Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: WiFi Bridging Device

Trade Mark: N/A

Test Model: AC-RW-R120

Environmental Conditions

Temperature:	21.6° C
Relative Humidity:	52.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

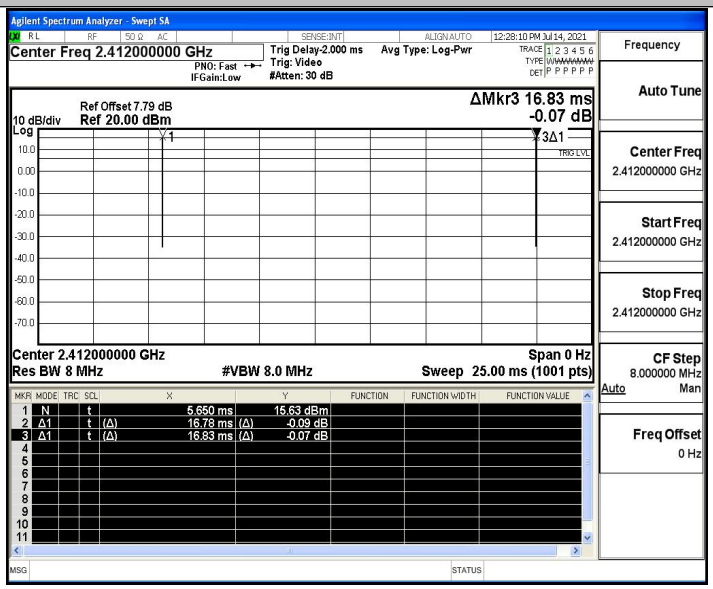
A.1 Duty Cycle

Test Result

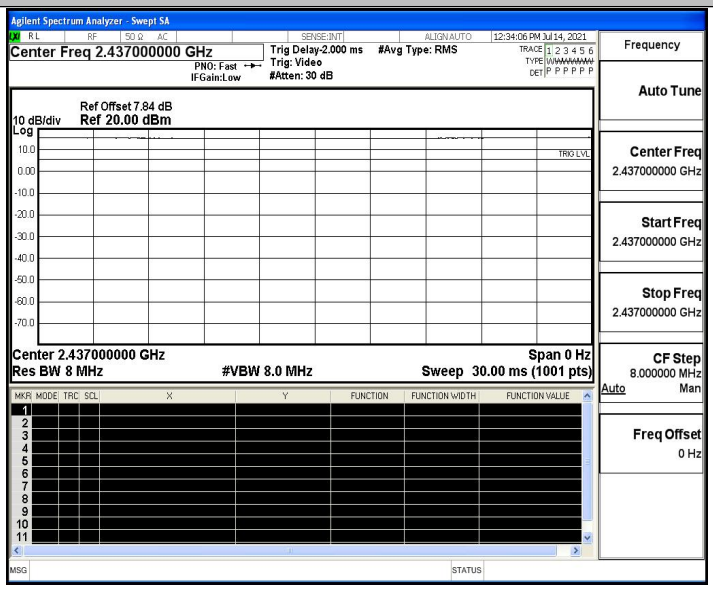
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	16.78	16.83	99.70	---	PASS
		2437	30.00	30.00	100.00	---	PASS
		2462	30.00	30.00	100.00	---	PASS
11G	Ant1	2412	1.39	1.43	97.20	---	PASS
		2437	1.39	1.43	97.20	---	PASS
		2462	1.39	1.43	97.20	---	PASS
11N20SISO	Ant1	2412	1.30	1.34	97.01	---	PASS
		2437	1.30	1.34	97.01	---	PASS
		2462	1.30	1.34	97.01	---	PASS
11N40SISO	Ant1	2422	0.64	0.68	94.12	---	PASS
		2437	0.64	0.68	94.12	---	PASS
		2452	0.64	0.68	94.12	---	PASS

Test Graphs

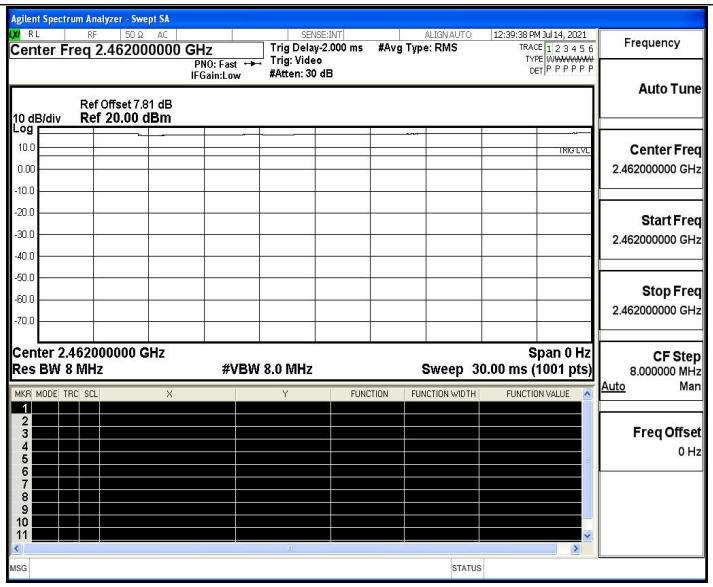
11B_Ant1_2412



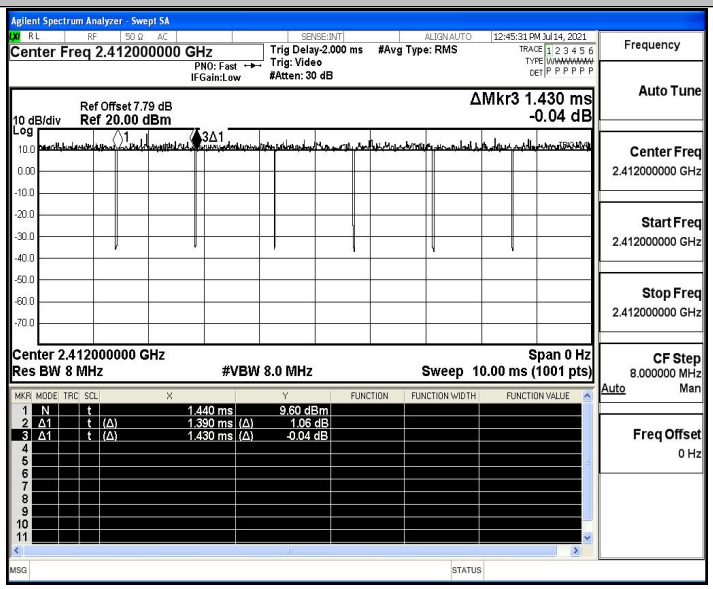
11B_Ant1_2437



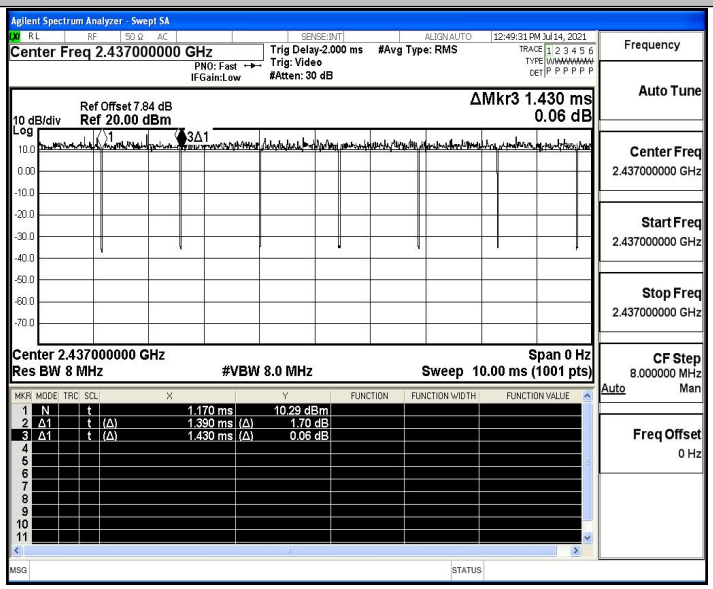
11B_Ant1_2462



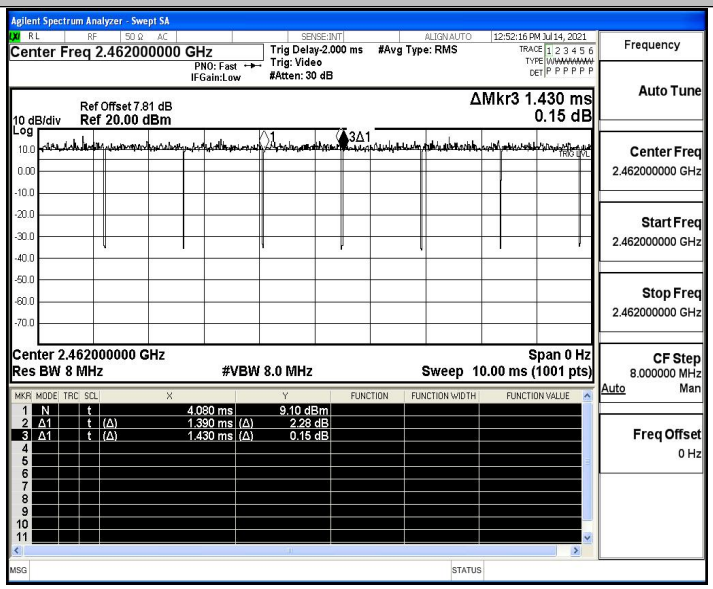
11G_Ant1_2412



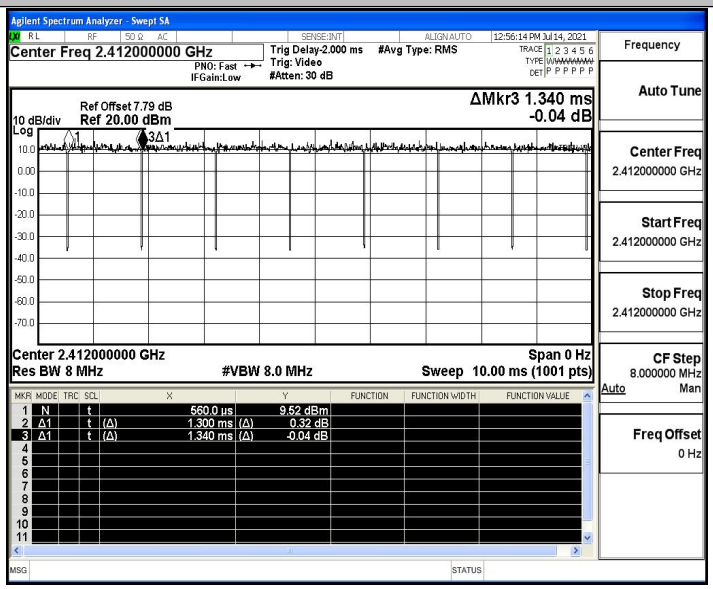
11G_Ant1_2437



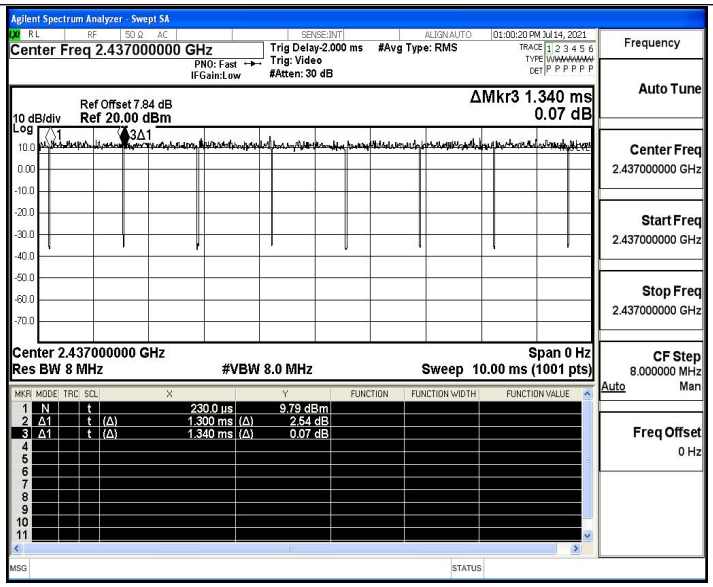
11G_Ant1_2462



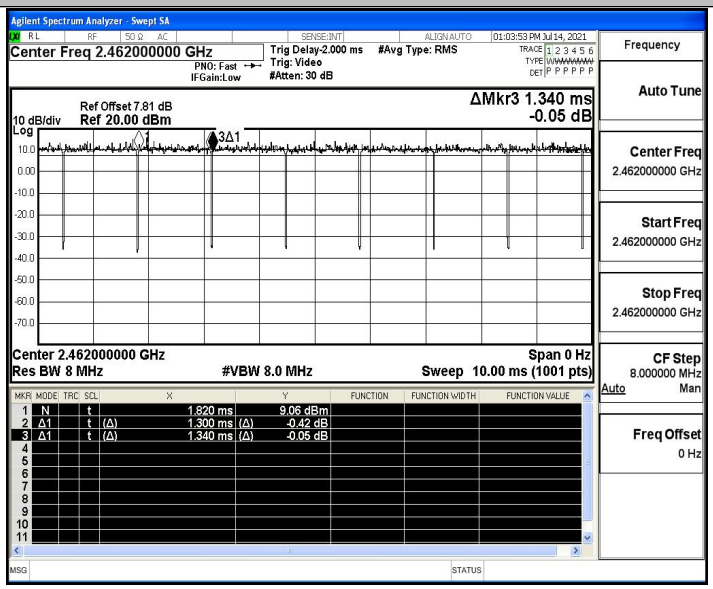
11N20SISO_Ant1_2412



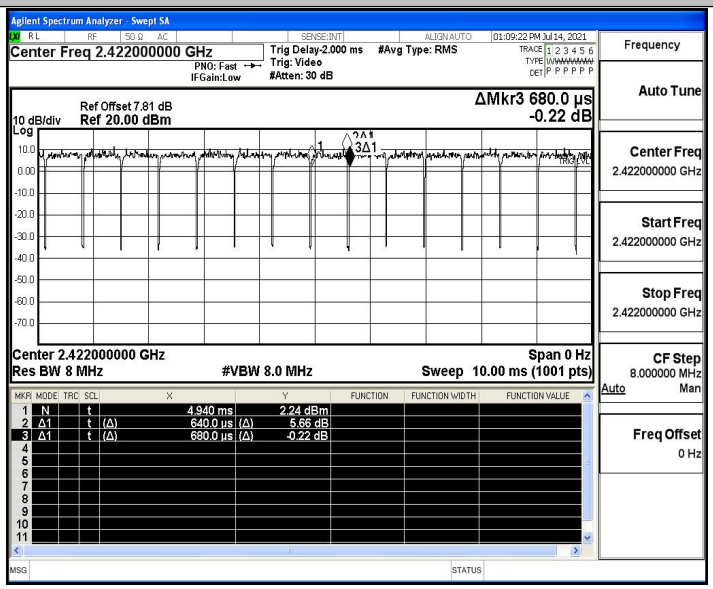
11N20SISO_Ant1_2437



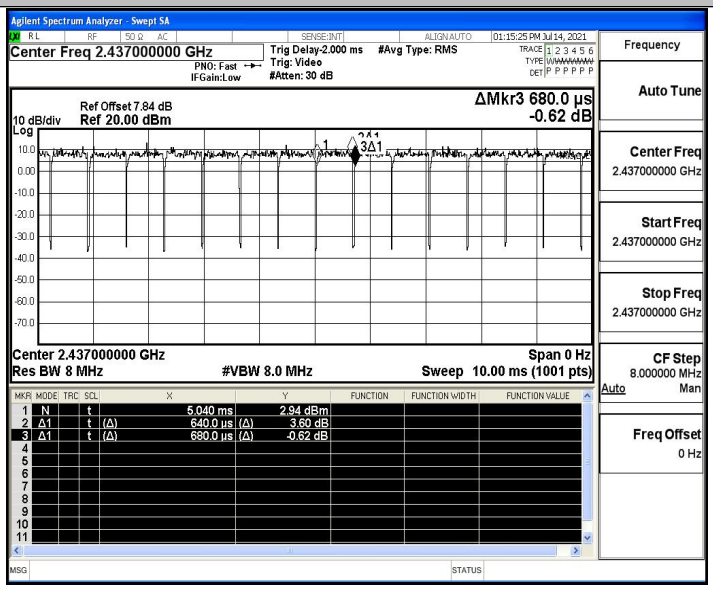
11N20SISO_Ant1_2462



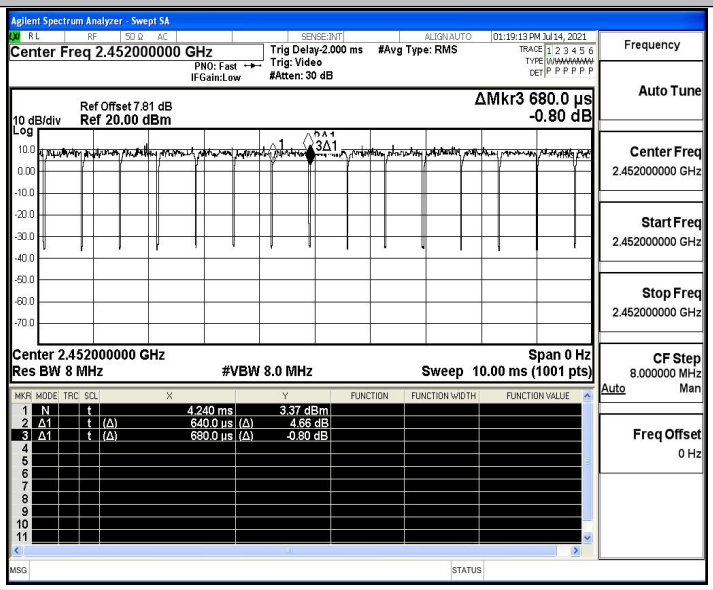
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



A.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	15.76	≤30	PASS
		2437	15.55	≤30	PASS
		2462	16.02	≤30	PASS
11G	Ant1	2412	14.48	≤30	PASS
		2437	15.05	≤30	PASS
		2462	14.50	≤30	PASS
11N20SISO	Ant1	2412	14.55	≤30	PASS
		2437	14.76	≤30	PASS
		2462	14.12	≤30	PASS
11N40SISO	Ant1	2422	14.76	≤30	PASS
		2437	14.89	≤30	PASS
		2452	14.52	≤30	PASS

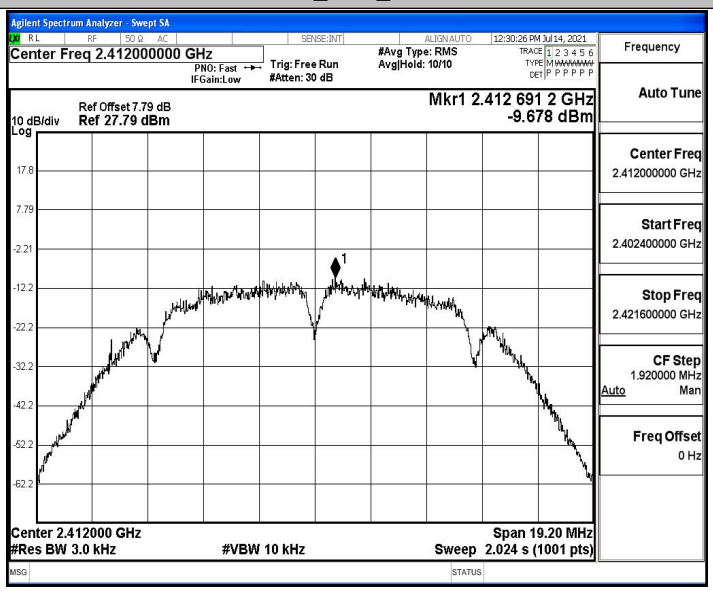
A.3 Maximum power spectral density

Test Result

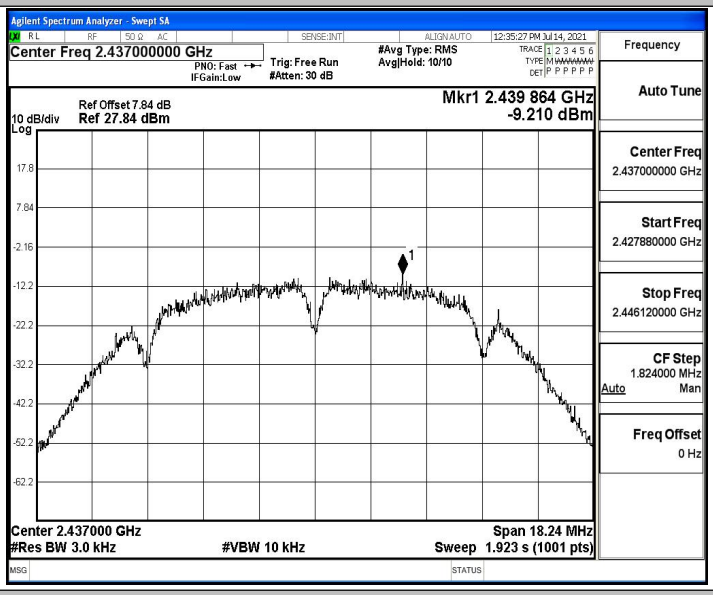
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-9.68	≤8	PASS
		2437	-9.21	≤8	PASS
		2462	-9.48	≤8	PASS
11G	Ant1	2412	-17.59	≤8	PASS
		2437	-17.26	≤8	PASS
		2462	-16.54	≤8	PASS
11N20SISO	Ant1	2412	-18.22	≤8	PASS
		2437	-17.14	≤8	PASS
		2462	-17.55	≤8	PASS
11N40SISO	Ant1	2422	-20.03	≤8	PASS
		2437	-19.71	≤8	PASS
		2452	-19.3	≤8	PASS

Test Graphs

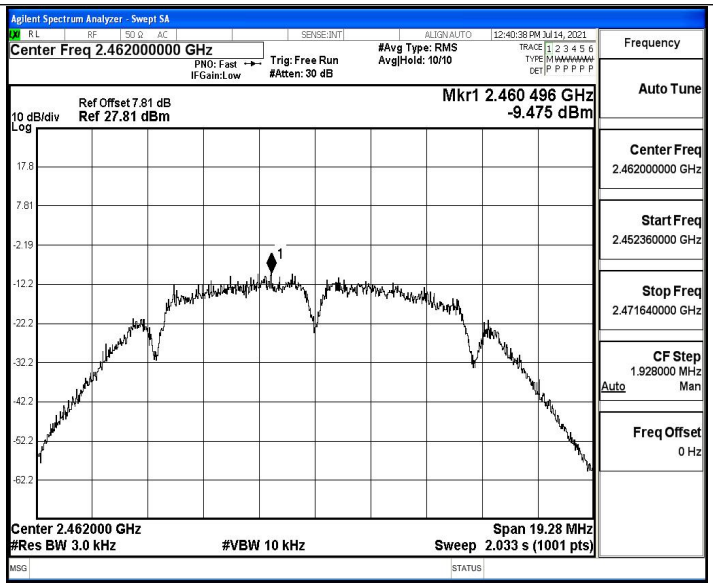
11B_Ant1_2412



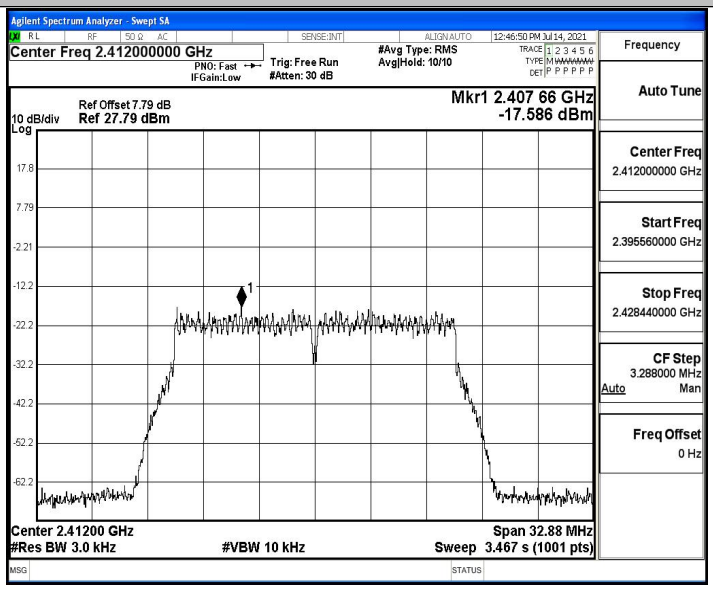
11B_Ant1_2437



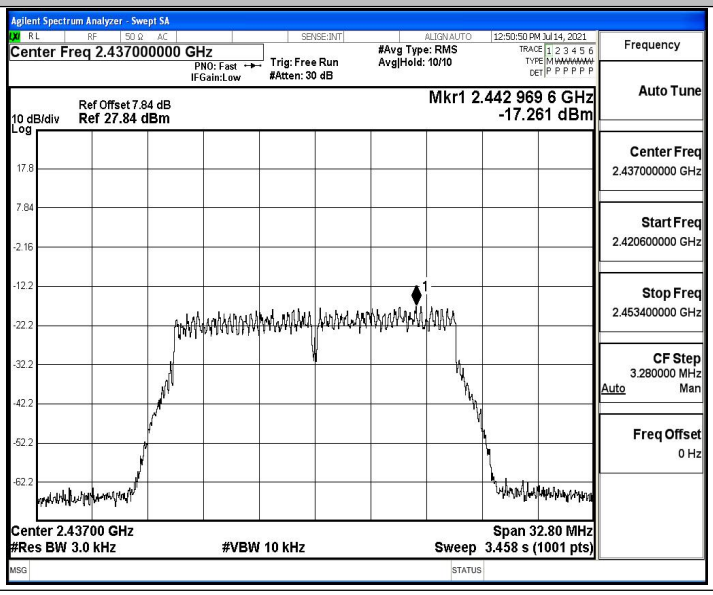
11B_Ant1_2462



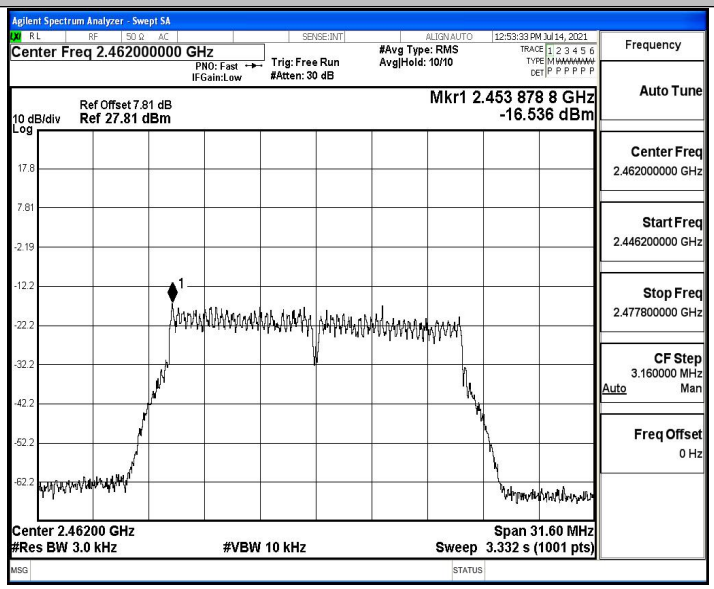
11G_Ant1_2412



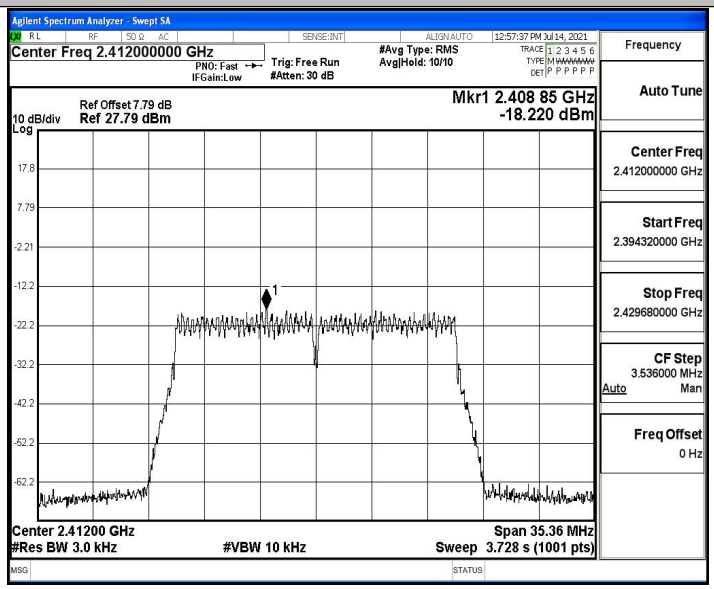
11G_Ant1_2437



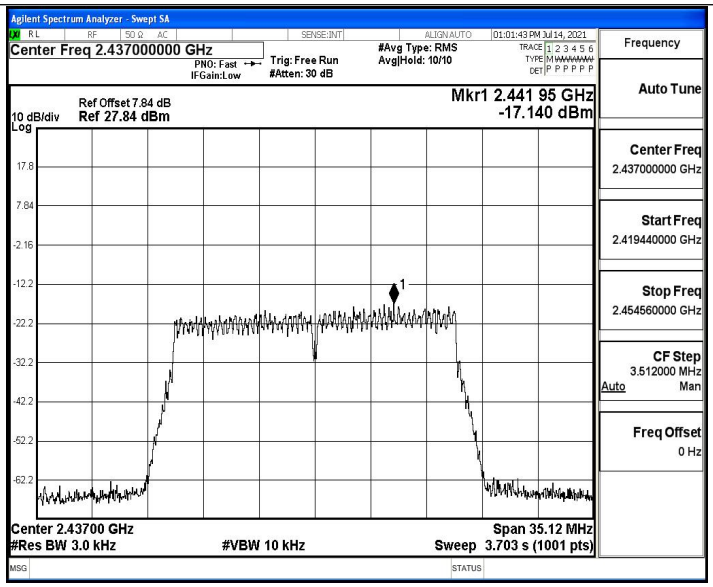
11G_Ant1_2462



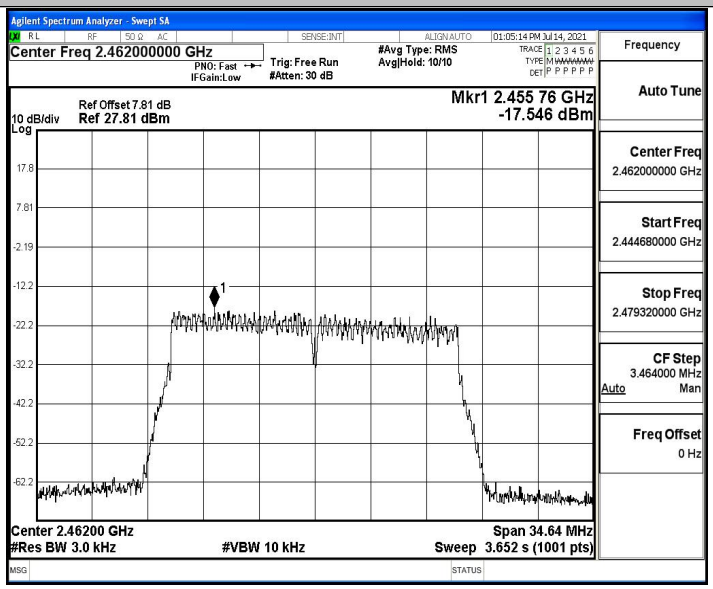
11N20SISO_Ant1_2412



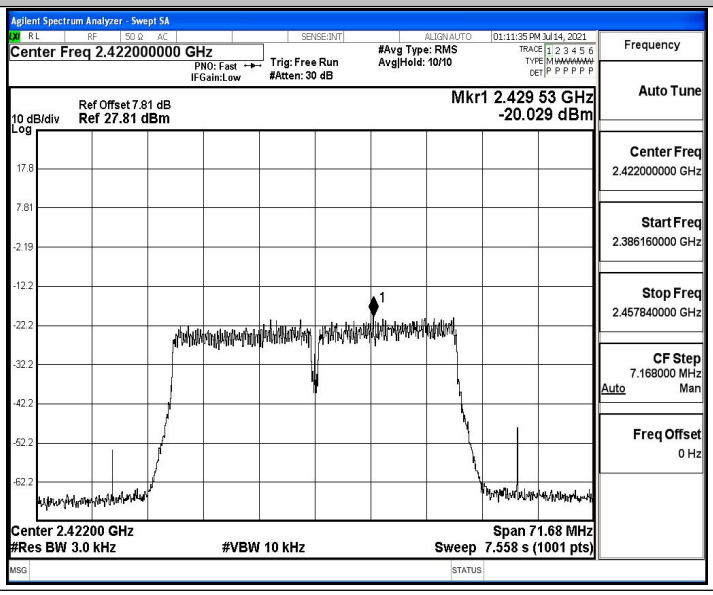
11N20SISO_Ant1_2437



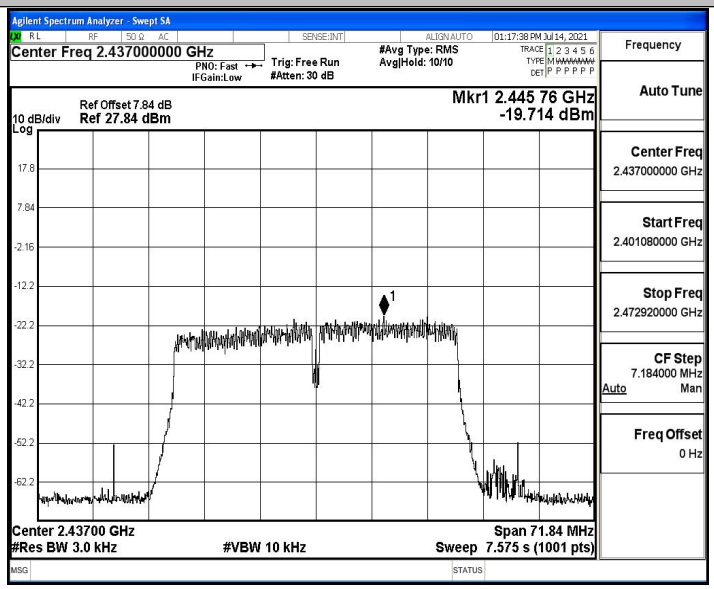
11N20SISO_Ant1_2462



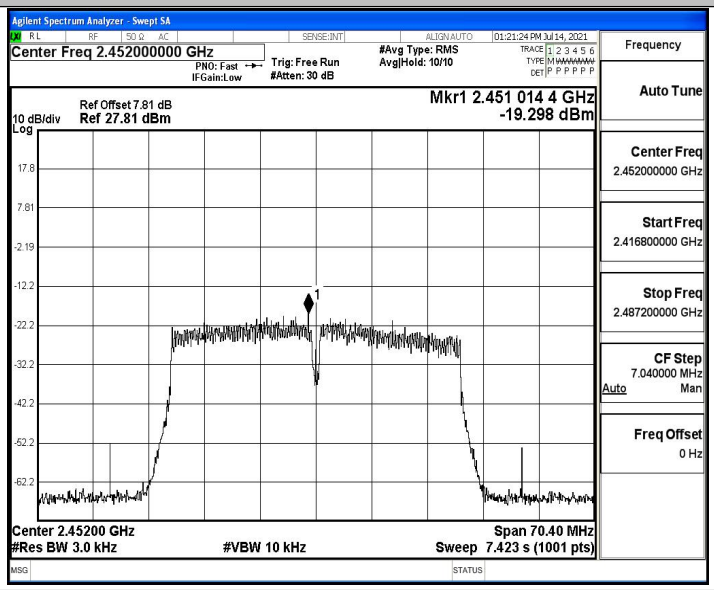
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



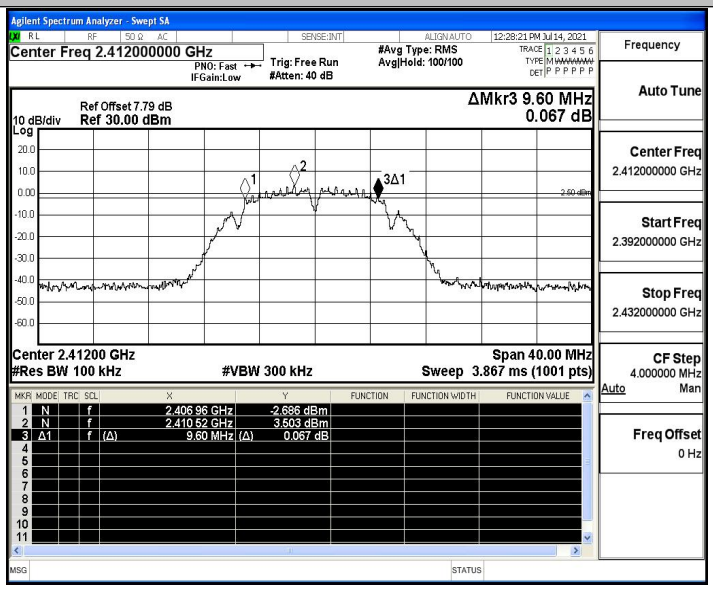
A.4 6dB Bandwidth

Test Result

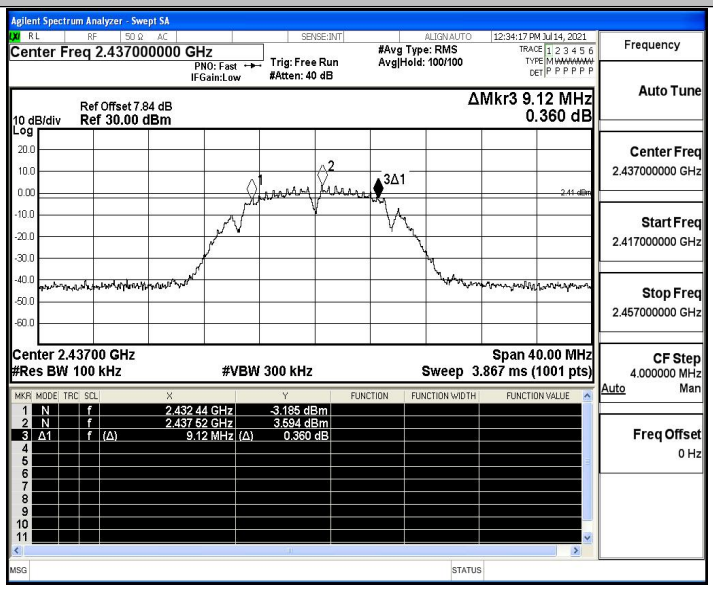
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.600	2406.960	2416.560	0.5	PASS
		2437	9.120	2432.440	2441.560	0.5	PASS
		2462	9.640	2456.920	2466.560	0.5	PASS
11G	Ant1	2412	16.440	2403.800	2420.240	0.5	PASS
		2437	16.400	2428.840	2445.240	0.5	PASS
		2462	15.800	2453.760	2469.560	0.5	PASS
11N20SISO	Ant1	2412	17.680	2403.160	2420.840	0.5	PASS
		2437	17.560	2428.320	2445.880	0.5	PASS
		2462	17.320	2453.080	2470.400	0.5	PASS
11N40SISO	Ant1	2422	35.840	2404.400	2440.240	0.5	PASS
		2437	35.920	2419.320	2455.240	0.5	PASS
		2452	35.200	2434.400	2469.600	0.5	PASS

Test Graphs

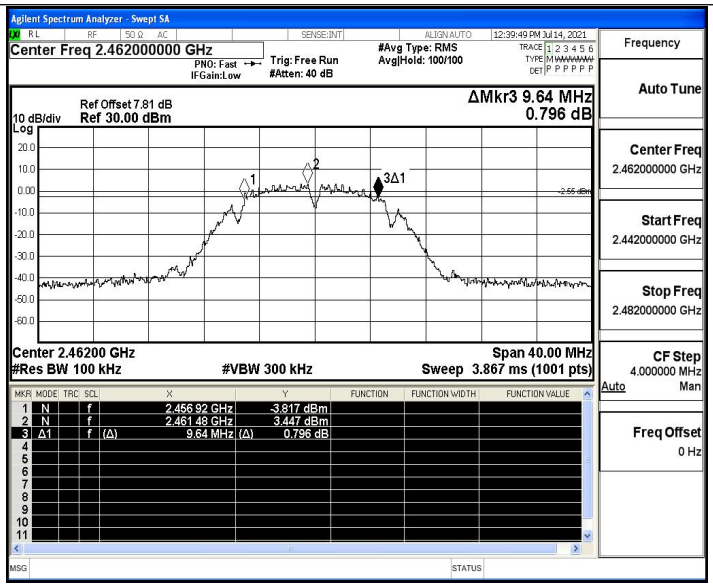
11B_Ant1_2412



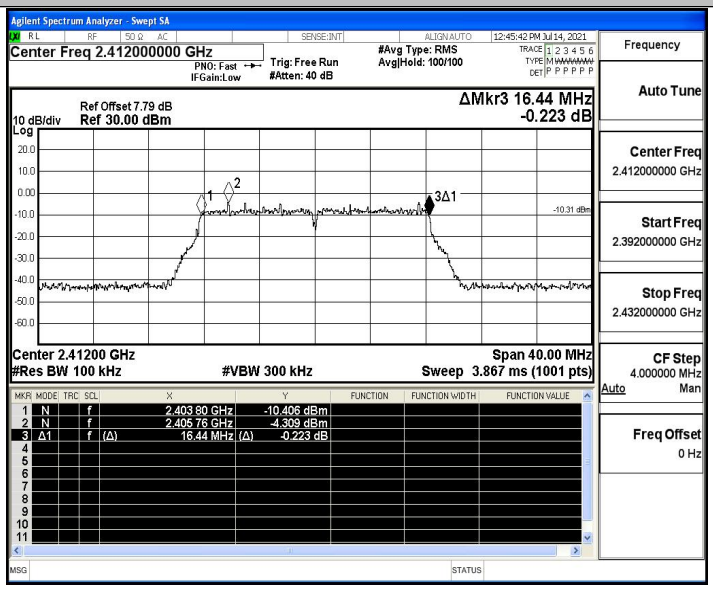
11B_Ant1_2437



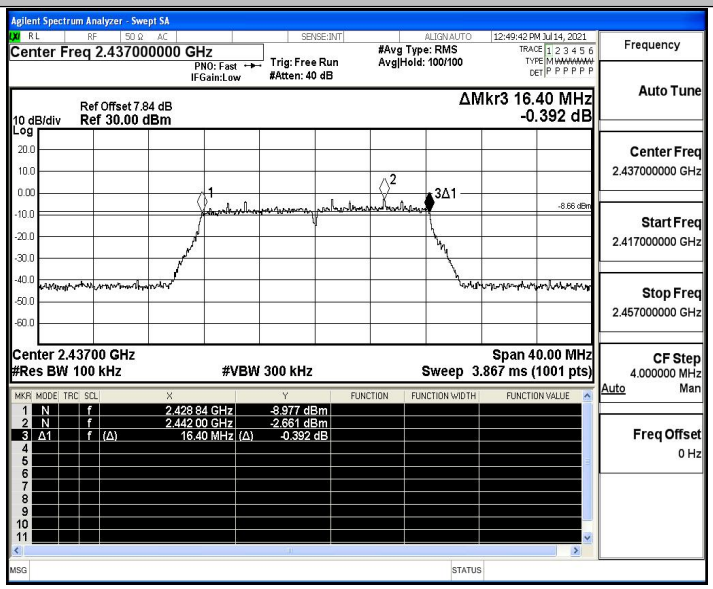
11B_Ant1_2462



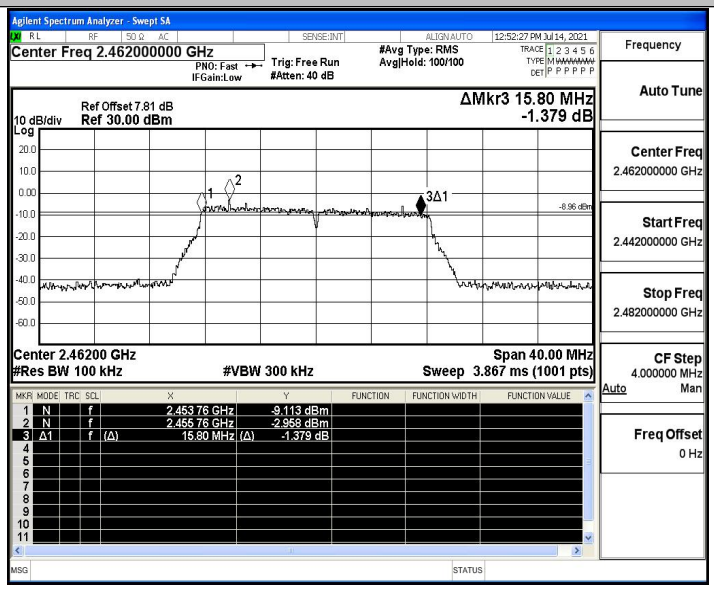
11G_Ant1_2412



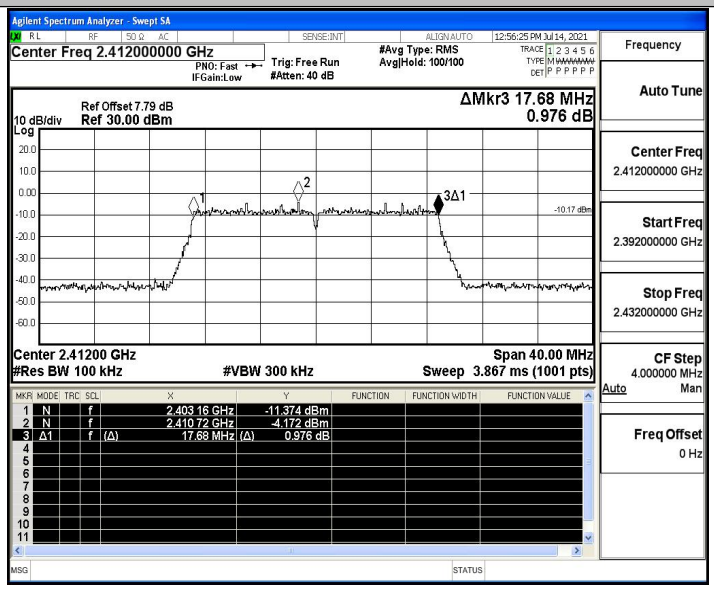
11G_Ant1_2437



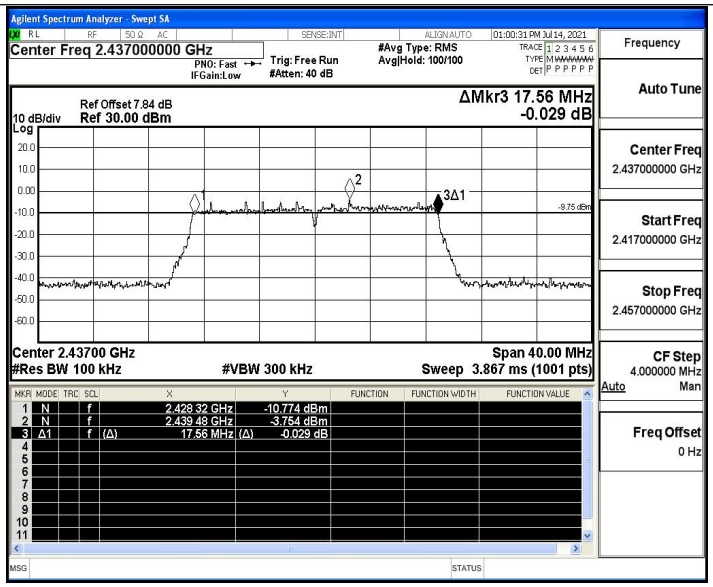
11G_Ant1_2462



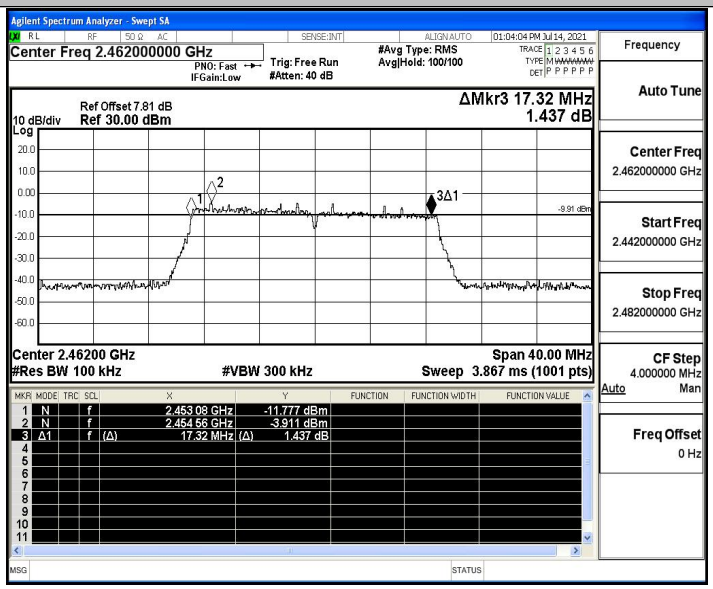
11N20SISO_Ant1_2412



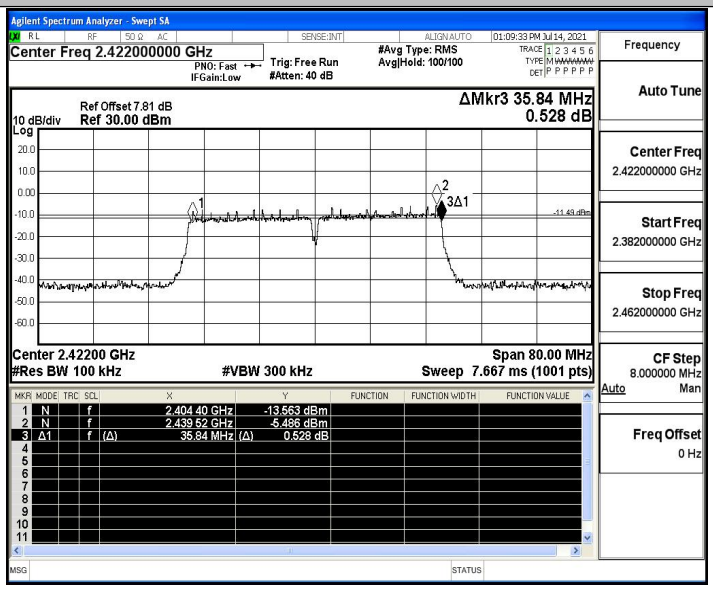
11N20SISO_Ant1_2437



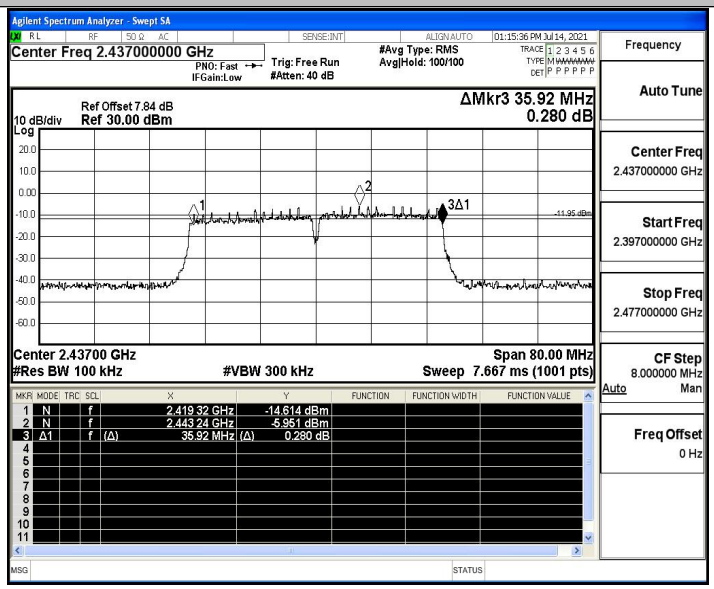
11N20SISO_Ant1_2462



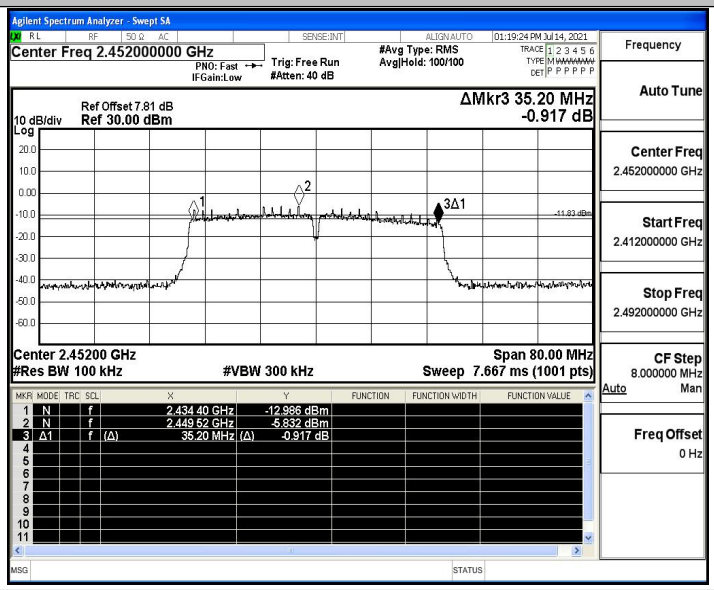
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



A.5 Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.32	1.32	---	PASS
			30~1000	1.32	-61.29	≤-18.68	PASS
			1000~26500	1.32	-47.8	≤-18.68	PASS
		2437	Reference	1.70	1.70	---	PASS
			30~1000	1.70	-59.45	≤-18.3	PASS
			1000~26500	1.70	-47.21	≤-18.3	PASS
		2462	Reference	1.36	1.36	---	PASS
			30~1000	1.36	-58.77	≤-18.64	PASS
			1000~26500	1.36	-47.88	≤-18.64	PASS
11G	Ant1	2412	Reference	-3.65	-3.65	---	PASS
			30~1000	-3.65	-58.57	≤-23.65	PASS
			1000~26500	-3.65	-46.56	≤-23.65	PASS
		2437	Reference	-2.05	-2.05	---	PASS
			30~1000	-2.05	-60.3	≤-22.05	PASS
			1000~26500	-2.05	-47.56	≤-22.05	PASS
		2462	Reference	-3.22	-3.22	---	PASS
			30~1000	-3.22	-59.44	≤-23.22	PASS
			1000~26500	-3.22	-46.88	≤-23.22	PASS
11N20SISO	Ant1	2412	Reference	-4.07	-4.07	---	PASS
			30~1000	-4.07	-59	≤-24.07	PASS
			1000~26500	-4.07	-47.6	≤-24.07	PASS
		2437	Reference	-2.03	-2.03	---	PASS
			30~1000	-2.03	-59.46	≤-22.03	PASS
			1000~26500	-2.03	-46.94	≤-22.03	PASS
		2462	Reference	-1.27	-1.27	---	PASS
			30~1000	-1.27	-58.91	≤-21.27	PASS
			1000~26500	-1.27	-47.28	≤-21.27	PASS
11N40SISO	Ant1	2422	Reference	-3.69	-3.69	---	PASS
			30~1000	-3.69	-58.69	≤-23.69	PASS
			1000~26500	-3.69	-47.75	≤-23.69	PASS
		2437	Reference	-2.50	-2.50	---	PASS
			30~1000	-2.50	-59.72	≤-22.5	PASS
			1000~26500	-2.50	-47.67	≤-22.5	PASS
		2452	Reference	-3.43	-3.43	---	PASS
			30~1000	-3.43	-58.43	≤-23.43	PASS
			1000~26500	-3.43	-47.29	≤-23.43	PASS