



9. 26dB Bandwidth, 6dB Bandwidth and 99% Bandwidth

9.1. Block Diagram of Test Setup

Same as section 8.1

9.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Bandwidth	26 dB Bandwidth	5150 - 5250
	26 dB Bandwidth	5250 - 5350
	26 dB Bandwidth	For FCC: 5470 - 5725 For IC: 5470 - 5600 5650 - 5725
	Minimum 500 kHz 6 dB Bandwidth	5725 - 5850
	For reporting purposes only.	For IC: 5150 ~ 5825

9.3. Test Procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	For 6 dB Bandwidth: RBW=100 kHz For 26 dB Bandwidth: approximately 1% of the emission bandwidth. For 99 % Occupied Bandwidth: approximately 1 % ~ 5 % of the OBW.
VBW	For 6 dB Bandwidth: VBW=300 kHz For 26 dB Bandwidth: >3*RBW For 99 % Bandwidth: >3*RBW
Trace	Max hold
Sweep	Auto couple

(2) Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB and 6 dB relative to the maximum level measured in the fundamental emission.

(3) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

9.4. Test Result

Test Mode	Ant.	Freq. (MHz)	OCB (MHz)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
11A	Ant1	5180	17.867	5170.8656	5188.7326	---	---
		5200	17.708	5190.9960	5208.7040	---	---
		5240	17.767	5231.0534	5248.8204	---	---
		5260	17.723	5251.0750	5268.7980	---	---
		5280	17.844	5271.0008	5288.8448	---	---
		5320	17.770	5310.9625	5328.7325	---	---
		5500	17.959	5490.9301	5508.8891	---	---
		5580	18.029	5570.8734	5588.9024	---	---
		5700	17.950	5690.8496	5708.7996	---	---
		5720	18.086	5710.7729	5728.8589	---	---
		5720_UNII-2C	14.227	5710.7729	5725	---	---
		5720_UNII-3	3.859	5725	5728.8589	---	---
		5745	17.897	5735.8782	5753.7752	---	---
		5785	18.011	5775.8196	5793.8306	---	---
		5825	18.038	5815.7109	5833.7489	---	---
11N20SISO	Ant1	5180	18.823	5170.4945	5189.3175	---	---
		5200	18.833	5190.4785	5209.3115	---	---
		5240	18.793	5230.6416	5249.4346	---	---
		5260	18.749	5250.5849	5269.3339	---	---

		5280	18.779	5270.6089	5289.3879	---	---
		5320	18.705	5310.5532	5329.2582	---	---
		5500	18.997	5490.4588	5509.4558	---	---
		5580	19.216	5570.2991	5589.5151	---	---
		5700	18.997	5690.4236	5709.4206	---	---
		5720	19.142	5710.2798	5729.4218	---	---
		5720 UNII-2C	14.72	5710.2798	5725	---	---
		5720 UNII-3	4.422	5725	5729.4218	---	---
		5745	19.100	5735.3511	5754.4511	---	---
		5785	19.063	5775.3243	5794.3873	---	---
		5825	18.953	5815.3106	5834.2636	---	---
		5190	37.075	5171.3234	5208.3984	---	---
11N40SISO	Ant1	5230	37.325	5211.3297	5248.6547	---	---
		5270	37.215	5251.4077	5288.6227	---	---
		5310	37.103	5291.3401	5328.4431	---	---
		5510	37.410	5491.2967	5528.7067	---	---
		5550	37.626	5531.0716	5568.6976	---	---
		5670	37.442	5651.2591	5688.7011	---	---
		5710	37.491	5691.1618	5728.6528	---	---
		5710 UNII-2C	33.838	5691.1618	5725	---	---
		5710 UNII-3	3.653	5725	5728.6528	---	---
		5755	37.506	5736.1267	5773.6327	---	---
		5795	37.557	5776.0235	5813.5805	---	---
		5180	18.823	5170.5179	5189.3409	---	---
11AC20SISO	Ant1	5200	18.721	5190.5414	5209.2624	---	---
		5240	18.732	5230.6374	5249.3694	---	---
		5260	18.821	5250.5898	5269.4108	---	---
		5280	18.865	5270.5099	5289.3749	---	---
		5320	18.745	5310.5520	5329.2970	---	---
		5500	19.033	5490.4647	5509.4977	---	---
		5580	19.149	5570.3404	5589.4894	---	---
		5700	18.951	5690.4631	5709.4141	---	---
		5720	19.268	5710.2334	5729.5014	---	---
		5720 UNII-2C	14.767	5710.2334	5725	---	---
		5720 UNII-3	4.501	5725	5729.5014	---	---
		5745	19.005	5735.4515	5754.4565	---	---
11AC40SISO	Ant1	5785	19.003	5775.3855	5794.3885	---	---
		5825	19.103	5815.2777	5834.3807	---	---
		5190	37.182	5171.2651	5208.4471	---	---
		5230	37.417	5211.2825	5248.6995	---	---
		5270	37.315	5251.3178	5288.6328	---	---
		5310	37.251	5291.2280	5328.4790	---	---
		5510	37.554	5491.2139	5528.7679	---	---
		5550	37.790	5530.9625	5568.7525	---	---
		5670	37.616	5651.1605	5688.7765	---	---
		5710	37.940	5690.8839	5728.8239	---	---
		5710 UNII-2C	34.116	5690.8839	5725	---	---
		5710 UNII-3	3.824	5725	5728.8239	---	---
11AC80SISO	Ant1	5755	37.698	5736.0715	5773.7695	---	---
		5795	37.600	5776.0258	5813.6258	---	---
		5210	76.498	5171.5287	5248.0267	---	---
		5290	76.075	5251.8347	5327.9097	---	---
		5530	76.736	5491.4765	5568.2125	---	---
		5610	76.978	5571.6075	5648.5855	---	---
		5690	77.373	5650.9998	5728.3728	---	---
		5690 UNII-2C	74	5650.9998	5725	---	---
		5690 UNII-3	3.373	5725	5728.3728	---	---
		5775	77.112	5735.9375	5813.0495	---	---
11AX20SISO	Ant1	5180	19.467	5170.2542	5189.7212	---	---
		5200	19.515	5190.2148	5209.7298	---	---
		5240	19.448	5230.3113	5249.7593	---	---
		5260	19.425	5250.2855	5269.7105	---	---
		5280	19.573	5270.1752	5289.7482	---	---
		5320	19.466	5310.2194	5329.6854	---	---
		5500	19.738	5490.1004	5509.8384	---	---
		5580	19.656	5570.1580	5589.8140	---	---
		5700	19.732	5690.0966	5709.8286	---	---

		5720	18.800	5710.5601	5729.3601	---	---
		5720 UNII-2C	14.44	5710.5601	5725	---	---
		5720 UNII-3	4.36	5725	5729.3601	---	---
		5745	19.716	5735.0771	5754.7931	---	---
		5785	19.760	5775.0554	5794.8154	---	---
		5825	19.707	5815.0737	5834.7807	---	---
11AX40SISO	Ant1	5190	38.210	5170.7813	5208.9913	---	---
		5230	38.299	5210.8662	5249.1652	---	---
		5270	38.298	5250.7993	5289.0973	---	---
		5310	38.192	5290.8449	5329.0369	---	---
		5510	38.432	5490.7176	5529.1496	---	---
		5550	38.422	5530.6980	5569.1200	---	---
		5670	38.315	5650.7770	5689.0920	---	---
		5710	38.788	5690.5242	5729.3122	---	---
		5710 UNII-2C	34.476	5690.5242	5725	---	---
		5710 UNII-3	4.312	5725	5729.3122	---	---
		5755	38.464	5735.6445	5774.1085	---	---
		5795	37.996	5775.9169	5813.9129	---	---
11AX80SISO	Ant1	5210	77.726	5171.0020	5248.7280	---	---
		5290	77.744	5251.0600	5328.8040	---	---
		5530	77.950	5490.9231	5568.8731	---	---
		5610	78.167	5570.9728	5649.1398	---	---
		5690	78.594	5650.5011	5729.0951	---	---
		5690 UNII-2C	74.499	5650.5011	5725	---	---
		5690 UNII-3	4.095	5725	5729.0951	---	---
		5775	78.215	5735.6049	5813.8199	---	---

Test Mode	Ant.	Freq. (MHz)	26dB EBW (MHz)	FL (MHz)	FH (MHz)	Limit (MHz)	Verdict
11A	Ant1	5180	24.560	5167.600	5192.160	---	---
		5200	24.360	5188.200	5212.560	---	---
		5240	26.000	5227.200	5253.200	---	---
		5260	25.560	5247.960	5273.520	---	---
		5280	27.000	5267.200	5294.200	---	---
		5320	23.960	5307.920	5331.880	---	---
		5500	25.280	5487.080	5512.360	---	---
		5580	30.920	5565.520	5596.440	---	---
		5700	23.400	5688.120	5711.520	---	---
		5720	28.600	5705.560	5734.160	---	---
		5720 UNII-2C	19.44	5705.560	5725	---	---
		5720 UNII-3	9.16	5725	5734.160	---	---
		5745	23.960	5732.320	5756.280	---	---
		5785	25.240	5771.960	5797.200	---	---
11N20SISO	Ant1	5825	26.480	5810.240	5836.720	---	---
		5180	24.600	5167.680	5192.280	---	---
		5200	23.800	5187.720	5211.520	---	---
		5240	24.360	5228.240	5252.600	---	---
		5260	25.840	5246.760	5272.600	---	---
		5280	24.840	5267.240	5292.080	---	---
		5320	24.080	5307.640	5331.720	---	---
		5500	25.000	5487.320	5512.320	---	---
		5580	27.520	5566.240	5593.760	---	---
		5700	26.120	5687.000	5713.120	---	---
		5720	28.760	5705.040	5733.800	---	---
		5720 UNII-2C	19.96	5705.040	5725	---	---
		5720 UNII-3	8.8	5725	5733.800	---	---
		5745	25.960	5731.480	5757.440	---	---
		5785	25.840	5771.680	5797.520	---	---
11N40SISO	Ant1	5825	27.760	5810.320	5838.080	---	---
		5190	44.560	5167.200	5211.760	---	---
		5230	43.840	5207.920	5251.760	---	---
		5270	43.120	5248.240	5291.360	---	---
		5310	44.560	5287.280	5331.840	---	---
		5510	46.000	5486.880	5532.880	---	---
		5550	45.920	5526.880	5572.800	---	---
		5670	45.360	5646.880	5692.240	---	---

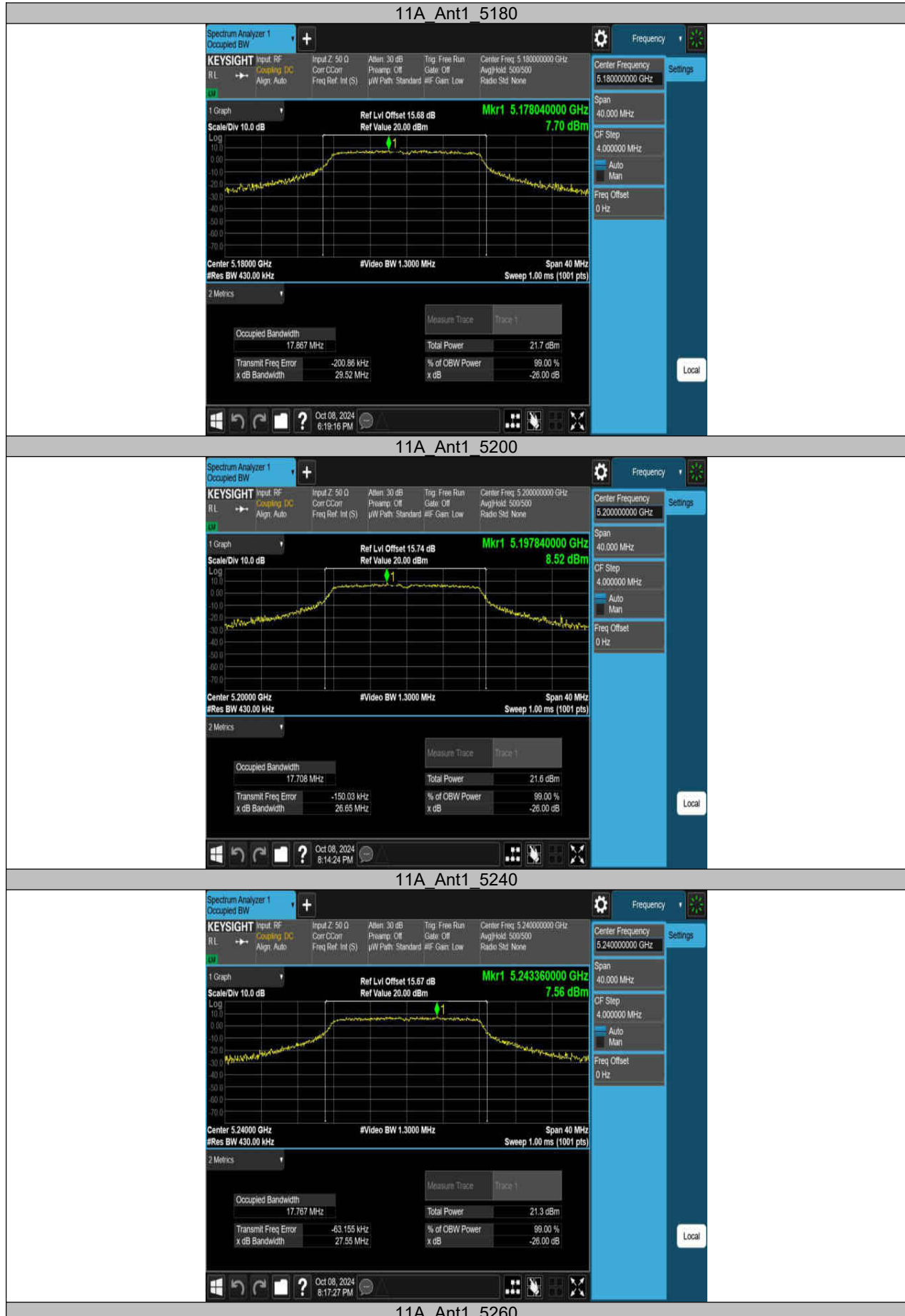
		5710	49.680	5685.040	5734.720	---	---
		5710 UNII-2C	39.96	5685.040	5725	---	---
		5710 UNII-3	9.72	5725	5734.720	---	---
		5755	44.720	5732.200	5776.920	---	---
		5795	46.240	5771.560	5817.800	---	---
11AC20SISO	Ant1	5180	24.280	5167.840	5192.120	---	---
		5200	25.120	5186.760	5211.880	---	---
		5240	25.040	5227.360	5252.400	---	---
		5260	25.440	5247.080	5272.520	---	---
		5280	24.400	5267.960	5292.360	---	---
		5320	25.080	5306.760	5331.840	---	---
		5500	25.440	5487.400	5512.840	---	---
		5580	28.720	5564.880	5593.600	---	---
		5700	25.080	5687.200	5712.280	---	---
		5720	26.240	5706.680	5732.920	---	---
		5720 UNII-2C	18.32	5706.680	5725	---	---
		5720 UNII-3	7.92	5725	5732.920	---	---
		5745	24.280	5732.640	5756.920	---	---
		5785	25.320	5771.920	5797.240	---	---
		5825	25.560	5811.560	5837.120	---	---
11AC40SISO	Ant1	5190	45.440	5167.360	5212.800	---	---
		5230	46.240	5207.600	5253.840	---	---
		5270	45.280	5248.000	5293.280	---	---
		5310	43.680	5288.000	5331.680	---	---
		5510	53.120	5483.680	5536.800	---	---
		5550	56.000	5517.440	5573.440	---	---
		5670	68.160	5632.640	5700.800	---	---
		5710	61.360	5679.440	5740.800	---	---
		5710 UNII-2C	45.56	5679.440	5725	---	---
		5710 UNII-3	15.8	5725	5740.800	---	---
		5755	48.240	5730.920	5779.160	---	---
		5795	52.160	5769.800	5821.960	---	---
		5210	85.760	5166.480	5252.240	---	---
11AC80SISO	Ant1	5290	99.040	5237.040	5336.080	---	---
		5530	90.240	5483.760	5574.000	---	---
		5610	89.760	5565.840	5655.600	---	---
		5690	148.000	5612.720	5760.720	---	---
		5690 UNII-2C	112.28	5612.720	5725	---	---
		5690 UNII-3	35.72	5725	5760.720	---	---
		5775	99.360	5718.520	5817.880	---	---
		5180	24.040	5167.880	5191.920	---	---
11AX20SISO	Ant1	5200	25.240	5187.440	5212.680	---	---
		5240	25.200	5227.840	5253.040	---	---
		5260	23.440	5247.800	5271.240	---	---
		5280	24.320	5267.760	5292.080	---	---
		5320	24.480	5307.800	5332.280	---	---
		5500	26.920	5487.280	5514.200	---	---
		5580	28.640	5565.040	5593.680	---	---
		5700	25.600	5687.440	5713.040	---	---
		5720	24.720	5707.840	5732.560	---	---
		5720 UNII-2C	17.16	5707.840	5725	---	---
		5720 UNII-3	7.56	5725	5732.560	---	---
		5745	26.400	5732.400	5758.800	---	---
		5785	24.360	5773.000	5797.360	---	---
		5825	27.440	5811.440	5838.880	---	---
11AX40SISO	Ant1	5190	45.120	5166.800	5211.920	---	---
		5230	45.680	5207.200	5252.880	---	---
		5270	43.600	5248.240	5291.840	---	---
		5310	45.360	5287.040	5332.400	---	---
		5510	44.960	5487.200	5532.160	---	---
		5550	45.280	5527.120	5572.400	---	---
		5670	45.040	5647.520	5692.560	---	---
		5710	58.800	5682.160	5740.960	---	---
		5710 UNII-2C	42.84	5682.160	5725	---	---
		5710 UNII-3	15.96	5725	5740.960	---	---
		5755	47.840	5729.720	5777.560	---	---
		5795	44.640	5772.360	5817.000	---	---

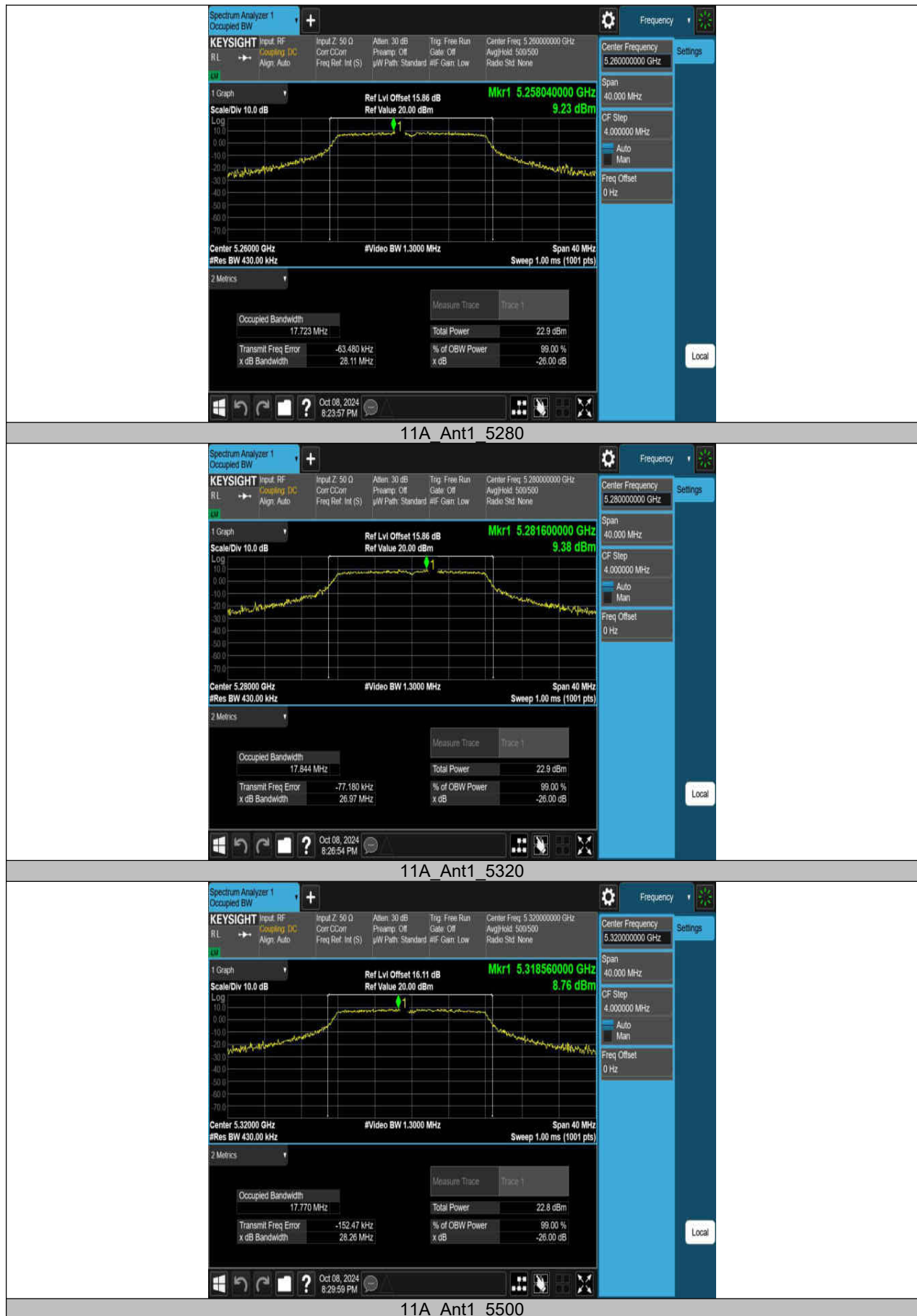
11AX80SISO	Ant1	5210	84.800	5166.480	5251.280	---	---
		5290	84.160	5247.760	5331.920	---	---
		5530	85.600	5486.320	5571.920	---	---
		5610	112.000	5542.800	5654.800	---	---
		5690	123.200	5619.600	5742.800	---	---
		5690_UNII-2C	105.4	5619.600	5725	---	---
		5690_UNII-3	17.8	5725	5742.800	---	---
		5775	84.640	5733.880	5818.520	---	---

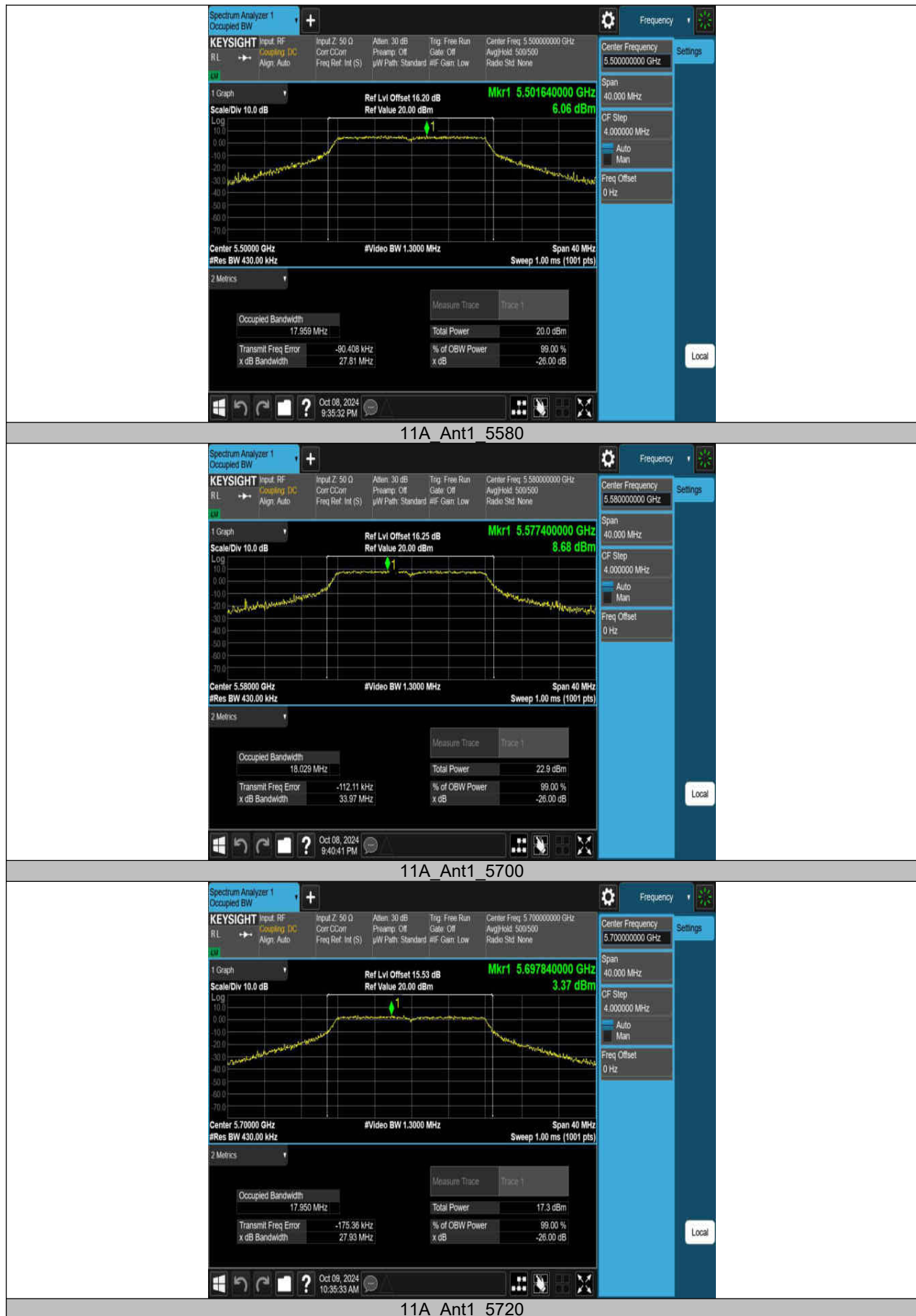
Test Mode	Antenna	Frequency (MHz)	6db EBW (MHz)	FL(MHz)	FH(MHz)	Limit(MHz)	Verdict
11A	Ant1	5720	16.320	5711.800	5728.120	---	---
		5720_UNII-2C	13.2	5711.800	5725	---	---
		5720_UNII-3	3.12	5725	5728.120	0.5	PASS
		5745	16.320	5736.800	5753.120	0.5	PASS
		5785	16.320	5776.800	5793.120	0.5	PASS
		5825	16.480	5816.680	5833.160	0.5	PASS
11N20SISO	Ant1	5720	17.600	5711.160	5728.760	---	---
		5720_UNII-2C	13.84	5711.160	5725	---	---
		5720_UNII-3	3.76	5725	5728.760	0.5	PASS
		5745	17.600	5736.160	5753.760	0.5	PASS
		5785	17.600	5776.160	5793.760	0.5	PASS
		5825	17.600	5816.160	5833.760	0.5	PASS
11N40SISO	Ant1	5710	36.240	5691.840	5728.080	---	---
		5710_UNII-2C	33.16	5691.840	5725	---	---
		5710_UNII-3	3.08	5725	5728.080	0.5	PASS
		5755	36.080	5736.760	5772.840	0.5	PASS
		5795	36.400	5776.760	5813.160	0.5	PASS
11AC20SISO	Ant1	5720	17.600	5711.160	5728.760	---	---
		5720_UNII-2C	13.84	5711.160	5725	---	---
		5720_UNII-3	3.76	5725	5728.760	0.5	PASS
		5745	17.600	5736.160	5753.760	0.5	PASS
		5785	17.600	5776.160	5793.760	0.5	PASS
		5825	17.600	5816.160	5833.760	0.5	PASS
11AC40SISO	Ant1	5710	36.240	5691.840	5728.080	---	---
		5710_UNII-2C	33.16	5691.840	5725	---	---
		5710_UNII-3	3.08	5725	5728.080	0.5	PASS
		5755	36.240	5736.840	5773.080	0.5	PASS
		5795	36.320	5776.760	5813.080	0.5	PASS
11AC80SISO	Ant1	5610	76.000	5572.080	5648.080	0.5	PASS
		5690	76.320	5651.760	5728.080	---	---
		5690_UNII-2C	73.24	5651.760	5725	---	---
		5690_UNII-3	3.08	5725	5728.080	0.5	PASS
		5775	75.840	5736.760	5812.600	0.5	PASS
11AX20SISO	Ant1	5720	18.960	5710.480	5729.440	---	---
		5720_UNII-2C	14.52	5710.480	5725	---	---
		5720_UNII-3	4.44	5725	5729.440	0.5	PASS
		5745	18.880	5735.520	5754.400	0.5	PASS
		5785	18.760	5775.480	5794.240	0.5	PASS
		5825	18.920	5815.440	5834.360	0.5	PASS
11AX40SISO	Ant1	5710	37.680	5691.040	5728.720	---	---
		5710_UNII-2C	33.96	5691.040	5725	---	---
		5710_UNII-3	3.72	5725	5728.720	0.5	PASS
		5755	37.600	5736.040	5773.640	0.5	PASS
		5795	37.600	5776.040	5813.640	0.5	PASS
11AX80SISO	Ant1	5610	77.120	5571.280	5648.400	0.5	PASS
		5690	77.600	5651.120	5728.720	---	---
		5690_UNII-2C	73.88	5651.120	5725	---	---
		5690_UNII-3	3.72	5725	5728.720	0.5	PASS
		5775	76.640	5736.280	5812.920	0.5	PASS

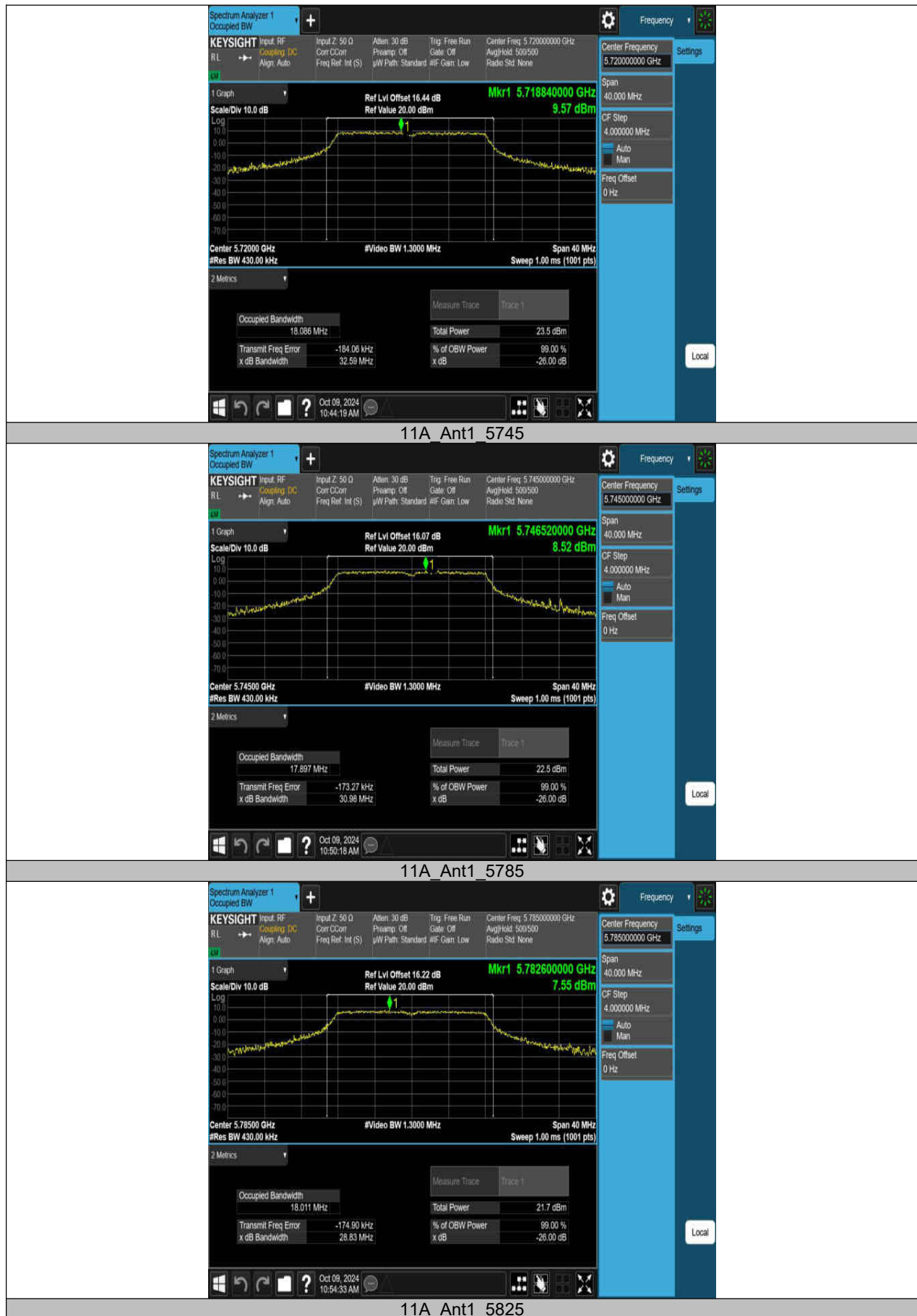
9.5. Original Test Data

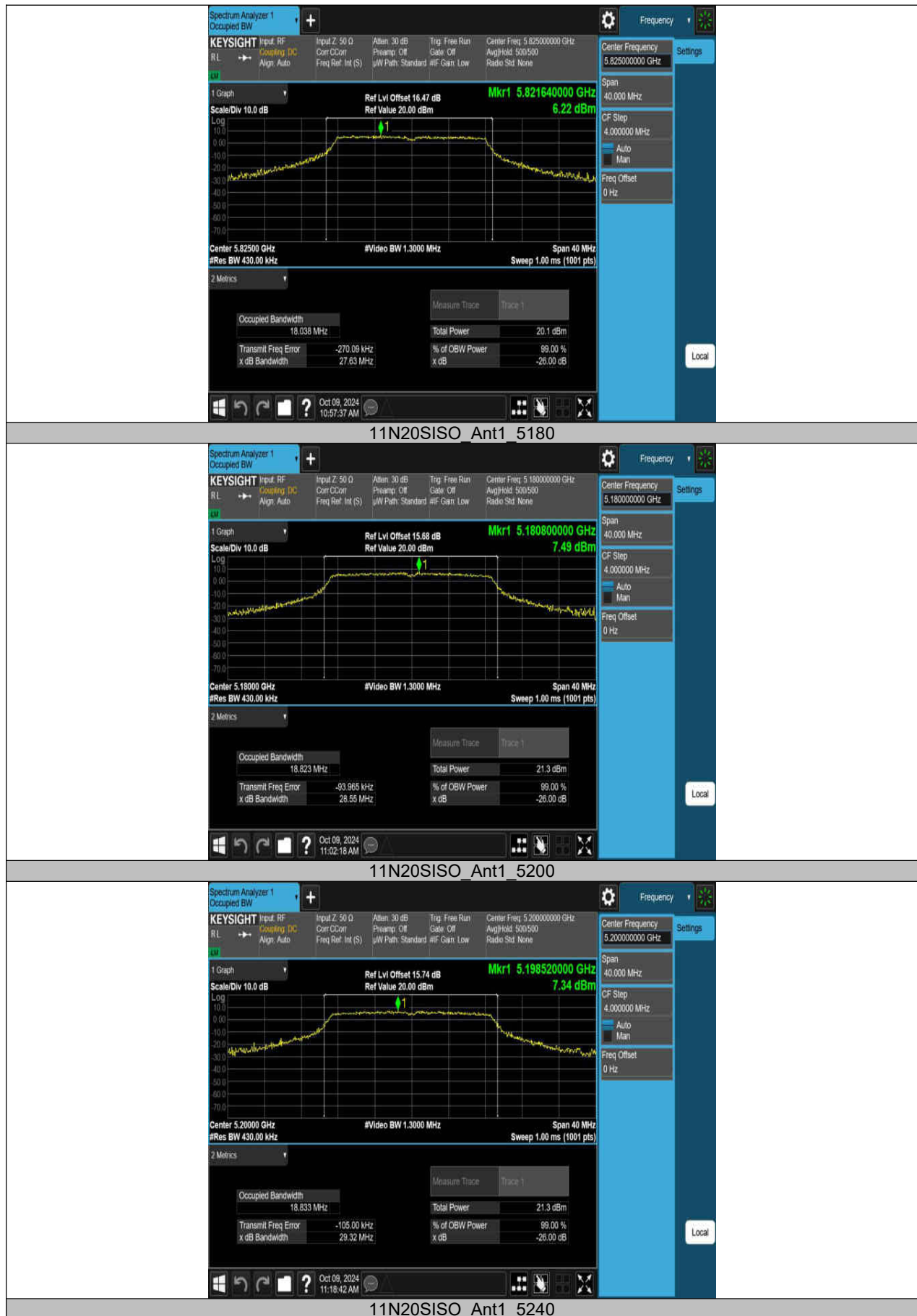
99% Bandwidth:









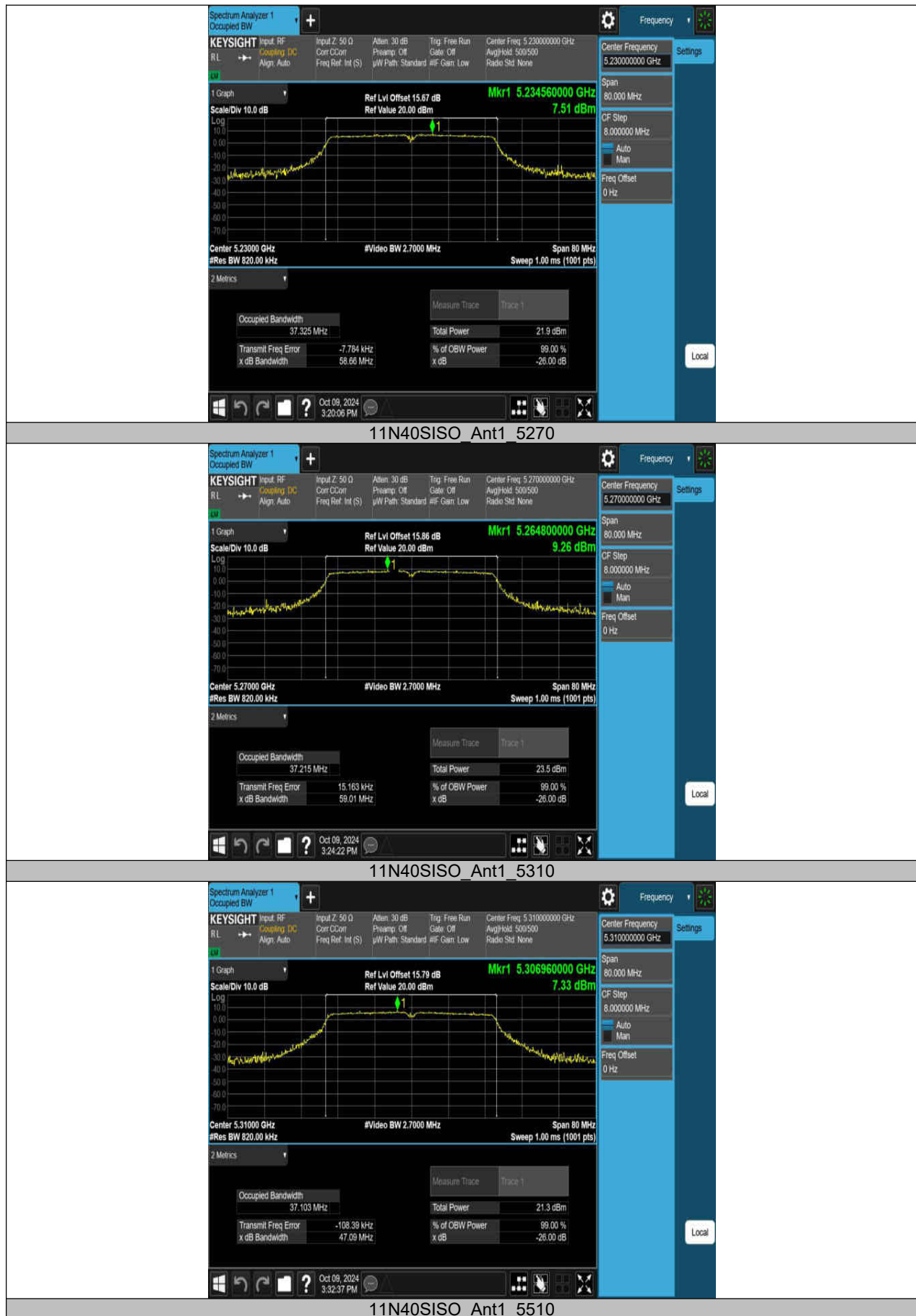




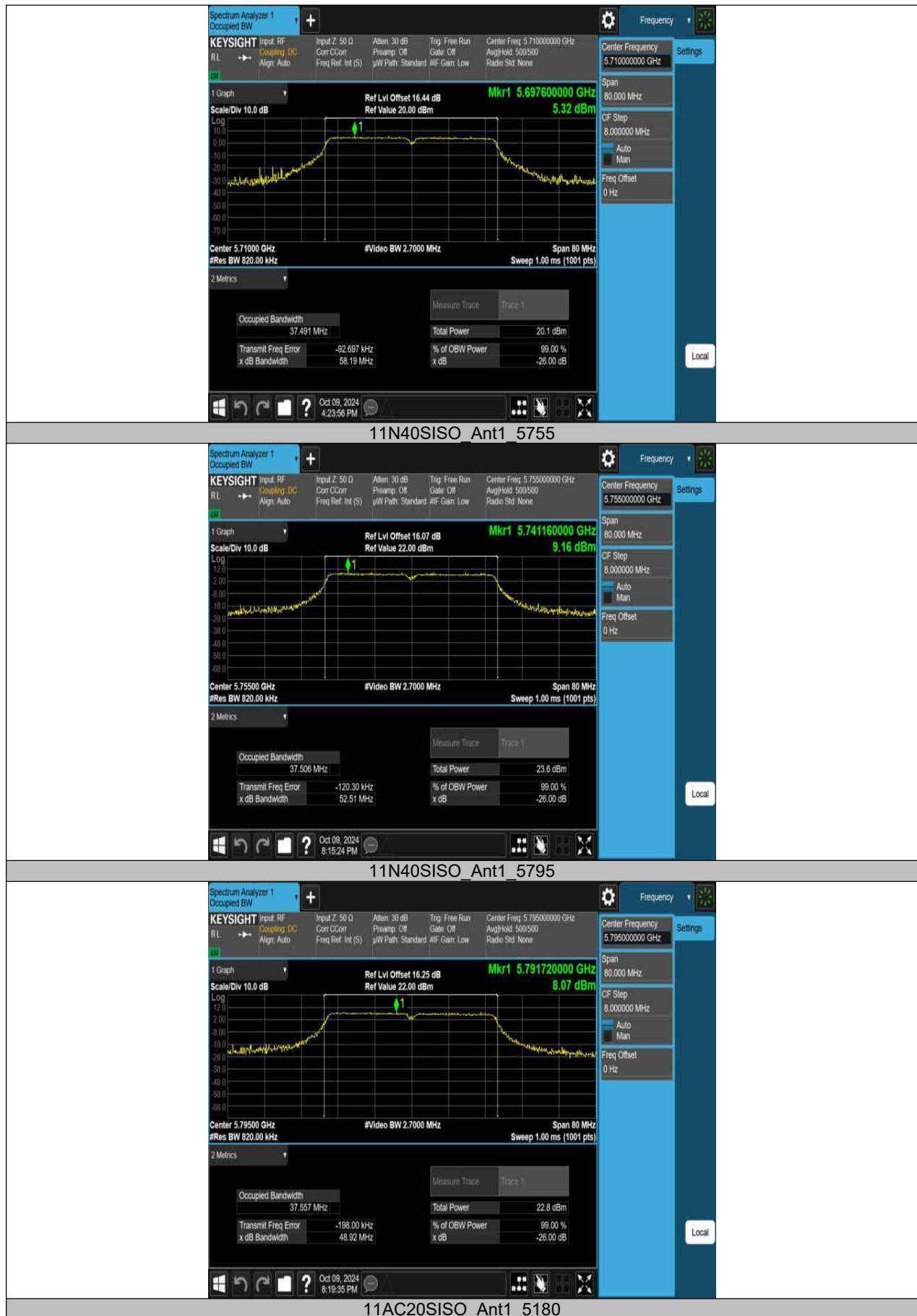




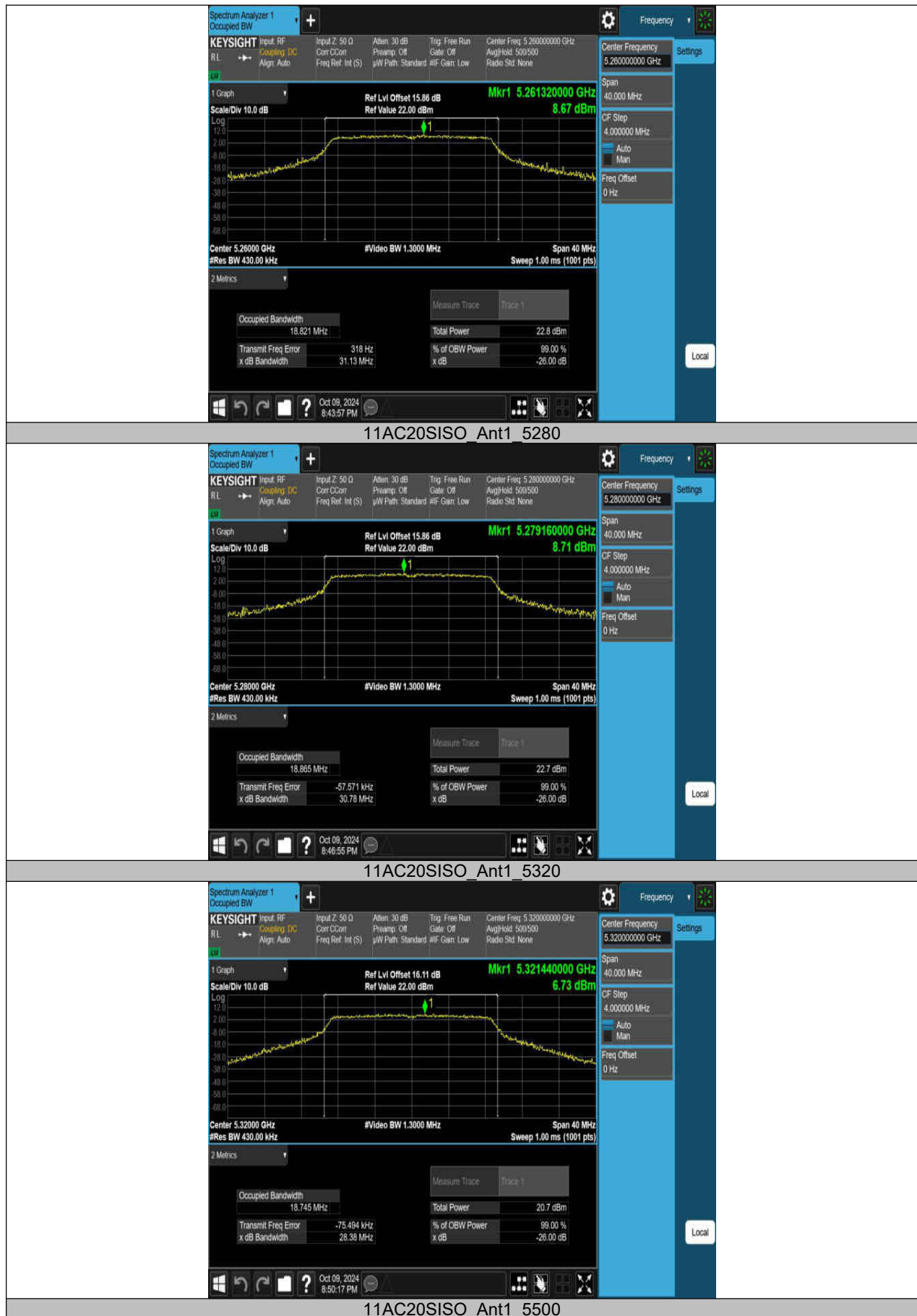




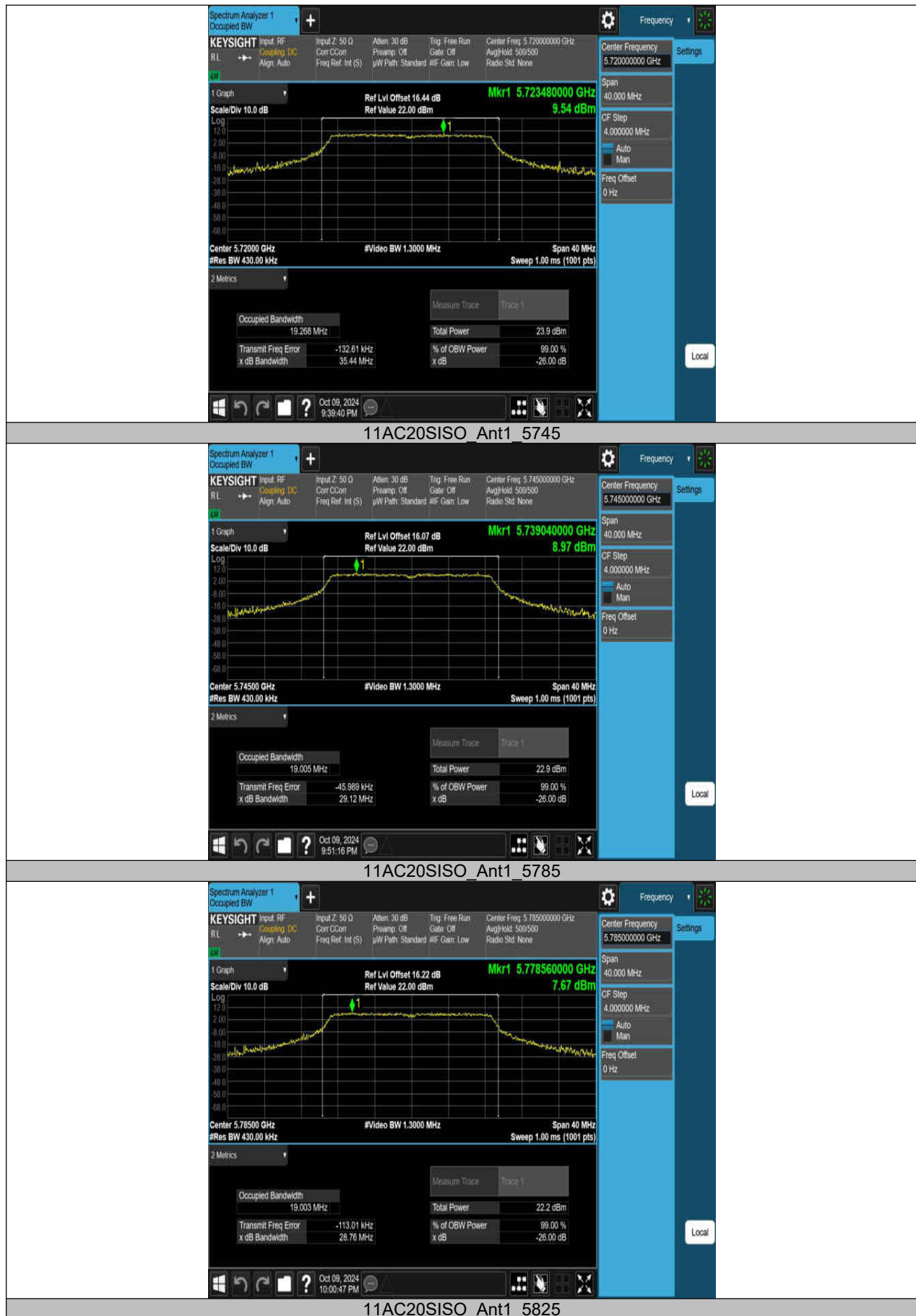






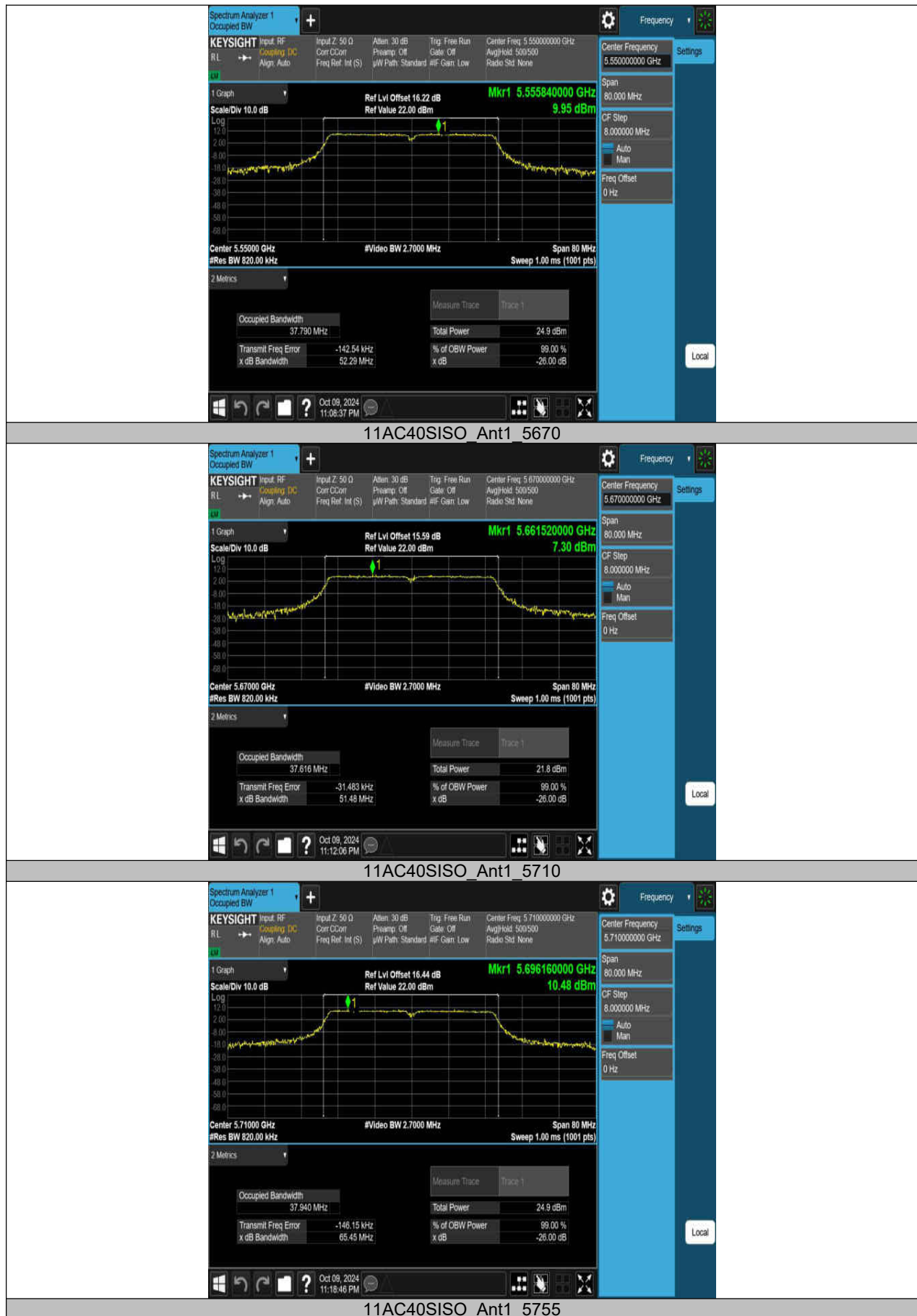






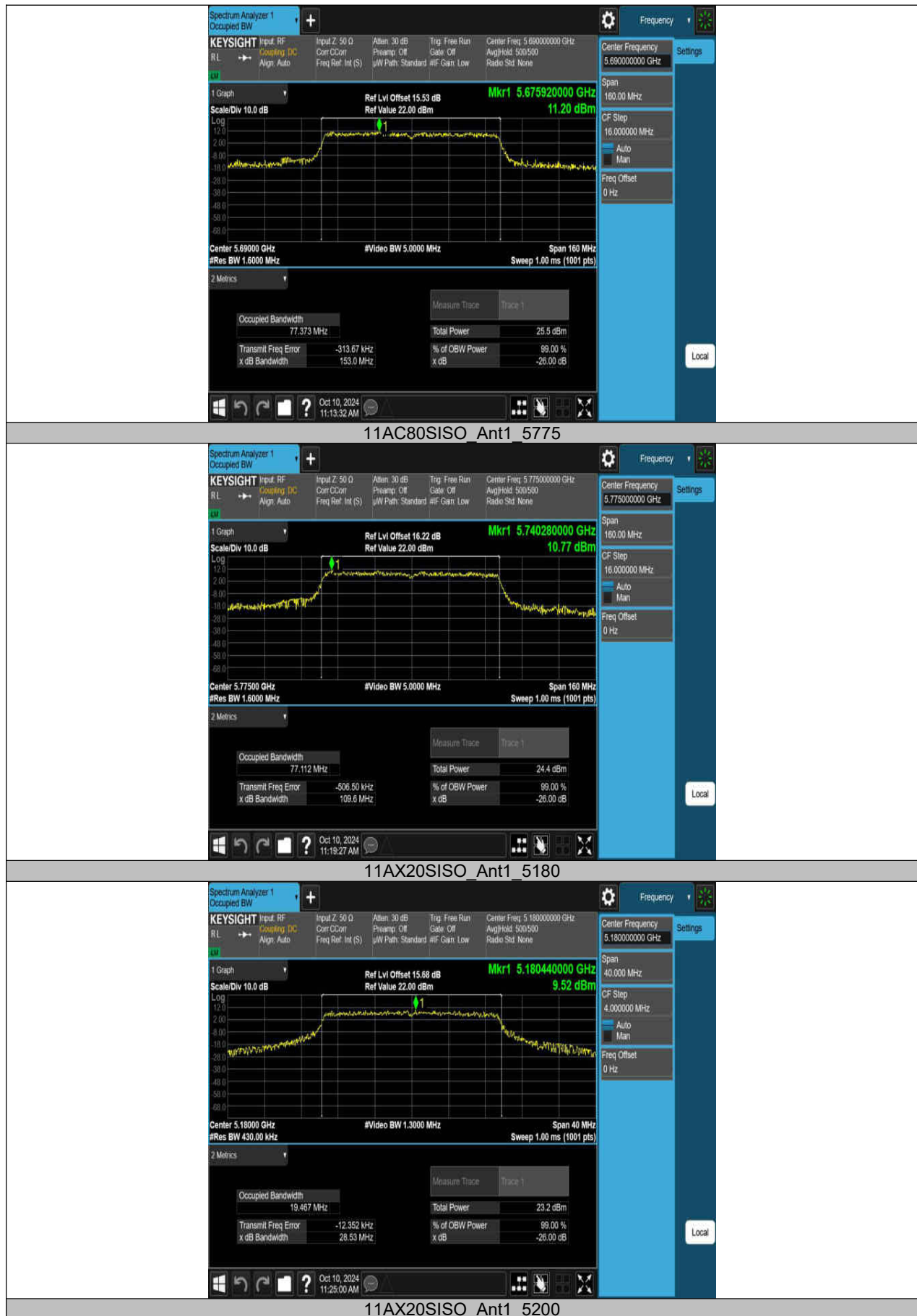








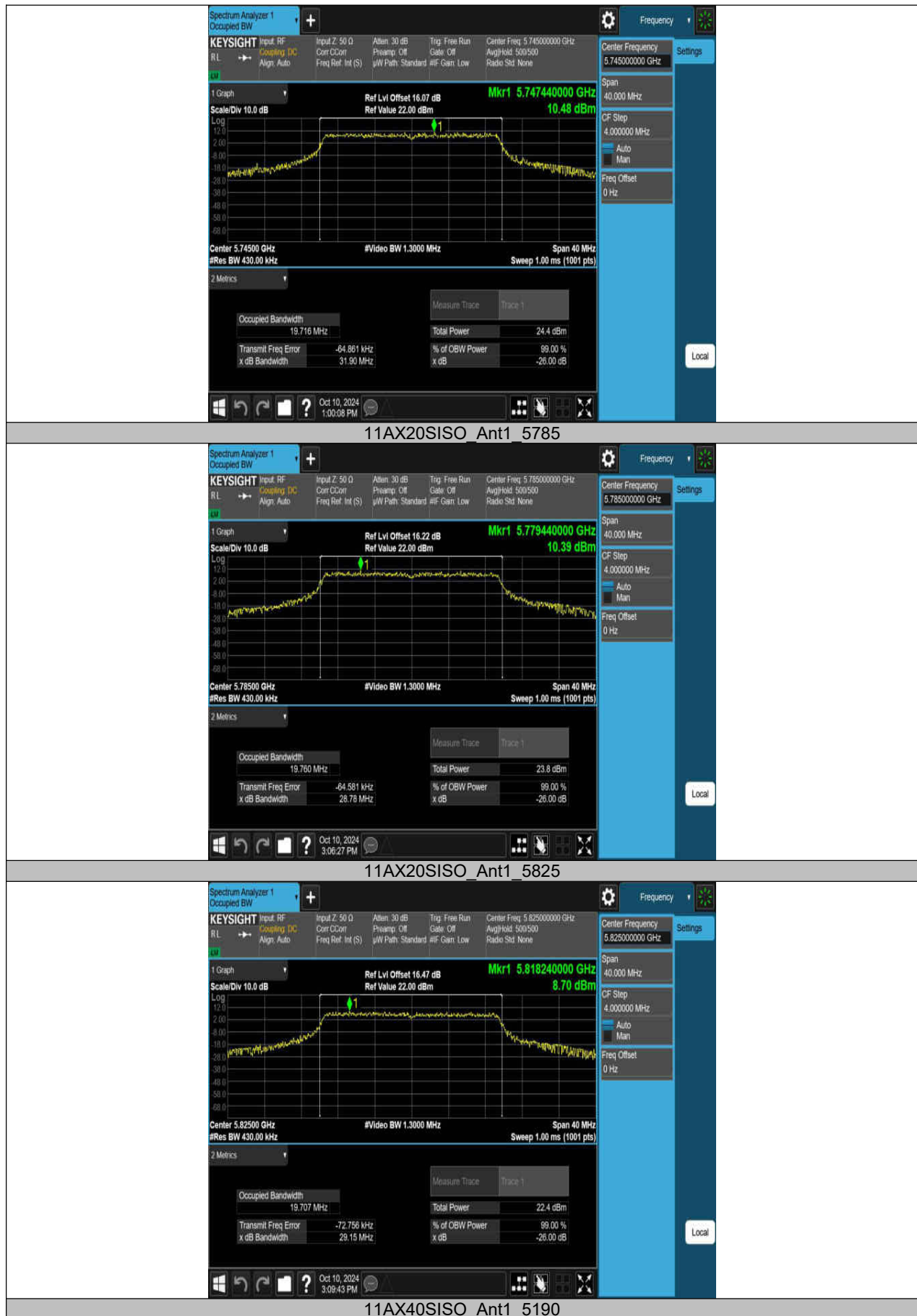
























26dB Bandwidth:

























