

FCC Appendix RF Test Data for 5GWIFI

FCC ID : 2BE7Z-T5MAX

Company : Shenzhen Cylan Technology Co., Ltd.

EUT : Dual-Screen Translation Device

Model Number : T5 Max

Report No. : CTA26081802207

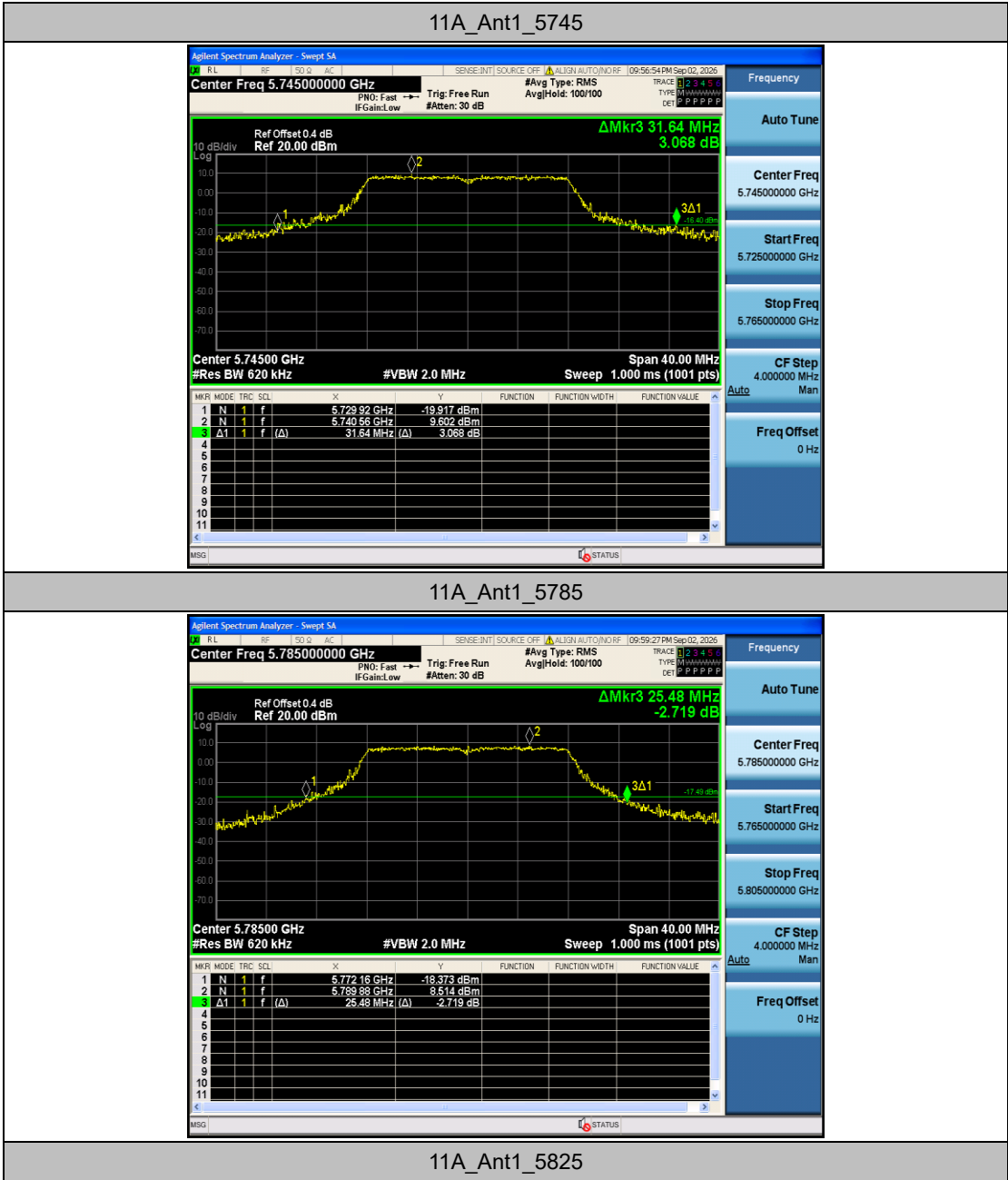
Reviewed By : Eric Wang

Appendix A1: Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	31.640	5729.920	5761.560	---	---
		5785	25.480	5772.160	5797.640	---	---
		5825	23.760	5812.920	5836.680	---	---
11N20SISO	Ant1	5745	25.400	5732.320	5757.720	---	---
		5785	25.440	5772.040	5797.480	---	---
		5825	25.560	5812.000	5837.560	---	---
11N40SISO	Ant1	5755	44.960	5732.840	5777.800	---	---
		5795	44.480	5773.000	5817.480	---	---

Test Graphs





11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



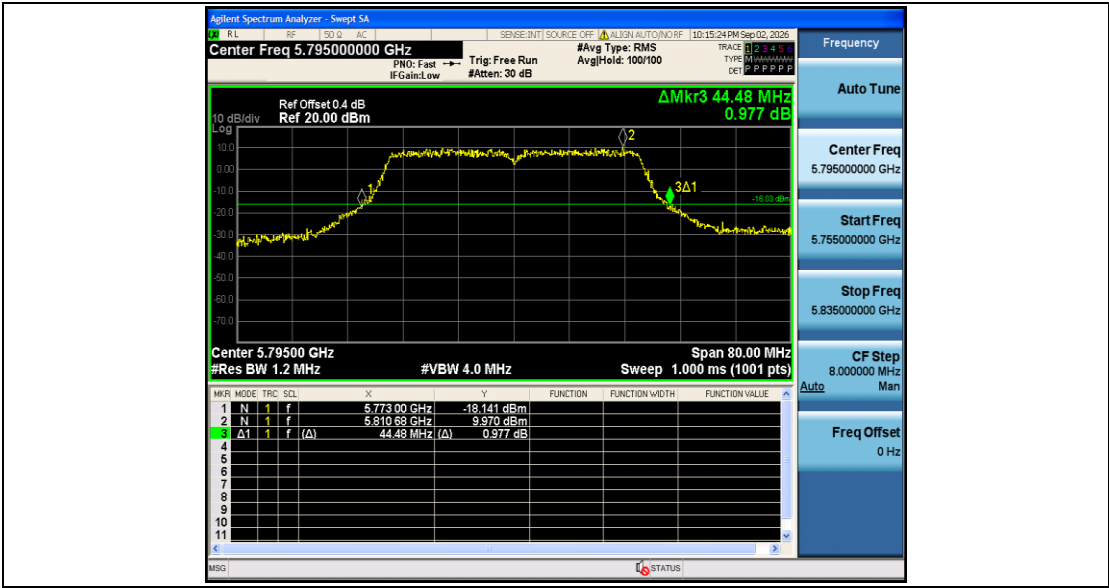
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

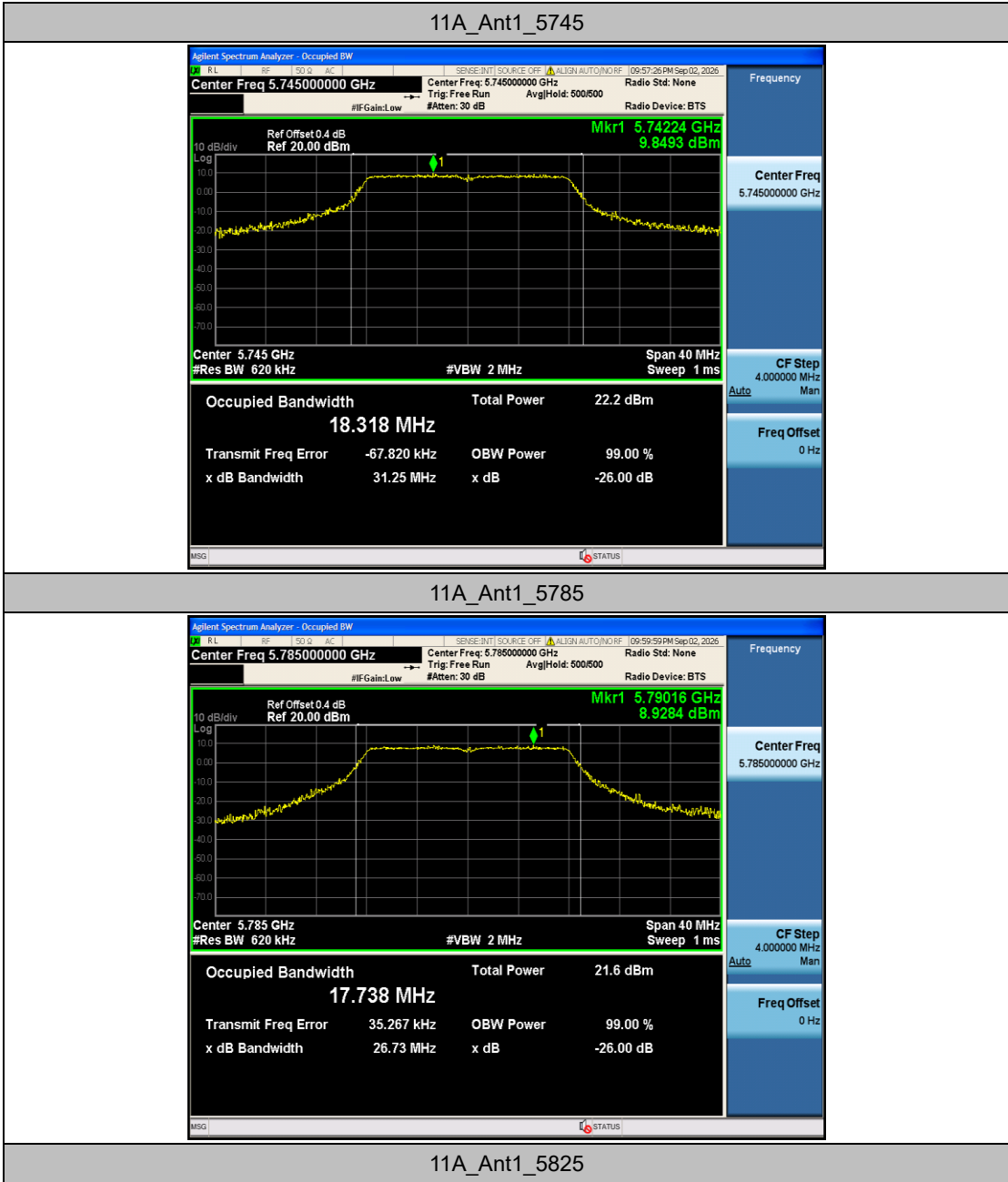


Appendix A2: Occupied channel bandwidth

Test Result

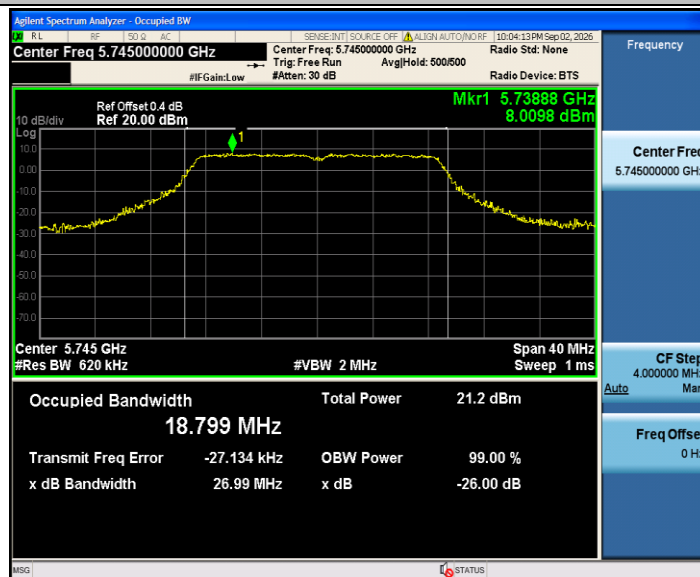
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	18.318	5735.7732	5754.0912	---	---
		5785	17.738	5776.1663	5793.9043	---	---
		5825	17.689	5816.1533	5833.8423	---	---
11N20SISO	Ant1	5745	18.799	5735.5734	5754.3724	---	---
		5785	18.726	5775.6368	5794.3628	---	---
		5825	18.708	5815.6179	5834.3259	---	---
11N40SISO	Ant1	5755	37.035	5736.5644	5773.5994	---	---
		5795	36.955	5776.6858	5813.6408	---	---

Test Graphs

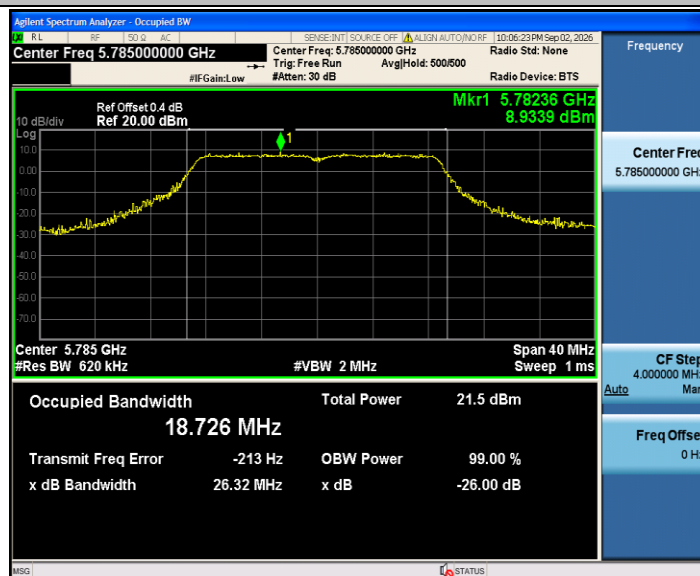




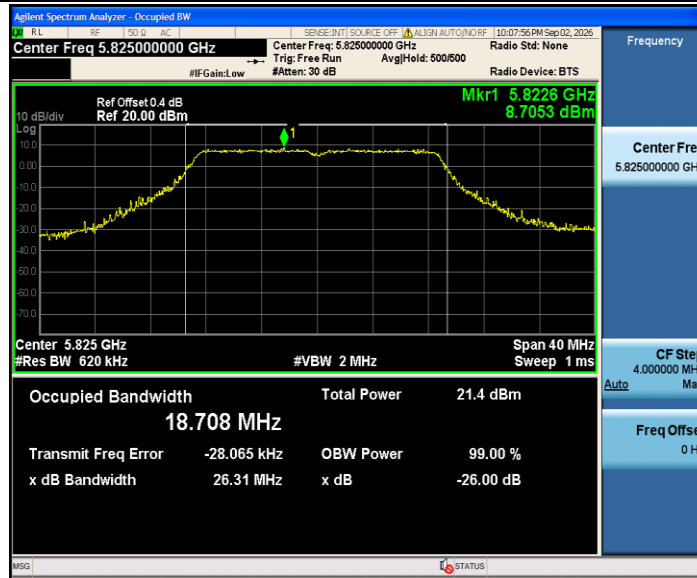
11N20SISO_Ant1_5745



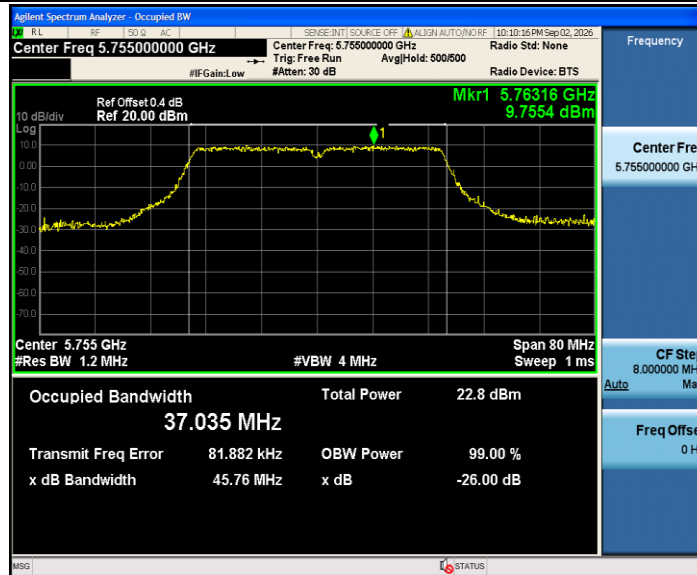
11N20SISO_Ant1_5785



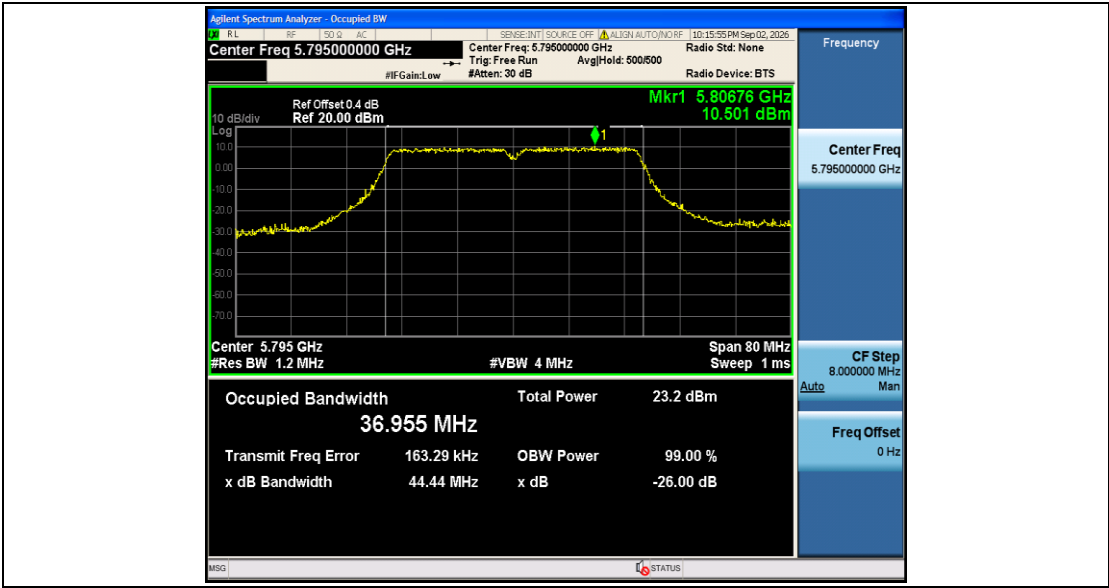
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



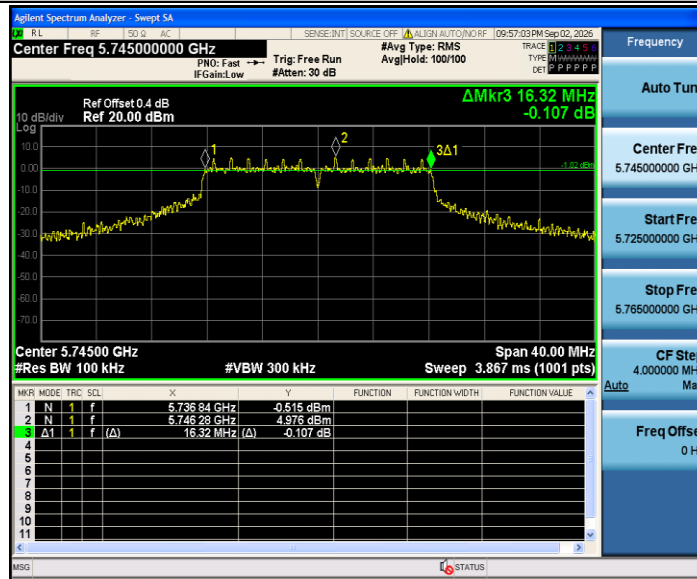
Appendix A3: Min emission bandwidth

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	5776.840	5793.160	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	17.560	5776.240	5793.800	0.5	PASS
		5825	17.520	5816.240	5833.760	0.5	PASS
11N40SISO	Ant1	5755	36.320	5736.840	5773.160	0.5	PASS
		5795	35.920	5777.240	5813.160	0.5	PASS

Test Graphs B4

11A_Ant1_5745



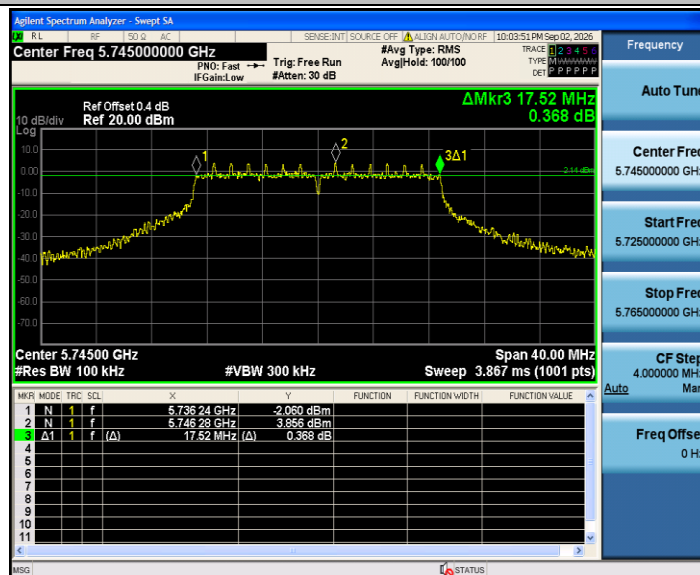
11A_Ant1_5785



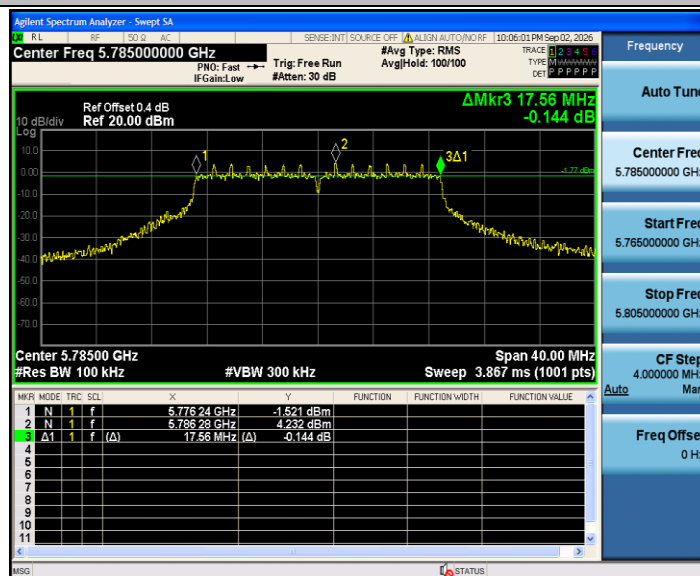
11A_Ant1_5825



11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

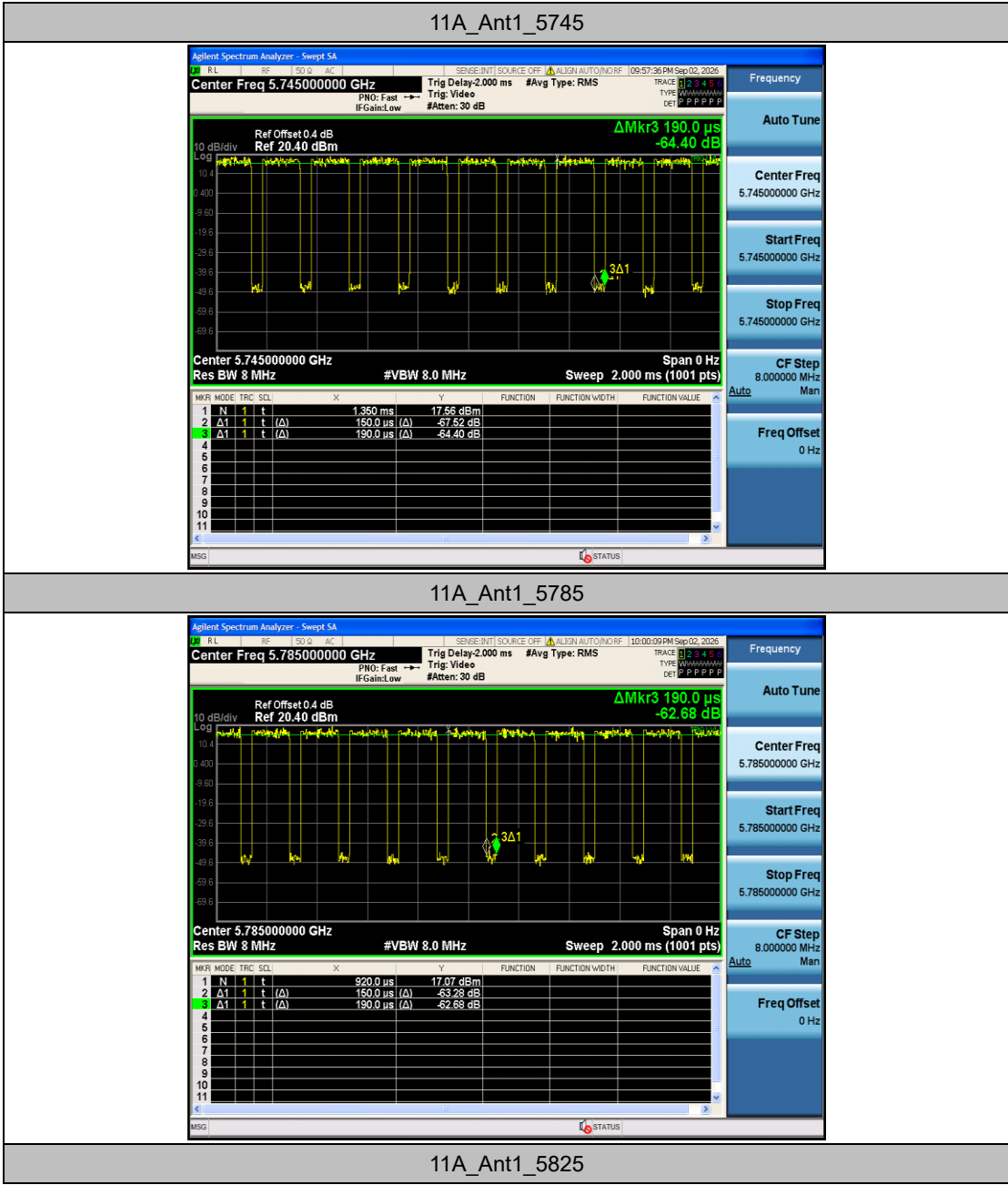


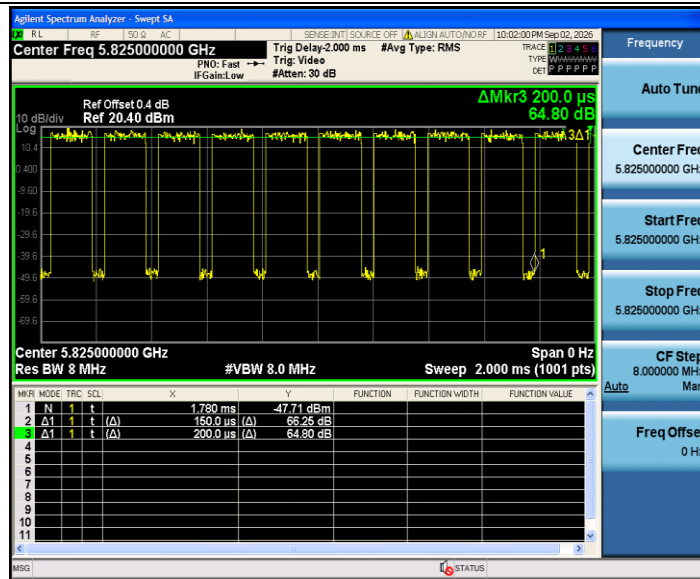
Appendix B: Duty Cycle

Test Result

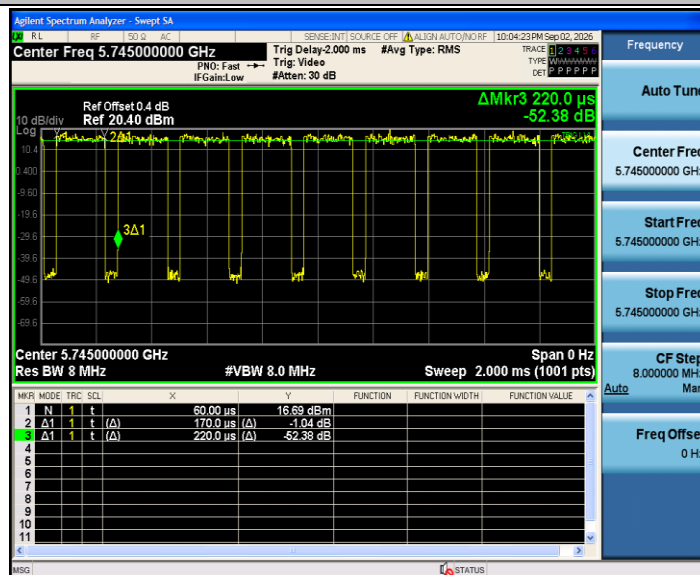
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor [dB]	Limit	Verdict
11A	Ant1	5745	0.15	0.19	78.95	1.03	---	---
		5785	0.15	0.19	78.95	1.03	---	---
		5825	0.15	0.20	75.00	1.25	---	---
11N20SISO	Ant1	5745	0.17	0.22	77.27	1.12	---	---
		5785	0.18	0.22	81.82	0.87	---	---
		5825	0.17	0.22	77.27	1.12	---	---
11N40SISO	Ant1	5755	0.18	0.23	78.26	1.06	---	---
		5795	0.18	0.23	78.26	1.06	---	---

Test Graphs

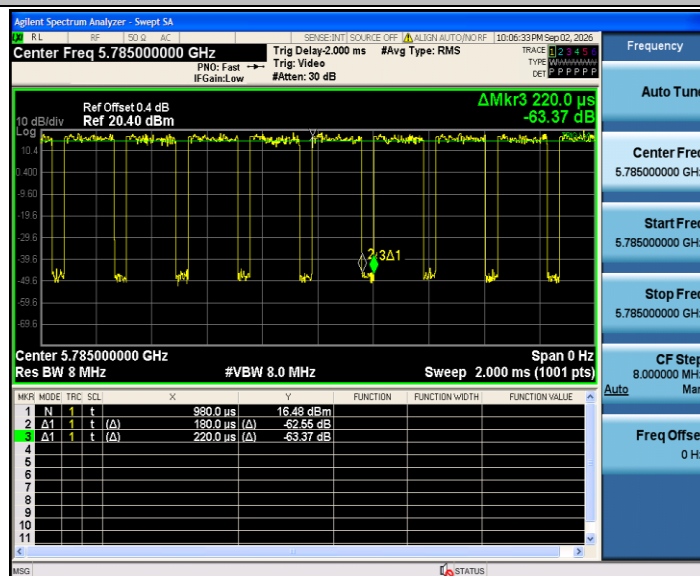




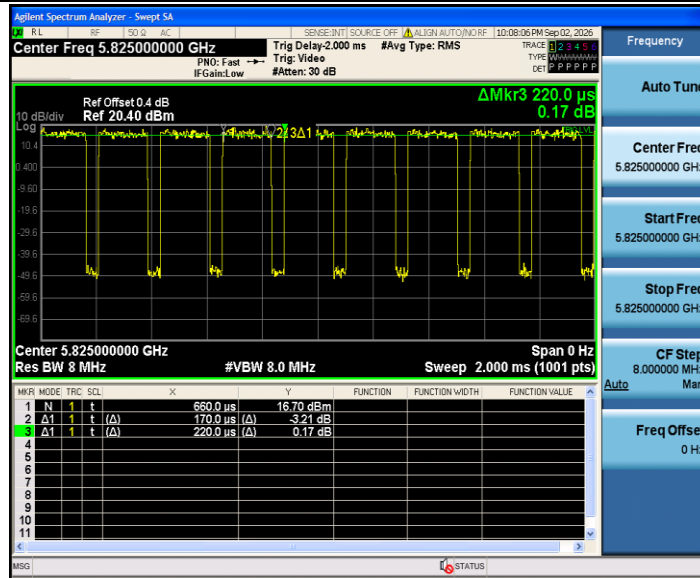
11N20SISO_Ant1_5745



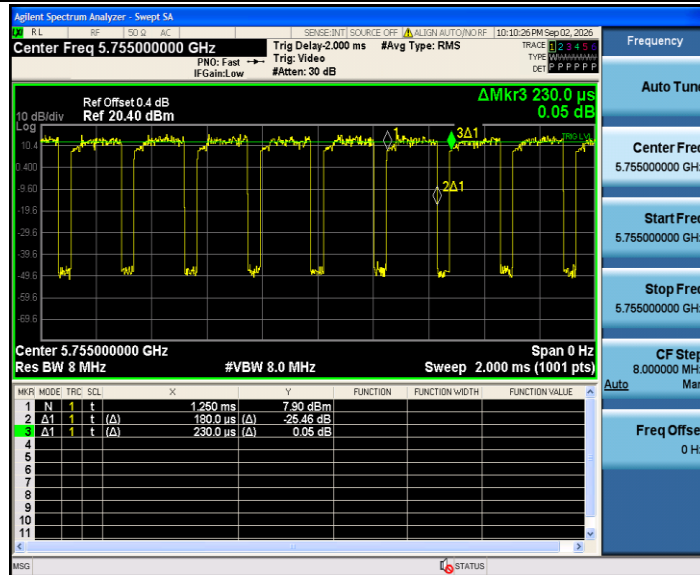
11N20SISO_Ant1_5785



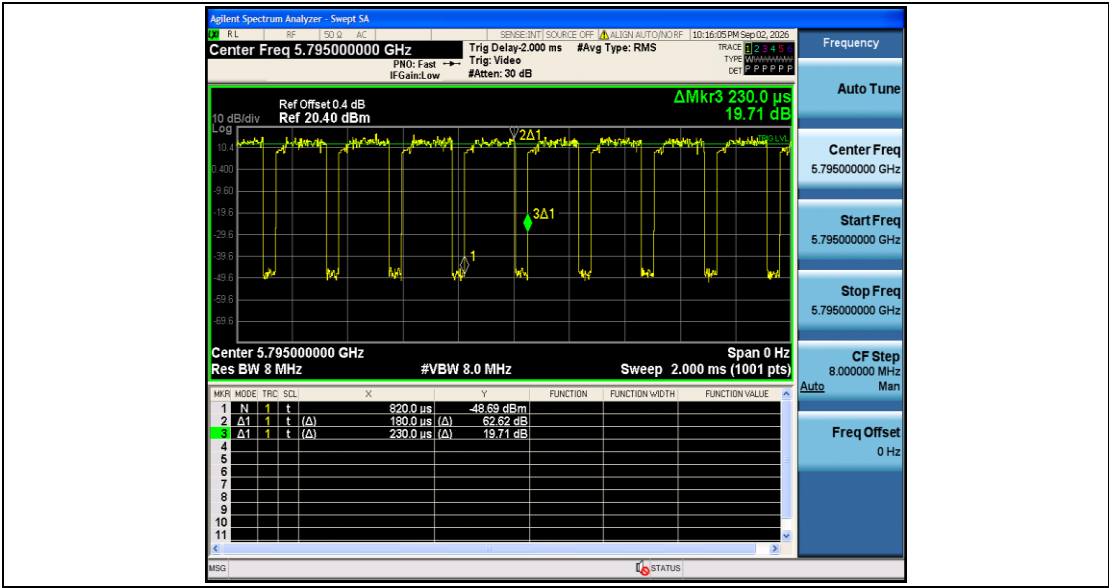
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



Appendix C: Maximum conducted output power

Test Result

Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	14.14	78.95	1.03	15.17	≤30.00	PASS
		5785	13.57	78.95	1.03	14.60	≤30.00	PASS
		5825	13.50	75.00	1.25	14.75	≤30.00	PASS
11N20SIS O	Ant1	5745	13.38	77.27	1.12	14.50	≤30.00	PASS
		5785	13.71	81.82	0.87	14.58	≤30.00	PASS
		5825	13.62	77.27	1.12	14.74	≤30.00	PASS
11N40SIS O	Ant1	5755	13.54	78.26	1.06	14.60	≤30.00	PASS
		5795	13.93	78.26	1.06	14.99	≤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	5745	-1.2	1.03	2.22	2.05	≤30.00	PASS
		5785	-2.21	1.03	2.22	1.04	≤30.00	PASS
		5825	-2.08	1.25	2.22	1.39	≤30.00	PASS
11N20SISO	Ant1	5745	-2.07	1.12	2.22	1.27	≤30.00	PASS
		5785	-1.64	0.87	2.22	1.45	≤30.00	PASS
		5825	-2.15	1.12	2.22	1.19	≤30.00	PASS
11N40SISO	Ant1	5755	-5.01	1.06	2.22	-1.73	≤30.00	PASS
		5795	-5.02	1.06	2.22	-1.74	≤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.

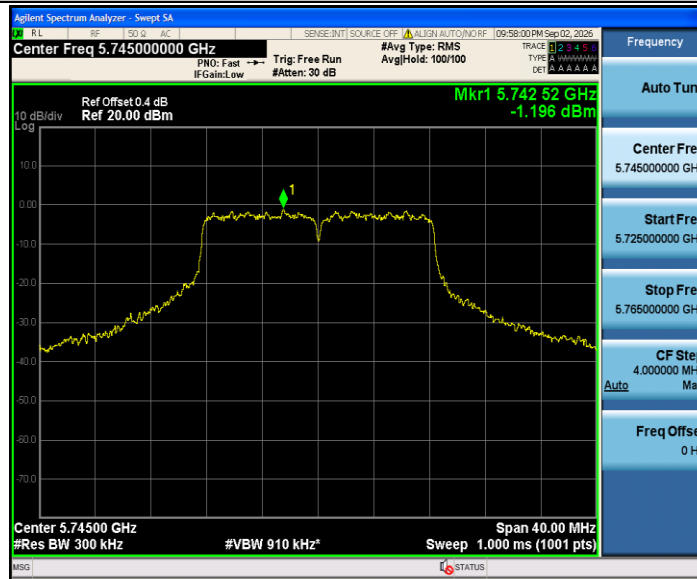
2. RBW factor= 10 log (500 KHz /300 KHz) = 2.22 dB

3. EIRP P.S.D(dBm/MHz)= Result P.S.D(dBm/MHz)+ Duty factor+Antenna Gain

4. Note:Offset=cable loss

Test Graphs

11A_Ant1_5745



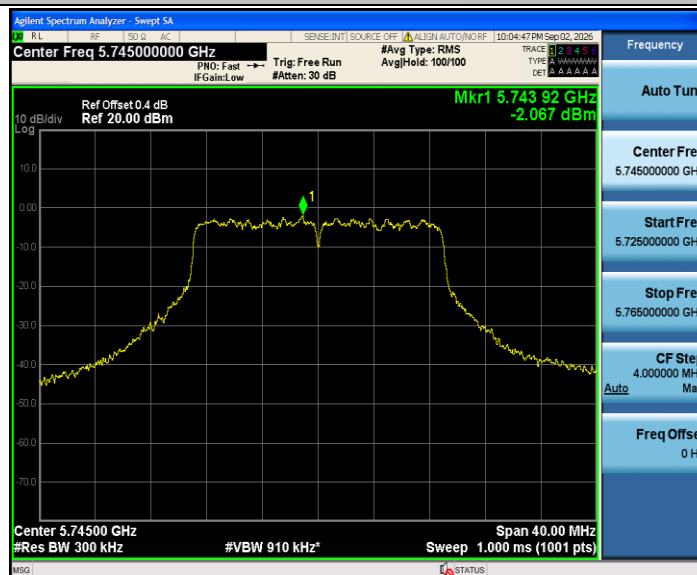
11A_Ant1_5785



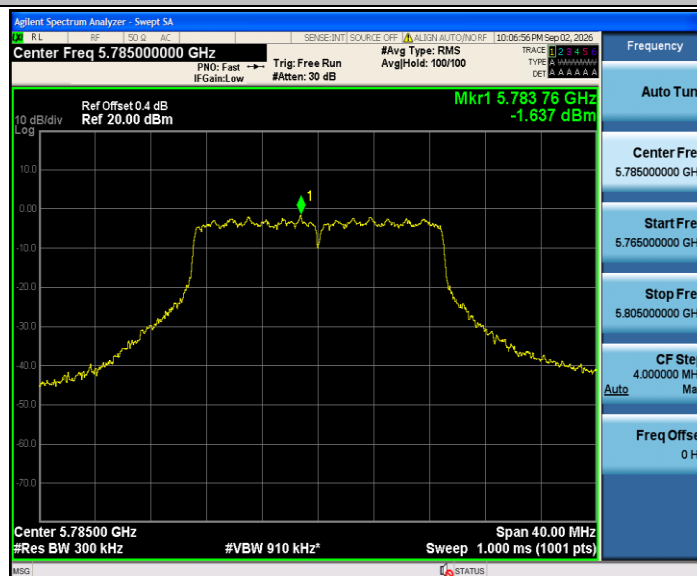
11A_Ant1_5825



11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



Appendix E: Band edge measurements

Test Result B4

TestMode	Antenna	ChName	Freq(MHz)	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5645~5650	-47.09	≤-27	PASS
				5650~5700	-47.46	≤-26.02	PASS
				5700~5720	-24.6	≤13.21	PASS
				5720~5725	-19.91	≤21.85	PASS
		High	5825	5850~5855	-36.18	≤16.34	PASS
				5855~5875	-35.4	≤15.39	PASS
				5875~5925	-48.56	≤-25.91	PASS
				5925~5935	-49.04	≤-27	PASS
11N20SI SO	Ant1	Low	5745	5645~5650	-46.26	≤-27	PASS
				5650~5700	-47.59	≤-26.70	PASS
				5700~5720	-30.24	≤12.89	PASS
				5720~5725	-25.34	≤18.44	PASS
		High	5825	5850~5855	-34.61	≤16.34	PASS
				5855~5875	-35.4	≤15.12	PASS
				5875~5925	-49.54	≤-26.21	PASS
				5925~5935	-48.81	≤-27	PASS
11N40SI SO	Ant1	Low	5755	5645~5650	-39.31	≤-27	PASS
				5650~5700	-39.25	≤-26.30	PASS
				5700~5720	-27.46	≤14.86	PASS
				5720~5725	-28.62	≤16.35	PASS
		High	5795	5850~5855	-36.46	≤16.41	PASS
				5855~5875	-39.11	≤11.26	PASS
				5875~5925	-48.47	≤-25.61	PASS
				5925~5935	-48.4	≤-27	PASS

Test Graphs B4

11A_Ant1_Low_5745



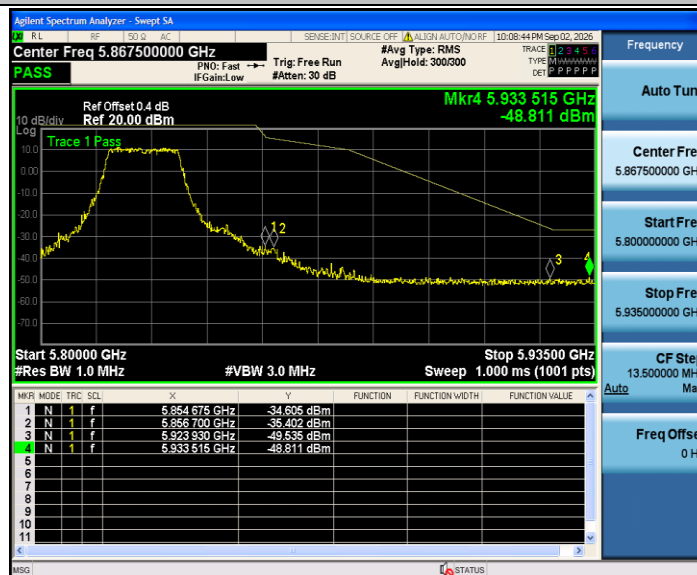
11A_Ant1_High_5825



11N20SISO_Ant1_Low_5745



11N20ISO_Ant1_High_5825



11N40ISO_Ant1_Low_5755



11N40SISO_Ant1_High_5795

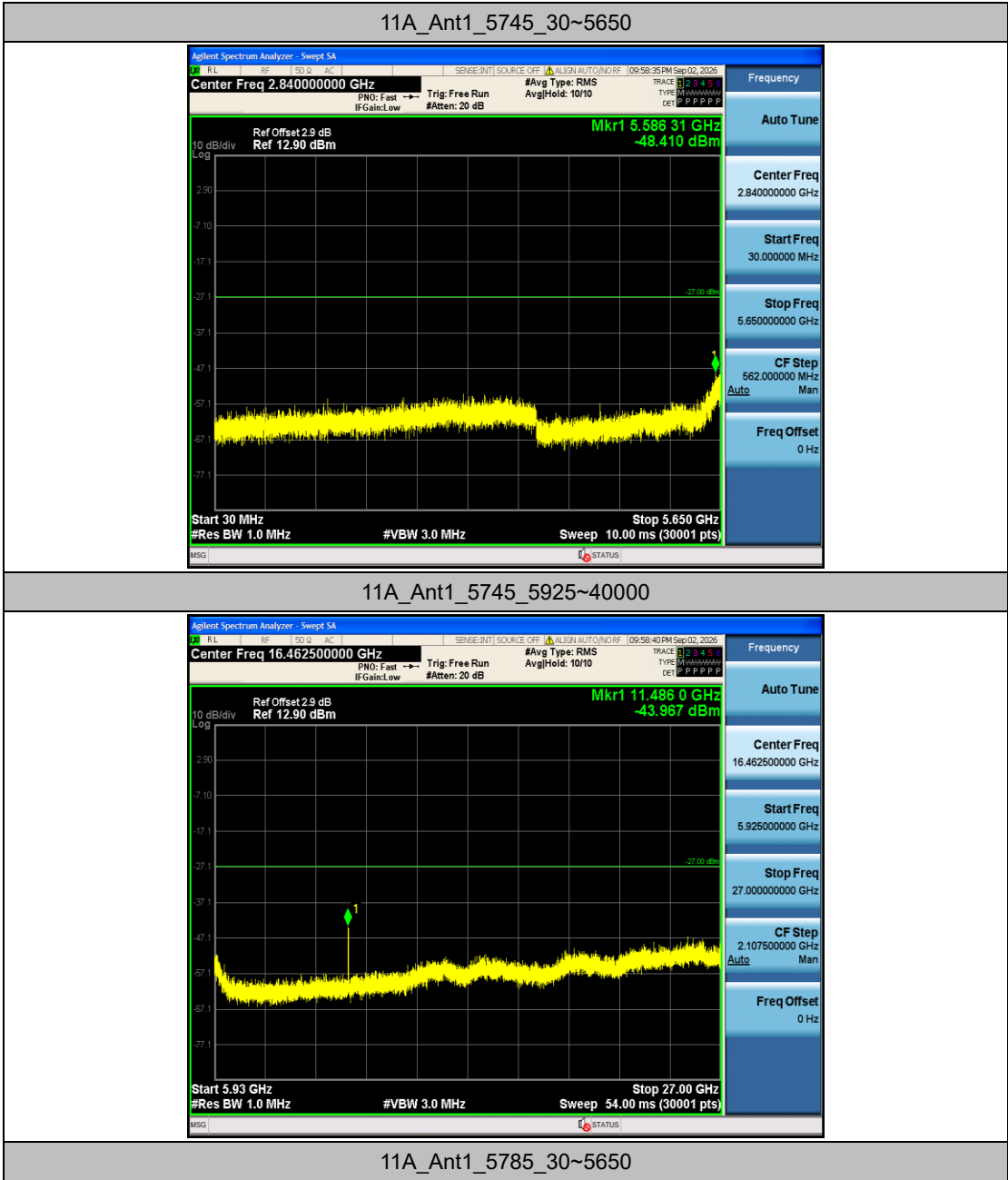


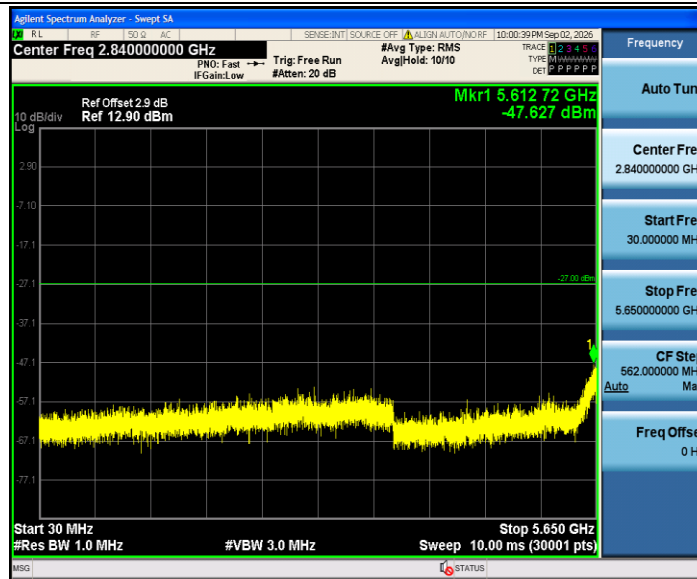
Appendix F: Conducted Spurious Emission

Test Result

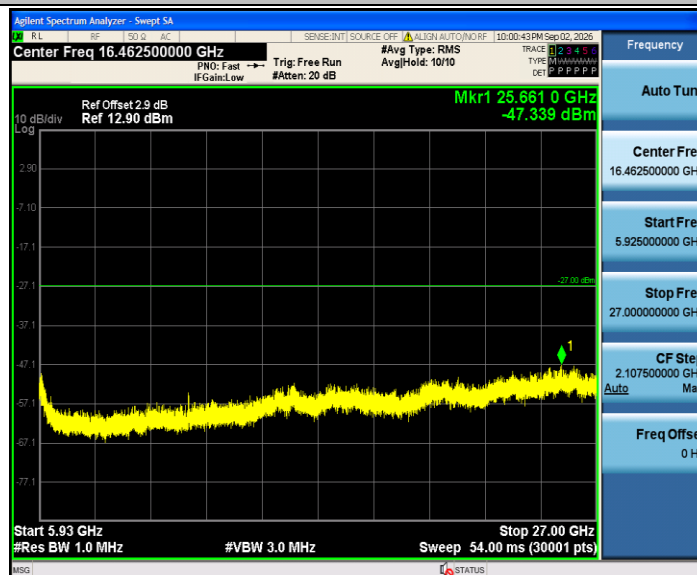
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	30~5650	5586.31	-48.41	≤-27	PASS
			5925~40000	11485.99	-43.97	≤-27	PASS
		5785	30~5650	5612.72	-47.63	≤-27	PASS
			5925~40000	25661.04	-47.34	≤-27	PASS
		5825	30~5650	5630.7	-47.3	≤-27	PASS
			5925~40000	25807.16	-47.88	≤-27	PASS
11N20SISO	Ant1	5745	30~5650	5634.26	-46.4	≤-27	PASS
			5925~40000	11483.88	-46.19	≤-27	PASS
		5785	30~5650	5597.55	-47.96	≤-27	PASS
			5925~40000	26088.86	-46.68	≤-27	PASS
		5825	30~5650	5648.88	-47.7	≤-27	PASS
			5925~40000	25983.48	-47.85	≤-27	PASS
11N40SISO	Ant1	5755	30~5650	5650	-39.59	≤-27	PASS
			5925~40000	25758.68	-47.26	≤-27	PASS
		5795	30~5650	5626.77	-47.76	≤-27	PASS
			5925~40000	25748.85	-47.9	≤-27	PASS

Test Graphs

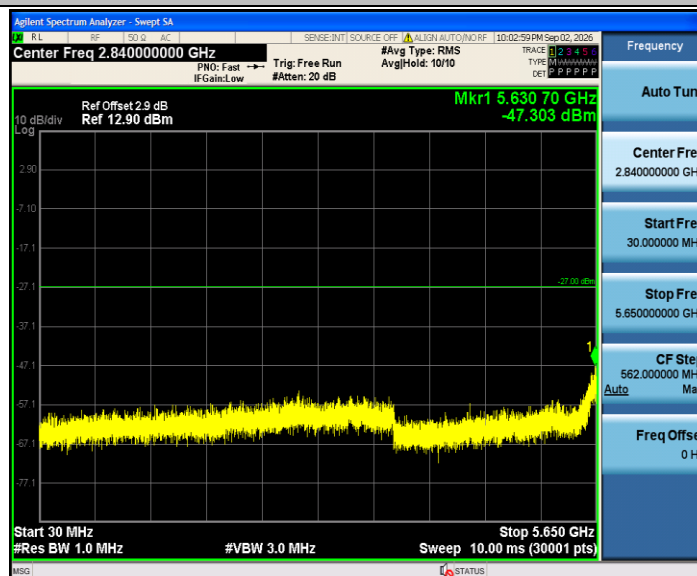




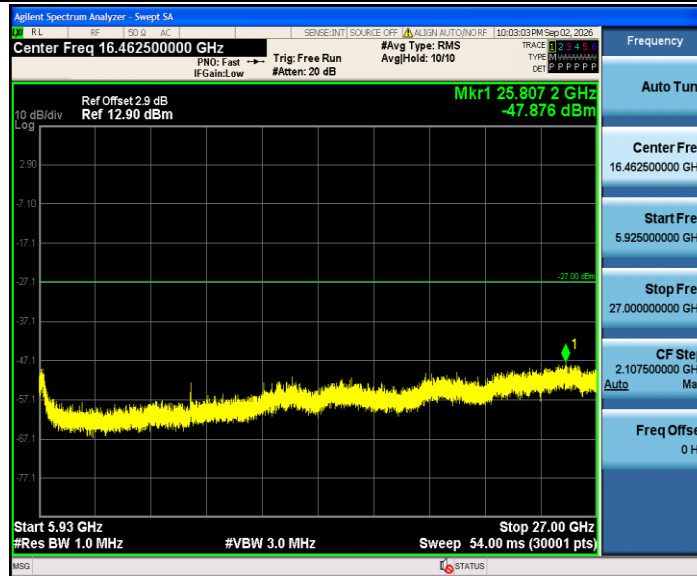
11A_Ant1_5785_5925~40000



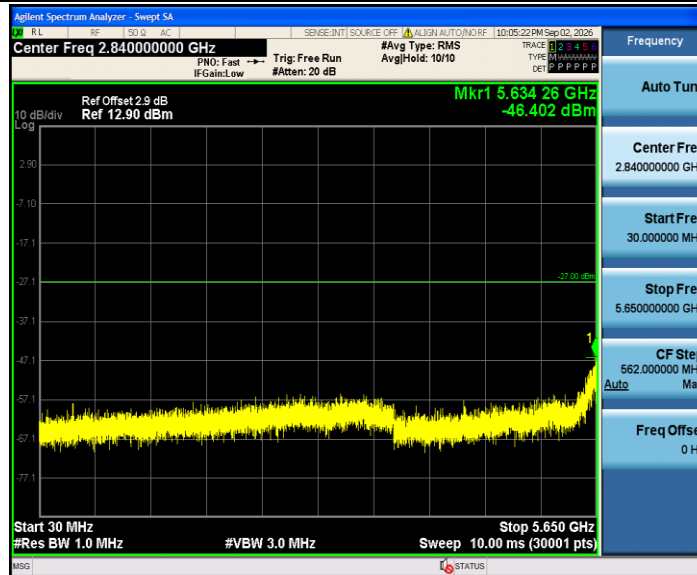
11A_Ant1_5825_30~5650



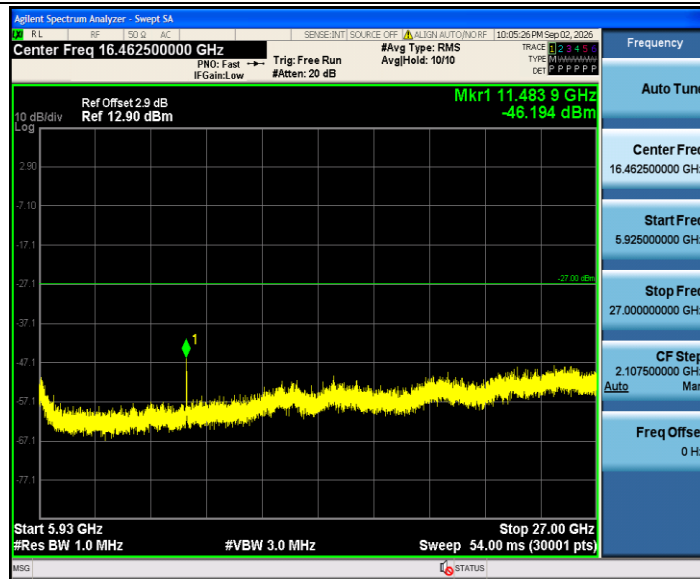
11A_Ant1_5825_5925~40000



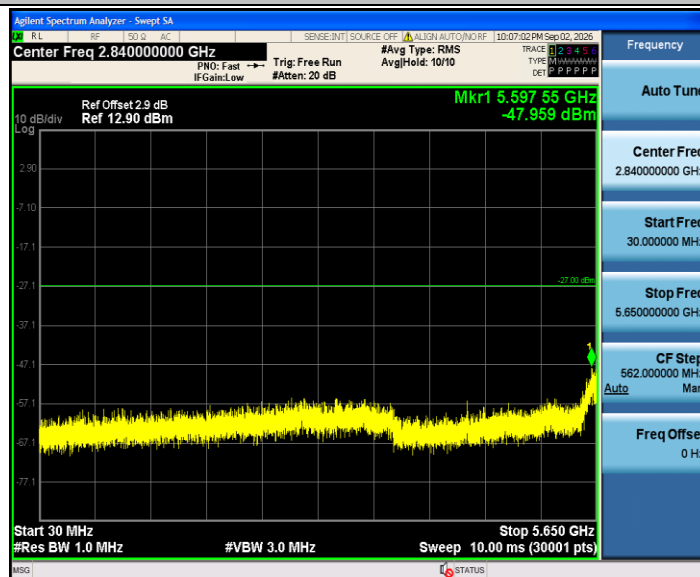
11N20SISO_Ant1_5745_30~5650



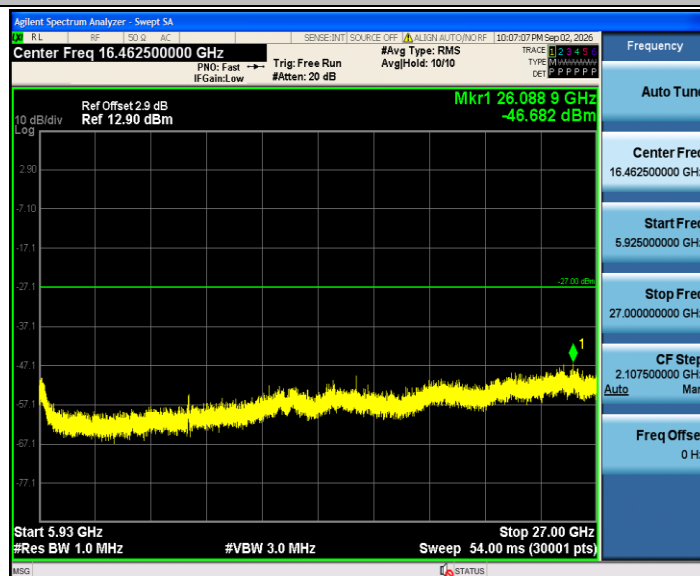
11N20SISO_Ant1_5745_5925~40000



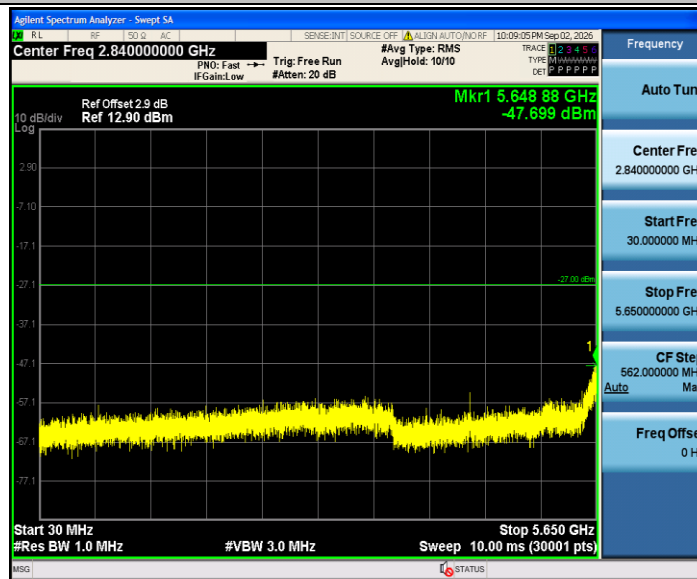
11N20SISO_Ant1_5785_30~5650



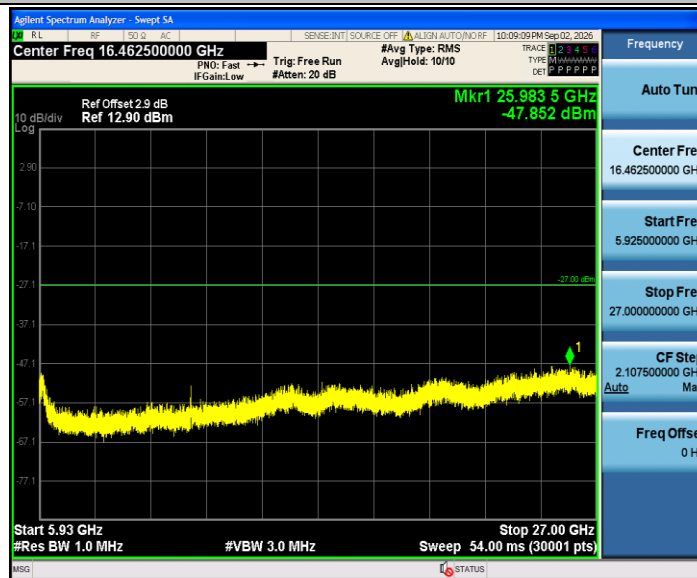
11N20SISO_Ant1_5785_5925~40000



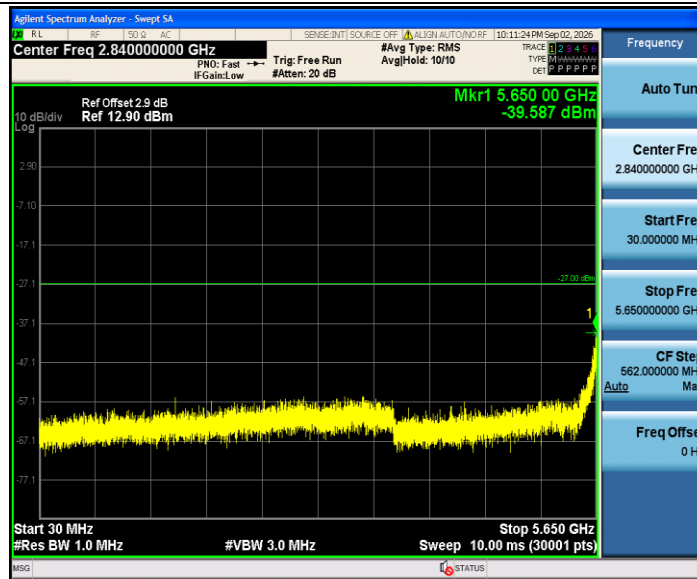
11N20SISO_Ant1_5825_30~5650



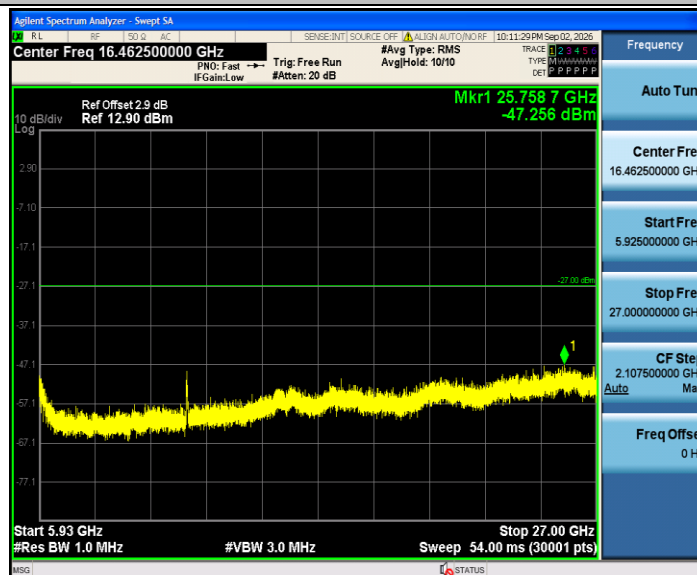
11N20SISO_Ant1_5825_5925~40000



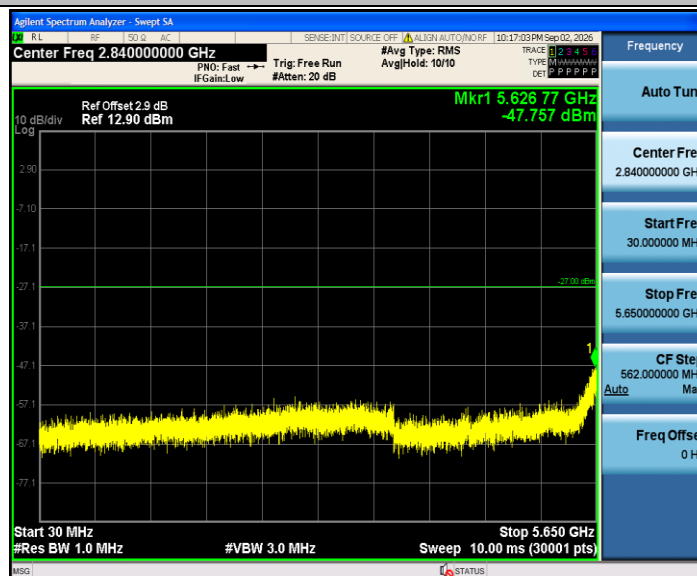
11N40SISO_Ant1_5755_30~5650



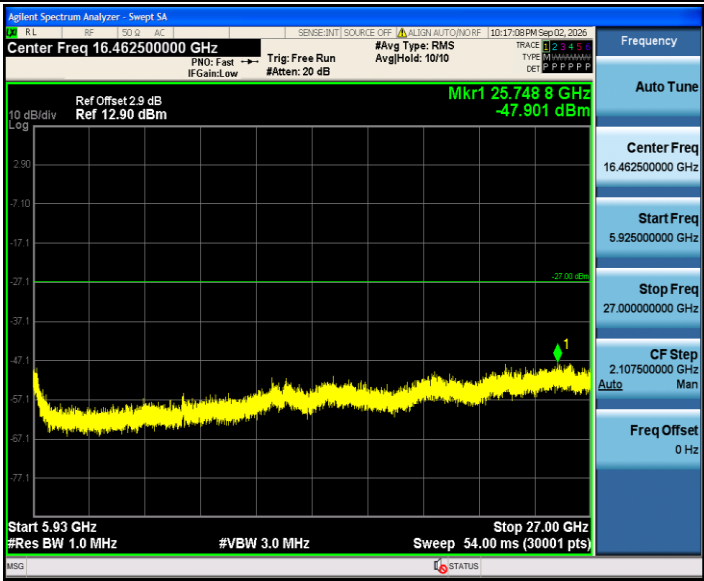
11N40SISO_Ant1_5755_5925~40000



11N40SISO_Ant1_5795_30~5650



11N40SISO_Ant1_5795_5925~40000



Appendix G: Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	EIRP [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-49.46	3.03	-46.43	≤-27.00	PASS
				Peak	5700.000	-35.77	3.03	-32.74	≤10.00	PASS
				Peak	5720.000	-28.43	3.03	-25.4	≤15.60	PASS
				Peak	5725.000	-19.76	3.03	-16.73	≤27.00	PASS
		High	5825	Peak	5850.000	-36.086	3.03	-33.056	≤27.00	PASS
				Peak	5855.000	-39.45	3.03	-36.42	≤15.60	PASS
				Peak	5875.000	-47.14	3.03	-44.11	≤10.00	PASS
				Peak	5925.000	-50.76	3.03	-47.73	≤-27.00	PASS
11N20SISO	Ant1	Low	5745	Peak	5650.000	-49.374	3.03	-46.344	≤-27.00	PASS
				Peak	5700.000	-39.79	3.03	-36.76	≤10.00	PASS
				Peak	5720.000	-31.23	3.03	-28.2	≤15.60	PASS
				Peak	5725.000	-24.01	3.03	-20.98	≤27.00	PASS
		High	5825	Peak	5850.000	-35.51	3.03	-32.48	≤27.00	PASS
				Peak	5855.000	-39.32	3.03	-36.29	≤15.60	PASS
				Peak	5875.000	-48.19	3.03	-45.16	≤10.00	PASS
				Peak	5925.000	-51.32	3.03	-48.29	≤-27.00	PASS
11N40SISO	Ant1	Low	5755	Peak	5650.000	-41.017	3.03	-37.987	≤-27.00	PASS
				Peak	5700.000	-36.39	3.03	-33.36	≤10.00	PASS
				Peak	5720.000	-31.8	3.03	-28.77	≤15.60	PASS
				Peak	5725.000	-27.04	3.03	-24.01	≤27.00	PASS
		High	5795	Peak	5850.000	-37.688	3.03	-34.658	≤27.00	PASS
				Peak	5855.000	-39.12	3.03	-36.09	≤15.60	PASS
				Peak	5875.000	-47.18	3.03	-44.15	≤10.00	PASS
				Peak	5925.000	-51.52	3.03	-48.49	≤-27.00	PASS

Note:

- For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.