

FCC Appendix RF Test Data

FCC ID : 2AW5W-R4-RD

Company: : REXING INC.

EUT : Dash Cam

Model Number : R4-RD

Report No. : CTA25041701002

Reviewed By : Eric Wang

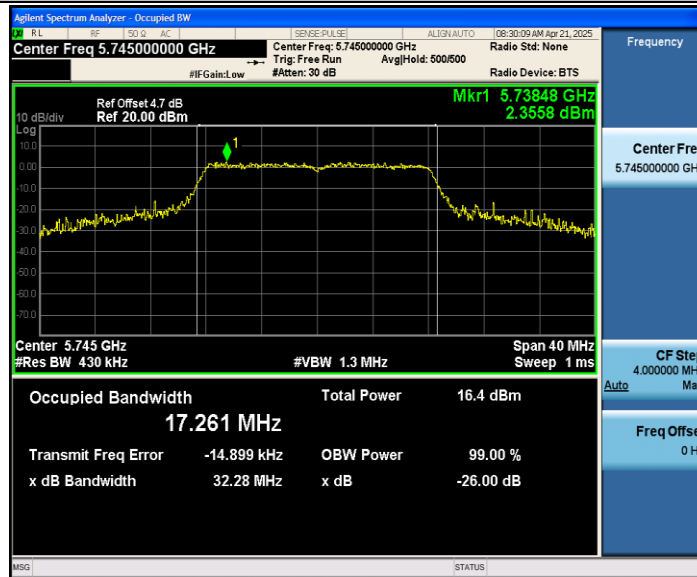
Appendix A1: Occupied channel bandwidth

Test Result

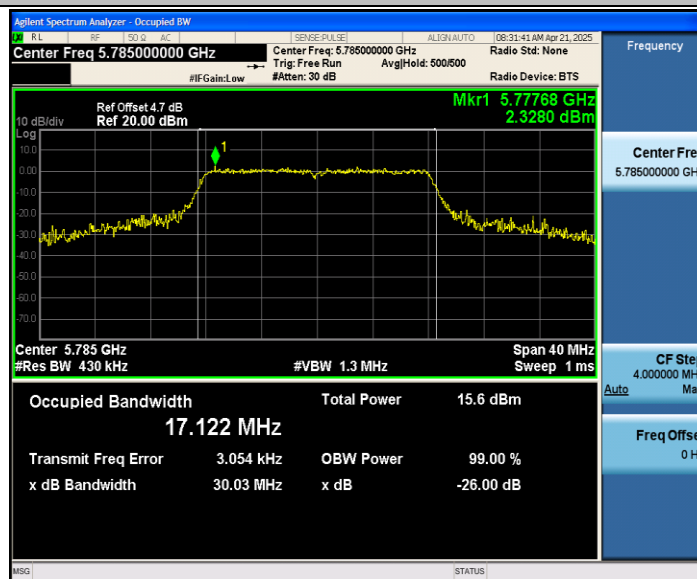
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	17.261	5736.3546	5753.6156	---	---
		5785	17.122	5776.4421	5793.5641	---	---
		5825	17.179	5816.4412	5833.6202	---	---
11N20SISO	Ant1	5745	18.170	5735.9016	5754.0716	---	---
		5785	18.148	5775.9817	5794.1297	---	---
		5825	18.099	5816.0282	5834.1272	---	---
11N40SISO	Ant1	5755	36.561	5736.6825	5773.2435	---	---
		5795	36.469	5776.8227	5813.2917	---	---

Test Graphs

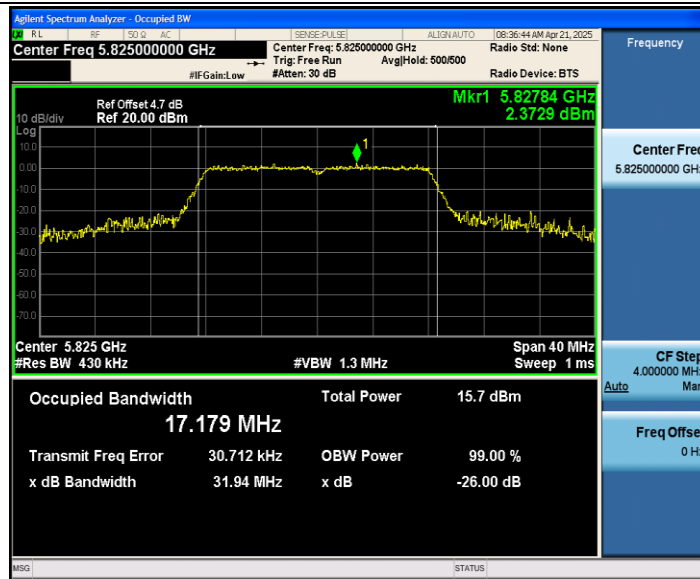
11A_Ant1_5745



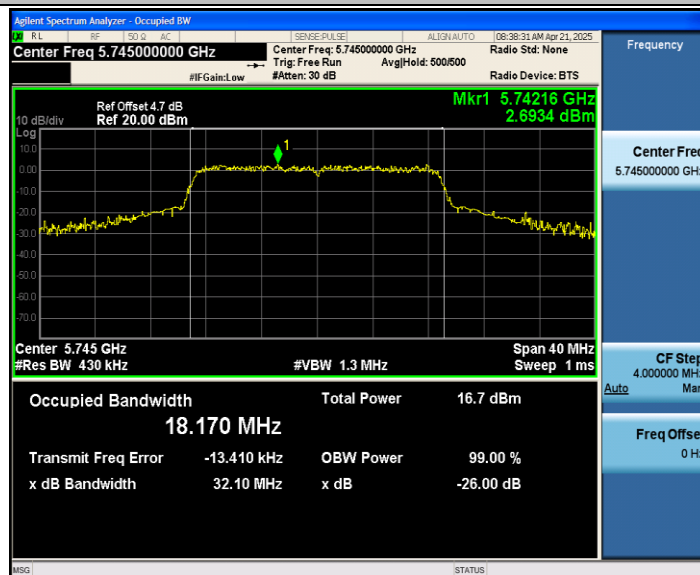
11A_Ant1_5785



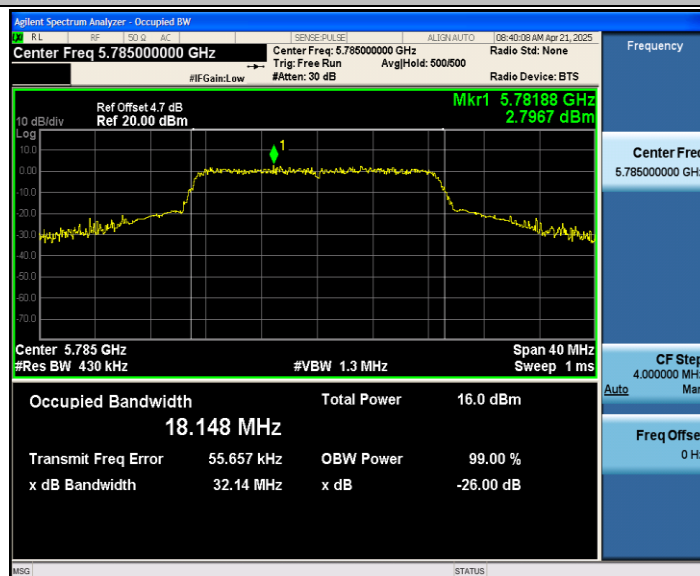
11A_Ant1_5825



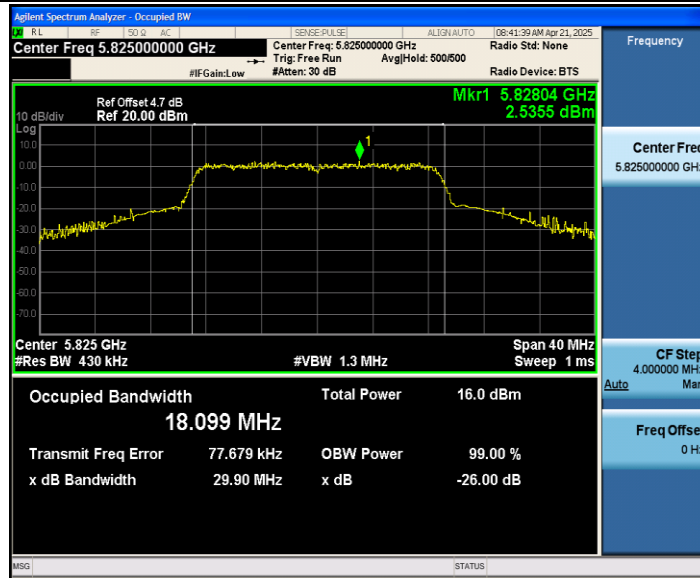
11N20SISO_Ant1_5745



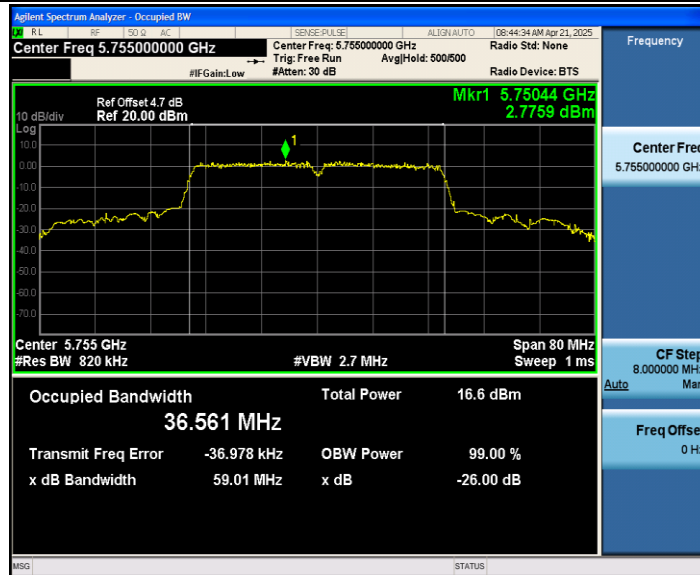
11N20SISO_Ant1_5785



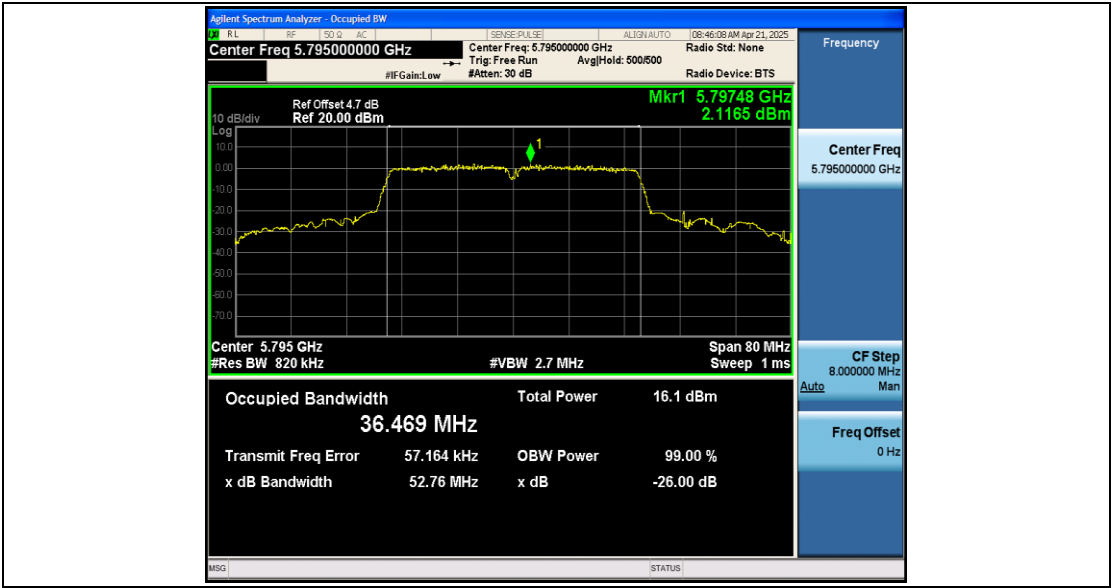
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

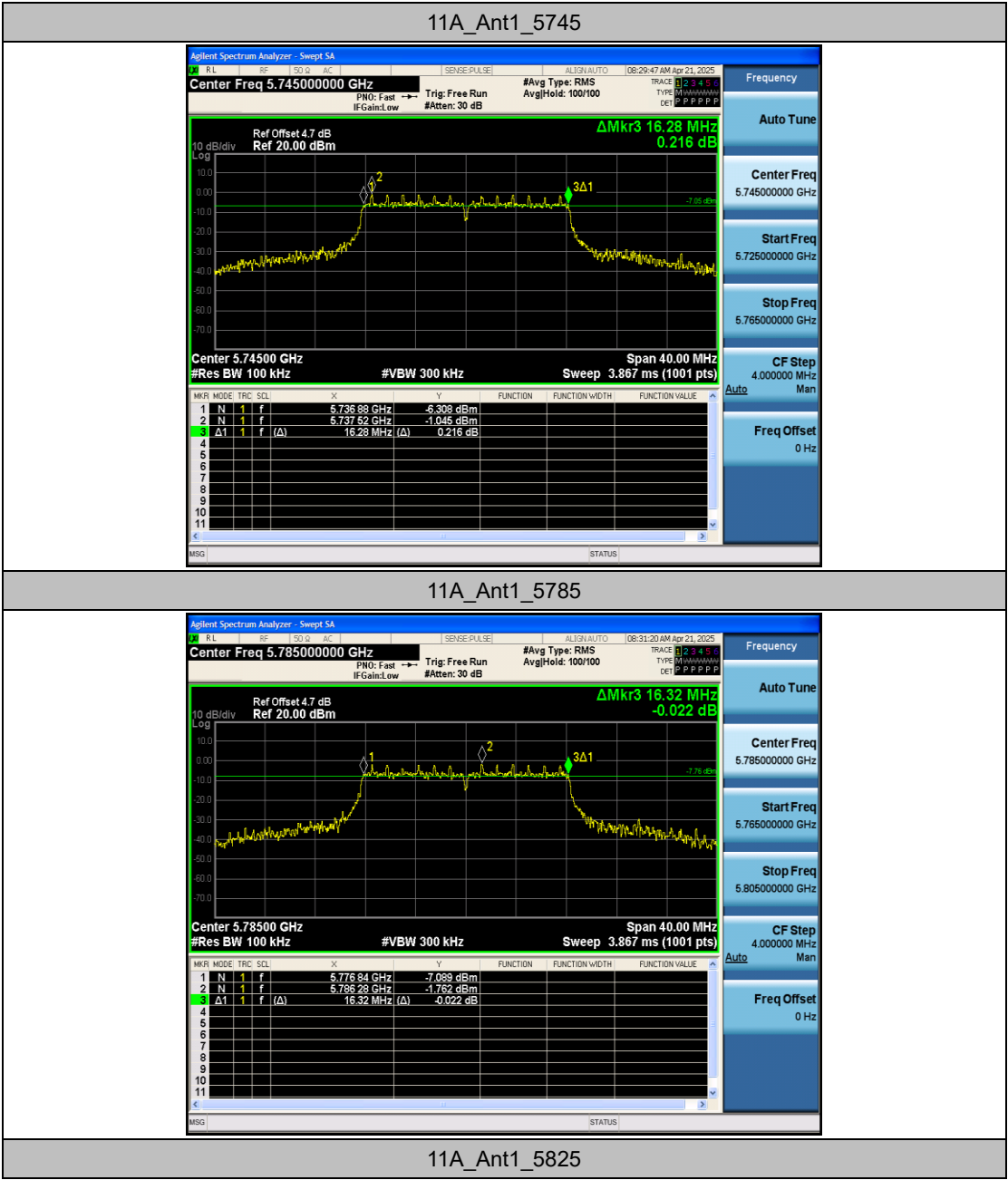


Appendix A1: Min emission bandwidth

Test Result B4

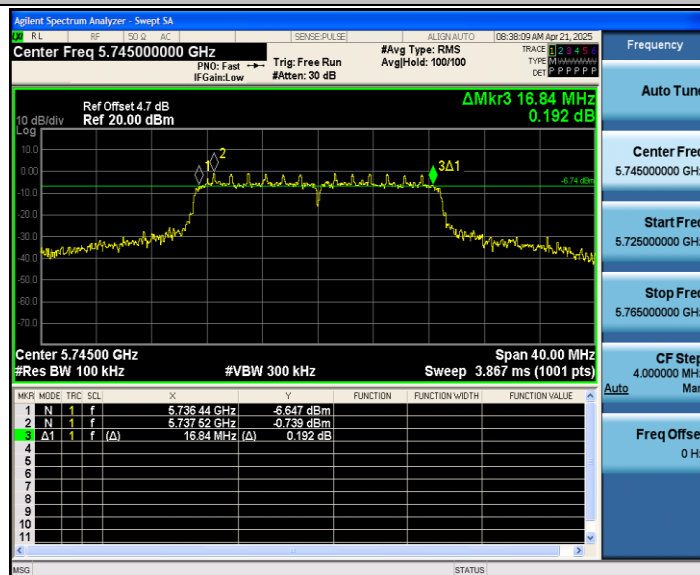
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.280	5736.880	5753.160	0.5	PASS
		5785	16.320	5776.840	5793.160	0.5	PASS
		5825	16.320	5816.840	5833.160	0.5	PASS
11N20SISO	Ant1	5745	16.840	5736.440	5753.280	0.5	PASS
		5785	16.800	5776.520	5793.320	0.5	PASS
		5825	17.120	5816.400	5833.520	0.5	PASS
11N40SISO	Ant1	5755	35.200	5737.400	5772.600	0.5	PASS
		5795	35.200	5777.400	5812.600	0.5	PASS

Test Graphs B4

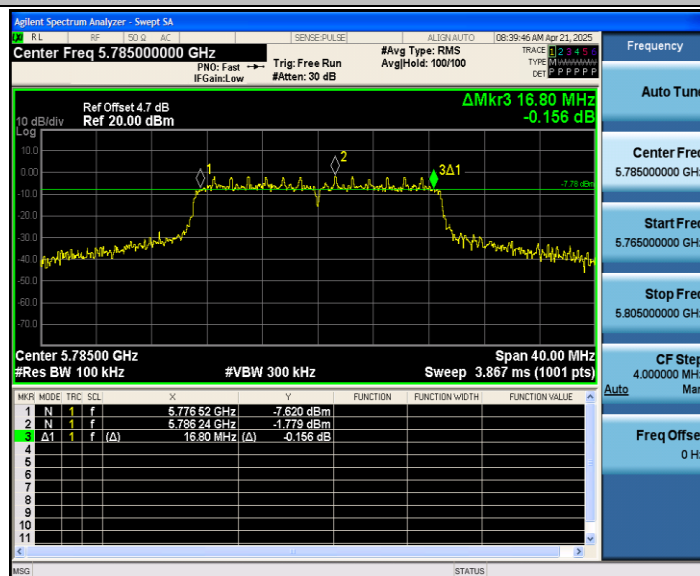




11N20SISO_Ant1_5745



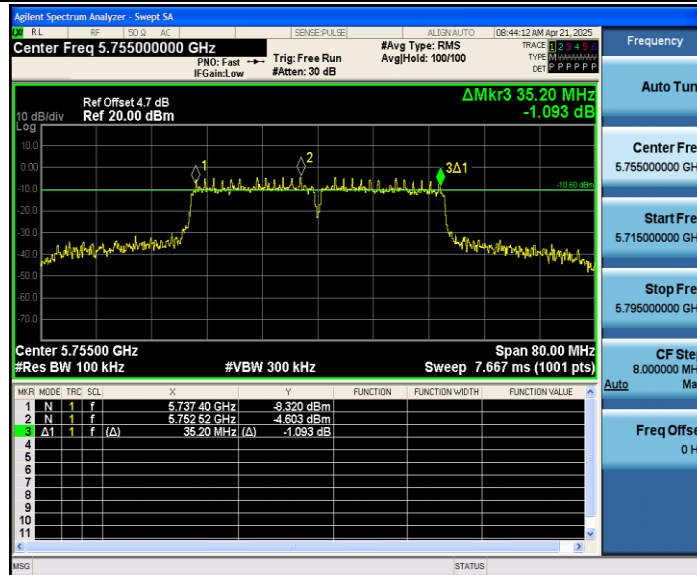
11N20SISO_Ant1_5785



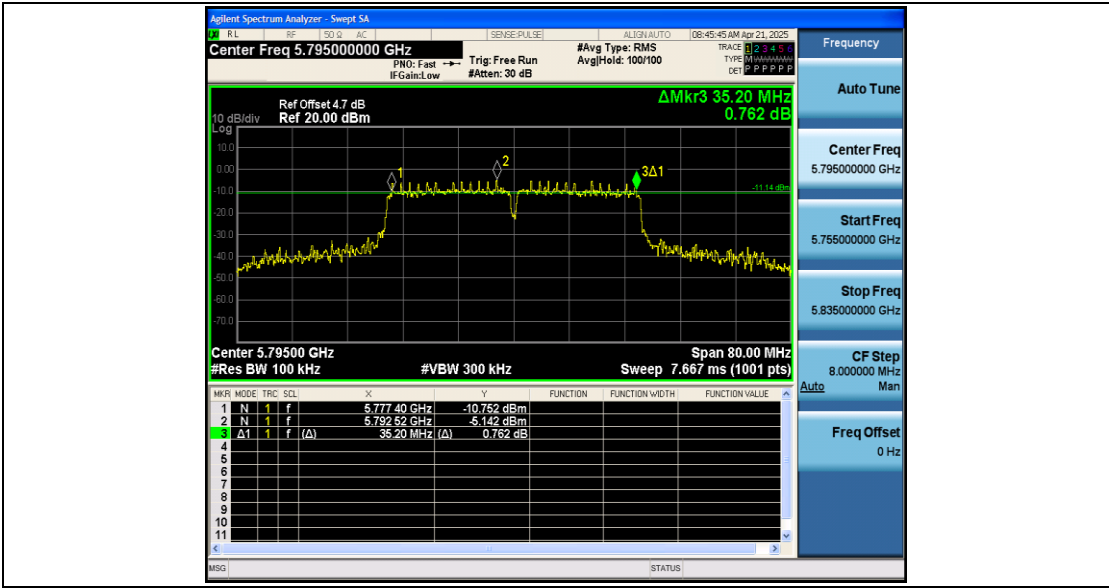
11N20SISO_Ant1_5825



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	0.12	0.29	41.38	3.83	---	---
		5785	0.12	0.29	41.38	3.83	---	---
		5825	0.11	0.28	39.29	4.06	---	---
11N20SISO	Ant1	5745	0.11	0.30	36.67	4.36	---	---
		5785	0.11	0.24	45.83	3.39	---	---
		5825	0.11	0.29	37.93	4.21	---	---
11N40SISO	Ant1	5755	0.07	0.30	23.33	6.32	---	---
		5795	0.07	0.25	28.00	5.53	---	---

11A_Ant1_5745

Agilent Spectrum Analyzer - Sweep SA

Center Freq 5.745000000 GHz

Trig Delay: 2.000 ms

#Avg Type: RMS

Trig: Video

IF Gain: Low

#Atten: 30 dB

Ref Offset: 4.7 dB

Ref: 24.70 dBm

ΔMkr3 290.0 μs

52.80 dB

Center 5.745000000 GHz

Res BW 8 MHz

#VBW 8.0 MHz

Sweep 2.000 ms (1001 pts)

Span 0 Hz

CF Step 8.0000000 MHz

Freq Offset 0 Hz

MNR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t		550.0 μs	-40.88 dBm		
2	Δ1	1	t	(Δ)	120.0 μs (Δ)	-2.39 dB		
3	Δ1	1	t	(Δ)	290.0 μs (Δ)	52.80 dB		

11A_Ant1_5785

Agilent Spectrum Analyzer - Sweep SA

Center Freq 5.785000000 GHz

Trig Delay: 2.000 ms

#Avg Type: RMS

Trig: Video

IF Gain: Low

#Atten: 30 dB

Ref Offset: 4.7 dB

Ref: 24.70 dBm

ΔMkr3 290.0 μs

54.33 dB

Center 5.785000000 GHz

Res BW 8 MHz

#VBW 8.0 MHz

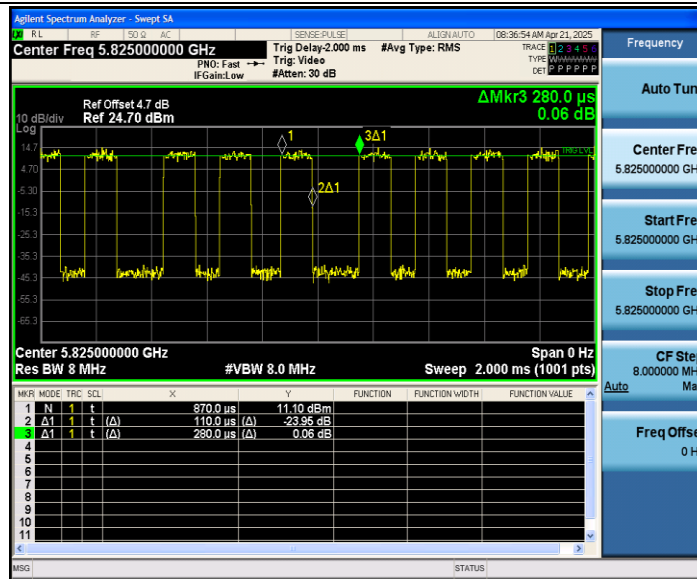
Sweep 2.000 ms (1001 pts)

Span 0 Hz

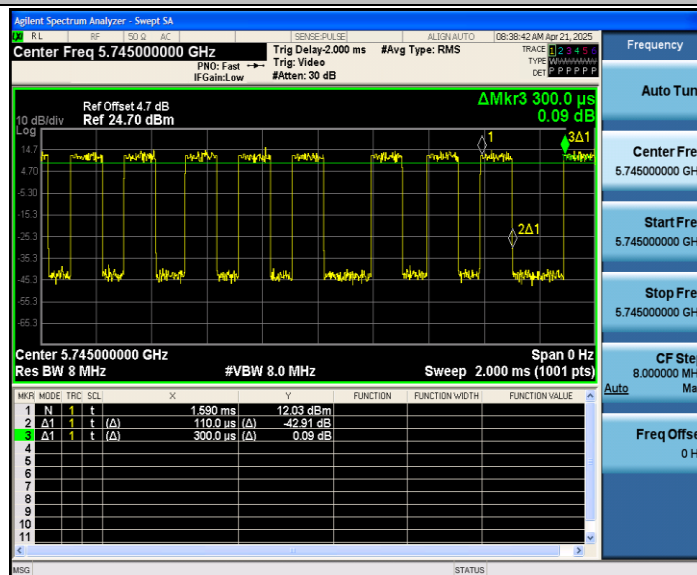
CF Step 8.0000000 MHz

Freq Offset 0 Hz

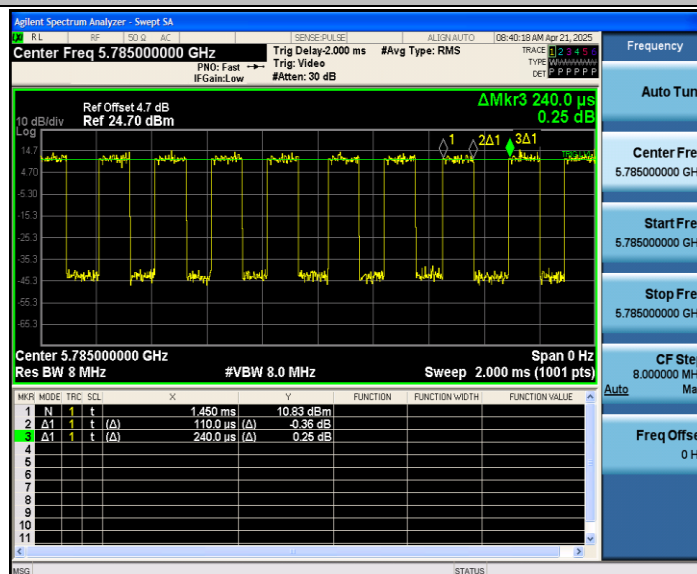
MNR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t		1.440 ms	-43.28 dBm		
2	Δ1	1	t	(Δ)	120.0 μs (Δ)	0.48 dB		
3	Δ1	1	t	(Δ)	290.0 μs (Δ)	54.33 dB		



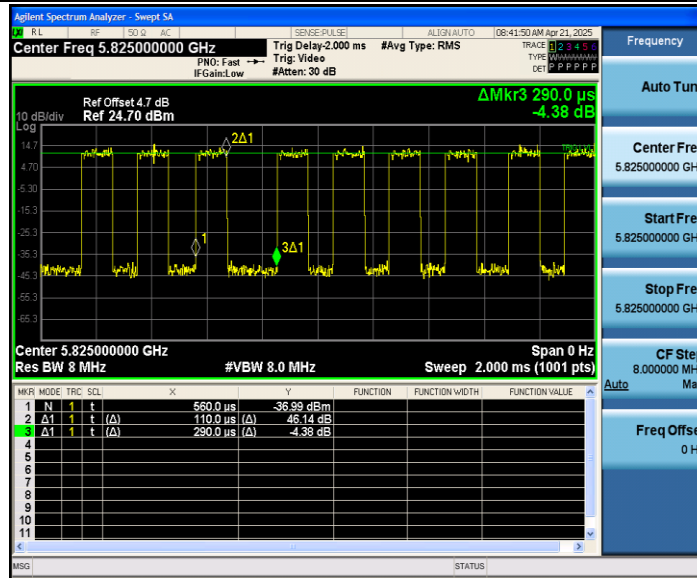
11N20SISO_Ant1_5745



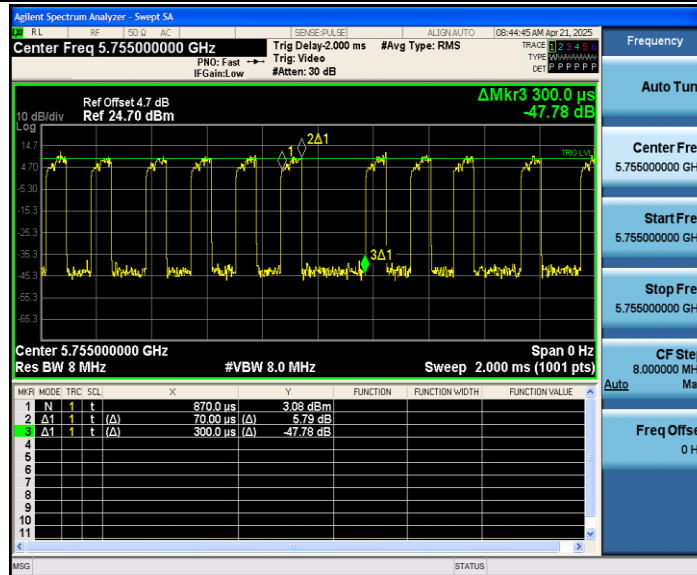
11N20SISO_Ant1_5785



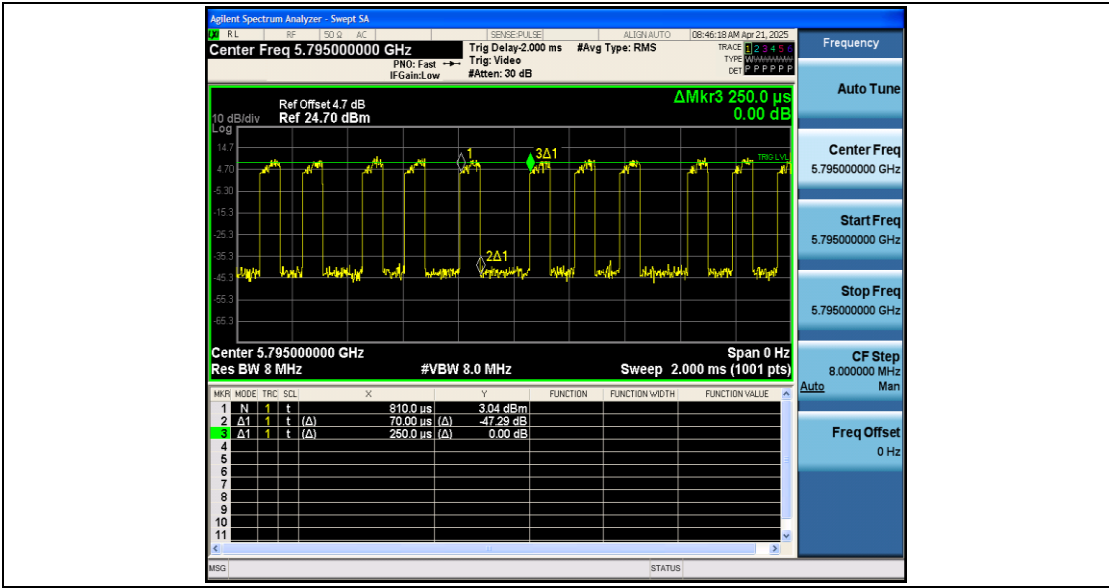
11N20SISO_Ant1_5825



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	5745	7.01	41.38	3.83	10.84	≤30.00	PASS
		5785	6.35	41.38	3.83	10.18	≤30.00	PASS
		5825	6.43	39.29	4.06	10.49	≤30.00	PASS
11N20SIS O	Ant1	5745	7.20	36.67	4.36	11.56	≤30.00	PASS
		5785	6.43	45.83	3.39	9.82	≤30.00	PASS
		5825	6.42	37.93	4.21	10.63	≤30.00	PASS
11N40SIS O	Ant1	5755	5.22	23.33	6.32	11.54	≤30.00	PASS
		5795	4.76	28.00	5.53	10.29	≤30.00	PASS

Appendix D: Maximum power spectral density

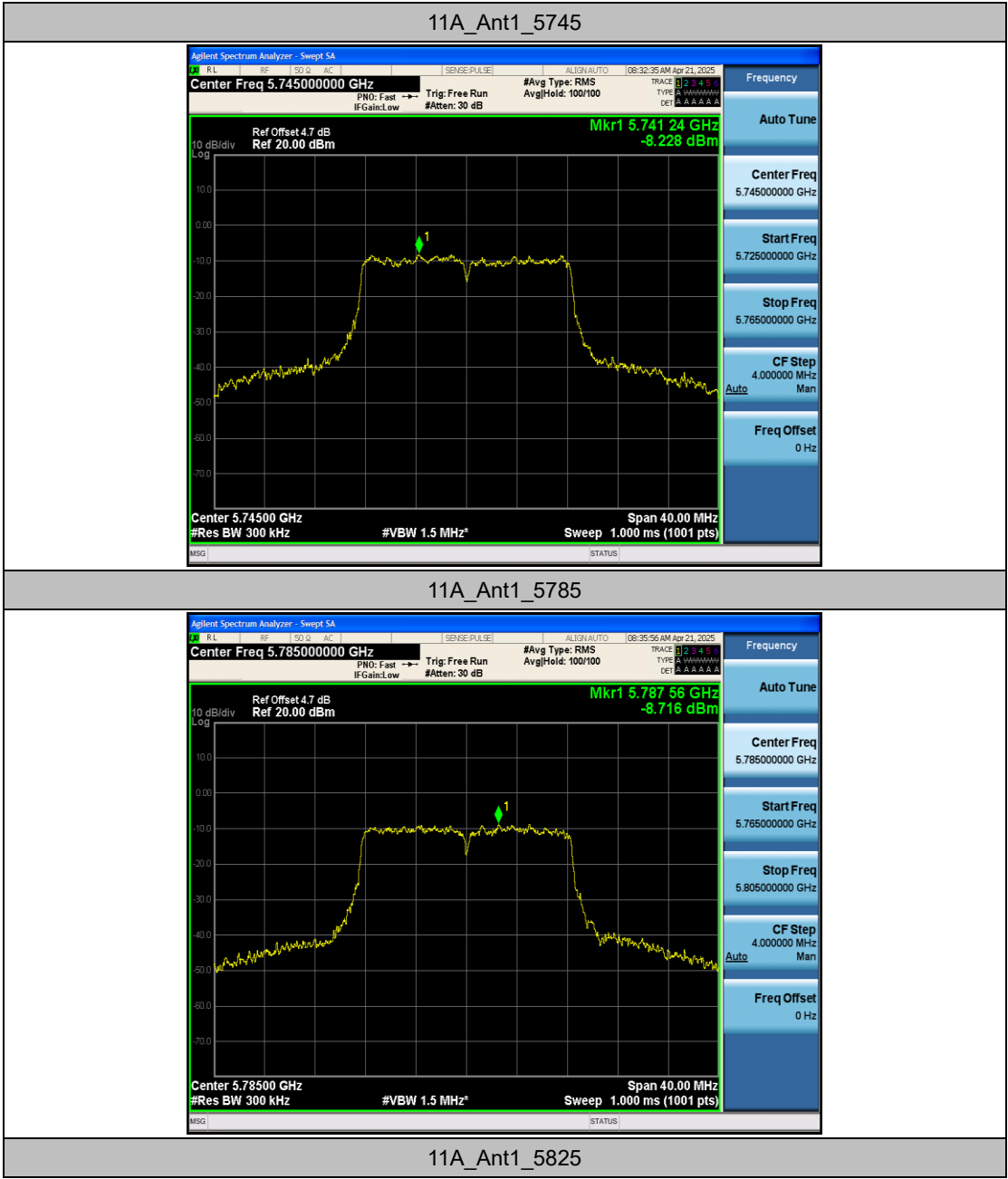
Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/300KHz]	RBW Factor (dB)	Duty factor (dB)	Result [dBm/500KHz]	Limit [dBm/500KHz]	Verdict
11A	Ant1	5745	-8.23	2.22	3.83	-2.18	≤30.00	PASS
		5785	-8.72	2.22	3.83	-2.67	≤30.00	PASS
		5825	-8.86	2.22	4.06	-2.58	≤30.00	PASS
11N20SISO	Ant1	5745	-7.83	2.22	4.36	-1.25	≤30.00	PASS
		5785	-8.79	2.22	3.39	-3.18	≤30.00	PASS
		5825	-8.36	2.22	4.21	-1.93	≤30.00	PASS
11N40SISO	Ant1	5755	-11.59	2.22	6.32	-3.05	≤30.00	PASS
		5795	-12.54	2.22	5.53	-4.79	≤30.00	PASS

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

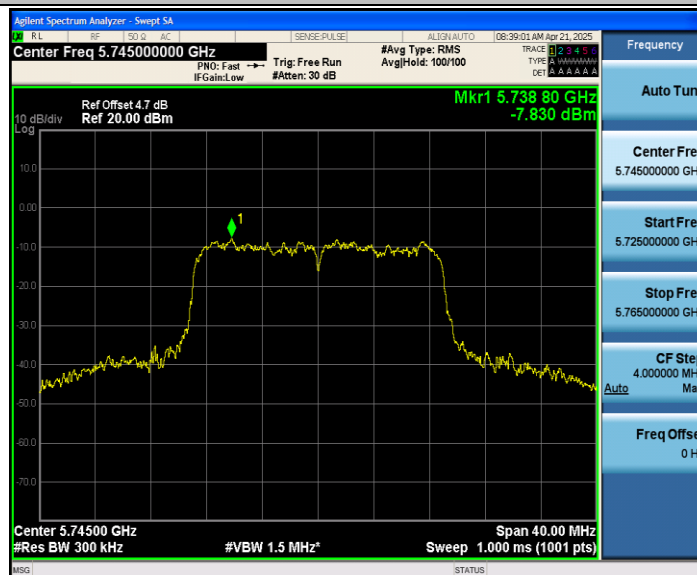
P.S.D(dBm/500KHz)= P.S.D(dBm/300KHz)+10 log (500 kHz/300KHz)=2.22 dB.

Test Graphs

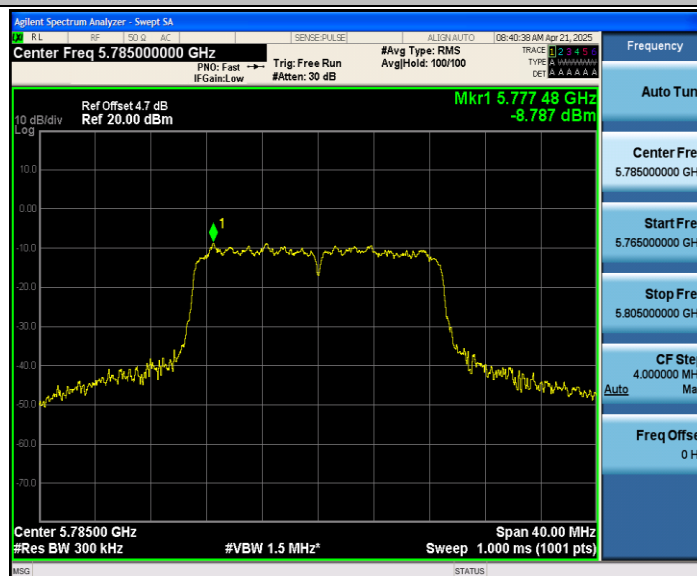




11N20SISO_Ant1_5745



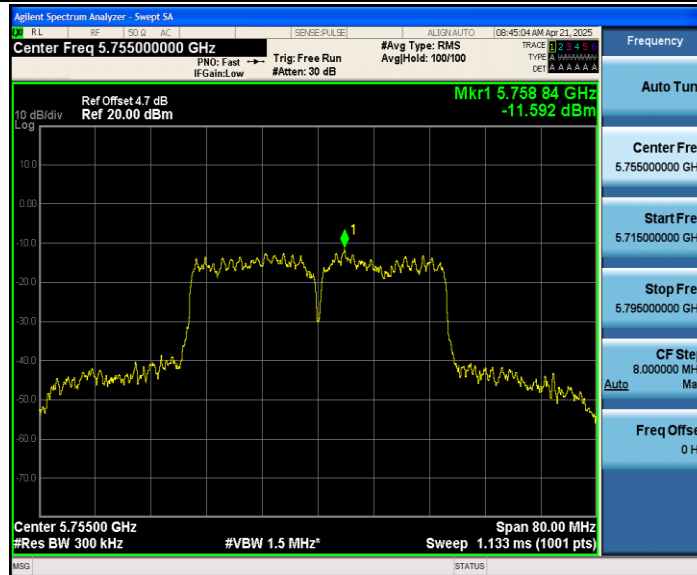
11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

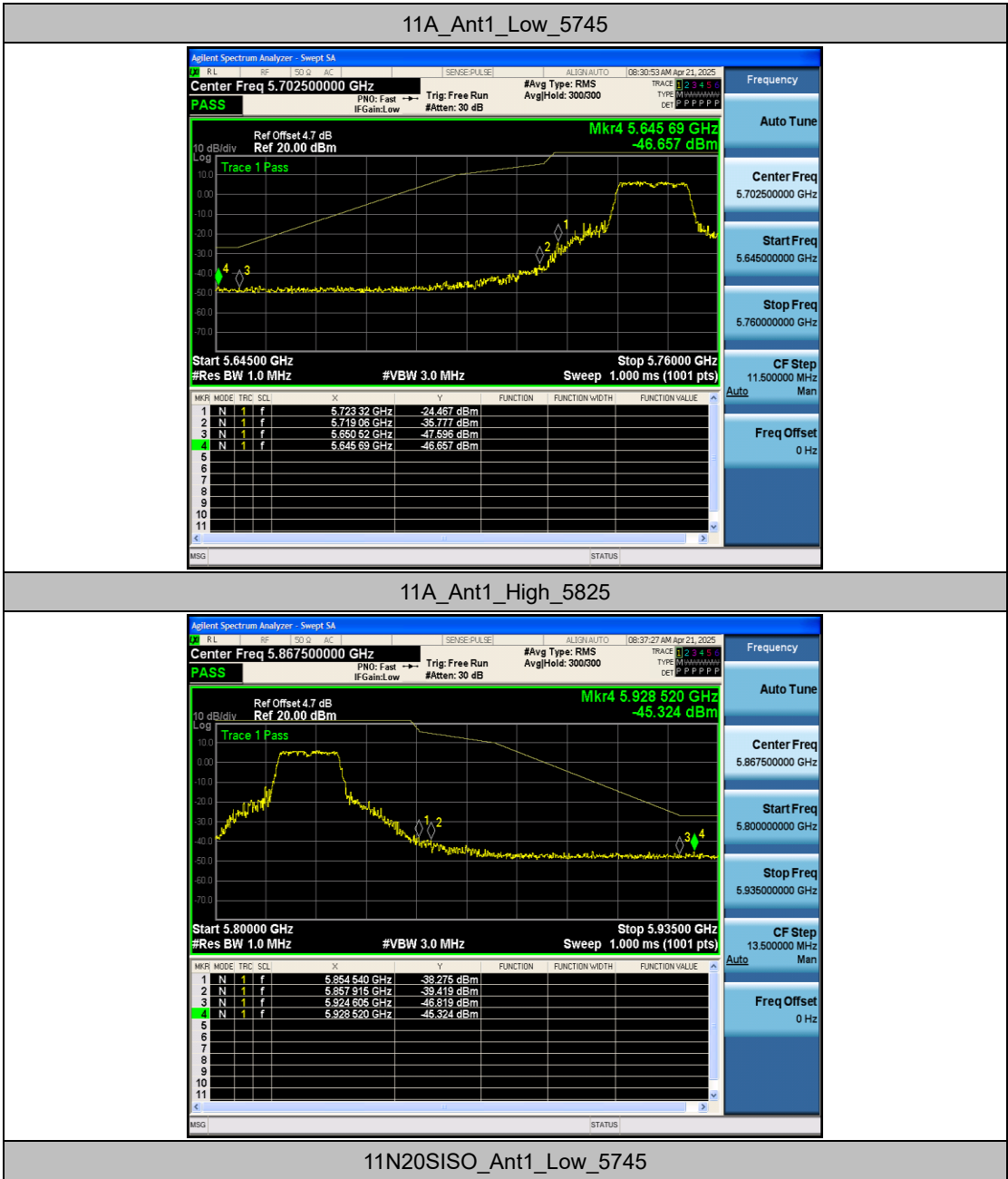


Appendix E: Band edge measurements

Test Result B4

TestMode	Antenna	ChName	Freq(MHz)	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-47.6	≤-26.62	PASS
				5700~5720	-35.78	≤15.34	PASS
				5720~5725	-24.47	≤23.16	PASS
				5760~5650	-46.66	≤-27	PASS
		High	5825	5850~5855	-38.28	≤16.65	PASS
				5855~5875	-39.42	≤14.78	PASS
				5875~5925	-46.82	≤-26.71	PASS
				5925~5935	-45.32	≤-27	PASS
11N20SI SO	Ant1	Low	5745	5650~5700	-47.42	≤-26.62	PASS
				5700~5720	-36.13	≤15.27	PASS
				5720~5725	-27.19	≤18.70	PASS
				5760~5650	-46.63	≤-27	PASS
		High	5825	5850~5855	-38.93	≤16.34	PASS
				5855~5875	-38.52	≤15.28	PASS
				5875~5925	-46.57	≤-26.91	PASS
				5925~5935	-45.9	≤-27	PASS
11N40SI SO	Ant1	Low	5755	5650~5700	-47.29	≤-26.90	PASS
				5700~5720	-24.02	≤15.47	PASS
				5720~5725	-24.37	≤15.74	PASS
				5780~5650	-46.04	≤-27	PASS
		High	5795	5850~5855	-45.05	≤15.66	PASS
				5855~5875	-45.19	≤10.76	PASS
				5875~5925	-47.12	≤-26.95	PASS
				5925~5935	-45.4	≤-27	PASS

Test Graphs B4





11N20ISO_Ant1_High_5825



11N40ISO_Ant1_Low_5755



11N40SISO_Ant1_High_5795

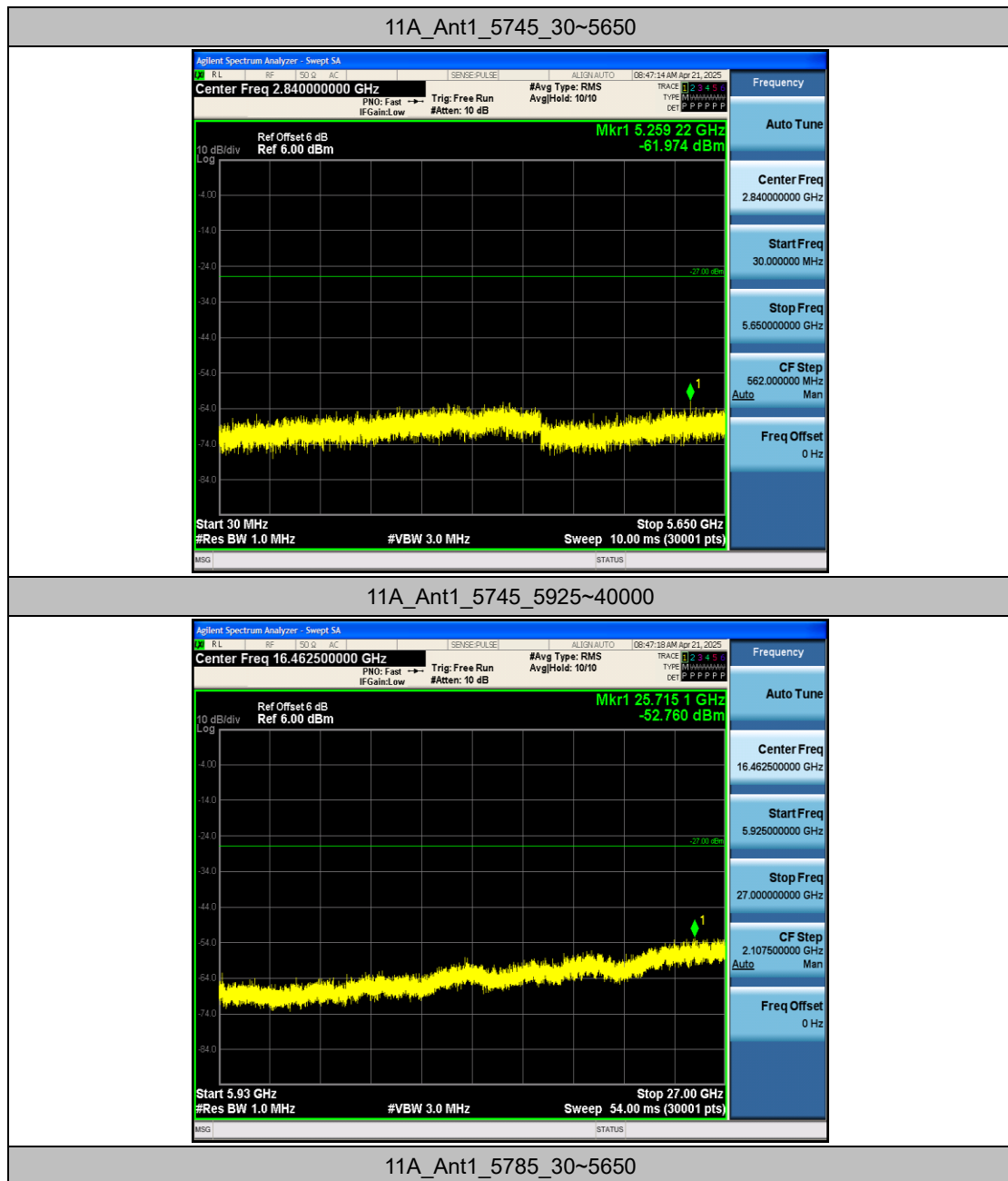


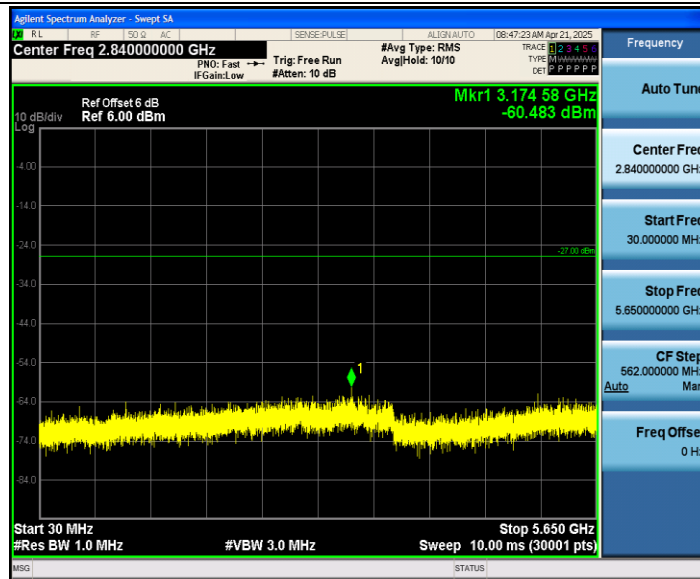
Appendix F: Conducted Spurious Emission

Test Result

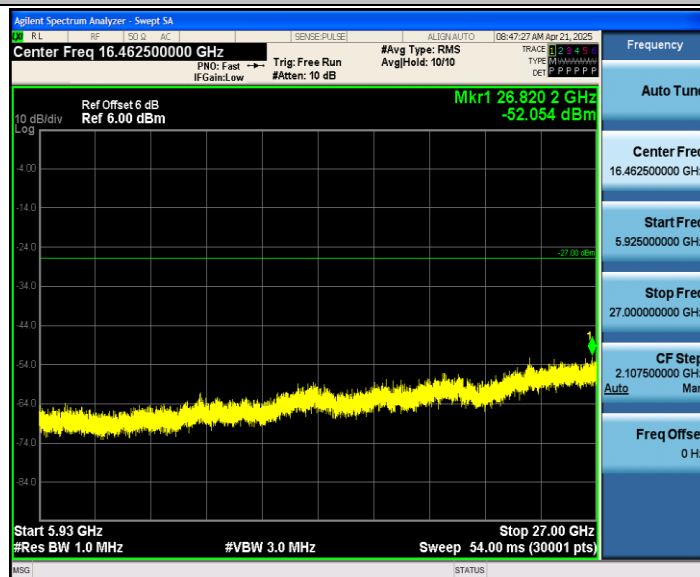
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	30~5650	5259.22	-61.97	≤-27	PASS
			5925~40000	25715.13	-52.76	≤-27	PASS
		5785	30~5650	3174.58	-60.48	≤-27	PASS
			5925~40000	26820.16	-52.05	≤-27	PASS
		5825	30~5650	3147.98	-62.29	≤-27	PASS
			5925~40000	26440.11	-51.63	≤-27	PASS
11N20SISO	Ant1	5745	30~5650	5179.98	-60.56	≤-27	PASS
			5925~40000	26778.01	-52.4	≤-27	PASS
		5785	30~5650	3023.59	-60.75	≤-27	PASS
			5925~40000	26467.51	-52.04	≤-27	PASS
		5825	30~5650	3104.51	-61.97	≤-27	PASS
			5925~40000	26142.25	-52.54	≤-27	PASS
11N40SISO	Ant1	5755	30~5650	5104.86	-62.13	≤-27	PASS
			5925~40000	26268	-51.7	≤-27	PASS
		5795	30~5650	3108.26	-62.13	≤-27	PASS
			5925~40000	26687.39	-52.26	≤-27	PASS

Test Graphs

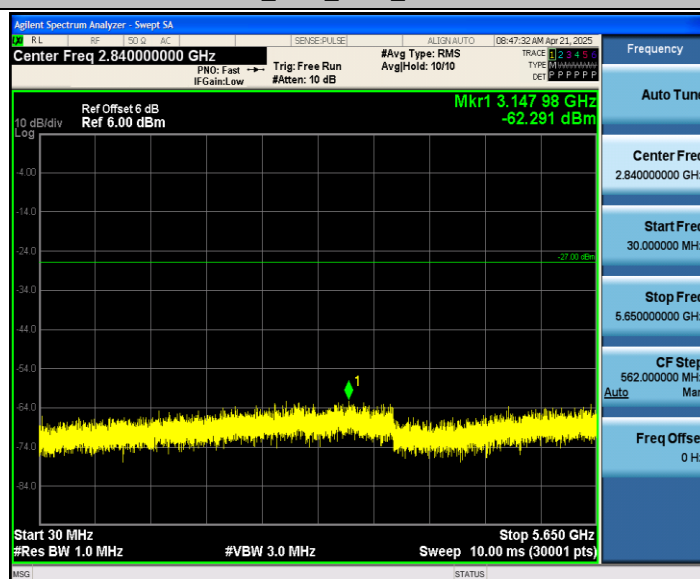




11A_Ant1_5785_5925~40000



11A_Ant1_5825_30~5650



11A_Ant1_5825_5925~40000



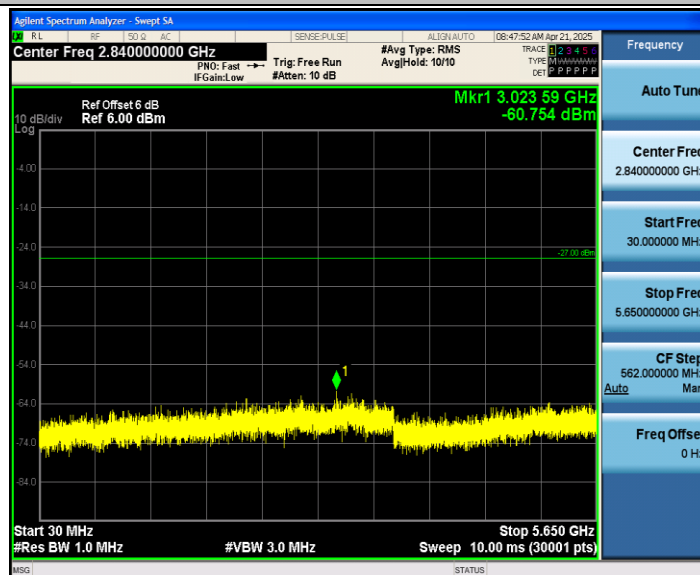
11N20SISO_Ant1_5745_30~5650



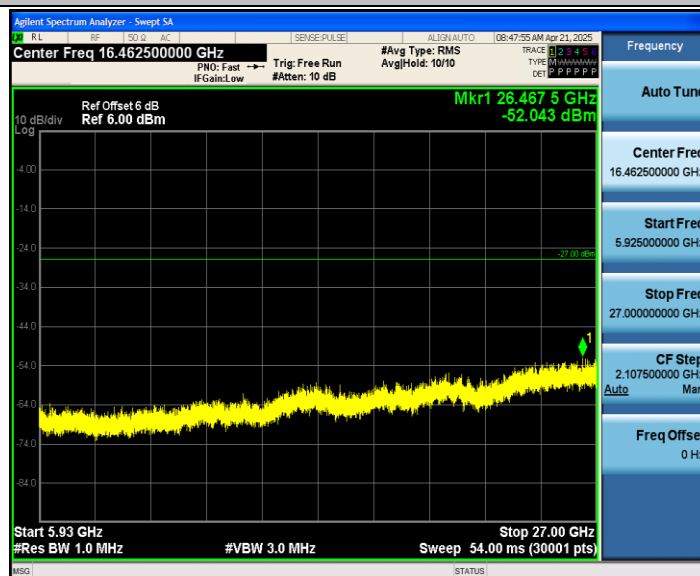
11N20SISO_Ant1_5745_5925~40000



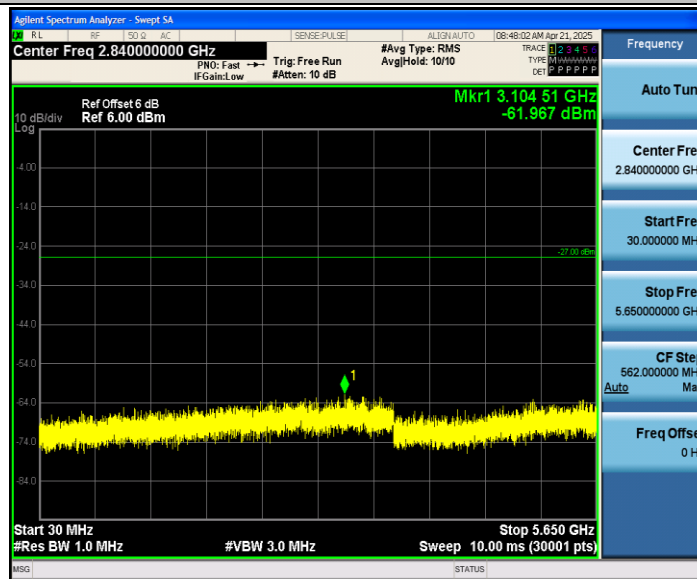
11N20SISO_Ant1_5785_30~5650



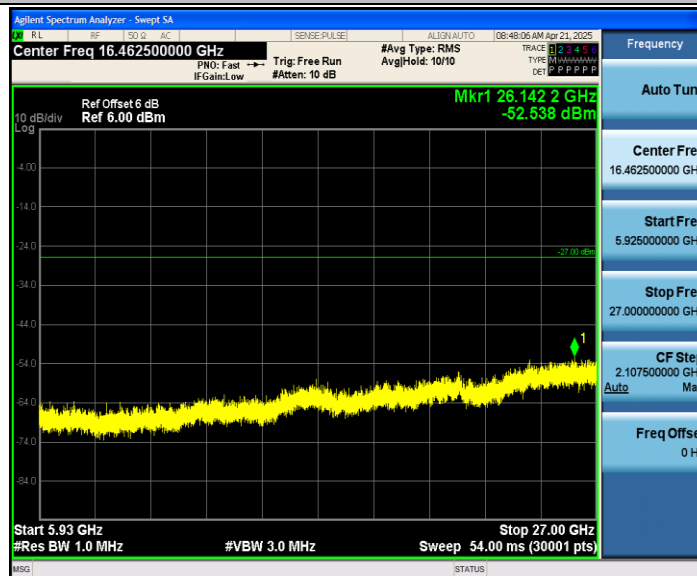
11N20SISO_Ant1_5785_5925~40000



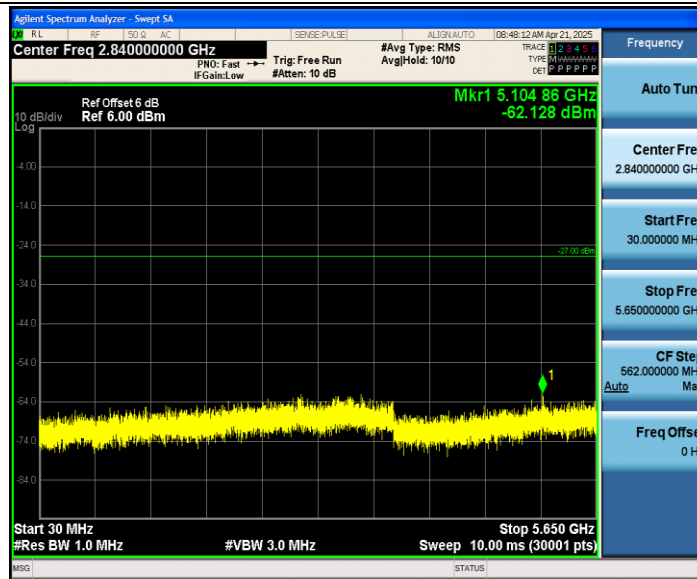
11N20SISO_Ant1_5825_30~5650



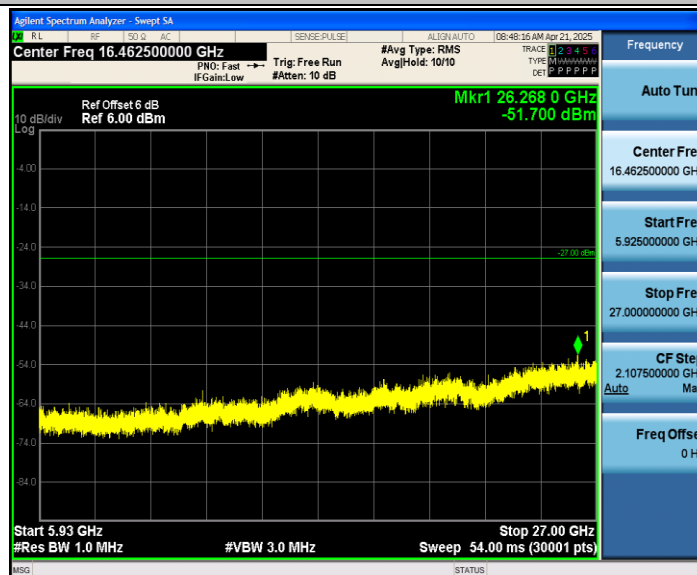
11N20SISO_Ant1_5825_5925~40000



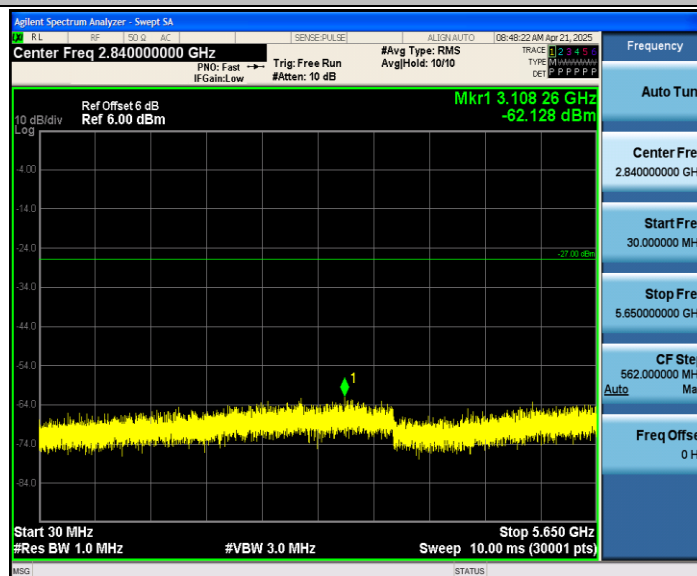
11N40SISO_Ant1_5755_30~5650



11N40SISO_Ant1_5755_5925~40000



11N40SISO_Ant1_5795_30~5650



11N40SISO_Ant1_5795_5925~40000

