

Case No. : <u>CTA24071501704</u>
Ambient Condition: <u>24</u> °C, <u>52</u> %RH
According Standard: <u>■Part15E</u>
Test Date: <u>2024.7.29</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]	Limit[MHz]	Verdict
11A	Ant1	5180	23.360	5169.200	5192.560	---	---
		5200	23.640	5189.240	5212.880	---	---
		5240	25.280	5227.680	5252.960	---	---
11N20SISO	Ant1	5180	28.520	5166.280	5194.800	---	---
		5200	28.800	5186.160	5214.960	---	---
		5240	30.200	5224.760	5254.960	---	---
11N40SISO	Ant1	5190	64.960	5158.720	5223.680	---	---
		5230	66.320	5197.280	5263.600	---	---
11AC20SISO	Ant1	5180	27.520	5167.440	5194.960	---	---
		5200	29.200	5185.800	5215.000	---	---
		5240	31.080	5225.040	5256.120	---	---
11AC40SISO	Ant1	5190	58.720	5161.280	5220.000	---	---
		5230	69.040	5194.640	5263.680	---	---
11AC80SISO	Ant1	5210	141.600	5147.440	5289.040	---	---

Test Graphs





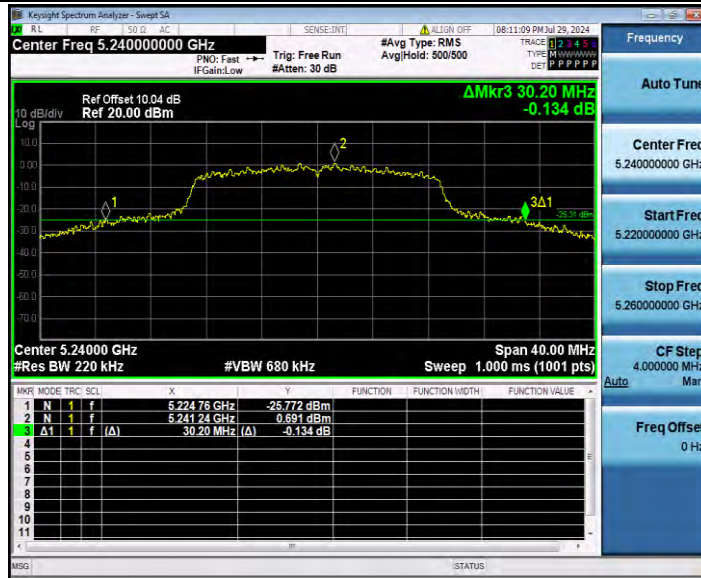
11N20SISO_Ant1_5180



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



11AC80SISO_Ant1_5210

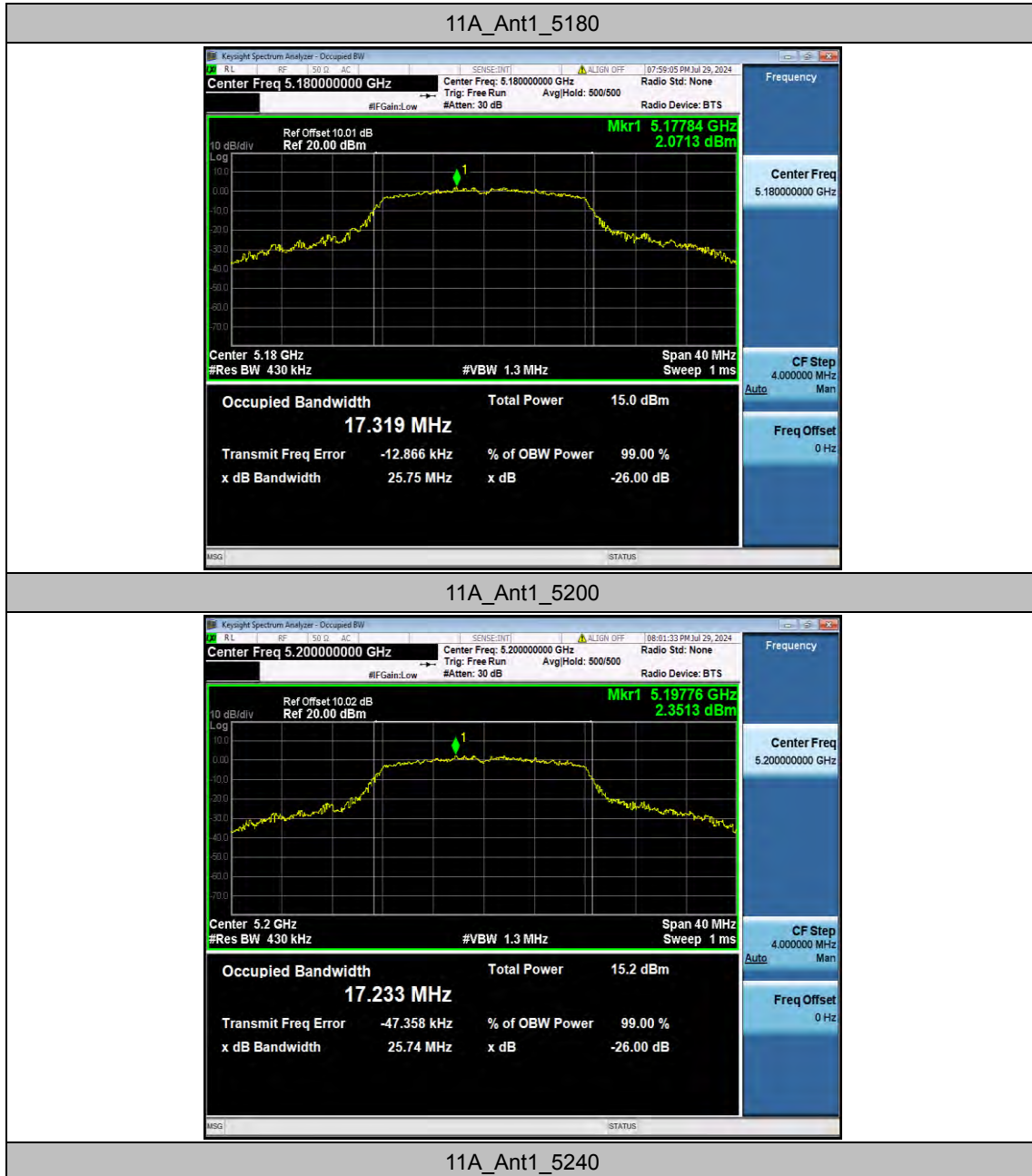


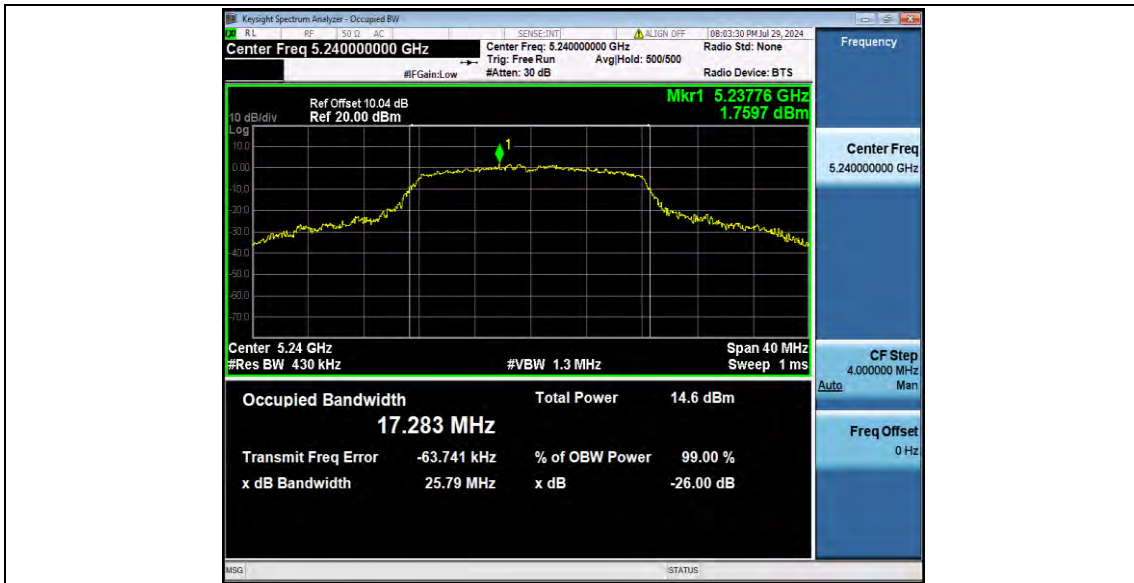
Appendix D.2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.319	5171.3276	5188.6466	---	---
		5200	17.233	5191.3361	5208.5691	---	---
		5240	17.283	5231.2948	5248.5778	---	---
11N20SISO	Ant1	5180	18.397	5170.8686	5189.2656	---	---
		5200	18.469	5190.8659	5209.3349	---	---
		5240	18.580	5230.7398	5249.3198	---	---
11N40SISO	Ant1	5190	37.274	5171.5636	5208.8376	---	---
		5230	37.515	5211.3016	5248.8166	---	---
11AC20SISO	Ant1	5180	18.465	5170.8715	5189.3365	---	---
		5200	18.476	5190.8629	5209.3389	---	---
		5240	18.657	5230.7729	5249.4299	---	---
11AC40SISO	Ant1	5190	37.106	5171.6031	5208.7091	---	---
		5230	37.332	5211.3648	5248.6968	---	---
11AC80SISO	Ant1	5210	77.342	5171.6183	5248.9603	---	---

Test Graphs





11N20SISO_Ant1_5180



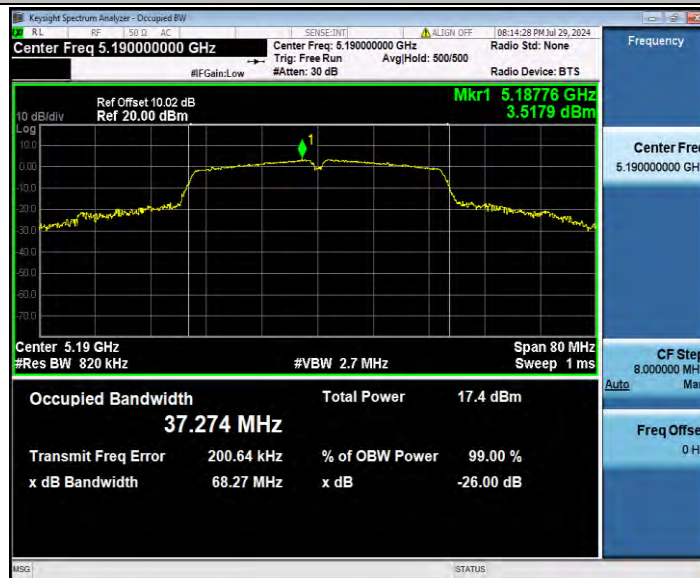
11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



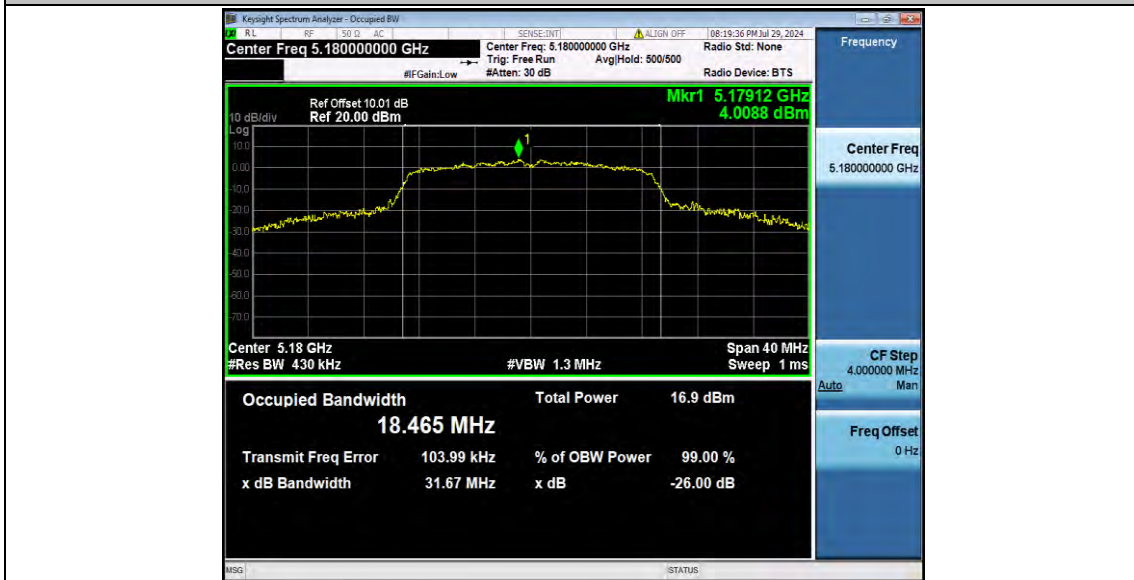
11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210

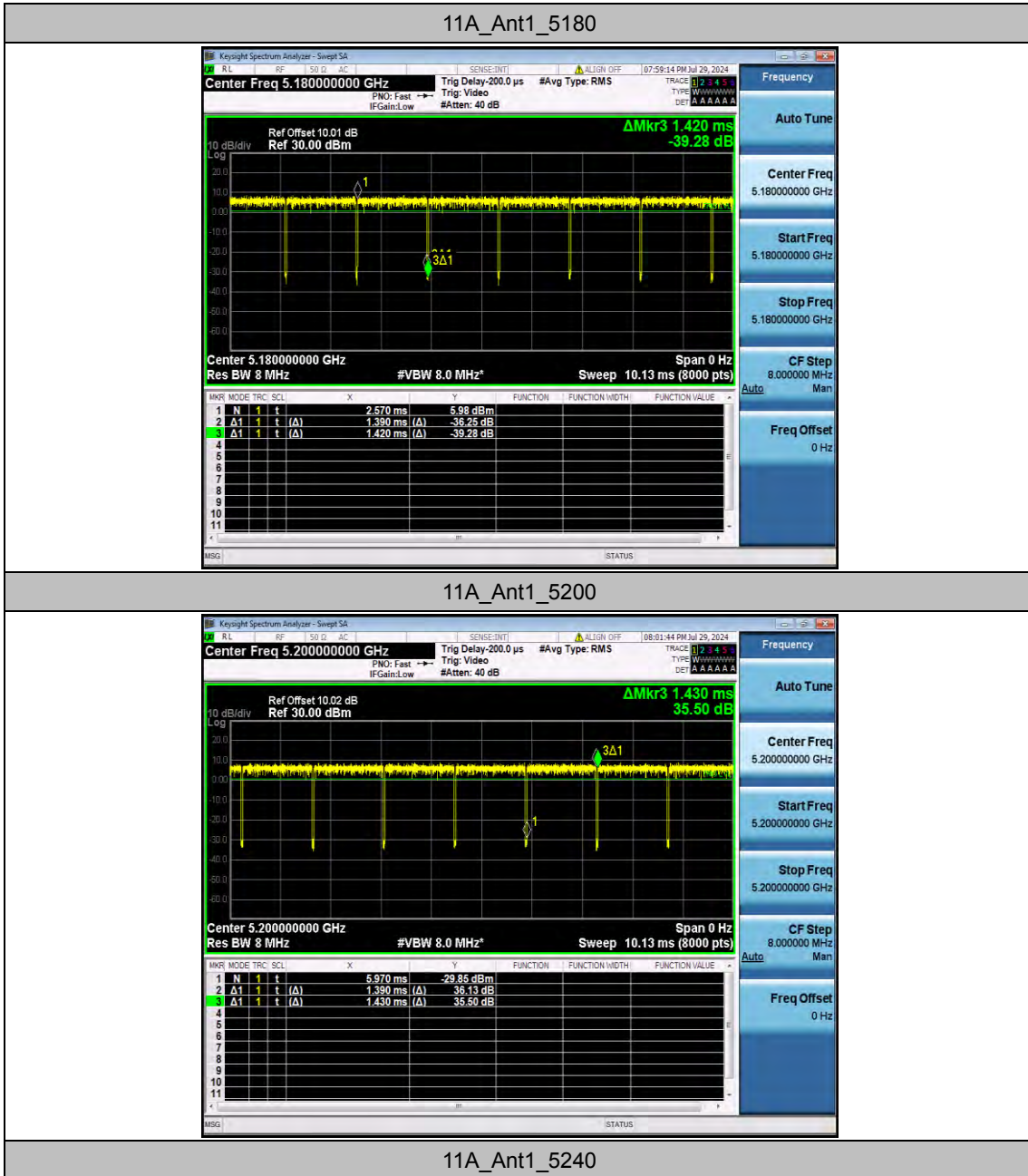


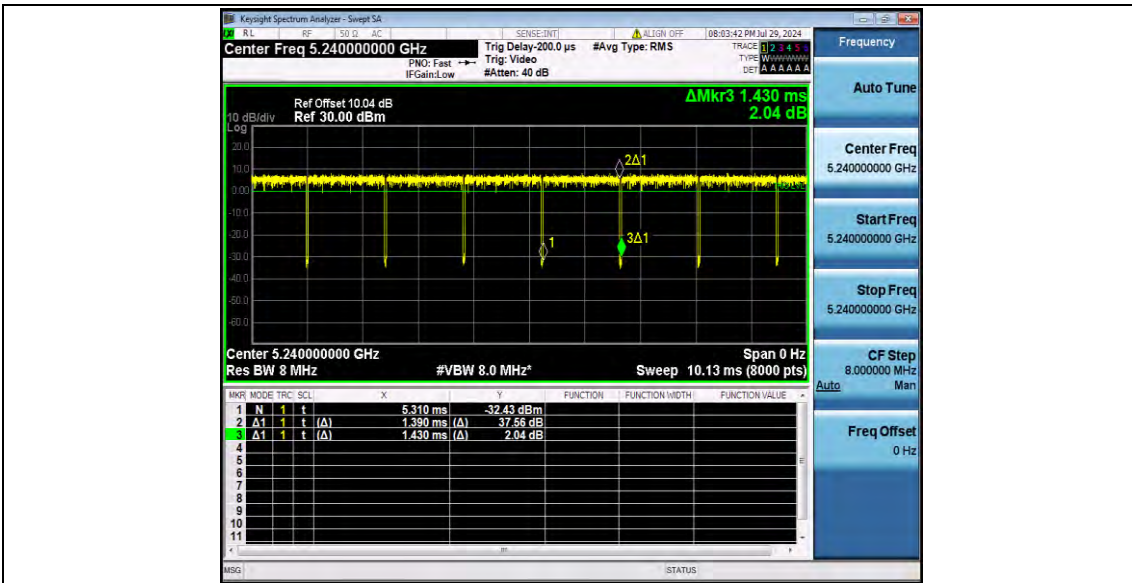
Appendix D.3: Duty Cycle

Test Result

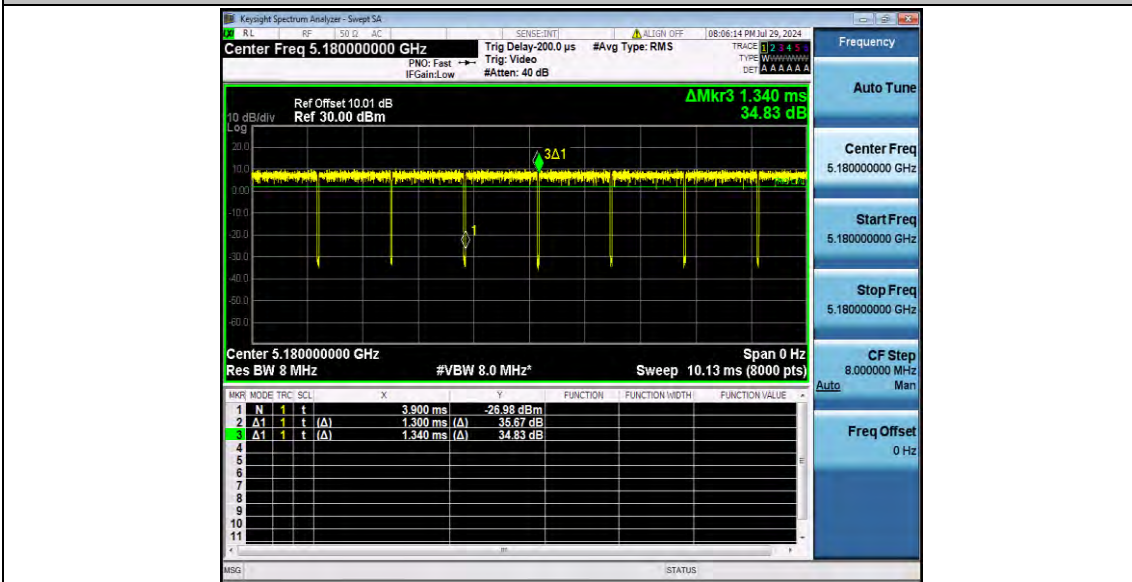
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5180	1.39	1.42	97.89	0.09	0.72
		5200	1.39	1.43	97.20	0.12	0.72
		5240	1.39	1.43	97.20	0.12	0.72
11N20SISO	Ant1	5180	1.30	1.34	97.01	0.13	0.77
		5200	1.30	1.33	97.74	0.10	0.77
		5240	1.30	1.34	97.01	0.13	0.77
11N40SISO	Ant1	5190	0.65	0.68	95.59	0.20	1.54
		5230	0.65	0.69	94.20	0.26	1.54
11AC20SISO	Ant1	5180	1.32	1.35	97.78	0.10	0.76
		5200	1.31	1.35	97.04	0.13	0.76
		5240	1.31	1.35	97.04	0.13	0.76
11AC40SISO	Ant1	5190	0.65	0.69	94.20	0.26	1.54
		5230	0.66	0.69	95.65	0.19	1.52
11AC80SISO	Ant1	5210	0.33	0.36	91.67	0.38	3.03

Test Graphs

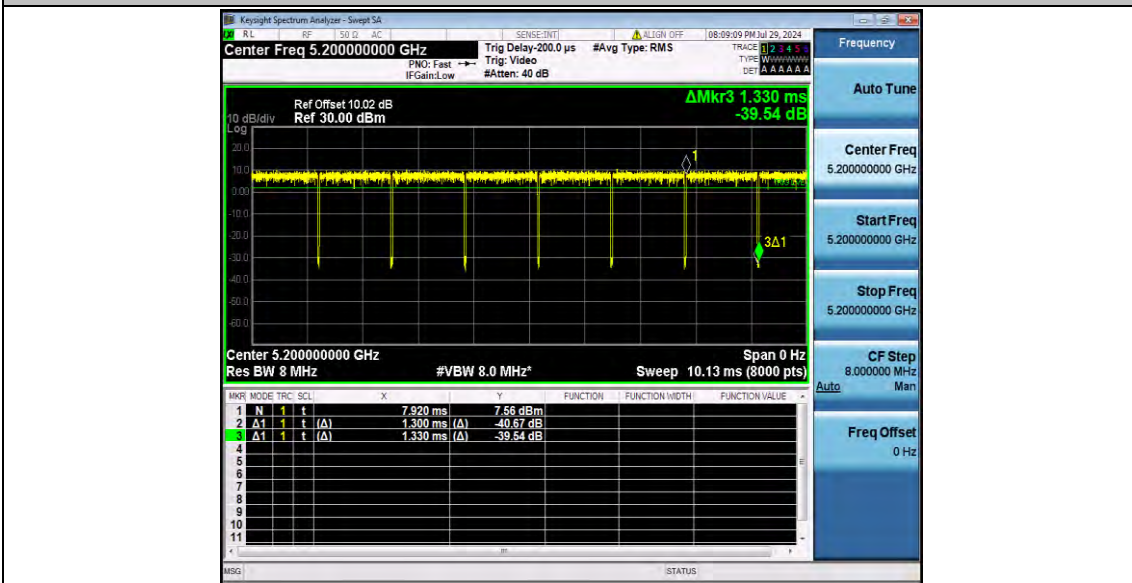




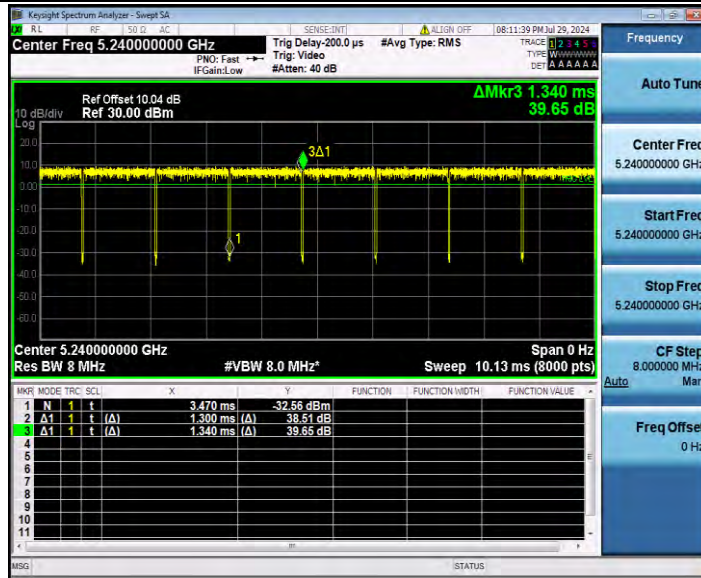
11N20SISO_Ant1_5180



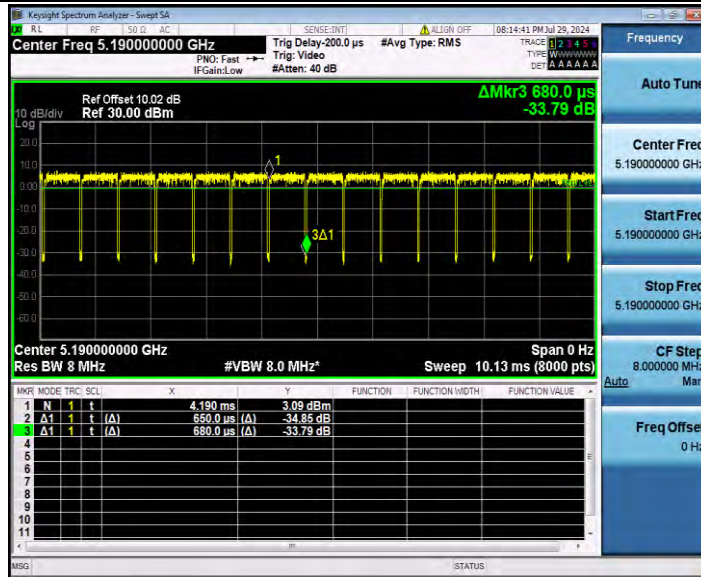
11N20SISO_Ant1_5200



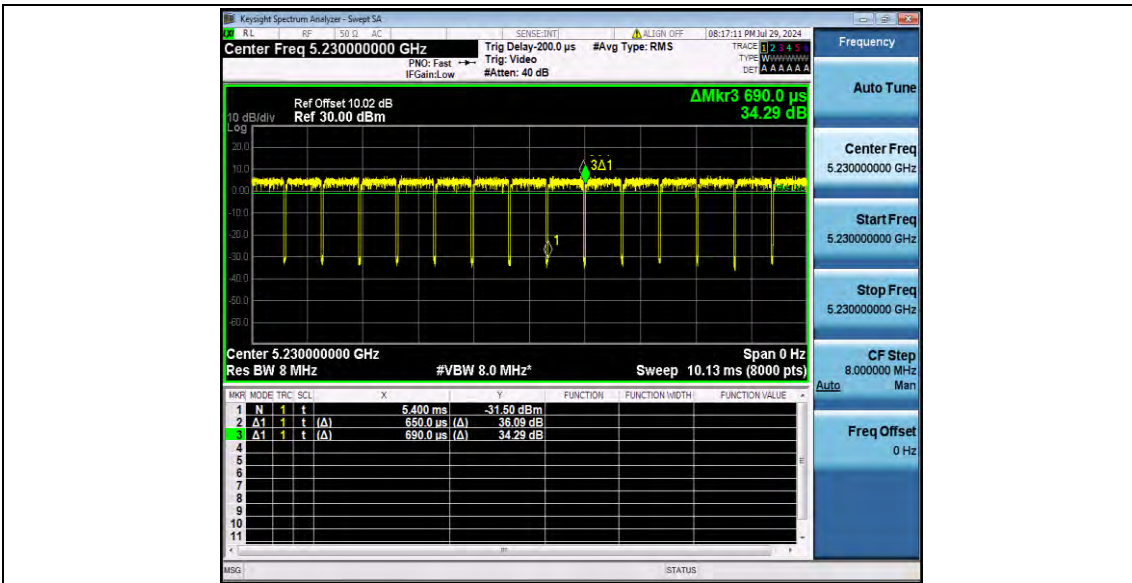
11N20SISO_Ant1_5240



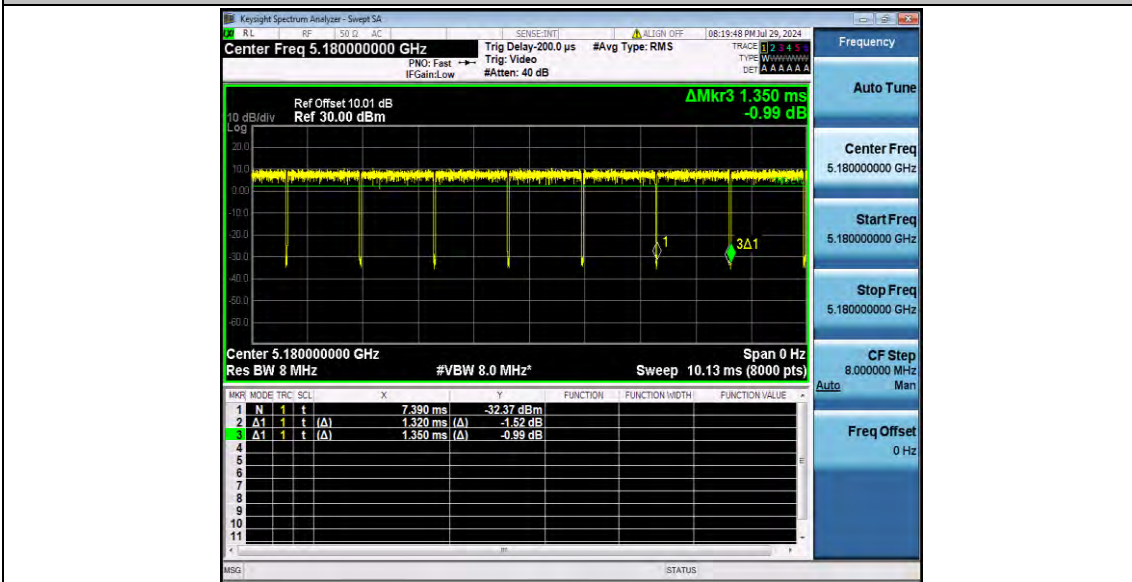
11N40SISO_Ant1_5190



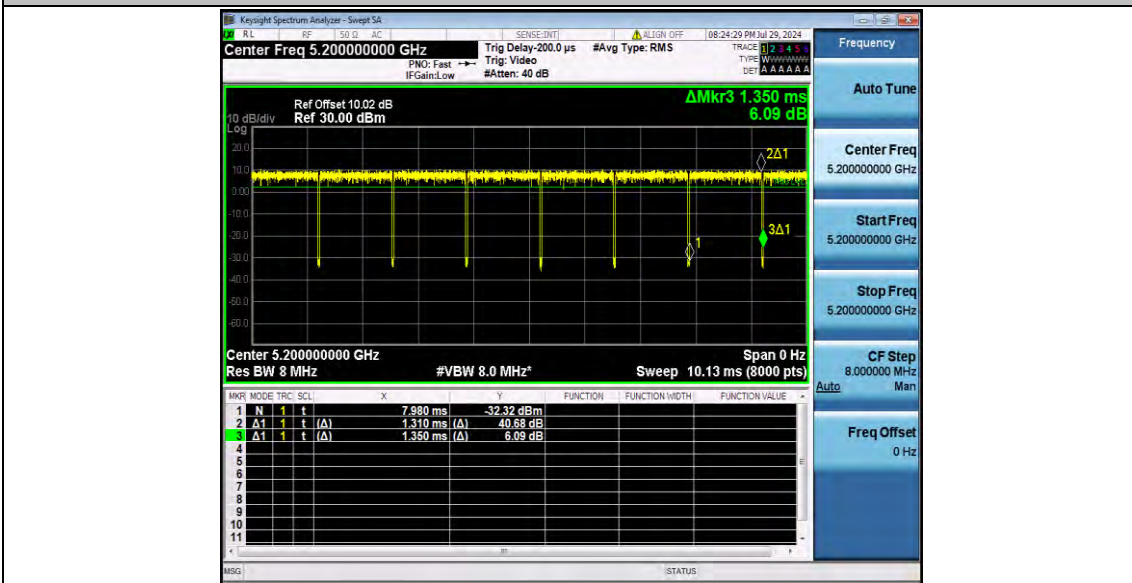
11N40SISO_Ant1_5230



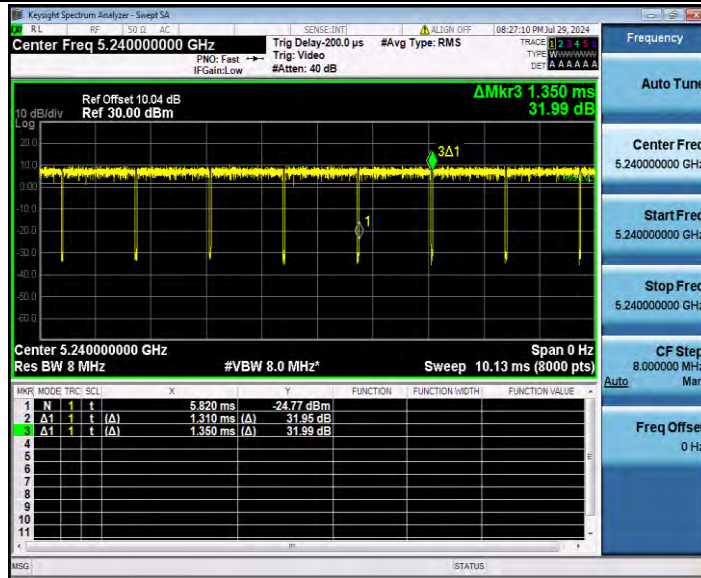
11AC20SISO_Ant1_5180



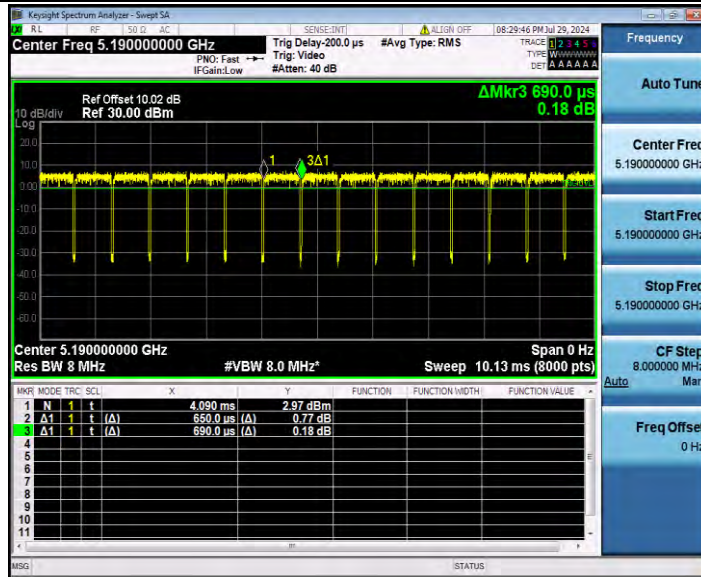
11AC20SISO_Ant1_5200



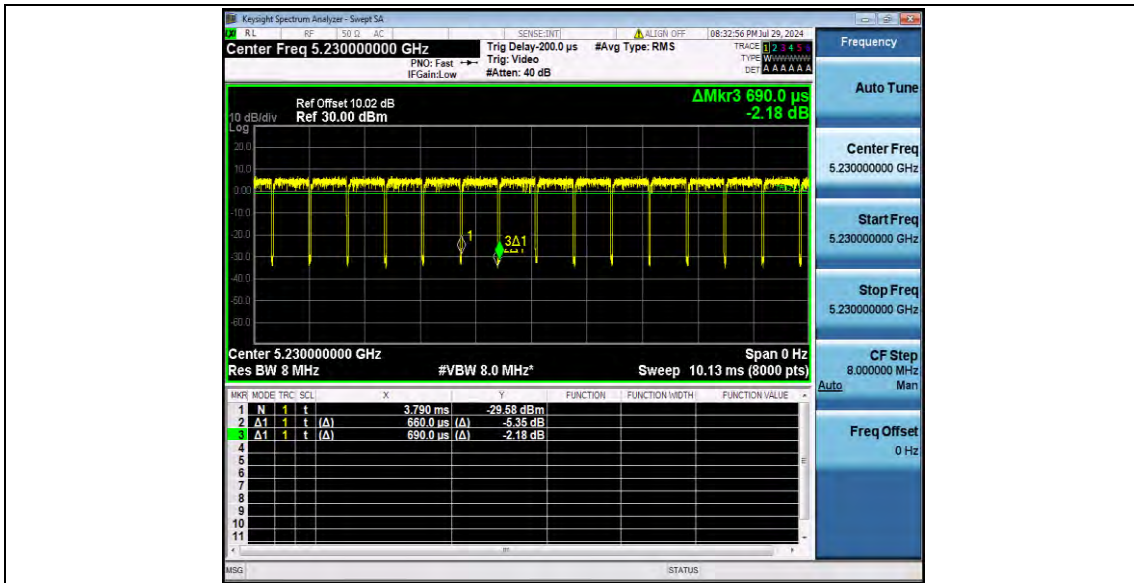
11AC20SISO_Ant1_5240



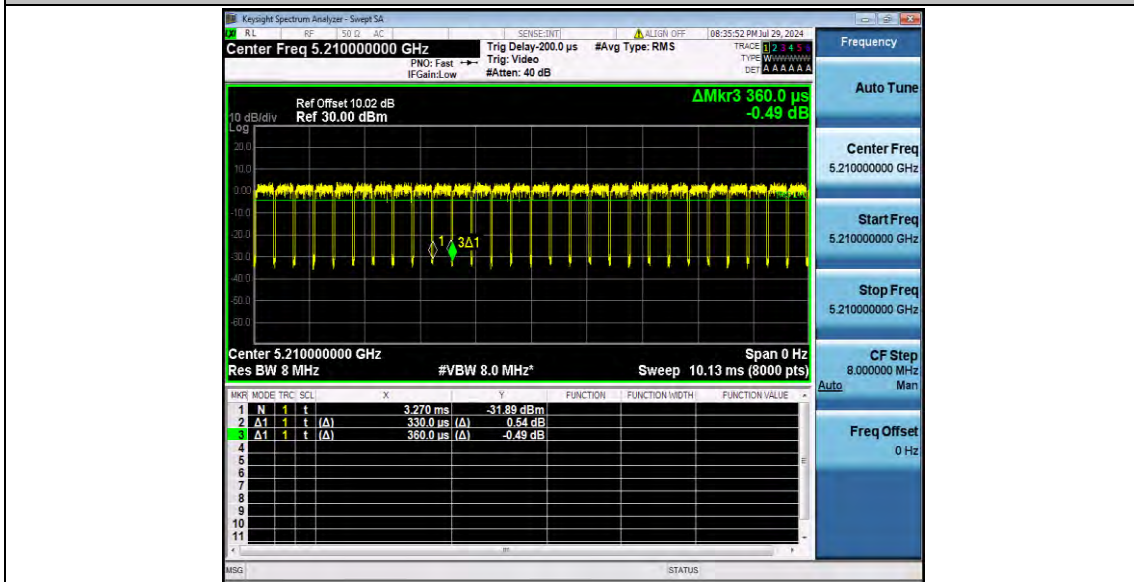
11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210



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	8.24	97.89	0.09	8.33	≤23.98	PASS
		5200	8.46	97.20	0.12	8.58	≤23.98	PASS
		5240	7.79	97.20	0.12	7.91	≤23.98	PASS
11N20SISO	Ant1	5180	9.88	97.01	0.13	10.01	≤23.98	PASS
		5200	9.97	97.74	0.10	10.07	≤23.98	PASS
		5240	9.39	97.01	0.13	9.52	≤23.98	PASS
11N40SISO	Ant1	5190	9.92	95.59	0.20	10.12	≤23.98	PASS
		5230	9.50	94.20	0.26	9.76	≤23.98	PASS
11AC20SISO	Ant1	5180	10.15	97.78	0.10	10.25	≤23.98	PASS
		5200	10.25	97.04	0.13	10.38	≤23.98	PASS
		5240	9.55	97.04	0.13	9.68	≤23.98	PASS
11AC40SISO	Ant1	5190	9.96	94.20	0.26	10.22	≤23.98	PASS
		5230	9.56	95.65	0.19	9.75	≤23.98	PASS
11AC80SISO	Ant1	5210	9.72	91.67	0.38	10.10	≤23.98	PASS

Appendix D.5: Maximum power spectral density

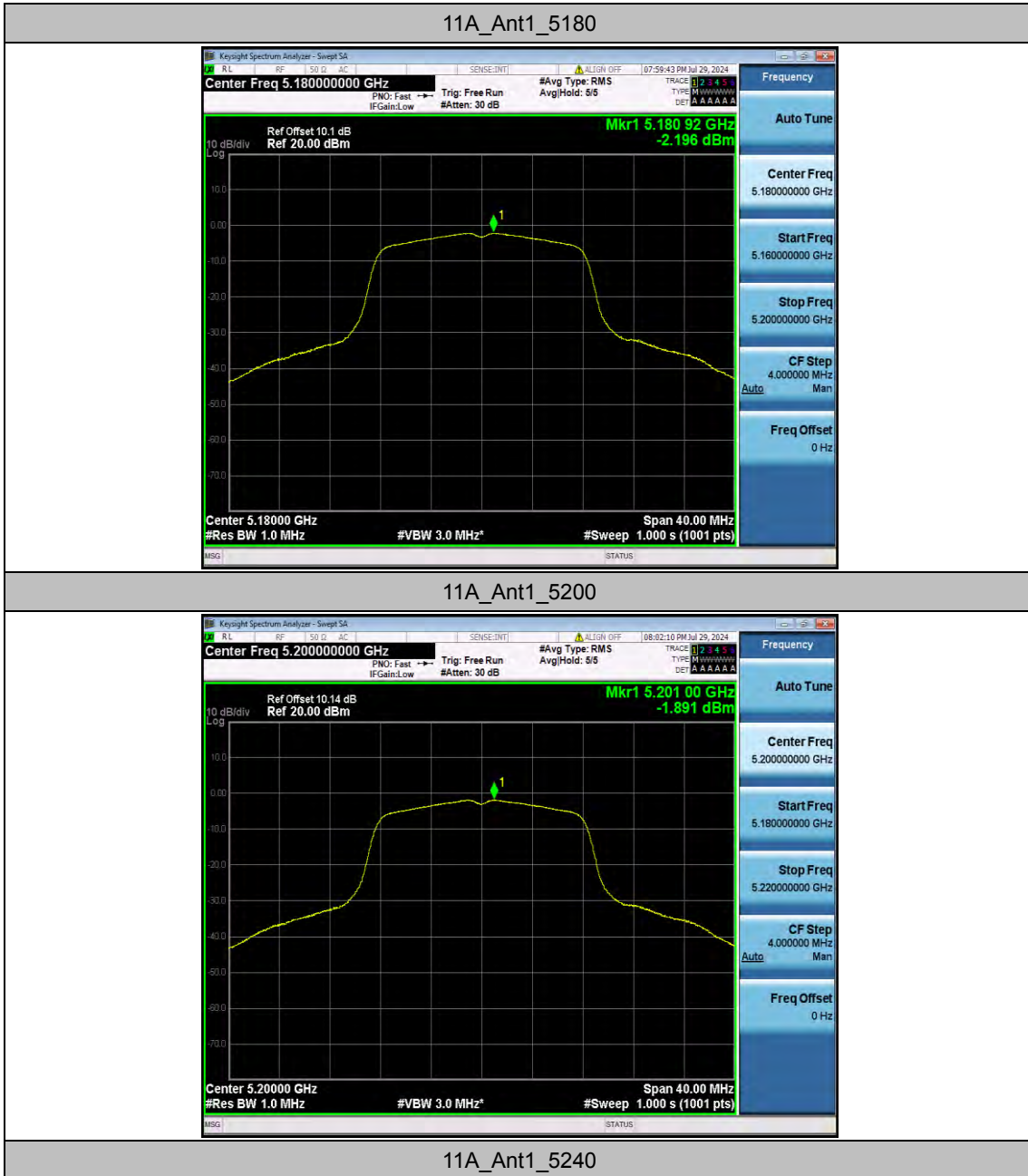
Test Result

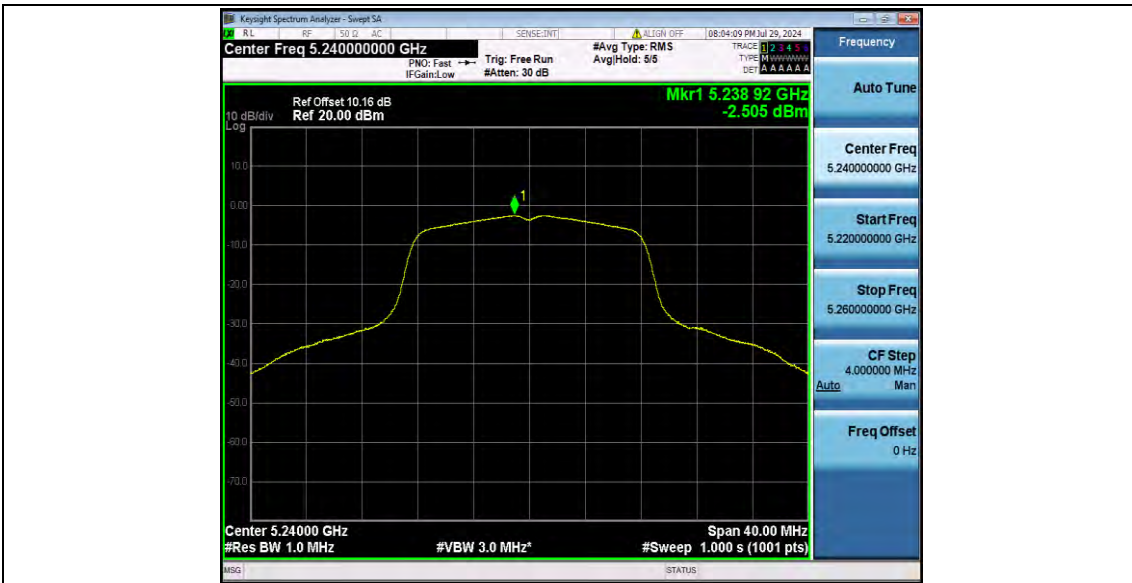
TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-2.20	≤11.00	PASS
		5200	-1.89	≤11.00	PASS
		5240	-2.51	≤11.00	PASS
11N20SISO	Ant1	5180	-0.75	≤11.00	PASS
		5200	-0.55	≤11.00	PASS
		5240	-1.05	≤11.00	PASS
11N40SISO	Ant1	5190	-3.27	≤11.00	PASS
		5230	-3.67	≤11.00	PASS
11AC20SISO	Ant1	5180	-0.44	≤11.00	PASS
		5200	-0.24	≤11.00	PASS
		5240	-0.89	≤11.00	PASS
11AC40SISO	Ant1	5190	-3.15	≤11.00	PASS
		5230	-3.68	≤11.00	PASS
11AC80SISO	Ant1	5210	-6.64	≤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





11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



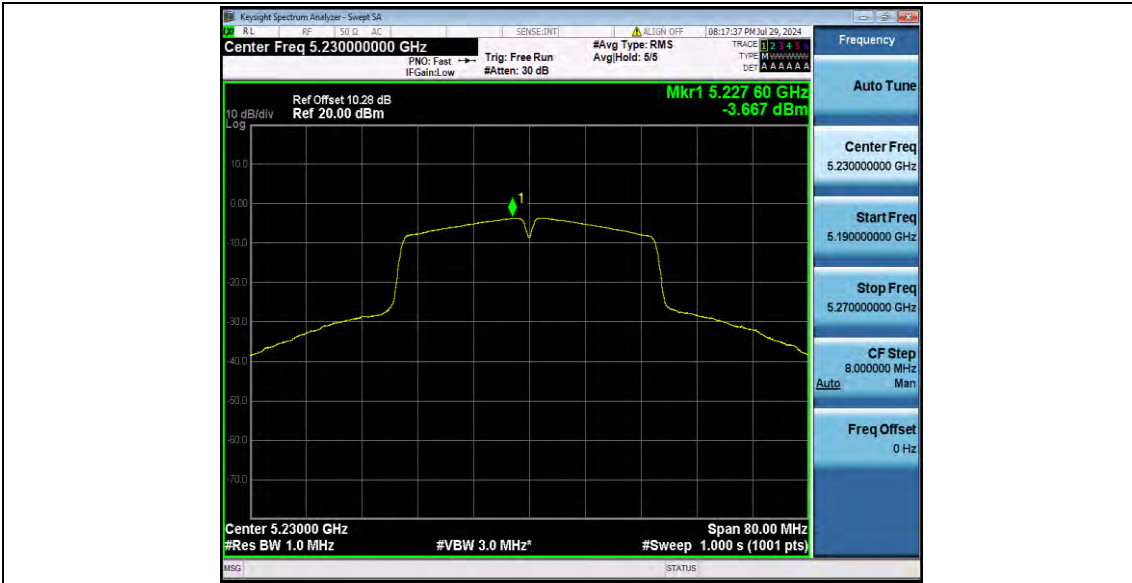
11N20SISO_Ant1_5240



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



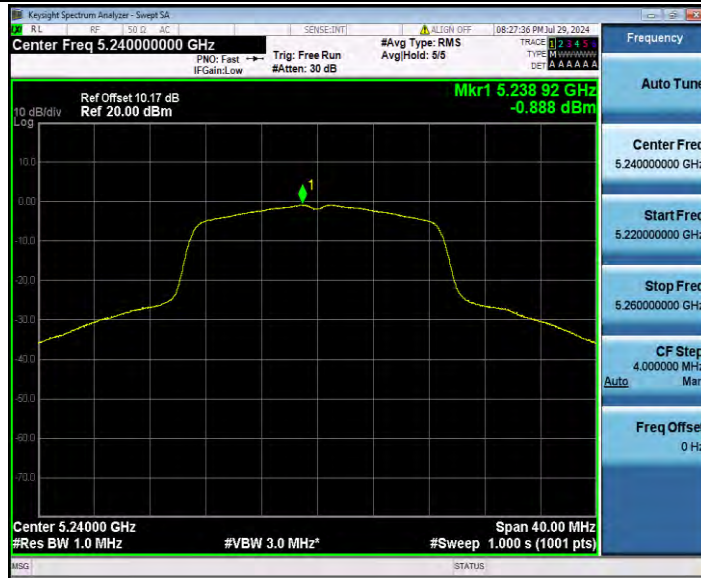
11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



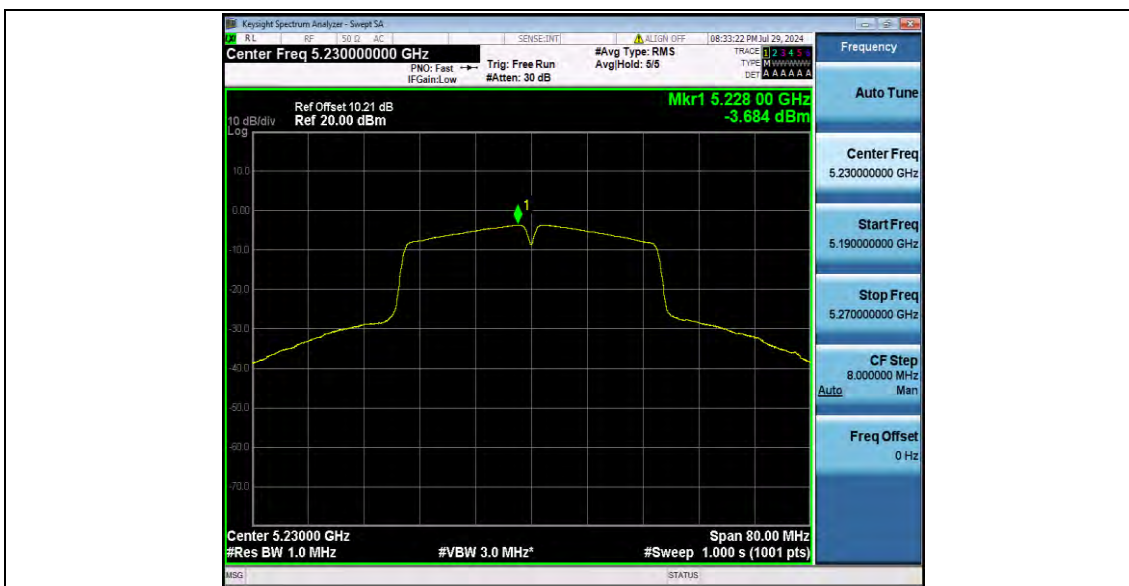
11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210

