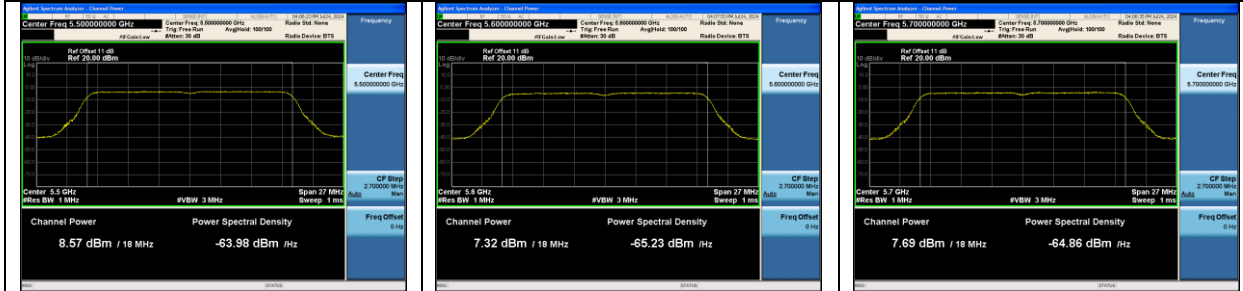


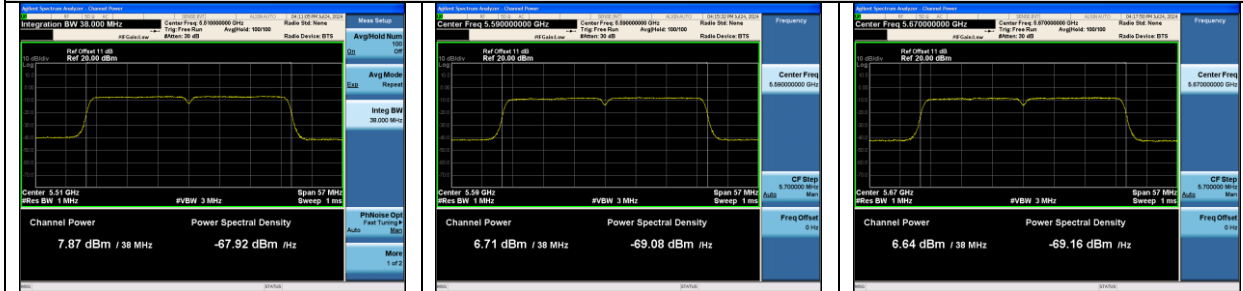
MIMO

U-NII-2C Band: ANT 0

IEEE 802.11n HT20



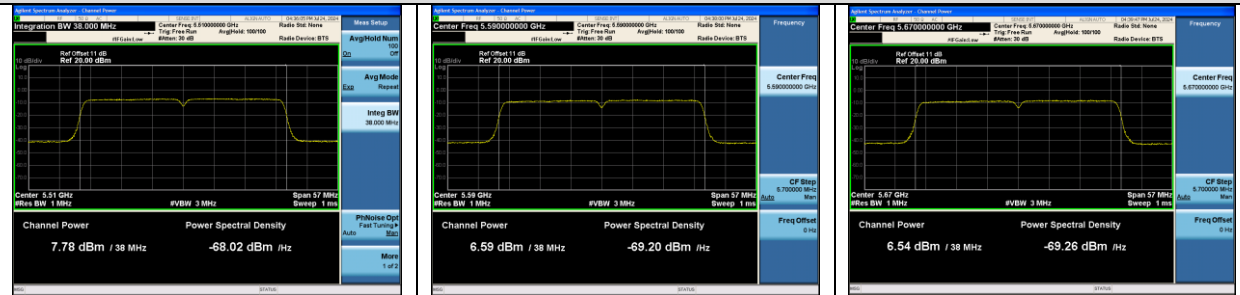
IEEE 802.11n HT40



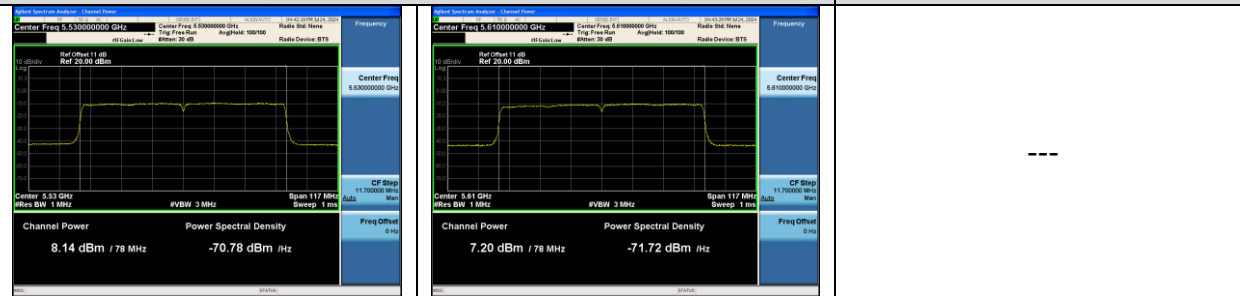
IEEE 802.11ac VHT20



IEEE 802.11ac VHT40



IEEE 802.11ac VHT80



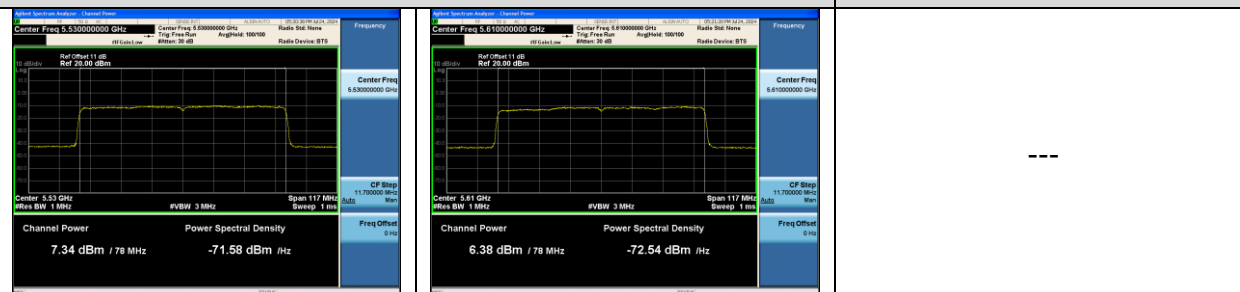
IEEE 802.11ax HE20



IEEE 802.11ax HE40



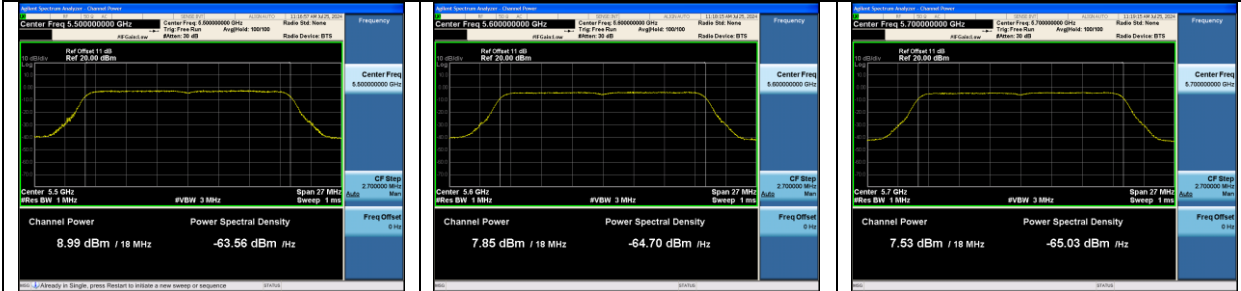
IEEE 802.11ax HE80



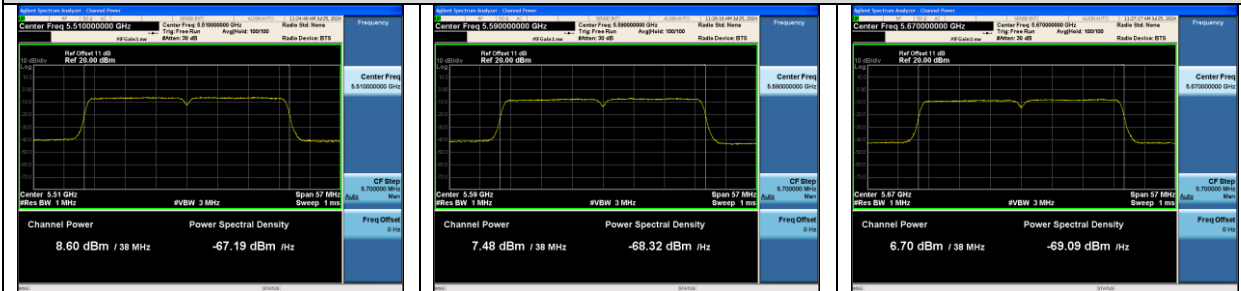
MIMO

U-NII-2C Band: ANT 1

IEEE 802.11n HT20



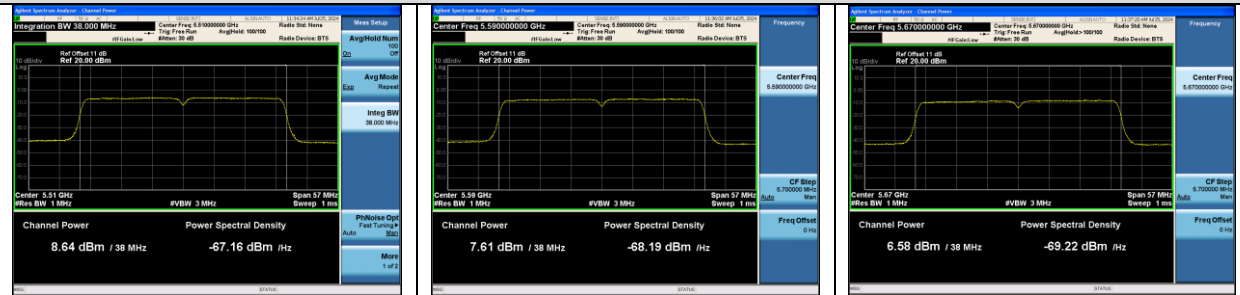
IEEE 802.11n HT40



IEEE 802.11ac VHT20



IEEE 802.11ac VHT40



IEEE 802.11ac VHT80



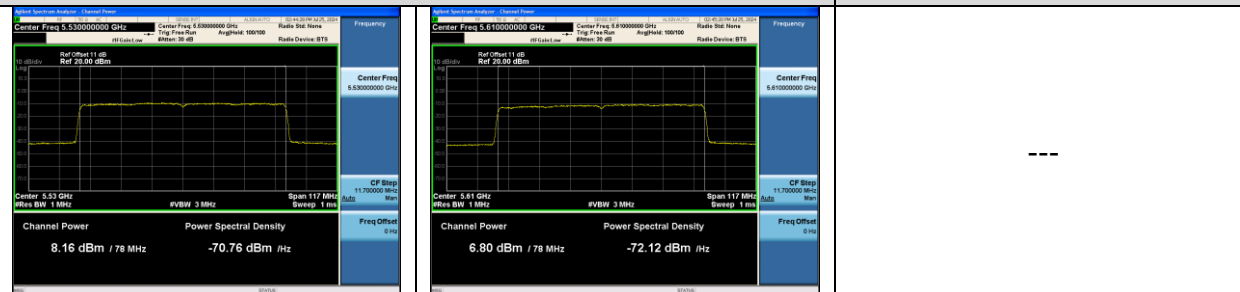
IEEE 802.11ax HE20

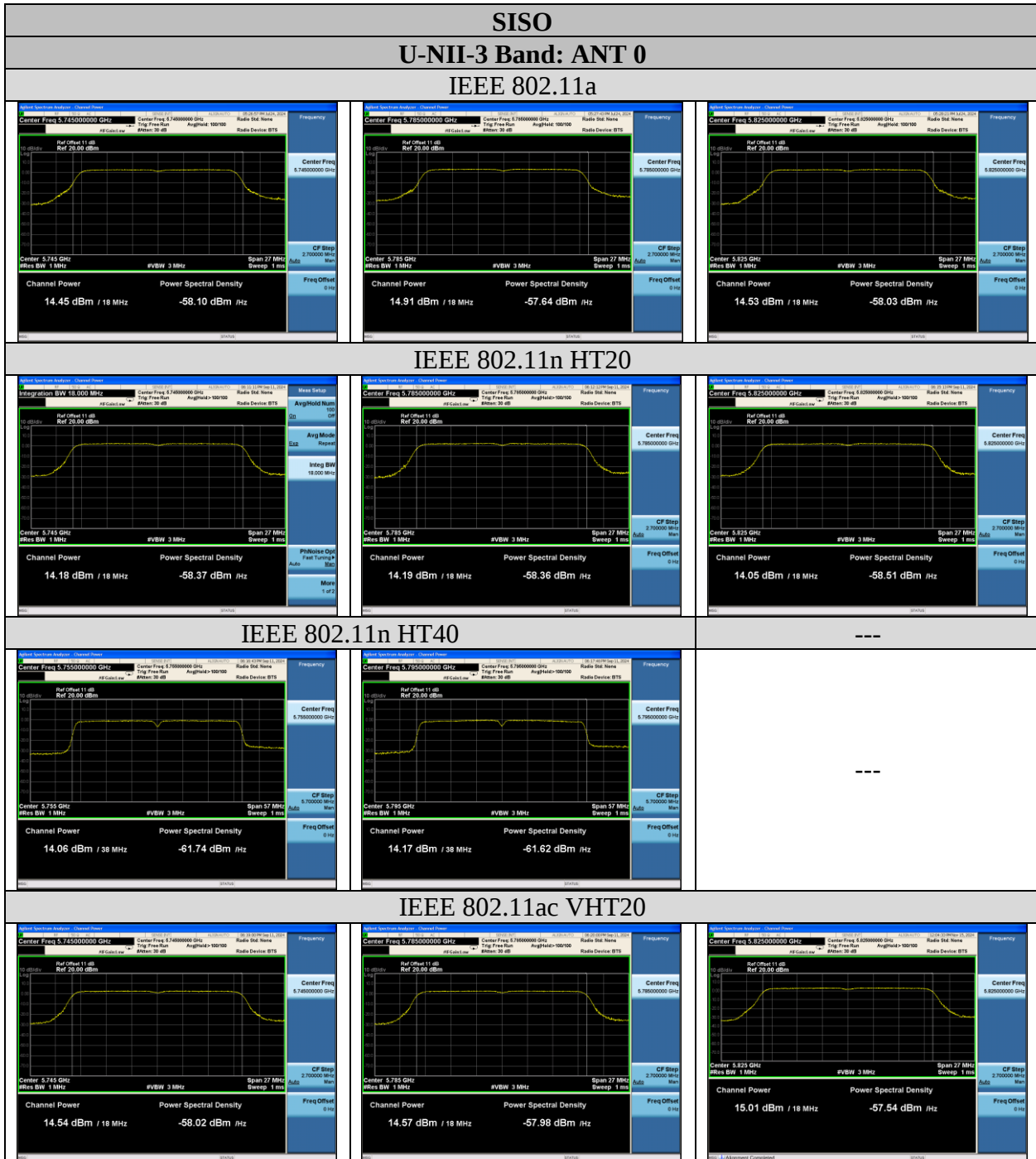


IEEE 802.11ax HE40

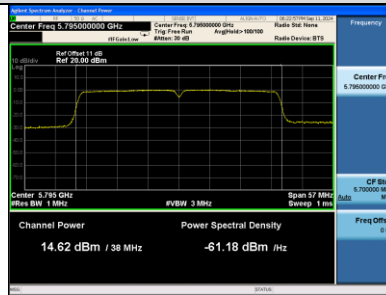
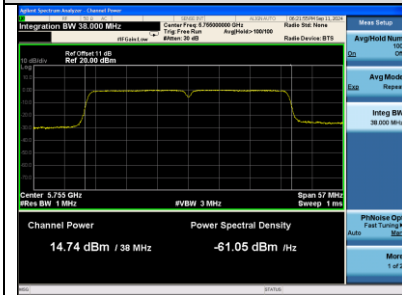


IEEE 802.11ax HE80

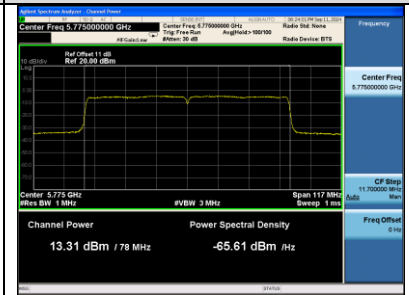




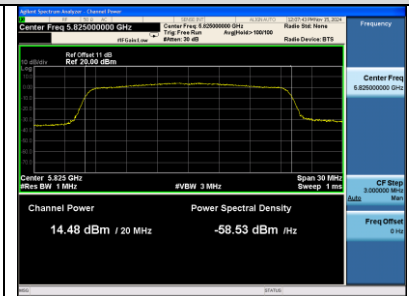
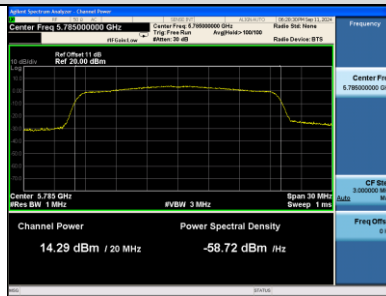
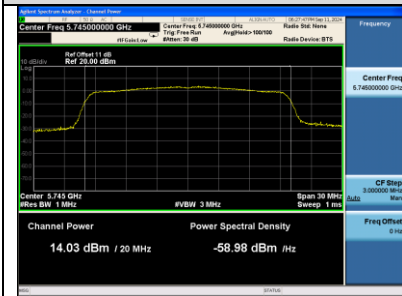
IEEE 802.11ac VHT40



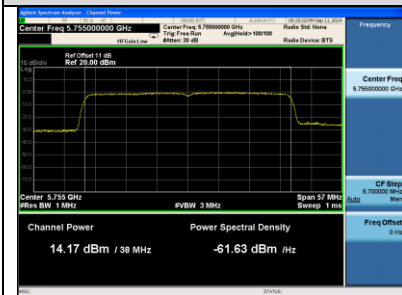
IEEE 802.11ac VHT80



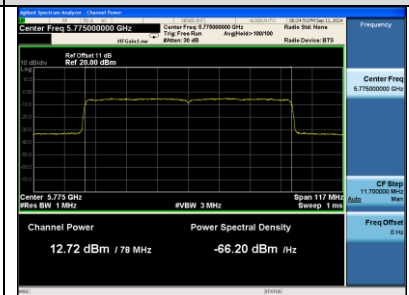
IEEE 802.11ax HE20

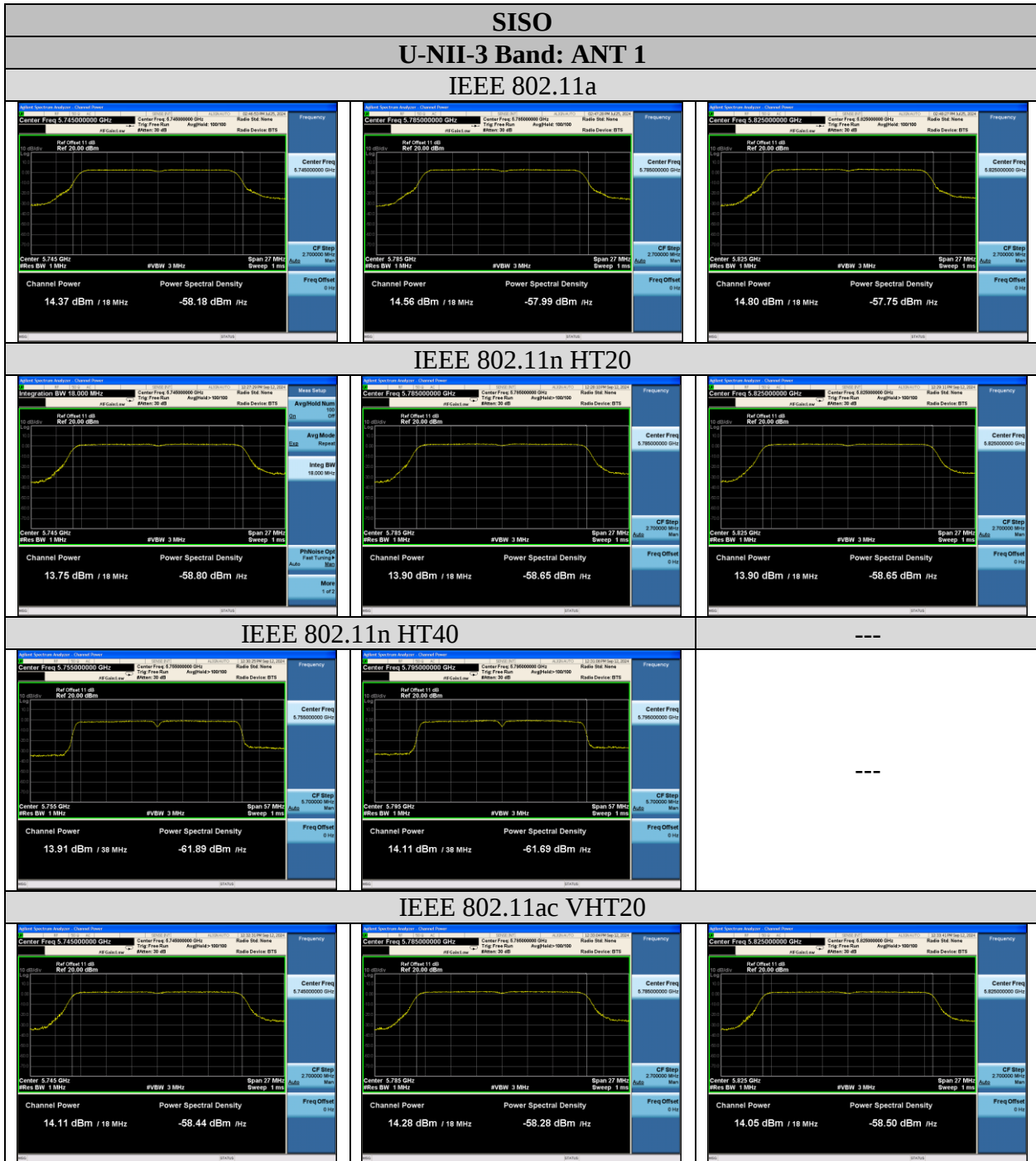


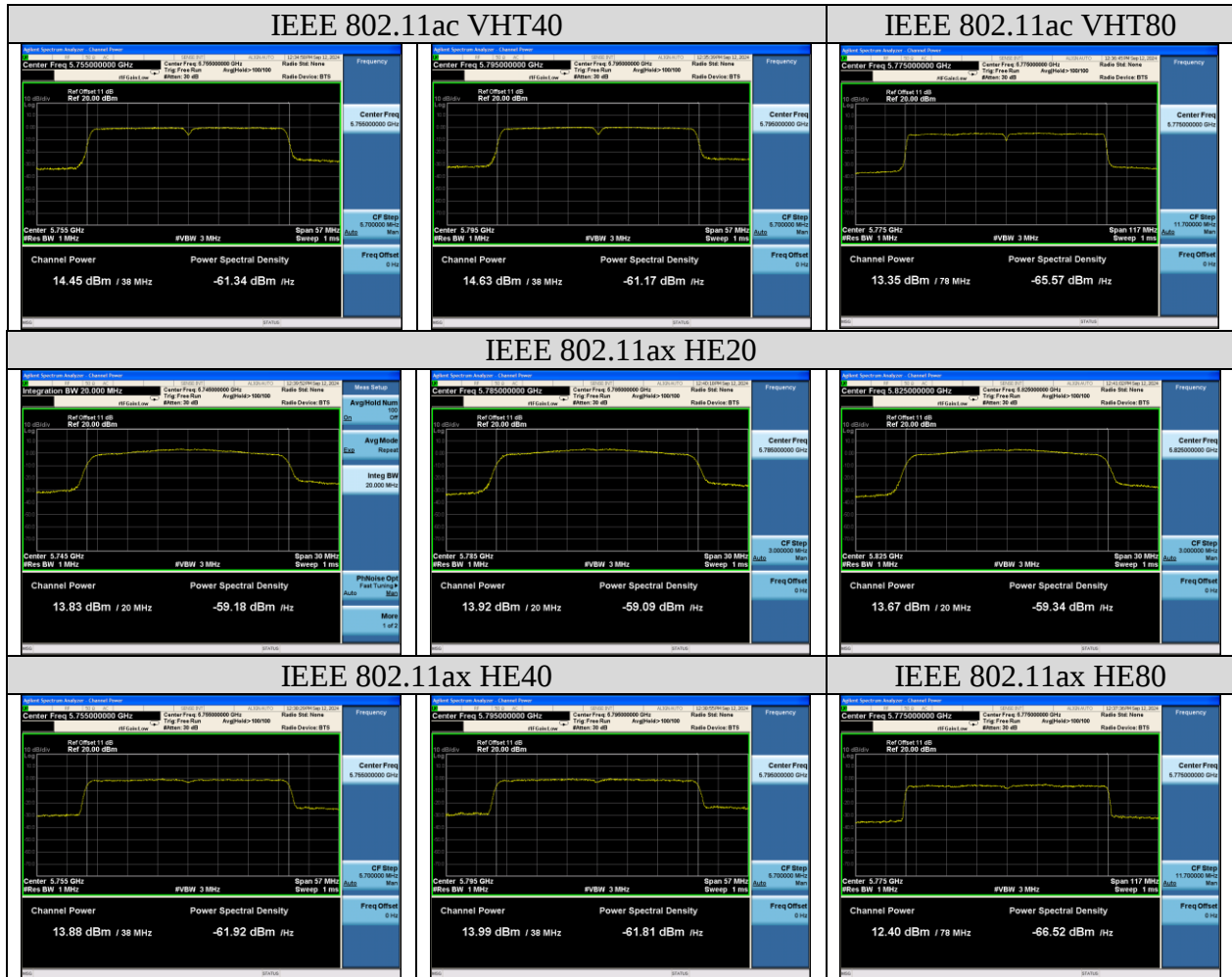
IEEE 802.11ax HE40



IEEE 802.11ax HE80



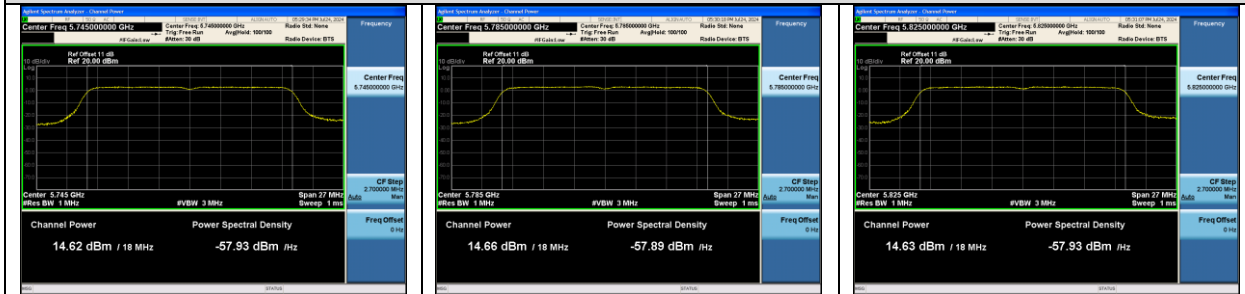




MIMO

U-NII-3 Band: ANT 0

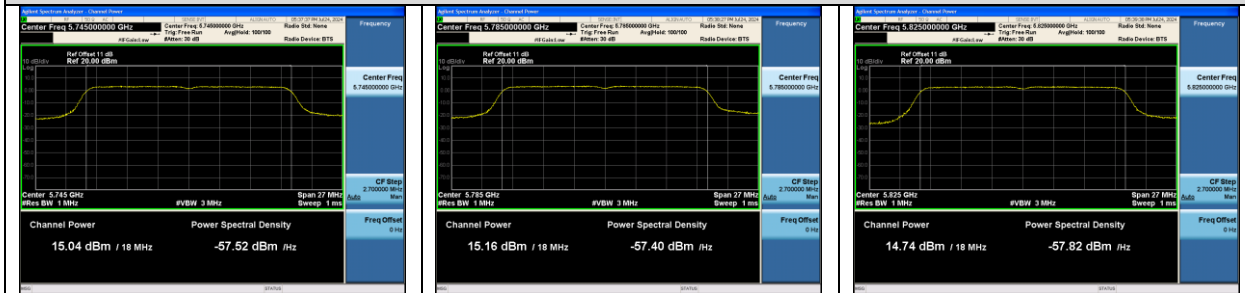
IEEE 802.11n HT20

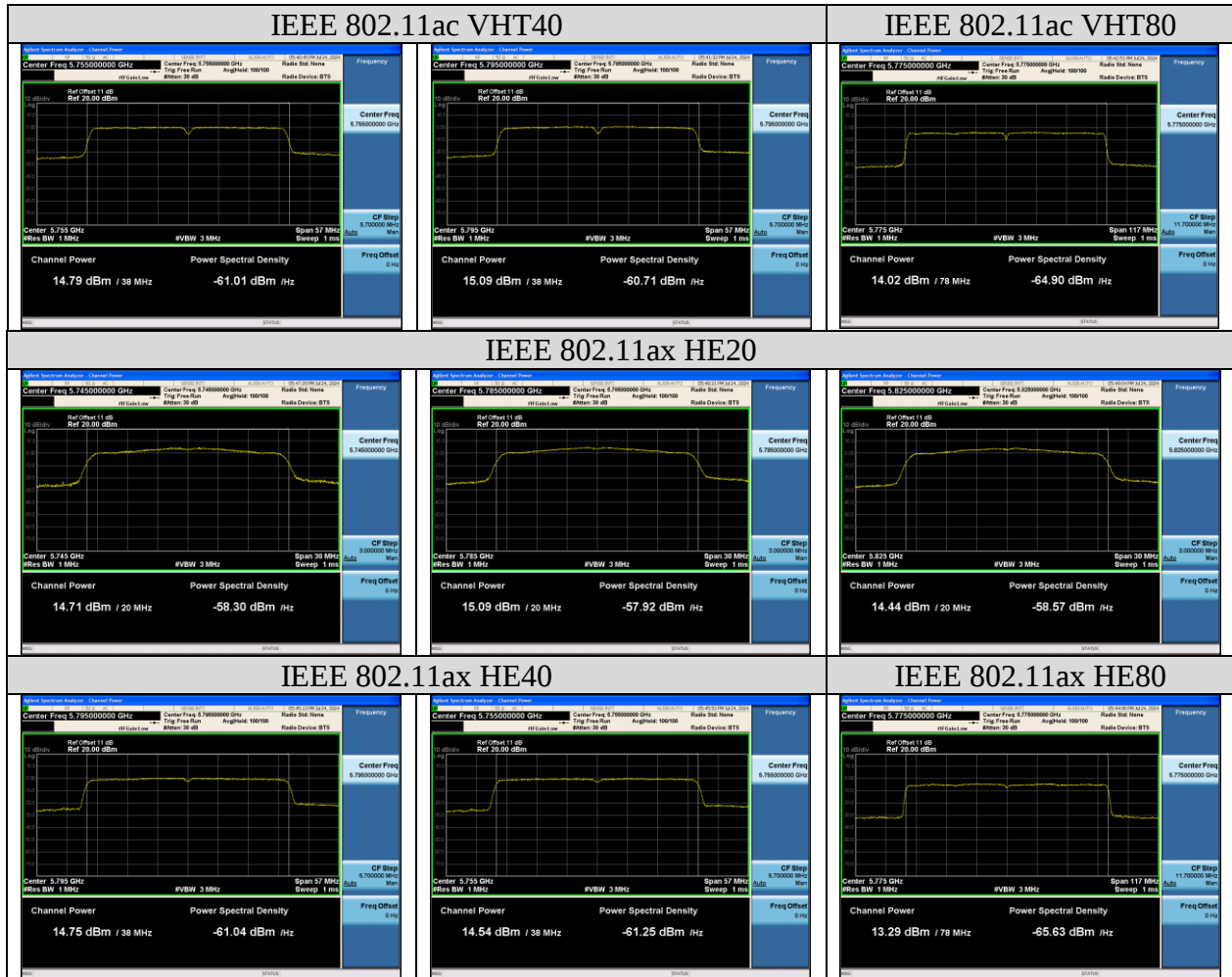


IEEE 802.11n HT40



IEEE 802.11ac VHT20

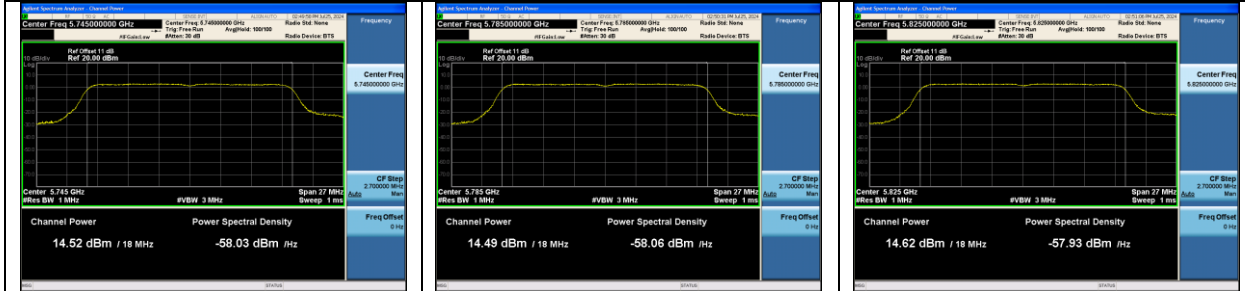




MIMO

U-NII-3 Band: ANT 1

IEEE 802.11n HT20

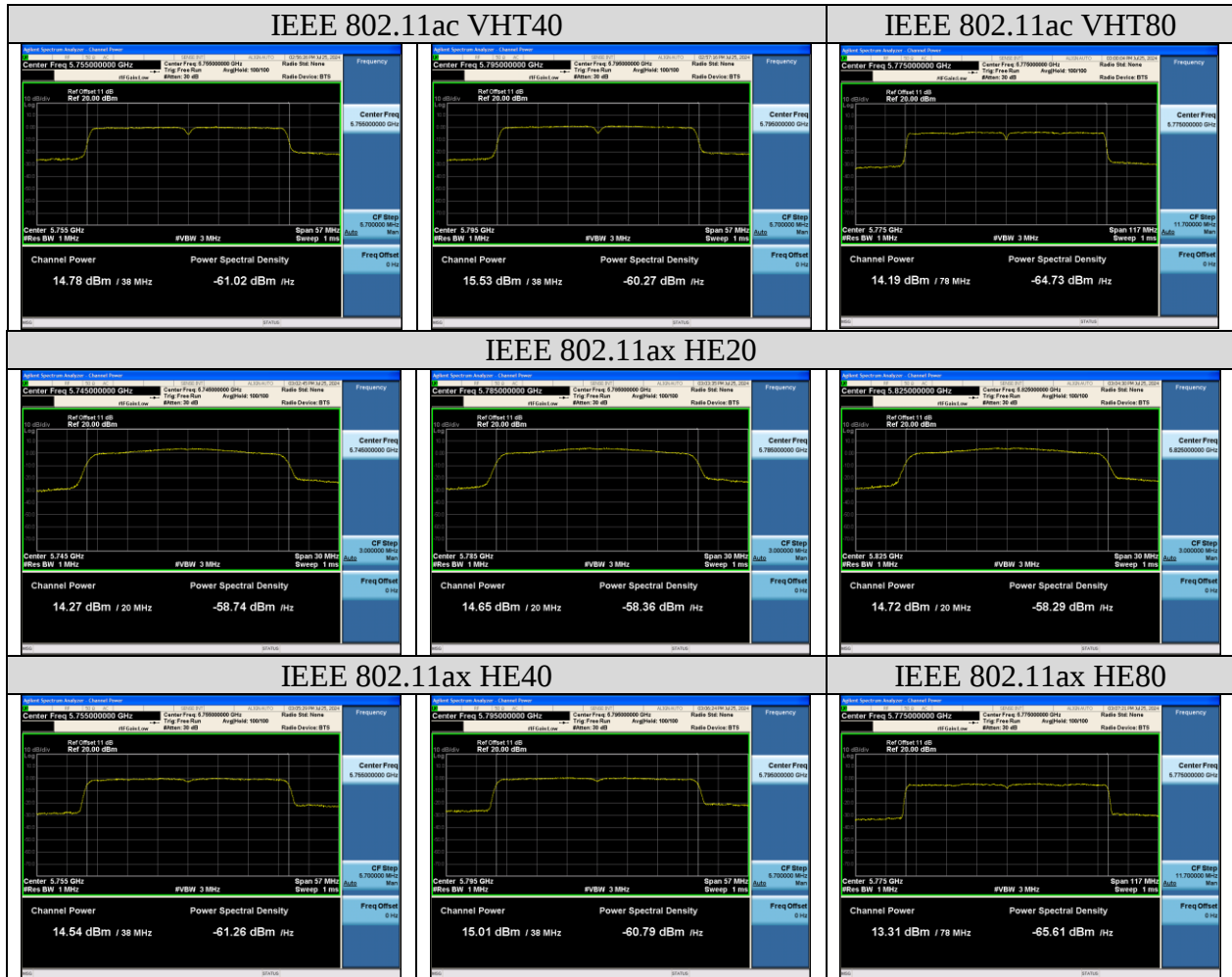


IEEE 802.11n HT40



IEEE 802.11ac VHT20





8. SPECTRAL DENSITY TEST

8.1.Limit

Band 5150-5250 MHz:

The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

Band 5250-5350 MHz:

The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

Band 5470-5725 MHz:

The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

Band 5725-5850 MHz:

The power spectral density shall not exceed 30 dBm in any 500 KHz band.

8.2.Test Procedure

Use the test method described in ANSI C63.10 clause 12.5:

For the Band 5.15-5.35GHz; 5.47-5.725 GHz:

The transmitter output was connected to a spectrum analyzer. Power density was measured by spectrum analyzer with 1MHz RBW and 3MHz VBW; Detector: RMS mode.

For the band 5.725-5.85 GHz:

The transmitter output was connected to a spectrum analyzer. Power density was measured by spectrum analyzer with 1MHz RBW and 3MHz VBW,RMS Detector.

So use the test method described in KDB789033 clause E

- 1) Set the RBW=100kHz and VBW =300kHz
- 2) Number of points in sweep $\geq 2 \text{ Span} / \text{RBW}$. (This ensures that bin-to-bin spacing is $\leq \text{RBW}/2$, so that narrowband signals are not lost between frequency bins.)
- 3) Sweep time = auto
- 4) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
- 5) Use the “peak search” function of spectrum analyzer find the max value, then add $10\log(500\text{kHz}/\text{RBW})$ to the measured result.

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

FCC ID: XVG500107APBT

8.3.Test Results

EUT: STB		
M/N: H200W		
Test date: 2024-08-16~20	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 Spectral Density (dBm/3KHz)	Limit (dBm/3KHz)
11a ANT0	5180	4.354	11
	5200	4.347	
	5240	4.269	
11a ANT1	5180	5.103	11
	5200	5.118	
	5240	5.770	

Conclusion : PASS

- Notes: 1. Directional Gain= $10 \log[(10^{3.1/10})+ (10^{2.8/10})/2]$ dB_i =2.95dB_i<6dB_i.
2. The transmit signals are completely uncorrelated.

U-NII-1 Band(MIMO):

Test Mode	Frequency (MHz)	Power Spectral Density (dBm/3KHz)			Limit (dBm/3KHz)
		ANT0	ANT1	Total	
11n20	5180	4.296	1.116	6.001	11
	5200	3.485	1.273	5.529	
	5240	3.358	1.151	5.404	
11n40	5190	-1.454	-3.975	0.476	11
	5230	-1.233	-2.949	1.004	
11ac20	5180	3.761	1.023	5.615	11
	5200	3.933	1.480	5.888	
	5240	3.674	2.053	5.949	
11ac40	5190	-1.514	-4.442	0.275	11
	5230	-1.545	-4.132	0.362	
11ac80	5210	-5.167	-7.667	-3.229	11
11ax20	5180	4.608	2.492	6.688	11
	5200	4.817	2.653	6.879	
	5240	4.563	2.619	6.709	
11ax40	5190	-1.318	-3.848	0.609	11
	5230	-0.933	-3.447	1.000	
11ax80	5210	-6.445	-9.394	-4.664	11
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 Spectral Density (dBm/3KHz)	Limit (dBm/3KHz)
11a (ANT0)	5260	4.806	11
	5300	3.888	
	5320	3.643	
11a (ANT1)	5260	4.429	
	5300	4.670	
	5320	4.471	

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-2A Band(MIMO):

Test Mode	Frequency (MHz)	Power Spectral Density (dBm/3KHz)			Limit (dBm/3KHz)
		ANT0	ANT1	Total	
11n20	5260	3.204	2.066	5.682	11
	5300	3.465	2.436	5.991	
	5320	3.819	2.588	6.257	
11n40	5270	0.033	-1.622	2.294	11
	5310	-0.292	-1.781	2.037	
11ac20	5260	3.871	1.874	5.997	11
	5300	3.562	1.617	5.708	
	5320	3.991	1.901	6.081	
11ac40	5270	-3.210	-0.750	1.202	11
	5310	-3.325	-1.223	0.862	
11ac80	5290	-7.509	-9.463	-5.367	11
11ax20	5260	4.543	2.684	6.723	11
	5300	4.418	3.221	6.871	
	5320	4.410	2.606	6.611	
11ax40	5270	-5.653	-7.622	-3.517	11
	5310	-5.960	-7.874	-3.802	
11ax80	5290	-8.645	-11.833	-6.943	11
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 Spectral Density (dBm/3KHz)	Limit (dBm/3KHz)
11a ANT0	5500	0.366	11
	5600	0.264	11
	5700	0.053	11
11a ANT1	5500	1.558	11
	5600	1.346	11
	5700	0.314	11
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-2C Band(MIMO):

Test Mode	Frequency (MHz)	Power Spectral Density (dBm/3KHz)			Limit (dBm/3KHz)
		ANT0	ANT1	Total	
11n20	5500	0.289	-1.723	2.409	11
	5600	-1.017	-2.892	1.156	11
	5700	-0.908	-3.022	1.173	11
11n40	5510	-3.867	-6.302	-1.906	11
	5590	-4.317	-7.213	-2.518	11
	5670	-4.347	-7.516	-2.638	11
11ac20	5500	-0.492	-2.362	1.683	11
	5600	-0.732	-3.563	1.090	11
	5700	-0.704	-3.541	1.115	11
11ac40	5510	-4.088	-5.881	-1.882	11
	5590	-4.345	-6.554	-2.300	11
	5670	-4.282	-7.151	-2.473	11
11ac80	5530	-6.491	-8.895	-4.518	11
	5610	-7.202	-9.755	-5.283	11
11ax20	5500	0.552	-0.830	2.926	11
	5600	0.705	-2.017	2.564	11
	5700	0.901	-2.697	2.475	11
11ax40	5510	-3.441	-6.743	-1.775	11
	5590	-3.886	-7.529	-2.326	11
	5670	-3.808	-8.269	-2.479	11
11ax80	5530	-7.141	-9.411	-5.119	11
	5610	-7.116	-10.741	-5.550	11
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 Spectral Density (dBm/500KHz)	Limit (dBm/500KHz)
11a ANT0	5745	3.468	30
	5785	3.575	
	5825	3.095	
11a ANT1	5745	3.730	
	5785	3.720	
	5825	3.515	
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.
 3. The result = Reading + $10 \log(500\text{kHz}/100\text{kHz})$.

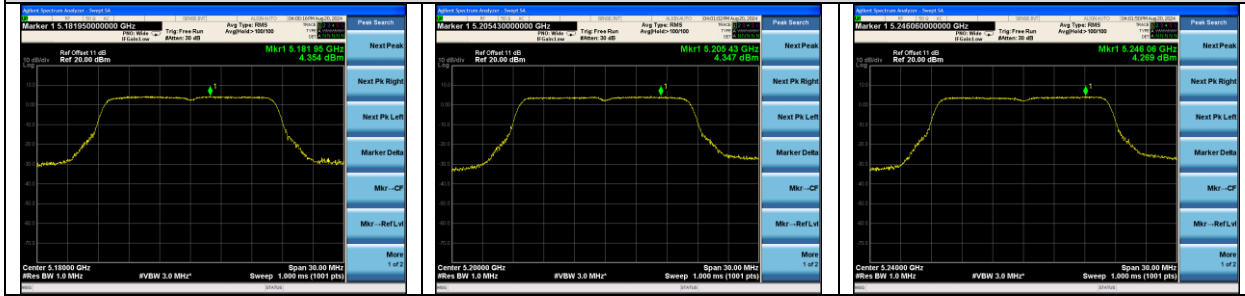
U-NII-3 Band(MIMO):

Test Mode	Frequency (MHz)	Power Spectral Density (dBm/500KHz)			Limit (dBm/500KHz)
		ANT0	ANT1	Total	
11n20	5745	-3.547	-4.230	6.125	30
	5785	-3.864	-4.206	5.969	
	5825	-3.766	-4.561	5.855	
11n40	5755	-7.114	-7.559	2.669	30
	5795	-6.860	-7.013	3.064	
11ac20	5745	-3.644	-4.011	6.177	30
	5785	-3.434	-4.589	6.027	
	5825	-3.912	-4.062	6.014	
11ac40	5755	-6.743	-6.894	3.182	30
	5795	-6.709	-6.613	3.340	
11ac80	5775	-10.590	-11.458	-1.002	30
11ax20	5745	-3.010	-3.792	6.617	30
	5785	-4.256	-3.690	6.037	
	5825	-4.054	-3.825	6.062	
11ax40	5755	-7.723	-8.015	2.134	30
	5795	-7.932	-7.813	2.128	
11ax80	5775	-11.899	-11.252	-1.563	30
Conclusion : PASS					

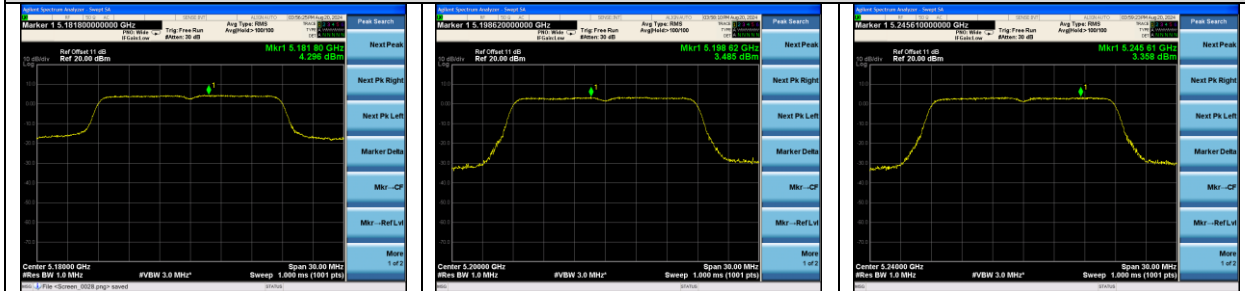
- Notes: 1. Directional Gain= $10 \log[(10^{3/10}) + (10^{3/10})/2]$ dBi = 3dBi < 6dBi.
2. The transmit signals are completely uncorrelated.
3. The result = Reading + $10 \log(500\text{kHz}/100\text{kHz})$.

U-NII-1 Band: ANT 0

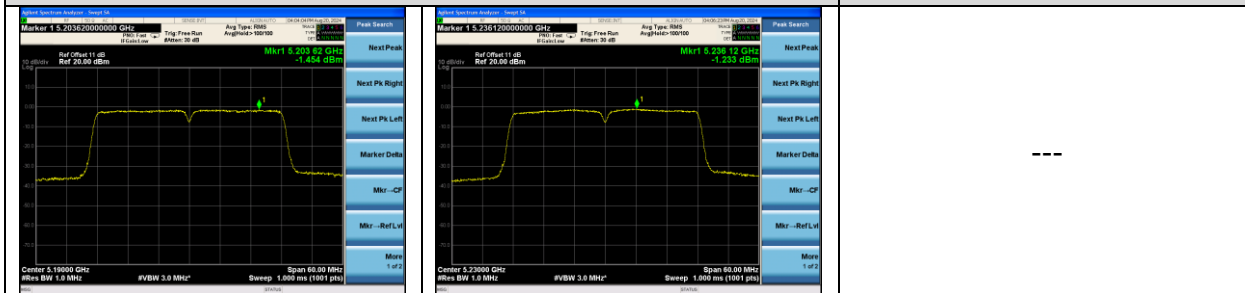
IEEE 802.11a



IEEE 802.11n HT20



IEEE 802.11n HT40



IEEE 802.11ac VHT20

