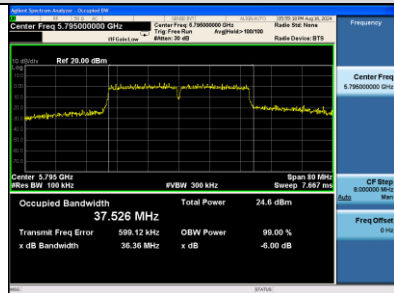
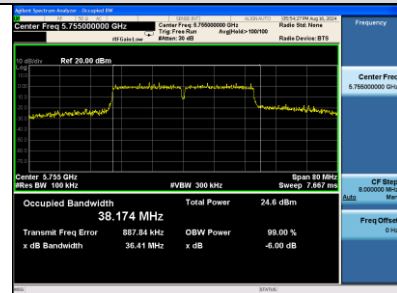
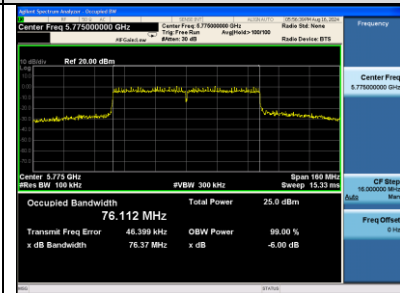


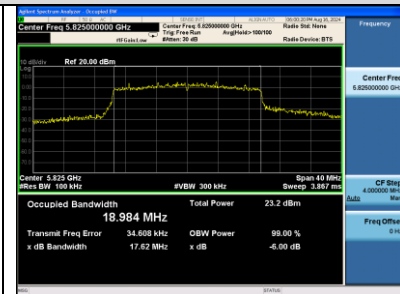
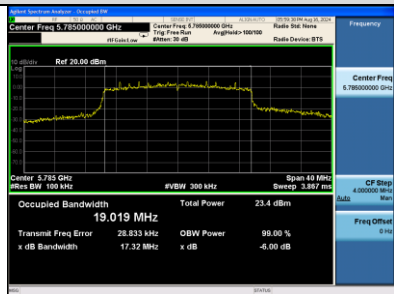
IEEE 802.11ac VHT40



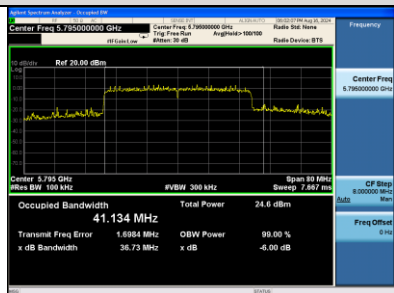
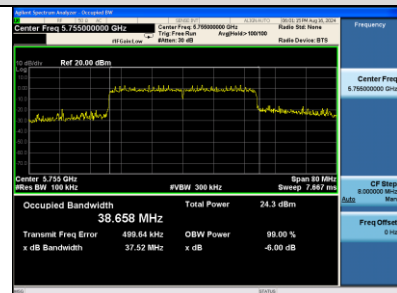
IEEE 802.11ac VHT80



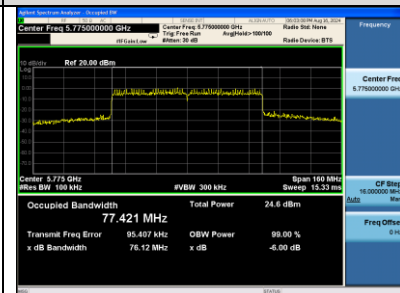
IEEE 802.11ax HE20



IEEE 802.11ax HE40



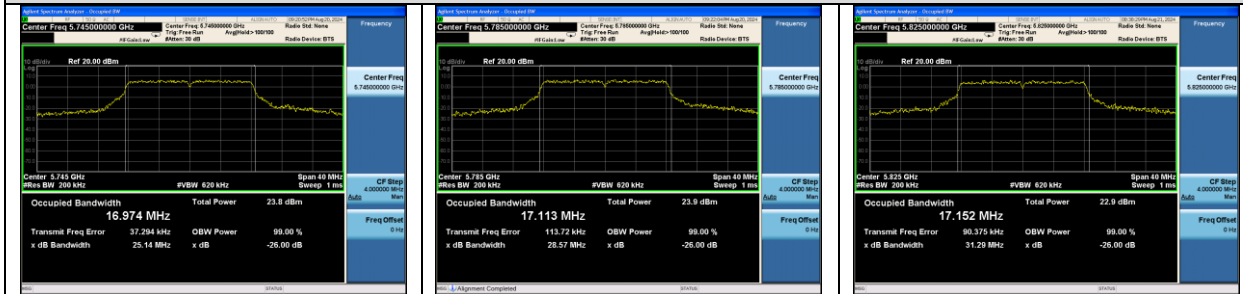
IEEE 802.11ax HE80



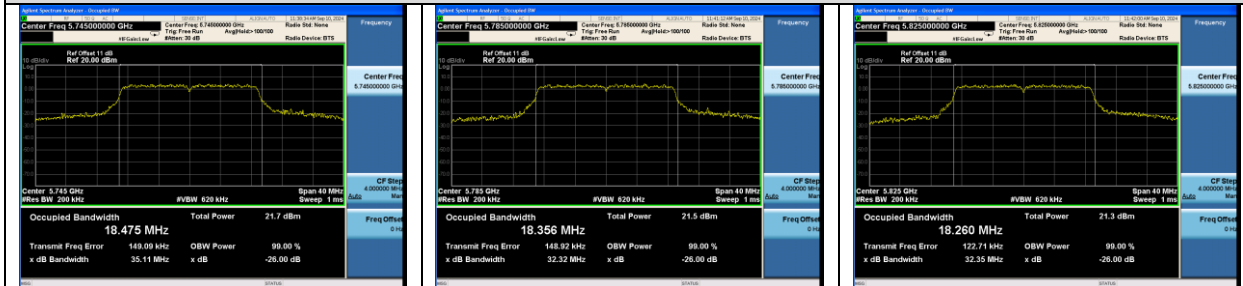
26dB bandwidth & 99% Occupied bandwidth

U-NII-3 Band: ANT 0

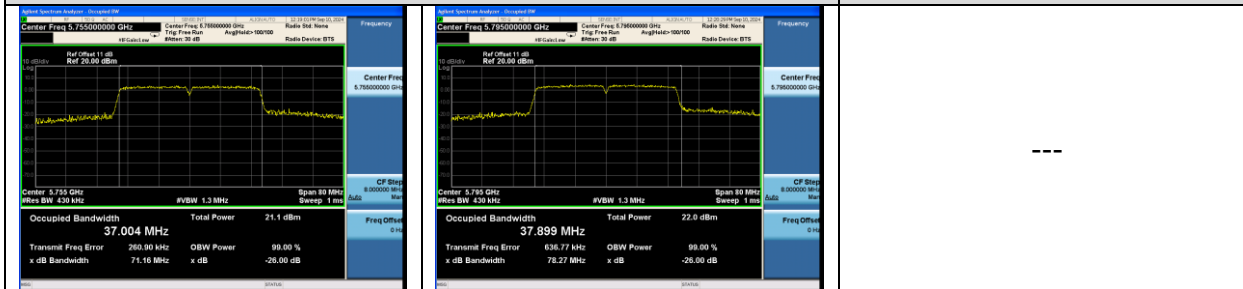
IEEE 802.11a



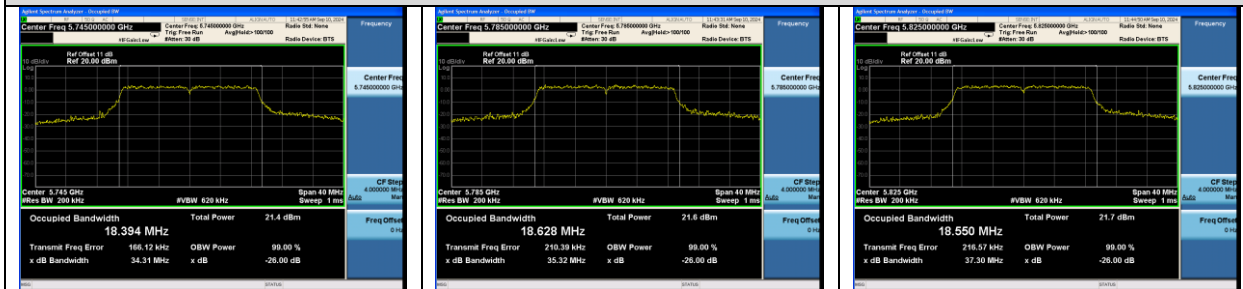
IEEE 802.11n HT20

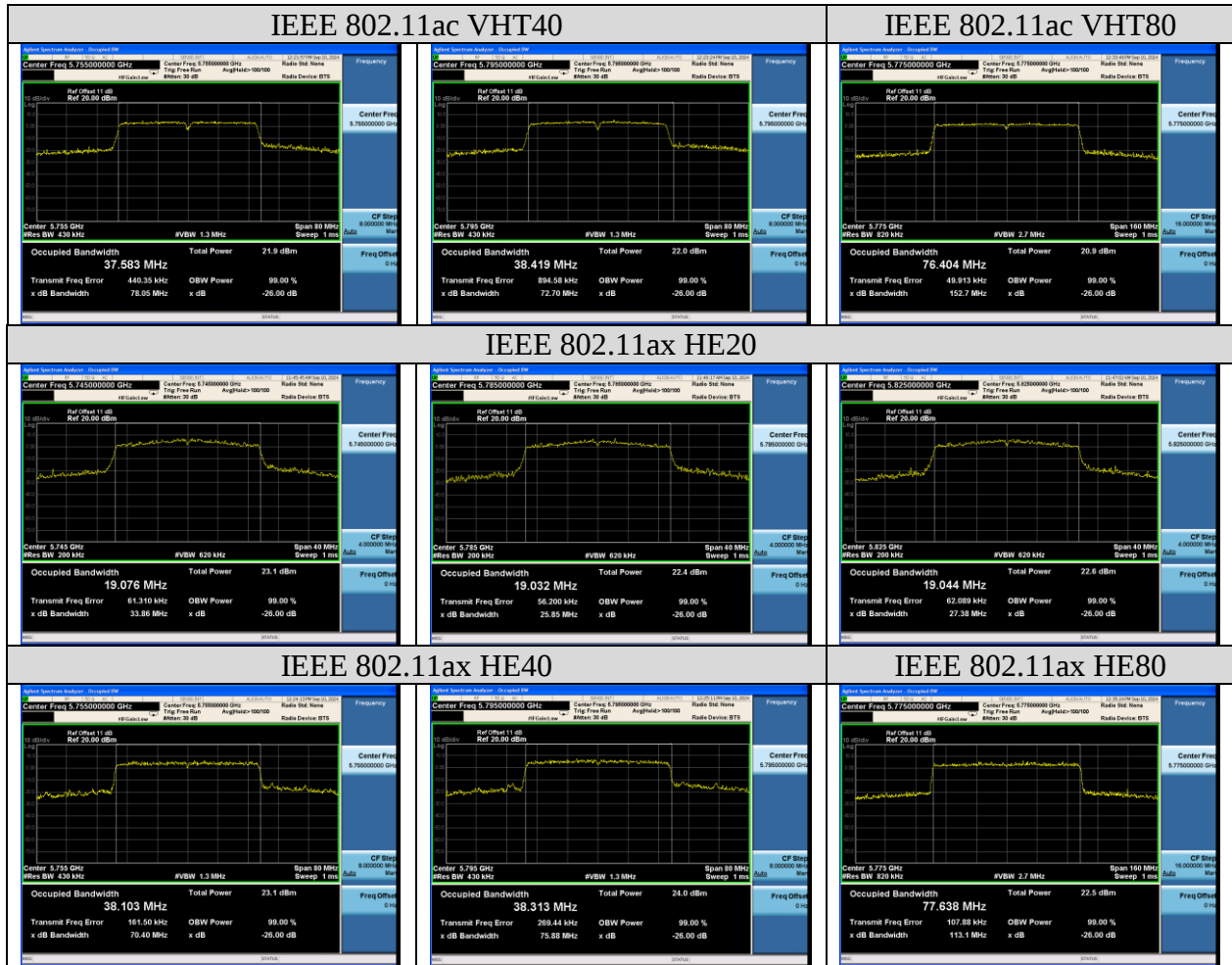


IEEE 802.11n HT40



IEEE 802.11ac VHT20

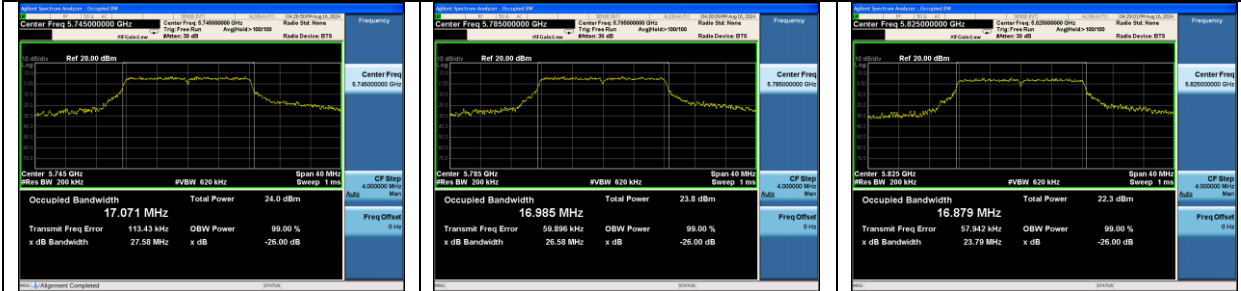




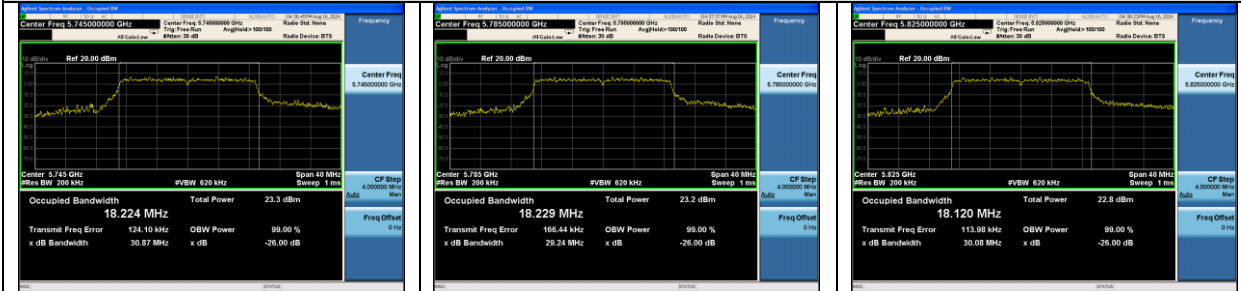
26dB bandwidth & 99% Occupied bandwidth

U-NII-3 Band: ANT 1

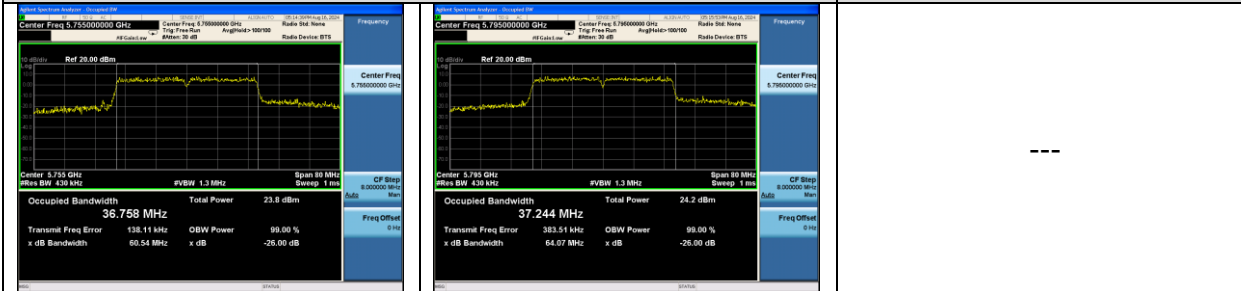
IEEE 802.11a



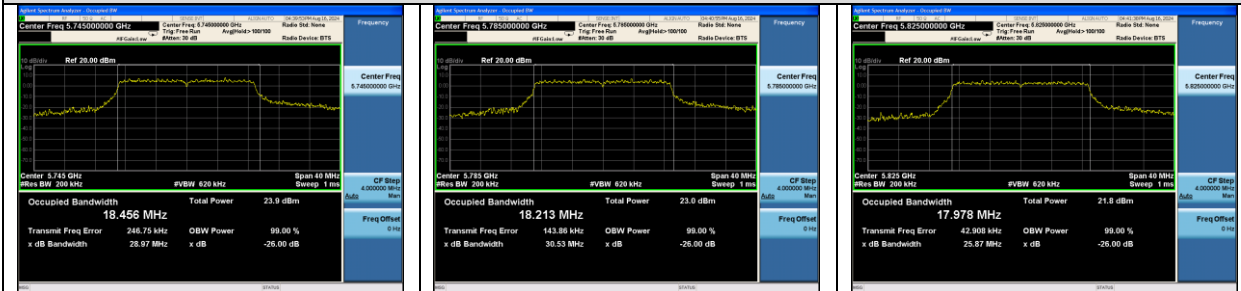
IEEE 802.11n HT20



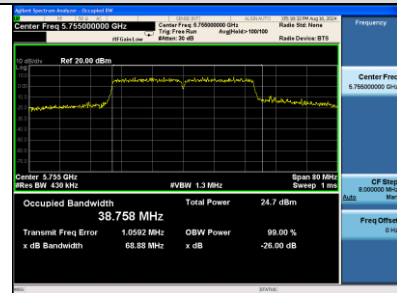
IEEE 802.11n HT40



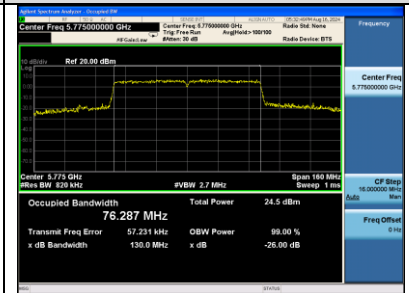
IEEE 802.11ac VHT20



IEEE 802.11ac VHT40



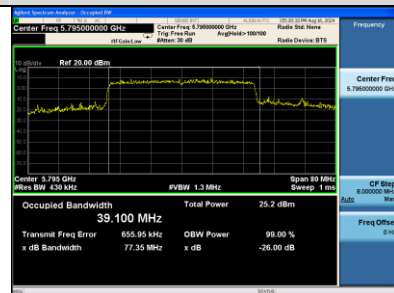
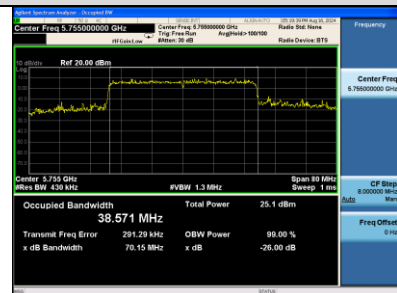
IEEE 802.11ac VHT80



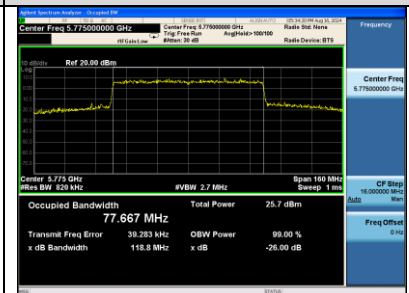
IEEE 802.11ax HE20



IEEE 802.11ax HE40



IEEE 802.11ax HE80



7. OUTPUT POWER TEST

7.1.Limit

For the band 5.15–5.25 GHz.

For mobile and portable 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, 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 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

7.2.Test Procedure

1. Connected the EUT's antenna port to measure device by 20dB attenuator.
2. Use the test method described in ANSI C63.10 clause 12.3 Method SA-1
 - 1) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
 - 2) Set RBW = 1 MHz.
 - 3) Set VBW $\geq$ 3 MHz.
 - 4) Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$.
 - 5) Sweep time = auto.
 - 6) Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
 - 7) If transmit duty cycle $< 98\%$, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must 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."
 - 8) Trace average at least 100 traces in power averaging (rms) mode.
 - 9) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

7.3.Test Results

EUT: STB		
M/N: H200W		
Test date: 2024-07-24~11-05	Pressure: 103.1±1.0 kpa	Humidity: 51.5±3.0%
Tested by: Epoch	Test site: RF site	Temperature: 22.5±0.6℃

U-NII-1 Band(SISO):

Test Mode	Frequency (MHz)	Power Setting	Channel Power	Duty Factor	Output Power (dBm)	Limit (dBm)
11a ANT0	5180	54	12.60	0.26	12.86	23.98
	5200		12.58		12.84	
	5240		13.03		13.29	
11a ANT1	5180	54	12.22	0.26	12.48	23.98
	5200		12.23		12.49	
	5240		13.09		13.35	
11n20 ANT0	5180	54	12.79	0.28	13.07	23.98
	5200		12.62		12.90	
	5240		13.03		13.31	
11n20 ANT1	5180	54	12.74	0.25	12.99	23.98
	5200		12.55		12.80	
	5240		12.95		13.20	
11n40 ANT0	5190	48	10.68	0.57	11.25	23.98
	5230		11.18		11.75	
11n40 ANT1	5190	48	10.39	0.57	10.96	23.98
	5230		10.94		11.51	
11ac20 ANT0	5180	54	12.84	0.01	12.85	23.98
	5200		12.96		12.97	
	5240		13.47		13.48	
11ac20 ANT1	5180	54	12.76	0.01	12.77	23.98
	5200		13.01		13.02	
	5240		13.41		13.42	
11ac40 ANT0	5190	44	10.16	0.03	10.19	23.98
	5230		10.84		10.87	

11ac40 ANT1	5190	44	9.94	0.03	9.97	23.98
	5230		10.40		10.43	
11ac80 ANT0	5210	44	9.91	0.15	10.06	23.98
11ac80 ANT1	5210	44	9.72	0.09	9.81	
11ax20 ANT0	5180	54	12.53	0.34	12.87	23.98
	5200		12.70		13.04	
	5240		13.15		13.49	
11ax20 ANT1	5180	54	12.62	0.34	12.96	23.98
	5200		12.66		13.00	
	5240		12.93		13.27	
11ax40 ANT0	5190	48	11.36	0.64	12.00	23.98
	5230		10.85		11.49	
11ax40 ANT1	5190	48	10.59	0.59	11.18	23.98
	5230		10.84		11.43	
11ax80 ANT0	5210	40	8.01	1.18	9.19	23.98
11ax80 ANT1	5210	40	7.71	1.20	8.91	
Conclusion : PASS						

U-NII-1 Band(MIMO):

Test Mode	Frequency (MHz)	Power Setting		Channel Power		Duty Factor		Output Power (dBm)	Limit (dBm)
		ANT0	ANT1	ANT0	ANT1	ANT0	ANT1	Total	
11n20 MIMO	5180	54	54	12.48	12.16	0.28	0.25	15.60	23.98
	5200			12.56	12.34			15.73	
	5240			12.92	12.98			16.23	
11n40 MIMO	5190	48	48	10.79	10.14	0.57	0.57	14.06	
	5230			10.96	10.98			14.55	
11ac20 MIMO	5180	54	54	12.81	12.21	0.01	0.01	15.54	
	5200			12.83	12.65			15.76	
	5240			13.27	13.43			16.37	
11ac40 MIMO	5190	44	44	10.33	9.47	0.03	0.03	12.96	
	5230			10.55	10.20			13.42	
11ac80 MIMO	5210	44	44	9.94	9.57	0.15	0.09	12.89	
11ax20 MIMO	5180	54	54	12.54	12.18	0.34	0.34	15.71	
	5200			12.64	12.42			15.88	
	5240			13.05	13.08			16.42	
11ax40 MIMO	5190	48	48	11.04	10.12	0.64	0.59	14.23	
	5230			11.42	10.92			14.80	
11ax80 MIMO	5210	40	40	8.33	7.75	1.18	1.20	12.25	

Conclusion : PASS

Notes: 1. Directional Gain= $10 \log[(10^{3.1/10} + 10^{2.8/10})/2]$ dBi = 2.95dBi < 6dBi.

2. The transmit signals are completely uncorrelated.

U-NII-2A Band(SISO):

Test Mode	Frequency (MHz)	Power Set	Channel Power	Duty Factor	Output Power (dBm)	Limit (dBm)
11a (ANT0)	5260	58	14.15	0.26	14.41	23.98
	5300		14.10		14.36	
	5320		14.26		14.52	
11a (ANT1)	5260	58	14.05	0.26	14.31	
	5300		14.43		14.69	
	5320		14.11		14.37	
11n20 (ANT0)	5260	54	13.15	0.28	13.43	23.98
	5300		13.22		13.50	
	5320		13.18		13.46	
11n20 (ANT1)	5260	54	12.78	0.25	13.03	
	5300		12.62		12.87	
	5320		12.46		12.71	
11n40 (ANT0)	5270	40	9.07	0.57	9.64	
	5310		8.98		9.55	
11n40 (ANT1)	5270	40	8.59	0.57	9.16	
	5310		8.34		8.91	
11ac20 (ANT0)	5260	55	13.55	0.01	13.56	23.98
	5300		13.61		13.62	
	5320		13.64		13.65	
11ac20 (ANT1)	5260	55	13.18	0.01	13.19	23.98
	5300		13.24		13.25	
	5320		13.21		13.22	
11ac40 (ANT0)	5270	40	9.59	0.03	9.62	
	5310		9.83		9.86	
11ac40 (ANT1)	5270	40	9.29	0.03	9.32	
	5310		9.00		9.03	
11ac80 (ANT0)	5290	36	7.91	0.15	8.06	
11ac80 (ANT1)	5290	36	7.62	0.09	7.71	

11ax20 (ANT0)	5260	54	13.17	0.34	13.51	23.98
	5300		13.12		13.46	
	5320		13.22		13.56	
11ax20 (ANT1)	5260	54	12.81	0.34	13.15	
	5300		12.64		12.98	
	5320		12.64		12.98	
11ax40 (ANT0)	5270	32	7.07	0.64	7.71	
	5310		6.86		7.50	
11ax40 (ANT1)	5270	32	6.38	0.59	6.97	
	5310		6.12		6.71	
11ax80 (ANT0)	5290	34	6.68	1.18	7.86	
11ax80 (ANT1)	5290	34	6.20	1.20	7.40	
Conclusion : PASS						

U-NII-2A Band(MIMO):

Test Mode	Frequency (MHz)	Power Setting		Channel Power		Duty Factor		Output Power (dBm)	Limit (dBm)
		ANT0	ANT1	ANT0	ANT1	ANT0	ANT1	Total	
11n20	5260	54	54	13.09	13.14	0.28	0.25	16.390	23.98
	5300			13.04	13.03			16.310	
	5320			12.96	13.12			16.316	
11n40	5270	40	40	9.04	9.07	0.57	0.57	12.635	
	5310			9.86	9.15			13.100	
11ac20	5260	55	55	13.54	13.76	0.01	0.01	16.672	
	5300			13.68	13.51			16.616	
	5320			13.49	13.45			16.490	
11ac40	5270	40	40	9.67	9.56	0.03	0.03	12.656	
	5310			9.53	9.60			12.605	
11ac80	5290	36	36	8.03	8.23	0.15	0.09	11.261	23.98
11ax20	5260	54	54	12.99	13.21	0.34	0.34	16.452	
	5300			13.04	13.15			16.446	
	5320			13.07	13.03			16.400	
11ax40	5270	32	32	7.10	6.90	0.64	0.59	10.627	
	5310			7.05	6.70			10.505	
11ax80	5290	34	34	6.83	6.84	1.18	1.20	11.035	
Conclusion : PASS									

Notes: 1. Directional Gain= $10 \log[(10^{3.2/10} + 10^{3.2/10})/2]$ dBi = 3.2dBi < 6dBi.

2. The transmit signals are completely uncorrelated.

U-NII-2C Band(SISO):

Test Mode	Frequency (MHz)	Power Set	Channel Power	Duty Factor	Output Power (dBm)	Limit (dBm)
11a ANT0	5500	40	9.31	0.26	9.57	23.98
	5600		8.08		8.34	
	5700		8.53		8.79	
11a ANT1	5500	40	10.20	0.26	10.46	23.98
	5600		8.89		9.15	
	5700		8.51		8.77	
11n20 ANT0	5500	36	8.61	0.28	8.89	23.98
	5600		7.85		8.13	
	5700		7.79		8.07	
11n20 ANT1	5500	36	8.62	0.25	8.87	23.98
	5600		7.69		7.94	
	5700		7.27		7.52	
11n40 ANT0	5510	36	7.93	0.57	8.50	23.98
	5590		7.39		7.96	
	5670		7.04		7.61	
11n40 ANT1	5510	36	8.04	0.57	8.61	23.98
	5590		7.25		7.82	
	5670		6.55		7.12	
11ac20 ANT0	5500	36	8.80	0.01	8.81	23.98
	5600		8.07		8.08	
	5700		8.17		8.18	
11ac20 ANT1	5500	36	8.93	0.01	8.94	23.98
	5600		8.02		8.03	
	5700		7.66		7.67	
11ac40 ANT0	5510	34	8.01	0.03	8.04	23.98
	5590		7.11		7.14	
	5670		7.06		7.09	
11ac40 ANT1	5510	34	7.95	0.03	7.98	23.98
	5590		7.19		7.22	
	5670		6.50		6.53	

11ac80 ANT0	5530	38	8.43	0.15	8.58	23.98
	5610		7.68		7.83	
11ac80 ANT1	5530	38	8.45	0.09	8.60	23.98
	5610		7.42		7.57	
11ax20 ANT0	5500	38	9.03	0.34	9.37	23.98
	5600		8.17		8.51	
	5700		8.21		8.55	
11ax20 ANT1	5500	38	9.17	0.34	9.51	23.98
	5600		8.14		8.48	
	5700		7.79		8.13	
11ax40 ANT0	5510	34	7.60	0.66	8.24	23.98
	5590		6.78		7.42	
	5670		6.58		7.22	
11ax40 ANT1	5510	34	7.54	0.59	8.13	23.98
	5590		6.67		7.26	
	5670		6.08		6.67	
11ax80 ANT0	5530	38	7.62	1.18	8.80	23.98
	5610		6.86		8.04	
11ax80 ANT1	5530	38	7.67	1.20	8.87	23.98
	5610		6.56		7.76	
Conclusion : PASS						

U-NII-2C Band(MIMO):

Test Mode	Frequency (MHz)	Power Setting		Channel Power		Duty Factor		Output Power (dBm)	Limit (dBm)
		ANT0	ANT1	ANT0	ANT1	ANT0	ANT1	Total	
11n20 MIMO	5500	36	36	8.57	8.99	0.28	0.25	12.06	23.98
	5600			7.32	7.85			10.87	23.98
	5700			7.69	7.53			10.89	23.98
11n40 MIMO	5510	36	36	7.87	8.60	0.57	0.57	11.83	23.98
	5590			6.71	7.48			10.69	23.98
	5670			6.64	6.70			10.25	23.98
11ac20 MIMO	5500	36	36	8.66	9.39	0.01	0.01	12.06	23.98
	5600			7.59	8.20			10.93	23.98
	5700			7.93	7.88			10.93	23.98
11ac40 MIMO	5510	34	34	7.78	8.64	0.03	0.03	11.27	23.98
	5590			6.59	7.61			10.17	23.98
	5670			6.54	6.58			9.60	23.98
11ac80 MIMO	5530	38	38	8.14	9.00	0.15	0.09	11.72	23.98
	5610			7.20	7.84			10.66	23.98
11ax20 MIMO	5500	38	38	8.80	9.47	0.34	0.34	12.50	23.98
	5600			7.64	8.34			11.35	23.98
	5700			8.14	8.01			11.43	23.98
11ax40 MIMO	5510	34	34	7.39	7.85	0.64	0.59	11.25	23.98
	5590			6.29	7.13			10.35	23.98
	5670			6.23	6.38			9.93	23.98
11ax80 MIMO	5530	38	38	7.34	8.16	1.18	1.20	11.97	23.98
	5610			6.38	6.80			10.80	23.98

Conclusion : PASS

Notes: 1. Directional Gain= $10 \log[(10^{3.4/10} + 10^{3.4/10})/2]$ dBi = 3.4dBi < 6dBi.

2. The transmit signals are completely uncorrelated.

U-NII-3 Band(SISO):

Test Mode	Frequency (MHz)	Power Set	Channel Power	Duty Factor	Output Power (dBm)	Limit (dBm)
11a ANT0	5745	58	14.45	0.26	14.71	30
	5785		14.91		15.17	
	5825		14.53		14.79	
11a ANT1	5745	58	14.37	0.26	14.63	
	5785		14.56		14.82	
	5825		14.80		15.06	
11n20 ANT0	5745	58	14.18	0.28	14.46	30
	5785		14.19		14.47	
	5825		14.05		14.33	
11n20 ANT1	5745	58	13.75	0.25	14.00	
	5785		13.90		14.15	
	5825		13.90		14.15	
11n40 ANT0	5755	58	14.06	0.57	14.63	
	5795		14.17		14.74	
11n40 ANT1	5755	58	13.91	0.57	14.48	
	5795		14.11		14.68	
11ac20 ANT0	5745	58	14.54	0.01	14.55	30
	5785		14.57		14.58	
	5825		14.35		14.36	
11ac20 ANT1	5745	58	14.11	0.01	14.12	
	5785		14.28		14.29	
	5825		15.01		15.02	

11ac40 ANT0	5755	58	14.74	0.03	14.77	30
	5795		14.62		14.65	
11ac40 ANT1	5755	58	14.45	0.03	14.48	
	5795		14.63		14.66	
11ac80 ANT0	5775	56	13.31	0.15	13.46	
11ac80 ANT1	5775	56	13.35	0.09	13.44	
11ax20 ANT0	5745	58	14.03	0.34	14.37	30
	5785		14.29		14.63	
	5825		13.95		14.29	
11ax20 ANT1	5745	58	13.83	0.34	14.17	
	5785		13.92		14.26	
	5825		14.48		14.82	
11ax40 ANT0	5755	58	14.17	0.64	14.81	
	5795		14.16		14.80	
11ax40 ANT1	5755	58	13.88	0.59	14.47	
	5795		14.39		14.98	
11ax80 ANT0	5775	56	12.72	1.18	13.90	
11ax80 ANT1	5775	56	12.40	1.20	13.60	
Conclusion : PASS						

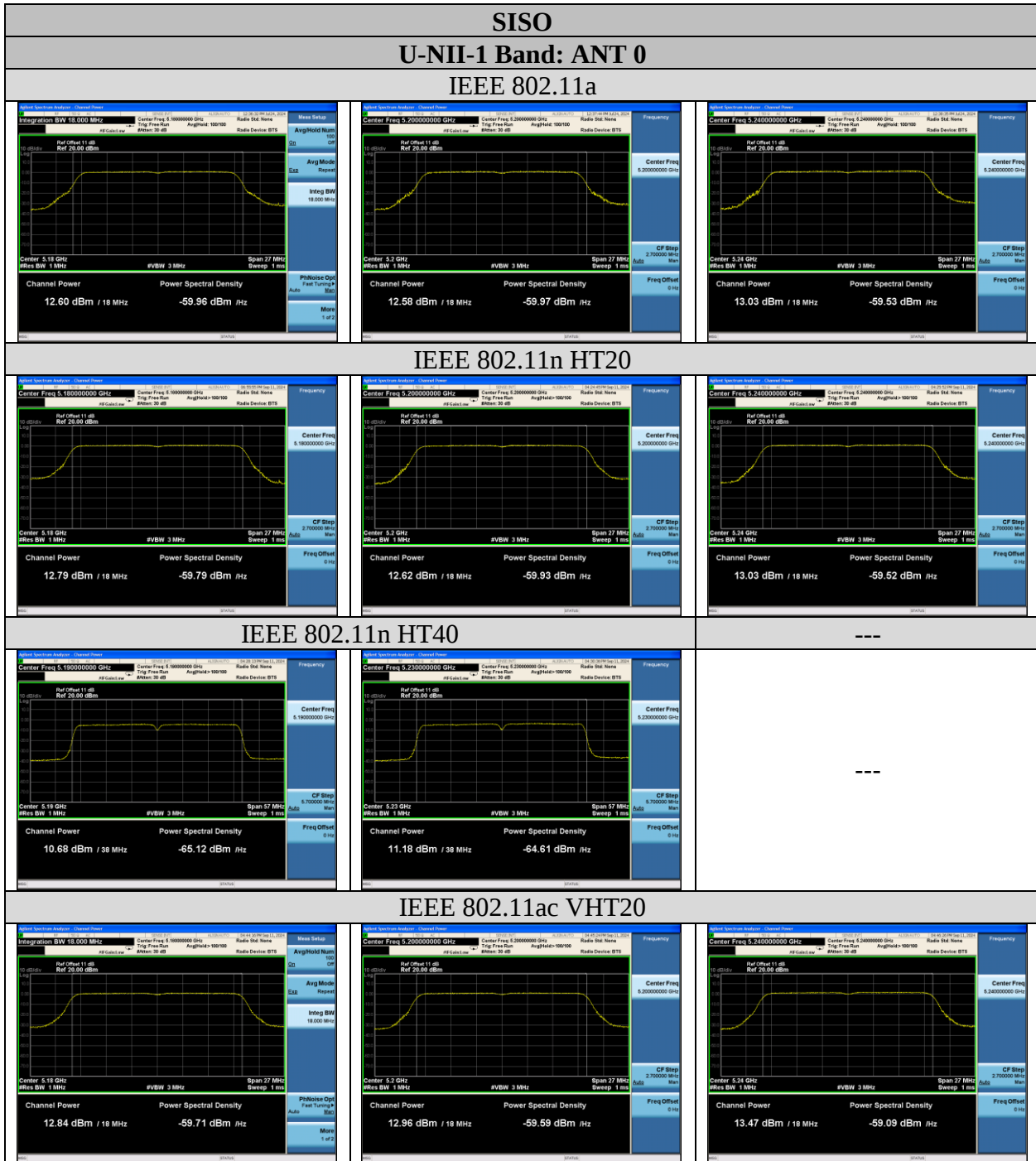
U-NII-3 Band(MIMO):

Test Mode	Frequency (MHz)	Power Setting		Channel Power		Duty Factor		Output Power (dBm)	Limit (dBm)
		ANT0	ANT1	ANT0	ANT1	ANT0	ANT1	Total	
11n20 MIMO	5745	58	58	14.62	14.52	0.28	0.25	17.85	30
	5785			14.66	14.49			17.85	
	5825			14.63	14.62			17.90	
11n40 MIMO	5755	58	58	14.52	14.32	0.57	0.57	18.00	
	5795			14.76	14.91			18.42	
11ac20 MIMO	5745	58	58	15.04	14.59	0.01	0.01	17.84	30
	5785			15.16	14.82			18.01	
	5825			14.74	15.09			17.94	
11ac40 MIMO	5755	58	58	14.79	14.78	0.03	0.03	17.83	
	5795			15.09	15.53			18.36	
11ac80 MIMO	5775	56	56	14.02	14.19	0.15	0.09	17.24	
11ax20 MIMO	5745	58	58	14.71	14.27	0.34	0.34	17.85	30
	5785			15.09	14.65			18.23	
	5825			14.44	14.72			17.93	
11ax40 MIMO	5755	58	58	14.75	14.54	0.64	0.59	18.27	
	5795			14.54	15.01			18.41	
11ax80 MIMO	5775	56	56	13.29	13.31	1.18	1.20	17.50	

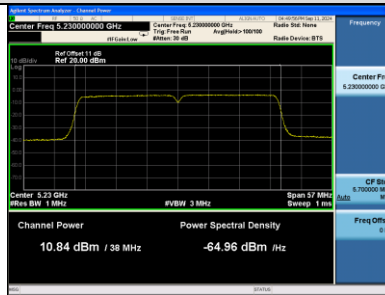
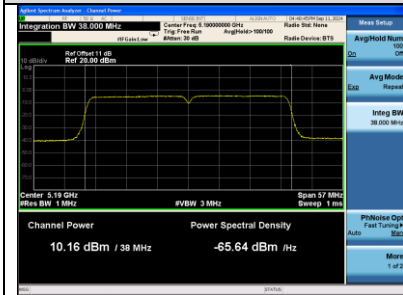
Conclusion : PASS

Notes: 1. Directional Gain= $10 \log[(10^{3/10} + 10^{3/10})/2]$ dBi = 3dBi < 6dBi.

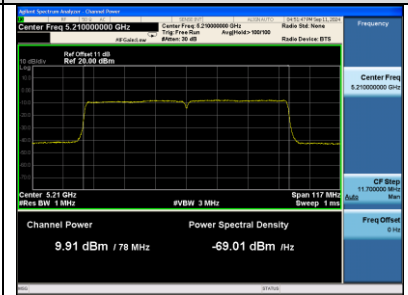
2. The transmit signals are completely uncorrelated.



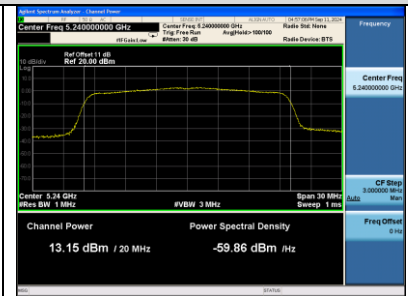
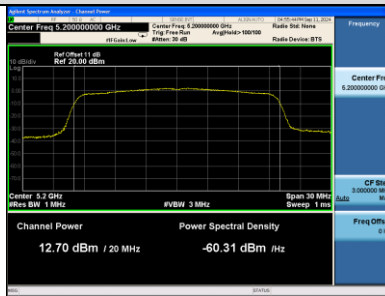
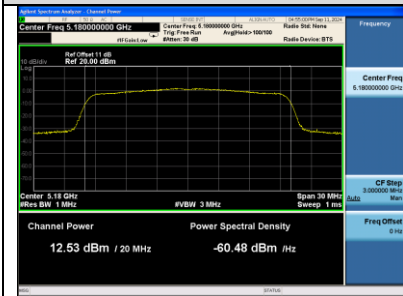
IEEE 802.11ac VHT40



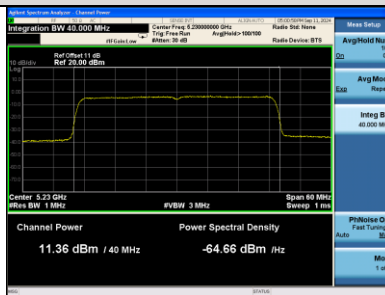
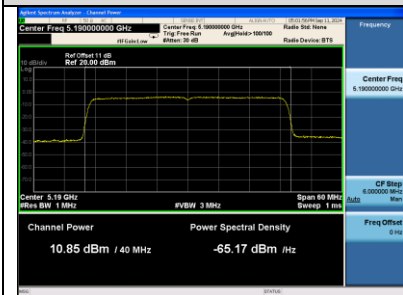
IEEE 802.11ac VHT80



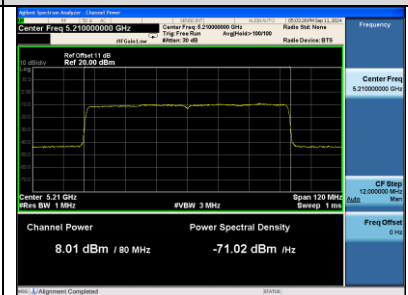
IEEE 802.11ax HE20

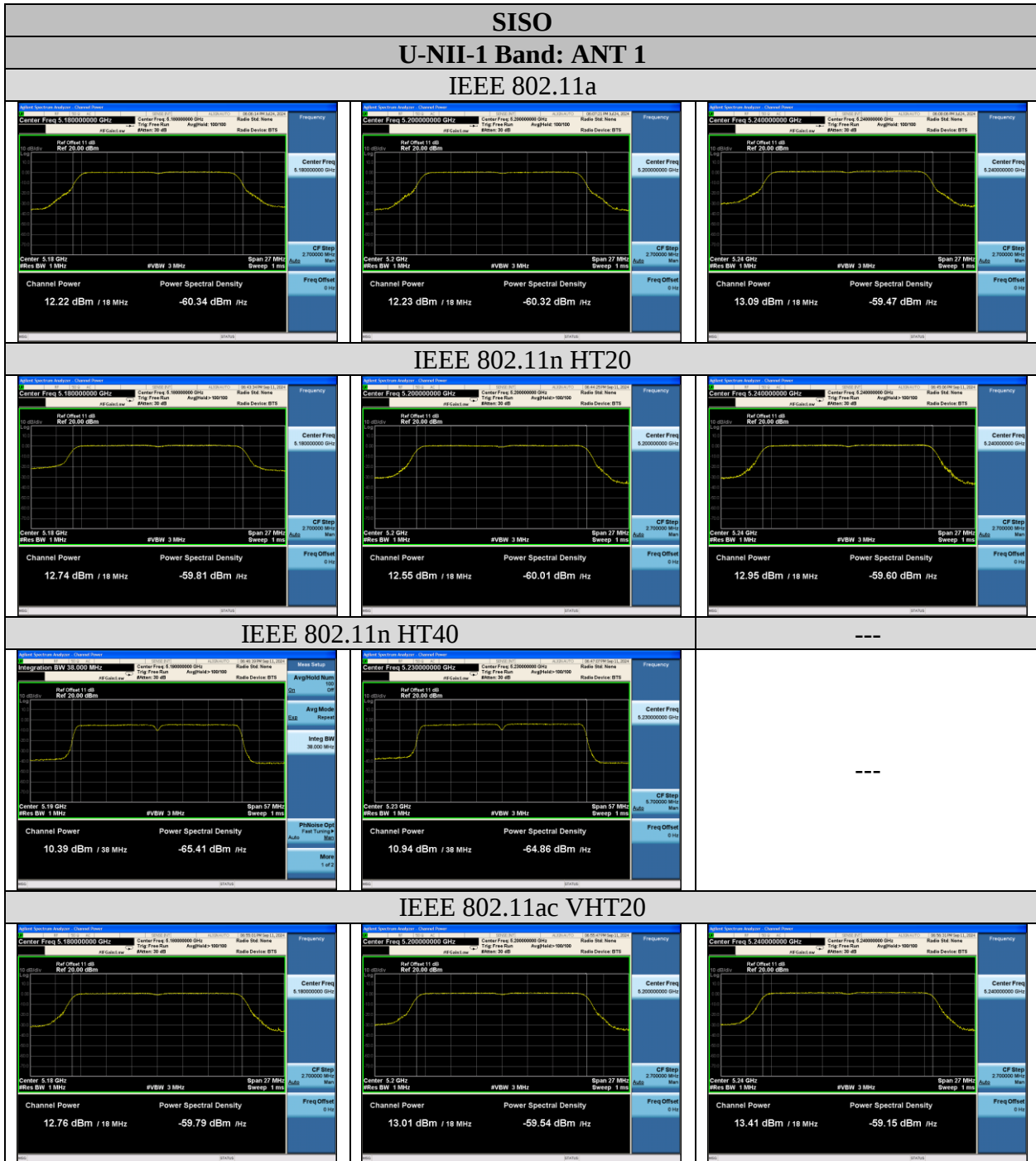


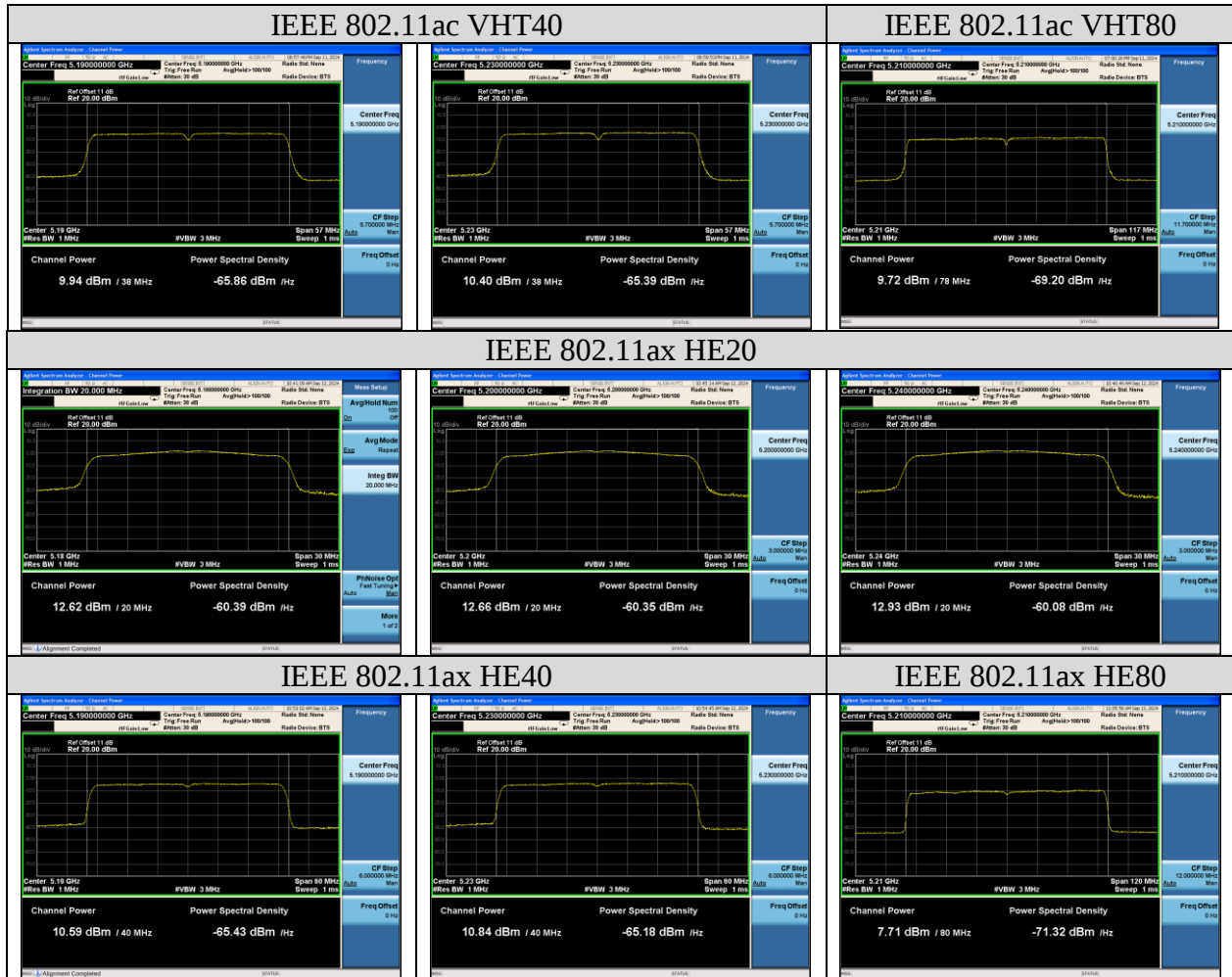
IEEE 802.11ax HE40



IEEE 802.11ax HE80



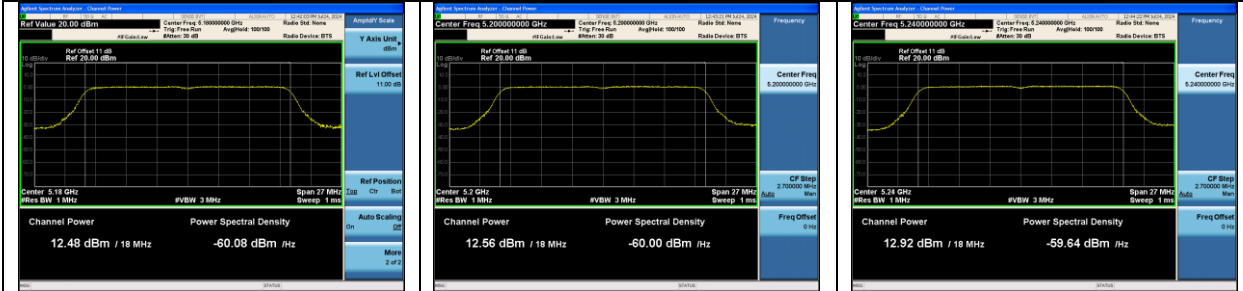




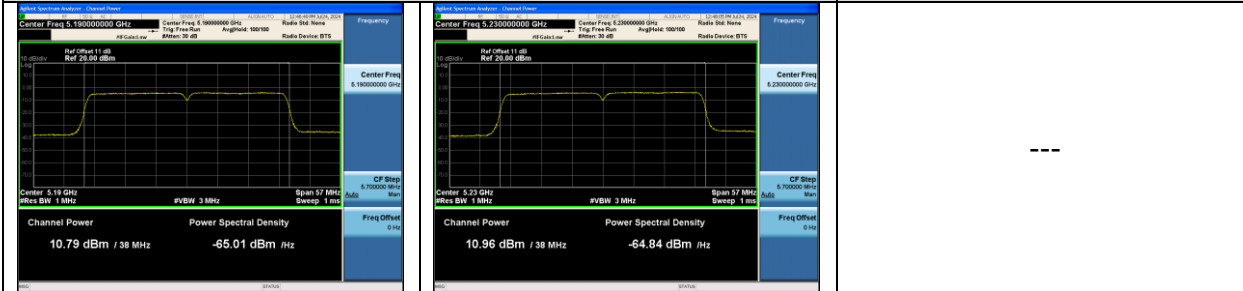
MIMO

U-NII-1 Band: ANT 0

IEEE 802.11n HT20

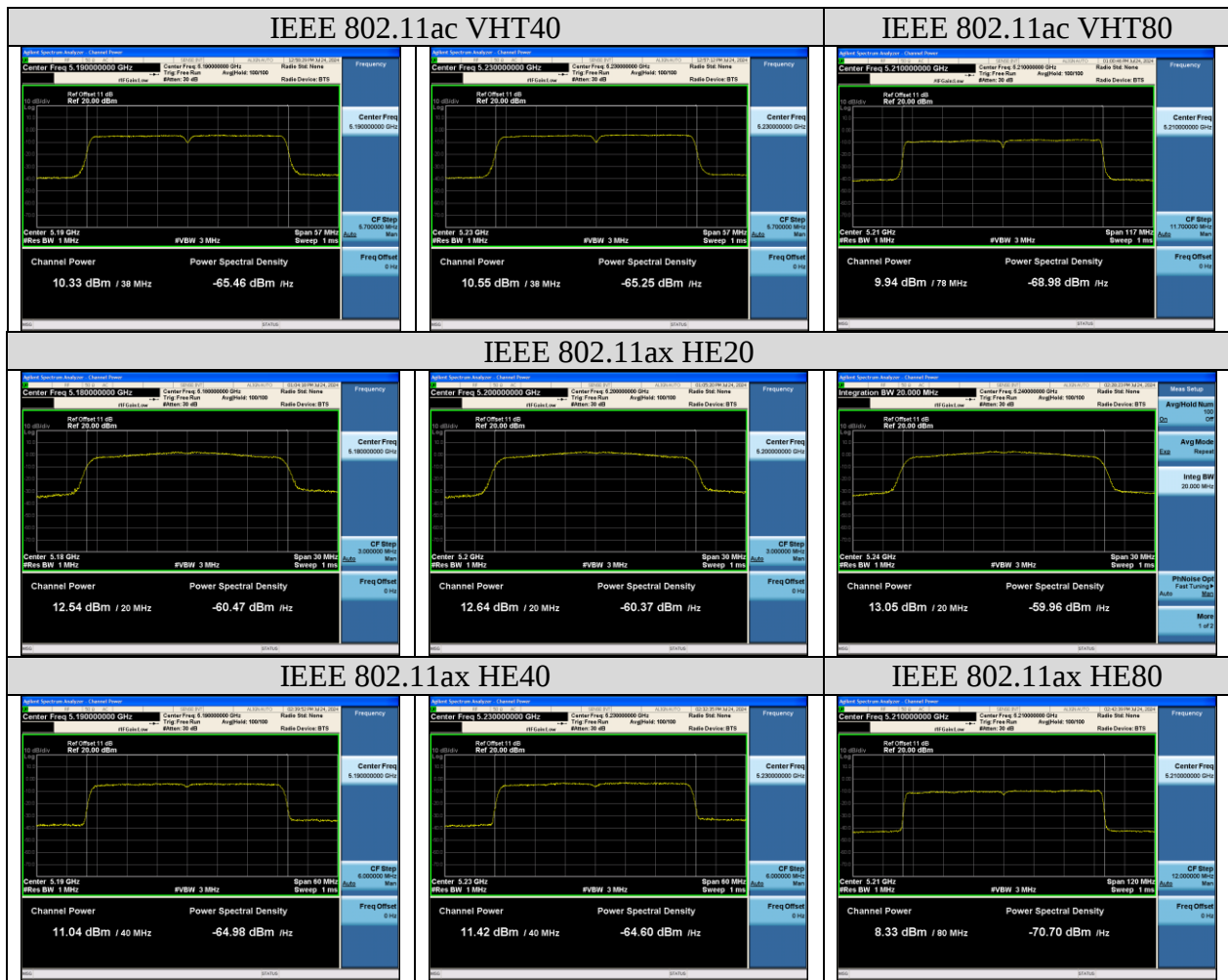


IEEE 802.11n HT40



IEEE 802.11ac VHT20

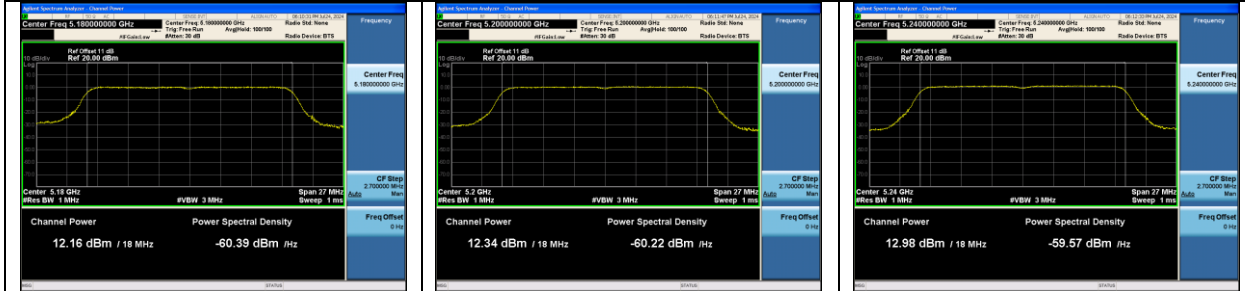




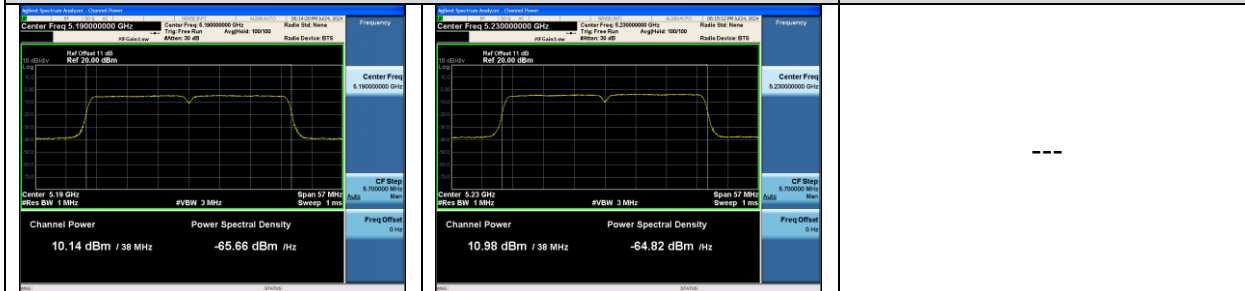
MIMO

U-NII-1 Band: ANT 1

IEEE 802.11n HT20



IEEE 802.11n HT40



IEEE 802.11ac VHT20

