

Appendix RF Test Data for 5GWIFI

FCC ID : 2BR7F-A99

Company : Shenzhen Pasens Auto Electronic Co., Ltd.

EUT : Driving Recorder

Model Number : A99

Report No. : CTA25082800301

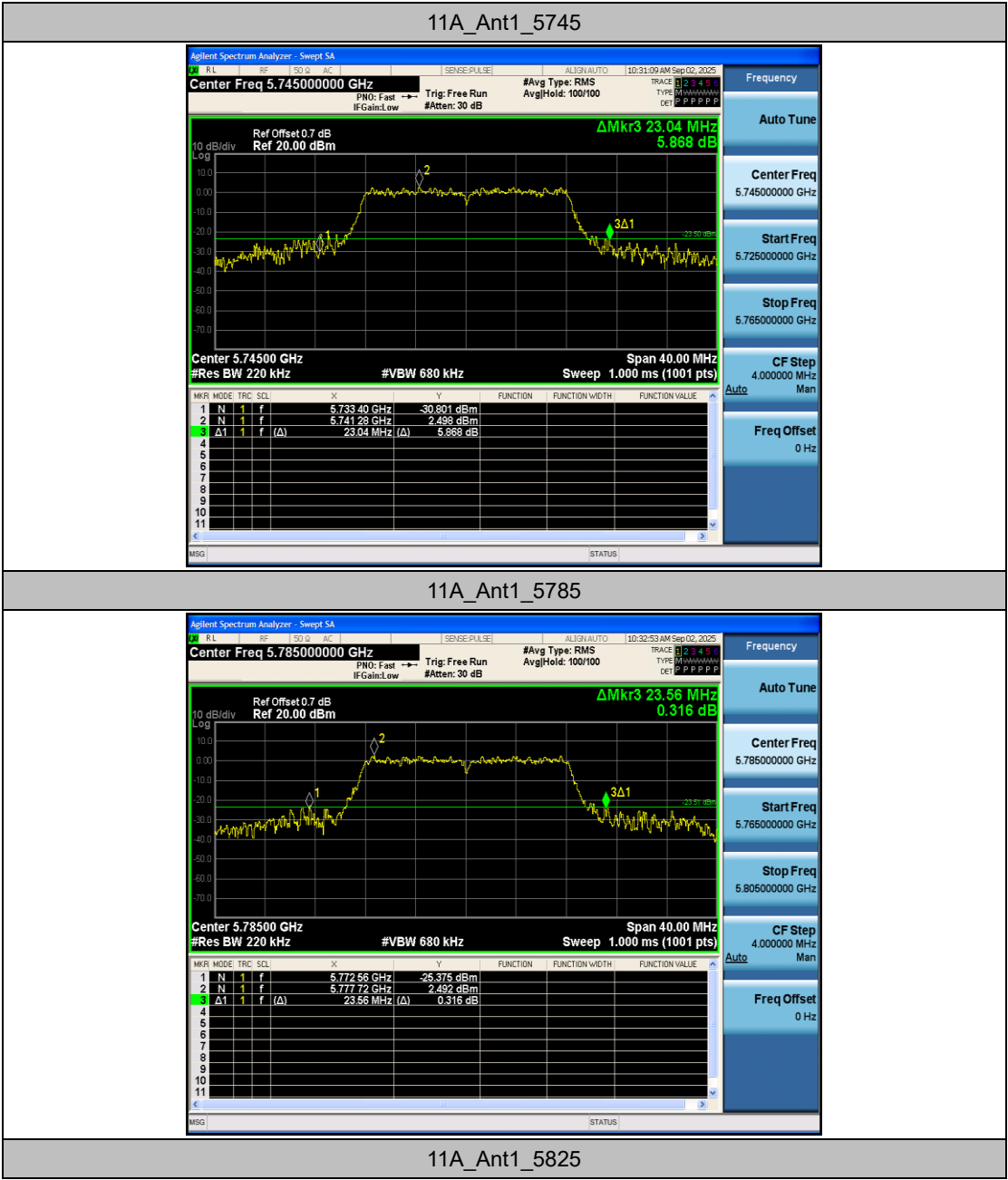
Reviewed By : Eric Wang

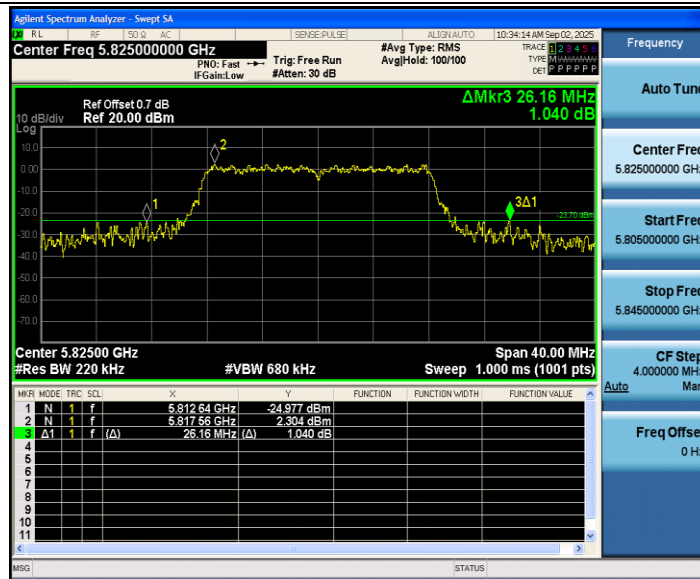
Appendix A1: Emission Bandwidth

Test Result

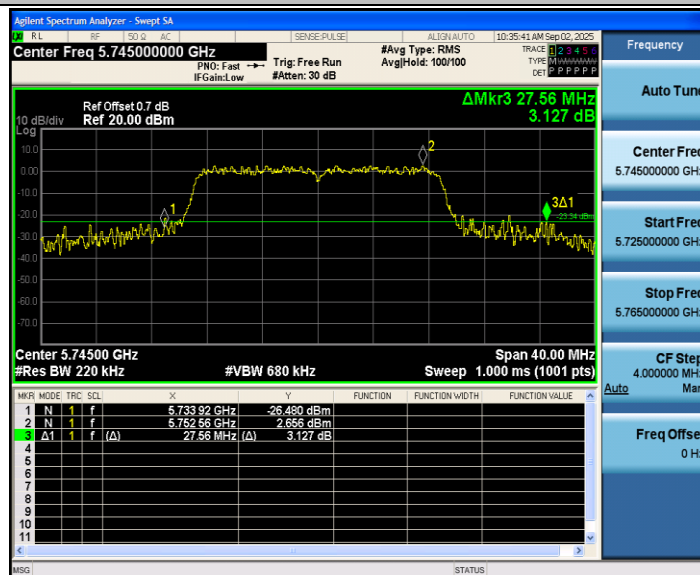
TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	23.040	5733.400	5756.440	---	---
		5785	23.560	5772.560	5796.120	---	---
		5825	26.160	5812.640	5838.800	---	---
11N20SISO	Ant1	5745	27.560	5733.920	5761.480	---	---
		5785	22.840	5773.640	5796.480	---	---
		5825	23.760	5812.040	5835.800	---	---
11N40SISO	Ant1	5755	41.760	5734.040	5775.800	---	---
		5795	39.840	5774.920	5814.760	---	---

Test Graphs

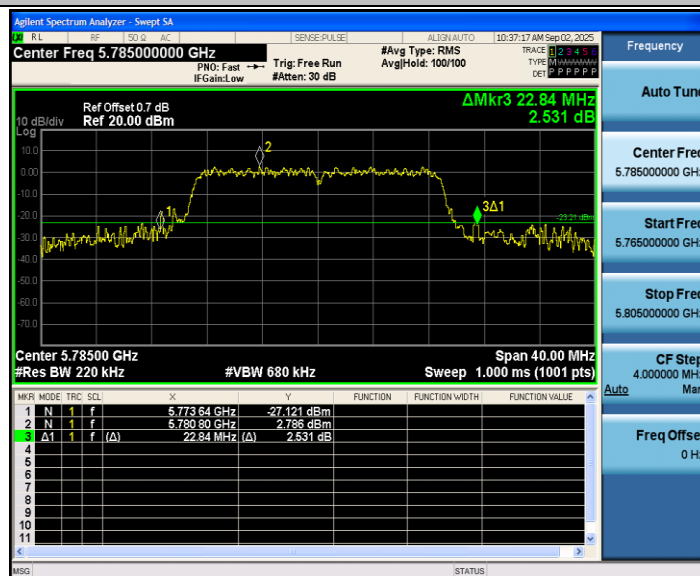




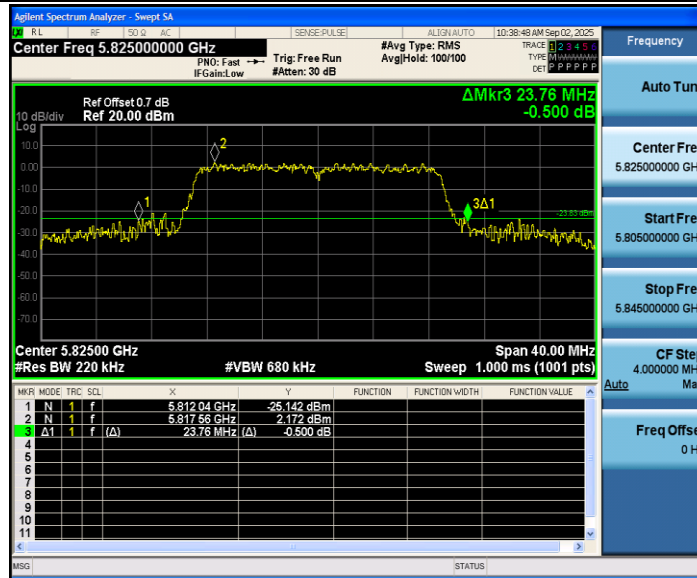
11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



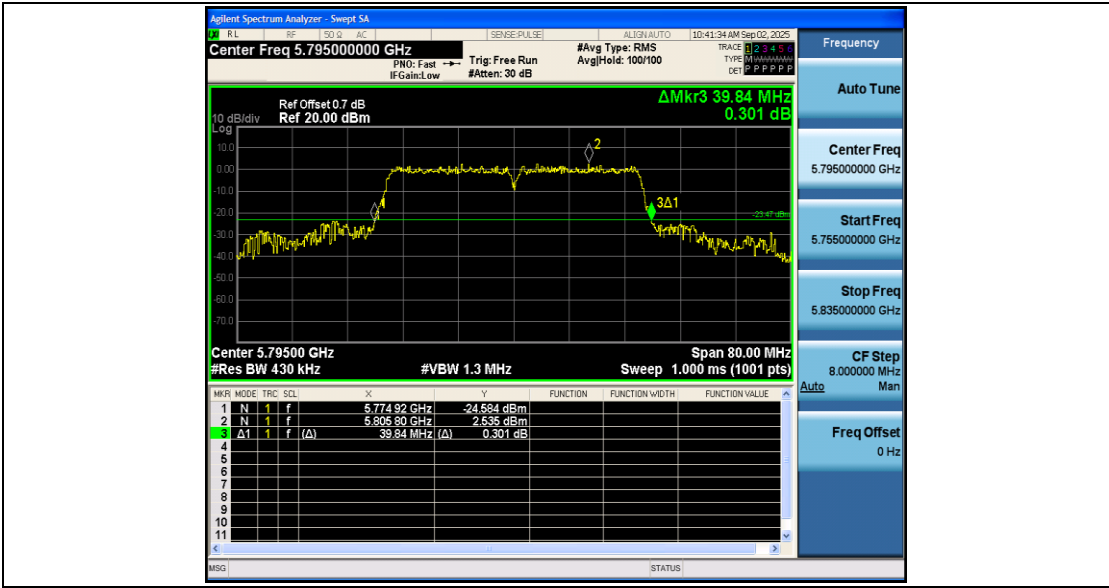
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



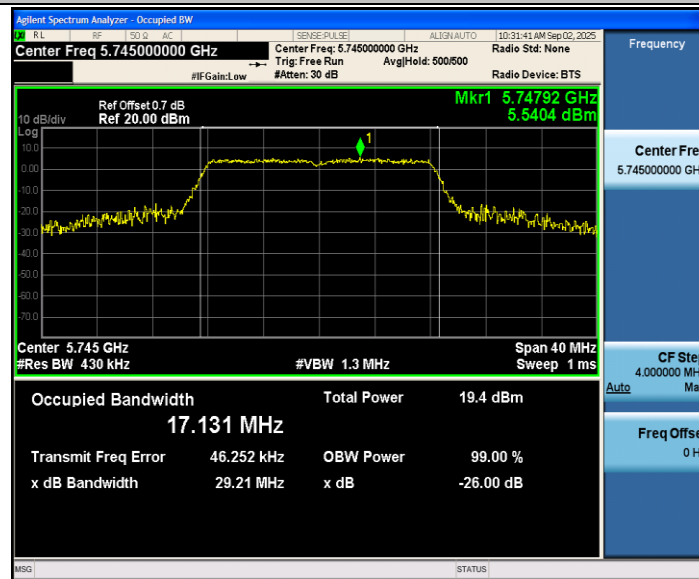
Appendix A2: Occupied channel bandwidth

Test Result

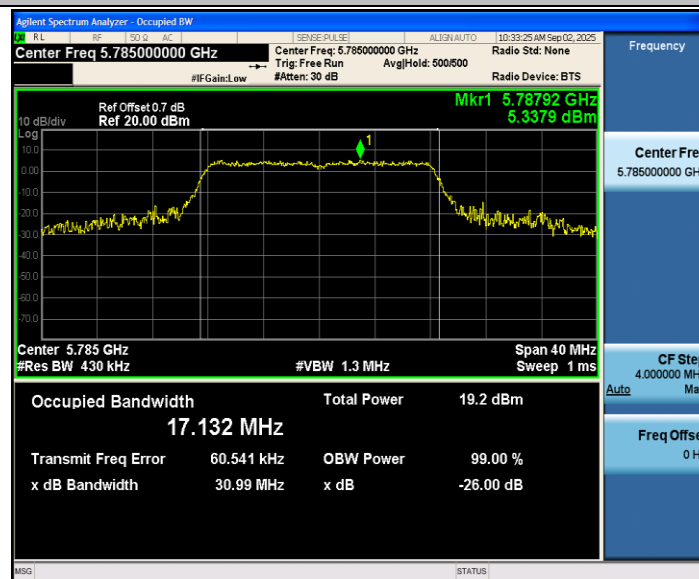
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	17.131	5736.4808	5753.6118	---	---
		5785	17.132	5776.4945	5793.6265	---	---
		5825	17.138	5816.4273	5833.5653	---	---
11N20SISO	Ant1	5745	18.013	5736.0135	5754.0265	---	---
		5785	17.977	5776.0491	5794.0261	---	---
		5825	17.941	5816.0310	5833.9720	---	---
11N40SISO	Ant1	5755	36.744	5736.6968	5773.4408	---	---
		5795	36.675	5776.6729	5813.3479	---	---

Test Graphs

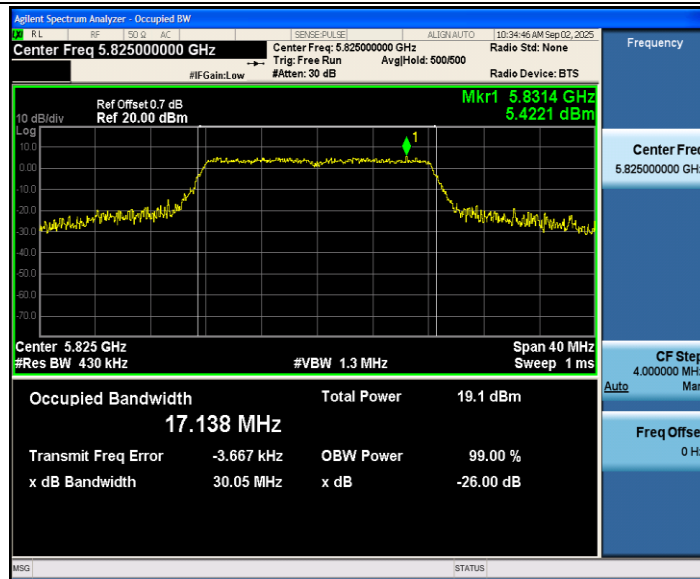
11A_Ant1_5745



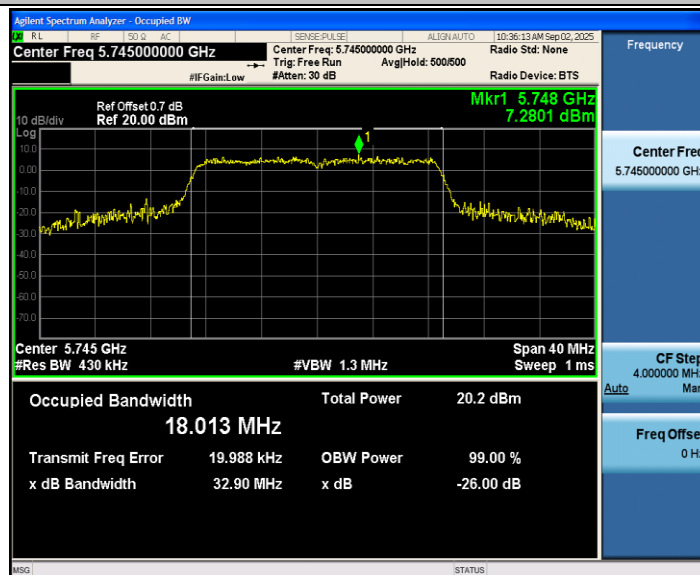
11A_Ant1_5785



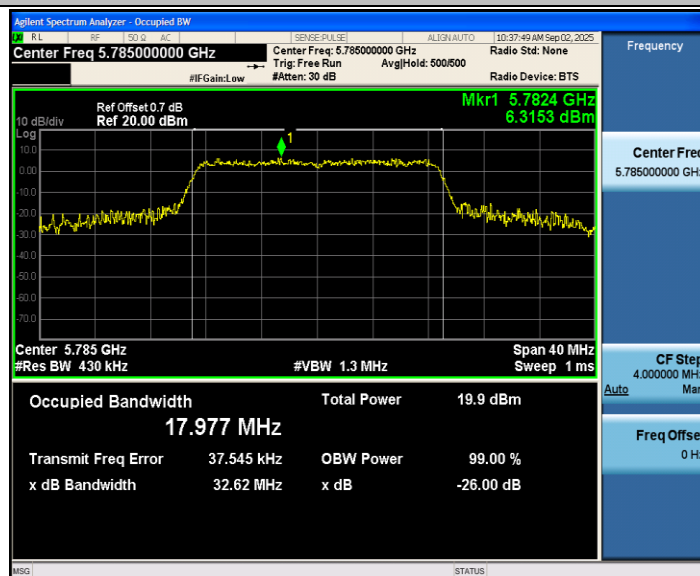
11A_Ant1_5825



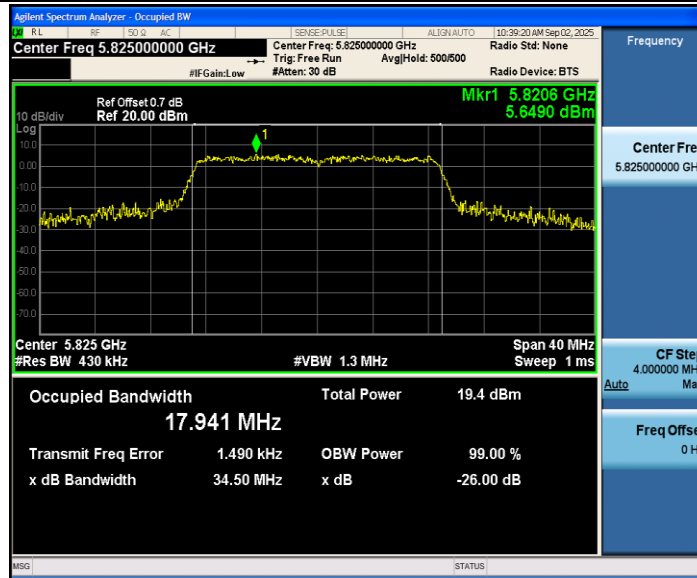
11N20SISO_Ant1_5745



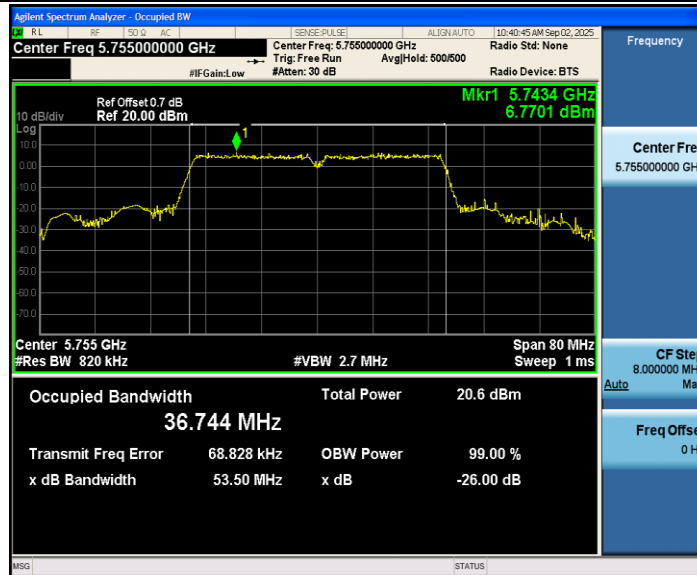
11N20SISO_Ant1_5785



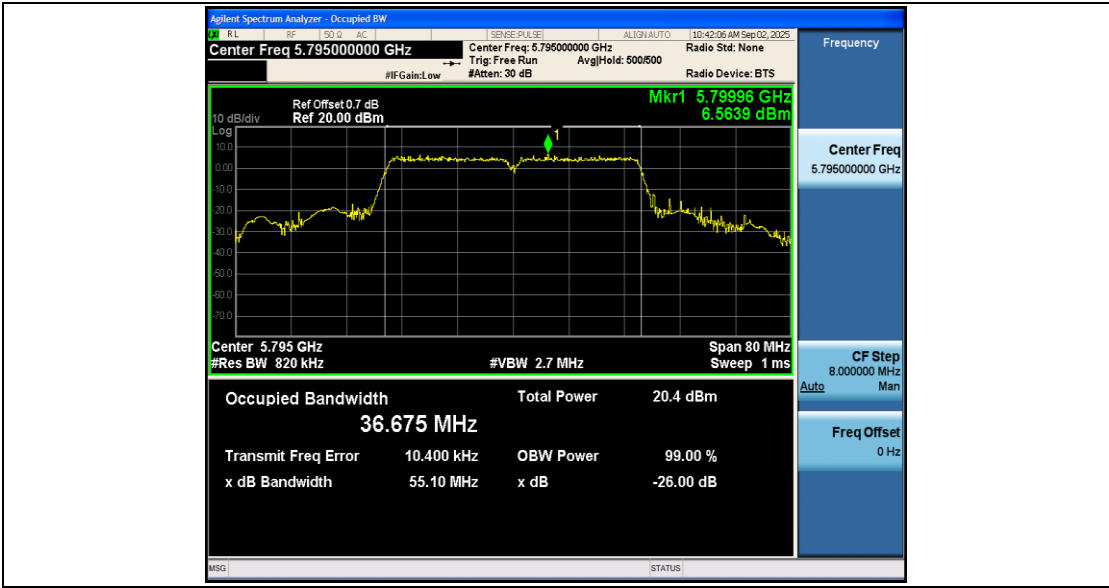
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



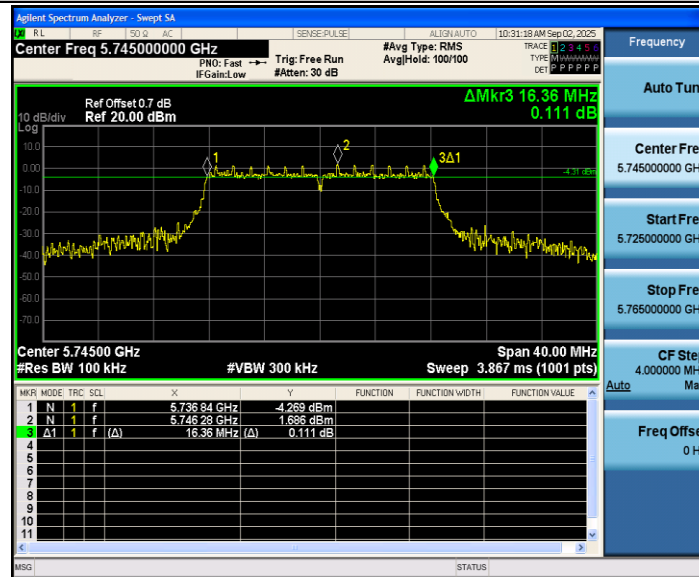
Appendix A3: Min emission bandwidth

Test Result B4

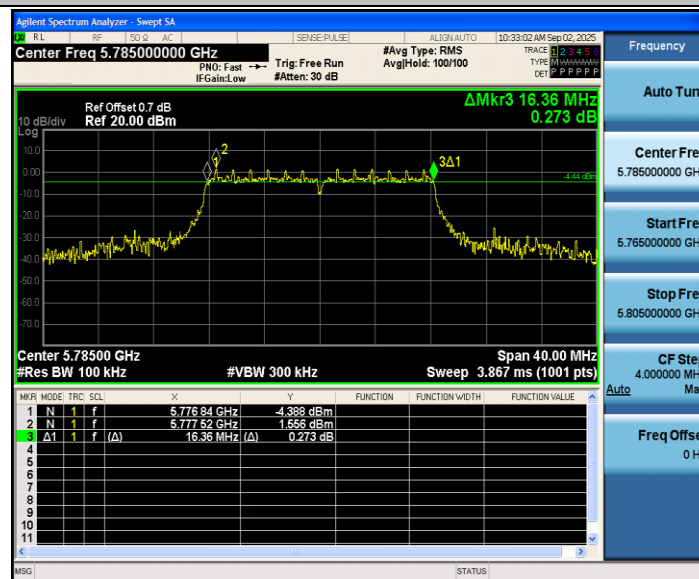
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.360	5736.840	5753.200	0.5	PASS
		5785	16.360	5776.840	5793.200	0.5	PASS
		5825	16.320	5816.840	5833.160	0.5	PASS
11N20SISO	Ant1	5745	17.520	5736.240	5753.760	0.5	PASS
		5785	17.200	5776.440	5793.640	0.5	PASS
		5825	17.280	5816.400	5833.680	0.5	PASS
11N40SISO	Ant1	5755	36.000	5737.000	5773.000	0.5	PASS
		5795	36.080	5776.840	5812.920	0.5	PASS

Test Graphs B4

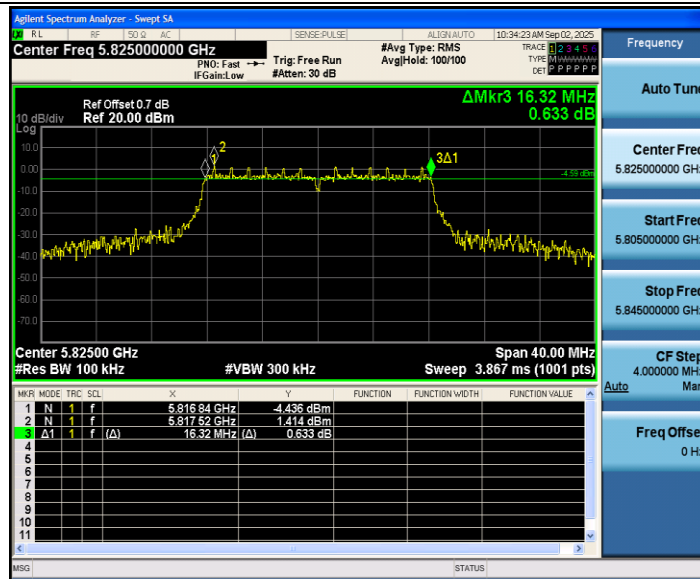
11A_Ant1_5745



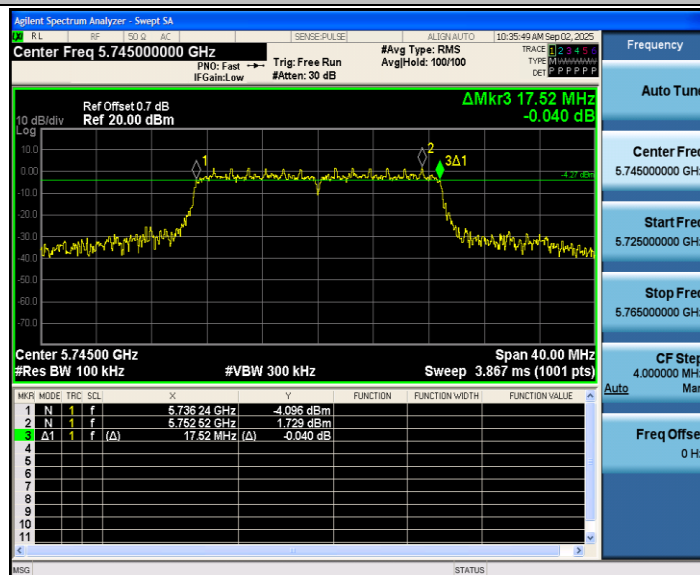
11A_Ant1_5785



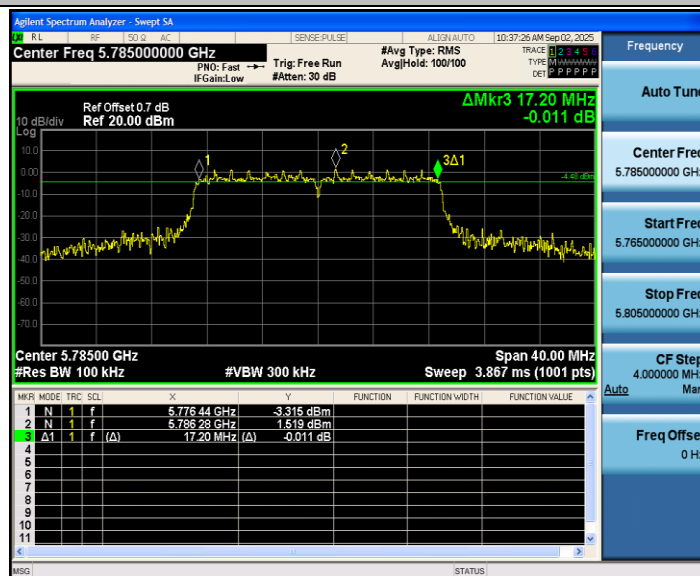
11A_Ant1_5825



11N20SISO_Ant1_5745



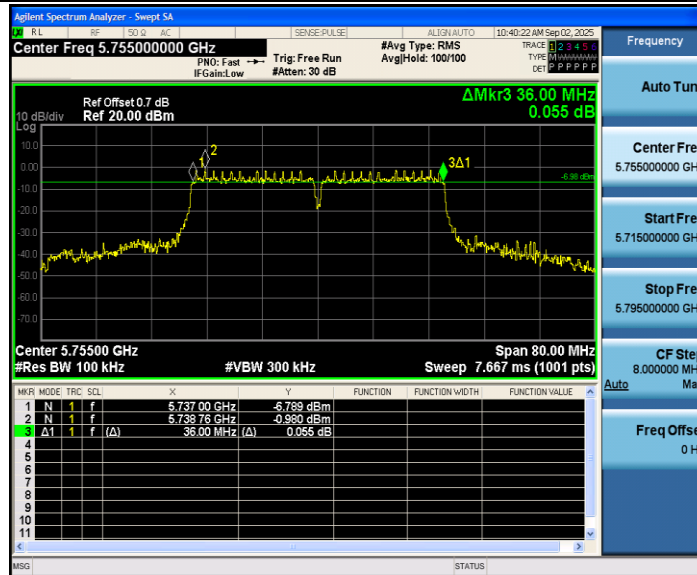
11N20SISO_Ant1_5785



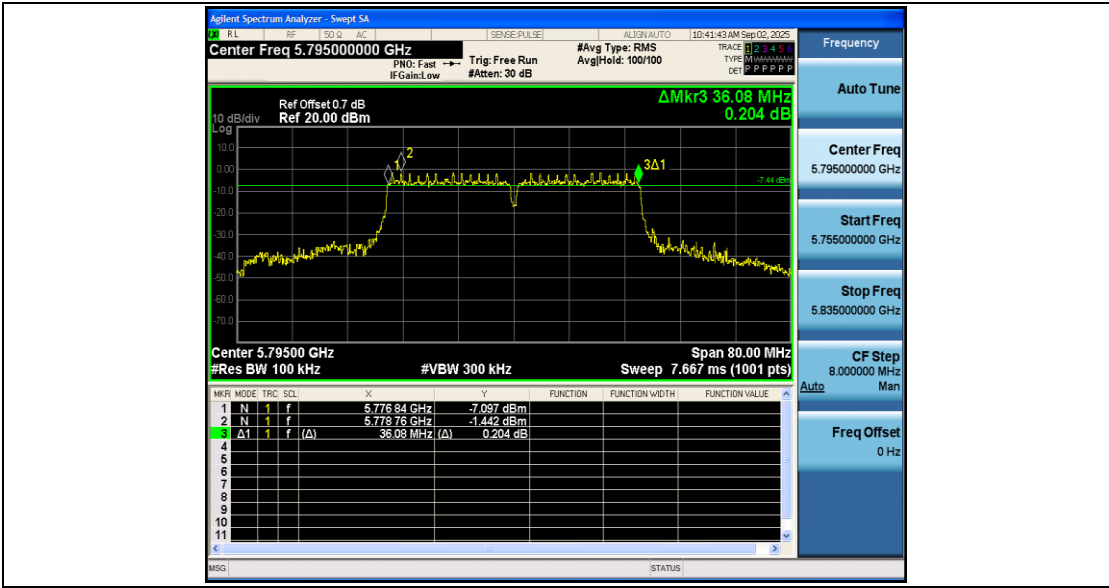
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

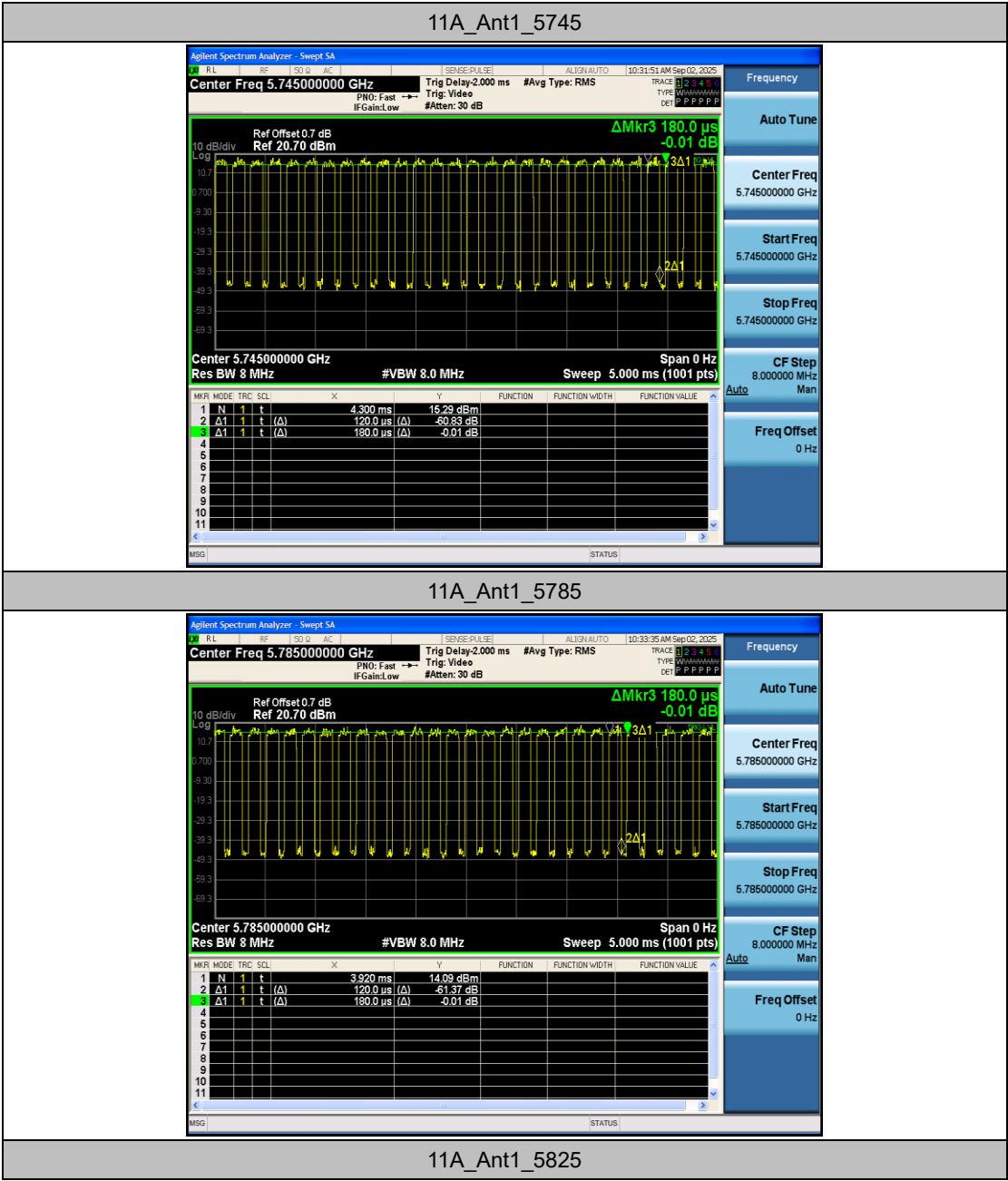


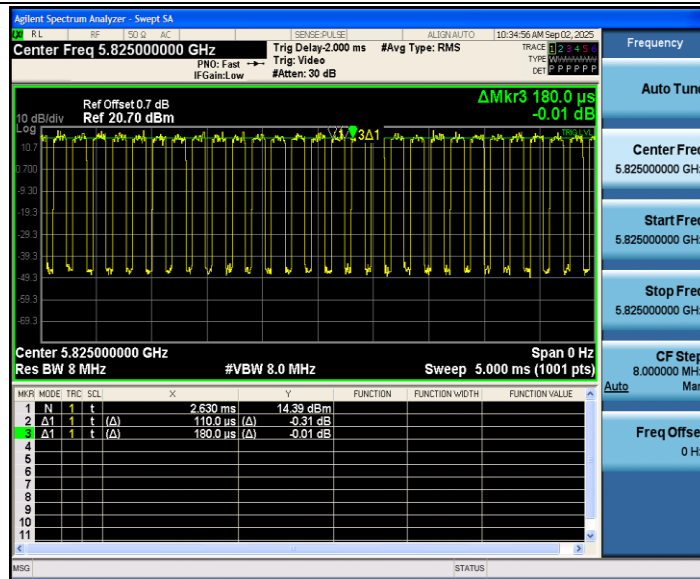
Appendix B: Duty Cycle

Test Result

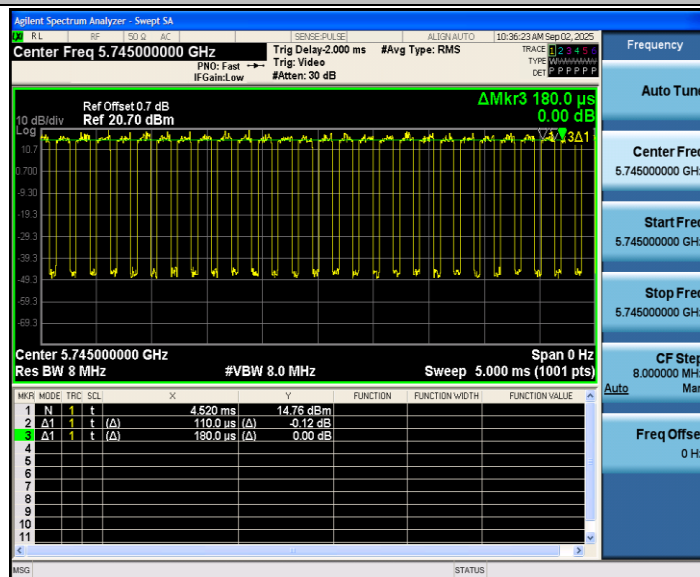
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty factor(dB)	Limit	Verdict
11A	Ant1	5745	0.12	0.18	66.67	1.76	---	---
		5785	0.12	0.18	66.67	1.76	---	---
		5825	0.11	0.18	61.11	2.14	---	---
11N20SISO	Ant1	5745	0.11	0.18	61.11	2.14	---	---
		5785	0.11	0.18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

Test Graphs

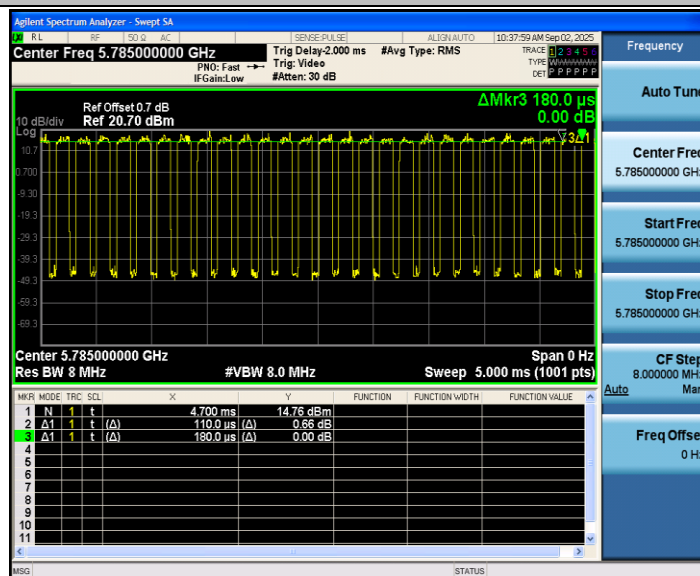




11N20SISO_Ant1_5745



11N20SISO_Ant1_5785





Appendix C: Maximum conducted output power

Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	11.10	1.76	12.86	≤30.00	PASS
		5785	10.69	1.76	12.45	≤30.00	PASS
		5825	10.59	2.14	12.73	≤30.00	PASS
11N20SISO	Ant1	5745	11.36	2.14	13.50	≤30.00	PASS
		5785	11.15	2.14	13.29	≤30.00	PASS
		5825	10.66	2.14	12.80	≤30.00	PASS
11N40SISO	Ant1	5755	10.59	2.43	13.02	≤30.00	PASS
		5795	10.29	2.43	12.72	≤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	-4.365	2.22	1.76	-0.39	≤30.00	PASS
		5785	-4.675	2.22	1.76	-0.70	≤30.00	PASS
		5825	-4.746	2.22	2.14	-0.39	≤30.00	PASS
11N20SISO	Ant1	5745	-3.804	2.22	2.14	0.56	≤30.00	PASS
		5785	-4.347	2.22	2.14	0.01	≤30.00	PASS
		5825	-4.638	2.22	2.14	-0.28	≤30.00	PASS
11N40SISO	Ant1	5755	-7.457	2.22	2.43	-2.81	≤30.00	PASS
		5795	-7.606	2.22	2.43	-2.96	≤30.00	PASS

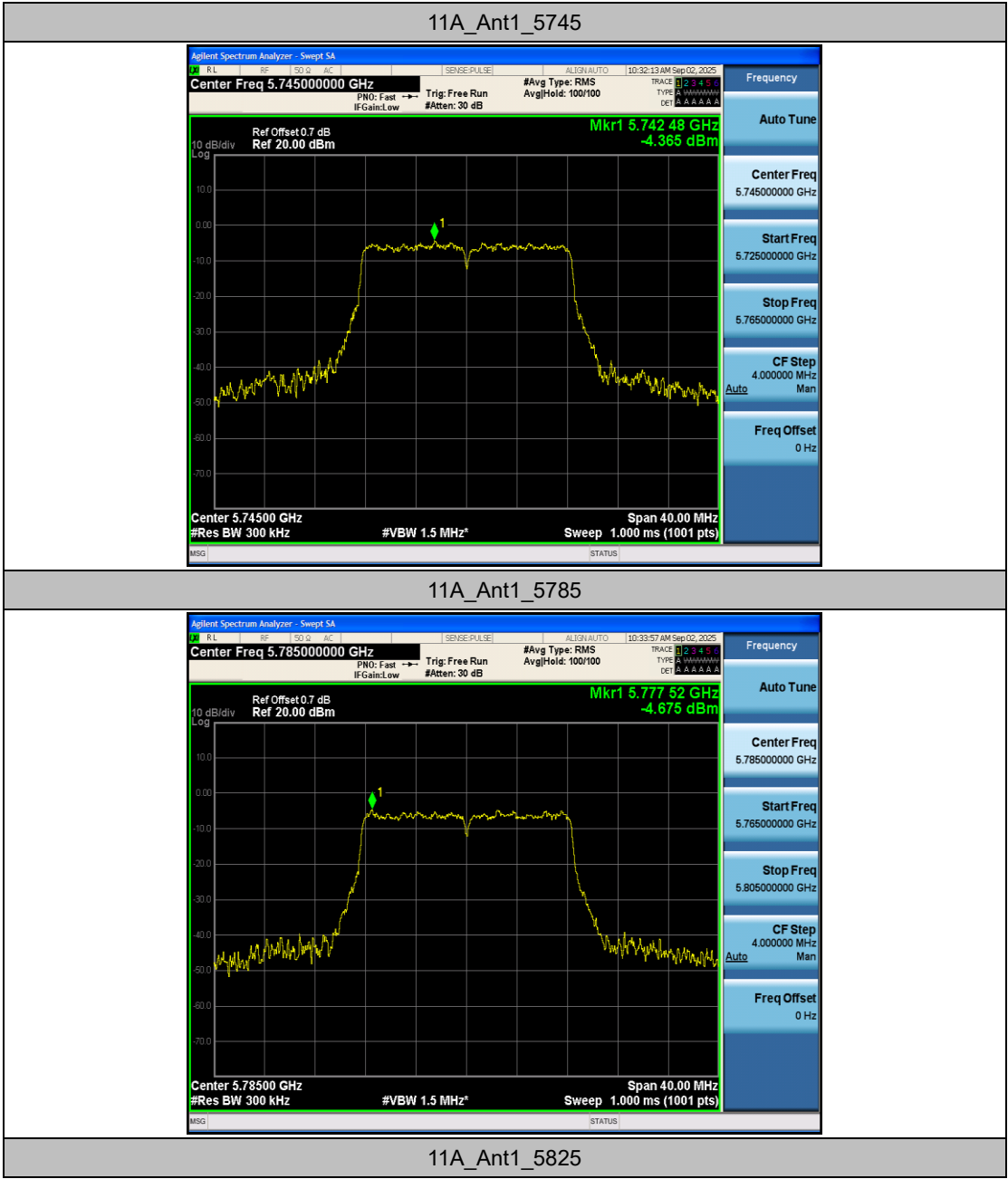
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

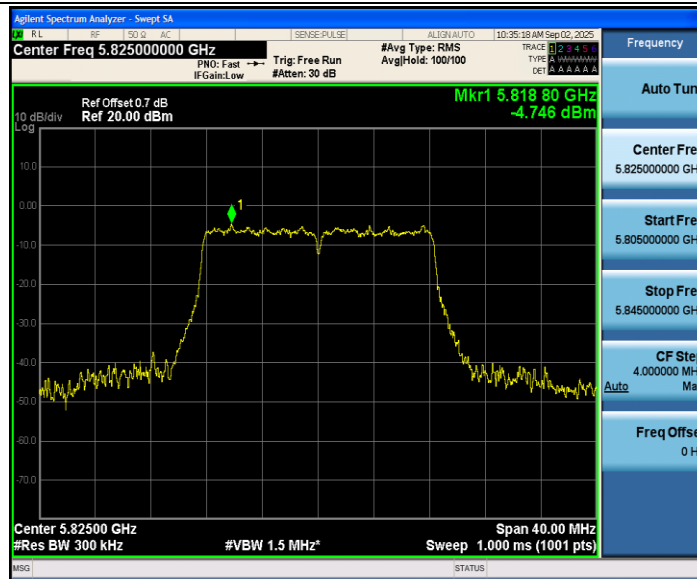
P.S.D(dBm/500KHz)= P.S.D(dBm/300KHz)+10 log (500 kHz/300KHz).

2. RBW factor= $10 \log (500 \text{ KHz} / 300 \text{ KHz}) = 2.22 \text{ dB}$ and The RBW Factor is compensated in the data graph.

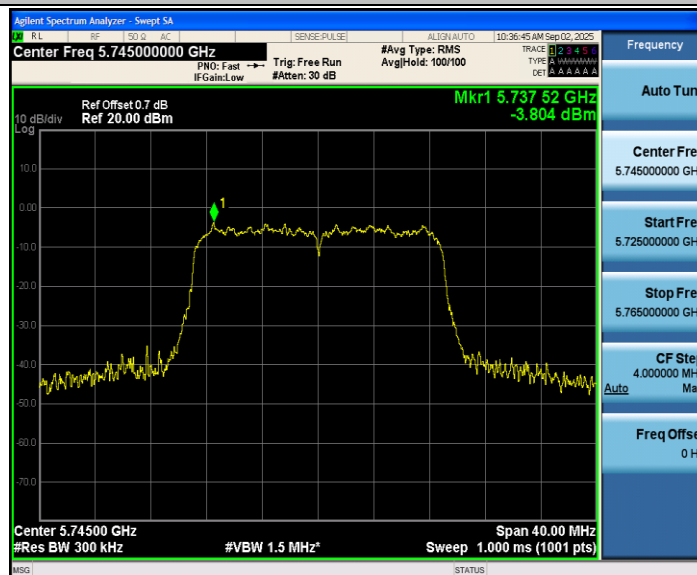
3. The Duty Cycle Factor is compensated in the graph.

Test Graphs

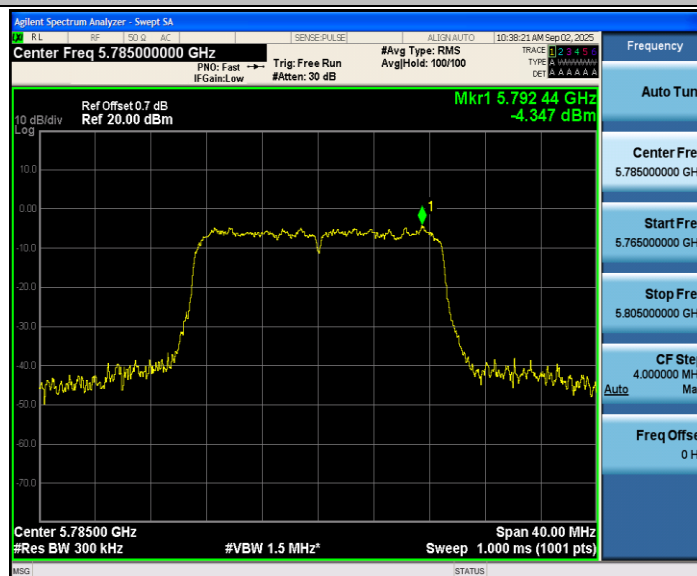




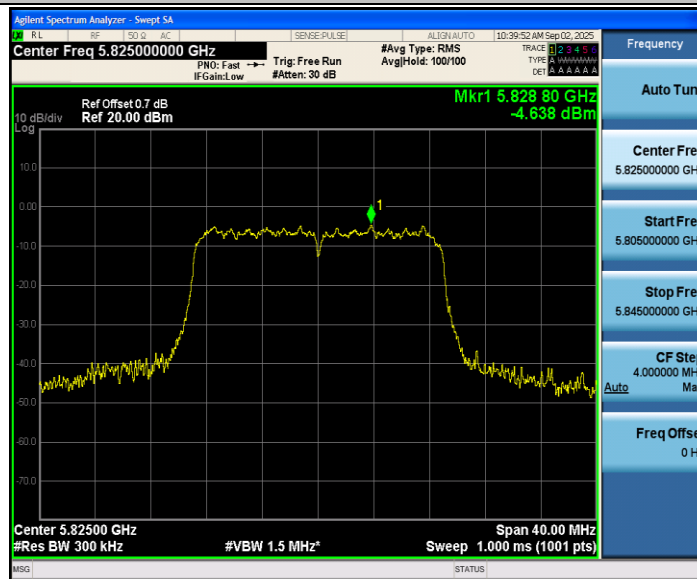
11N20SISO_Ant1_5745



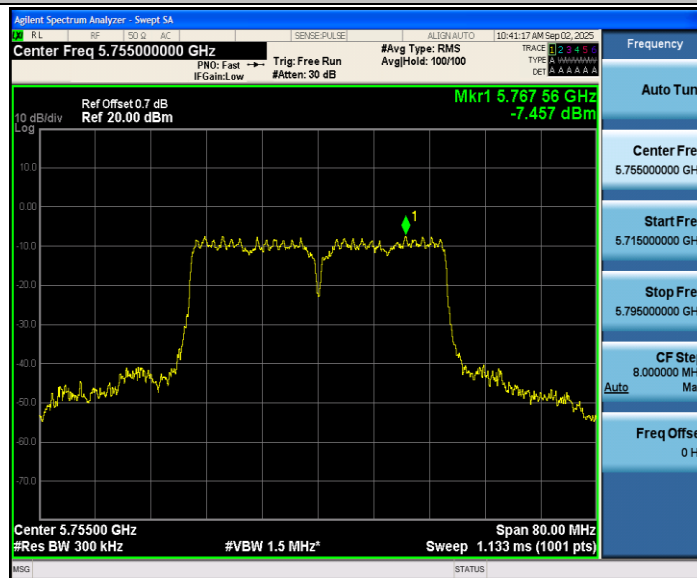
11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

