FCC Appendix RF Test Data

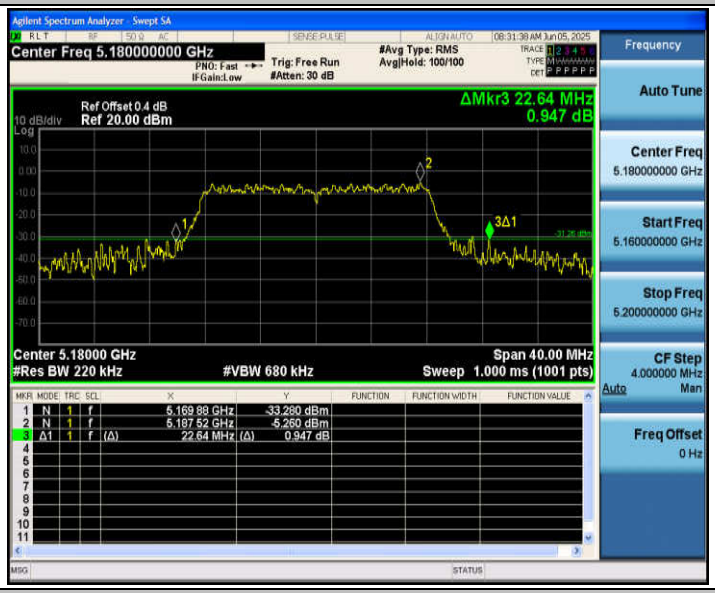
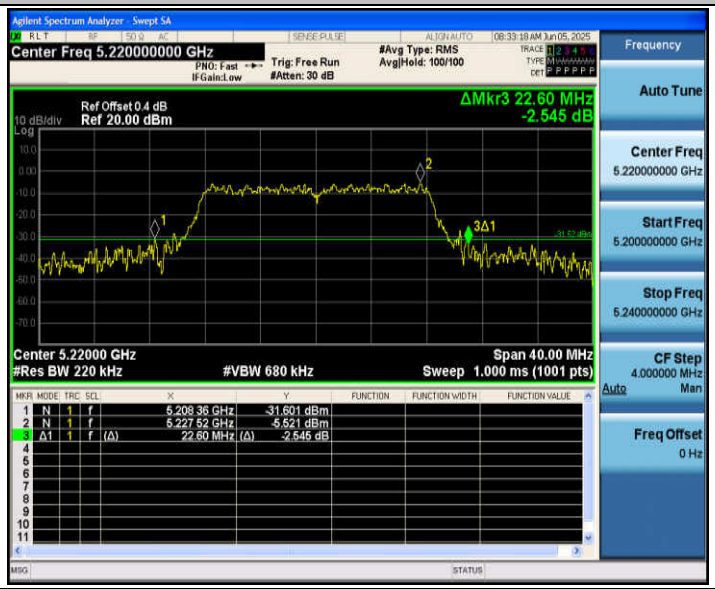
FCC ID	**:**	**2AXCX-GT20**
Company:	**:**	**Shenzhen Foxwell Technology Co., Ltd**
EUT	**:**	**Automobile diagnosis equipment**
Model Number	**:**	**GT20**
Report No.	**:**	**CTA25052800702**
Reviewed By	**:**	**Eric Wang**

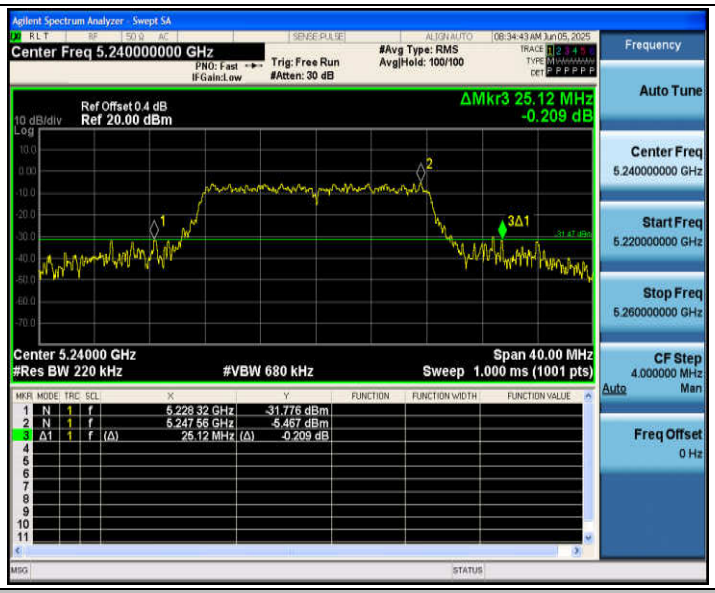
Appendix A1: Emission Bandwidth

Test Result

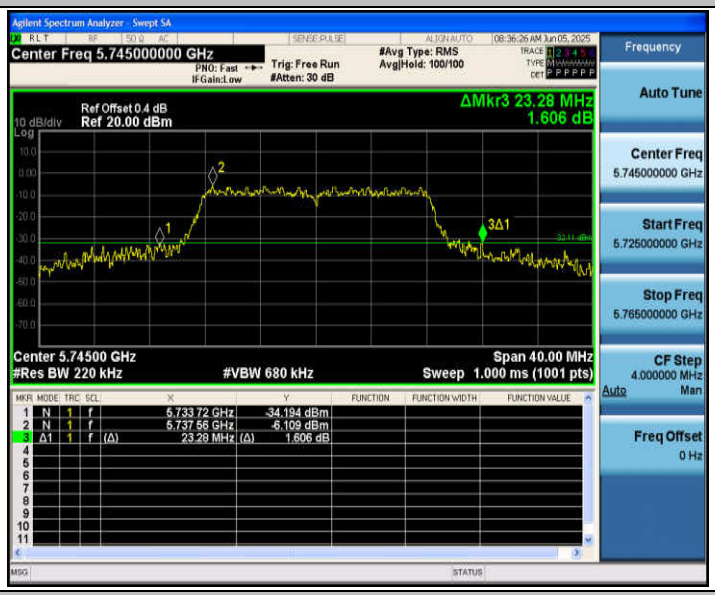
TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	22.640	5169.880	5192.520	---	---
		5220	22.600	5208.360	5230.960	---	---
		5240	25.120	5228.320	5253.440	---	---
		5745	23.280	5733.720	5757.000	---	---
		5785	22.480	5772.800	5795.280	---	---
		5825	19.440	5815.360	5834.800	---	---
11N20SISO	Ant1	5180	24.480	5168.400	5192.880	---	---
		5220	25.040	5208.320	5233.360	---	---
		5240	25.280	5227.360	5252.640	---	---
		5745	24.440	5733.080	5757.520	---	---
		5785	24.480	5773.040	5797.520	---	---
		5825	24.840	5812.880	5837.720	---	---
11N40SISO	Ant1	5190	44.560	5168.800	5213.360	---	---
		5230	42.880	5208.880	5251.760	---	---
		5755	58.800	5727.720	5786.520	---	---
		5795	48.240	5773.800	5822.040	---	---

Test Graphs

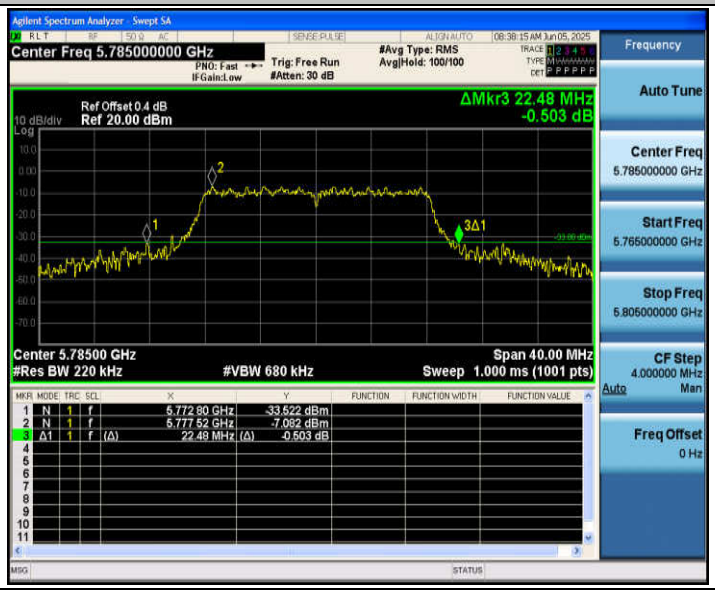
11A_Ant1_5180

11A_Ant1_5220

11A_Ant1_5240



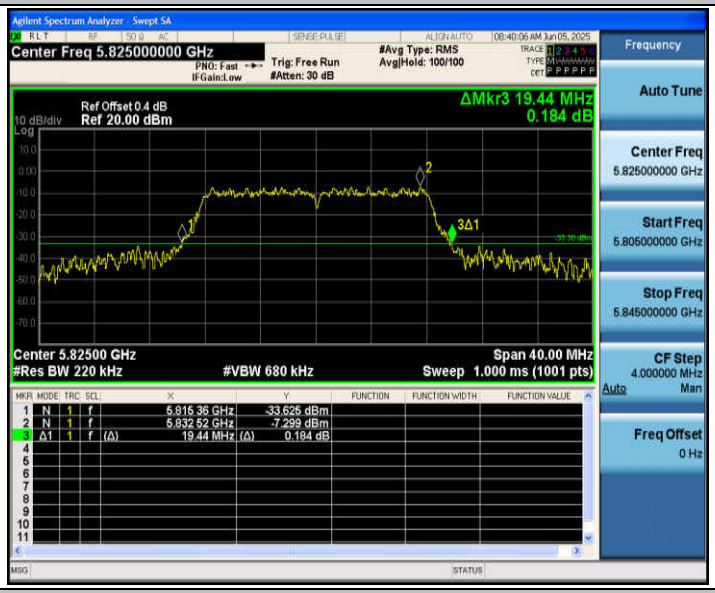
11A_Ant1_5745



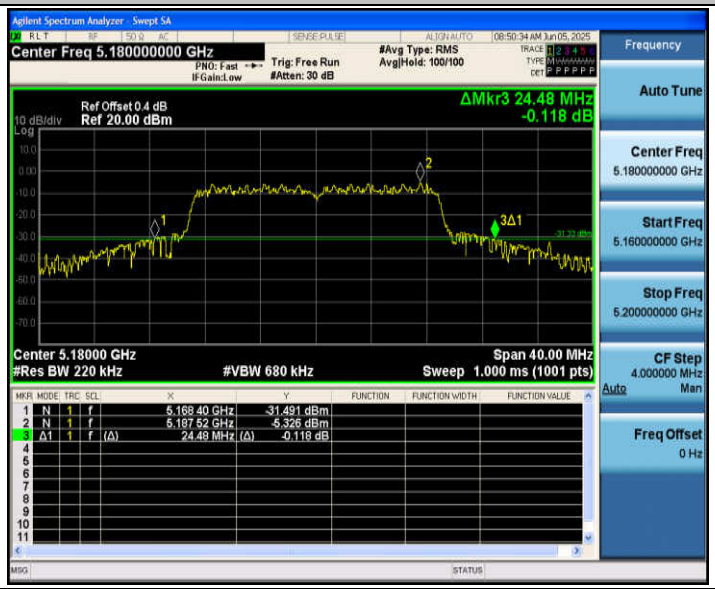
11A_Ant1_5785



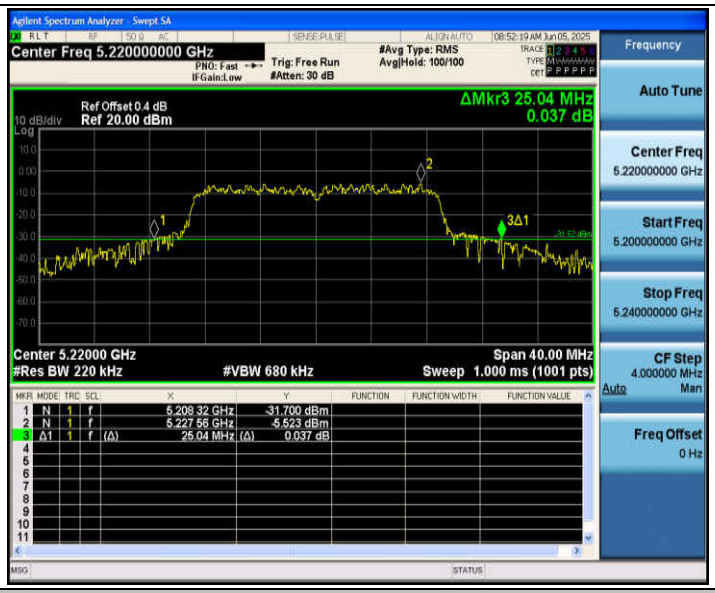
11A_Ant1_5825



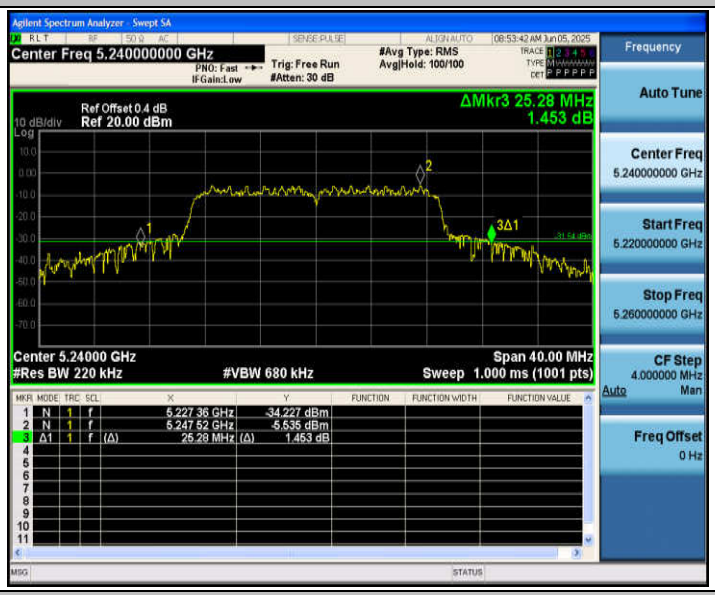
11N20SISO_Ant1_5180



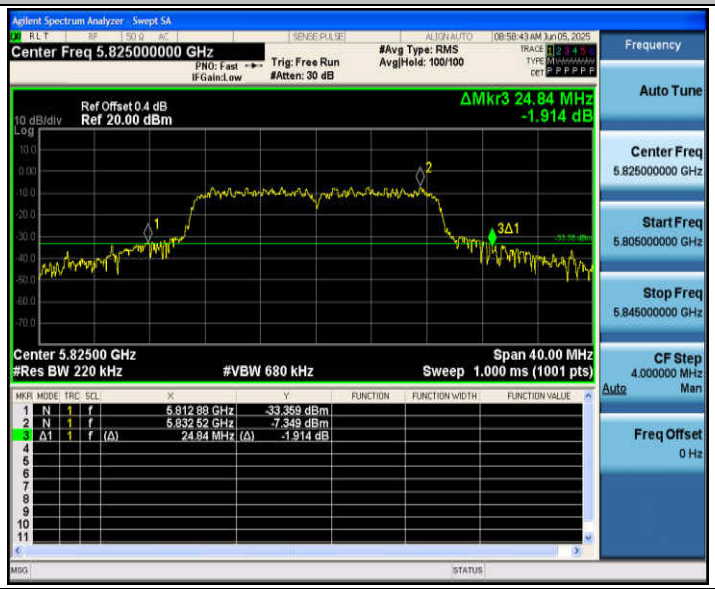
11N20SISO_Ant1_5220



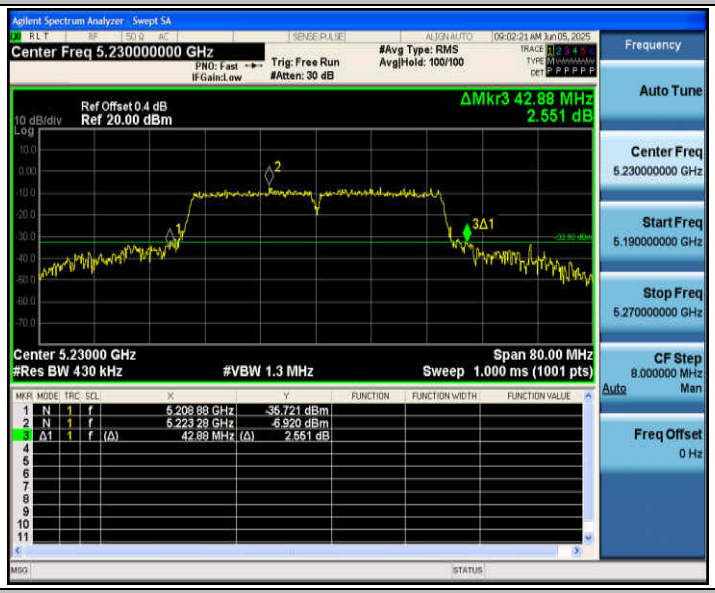
11N20SISO_Ant1_5240



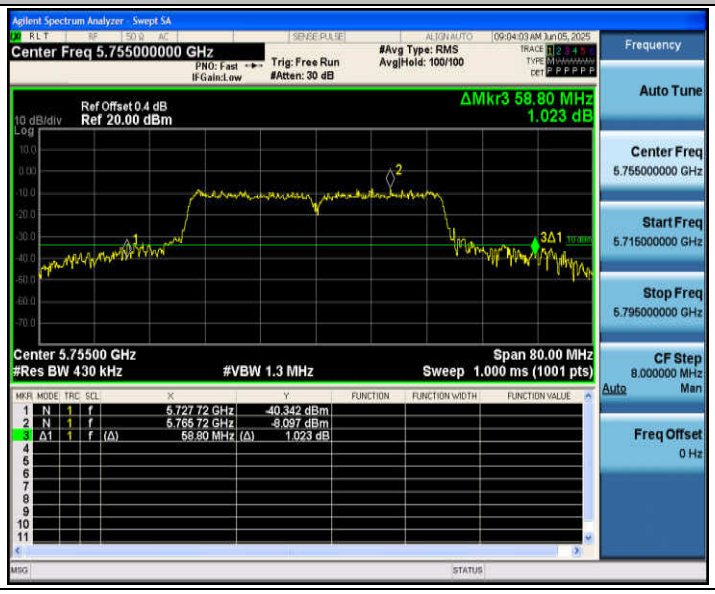
11N20SISO_Ant1_5745

11N20SISO_Ant1_5785
11N20SISO_Ant1_5825

11N40SISO_Ant1_5190

11N40SISO_Ant1_5230



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

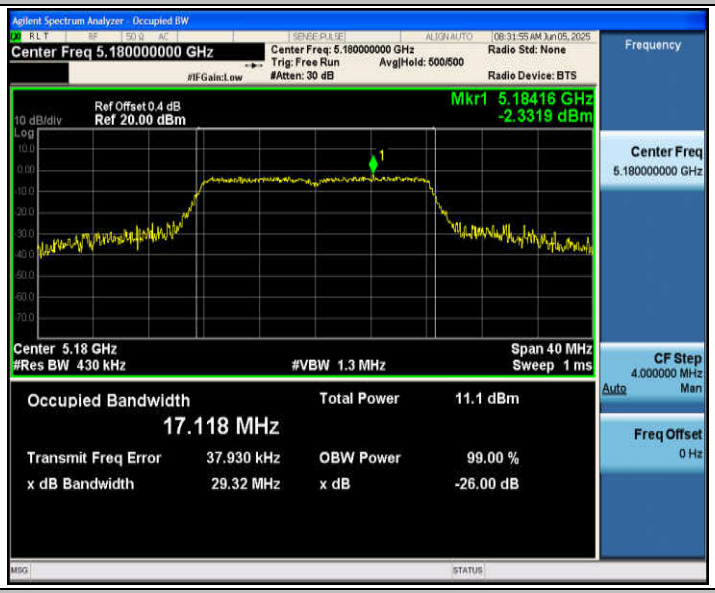
Appendix A2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.118	5171.4789	5188.5969	---	---
		5220	17.105	5211.4770	5228.5820	---	---
		5240	17.075	5231.4719	5248.5469	---	---
		5745	17.169	5736.3843	5753.5533	---	---
		5785	17.102	5776.4298	5793.5318	---	---
		5825	17.099	5816.4830	5833.5820	---	---
11N20SISO	Ant1	5180	18.198	5170.9895	5189.1875	---	---
		5220	18.148	5210.9706	5229.1186	---	---
		5240	18.148	5230.9753	5249.1233	---	---
		5745	18.142	5735.9041	5754.0461	---	---
		5785	18.054	5775.9815	5794.0355	---	---
		5825	18.118	5816.0148	5834.1328	---	---
11N40SISO	Ant1	5190	36.958	5171.6915	5208.6495	---	---
		5230	36.416	5211.8326	5248.2486	---	---
		5755	36.826	5736.7206	5773.5466	---	---
		5795	36.845	5776.7581	5813.6031	---	---

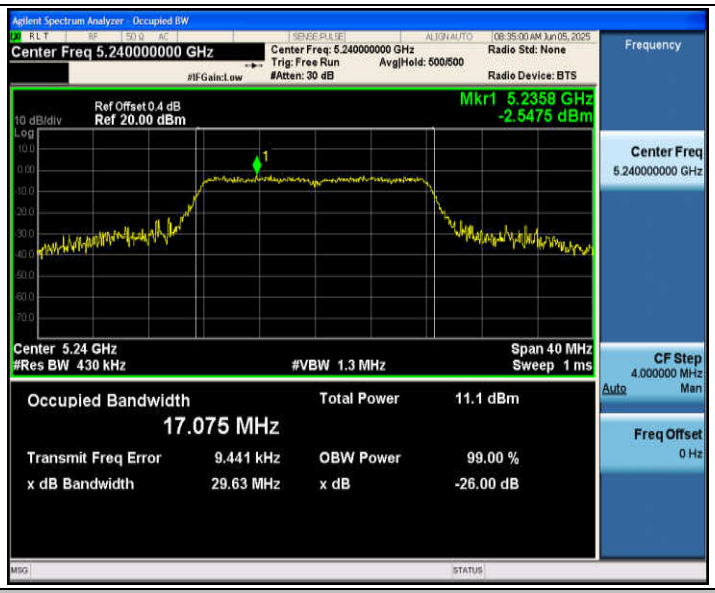
Test Graphs

11A_Ant1_5180

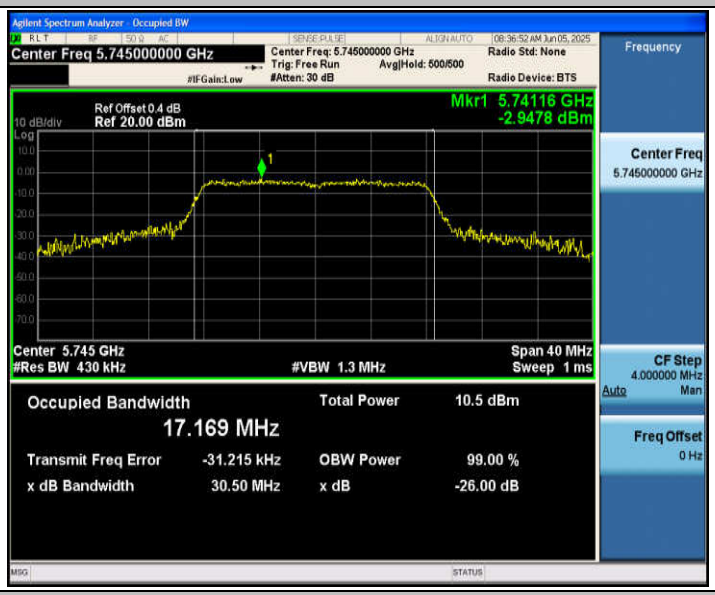


11A_Ant1_5220

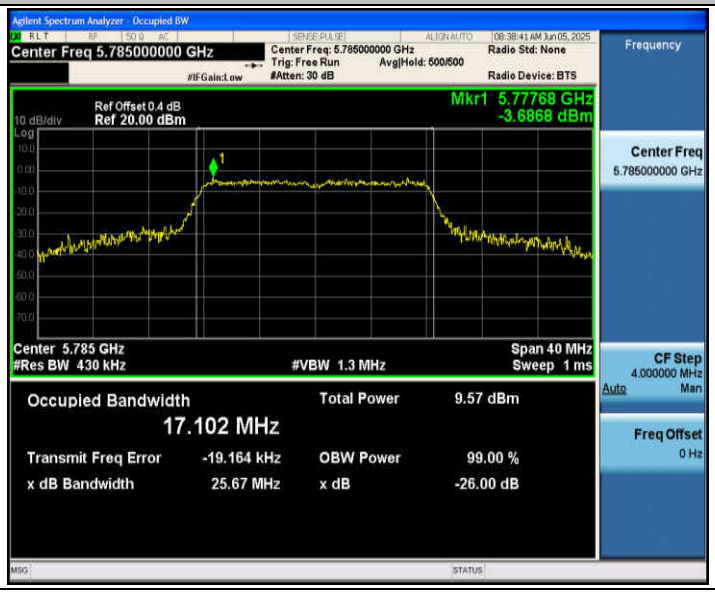
11A_Ant1_5240



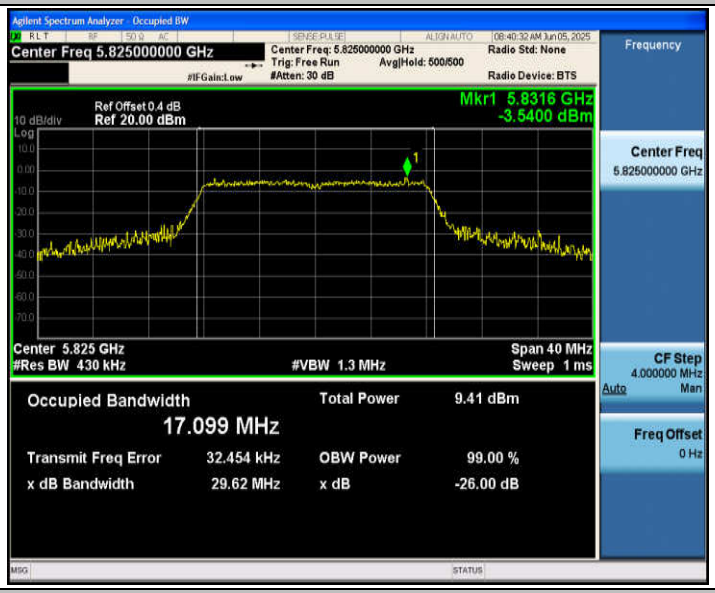
11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825

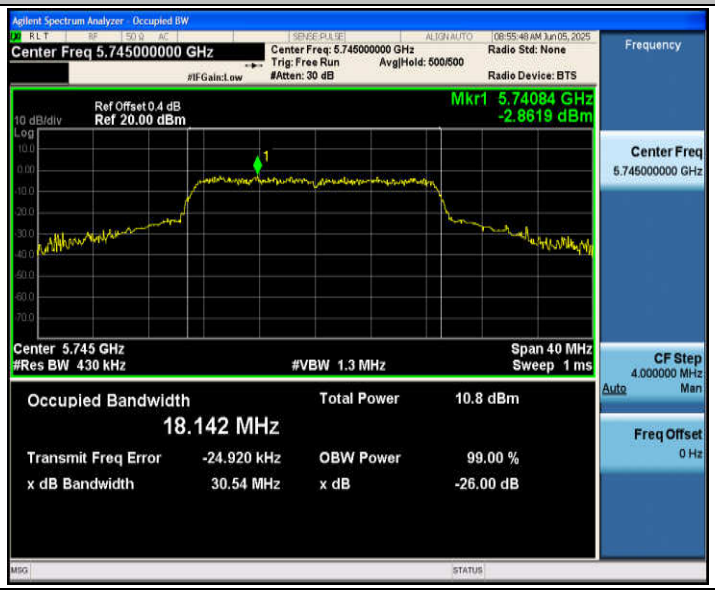


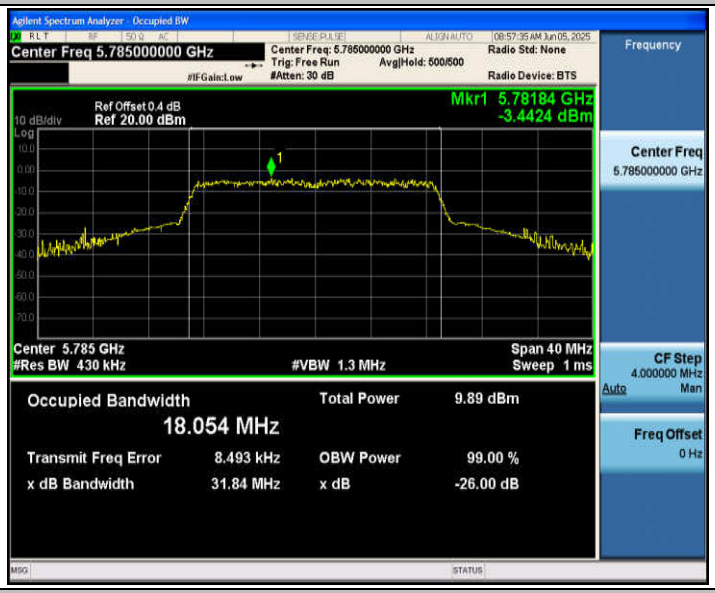
11N20SISO_Ant1_5180

11N20SISO_Ant1_5220

11N20SISO_Ant1_5240

11N20SISO_Ant1_5745



11N20SISO_Ant1_5785


11N20SISO_Ant1_5825

11N40SISO_Ant1_5190

11N40SISO_Ant1_5230

11N40SISO_Ant1_5755

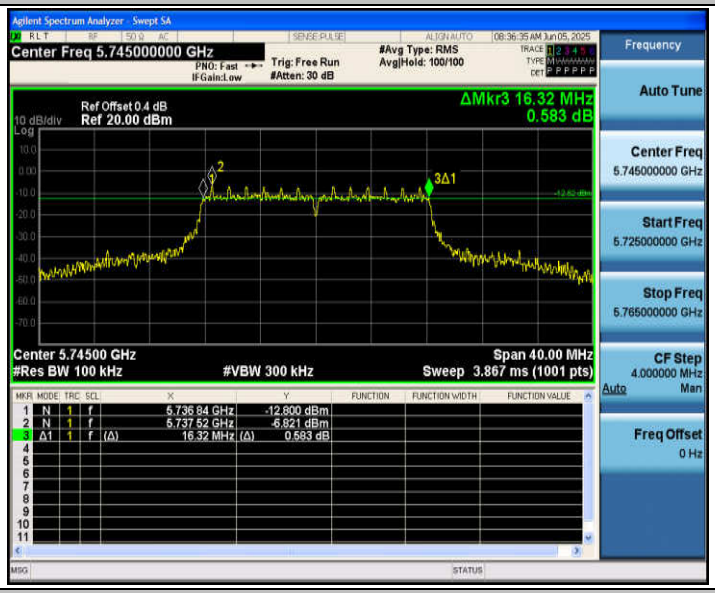
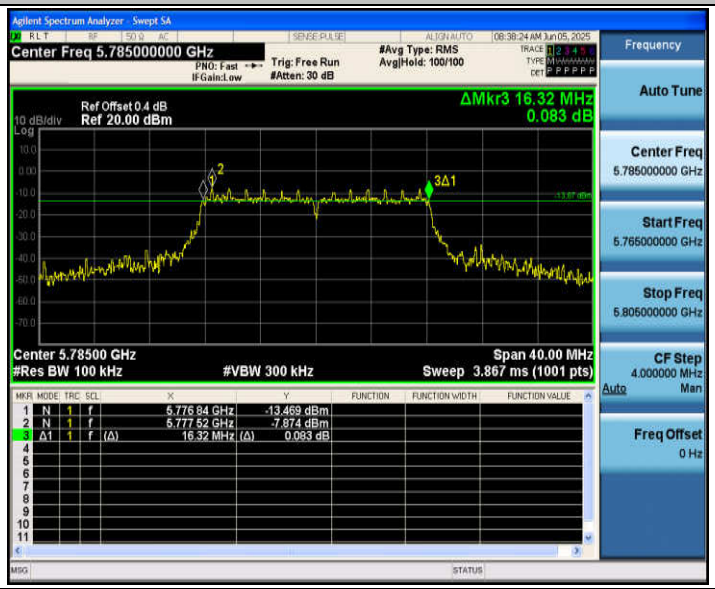
11N40SISO_Ant1_5795

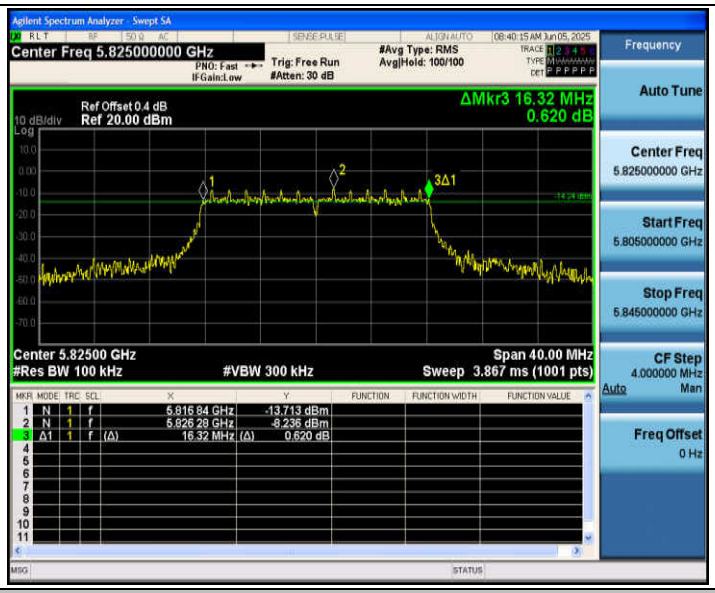
Appendix A3: Min emission bandwidth

Test Result B4

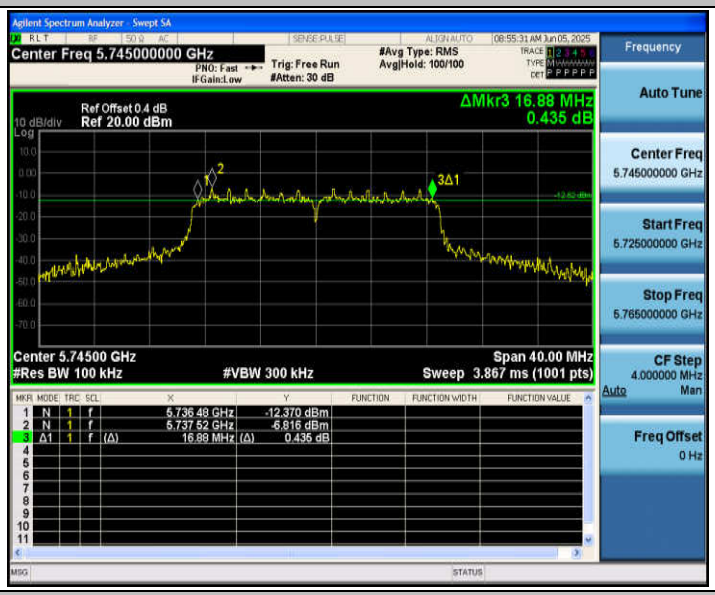
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.840	5753.160	0.5	PASS
		5785	16.320	5776.840	5793.160	0.5	PASS
		5825	16.320	5816.840	5833.160	0.5	PASS
11N20SISO	Ant1	5745	16.880	5736.480	5753.360	0.5	PASS
		5785	16.840	5776.520	5793.360	0.5	PASS
		5825	17.000	5816.480	5833.480	0.5	PASS
11N40SISO	Ant1	5755	35.680	5737.240	5772.920	0.5	PASS
		5795	35.760	5777.080	5812.840	0.5	PASS

Test Graphs B4

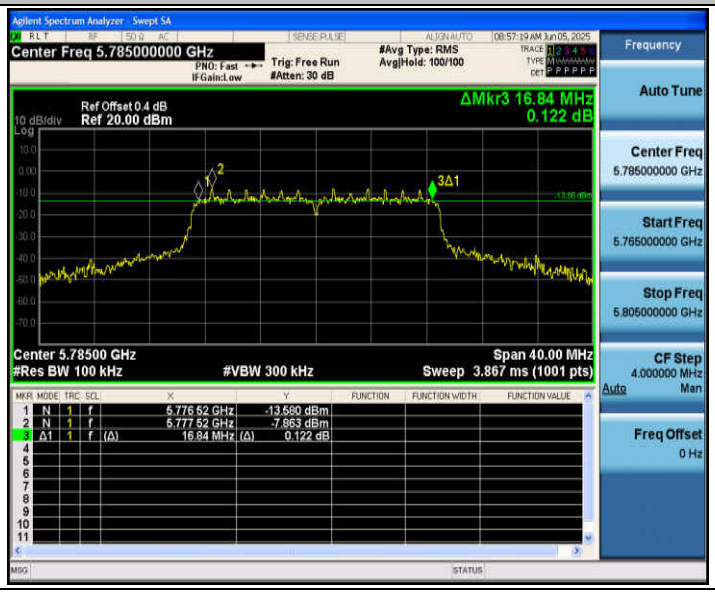
11A_Ant1_5745

11A_Ant1_5785

11A_Ant1_5825



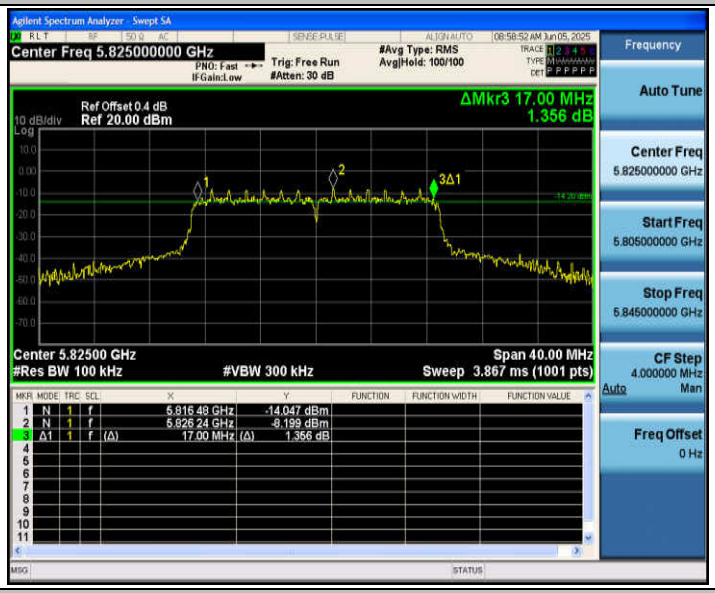
11N20SISO_Ant1_5745



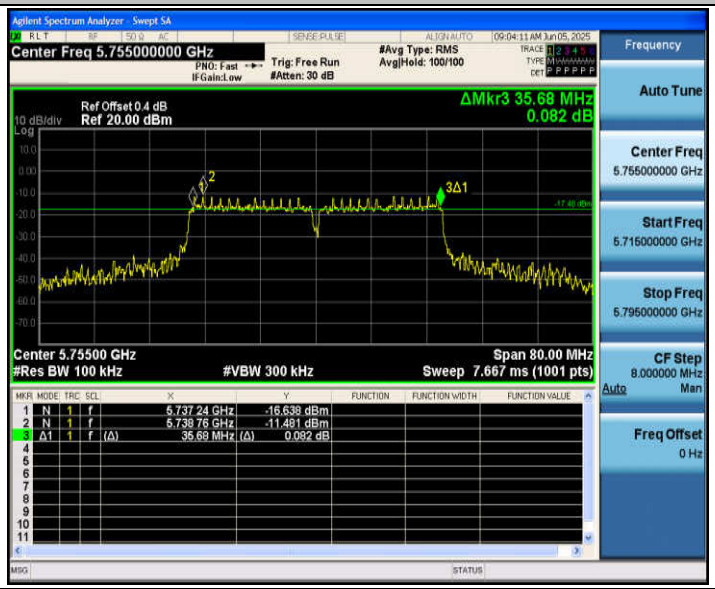
11N20SISO_Ant1_5785



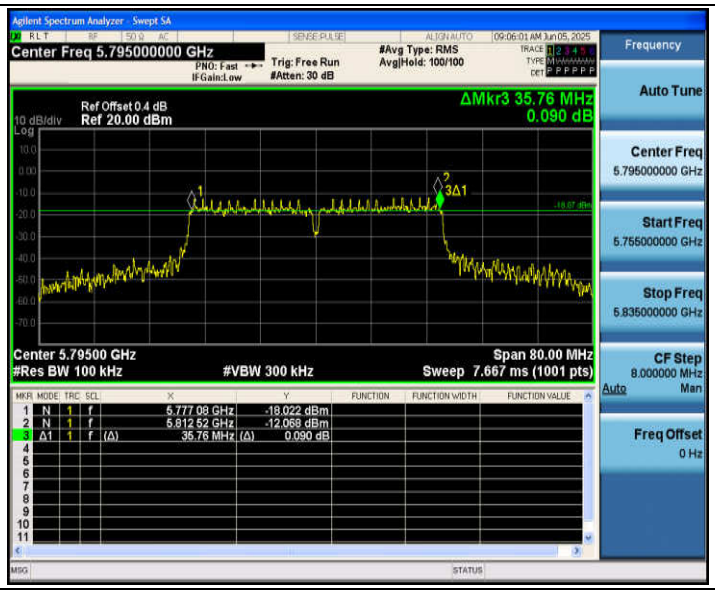
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

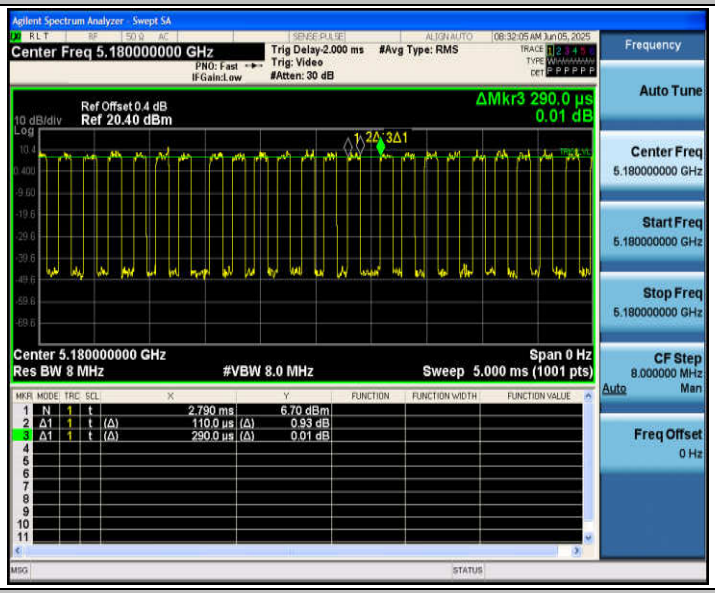
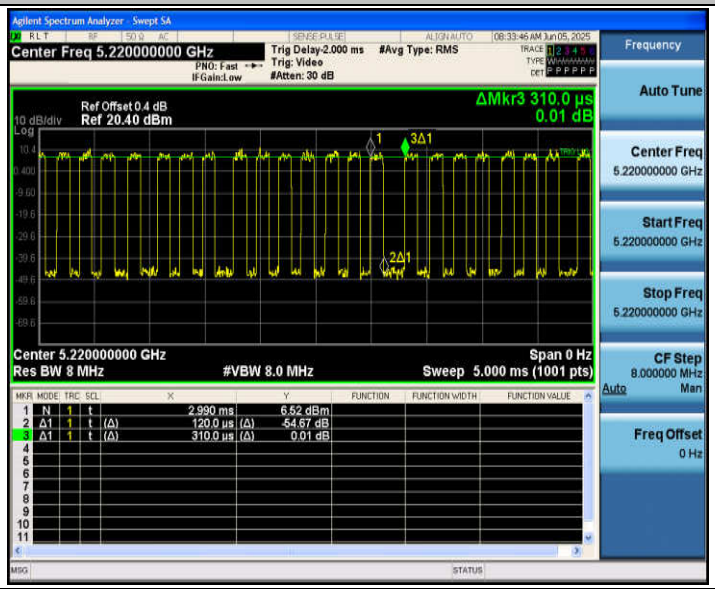

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.795000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
09:06:01 AM Jun 05, 2025
Frequency
Auto Tune
Center Freq
5.795000000 GHz
Start Freq
5.755000000 GHz
Stop Freq
5.835000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz
Ref Offset 0.4 dB
10 dB/div
Ref 20.00 dBm
Log
ΔMkr3 35.76 MHz
0.090 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 08 GHz -18.022 dBm
2 N 1 f 5.812 52 GHz -12.068 dBm
3 Δ1 1 f (Δ) 35.76 MHz (Δ) 0.090 dB
MSG
STATUS

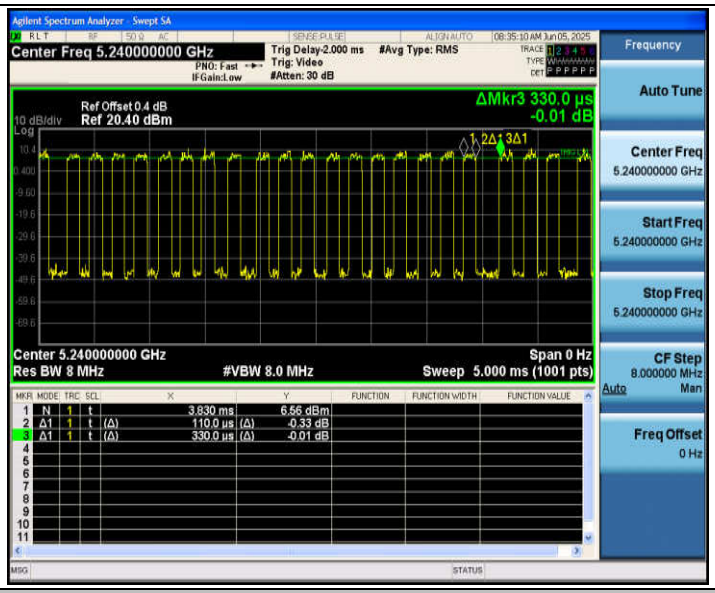
Appendix B: Duty Cycle

Test Result

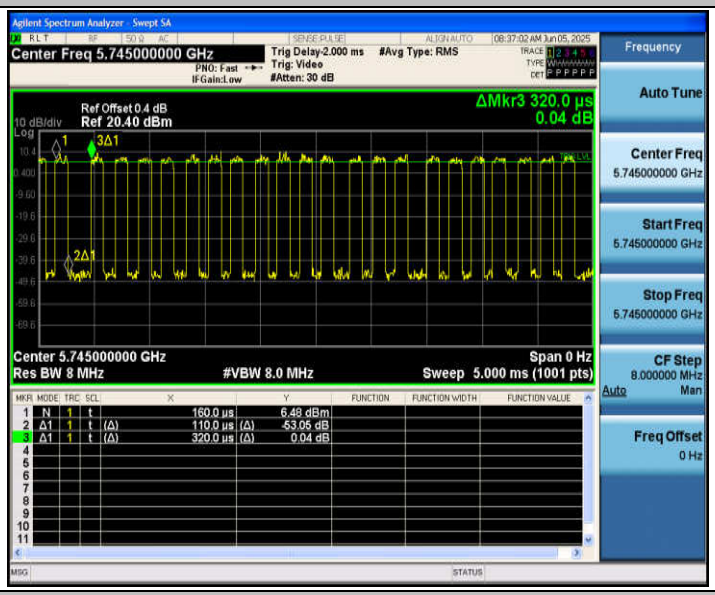
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty factor(dB)	Limit	Verdict
11A	Ant1	5180	0.11	0.29	37.93	4.21	---	---
		5220	0.12	0.31	38.71	4.12	---	---
		5240	0.11	0.33	33.33	4.77	---	---
		5745	0.11	0.32	34.38	4.64	---	---
		5785	0.11	0.28	39.29	4.06	---	---
		5825	0.11	0.31	35.48	4.50	---	---
11N20SISO	Ant1	5180	0.11	0.31	35.48	4.50	---	---
		5220	0.11	0.32	34.38	4.64	---	---
		5240	0.11	0.28	39.29	4.06	---	---
		5745	0.11	0.30	36.67	4.36	---	---
		5785	0.11	0.30	36.67	4.36	---	---
		5825	0.11	0.30	36.67	4.36	---	---
11N40SISO	Ant1	5190	0.07	0.29	24.14	6.17	---	---
		5230	0.07	0.25	28.00	5.53	---	---
		5755	0.08	0.29	27.59	5.59	---	---
		5795	0.07	0.27	25.93	5.86	---	---

Test Graphs

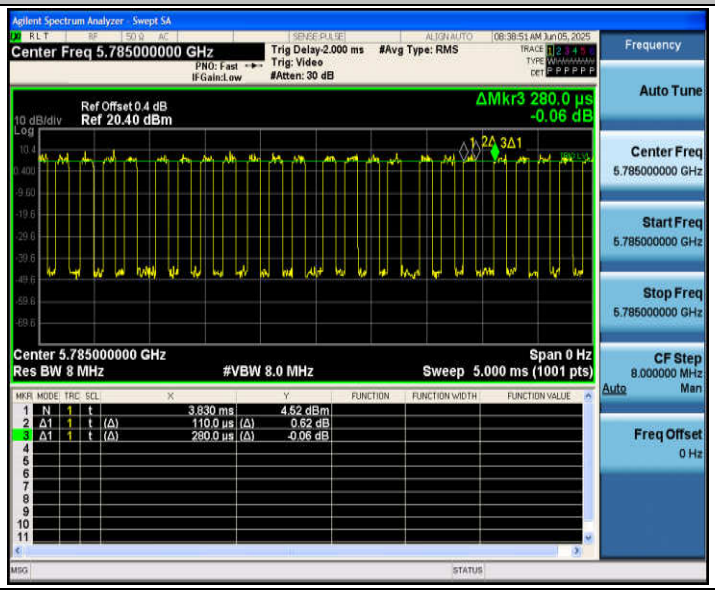
11A_Ant1_5180

11A_Ant1_5220

11A_Ant1_5240



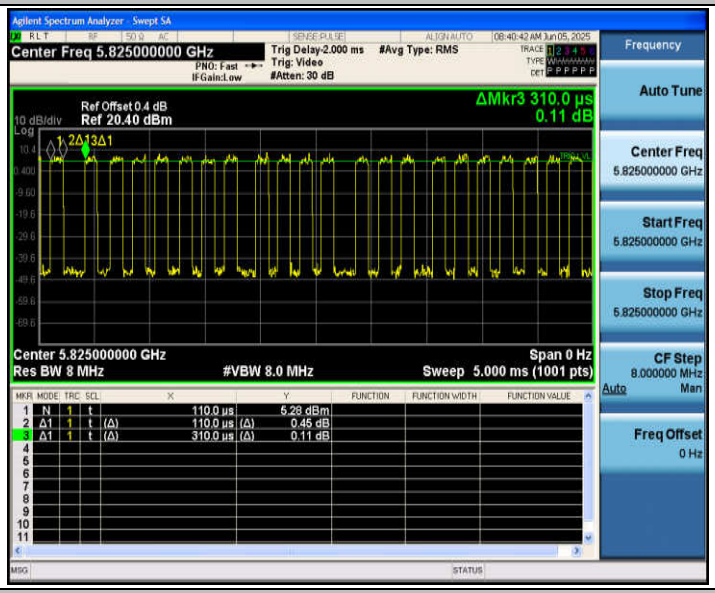
11A_Ant1_5745



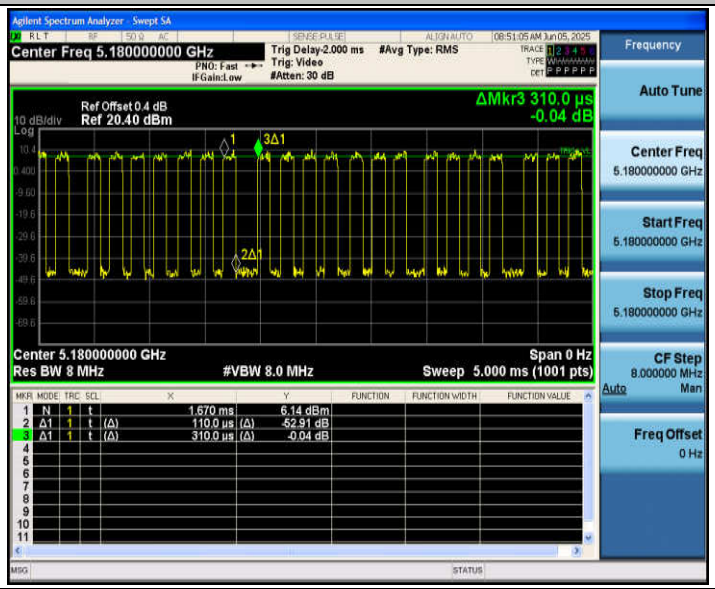
11A_Ant1_5785



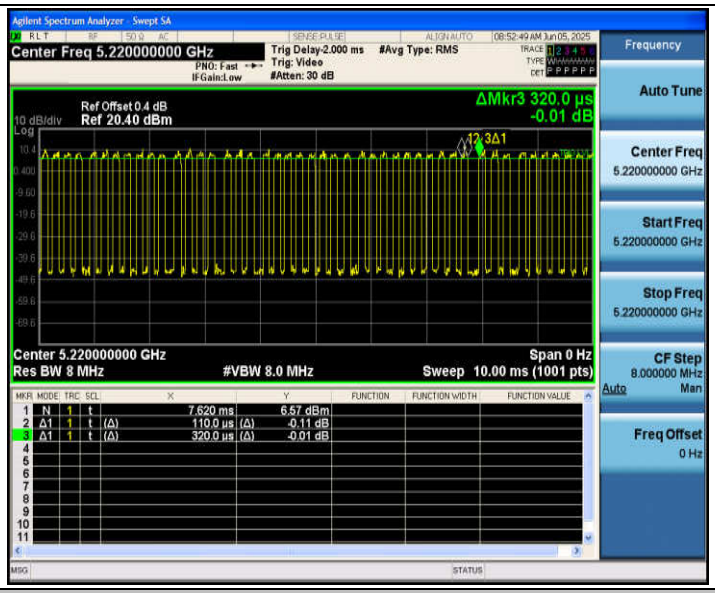
11A_Ant1_5825



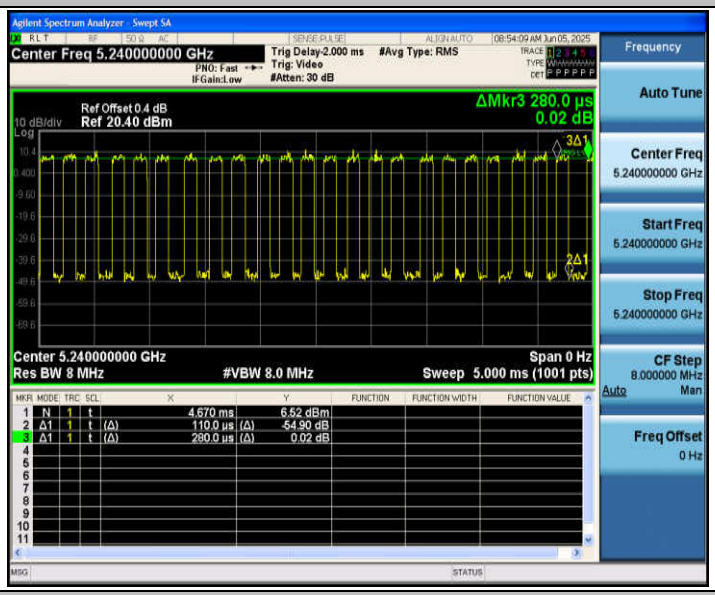
11N20SISO_Ant1_5180



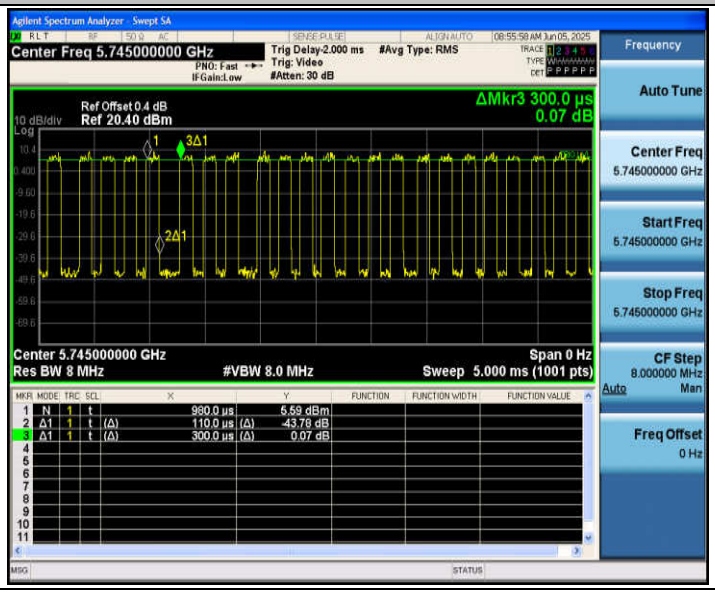
11N20SISO_Ant1_5220

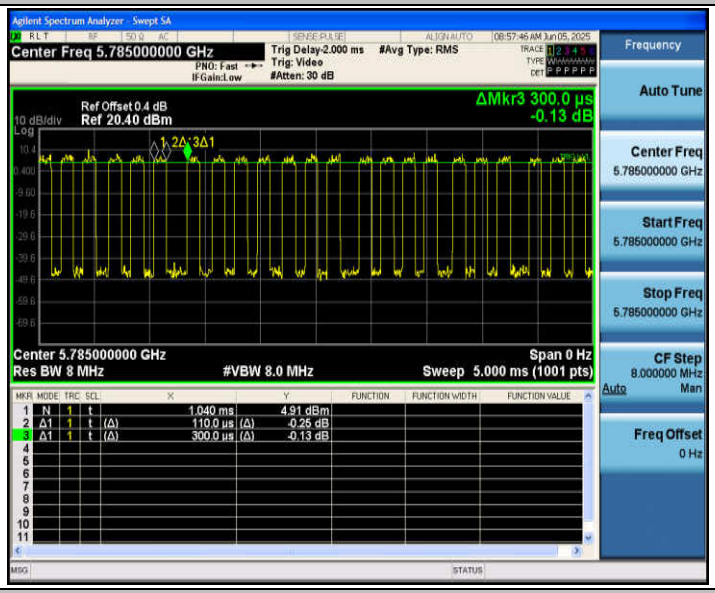
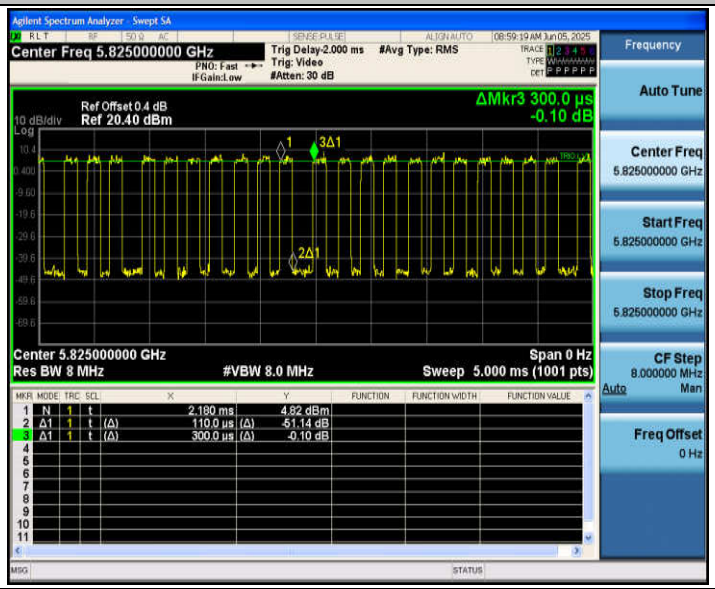


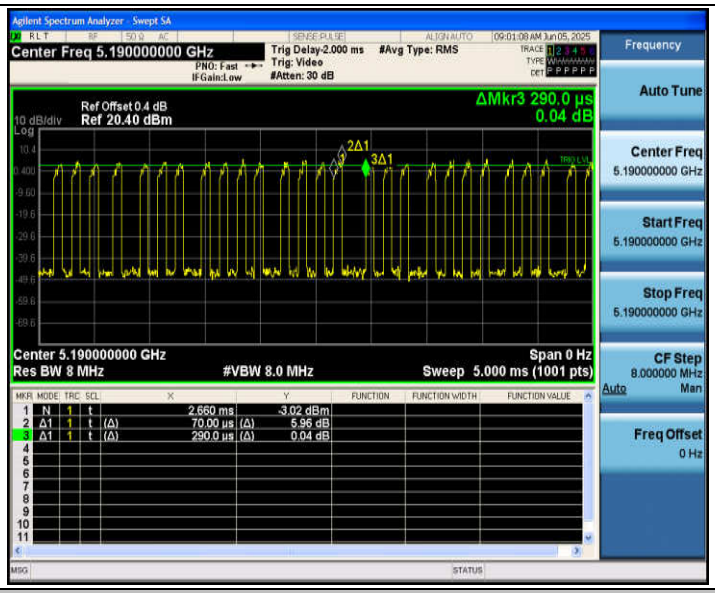
11N20SISO_Ant1_5240



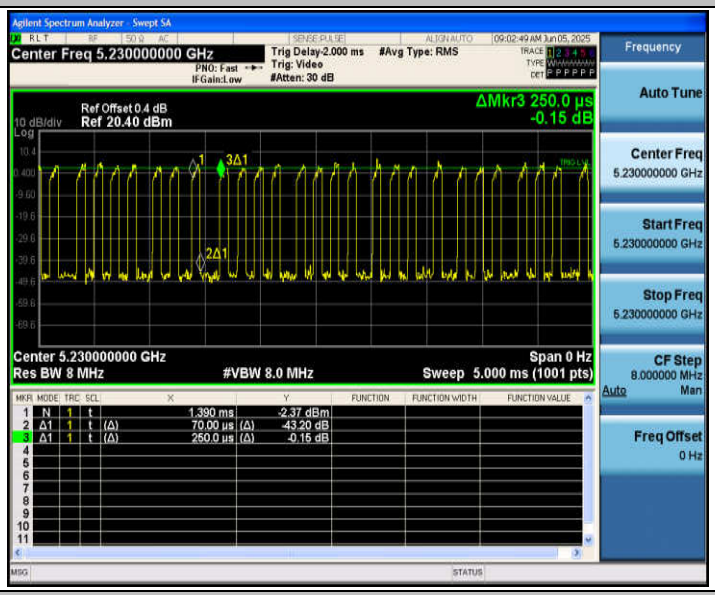
11N20SISO_Ant1_5745



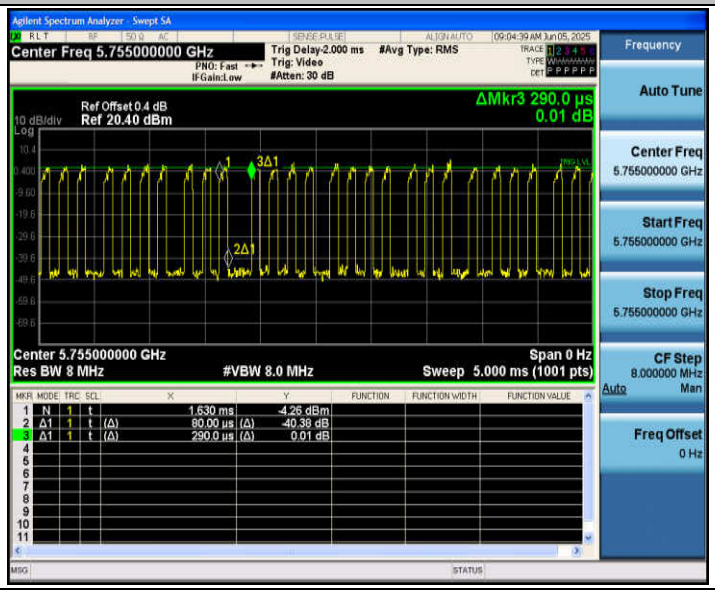
11N20SISO_Ant1_5785

11N20SISO_Ant1_5825

11N40SISO_Ant1_5190

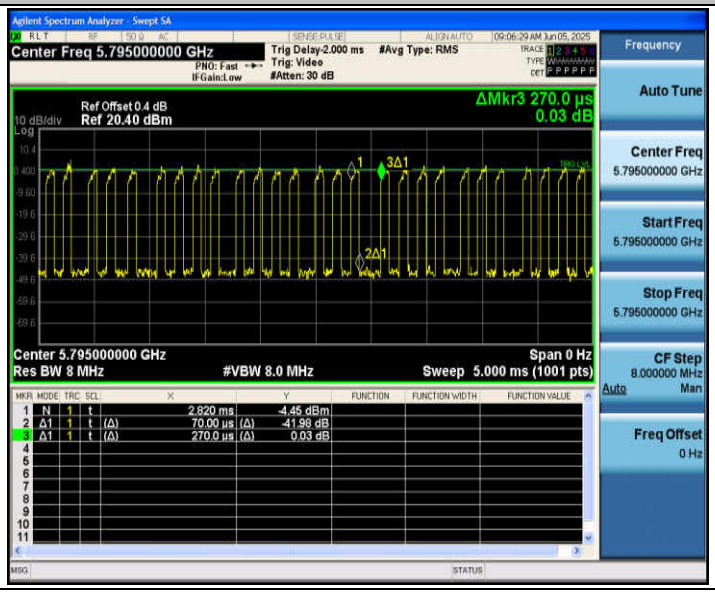


11N40SISO_Ant1_5230



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795


Appendix C: 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	1.80	37.93	4.21	6.01	≤23.98	PASS
		5220	1.80	38.71	4.12	5.92	≤23.98	PASS
		5240	1.81	33.33	4.77	6.58	≤23.98	PASS
		5745	1.21	34.38	4.64	5.85	≤30.00	PASS
		5785	0.28	39.29	4.06	4.34	≤30.00	PASS
		5825	0.11	35.48	4.50	4.61	≤30.00	PASS
11N20SISO	Ant1	5180	1.73	35.48	4.50	6.23	≤23.98	PASS
		5220	1.69	34.38	4.64	6.33	≤23.98	PASS
		5240	1.85	39.29	4.06	5.91	≤23.98	PASS
		5745	1.19	36.67	4.36	5.55	≤30.00	PASS
		5785	0.23	36.67	4.36	4.59	≤30.00	PASS
		5825	0.14	36.67	4.36	4.50	≤30.00	PASS
11N40SISO	Ant1	5190	0.13	24.14	6.17	6.30	≤23.98	PASS
		5230	-0.73	28.00	5.53	4.80	≤23.98	PASS
		5755	-1.65	27.59	5.59	3.94	≤30.00	PASS
		5795	-2.39	25.93	5.86	3.47	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/1MHz] For 5.2G / Result [dBm/300KHz] For 5.8G	RBW Factor (dB)	Duty factor (dB)	Result [dBm/MHz] For 5.2G / Result [dBm/500kHz] For 5.8G	Limit[dBm/MHz] For 5.2G / Limit[dBm/500kHz] For 5.8G	Verdict
11A	Ant1	5180	-8.394	/	4.21	-4.18	≤11.00	PASS
		5220	-8.693	/	4.12	-4.57	≤11.00	PASS
		5240	-8.277	/	4.77	-3.51	≤11.00	PASS
		5745	-14.029	2.22	4.64	-7.17	≤30.00	PASS
		5785	-14.689	2.22	4.06	-8.41	≤30.00	PASS
		5825	-14.870	2.22	4.50	-8.15	≤30.00	PASS
11N20SISO	Ant1	5180	-9.179	/	4.50	-4.68	≤11.00	PASS
		5220	-8.835	/	4.64	-4.20	≤11.00	PASS
		5240	-8.822	/	4.06	-4.76	≤11.00	PASS
		5745	-13.589	2.22	4.36	-7.01	≤30.00	PASS
		5785	-14.741	2.22	4.36	-8.16	≤30.00	PASS
		5825	-14.755	2.22	4.36	-8.18	≤30.00	PASS
11N40SISO	Ant1	5190	-13.182	/	6.17	-7.01	≤11.00	PASS
		5230	-13.979	/	5.53	-8.45	≤11.00	PASS
		5755	-19.262	2.22	5.59	-11.45	≤30.00	PASS
		5795	-19.515	2.22	5.86	-11.44	≤30.00	PASS

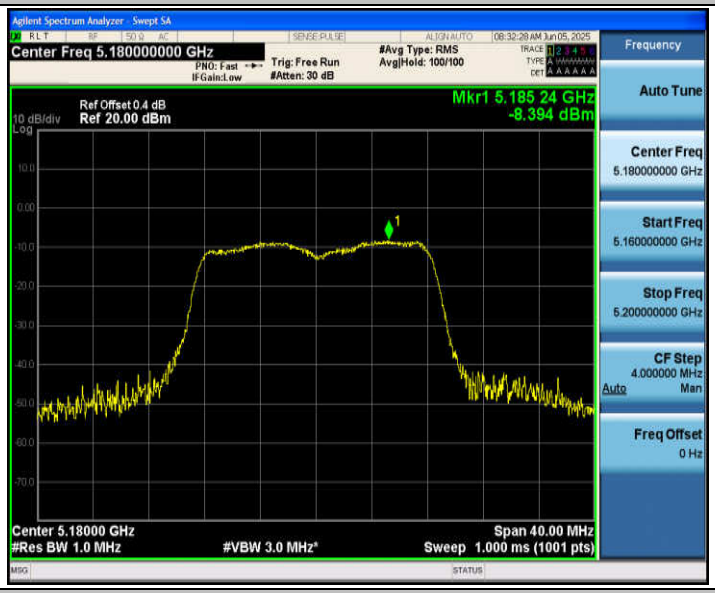
Note：1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

P.S.D(dBm/500KHz)= P.S.D(dBm/300KHz)+10 log (500 kHz/300KHz).

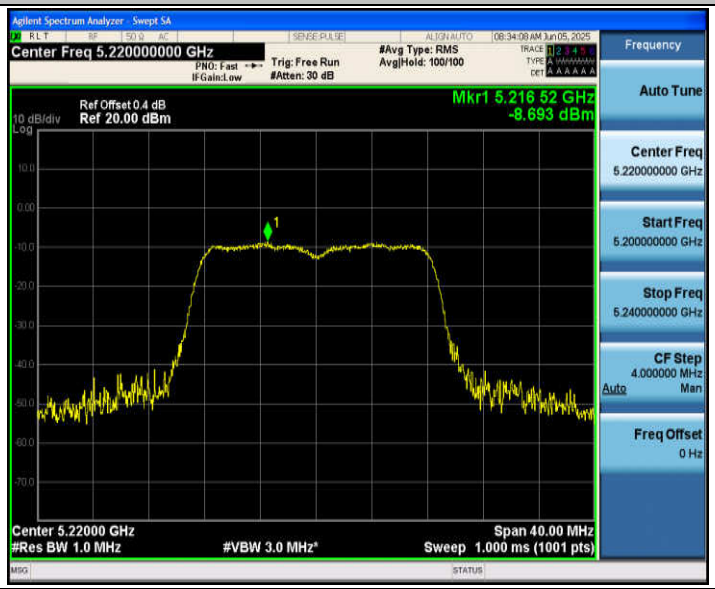
2. RBW factor= 10 log (500 KHz /300 KHz) = 2.22 dB

Test Graphs

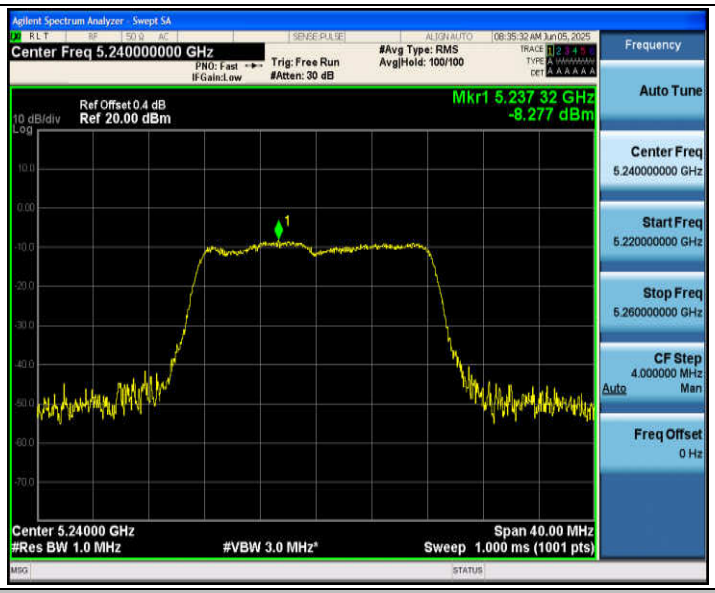
11A_Ant1_5180



11A_Ant1_5220

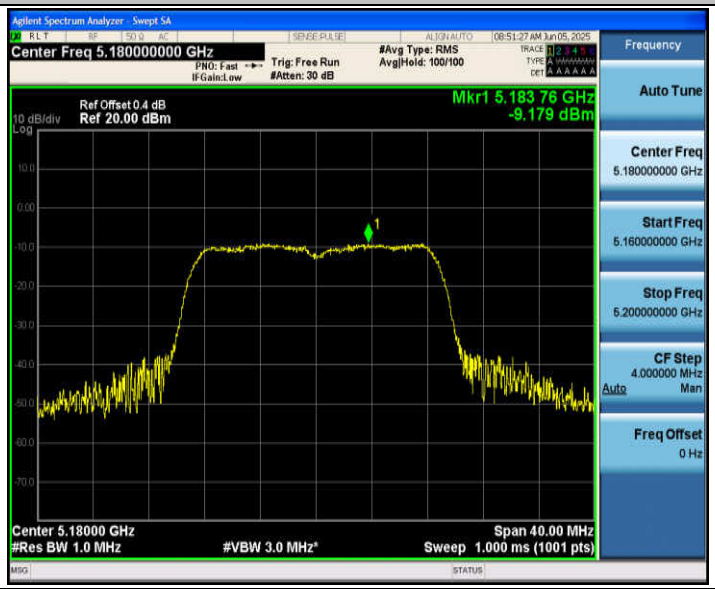


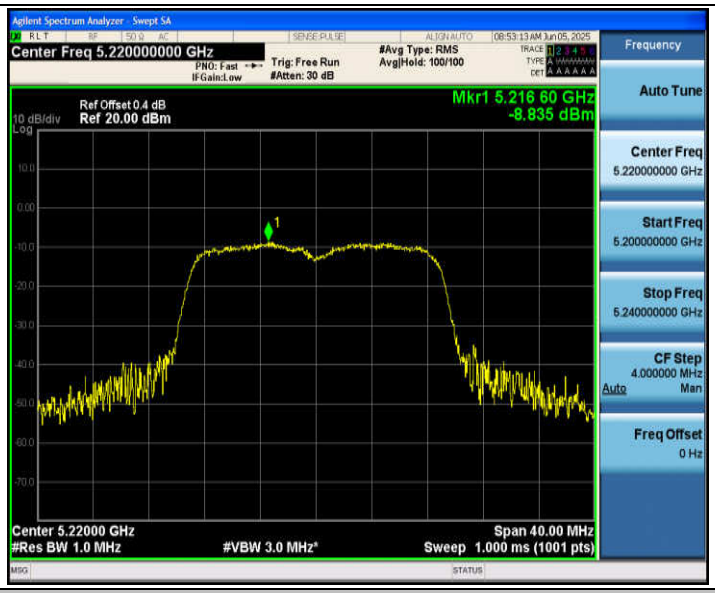
11A_Ant1_5240



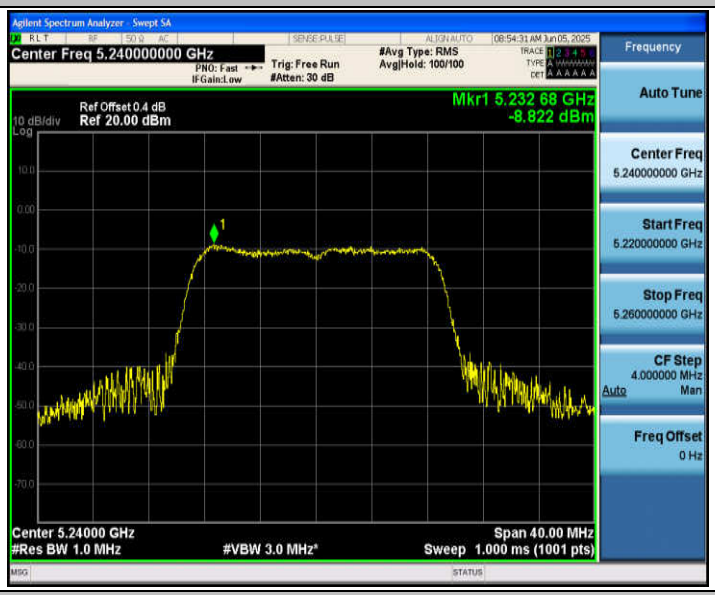
11A_Ant1_5745

11A_Ant1_5785

11A_Ant1_5825
11N20SISO_Ant1_5180

11N20SISO_Ant1_5220



11N20SISO_Ant1_5240



11N20SISO_Ant1_5745

11N20SISO_Ant1_5785

11N20SISO_Ant1_5825

11N40SISO_Ant1_5190

11N40SISO_Ant1_5230

11N40SISO_Ant1_5755

11N40SISO_Ant1_5795

Appendix E: Band edge measurements

Test Result B1

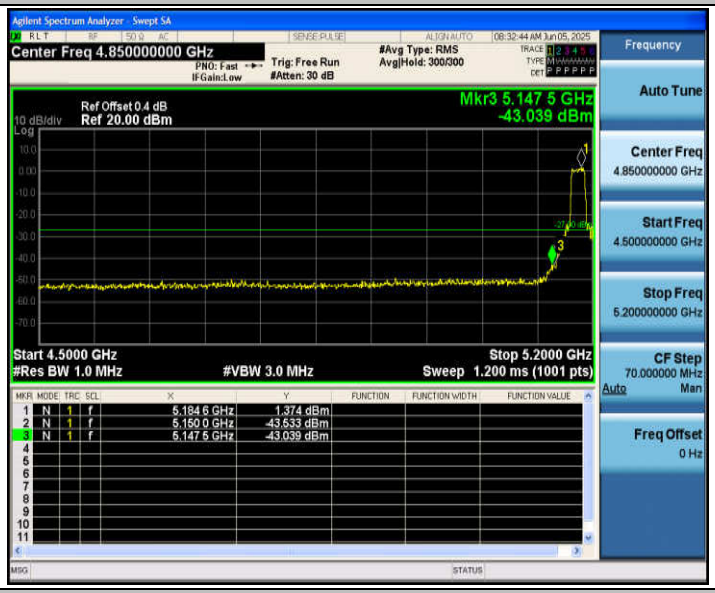
TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-43.04	≤-27	PASS
		High	5240	-49.49	≤-27	PASS
11N20SISO	Ant1	Low	5180	-41.34	≤-27	PASS
		High	5240	-49	≤-27	PASS
11N40SISO	Ant1	Low	5190	-41.39	≤-27	PASS
		High	5230	-50.25	≤-27	PASS

Test Result B4

TestMode	Antenna	ChName	Freq(MHz)	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-51.95	≤-26.79	PASS
				5700~5720	-41.77	≤15.40	PASS
				5720~5725	-32.04	≤22.90	PASS
				5760~5650	-51.59	≤-27	PASS
		High	5825	5850~5855	-39.95	≤16.03	PASS
				5855~5875	-45.24	≤14.25	PASS
				5875~5925	-50.61	≤-26.21	PASS
				5925~5935	-50.06	≤-27	PASS
11N20SISO	Ant1	Low	5745	5650~5700	-51.16	≤-26.70	PASS
				5700~5720	-41.37	≤15.27	PASS
				5720~5725	-26.34	≤25.78	PASS
				5760~5650	-51.45	≤-27	PASS
		High	5825	5850~5855	-42.54	≤16.03	PASS
				5855~5875	-42.34	≤15.50	PASS
				5875~5925	-50.66	≤-26.61	PASS
				5925~5935	-49.71	≤-27	PASS
11N40SISO	Ant1	Low	5755	5650~5700	-51.59	≤-26.20	PASS
				5700~5720	-32.78	≤15.47	PASS
				5720~5725	-32.99	≤15.74	PASS
				5780~5650	-50.79	≤-27	PASS
		High	5795	5850~5855	-51.13	≤16.03	PASS
				5855~5875	-50.65	≤10.57	PASS
				5875~5925	-51	≤-26.22	PASS
				5925~5935	-50.18	≤-27	PASS

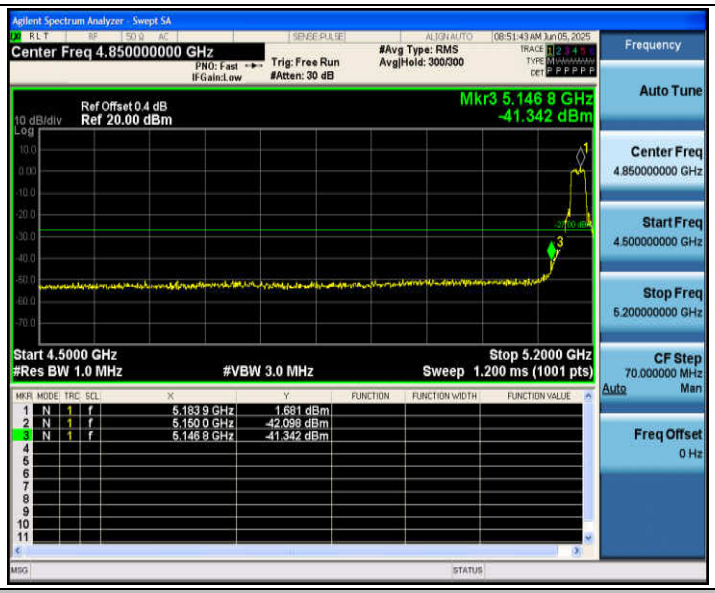
Test Graphs B1/2/3

11A_Ant1_Low_5180

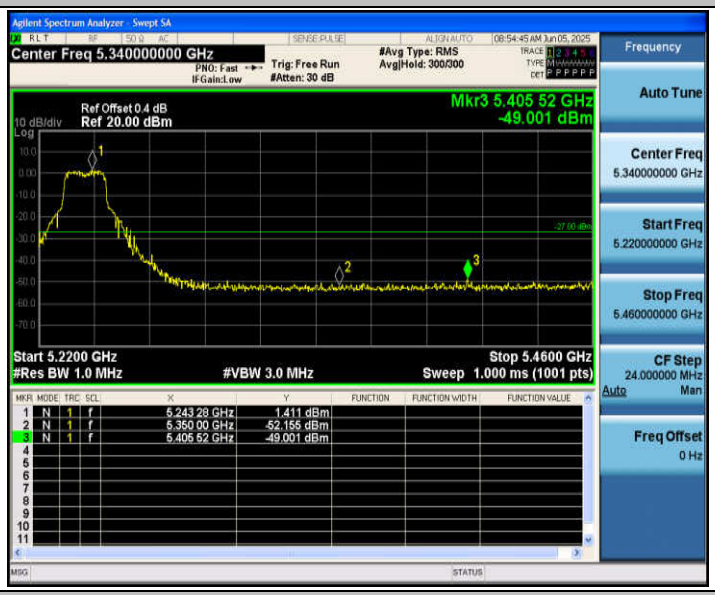


11A_Ant1_High_5240

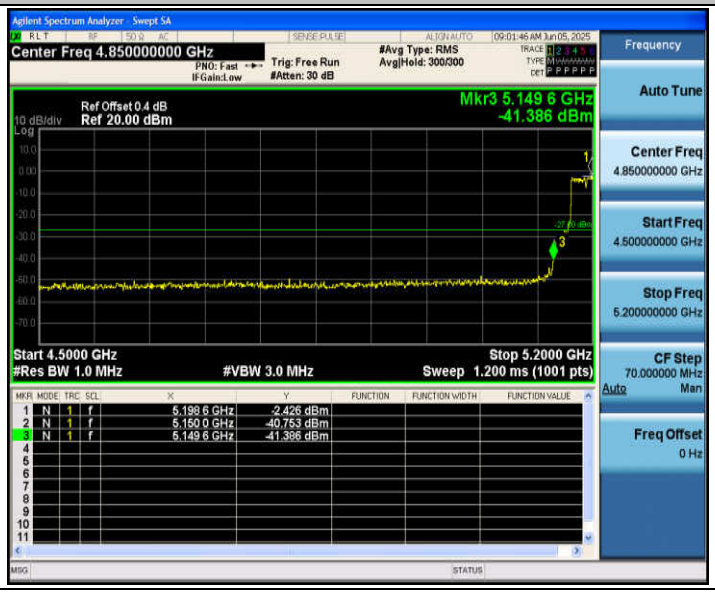
11N20SISO_Ant1_Low_5180

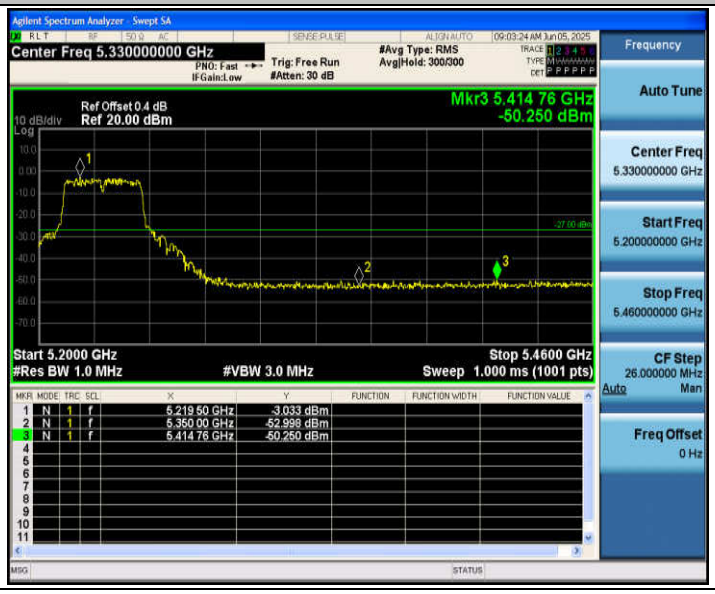


11N20SISO_Ant1_High_5240



11N40SISO_Ant1_Low_5190



11N40SISO_Ant1_High_5230


Test Graphs B4

11A_Ant1_Low_5745

11A_Ant1_High_5825

11N20SISO_Ant1_Low_5745

11N20SISO_Ant1_High_5825

11N40SISO_Ant1_Low_5755