

Case No. : <u>CTA24071502104</u>	
Ambient Condition: <u>24</u> °C, <u>53</u> %RH	
According Standard: ■Part15E	
Test Date: <u>2024.7.24</u>	Test Engineer: <u>Lushan Kong</u>

Appendix E.1: Min emission bandwidth

Test Result B4

TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.120	5737.400	5752.520	0.5	PASS
		5785	15.120	5777.440	5792.560	0.5	PASS
		5825	15.120	5817.400	5832.520	0.5	PASS
11N20SISO	Ant1	5745	15.040	5737.480	5752.520	0.5	PASS
		5785	15.080	5777.440	5792.520	0.5	PASS
		5825	15.120	5817.400	5832.520	0.5	PASS
11N40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.040	5777.480	5812.520	0.5	PASS
11AC20SISO	Ant1	5745	15.120	5737.400	5752.520	0.5	PASS
		5785	14.920	5777.560	5792.480	0.5	PASS
		5825	26.400	5812.120	5838.520	0.5	PASS
11AC40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC80SISO	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS

Test Graphs B4

11A_Ant1_5745



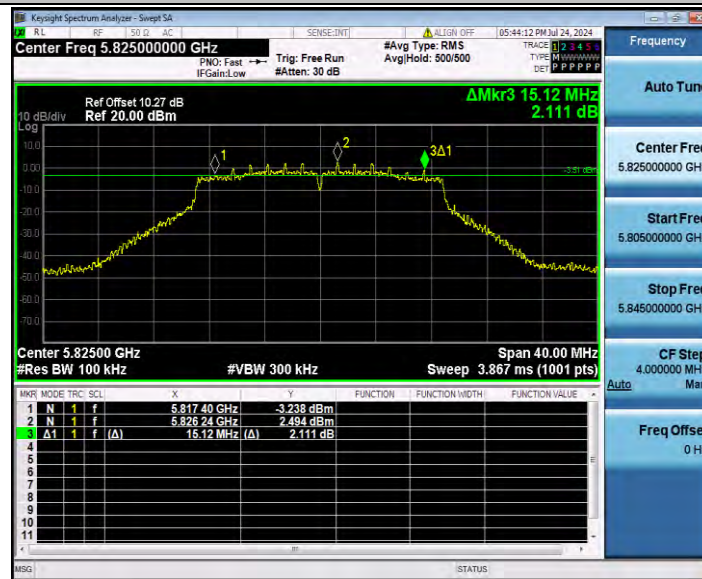
11A_Ant1_5785



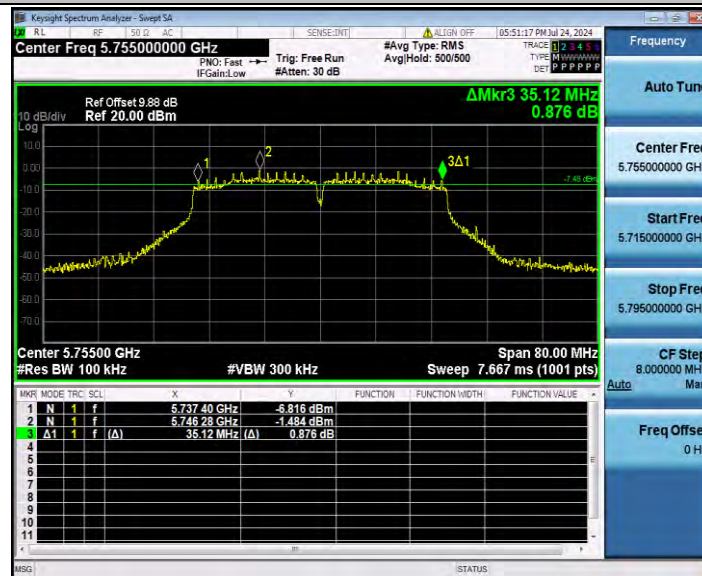
11A_Ant1_5825



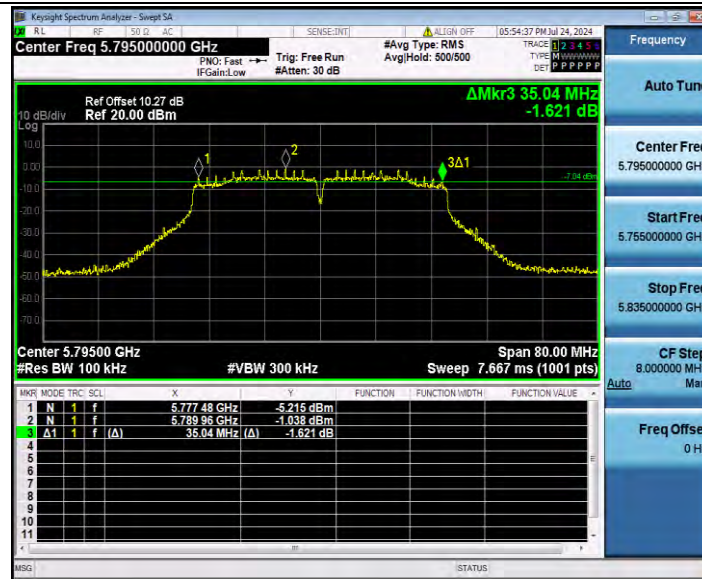
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



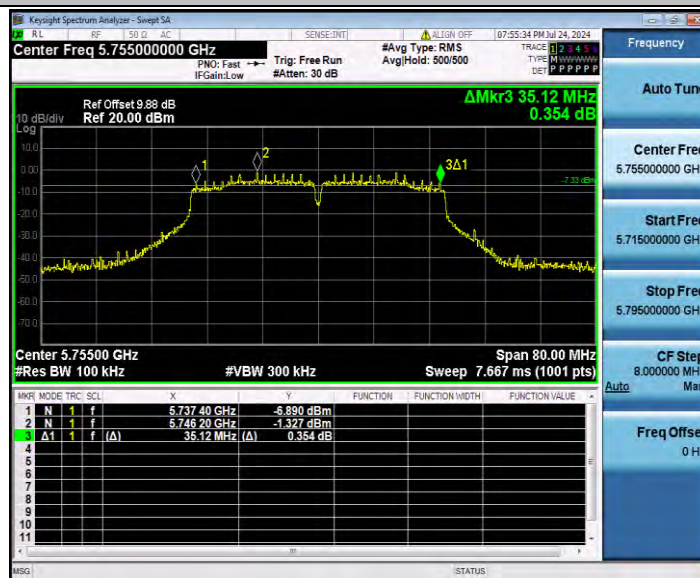
11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



Appendix E.2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.995	5736.4361	5753.4311	---	---
		5785	17.005	5776.4276	5793.4326	---	---
		5825	16.979	5816.4695	5833.4485	---	---
11N20SISO	Ant1	5745	18.016	5735.9503	5753.9663	---	---
		5785	18.017	5775.9562	5793.9732	---	---
		5825	18.022	5815.9369	5833.9589	---	---
11N40SISO	Ant1	5755	36.290	5736.7961	5773.0861	---	---
		5795	36.196	5776.8640	5813.0600	---	---
11AC20SISO	Ant1	5745	18.002	5735.9447	5753.9467	---	---
		5785	18.022	5775.9519	5793.9739	---	---
		5825	18.959	5815.5606	5834.5196	---	---
11AC40SISO	Ant1	5755	36.313	5736.8268	5773.1398	---	---
		5795	36.148	5776.8969	5813.0449	---	---
11AC80SISO	Ant1	5775	75.229	5737.3069	5812.5359	---	---

Test Graphs

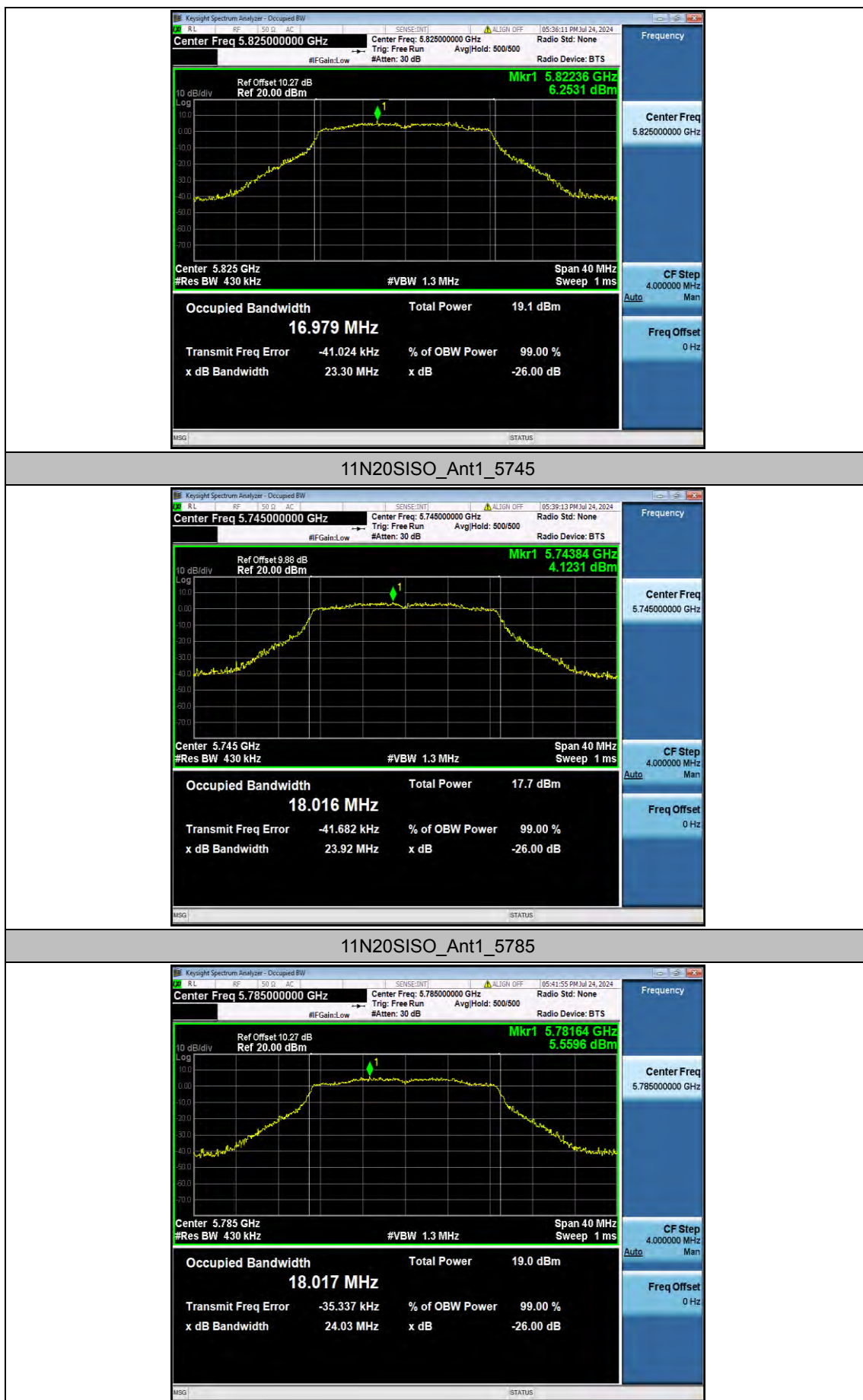
11A_Ant1_5745



11A_Ant1_5785



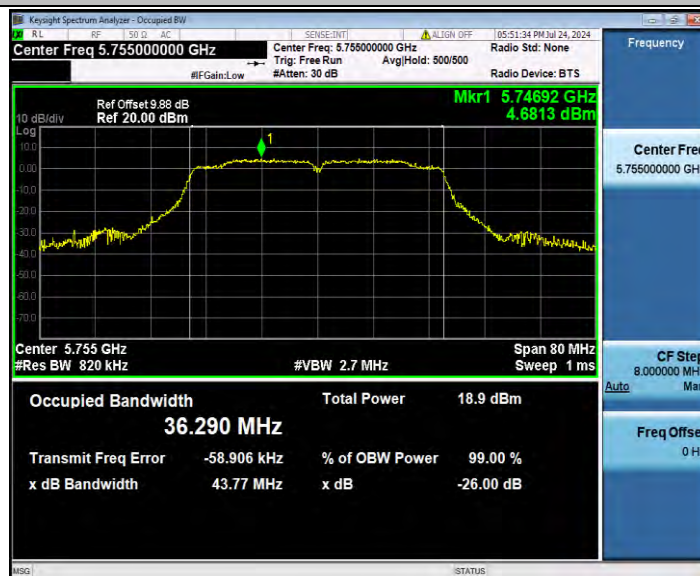
11A_Ant1_5825



11N20SISO_Ant1_5825



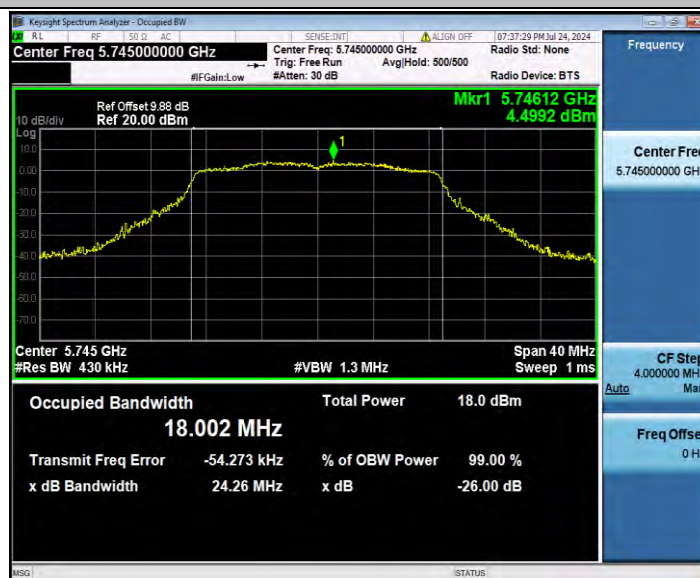
11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



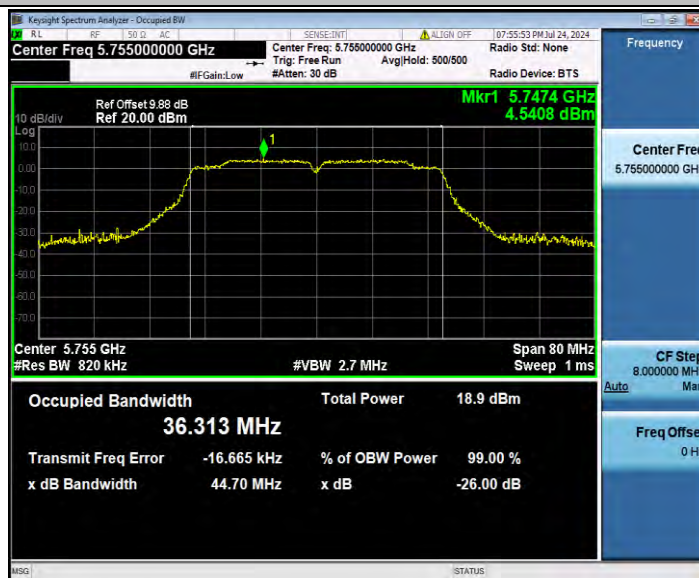
11AC20SISO_Ant1_5785



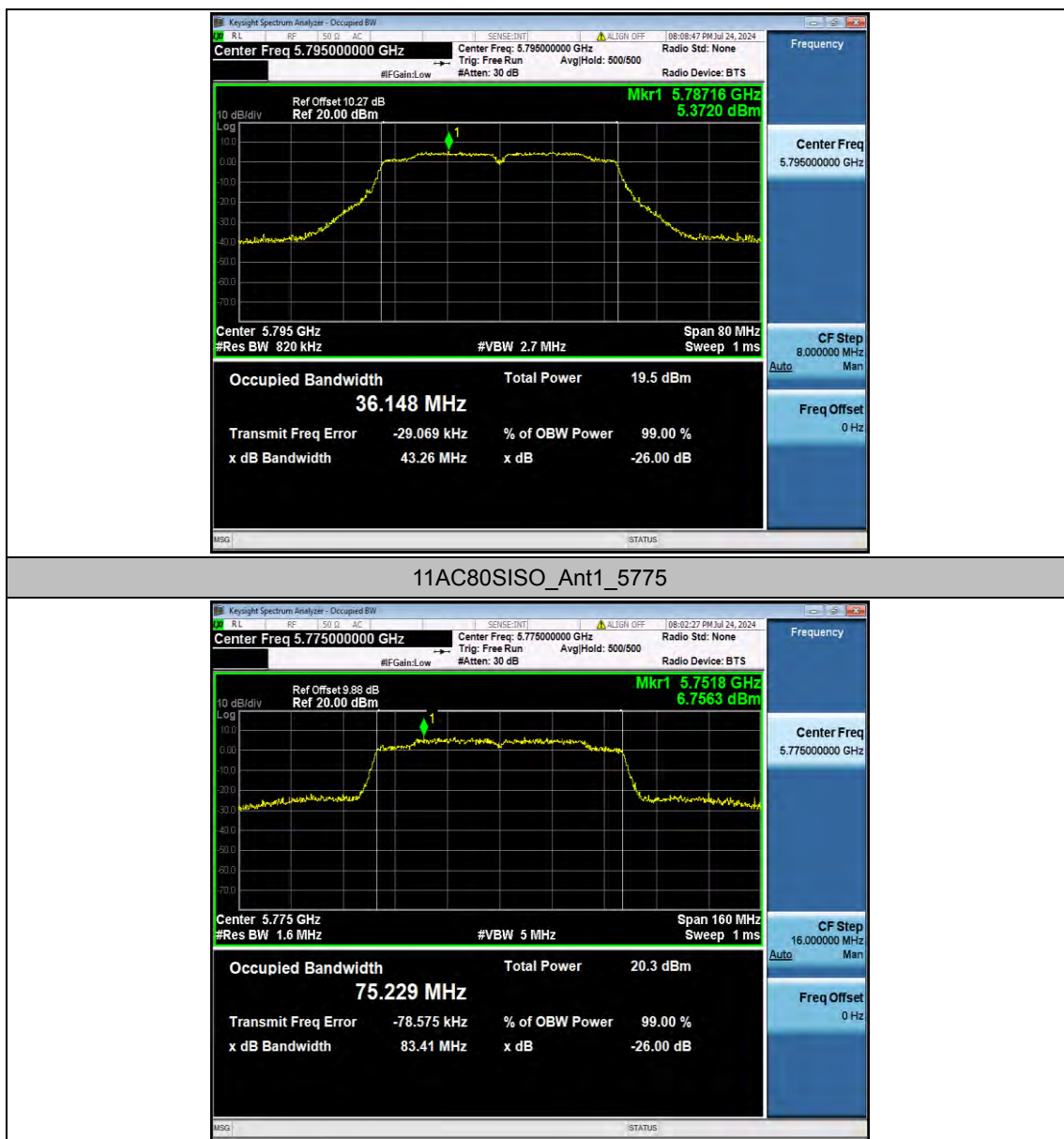
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



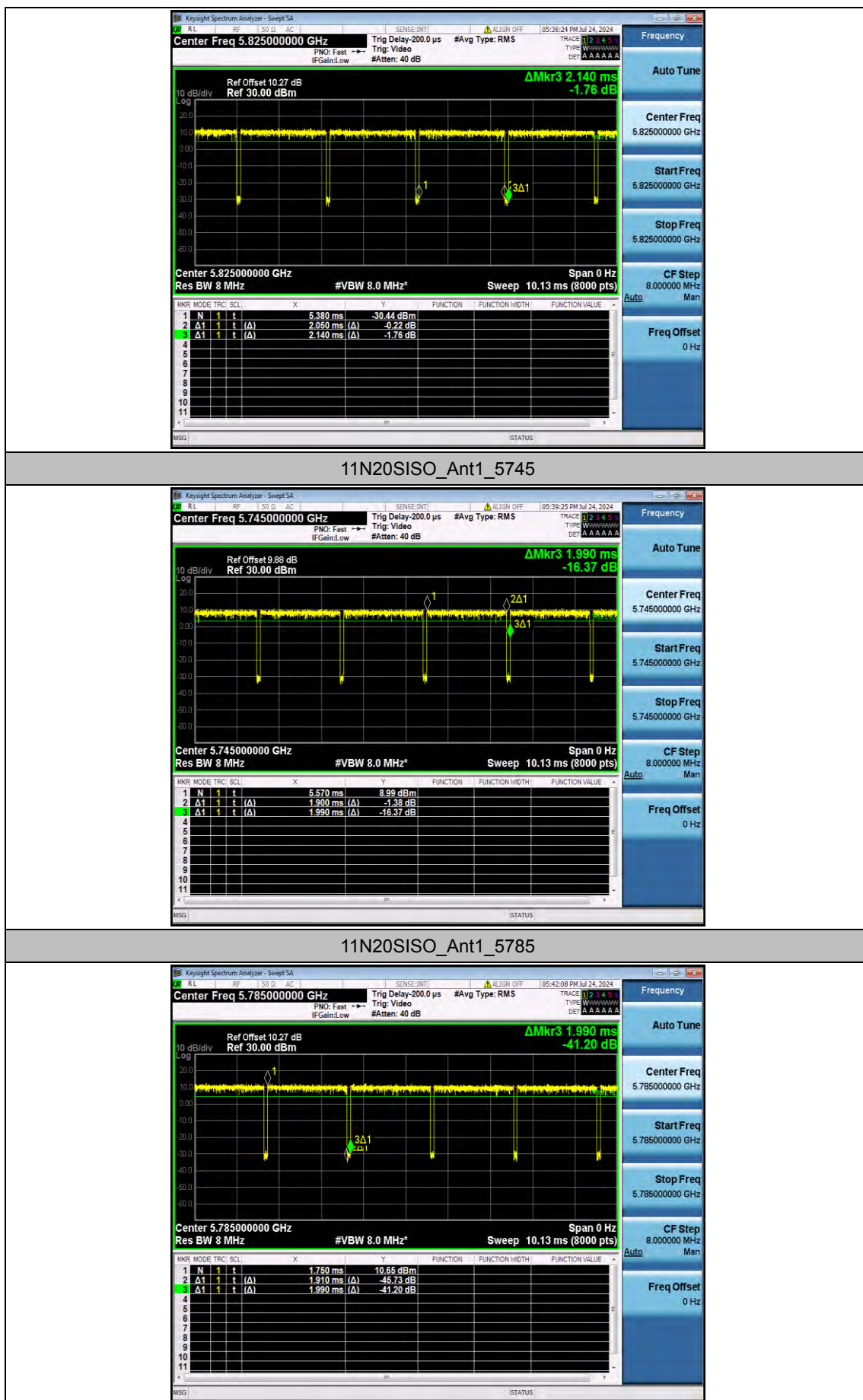
11AC40SISO_Ant1_5795



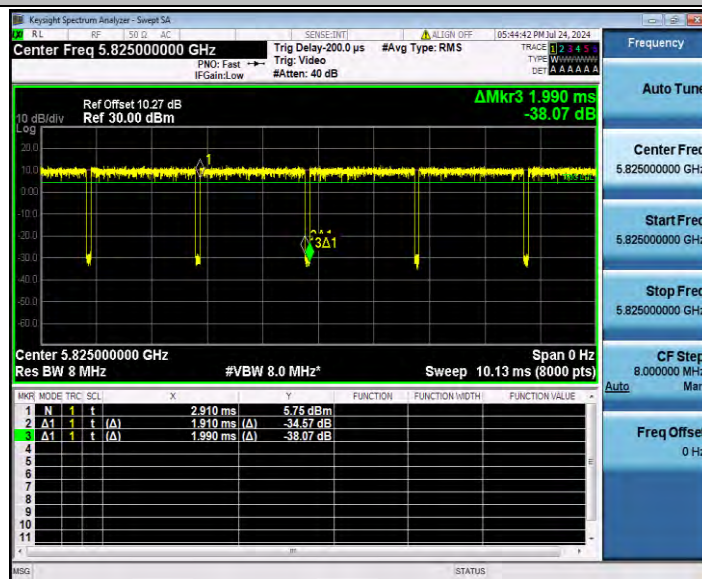
Appendix E.3: Duty Cycle

Test Result

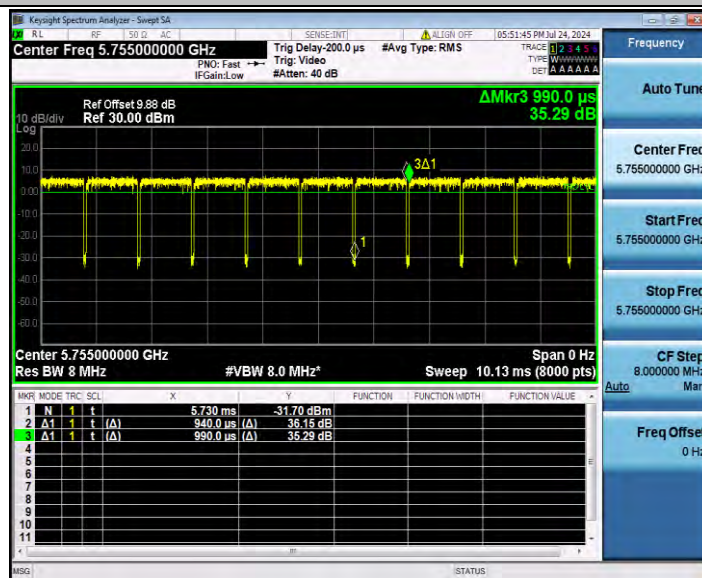
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5745	2.05	2.14	95.79	0.19	0.49
		5785	2.05	2.14	95.79	0.19	0.49
		5825	2.05	2.14	95.79	0.19	0.49
11N20SISO	Ant1	5745	1.90	1.99	95.48	0.20	0.53
		5785	1.91	1.99	95.98	0.18	0.52
		5825	1.91	1.99	95.98	0.18	0.52
11N40SISO	Ant1	5755	0.94	0.99	94.95	0.23	1.06
		5795	0.94	0.98	95.92	0.18	1.06
11AC20SISO	Ant1	5745	1.91	2.00	95.50	0.20	0.52
		5785	1.92	2.00	96.00	0.18	0.52
		5825	5.10	5.32	95.86	0.18	0.20
11AC40SISO	Ant1	5755	0.95	0.99	95.96	0.18	1.05
		5795	0.95	0.99	95.96	0.18	1.05
11AC80SISO	Ant1	5775	0.46	0.50	92.00	0.36	2.17



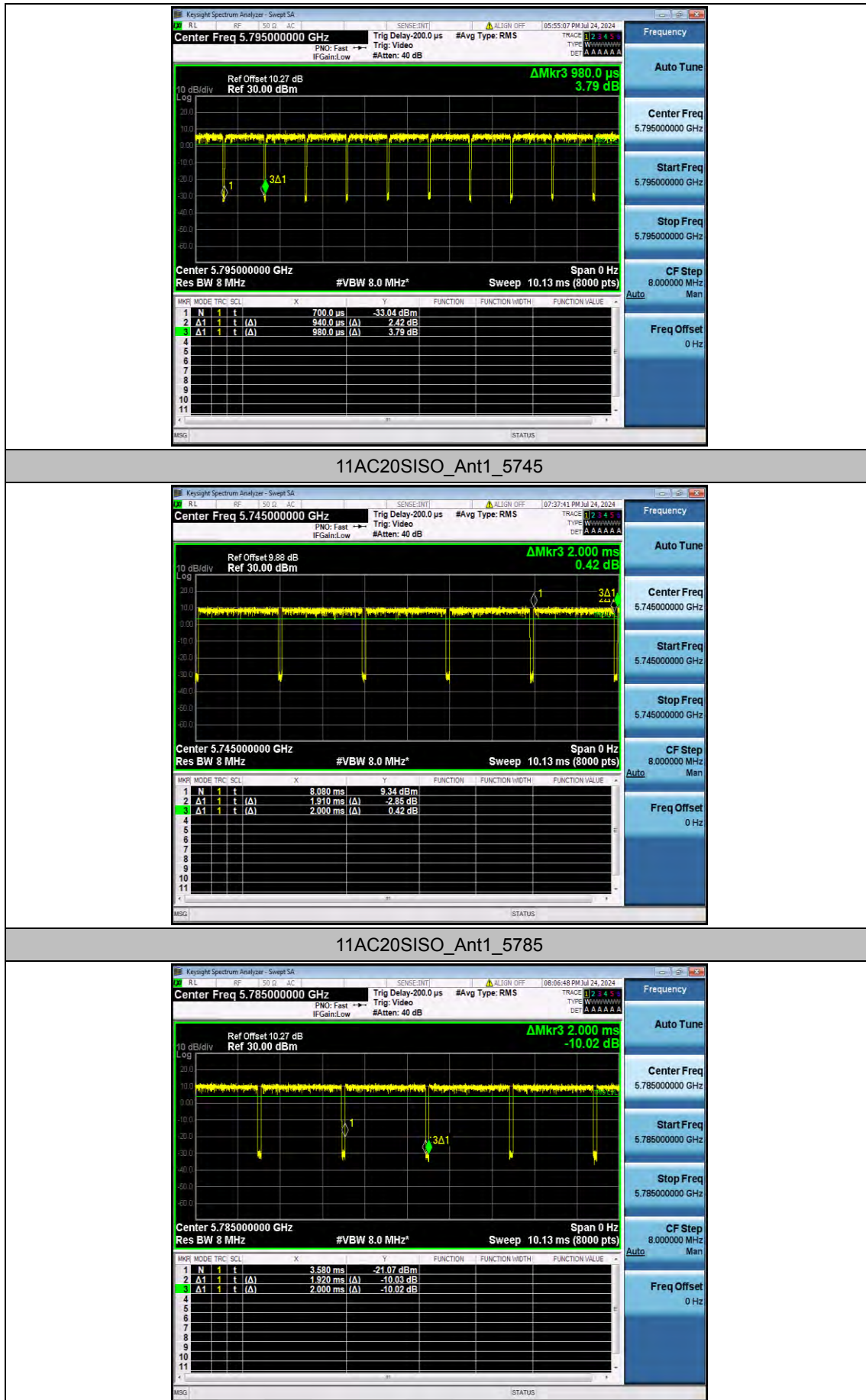
11N20SISO_Ant1_5825



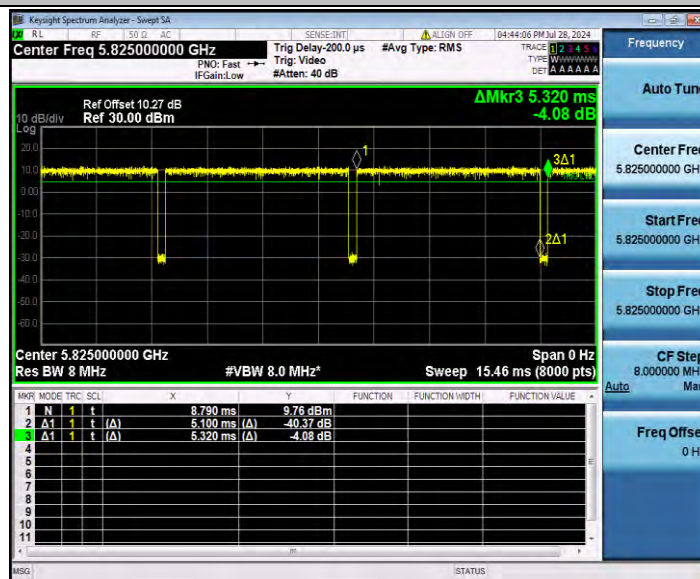
11N40SISO_Ant1_5755



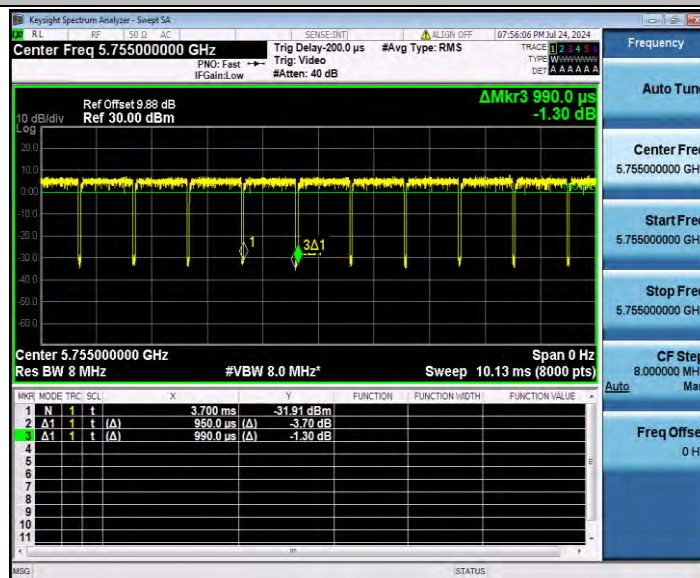
11N40SISO_Ant1_5795



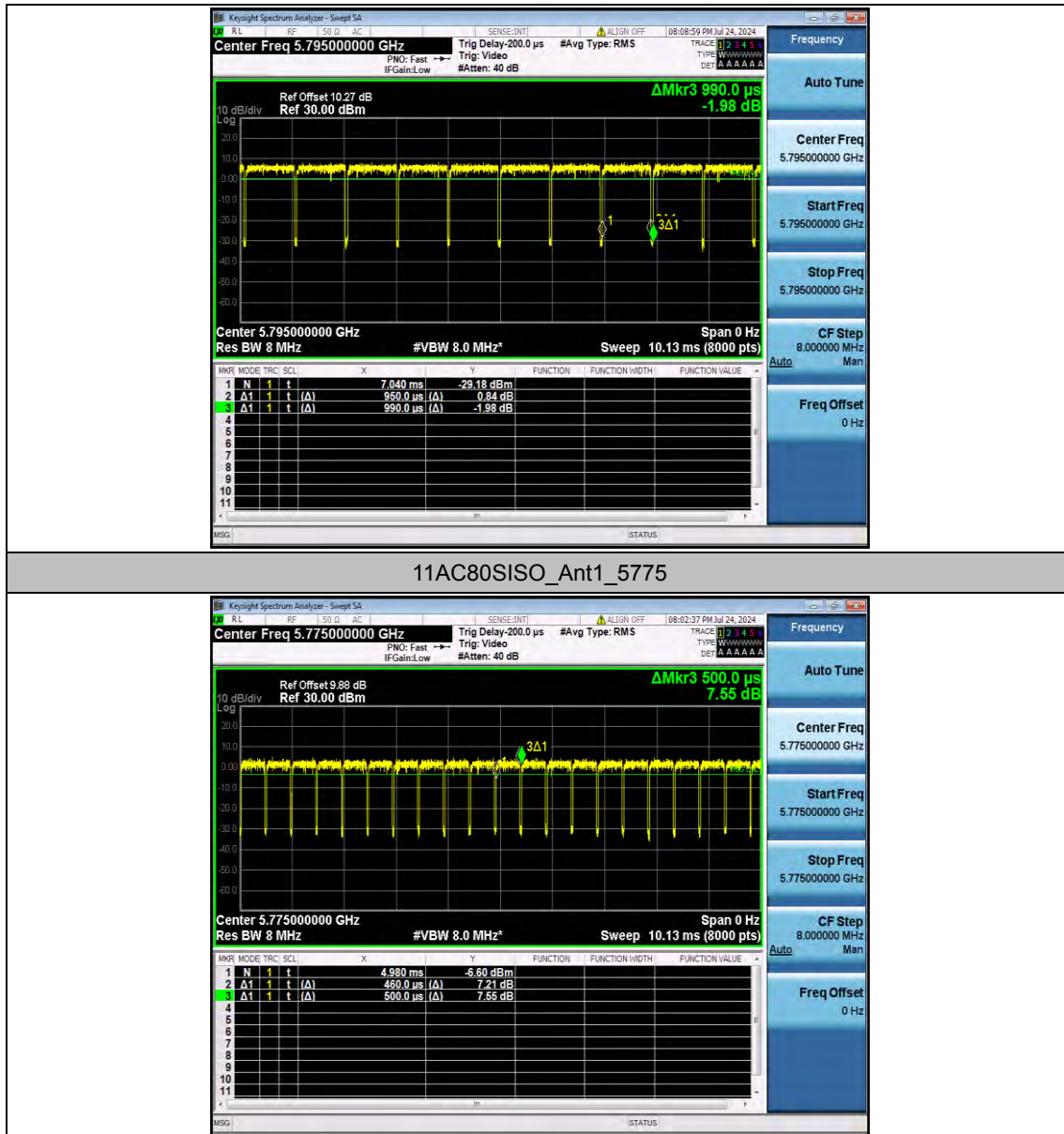
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



Appendix E.4: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	10.94	95.79	0.19	11.13	≤30.00	PASS
		5785	12.06	95.79	0.19	12.25	≤30.00	PASS
		5825	12.07	95.79	0.19	12.26	≤30.00	PASS
11N20SISO	Ant1	5745	10.69	95.48	0.20	10.89	≤30.00	PASS
		5785	12.00	95.98	0.18	12.18	≤30.00	PASS
		5825	11.98	95.98	0.18	12.16	≤30.00	PASS
11N40SISO	Ant1	5755	11.15	94.95	0.23	11.38	≤30.00	PASS
		5795	11.61	95.92	0.18	11.79	≤30.00	PASS
11AC20SISO	Ant1	5745	11.10	95.50	0.20	11.30	≤30.00	PASS
		5785	11.76	96.00	0.18	11.94	≤30.00	PASS
		5825	11.20	100.00	0.00	11.20	≤30.00	PASS
11AC40SISO	Ant1	5755	11.10	95.50	0.20	11.30	≤30.00	PASS
	Ant1	5795	11.69	95.92	0.18	11.87	≤30.00	PASS
11AC80SISO	Ant1	5775	11.08	92.00	0.36	11.44	≤30.00	PASS

Appendix E.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-2.40	≤30.00	PASS
		5785	-1.34	≤30.00	PASS
		5825	-1.27	≤30.00	PASS
11N20SISO	Ant1	5745	-2.70	≤30.00	PASS
		5785	-1.66	≤30.00	PASS
		5825	-1.48	≤30.00	PASS
11N40SISO	Ant1	5755	-5.68	≤30.00	PASS
		5795	-5.22	≤30.00	PASS
11AC20SISO	Ant1	5745	-2.59	≤30.00	PASS
		5785	-1.41	≤30.00	PASS
		5825	-1.15	≤30.00	PASS
11AC40SISO	Ant1	5755	-5.70	≤30.00	PASS
		5795	-5.11	≤30.00	PASS
11AC80SISO	Ant1	5775	-8.85	≤30.00	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
 2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



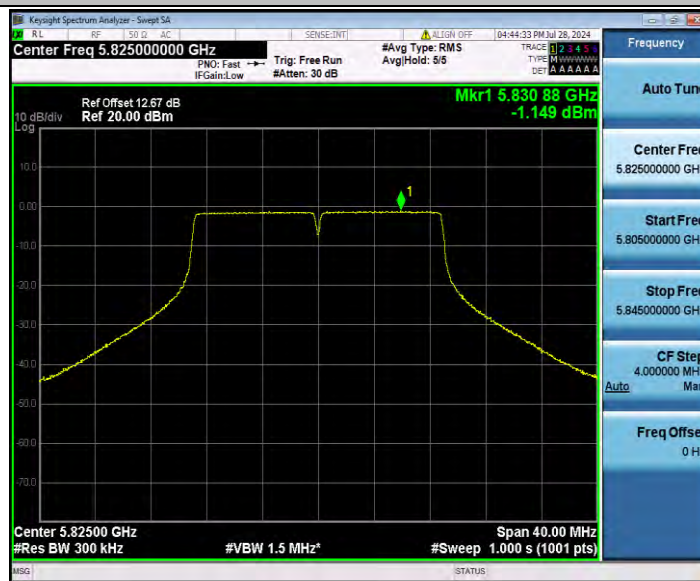
11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



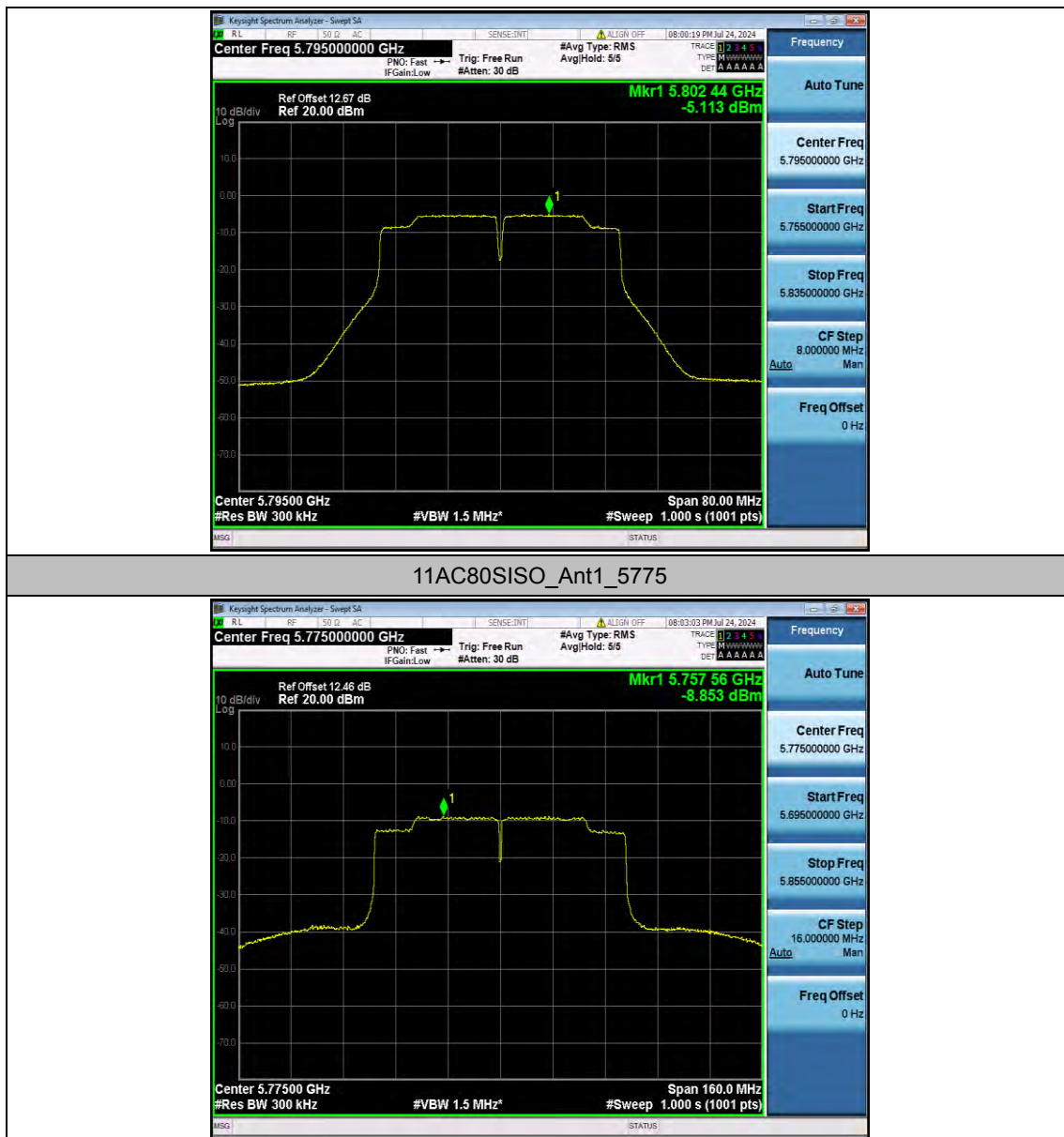
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



Appendix E.6: Band edge measurements

Test Result B4

TestMode	Antenna	ChName	Freq(MHz)	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-40.5	≤-26.70	PASS
				5700~5720	-32.01	≤14.44	PASS
				5720~5725	-35.08	≤16.34	PASS
				5760~5650	-40.09	≤-27	PASS
		High	5825	5850~5855	-37.8	≤15.73	PASS
				5855~5875	-39.34	≤10.06	PASS
				5875~5925	-39.93	≤-26.71	PASS
				5925~5935	-38.23	≤-27	PASS
11N20SI SO	Ant1	Low	5745	5650~5700	-39.74	≤-26.96	PASS
				5700~5720	-30.97	≤15.05	PASS
				5720~5725	-36.82	≤16.08	PASS
				5760~5650	-39.45	≤-27	PASS
		High	5825	5850~5855	-38.37	≤17.26	PASS
				5855~5875	-38.84	≤10.32	PASS
				5875~5925	-39.51	≤-26.61	PASS
				5925~5935	-38.46	≤-27	PASS
11N40SI SO	Ant1	Low	5755	5650~5700	-39.91	≤-26.60	PASS
				5700~5720	-33.03	≤10.93	PASS
				5720~5725	-34.18	≤16.04	PASS
				5780~5650	-39.21	≤-27	PASS
		High	5795	5850~5855	-38.77	≤15.66	PASS
				5855~5875	-38.5	≤10.39	PASS
				5875~5925	-38.41	≤-25.49	PASS
				5925~5935	-39.13	≤-27	PASS
11AC20S ISO	Ant1	Low	5745	5650~5700	-38.47	≤-26.10	PASS
				5700~5720	-34.53	≤13.28	PASS
				5720~5725	-34.48	≤16.34	PASS
				5760~5650	-39.49	≤-27	PASS
		High	5825	5850~5855	-29.43	≤17.26	PASS
				5855~5875	-28.36	≤15.09	PASS
				5875~5925	-37.66	≤-26.81	PASS
				5925~5935	-38.55	≤-27	PASS
11AC40S ISO	Ant1	Low	5755	5650~5700	-39.84	≤-26.60	PASS
				5700~5720	-29.18	≤14.41	PASS
				5720~5725	-28.62	≤19.43	PASS
				5780~5650	-39.49	≤-27	PASS

		High	5795	5850~5855	-39.52	≤ 15.66	PASS
				5855~5875	-38.62	≤ 10.71	PASS
				5875~5925	-39.37	≤ -26.95	PASS
				5925~5935	-38.58	≤ -27	PASS
11AC80S ISO	Ant1	Low	5775	5650~5700	-37.65	≤ -26.69	PASS
				5700~5720	-27.73	≤ 10.57	PASS
				5720~5725	-25.48	≤ 17.06	PASS
				5800~5650	-38.68	≤ -27	PASS
		High	5775	5850~5855	-30.34	≤ 15.84	PASS
				5855~5875	-29.25	≤ 15.58	PASS
				5875~5925	-40.29	≤ -26.87	PASS
				5925~5935	-38.71	≤ -27	PASS

Test Graphs B4

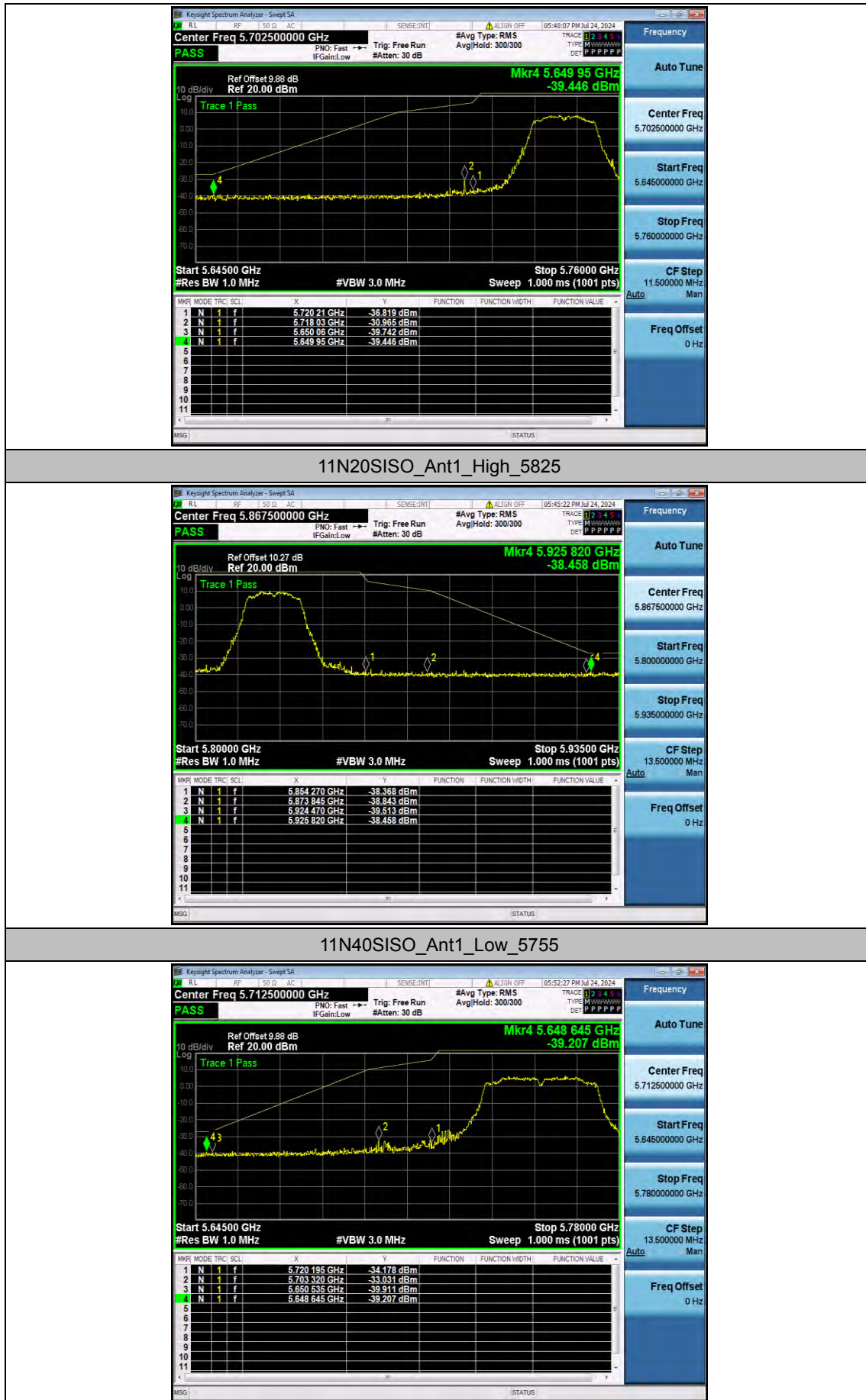
11A_Ant1_Low_5745



11A_Ant1_High_5825



11N20SISO_Ant1_Low_5745



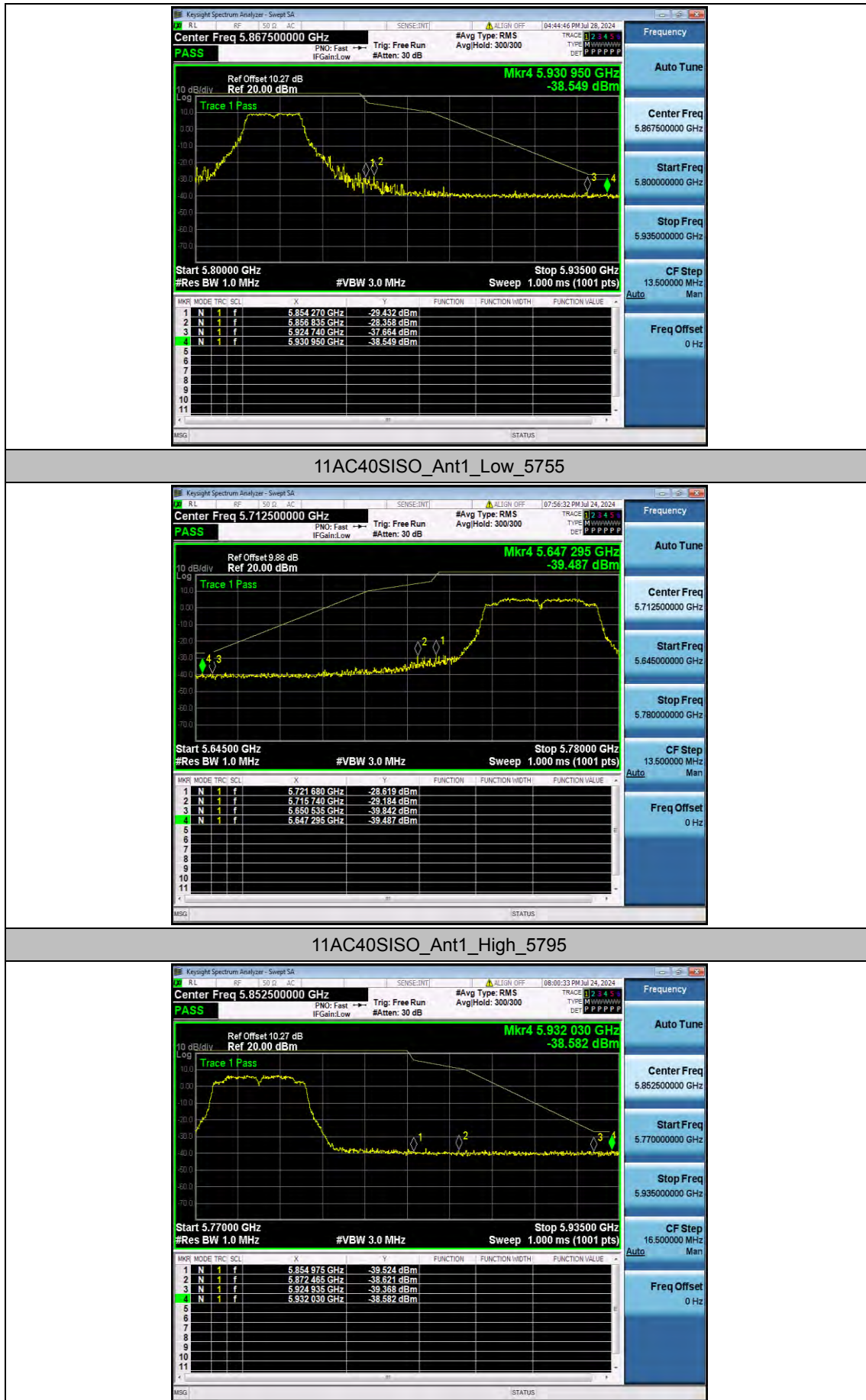
11N40SISO_Ant1_High_5795



11AC20SISO_Ant1_Low_5745



11AC20SISO_Ant1_High_5825



11AC80SISO_Ant1_Low_5775



11AC80SISO_Ant1_High_5775



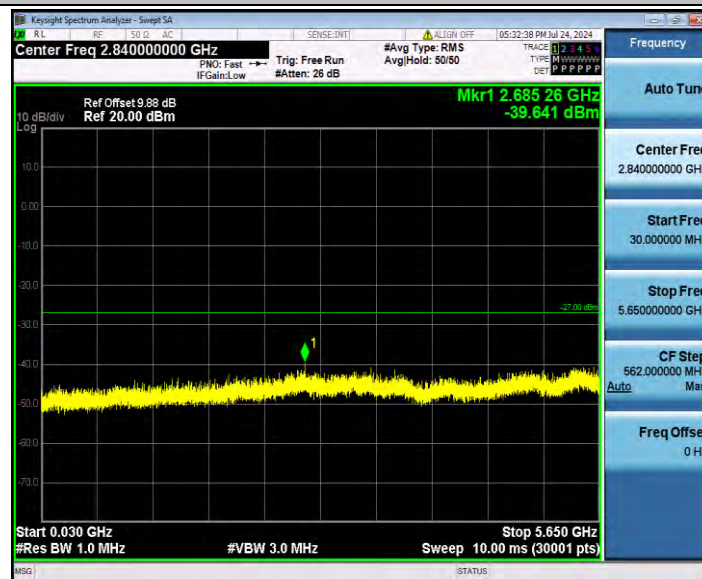
Appendix E.7: Conducted Spurious Emission

Test Result

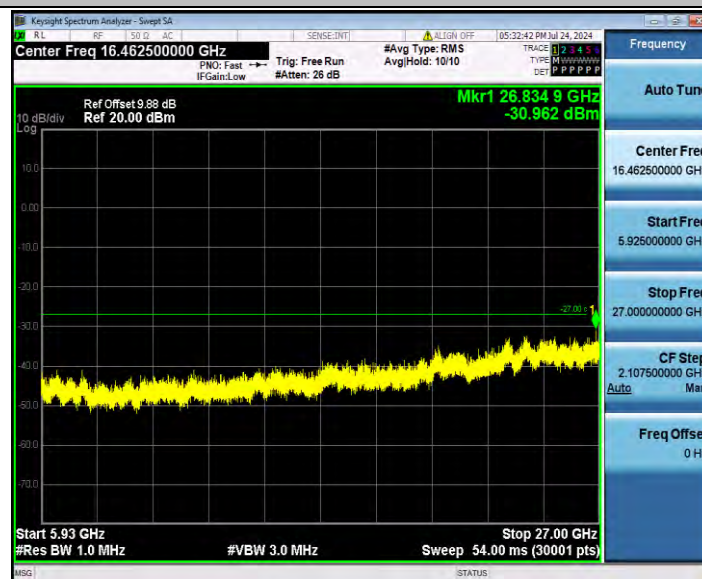
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	30~5650	2685.26	-39.64	≤-27	PASS
			5925~27000	26834.91	-30.96	≤-27	PASS
		5785	30~5650	4990.77	-39.87	≤-27	PASS
			5925~27000	24271.49	-32.09	≤-27	PASS
		5825	30~5650	5470.91	-40	≤-27	PASS
			5925~27000	26881.98	-30.86	≤-27	PASS
11N20SISO	Ant1	5745	30~5650	4907.6	-39.6	≤-27	PASS
			5925~27000	26844.05	-31.97	≤-27	PASS
		5785	30~5650	4970.35	-39.59	≤-27	PASS
			5925~27000	26075.51	-31.85	≤-27	PASS
		5825	30~5650	4998.27	-40.26	≤-27	PASS
			5925~27000	26708.46	-31.87	≤-27	PASS
11N40SISO	Ant1	5755	30~5650	5399.16	-39.82	≤-27	PASS
			5925~27000	26546.89	-32.02	≤-27	PASS
		5795	30~5650	5454.8	-39.64	≤-27	PASS
			5925~27000	24246.9	-30.67	≤-27	PASS
11AC20SISO	Ant1	5745	30~5650	5418.83	-40.38	≤-27	PASS
			5925~27000	24355.79	-31.16	≤-27	PASS
		5785	30~5650	3032.95	-40.15	≤-27	PASS
			5925~27000	26789.25	-30.92	≤-27	PASS
		5825	30~5650	2685.45	-39.21	≤-27	PASS
			5925~27000	24226.53	-31.25	≤-27	PASS
11AC40SISO	Ant1	5755	30~5650	5476.72	-39.92	≤-27	PASS
			5925~27000	24819.44	-31.55	≤-27	PASS
		5795	30~5650	5291.44	-39.22	≤-27	PASS
			5925~27000	24162.6	-31.91	≤-27	PASS
11AC80SISO	Ant1	5775	30~5650	5648.31	-39.94	≤-27	PASS
			5925~27000	26052.33	-32.33	≤-27	PASS

Test Graphs

11A_Ant1_5745_30~5650



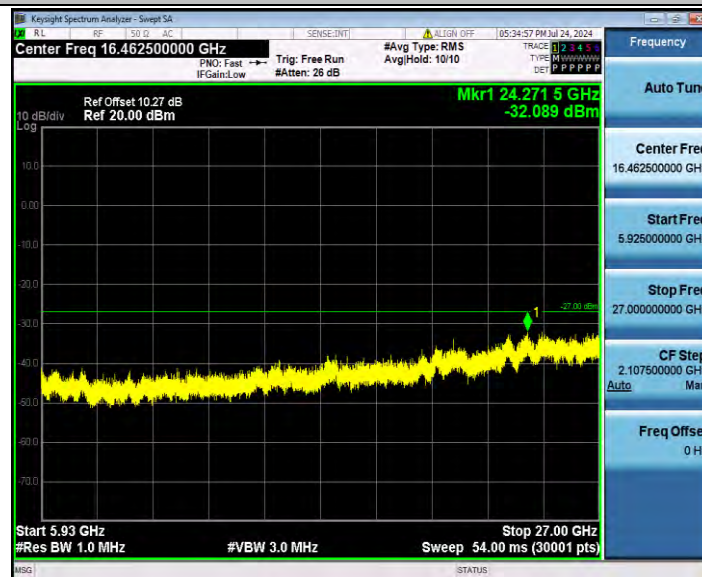
11A_Ant1_5745_5925~27000



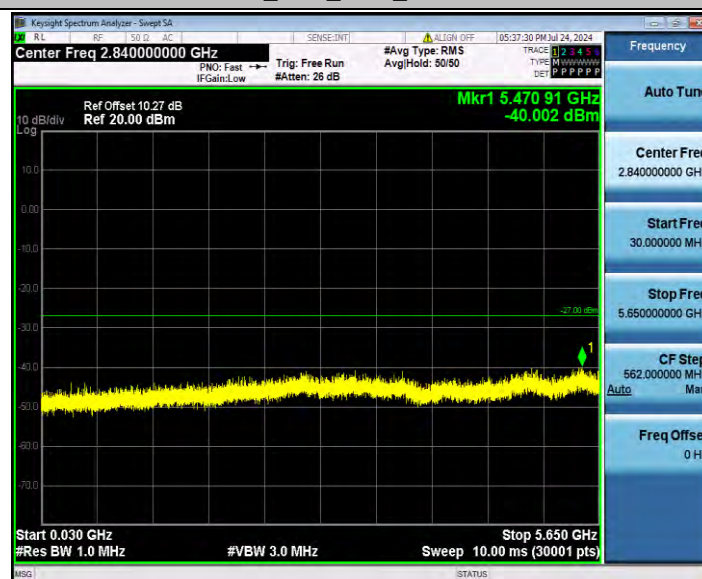
11A_Ant1_5785_30~5650



11A_Ant1_5785_5925~27000



11A_Ant1_5825_30~5650



11A_Ant1_5825_5925~27000



11N20SISO_Ant1_5745_30~5650



11N20SISO_Ant1_5745_5925~27000



11N20SISO_Ant1_5785_30~5650



11N20SISO_Ant1_5785_5925~27000



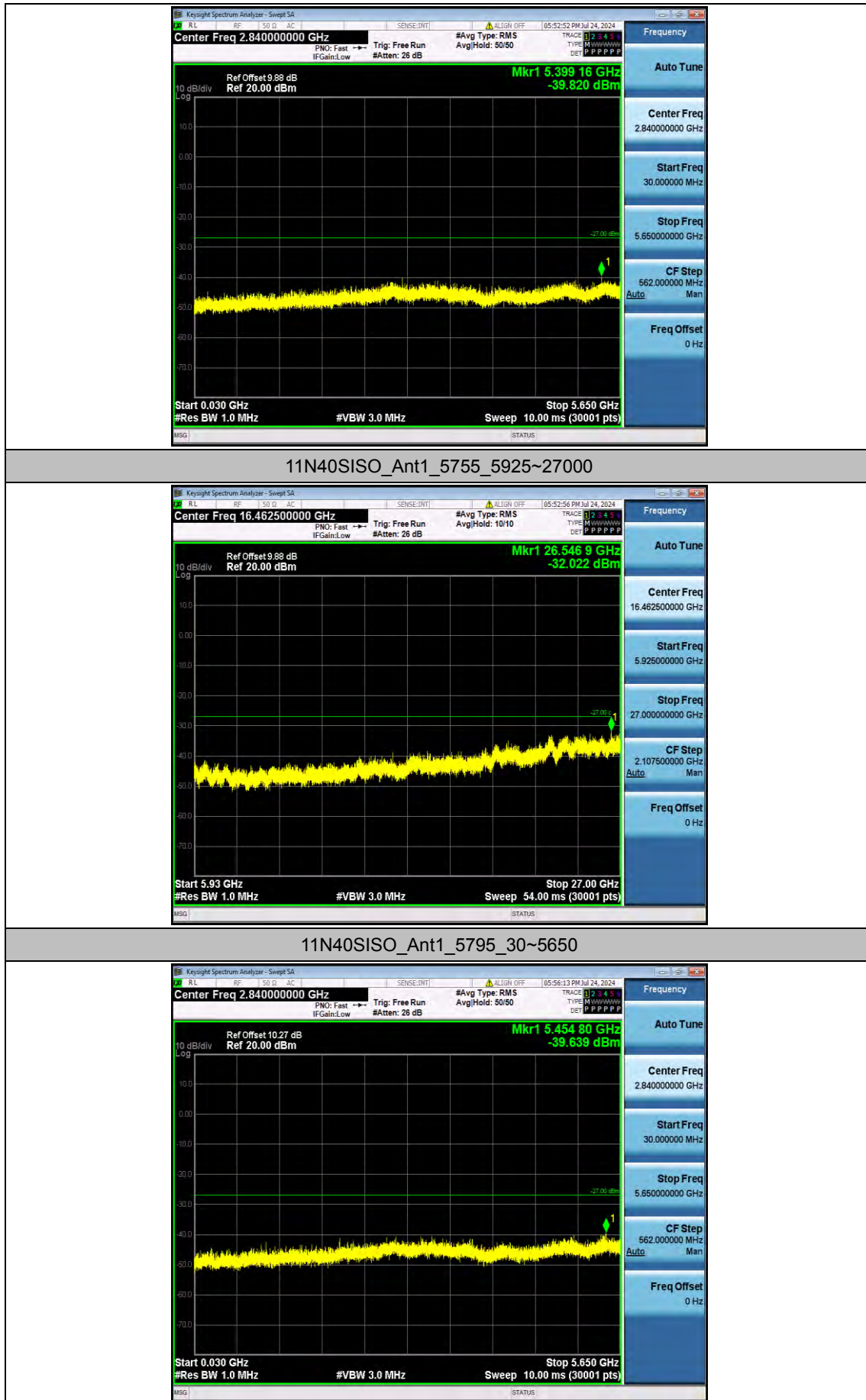
11N20SISO_Ant1_5825_30~5650



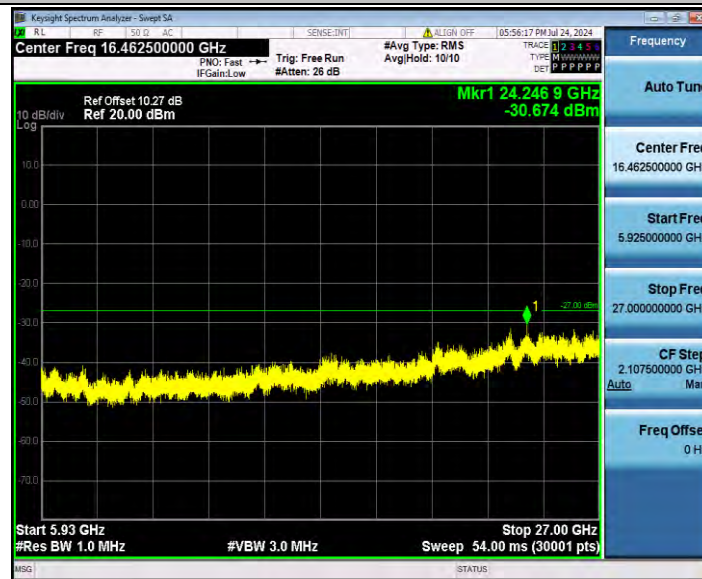
11N20SISO_Ant1_5825_5925~27000



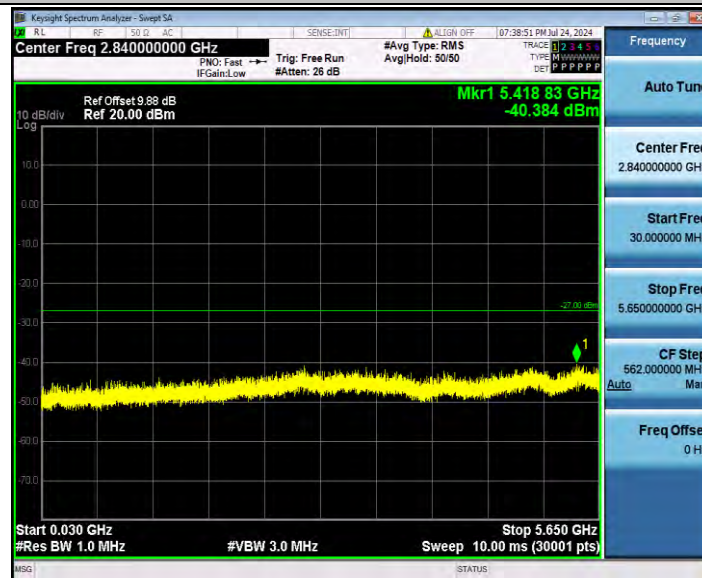
11N40SISO_Ant1_5755_30~5650



11N40SISO_Ant1_5795_5925~27000



11AC20SISO_Ant1_5745_30~5650



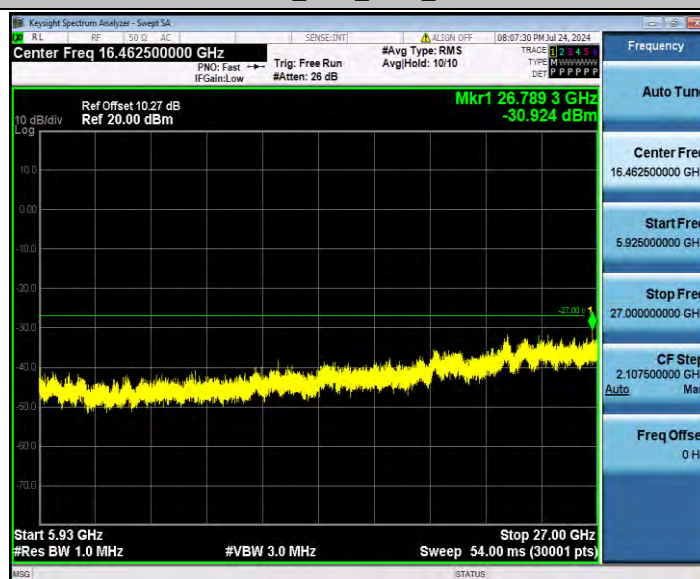
11AC20SISO_Ant1_5745_5925~27000



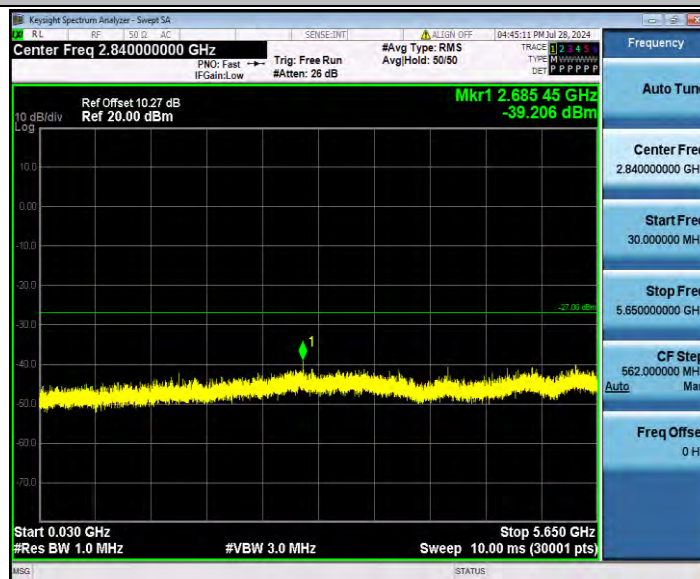
11AC20SISO_Ant1_5785_30~5650



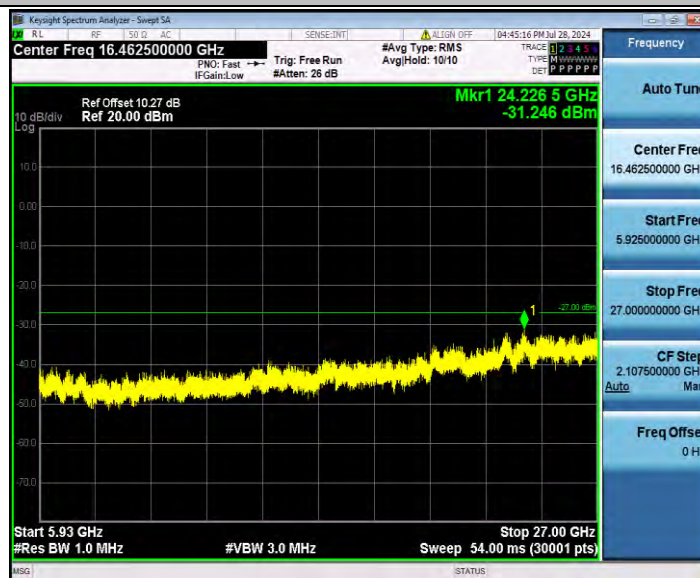
11AC20SISO_Ant1_5785_5925~27000



11AC20SISO_Ant1_5825_30~5650



11AC20SISO_Ant1_5825_5925~27000



11AC40SISO_Ant1_5755_30~5650



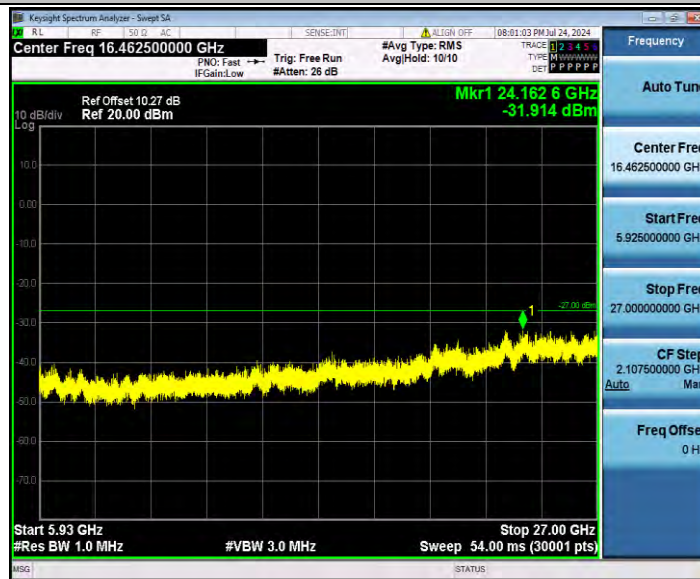
11AC40SISO_Ant1_5755_5925~27000



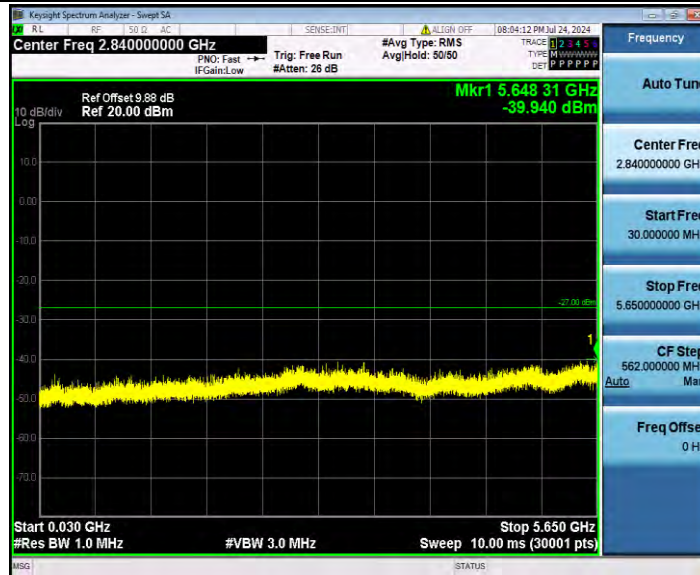
11AC40SISO_Ant1_5795_30~5650



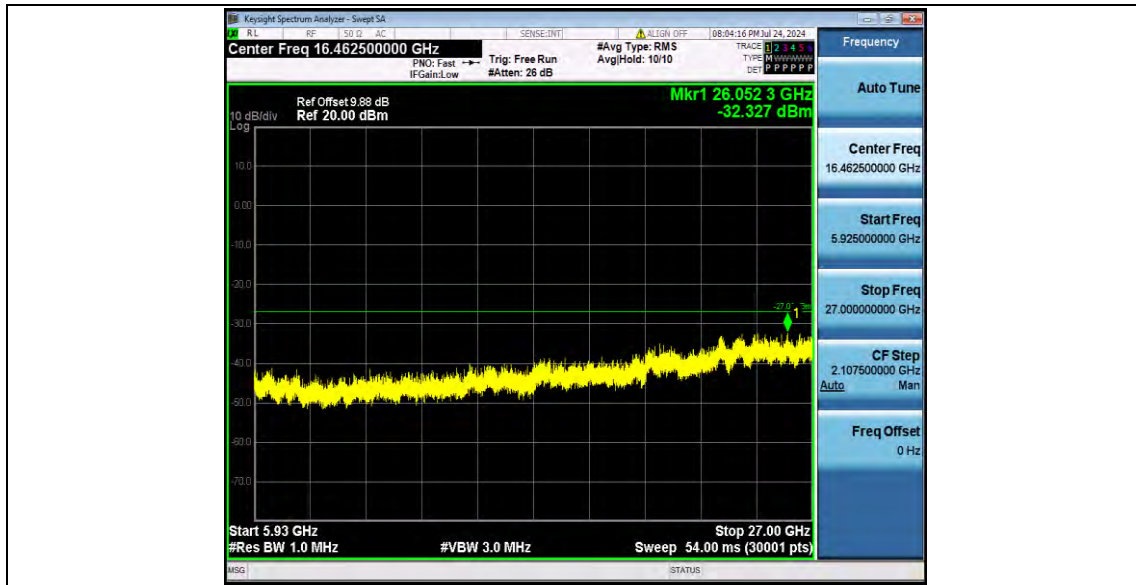
11AC40SISO_Ant1_5795_5925~27000



11AC80SISO_Ant1_5775_30~5650



11AC80SISO_Ant1_5775_5925~27000



Appendix E.8: Emissions in Restricted Bands

Test Result

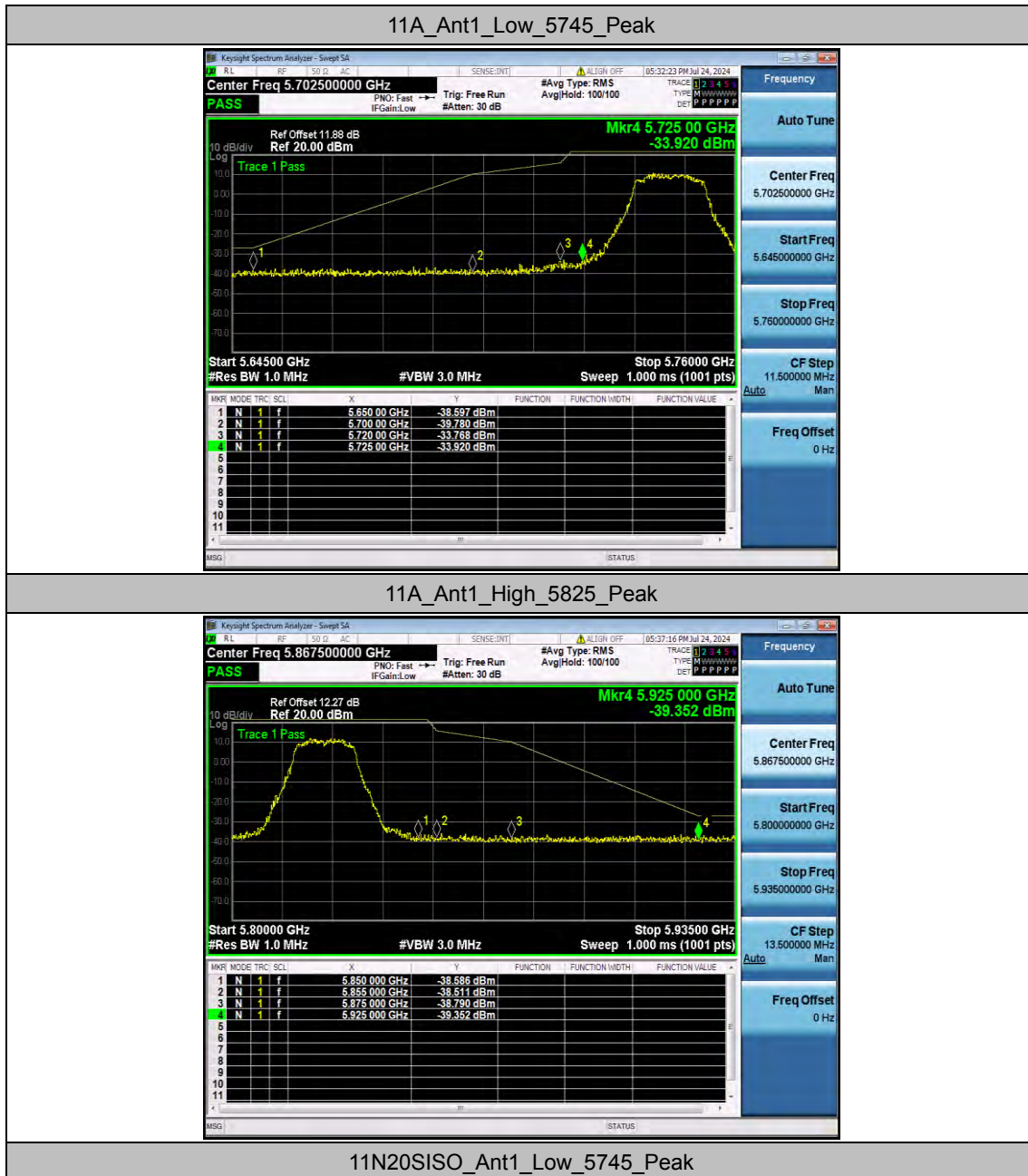
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-38.597	≤-27.00	PASS
				Peak	5700.000	-39.78	≤10.00	PASS
				Peak	5720.000	-33.77	≤15.60	PASS
				Peak	5725.000	-33.92	≤27.00	PASS
		High	5825	Peak	5850.000	-38.586	≤27.00	PASS
				Peak	5855.000	-38.51	≤15.60	PASS
				Peak	5875.000	-38.79	≤10.00	PASS
				Peak	5925.000	-39.35	≤-27.00	PASS
11N20SIS O	Ant1	Low	5745	Peak	5650.000	-39.171	≤-27.00	PASS
				Peak	5700.000	-38.61	≤10.00	PASS
				Peak	5720.000	-36.07	≤15.60	PASS
				Peak	5725.000	-33.5	≤27.00	PASS
		High	5825	Peak	5850.000	-37.033	≤27.00	PASS
				Peak	5855.000	-35.95	≤15.60	PASS
				Peak	5875.000	-39.23	≤10.00	PASS
				Peak	5925.000	-38.3	≤-27.00	PASS
11N40SIS O	Ant1	Low	5755	Peak	5650.000	-38.308	≤-27.00	PASS
				Peak	5700.000	-35.76	≤10.00	PASS
				Peak	5720.000	-33.55	≤15.60	PASS
				Peak	5725.000	-32.97	≤27.00	PASS
		High	5795	Peak	5850.000	-37.448	≤27.00	PASS
				Peak	5855.000	-38.16	≤15.60	PASS
				Peak	5875.000	-37.87	≤10.00	PASS
				Peak	5925.000	-40.07	≤-27.00	PASS
11AC20SI SO	Ant1	Low	5745	Peak	5650.000	-40.218	≤-27.00	PASS
				Peak	5700.000	-39.89	≤10.00	PASS
				Peak	5720.000	-36.77	≤15.60	PASS
				Peak	5725.000	-34.36	≤27.00	PASS
		High	5825	Peak	5850.000	-34.52	≤27.00	PASS
				Peak	5855.000	-34.56	≤15.60	PASS
				Peak	5875.000	-36.78	≤10.00	PASS
				Peak	5925.000	-39.26	≤-27.00	PASS
11AC40SI SO	Ant1	Low	5755	Peak	5650.000	-39.597	≤-27.00	PASS
				Peak	5700.000	-37.66	≤10.00	PASS
				Peak	5720.000	-32.81	≤15.60	PASS
				Peak	5725.000	-30.67	≤27.00	PASS

11AC80SI SO	Ant1	High	5795	Peak	5850.000	-38.818	≤27.00	PASS
				Peak	5855.000	-37.79	≤15.60	PASS
				Peak	5875.000	-38.74	≤10.00	PASS
				Peak	5925.000	-38.03	≤-27.00	PASS
		Low	5775	Peak	5650.000	-38.602	≤-27.00	PASS
				Peak	5700.000	-28.72	≤10.00	PASS
				Peak	5720.000	-25.45	≤15.60	PASS
				Peak	5725.000	-25.58	≤27.00	PASS
		High	5775	Peak	5850.000	-26.835	≤27.00	PASS
				Peak	5855.000	-30.12	≤15.60	PASS
				Peak	5875.000	-36.81	≤10.00	PASS
				Peak	5925.000	-38.89	≤-27.00	PASS

Note:

1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs





11N20SISO_Ant1_High_5825_Peak



11N40SISO_Ant1_Low_5755_Peak



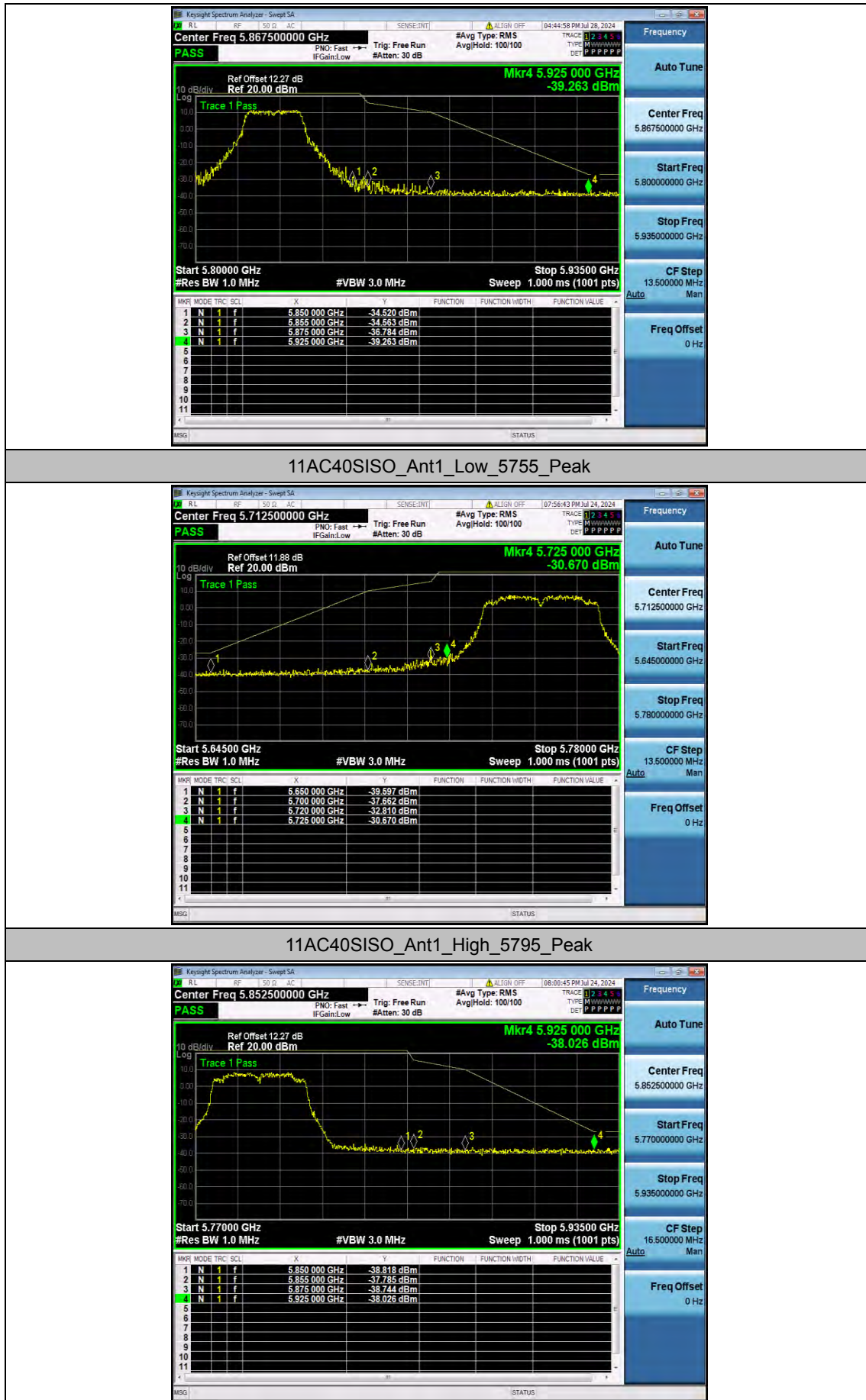
11N40SISO_Ant1_High_5795_Peak



11AC20SISO_Ant1_Low_5745_Peak



11AC20SISO_Ant1_High_5825_Peak



11AC80SISO_Ant1_Low_5775_Peak



11AC80SISO_Ant1_High_5775_Peak

