

Case No. : <u>CTA24070301904</u>	
Ambient Condition: <u>24</u> °C, <u>51</u> %RH	
According Standard: ■Part15E	
Test Date: <u>2024.7.8</u>	Test Engineer: <u>Lushan Kong</u>

Appendix D.1: Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]
11A	Ant1	5180	23.160	5168.600	5191.760
		5200	23.240	5188.640	5211.880
		5240	23.480	5228.160	5251.640
11N20SISO	Ant1	5180	23.560	5168.480	5192.040
		5200	23.200	5188.560	5211.760
		5240	23.760	5228.160	5251.920
11N40SISO	Ant1	5190	43.760	5168.240	5212.000
		5230	43.760	5208.320	5252.080
11AC20SISO	Ant1	5180	24.120	5168.120	5192.240
		5200	23.800	5188.320	5212.120
		5240	24.320	5227.440	5251.760
11AC40SISO	Ant1	5190	43.840	5167.920	5211.760
		5230	44.400	5207.760	5252.160
11AC80SISO	Ant1	5210	83.200	5168.560	5251.760

Test Graphs

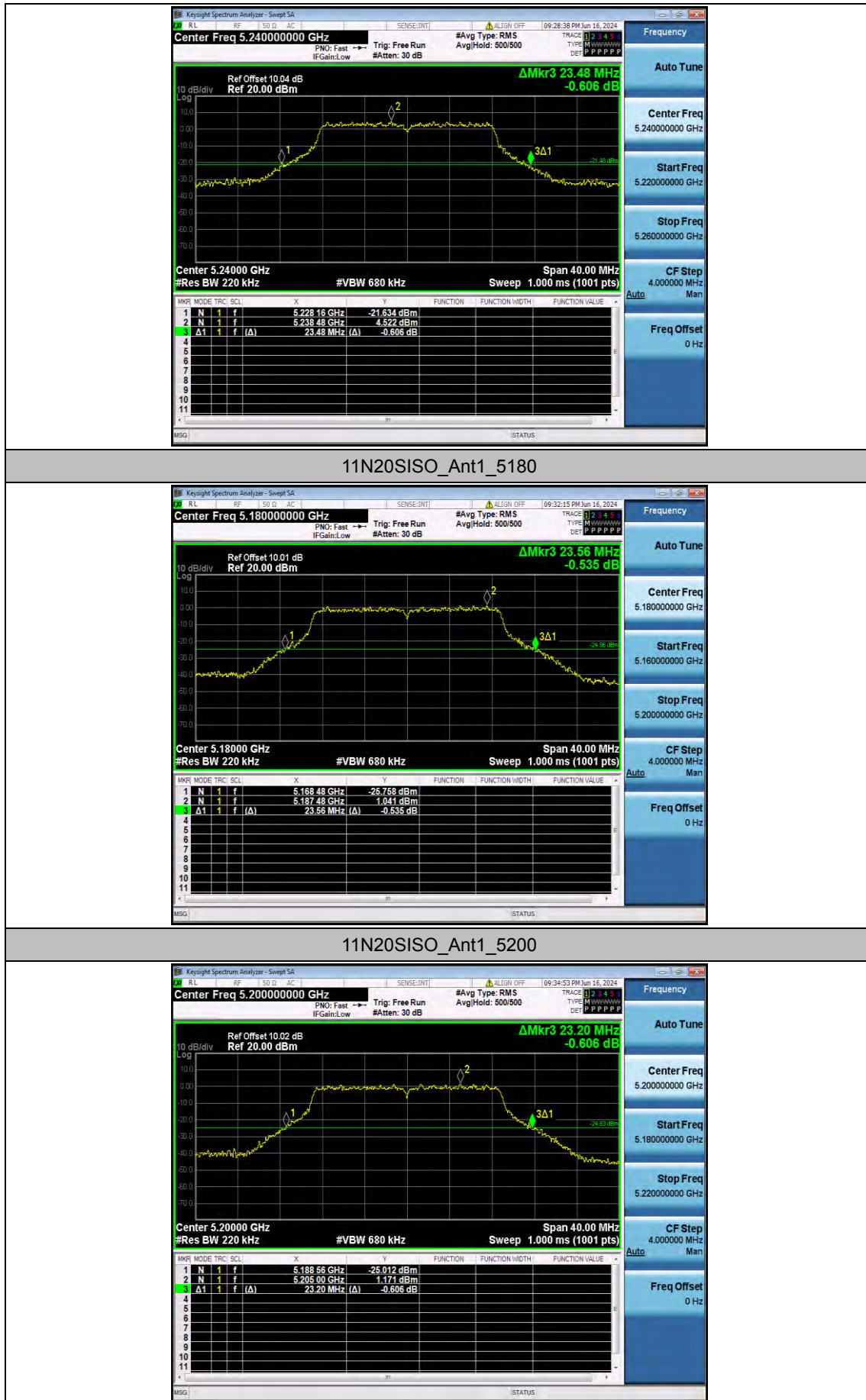
11A_Ant1_5180



11A_Ant1_5200



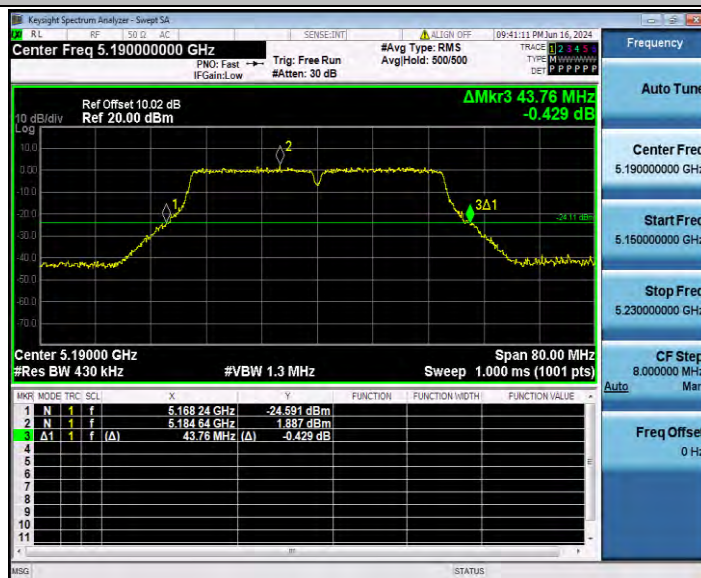
11A_Ant1_5240



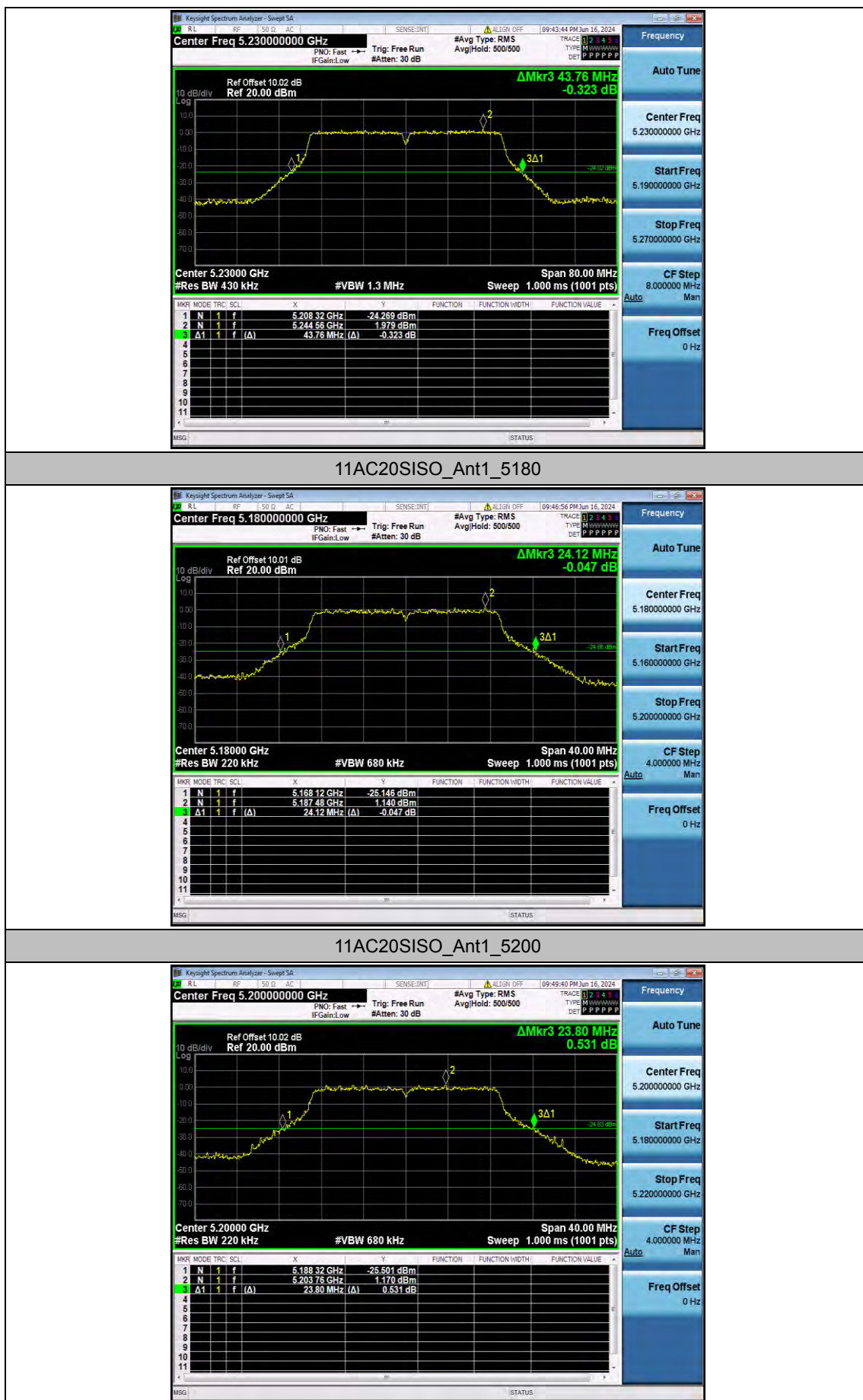
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230

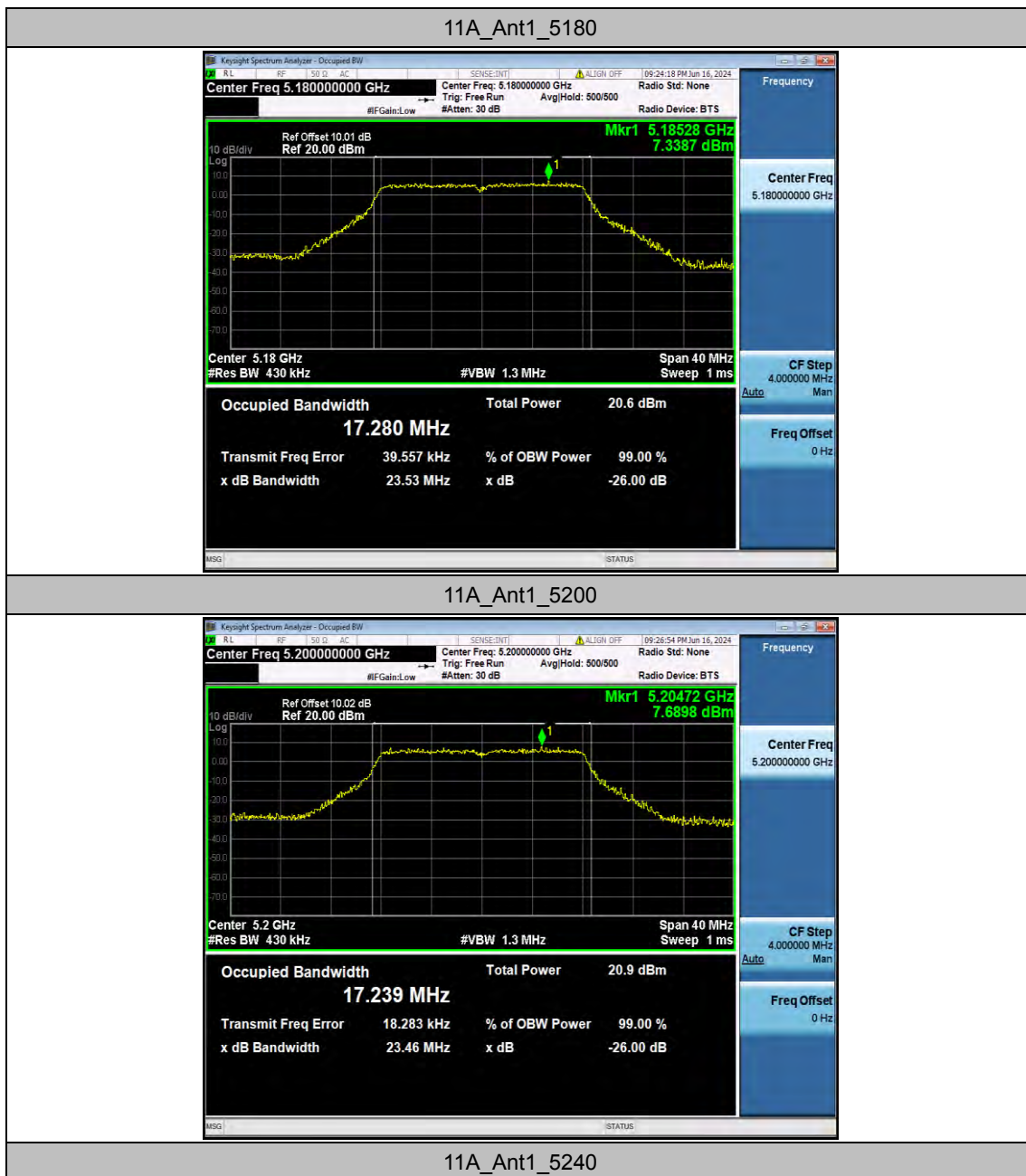


Appendix D.2: Occupied channel bandwidth

Test Result

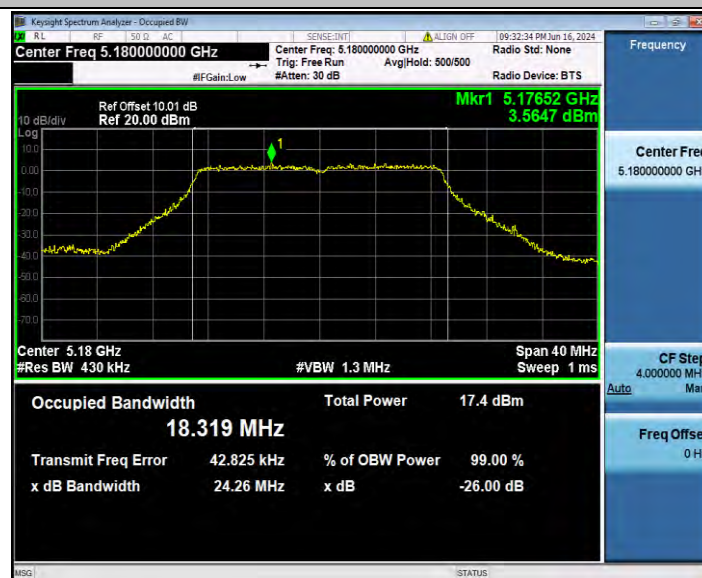
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]
11A	Ant1	5180	17.280	5171.3996	5188.6796
		5200	17.239	5191.3988	5208.6378
		5240	17.251	5231.3624	5248.6134
11N20SISO	Ant1	5180	18.319	5170.8833	5189.2023
		5200	18.311	5190.8681	5209.1791
		5240	18.329	5230.8243	5249.1533
11N40SISO	Ant1	5190	36.744	5171.6463	5208.3903
		5230	36.705	5211.6619	5248.3669
11AC20SISO	Ant1	5180	18.338	5170.8697	5189.2077
		5200	18.330	5190.8445	5209.1745
		5240	18.346	5230.8202	5249.1662
11AC40SISO	Ant1	5190	36.760	5171.6636	5208.4236
		5230	36.703	5211.6673	5248.3703
11AC80SISO	Ant1	5210	75.126	5172.5304	5247.6564

Test Graphs





11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



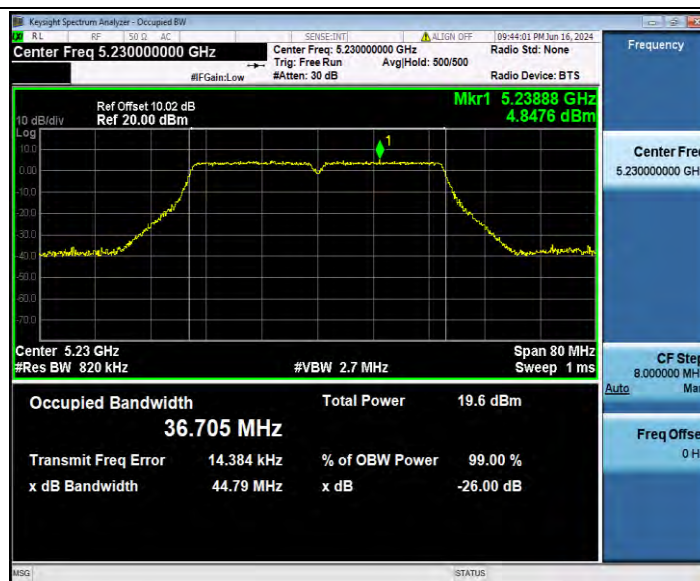
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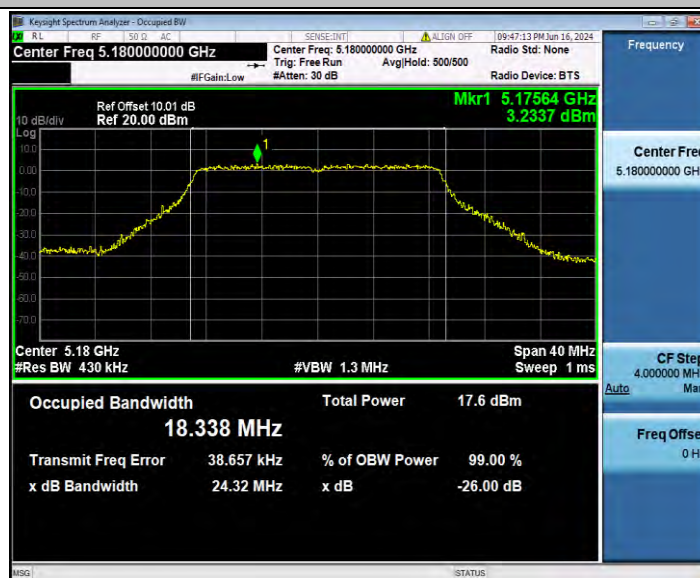
11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



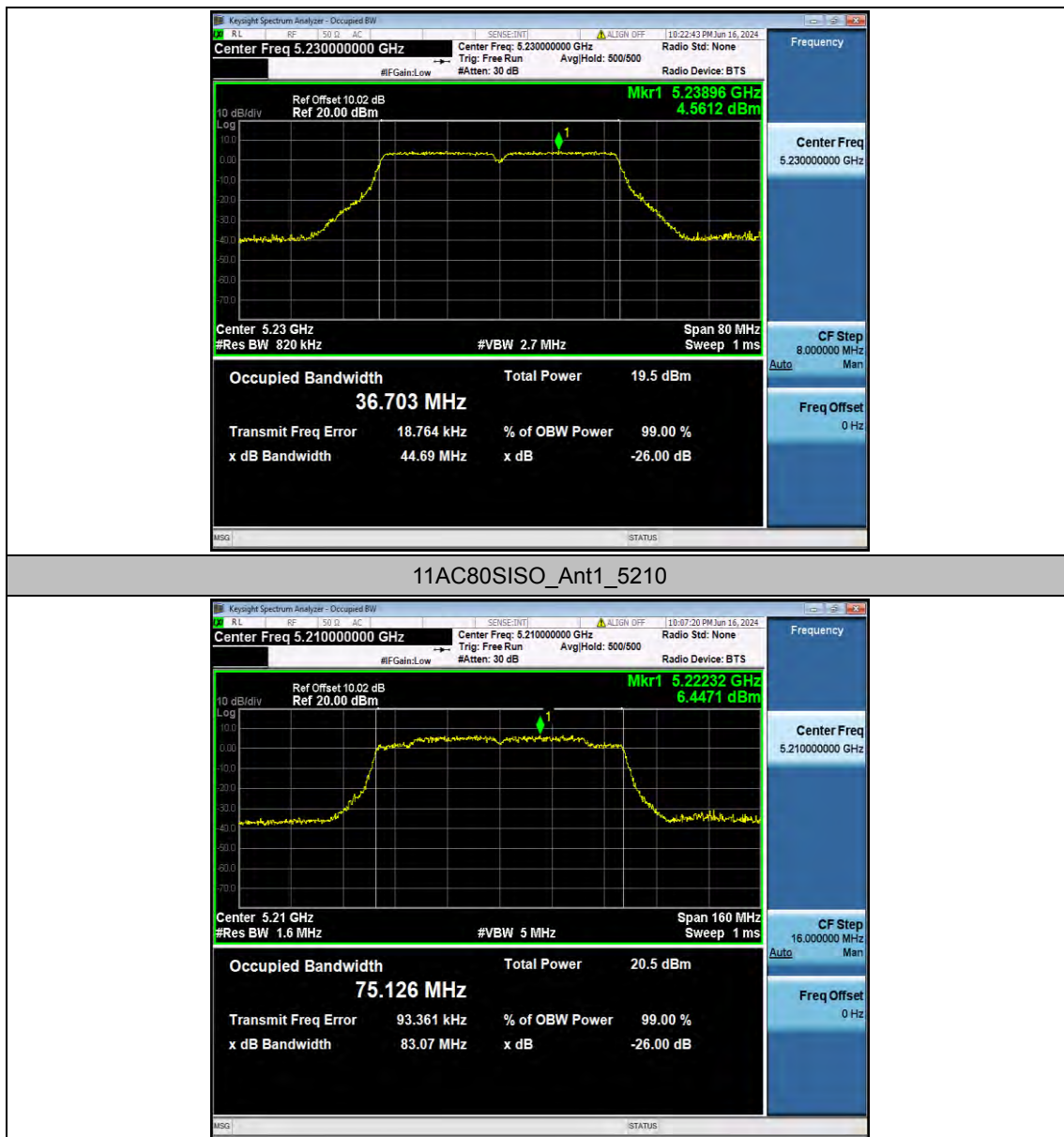
11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



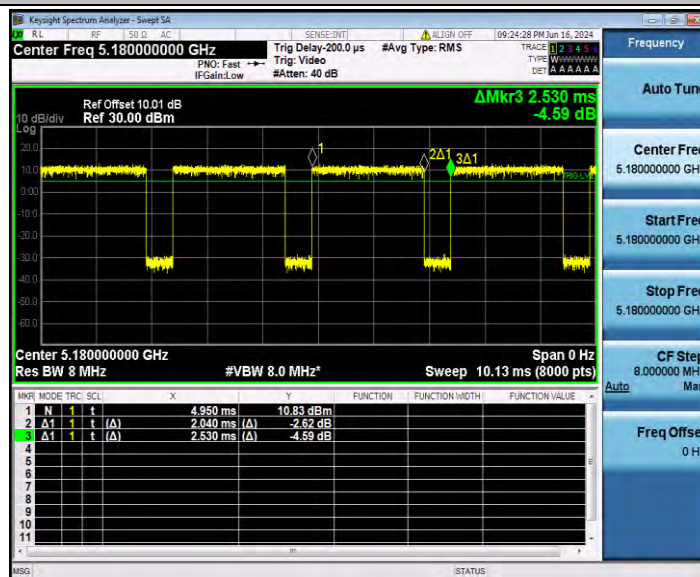
Appendix D.3: Duty Cycle

Test Result

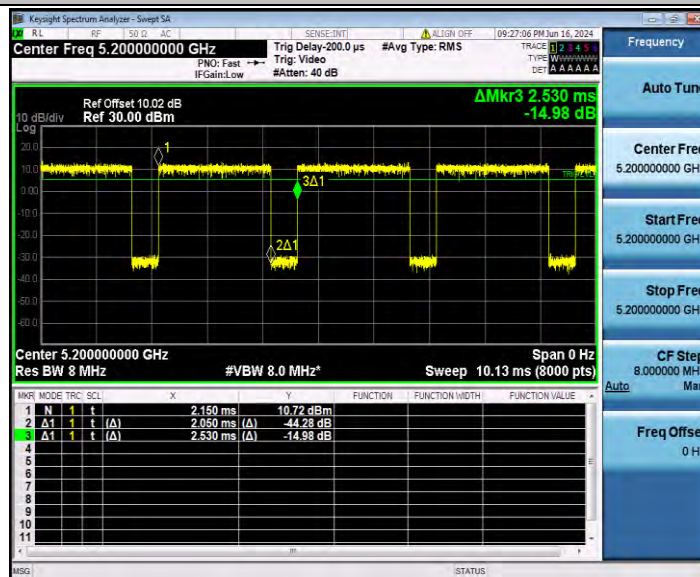
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5180	2.04	2.53	80.63	0.94	0.49
		5200	2.05	2.53	81.03	0.91	0.49
		5240	2.04	2.53	80.63	0.94	0.49
11N20SISO	Ant1	5180	1.91	2.36	80.93	0.92	0.52
		5200	1.91	2.36	80.93	0.92	0.52
		5240	1.90	2.36	80.51	0.94	0.53
11N40SISO	Ant1	5190	0.94	1.17	80.34	0.95	1.06
		5230	0.94	1.16	81.03	0.91	1.06
11AC20SISO	Ant1	5180	1.91	2.37	80.59	0.94	0.52
		5200	1.91	2.37	80.59	0.94	0.52
		5240	1.91	2.37	80.59	0.94	0.52
11AC40SISO	Ant1	5190	0.95	1.18	80.51	0.94	1.05
		5230	0.94	1.17	80.34	0.95	1.06
11AC80SISO	Ant1	5210	0.46	0.57	80.70	0.93	2.17

Test Graphs

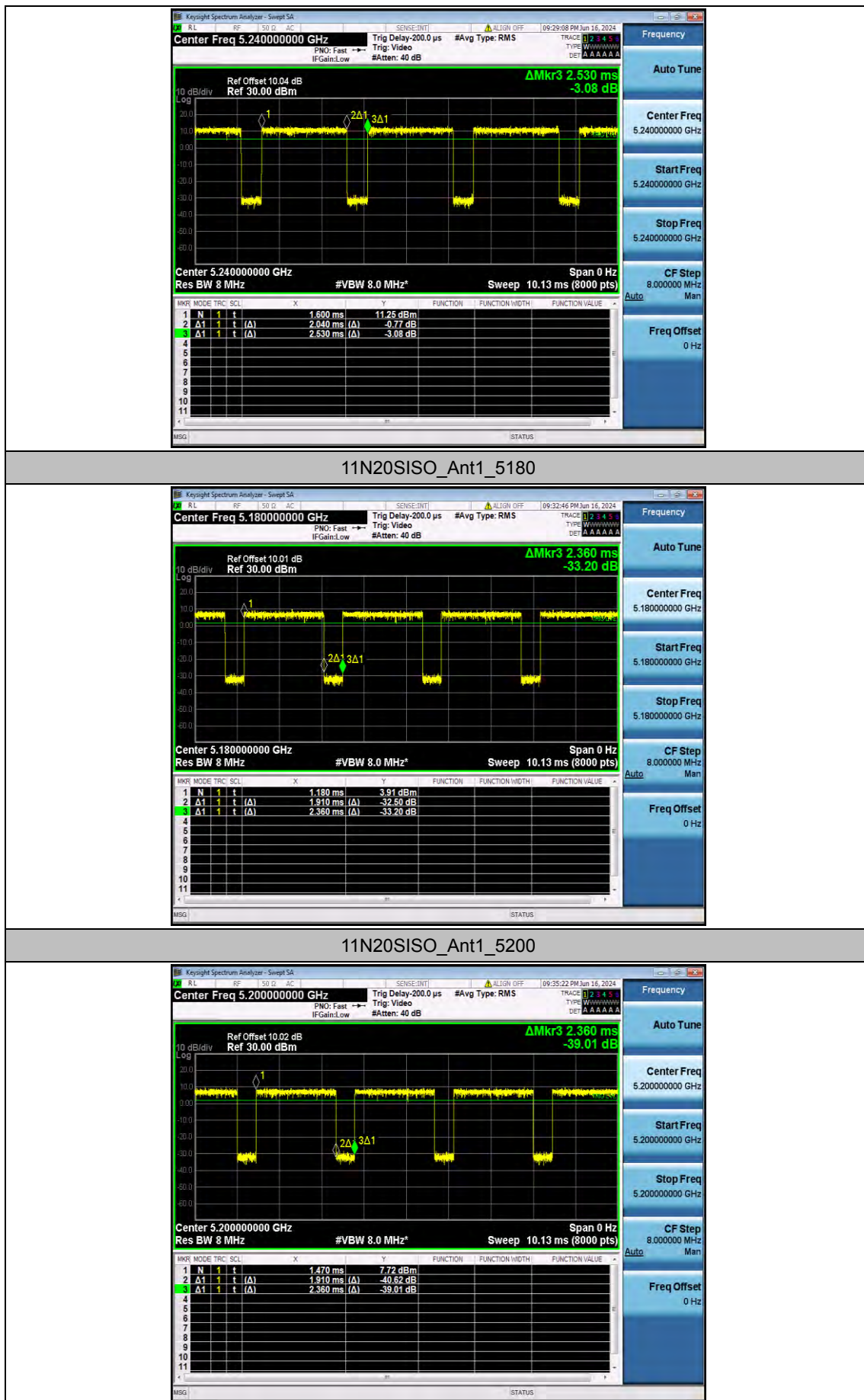
11A_Ant1_5180



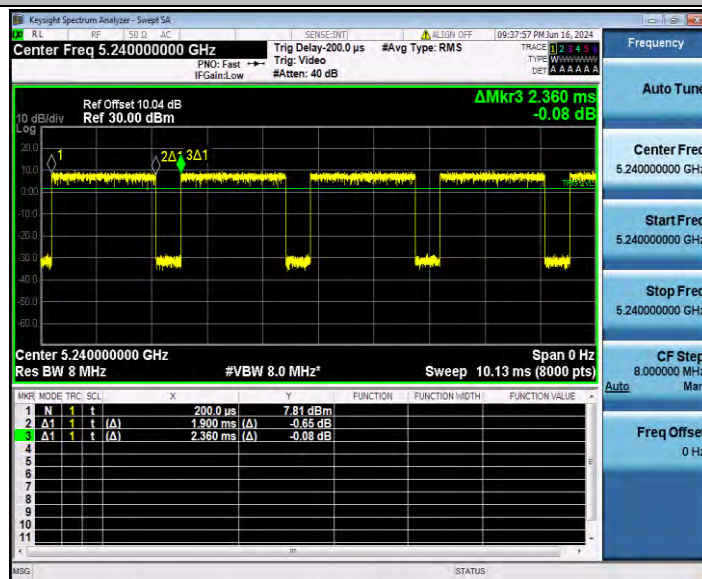
11A_Ant1_5200



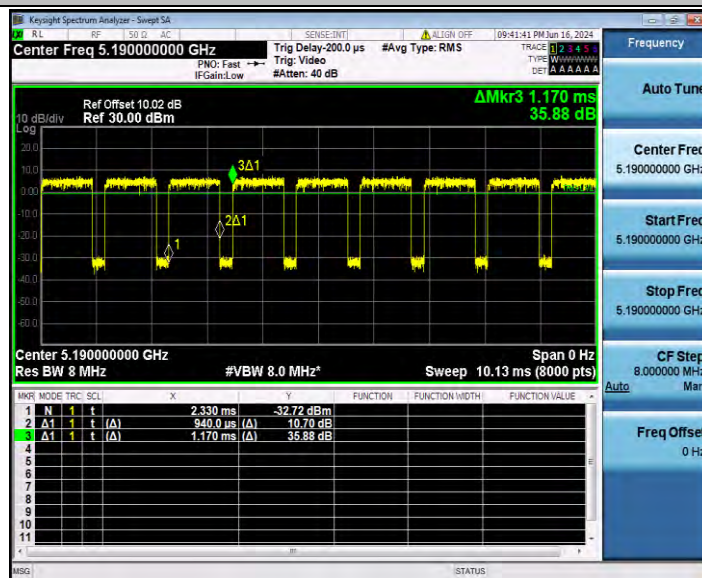
11A_Ant1_5240



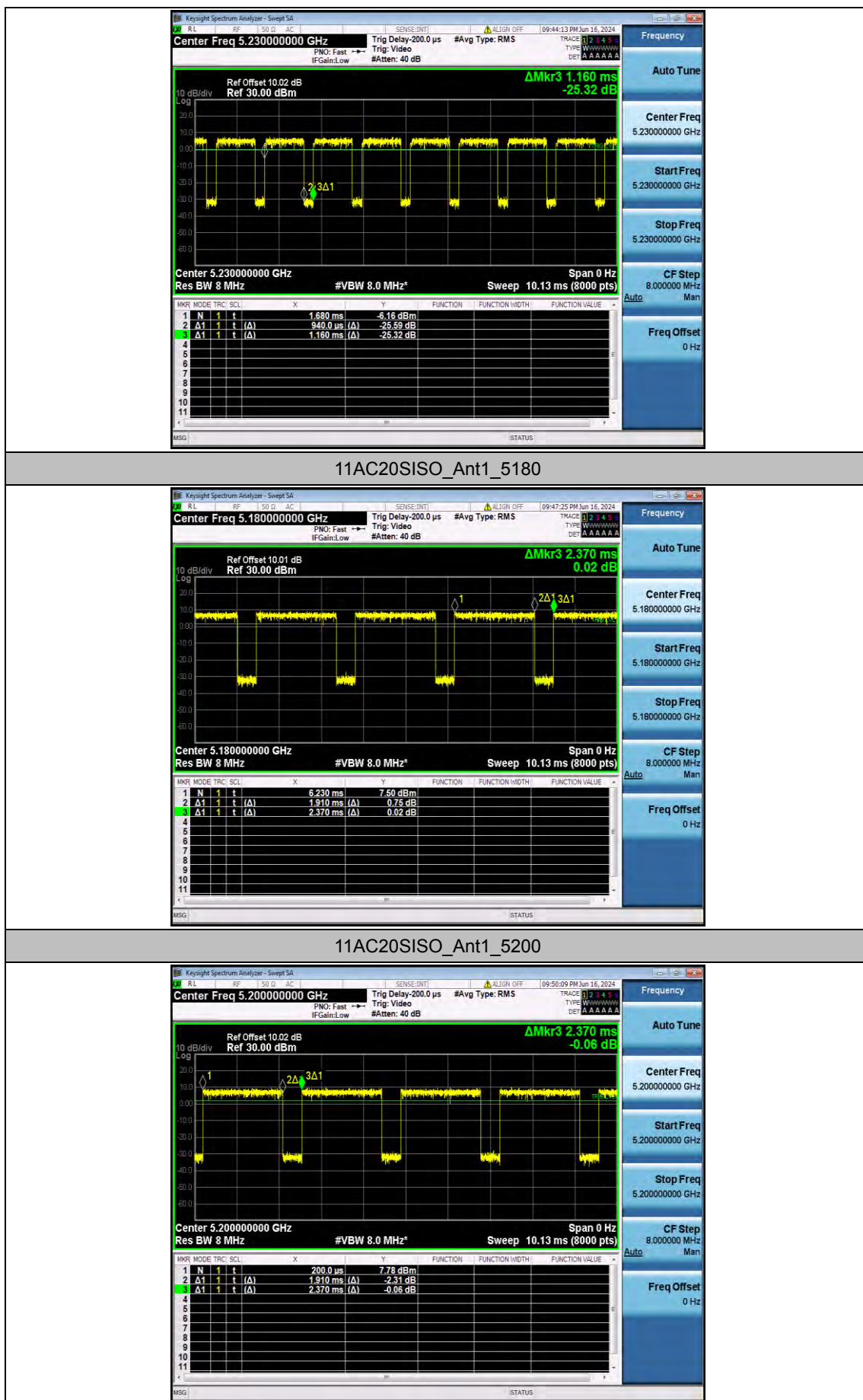
11N20SISO_Ant1_5240



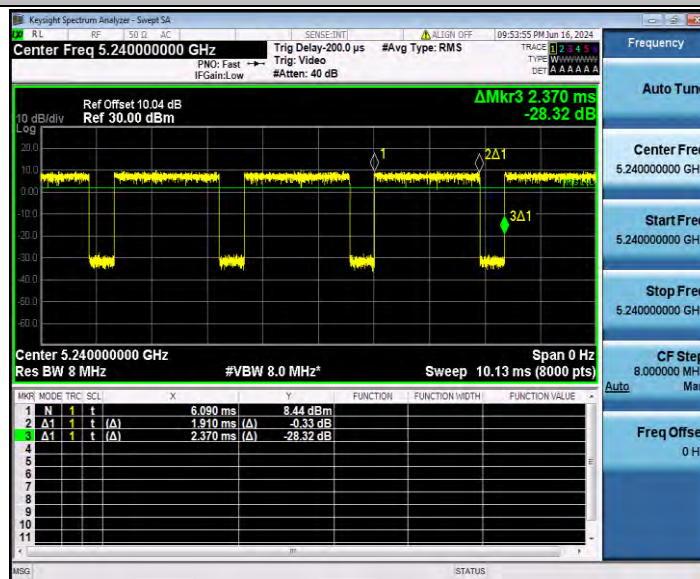
11N40SISO_Ant1_5190



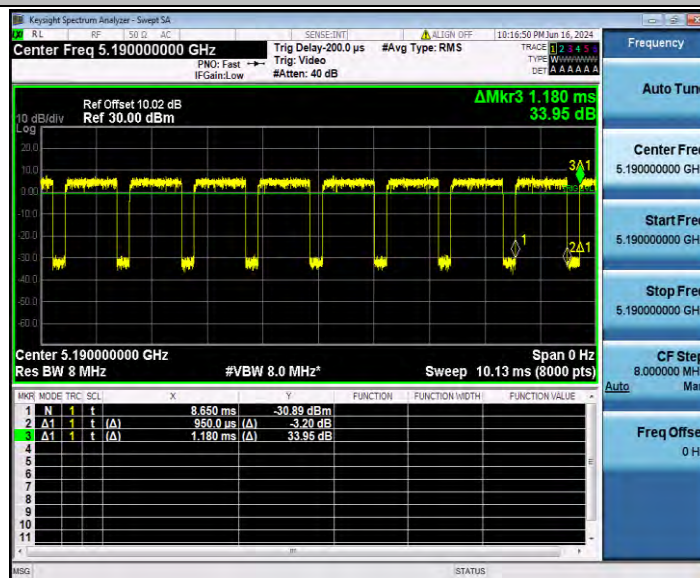
11N40SISO_Ant1_5230



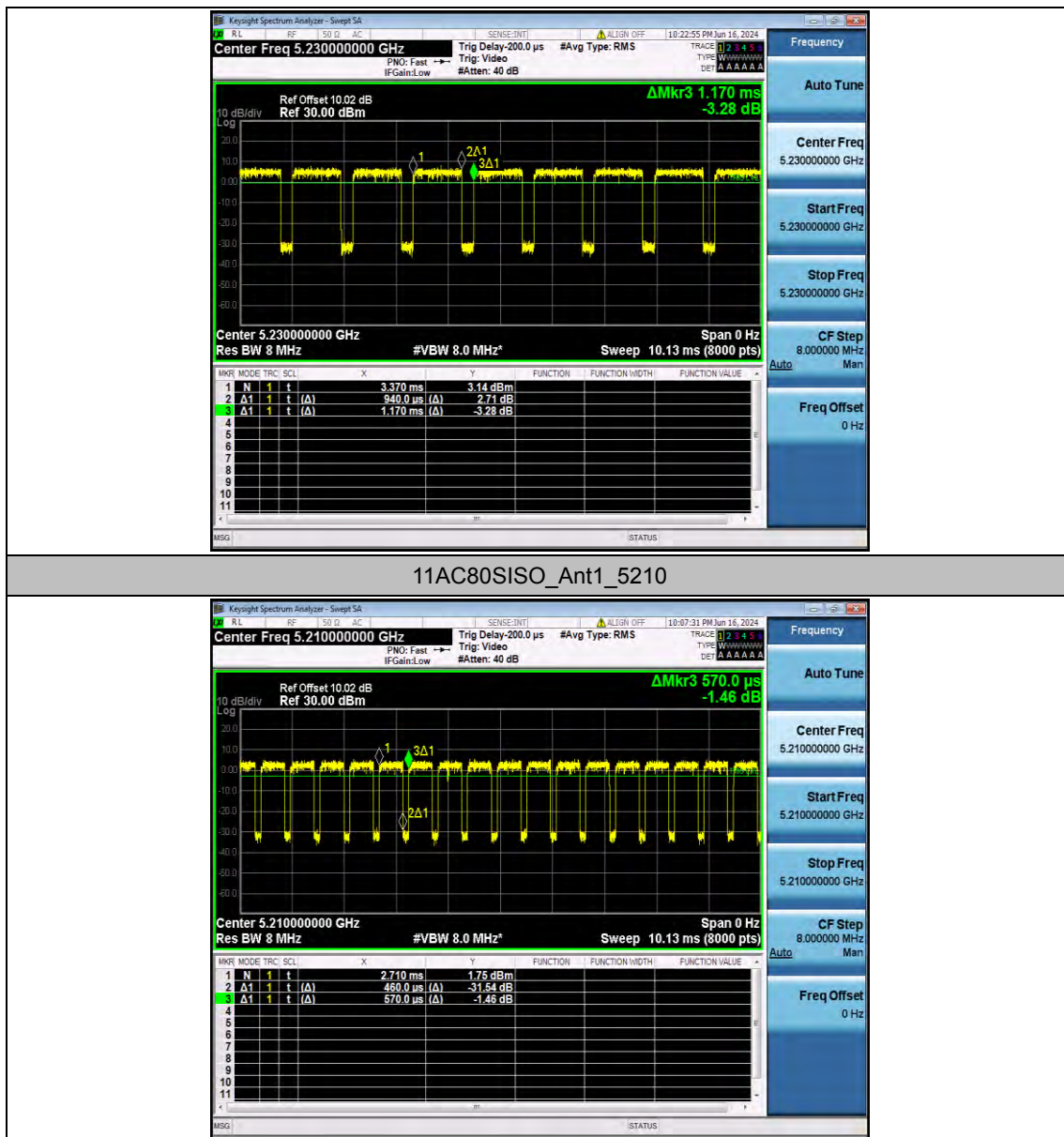
11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



Appendix D.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	5180	12.98	80.63	0.94	13.92	≤23.98	PASS
		5200	13.09	81.03	0.91	14.00	≤23.98	PASS
		5240	13.19	80.63	0.94	14.13	≤23.98	PASS
11N20SISO	Ant1	5180	10.13	80.93	0.92	11.05	≤23.98	PASS
		5200	10.35	80.93	0.92	11.27	≤23.98	PASS
		5240	10.09	80.51	0.94	11.03	≤23.98	PASS
11N40SISO	Ant1	5190	10.82	80.34	0.95	11.77	≤23.98	PASS
		5230	11.11	81.03	0.91	12.02	≤23.98	PASS
11AC20SISO	Ant1	5180	10.00	80.59	0.94	10.94	≤23.98	PASS
		5200	10.02	80.59	0.94	10.96	≤23.98	PASS
		5240	9.81	80.59	0.94	10.75	≤23.98	PASS
11AC40SISO	Ant1	5190	10.82	80.51	0.94	11.76	≤23.98	PASS
		5230	10.95	80.34	0.95	11.90	≤23.98	PASS
11AC80SISO	Ant1	5210	10.90	80.70	0.93	11.83	≤23.98	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 D.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	3.00	≤11.00	PASS
		5200	3.21	≤11.00	PASS
		5240	3.31	≤11.00	PASS
11N20SISO	Ant1	5180	-0.48	≤11.00	PASS
		5200	-0.27	≤11.00	PASS
		5240	-0.27	≤11.00	PASS
11N40SISO	Ant1	5190	-2.72	≤11.00	PASS
		5230	-2.44	≤11.00	PASS
11AC20SISO	Ant1	5180	-0.43	≤11.00	PASS
		5200	-0.27	≤11.00	PASS
		5240	-0.36	≤11.00	PASS
11AC40SISO	Ant1	5190	-2.62	≤11.00	PASS
		5230	-2.42	≤11.00	PASS
11AC80SISO	Ant1	5210	-4.97	≤11.00	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_5180



11A_Ant1_5200



11A_Ant1_5240



11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



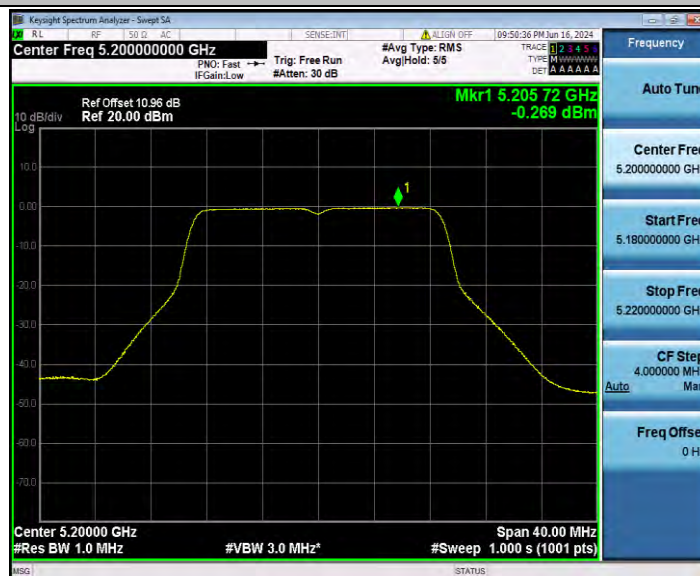
11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



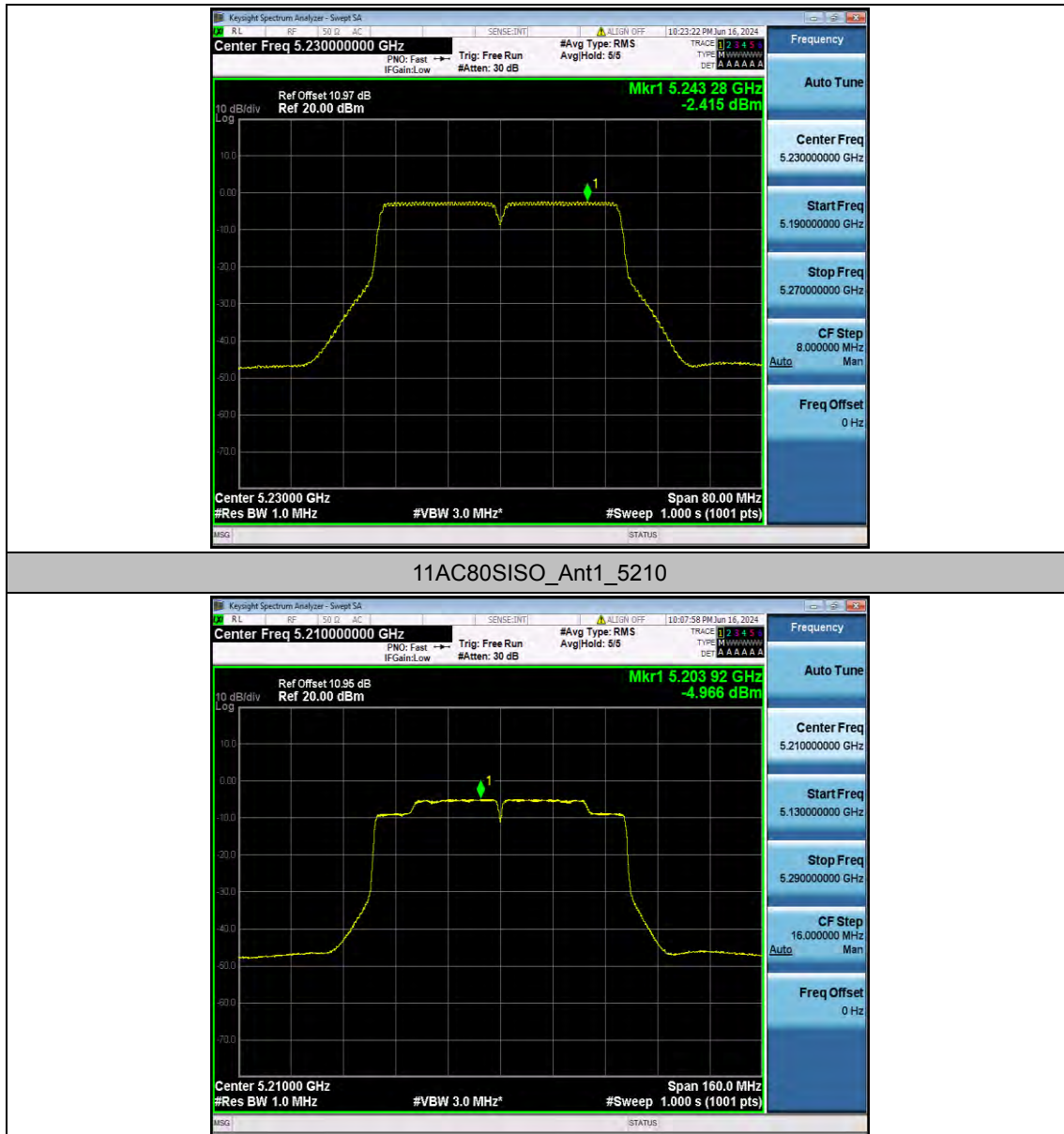
11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



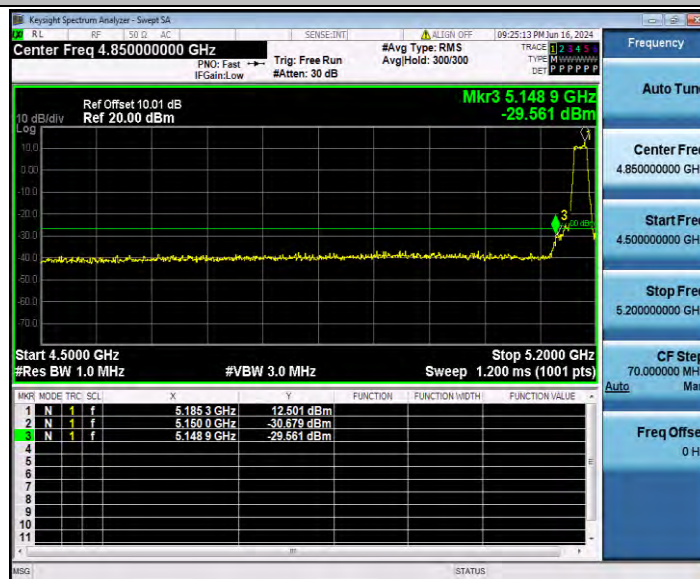
Appendix D.6: Band edge measurements

Test Result B1

TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-29.56	≤ -27	PASS
		High	5240	-37.6	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-37.43	≤ -27	PASS
		High	5240	-36.88	≤ -27	PASS
11N40SISO	Ant1	Low	5190	-36.98	≤ -27	PASS
		High	5230	-37.74	≤ -27	PASS
11AC20SISO	Ant1	Low	5180	-36.75	≤ -27	PASS
		High	5240	-37.18	≤ -27	PASS
11AC40SISO	Ant1	Low	5190	-37.25	≤ -27	PASS
		High	5230	-37.11	≤ -27	PASS
11AC80SISO	Ant1	Low	5210	-36.33	≤ -27	PASS
		High	5210	-37.72	≤ -27	PASS

Test Graphs B1

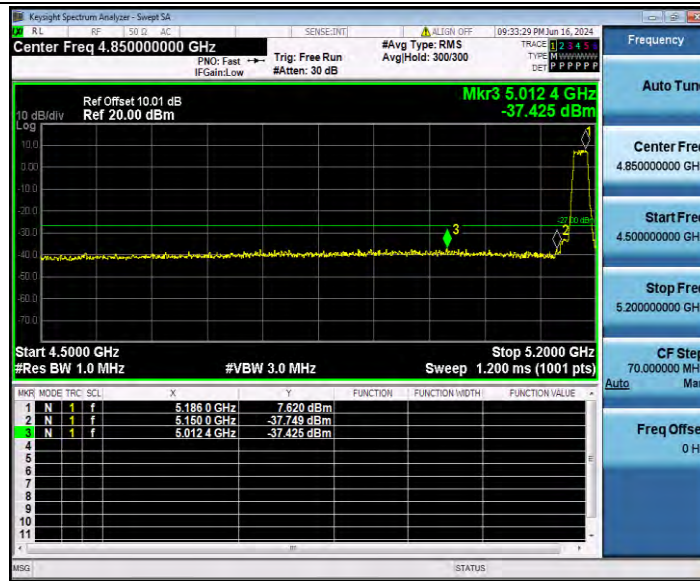
11A_Ant1_Low_5180



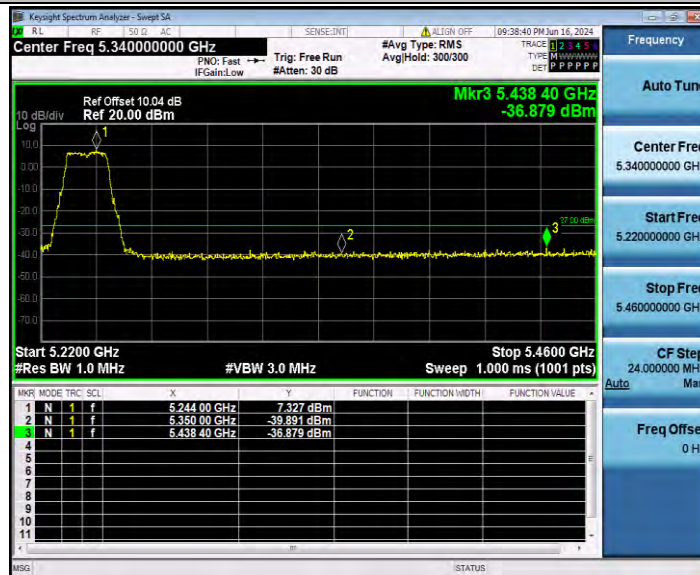
11A_Ant1_High_5240



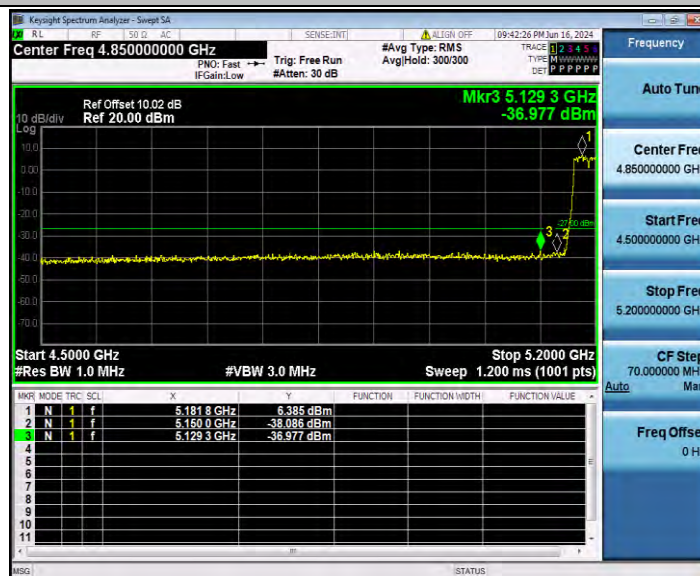
11N20SISO_Ant1_Low_5180



11N20SISO_Ant1_High_5240



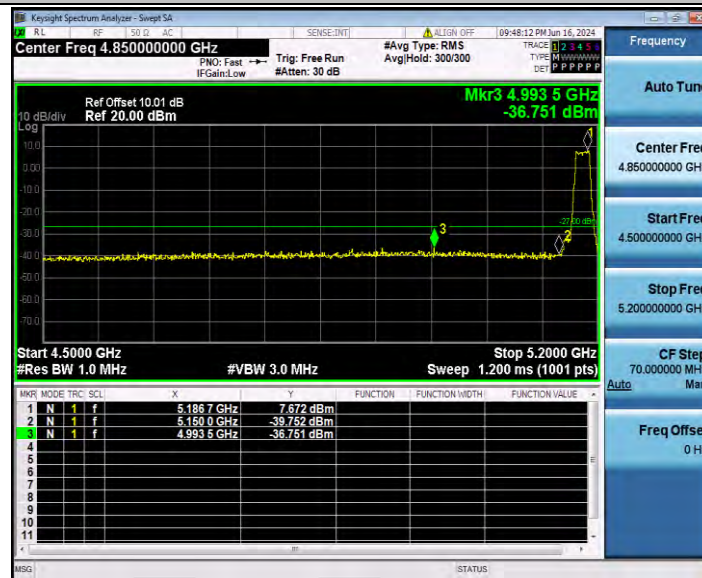
11N40SISO_Ant1_Low_5190



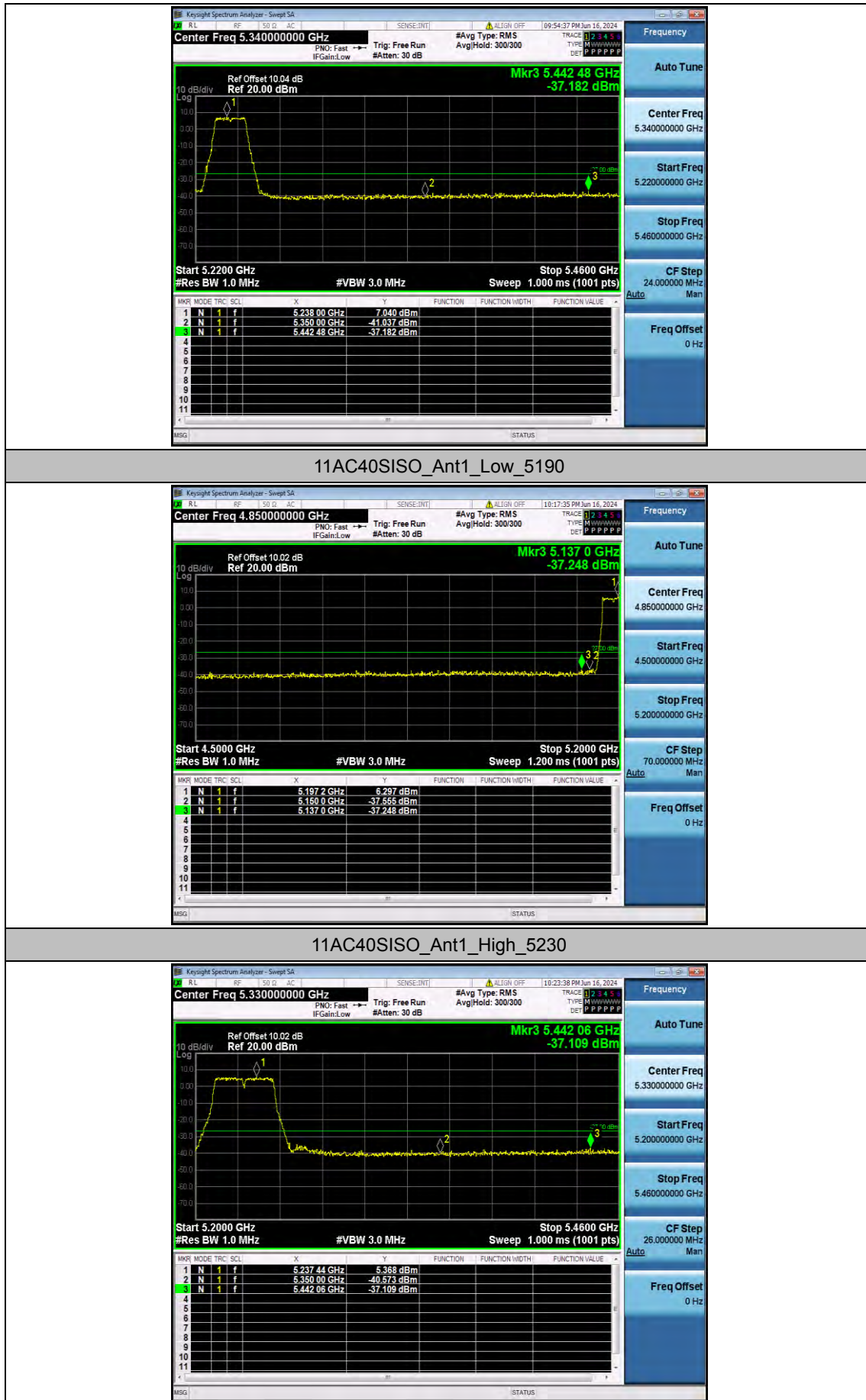
11N40SISO_Ant1_High_5230



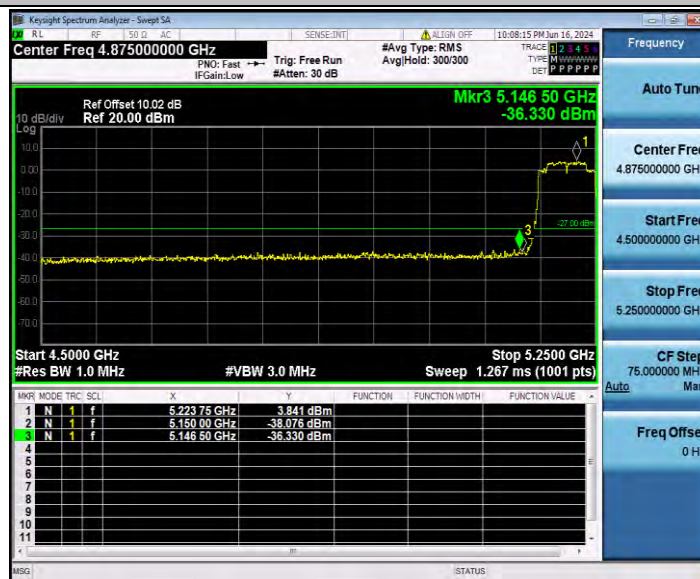
11AC20SISO_Ant1_Low_5180



11AC20SISO_Ant1_High_5240



11AC80SISO_Ant1_Low_5210



11AC80SISO_Ant1_High_5210

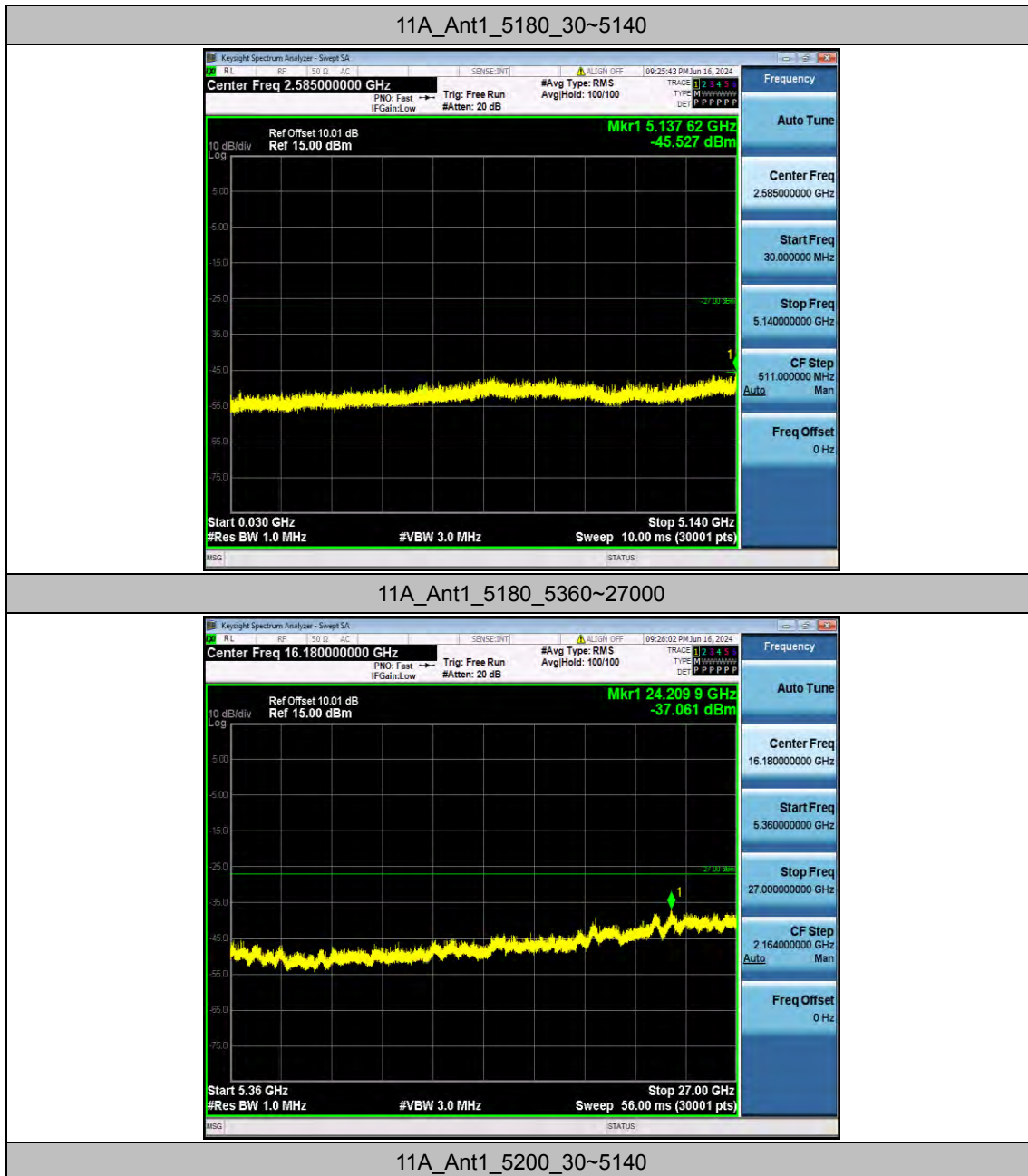


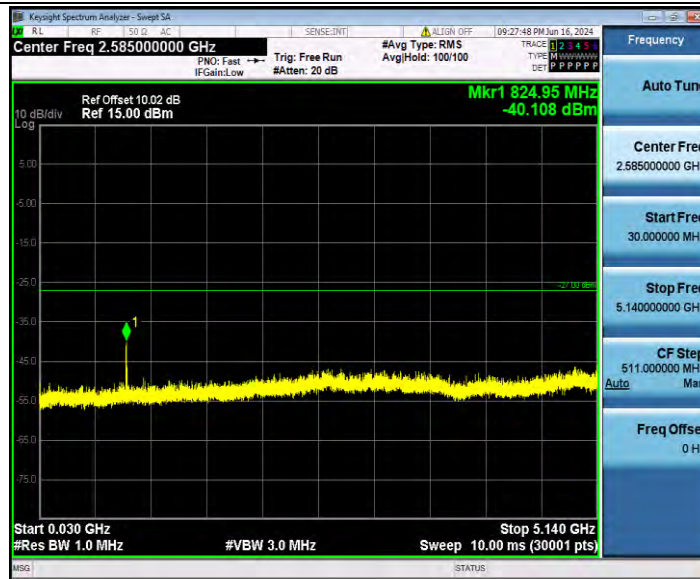
Appendix D.7: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	5137.62	-45.53	≤-27	PASS
			5360~27000	24209.88	-37.06	≤-27	PASS
		5200	30~5140	824.95	-40.11	≤-27	PASS
			5360~27000	24888.66	-36.58	≤-27	PASS
		5240	30~5140	2685.16	-46.17	≤-27	PASS
			5360~27000	25055.29	-36.96	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	3291.03	-46.06	≤-27	PASS
			5360~27000	24285.62	-35.68	≤-27	PASS
		5200	30~5140	2416.2	-45.75	≤-27	PASS
			5360~27000	23541.21	-37.03	≤-27	PASS
		5240	30~5140	2673.91	-45.41	≤-27	PASS
			5360~27000	24285.62	-37.37	≤-27	PASS
11N40SISO	Ant1	5190	30~5140	5138.98	-41.7	≤-27	PASS
			5360~27000	24252.44	-37.08	≤-27	PASS
		5230	30~5140	122.15	-44.95	≤-27	PASS
			5360~27000	23497.93	-36.65	≤-27	PASS
11AC20SISO	Ant1	5180	30~5140	905.34	-40.79	≤-27	PASS
			5360~27000	24275.52	-36.75	≤-27	PASS
		5200	30~5140	4981.59	-44.69	≤-27	PASS
			5360~27000	24216.37	-37.57	≤-27	PASS
		5240	30~5140	1743.72	-41.37	≤-27	PASS
			5360~27000	24232.97	-36.7	≤-27	PASS
11AC40SISO	Ant1	5190	30~5140	123.68	-42.01	≤-27	PASS
			5360~27000	23560.68	-36.19	≤-27	PASS
		5230	30~5140	828.18	-36.6	≤-27	PASS
			5360~27000	26906.95	-37	≤-27	PASS
11AC80SISO	Ant1	5210	30~5140	5136.76	-41.57	≤-27	PASS
			5360~27000	24253.88	-36.29	≤-27	PASS

Test Graphs

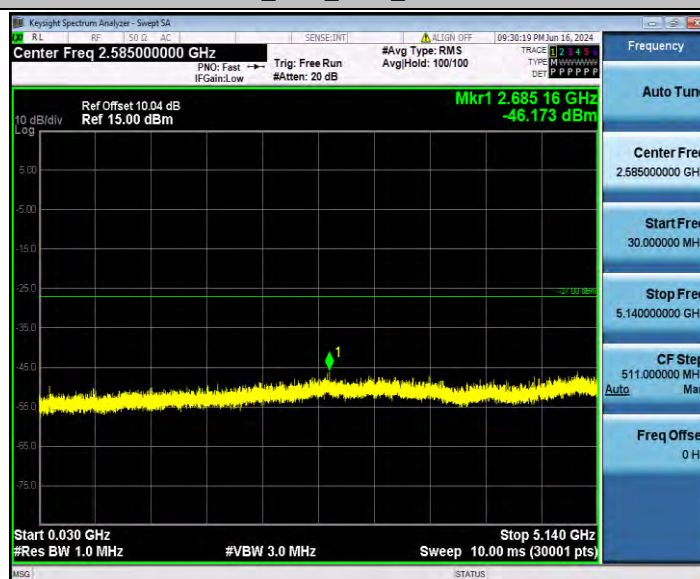




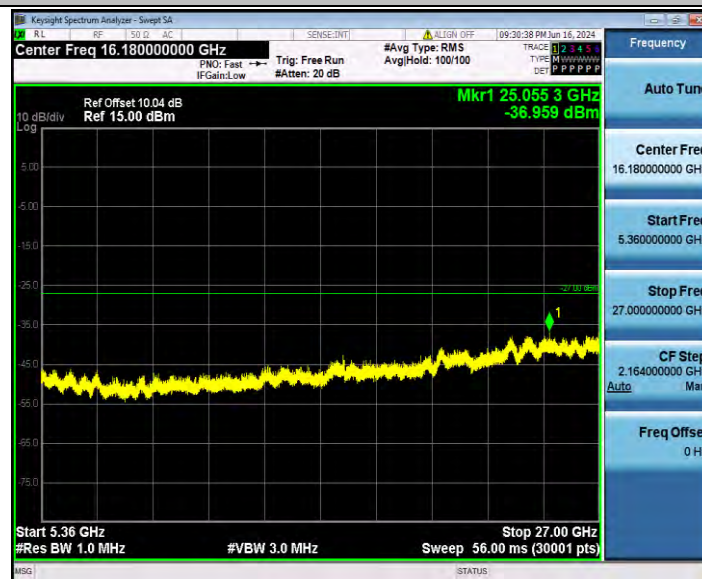
11A_Ant1_5200_5360~27000



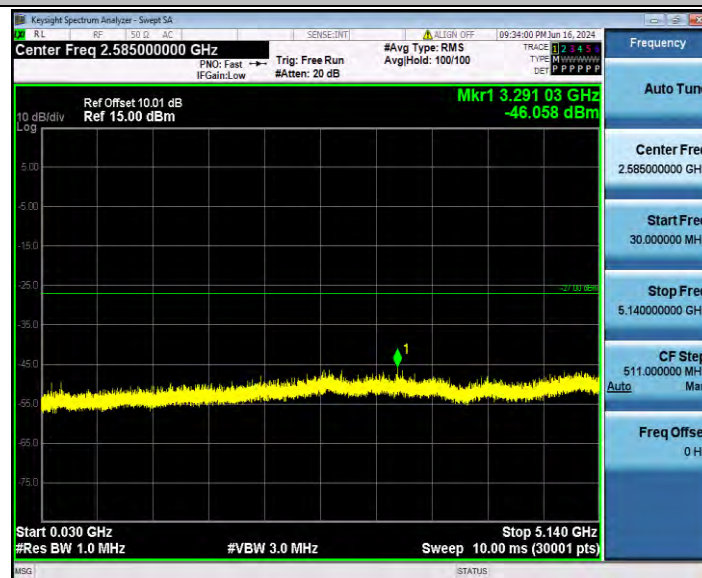
11A_Ant1_5240_30~5140



11A_Ant1_5240_5360~27000



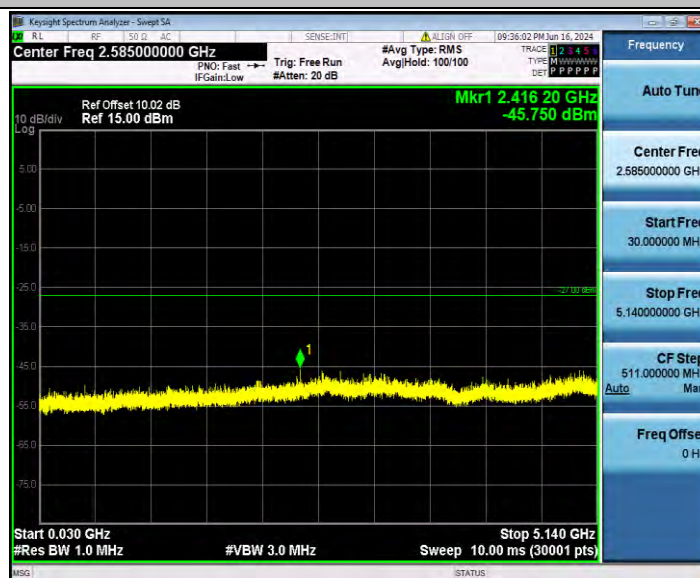
11N20SISO_Ant1_5180_30~5140



11N20SISO_Ant1_5180_5360~27000



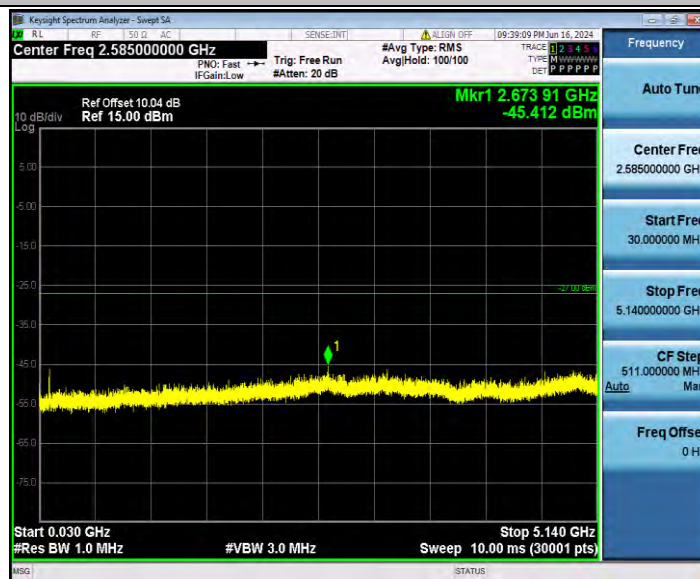
11N20SISO_Ant1_5200_30~5140



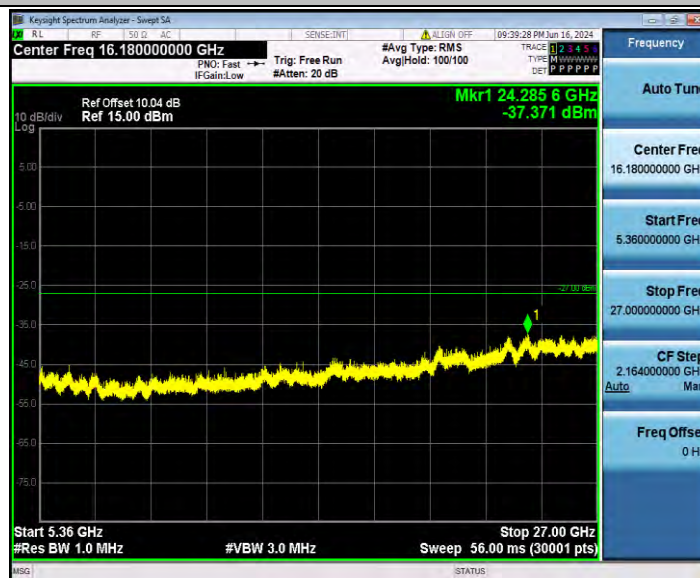
11N20SISO_Ant1_5200_5360~27000



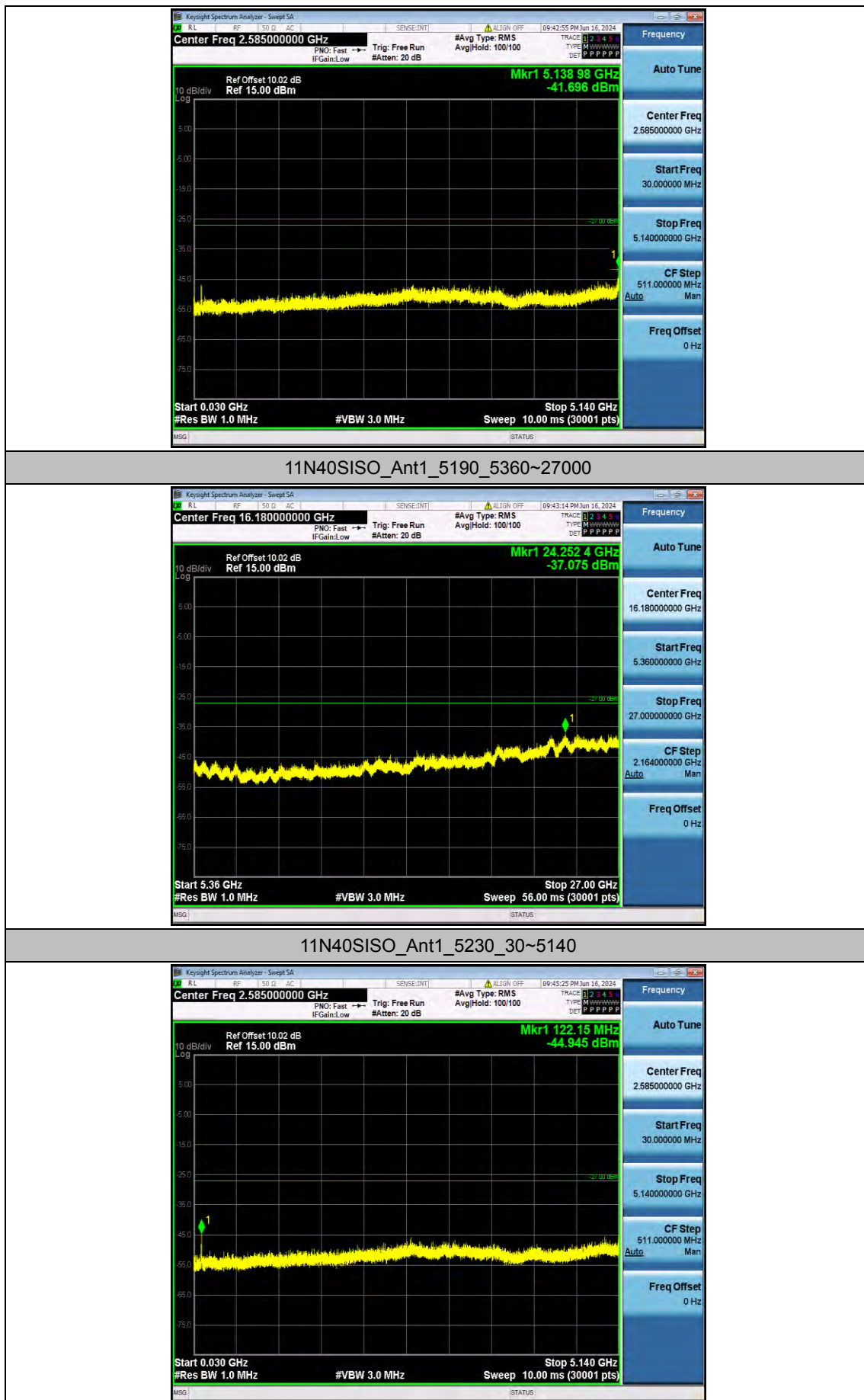
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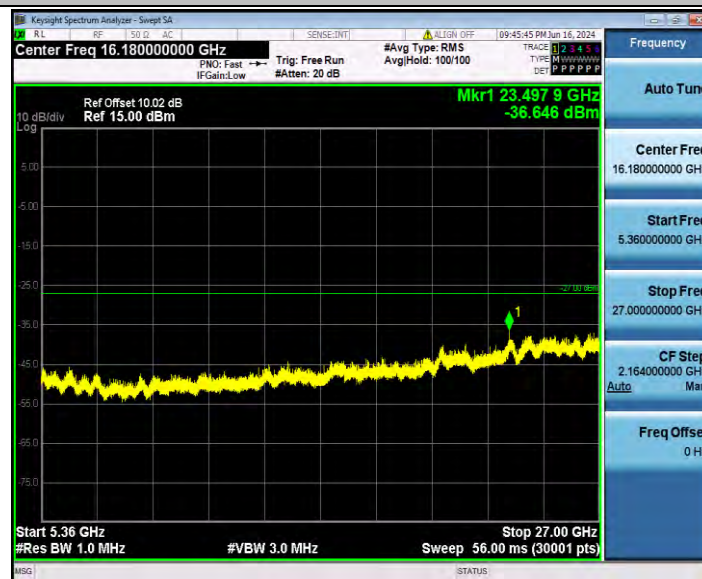
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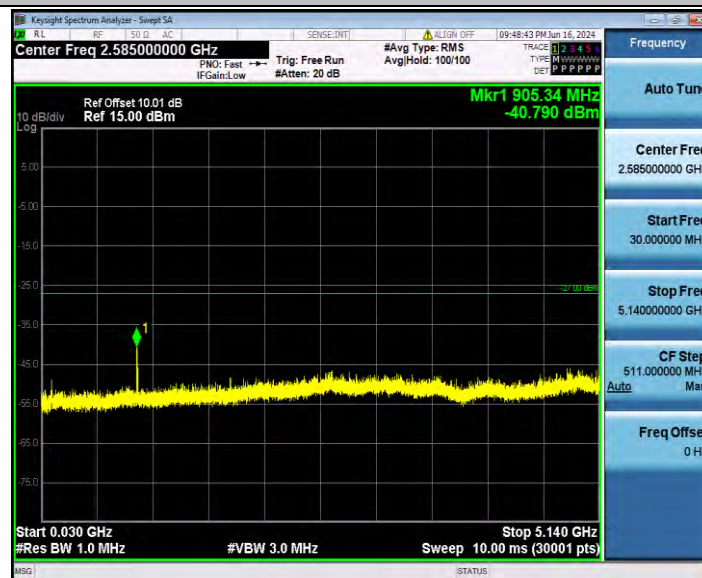
11N40SISO_Ant1_5190_30~5140



11N40SISO_Ant1_5230_5360~27000



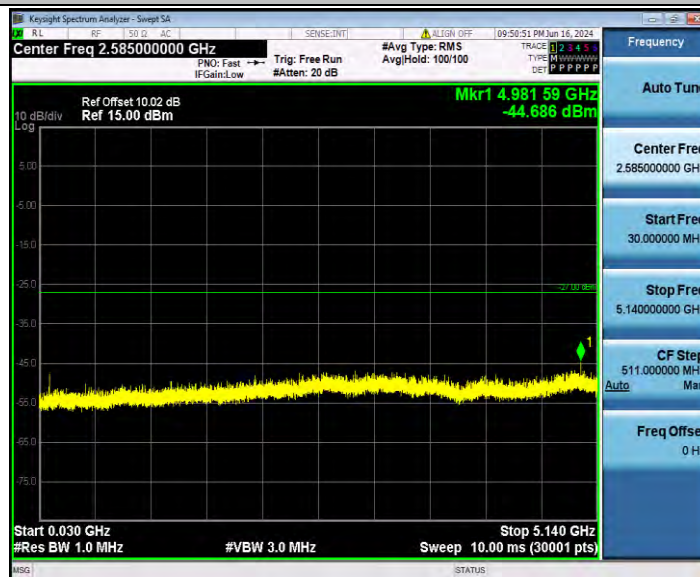
11AC20SISO_Ant1_5180_30~5140



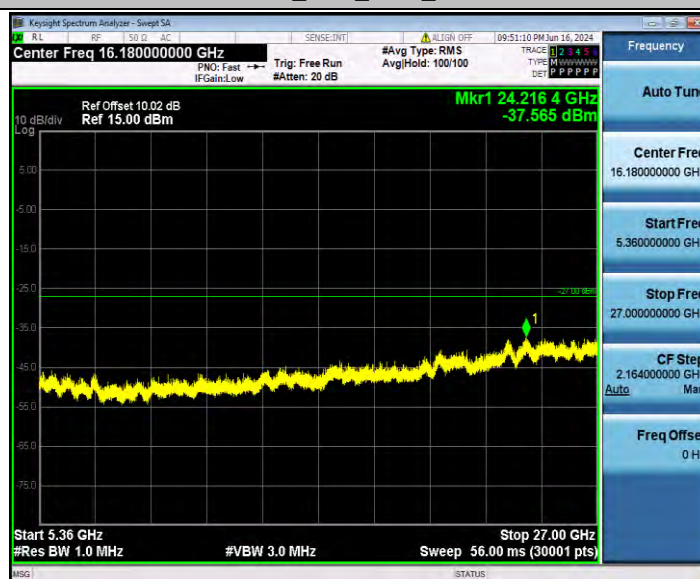
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11AC20SISO_Ant1_5200_30~5140



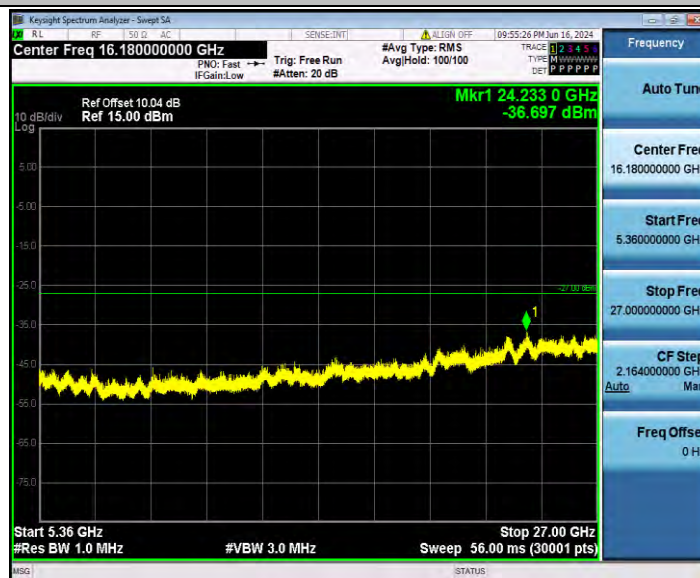
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11AC20SISO_Ant1_5240_30~5140



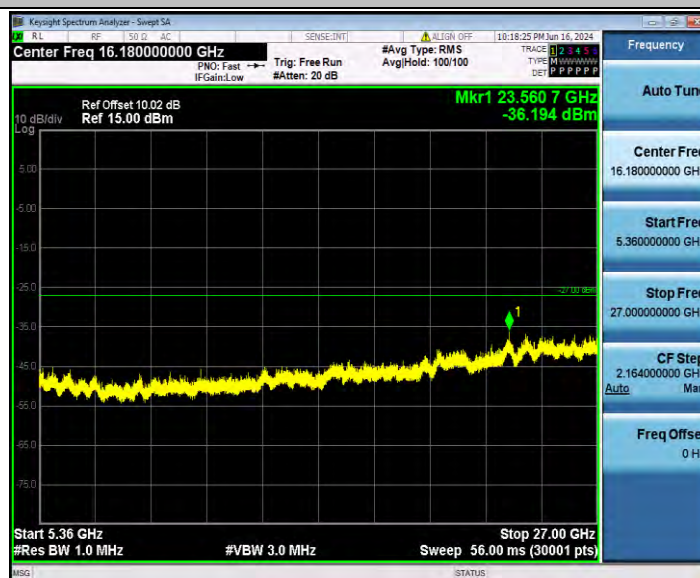
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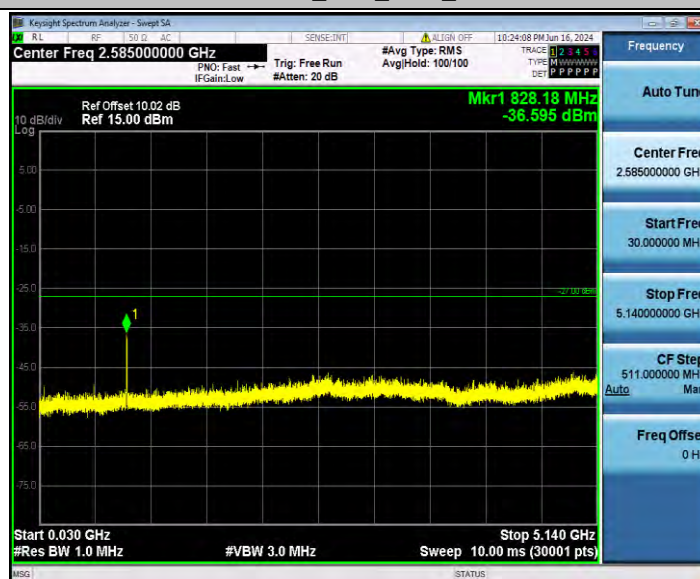
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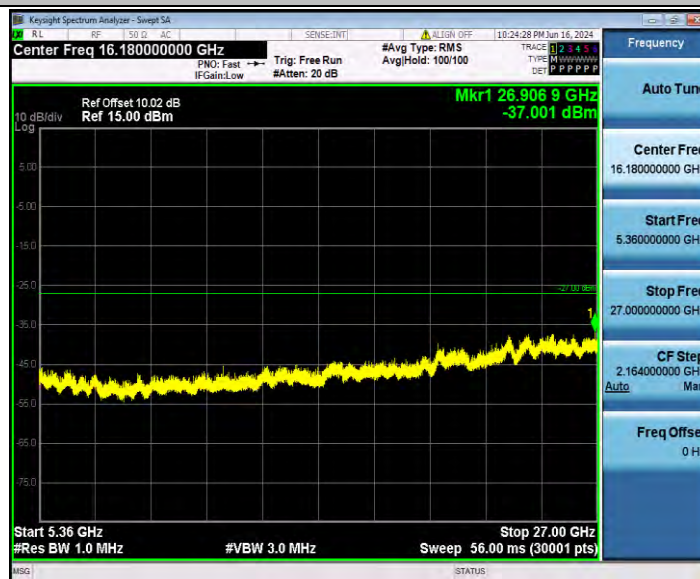
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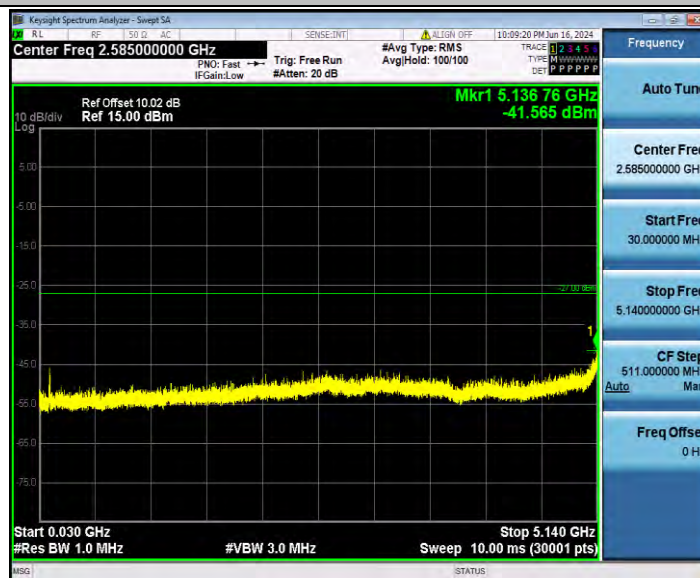
11AC40SISO_Ant1_5230_30~5140



11AC40SISO_Ant1_5230_5360~27000



11AC80SISO_Ant1_5210_30~5140



11AC80SISO_Ant1_5210_5360~27000

