FCC Appendix RF Test Data of Module 1

FCC ID	**:**	**2BO56-ZA001**
Company:	**:**	**Shenzhen Xingbiao Hang Technology Co., Ltd.**
EUT	**:**	**Dual WiFi three-in-one closed small system**
Model Number	**:**	**ZA001**
Report No.	**:**	**CTA25041800504**
Reviewed By	**:**	**Eric Wang**

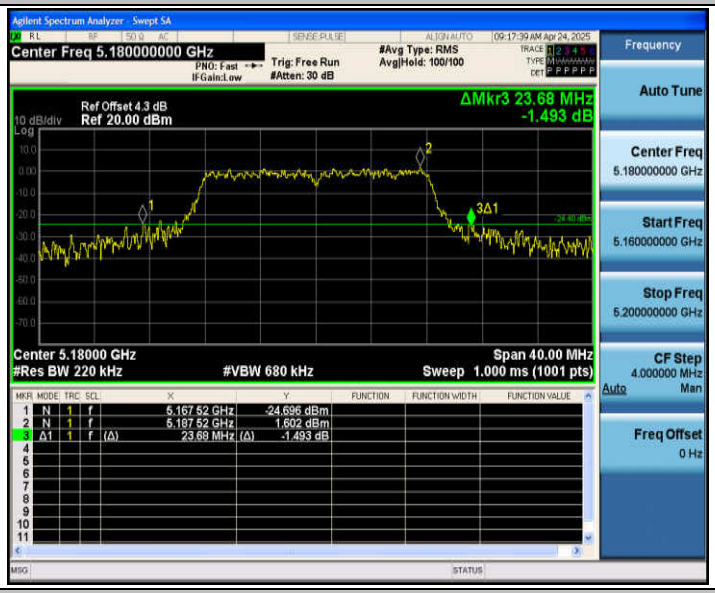
Appendix A1: Emission Bandwidth

Test Result

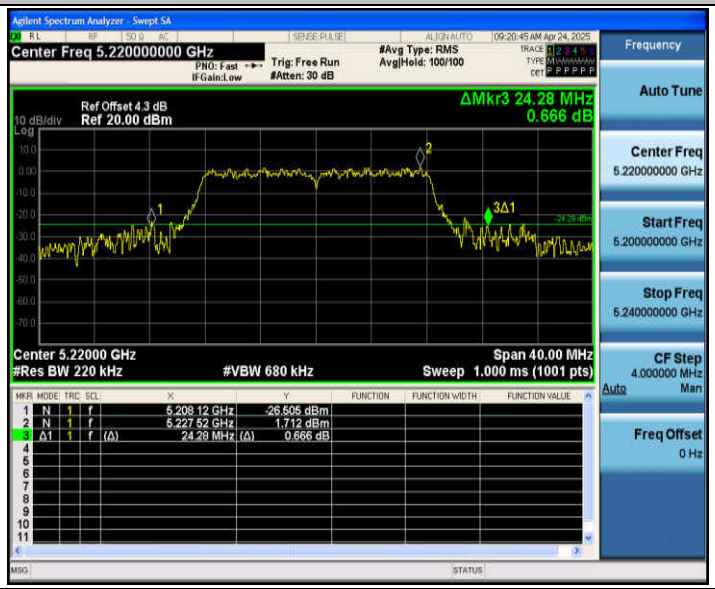
TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	23.680	5167.520	5191.200	---	---
		5220	24.280	5208.120	5232.400	---	---
		5240	21.640	5227.960	5249.600	---	---
		5745	24.000	5732.680	5756.680	---	---
		5785	28.360	5773.840	5802.200	---	---
		5825	27.240	5814.160	5841.400	---	---
11N20SISO	Ant1	5180	24.680	5168.160	5192.840	---	---
		5220	25.440	5208.040	5233.480	---	---
		5240	25.560	5227.920	5253.480	---	---
		5745	27.920	5732.440	5760.360	---	---
		5785	25.880	5773.200	5799.080	---	---
		5825	24.840	5812.800	5837.640	---	---
11N40SISO	Ant1	5190	47.600	5168.800	5216.400	---	---
		5230	43.840	5208.880	5252.720	---	---
		5755	53.120	5723.960	5777.080	---	---
		5795	49.200	5767.720	5816.920	---	---
11AC20SISO	Ant1	5180	24.000	5168.080	5192.080	---	---
		5220	20.000	5209.960	5229.960	---	---
		5240	22.720	5229.880	5252.600	---	---
		5745	25.360	5733.040	5758.400	---	---
		5785	25.160	5771.720	5796.880	---	---
		5825	24.200	5814.560	5838.760	---	---
11AC40SISO	Ant1	5190	55.120	5164.640	5219.760	---	---
		5230	50.160	5205.840	5256.000	---	---
		5755	39.840	5735.400	5775.240	---	---
		5795	41.840	5775.400	5817.240	---	---
11AX20SISO	Ant1	5180	26.640	5169.480	5196.120	---	---
		5220	22.040	5207.880	5229.920	---	---
		5240	25.920	5227.520	5253.440	---	---
		5745	23.920	5732.760	5756.680	---	---
		5785	23.520	5773.360	5796.880	---	---
		5825	24.120	5813.040	5837.160	---	---
11AX40SISO	Ant1	5190	49.120	5169.680	5218.800	---	---
		5230	47.440	5208.560	5256.000	---	---
		5755	41.680	5734.440	5776.120	---	---
		5795	46.480	5774.360	5820.840	---	---

Test Graphs

11A_Ant1_5180

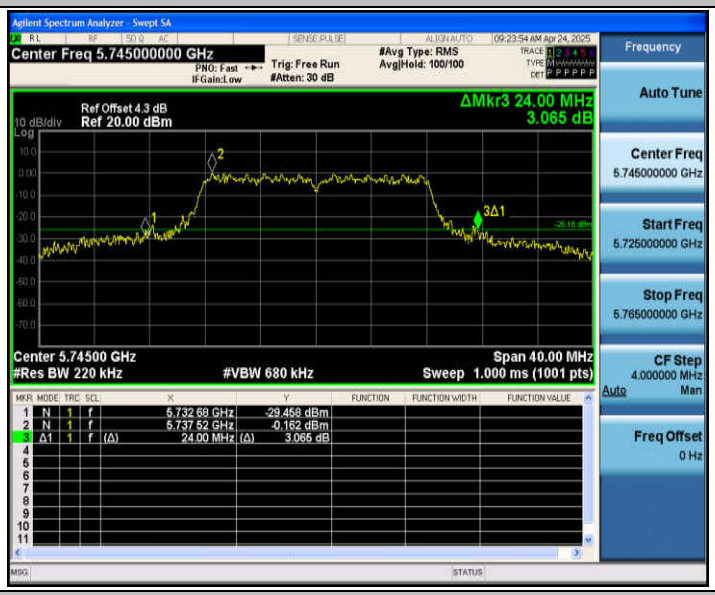


11A_Ant1_5220

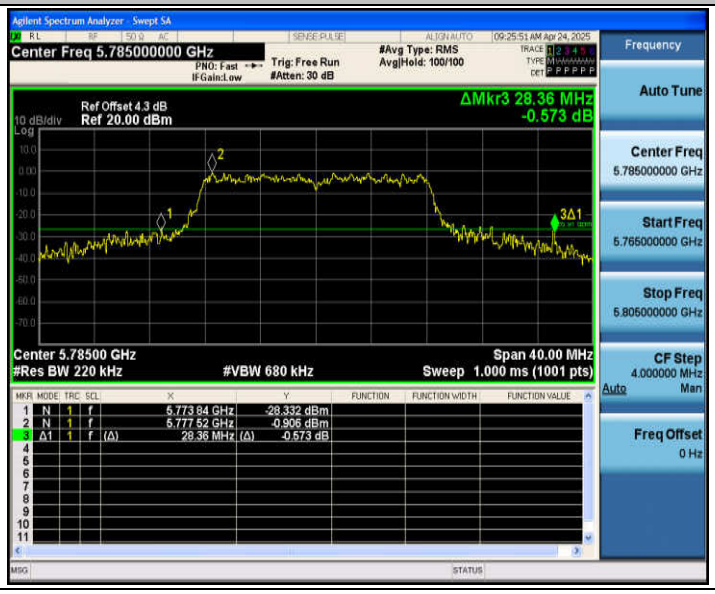


11A_Ant1_5240

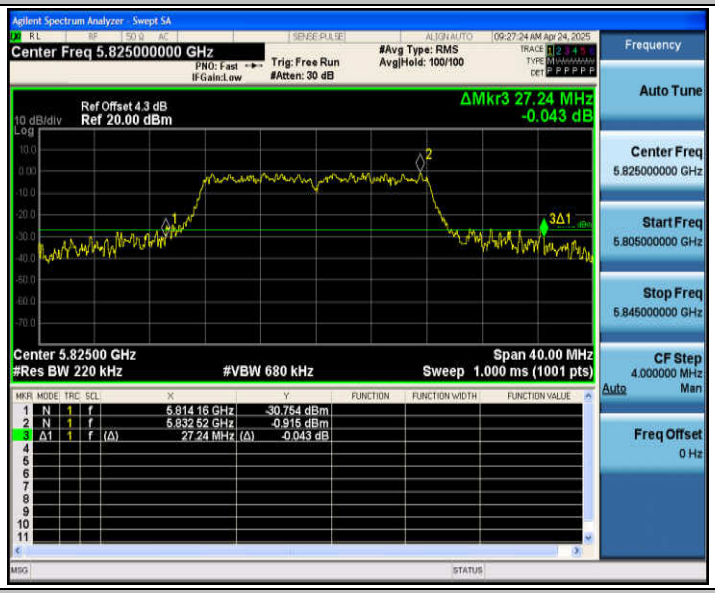
11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5180

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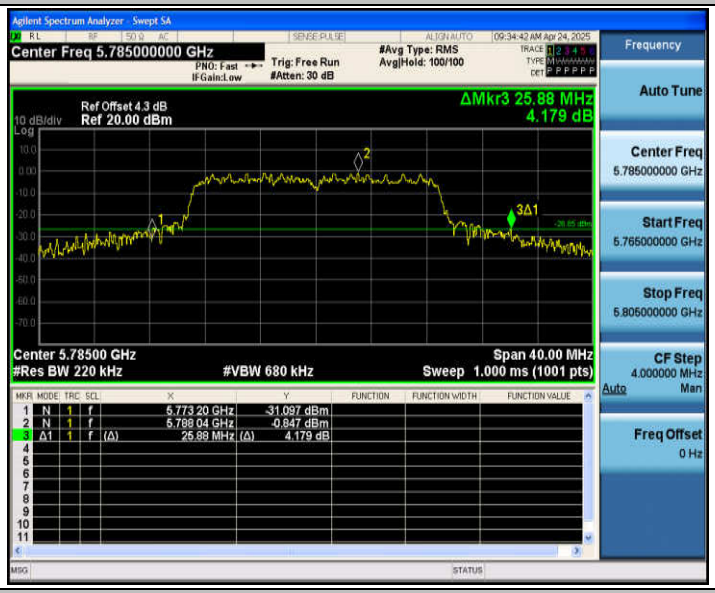
11N20SISO_Ant1_5240

11N20SISO_Ant1_5745

11N20SISO_Ant1_5785



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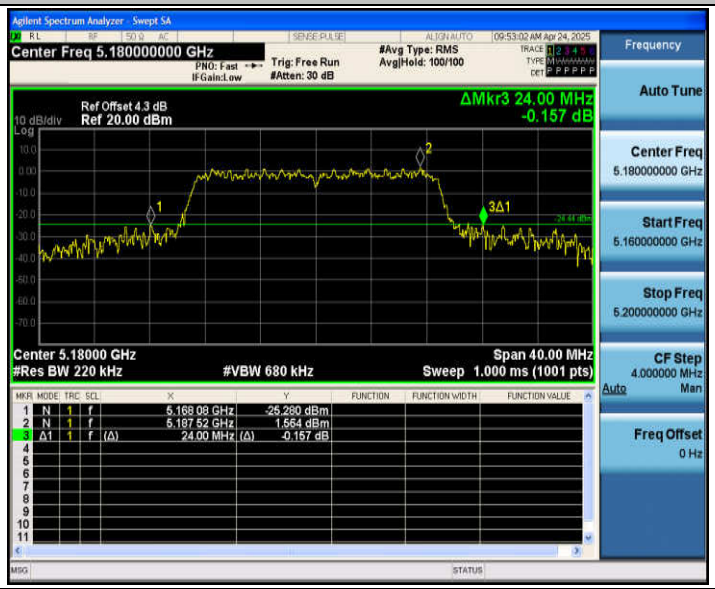
11N40SISO_Ant1_5190

11N40SISO_Ant1_5230

11N40SISO_Ant1_5755

11N40SISO_Ant1_5795

11AC20SISO_Ant1_5180



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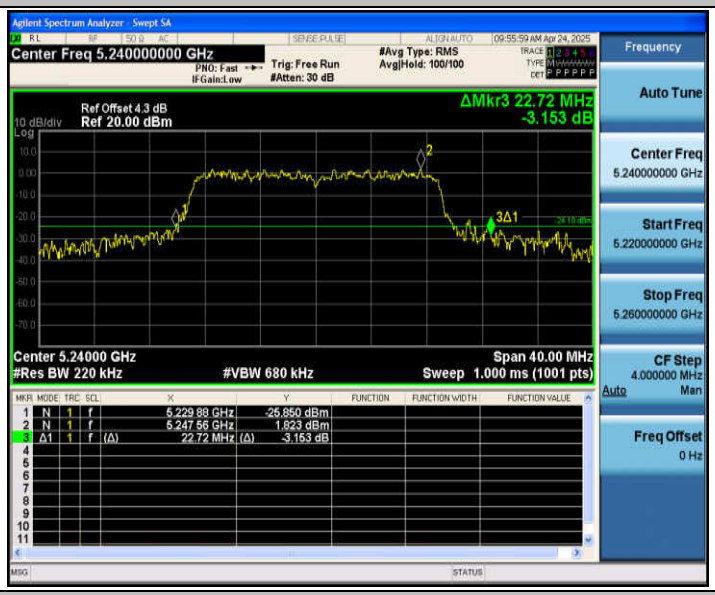
11AC20SISO_Ant1_5240



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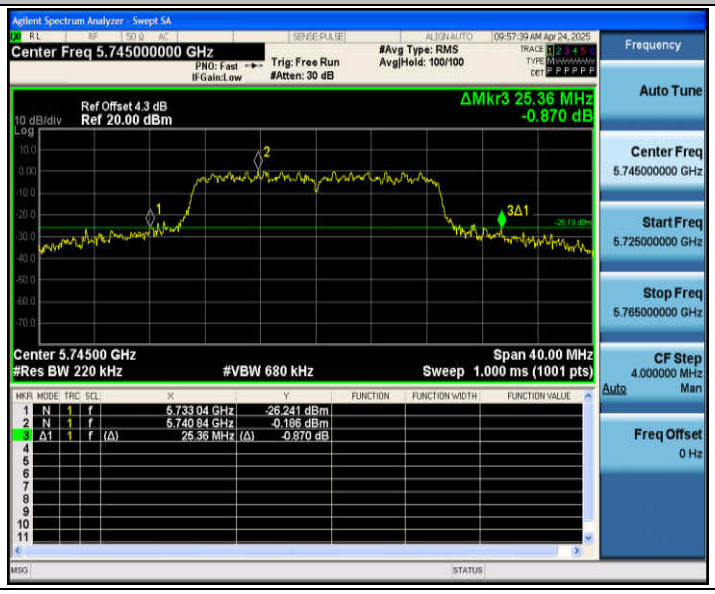

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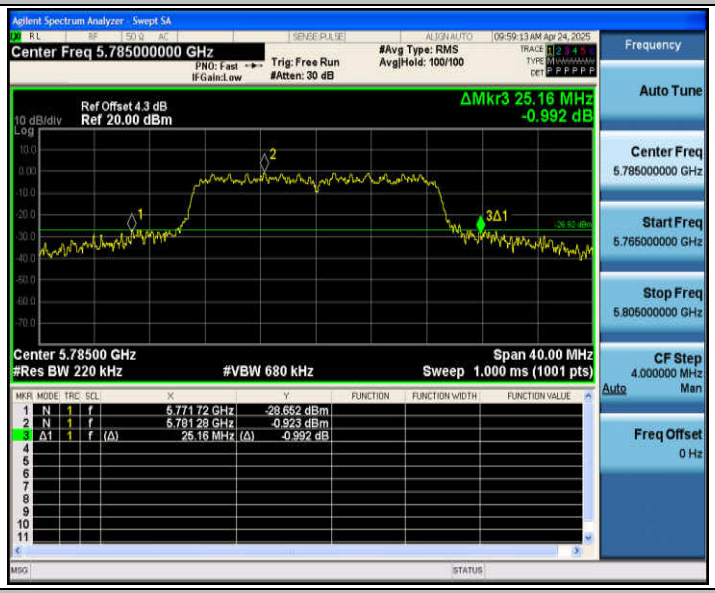
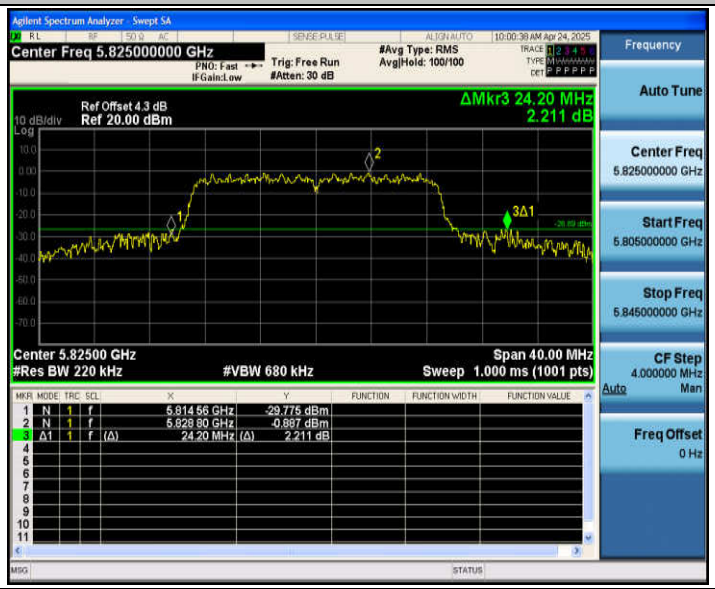


11AC20SISO_Ant1_5825



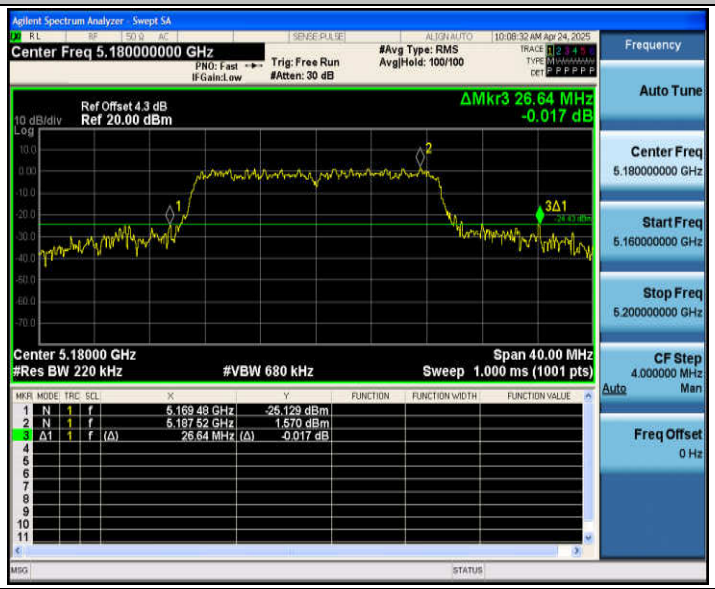
11AC40SISO_Ant1_5190

11AC40SISO_Ant1_5230

11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795

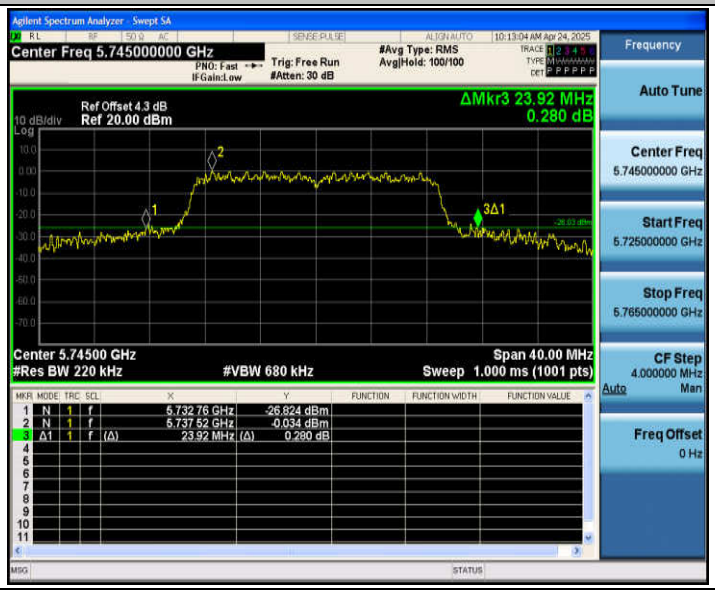
11AX20SISO_Ant1_5180



11AX20SISO_Ant1_5220

11AX20SISO_Ant1_5240

11AX20SISO_Ant1_5745



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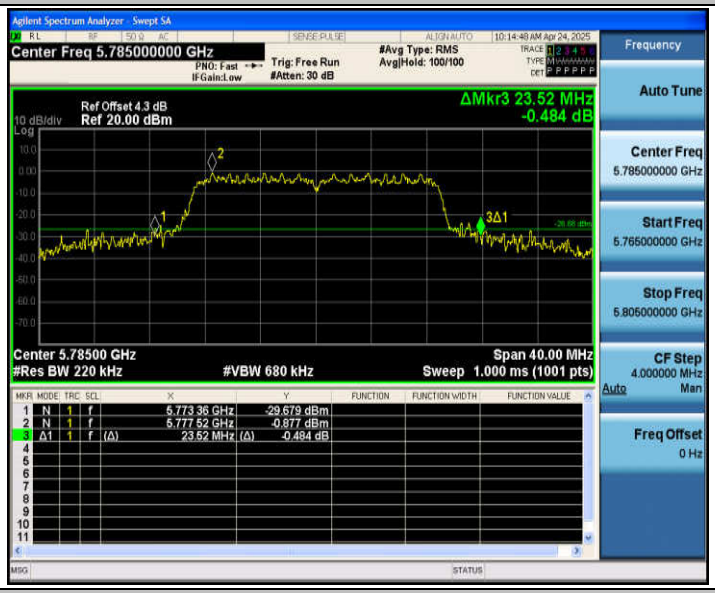
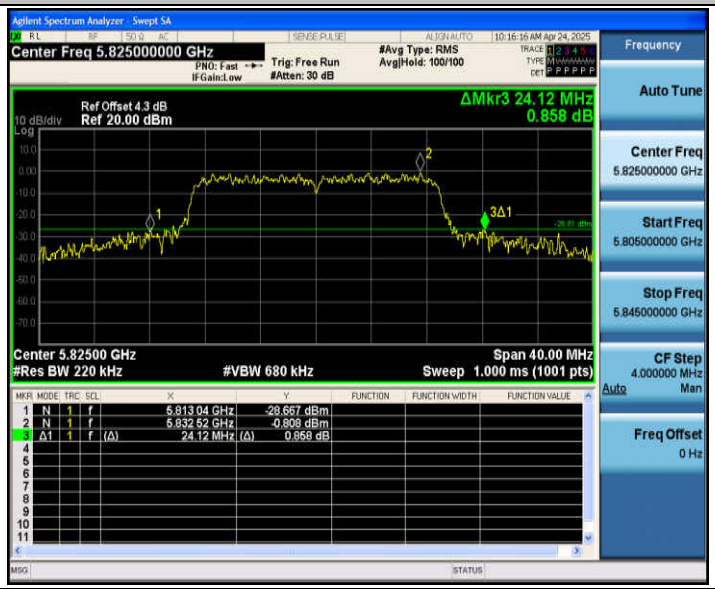


11AX20SISO_Ant1_5825



11AX40SISO_Ant1_5190

11AX40SISO_Ant1_5230

11AX40SISO_Ant1_5755

11AX40SISO_Ant1_5795

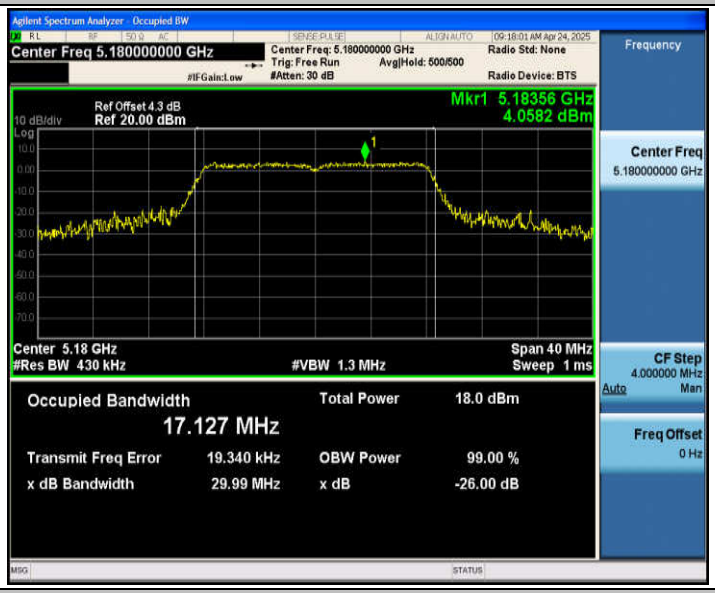
Appendix A2: Occupied channel bandwidth

Test Result

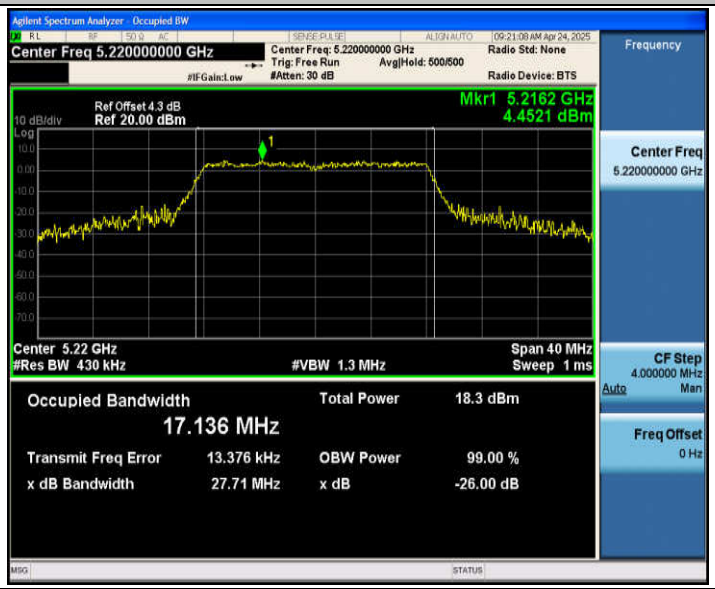
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.127	5171.4558	5188.5828	---	---
		5220	17.136	5211.4454	5228.5814	---	---
		5240	17.065	5231.4726	5248.5376	---	---
		5745	17.242	5736.3804	5753.6224	---	---
		5785	17.152	5776.4481	5793.6001	---	---
		5825	17.096	5816.4884	5833.5844	---	---
11N20SISO	Ant1	5180	18.189	5171.0049	5189.1939	---	---
		5220	18.240	5210.9351	5229.1751	---	---
		5240	18.209	5230.9489	5249.1579	---	---
		5745	18.140	5735.9300	5754.0700	---	---
		5785	18.126	5775.9947	5794.1207	---	---
		5825	18.062	5816.0316	5834.0936	---	---
11N40SISO	Ant1	5190	36.834	5171.8314	5208.6654	---	---
		5230	36.813	5211.6882	5248.5012	---	---
		5755	36.691	5736.6676	5773.3586	---	---
		5795	36.454	5776.8186	5813.2726	---	---
11AC20SISO	Ant1	5180	17.916	5171.1143	5189.0303	---	---
		5220	17.860	5211.1252	5228.9852	---	---
		5240	17.894	5231.0699	5248.9639	---	---
		5745	18.004	5735.9925	5753.9965	---	---
		5785	17.859	5776.0671	5793.9261	---	---
		5825	17.855	5816.0984	5833.9534	---	---
11AC40SISO	Ant1	5190	36.683	5171.8486	5208.5316	---	---
		5230	36.632	5211.8024	5248.4344	---	---
		5755	36.482	5736.7350	5773.2170	---	---
		5795	36.505	5776.8131	5813.3181	---	---
11AX20SISO	Ant1	5180	17.876	5171.1031	5188.9791	---	---
		5220	17.862	5211.1141	5228.9761	---	---
		5240	17.908	5231.0907	5248.9987	---	---
		5745	18.003	5735.9772	5753.9802	---	---
		5785	17.890	5776.0917	5793.9817	---	---
		5825	17.840	5816.1152	5833.9552	---	---
11AX40SISO	Ant1	5190	36.740	5171.8516	5208.5916	---	---
		5230	36.733	5211.7303	5248.4633	---	---
		5755	36.497	5736.7781	5773.2751	---	---
		5795	36.365	5776.8729	5813.2379	---	---

Test Graphs

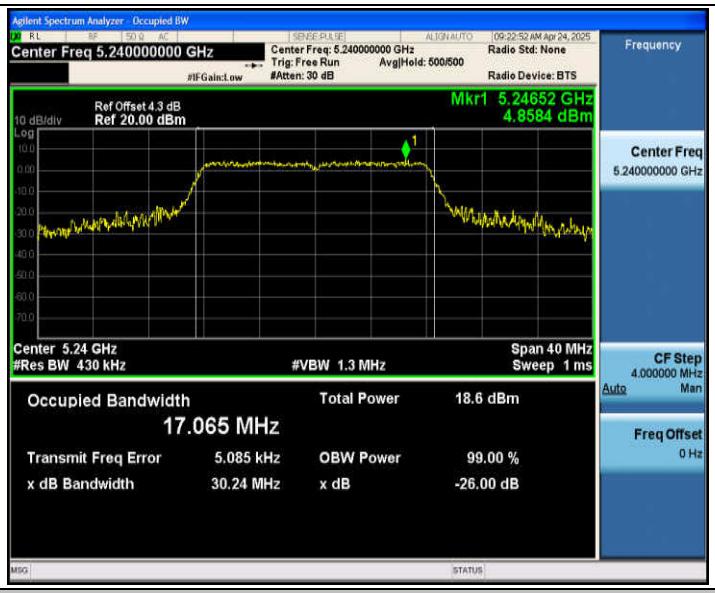
11A_Ant1_5180



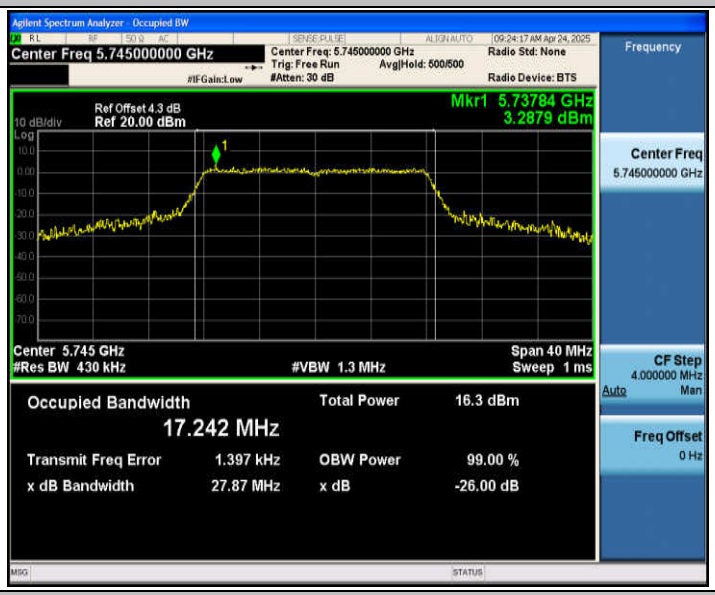
11A_Ant1_5220



11A_Ant1_5240



11A_Ant1_5745



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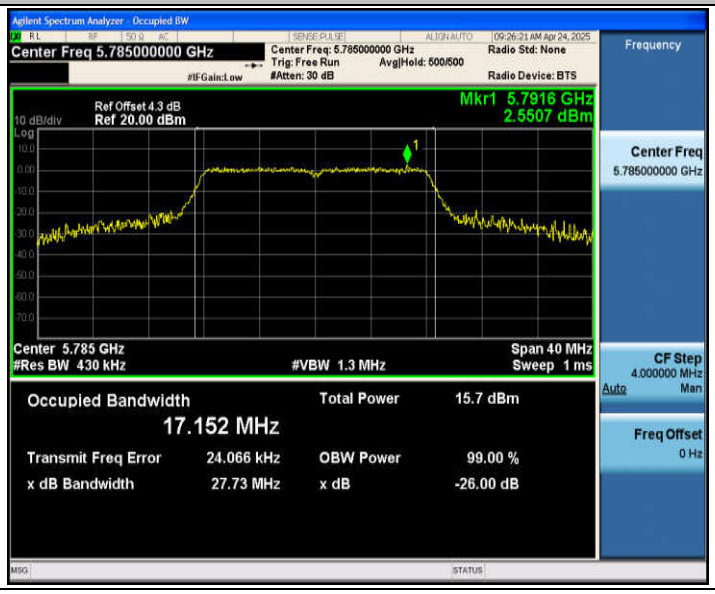

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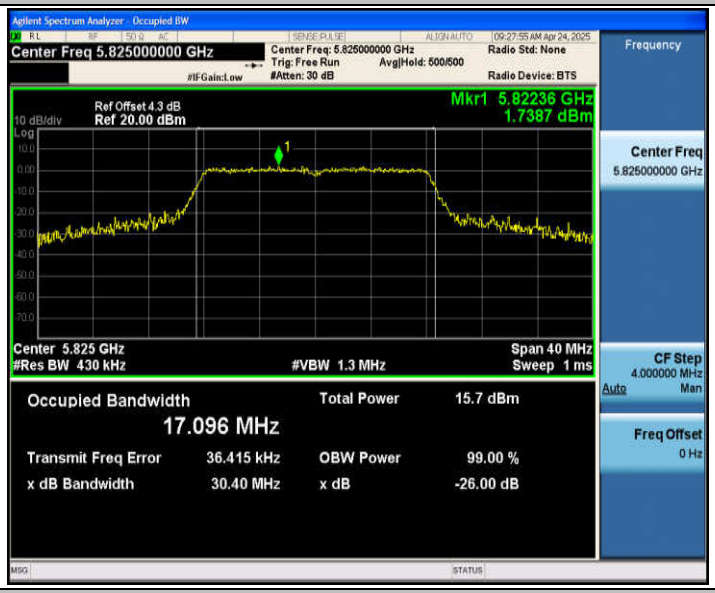
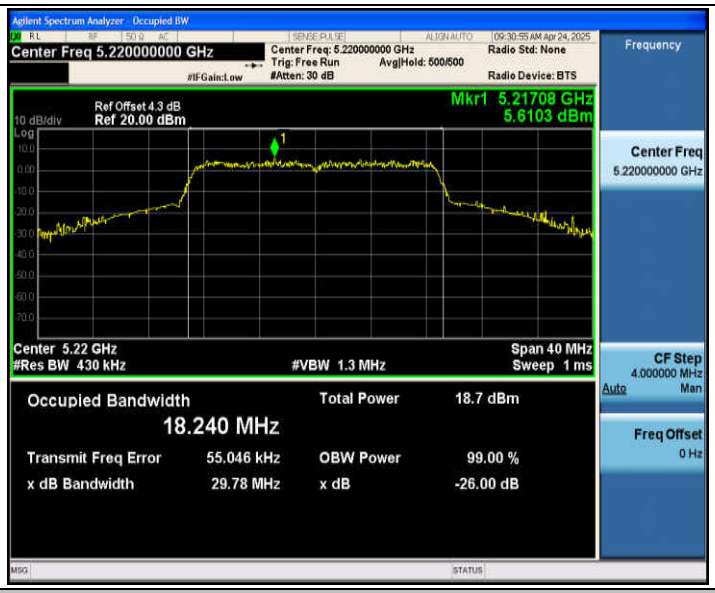


11N20SISO_Ant1_5180

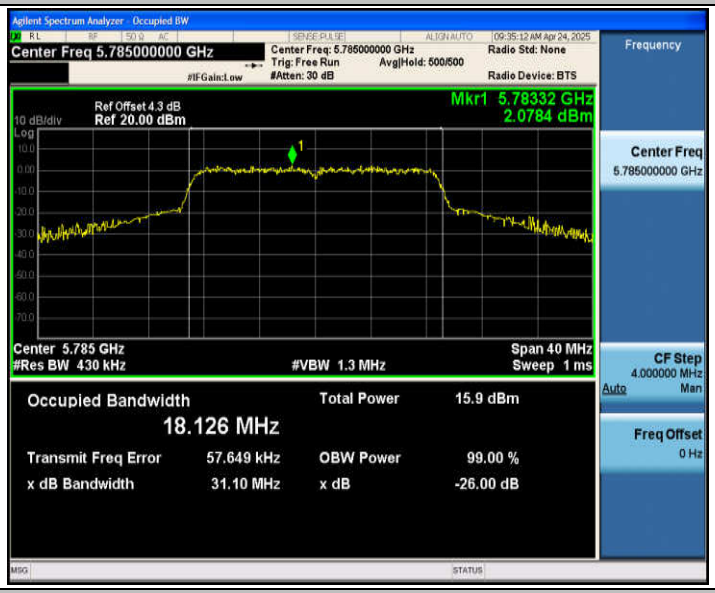
11N20SISO_Ant1_5220



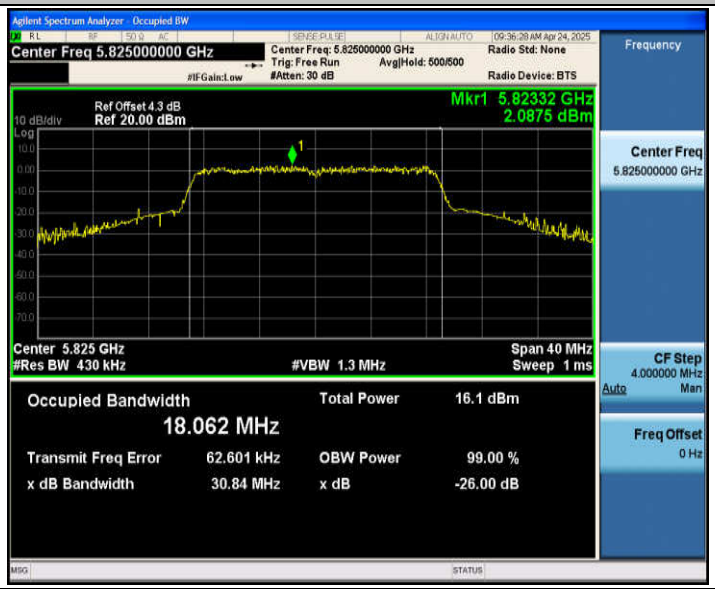
11N20SISO_Ant1_5240

11N20SISO_Ant1_5745

11N20SISO_Ant1_5785

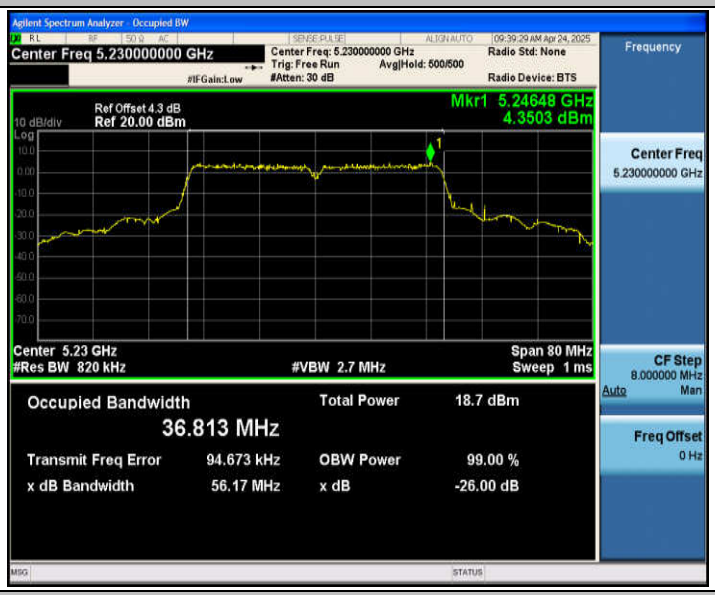


11N20SISO_Ant1_5825



11N40SISO_Ant1_5190

11N40SISO_Ant1_5230



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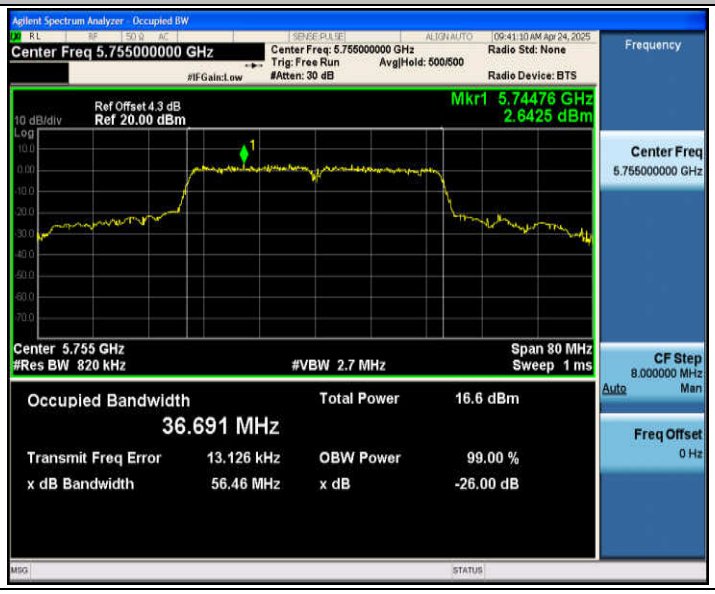

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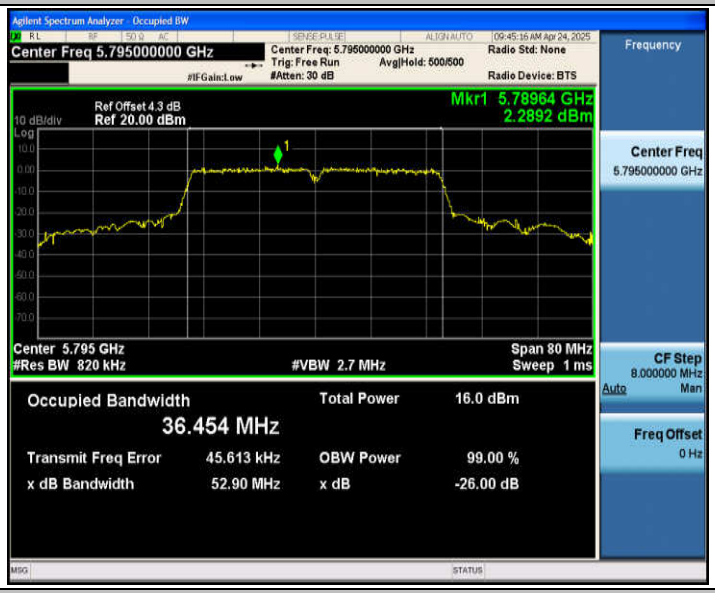

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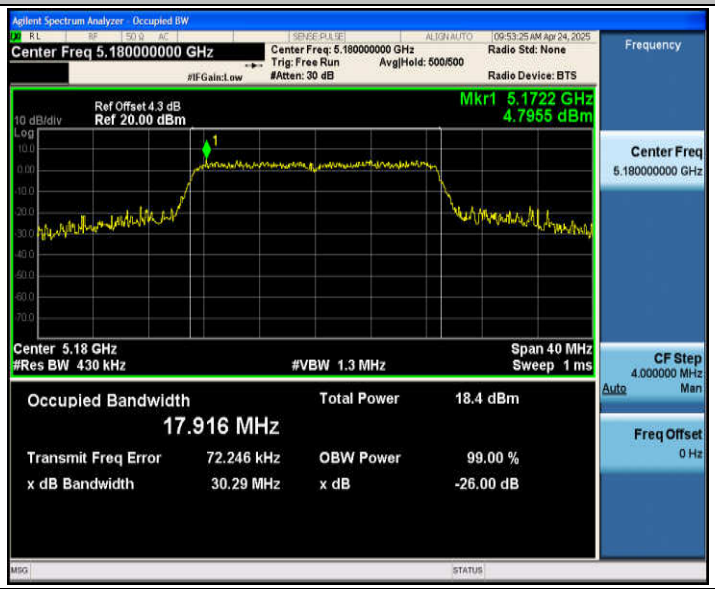

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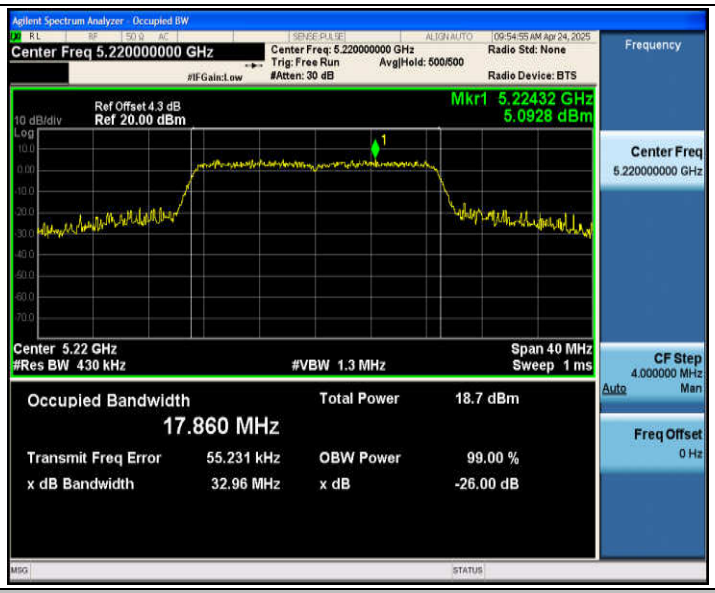

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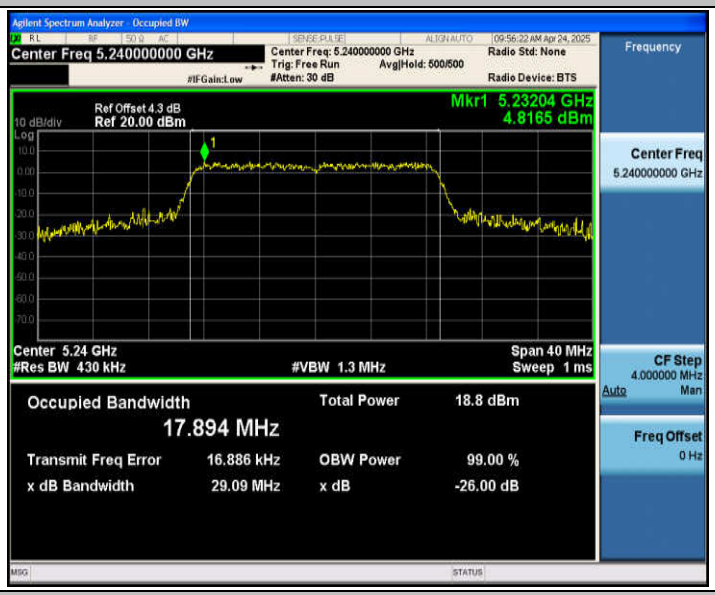

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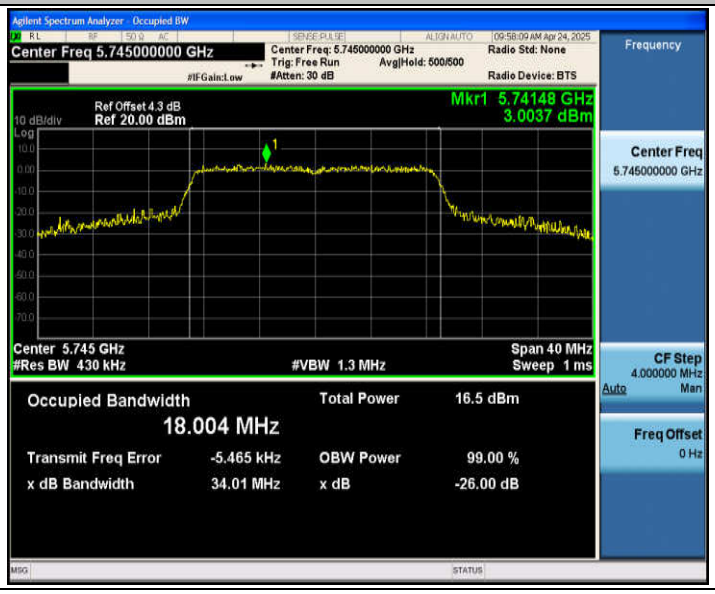

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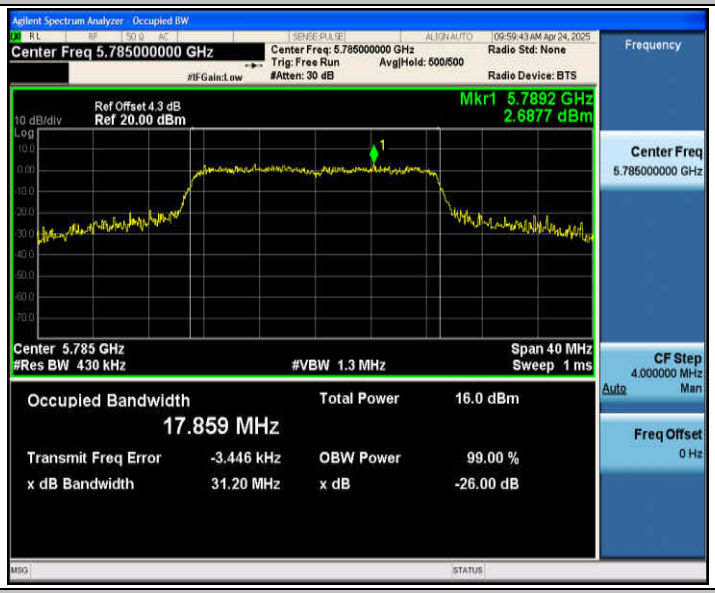

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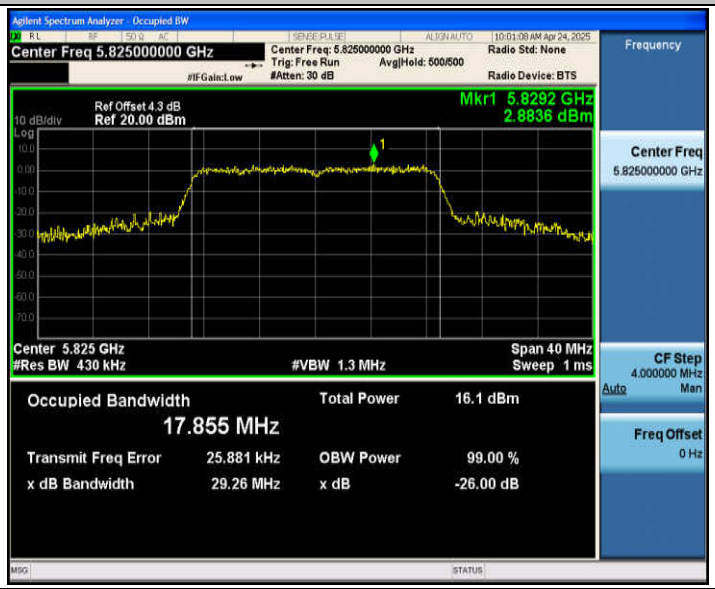
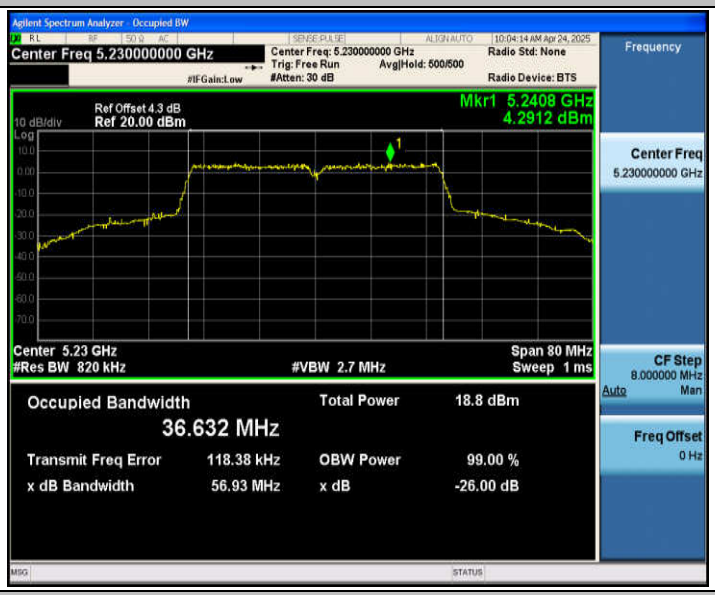
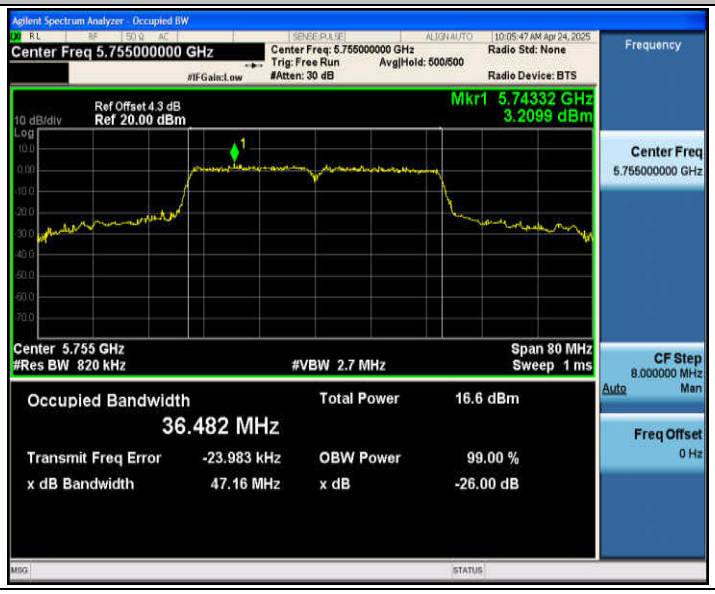


11AC40SISO_Ant1_5190

11AC40SISO_Ant1_5230



11AC40SISO_Ant1_5755



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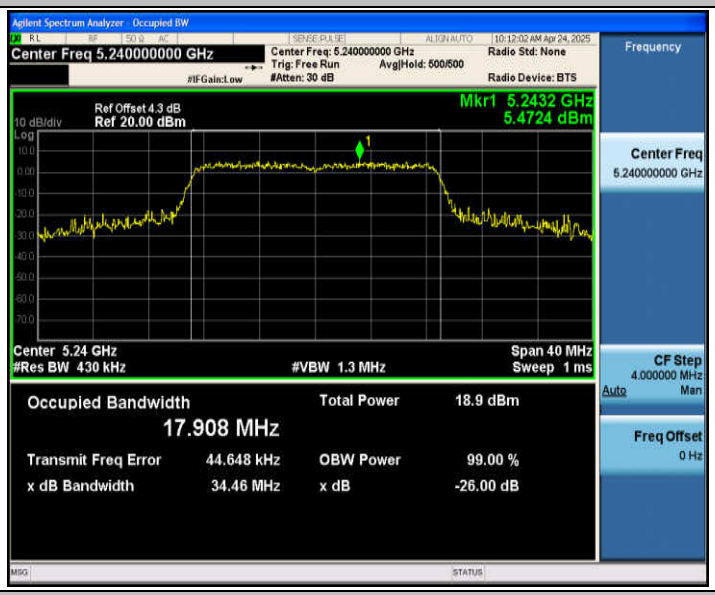
11AX20SISO_Ant1_5180

11AX20SISO_Ant1_5220

11AX20SISO_Ant1_5240



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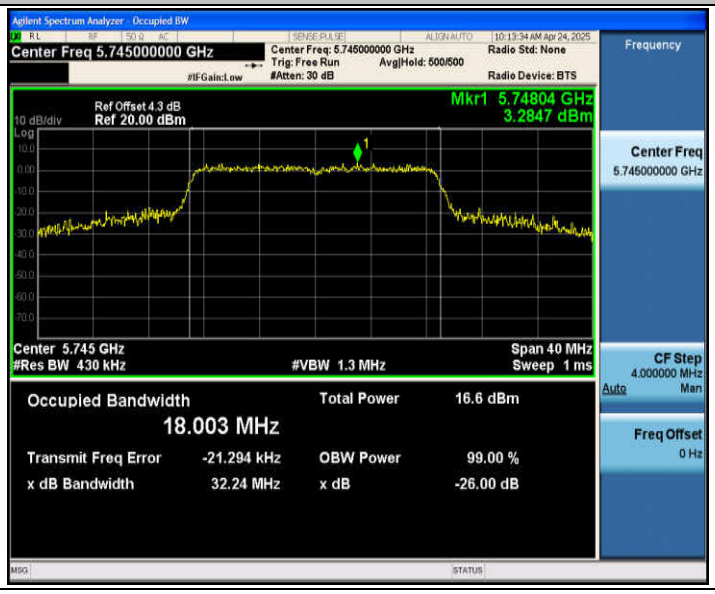
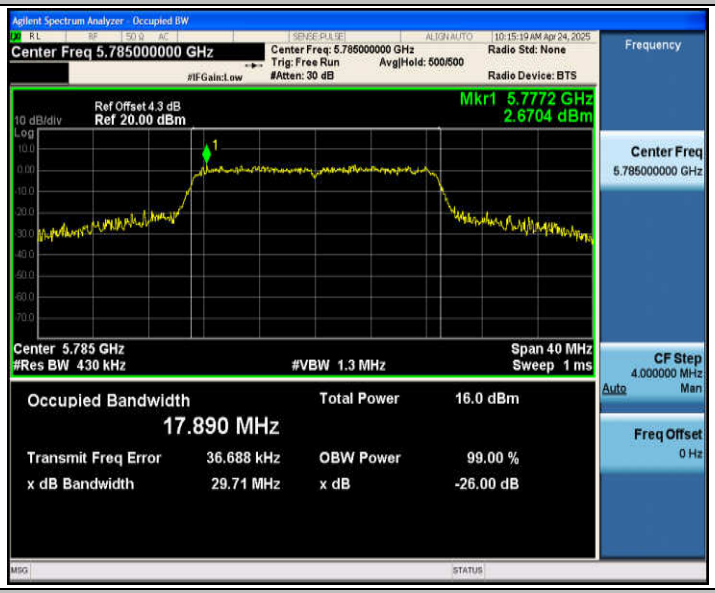
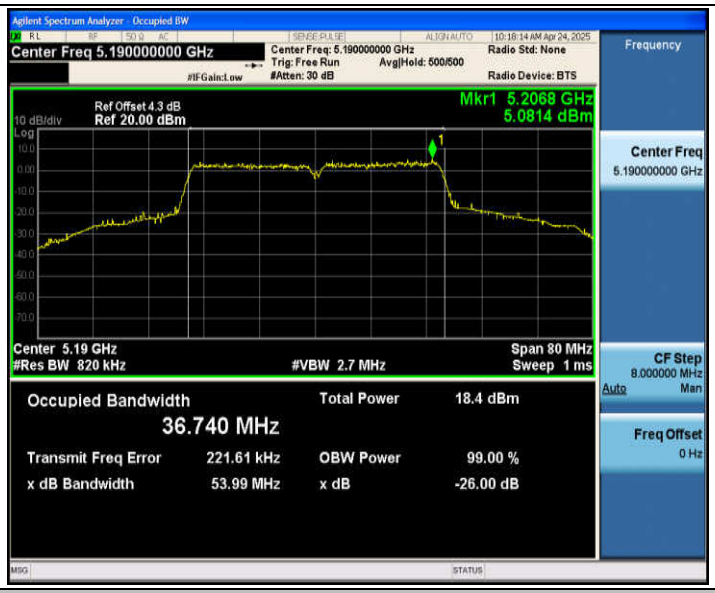


11AX20SISO_Ant1_5785

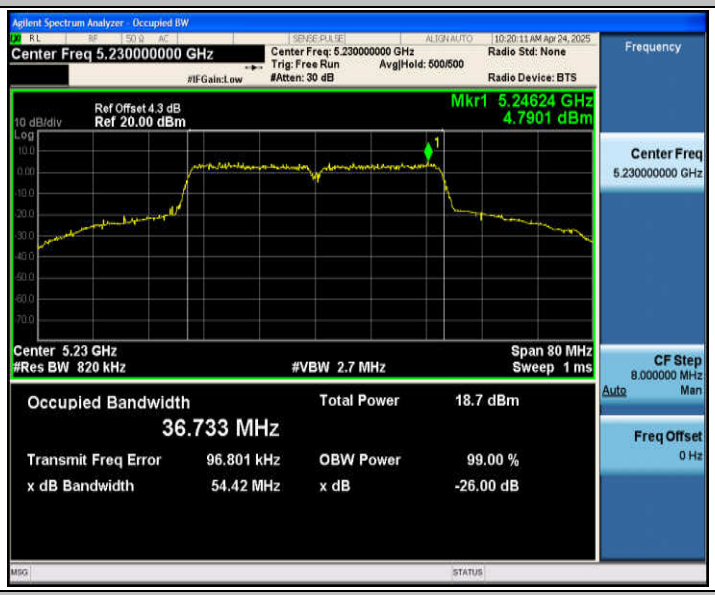


11AX20SISO_Ant1_5825

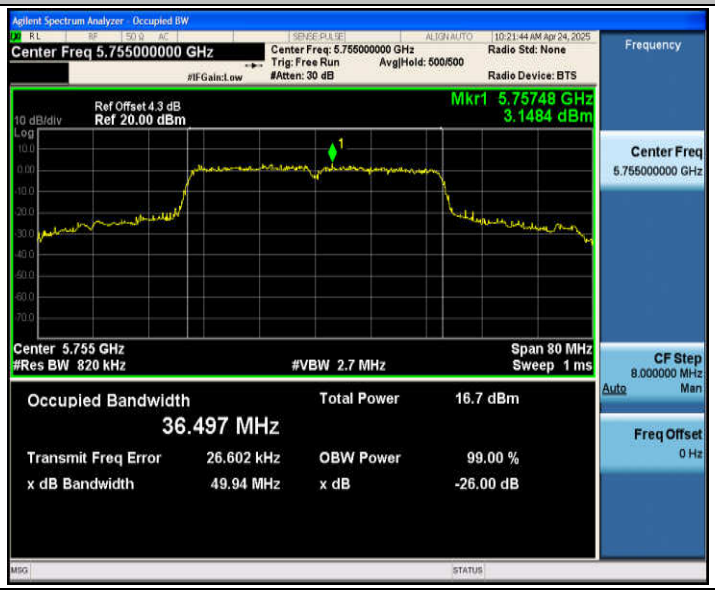
11AX40SISO_Ant1_5190

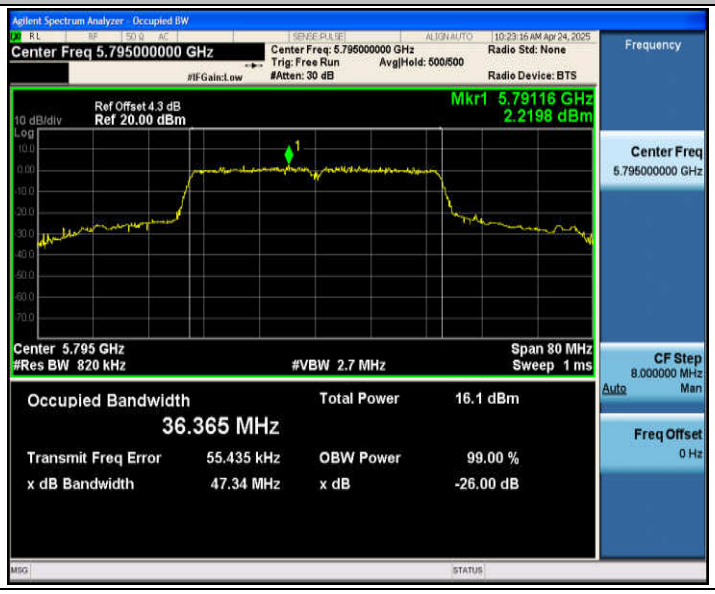


11AX40SISO_Ant1_5230



11AX40SISO_Ant1_5755



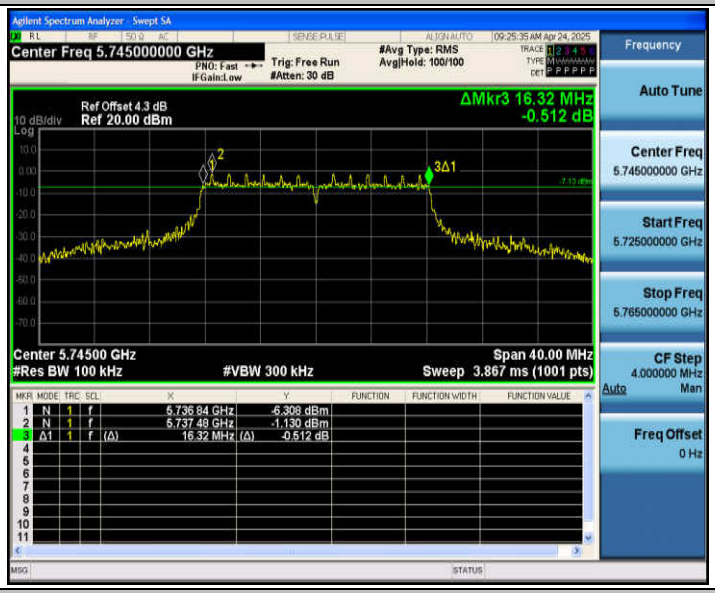
11AX40SISO_Ant1_5795


Appendix A3: Min emission bandwidth

Test Result B4

TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.840	5753.160	0.5	PASS
		5785	16.320	5776.840	5793.160	0.5	PASS
		5825	16.360	5816.800	5833.160	0.5	PASS
11N20SISO	Ant1	5745	16.840	5736.480	5753.320	0.5	PASS
		5785	17.040	5776.480	5793.520	0.5	PASS
		5825	17.280	5816.480	5833.760	0.5	PASS
11N40SISO	Ant1	5755	35.200	5737.400	5772.600	0.5	PASS
		5795	35.200	5777.400	5812.600	0.5	PASS
11AC20SISO	Ant1	5745	16.480	5736.840	5753.320	0.5	PASS
		5785	17.120	5776.520	5793.640	0.5	PASS
		5825	17.160	5816.440	5833.600	0.5	PASS
11AC40SISO	Ant1	5755	35.360	5737.240	5772.600	0.5	PASS
		5795	35.360	5777.240	5812.600	0.5	PASS
11AX20SISO	Ant1	5745	16.720	5736.520	5753.240	0.5	PASS
		5785	17.080	5776.440	5793.520	0.5	PASS
		5825	16.760	5816.640	5833.400	0.5	PASS
11AX40SISO	Ant1	5755	35.360	5737.240	5772.600	0.5	PASS
		5795	35.360	5777.240	5812.600	0.5	PASS

Test Graphs B4

11A_Ant1_5745

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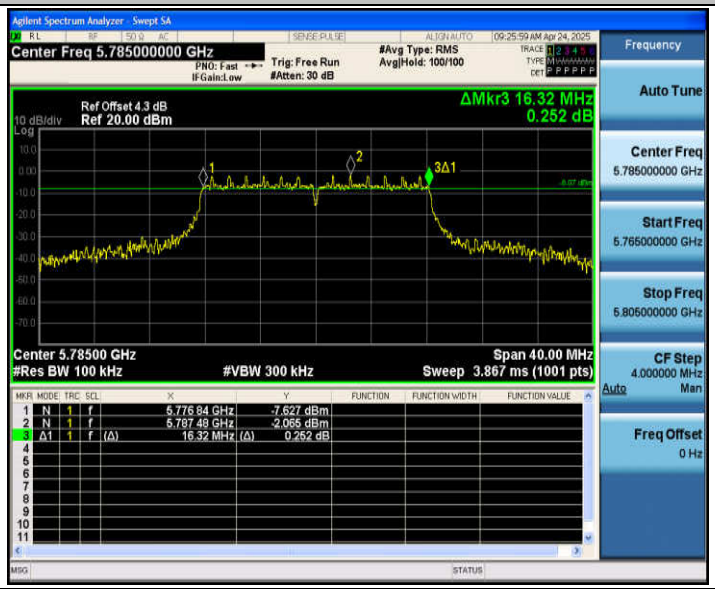
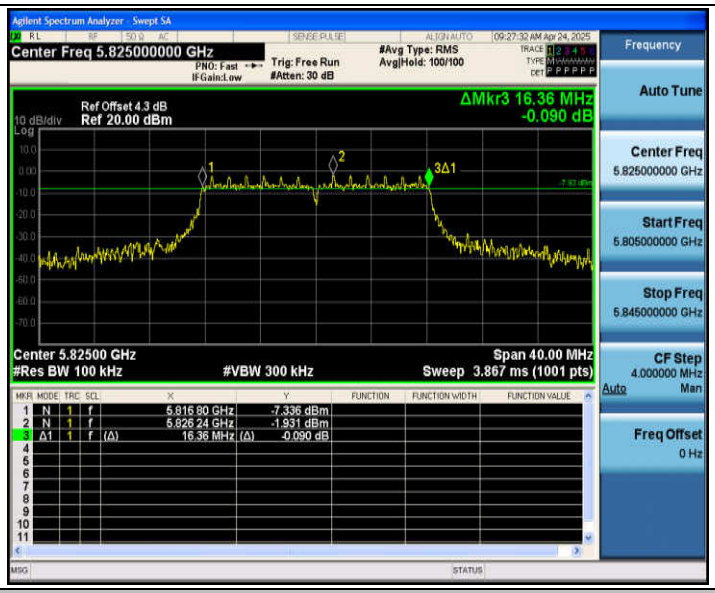
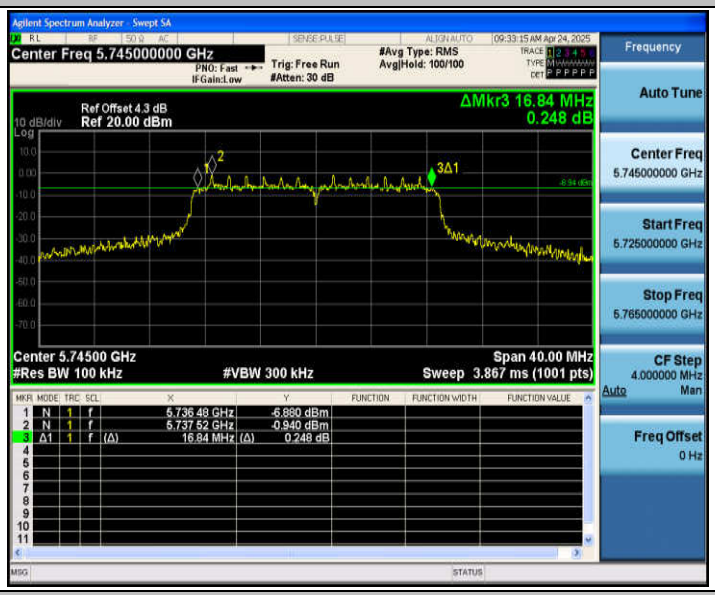

11A_Ant1_5825

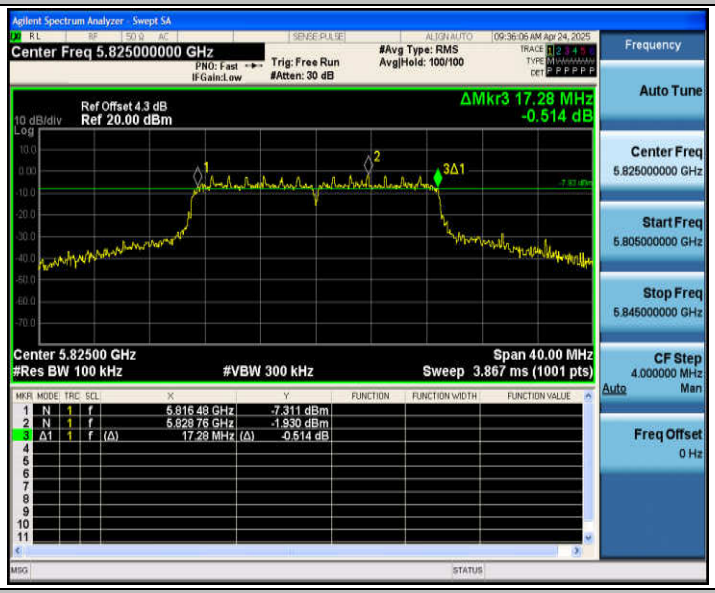


11N20SISO_Ant1_5745



11N20SISO_Ant1_5785

11N20SISO_Ant1_5825



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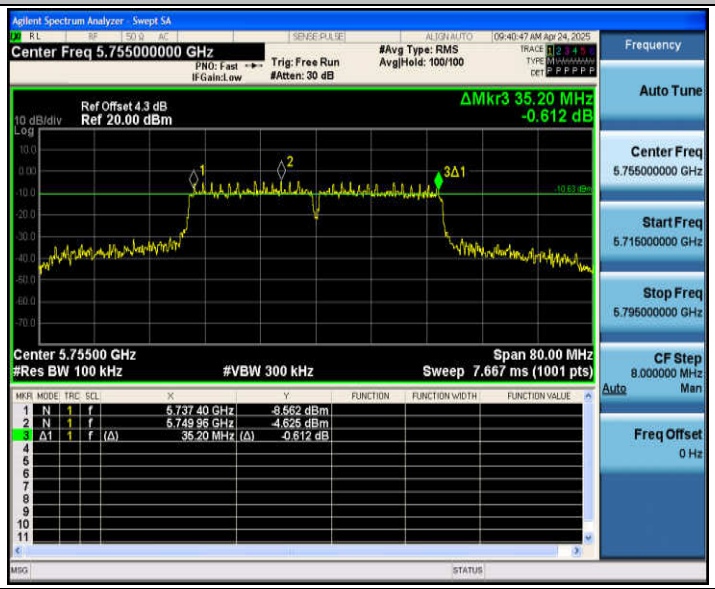
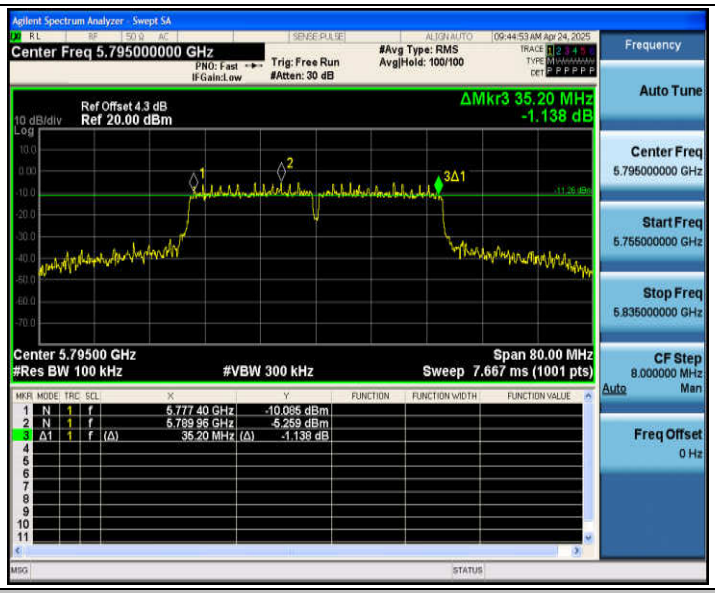


11N40SISO_Ant1_5795



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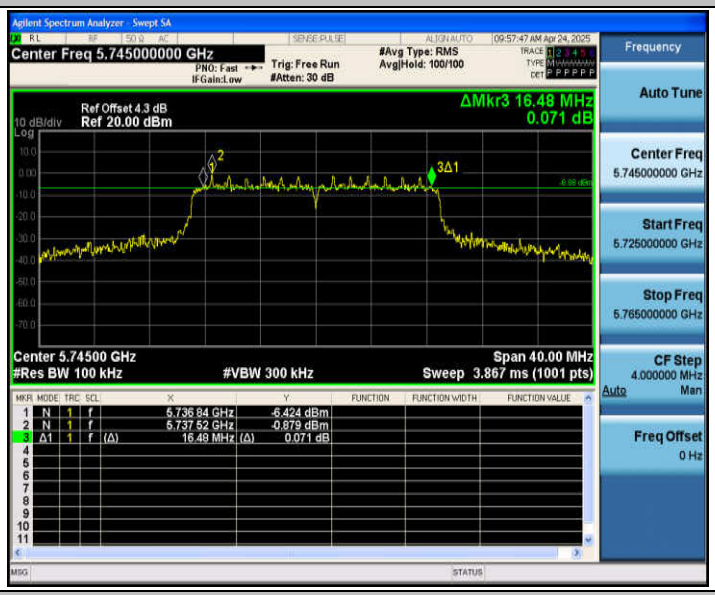
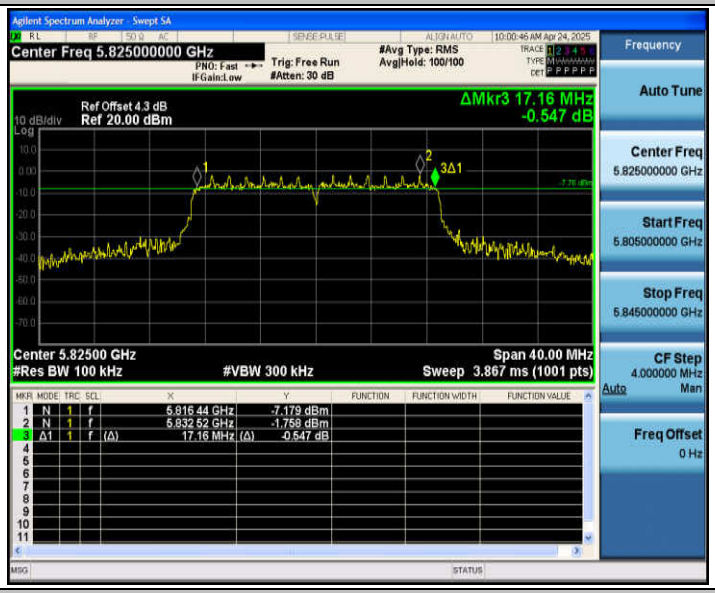


11AC20SISO_Ant1_5785

11AC20SISO_Ant1_5825



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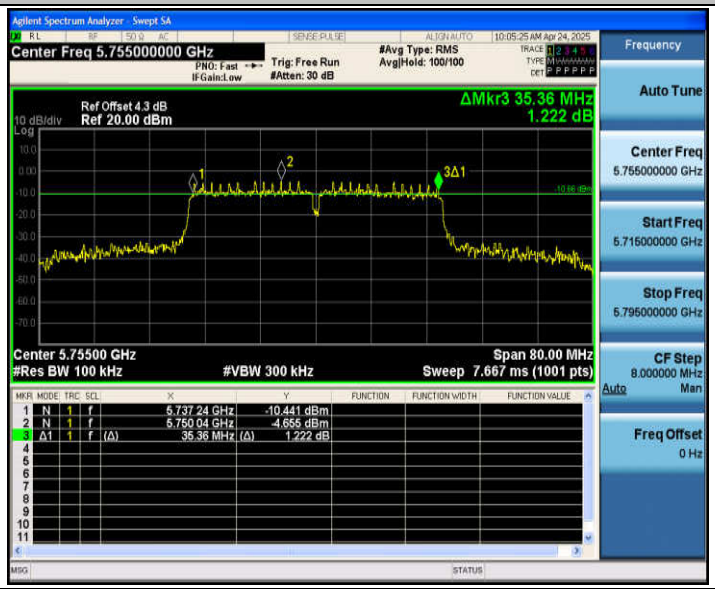

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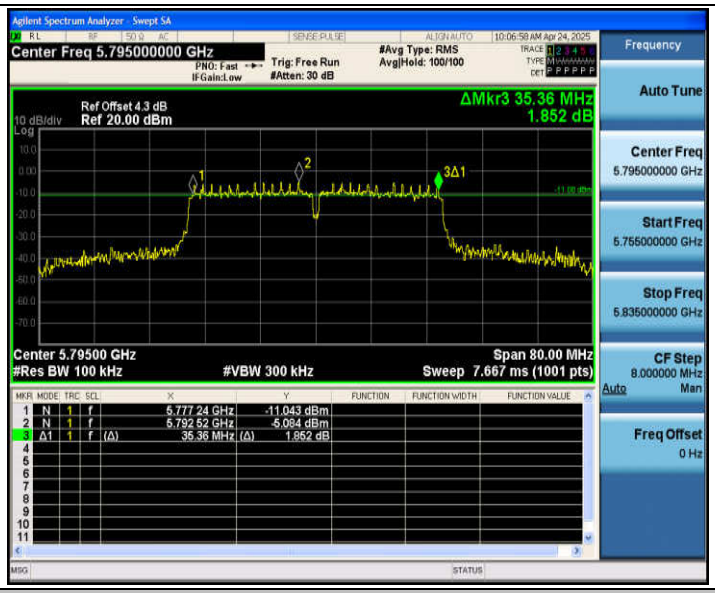

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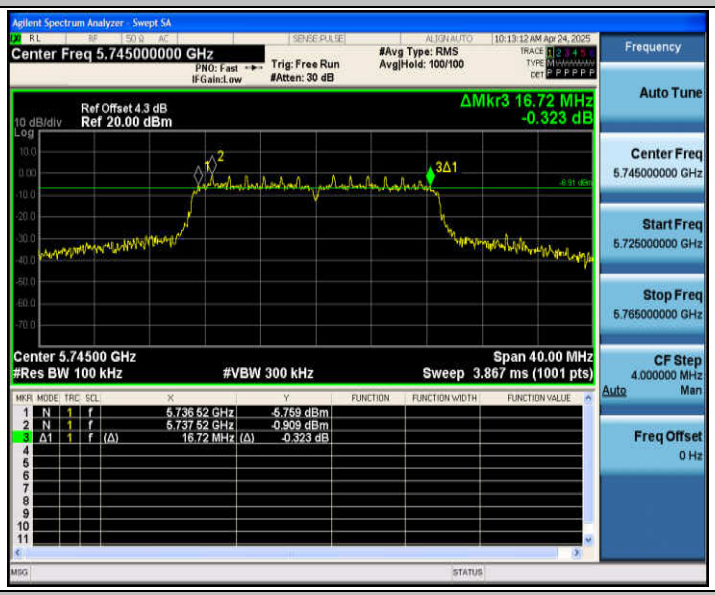

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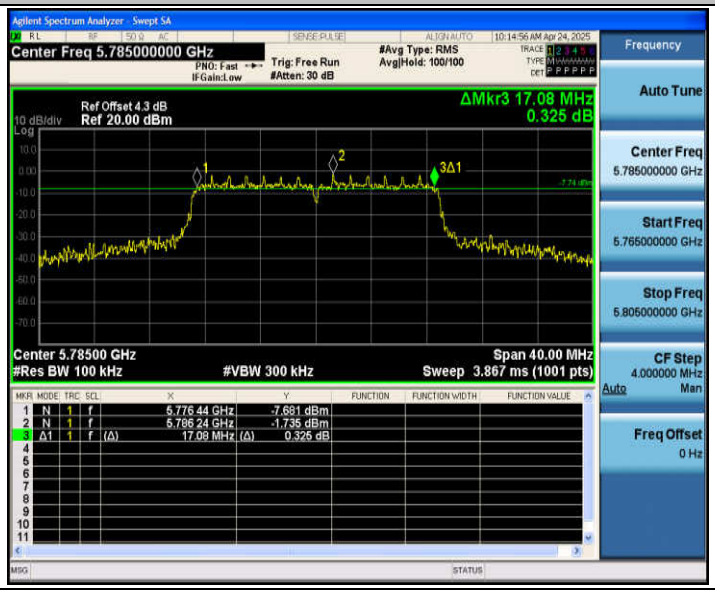

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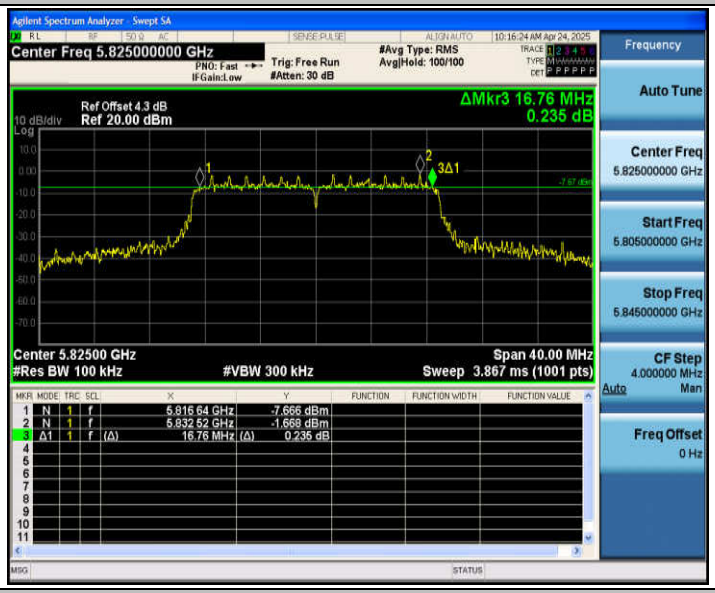
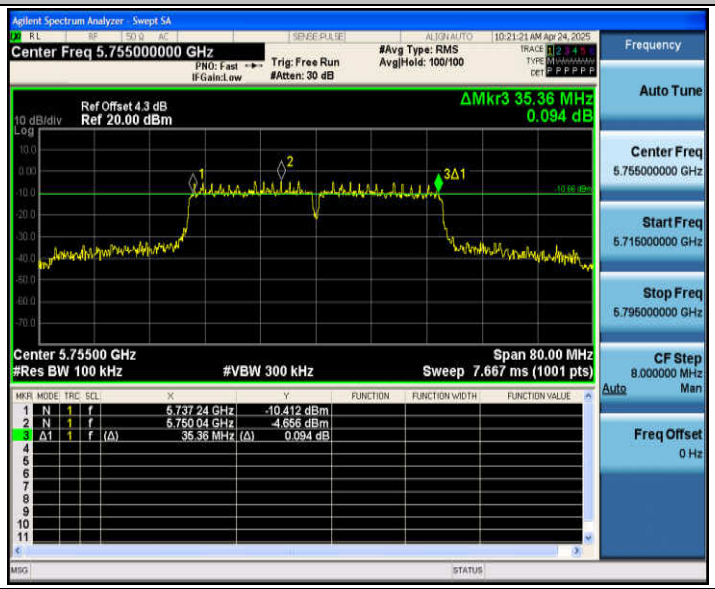
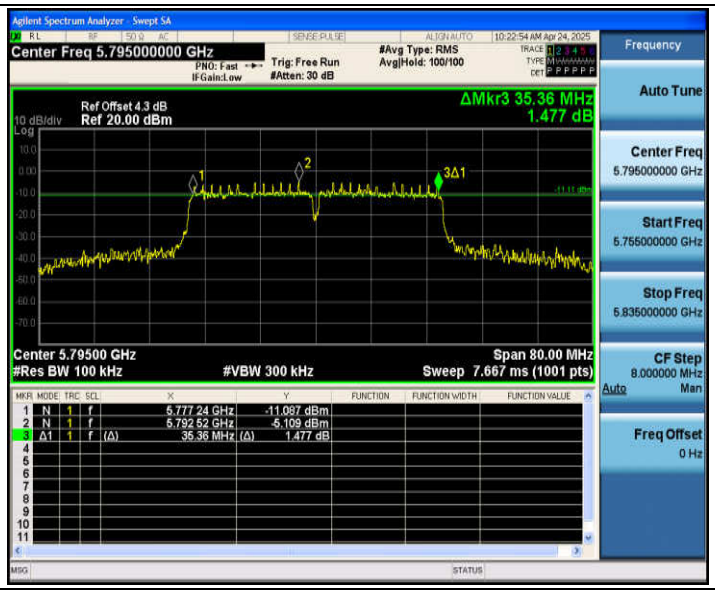


11AX40SISO_Ant1_5755



11AX40SISO_Ant1_5795


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.795000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
10:22:54 AM Apr 24, 2025
Frequency
Auto Tune
Center Freq
5.795000000 GHz
Start Freq
5.755000000 GHz
Stop Freq
5.835000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz
Ref Offset 4.3 dB
10 dB/div
Ref 20.00 dBm
Log
ΔMkr3 35.36 MHz
1.477 dB
Center 5.79500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 80.00 MHz
Sweep 7.667 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 5.777 24 GHz -11.087 dBm
2 N 1 f 5.792 52 GHz -5.109 dBm
3 Δ1 1 f (Δ) 35.36 MHz (Δ) 1.477 dB
MSG
STATUS

Appendix B: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty factor(dB)	Limit	Verdict
11A	Ant1	5180	0.11	0.31	35.48	4.50	---	---
		5220	0.11	0.25	44.00	3.57	---	---
		5240	0.11	0.28	39.29	4.06	---	---
		5745	0.11	0.31	35.48	4.50	---	---
		5785	0.12	0.27	44.44	3.52	---	---
		5825	0.11	0.28	39.29	4.06	---	---
11N20SISO	Ant1	5180	0.12	0.29	41.38	3.83	---	---
		5220	0.11	0.22	50.00	3.01	---	---
		5240	0.11	0.27	40.74	3.90	---	---
		5745	0.11	0.27	40.74	3.90	---	---
		5785	0.12	0.23	52.17	2.83	---	---
		5825	0.11	0.27	40.74	3.90	---	---
11N40SISO	Ant1	5190	0.07	0.24	29.17	5.35	---	---
		5230	0.07	0.27	25.93	5.86	---	---
		5755	0.07	0.23	30.43	5.17	---	---
		5795	0.08	0.26	30.77	5.12	---	---
11AC20SISO	Ant1	5180	0.12	0.28	42.86	3.68	---	---
		5220	0.12	0.22	54.55	2.63	---	---
		5240	0.12	0.29	41.38	3.83	---	---
		5745	0.12	0.32	37.50	4.26	---	---
		5785	0.12	0.21	57.14	2.43	---	---
		5825	0.12	0.28	42.86	3.68	---	---
11AC40SISO	Ant1	5190	0.08	0.27	29.63	5.28	---	---
		5230	0.08	0.24	33.33	4.77	---	---
		5755	0.08	0.28	28.57	5.44	---	---
		5795	0.08	0.28	28.57	5.44	---	---
11AX20SISO	Ant1	5180	0.12	0.22	54.55	2.63	---	---
		5220	0.12	0.28	42.86	3.68	---	---
		5240	0.12	0.28	42.86	3.68	---	---
		5745	0.12	0.27	44.44	3.52	---	---
		5785	0.12	0.29	41.38	3.83	---	---
		5825	0.11	0.21	52.38	2.81	---	---
11AX40SISO	Ant1	5190	0.08	0.21	38.10	4.19	---	---
		5230	0.08	0.25	32.00	4.95	---	---
		5755	0.08	0.24	33.33	4.77	---	---
		5795	0.08	0.22	36.36	4.39	---	---