



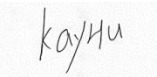
Appendix B

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Tigapo Cards vending machine

Test Model: LKS8500 series

Environmental Conditions

Temperature:	22.2℃
Relative Humidity:	53.5%
ATM Pressure:	100.0 kPa
Test Engineer:	
	Kay Hu
Supervised by:	
	Li Huan



B.1 DTS Bandwidth

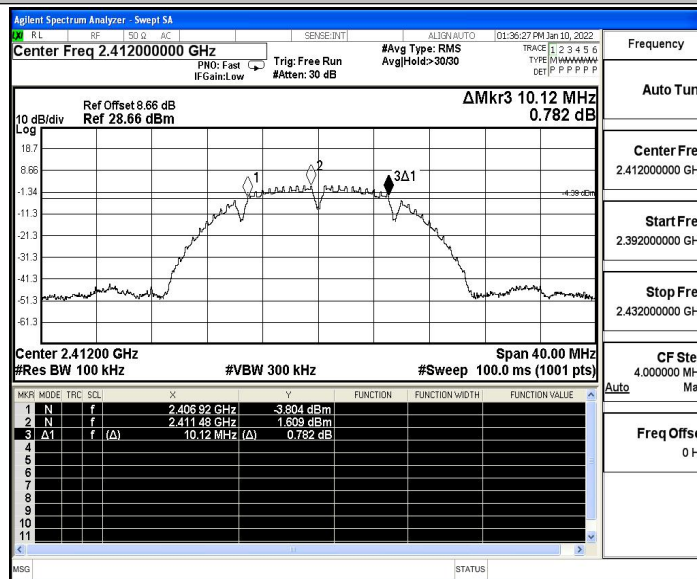
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.120	2406.920	2417.040	0.5	PASS
		2437	10.120	2431.920	2442.040	0.5	PASS
		2462	10.120	2456.920	2467.040	0.5	PASS
11G	Ant1	2412	16.360	2403.800	2420.160	0.5	PASS
		2437	16.360	2428.800	2445.160	0.5	PASS
		2462	16.360	2453.800	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.600	2403.200	2420.800	0.5	PASS
		2437	17.560	2428.200	2445.760	0.5	PASS
		2462	17.560	2453.200	2470.760	0.5	PASS
11N40SISO	Ant1	2422	36.320	2403.840	2440.160	0.5	PASS
		2437	36.320	2418.840	2455.160	0.5	PASS
		2452	36.320	2433.840	2470.160	0.5	PASS

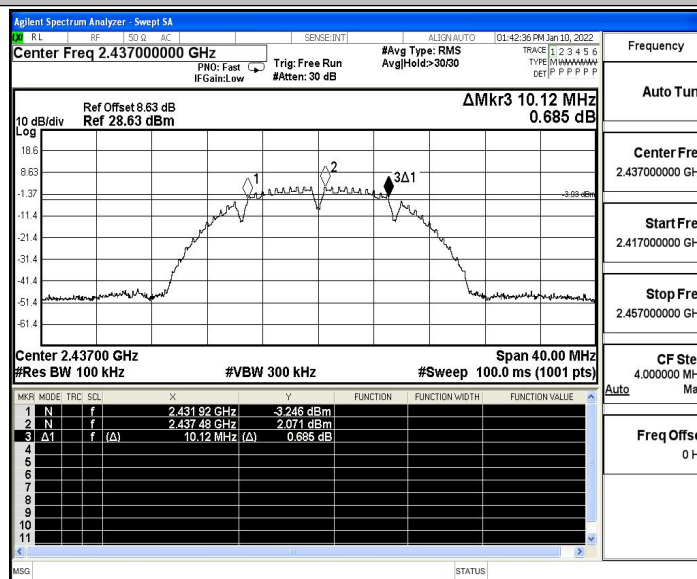


Test Graphs

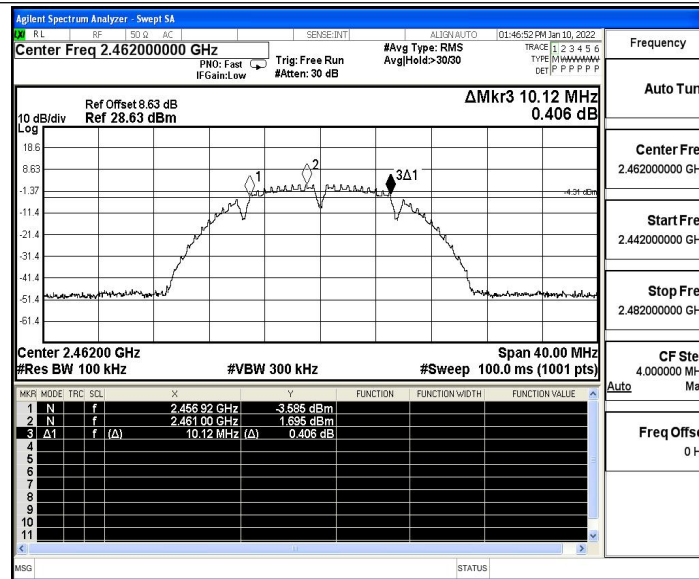
11B_Ant1_2412



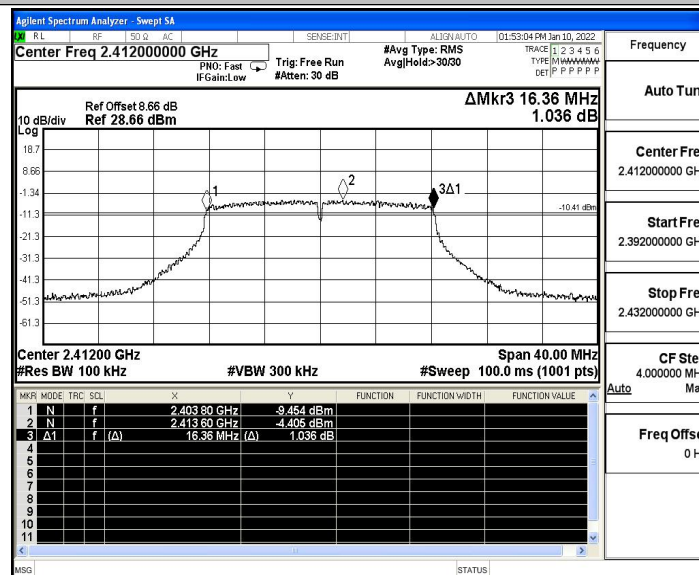
11B_Ant1_2437



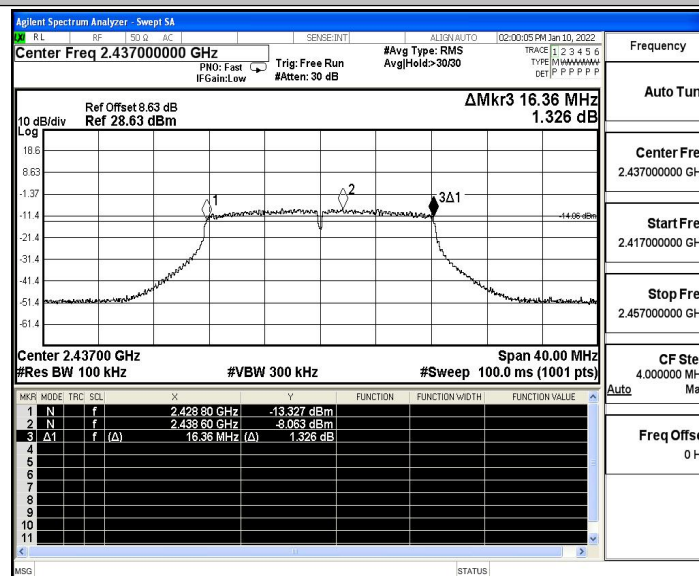
11B_Ant1_2462



11G_Ant1_2412

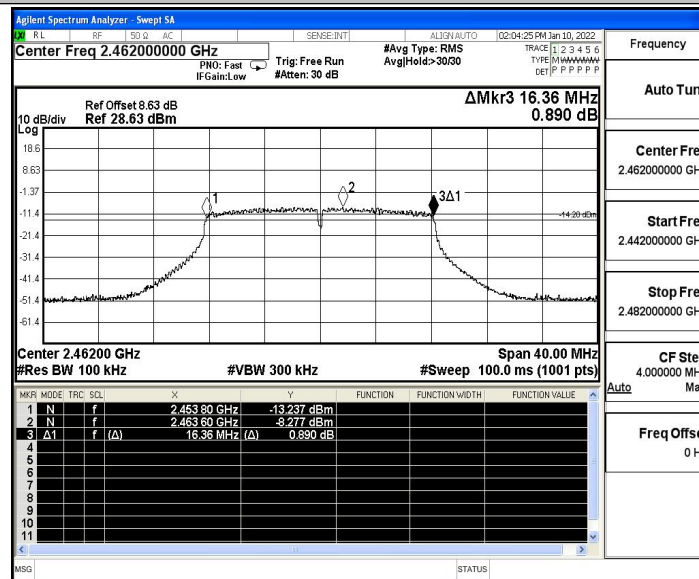


11G_Ant1_2437

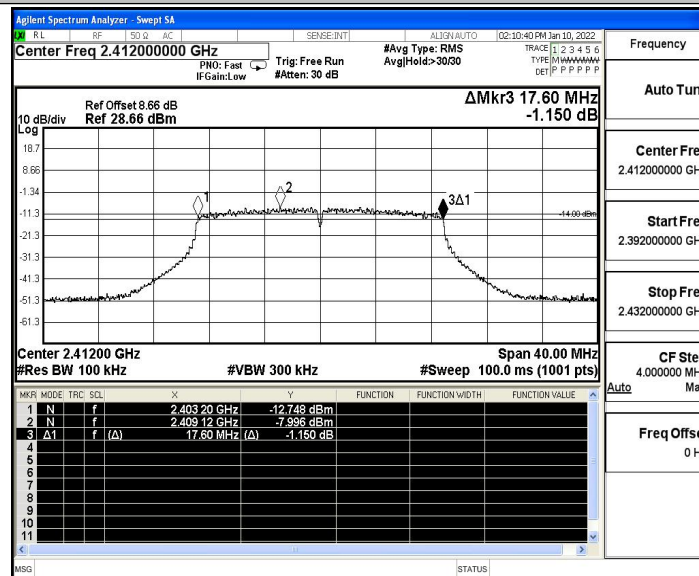




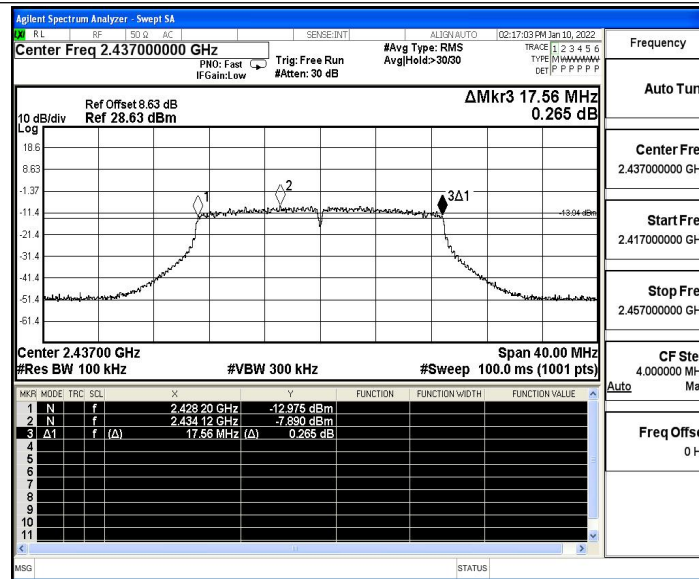
11G_Ant1_2462



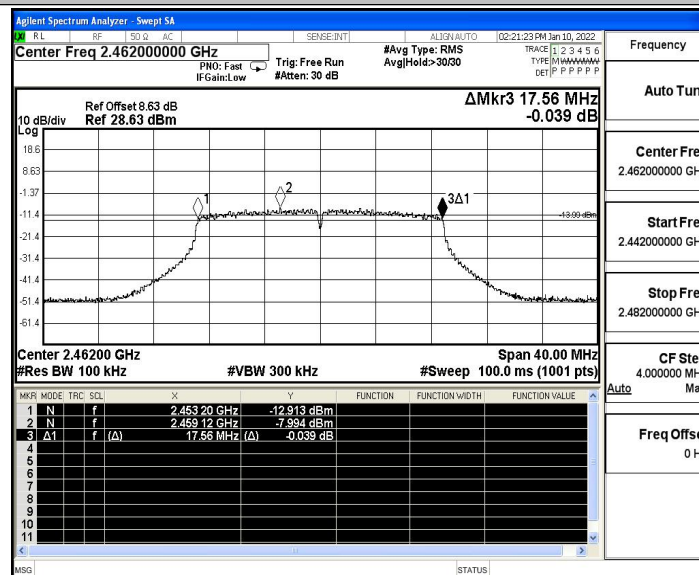
11N20SISO_Ant1_2412



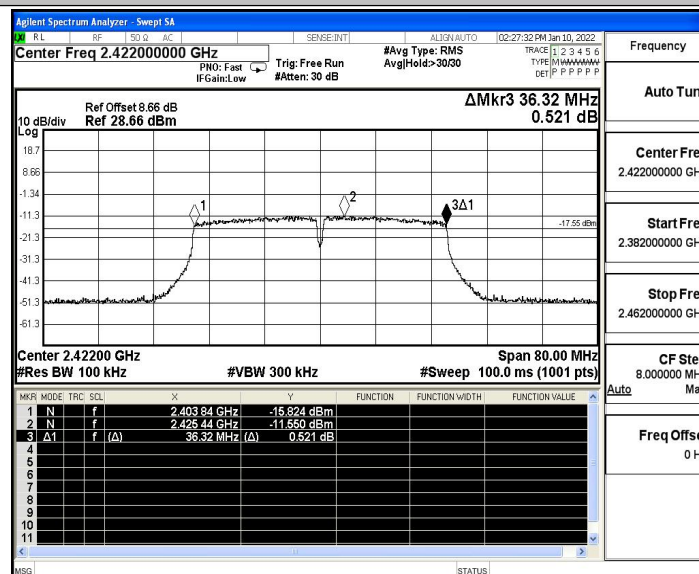
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

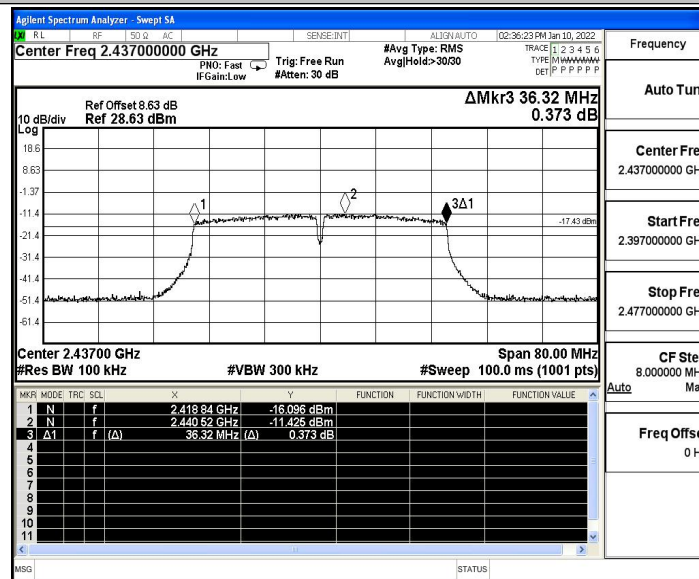


11N40SISO_Ant1_2422

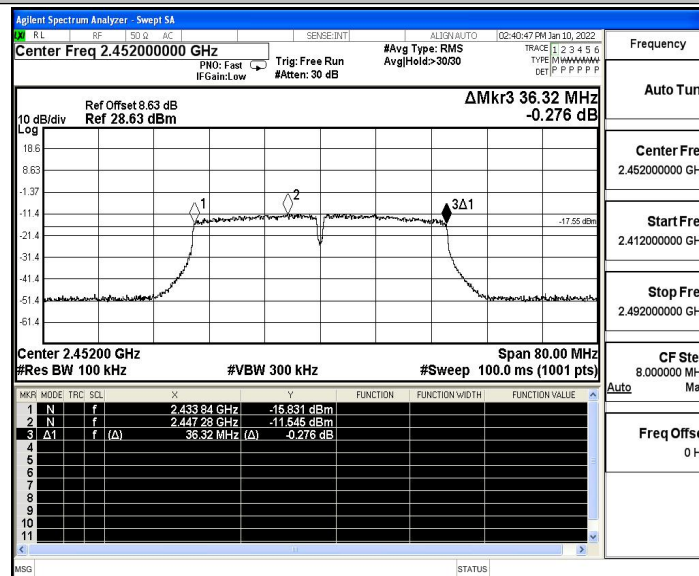




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





B.2 Maximum peak conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	15.44	≤30.00	PASS
		2437	15.90	≤30.00	PASS
		2462	15.50	≤30.00	PASS
11G	Ant1	2412	13.83	≤30.00	PASS
		2437	13.74	≤30.00	PASS
		2462	13.61	≤30.00	PASS
11N20SISO	Ant1	2412	13.66	≤30.00	PASS
		2437	13.64	≤30.00	PASS
		2462	13.50	≤30.00	PASS
11N40SISO	Ant1	2422	13.79	≤30.00	PASS
		2437	13.70	≤30.00	PASS
		2452	13.71	≤30.00	PASS



B.3 Maximum power spectral density

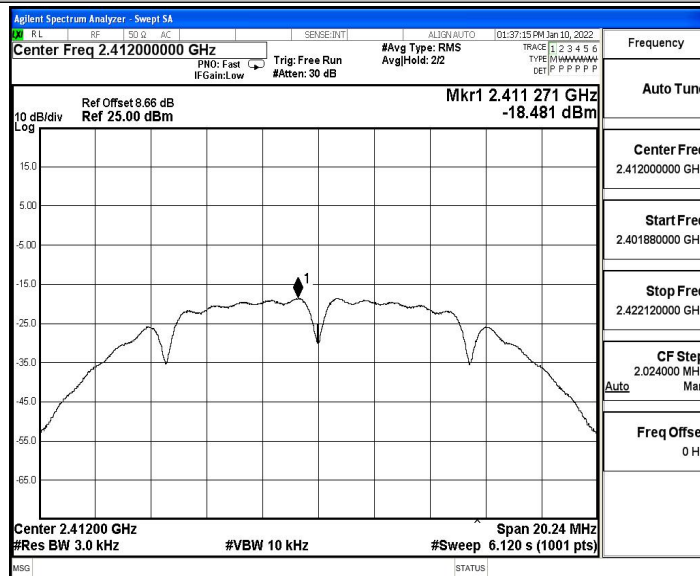
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-18.48	≤8.00	PASS
		2437	-17.94	≤8.00	PASS
		2462	-18.41	≤8.00	PASS
11G	Ant1	2412	-22.38	≤8.00	PASS
		2437	-22.56	≤8.00	PASS
		2462	-22.36	≤8.00	PASS
11N20SISO	Ant1	2412	-22.3	≤8.00	PASS
		2437	-22.43	≤8.00	PASS
		2462	-21.73	≤8.00	PASS
11N40SISO	Ant1	2422	-22.38	≤8.00	PASS
		2437	-22.67	≤8.00	PASS
		2452	-22.11	≤8.00	PASS

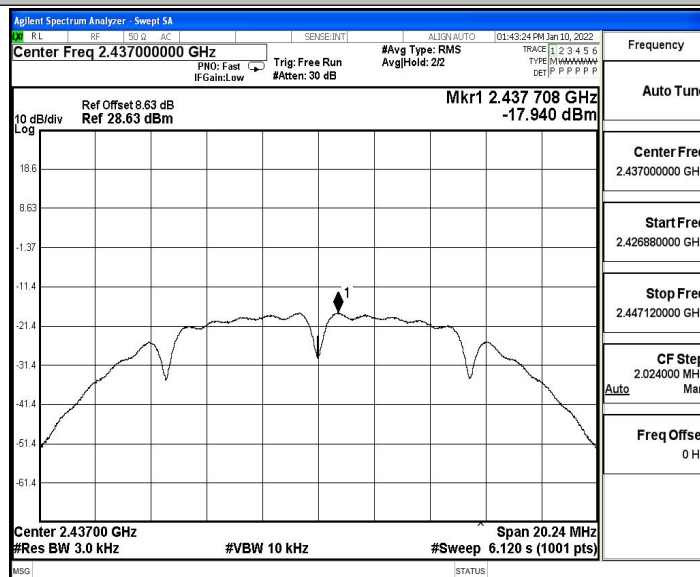


Test Graphs

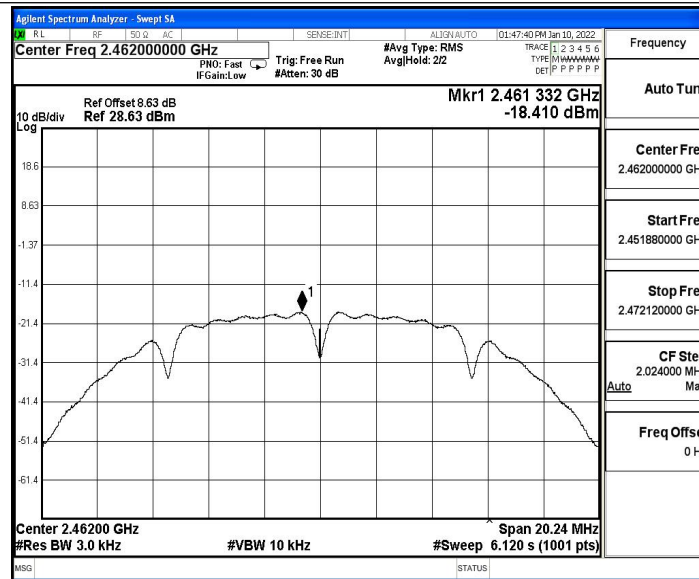
11B_Ant1_2412



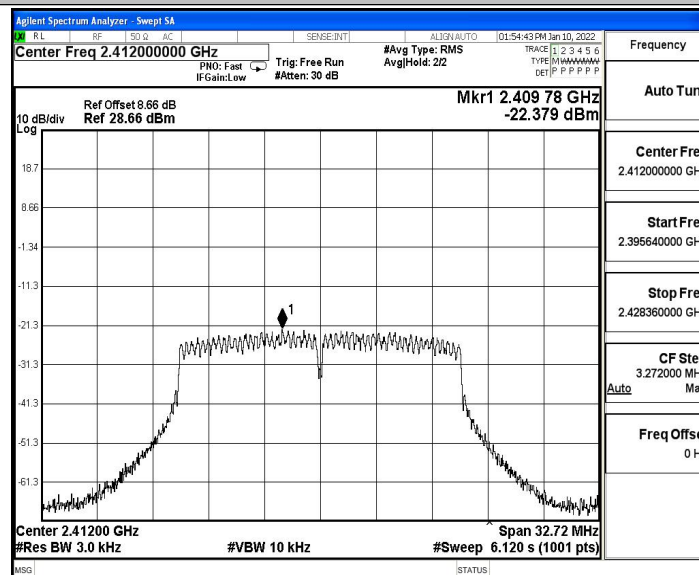
11B_Ant1_2437



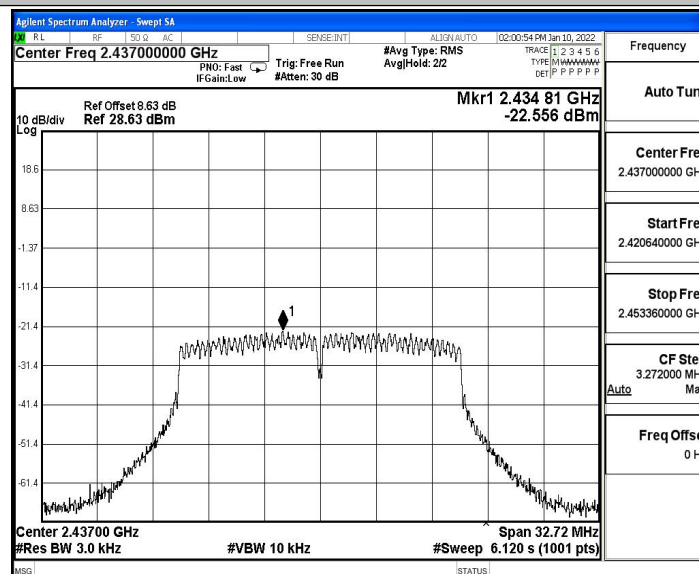
11B_Ant1_2462



11G_Ant1_2412

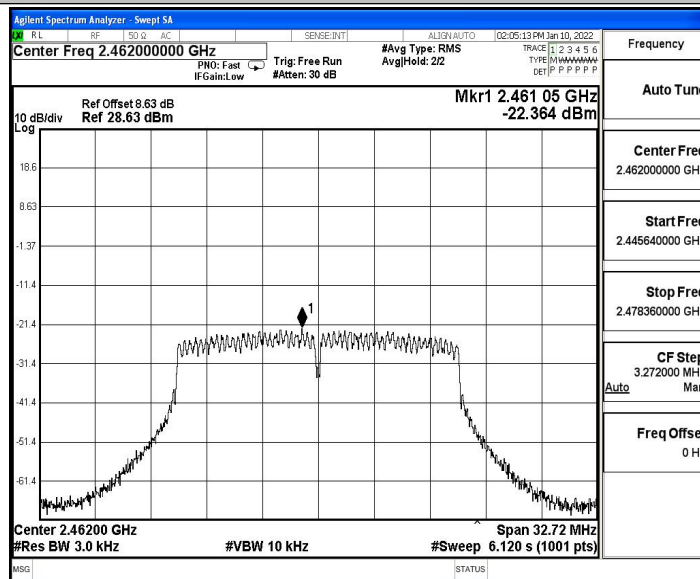


11G_Ant1_2437

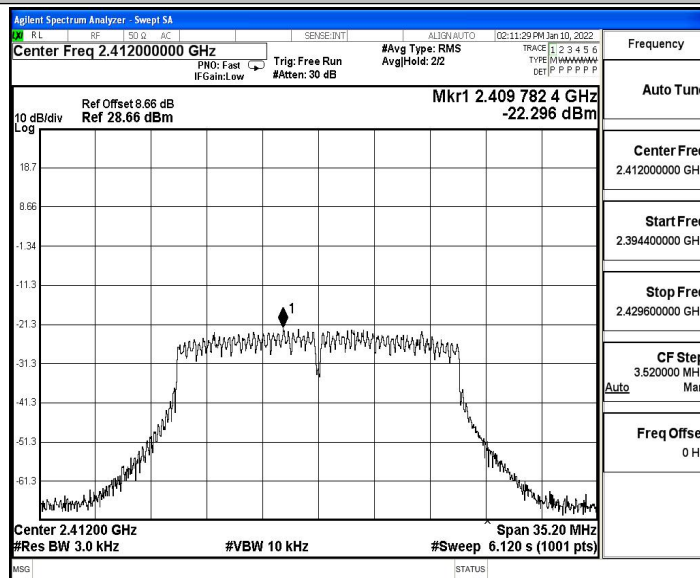




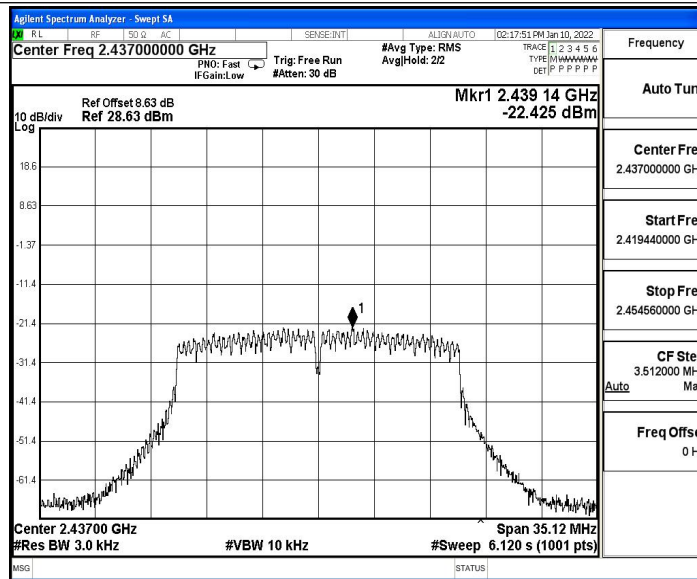
11G_Ant1_2462



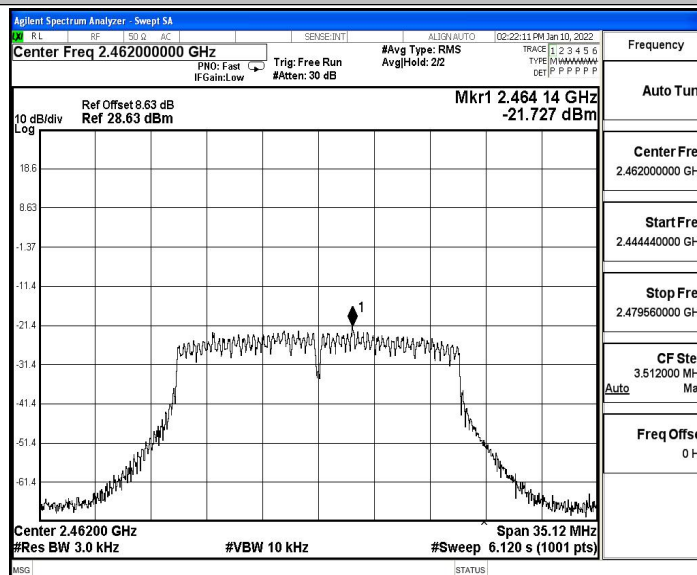
11N20SISO_Ant1_2412



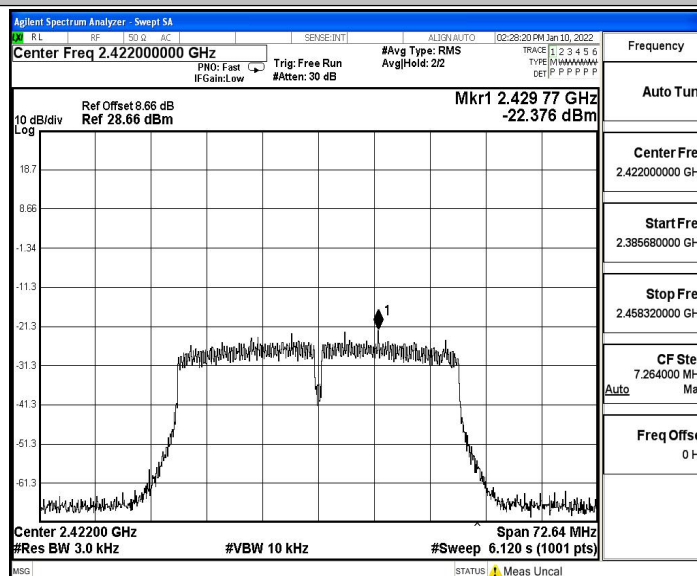
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

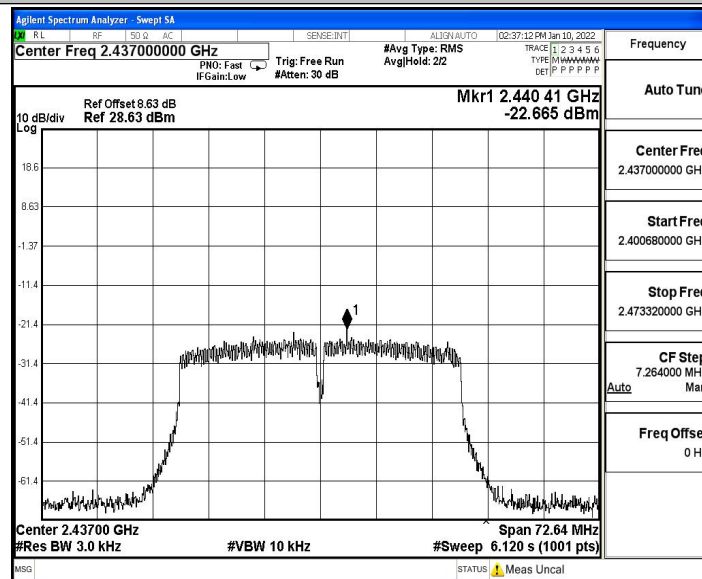


11N40SISO_Ant1_2422

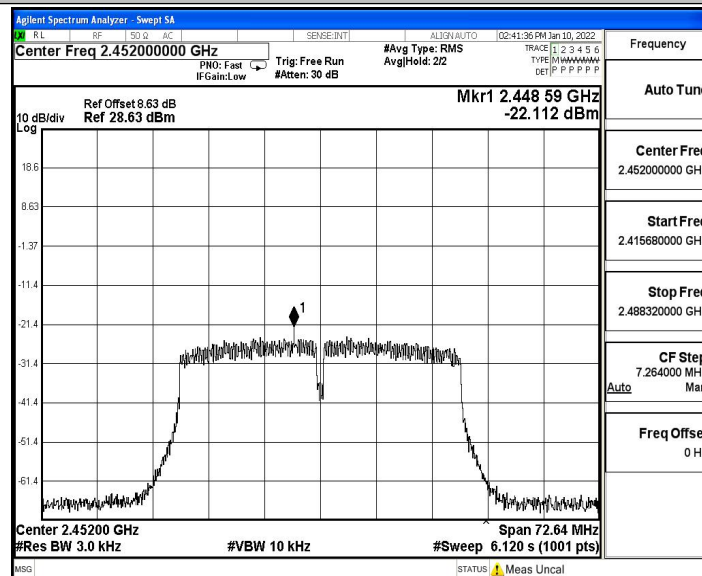




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





B.4 Band edge measurements

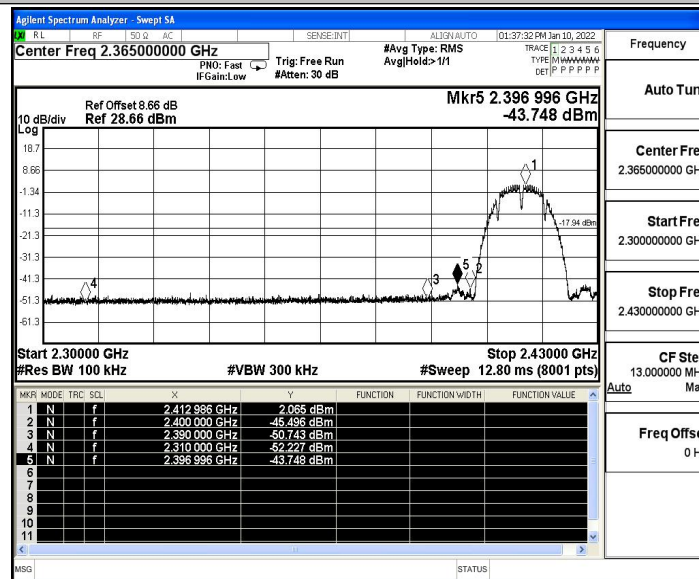
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.07	-43.75	≤ -17.94	PASS
		High	2462	1.99	-47.58	≤ -18.01	PASS
11G	Ant1	Low	2412	-7.83	-44.38	≤ -27.83	PASS
		High	2462	-8.12	-47.49	≤ -28.12	PASS
11N20SISO	Ant1	Low	2412	-7.86	-41.55	≤ -27.86	PASS
		High	2462	-8.10	-47.83	≤ -28.1	PASS
11N40SISO	Ant1	Low	2422	-11.29	-45.39	≤ -31.29	PASS
		High	2452	-11.28	-47.66	≤ -31.28	PASS

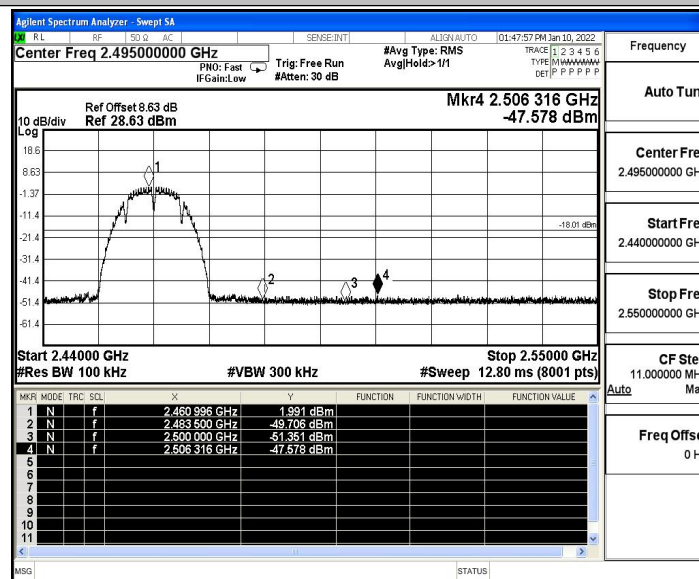


Test Graphs

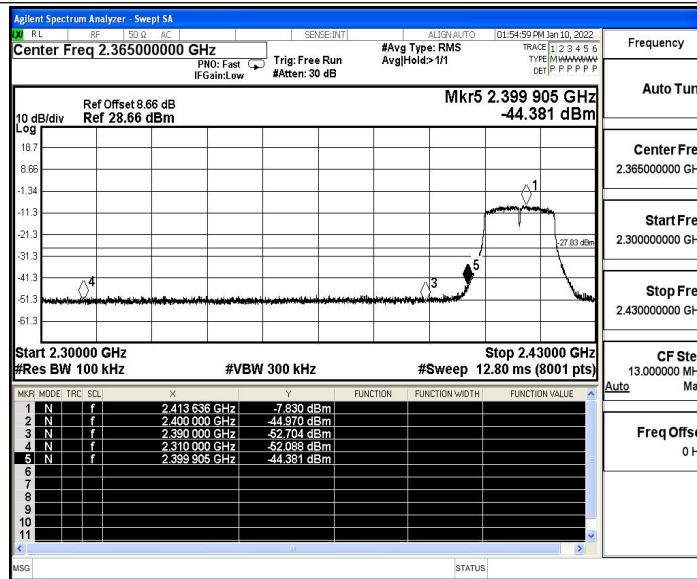
11B_Ant1_Low_2412



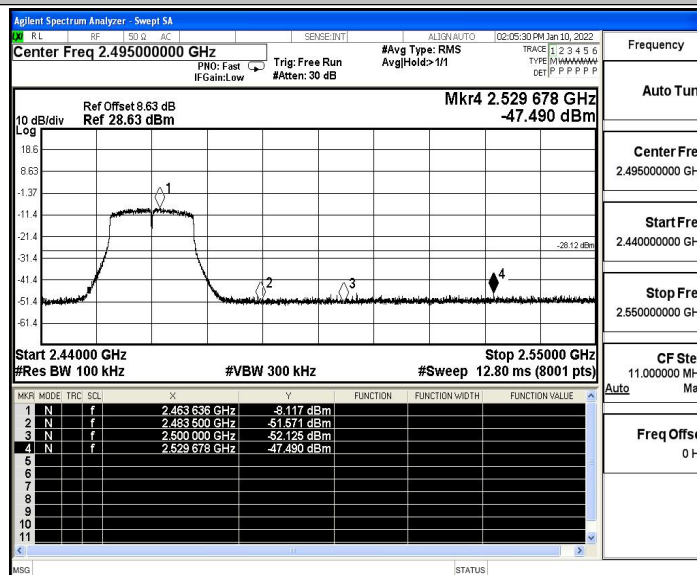
11B_Ant1_High_2462



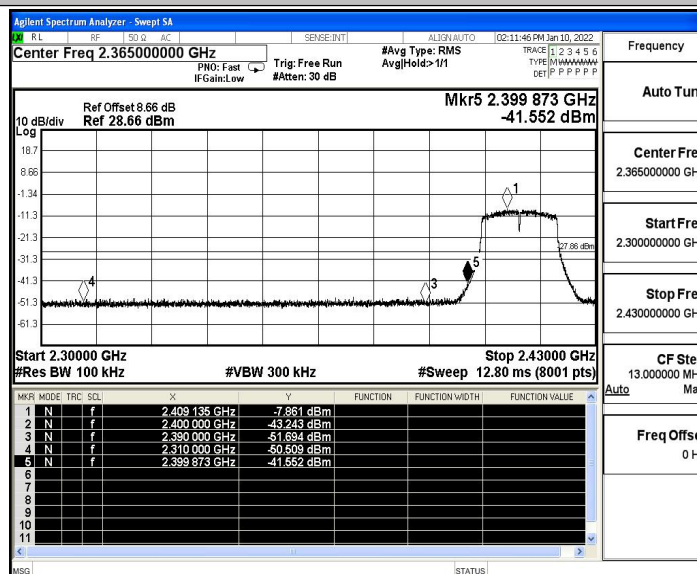
11G_Ant1_Low_2412



11G_Ant1_High_2462

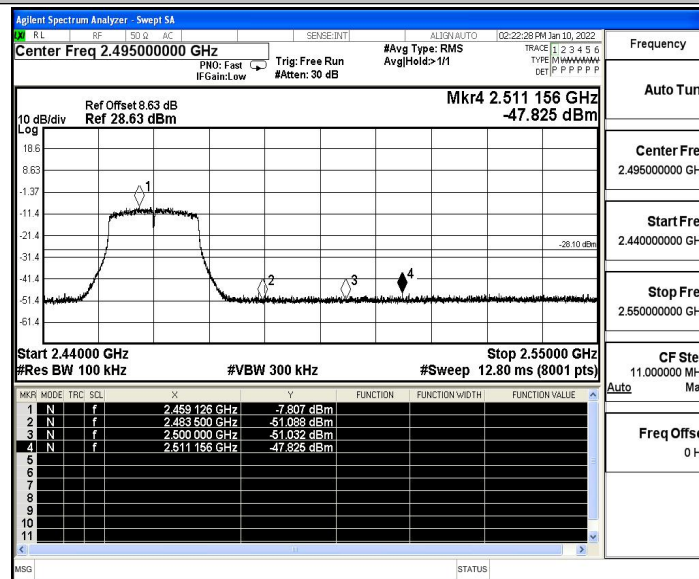


11N20SISO_Ant1_Low_2412

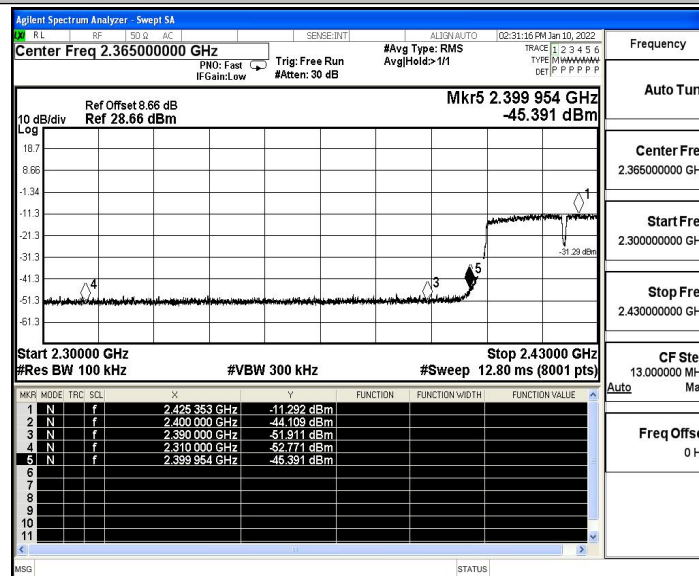




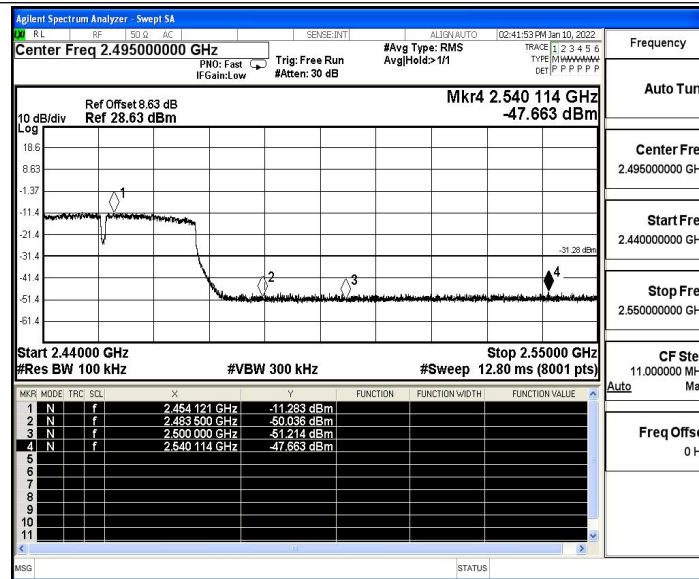
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452





B.5 Conducted Spurious Emission

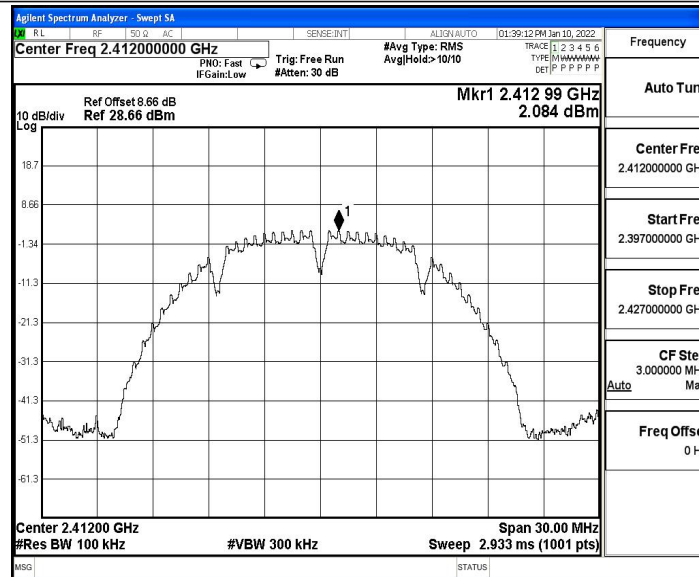
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.08	2.08	---	PASS
			30~1000	2.08	-60.62	≤ -17.92	PASS
			1000~26500	2.08	-46.1	≤ -17.92	PASS
		2437	Reference	2.50	2.50	---	PASS
			30~1000	2.50	-60.46	≤ -17.5	PASS
			1000~26500	2.50	-46.07	≤ -17.5	PASS
		2462	Reference	2.10	2.10	---	PASS
			30~1000	2.10	-48.59	≤ -17.9	PASS
			1000~26500	2.10	-46.58	≤ -17.9	PASS
11G	Ant1	2412	Reference	-7.84	-7.84	---	PASS
			30~1000	-7.84	-60.53	≤ -27.84	PASS
			1000~26500	-7.84	-45.52	≤ -27.84	PASS
		2437	Reference	-7.84	-7.84	---	PASS
			30~1000	-7.84	-59.82	≤ -27.84	PASS
			1000~26500	-7.84	-46.65	≤ -27.84	PASS
		2462	Reference	-8.00	-8.00	---	PASS
			30~1000	-8.00	-60.22	≤ -28	PASS
			1000~26500	-8.00	-46.39	≤ -28	PASS
11N20SISO	Ant1	2412	Reference	-7.88	-7.88	---	PASS
			30~1000	-7.88	-60.36	≤ -27.88	PASS
			1000~26500	-7.88	-46.14	≤ -27.88	PASS
		2437	Reference	-7.90	-7.90	---	PASS
			30~1000	-7.90	-60.99	≤ -27.9	PASS
			1000~26500	-7.90	-45.82	≤ -27.9	PASS
		2462	Reference	-7.92	-7.92	---	PASS
			30~1000	-7.92	-60.75	≤ -27.92	PASS
			1000~26500	-7.92	-46.32	≤ -27.92	PASS
11N40SISO	Ant1	2422	Reference	-11.14	-11.14	---	PASS
			30~1000	-11.14	-60.27	≤ -31.14	PASS
			1000~26500	-11.14	-45.36	≤ -31.14	PASS
		2437	Reference	-11.11	-11.11	---	PASS
			30~1000	-11.11	-60.59	≤ -31.11	PASS
			1000~26500	-11.11	-46.4	≤ -31.11	PASS
		2452	Reference	-11.19	-11.19	---	PASS
			30~1000	-11.19	-49.15	≤ -31.19	PASS
			1000~26500	-11.19	-45.8	≤ -31.19	PASS

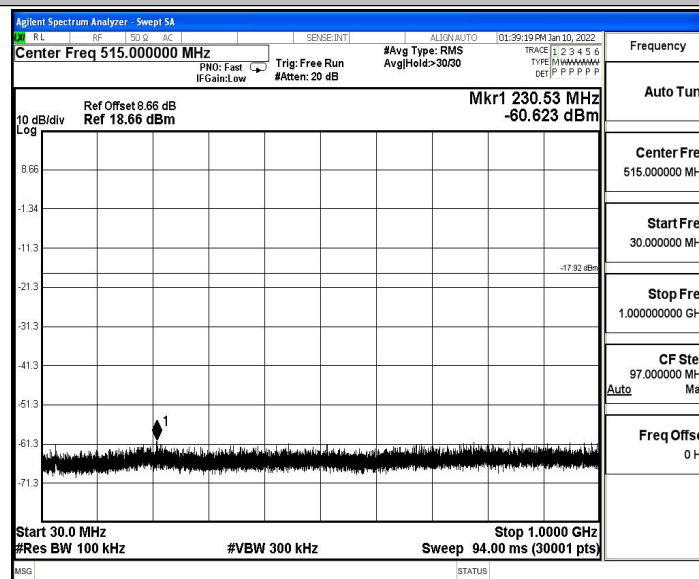


Test Graphs

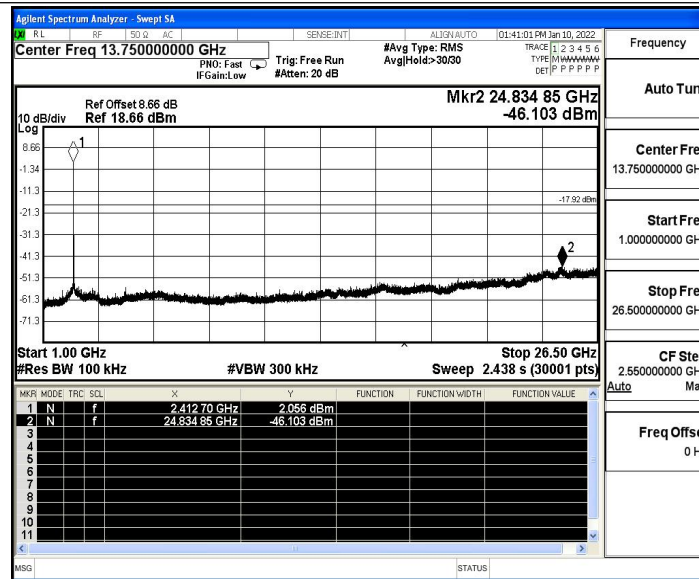
11B_Ant1_2412_0~Reference



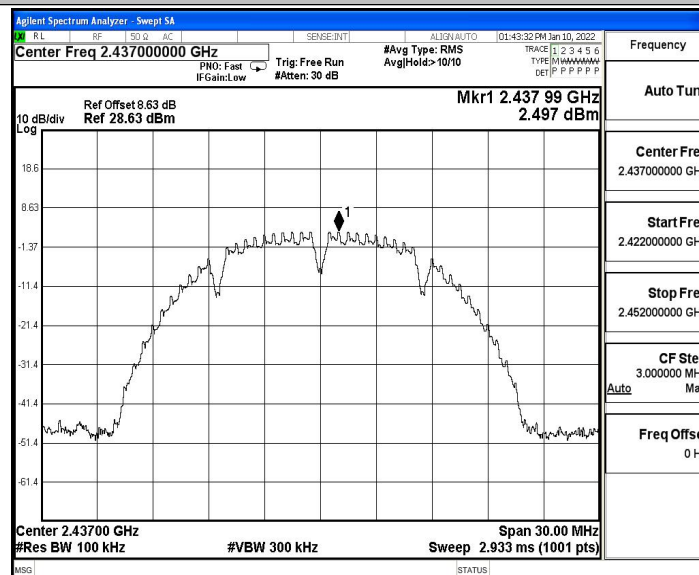
11B_Ant1_2412_30~1000



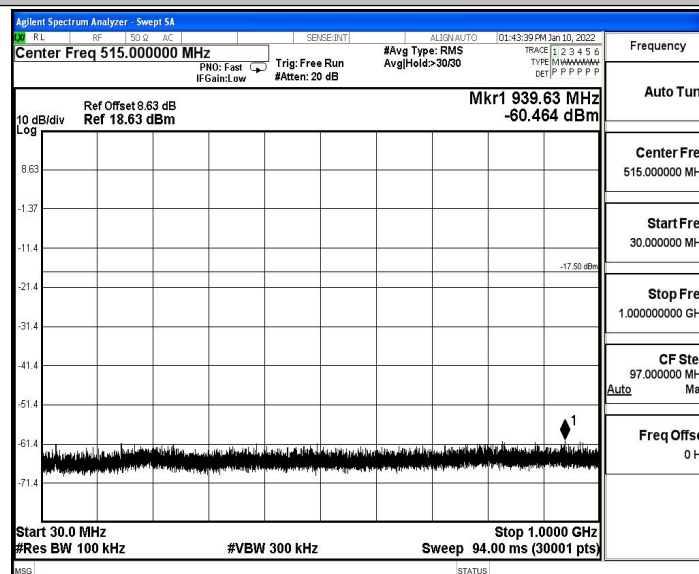
11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference

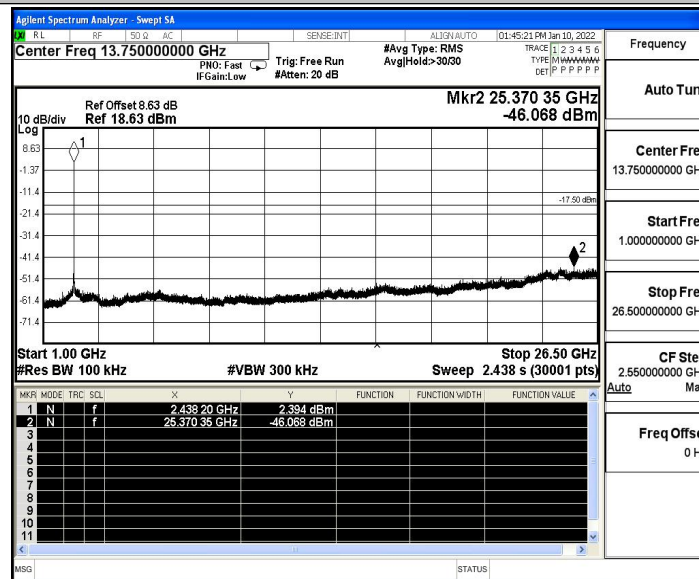


11B_Ant1_2437_30~1000

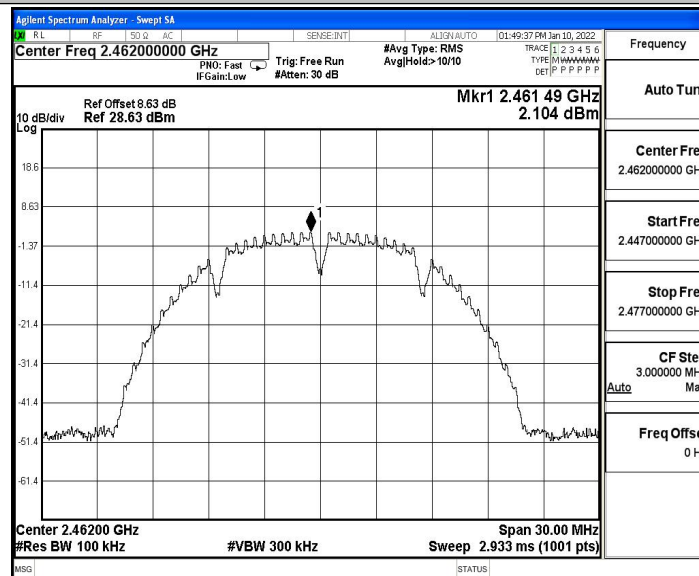




11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000