

Case No. : <u>CTA24052001004</u>	
Ambient Condition: <u>23</u> °C, <u>55</u> %RH	
According Standard: ■Part15E	
Test Date: <u>2024.4.28</u>	Test Engineer: <u>Evan ouyang</u>

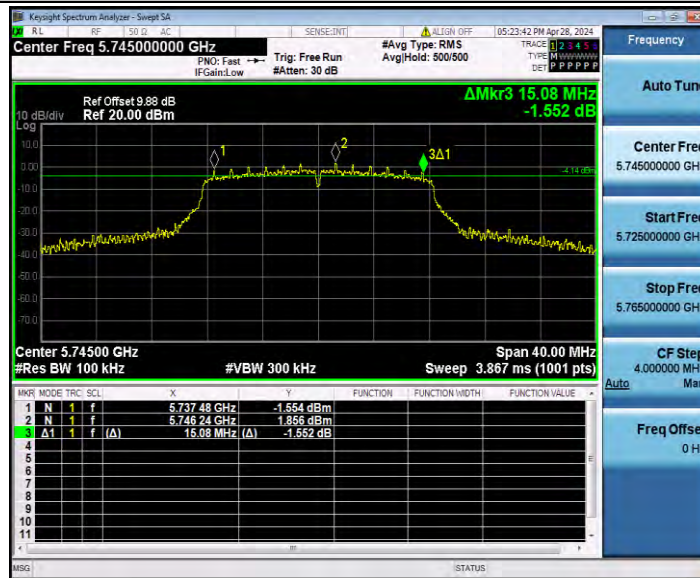
Appendix E.1: Min emission bandwidth

Test Result B4

TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.080	5737.480	5752.560	0.5	PASS
		5785	15.120	5777.440	5792.560	0.5	PASS
		5825	15.120	5817.440	5832.560	0.5	PASS
11N20SISO	Ant1	5745	15.120	5737.440	5752.560	0.5	PASS
		5785	15.120	5777.440	5792.560	0.5	PASS
		5825	15.040	5817.520	5832.560	0.5	PASS
11N40SISO	Ant1	5755	35.040	5737.480	5772.520	0.5	PASS
		5795	35.040	5777.480	5812.520	0.5	PASS
11AC20SISO	Ant1	5745	15.120	5737.440	5752.560	0.5	PASS
		5785	15.120	5777.440	5792.560	0.5	PASS
		5825	15.120	5817.440	5832.560	0.5	PASS
11AC40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.040	5777.480	5812.520	0.5	PASS
11AC80SISO	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS

Test Graphs B4

11A_Ant1_5745



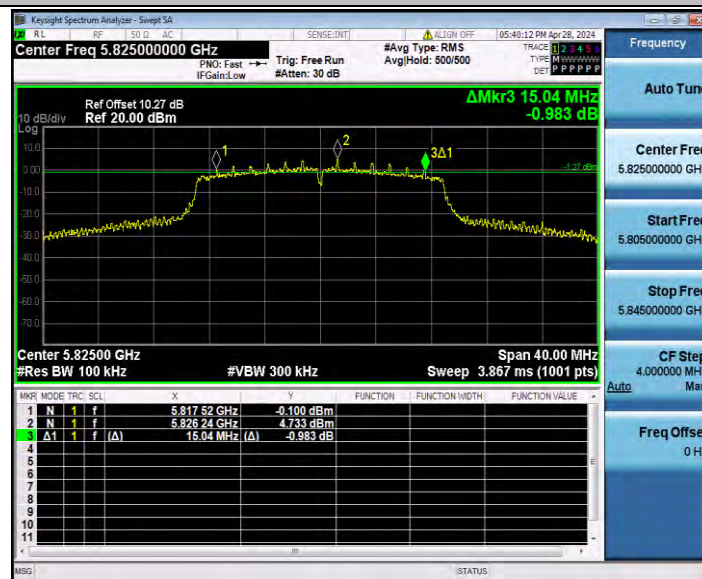
11A_Ant1_5785



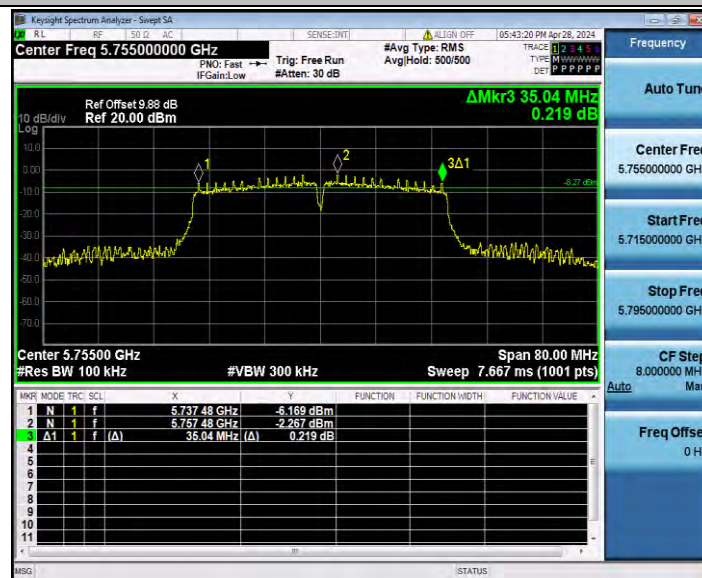
11A_Ant1_5825



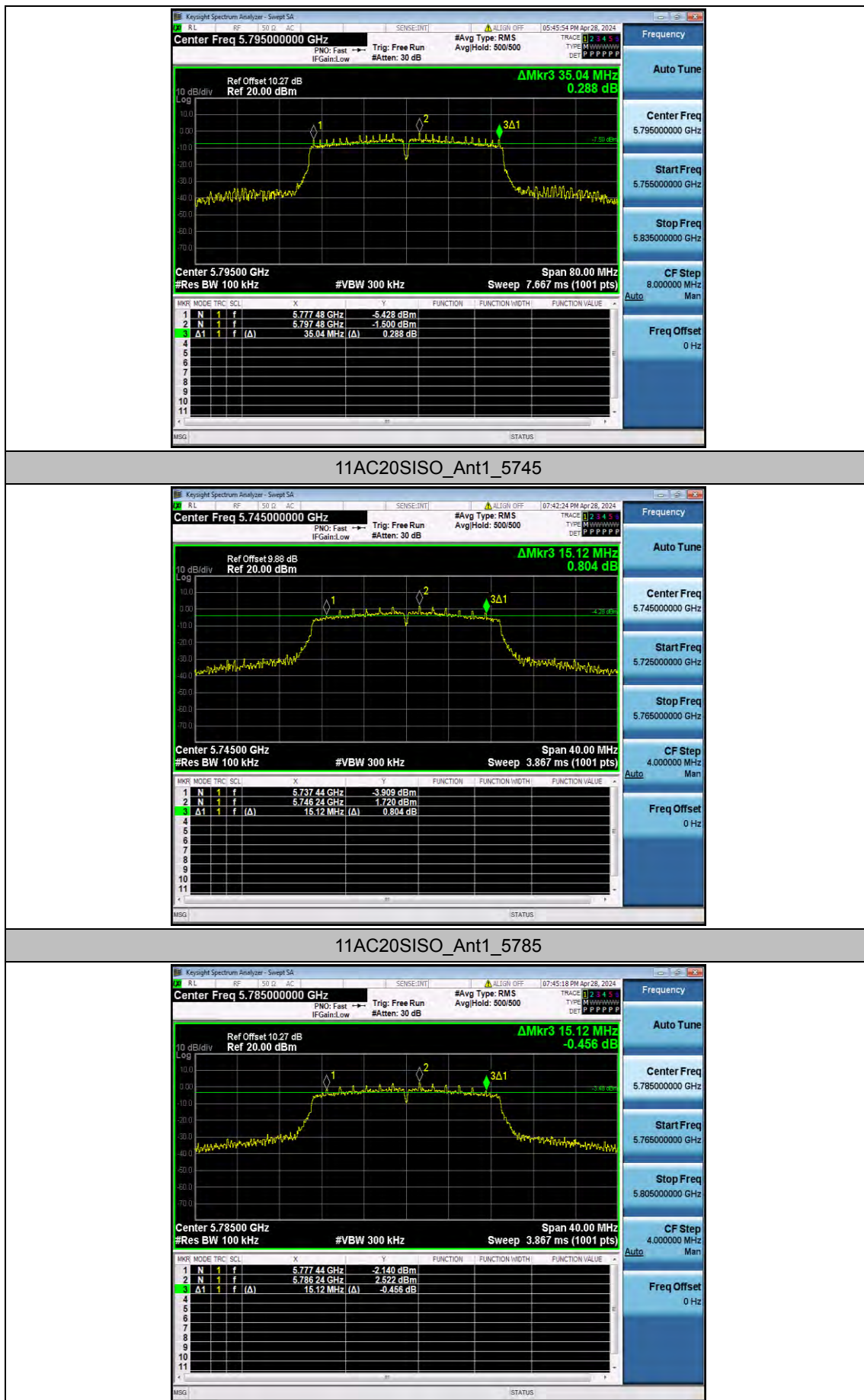
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



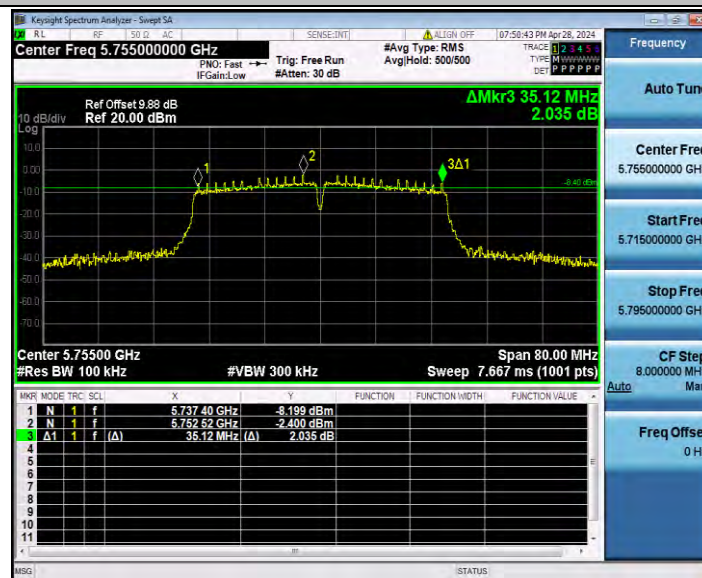
11N40SISO_Ant1_5795



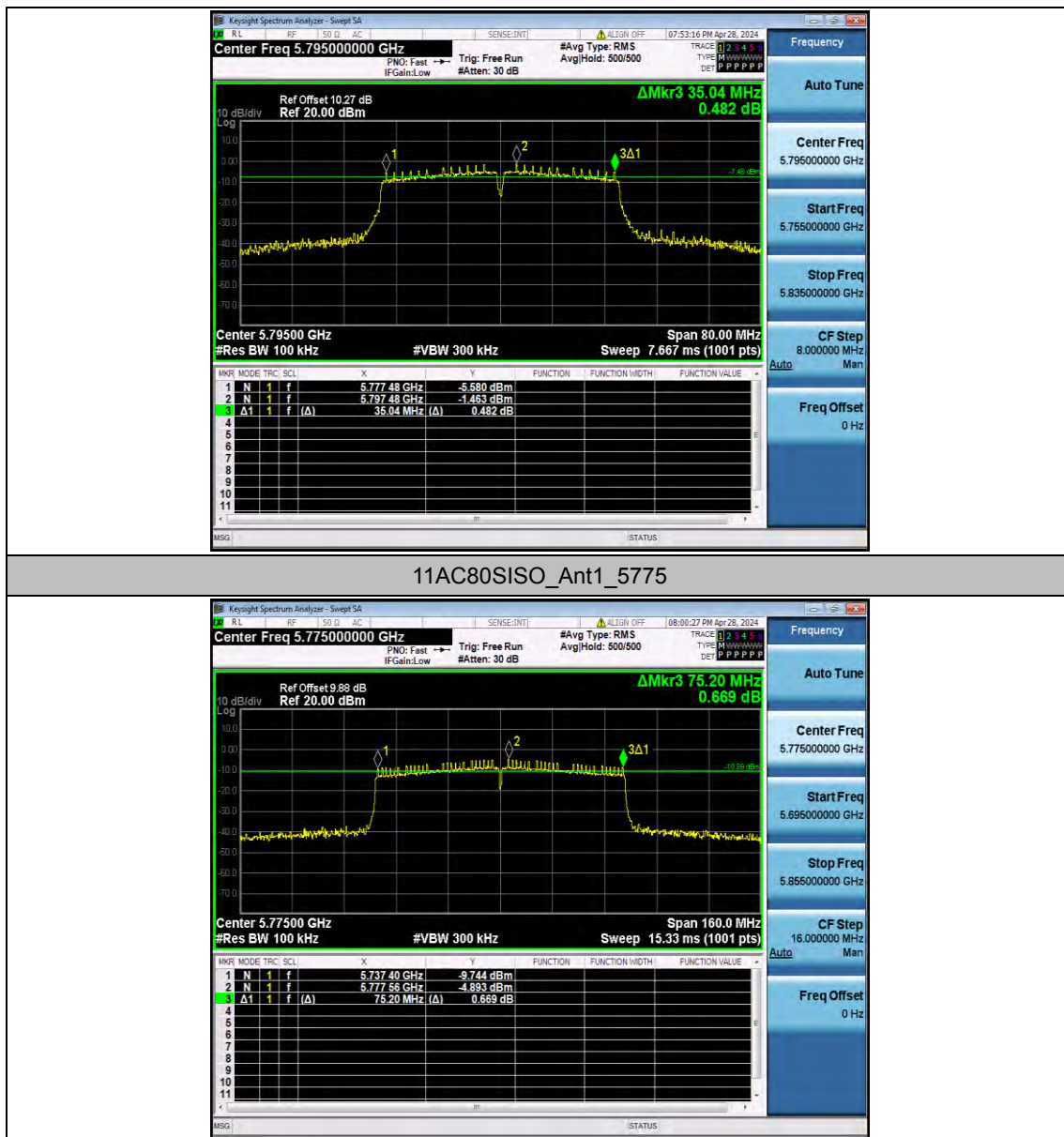
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



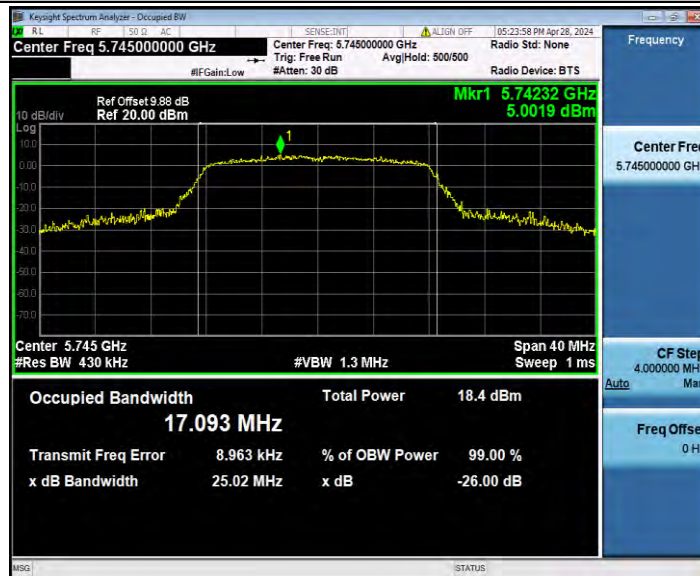
Appendix E.2: Occupied channel bandwidth

Test Result

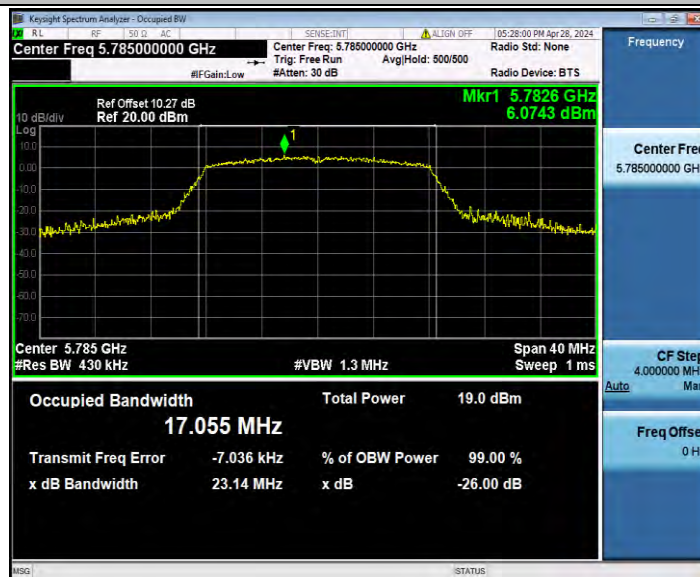
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]
11A	Ant1	5745	17.093	5736.4625	5753.5555
		5785	17.055	5776.4655	5793.5205
		5825	17.089	5816.4348	5833.5238
11N20SISO	Ant1	5745	18.329	5735.8147	5754.1437
		5785	18.249	5775.8636	5794.1126
		5825	18.296	5815.8059	5834.1019
11N40SISO	Ant1	5755	36.506	5736.7342	5773.2402
		5795	36.551	5776.7941	5813.3451
11AC20SISO	Ant1	5745	17.963	5736.0112	5753.9742
		5785	17.966	5776.0373	5794.0033
		5825	18.002	5815.9757	5833.9777
11AC40SISO	Ant1	5755	36.330	5736.8470	5773.1770
		5795	36.350	5776.8663	5813.2163
11AC80SISO	Ant1	5775	75.416	5737.3797	5812.7957

Test Graphs

11A_Ant1_5745



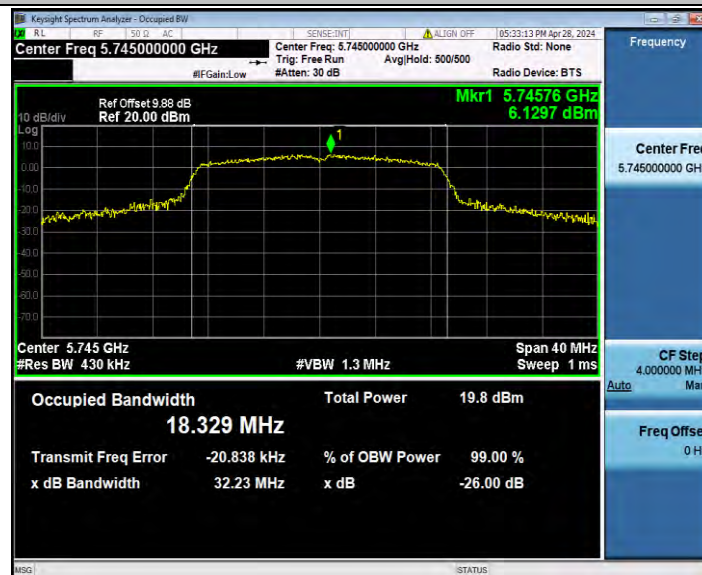
11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5745



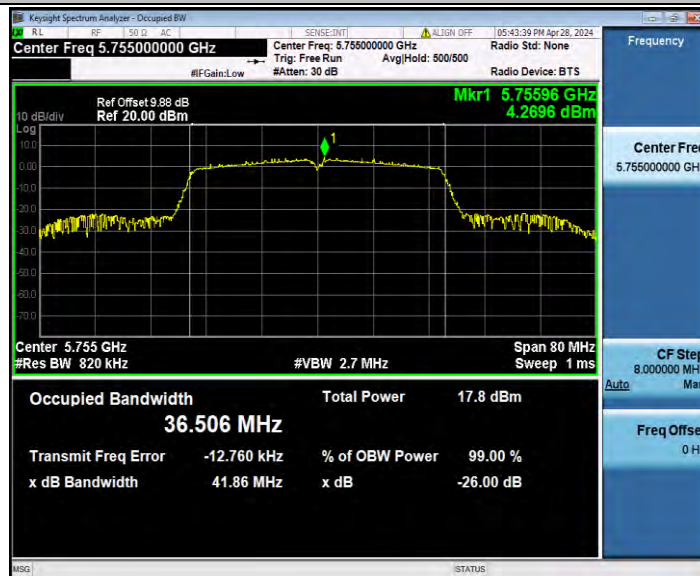
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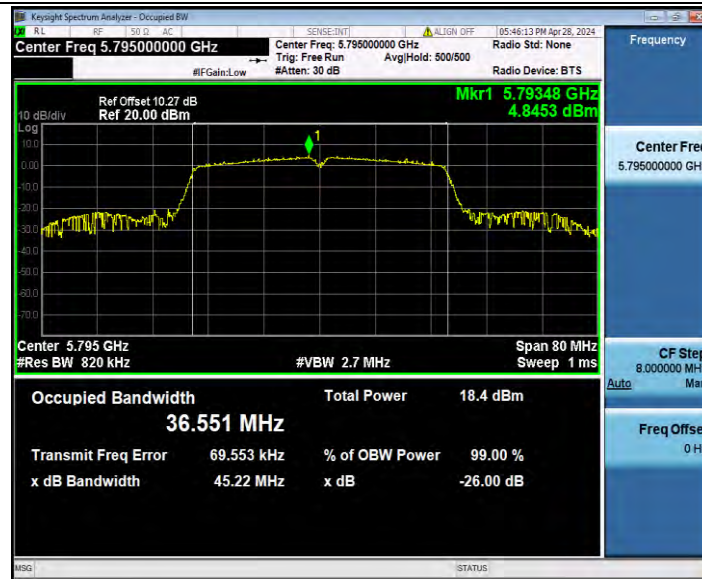
11N20SISO_Ant1_5825



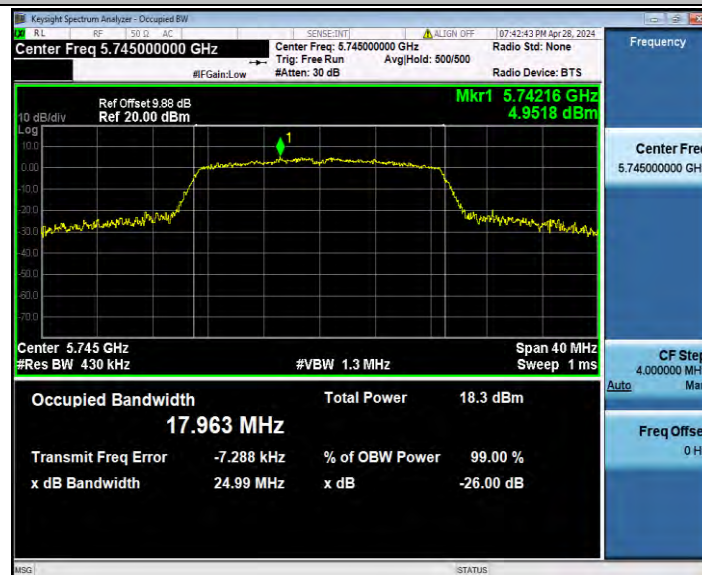
11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



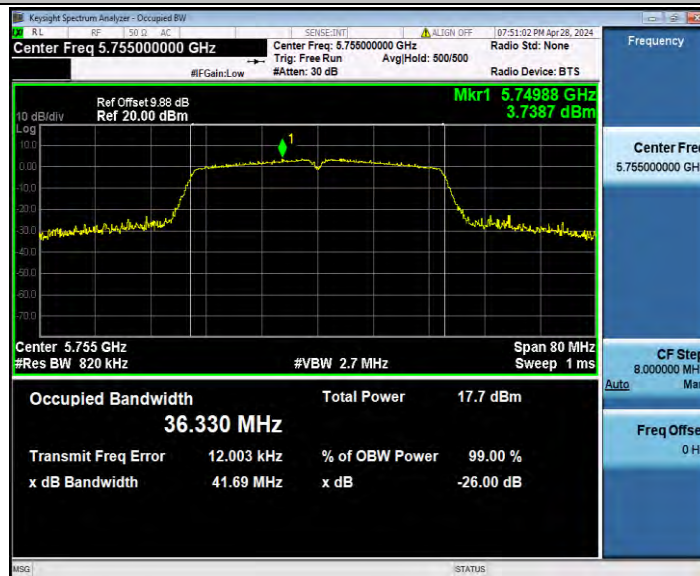
11AC20SISO_Ant1_5785



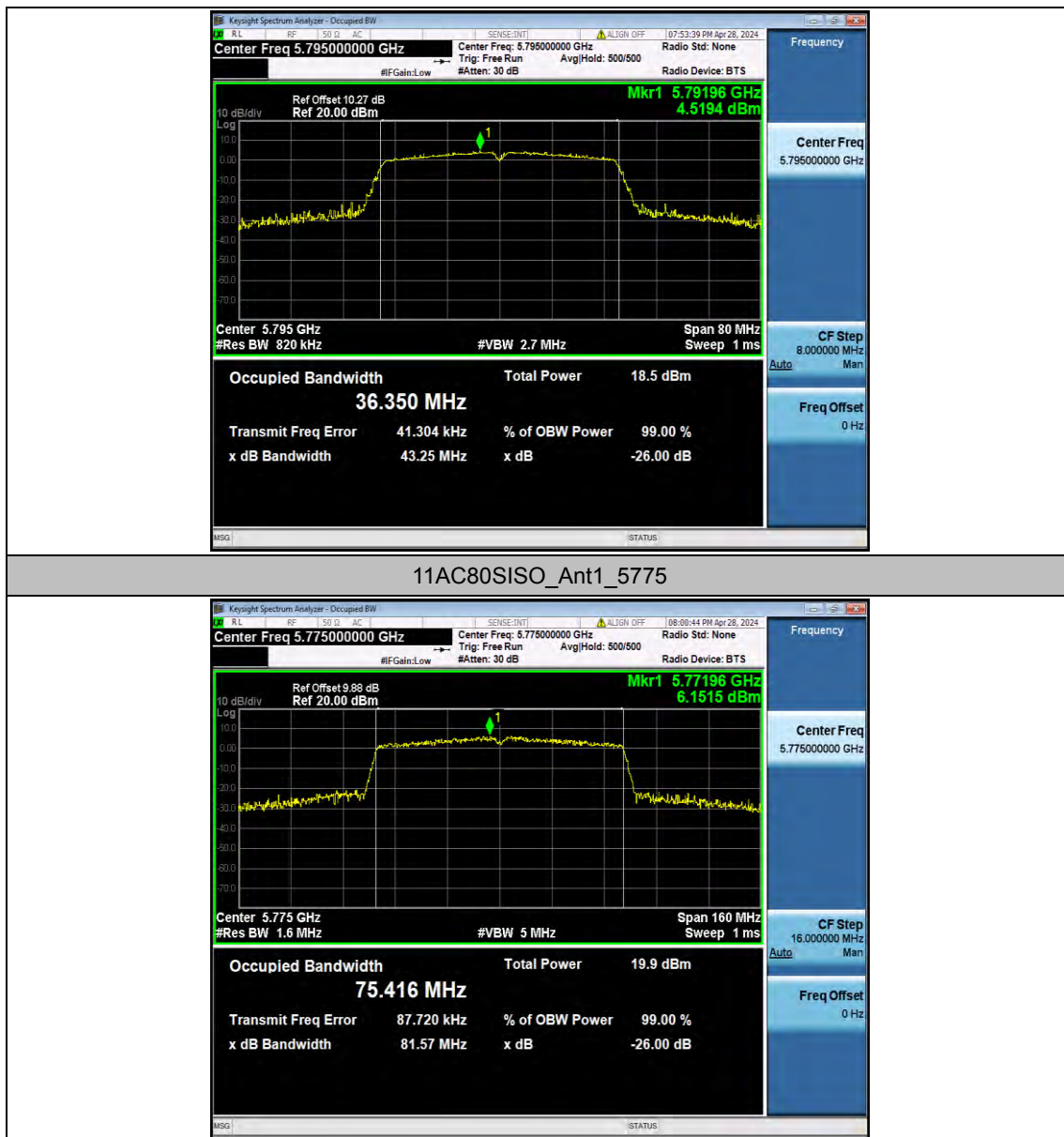
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

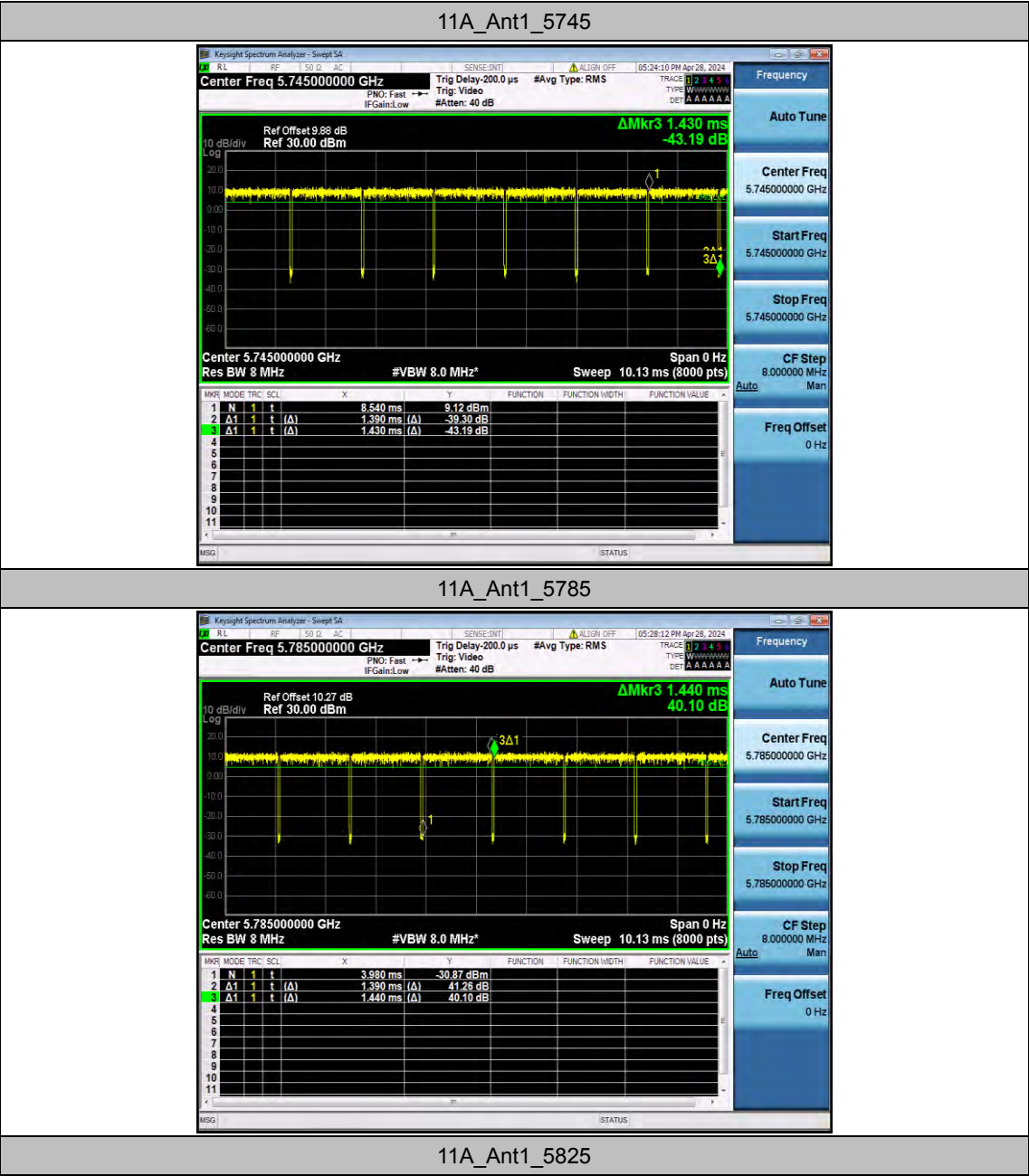


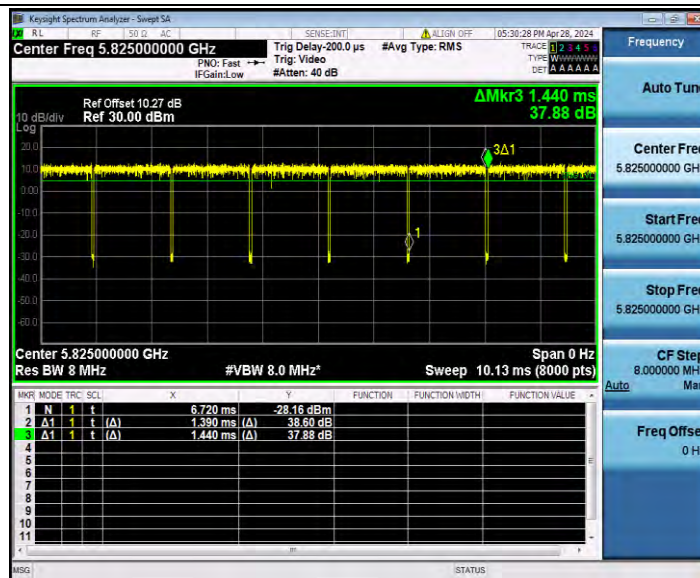
Appendix E.3: Duty Cycle

Test Result

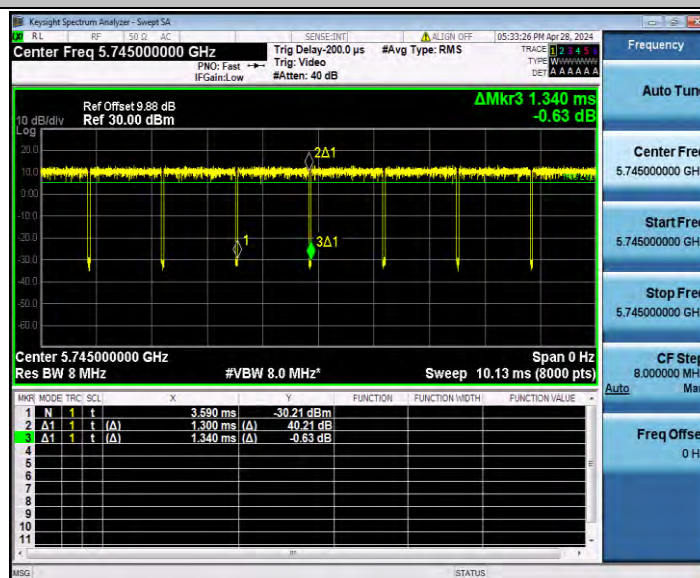
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5745	1.39	1.43	97.20	0.12	0.72
		5785	1.39	1.44	96.53	0.15	0.72
		5825	1.39	1.44	96.53	0.15	0.72
11N20SISO	Ant1	5745	1.30	1.34	97.01	0.13	0.77
		5785	1.30	1.34	97.01	0.13	0.77
		5825	1.30	1.35	96.30	0.16	0.77
11N40SISO	Ant1	5755	0.64	0.69	92.75	0.33	1.56
		5795	0.64	0.69	92.75	0.33	1.56
11AC20SISO	Ant1	5745	1.31	1.36	96.32	0.16	0.76
		5785	1.31	1.35	97.04	0.13	0.76
		5825	1.32	1.36	97.06	0.13	0.76
11AC40SISO	Ant1	5755	0.65	0.69	94.20	0.26	1.54
		5795	0.65	0.70	92.86	0.32	1.54
11AC80SISO	Ant1	5775	0.32	0.37	86.49	0.63	3.13

Test Graphs

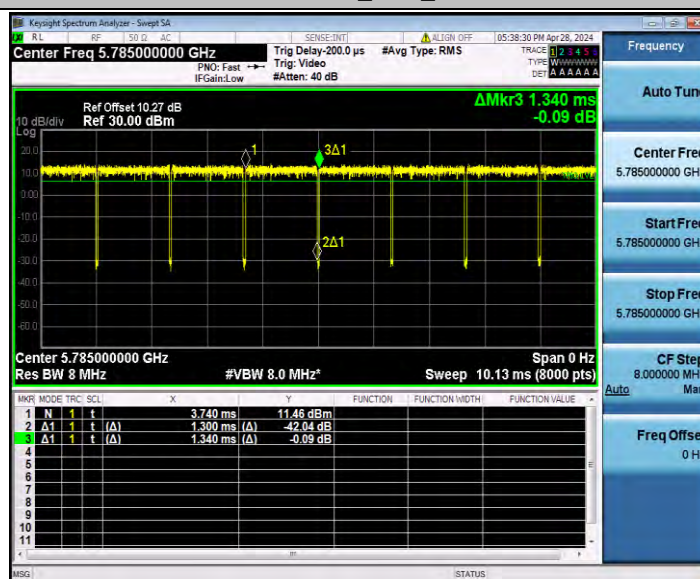




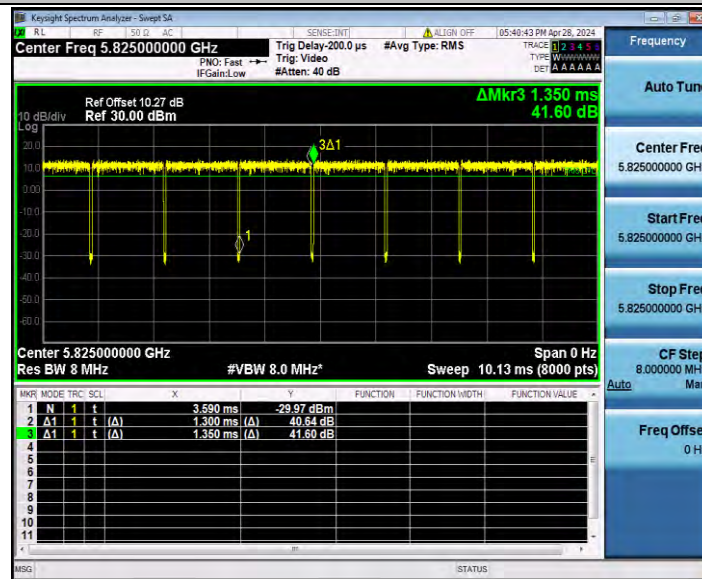
11N20SISO_Ant1_5745



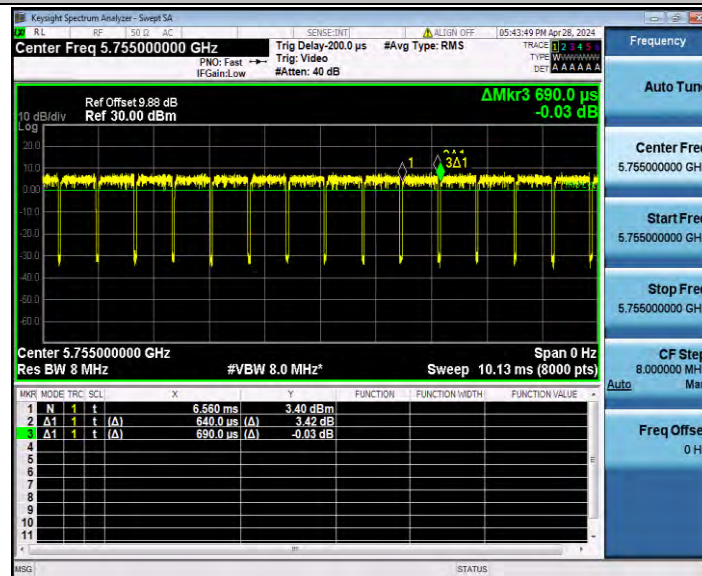
11N20SISO_Ant1_5785



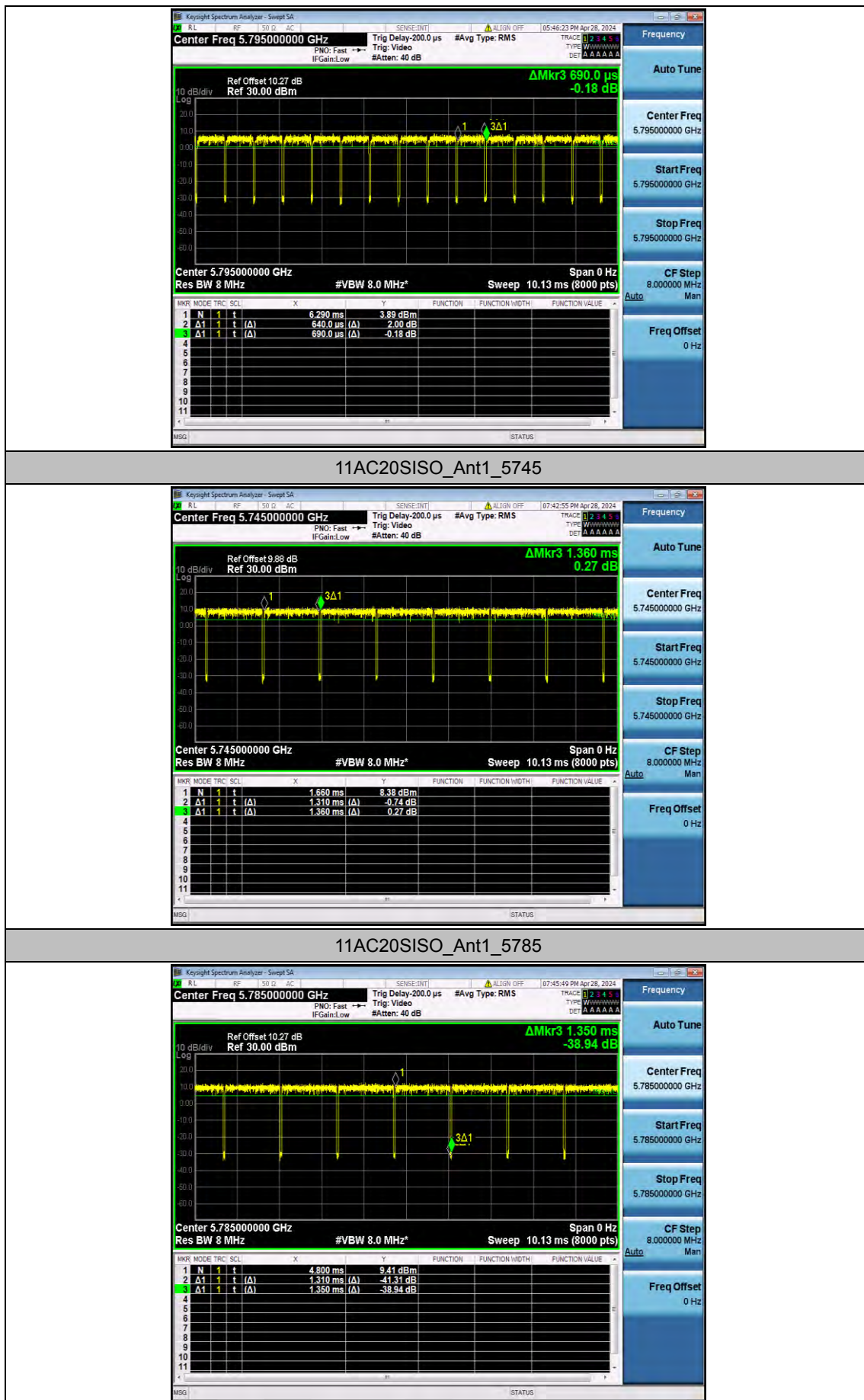
11N20SISO_Ant1_5825



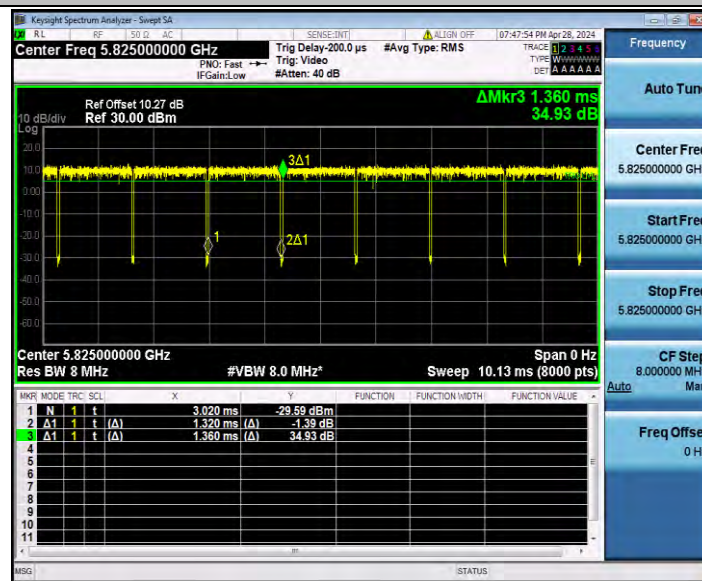
11N40SISO_Ant1_5755



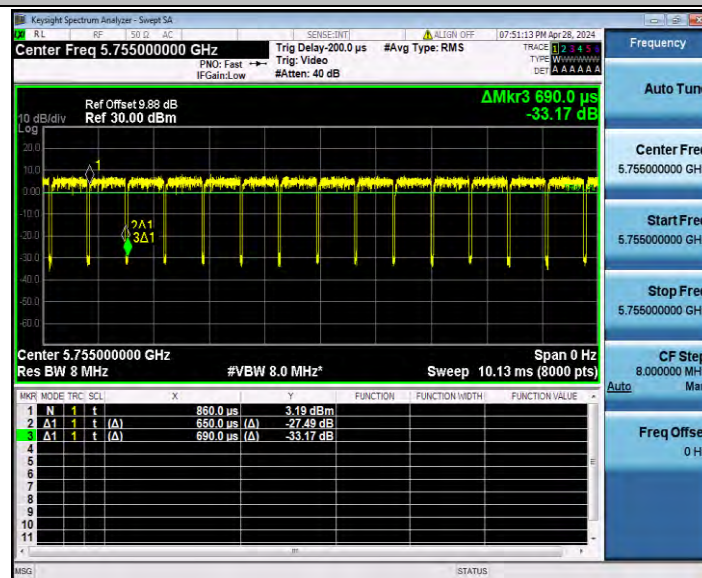
11N40SISO_Ant1_5795



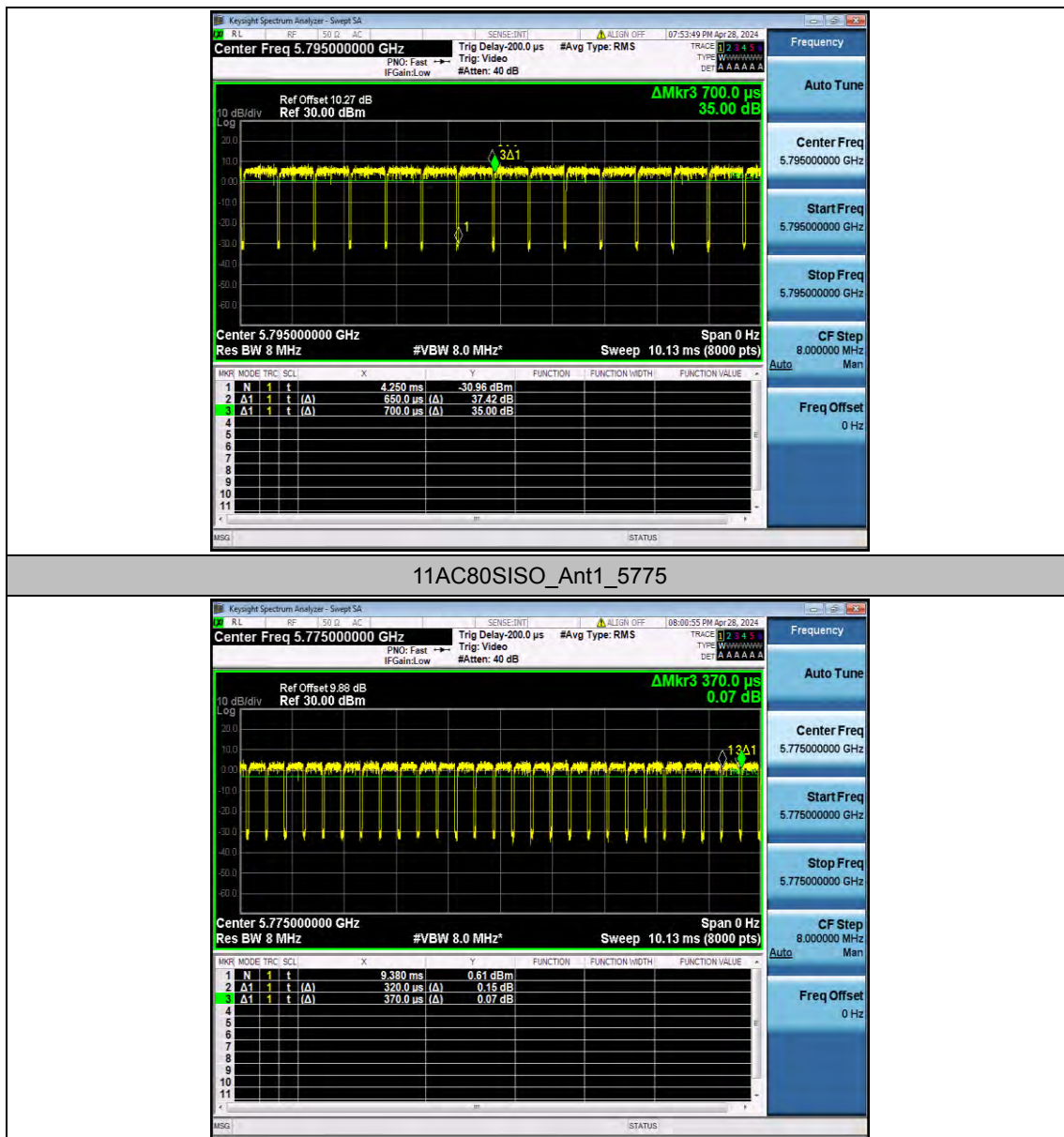
11AC20SISO_Ant1_5825



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	11.44	97.20	0.12	11.56	≤30.00	PASS
		5785	12.30	96.53	0.15	12.45	≤30.00	PASS
		5825	12.42	96.53	0.15	12.57	≤30.00	PASS
11N20SISO	Ant1	5745	12.86	97.01	0.13	12.99	≤30.00	PASS
		5785	14.11	97.01	0.13	14.24	≤30.00	PASS
		5825	13.92	96.30	0.16	14.08	≤30.00	PASS
11N40SISO	Ant1	5755	10.12	92.75	0.33	10.45	≤30.00	PASS
		5795	10.75	92.75	0.33	11.08	≤30.00	PASS
11AC20SISO	Ant1	5745	11.32	96.32	0.16	11.48	≤30.00	PASS
		5785	12.20	97.04	0.13	12.33	≤30.00	PASS
		5825	12.51	97.06	0.13	12.64	≤30.00	PASS
11AC40SISO	Ant1	5755	10.09	94.20	0.26	10.35	≤30.00	PASS
		5795	10.96	92.86	0.32	11.28	≤30.00	PASS
11AC80SISO	Ant1	5775	10.44	86.49	0.63	11.07	≤30.00	PASS

Note:

1. The Duty Cycle Factor is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the data.

Appendix E.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-1.68	≤30.00	PASS
		5785	-0.77	≤30.00	PASS
		5825	-0.65	≤30.00	PASS
11N20SISO	Ant1	5745	-0.31	≤30.00	PASS
		5785	0.68	≤30.00	PASS
		5825	0.60	≤30.00	PASS
11N40SISO	Ant1	5755	-5.89	≤30.00	PASS
		5795	-5.23	≤30.00	PASS
11AC20SISO	Ant1	5745	-2.22	≤30.00	PASS
		5785	-1.18	≤30.00	PASS
		5825	-0.99	≤30.00	PASS
11AC40SISO	Ant1	5755	-5.94	≤30.00	PASS
		5795	-5.11	≤30.00	PASS
11AC80SISO	Ant1	5775	-8.39	≤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

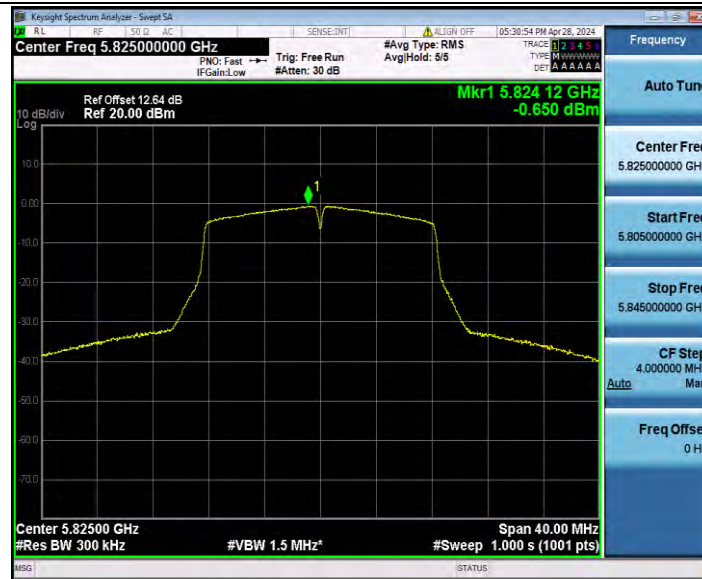
11A_Ant1_5745



11A_Ant1_5785



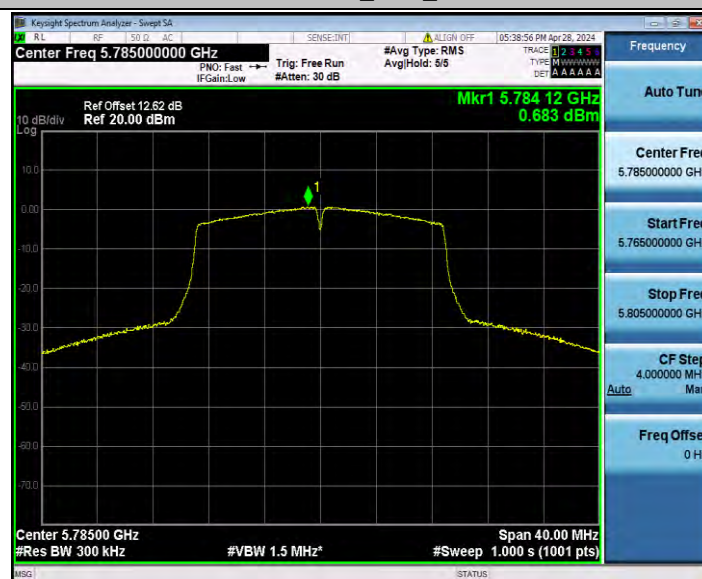
11A_Ant1_5825



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



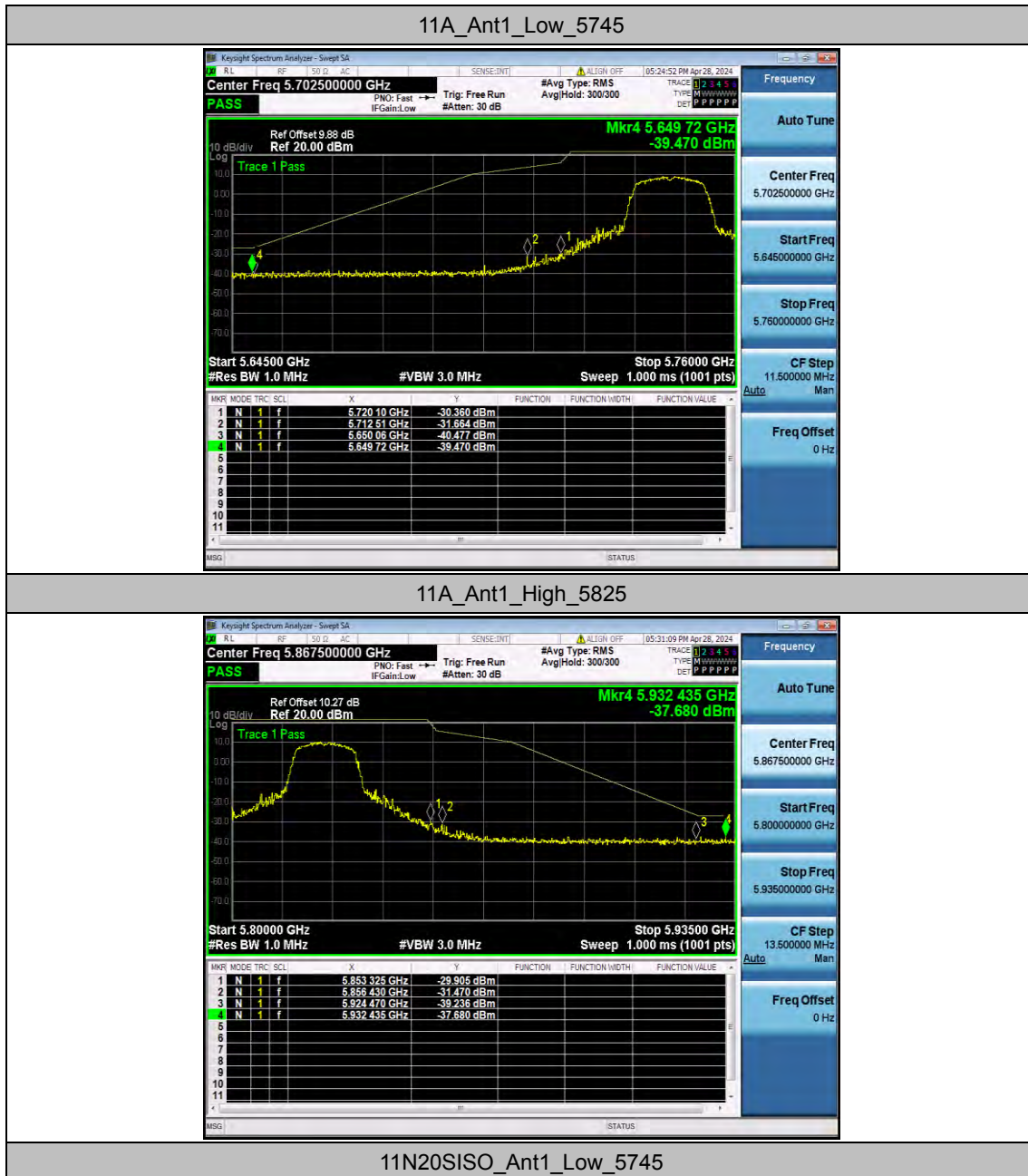
Appendix E.6: Band edge measurements

Test Result B4

TestMode	Antenna	ChName	Freq(MHz)	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-40.48	≤-26.96	PASS
				5700~5720	-31.66	≤13.50	PASS
				5720~5725	-30.36	≤15.82	PASS
				5760~5650	-39.47	≤-27	PASS
		High	5825	5850~5855	-29.91	≤19.42	PASS
				5855~5875	-31.47	≤15.20	PASS
				5875~5925	-39.24	≤-26.61	PASS
				5925~5935	-37.68	≤-27	PASS
11N20SI SO	Ant1	Low	5745	5650~5700	-39.18	≤-25.76	PASS
				5700~5720	-25.16	≤15.34	PASS
				5720~5725	-23.46	≤17.91	PASS
				5760~5650	-38.11	≤-27	PASS
		High	5825	5850~5855	-27.32	≤17.57	PASS
				5855~5875	-29	≤15.35	PASS
				5875~5925	-38.03	≤-26.21	PASS
				5925~5935	-37.59	≤-27	PASS
11N40SI SO	Ant1	Low	5755	5650~5700	-38.89	≤-26.90	PASS
				5700~5720	-23.21	≤15.35	PASS
				5720~5725	-21.74	≤17.58	PASS
				5780~5650	-39.4	≤-27	PASS
		High	5795	5850~5855	-34.75	≤17.16	PASS
				5855~5875	-38.18	≤10.02	PASS
				5875~5925	-39.13	≤-26.83	PASS
				5925~5935	-37.96	≤-27	PASS
11AC20S ISO	Ant1	Low	5745	5650~5700	-39.17	≤-26.27	PASS
				5700~5720	-32.8	≤13.92	PASS
				5720~5725	-29.21	≤16.60	PASS
				5760~5650	-39.41	≤-27	PASS
		High	5825	5850~5855	-32.63	≤15.73	PASS
				5855~5875	-32.94	≤14.41	PASS
				5875~5925	-37.9	≤-26.11	PASS
				5925~5935	-38.35	≤-27	PASS
11AC40S ISO	Ant1	Low	5755	5650~5700	-40.25	≤-26.60	PASS
				5700~5720	-28.47	≤15.50	PASS
				5720~5725	-27.27	≤16.66	PASS
				5780~5650	-39.97	≤-27	PASS

		High	5795	5850~5855	-39.25	≤ 16.03	PASS
				5855~5875	-37.11	≤ 11.08	PASS
				5875~5925	-39.63	≤ -26.83	PASS
				5925~5935	-38.13	≤ -27	PASS
11AC80S ISO	Ant1	Low	5775	5650~5700	-38.84	≤ -26.23	PASS
				5700~5720	-25.82	≤ 14.65	PASS
				5720~5725	-26.87	≤ 16.71	PASS
				5800~5650	-39.08	≤ -27	PASS
		High	5775	5850~5855	-31.18	≤ 18.37	PASS
				5855~5875	-32.25	≤ 11.74	PASS
				5875~5925	-38.71	≤ -26.32	PASS
				5925~5935	-38.43	≤ -27	PASS

Test Graphs B4





11N20SISO_Ant1_High_5825



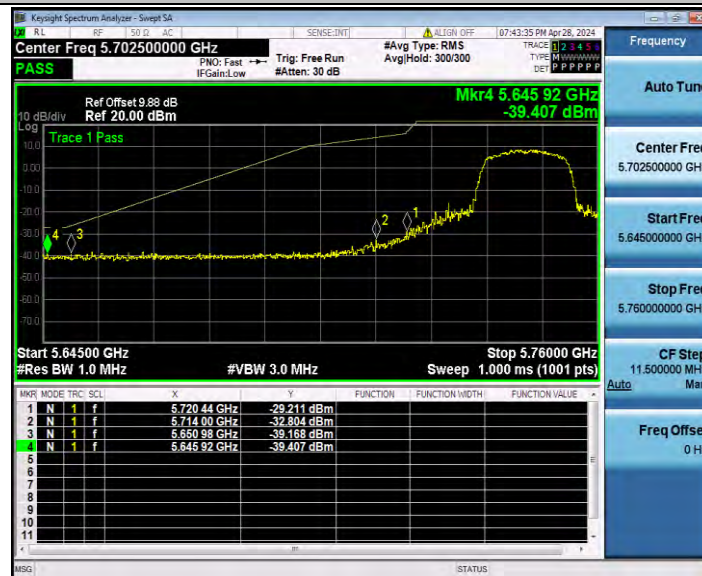
11N40SISO_Ant1_Low_5755



11N40SISO_Ant1_High_5795



11AC20SISO_Ant1_Low_5745



11AC20SISO_Ant1_High_5825



11AC40SISO_Ant1_Low_5755



11AC40SISO_Ant1_High_5795



11AC80SISO_Ant1_Low_5775



11AC80SISO_Ant1_High_5775



Appendix E.7: Conducted Spurious Emission

Test Result

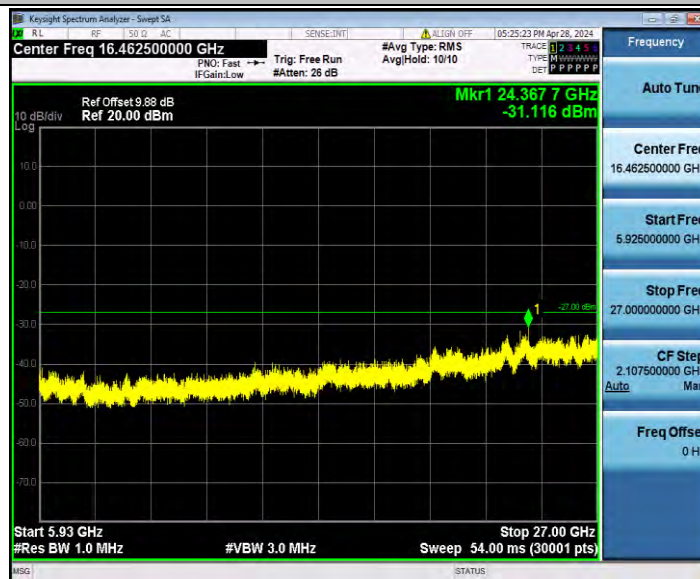
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	30~5650	5404.22	-40.47	≤-27	PASS
			5925~40000	24367.73	-31.12	≤-27	PASS
		5785	30~5650	5452.36	-39.78	≤-27	PASS
			5925~40000	24272.19	-30.97	≤-27	PASS
		5825	30~5650	4950.12	-39.3	≤-27	PASS
			5925~40000	24227.94	-31.65	≤-27	PASS
11N20SISO	Ant1	5745	30~5650	5395.79	-40.37	≤-27	PASS
			5925~40000	24801.18	-32.55	≤-27	PASS
		5785	30~5650	2630.37	-39.85	≤-27	PASS
			5925~40000	25016.84	-31.97	≤-27	PASS
		5825	30~5650	5481.96	-39.67	≤-27	PASS
			5925~40000	24200.54	-31.77	≤-27	PASS
11N40SISO	Ant1	5755	30~5650	5380.8	-39.96	≤-27	PASS
			5925~40000	26037.58	-31.21	≤-27	PASS
		5795	30~5650	5450.3	-39.85	≤-27	PASS
			5925~40000	24836.3	-31.62	≤-27	PASS
11AC20SISO	Ant1	5745	30~5650	5488.52	-40.11	≤-27	PASS
			5925~40000	24232.15	-32.18	≤-27	PASS
		5785	30~5650	5412.84	-40.11	≤-27	PASS
			5925~40000	24282.03	-32.12	≤-27	PASS
		5825	30~5650	5398.04	-39.92	≤-27	PASS
			5925~40000	26551.81	-31.85	≤-27	PASS
11AC40SISO	Ant1	5755	30~5650	5475.59	-39.53	≤-27	PASS
			5925~40000	26665.61	-32.13	≤-27	PASS
		5795	30~5650	5438.88	-39.22	≤-27	PASS
			5925~40000	24854.57	-30.7	≤-27	PASS
11AC80SISO	Ant1	5775	30~5650	5355.32	-40.25	≤-27	PASS
			5925~40000	24192.11	-32.43	≤-27	PASS

Test Graphs

11A_Ant1_5745_30~5650



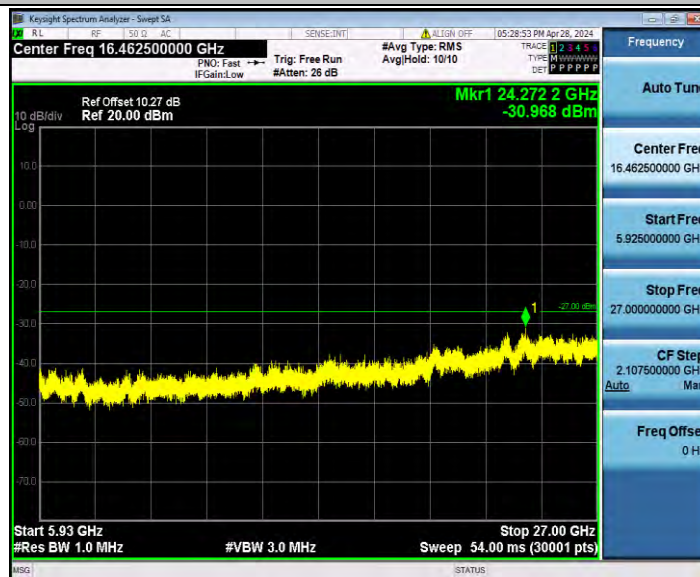
11A_Ant1_5745_5925~40000



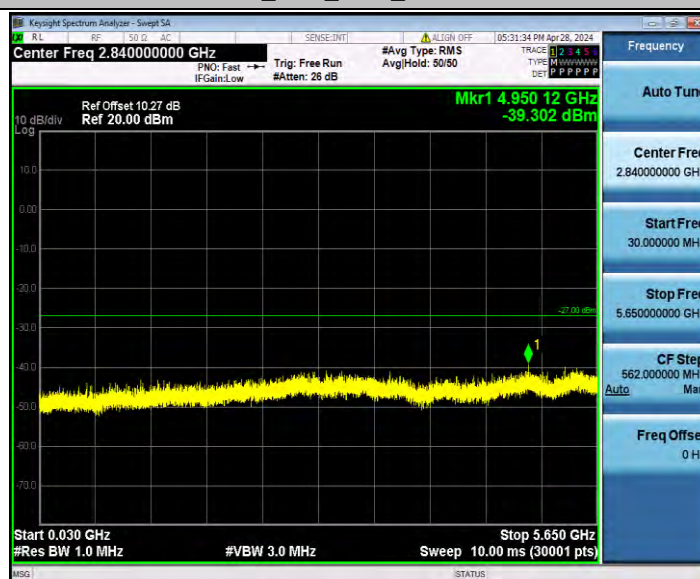
11A_Ant1_5785_30~5650



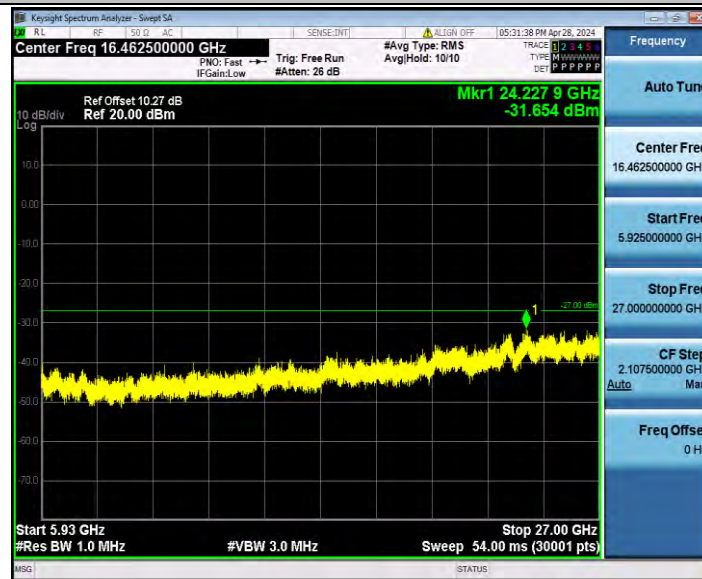
11A_Ant1_5785_5925~40000



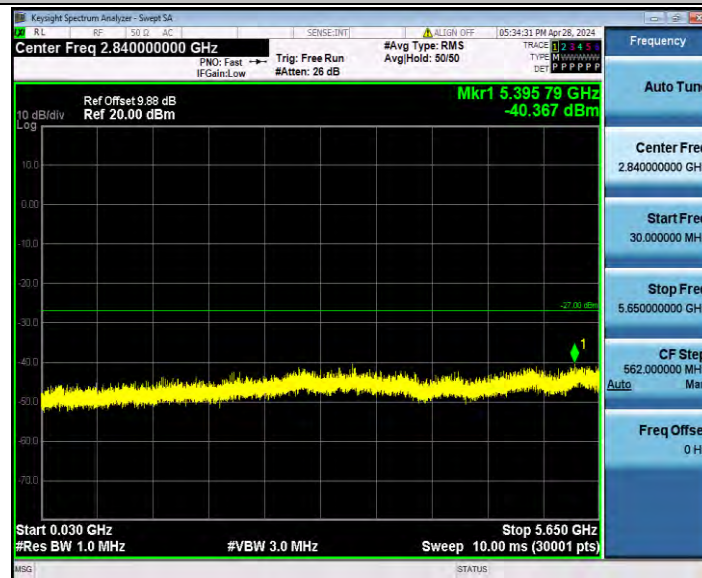
11A_Ant1_5825_30~5650



11A_Ant1_5825_5925~40000



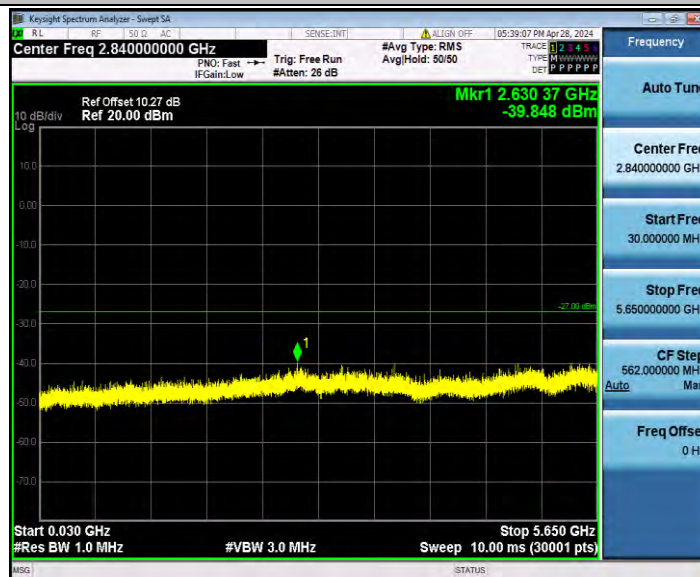
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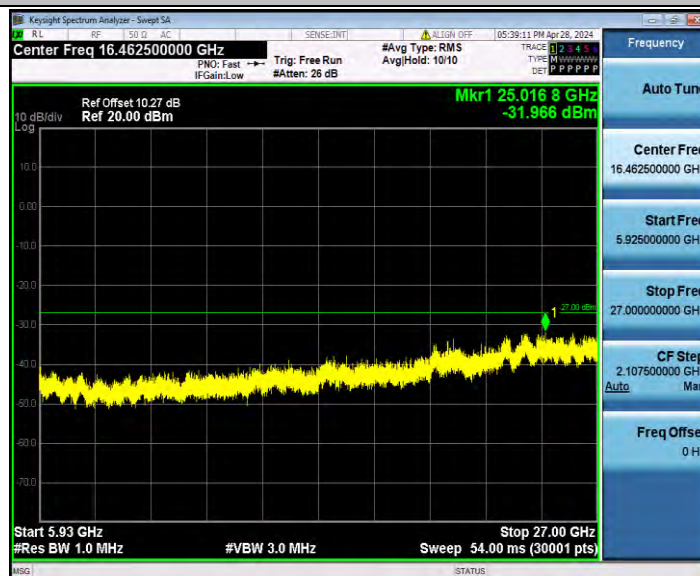
11N20SISO_Ant1_5745_5925~40000



11N20SISO_Ant1_5785_30~5650



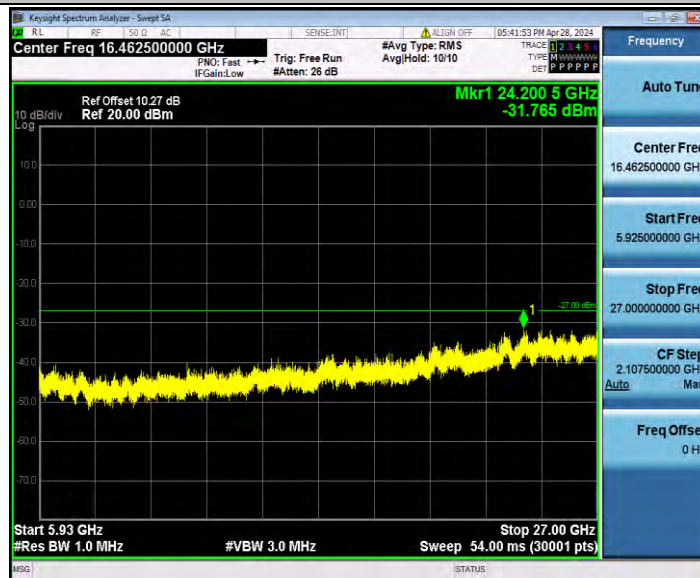
11N20SISO_Ant1_5785_5925~40000



11N20SISO_Ant1_5825_30~5650



11N20SISO_Ant1_5825_5925~40000



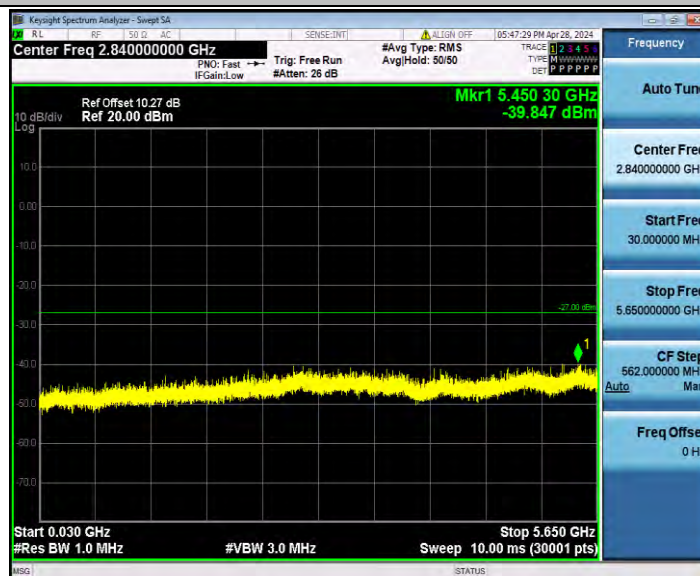
11N40SISO_Ant1_5755_30~5650



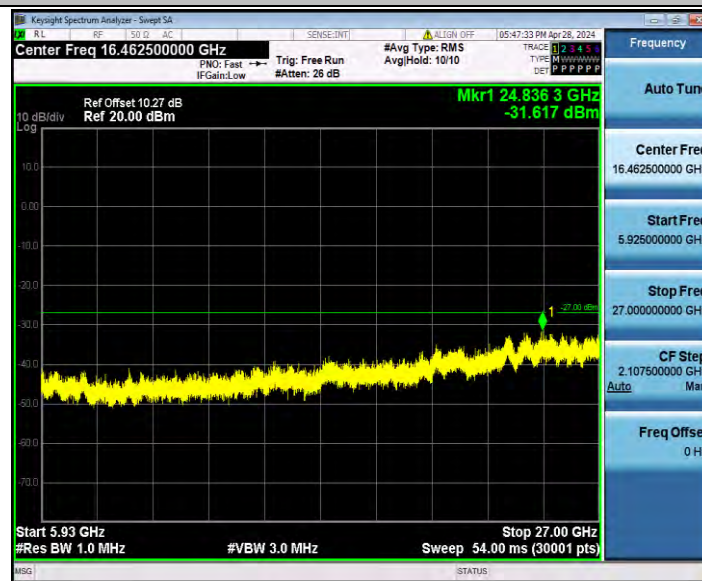
11N40SISO_Ant1_5755_5925~40000



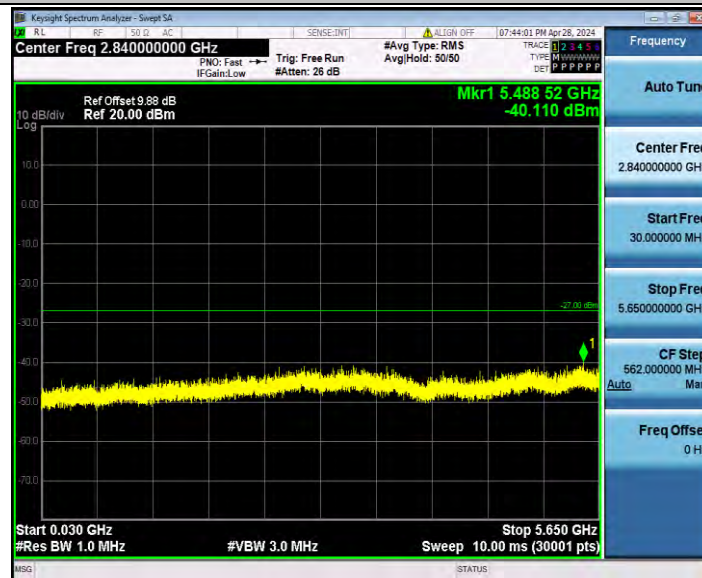
11N40SISO_Ant1_5795_30~5650



11N40SISO_Ant1_5795_5925~40000



11AC20SISO_Ant1_5745_30~5650



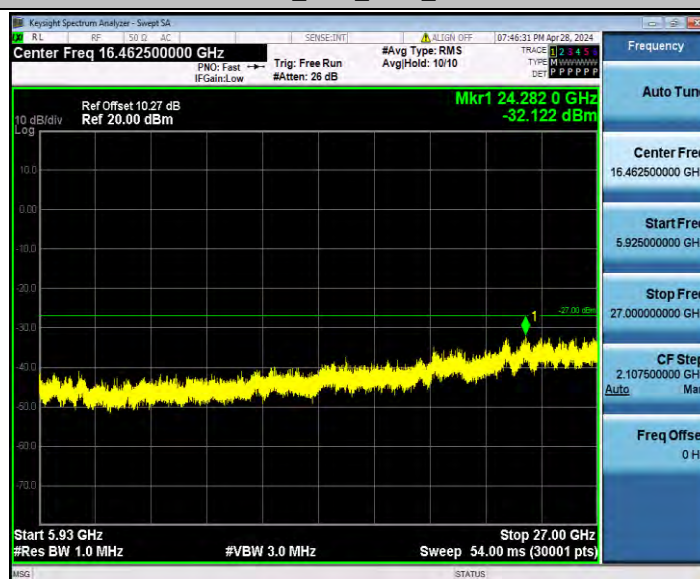
11AC20SISO_Ant1_5745_5925~40000



11AC20SISO_Ant1_5785_30~5650



11AC20SISO_Ant1_5785_5925~40000



11AC20SISO_Ant1_5825_30~5650



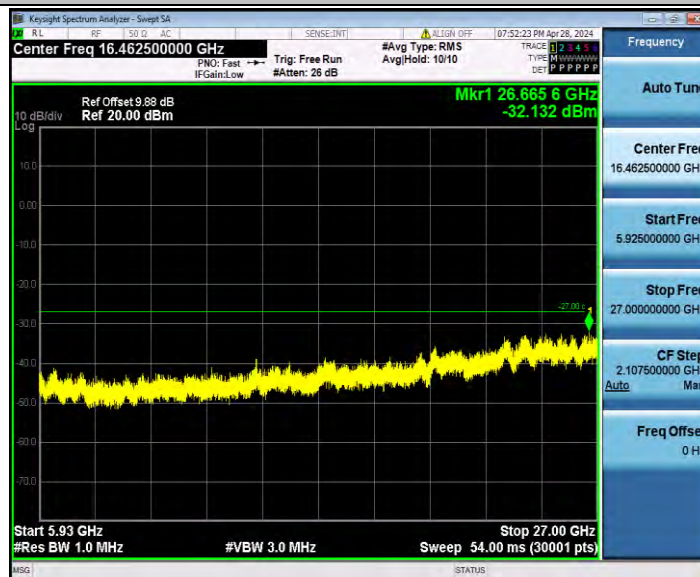
11AC20SISO_Ant1_5825_5925~40000



11AC40SISO_Ant1_5755_30~5650



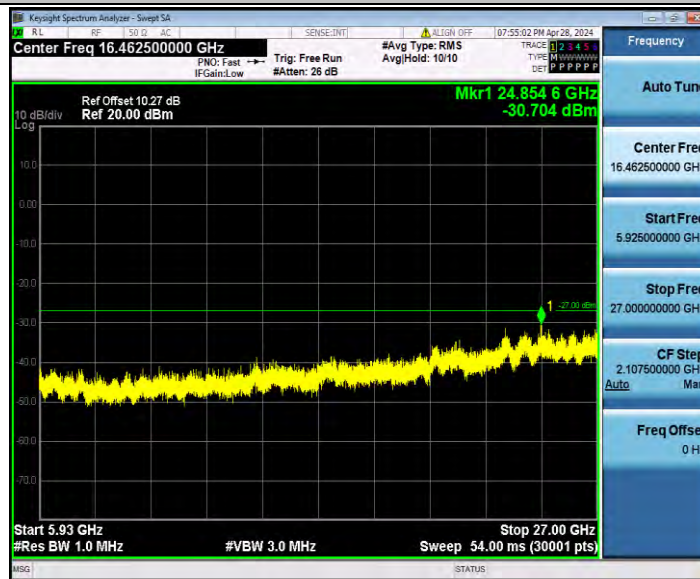
11AC40SISO_Ant1_5755_5925~40000



11AC40SISO_Ant1_5795_30~5650



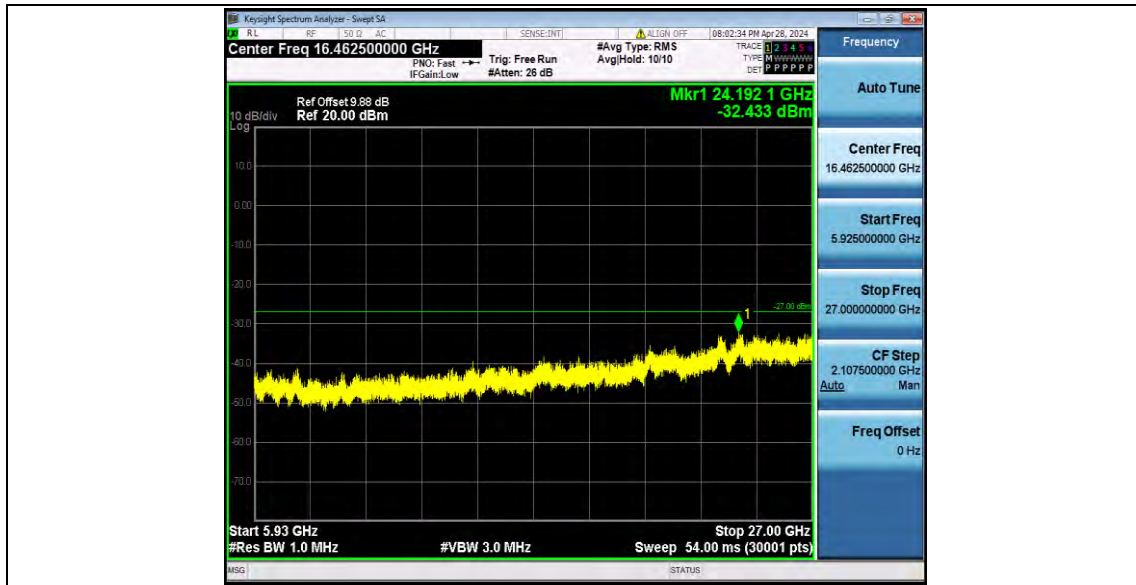
11AC40SISO_Ant1_5795_5925~40000



11AC80SISO_Ant1_5775_30~5650



11AC80SISO_Ant1_5775_5925~40000



Appendix E.8: Emissions in Restricted Bands

Test Result

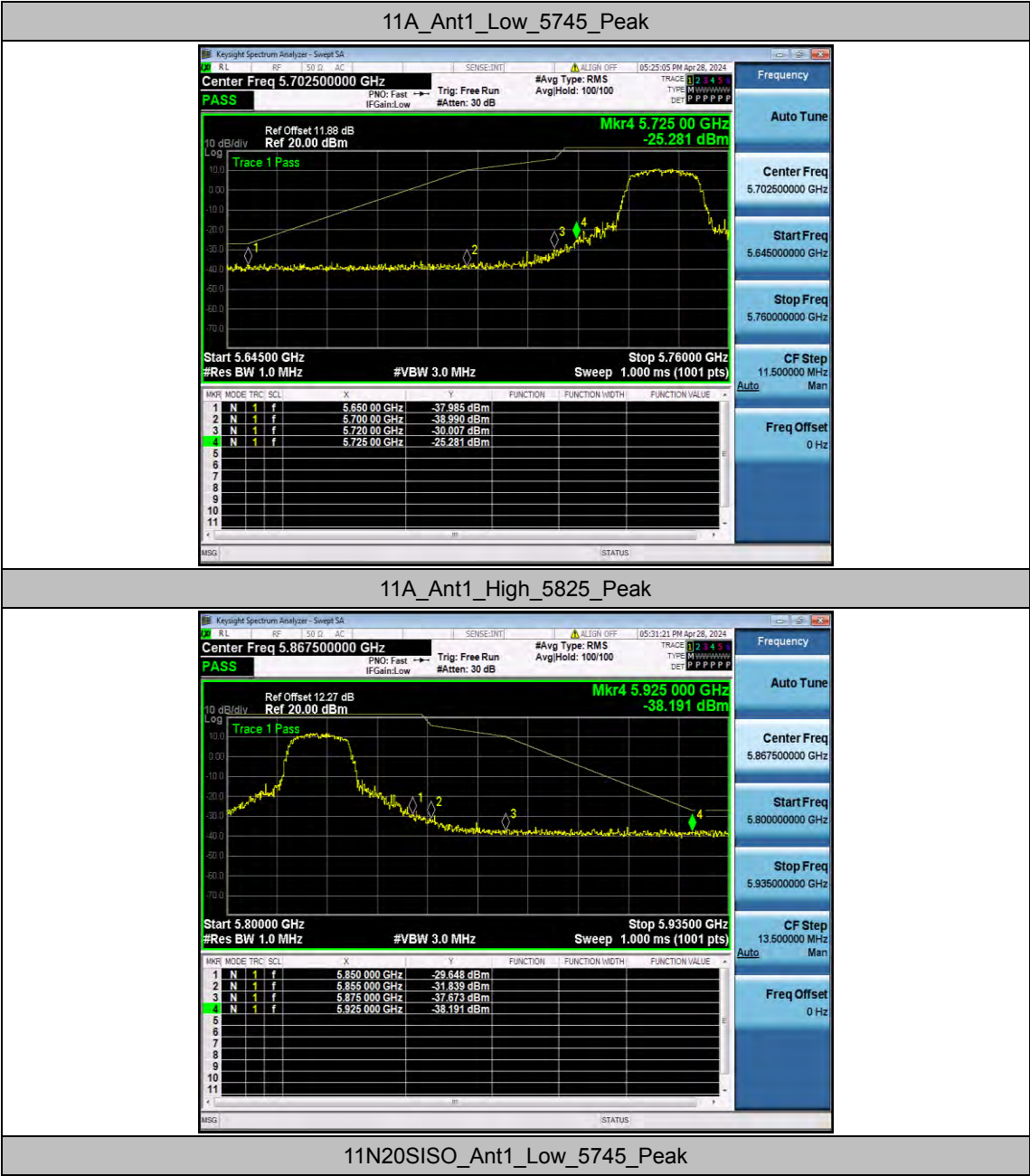
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-37.985	≤-27.00	PASS
				Peak	5700.000	-38.99	≤10.00	PASS
				Peak	5720.000	-30.01	≤15.60	PASS
				Peak	5725.000	-25.28	≤27.00	PASS
		High	5825	Peak	5850.000	-29.648	≤27.00	PASS
				Peak	5855.000	-31.84	≤15.60	PASS
				Peak	5875.000	-37.67	≤10.00	PASS
				Peak	5925.000	-38.19	≤-27.00	PASS
11N20SISO	Ant1	Low	5745	Peak	5650.000	-38.32	≤-27.00	PASS
				Peak	5700.000	-35.97	≤10.00	PASS
				Peak	5720.000	-25.99	≤15.60	PASS
				Peak	5725.000	-20.54	≤27.00	PASS
		High	5825	Peak	5850.000	-24.626	≤27.00	PASS
				Peak	5855.000	-30.22	≤15.60	PASS
				Peak	5875.000	-34.88	≤10.00	PASS
				Peak	5925.000	-39.48	≤-27.00	PASS
11N40SISO	Ant1	Low	5755	Peak	5650.000	-38.793	≤-27.00	PASS
				Peak	5700.000	-36.84	≤10.00	PASS
				Peak	5720.000	-28.04	≤15.60	PASS
				Peak	5725.000	-27.7	≤27.00	PASS
		High	5795	Peak	5850.000	-37.488	≤27.00	PASS
				Peak	5855.000	-38.4	≤15.60	PASS
				Peak	5875.000	-36.55	≤10.00	PASS
				Peak	5925.000	-40.41	≤-27.00	PASS
11AC20SISO	Ant1	Low	5745	Peak	5650.000	-39.412	≤-27.00	PASS
				Peak	5700.000	-37.94	≤10.00	PASS
				Peak	5720.000	-30.12	≤15.60	PASS
				Peak	5725.000	-25.93	≤27.00	PASS
		High	5825	Peak	5850.000	-28.711	≤27.00	PASS
				Peak	5855.000	-34.24	≤15.60	PASS
				Peak	5875.000	-38.91	≤10.00	PASS
				Peak	5925.000	-38.52	≤-27.00	PASS
11AC40SISO	Ant1	Low	5755	Peak	5650.000	-39.297	≤-27.00	PASS
				Peak	5700.000	-38.65	≤10.00	PASS
				Peak	5720.000	-30.72	≤15.60	PASS
				Peak	5725.000	-25.51	≤27.00	PASS

11AC80SISO	Ant1	High	5795	Peak	5850.000	-38.155	≤27.00	PASS
				Peak	5855.000	-37.8	≤15.60	PASS
				Peak	5875.000	-36.09	≤10.00	PASS
				Peak	5925.000	-38.77	≤-27.00	PASS
		Low	5775	Peak	5650.000	-38.39	≤-27.00	PASS
				Peak	5700.000	-32.83	≤10.00	PASS
				Peak	5720.000	-24.32	≤15.60	PASS
				Peak	5725.000	-29.79	≤27.00	PASS
		High	5775	Peak	5850.000	-29.274	≤27.00	PASS
				Peak	5855.000	-31.18	≤15.60	PASS
				Peak	5875.000	-38.22	≤10.00	PASS
				Peak	5925.000	-38.99	≤-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



11A_Ant1_High_5825_Peak

Frequency

Auto Tune

Center Freq 5.867500000 GHz

Start Freq 5.800000000 GHz

Stop Freq 5.935000000 GHz

CF Step 13.500000 MHz Man

Freq Offset 0 Hz

11N20SISO_Ant1_Low_5745_Peak



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



11AC40SISO_Ant1_Low_5755_Peak



11AC40SISO_Ant1_High_5795_Peak



11AC80SISO_Ant1_Low_5775_Peak



11AC80SISO_Ant1_High_5775_Peak

