

Appendix A: Test Results of NII device

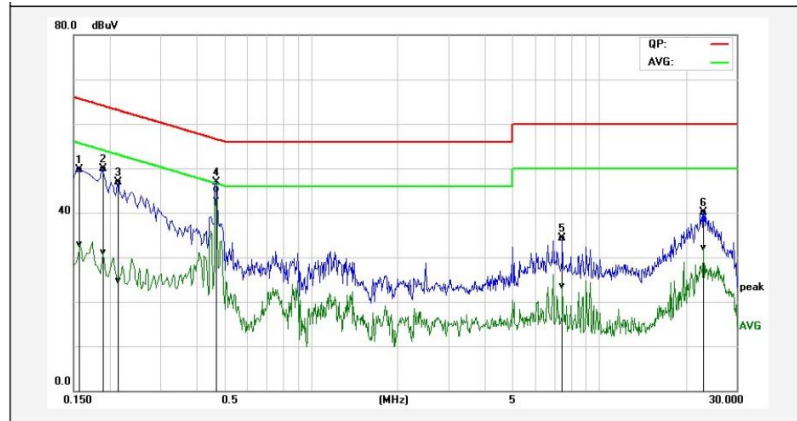
Table of Contents	Page
APPENDIX A.1 TEST RESULTS OF CONDUCTED EMISSION ON AC MAINS	2
APPENDIX A.2 TEST RESULTS OF RADIATED SPURIOUS EMISSION	3
APPENDIX A.3 TEST RESULTS OF CONDUCTED SPURIOUS EMISSIONS AND BAND EDGE	9
APPENDIX A.4 TEST RESULTS OF FREQUENCY STABILITY	18
APPENDIX A.5 TEST RESULTS OF CONDUCTED POWER SPECTRAL DENSITY	22
APPENDIX A.6 TEST RESULTS OF 6DB & 26DB & 99% BANDWIDTH	33
APPENDIX A.7 TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER	48

Appendix A.1 Test Results of Conducted Emission on AC Mains

Note: All modes have been tested, and the report only reflects the worst mode.

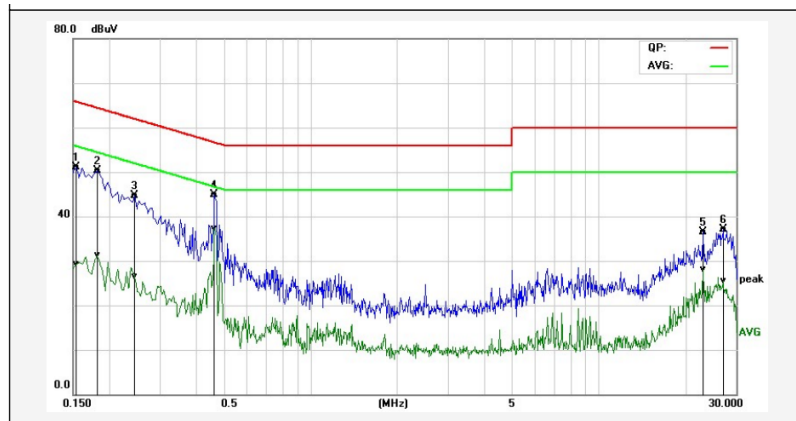
Test Mode :	Working	Test Voltage :	AC 110V/60Hz
-------------	---------	----------------	--------------

L



No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
1P	0.1580	40.01	23.18	9.74	49.75	32.92	65.56	55.57	-15.81	-22.65	Pass
2P	0.1900	40.23	21.43	9.74	49.97	31.17	64.03	54.04	-14.06	-22.87	Pass
3P	0.2140	37.11	14.94	9.74	46.85	24.68	63.04	53.05	-16.19	-28.37	Pass
4*	0.4700	35.63	33.23	9.73	45.36	42.96	56.51	46.51	-11.15	-3.55	Pass
5P	7.4580	24.47	13.78	9.82	34.29	23.60	60.00	50.00	-25.71	-26.40	Pass
6P	23.1259	29.85	21.85	10.16	40.01	32.01	60.00	50.00	-19.99	-17.99	Pass

N



No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
1P	0.1539	41.43	19.52	9.74	51.17	29.26	65.78	55.79	-14.61	-26.53	Pass
2P	0.1819	40.52	21.57	9.74	50.26	31.31	64.39	54.40	-14.13	-23.09	Pass
3P	0.2460	34.94	16.66	9.76	44.70	26.42	61.89	51.89	-17.19	-25.47	Pass
4*	0.4660	35.01	27.54	9.82	44.83	37.36	56.58	46.58	-11.75	-9.22	Pass
5P	23.1299	25.71	17.37	10.71	36.42	28.08	60.00	50.00	-23.58	-21.92	Pass
6P	27.0020	26.33	14.78	10.75	37.08	25.53	60.00	50.00	-22.92	-24.47	Pass

Correction Factor = insertion loss of LISN + cable loss;

Reading = Reading Amplitude in the instrument;

Result = Correction Factor + Reading;

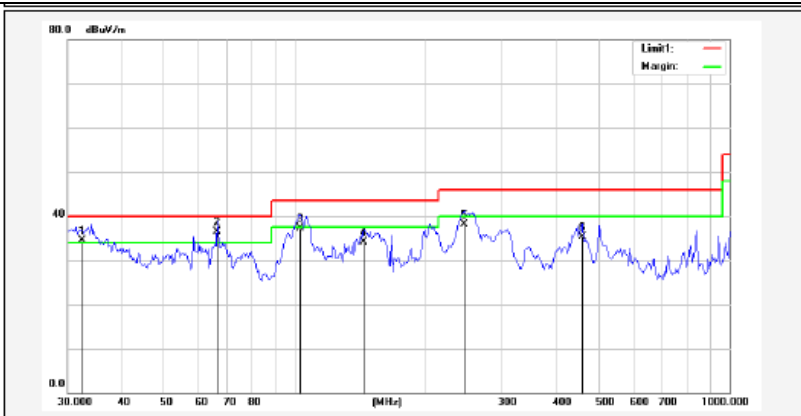
Margin = Result – Limit.

Appendix A.2 Test Results of Radiated Spurious Emission

Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 40GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported. All the data rate and configurations have been tested and only the worst case mode (ac(VHT20)) reported.

Below 1G:

Note: All modes have been tested, and the report only reflects the worst mode.

Test Mode :	Working	Test Voltage :	AC 110V/60Hz																																																																						
Horizontal																																																																									
 <table><tr><th>No.</th><th>Frequency (MHz)</th><th>Reading (dBuV)</th><th>Correction factor(dB/m)</th><th>Result (dBuV/m)</th><th>Limit (dBuV/m)</th><th>Margin (dB)</th><th>Degree (deg.)</th><th>Height (cm)</th><th>Remark</th></tr><tr><td>1</td><td>257.6285</td><td>49.19</td><td>-12.35</td><td>36.84</td><td>46.00</td><td>-9.16</td><td></td><td></td><td>QP</td></tr><tr><td>2</td><td>294.4280</td><td>51.29</td><td>-11.57</td><td>39.72</td><td>46.00</td><td>-6.28</td><td></td><td></td><td>QP</td></tr><tr><td>3</td><td>363.5230</td><td>45.09</td><td>-9.36</td><td>35.73</td><td>46.00</td><td>-10.27</td><td></td><td></td><td>QP</td></tr><tr><td>4*</td><td>406.7820</td><td>47.58</td><td>-7.82</td><td>39.76</td><td>46.00</td><td>-6.24</td><td></td><td></td><td>QP</td></tr><tr><td>5</td><td>436.3956</td><td>43.78</td><td>-7.20</td><td>36.58</td><td>46.00</td><td>-9.42</td><td></td><td></td><td>QP</td></tr><tr><td>6</td><td>838.8870</td><td>39.64</td><td>-0.40</td><td>39.24</td><td>46.00</td><td>-6.76</td><td></td><td></td><td>QP</td></tr></table>				No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (deg.)	Height (cm)	Remark	1	257.6285	49.19	-12.35	36.84	46.00	-9.16			QP	2	294.4280	51.29	-11.57	39.72	46.00	-6.28			QP	3	363.5230	45.09	-9.36	35.73	46.00	-10.27			QP	4*	406.7820	47.58	-7.82	39.76	46.00	-6.24			QP	5	436.3956	43.78	-7.20	36.58	46.00	-9.42			QP	6	838.8870	39.64	-0.40	39.24	46.00	-6.76			QP
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (deg.)	Height (cm)	Remark																																																																
1	257.6285	49.19	-12.35	36.84	46.00	-9.16			QP																																																																
2	294.4280	51.29	-11.57	39.72	46.00	-6.28			QP																																																																
3	363.5230	45.09	-9.36	35.73	46.00	-10.27			QP																																																																
4*	406.7820	47.58	-7.82	39.76	46.00	-6.24			QP																																																																
5	436.3956	43.78	-7.20	36.58	46.00	-9.42			QP																																																																
6	838.8870	39.64	-0.40	39.24	46.00	-6.76			QP																																																																
Vertical																																																																									
 <table><tr><th>No.</th><th>Frequency (MHz)</th><th>Reading (dBuV)</th><th>Correction factor(dB/m)</th><th>Result (dBuV/m)</th><th>Limit (dBuV/m)</th><th>Margin (dB)</th><th>Degree (deg.)</th><th>Height (cm)</th><th>Remark</th></tr><tr><td>1†</td><td>32.5947</td><td>47.08</td><td>-12.49</td><td>34.59</td><td>40.00</td><td>-5.41</td><td></td><td></td><td>QP</td></tr><tr><td>2*</td><td>66.3113</td><td>49.71</td><td>-13.15</td><td>36.56</td><td>40.00</td><td>-3.44</td><td></td><td></td><td>QP</td></tr><tr><td>3</td><td>102.6117</td><td>53.27</td><td>-15.93</td><td>37.34</td><td>43.50</td><td>-6.16</td><td></td><td></td><td>QP</td></tr><tr><td>4</td><td>143.7760</td><td>45.87</td><td>-11.86</td><td>34.01</td><td>43.50</td><td>-9.49</td><td></td><td></td><td>QP</td></tr><tr><td>5</td><td>245.2606</td><td>50.79</td><td>-12.59</td><td>38.20</td><td>46.00</td><td>-7.80</td><td></td><td></td><td>QP</td></tr><tr><td>6</td><td>458.3987</td><td>42.08</td><td>-6.82</td><td>35.26</td><td>46.00</td><td>-10.74</td><td></td><td></td><td>QP</td></tr></table>				No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (deg.)	Height (cm)	Remark	1†	32.5947	47.08	-12.49	34.59	40.00	-5.41			QP	2*	66.3113	49.71	-13.15	36.56	40.00	-3.44			QP	3	102.6117	53.27	-15.93	37.34	43.50	-6.16			QP	4	143.7760	45.87	-11.86	34.01	43.50	-9.49			QP	5	245.2606	50.79	-12.59	38.20	46.00	-7.80			QP	6	458.3987	42.08	-6.82	35.26	46.00	-10.74			QP
No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (deg.)	Height (cm)	Remark																																																																
1†	32.5947	47.08	-12.49	34.59	40.00	-5.41			QP																																																																
2*	66.3113	49.71	-13.15	36.56	40.00	-3.44			QP																																																																
3	102.6117	53.27	-15.93	37.34	43.50	-6.16			QP																																																																
4	143.7760	45.87	-11.86	34.01	43.50	-9.49			QP																																																																
5	245.2606	50.79	-12.59	38.20	46.00	-7.80			QP																																																																
6	458.3987	42.08	-6.82	35.26	46.00	-10.74			QP																																																																

Correction Factor = antenna factor + cable loss – amplifier gain;

Reading = Reading Amplitude in the instrument;

Result = Correction Factor + Reading;

Margin = Result – Limit

Above 1GHz:

Note: All modes and antenna have been tested, and the report only reflects the worst mode(802.11 ac (VHT20) MIMO).

Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

Band I:
802.11 ac (VHT20)-Low Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6984	54.46	-9.74	44.72	68.2	-23.48	peak
2	8854	54.45	-6.88	47.57	68.2	-20.63	peak
3	10044	53.04	-4.58	48.46	68.2	-19.74	peak
4	11234	53.19	-3.14	50.05	68.2	-18.15	peak
5	11846	52.5	-2.97	49.53	68.2	-18.67	peak
6	12764	52.84	-1.35	51.49	68.2	-16.71	peak

802.11 ac (VHT20)-Low Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6270	56.04	-11.05	44.99	68.2	-23.21	peak
2	7460	54.06	-8.8	45.26	68.2	-22.94	peak
3	8956	54.55	-6.6	47.95	68.2	-20.25	peak
4	10384	53.78	-4.06	49.72	68.2	-18.48	peak
5	12152	53.2	-2.53	50.67	68.2	-17.53	peak
6	13070	53.28	-0.85	52.43	68.2	-15.77	peak

802.11 ac (VHT20)-Middle Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6916	55.28	-9.9	45.38	68.2	-22.82	peak
2	8718	54.14	-7.25	46.89	68.2	-21.31	peak
3	9908	53.38	-4.87	48.51	68.2	-19.69	peak
4	11370	52.75	-3.14	49.61	68.2	-18.59	peak
5	11914	53.23	-2.94	50.29	68.2	-17.91	peak
6	12424	52.62	-2.02	50.6	68.2	-17.6	peak

802.11ac (VHT20)-Middle Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6168	54.74	-11.14	43.6	68.2	-24.6	peak
2	6916	55.24	-9.9	45.34	68.2	-22.86	peak
3	8820	54.27	-6.97	47.3	68.2	-20.9	peak
4	10010	53.67	-4.65	49.02	68.2	-19.18	peak
5	11404	53.78	-3.12	50.66	68.2	-17.54	peak
6	12458	52.75	-1.95	50.8	68.2	-17.4	peak

802.11 ac (VHT20)-High Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7256	53.72	-9.09	44.63	68.2	-23.57	peak
2	8174	54.27	-8.84	45.43	68.2	-22.77	peak
3	8854	54.67	-6.88	47.79	68.2	-20.41	peak
4	9840	53.38	-5.06	48.32	68.2	-19.88	peak
5	11166	54.07	-3.13	50.94	68.2	-17.26	peak
6	12458	52.97	-1.95	51.02	68.2	-17.18	peak

802.11 ac (VHT20)-High Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7324	54.29	-8.95	45.34	68.2	-22.86	peak
2	8820	54.42	-6.97	47.45	68.2	-20.75	peak
3	10044	53.9	-4.58	49.32	68.2	-18.88	peak
4	11302	53.23	-3.17	50.06	68.2	-18.14	peak
5	12424	53.23	-2.02	51.21	68.2	-16.99	peak
6	13070	52.86	-0.85	52.01	68.2	-16.19	peak

Band IV:

Note: All modes and antenna have been tested, and the report only reflects the worst mode (802.11 ac (VHT20) MIMO).

Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

802.11 ac (VHT20)-Low Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6712	54.39	-10.28	44.11	68.2	-24.09	peak
2	7528	54.12	-8.8	45.32	68.2	-22.88	peak
3	9024	54.76	-6.46	48.3	68.2	-19.9	peak
4	9772	53.46	-5.26	48.2	68.2	-20	peak
5	11336	53.78	-3.16	50.62	68.2	-17.58	peak
6	12356	52.8	-2.14	50.66	68.2	-17.54	peak

802.11 ac (VHT20)-Low Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7460	53.71	-8.8	44.91	68.2	-23.29	peak
2	8548	53.82	-7.7	46.12	68.2	-22.08	peak
3	8990	53.83	-6.5	47.33	68.2	-20.87	peak
4	9942	53.46	-4.83	48.63	68.2	-19.57	peak
5	11404	53.67	-3.12	50.55	68.2	-17.65	peak
6	11880	53.11	-2.96	50.15	68.2	-18.05	peak

802.11 ac (VHT20)-Middle Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7256	54.47	-9.09	45.38	68.2	-22.82	peak
2	8446	54.47	-7.99	46.48	68.2	-21.72	peak
3	8752	54.84	-7.16	47.68	68.2	-20.52	peak
4	9772	54.72	-5.26	49.46	68.2	-18.74	peak
5	11404	53.86	-3.12	50.74	68.2	-17.46	peak
6	12424	52.99	-2.02	50.97	68.2	-17.23	peak

802.11 ac (VHT20)-Middle Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7290	53.96	-9.02	44.94	68.2	-23.26	peak
2	8174	54.78	-8.84	45.94	68.2	-22.26	peak
3	8854	54.52	-6.88	47.64	68.2	-20.56	peak
4	10010	53.58	-4.65	48.93	68.2	-19.27	peak
5	11370	52.54	-3.14	49.4	68.2	-18.8	peak
6	12424	52.41	-2.02	50.39	68.2	-17.81	peak

802.11 ac (VHT20)-High Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	6916	54.27	-9.9	44.37	68.2	-23.83	peak
2	7494	53.46	-8.8	44.66	68.2	-23.54	peak
3	8684	55.08	-7.34	47.74	68.2	-20.46	peak
4	9432	53.6	-6.24	47.36	68.2	-20.84	peak
5	11132	53.17	-3.15	50.02	68.2	-18.18	peak
6	12152	52.31	-2.53	49.78	68.2	-18.42	peak

802.11 ac (VHT20)-High Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	6168	55.42	-11.14	44.28	68.2	-23.92	peak
2	7256	54.15	-9.09	45.06	68.2	-23.14	peak
3	8854	53.82	-6.88	46.94	68.2	-21.26	peak
4	9772	53.73	-5.26	48.47	68.2	-19.73	peak
5	11336	53.45	-3.16	50.29	68.2	-17.91	peak
6	11880	53.48	-2.96	50.52	68.2	-17.68	peak

Node:

1. Radiated emissions measured in frequency above 1GHz were made with an instrument using peak/average detector mode.
2. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
3. Margin (dB), result in dBuV/m – limit in dBuV/m.

Restricted band Requirements							
Band I							
Note: Since the distance of band IV exceeds 200 MHz and the distance limit is greater than 20 dB, only band I to band III data is reflected in this document All antennas and bandwidths are tested, and only the worst mode (802.11 ac (VHT20) MIMO) is reported in the report.							
802.11 ac (VHT20)-Low (worst mode)							
Horizontal							
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5076.8	61.36	-13.72	47.64	68.2	-20.56	peak
2	5076.8	52.68	-13.72	38.96	54	-15.04	AVG
3	5150	59.94	-13.62	46.32	68.2	-21.88	peak
4	5150	51.87	-13.62	38.25	54	-15.75	AVG
Vertical							
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4945.2	60.88	-13.98	46.9	68.2	-21.3	peak
2	4945.2	51.37	-13.98	37.39	54	-16.61	AVG
3	5150	60.63	-13.62	47.01	68.2	-21.19	peak
4	5150	51.63	-13.62	38.01	54	-15.99	AVG
802.11 ac (VHT20)-High (worst mode)							
Horizontal							
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350	57.55	-13.37	44.18	68.2	-24.02	peak
2	5350	50.26	-13.37	36.89	54	-17.11	AVG
3	5398.82	61.38	-13.14	48.24	68.2	-19.96	peak
4	5398.82	52.69	-13.14	39.55	54	-14.45	AVG
Vertical							
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350	57.74	-13.37	44.37	68.2	-23.83	peak
2	5350	50.75	-13.37	37.38	54	-16.62	AVG
3	5388.7	63.13	-13.2	49.93	68.2	-18.27	peak
4	5388.7	53.54	-13.2	40.34	54	-13.66	AVG

Correction Factor = antenna factor + cable loss – amplifier gain;

Reading = Reading Amplitude in the instrument;

Result = Correction Factor + Reading;

Margin = Result – Limit

802.11 ac (VHT20)-High (worst mode)							
Note: Since the distance restricted band of this part frequency exceeds 200 MHz and the distance limit is greater than 20 dB.							

Correction Factor = antenna factor + cable loss – amplifier gain;

Reading = Reading Amplitude in the instrument;

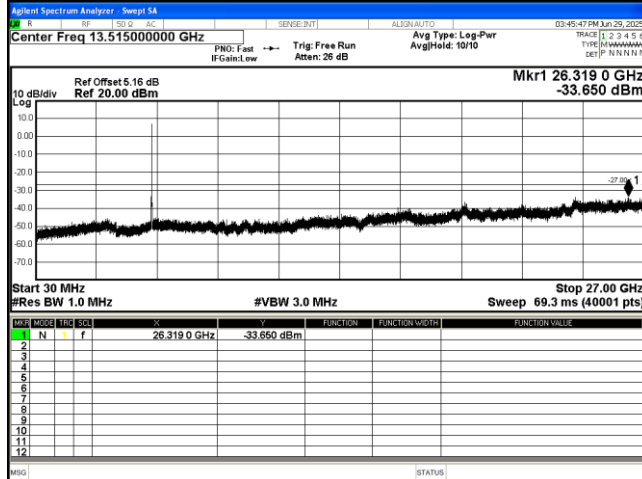
Result = Correction Factor + Reading;

Margin = Result – Limit

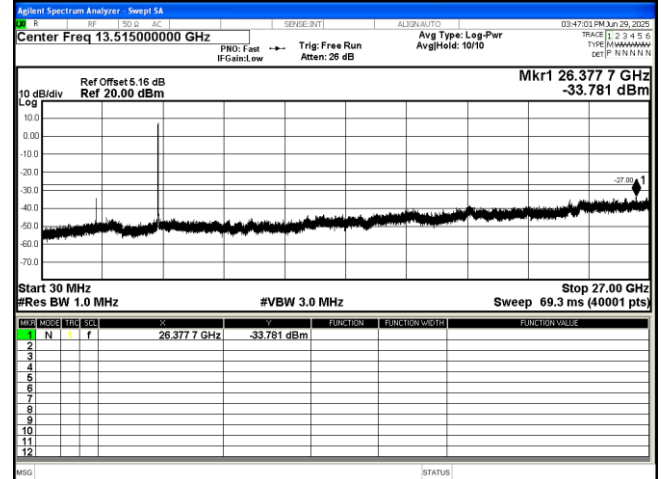
Appendix A.3 Test Results of Conducted Spurious Emissions and Band Edge

All the data rate and antenna configurations have been tested and only the worst-case mode SISO antenna 1 reported.

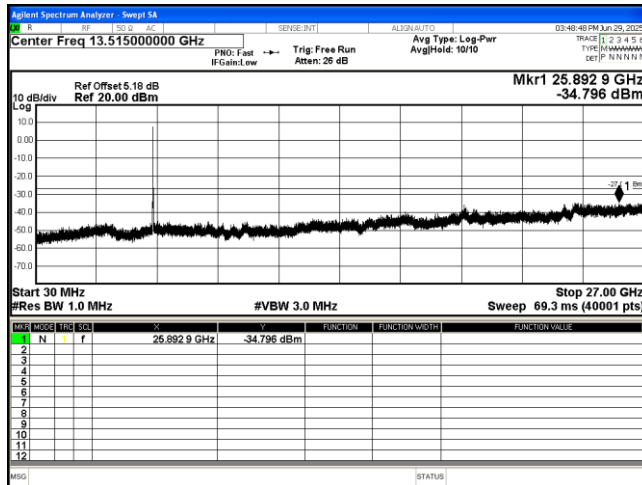
Conducted Spurious Emissions



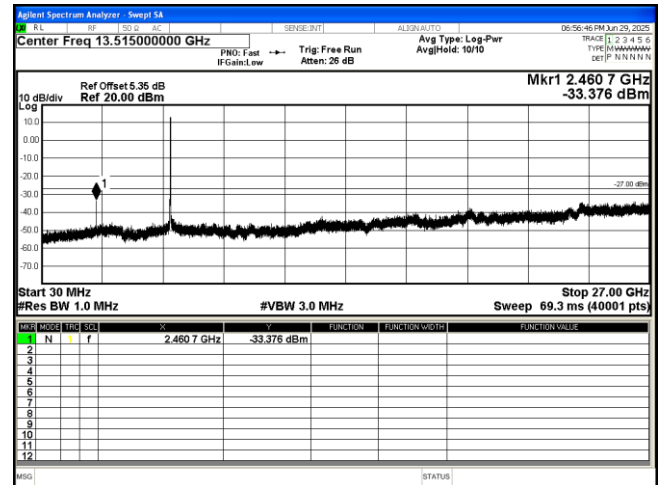
802.11a 5180MHz



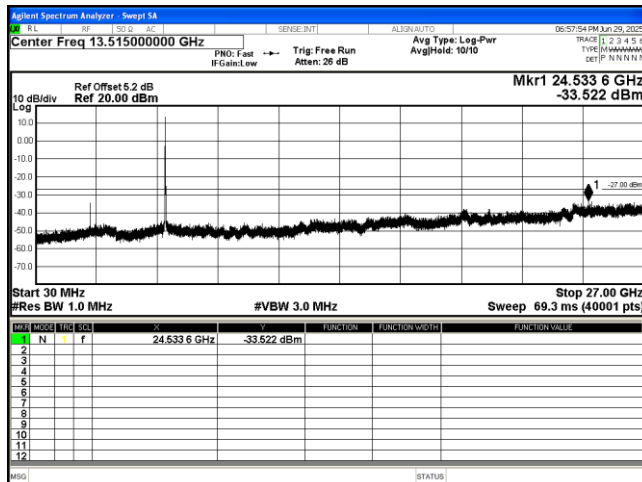
802.11a 5200MHz



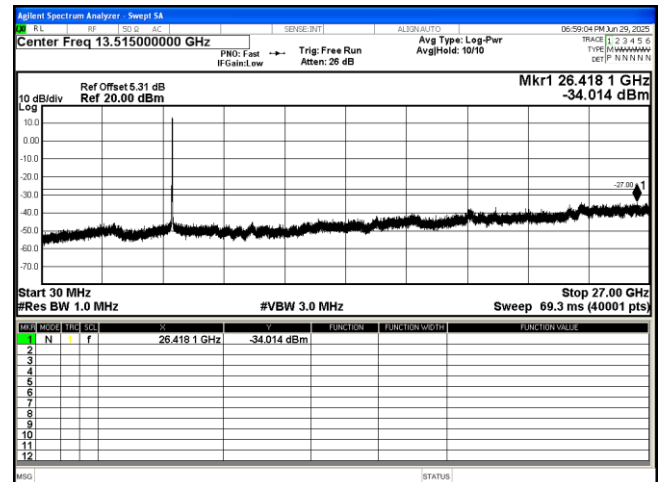
802.11a 5240MHz



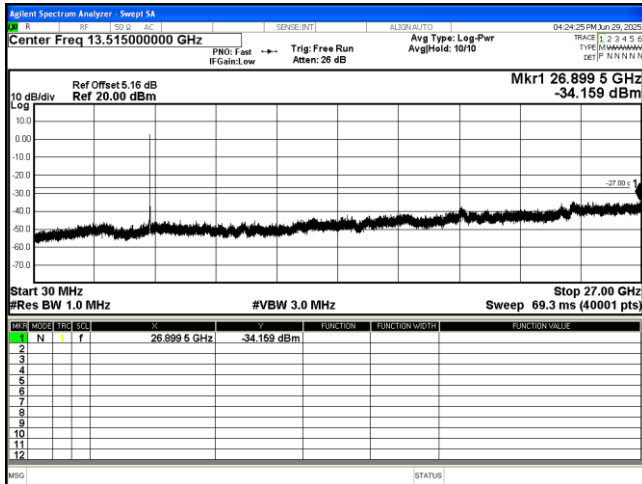
802.11a 5200MHz



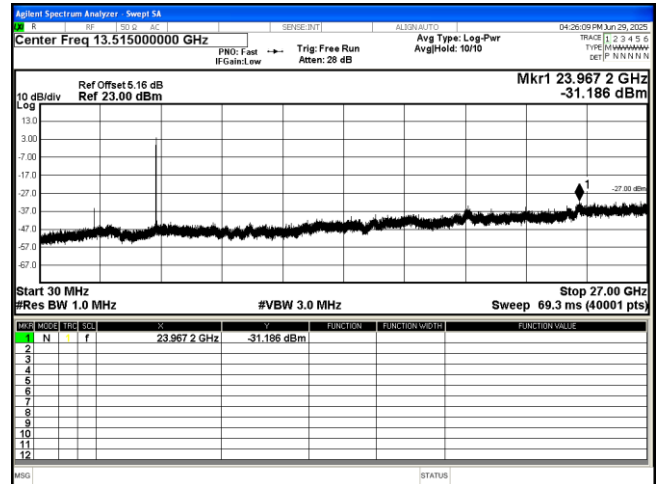
802.11a 5785MHz



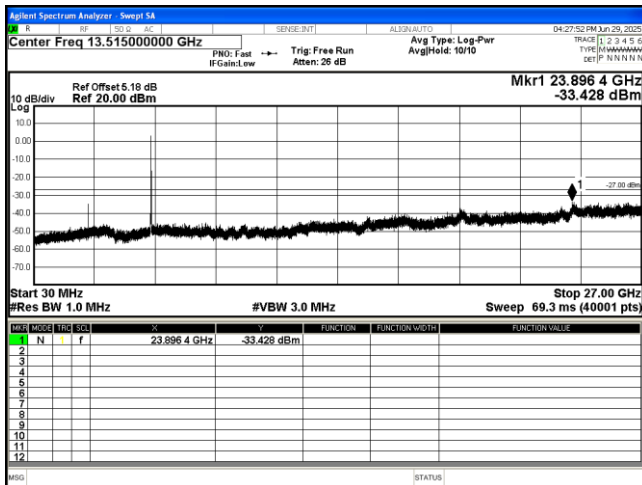
802.11a 5745MHz



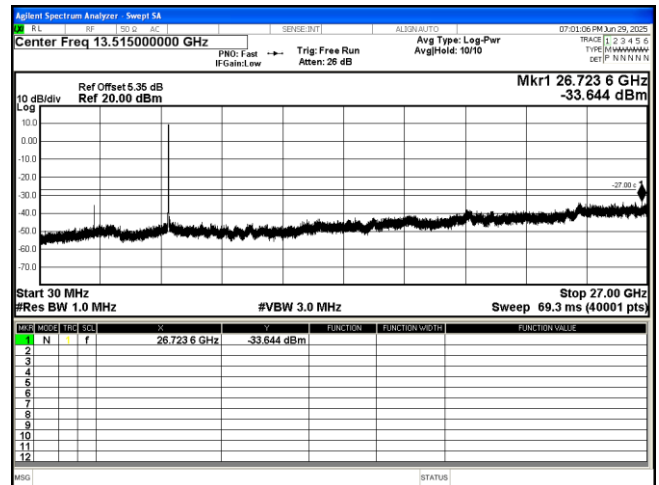
802.11 n20 5180MHz



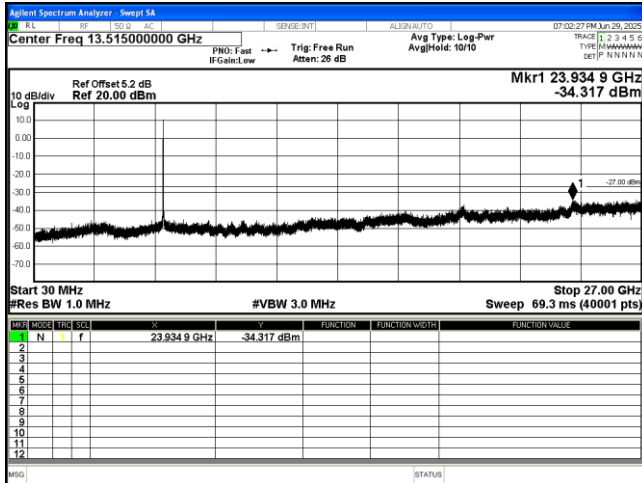
802.11 n20 5200MHz



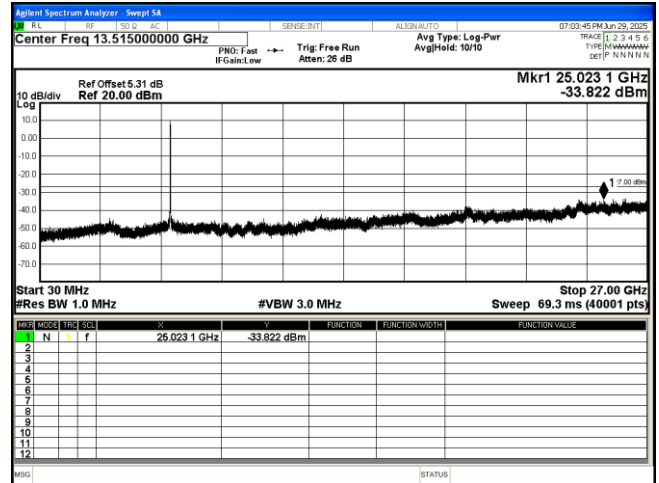
802.11 n20 5240MHz



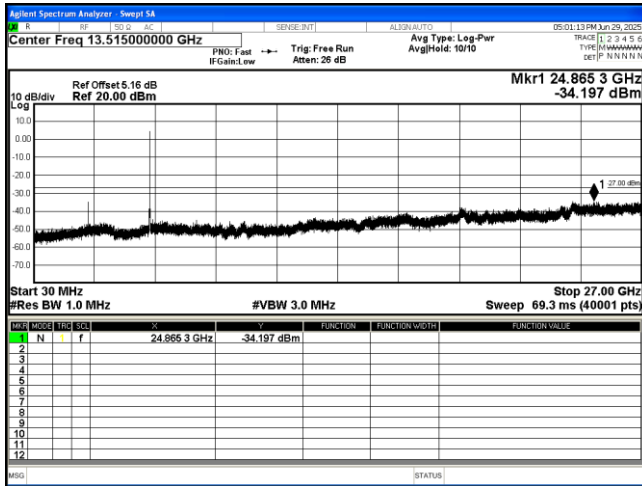
802.11 n20 5200MHz



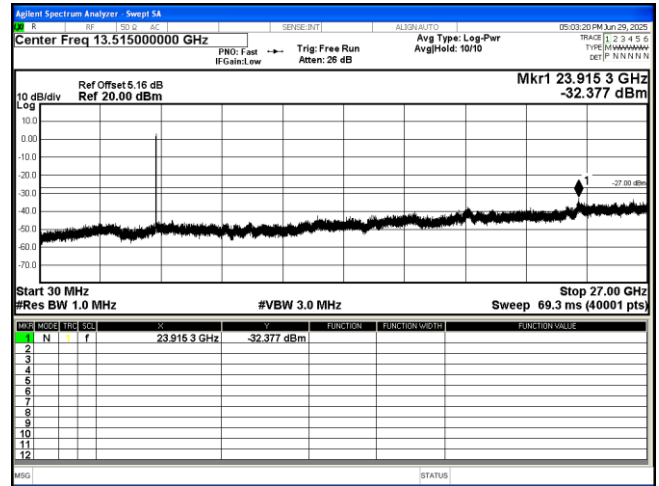
802.11 n20 5240MHz



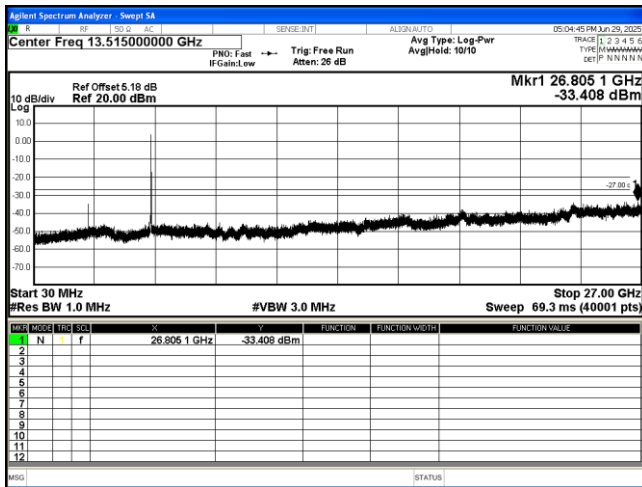
802.11 n20 5745MHz



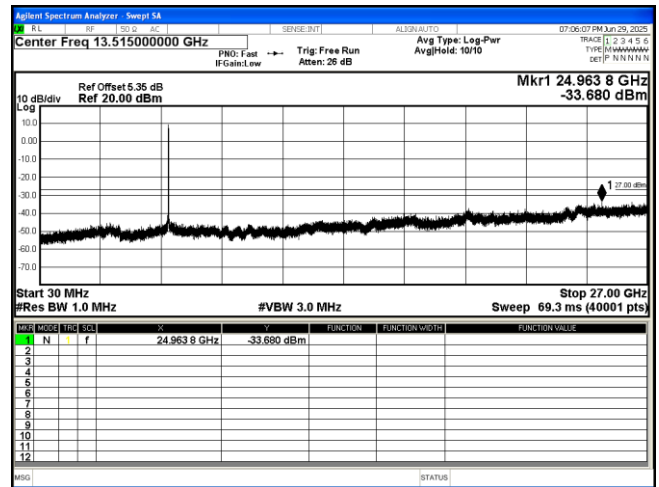
802.11 ac20 5180MHz



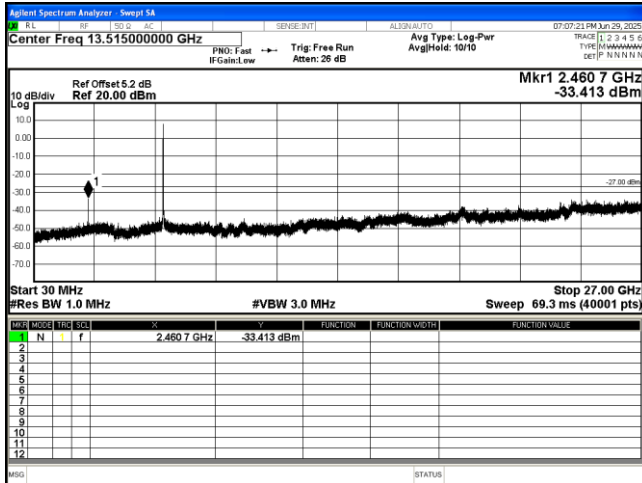
802.11 ac20 5200MHz



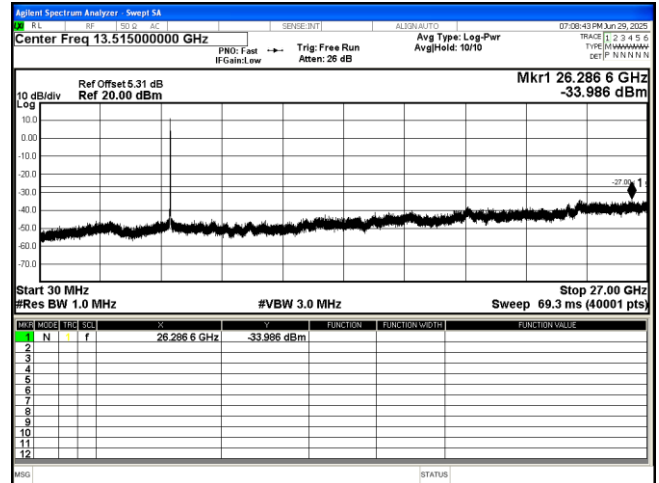
802.11 ac20 5240MHz



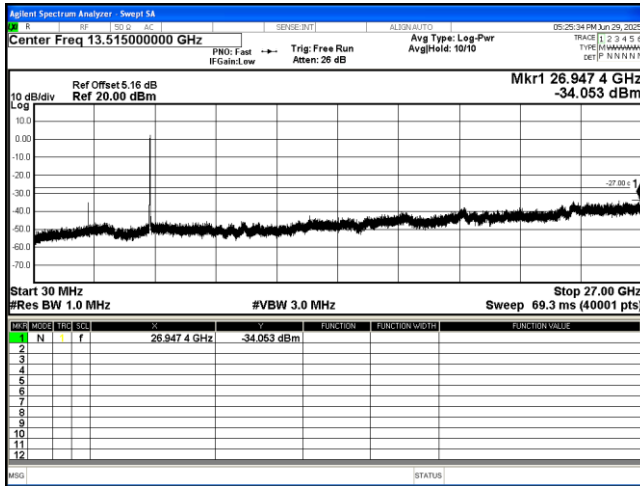
802.11 ac20 5200MHz



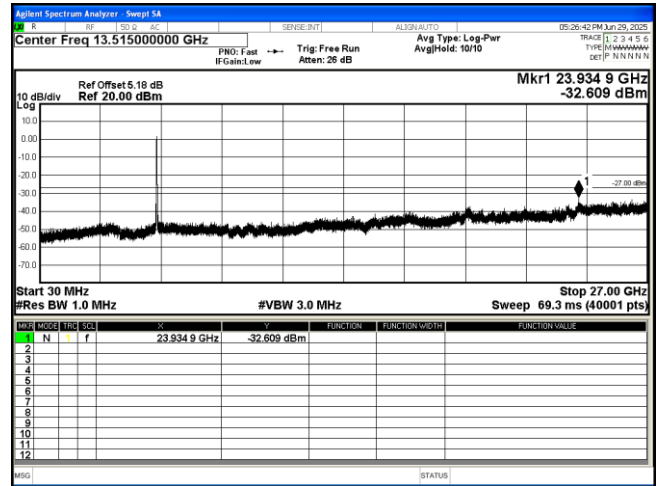
802.11 ac20 5240MHz



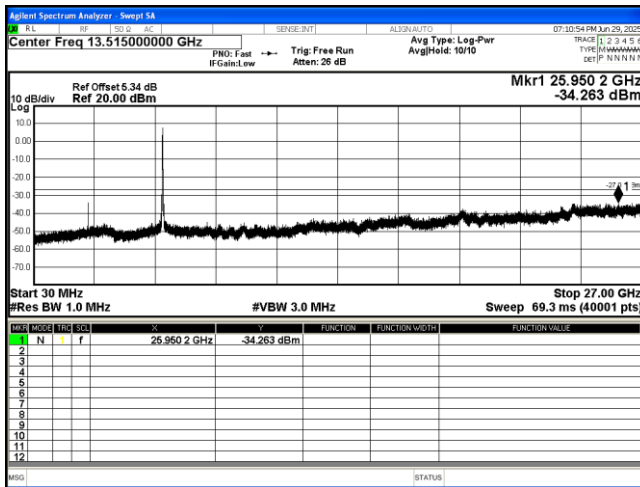
802.11 ac20 5745MHz



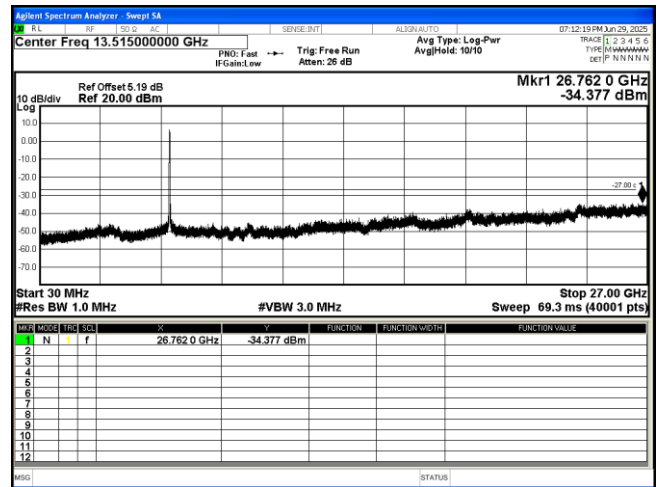
802.11 n40 5190MHz



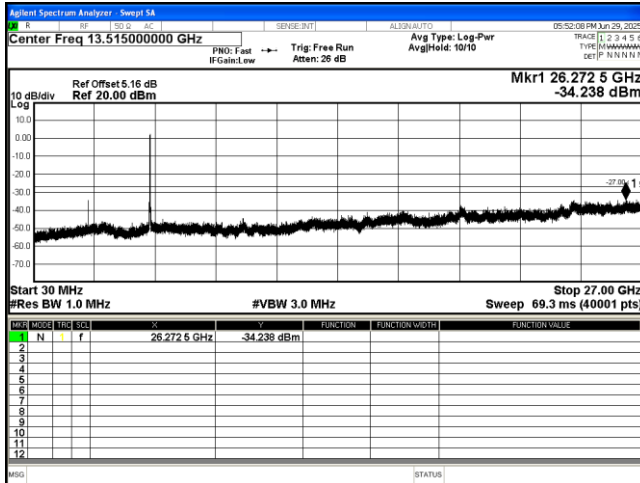
802.11 n40 5230MHz



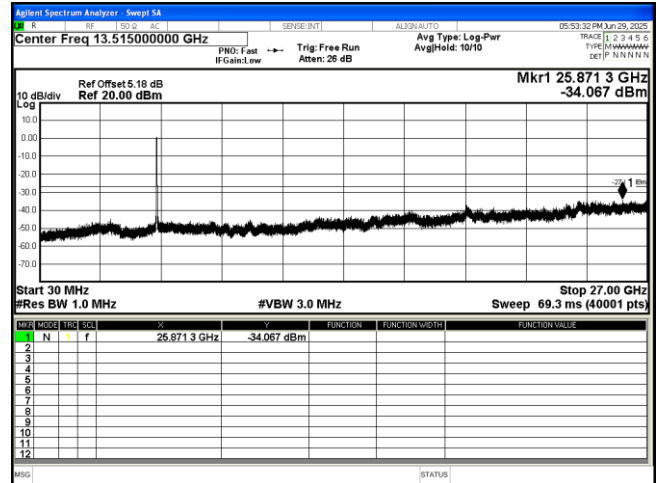
802.11 n40 5190MHz



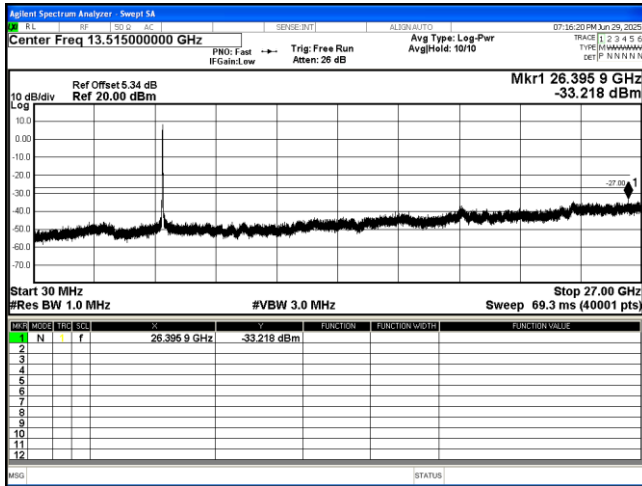
802.11 n40 5230MHz



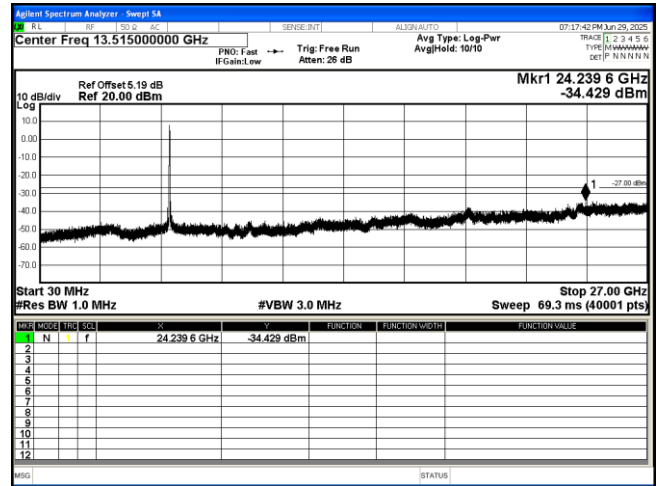
802.11 ac40 5190MHz



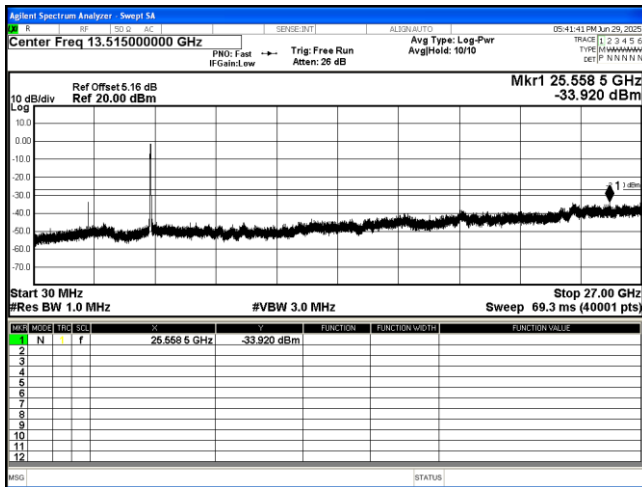
802.11 ac40 5230MHz



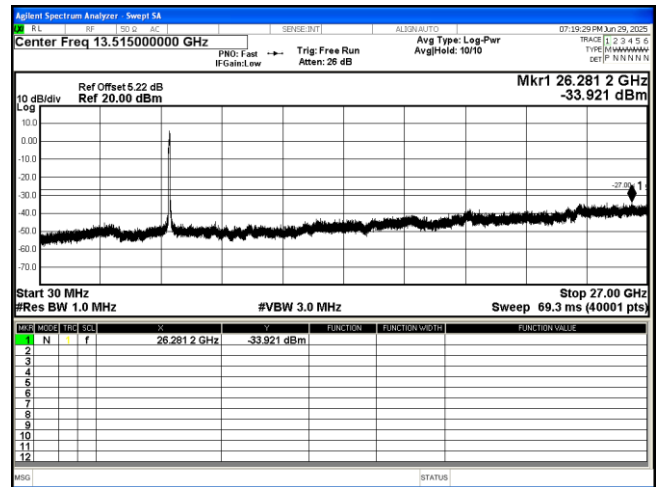
802.11 ac40 5755MHz



802.11 ac40 5795MHz



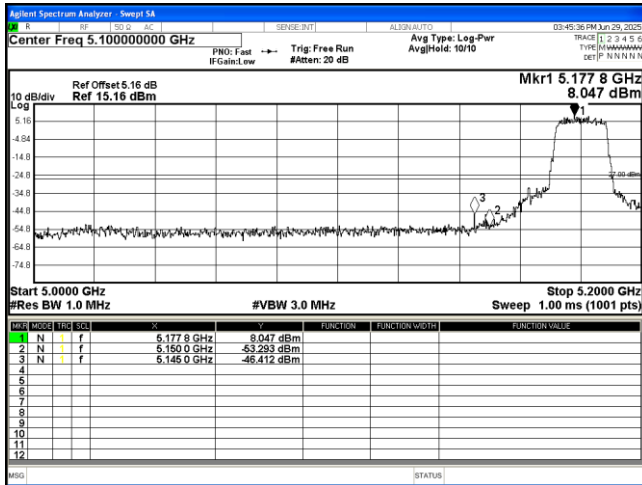
802.11 ac80 5210MHz



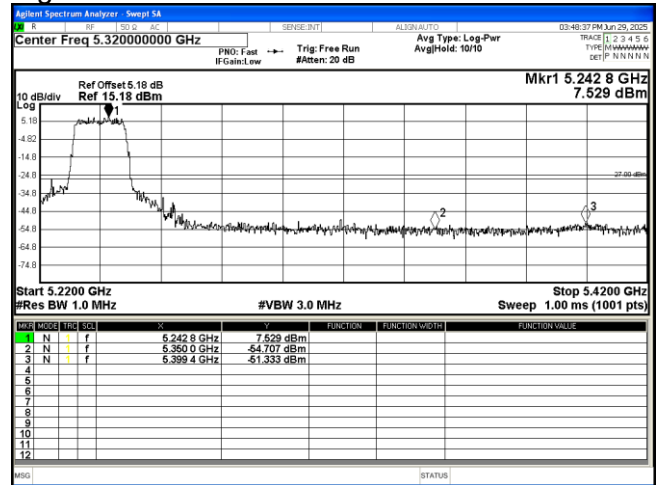
802.11 ac80 5775MHz



Band Edge



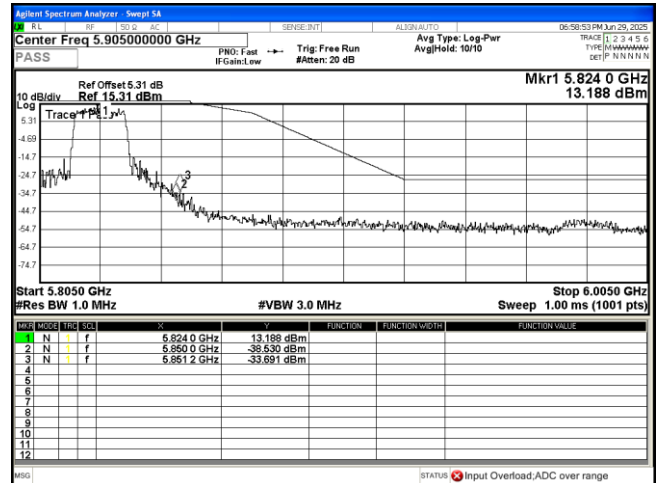
802.11 a 5180MHz



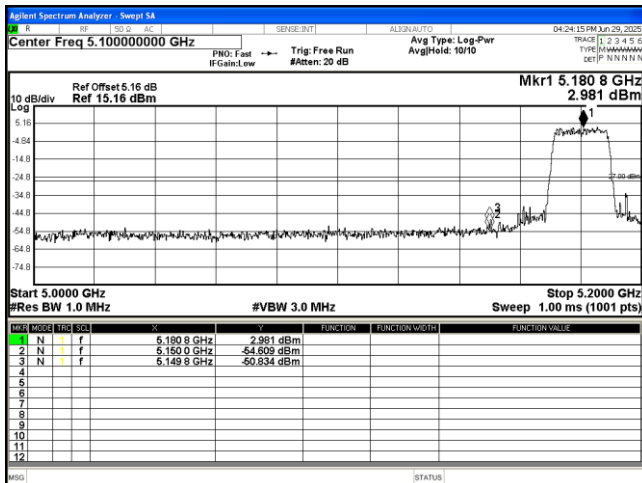
802.11 a 5240MHz



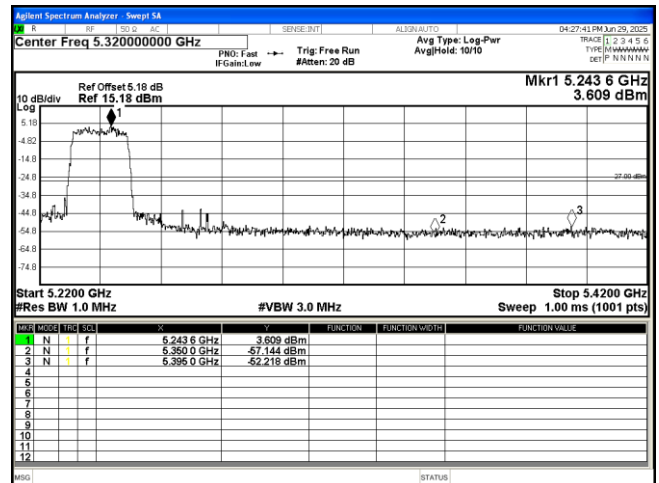
802.11 a 5745MHz



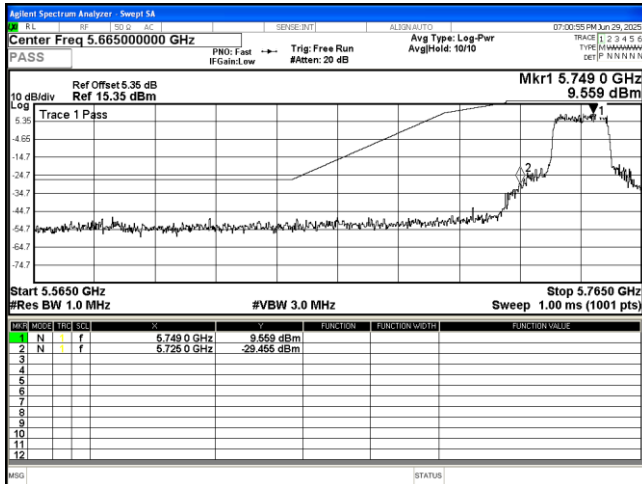
802.11 a 5825MHz



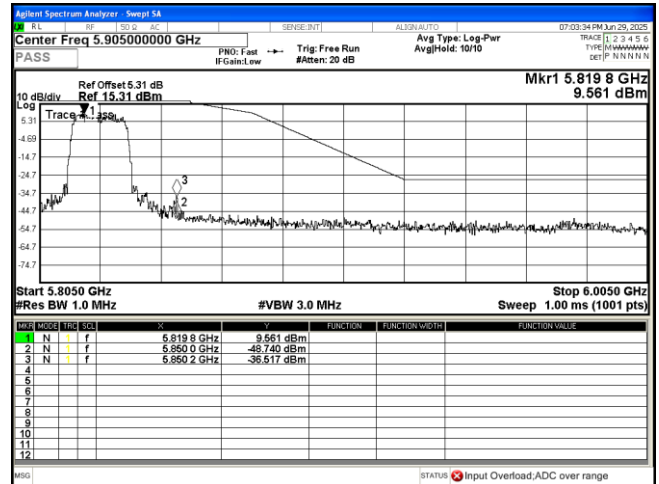
802.11 n20 5180MHz



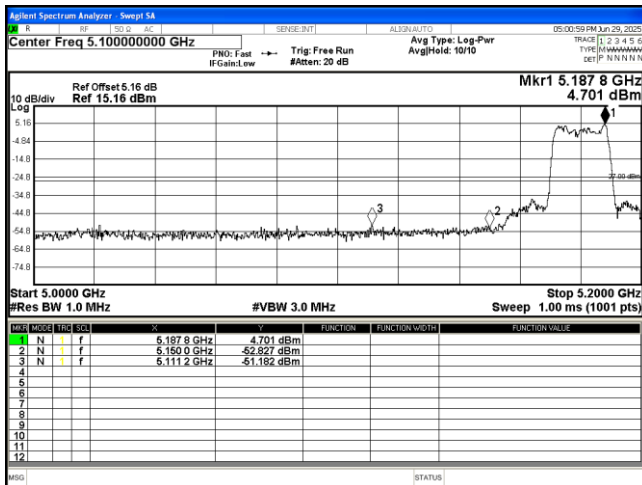
802.11 n20 5240MHz



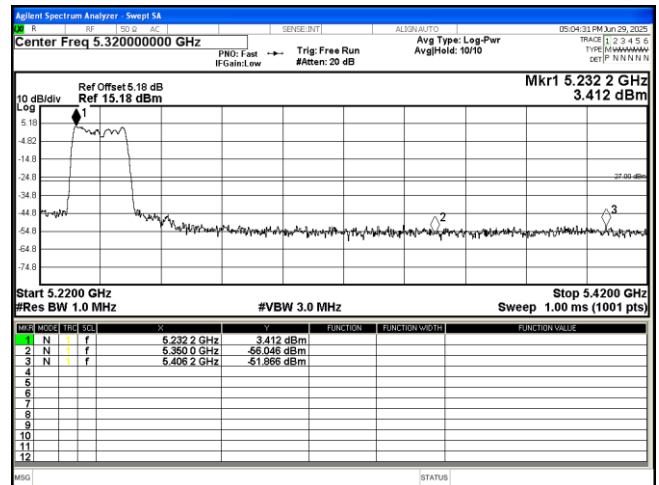
802.11 n20 5745MHz



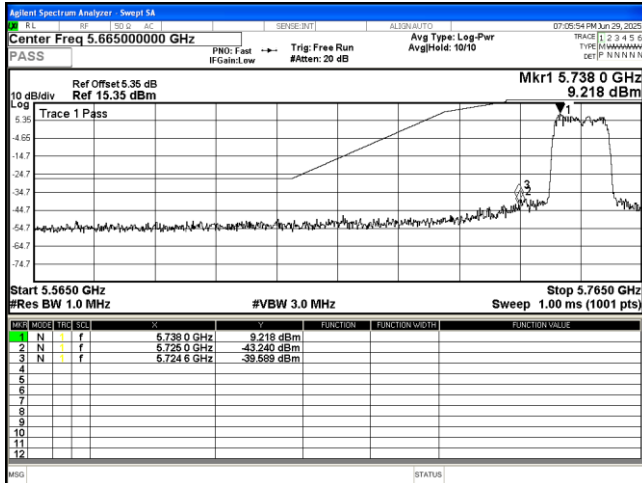
802.11 n20 5825MHz



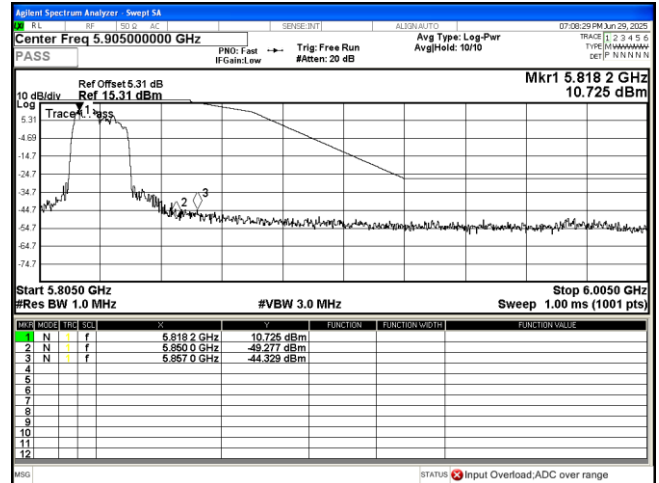
802.11 ac20 5180MHz



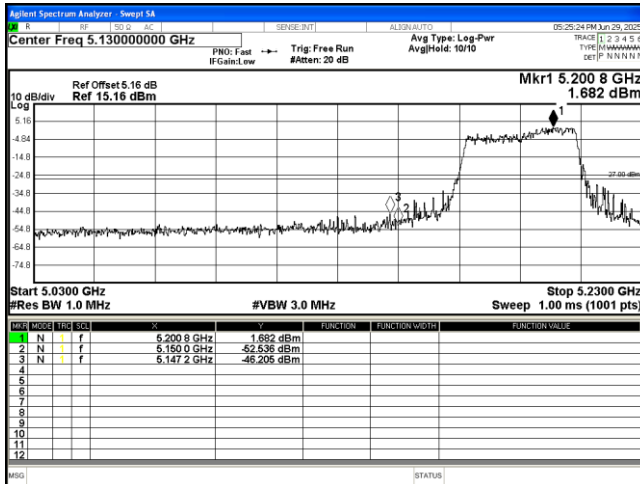
802.11 ac20 5240MHz



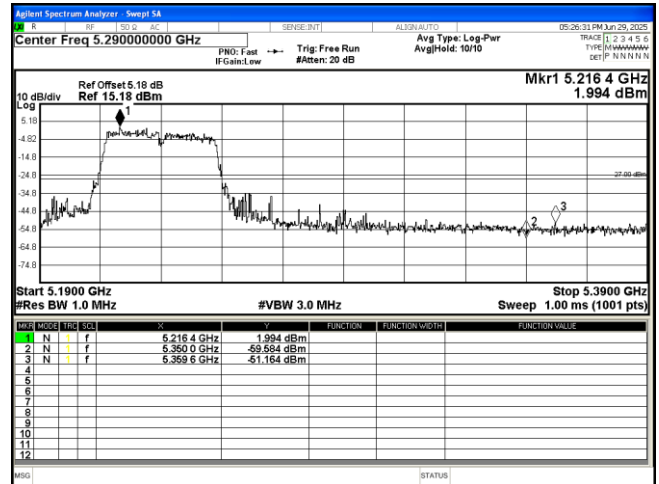
802.11 ac20 5745MHz



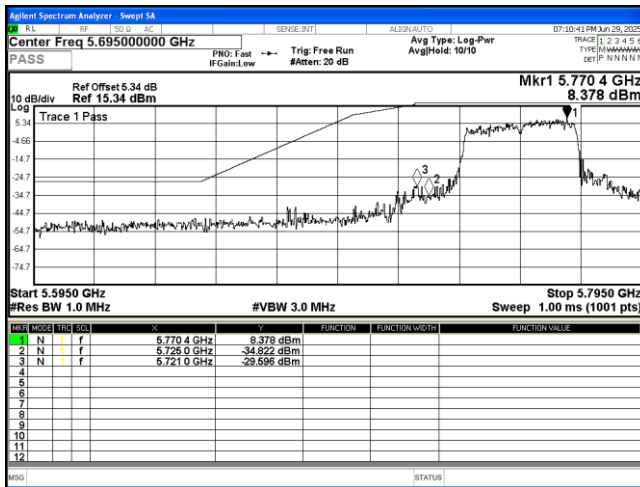
802.11 ac20 5825MHz



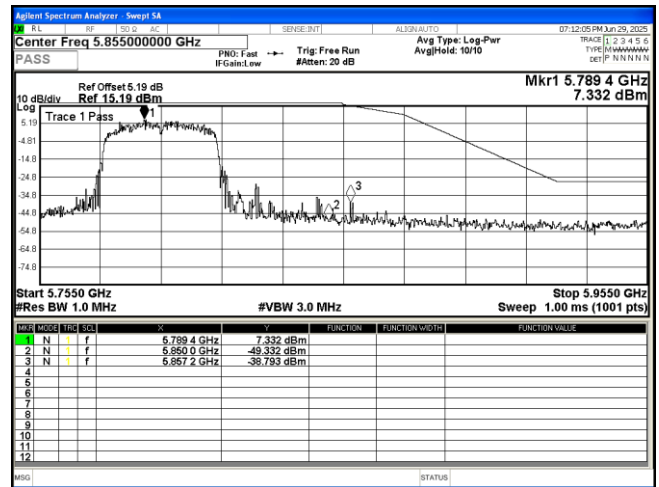
802.11 n40 5190MHz



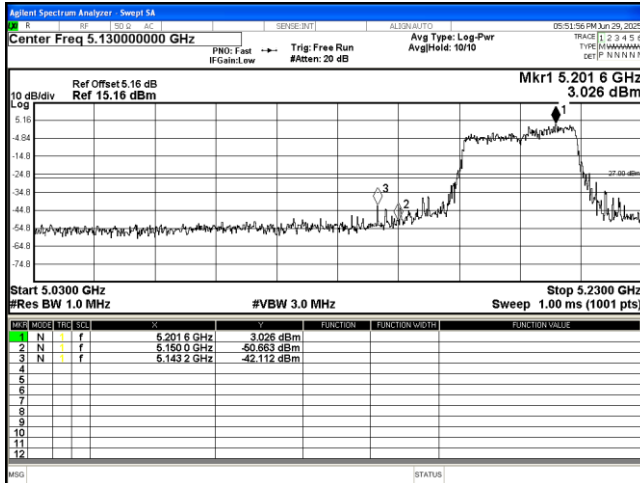
802.11 n40 5230MHz



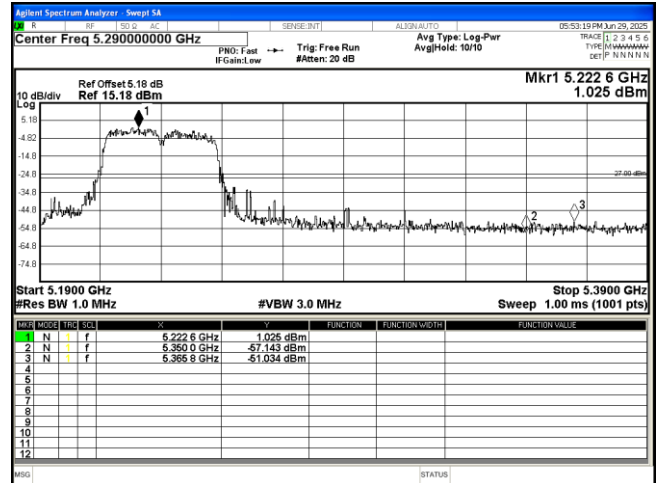
802.11 n40 5755MHz



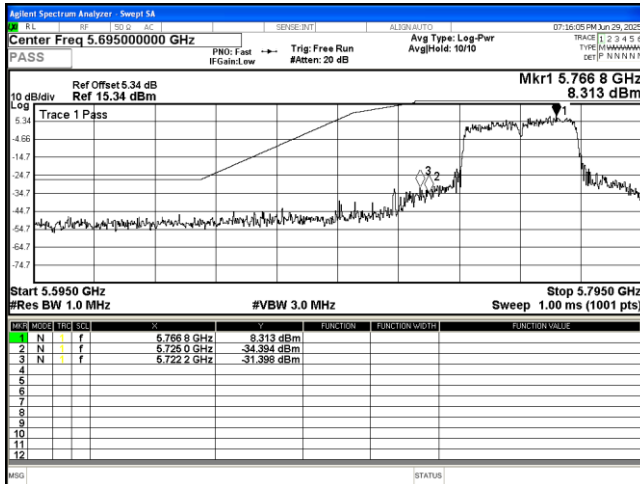
802.11 n40 5795MHz



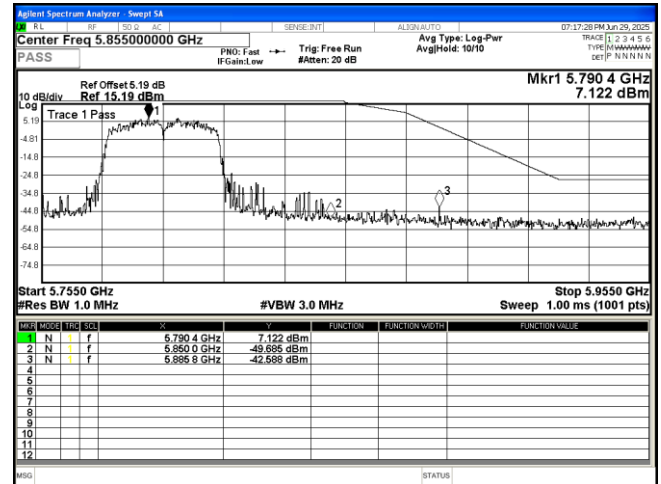
802.11 ac40 5190MHz



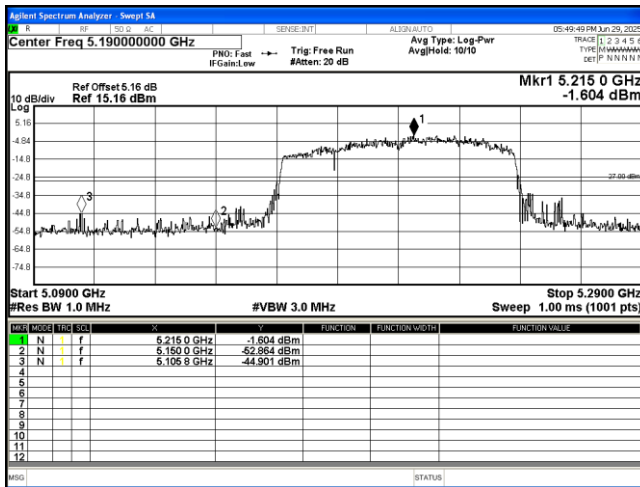
802.11 ac40 5230MHz



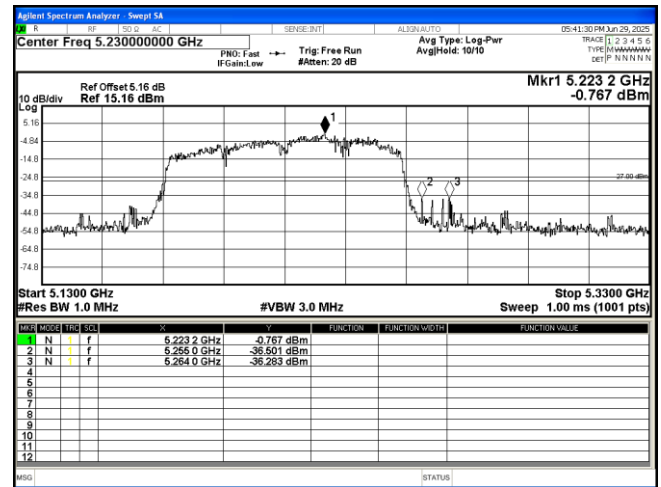
802.11 ac40 5755MHz



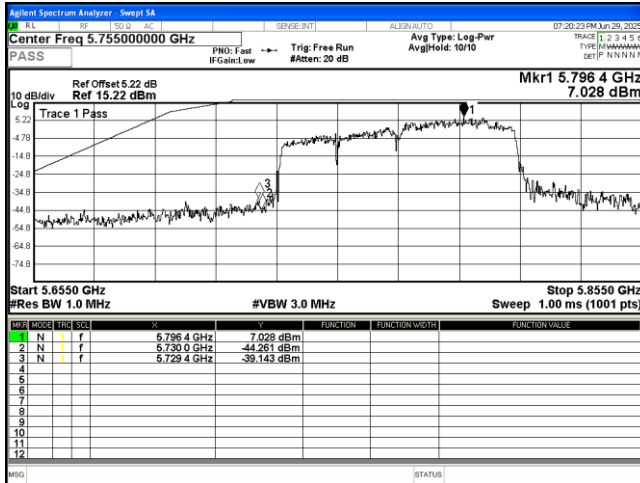
802.11 ac40 5795MHz



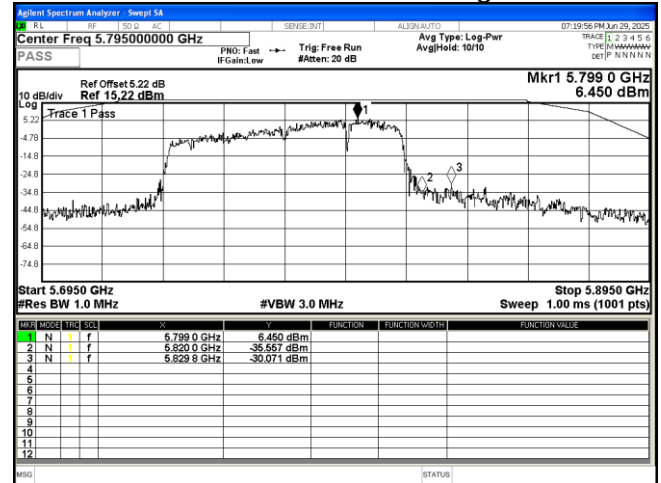
802.11 ac80 5210MHz Left



802.11 ac80 5210MHz Right



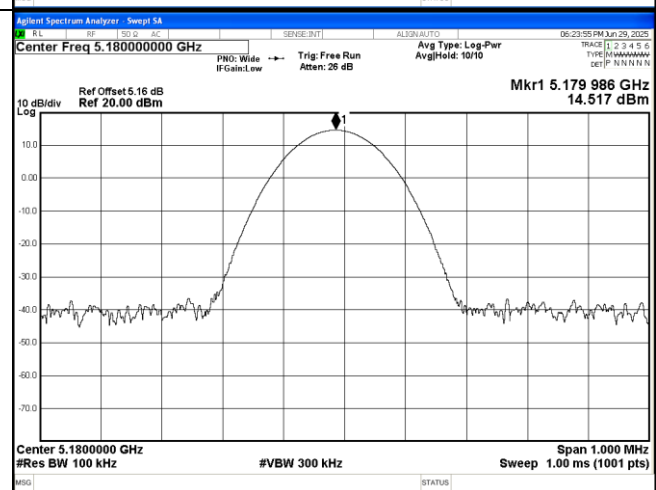
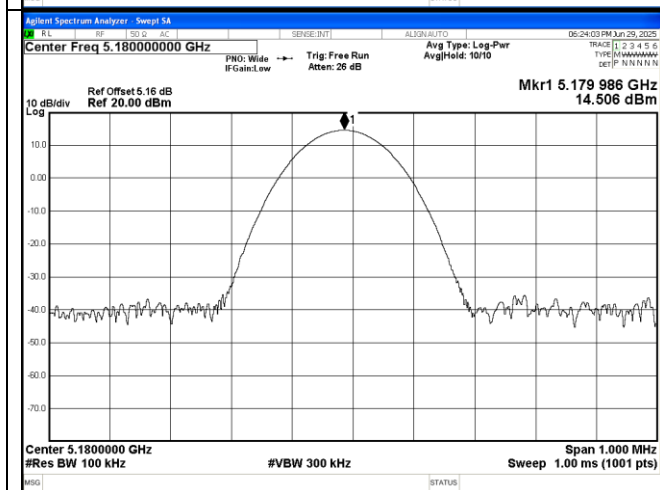
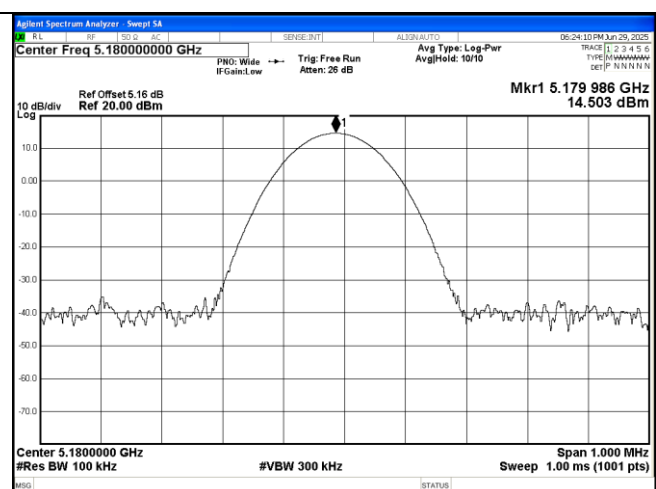
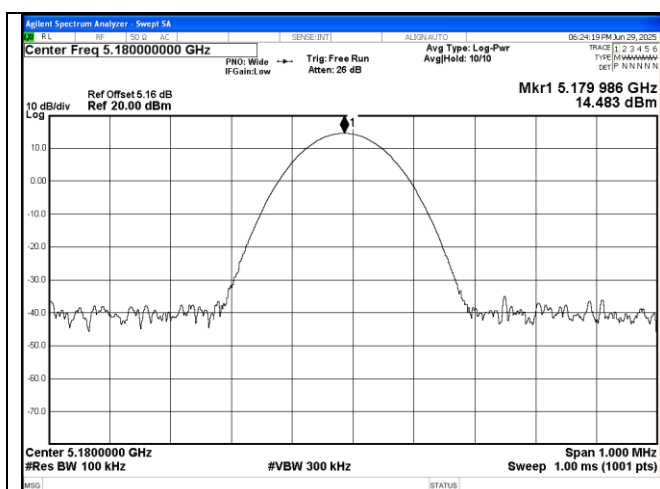
802.11 ac80 5775MHz Left

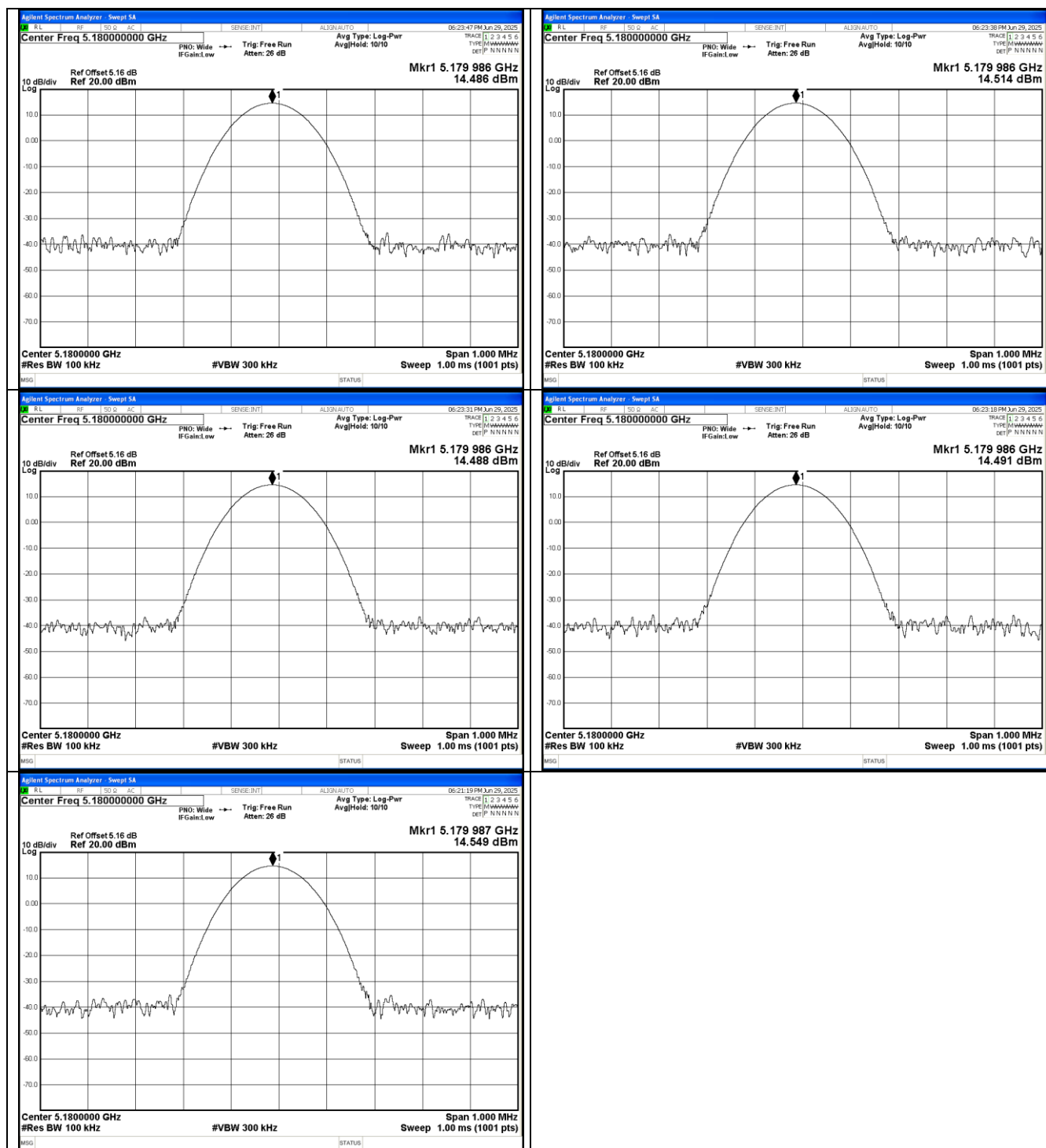


802.11 ac80 5775MHz Right

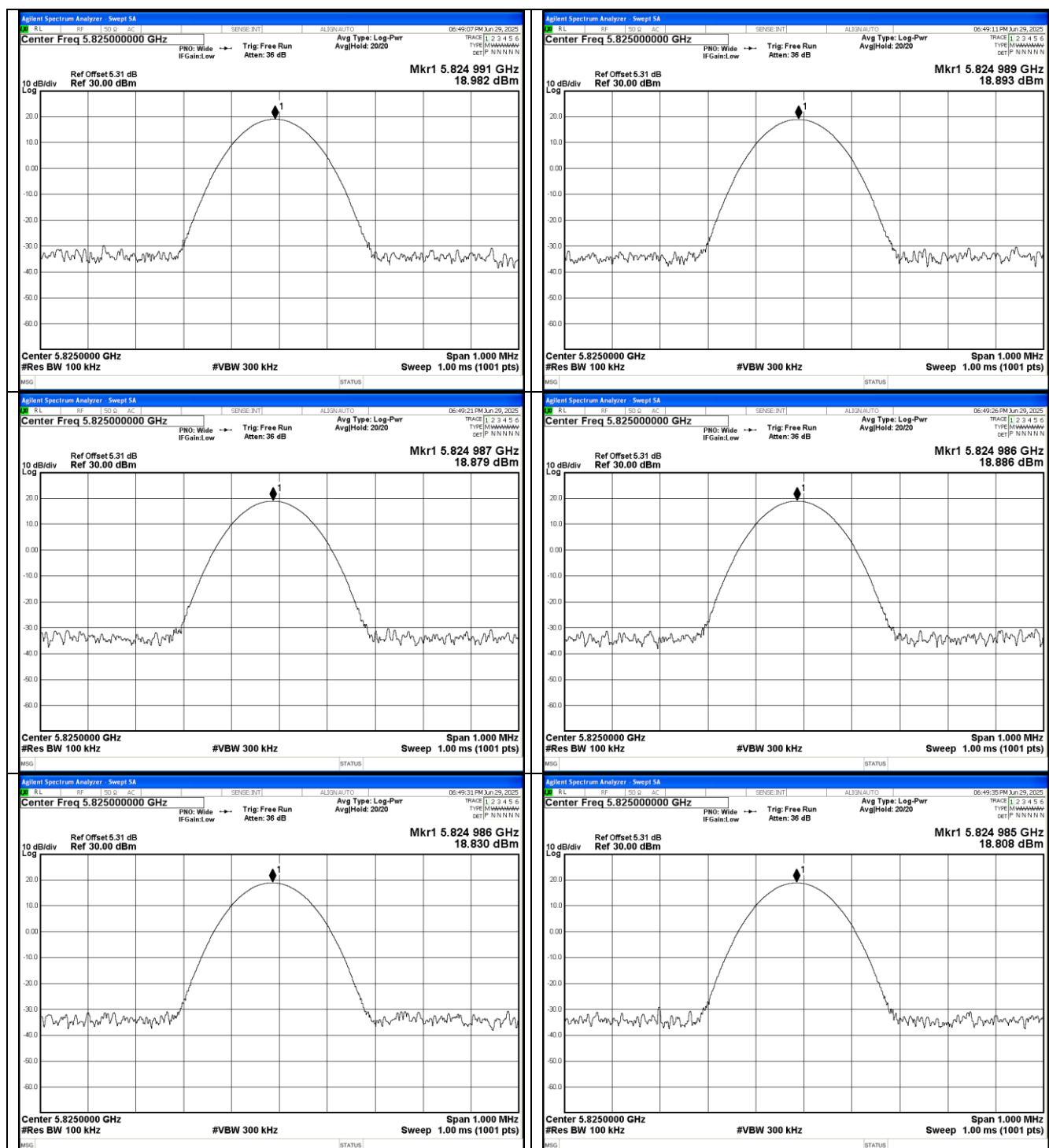
Appendix A.4 Test Results of Frequency Stability

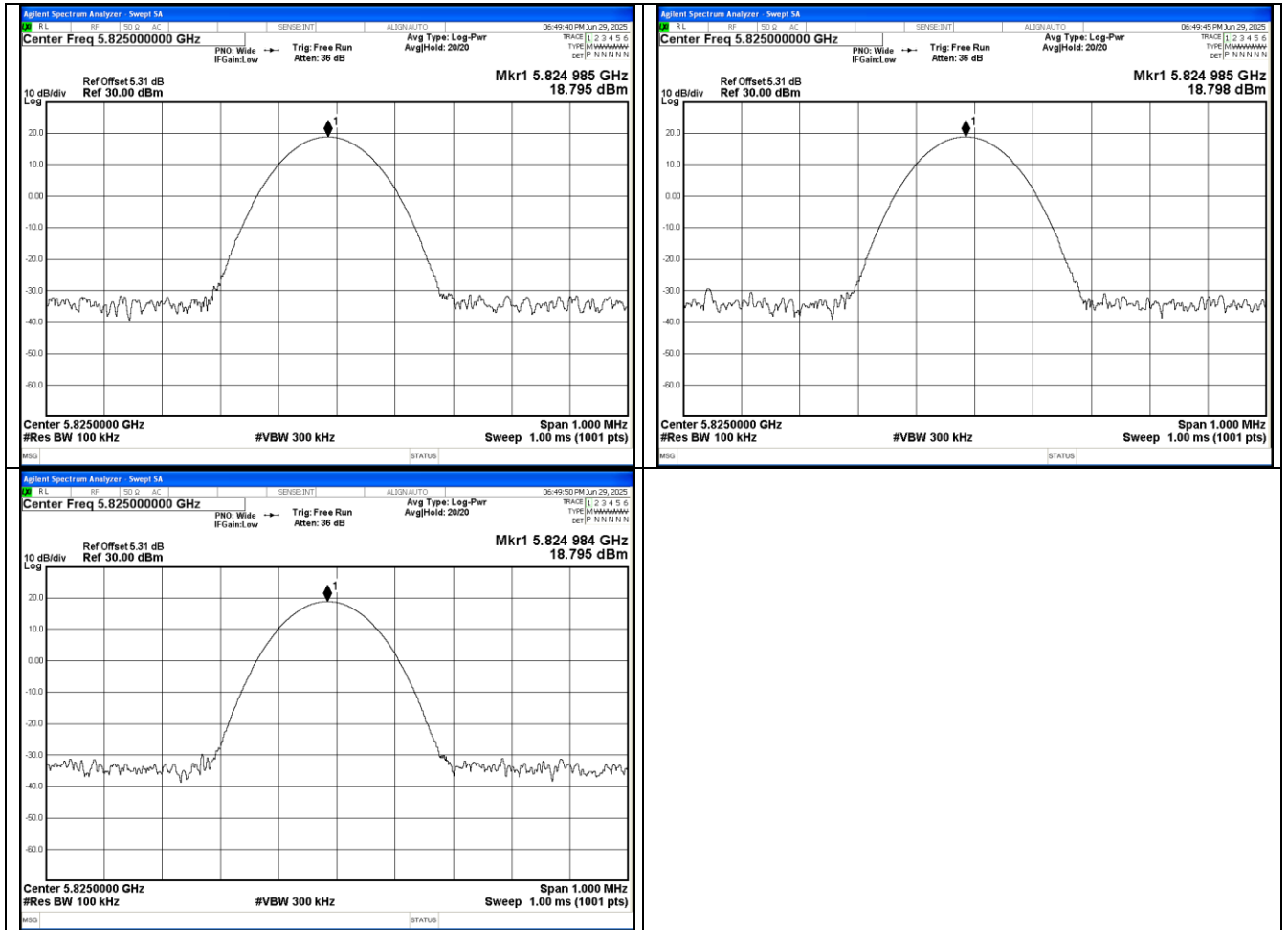
Frequency (MHz)	Voltage (V)	Temperature (°C)	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Result
5180	110 Vac	-25	5179.9855	1.93	25	Pass
		-15	5179.9855	1.93	25	Pass
		0	5179.986	1.93	25	Pass
		10	5179.9855	1.93	25	Pass
		20	5179.9855	1.93	25	Pass
		30	5179.9855	1.93	25	Pass
		40	5179.9855	1.93	25	Pass
	93.5 Vac	25	5179.9855	1.93	25	Pass
	126.5 Vac	25	5179.9865	1.83	25	Pass





Frequency (MHz)	Voltage (V)	Temperature (°C)	Measured Frequency (MHz)	Deviation (ppm)	Limit (ppm)	Result
5825	110 Vac	-25	5824.991	1.72	25	Pass
		-15	5824.9885	1.72	25	Pass
		0	5824.987	1.8	25	Pass
		10	5824.986	1.89	25	Pass
		20	5824.9855	1.89	25	Pass
		30	5824.985	1.89	25	Pass
		40	5824.985	1.89	25	Pass
	93.5 Vac	25	5824.985	1.89	25	Pass
	126.5 Vac	25	5824.984	1.8	25	Pass





Appendix A.5 Test Results of Conducted Power Spectral Density

802.11a mode:					
CH	Freq.	FCC PSD (dBm/MHz)		FCC Limit (dBm/MHz)	Result
		ANT1	ANT2		
36	5180	8.422	9.706	11	Pass
44	5200	7.835	10.056	11	Pass
48	5240	7.719	10.535	11	Pass

CH	Freq.	ANT1_PSD (dBm/500kHz)	ANT2_PSD (dBm/500kHz)	MIMO PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
149	5745	10.017	9.809	/	30	Pass
157	5785	9.536	10.154	/	30	Pass
165	5825	9.988	9.619	/	30	Pass

Note:

Antenna gain(G) of 802.11 a/n/ac: 5150MHz to 5250MHz: 2.00 dBi, 5725MHz to 5850MHz: 2.00 dBi(ANT1&2).

