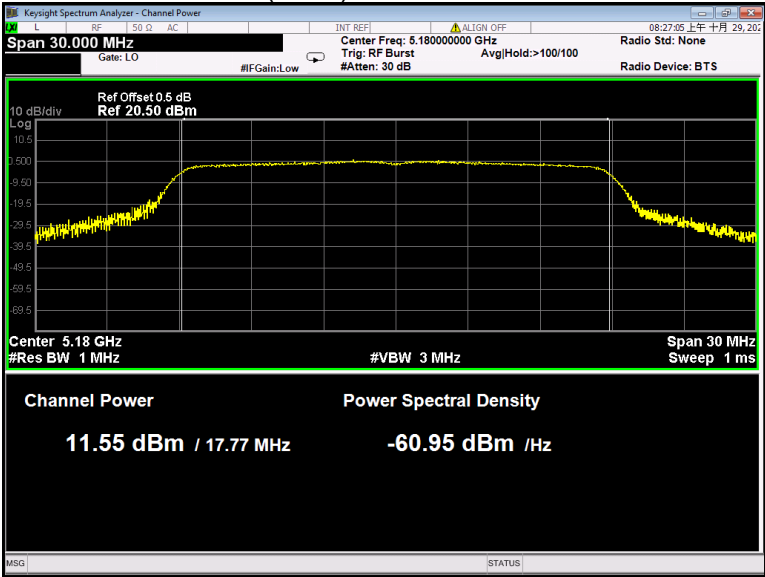
Test result plots shown as follows:



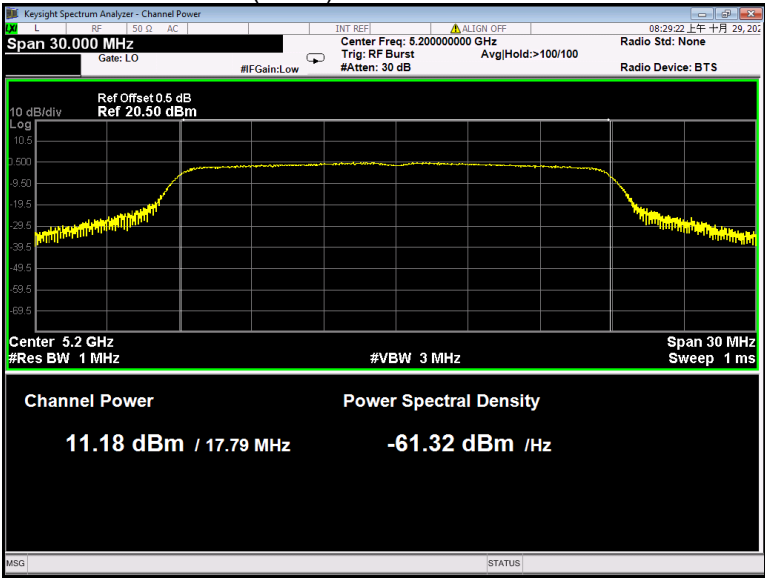
802.11a U-NII-1 High channel



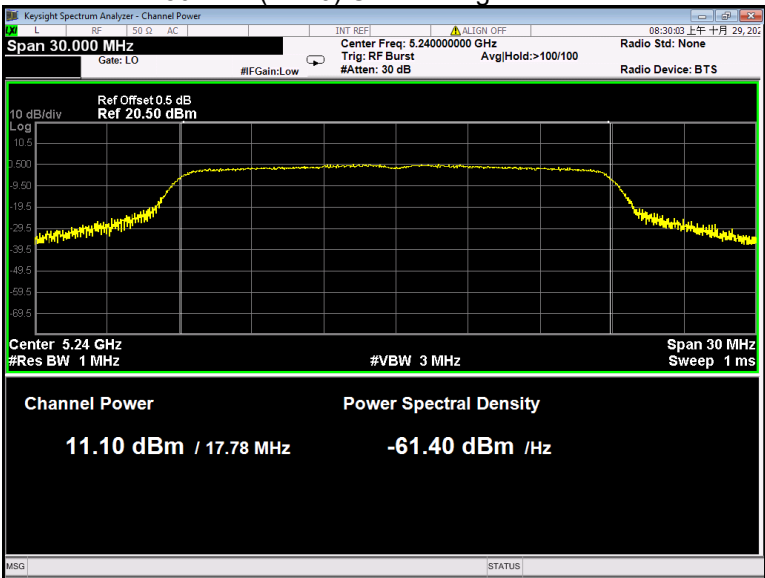
802.11n(HT20) U-NII-1 Low channel



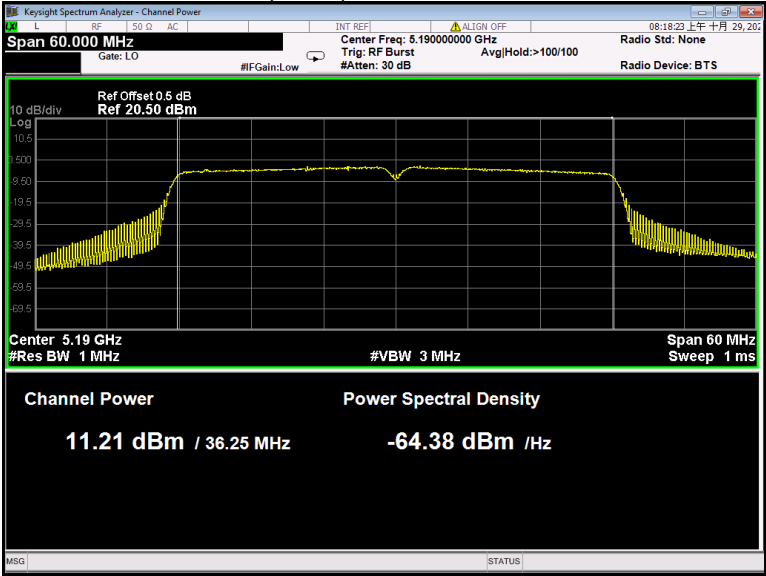
802.11n(HT20) U-NII-1 Middle channel



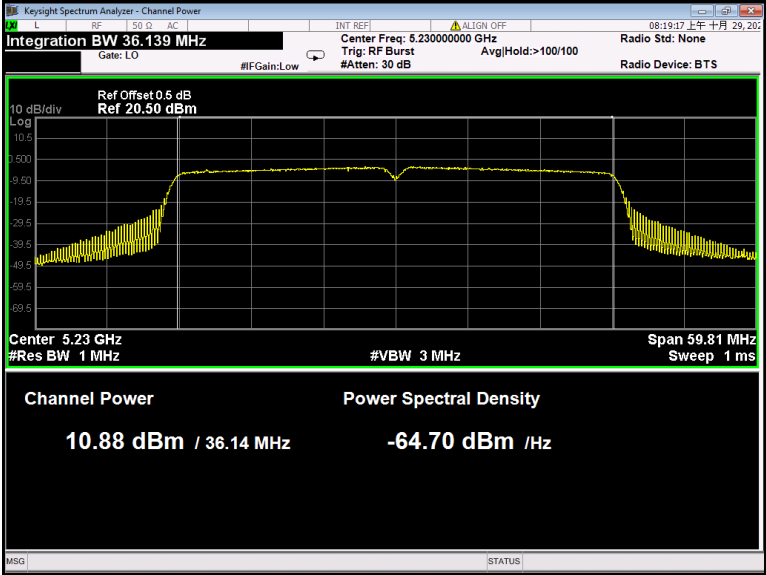
802.11n(HT20) U-NII-1 High channel

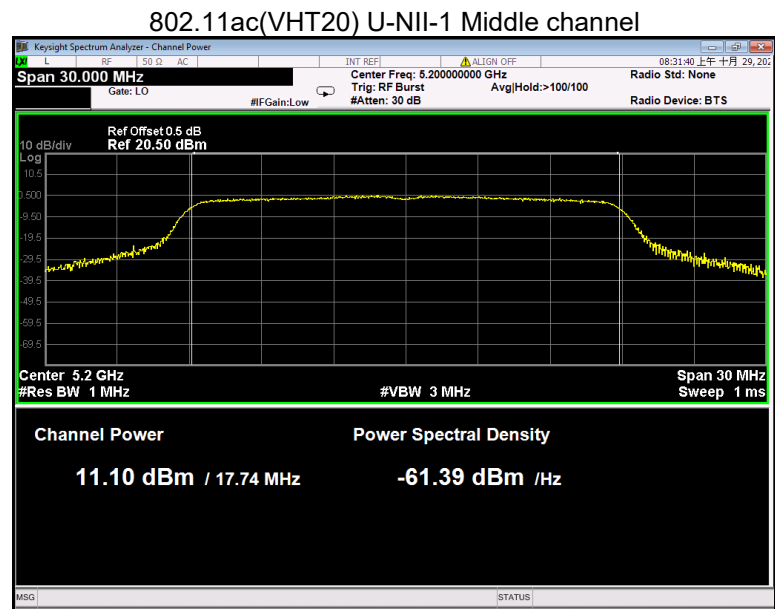
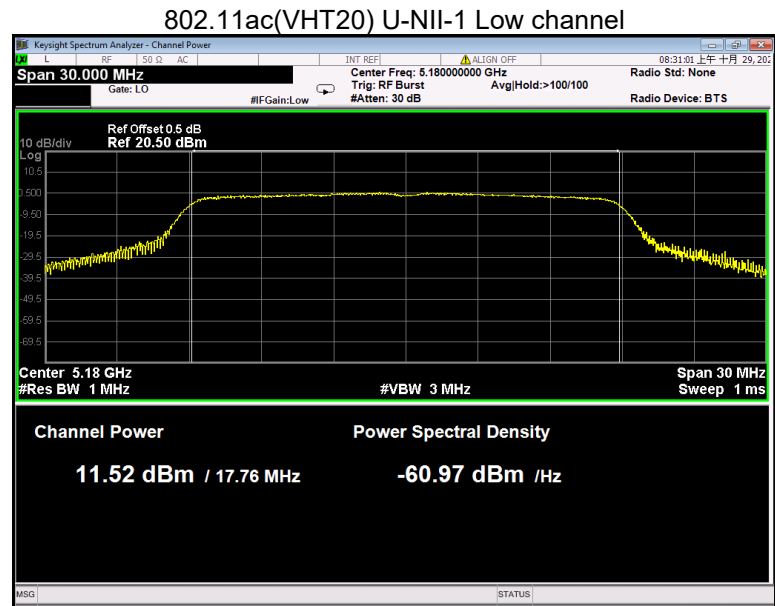


802.11n(HT40) U-NII-1 Low channel

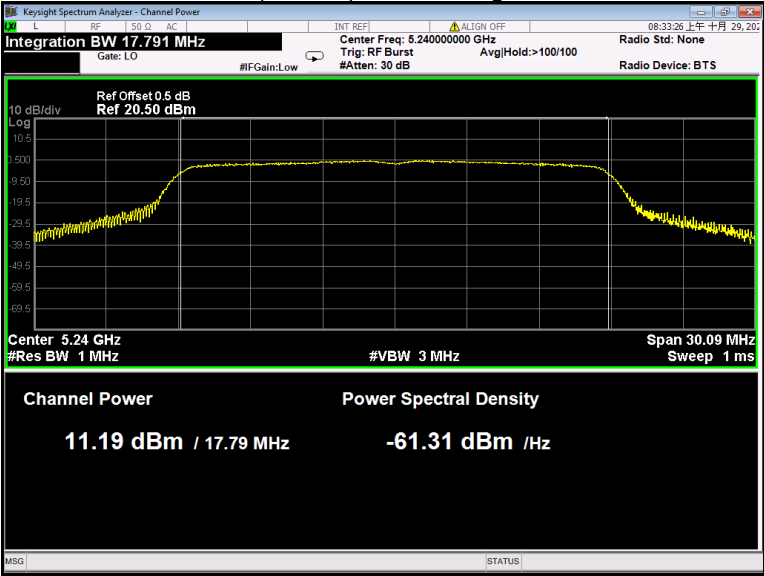


802.11n(HT40) U-NII-1 High channel

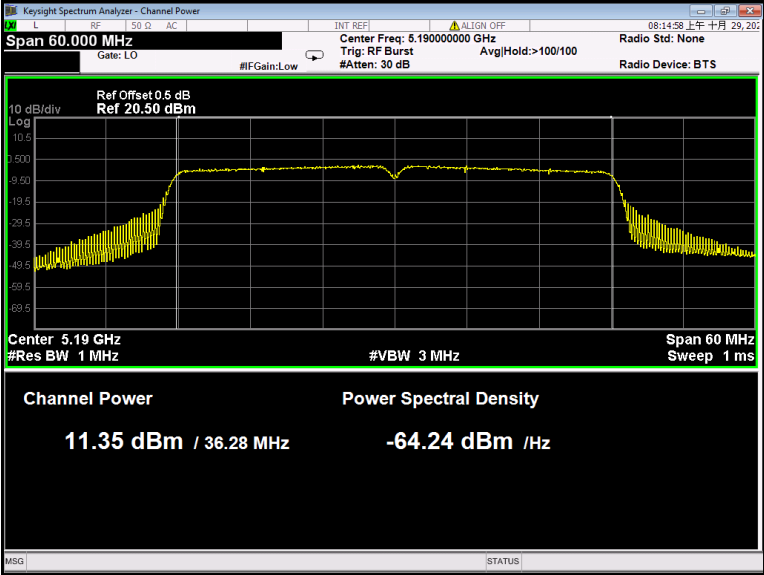




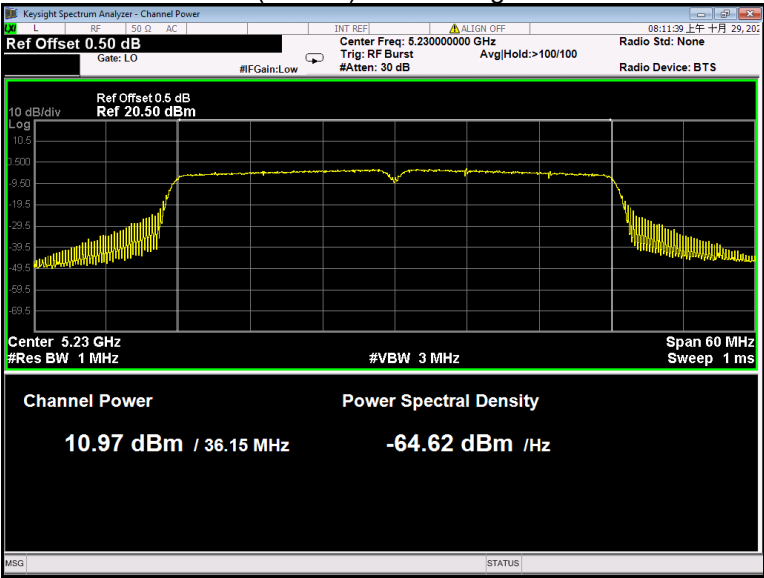
802.11ac(VHT20) U-NII-1 High channel



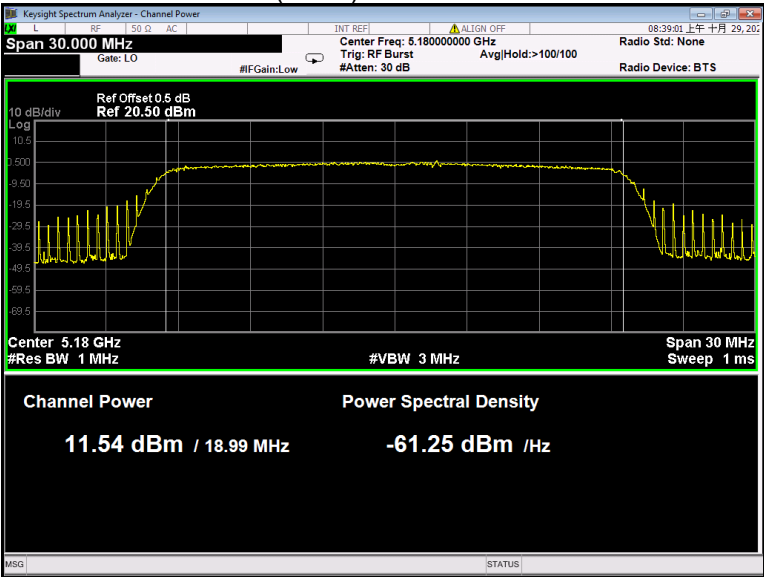
802.11ac(VHT40) U-NII-1 Low channel



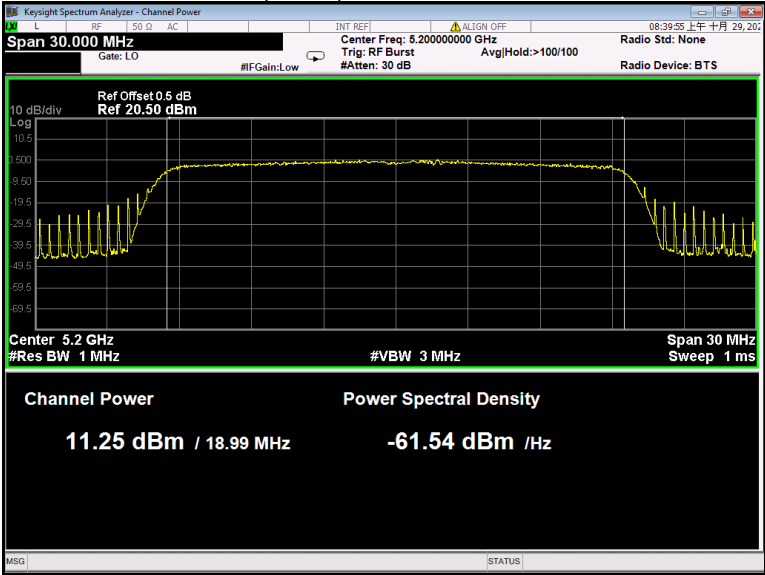
802.11ac(VHT40) U-NII-1 High channel



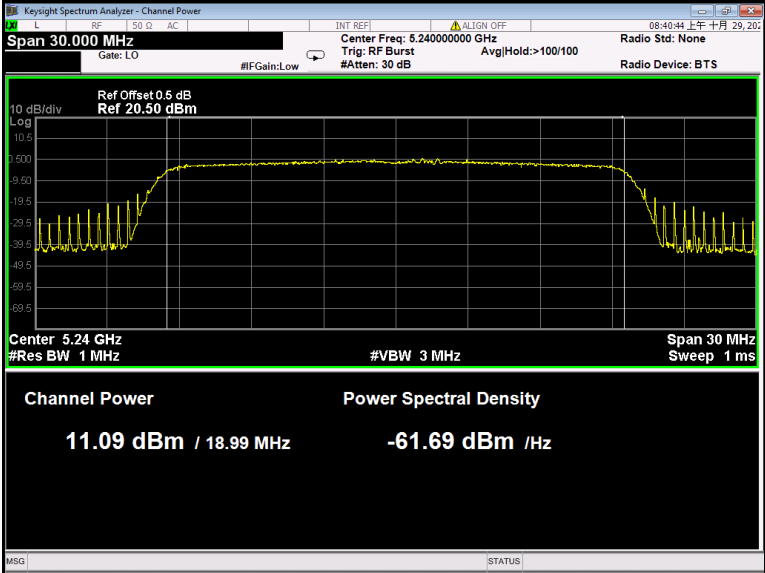
802.11ax(HE20)U-NII-1 Low channel



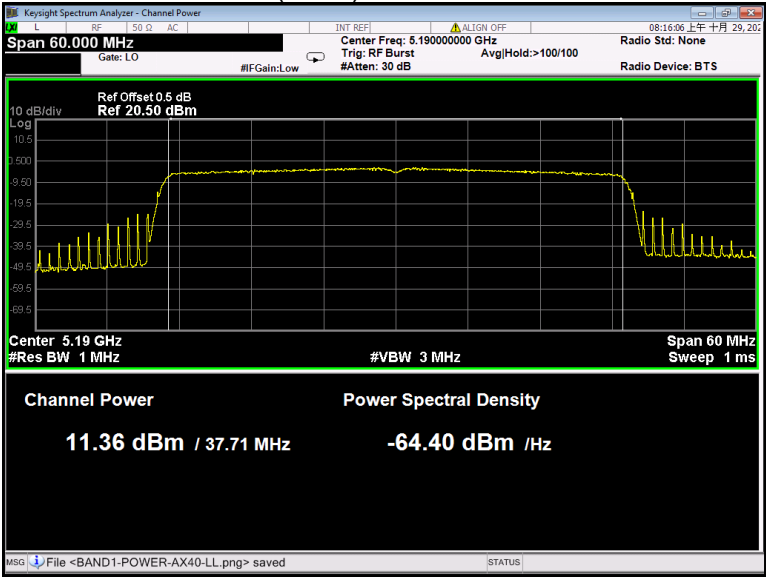
802.11ax(HE20)U-NII-1 Middle channel



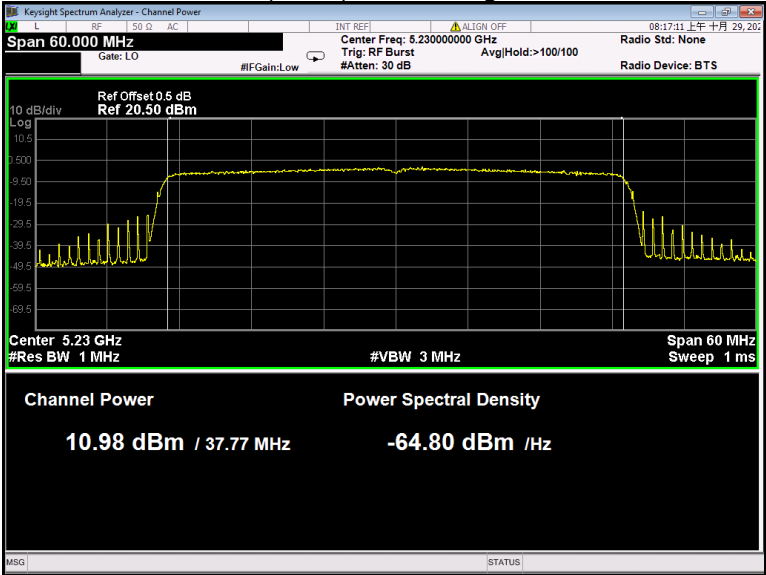
802.11ax(HE20) U-NII-1 High channel



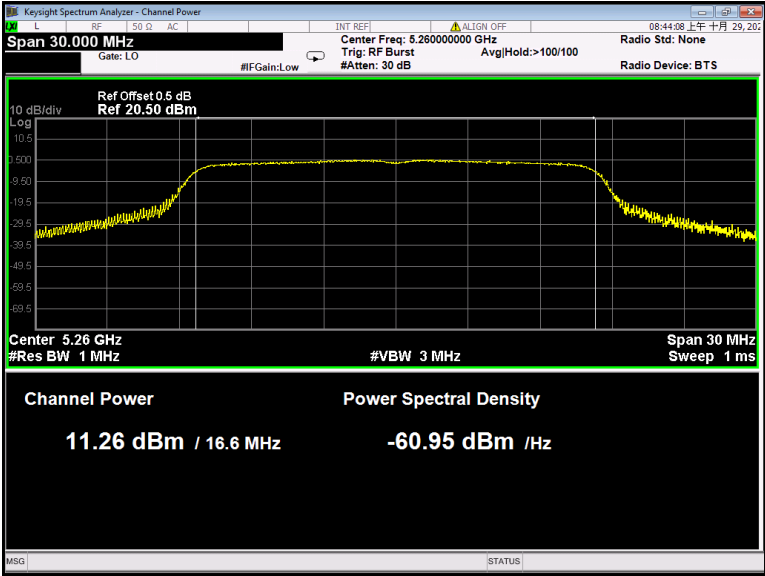
802.11ax(HE40)U-NII-1 Low channel



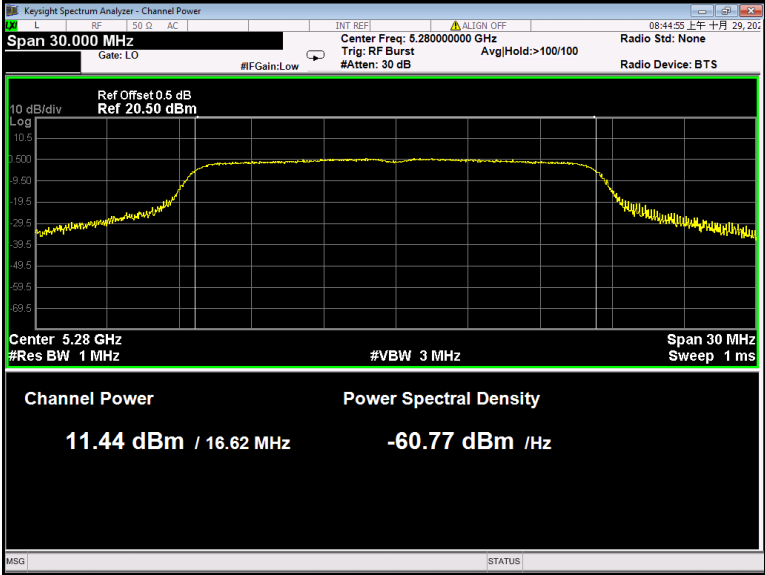
802.11ax(HE40) U-NII-1 High channel



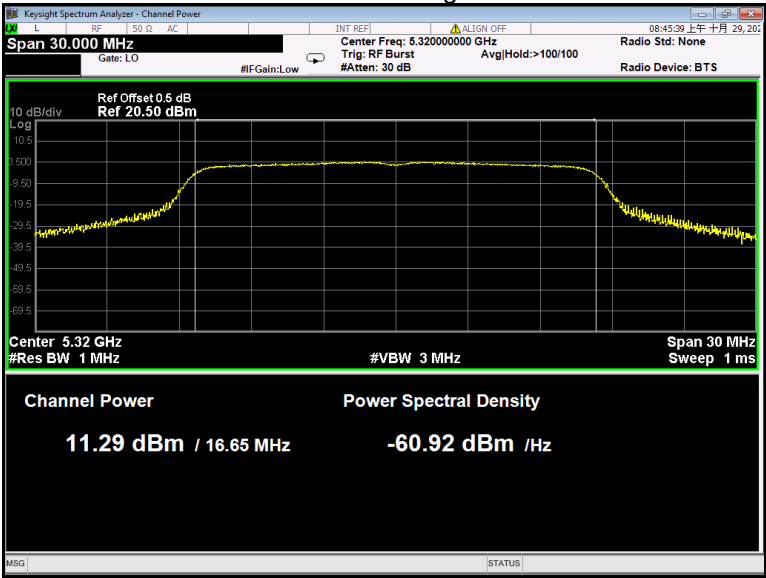
802.11a U-NII-2A Low channel



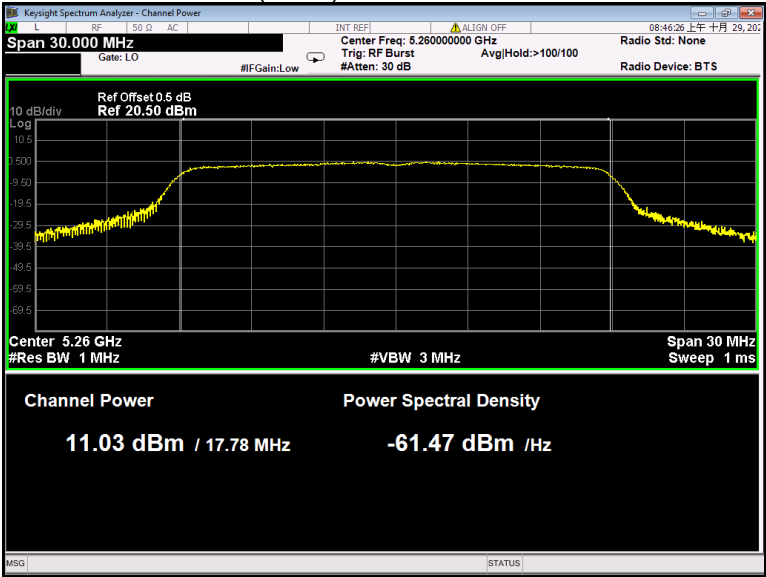
802.11a U-NII-2A Middle channel



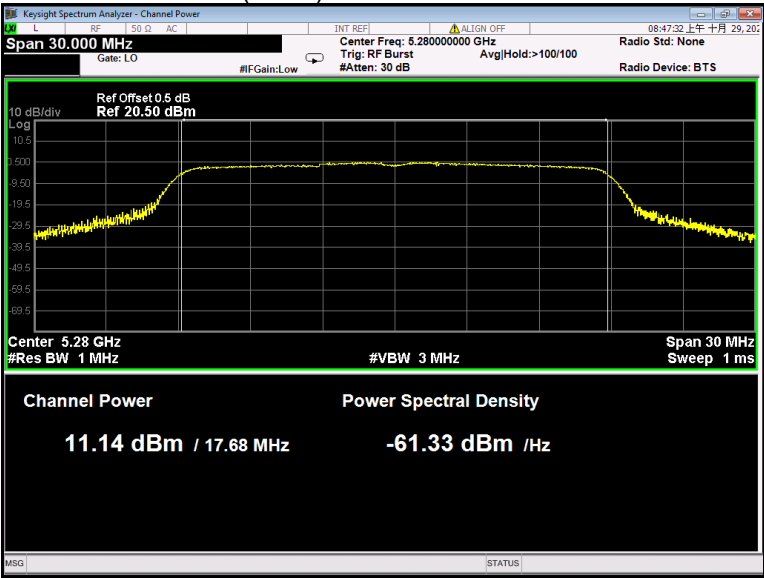
802.11a U-NII-2A High channel



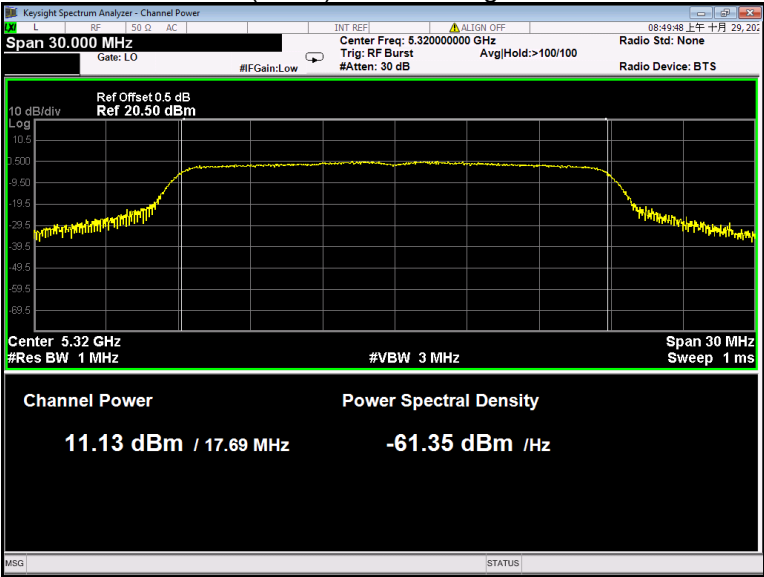
802.11n(HT20) U-NII-2A Low channel



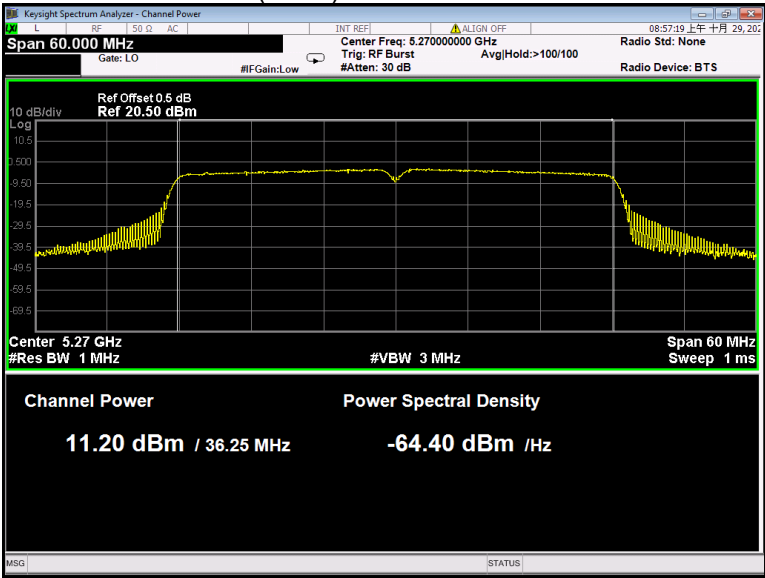
802.11n(HT20) U-NII-2A Middle channel



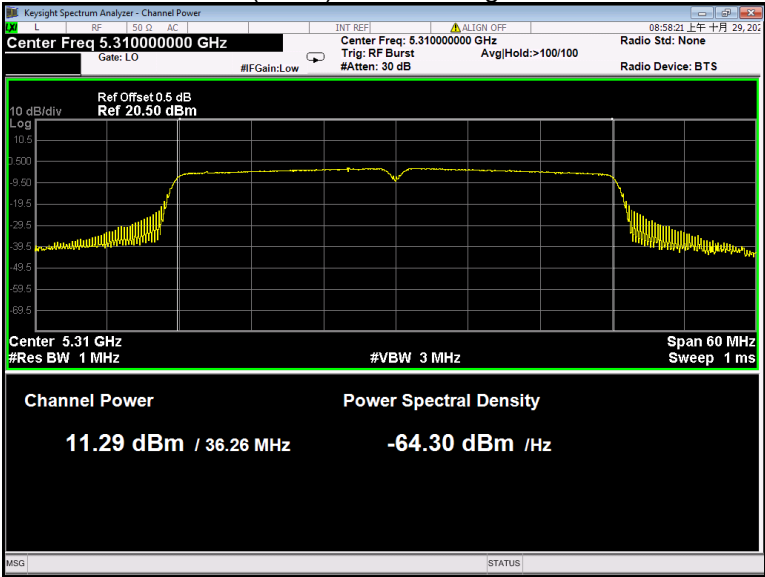
802.11n(HT20) U-NII-2A High channel



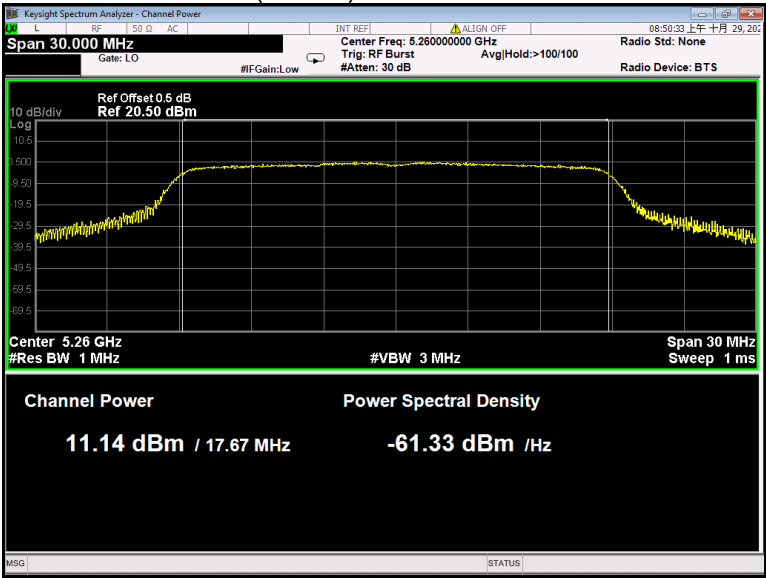
802.11n(HT40) U-NII-2A Low channel



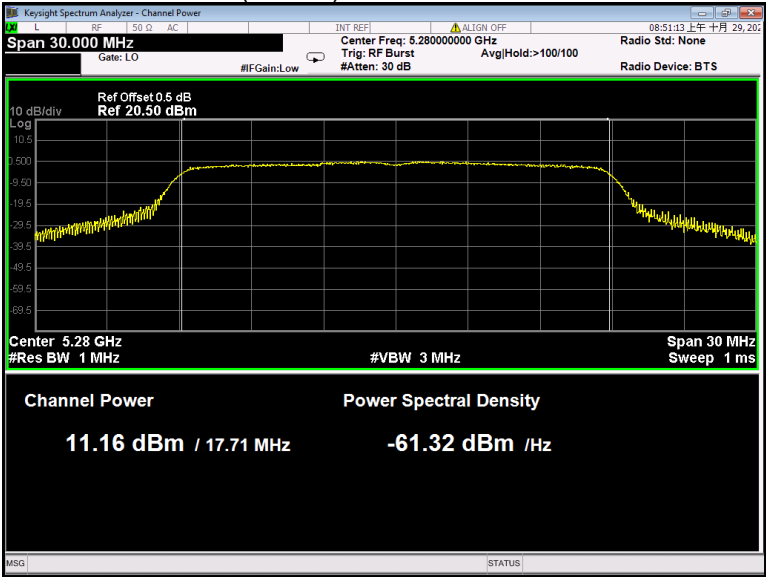
802.11n(HT40) U-NII-2A High channel



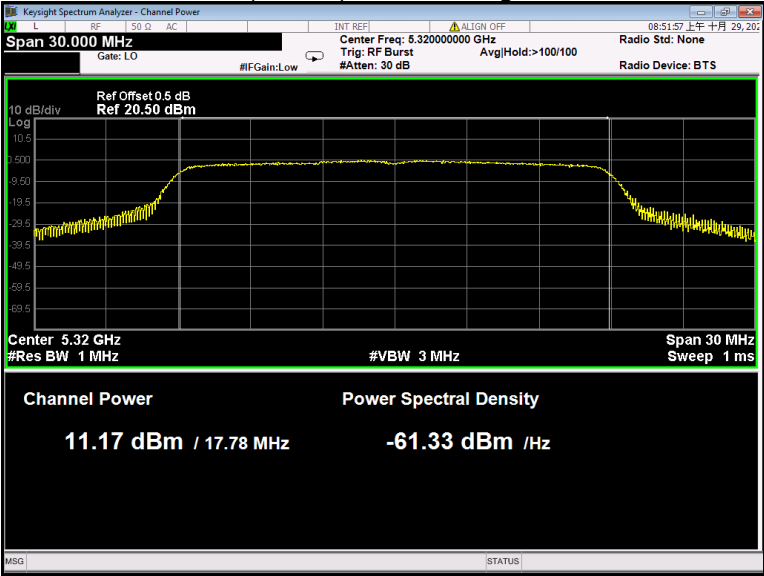
802.11ac(VHT20) U-NII-2A Low channel



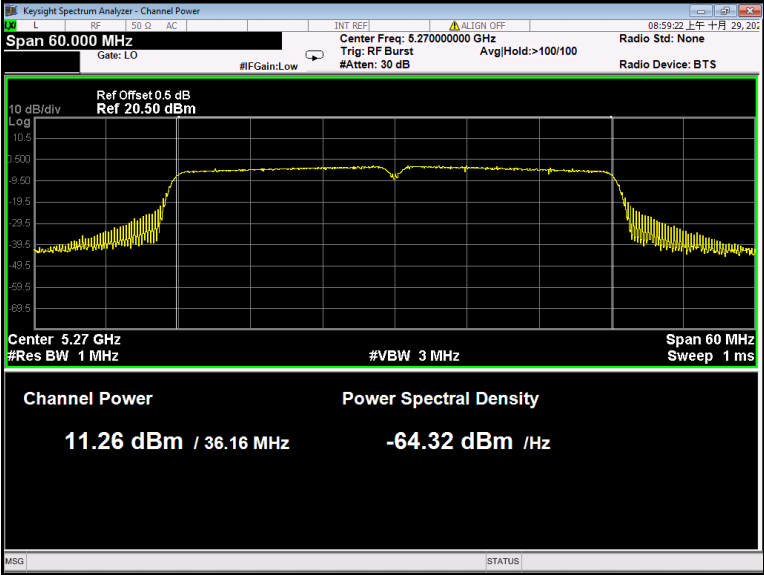
802.11ac(VHT20) U-NII-2A Middle channel



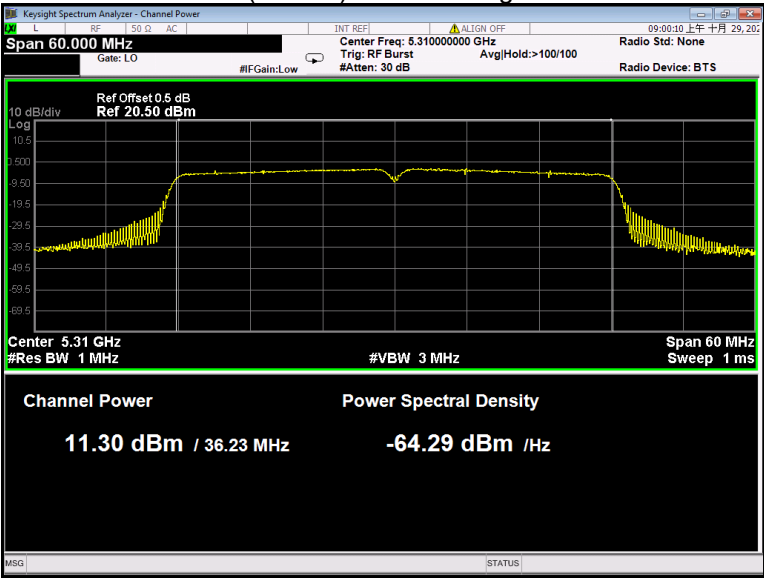
802.11ac(VHT20) U-NII-2A High channel



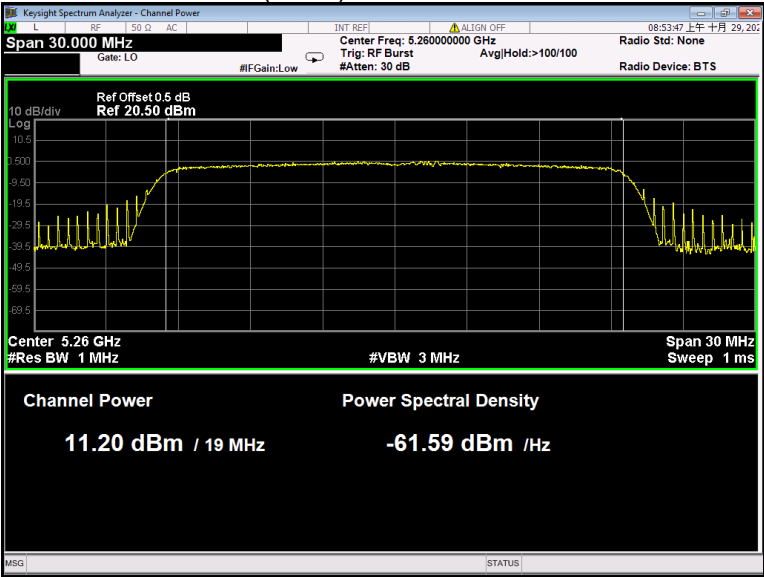
802.11ac(VHT40) U-NII-2A Low channel



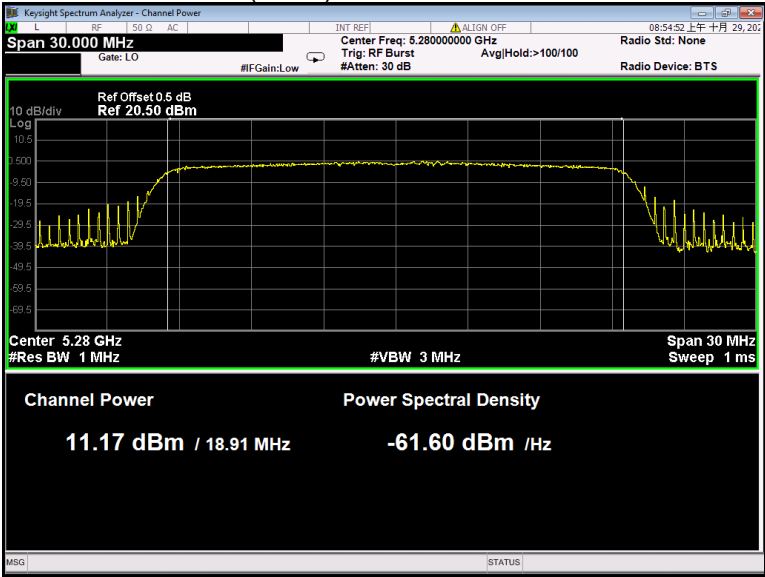
802.11ac(VHT40) U-NII-2A High channel



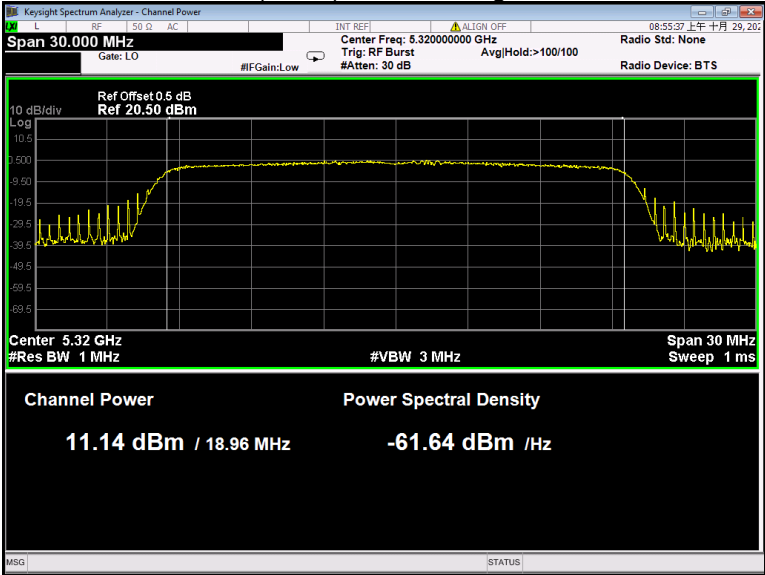
802.11ax(HE20) U-NII-2A Low channel

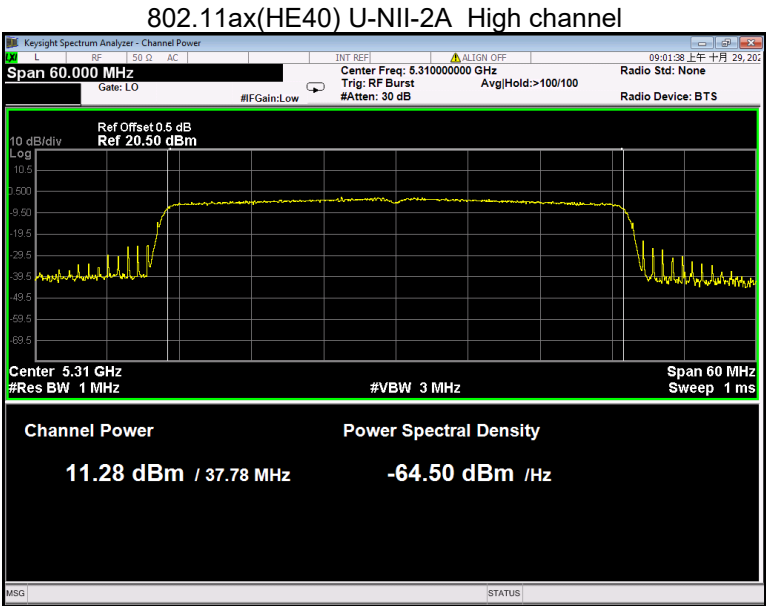
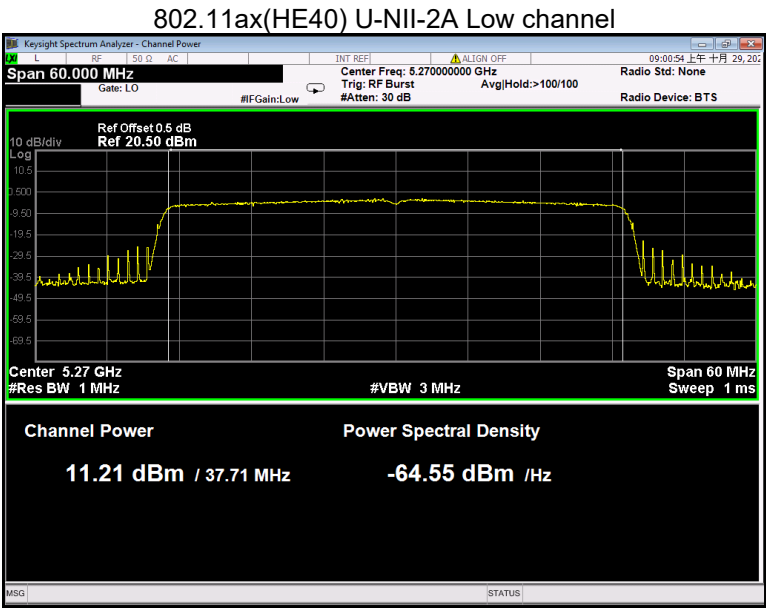


802.11ax(HE20) U-NII-2A Middle channel

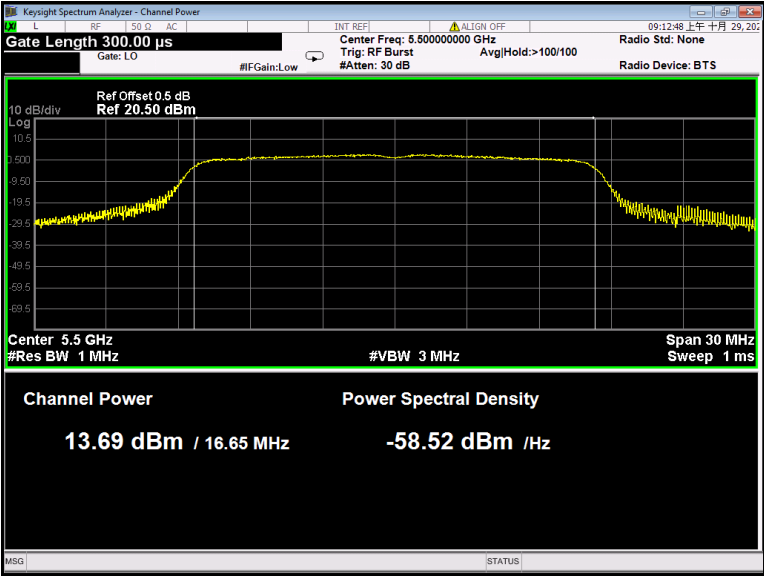


802.11ax(HE20) U-NII-2A High channel

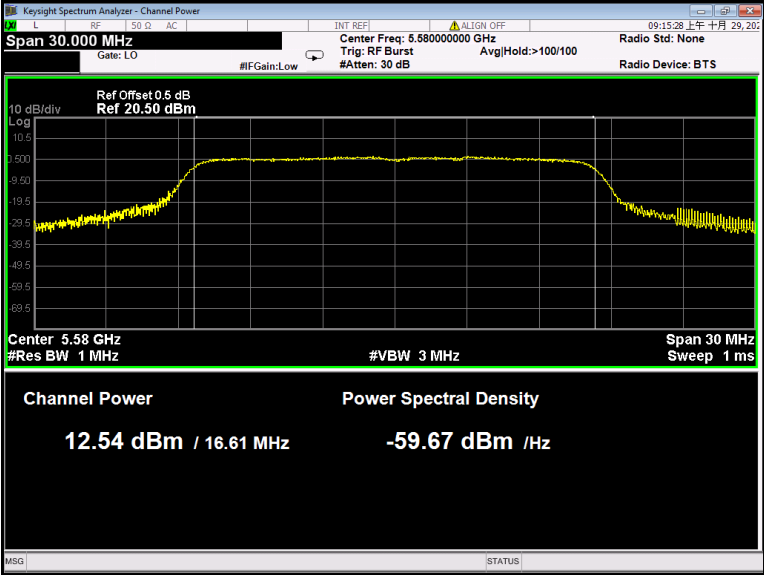




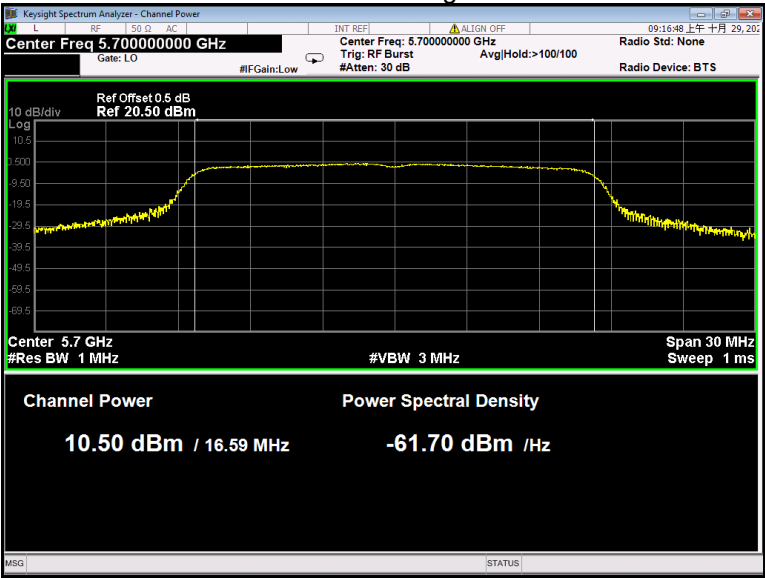
802.11a U-NII-2C Low channel



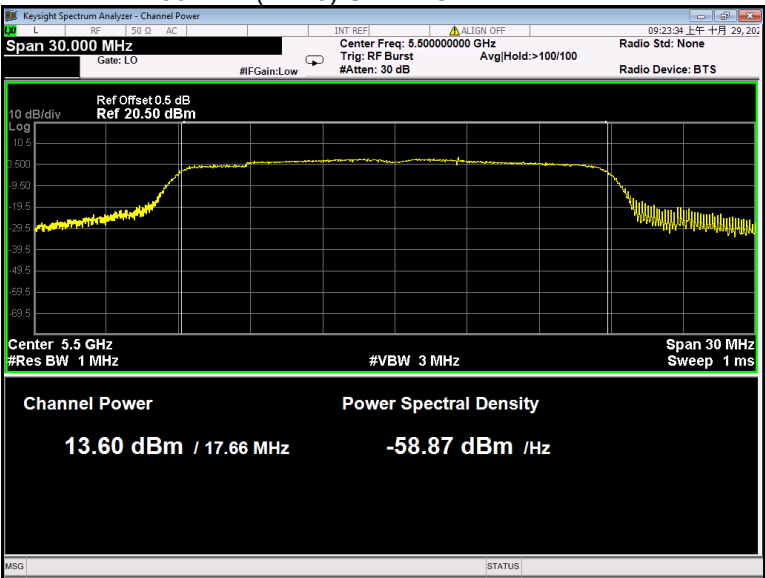
802.11a U-NII-2C Middle channel



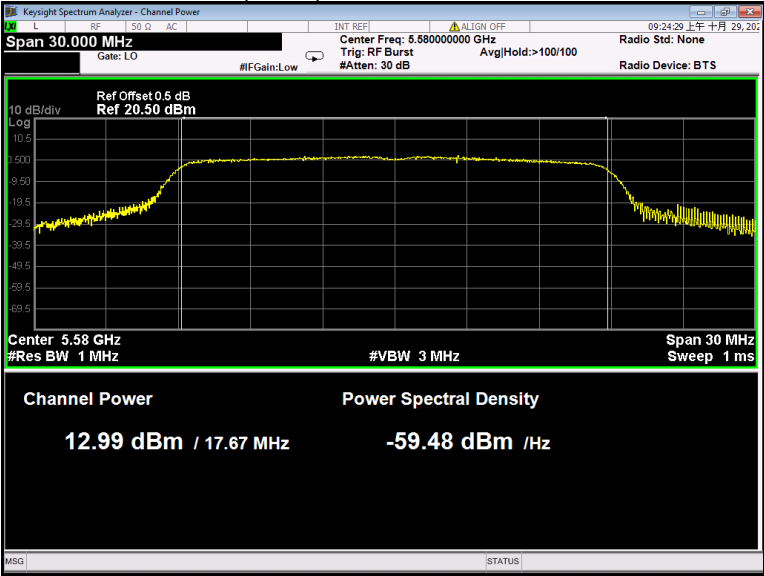
802.11a U-NII-2C High channel



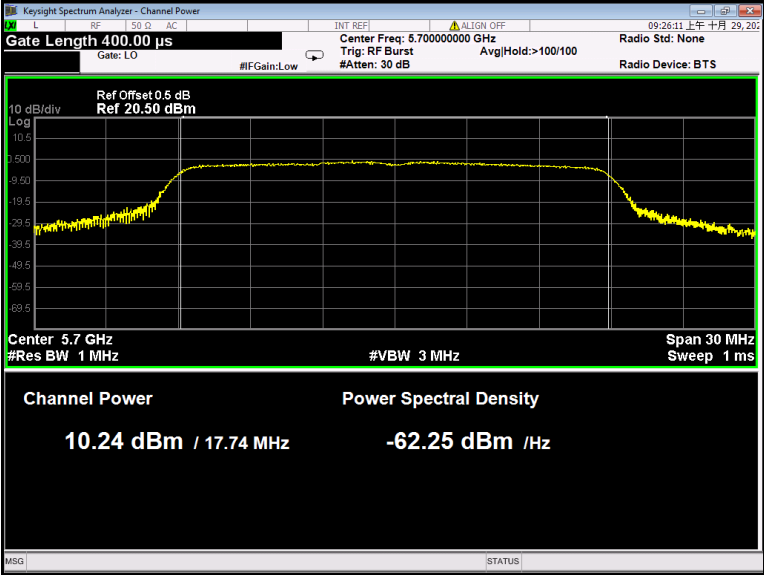
802.11n(HT20) U-NII-2C Low channel



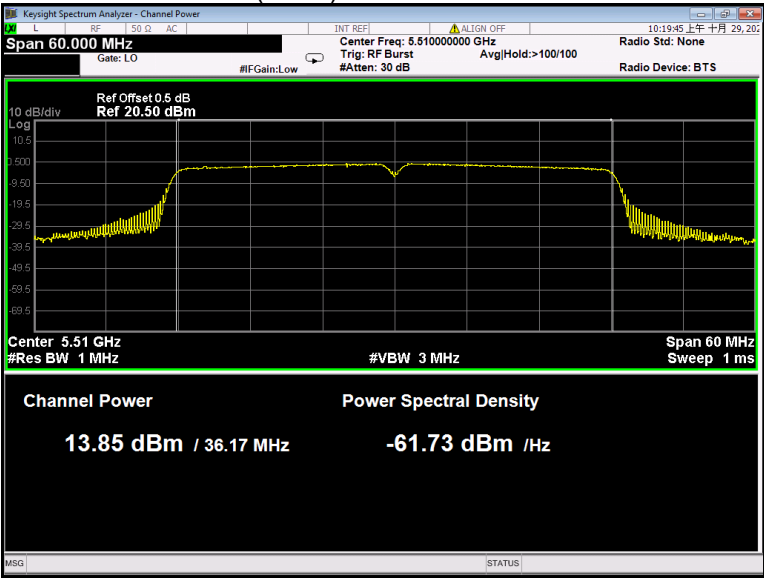
802.11n(HT20) U-NII-2C Middle channel



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



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



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

