

Appendix A

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: MagicDash 4
Test Model: MagicDash 4

Environmental Conditions

Temperature:	24.2° C
Relative Humidity:	53.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang Hai
Supervised by:	Fengliu Tang

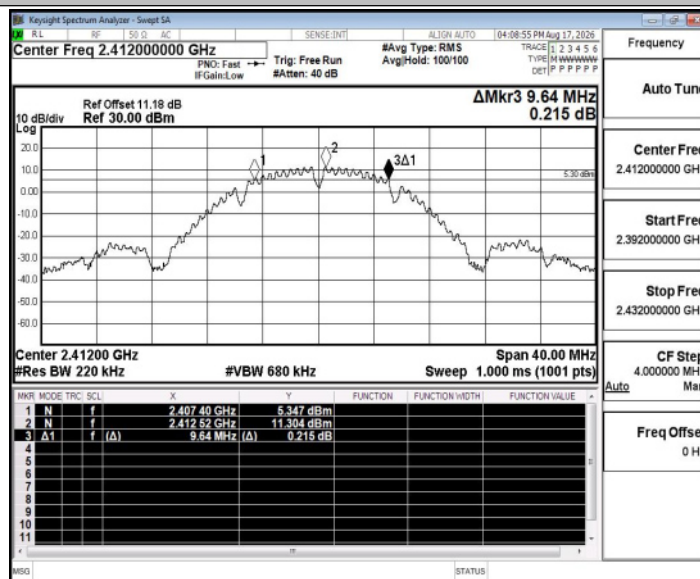
A.1 6dB Bandwidth

Test Result

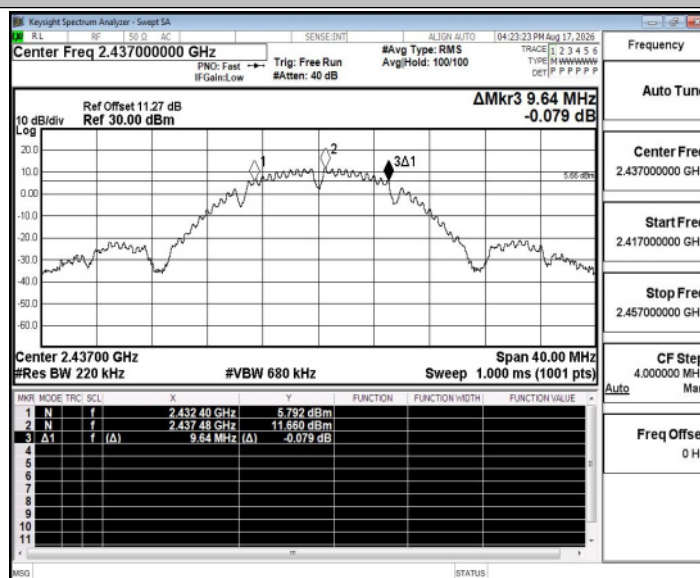
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.640	2407.400	2417.040	0.5	PASS
		2437	9.640	2432.400	2442.040	0.5	PASS
		2462	9.640	2457.400	2467.040	0.5	PASS
11G	Ant1	2412	16.320	2403.880	2420.200	0.5	PASS
		2437	16.400	2428.800	2445.200	0.5	PASS
		2462	16.360	2453.840	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.600	2403.160	2420.760	0.5	PASS
		2437	17.600	2428.160	2445.760	0.5	PASS
		2462	17.200	2453.320	2470.520	0.5	PASS
11N40SISO	Ant1	2422	36.000	2404.000	2440.000	0.5	PASS
		2437	36.160	2418.760	2454.920	0.5	PASS
		2452	35.760	2434.000	2469.760	0.5	PASS
11AX20SISO	Ant1	2412	18.400	2402.960	2421.360	0.5	PASS
		2437	18.560	2427.880	2446.440	0.5	PASS
		2462	18.560	2452.840	2471.400	0.5	PASS
11AX40SISO	Ant1	2422	36.560	2403.360	2439.920	0.5	PASS
		2437	37.680	2418.200	2455.880	0.5	PASS
		2452	37.680	2433.200	2470.880	0.5	PASS

Test Graphs

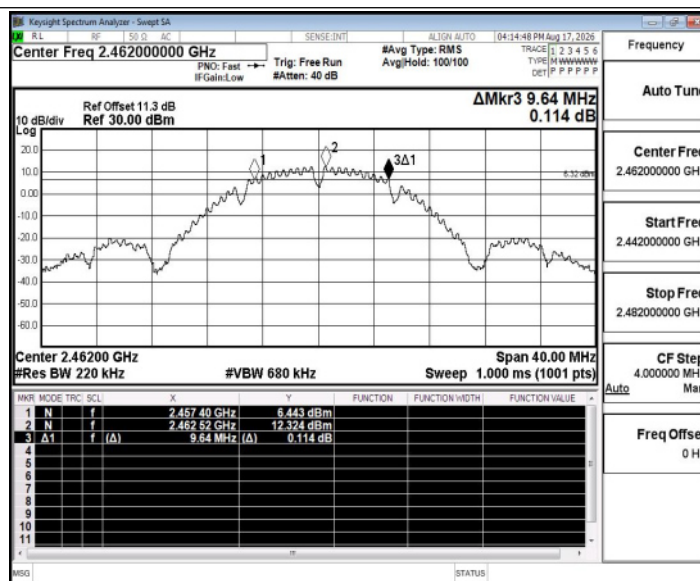
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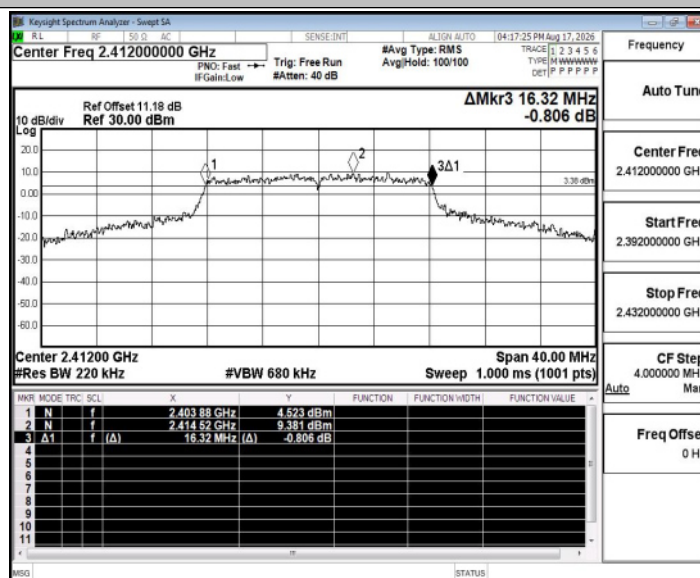
11B_Ant1_2437



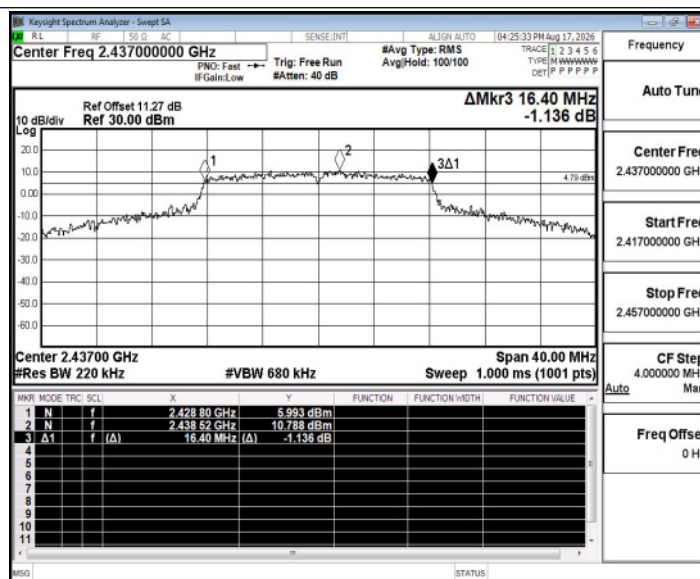
11B_Ant1_2462



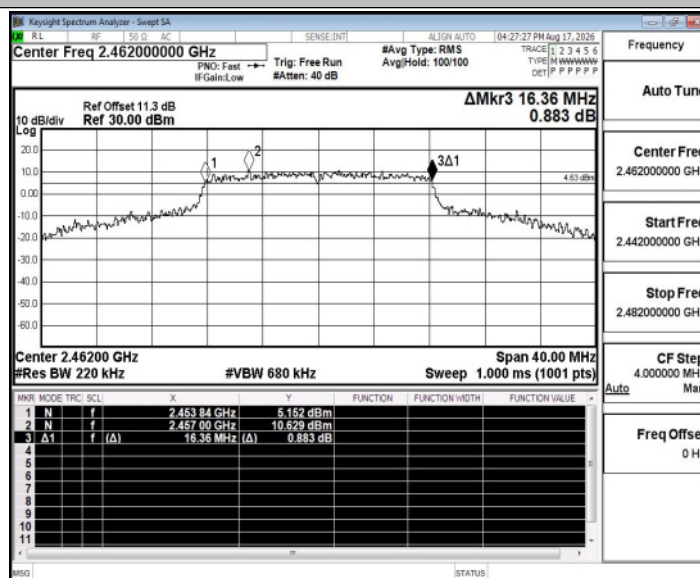
11G_Ant1_2412



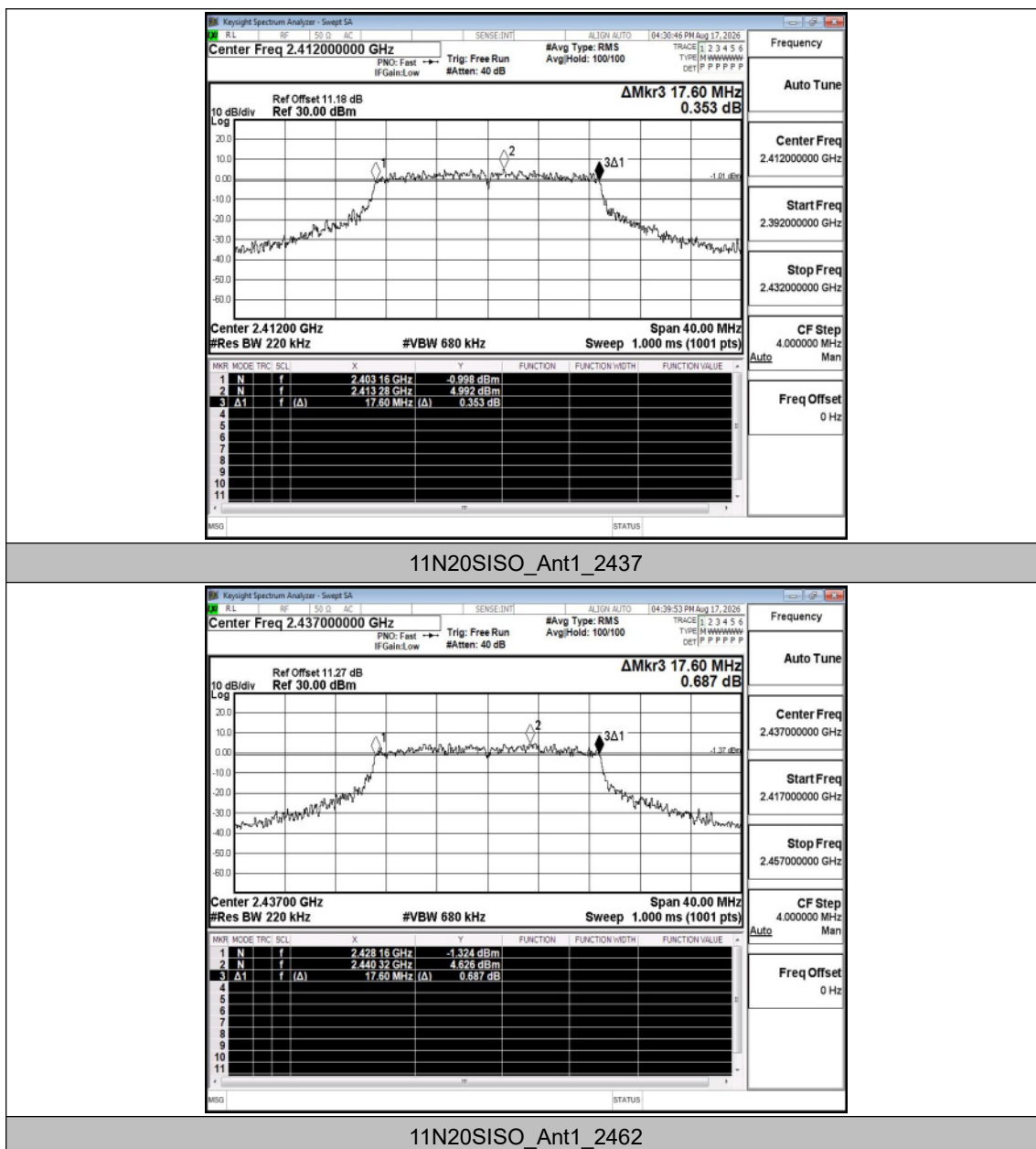
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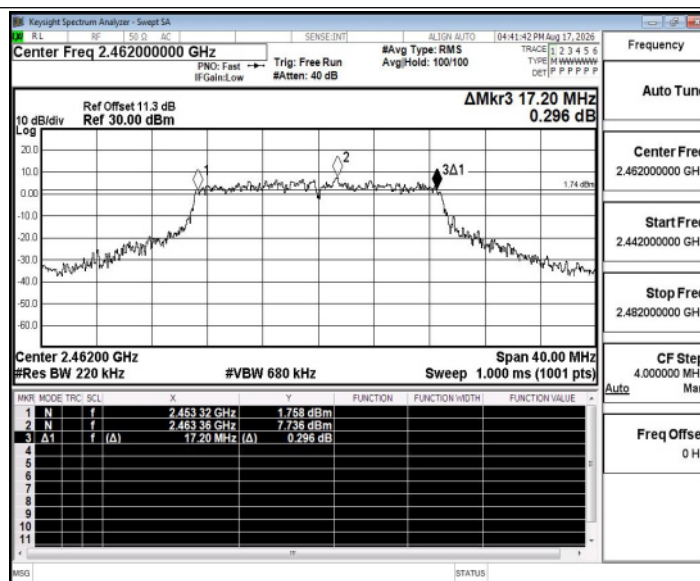


11G_Ant1_2462

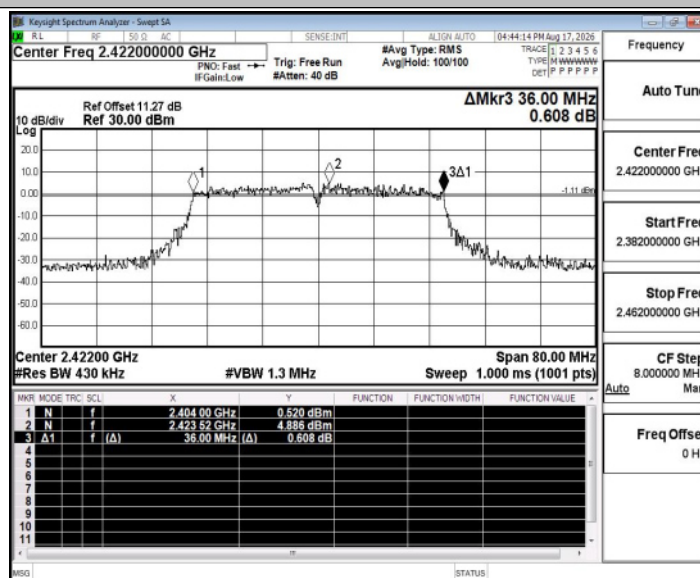


11N20SISO_Ant1_2412

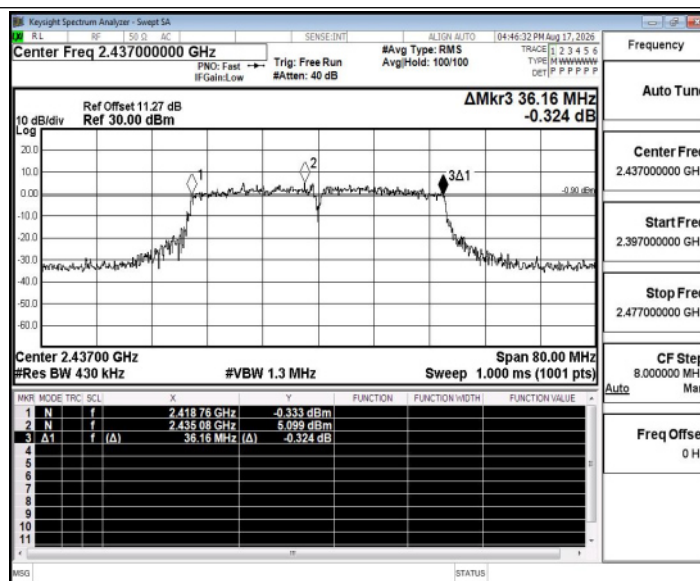




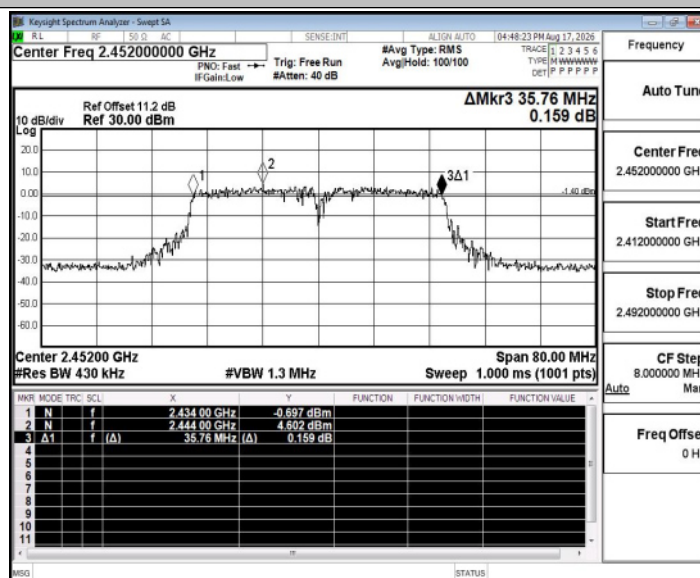
11N40SISO_Ant1_2422



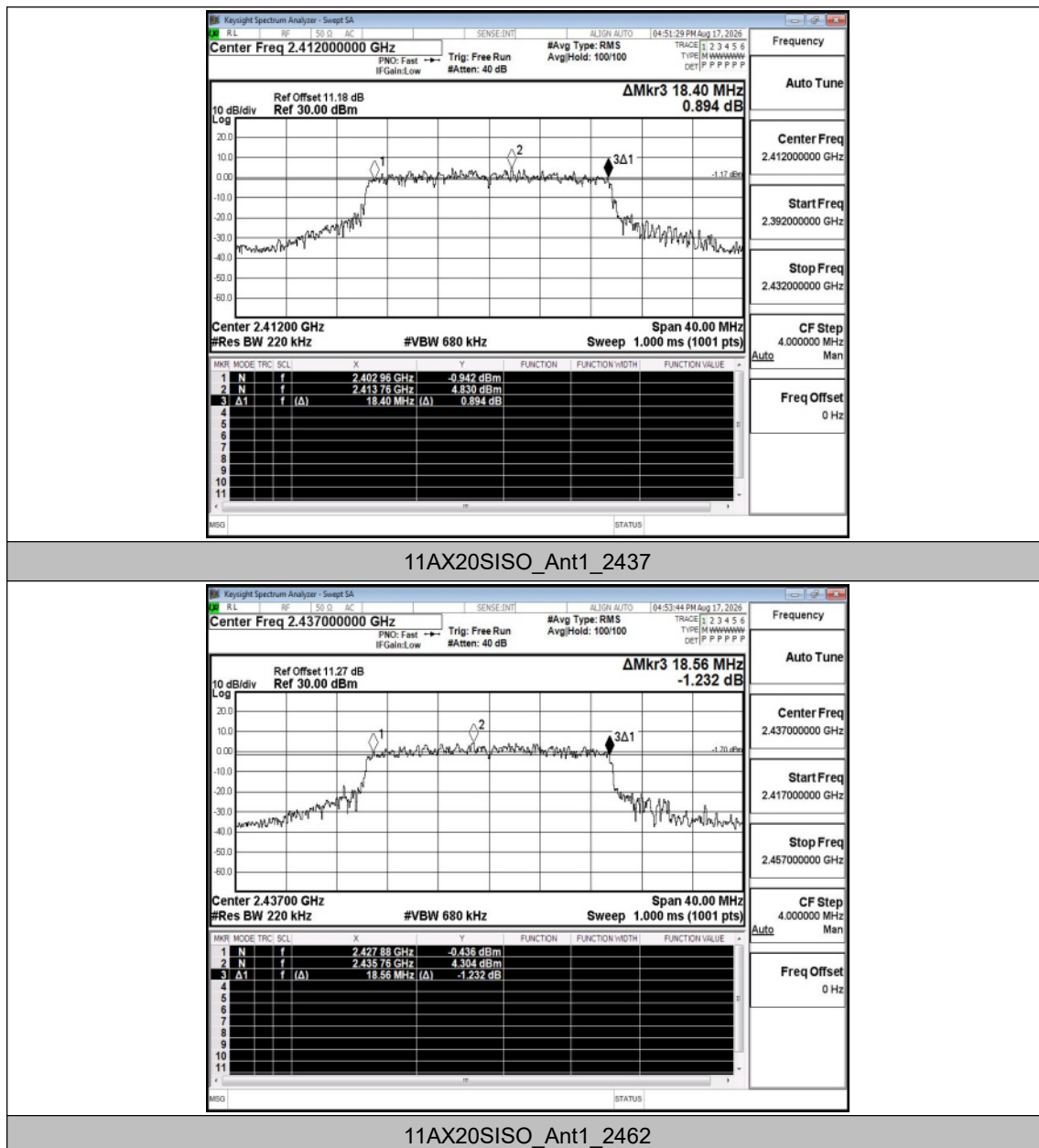
11N40SISO_Ant1_2437

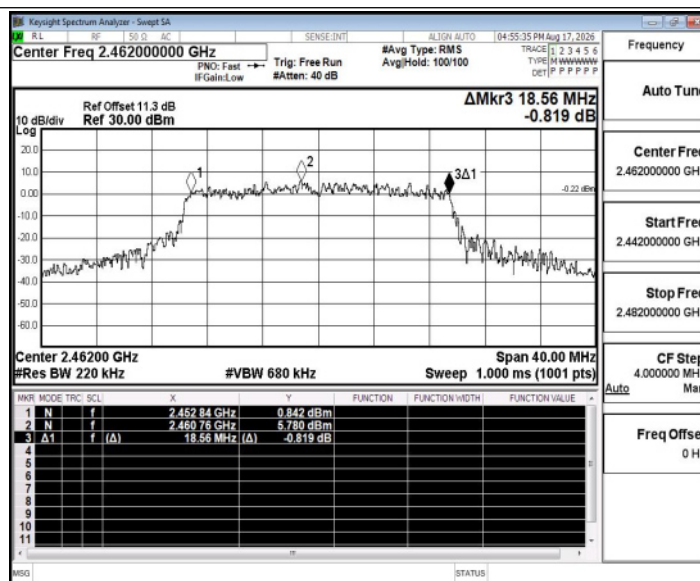


11N40SISO_Ant1_2452

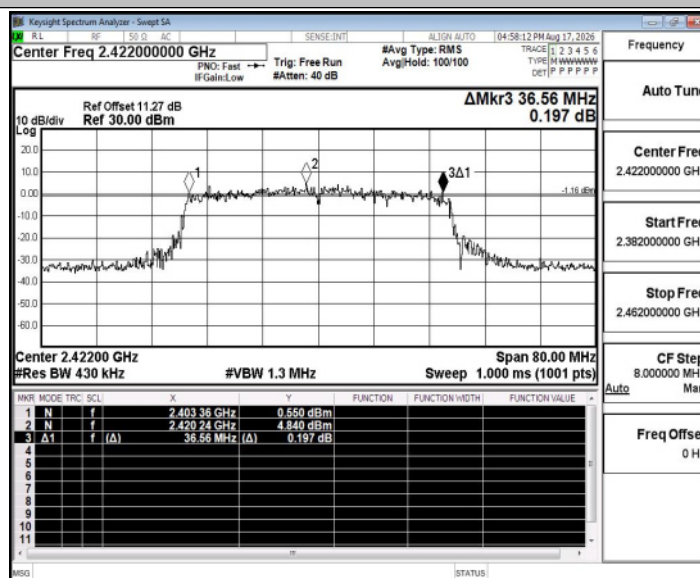


11AX20SISO_Ant1_2412

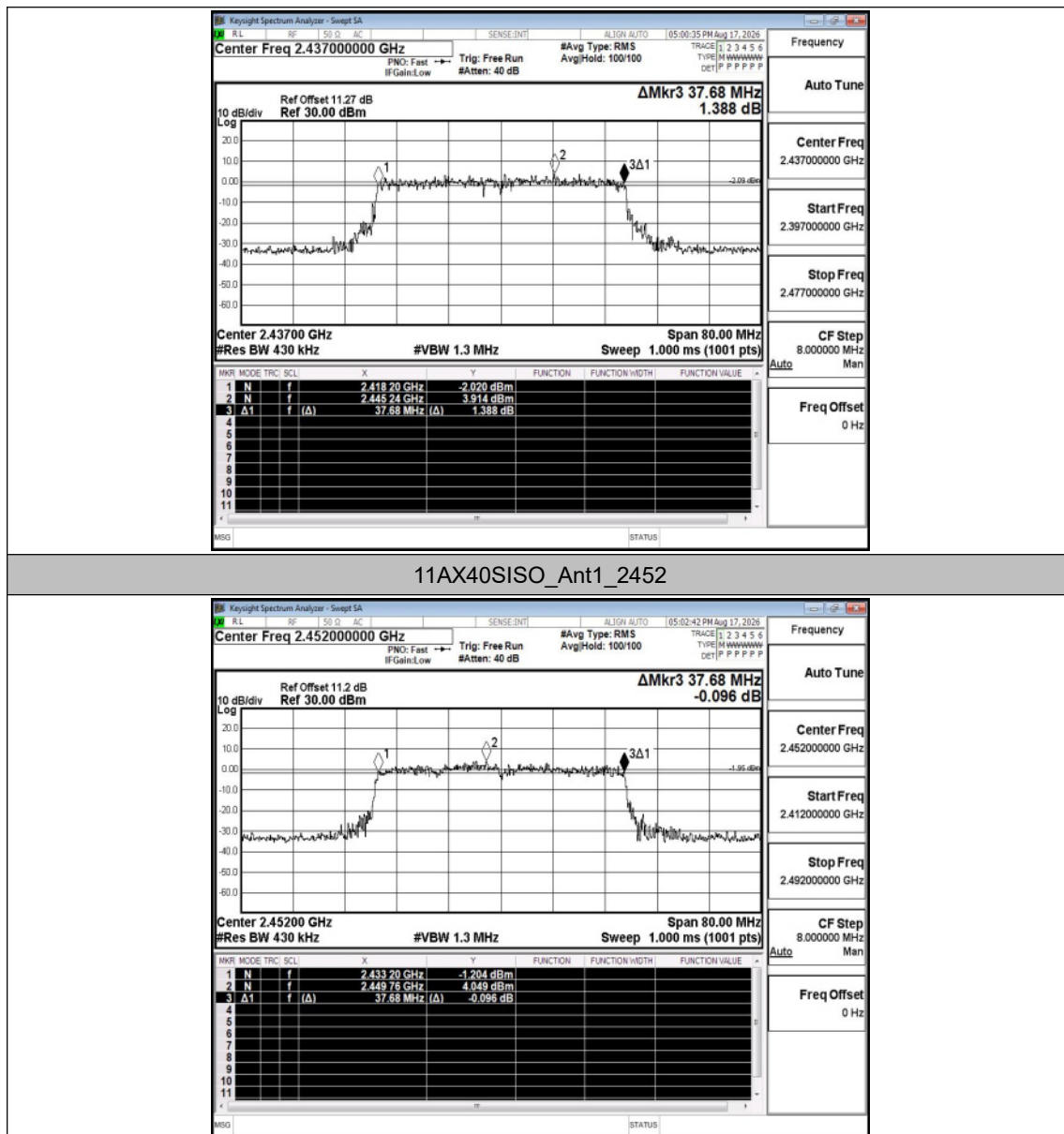




11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



A.2 Maximum Average conducted output power

Test Result

TestMode	Antenna	Frequency [MHz]	Measured Power	DC Factor [dB]	AV Power [dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	17.70	0.35	18.05	≤30.00	PASS
		2437	17.72	0.82	18.54	≤30.00	PASS
		2462	17.71	0.35	18.06	≤30.00	PASS
11G	Ant1	2412	16.90	1.80	18.70	≤30.00	PASS
		2437	15.92	1.80	18.72	≤30.00	PASS
		2462	16.92	2.15	18.07	≤30.00	PASS
11N20SISO	Ant1	2412	7.77	7.75	15.52	≤30.00	PASS
		2437	7.69	7.75	15.44	≤30.00	PASS
		2462	9.09	7.84	16.93	≤30.00	PASS
11N40SISO	Ant1	2422	5.80	10.57	16.37	≤30.00	PASS
		2437	5.56	9.85	15.41	≤30.00	PASS
		2452	5.49	9.85	15.34	≤30.00	PASS
11AX20SISO	Ant1	2412	5.82	9.10	14.92	≤30.00	PASS
		2437	5.61	8.75	14.36	≤30.00	PASS
		2462	6.84	8.75	15.59	≤30.00	PASS
11AX40SISO	Ant1	2422	4.50	10.57	15.07	≤30.00	PASS
		2437	4.14	10.79	14.93	≤30.00	PASS
		2452	3.67	10.99	14.66	≤30.00	PASS

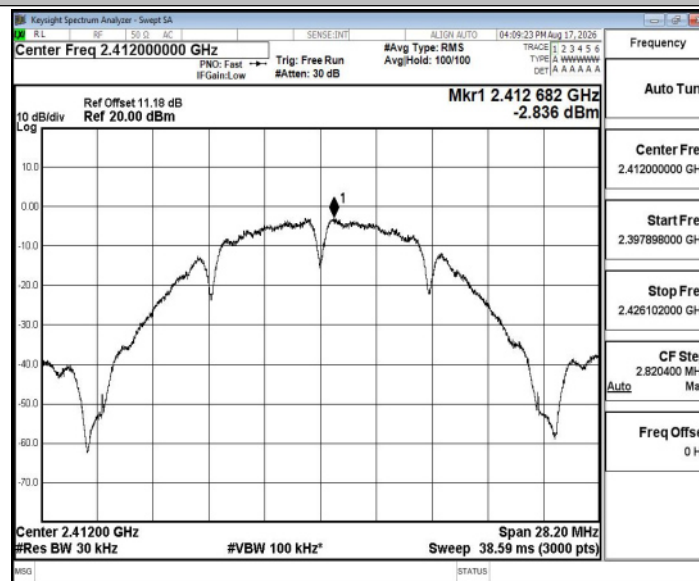
A.3 Maximum power spectral density

Test Result

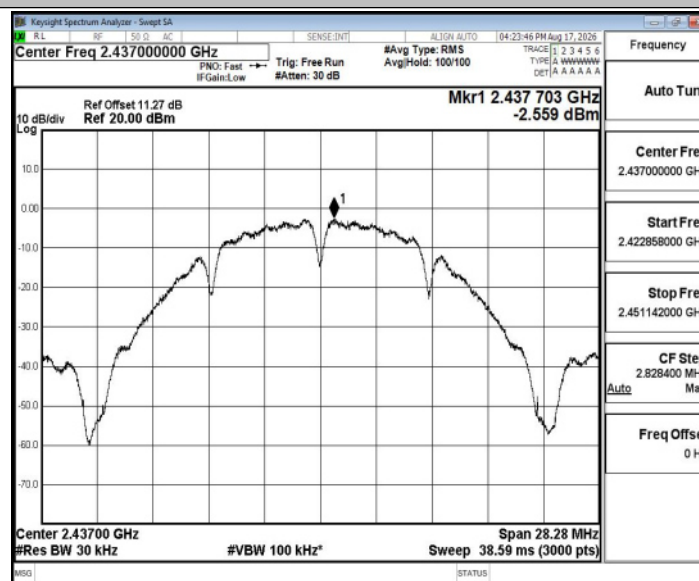
TestMode	Antenna	Frequency[MHz]	Measured PSD [dBm/30kHz]	DC Factor [dB]	Result [dBm/30kHz]	Total PSD (dBm/3kHz)	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-2.84	0.35	-2.49	-12.49	≤8.00	PASS
		2437	-2.56	0.82	-1.74	-11.74	≤8.00	PASS
		2462	-1.89	0.35	-1.54	-11.54	≤8.00	PASS
11G	Ant1	2412	-6.06	1.80	-4.26	-14.26	≤8.00	PASS
		2437	-5.11	1.80	-3.31	-13.31	≤8.00	PASS
		2462	-4.95	2.15	-2.80	-12.80	≤8.00	PASS
11N20SISO	Ant1	2412	-14.3	7.75	-6.55	-16.55	≤8.00	PASS
		2437	-13.31	7.75	-5.56	-15.56	≤8.00	PASS
		2462	-13.46	7.84	-5.62	-15.62	≤8.00	PASS
11N40SISO	Ant1	2422	-18.01	10.57	-7.44	-17.44	≤8.00	PASS
		2437	-17.54	9.85	-7.69	-17.69	≤8.00	PASS
		2452	-18.18	9.85	-8.33	-18.33	≤8.00	PASS
11AX20SISO	Ant1	2412	-15.15	9.10	-6.05	-16.05	≤8.00	PASS
		2437	-16.24	8.75	-7.49	-17.49	≤8.00	PASS
		2462	-13.07	8.75	-4.32	-14.32	≤8.00	PASS
11AX40SISO	Ant1	2422	-20.04	10.57	-9.47	-19.47	≤8.00	PASS
		2437	-19.51	10.79	-8.72	-18.72	≤8.00	PASS
		2452	-20.38	10.99	-9.39	-19.39	≤8.00	PASS

Test Graphs

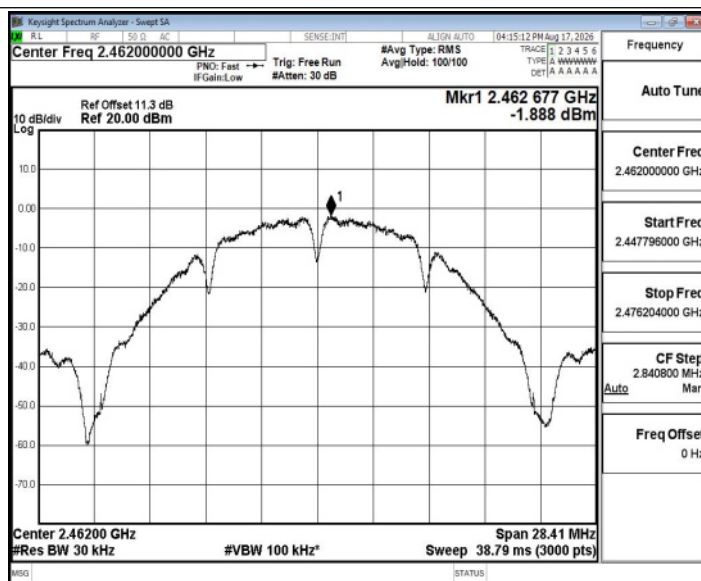
11B_Ant1_2412



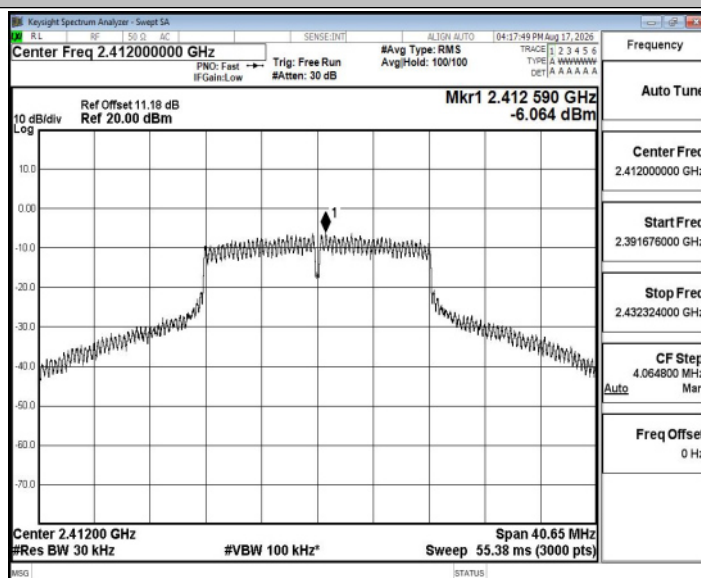
11B_Ant1_2437



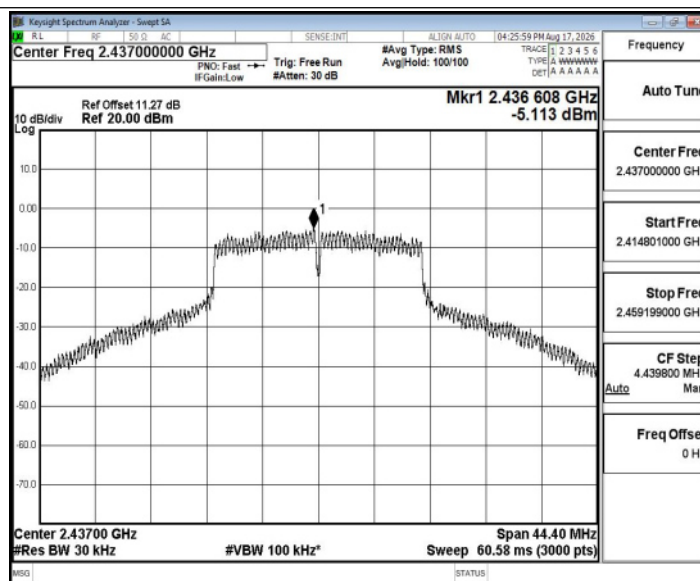
11B_Ant1_2462



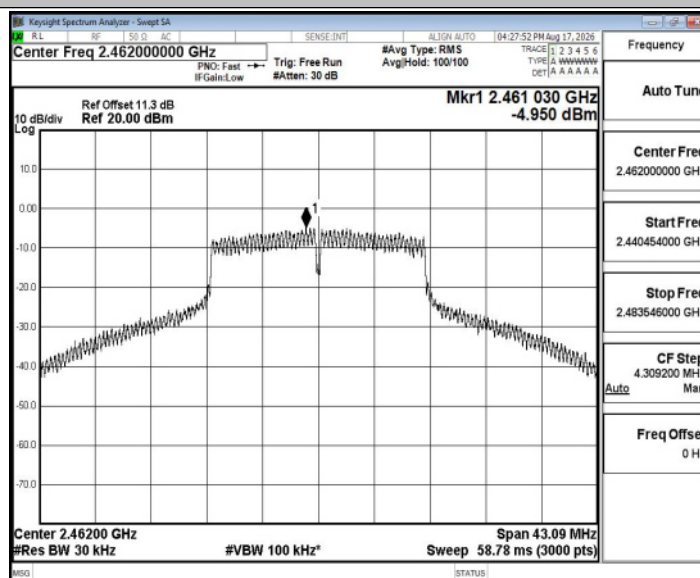
11G_Ant1_2412



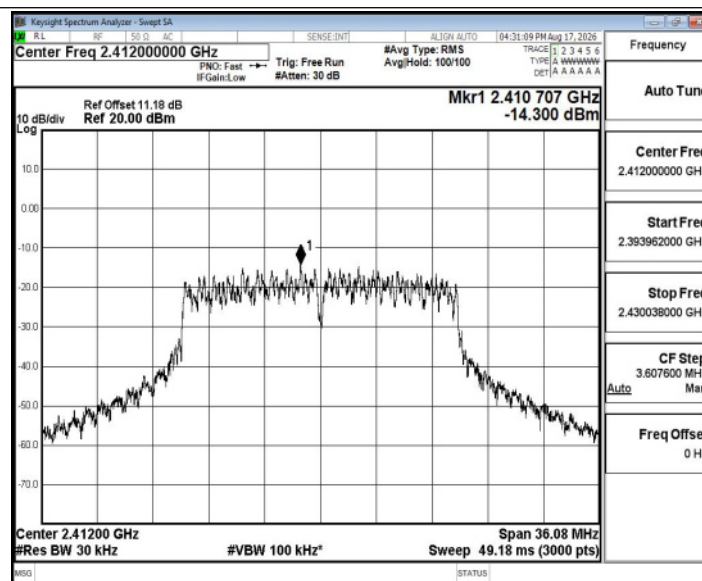
11G_Ant1_2437



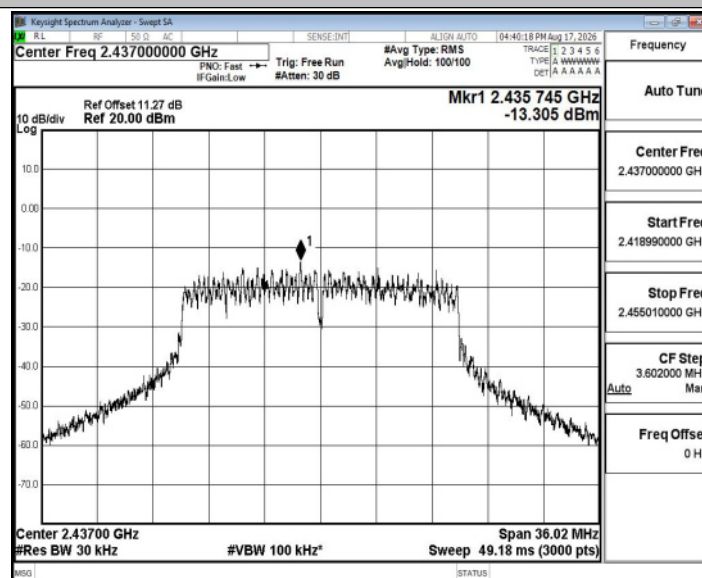
11G_Ant1_2462



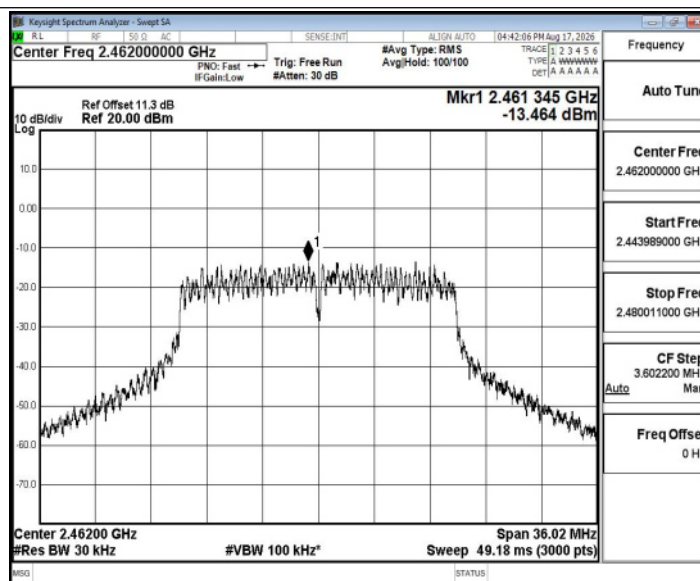
11N20SISO_Ant1_2412



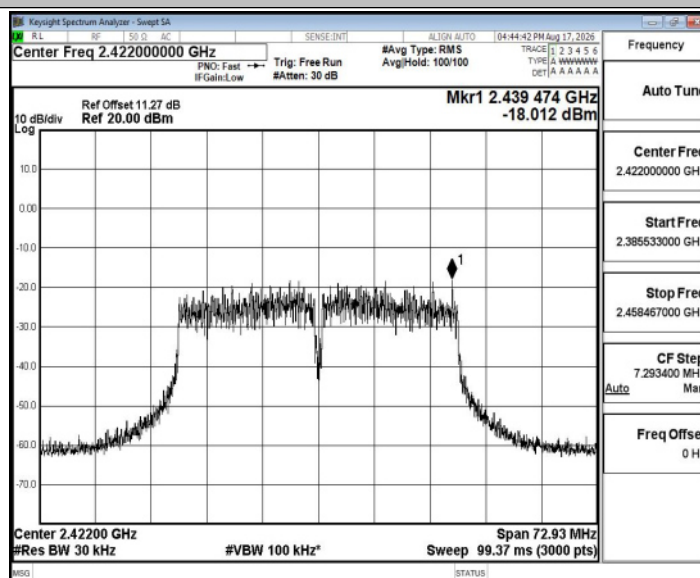
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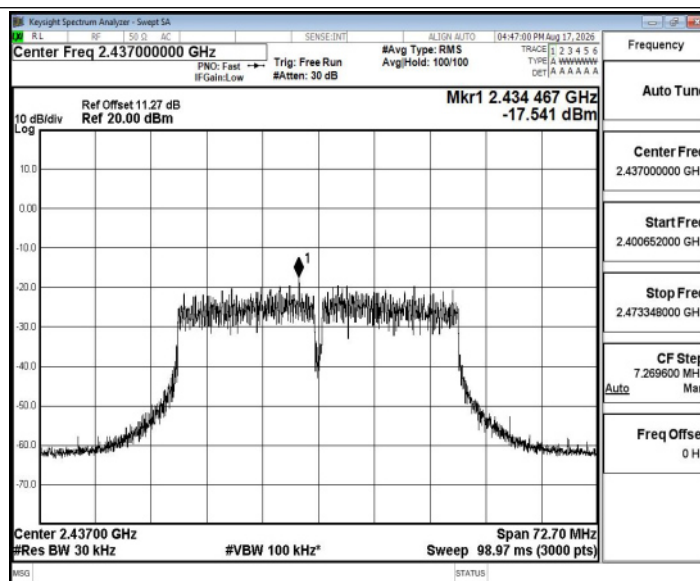
11N20SISO_Ant1_2462



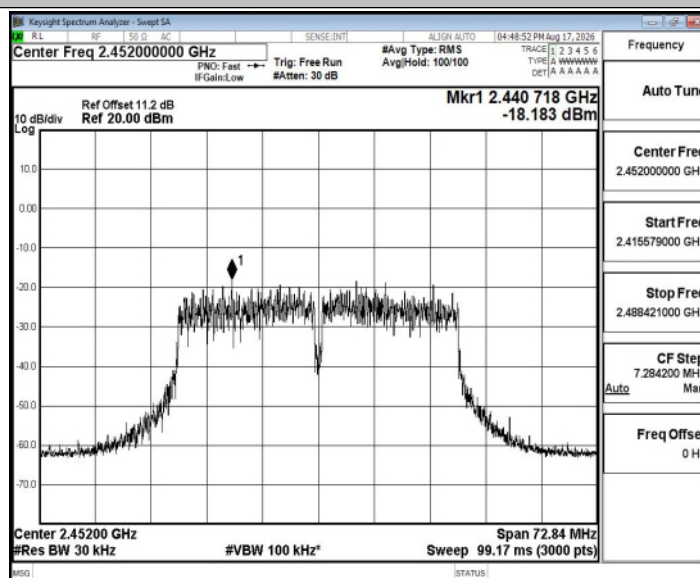
11N40SISO_Ant1_2422



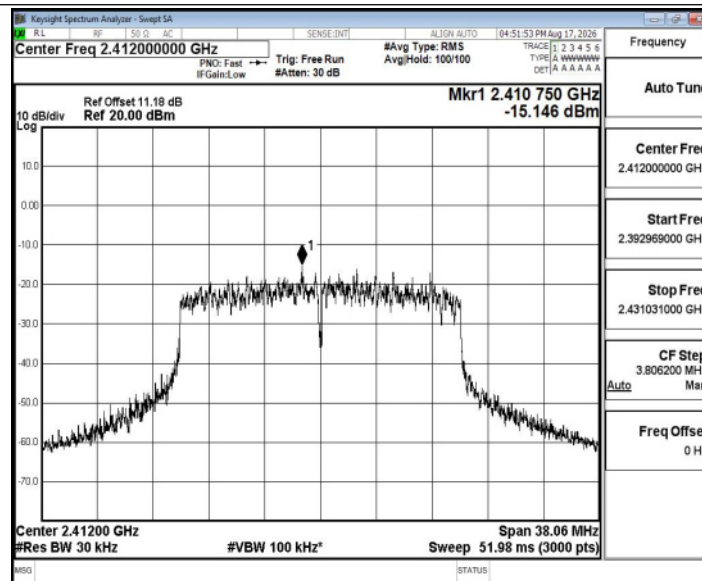
11N40SISO_Ant1_2437



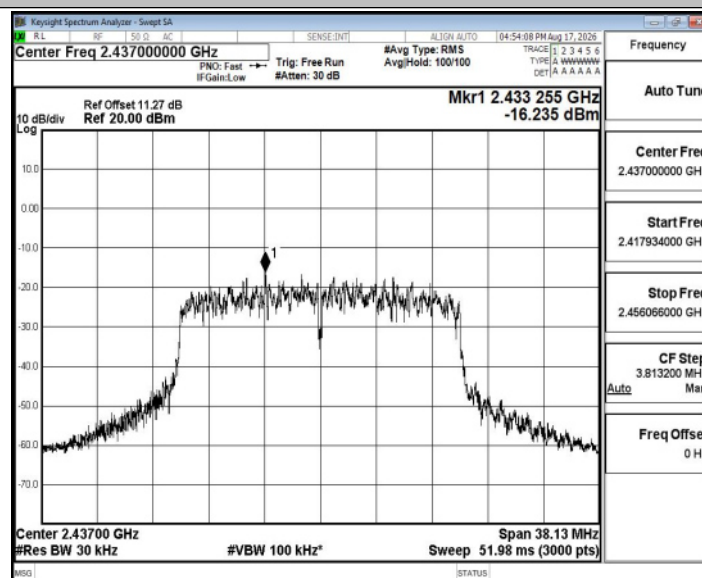
11N40SISO_Ant1_2452



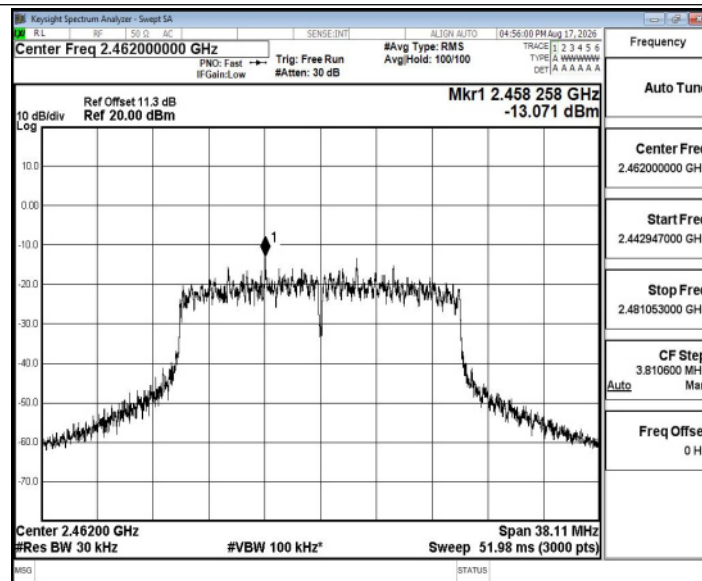
11AX20SISO_Ant1_2412



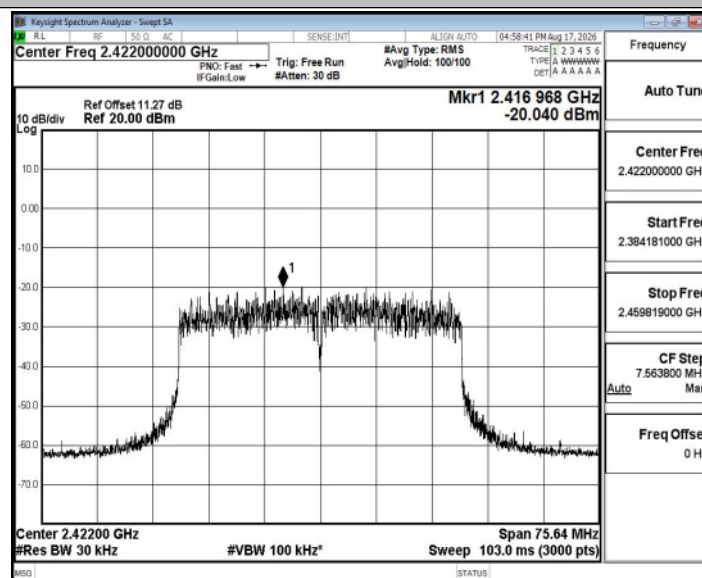
11AX20SISO_Ant1_2437



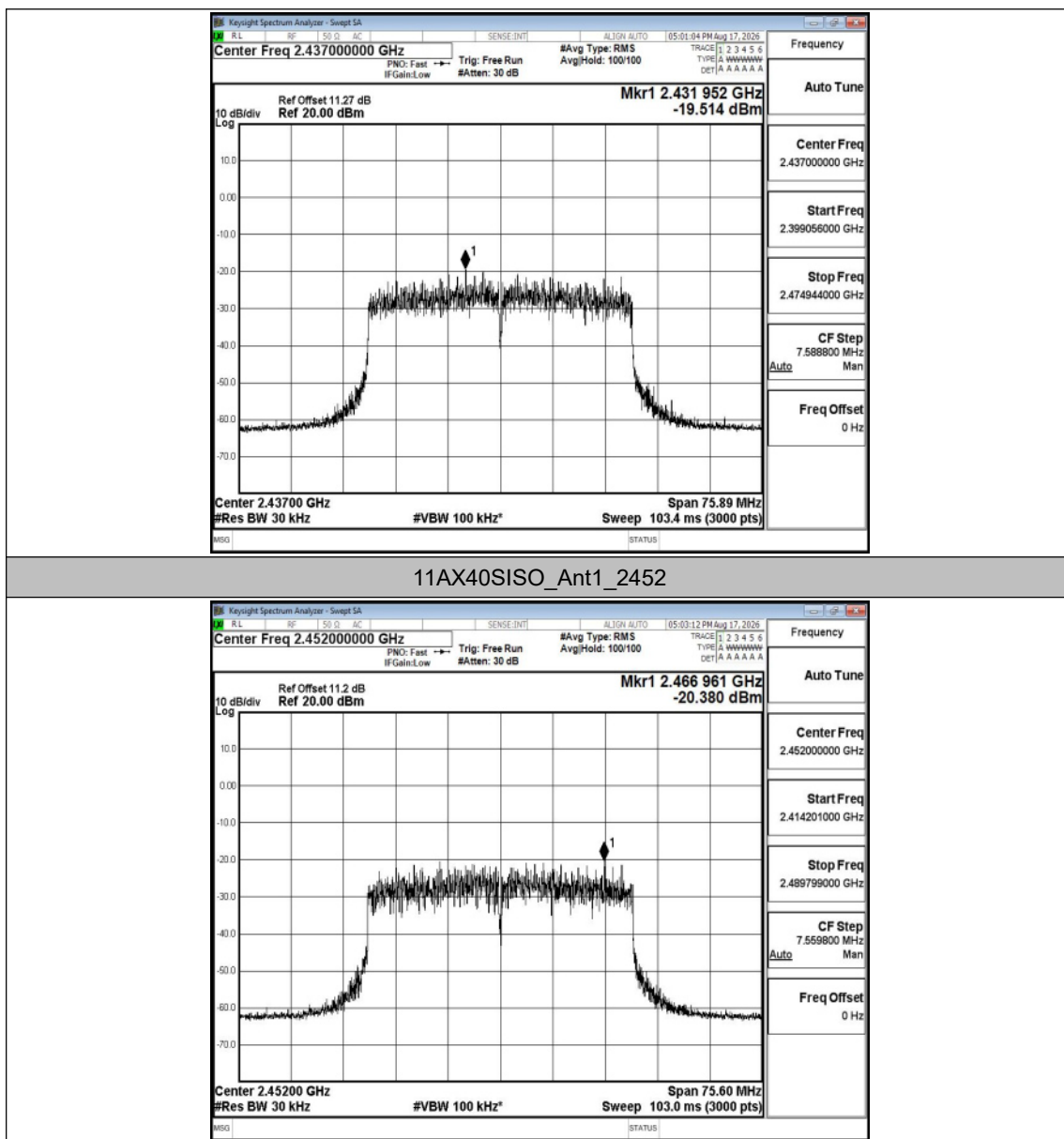
11AX20SISO_Ant1_2462



11AX40SISO_Ant1_2422



11AX40SISO_Ant1_2437



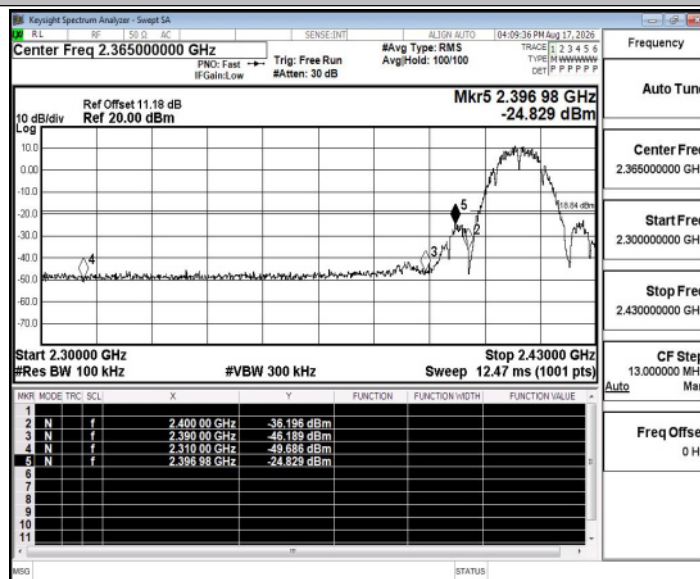
A.4 Band edge measurements

Test Result

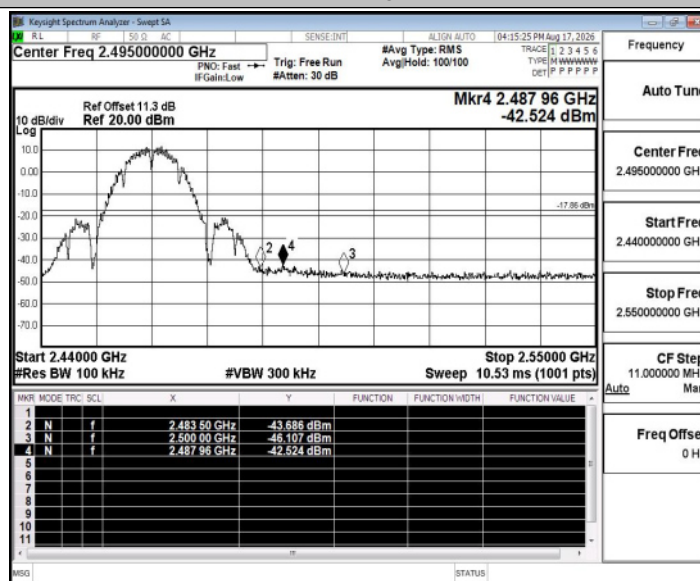
TestMode	Antenna	Channel Name	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	11.16	-24.83	≤-18.84	PASS
		High	2462	12.14	-42.52	≤-17.86	PASS
11G	Ant1	Low	2412	8.61	-21.59	≤-21.39	PASS
		High	2462	8.73	-23.82	≤-21.27	PASS
11N20SISO	Ant1	Low	2412	4.21	-39.42	≤-25.79	PASS
		High	2462	6.23	-39.2	≤-23.77	PASS
11N40SISO	Ant1	Low	2422	2.01	-31.21	≤-27.99	PASS
		High	2452	1.39	-38.34	≤-28.61	PASS
11AX20SISO	Ant1	Low	2412	3.25	-27.38	≤-26.75	PASS
		High	2462	4.69	-42.76	≤-25.31	PASS
11AX40SISO	Ant1	Low	2422	0.82	-34.04	≤-29.18	PASS
		High	2452	0.36	-41.03	≤-29.64	PASS

Test Graphs

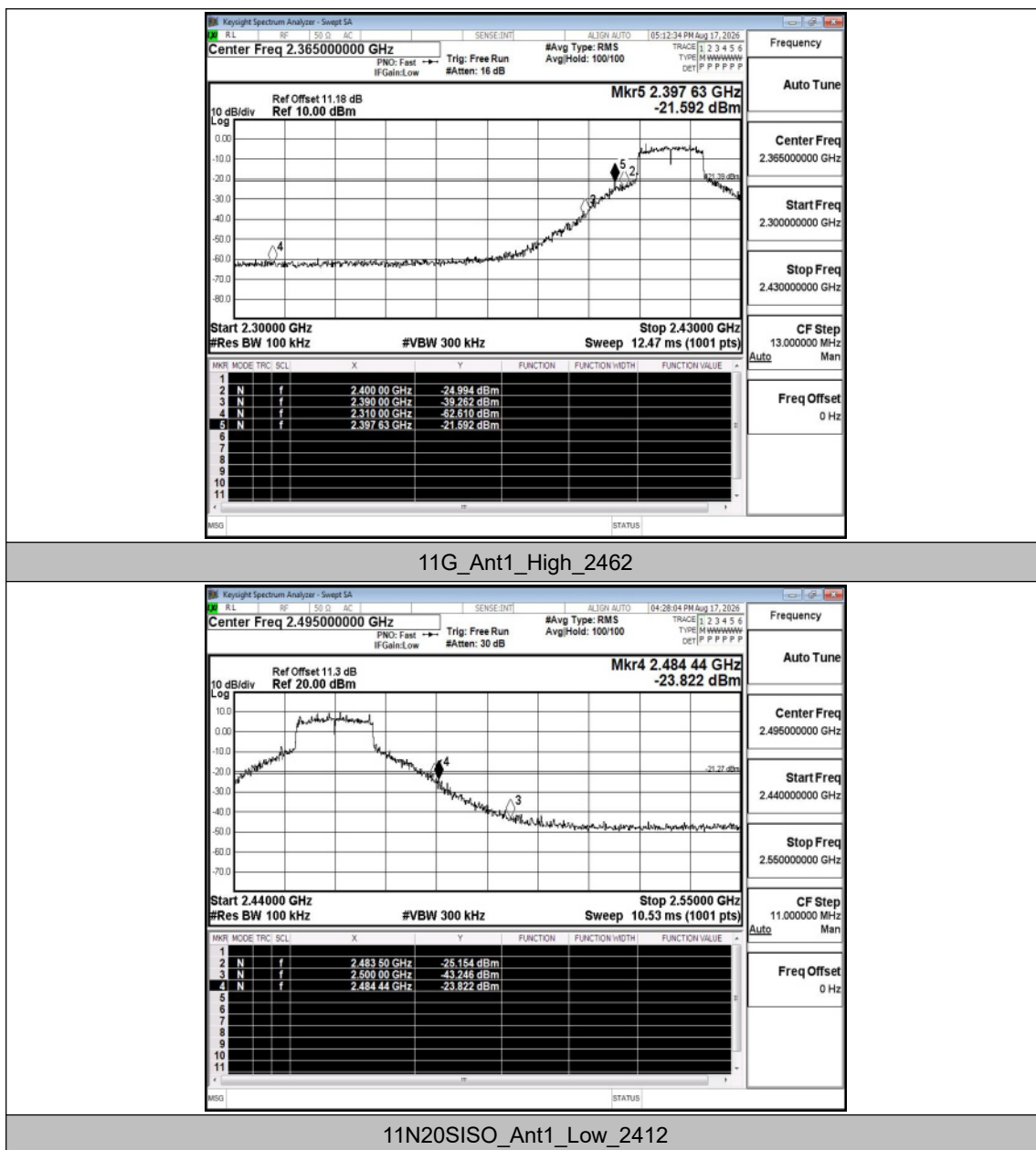
11B_Ant1_Low_2412

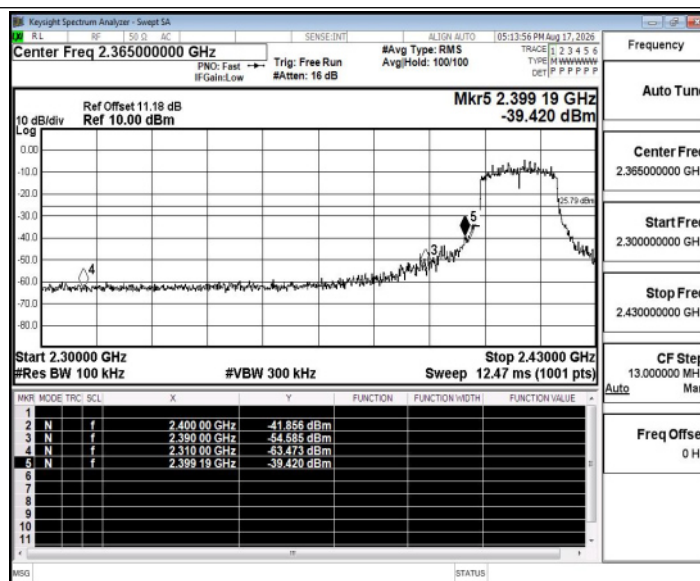


11B_Ant1_High_2462

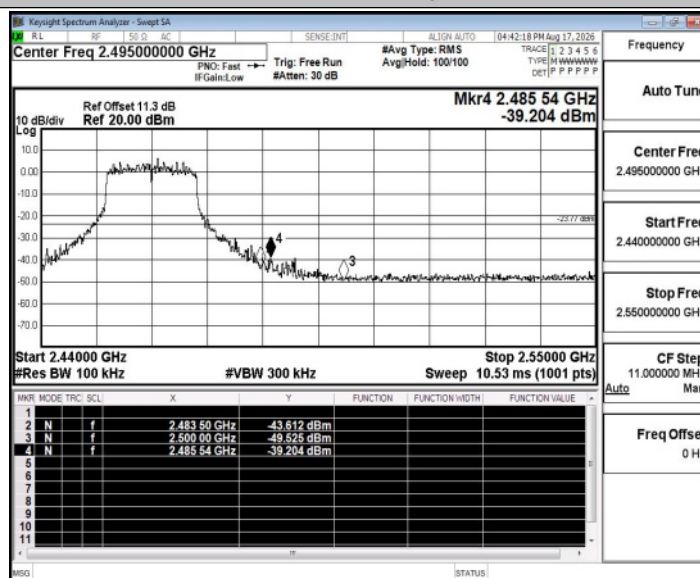


11G_Ant1_Low_2412

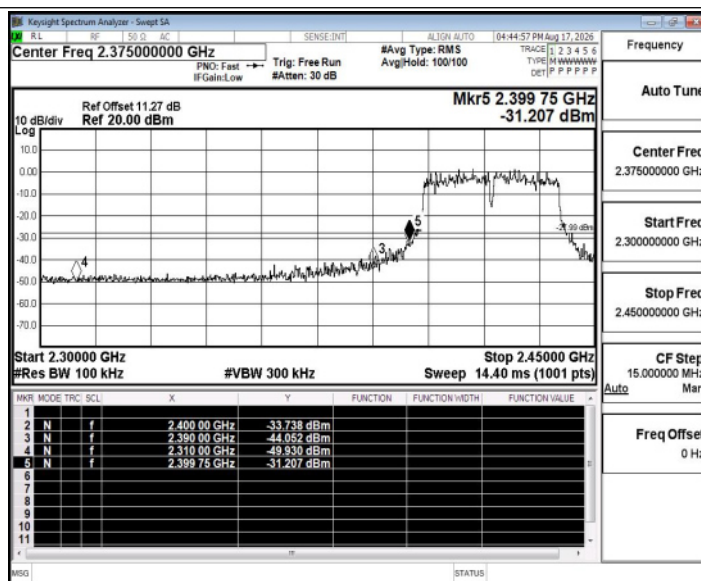




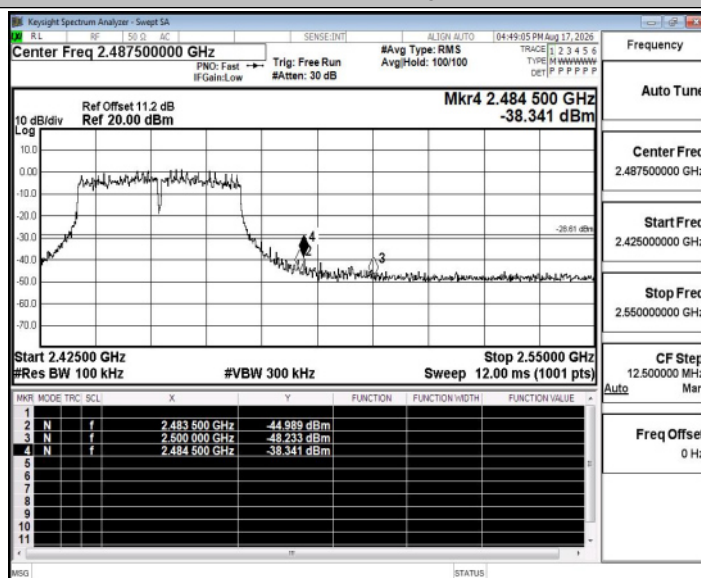
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452



11AX20SISO_Ant1_Low_2412