

FCC Appendix RF Test Data

FCC ID : 2BPTU-P156AHBW

Company: : Thread Technology Co., Limited

EUT : Portable display

Model Number : P156AHBW

Report No. : CTA25042701202

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	19.440	5170.440	5189.880	---	---
		5220	26.360	5206.520	5232.880	---	---
		5240	20.560	5230.280	5250.840	---	---
		5745	23.160	5731.880	5755.040	---	---
		5785	21.400	5774.280	5795.680	---	---
		5825	19.520	5815.360	5834.880	---	---
11N20SISO	Ant1	5180	24.600	5168.280	5192.880	---	---
		5220	26.160	5207.520	5233.680	---	---
		5240	25.440	5227.360	5252.800	---	---
		5745	24.440	5733.080	5757.520	---	---
		5785	24.800	5772.840	5797.640	---	---
		5825	25.760	5812.880	5838.640	---	---
11N40SISO	Ant1	5190	42.880	5168.880	5211.760	---	---
		5230	43.120	5208.800	5251.920	---	---
		5755	54.400	5727.800	5782.200	---	---
		5795	46.160	5773.240	5819.400	---	---

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



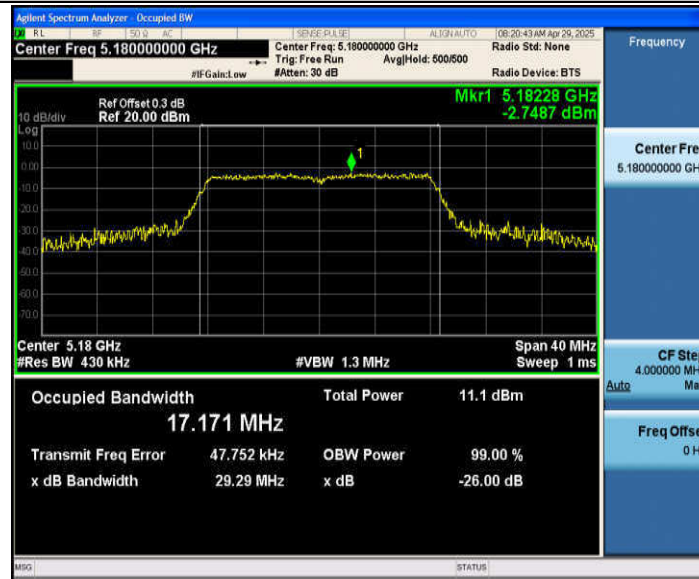
Appendix A2: Occupied channel bandwidth

Test Result

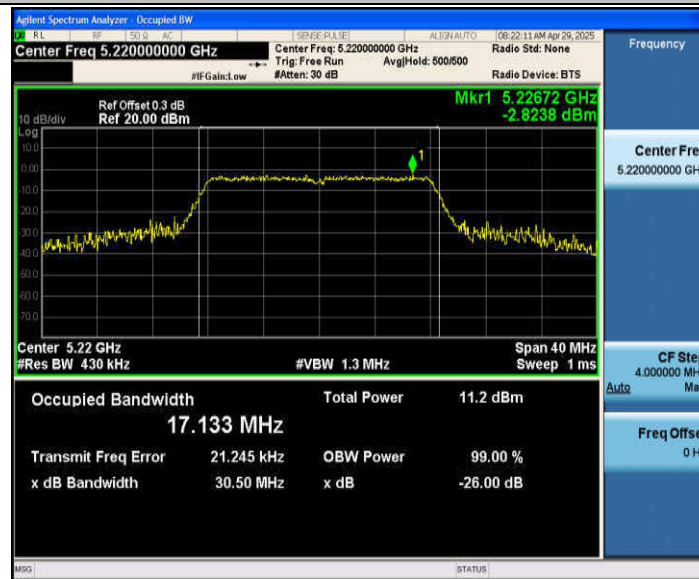
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.171	5171.4623	5188.6333	---	---
		5220	17.133	5211.4548	5228.5878	---	---
		5240	17.133	5231.4409	5248.5739	---	---
		5745	17.143	5736.4086	5753.5516	---	---
		5785	17.091	5776.4785	5793.5695	---	---
		5825	17.033	5816.4932	5833.5262	---	---
11N20SISO	Ant1	5180	18.178	5171.0023	5189.1803	---	---
		5220	18.137	5210.9915	5229.1285	---	---
		5240	18.190	5230.9442	5249.1342	---	---
		5745	18.100	5735.9372	5754.0372	---	---
		5785	18.066	5775.9954	5794.0614	---	---
		5825	18.122	5816.0030	5834.1250	---	---
11N40SISO	Ant1	5190	36.485	5171.8687	5208.3537	---	---
		5230	36.534	5211.8152	5248.3492	---	---
		5755	36.807	5736.7030	5773.5100	---	---
		5795	36.873	5776.7472	5813.6202	---	---

Test Graphs

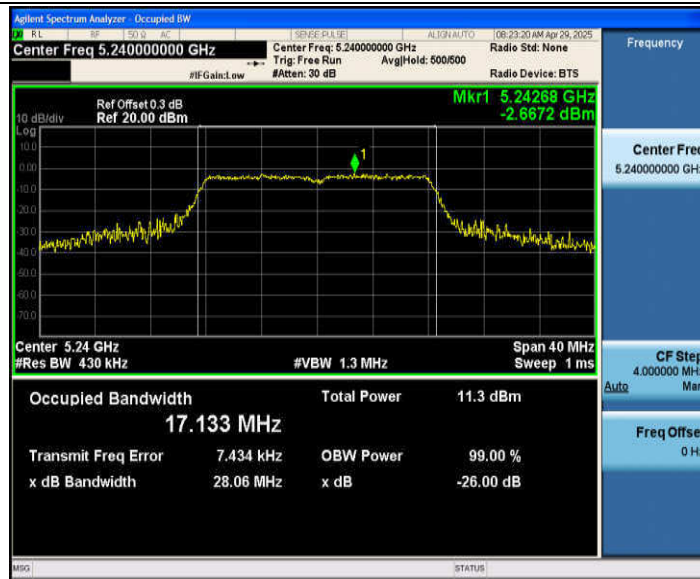
11A_Ant1_5180



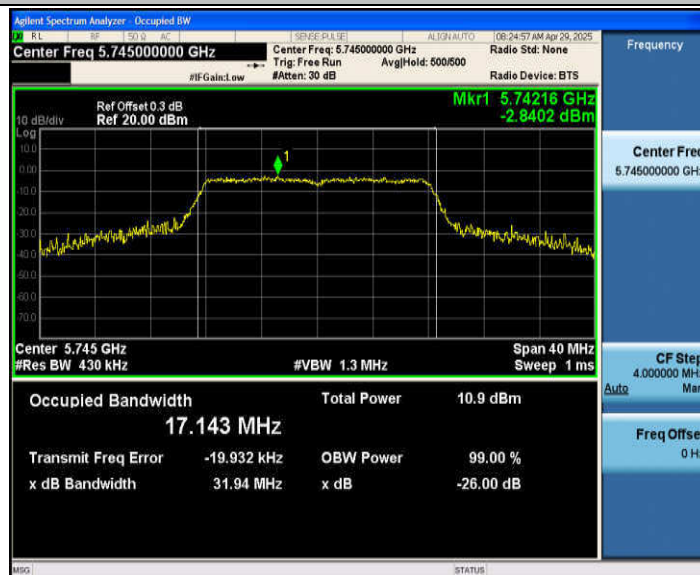
11A_Ant1_5220



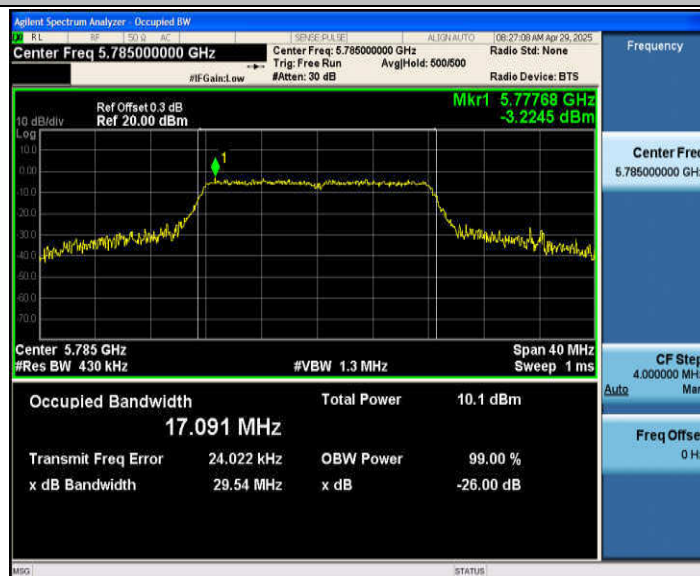
11A_Ant1_5240



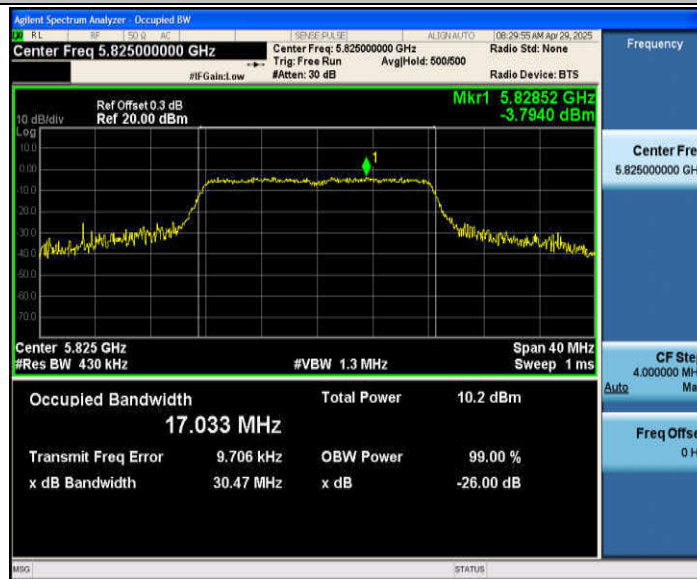
11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5180



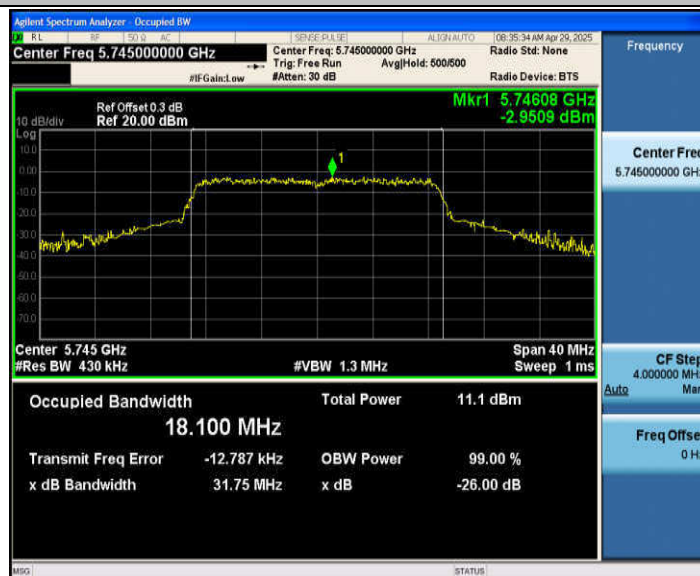
11N20SISO_Ant1_5220



11N20SISO_Ant1_5240



11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

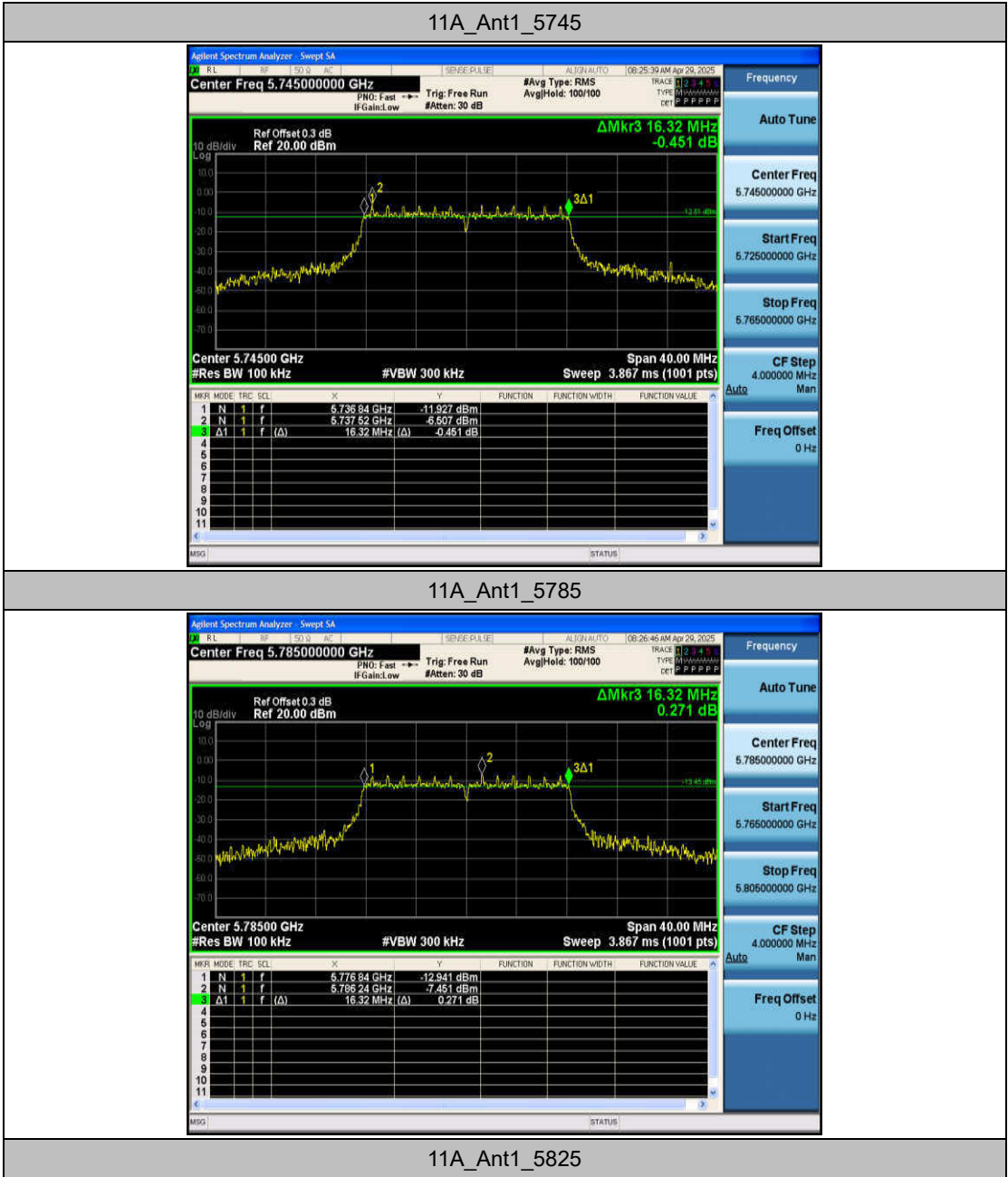


Appendix A3: Min emission bandwidth

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	16.760	5736.640	5753.400	0.5	PASS
		5785	17.160	5776.480	5793.640	0.5	PASS
		5825	17.160	5816.360	5833.520	0.5	PASS
11N40SISO	Ant1	5755	36.080	5736.920	5773.000	0.5	PASS
		5795	35.760	5777.320	5813.080	0.5	PASS

Test Graphs B4





11N20SISO_Ant1_5745



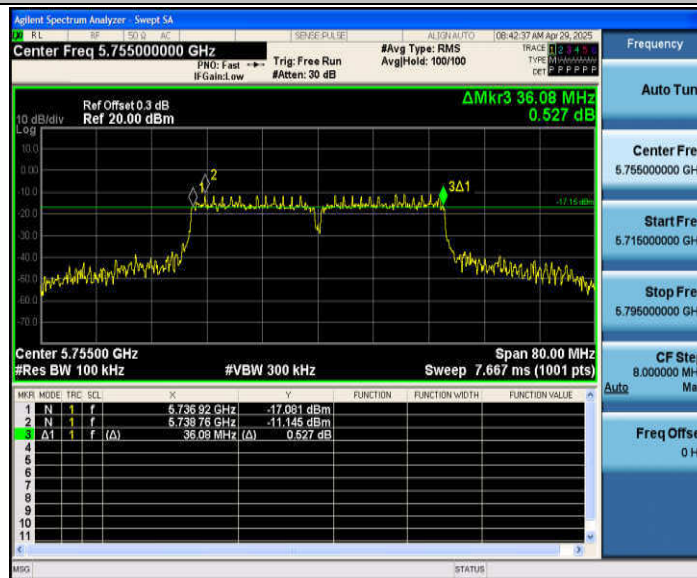
11N20SISO_Ant1_5785



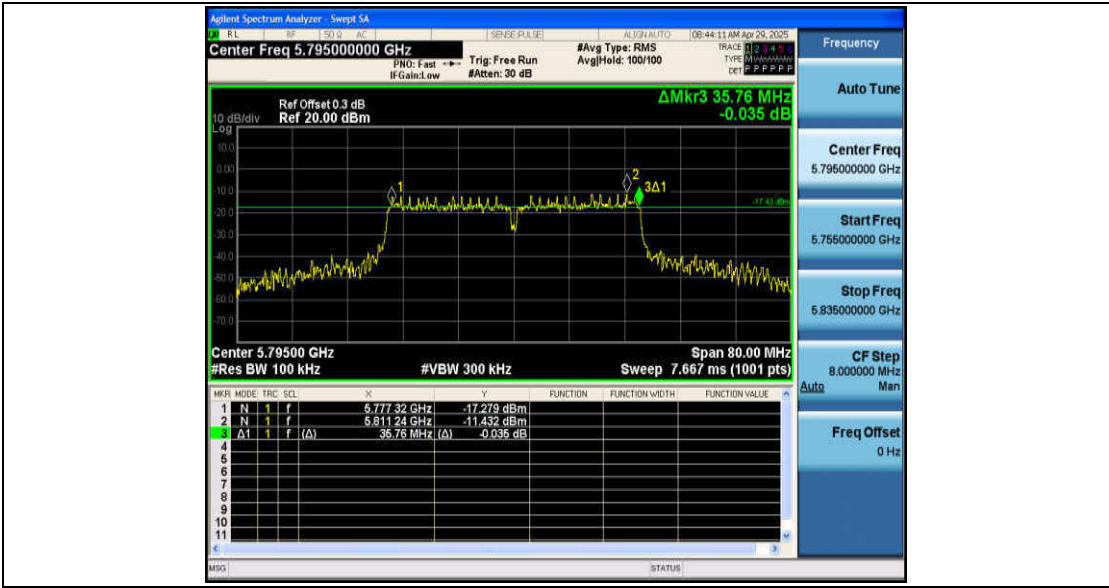
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

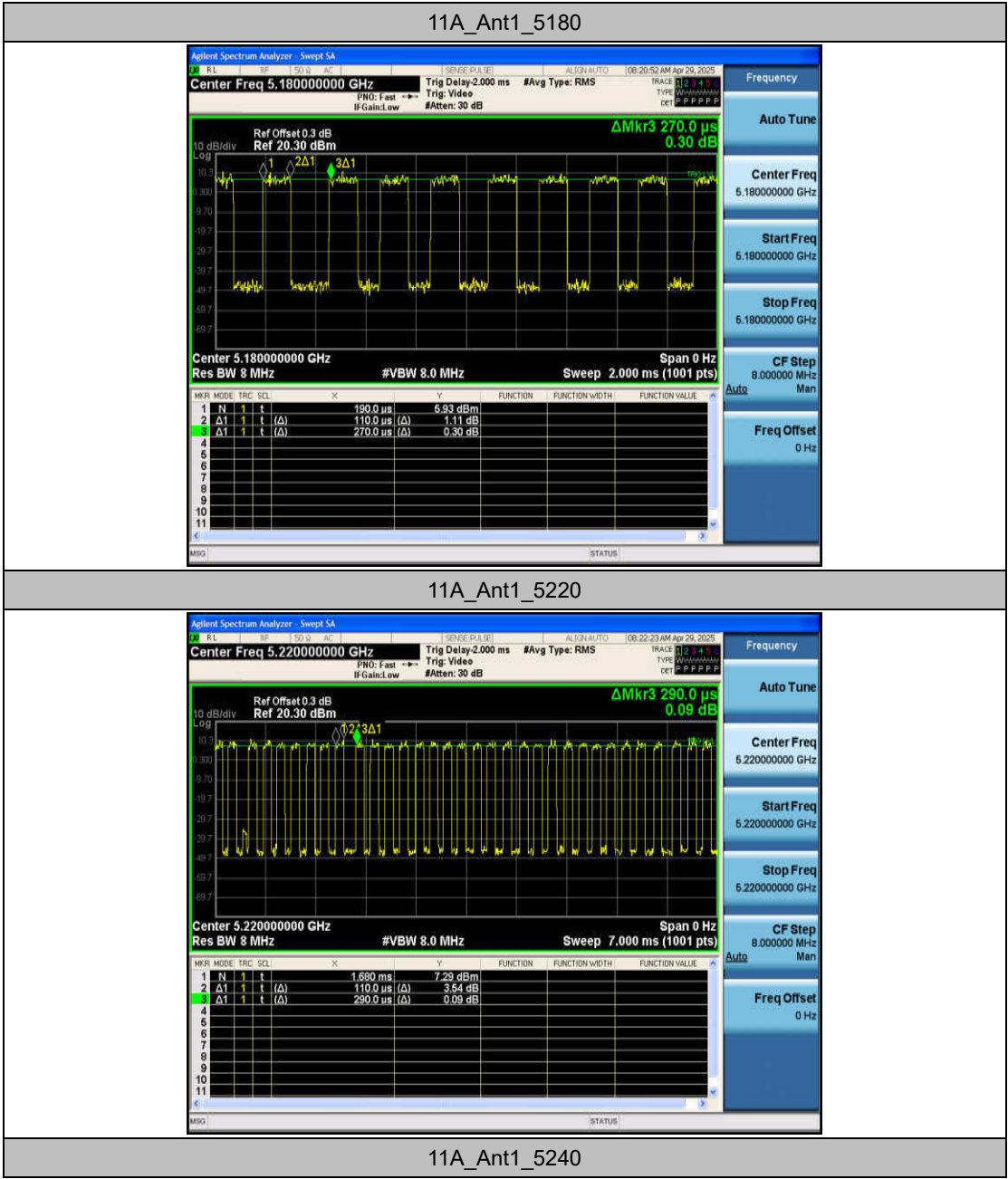


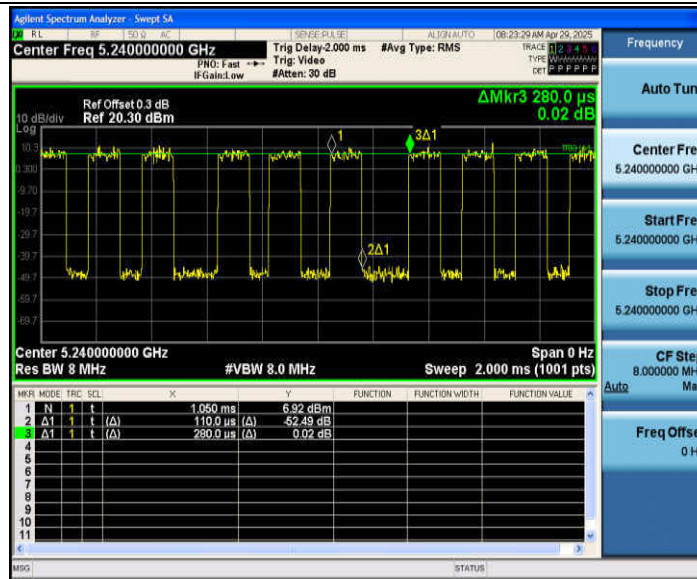
Appendix B: Duty Cycle

Test Result

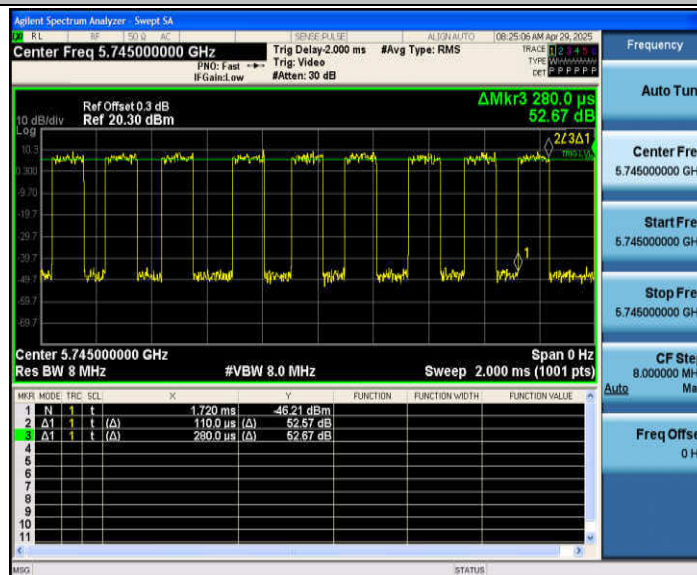
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty factor(dB)	Limit	Verdict
11A	Ant1	5180	0.11	0.27	40.74	3.90	---	---
		5220	0.11	0.29	37.93	4.21	---	---
		5240	0.11	0.28	39.29	4.06	---	---
		5745	0.11	0.28	39.29	4.06	---	---
		5785	0.11	0.23	47.83	3.20	---	---
		5825	0.11	0.28	39.29	4.06	---	---
11N20SISO	Ant1	5180	0.11	0.25	44.00	3.57	---	---
		5220	0.11	0.27	40.74	3.90	---	---
		5240	0.11	0.28	39.29	4.06	---	---
		5745	0.11	0.26	42.31	3.74	---	---
		5785	0.11	0.26	42.31	3.74	---	---
		5825	0.11	0.30	36.67	4.36	---	---
11N40SISO	Ant1	5190	0.08	0.24	33.33	4.77	---	---
		5230	0.07	0.27	25.93	5.86	---	---
		5755	0.07	0.23	30.43	5.17	---	---
		5795	0.08	0.24	33.33	4.77	---	---

Test Graphs

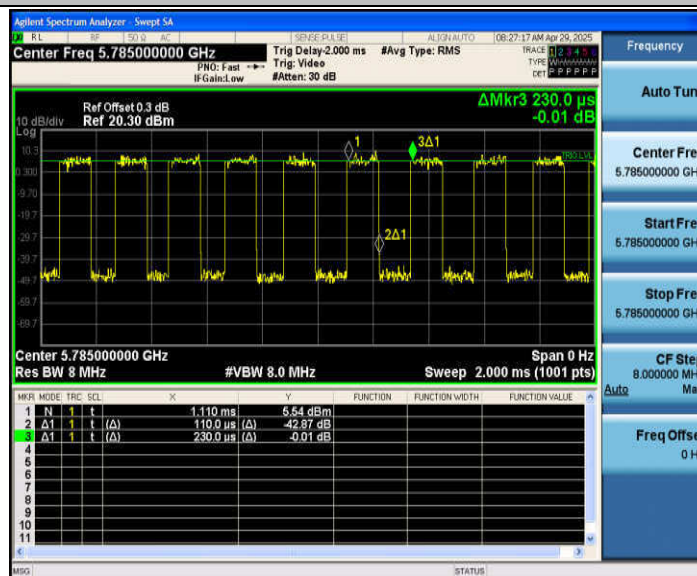




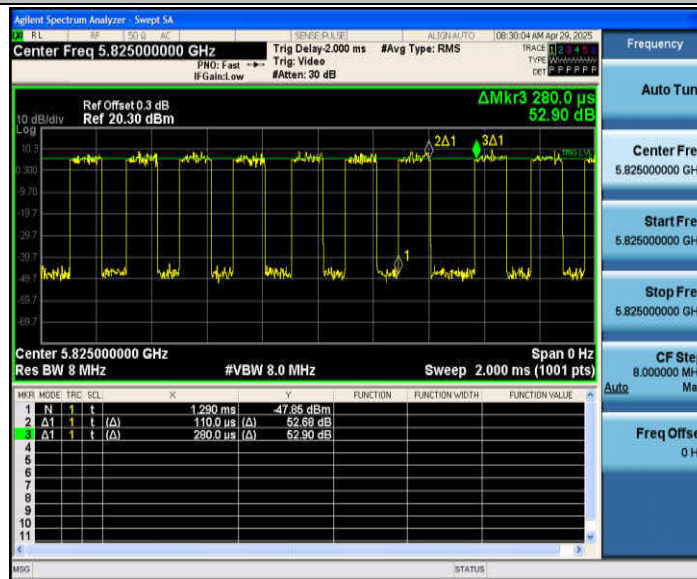
11A_Ant1_5745



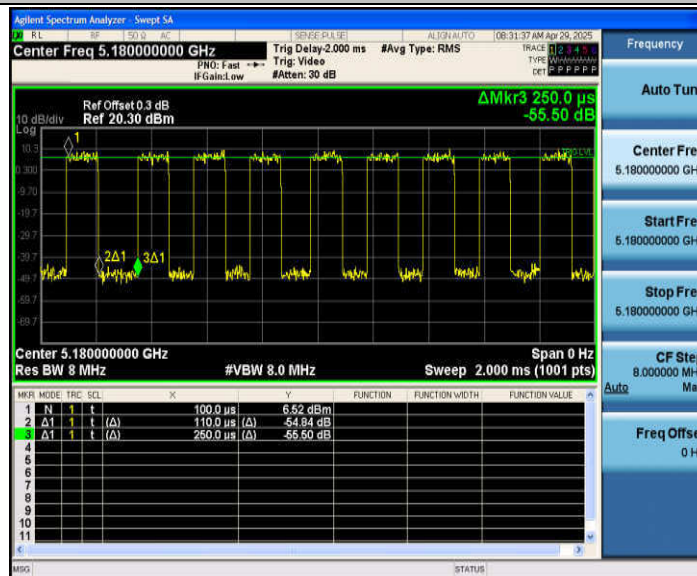
11A_Ant1_5785



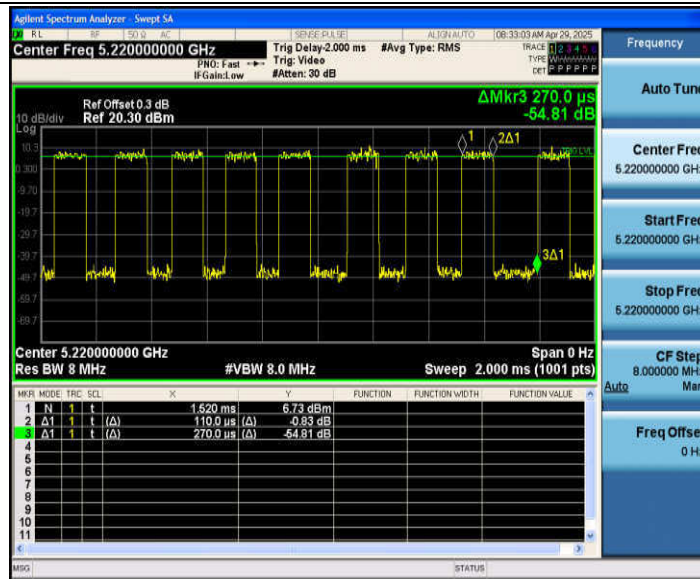
11A_Ant1_5825



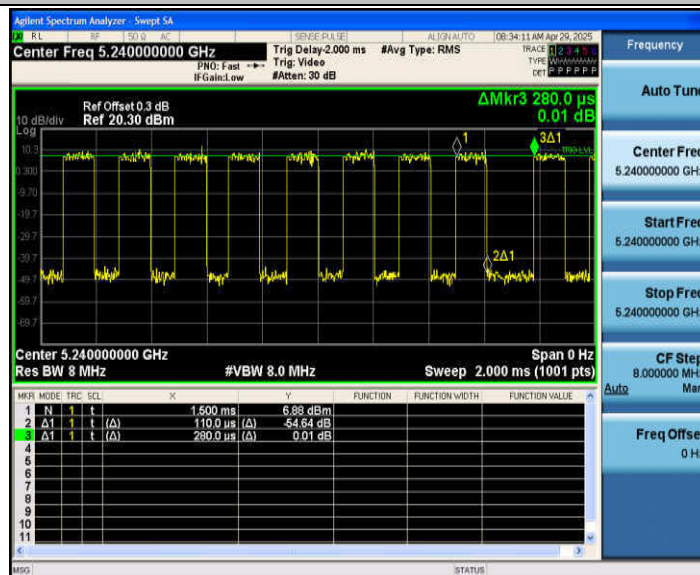
11N20SISO_Ant1_5180



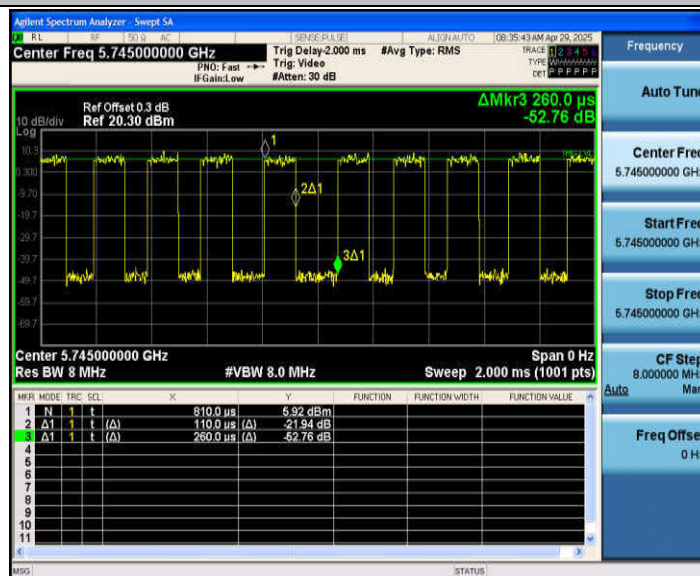
11N20SISO_Ant1_5220



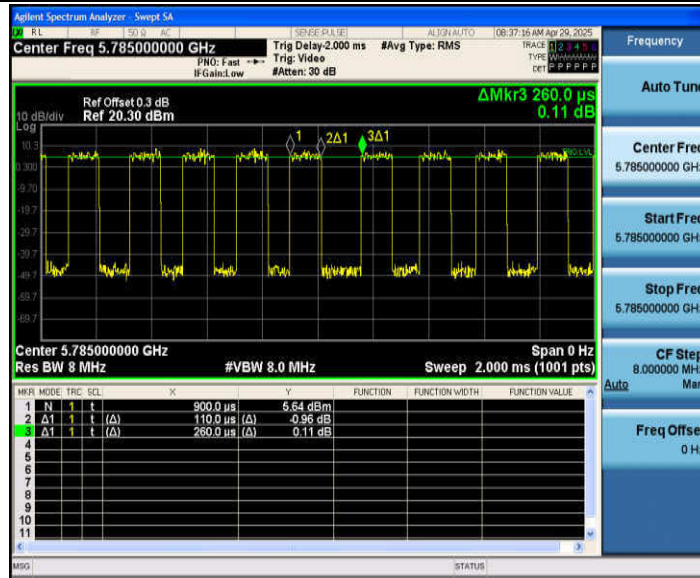
11N20SISO_Ant1_5240



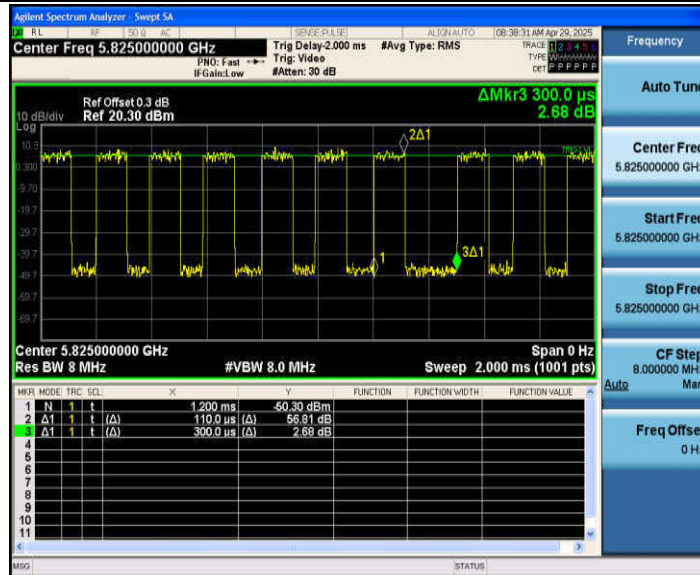
11N20SISO_Ant1_5745



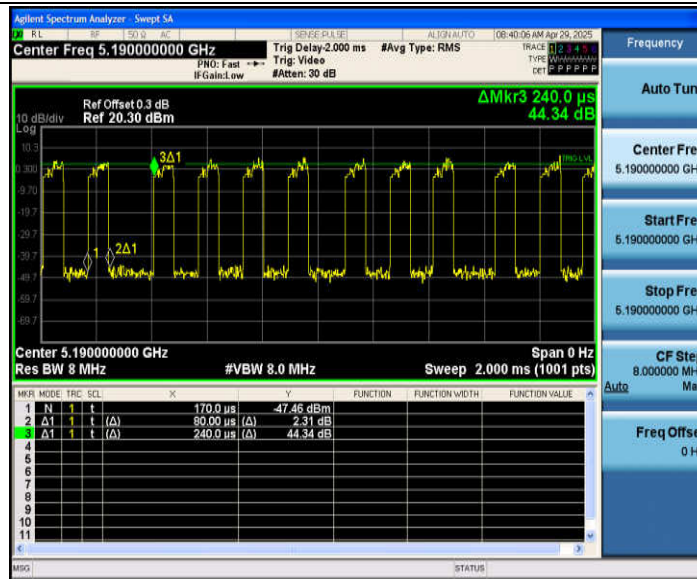
11N20SISO_Ant1_5785



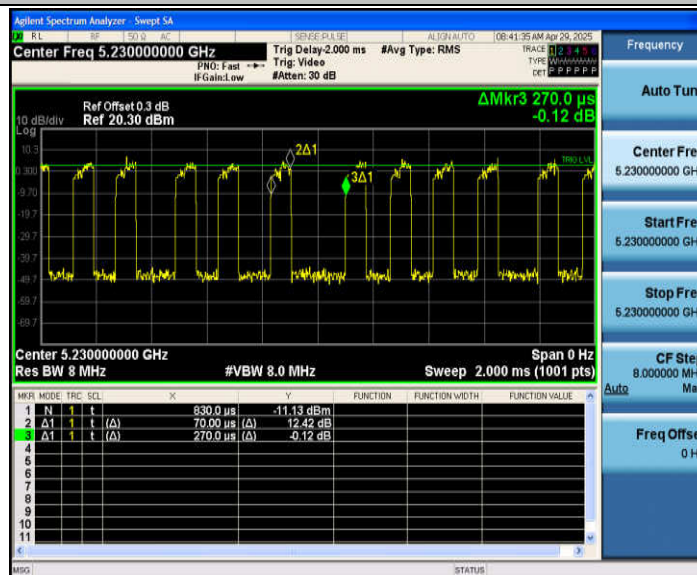
11N20SISO_Ant1_5825



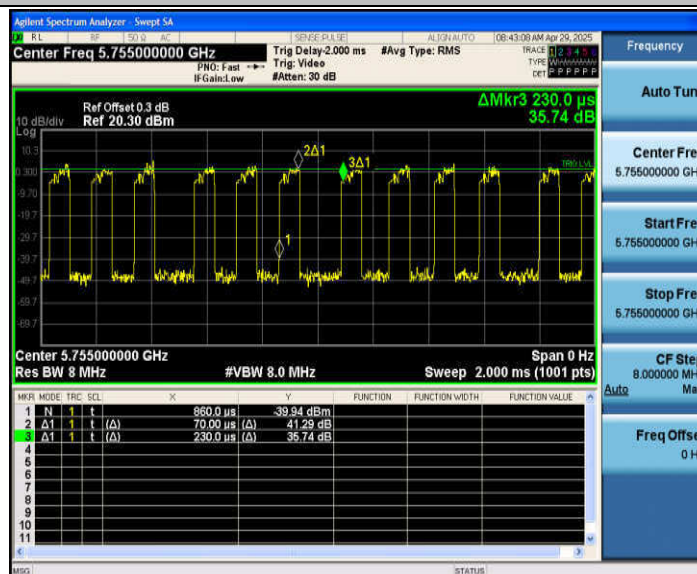
11N40SISO_Ant1_5190



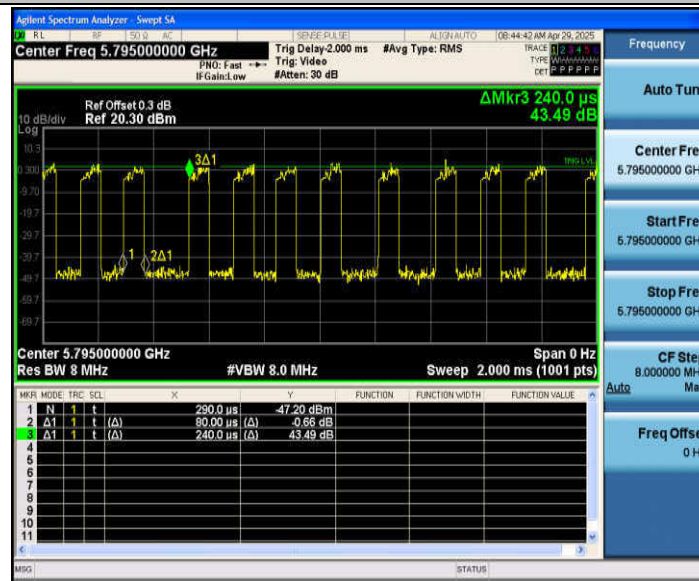
11N40SISO_Ant1_5230



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



Appendix C: Maximum conducted output power

Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	1.82	40.74	3.90	5.72	≤23.98	PASS
		5220	1.95	37.93	4.21	6.16	≤23.98	PASS
		5240	2.36	39.29	4.06	6.42	≤23.98	PASS
		5745	1.66	39.29	4.06	5.72	≤30.00	PASS
		5785	0.86	47.83	3.20	4.06	≤30.00	PASS
		5825	0.98	39.29	4.06	5.04	≤30.00	PASS
11N20SIS O	Ant1	5180	1.86	44.00	3.57	5.43	≤23.98	PASS
		5220	1.99	40.74	3.90	5.89	≤23.98	PASS
		5240	2.29	39.29	4.06	6.35	≤23.98	PASS
		5745	1.65	42.31	3.74	5.39	≤30.00	PASS
		5785	0.96	42.31	3.74	4.70	≤30.00	PASS
		5825	0.98	36.67	4.36	5.34	≤30.00	PASS
11N40SIS O	Ant1	5190	-0.80	33.33	4.77	3.97	≤23.98	PASS
		5230	-0.42	25.93	5.86	5.44	≤23.98	PASS
		5755	-1.09	30.43	5.17	4.08	≤30.00	PASS
		5795	-1.49	33.33	4.77	3.28	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/1MHz] For 5.2G	RBW Factor (dB)	Duty factor (dB)	Result [dBm/MHz] For 5.2G	Limit[dBm/MHz] For 5.2G	Verdict
			Result [dBm/300KHz] For 5.8G			Result [dBm/500kHz] For 5.8G	Limit[dBm/500kHz] For 5.8G	
11A	Ant1	5180	-8.886	/	3.90	-4.99	≤11.00	PASS
		5220	-8.816	/	4.21	-4.61	≤11.00	PASS
		5240	-8.316	/	4.06	-4.26	≤11.00	PASS
		5745	-13.365	2.22	4.06	-7.09	≤30.00	PASS
		5785	-14.565	2.22	3.20	-9.15	≤30.00	PASS
		5825	-14.089	2.22	4.06	-7.81	≤30.00	PASS
11N20SISO	Ant1	5180	-8.410	/	3.57	-4.84	≤11.00	PASS
		5220	-8.761	/	3.90	-4.86	≤11.00	PASS
		5240	-8.356	/	4.06	-4.30	≤11.00	PASS
		5745	-13.577	2.22	3.74	-7.62	≤30.00	PASS
		5785	-13.859	2.22	3.74	-7.90	≤30.00	PASS
		5825	-13.923	2.22	4.36	-7.34	≤30.00	PASS
11N40SISO	Ant1	5190	-13.516	/	4.77	-8.75	≤11.00	PASS
		5230	-13.899	/	5.86	-8.04	≤11.00	PASS
		5755	-18.578	2.22	5.17	-11.19	≤30.00	PASS
		5795	-19.605	2.22	4.77	-12.62	≤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

