

FCC Appendix RF Test Data for 5GWIFI

FCC ID : 2BVIK-PF01-V

Company : Dongguan Pabbi Intelligent Technology Co., Ltd.

EUT : Pet Feeder

Model Number : PF01-V

Report No. : CTA26032301203

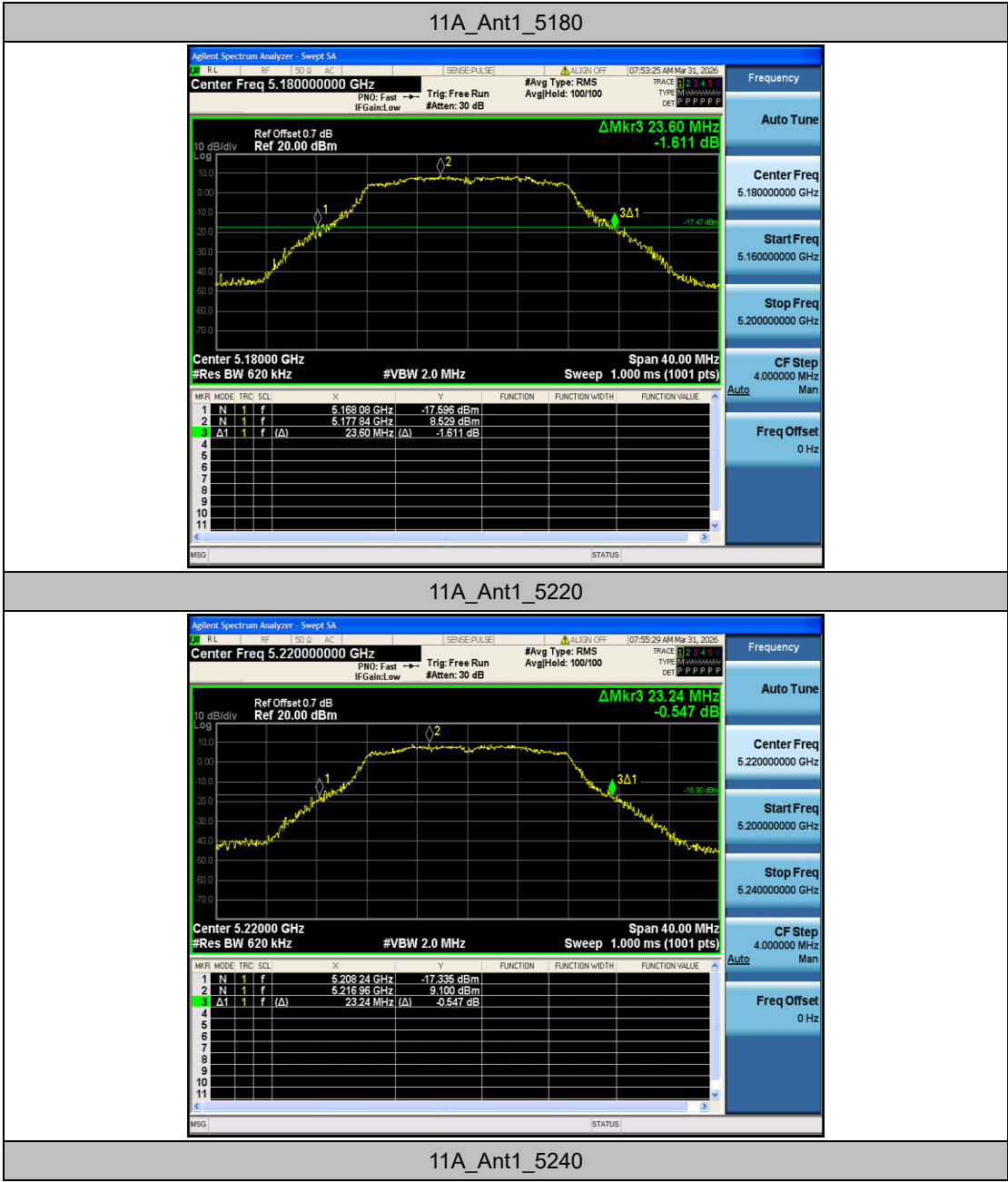
Reviewed By : Eric Wang

Appendix A1: Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	23.600	5168.080	5191.680	---	---
		5220	23.240	5208.240	5231.480	---	---
		5240	23.200	5228.280	5251.480	---	---
		5745	24.120	5732.760	5756.880	---	---
		5785	24.280	5772.520	5796.800	---	---
		5825	24.120	5812.800	5836.920	---	---
11N20SISO	Ant1	5180	24.040	5168.160	5192.200	---	---
		5220	23.400	5208.400	5231.800	---	---
		5240	23.640	5228.240	5251.880	---	---
		5745	24.040	5733.200	5757.240	---	---
		5785	24.760	5772.760	5797.520	---	---
		5825	24.600	5812.840	5837.440	---	---

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



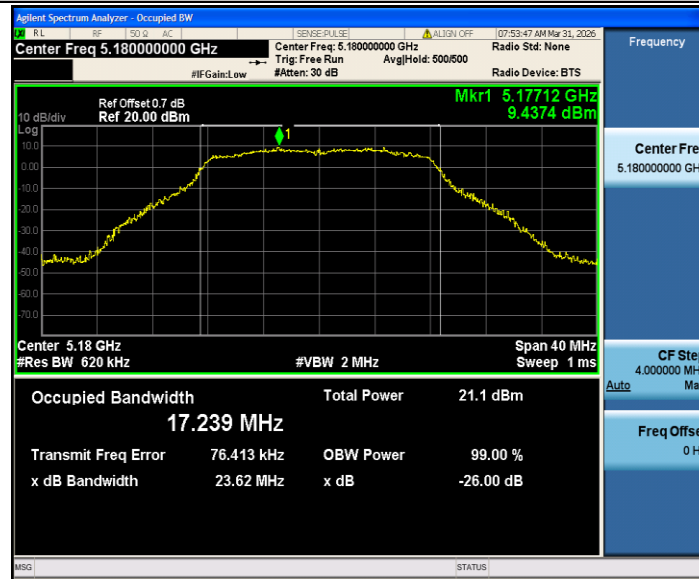
Appendix A2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.239	5171.4569	5188.6959	---	---
		5220	17.322	5211.4295	5228.7515	---	---
		5240	17.207	5231.4294	5248.6364	---	---
		5745	17.618	5736.2459	5753.8639	---	---
		5785	17.650	5776.2344	5793.8844	---	---
		5825	17.627	5816.2132	5833.8402	---	---
11N20SISO	Ant1	5180	18.288	5170.8908	5189.1788	---	---
		5220	18.221	5210.9125	5229.1335	---	---
		5240	18.247	5230.9076	5249.1546	---	---
		5745	18.662	5735.6959	5754.3579	---	---
		5785	18.672	5775.6939	5794.3659	---	---
		5825	18.643	5815.6529	5834.2959	---	---

Test Graphs

11A_Ant1_5180



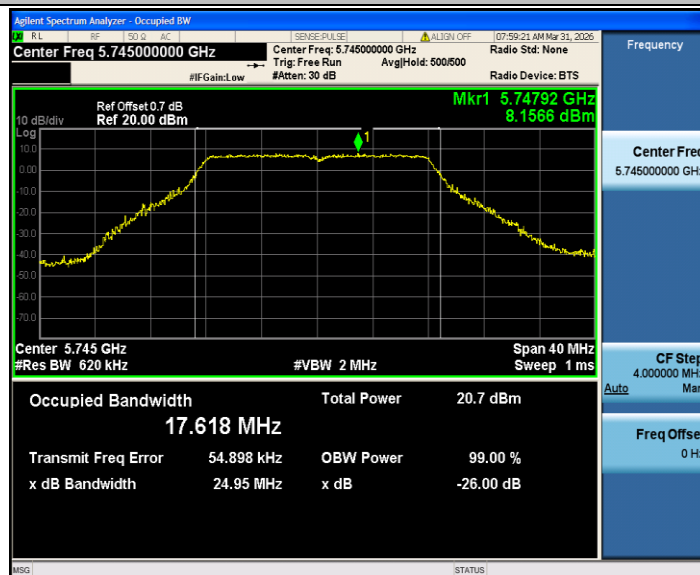
11A_Ant1_5220



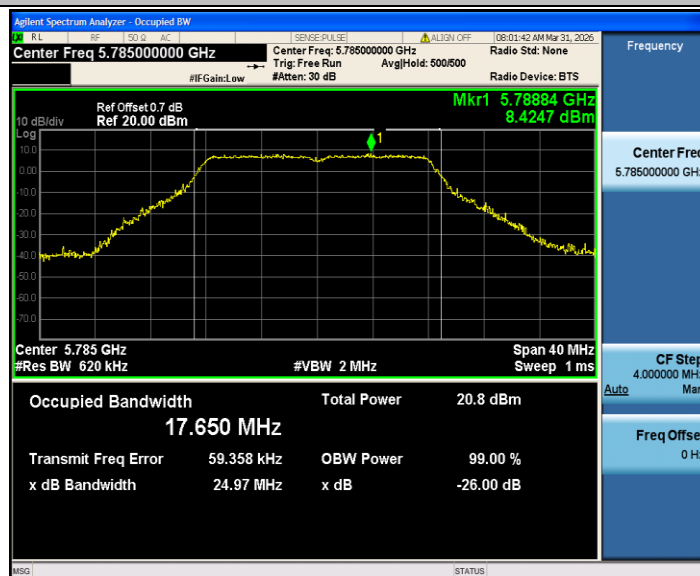
11A_Ant1_5240



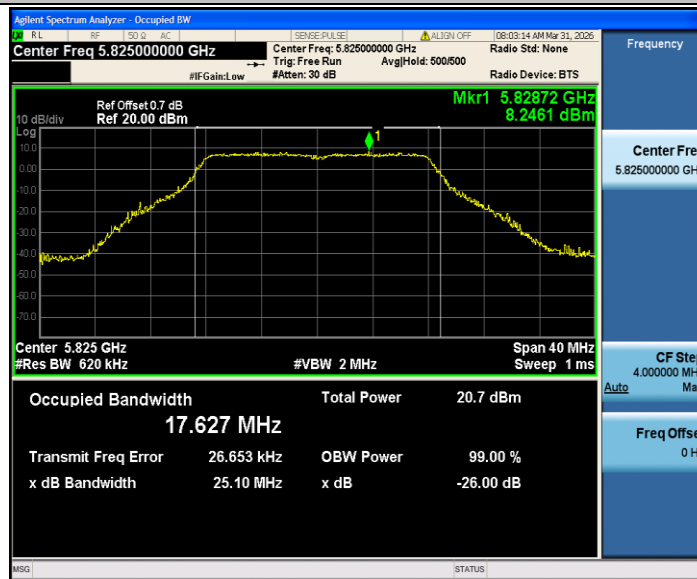
11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



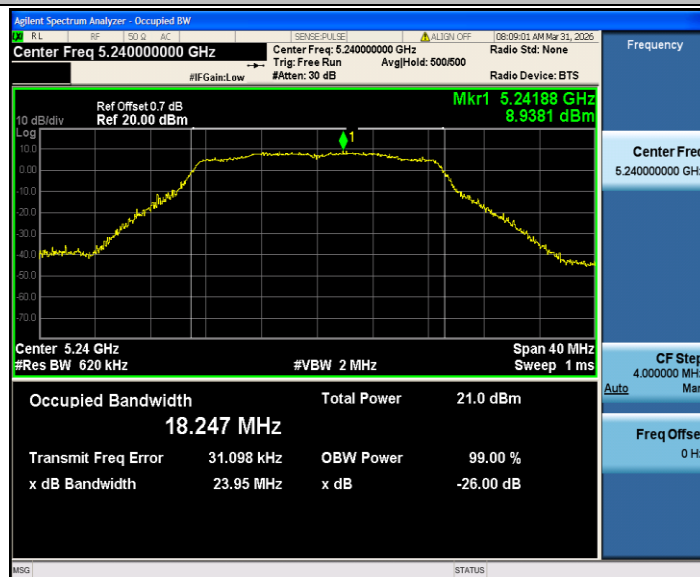
11N20SISO_Ant1_5180



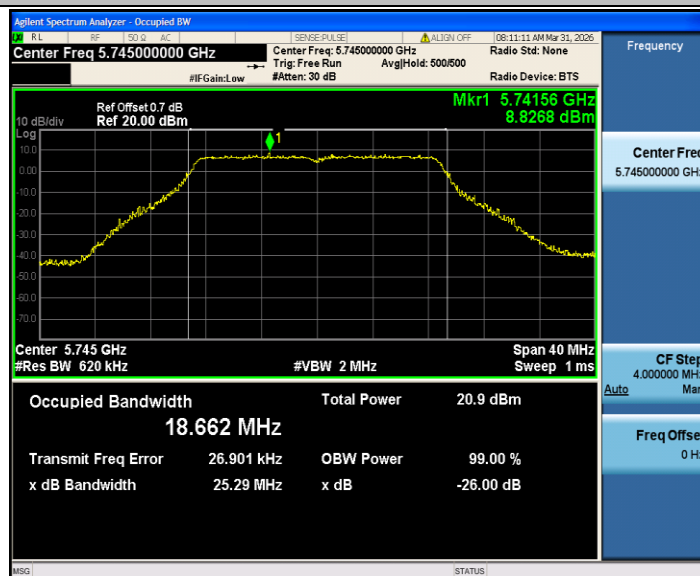
11N20SISO_Ant1_5220



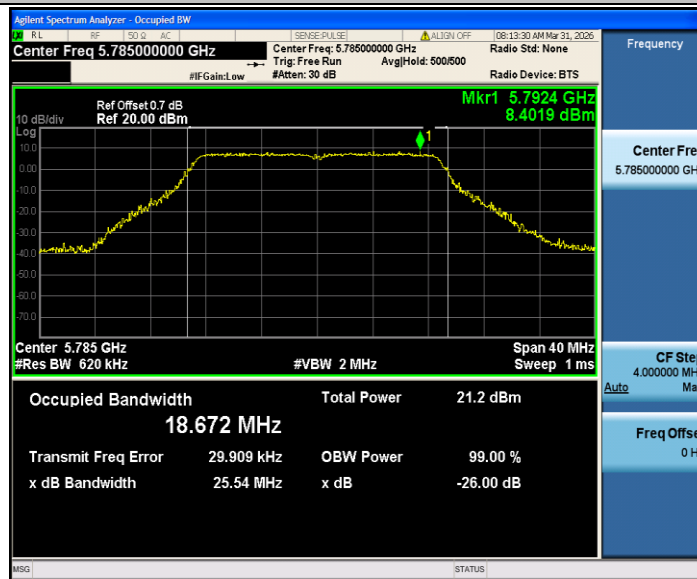
11N20SISO_Ant1_5240



11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



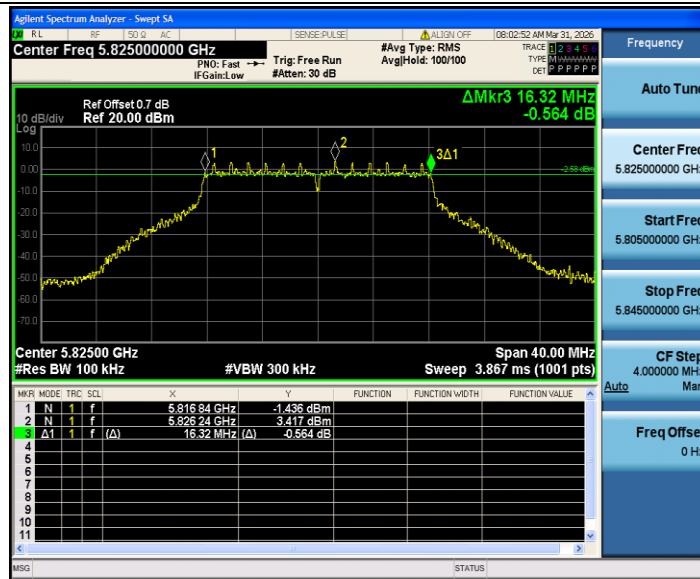
Appendix A3: Min emission bandwidth

Test Result B4

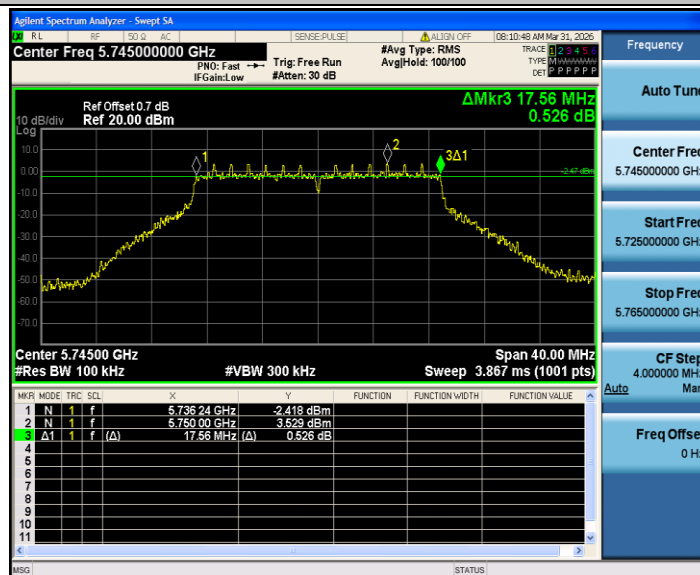
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.840	5753.160	0.5	PASS
		5785	16.320	5776.840	5793.160	0.5	PASS
		5825	16.320	5816.840	5833.160	0.5	PASS
11N20SISO	Ant1	5745	17.560	5736.240	5753.800	0.5	PASS
		5785	17.280	5776.480	5793.760	0.5	PASS
		5825	17.520	5816.240	5833.760	0.5	PASS

Test Graphs B4

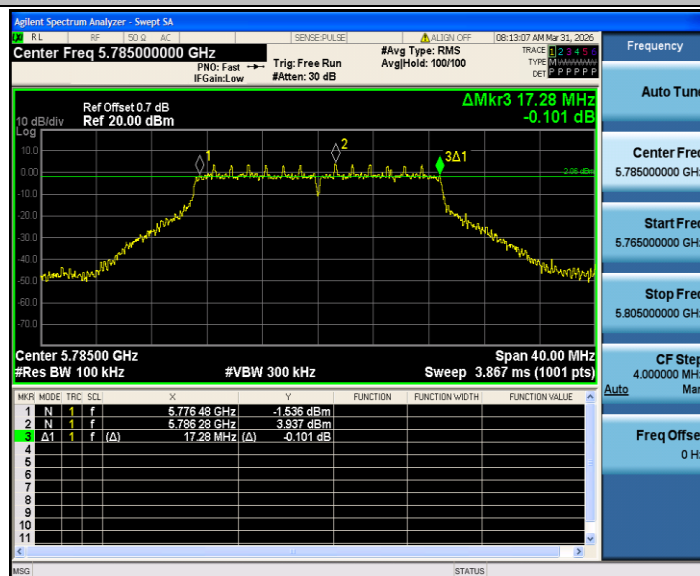




11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825

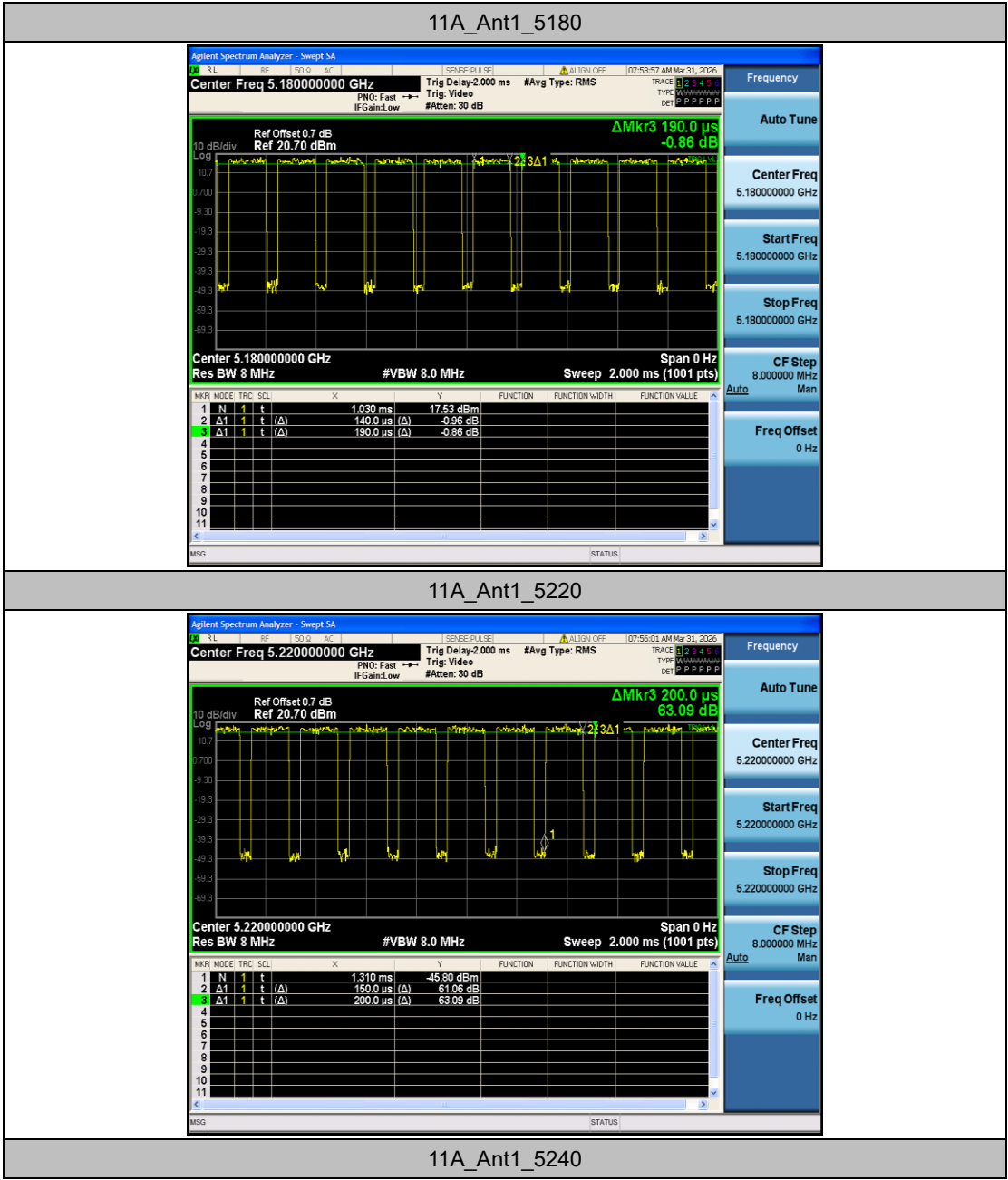


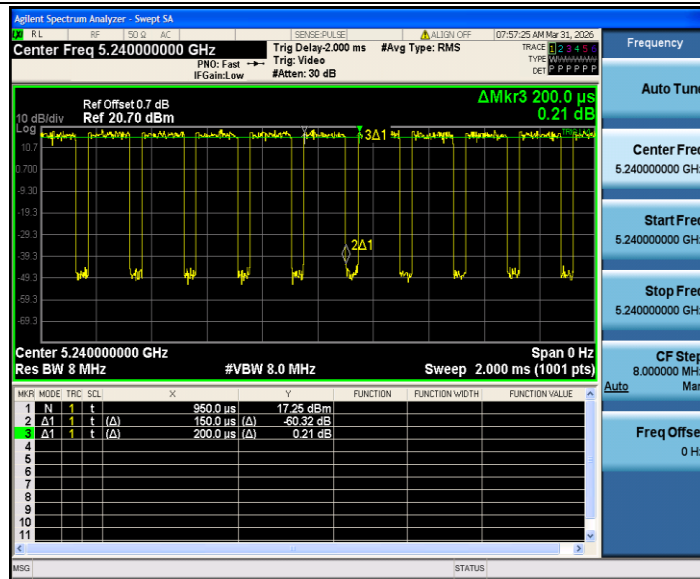
Appendix B: Duty Cycle

Test Result

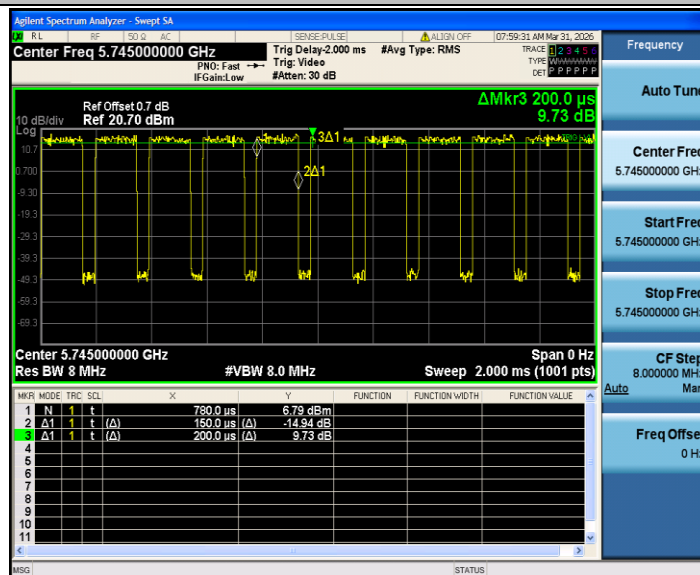
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor [dB]	Limit	Verdict
11A	Ant1	5180	0.14	0.19	73.68	1.33	---	---
		5220	0.15	0.20	75.00	1.25	---	---
		5240	0.15	0.20	75.00	1.25	---	---
		5745	0.15	0.20	75.00	1.25	---	---
		5785	0.15	0.20	75.00	1.25	---	---
		5825	0.14	0.19	73.68	1.33	---	---
11N20SISO	Ant1	5180	0.18	0.23	78.26	1.06	---	---
		5220	0.18	0.23	78.26	1.06	---	---
		5240	0.18	0.23	78.26	1.06	---	---
		5745	0.17	0.22	77.27	1.12	---	---
		5785	0.17	0.22	77.27	1.12	---	---
		5825	0.18	0.23	78.26	1.06	---	---

Test Graphs

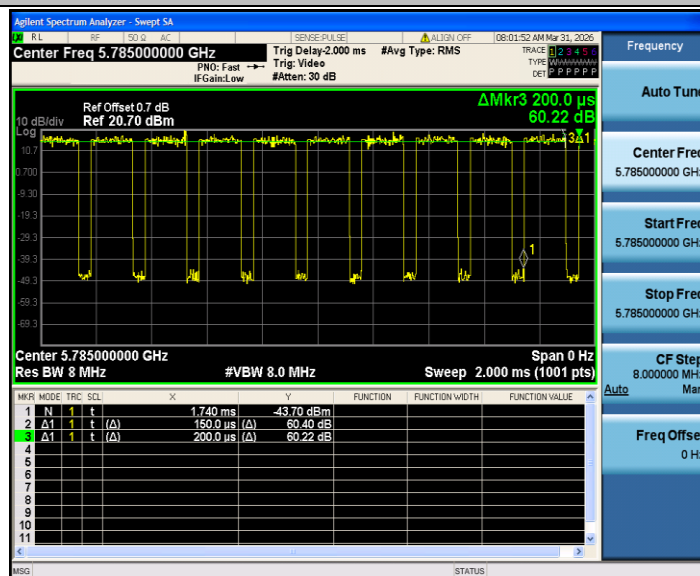




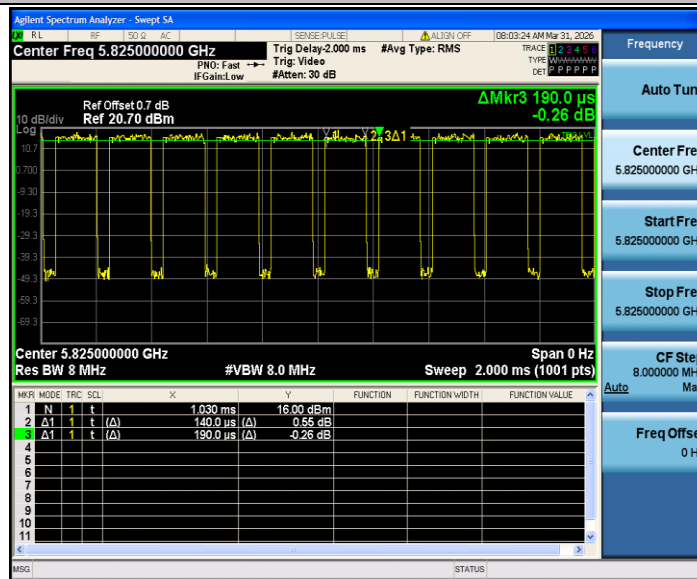
11A_Ant1_5745



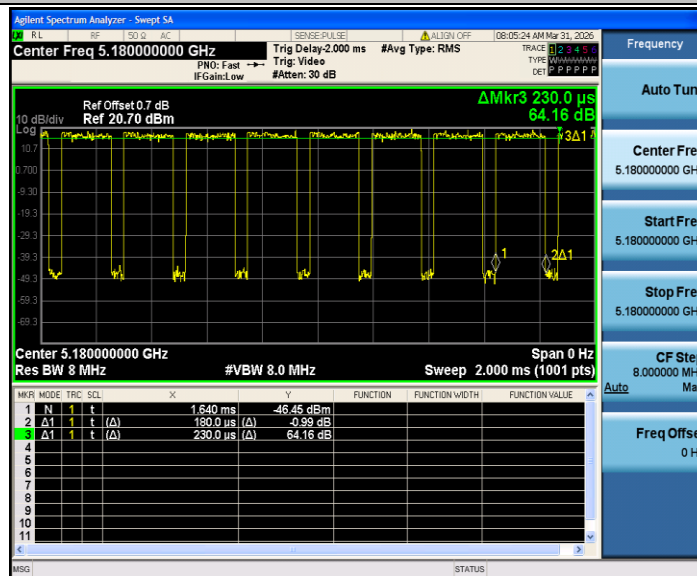
11A_Ant1_5785



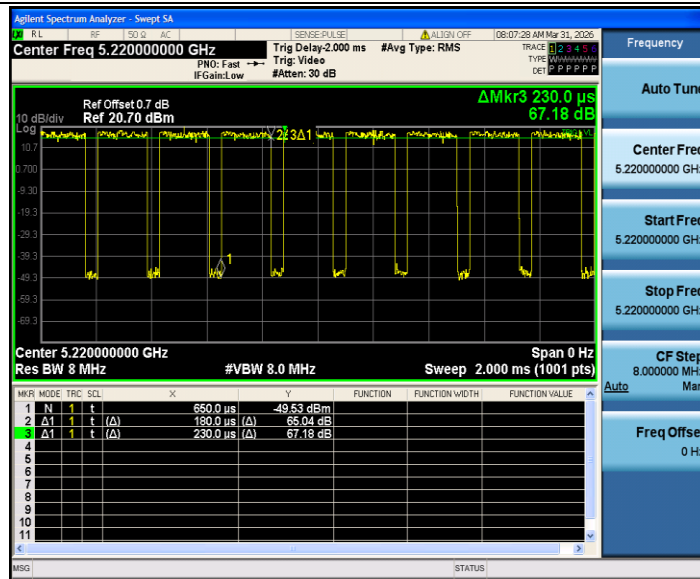
11A_Ant1_5825



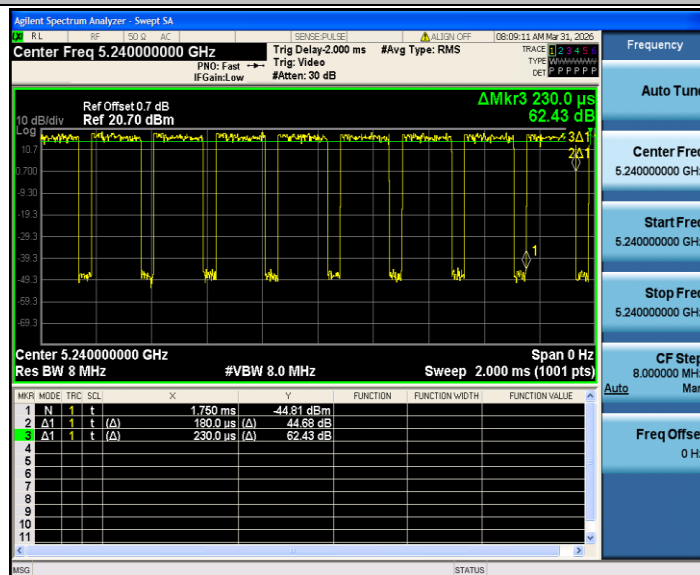
11N20SISO_Ant1_5180



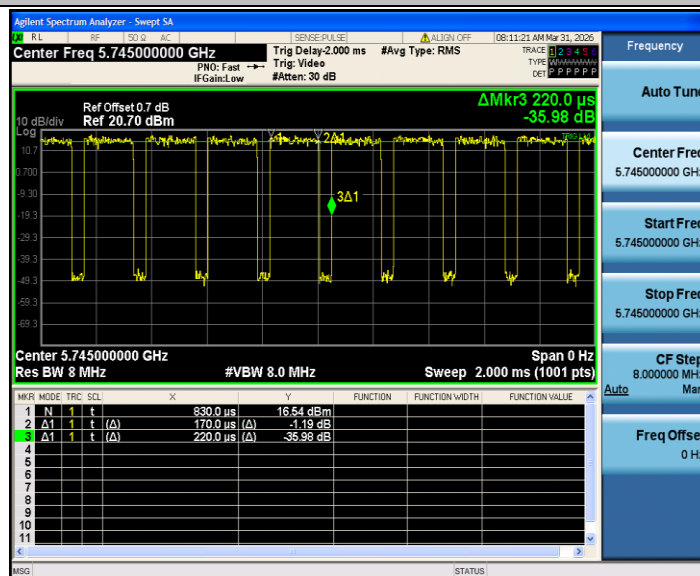
11N20SISO_Ant1_5220



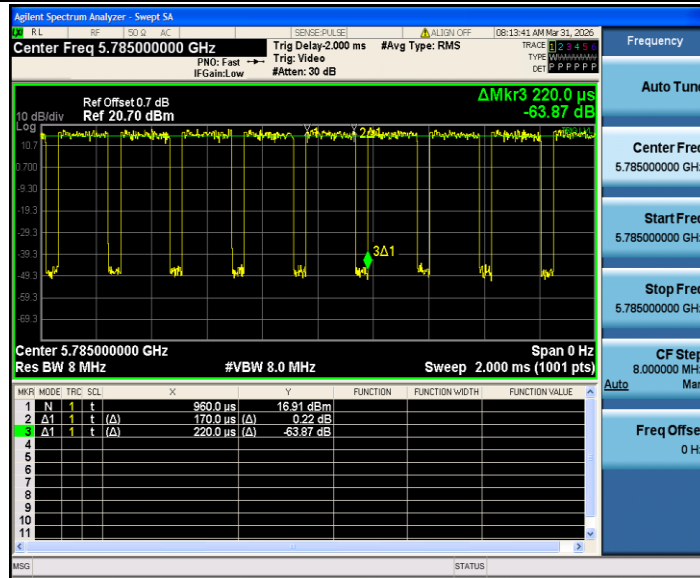
11N20SISO_Ant1_5240



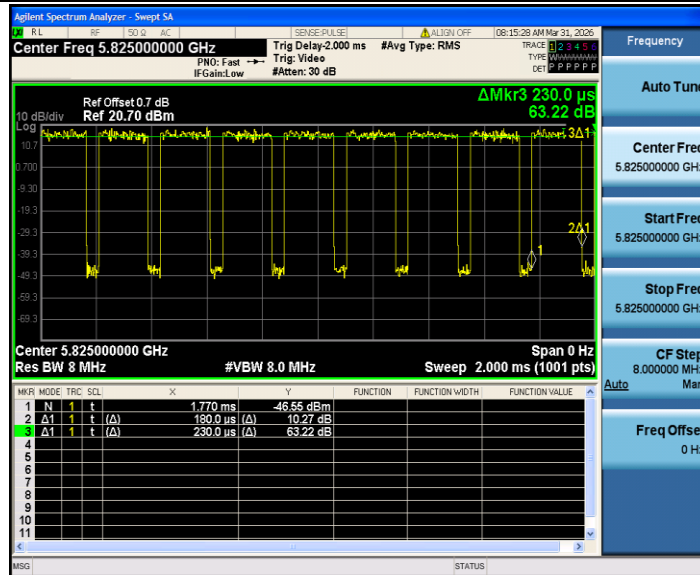
11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



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	13.07	73.68	1.33	14.40	≤23.98	PASS
		5220	13.13	75.00	1.25	14.38	≤23.98	PASS
		5240	13.05	75.00	1.25	14.30	≤23.98	PASS
		5745	12.71	75.00	1.25	13.96	≤30.00	PASS
		5785	12.86	75.00	1.25	14.11	≤30.00	PASS
		5825	12.80	73.68	1.33	14.13	≤30.00	PASS
11N20SISO	Ant1	5180	13.27	78.26	1.06	14.33	≤23.98	PASS
		5220	13.40	78.26	1.06	14.46	≤23.98	PASS
		5240	13.20	78.26	1.06	14.26	≤23.98	PASS
		5745	13.14	77.27	1.12	14.26	≤30.00	PASS
		5785	13.35	77.27	1.12	14.47	≤30.00	PASS
		5825	13.24	78.26	1.06	14.30	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	RawData [dBm/MHz]	DC Factor [dBm]	RBW Factor [dBm]	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	3.02	1.33	0.00	4.35	≤11.00	PASS
		5220	3.04	1.25	0.00	4.29	≤11.00	PASS
		5240	2.71	1.25	0.00	3.96	≤11.00	PASS
		5745	-2.05	1.25	2.22	1.42	≤30.00	PASS
		5785	-2.56	1.25	2.22	0.91	≤30.00	PASS
		5825	-2.54	1.33	2.22	1.01	≤30.00	PASS
11N20SISO	Ant1	5180	3.16	1.06	0.00	4.22	≤11.00	PASS
		5220	3.23	1.06	0.00	4.29	≤11.00	PASS
		5240	2.91	1.06	0.00	3.97	≤11.00	PASS
		5745	-2.44	1.12	2.22	0.90	≤30.00	PASS
		5785	-2.07	1.12	2.22	1.27	≤30.00	PASS
		5825	-2.09	1.06	2.22	1.19	≤30.00	PASS

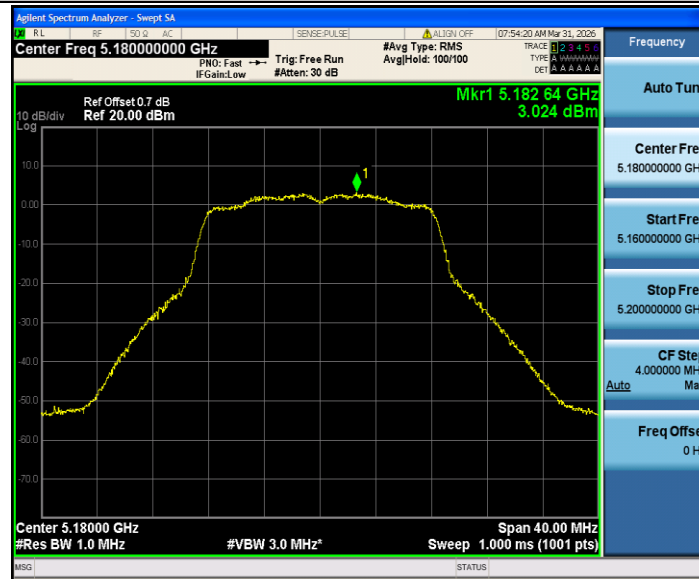
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

$$P.S.D(dBm/500KHz) = P.S.D(dBm/300KHz) + 10 \log (500 \text{ kHz}/300KHz).$$

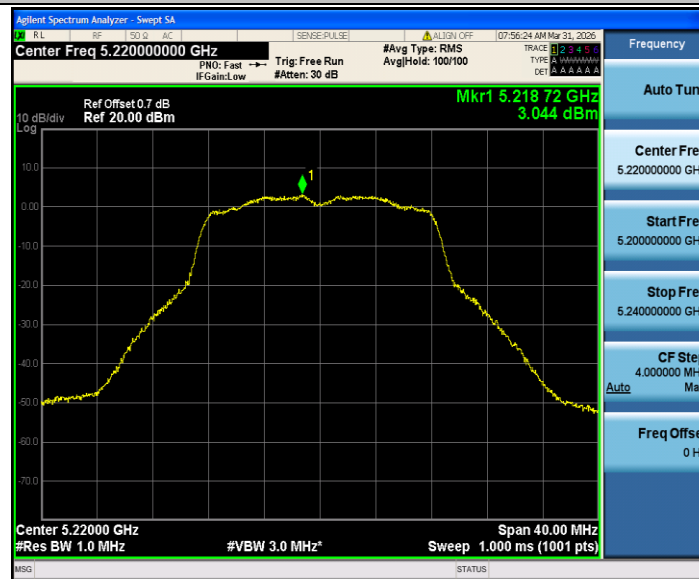
2. RBW factor= $10 \log (500 \text{ KHz} / 300 \text{ KHz}) = 2.22 \text{ dB}$ and The RBW Factor is compensated in the data graph.

Test Graphs

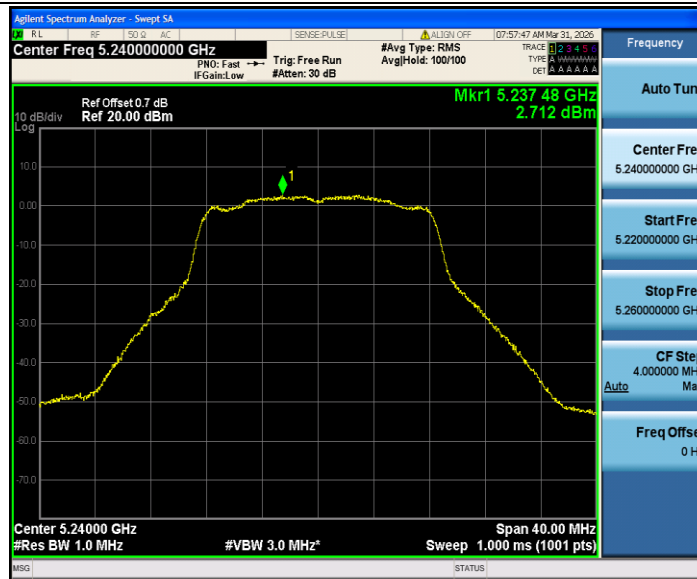
11A_Ant1_5180



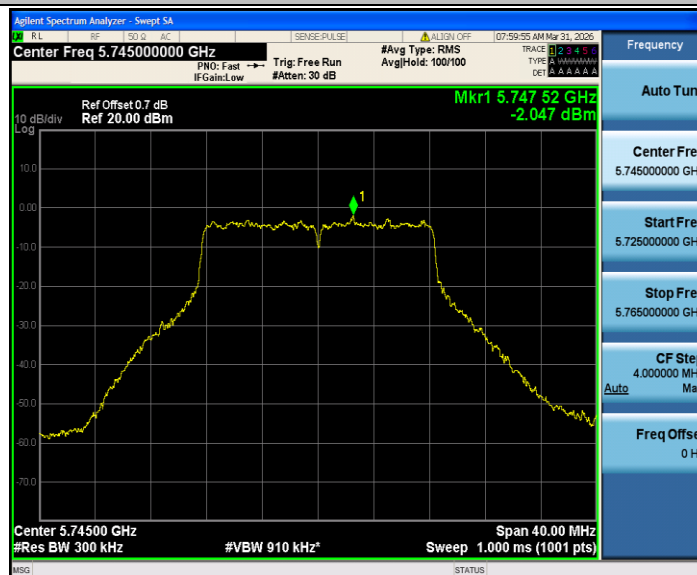
11A_Ant1_5220



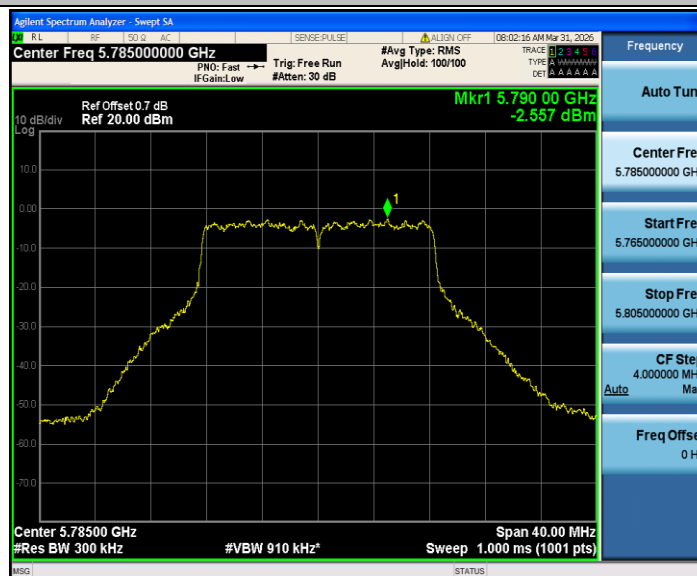
11A_Ant1_5240



11A_Ant1_5745



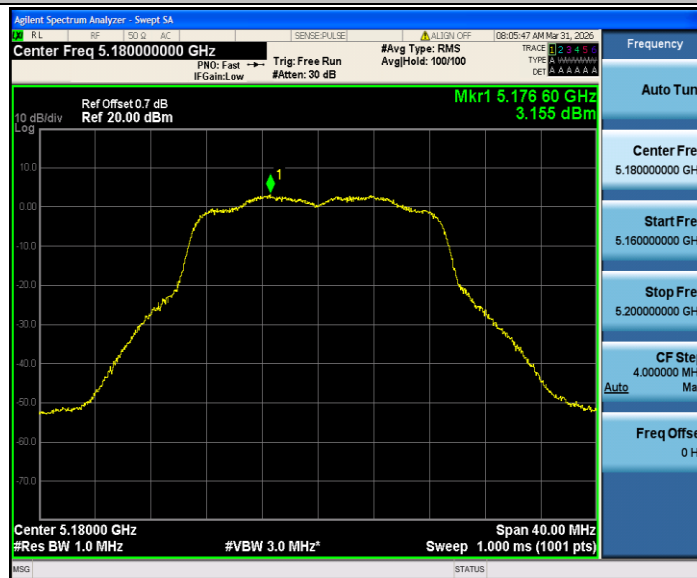
11A_Ant1_5785



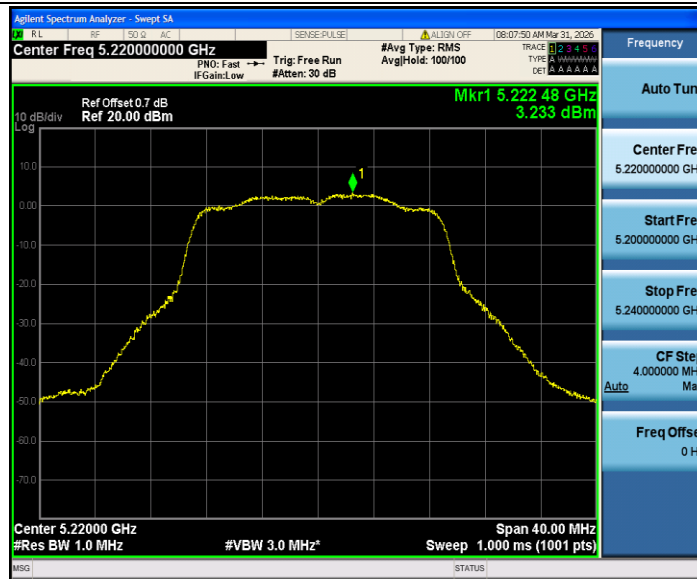
11A_Ant1_5825



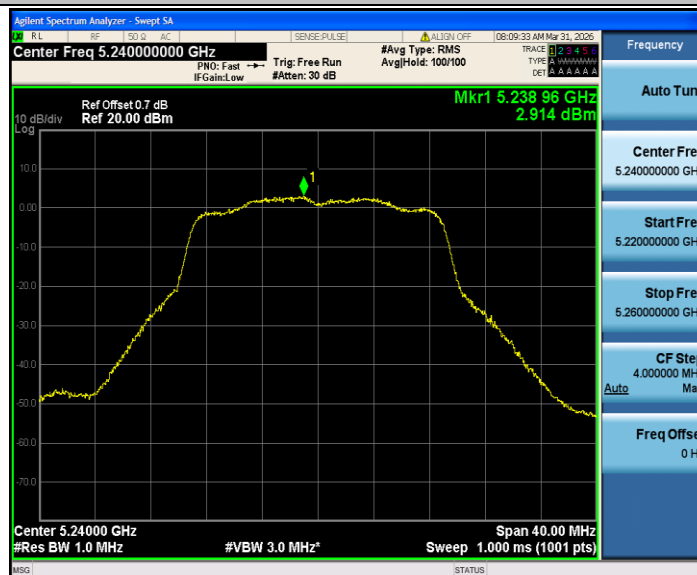
11N20SISO_Ant1_5180



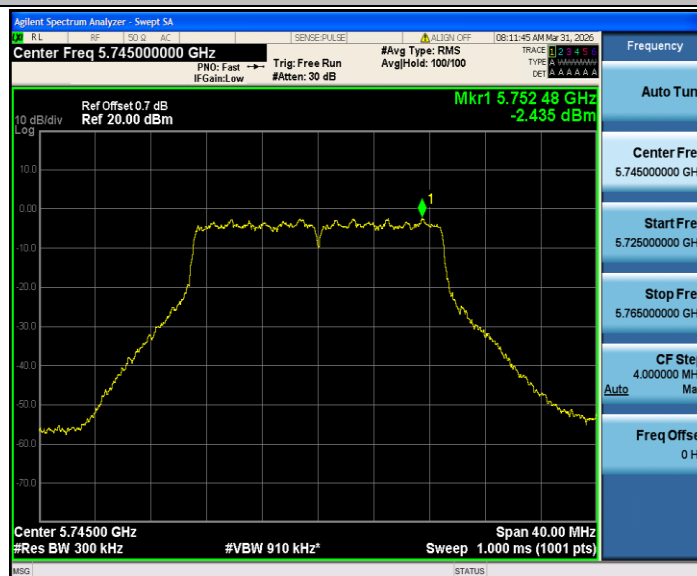
11N20SISO_Ant1_5220



11N20SISO_Ant1_5240



11N20SISO_Ant1_5745



Appendix E: Band edge measurements

Test Result B1

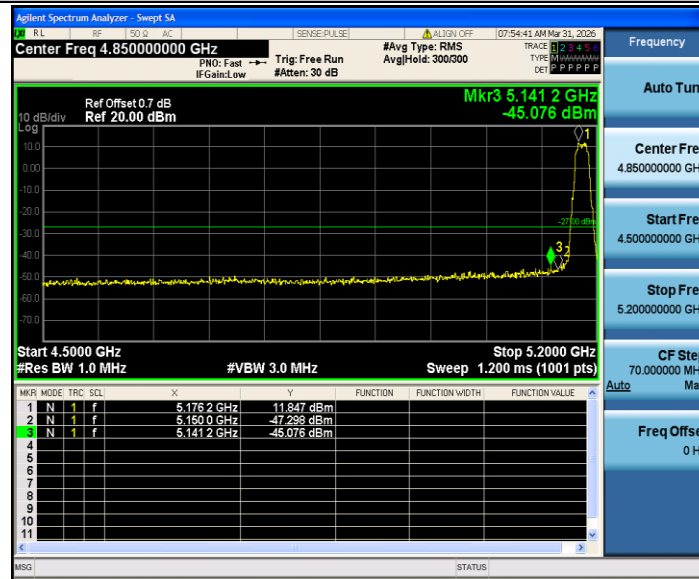
TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-45.08	≤ -27	PASS
		High	5240	-46.42	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-45.05	≤ -27	PASS
		High	5240	-45.71	≤ -27	PASS

Test Result B4

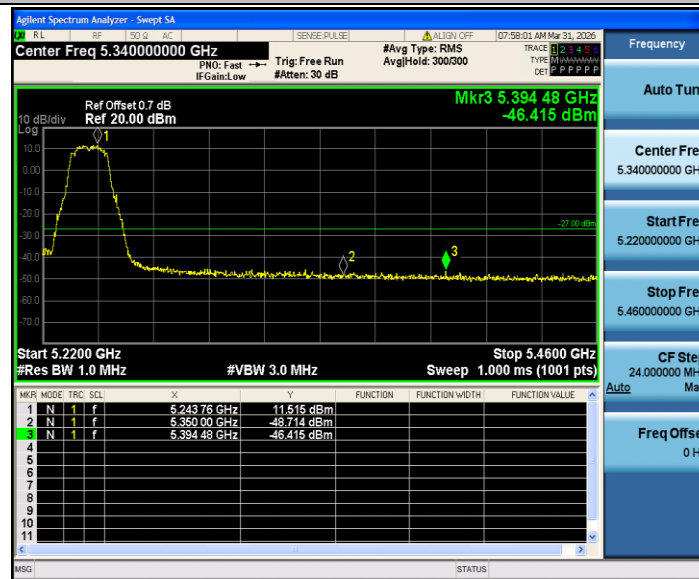
TestMode	Antenna	ChName	Freq(MHz)	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5645~5650	-47.87	≤ -27	PASS
				5650~5700	-49.16	≤ -26.96	PASS
				5700~5720	-47.3	≤ 10.35	PASS
				5720~5725	-45.56	≤ 17.13	PASS
		High	5825	5850~5855	-47.33	≤ 15.73	PASS
				5855~5875	-47.41	≤ 10.10	PASS
				5875~5925	-49.14	≤ -26.51	PASS
				5925~5935	-48.41	≤ -27	PASS
11N20SI SO	Ant1	Low	5745	5645~5650	-48.4	≤ -27	PASS
				5650~5700	-48.95	≤ -26.53	PASS
				5700~5720	-45.31	≤ 10.96	PASS
				5720~5725	-43.78	≤ 17.39	PASS
		High	5825	5850~5855	-47.15	≤ 15.73	PASS
				5855~5875	-47.37	≤ 10.02	PASS
				5875~5925	-49.05	≤ -26.81	PASS
				5925~5935	-47.78	≤ -27	PASS

Test Graphs B1

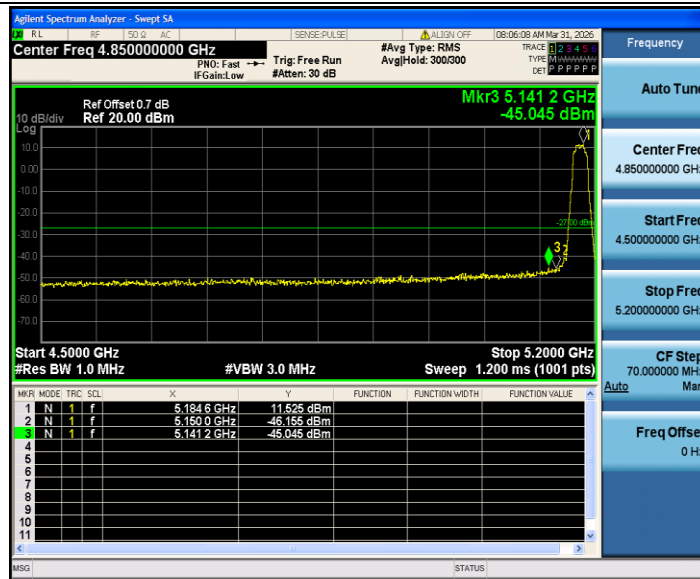
11A_Ant1_Low_5180



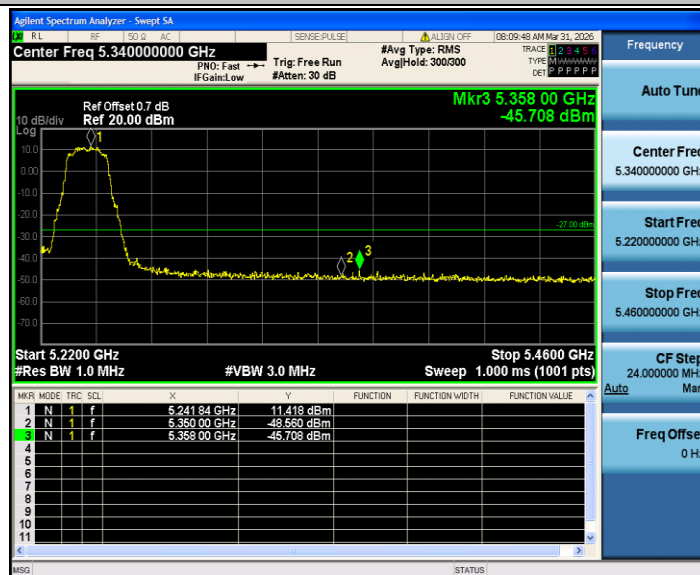
11A_Ant1_High_5240



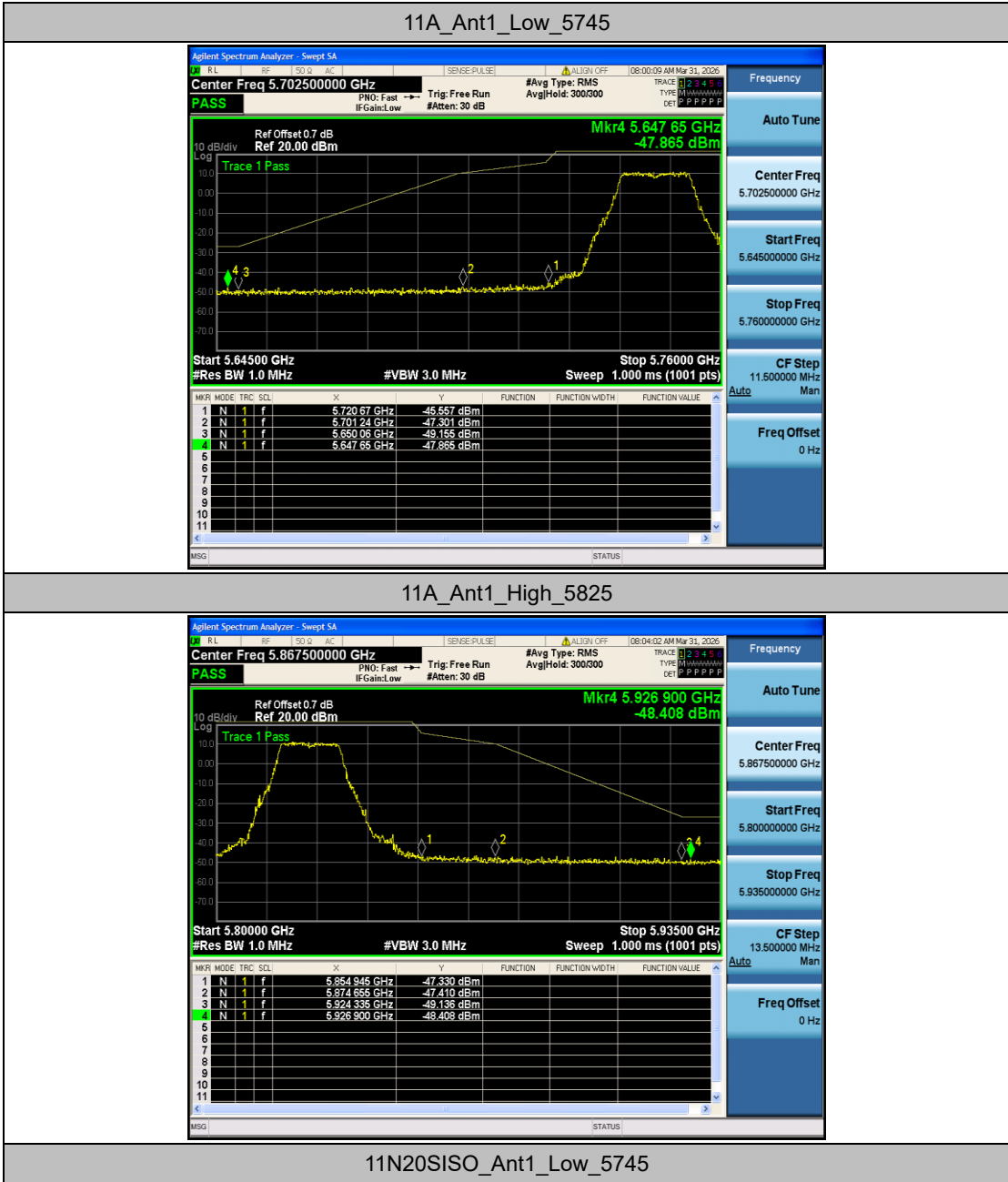
11N20SISO_Ant1_Low_5180

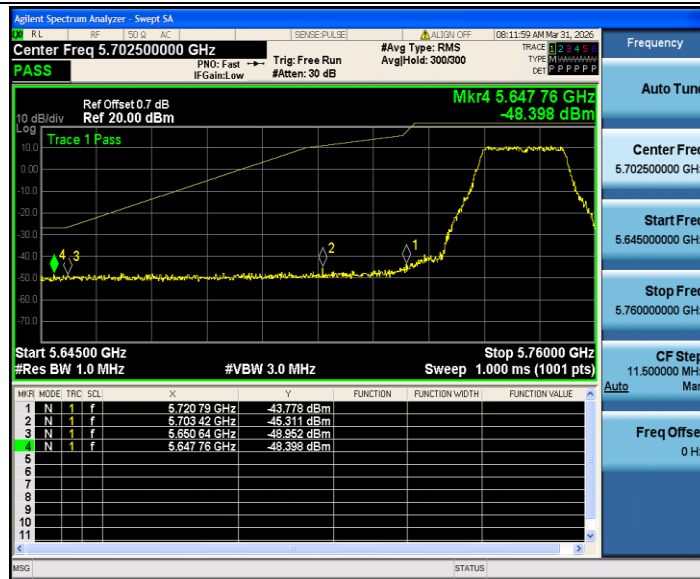


11N20SISO_Ant1_High_5240

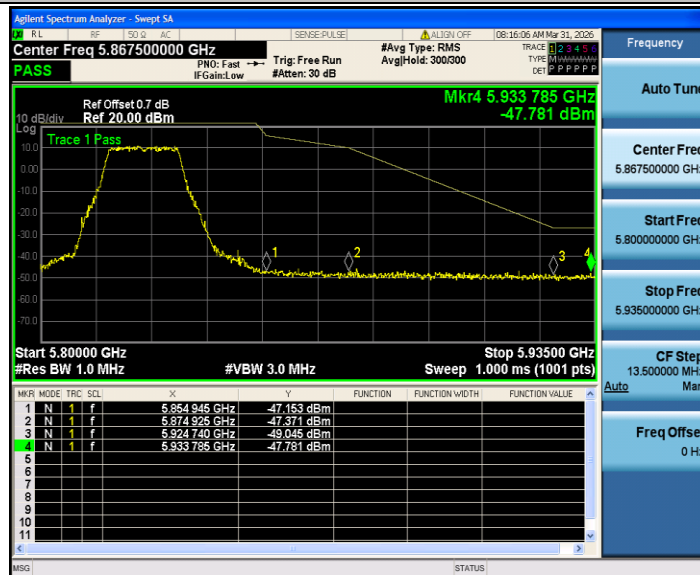


Test Graphs B4





11N20SISO_Ant1_High_5825



Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	5140	-46.39	≤-27	PASS
			5360~40000	6475.18	-48.32	≤-27	PASS
		5220	30~5140	2450.61	-47.4	≤-27	PASS
			5360~40000	5421.31	-48.82	≤-27	PASS
		5240	30~5140	5129.44	-49.79	≤-27	PASS
			5360~40000	5385.25	-46.9	≤-27	PASS
		5745	30~5650	5629.21	-51.88	≤-27	PASS
			5925~40000	11495.83	-42.6	≤-27	PASS
		5785	30~5650	5617.4	-51.06	≤-27	PASS
			5925~40000	11566.08	-46.09	≤-27	PASS
		5825	30~5650	5650	-51.86	≤-27	PASS
			5925~40000	11649.67	-48.33	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	5136.93	-47.2	≤-27	PASS
			5360~40000	5384.53	-48.5	≤-27	PASS
		5220	30~5140	5138.47	-48.75	≤-27	PASS
			5360~40000	5397.51	-49.47	≤-27	PASS
		5240	30~5140	5136.08	-50.06	≤-27	PASS
			5360~40000	5367.93	-48.96	≤-27	PASS
		5745	30~5650	5638.01	-51.72	≤-27	PASS
			5925~40000	11495.12	-44.54	≤-27	PASS
		5785	30~5650	5643.63	-51.91	≤-27	PASS
			5925~40000	11566.78	-46.71	≤-27	PASS
		5825	30~5650	5617.22	-52	≤-27	PASS
			5925~40000	5985.42	-47.43	≤-27	PASS