

Appendix RF Test Data for 5GWIFI

FCC ID : 2BO47-FW983A

Company : Shenzhen Fuallwin Technology Company Ltd

EUT : Dash cam

Model Number : FW983A

Report No. : CTA25082700302

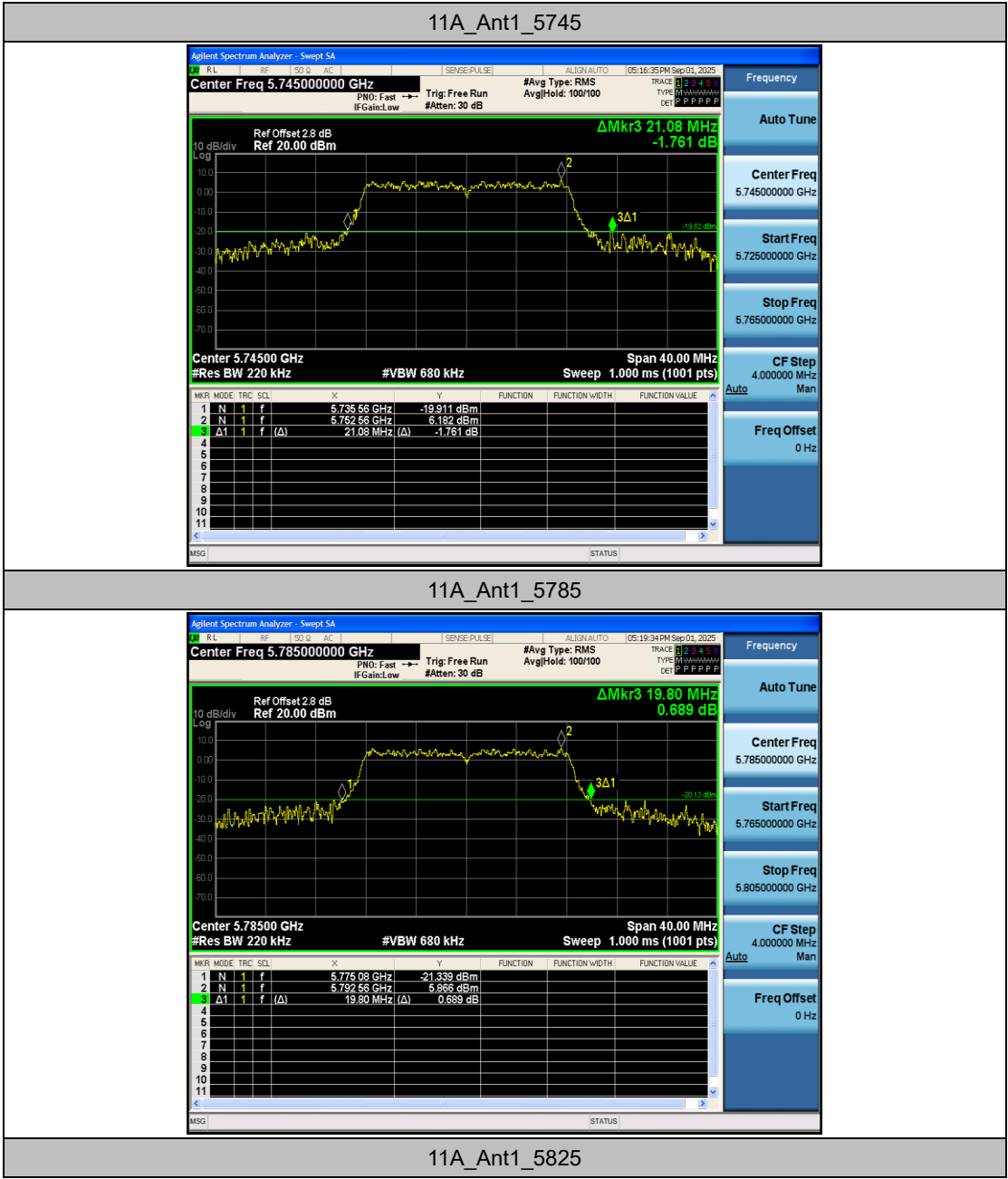
Reviewed By : Eric Wang

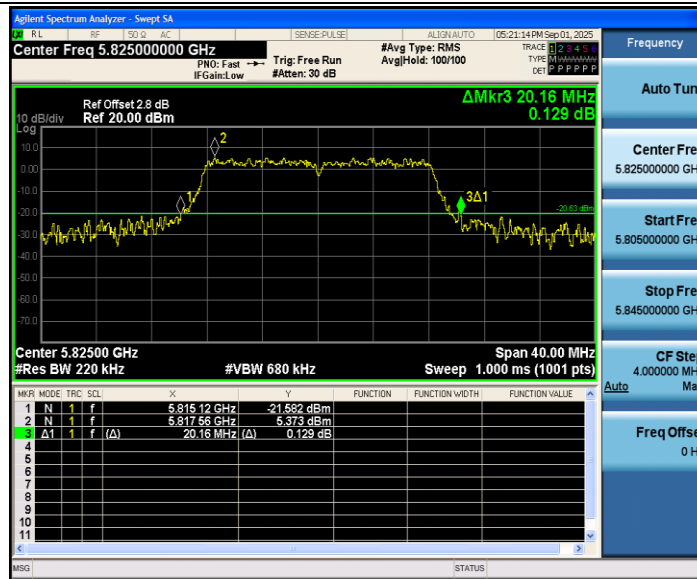
Appendix A1: Emission Bandwidth

Test Result

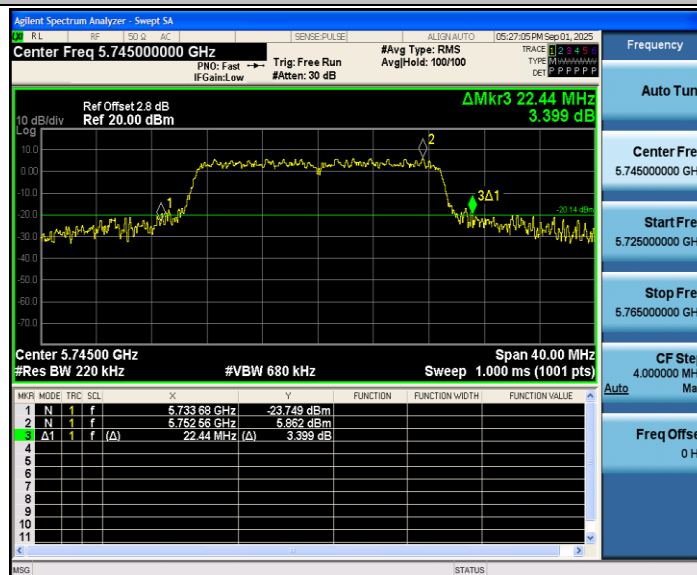
TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	21.080	5735.560	5756.640	---	---
		5785	19.800	5775.080	5794.880	---	---
		5825	20.160	5815.120	5835.280	---	---
11N20SISO	Ant1	5745	22.440	5733.680	5756.120	---	---
		5785	25.760	5771.600	5797.360	---	---
		5825	25.320	5810.000	5835.320	---	---
11N40SISO	Ant1	5755	45.280	5733.880	5779.160	---	---
		5795	39.760	5774.920	5814.680	---	---

Test Graphs

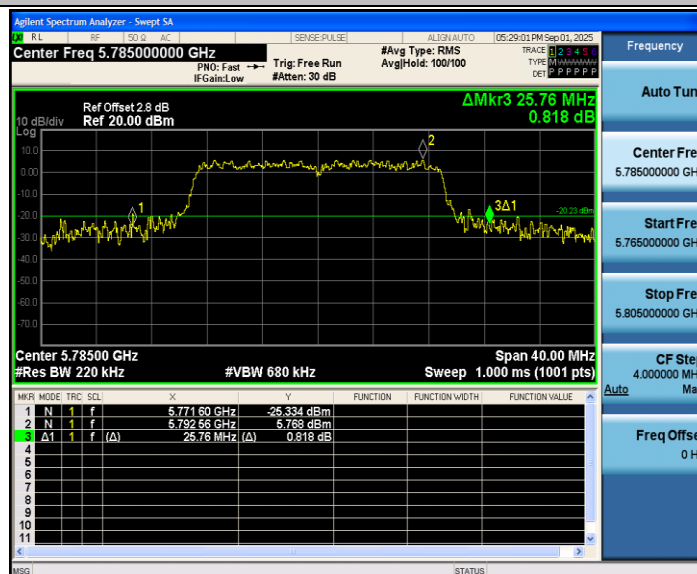




11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

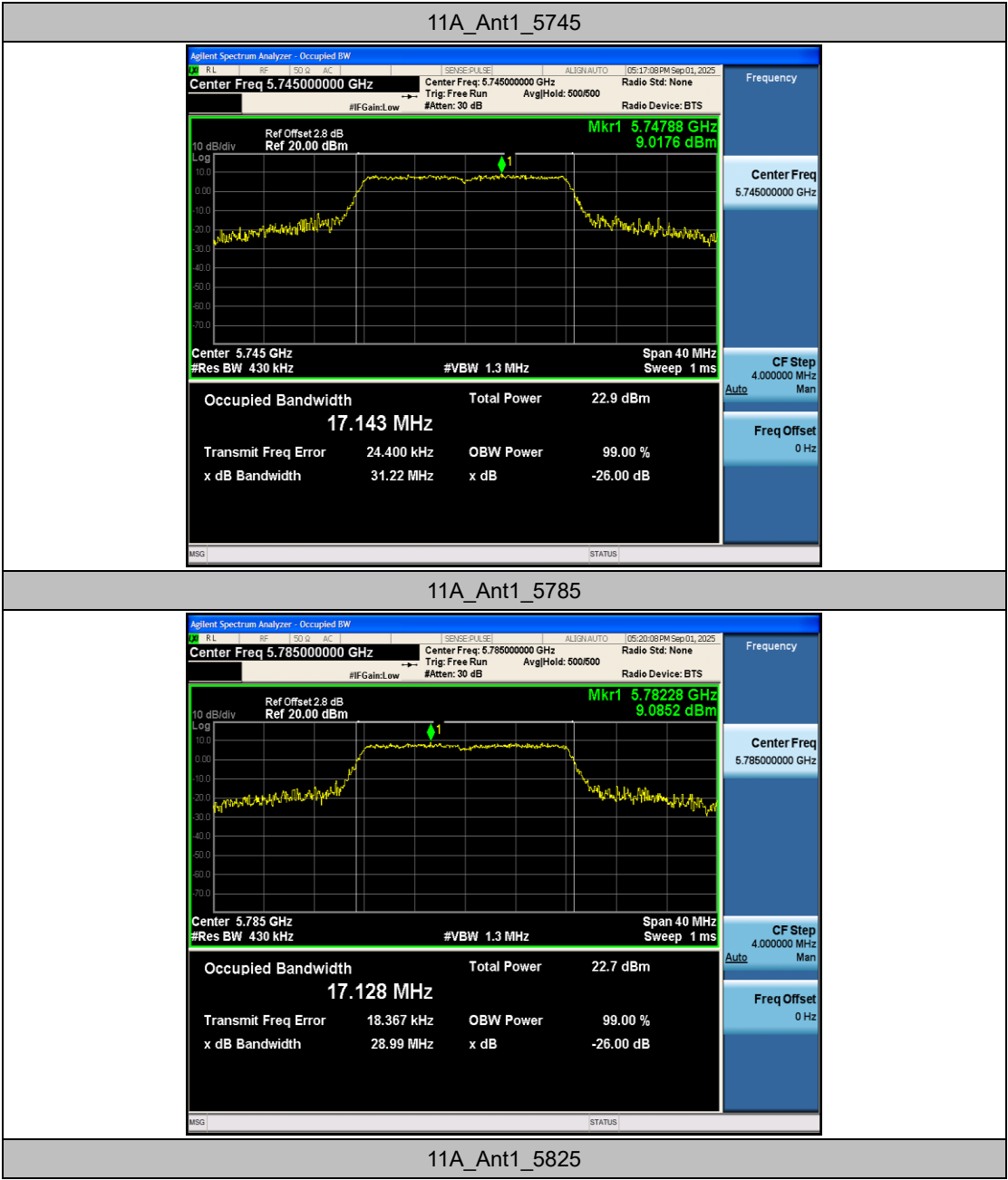


Appendix A2: Occupied channel bandwidth

Test Result

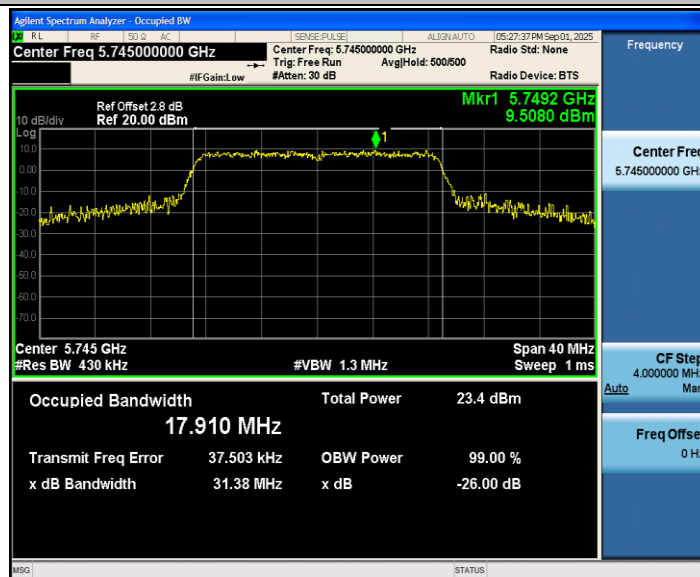
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	17.143	5736.4529	5753.5959	---	---
		5785	17.128	5776.4544	5793.5824	---	---
		5825	17.103	5816.4691	5833.5721	---	---
11N20SISO	Ant1	5745	17.910	5736.0825	5753.9925	---	---
		5785	17.952	5776.0593	5794.0113	---	---
		5825	17.943	5816.0495	5833.9925	---	---
11N40SISO	Ant1	5755	36.804	5736.6844	5773.4884	---	---
		5795	36.768	5776.6618	5813.4298	---	---

Test Graphs

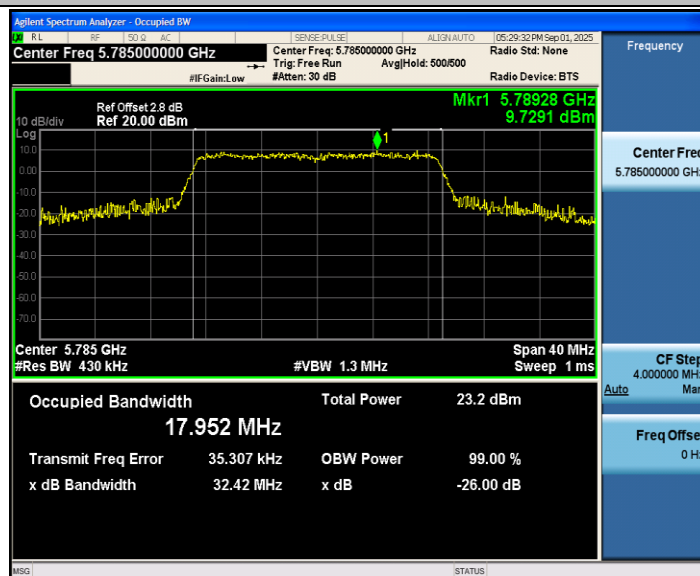




11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



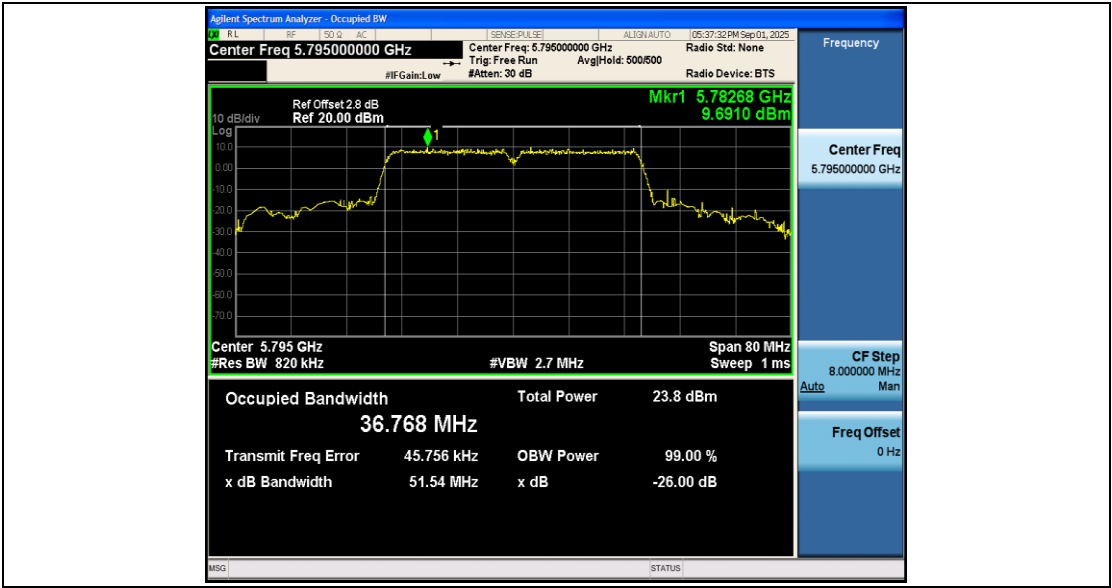
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

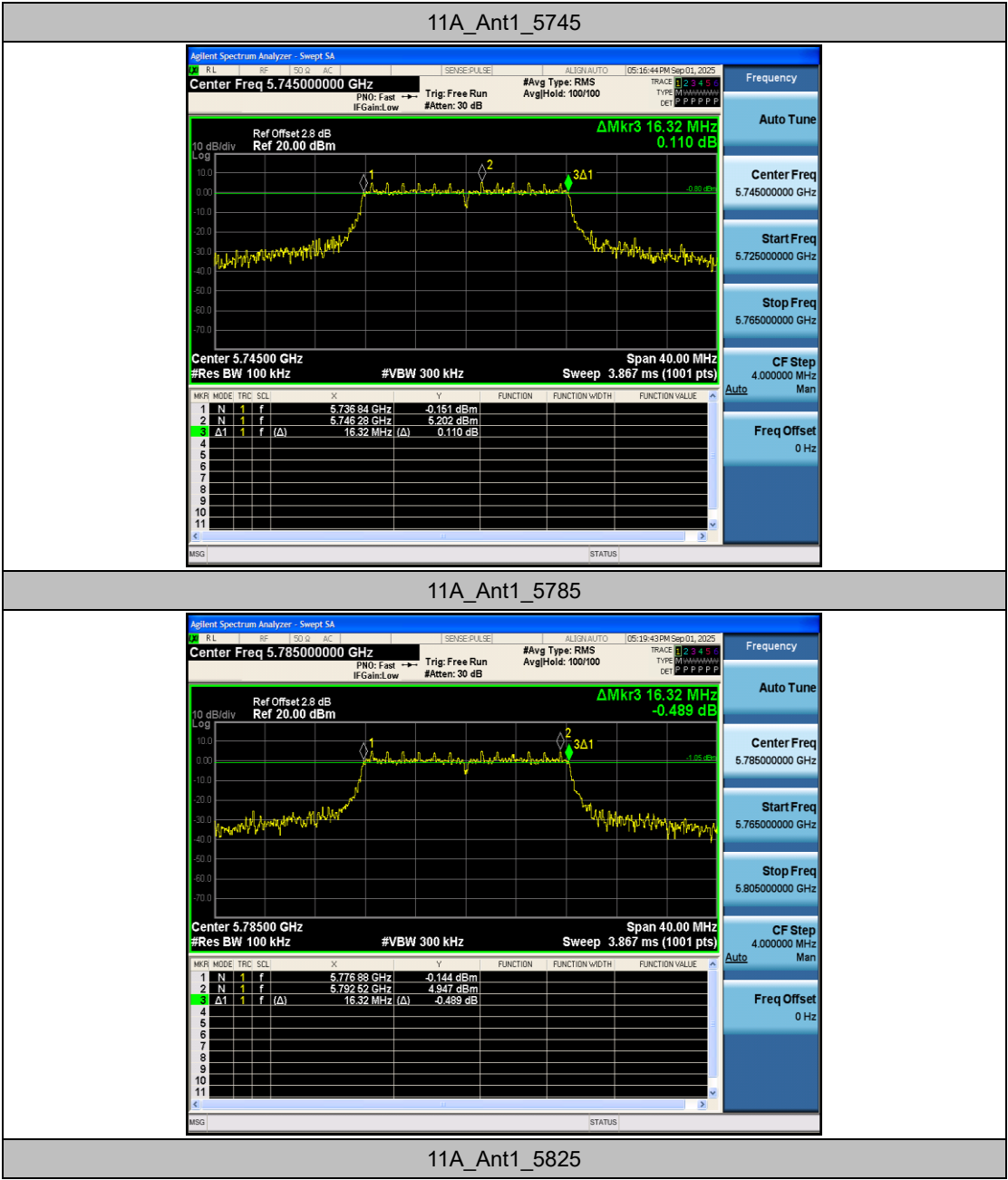


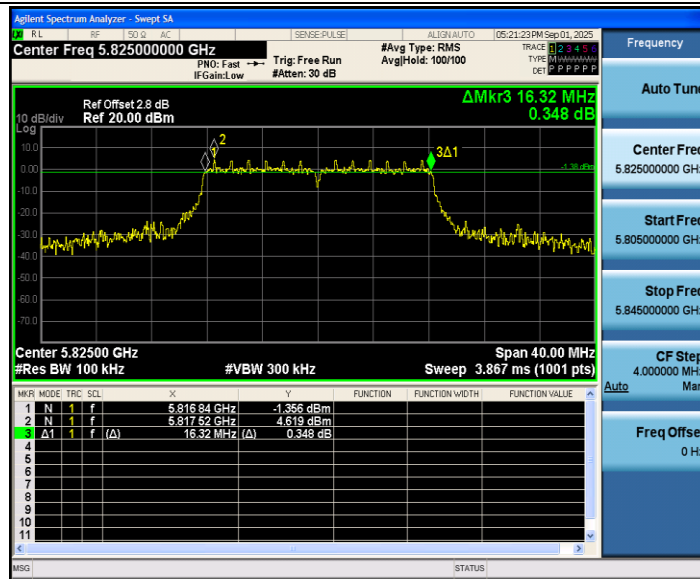
Appendix A3: Min emission bandwidth

Test Result B4

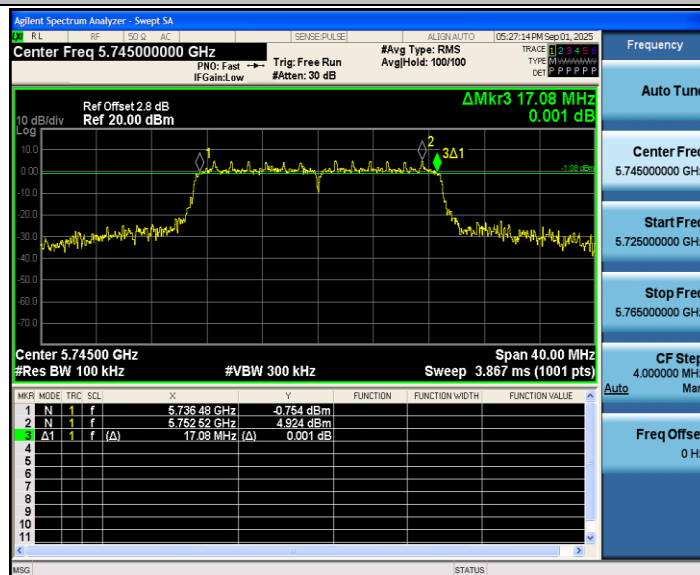
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.840	5753.160	0.5	PASS
		5785	16.320	5776.880	5793.200	0.5	PASS
		5825	16.320	5816.840	5833.160	0.5	PASS
11N20SISO	Ant1	5745	17.080	5736.480	5753.560	0.5	PASS
		5785	17.160	5776.520	5793.680	0.5	PASS
		5825	17.080	5816.400	5833.480	0.5	PASS
11N40SISO	Ant1	5755	35.840	5737.080	5772.920	0.5	PASS
		5795	35.920	5777.080	5813.000	0.5	PASS

Test Graphs B4

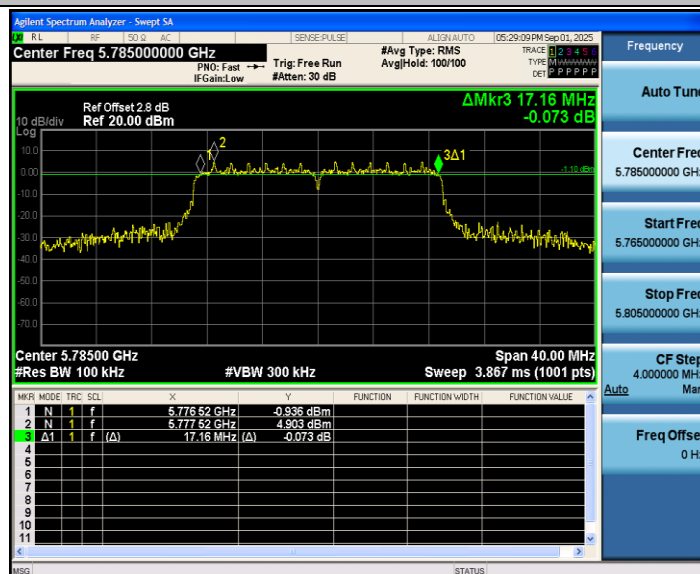




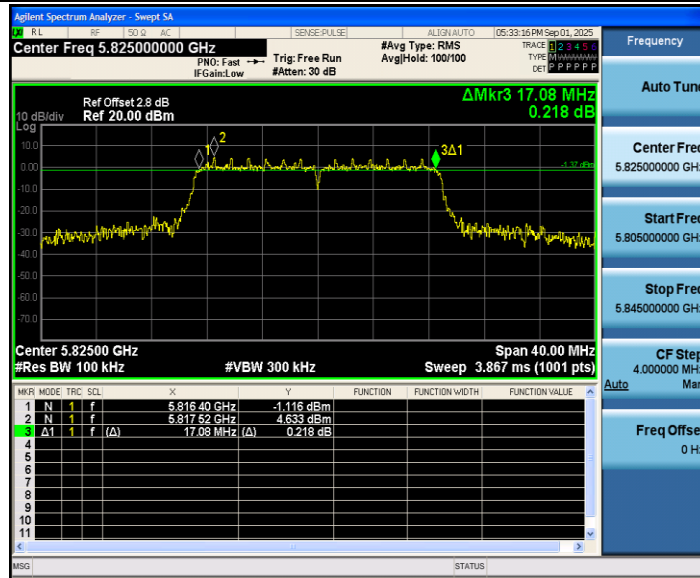
11N20SISO_Ant1_5745



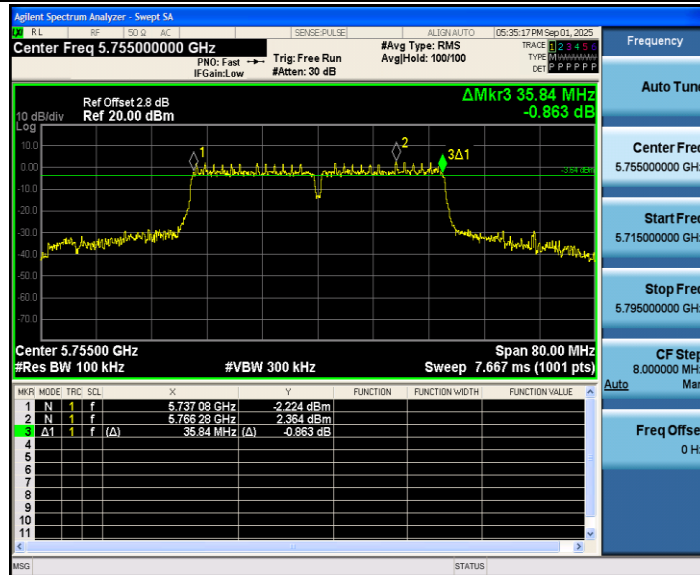
11N20SISO_Ant1_5785



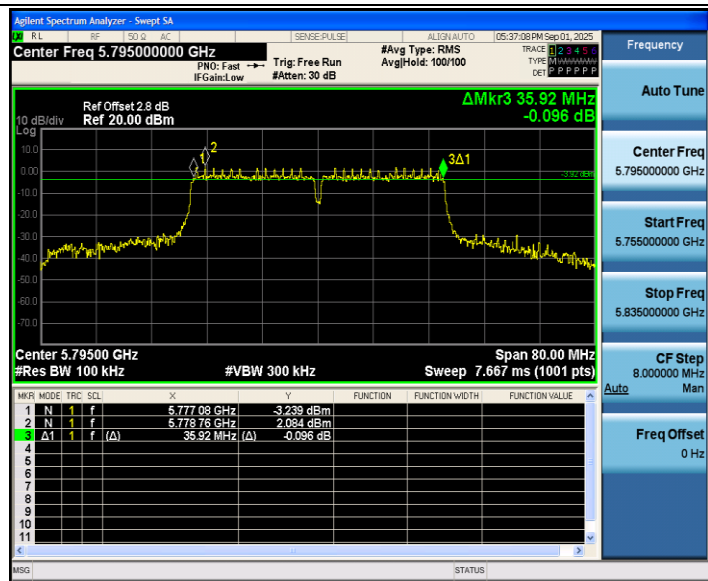
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

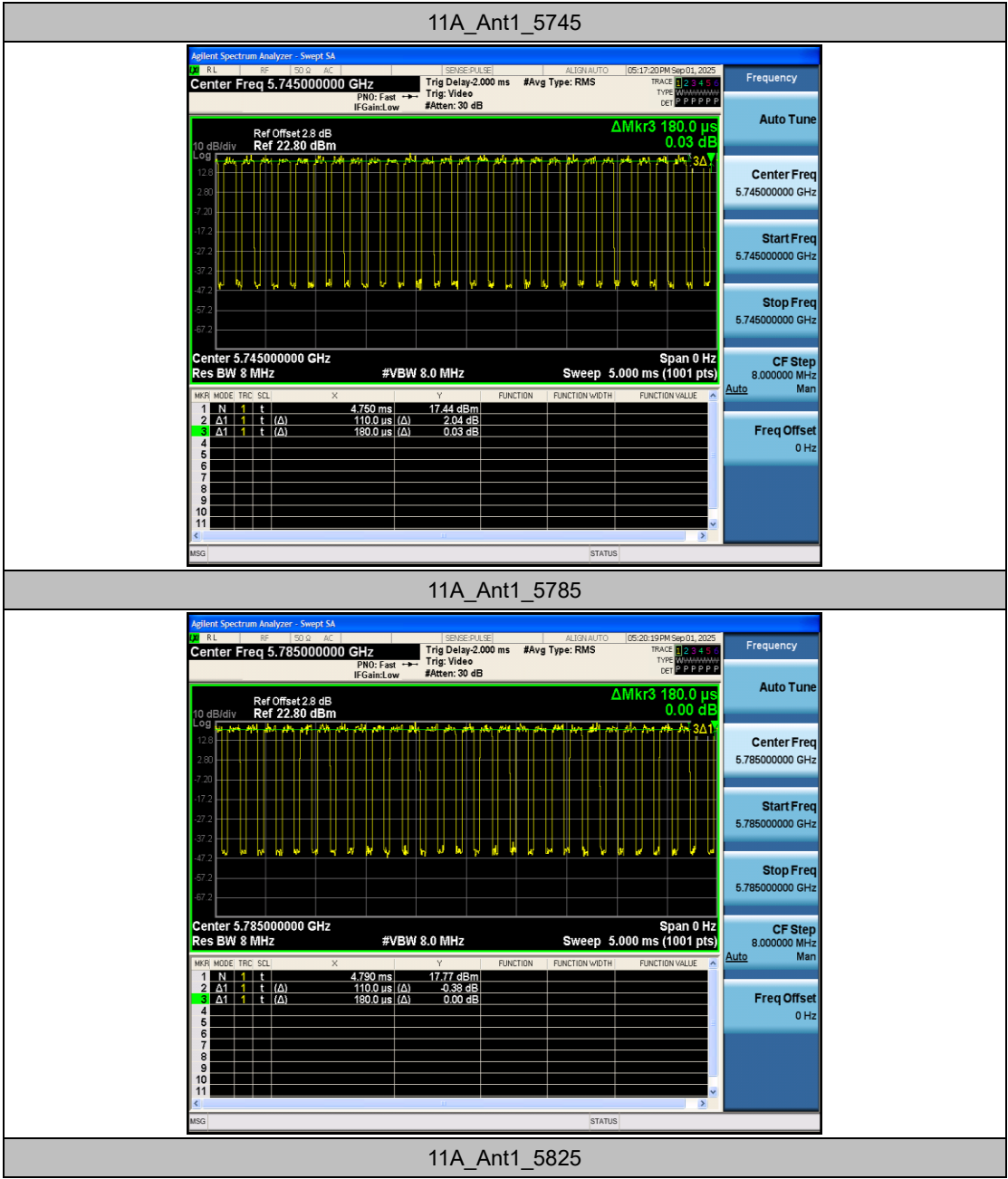


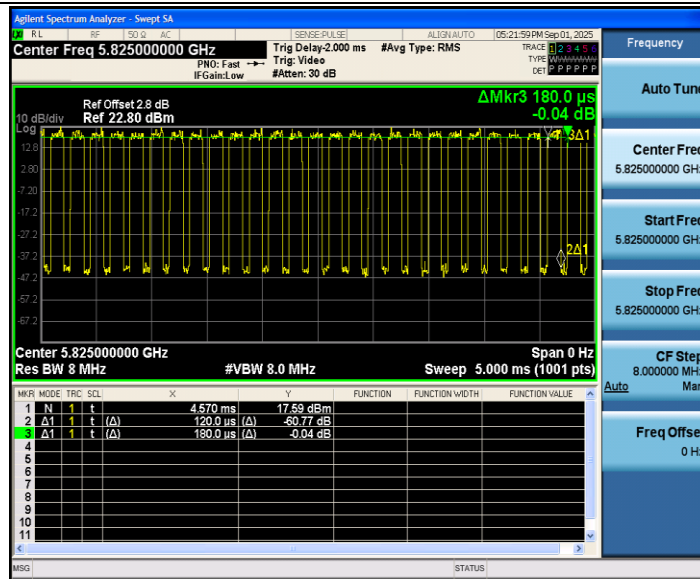
Appendix B: Duty Cycle

Test Result

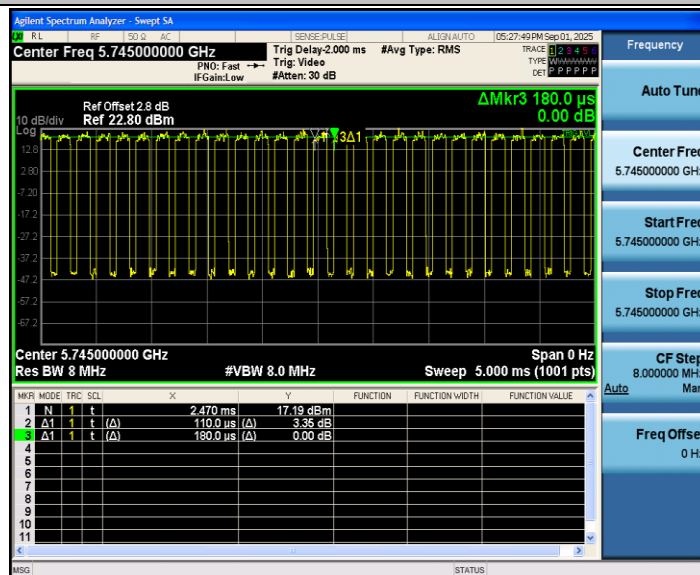
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty factor(dB)	Limit	Verdict
11A	Ant1	5745	0.11	0.18	61.11	2.14	---	---
		5785	0.11	0.18	61.11	2.14	---	---
		5825	0.12	0.18	66.67	1.76	---	---
11N20SISO	Ant1	5745	0.11	0.18	61.11	2.14	---	---
		5785	0.11	0.18	61.11	2.14	---	---
		5825	0.11	0.18	61.11	2.14	---	---
11N40SISO	Ant1	5755	0.07	0.14	50.00	3.01	---	---
		5795	0.08	0.14	57.14	2.43	---	---

Test Graphs

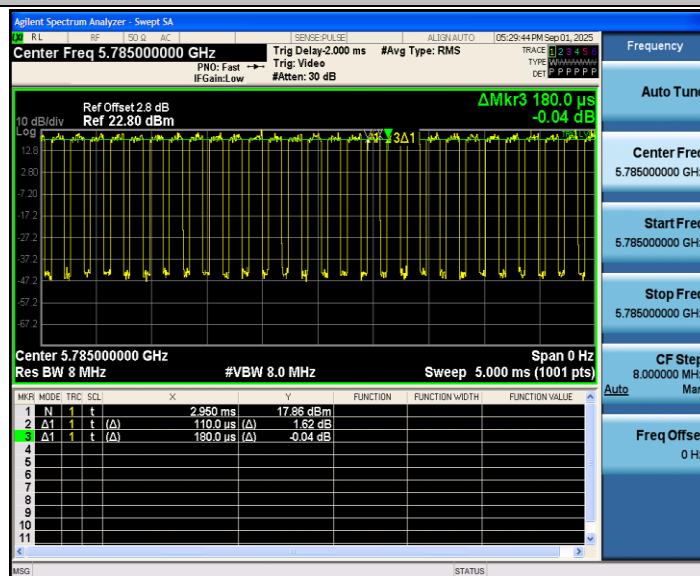




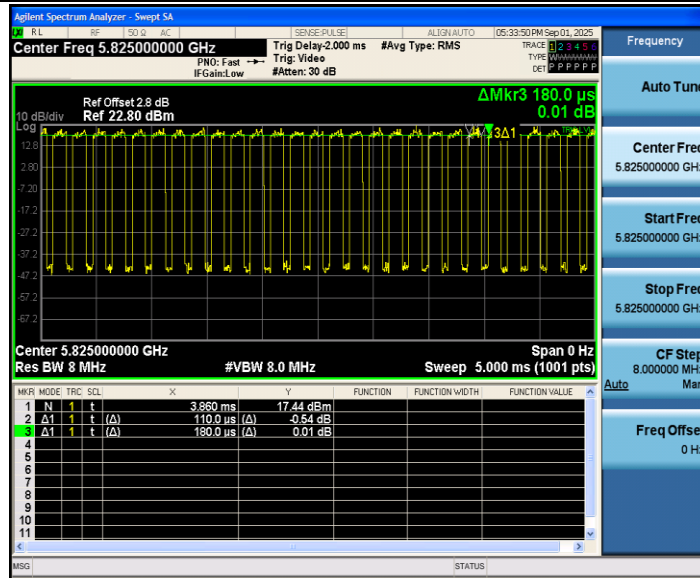
11N20SISO_Ant1_5745



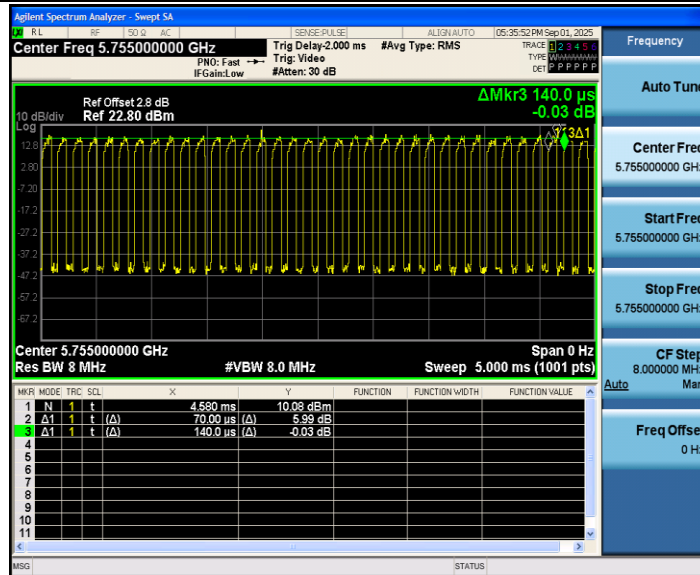
11N20SISO_Ant1_5785



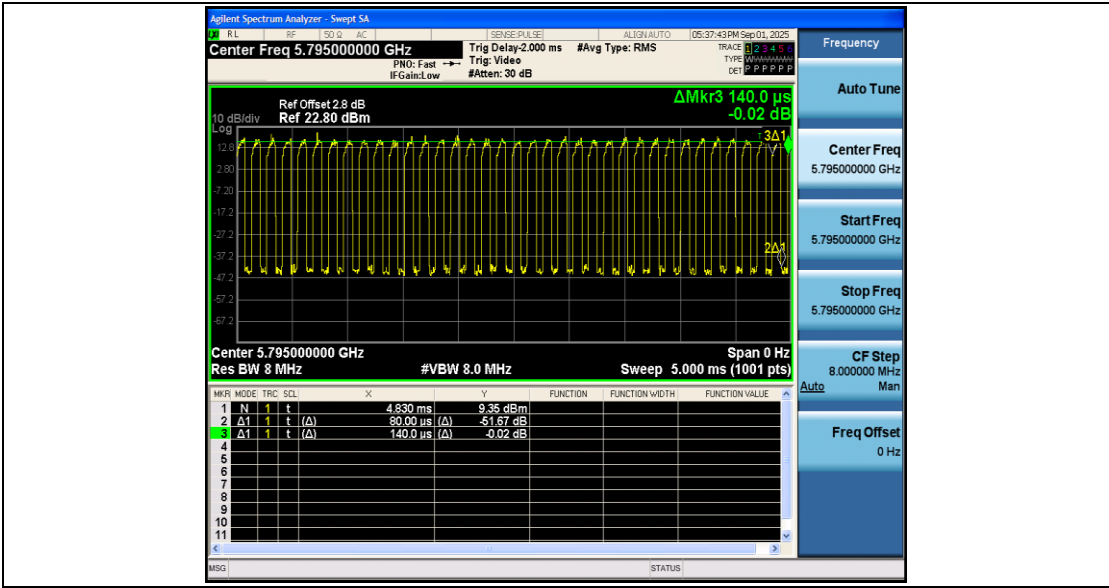
11N20SISO_Ant1_5825



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	5745	14.48	61.11	2.14	16.62	≤30.00	PASS
		5785	14.28	61.11	2.14	16.42	≤30.00	PASS
		5825	13.81	66.67	1.76	15.57	≤30.00	PASS
11N20SISO	Ant1	5745	14.48	61.11	2.14	16.62	≤30.00	PASS
		5785	14.45	61.11	2.14	16.59	≤30.00	PASS
		5825	14.01	61.11	2.14	16.15	≤30.00	PASS
11N40SISO	Ant1	5755	13.96	50.00	3.01	16.97	≤30.00	PASS
		5795	13.64	57.14	2.43	16.07	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

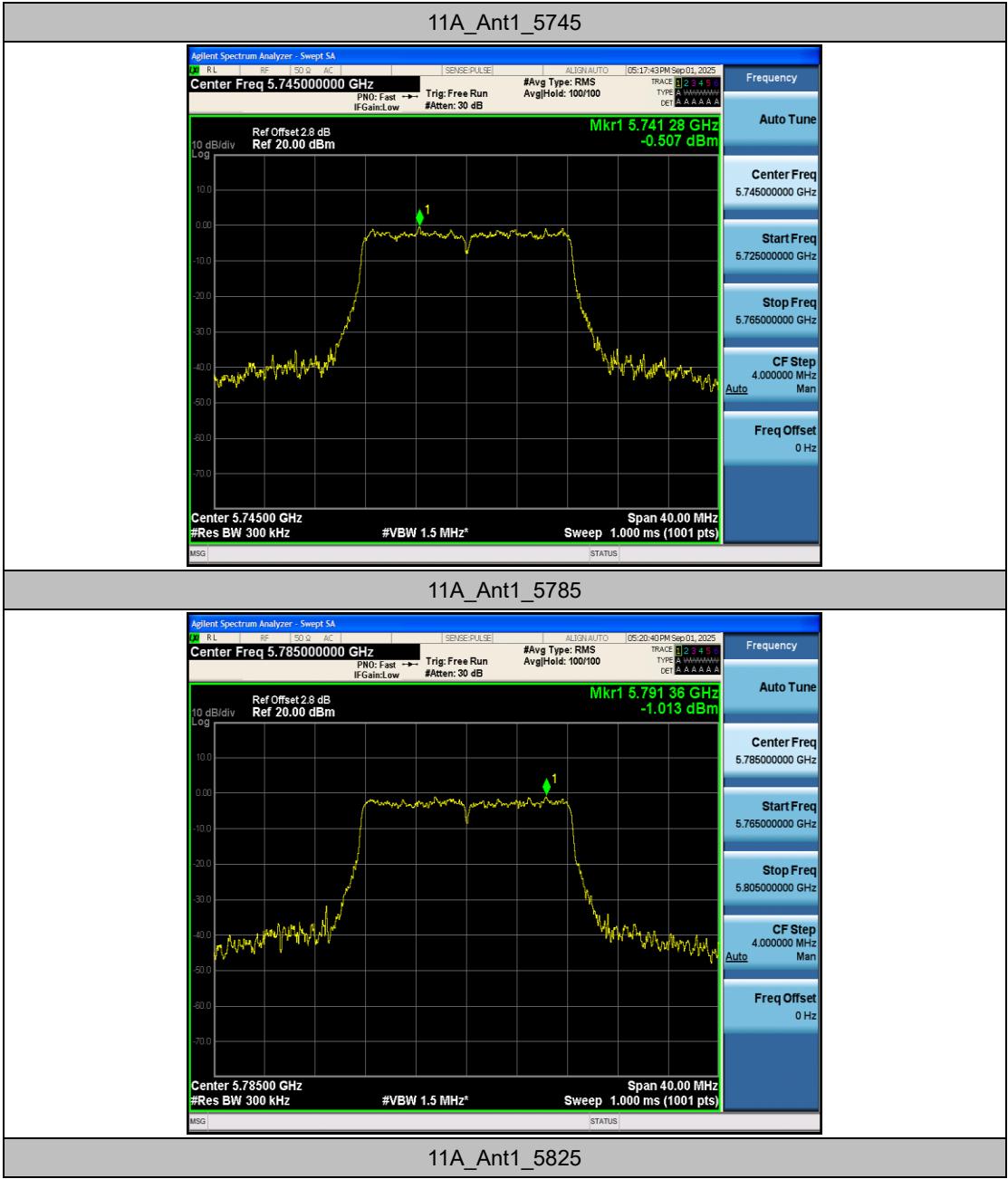
TestMode	Antenna	Freq(MHz)	Result [dBm/300KHz]	RBW Factor (dB)	Duty factor (dB)	Result [dBm/500KHz]	Limit [dBm/500KHz]	Verdict
11A	Ant1	5745	-0.507	2.22	2.14	3.85	≤30.00	PASS
		5785	-1.013	2.22	2.14	3.35	≤30.00	PASS
		5825	-1.532	2.22	1.76	2.45	≤30.00	PASS
11N20SISO	Ant1	5745	-0.451	2.22	2.14	3.91	≤30.00	PASS
		5785	-1.131	2.22	2.14	3.23	≤30.00	PASS
		5825	-1.306	2.22	2.14	3.05	≤30.00	PASS
11N40SISO	Ant1	5755	-3.296	2.22	3.01	1.93	≤30.00	PASS
		5795	-4.357	2.22	2.43	0.29	≤30.00	PASS

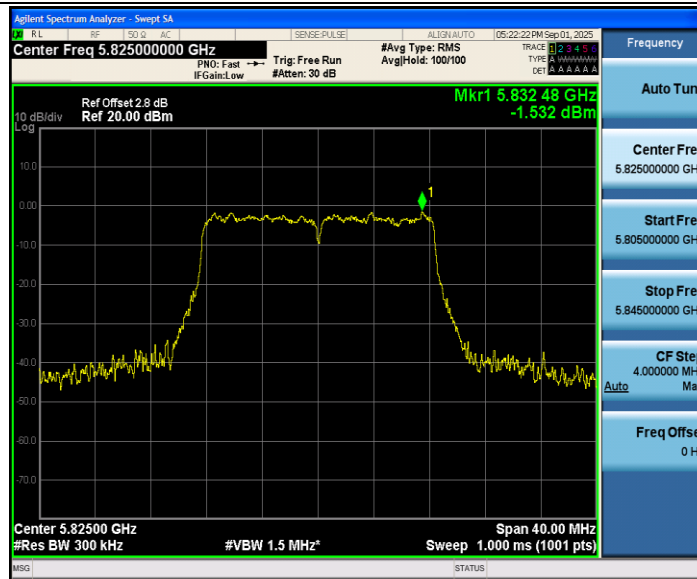
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

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

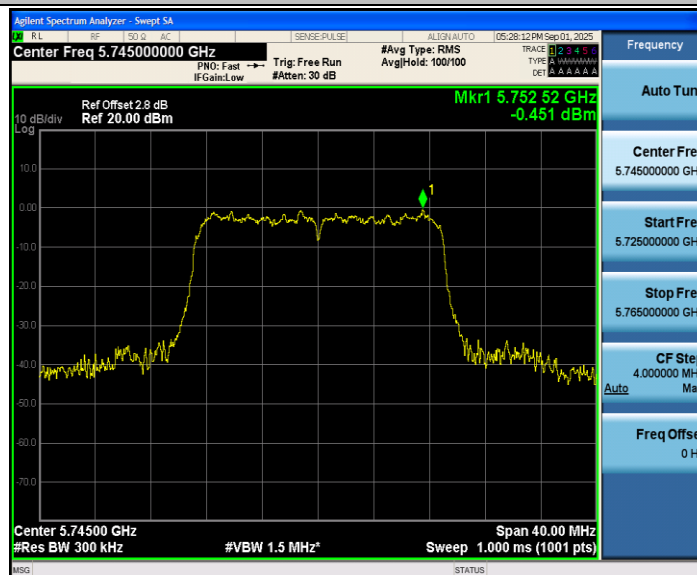
2. RBW factor= 10 log (500 KHz /300 KHz) = 2.22 dB

Test Graphs

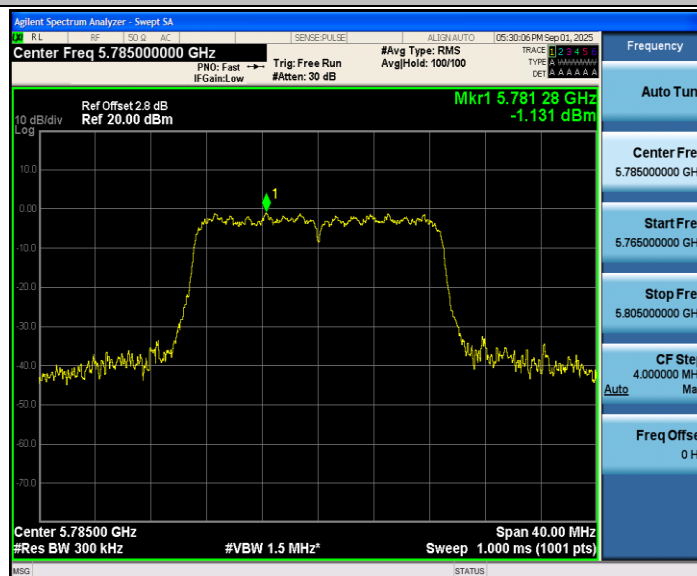




11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

