RF Test Data for RLAN(5.2G) (Conducted Measurement)

Product Name: MAIrobotics Gatekeeper

Trade Mark: MAIrobotics

Test Model: Gatekeeper

FCC ID: 2AZYE-GATEKEEPER

Environmental Conditions

Temperature:	25.5°C
Relative Humidity:	55.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

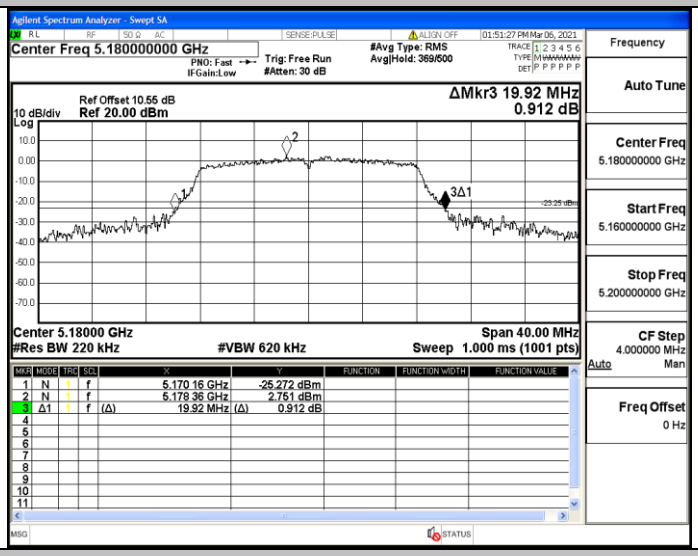
Appendix A: Emission Bandwidth

Test Result

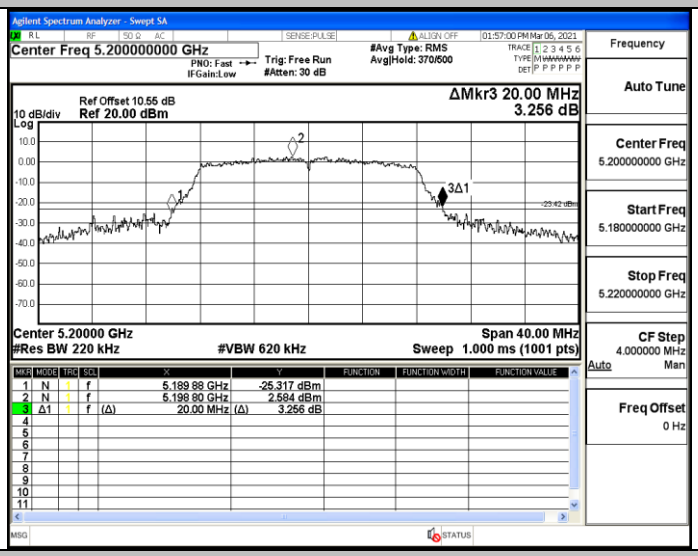
TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.920	5170.160	5190.080	---	PASS
		5200	20.000	5189.880	5209.880	---	PASS
		5240	19.720	5230.200	5249.920	---	PASS
11N20SISO	Ant1	5180	20.240	5169.960	5190.200	---	PASS
		5200	20.200	5189.840	5210.040	---	PASS
		5240	20.360	5229.800	5250.160	---	PASS
11N40SISO	Ant1	5190	40.000	5170.160	5210.160	---	PASS
		5230	40.400	5209.920	5250.320	---	PASS
11AC20SISO	Ant1	5180	20.120	5169.960	5190.080	---	PASS
		5200	20.200	5189.920	5210.120	---	PASS
		5240	20.120	5229.920	5250.040	---	PASS
11AC40SISO	Ant1	5190	40.160	5170.160	5210.320	---	PASS
		5230	40.640	5209.920	5250.560	---	PASS
11AC80SISO	Ant1	5210	80.640	5169.840	5250.480	---	PASS

Test Graphs

11A_Ant1_5180



11A_Ant1_5200



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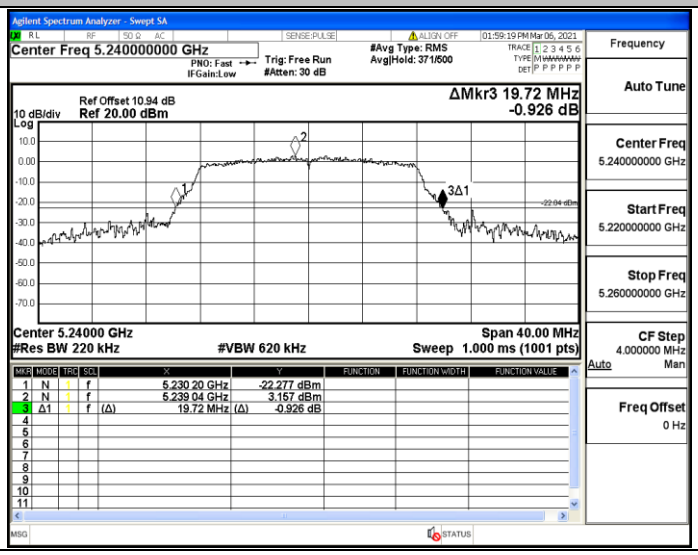
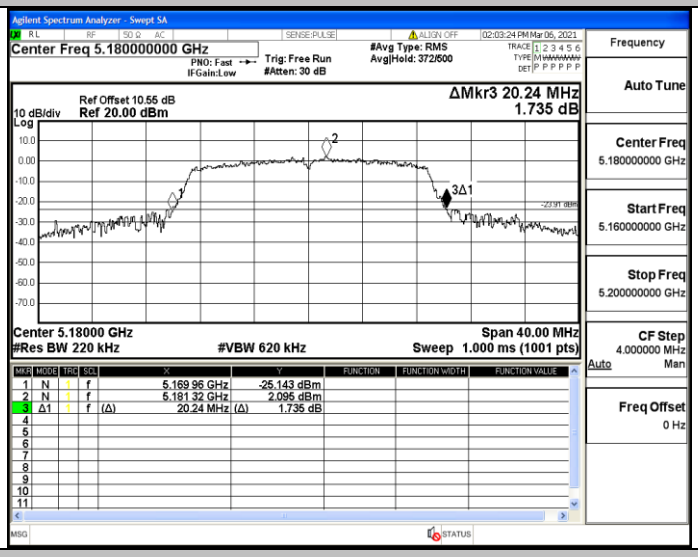


11N20SISO_Ant1_5180



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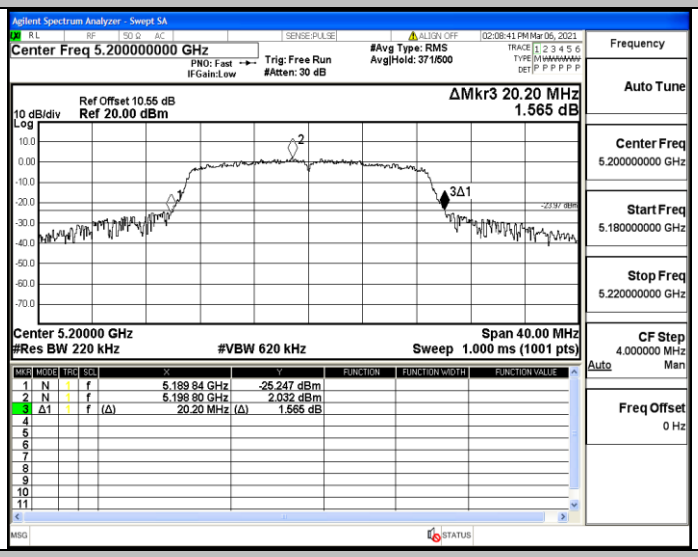

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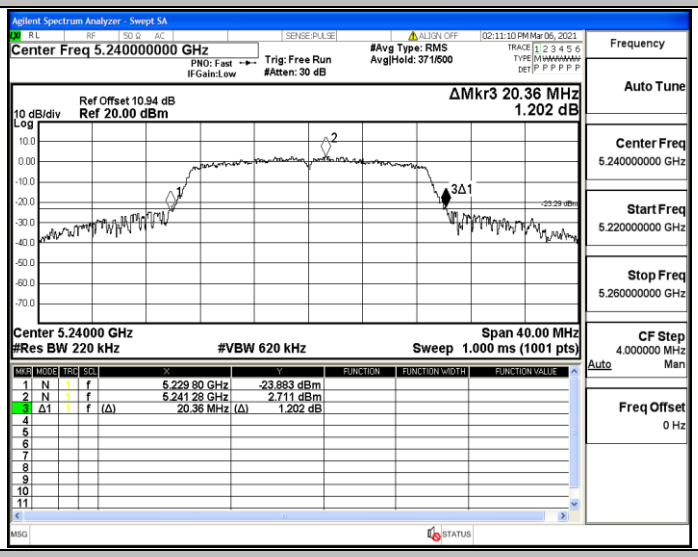

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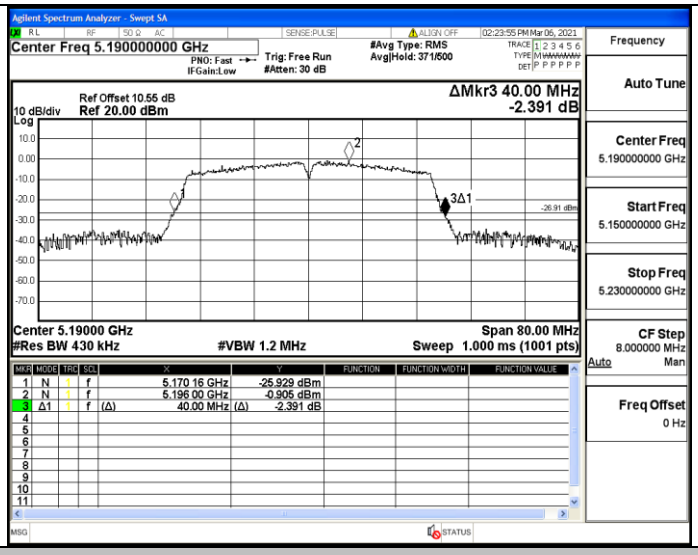
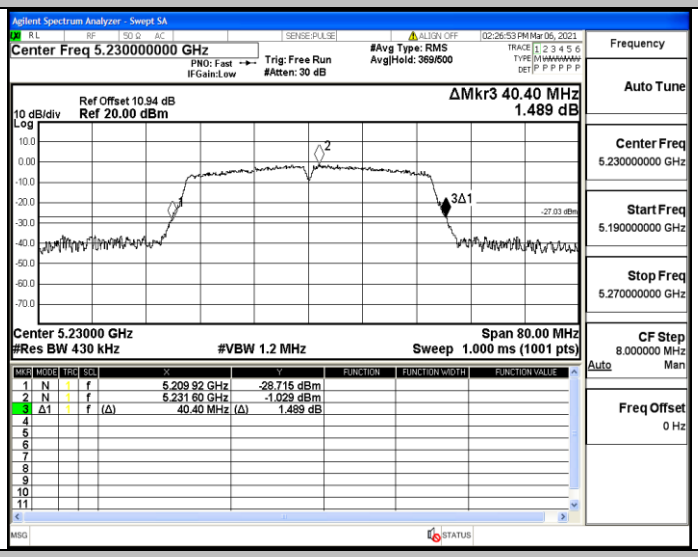


11N40SISO_Ant1_5230



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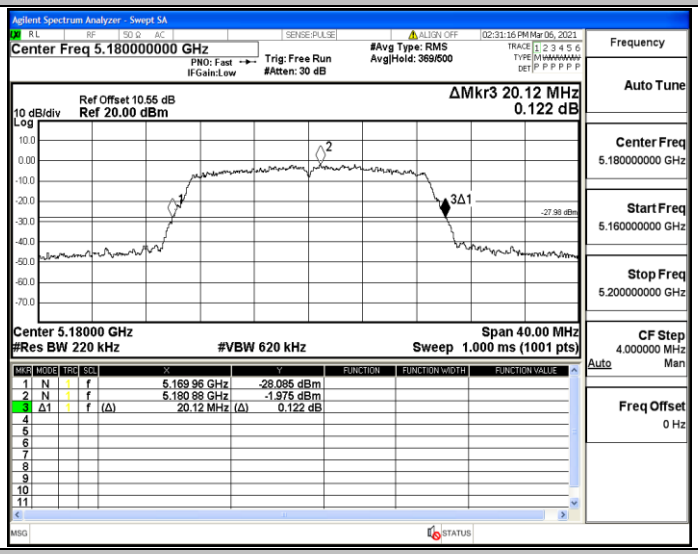

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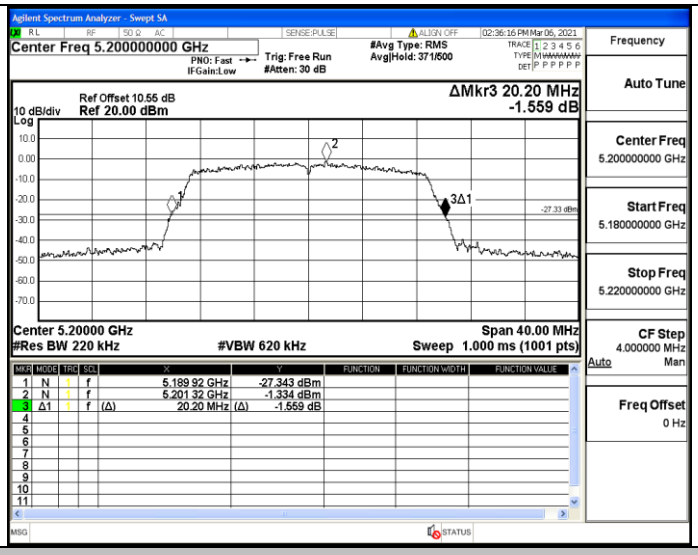

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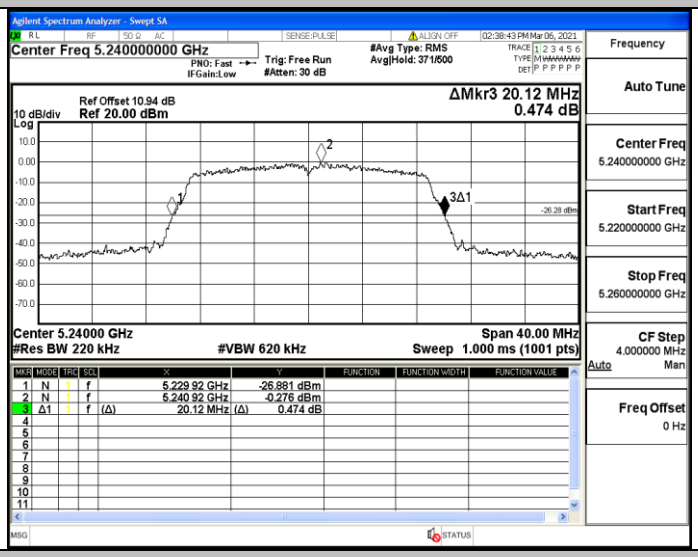

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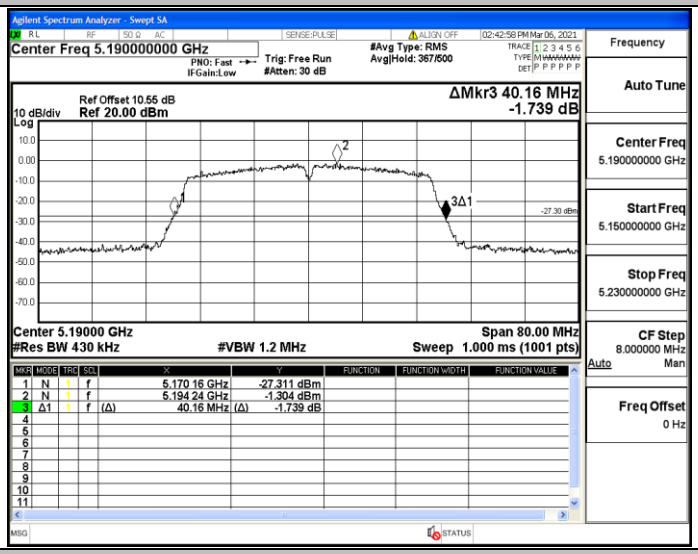

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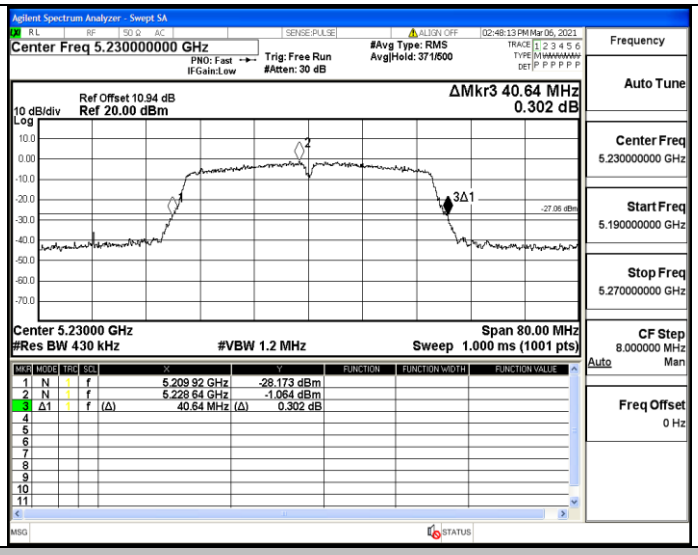
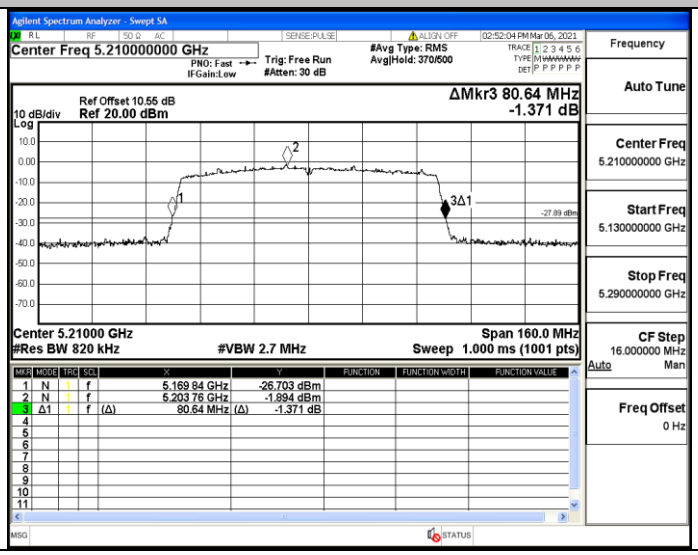


11AC80SISO_Ant1_5210



Appendix B: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	11.43	<=23.98	PASS
		5200	11.77	<=23.98	PASS
		5240	12.05	<=23.98	PASS
11N20SISO	Ant1	5180	11.19	<=23.98	PASS
		5200	11.10	<=23.98	PASS
		5240	11.87	<=23.98	PASS
11N40SISO	Ant1	5190	8.16	<=23.98	PASS
		5230	8.26	<=23.98	PASS
11AC20SISO	Ant1	5180	7.28	<=23.98	PASS
		5200	7.81	<=23.98	PASS
		5240	8.64	<=23.98	PASS
11AC40SISO	Ant1	5190	7.91	<=23.98	PASS
		5230	8.26	<=23.98	PASS
11AC80SISO	Ant1	5210	7.73	<=23.98	PASS

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

Appendix C: Maximum power spectral density

Test Result

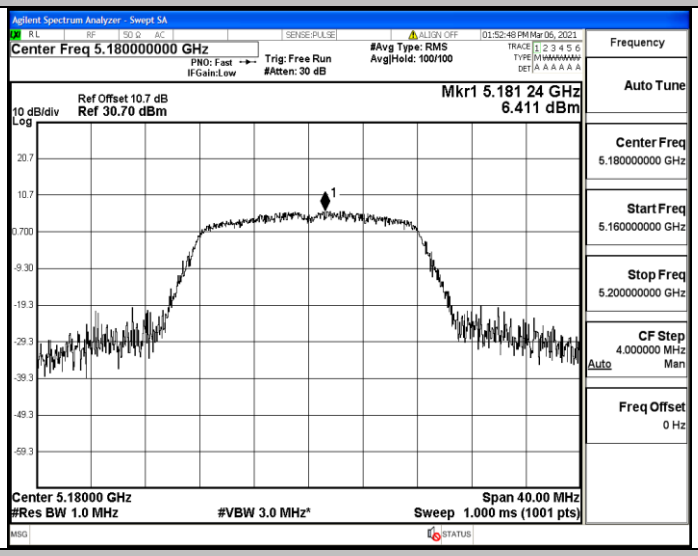
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	6.41	<=11	PASS
		5200	6.65	<=11	PASS
		5240	7.86	<=11	PASS
11N20SISO	Ant1	5180	5.97	<=11	PASS
		5200	6.01	<=11	PASS
		5240	6.55	<=11	PASS
11N40SISO	Ant1	5190	0.68	<=11	PASS
		5230	0.61	<=11	PASS
11AC20SISO	Ant1	5180	2.45	<=11	PASS
		5200	2.88	<=11	PASS
		5240	3.52	<=11	PASS
11AC40SISO	Ant1	5190	0.86	<=11	PASS
		5230	0.9	<=11	PASS
11AC80SISO	Ant1	5210	-2	<=11	PASS

Note：

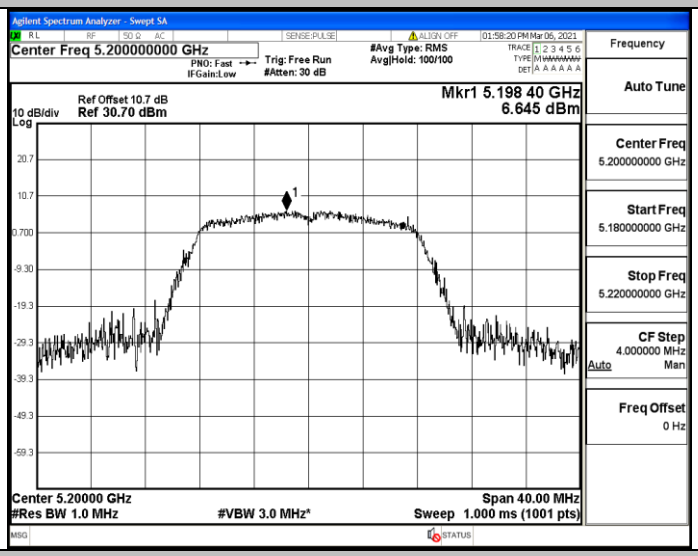
The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

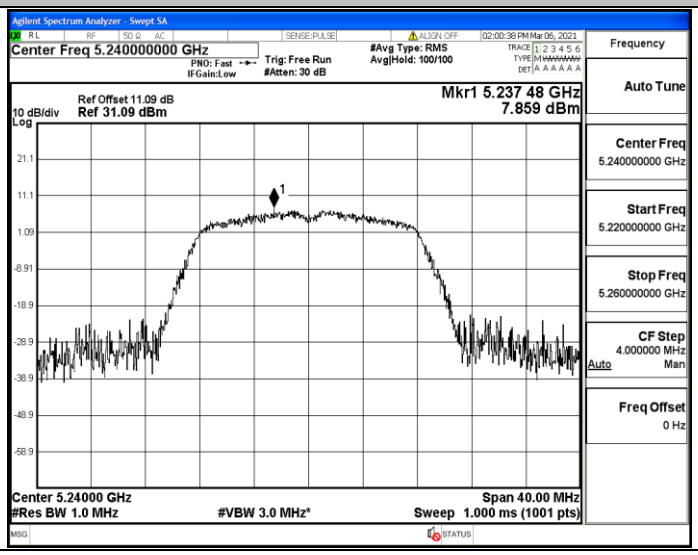
11A_Ant1_5180



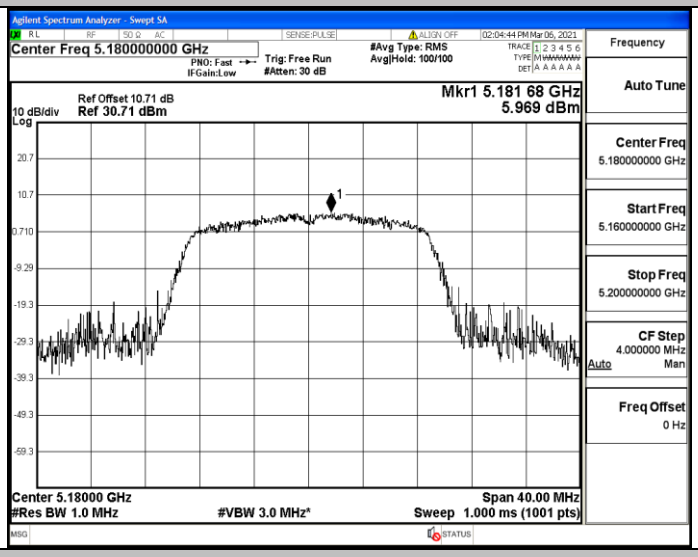
11A_Ant1_5200



11A_Ant1_5240



11N20SISO_Ant1_5180



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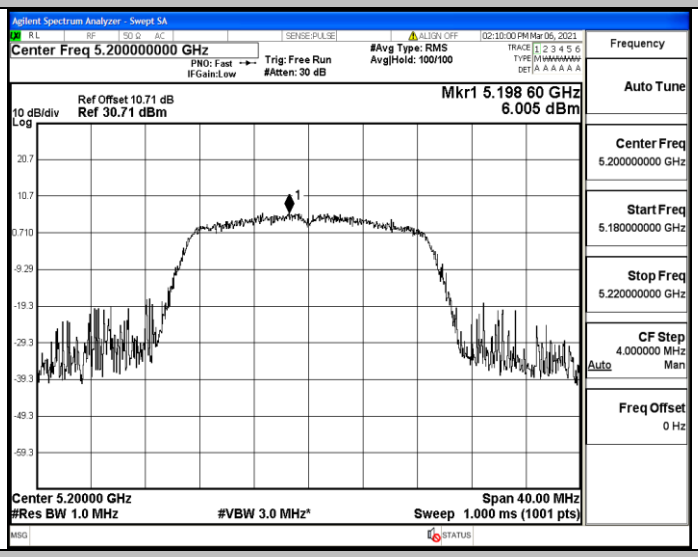
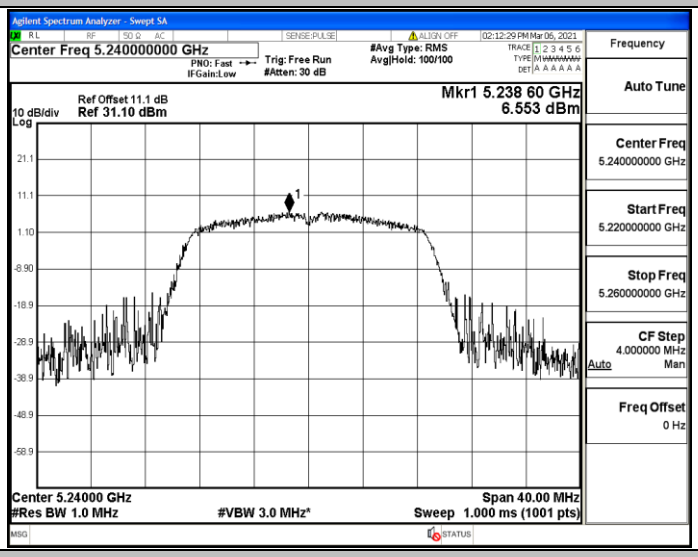
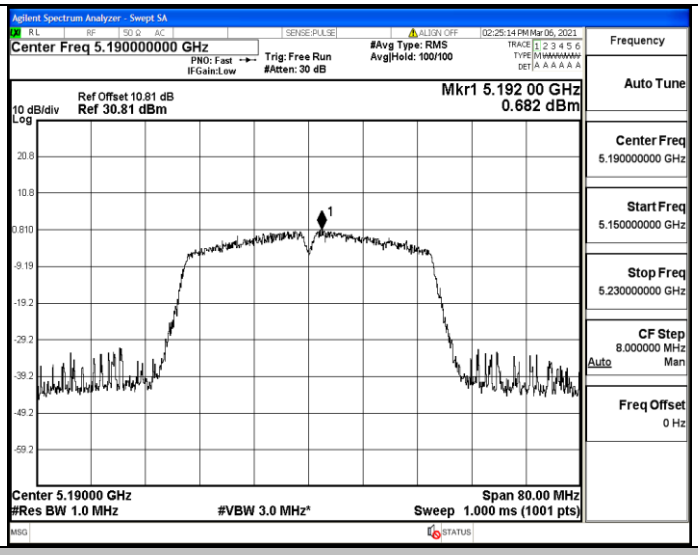


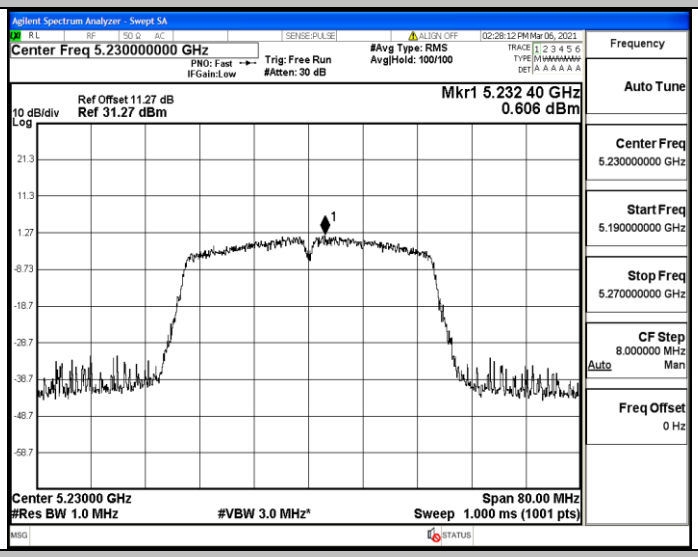
11N20SISO_Ant1_5240



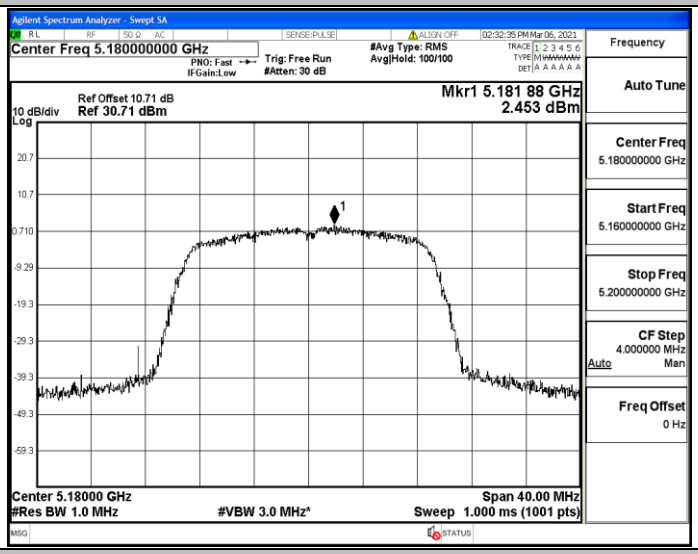
11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180



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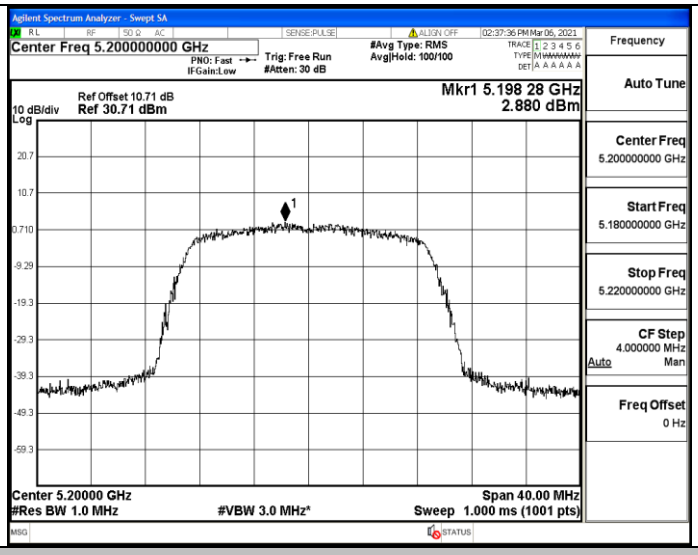
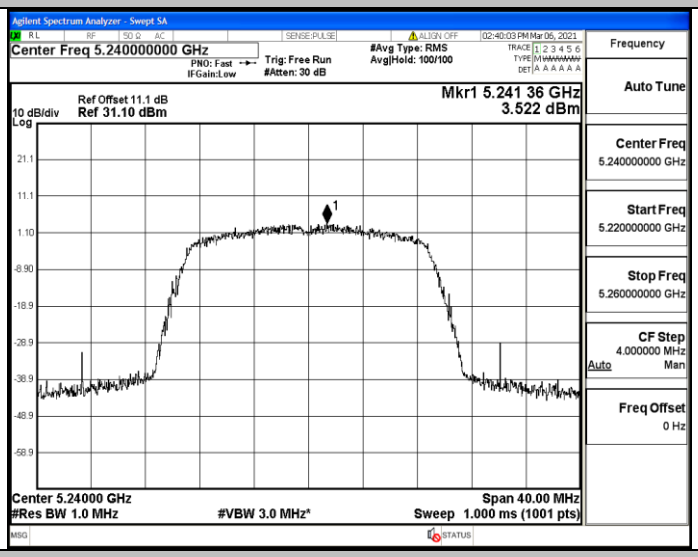


11AC20SISO_Ant1_5240



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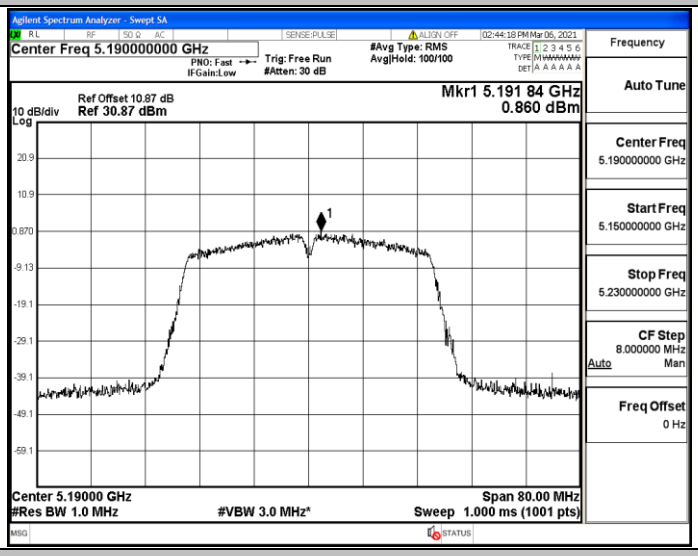

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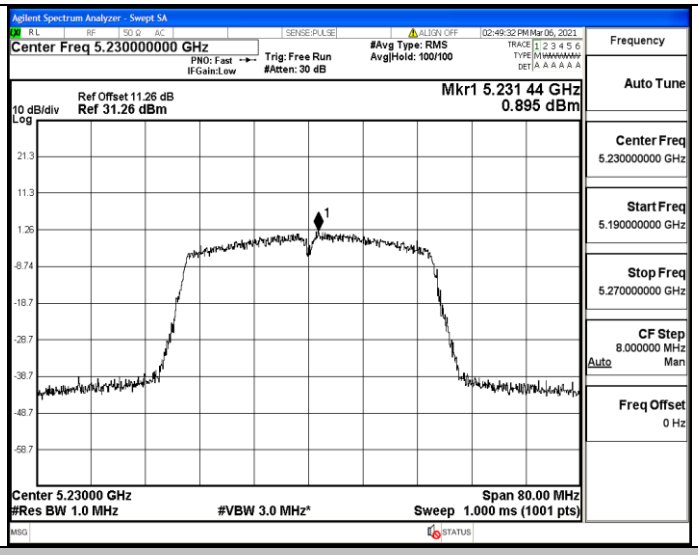

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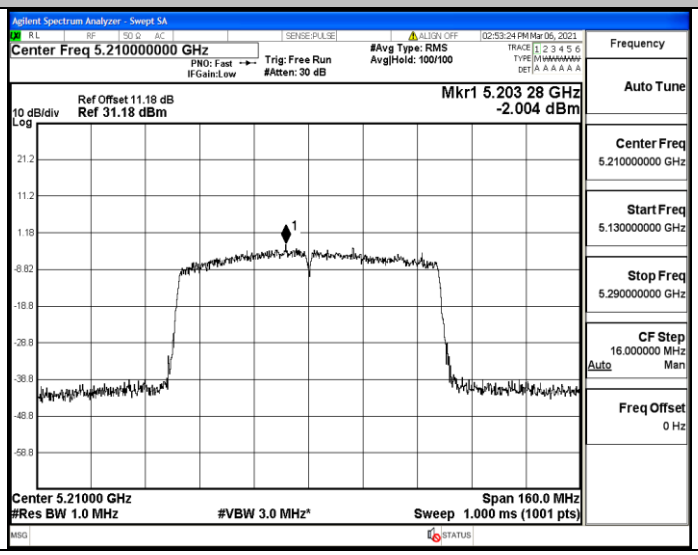


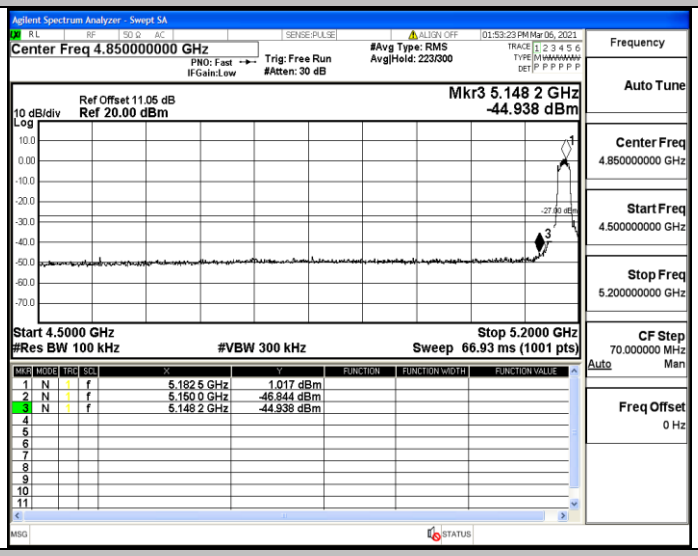
Appendix D: Band edge measurements

Test Result

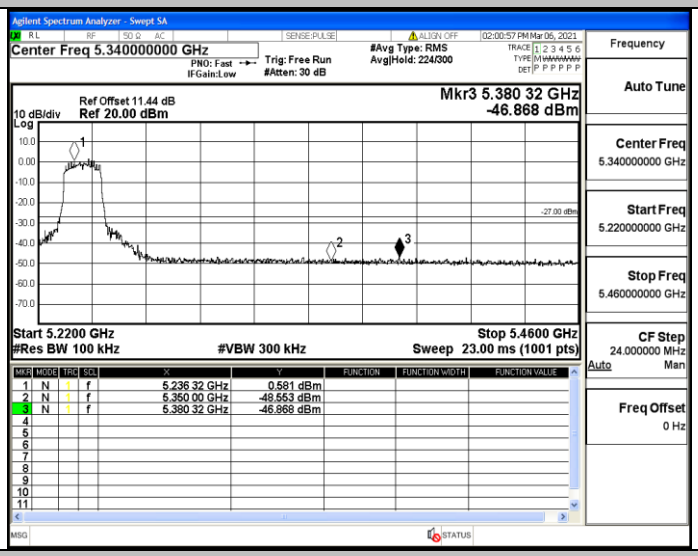
TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-44.94	<=-27	PASS
		High	5240	-46.87	<=-27	PASS
11N20SISO	Ant1	Low	5180	-45.66	<=-27	PASS
		High	5240	-46.78	<=-27	PASS
11N40SISO	Ant1	Low	5190	-46.34	<=-27	PASS
		High	5230	-47.45	<=-27	PASS
11AC20SISO	Ant1	Low	5180	-47.42	<=-27	PASS
		High	5240	-46.45	<=-27	PASS
11AC40SISO	Ant1	Low	5190	-45.78	<=-27	PASS
		High	5230	-47.12	<=-27	PASS
11AC80SISO	Ant1	Low	5210	-46.07	<=-27	PASS
		High	5210	-47.74	<=-27	PASS

Test Graphs

11A_Ant1_Low_5180



11A_Ant1_High_5240



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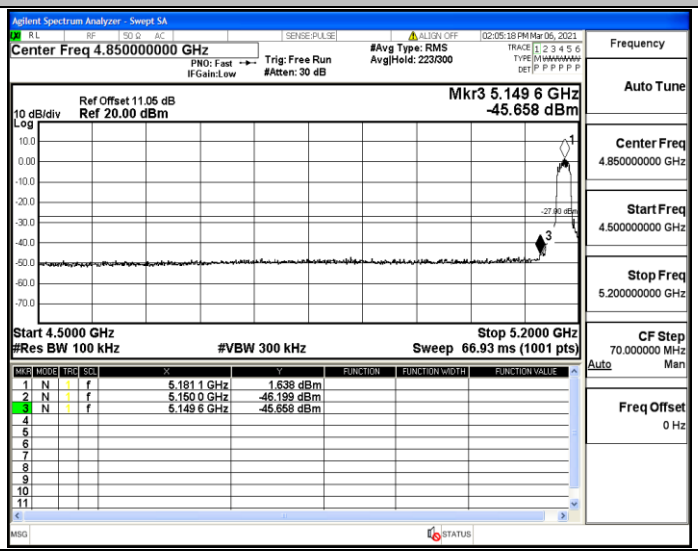
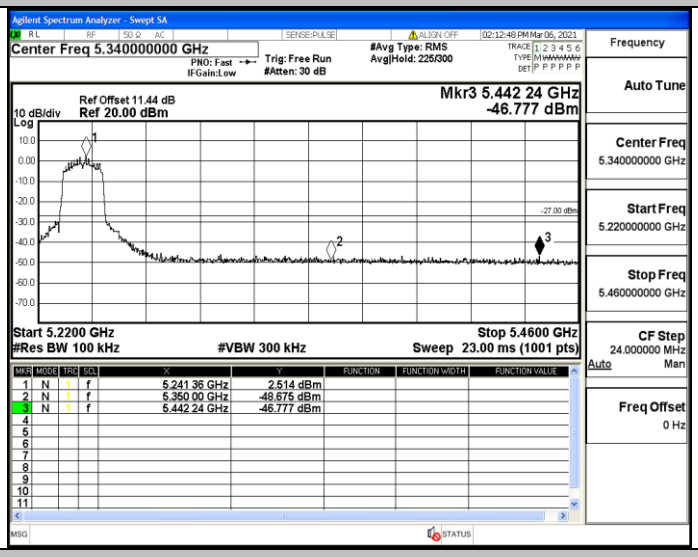


11N20SISO_Ant1_High_5240



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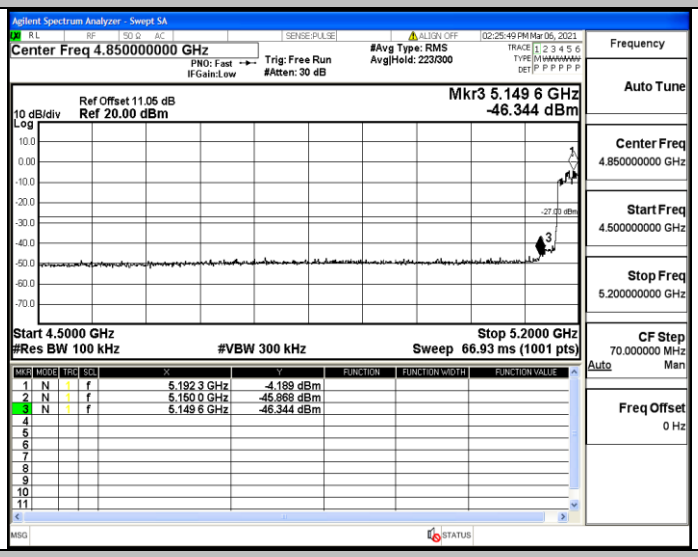

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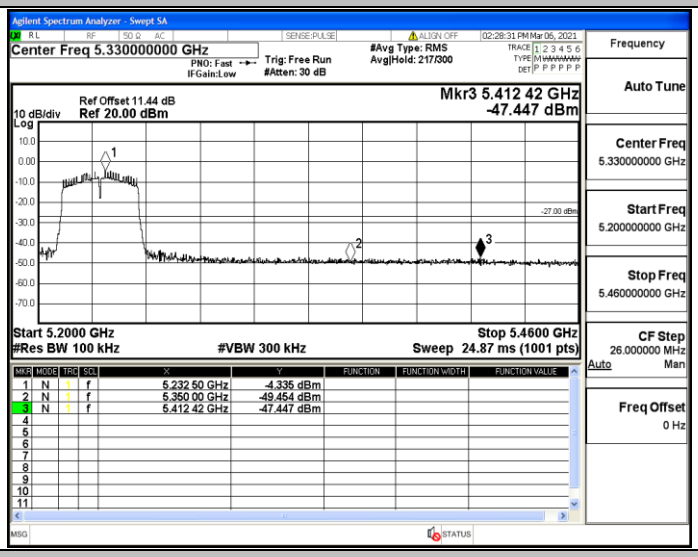

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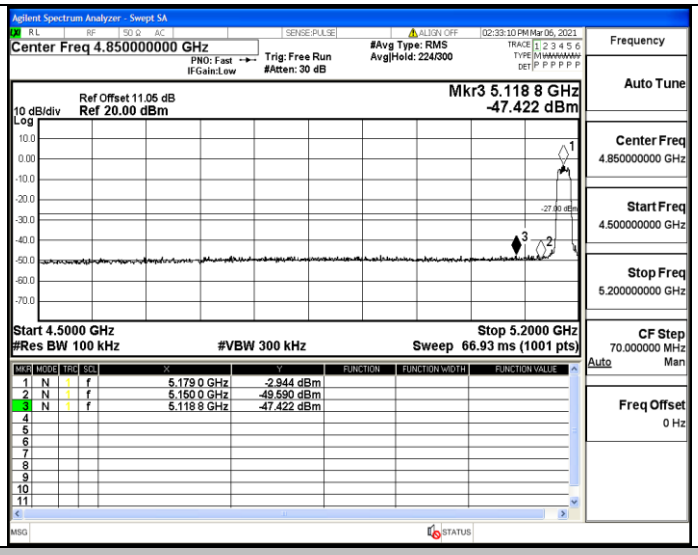

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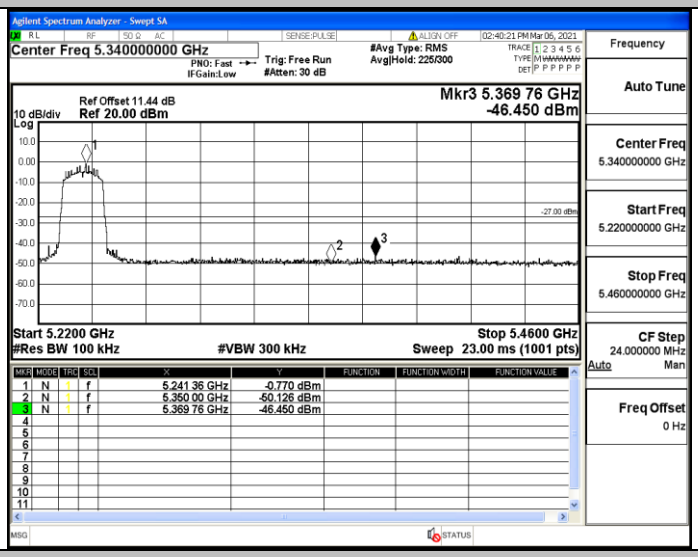

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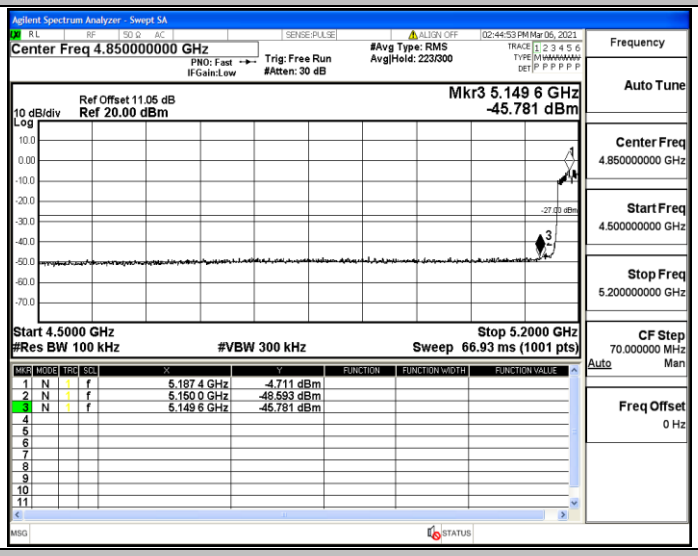

11AC40SISO_Ant1_High_5230