



Appendix D

RF Test Data for 5.2G WIFI (Conducted Measurement)

Product Name: Formuler Z11 Pro Max

Test Model: Z11 Pro Max

Environmental Conditions

Temperature:	23.9 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu Ling Zhu
Supervised by:	Li Huan Li Huan





D.1 Emission Bandwidth

Test Result

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant0	5180	18.560	5170.720	5189.280	---	---
		5220	18.520	5210.720	5229.240	---	---
		5240	18.480	5230.760	5249.240	---	---
11N20SISO	Ant0	5180	19.480	5170.280	5189.760	---	---
		5220	19.440	5210.320	5229.760	---	---
		5240	19.440	5230.320	5249.760	---	---
11N40SISO	Ant0	5190	39.200	5170.480	5209.680	---	---
		5230	39.040	5210.560	5249.600	---	---
11AC20SISO	Ant0	5180	19.440	5170.280	5189.720	---	---
		5220	19.440	5210.280	5229.720	---	---
		5240	19.400	5230.280	5249.680	---	---
11AC40SISO	Ant0	5190	38.960	5170.560	5209.520	---	---
		5230	38.880	5210.560	5249.440	---	---
11AC80SISO	Ant0	5210	88.160	5166.000	5254.160	---	---
11AX20SISO	Ant0	5180	20.240	5169.880	5190.120	---	---
		5220	20.240	5209.880	5230.120	---	---
		5240	20.200	5229.880	5250.080	---	---
11AX40SISO	Ant0	5190	39.920	5170.160	5210.080	---	---
		5230	39.760	5210.160	5249.920	---	---
11AX80SISO	Ant0	5210	81.760	5169.200	5250.960	---	---

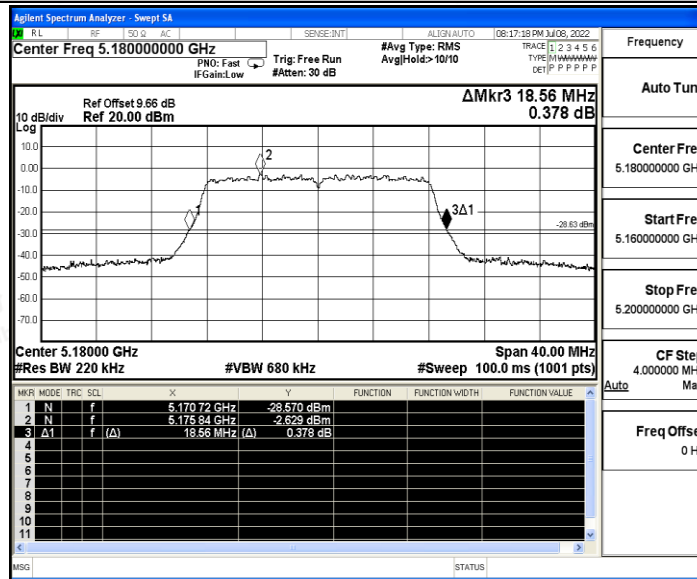


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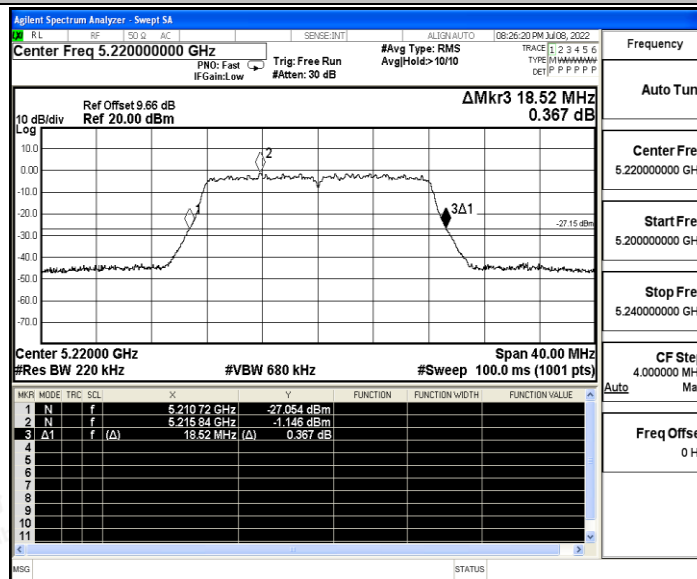


Test Graphs

11A_Ant0_5180

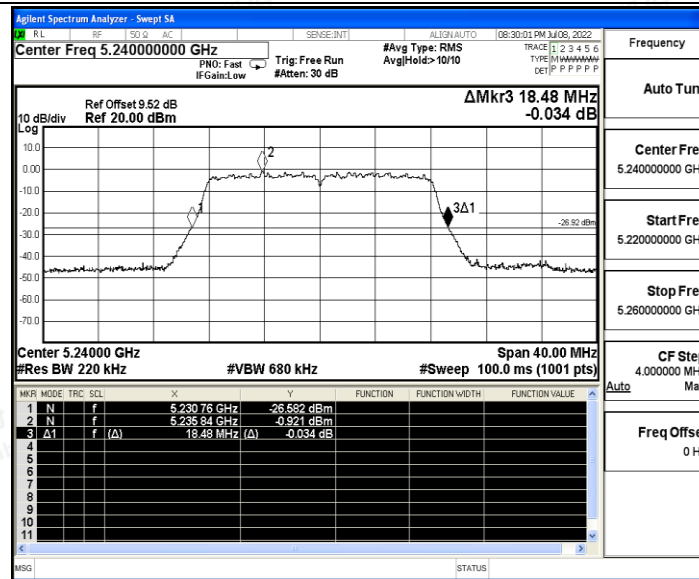


11A_Ant0_5220

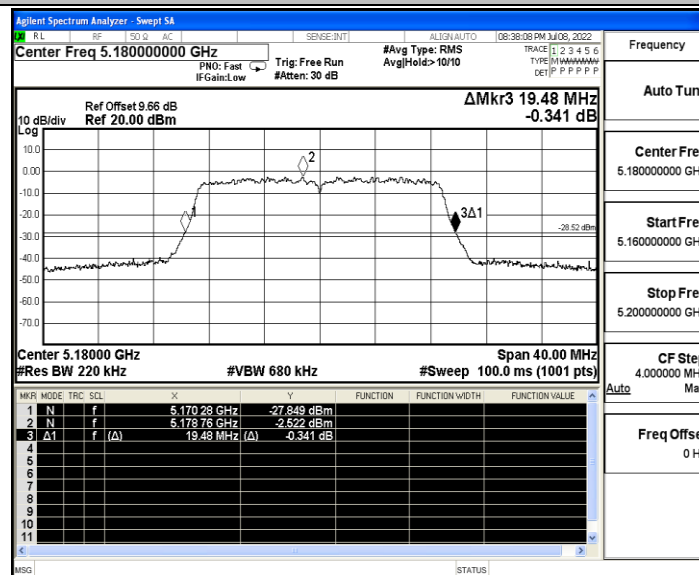


11A_Ant0_5240



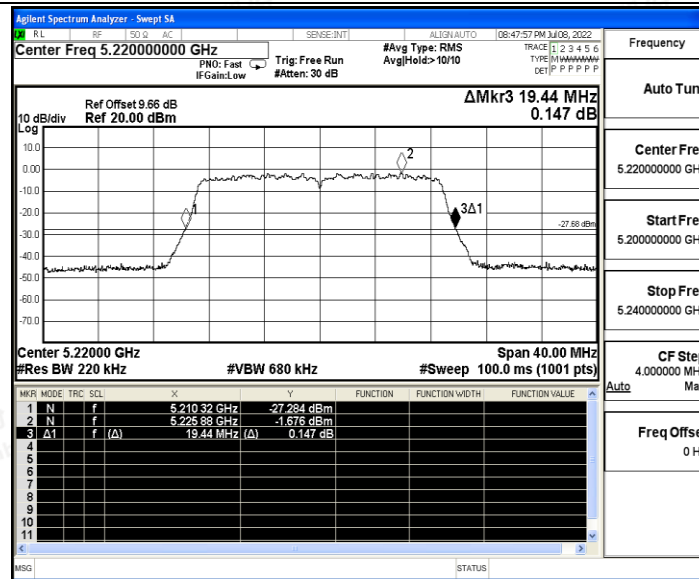


11N20SISO_Ant0_5180

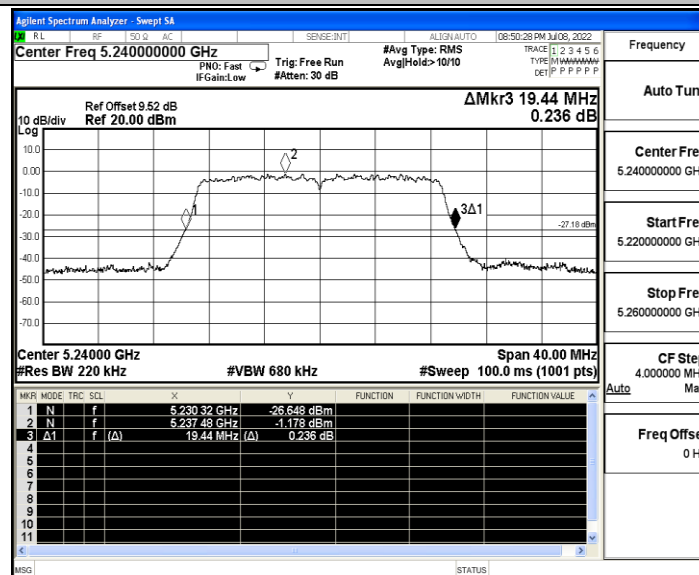


11N20SISO_Ant0_5220



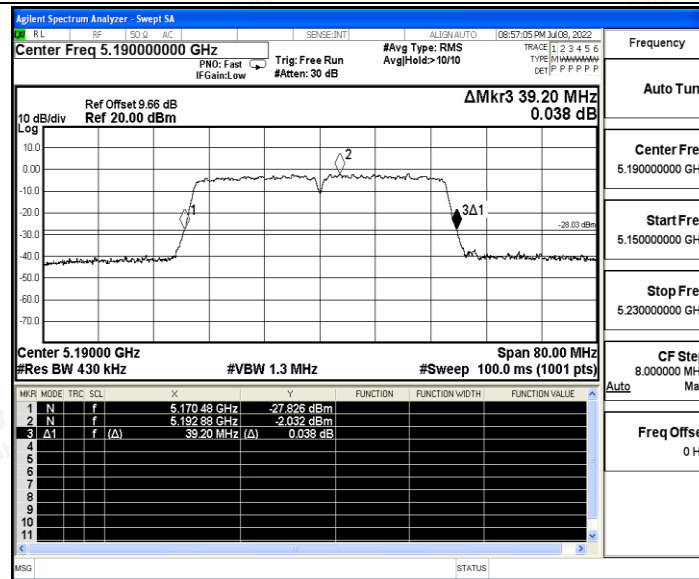


11N20SISO_Ant0_5240

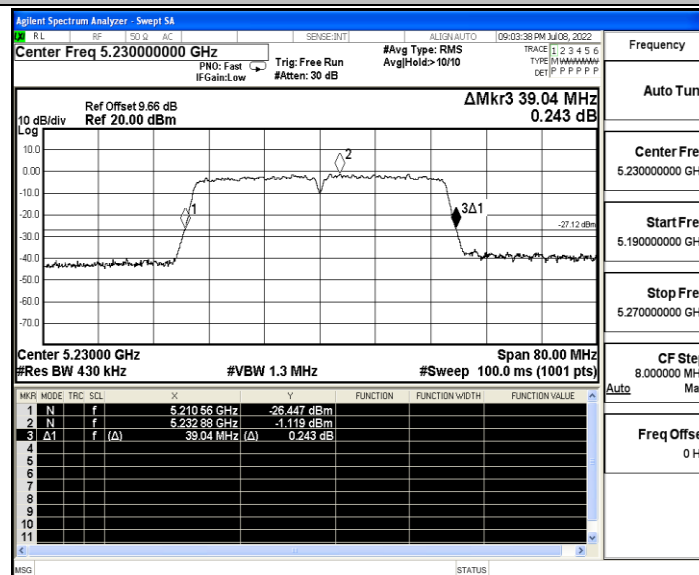


11N40SISO_Ant0_5190



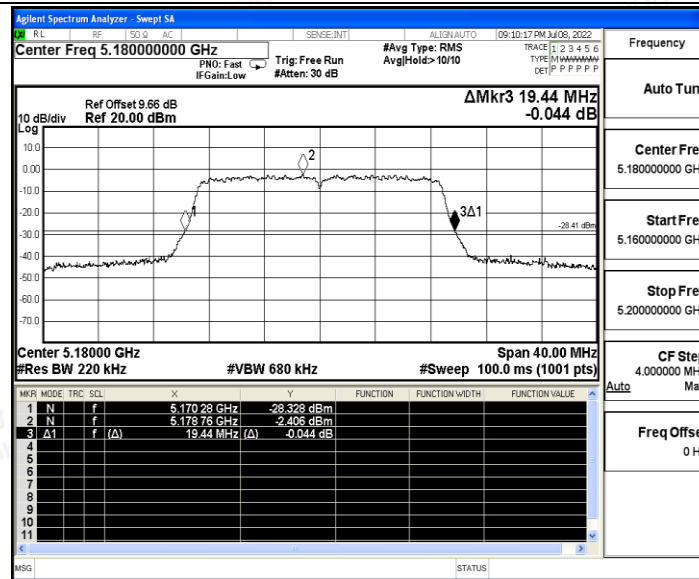


11N40SISO_Ant0_5230

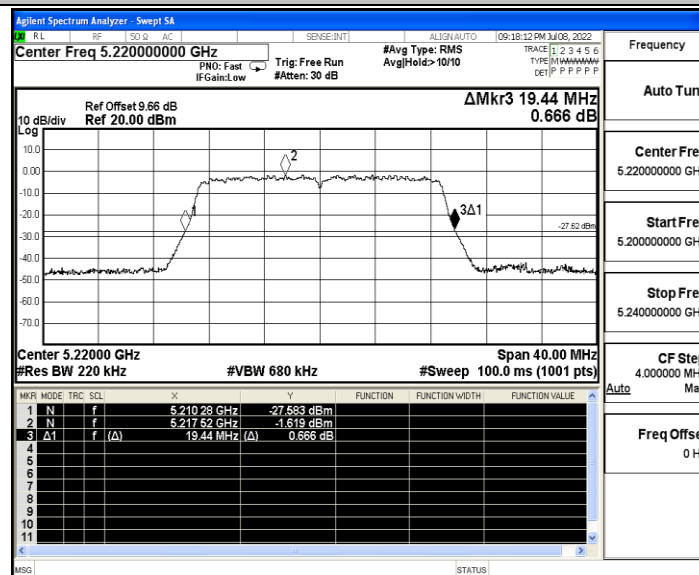


11AC20SISO_Ant0_5180



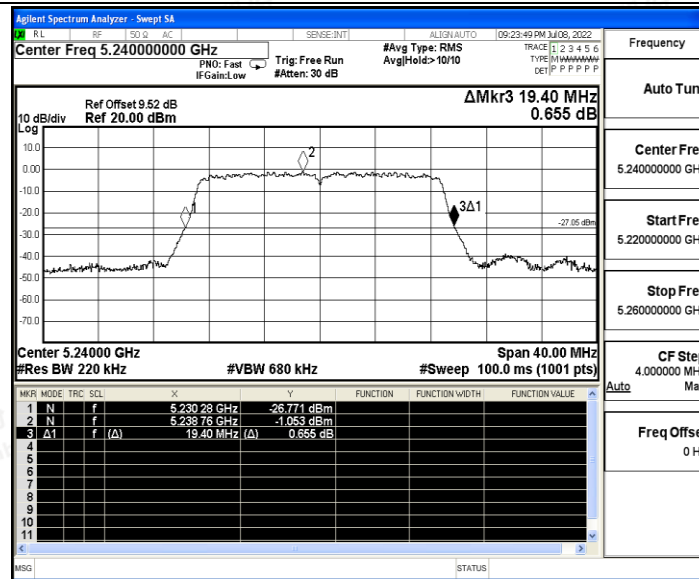


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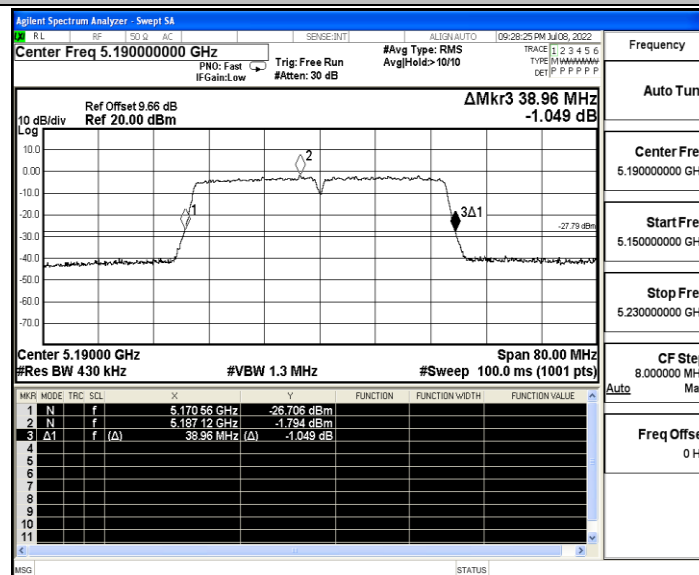


11AC20SISO_Ant0_5240



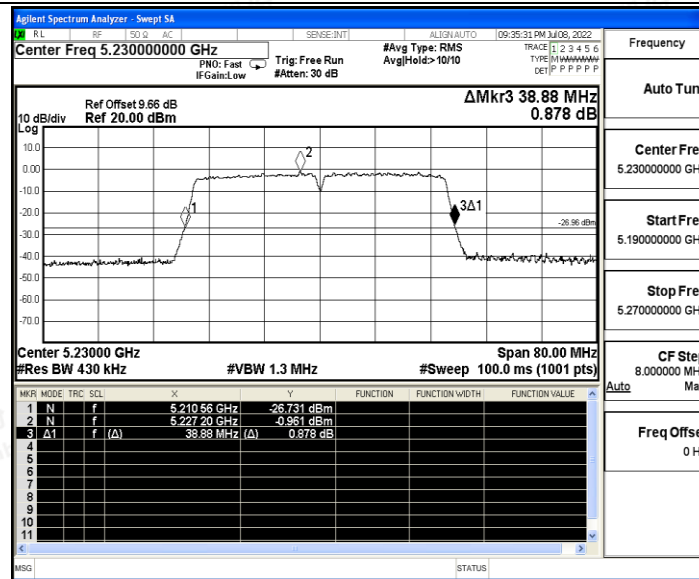


11AC40SISO_Ant0_5190

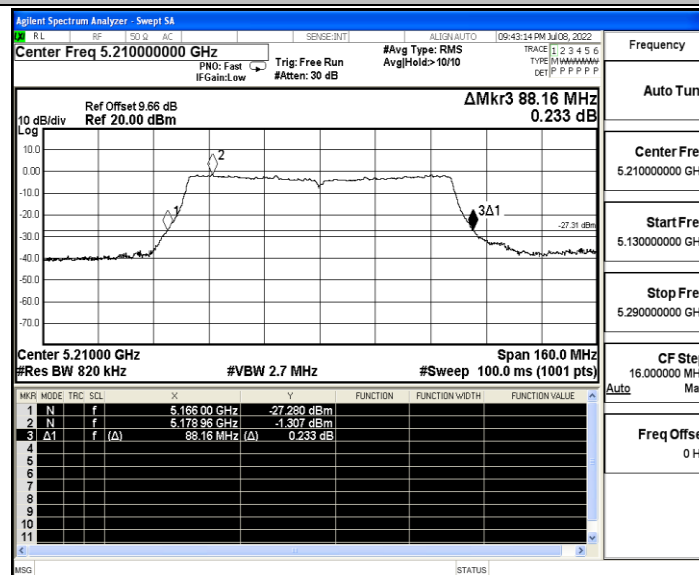


11AC40SISO_Ant0_5230



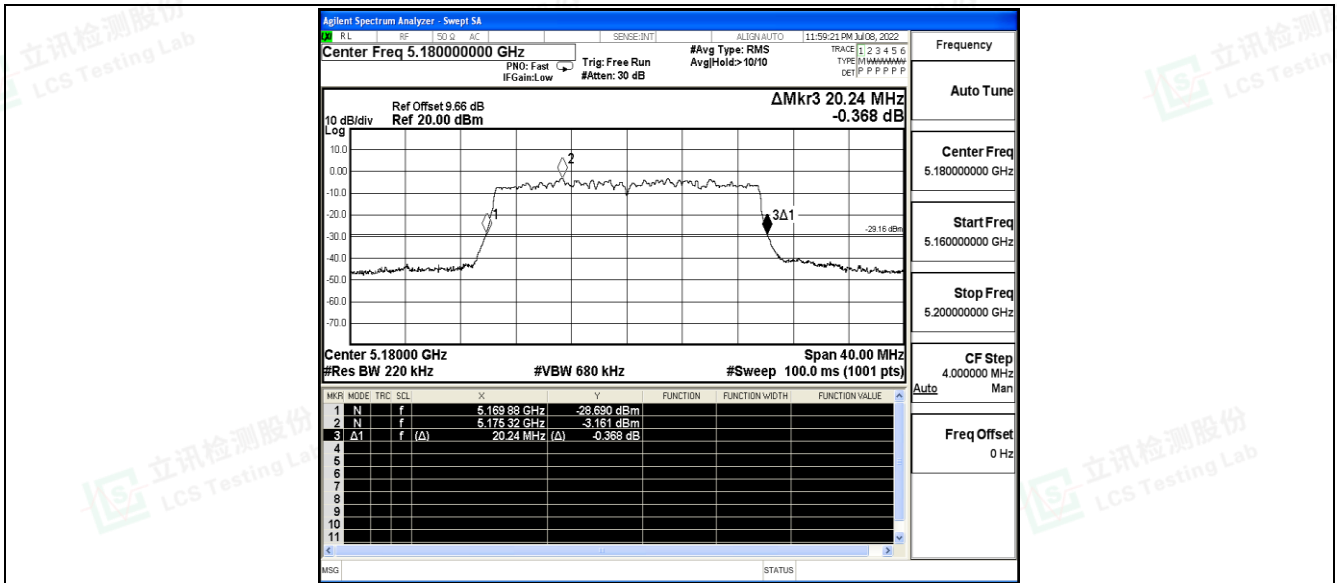


11AC80SISO_Ant0_5210

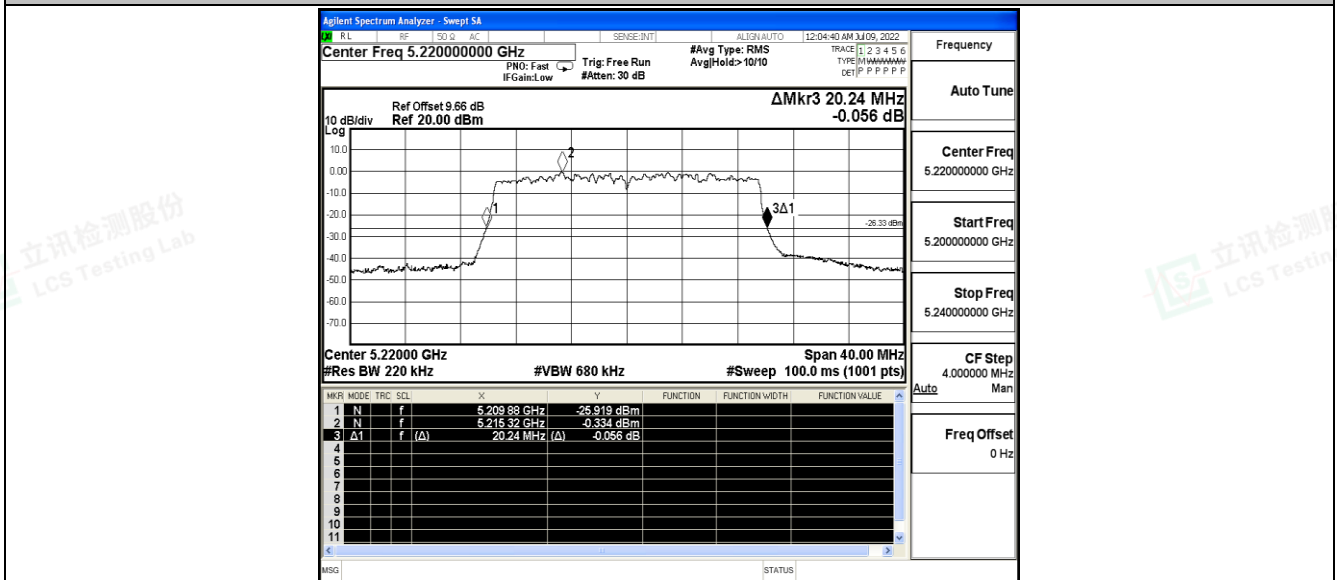


11AX20SISO_Ant0_5180



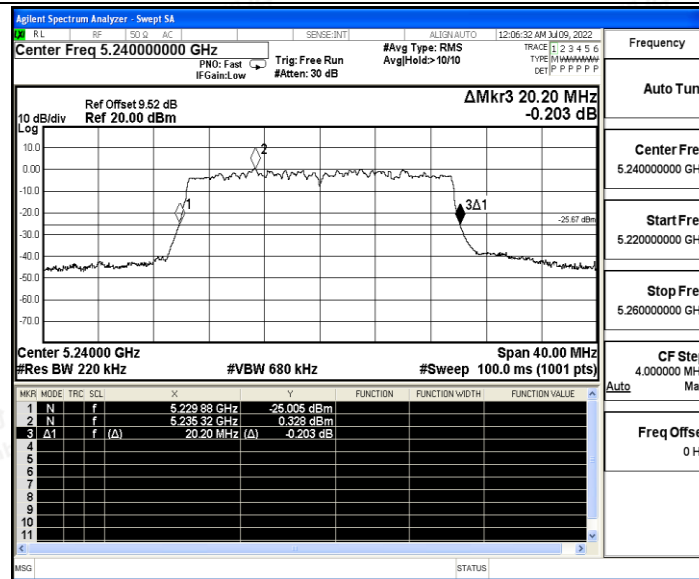


11AX20SISO_Ant0_5220

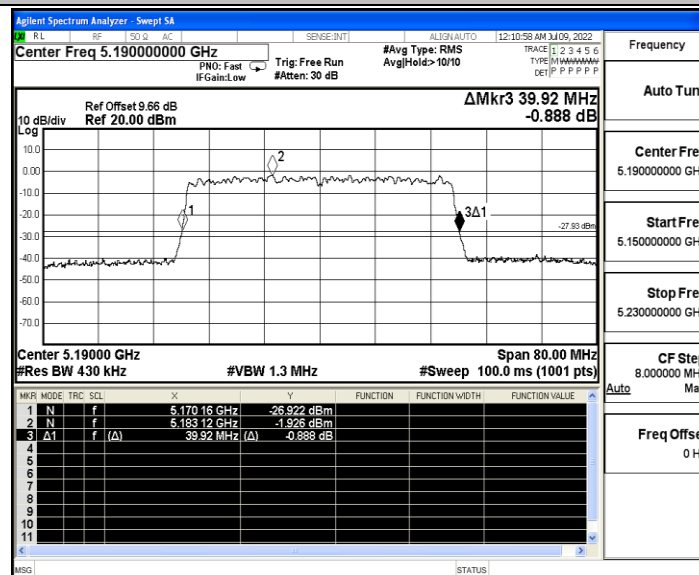


11AX20SISO_Ant0_5240



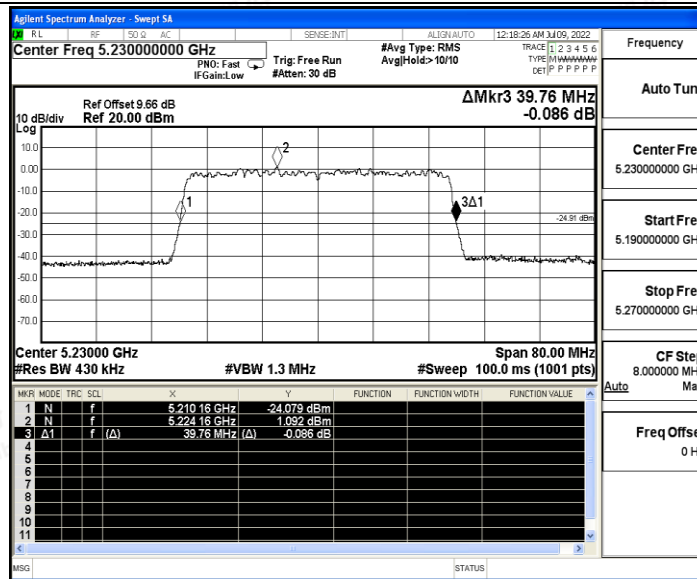


11AX40SISO_Ant0_5190

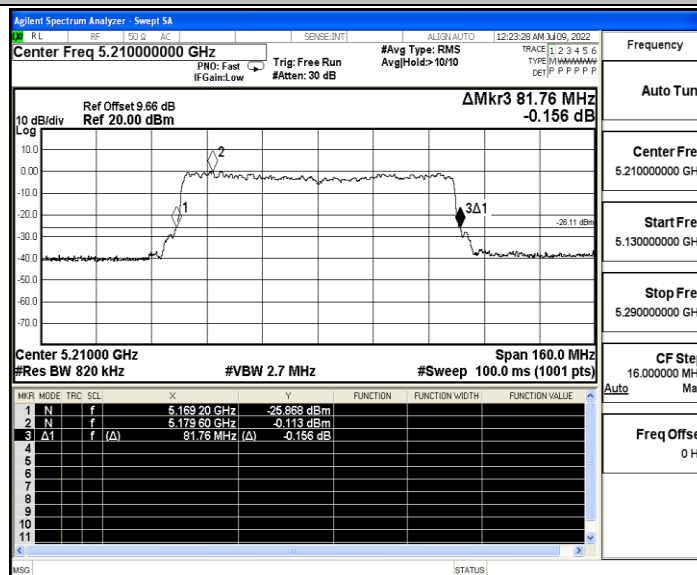


11AX40SISO_Ant0_5230





11AX80SISO_Ant0_5210



**Test Result**

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	18.680	5170.600	5189.280	---	---
		5220	18.560	5210.760	5229.320	---	---
		5240	18.520	5230.800	5249.320	---	---
11N20SISO	Ant1	5180	19.440	5170.240	5189.680	---	---
		5220	19.440	5210.280	5229.720	---	---
		5240	19.400	5230.320	5249.720	---	---
11N40SISO	Ant1	5190	39.120	5170.560	5209.680	---	---
		5230	39.120	5210.560	5249.680	---	---
11AC20SISO	Ant1	5180	19.400	5170.280	5189.680	---	---
		5220	19.440	5210.320	5229.760	---	---
		5240	19.440	5230.320	5249.760	---	---
11AC40SISO	Ant1	5190	38.960	5170.560	5209.520	---	---
		5230	39.040	5210.560	5249.600	---	---
11AC80SISO	Ant1	5210	88.160	5166.000	5254.160	---	---
11AX20SISO	Ant1	5180	20.440	5169.760	5190.200	---	---
		5220	20.440	5209.800	5230.240	---	---
		5240	20.440	5229.800	5250.240	---	---
11AX40SISO	Ant1	5190	39.760	5170.160	5209.920	---	---
		5230	39.760	5210.240	5250.000	---	---
11AX80SISO	Ant1	5210	81.760	5169.200	5250.960	---	---

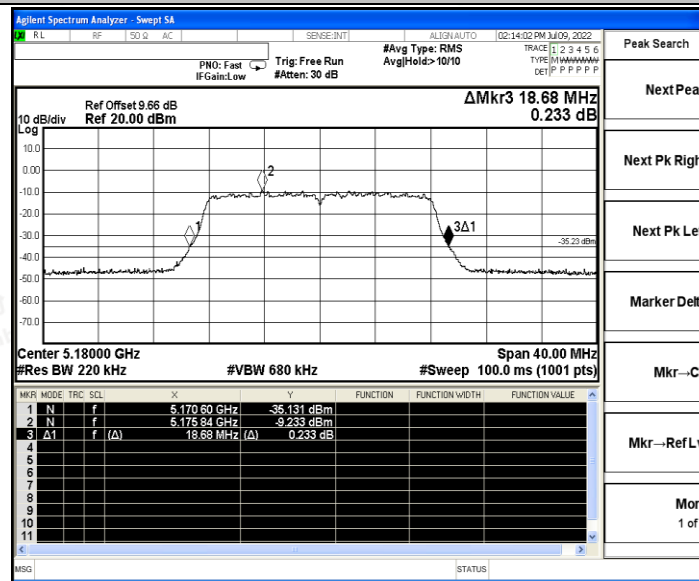


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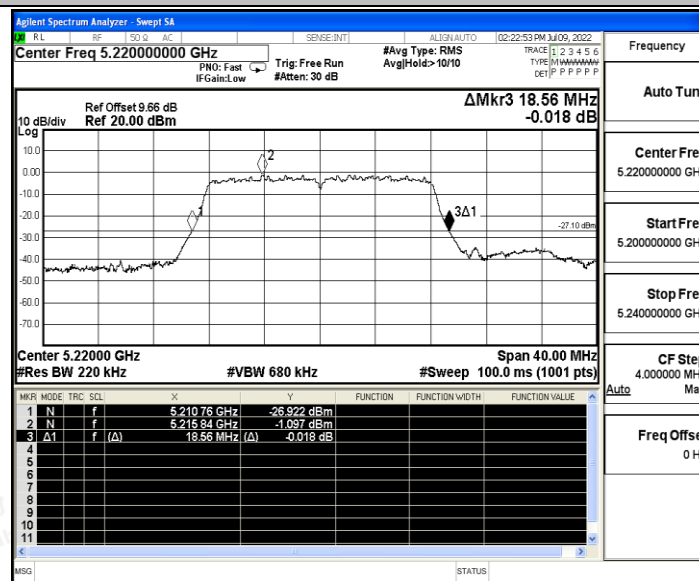


Test Graphs

11A_Ant1_5180

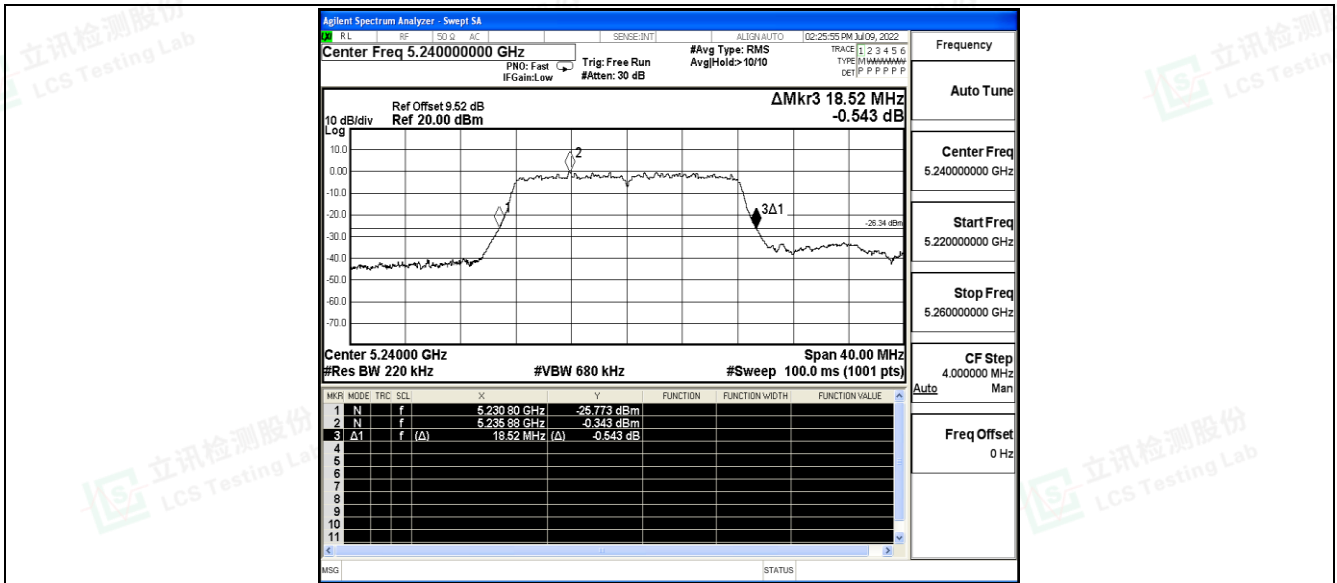


11A_Ant1_5220

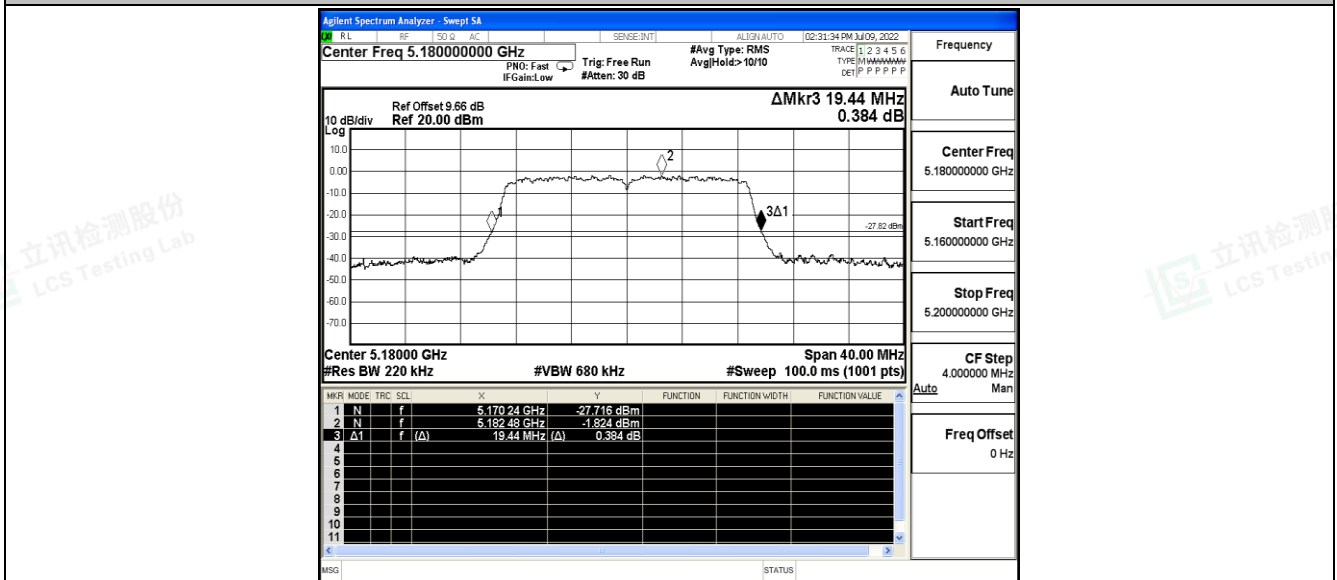


11A_Ant1_5240



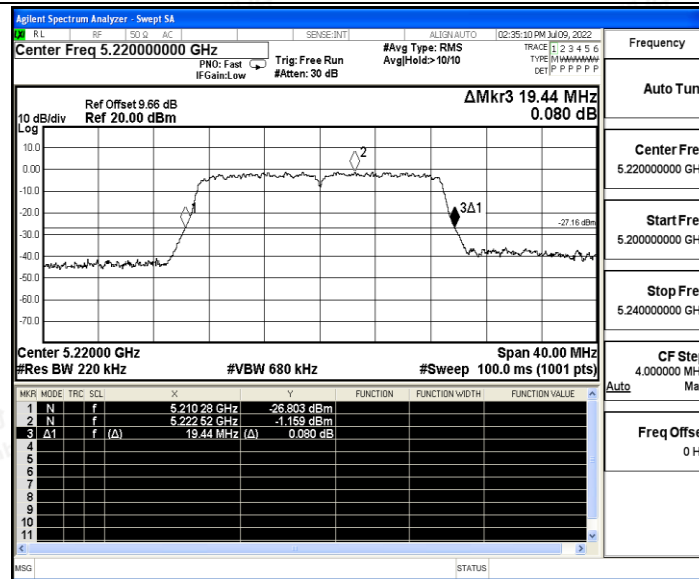


11N20SISO_Ant1_5180

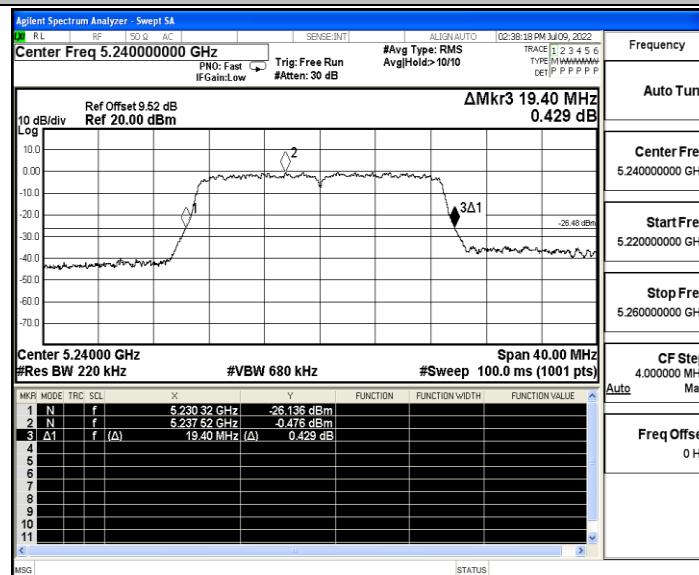


11N20SISO_Ant1_5220



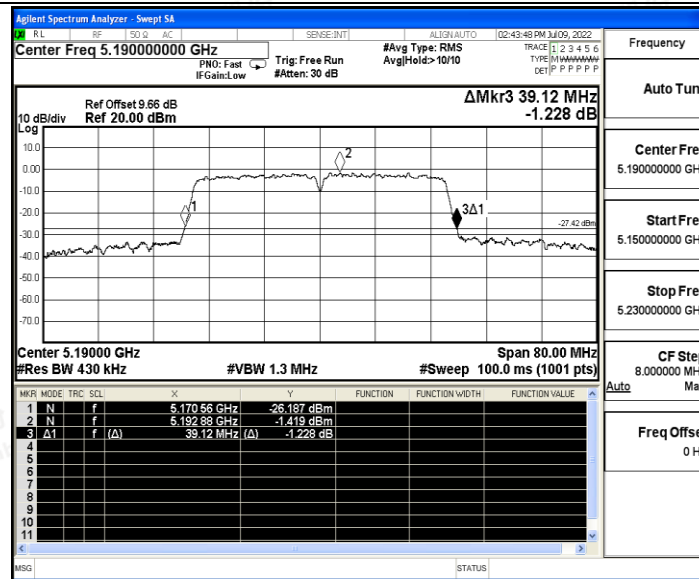


11N20SISO_Ant1_5240

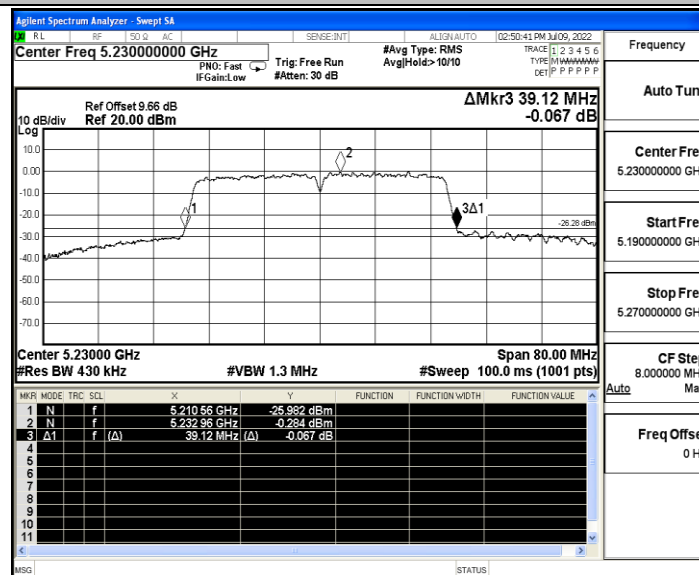


11N40SISO_Ant1_5190



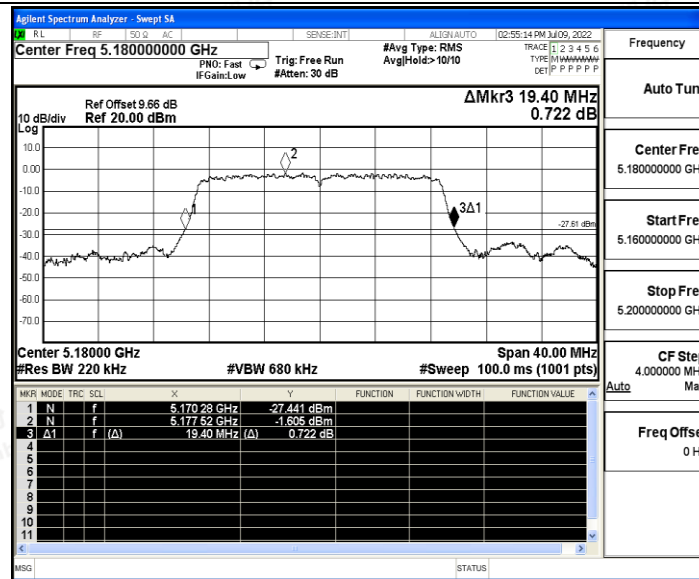


11N40SISO_Ant1_5230

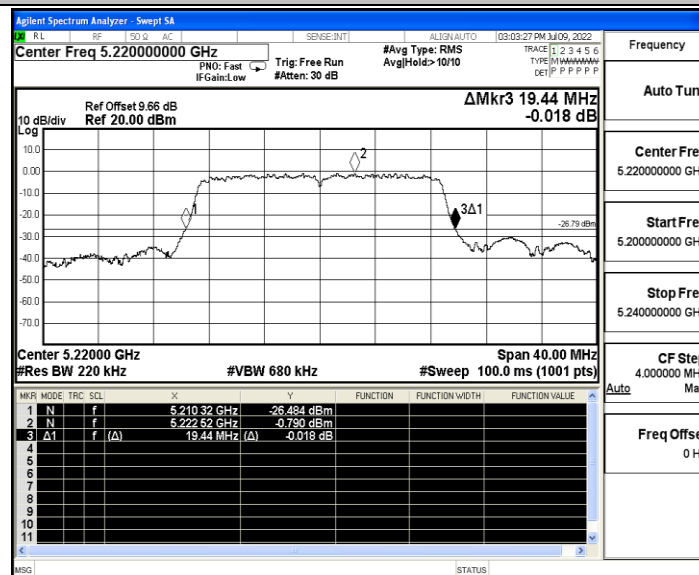


11AC20SISO_Ant1_5180



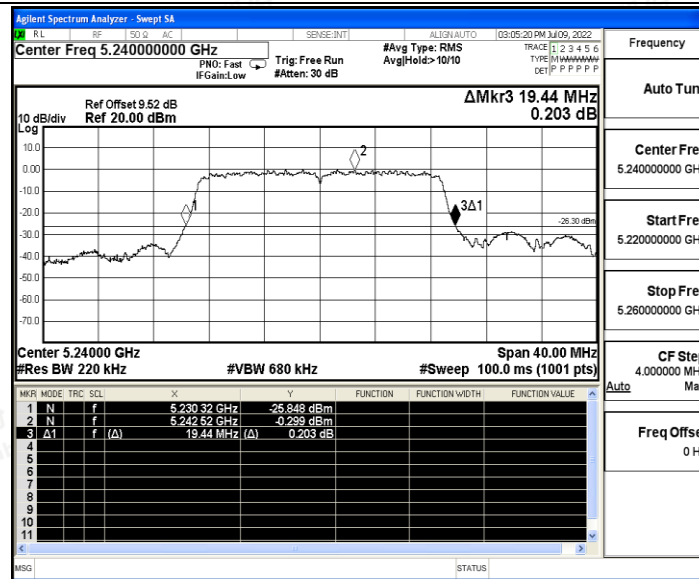


11AC20SiSO_Ant1_5220

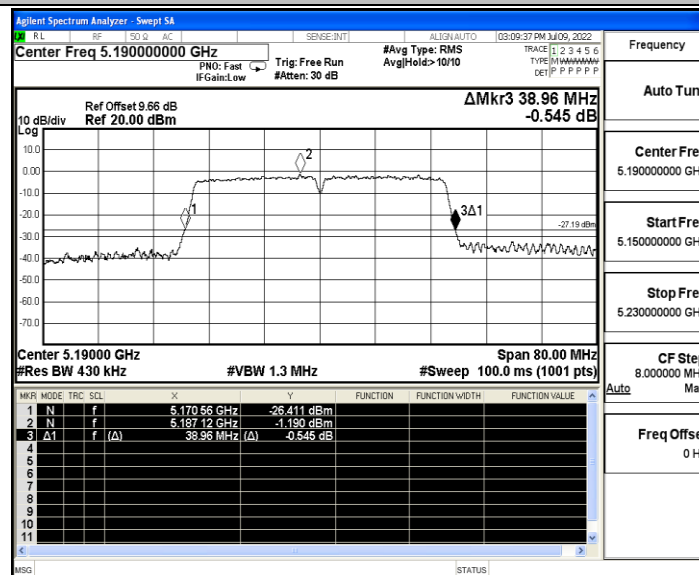


11AC20SiSO_Ant1_5240



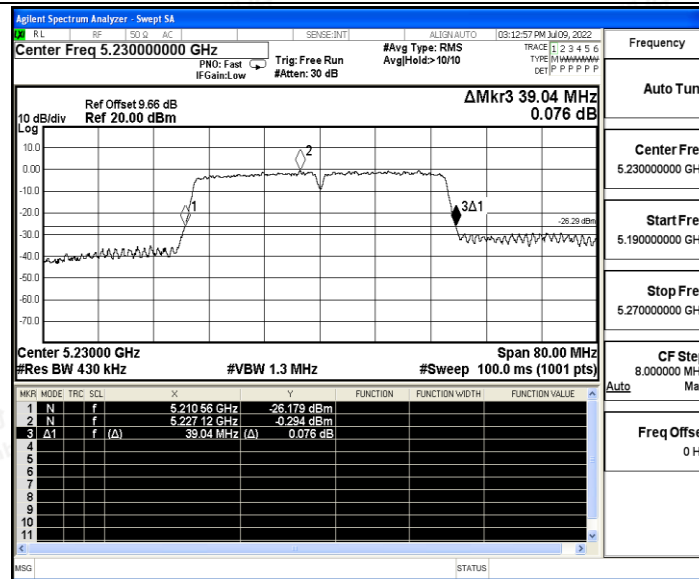


11AC40SISO_Ant1_5190

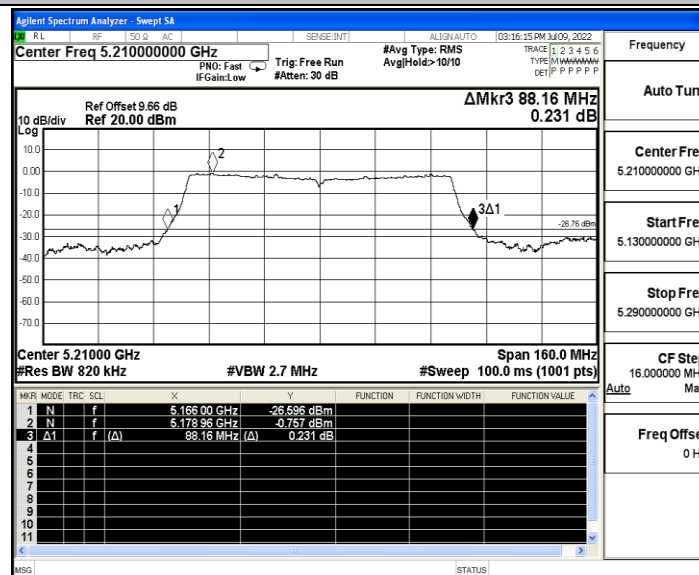


11AC40SISO_Ant1_5230



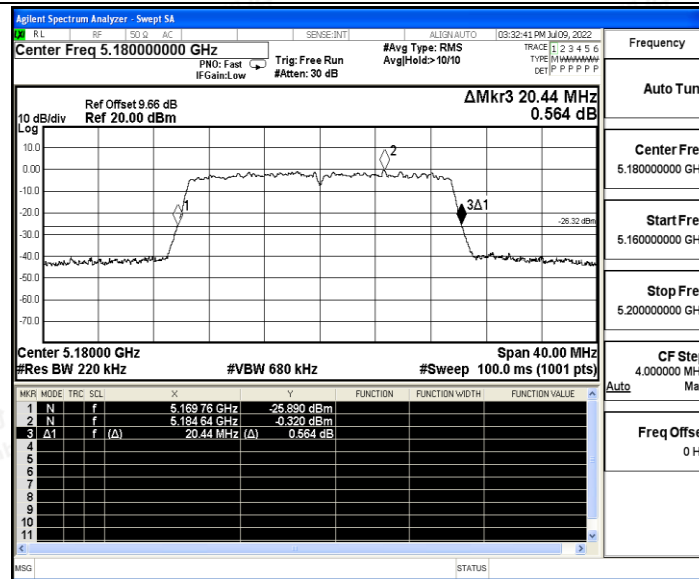


11AC80SISO_Ant1_5210

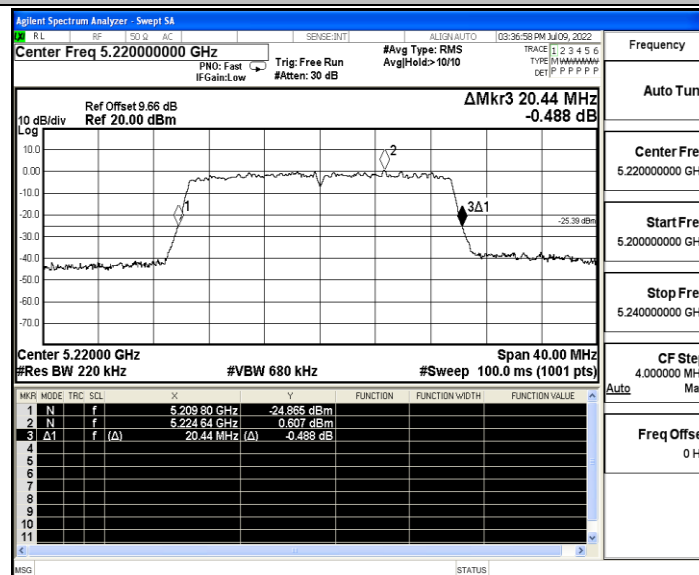


11AX20SISO_Ant1_5180



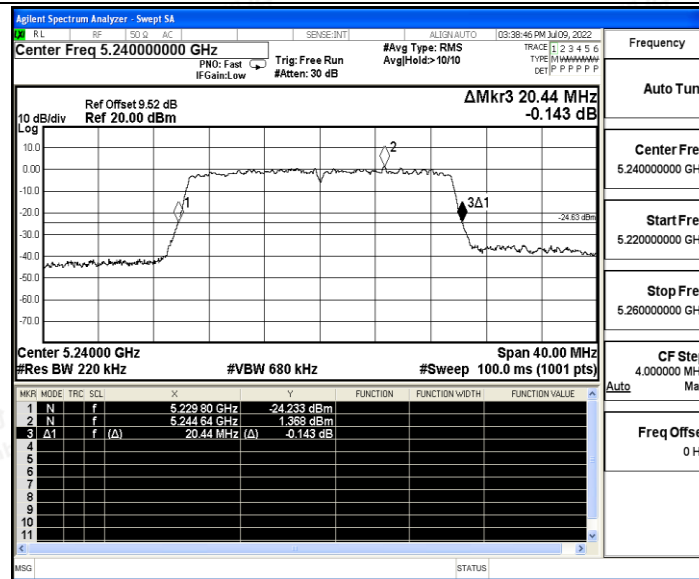


11AX20SISO_Ant1_5220

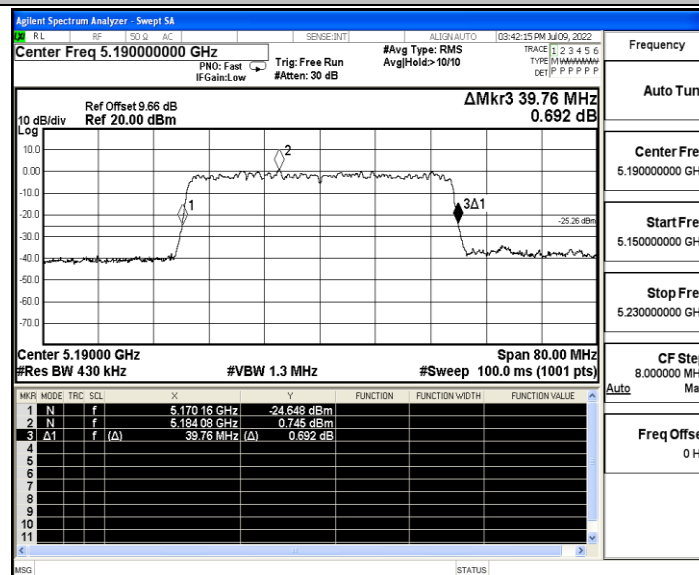


11AX20SISO_Ant1_5240



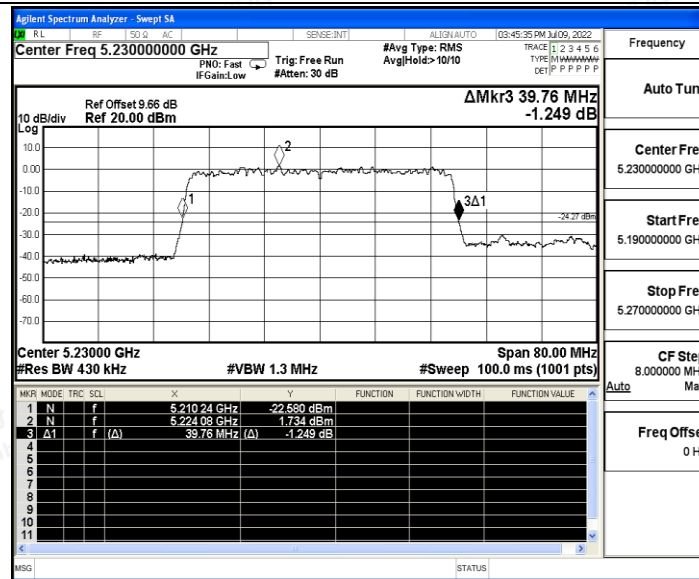


11AX40SISO_Ant1_5190

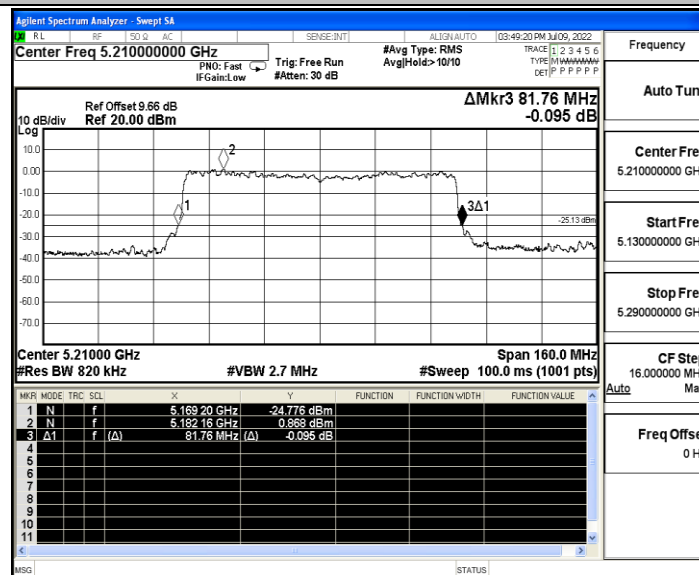


11AX40SISO_Ant1_5230





11AX80SISO_Ant1_5210





D.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant0	5180	7.57	≤23.98	PASS
		5220	8.74	≤23.98	PASS
		5240	9.23	≤23.98	PASS
11N20SISO	Ant0	5180	7.54	≤23.98	PASS
		5220	8.67	≤23.98	PASS
		5240	9.21	≤23.98	PASS
11N40SISO	Ant0	5190	8.30	≤23.98	PASS
		5230	9.24	≤23.98	PASS
11AC20SISO	Ant0	5180	7.27	≤23.98	PASS
		5220	8.38	≤23.98	PASS
		5240	8.91	≤23.98	PASS
11AC40SISO	Ant0	5190	8.13	≤23.98	PASS
		5230	9.10	≤23.98	PASS
11AC80SISO	Ant0	5210	8.80	≤23.98	PASS
11AX20SISO	Ant0	5180	8.60	≤23.98	PASS
		5220	9.36	≤23.98	PASS
		5240	9.45	≤23.98	PASS
11AX40SISO	Ant0	5190	7.62	≤23.98	PASS
		5230	8.84	≤23.98	PASS
11AX80SISO	Ant0	5210	8.55	≤23.98	PASS





TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	8.58	≤ 23.98	PASS
		5220	8.78	≤ 23.98	PASS
		5240	9.54	≤ 23.98	PASS
11N20SISO	Ant1	5180	8.06	≤ 23.98	PASS
		5220	8.92	≤ 23.98	PASS
		5240	9.58	≤ 23.98	PASS
11N40SISO	Ant1	5190	8.57	≤ 23.98	PASS
		5230	9.74	≤ 23.98	PASS
11AC20SISO	Ant1	5180	7.96	≤ 23.98	PASS
		5220	9.10	≤ 23.98	PASS
		5240	9.77	≤ 23.98	PASS
11AC40SISO	Ant1	5190	8.69	≤ 23.98	PASS
		5230	9.80	≤ 23.98	PASS
11AC80SISO	Ant1	5210	9.40	≤ 23.98	PASS
11AX20SISO	Ant1	5180	8.09	≤ 23.98	PASS
		5220	9.17	≤ 23.98	PASS
		5240	9.89	≤ 23.98	PASS
11AX40SISO	Ant1	5190	8.86	≤ 23.98	PASS
		5230	9.99	≤ 23.98	PASS
11AX80SISO	Ant1	5210	9.35	≤ 23.98	PASS



**MIMO**

TestMode	Channel	Result[dBm]			Limit[dBm]	Verdict
		ANT0	ANT1	MIMO		
11N20SISO	5180	7.54	8.06	10.82	≤23.98	PASS
	5220	8.67	8.92	11.81	≤23.98	PASS
	5240	9.21	9.58	12.41	≤23.98	PASS
11N40SISO	5190	8.30	8.57	11.45	≤23.98	PASS
	5230	9.24	9.74	12.51	≤23.98	PASS
11AC20SISO	5180	7.27	7.96	10.64	≤23.98	PASS
	5220	8.38	9.10	11.77	≤23.98	PASS
	5240	8.91	9.77	12.37	≤23.98	PASS
11AC40SISO	5190	8.13	8.69	11.43	≤23.98	PASS
	5230	9.10	9.80	12.47	≤23.98	PASS
11AC80SISO	5210	8.80	9.40	12.12	≤23.98	PASS
11AX20SISO	5180	8.60	8.09	11.36	≤23.98	PASS
	5220	9.36	9.17	12.28	≤23.98	PASS
	5240	9.45	9.89	12.69	≤23.98	PASS
11AX40SISO	5190	7.62	8.86	11.29	≤23.98	PASS
	5230	8.84	9.99	12.46	≤23.98	PASS
11AX80SISO	5210	8.55	9.35	11.98	≤23.98	PASS

Note: The Duty Cycle Factor is compensated in the graph.



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D.3 Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant0	5180	-4.02	≤11.00	PASS
		5220	-2.87	≤11.00	PASS
		5240	-2.48	≤11.00	PASS
11N20SISO	Ant0	5180	-4.30	≤11.00	PASS
		5220	-3.18	≤11.00	PASS
		5240	-2.76	≤11.00	PASS
11N40SISO	Ant0	5190	-6.60	≤11.00	PASS
		5230	-5.60	≤11.00	PASS
11AC20SISO	Ant0	5180	-4.43	≤11.00	PASS
		5220	-3.30	≤11.00	PASS
		5240	-2.78	≤11.00	PASS
11AC40SISO	Ant0	5190	-6.61	≤11.00	PASS
		5230	-5.55	≤11.00	PASS
11AC80SISO	Ant0	5210	-8.85	≤11.00	PASS
11AX20SISO	Ant0	5180	-4.67	≤11.00	PASS
		5220	-1.89	≤11.00	PASS
		5240	-1.78	≤11.00	PASS
11AX40SISO	Ant0	5190	-6.94	≤11.00	PASS
		5230	-6.02	≤11.00	PASS
11AX80SISO	Ant0	5210	-8.98	≤11.00	PASS





TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-3.18	≤11.00	PASS
		5220	-2.75	≤11.00	PASS
		5240	-1.95	≤11.00	PASS
11N20SISO	Ant1	5180	-3.81	≤11.00	PASS
		5220	-2.87	≤11.00	PASS
		5240	-2.19	≤11.00	PASS
11N40SISO	Ant1	5190	-6.37	≤11.00	PASS
		5230	-4.96	≤11.00	PASS
11AC20SISO	Ant1	5180	-3.87	≤11.00	PASS
		5220	-2.63	≤11.00	PASS
		5240	-2.01	≤11.00	PASS
11AC40SISO	Ant1	5190	-6.18	≤11.00	PASS
		5230	-4.89	≤11.00	PASS
11AC80SISO	Ant1	5210	-8.14	≤11.00	PASS
11AX20SISO	Ant1	5180	-4.03	≤11.00	PASS
		5220	-2.89	≤11.00	PASS
		5240	-2.11	≤11.00	PASS
11AX40SISO	Ant1	5190	-6.26	≤11.00	PASS
		5230	-4.92	≤11.00	PASS
11AX80SISO	Ant1	5210	-8.23	≤11.00	PASS



**MIMO**

TestMode	Channel	Result [dBm/MHz]			Limit[dBm/MHz]	Verdict
		ANT0	ANT1	MIMO		
11N20SISO	5180	-4.30	-3.81	-1.04	≤11.00	PASS
	5220	-3.18	-2.87	-0.01	≤11.00	PASS
	5240	-2.76	-2.19	0.54	≤11.00	PASS
11N40SISO	5190	-6.60	-6.37	-3.47	≤11.00	PASS
	5230	-5.60	-4.96	-2.26	≤11.00	PASS
11AC20SISO	5180	-4.43	-3.87	-1.13	≤11.00	PASS
	5220	-3.30	-2.63	0.06	≤11.00	PASS
	5240	-2.78	-2.01	0.63	≤11.00	PASS
11AC40SISO	5190	-6.61	-6.18	-3.38	≤11.00	PASS
	5230	-5.55	-4.89	-2.20	≤11.00	PASS
11AC80SISO	5210	-8.85	-8.14	-5.47	≤11.00	PASS
11AX20SISO	5180	-4.67	-4.03	-1.33	≤11.00	PASS
	5220	-1.89	-2.89	0.65	≤11.00	PASS
	5240	-1.78	-2.11	1.07	≤11.00	PASS
11AX40SISO	5190	-6.94	-6.26	-3.58	≤11.00	PASS
	5230	-6.02	-4.92	-2.42	≤11.00	PASS
11AX80SISO	5210	-8.98	-8.23	-5.58	≤11.00	PASS

Note: 1.The Duty Cycle Factor and RBW Factor is compensated in the graph.

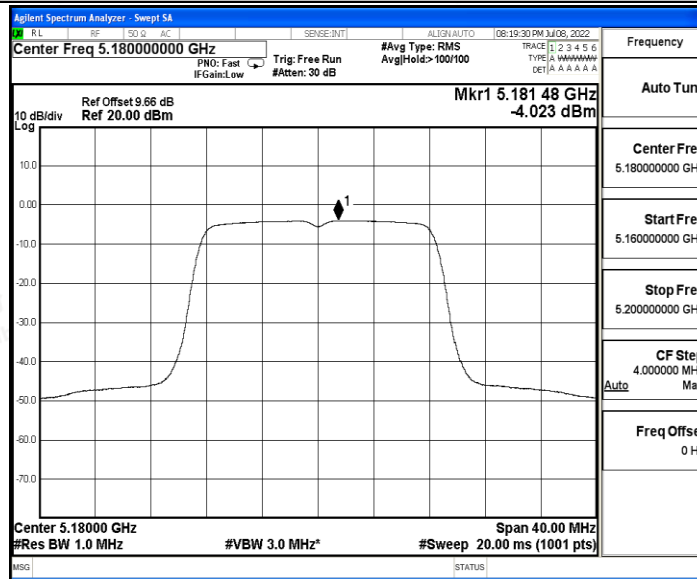


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Scan code to check authenticity

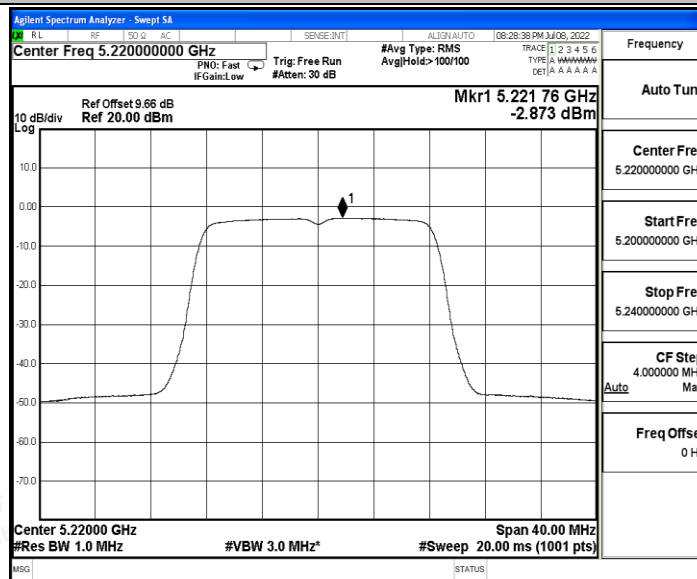


Test Graphs

11A_Ant0_5180

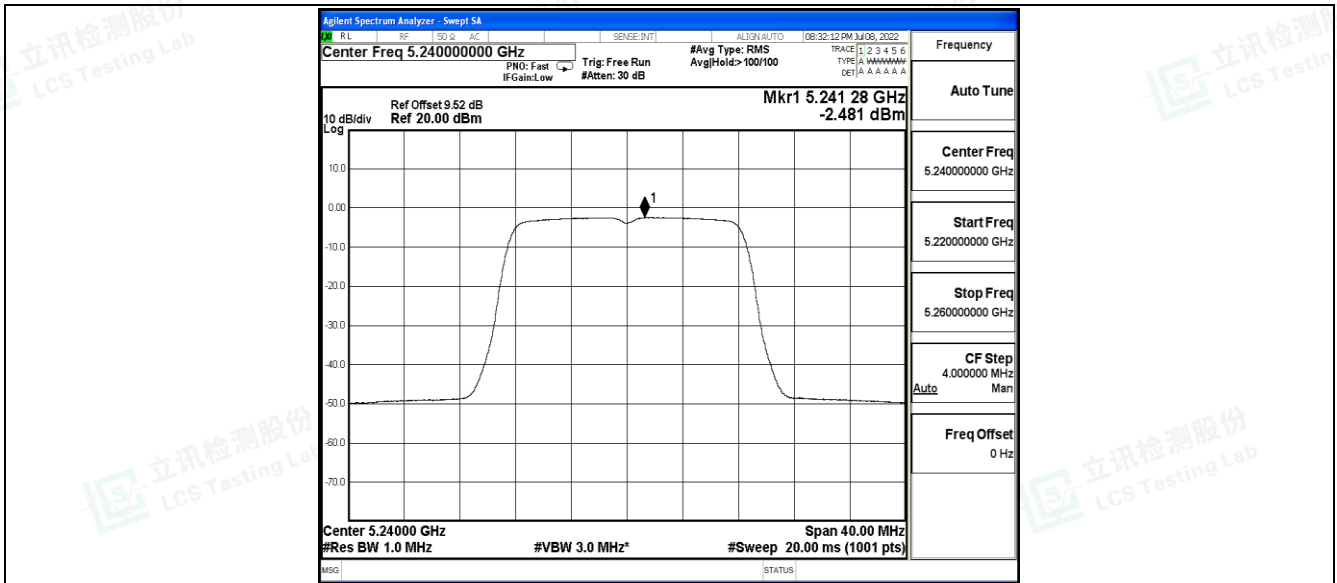


11A_Ant0_5220

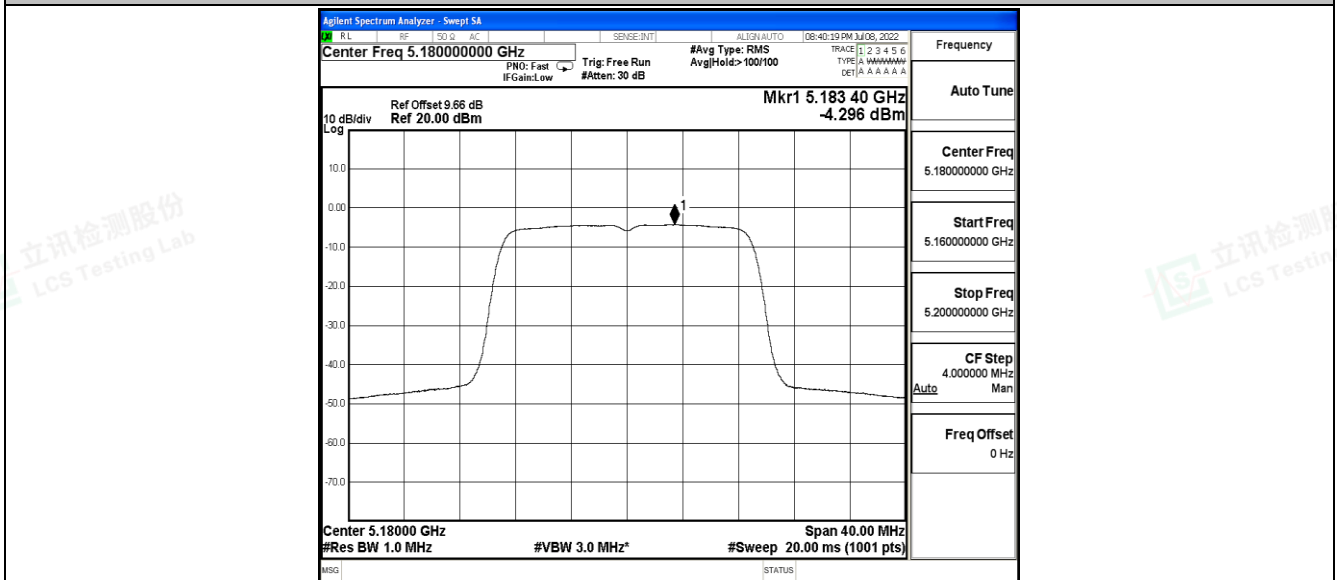


11A_Ant0_5240



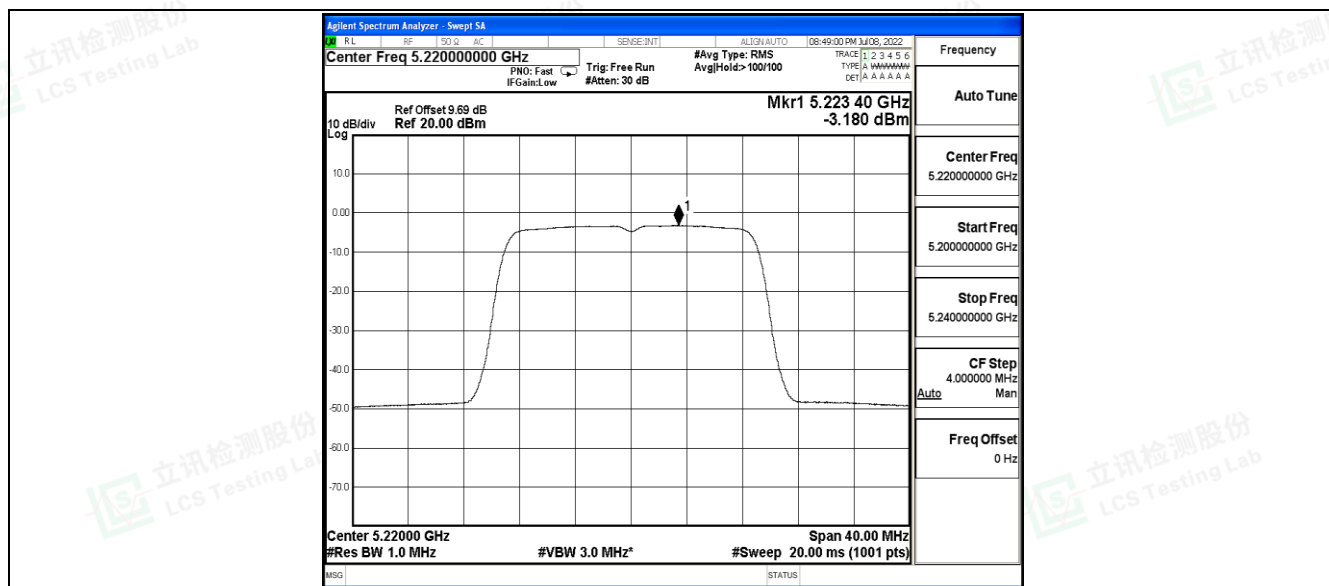


11N20SISO_Ant0_5180

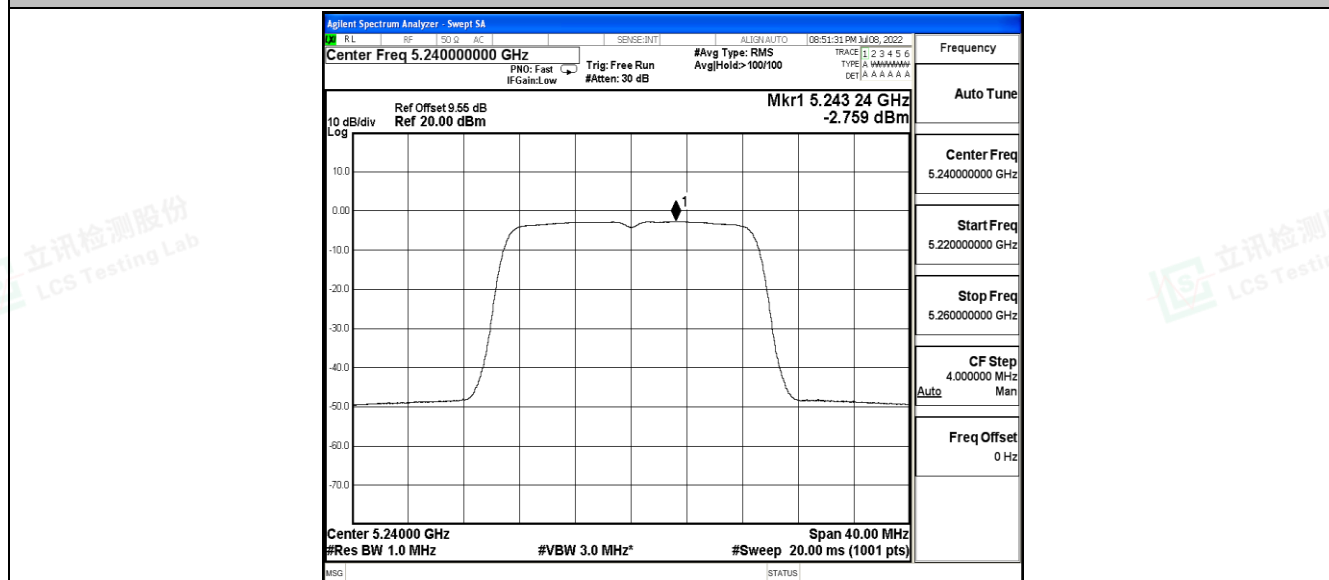


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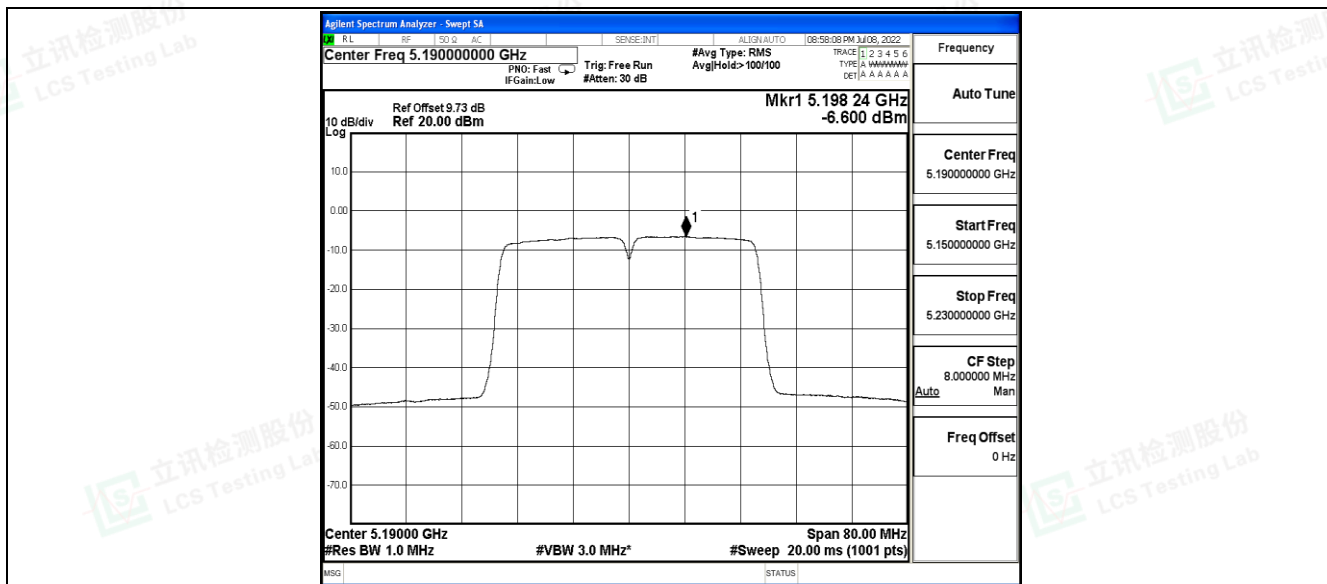


11N20SISO Ant0 5240

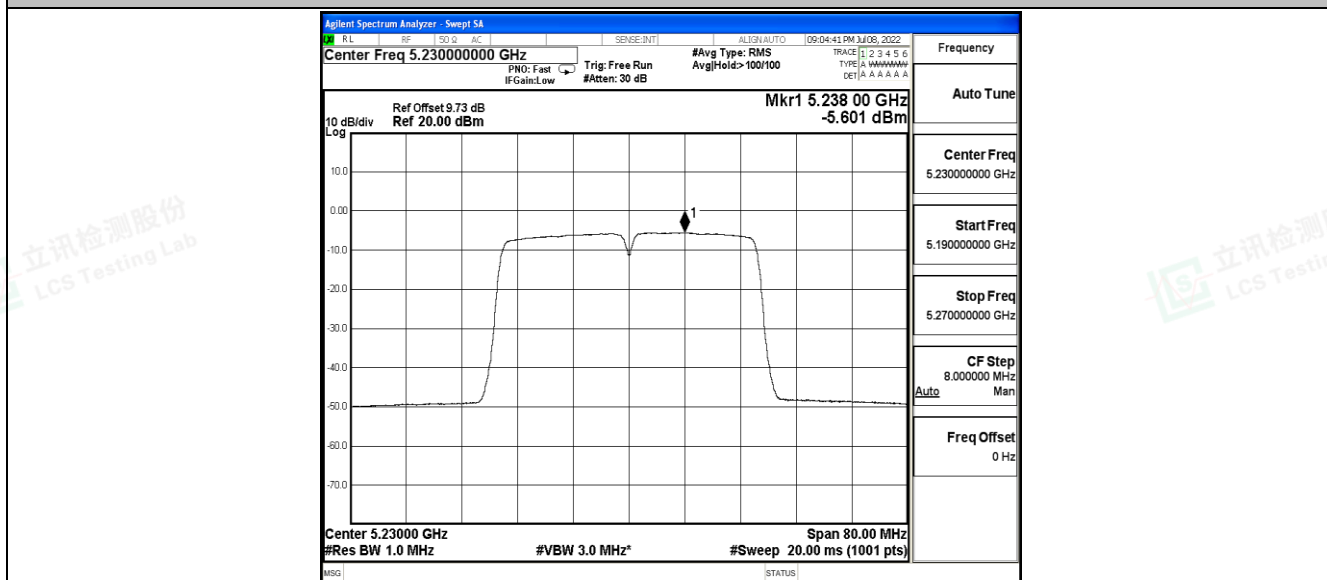


11N40SISO Ant0 5190



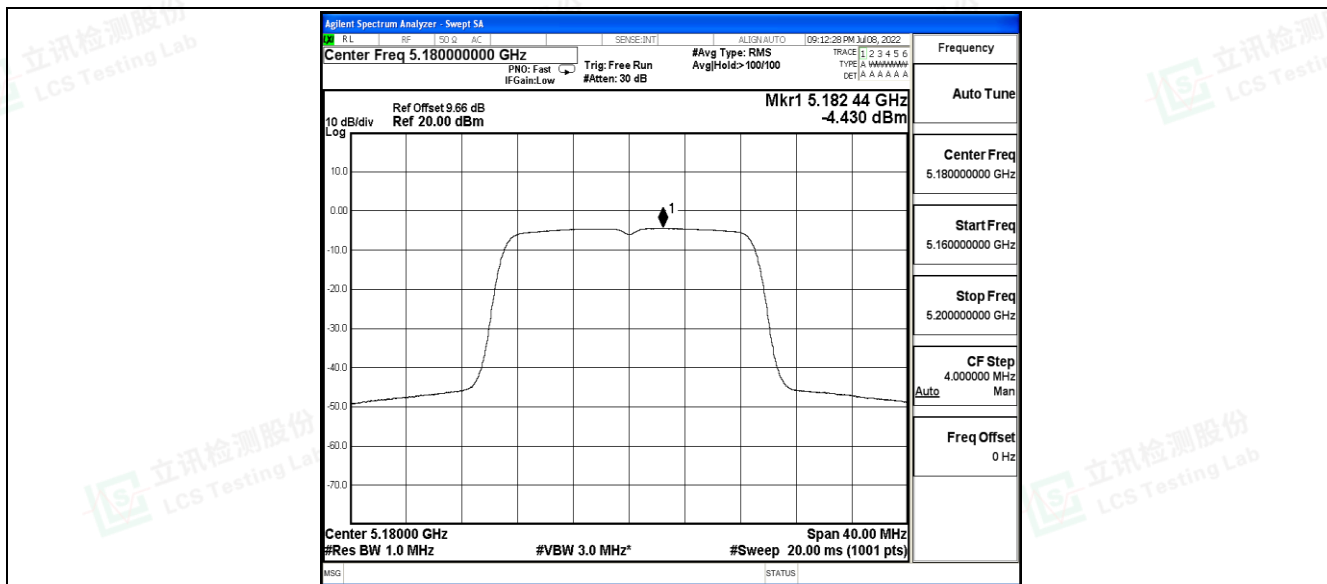


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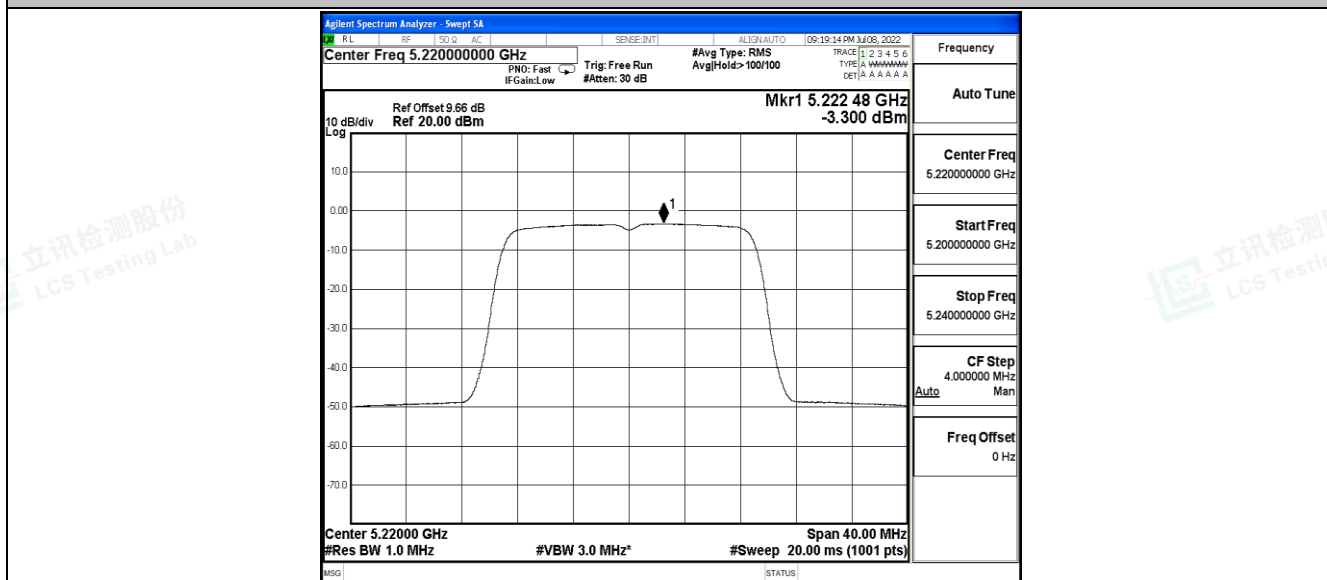


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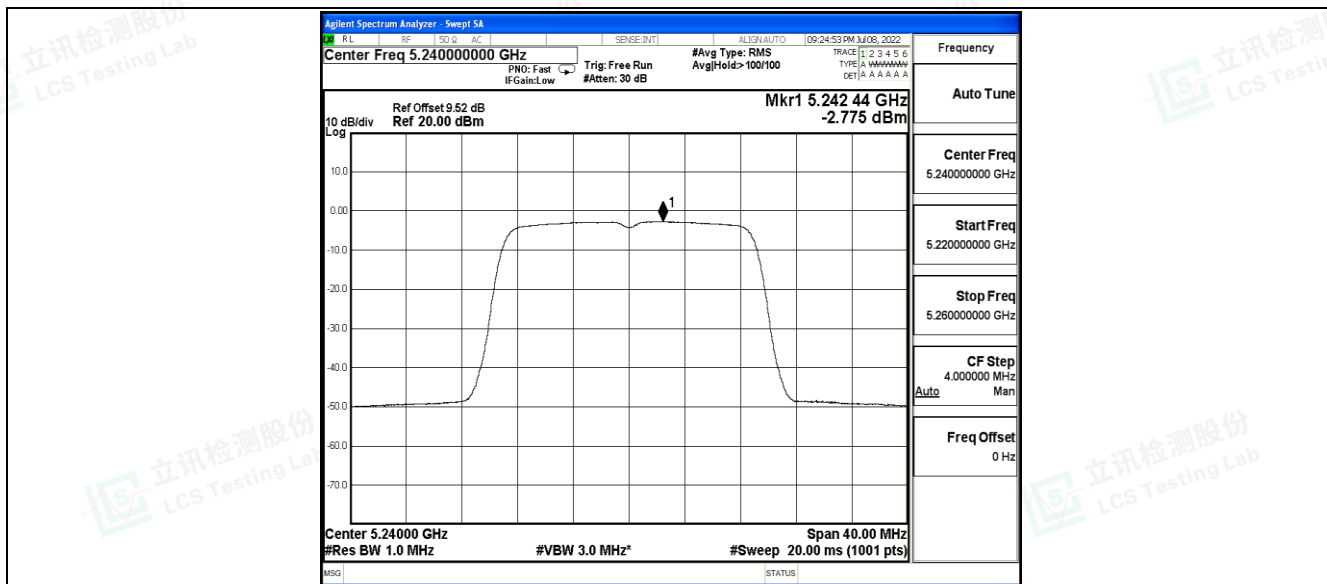


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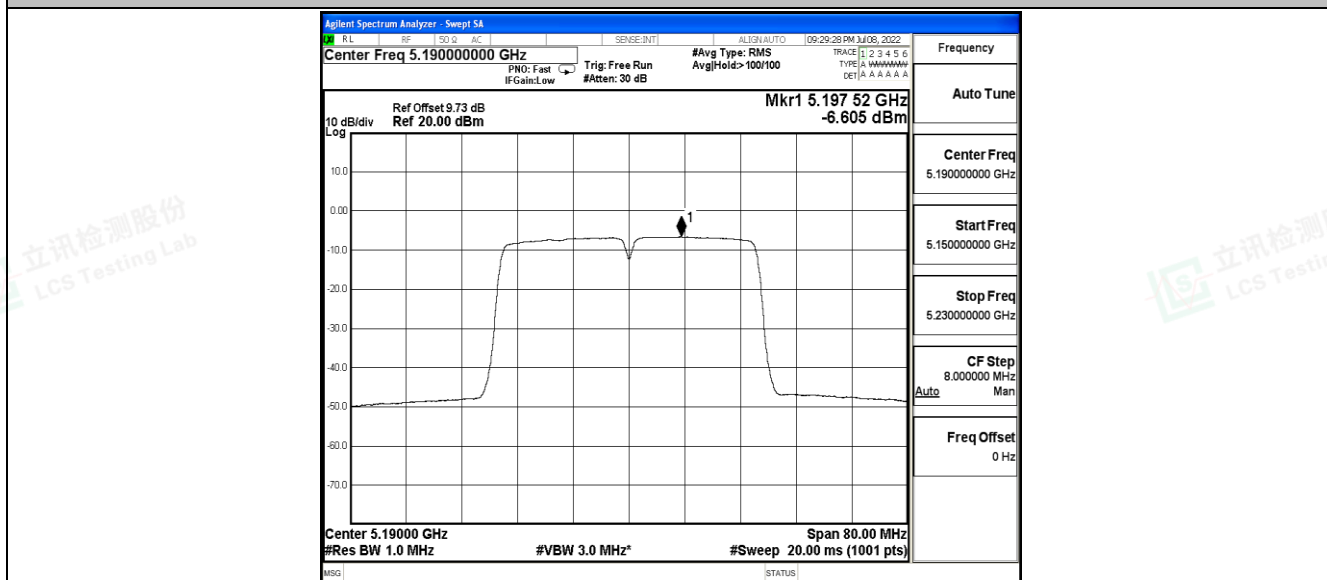


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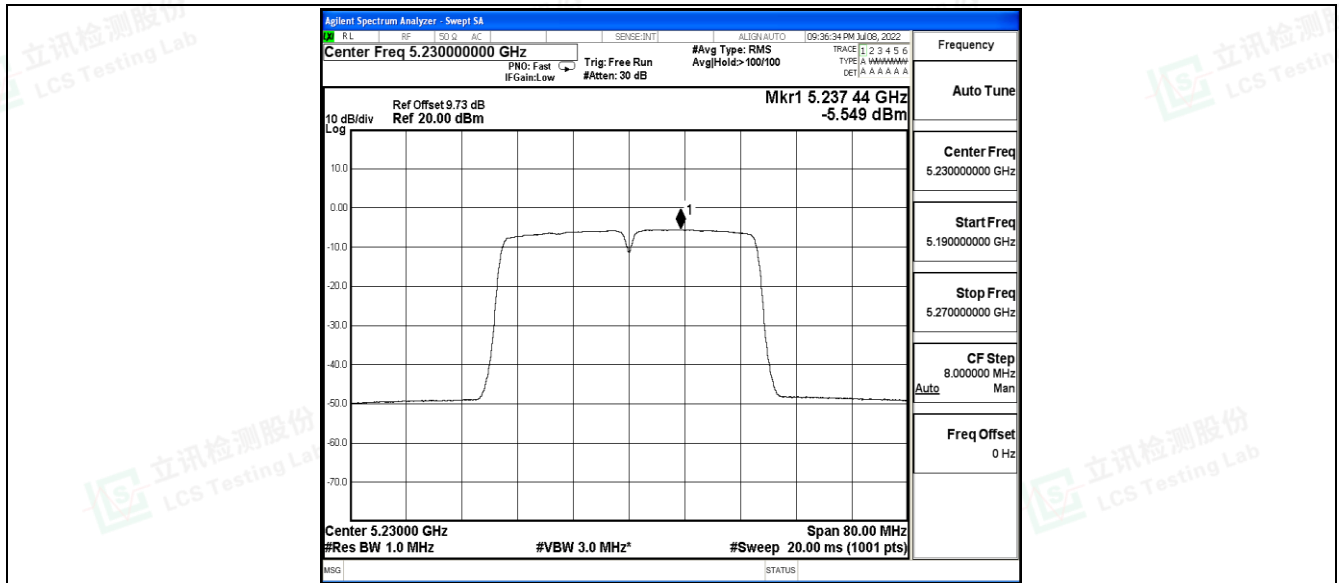


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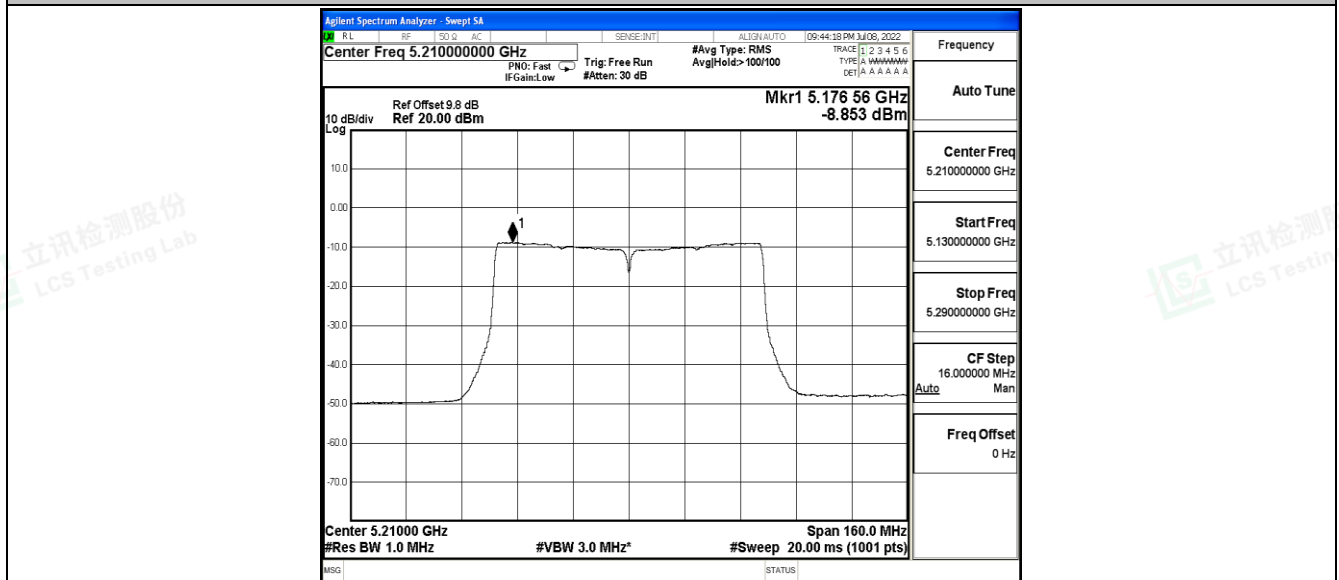


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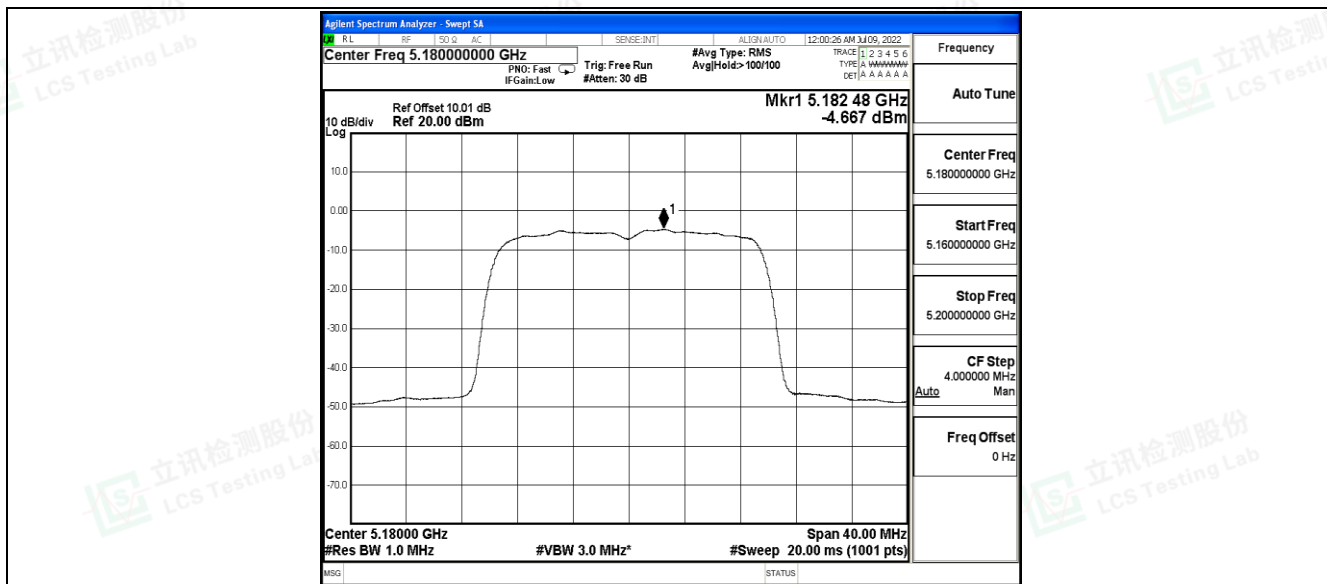


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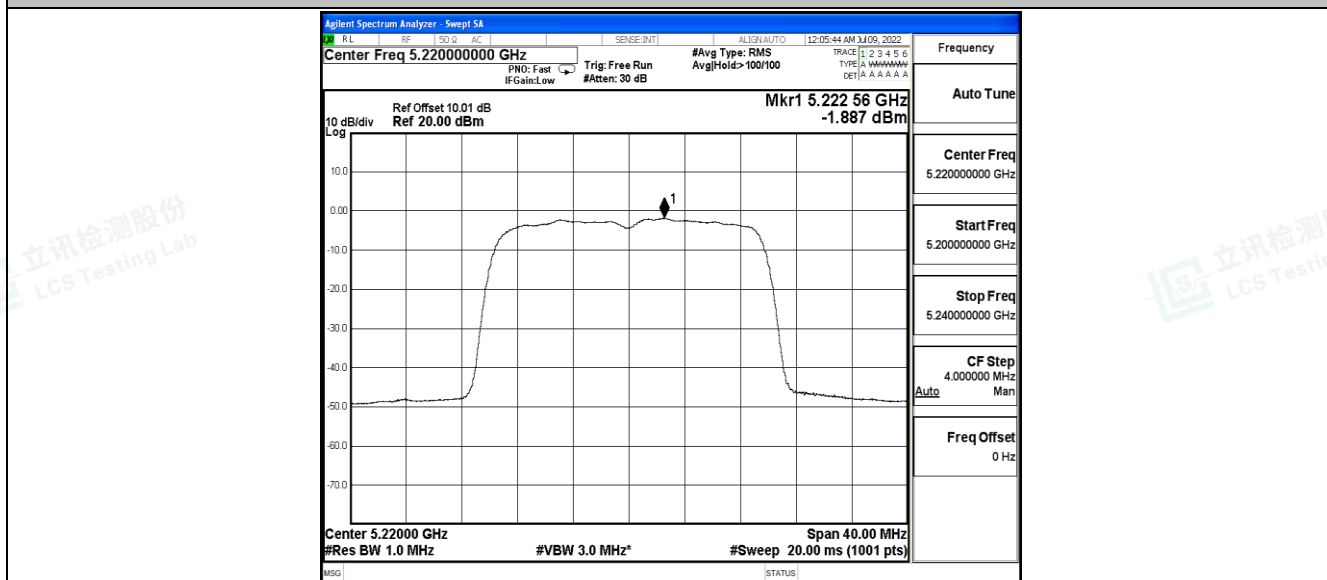


11AX20SISO_Ant0_5180



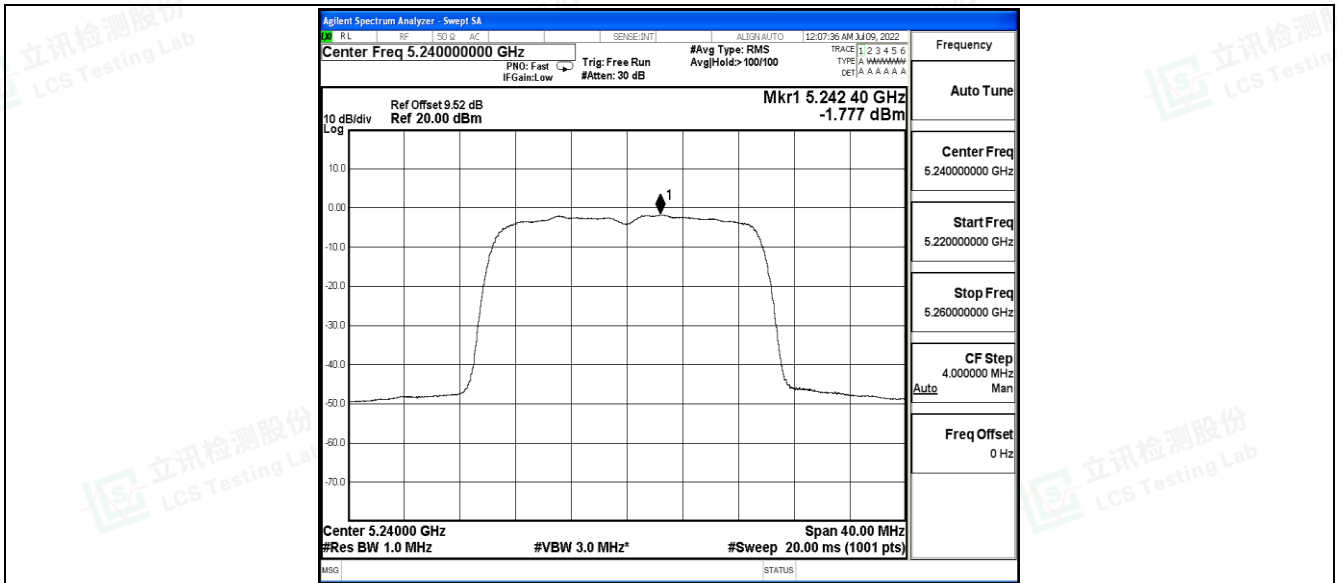


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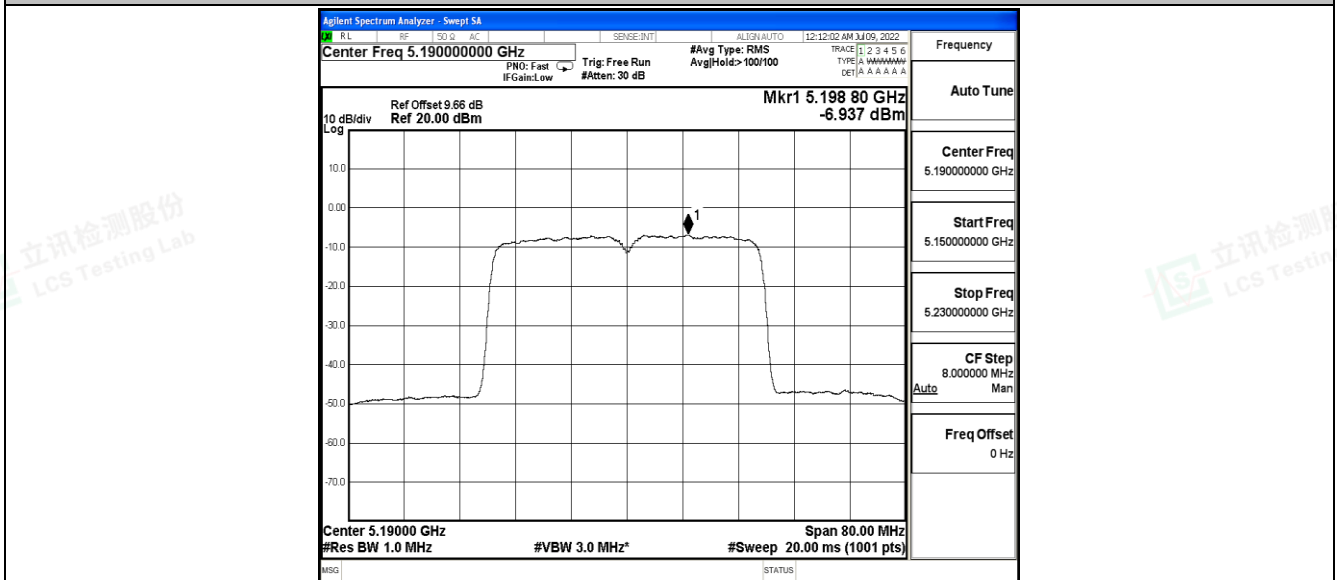


11AX20SISO_Ant0_5240



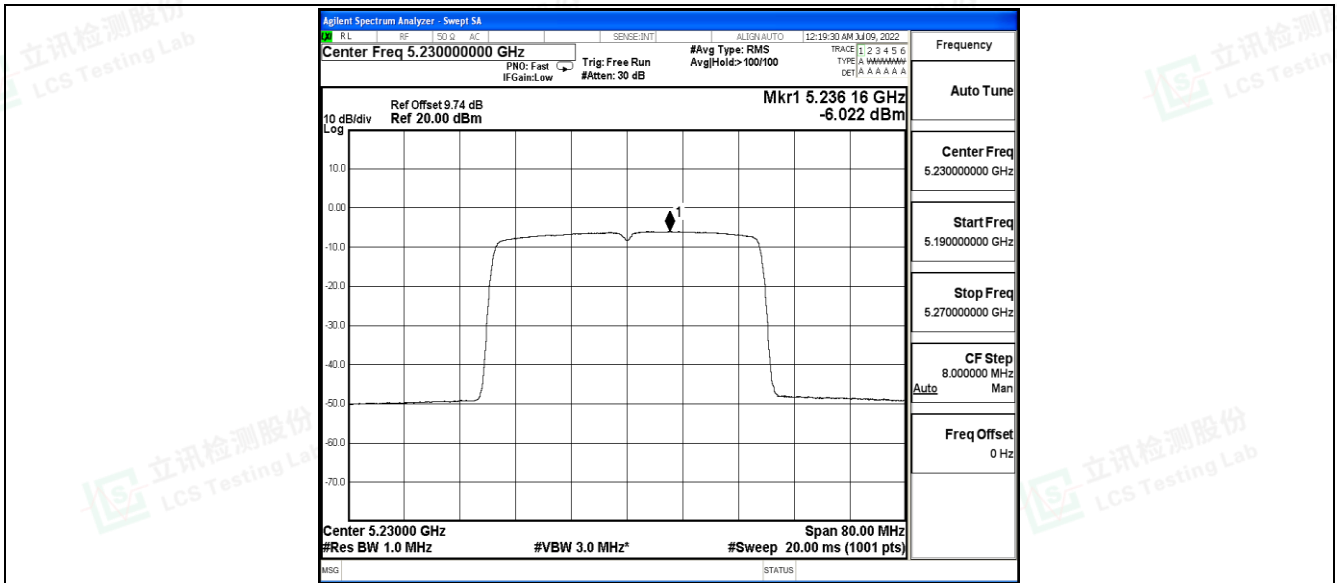


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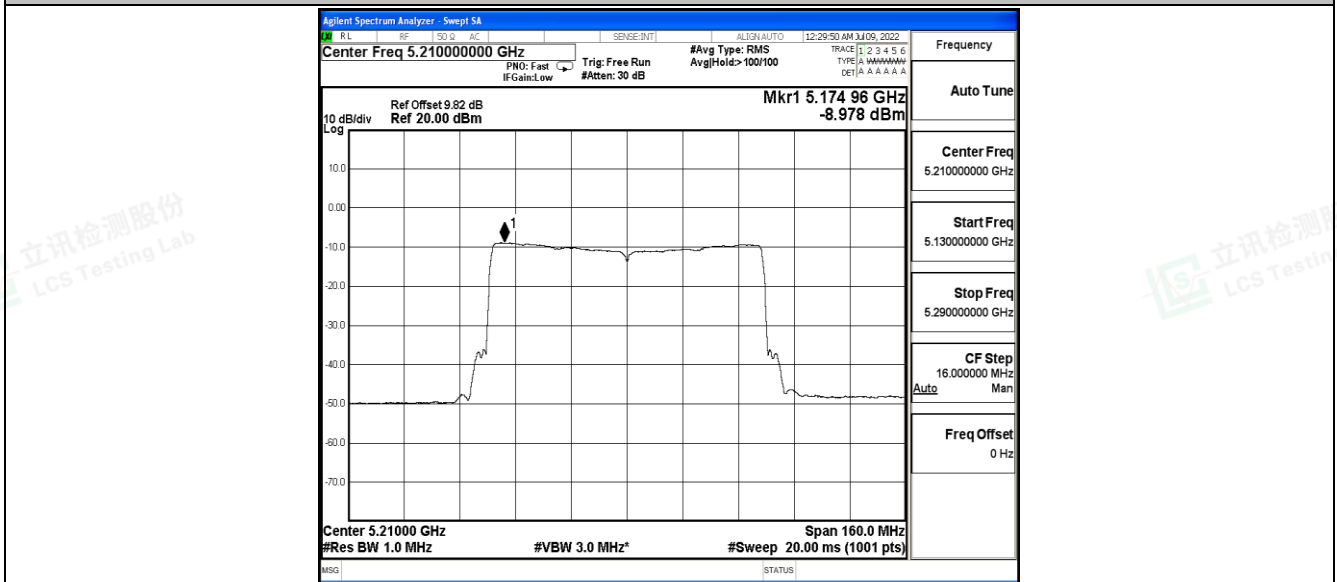


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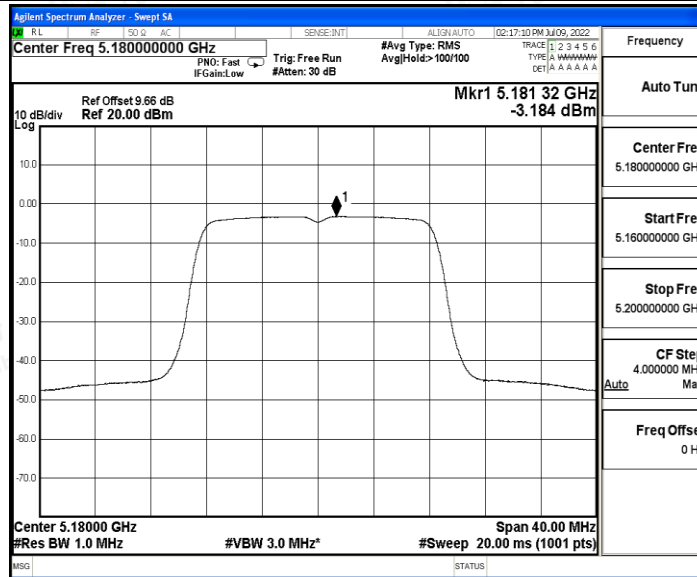


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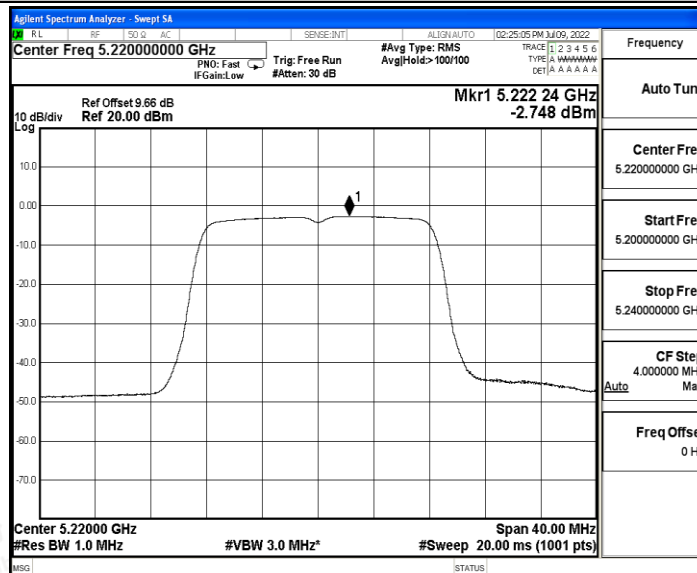




11A_Ant1_5180

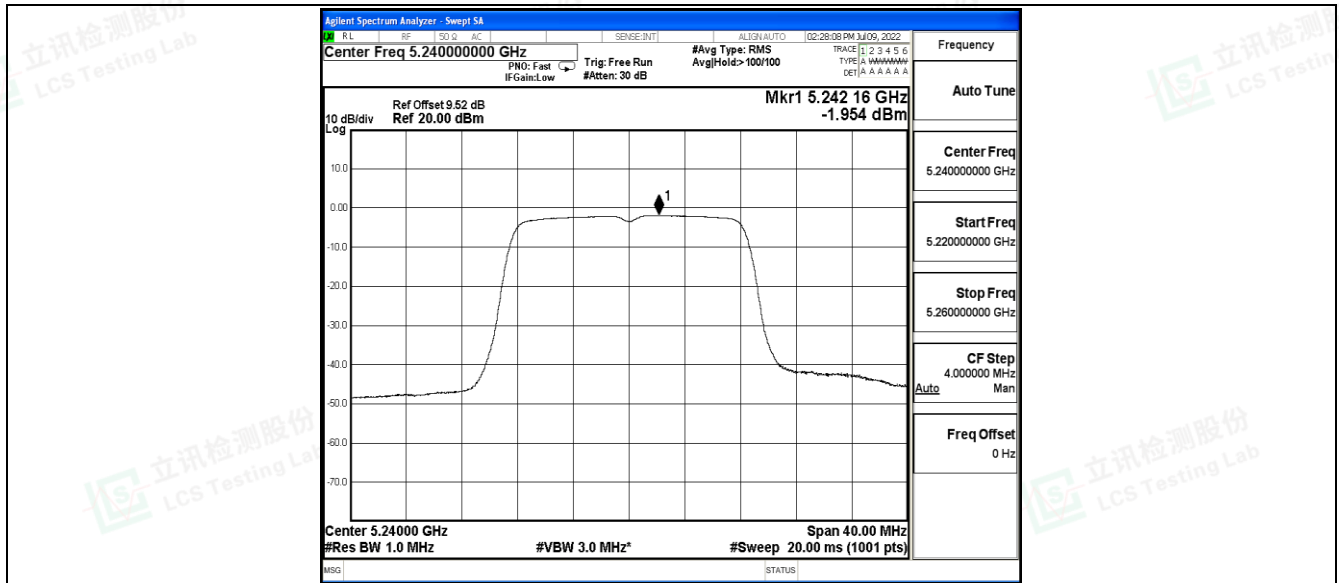


11A_Ant1_5220

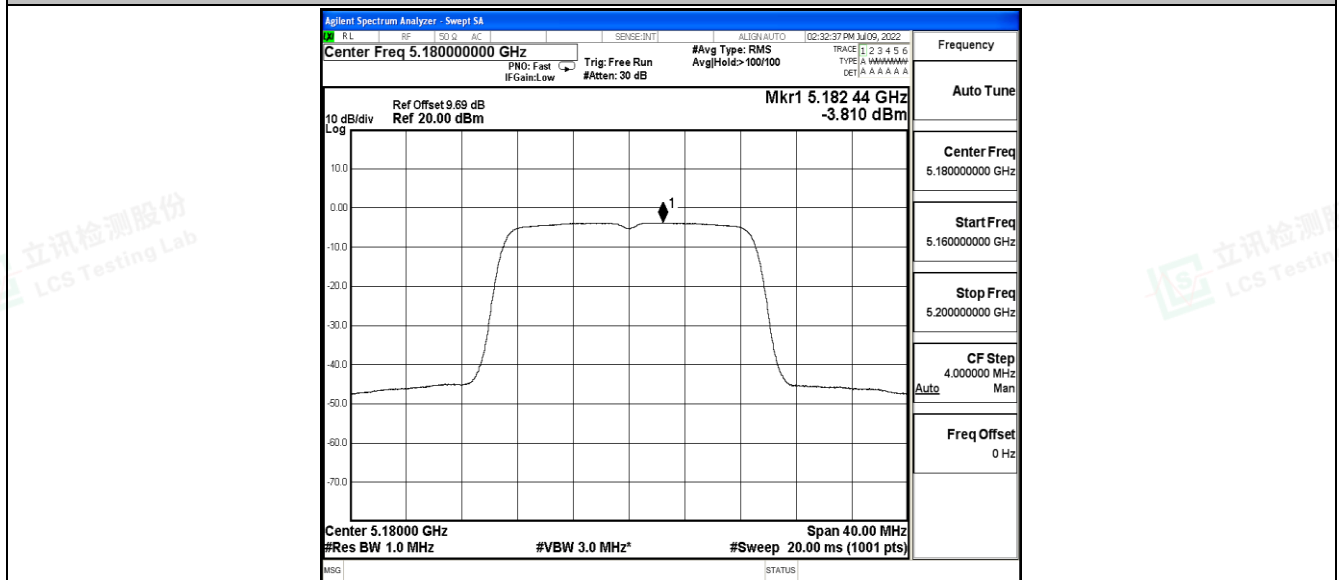


11A_Ant1_5240





11N20SISO_Ant1_5180



11N20SISO_Ant1_5220

