



Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Android Mobile Scanning Device

Test Model: DRS-50

Environmental Conditions

Temperature:	23.7° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Monkey Li
Supervised by:	Li Huan



A.1 6dB Bandwidth

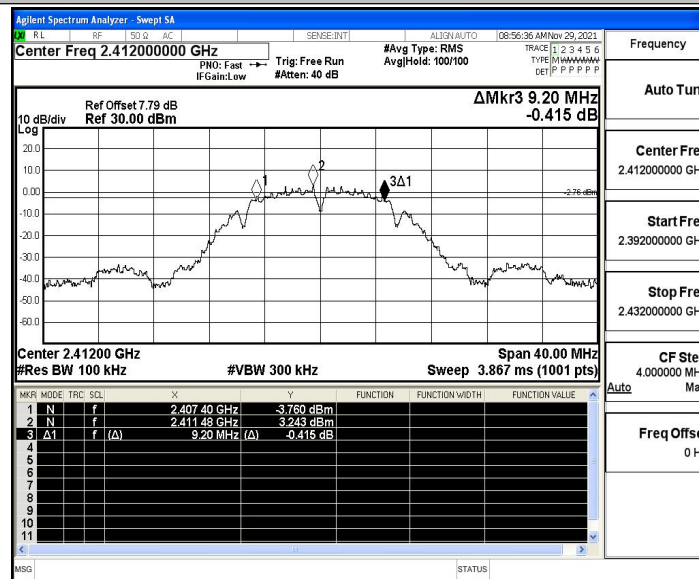
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.200	2407.400	2416.600	0.5	PASS
		2437	9.840	2432.200	2442.040	0.5	PASS
		2462	9.120	2457.440	2466.560	0.5	PASS
11G	Ant1	2412	13.880	2404.400	2418.280	0.5	PASS
		2437	15.520	2429.040	2444.560	0.5	PASS
		2462	15.560	2454.040	2469.600	0.5	PASS
11N20SISO	Ant1	2412	12.040	2405.640	2417.680	0.5	PASS
		2437	15.120	2429.480	2444.600	0.5	PASS
		2462	15.160	2454.440	2469.600	0.5	PASS
11N40SISO	Ant1	2422	32.640	2406.880	2439.520	0.5	PASS
		2437	33.920	2420.680	2454.600	0.5	PASS
		2452	35.120	2434.400	2469.520	0.5	PASS

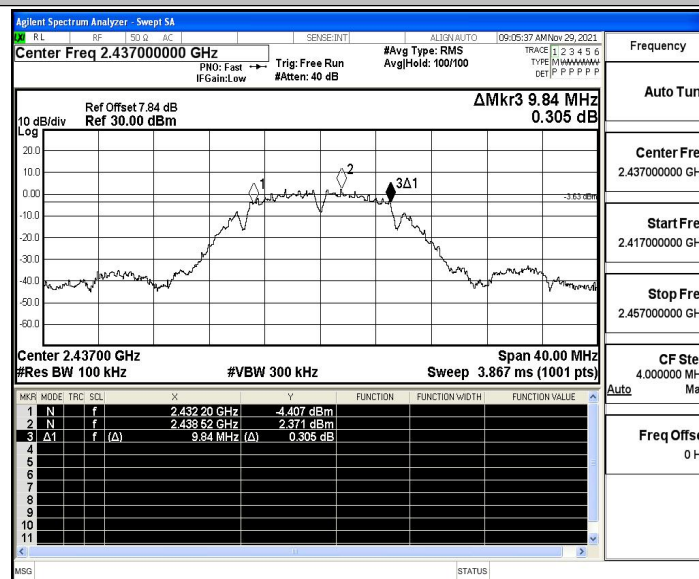


Test Graphs

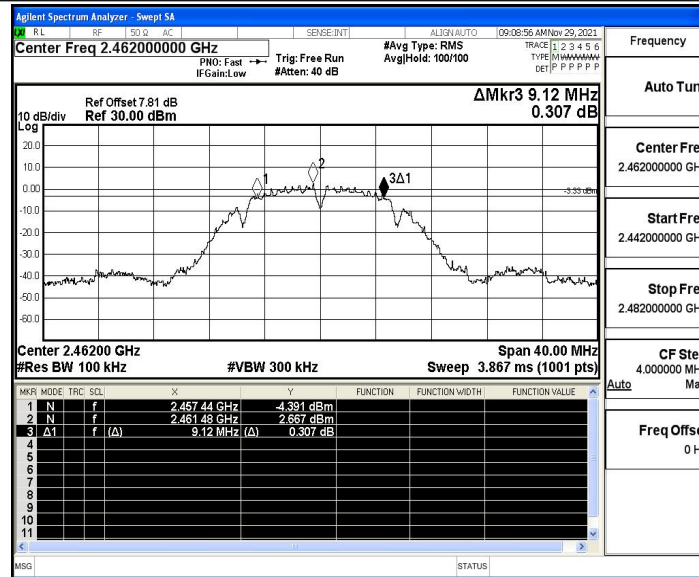
11B_Ant1_2412



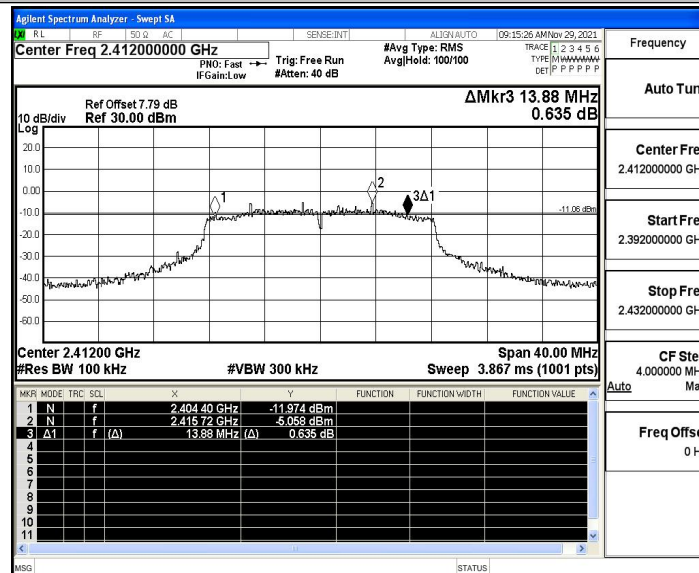
11B_Ant1_2437



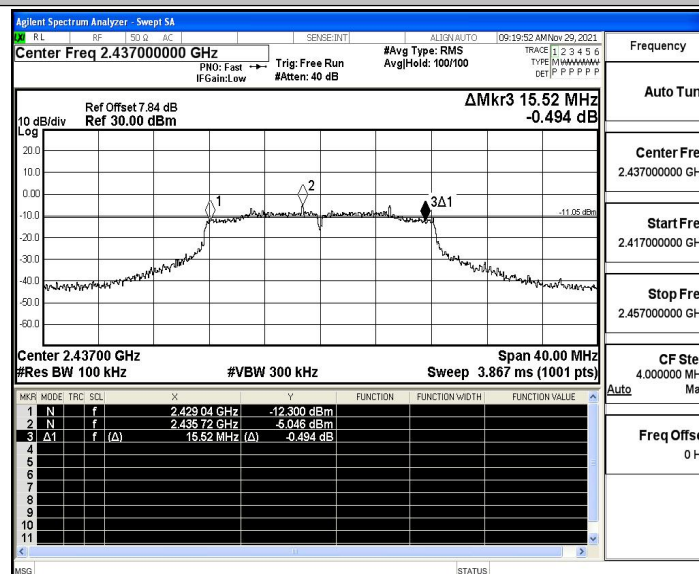
11B_Ant1_2462



11G_Ant1_2412

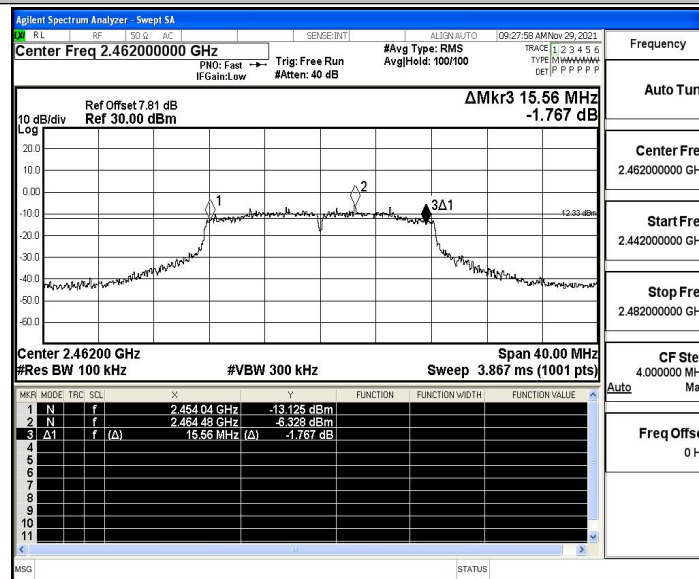


11G_Ant1_2437

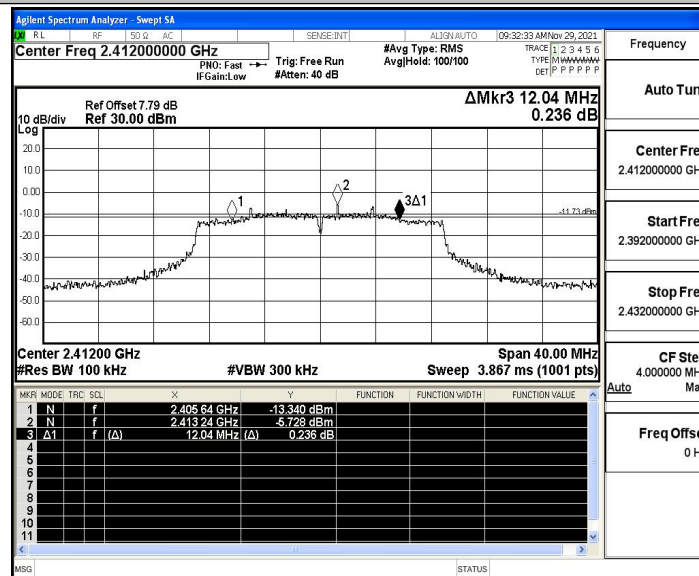




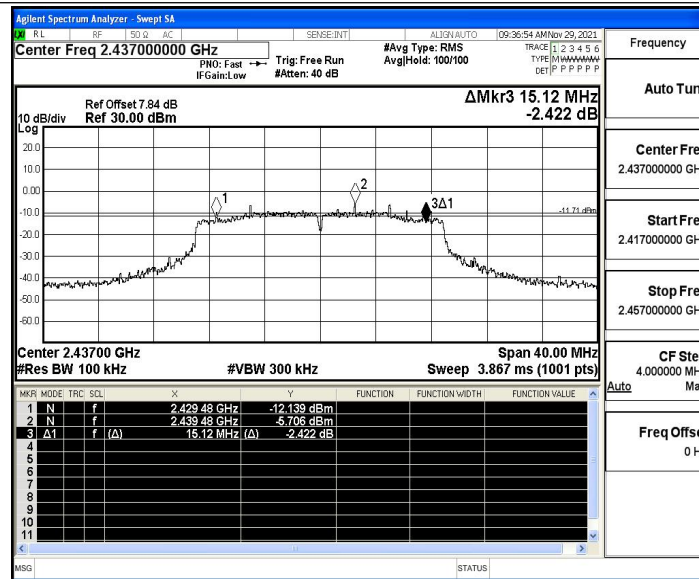
11G_Ant1_2462



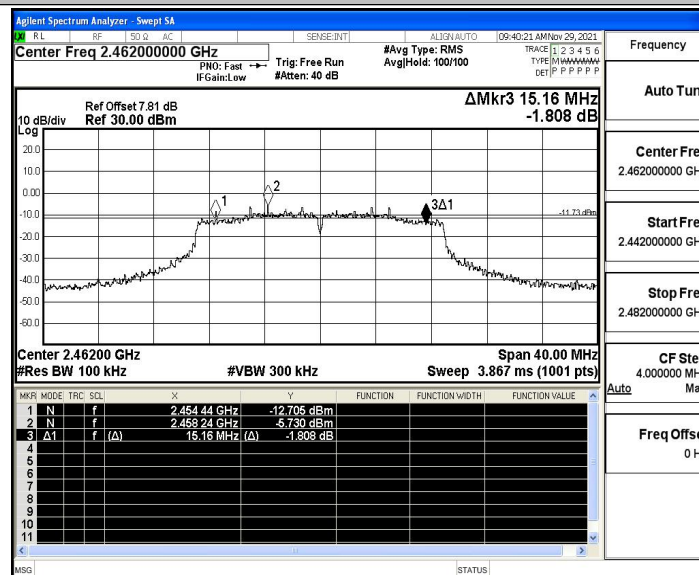
11N20SISO_Ant1_2412



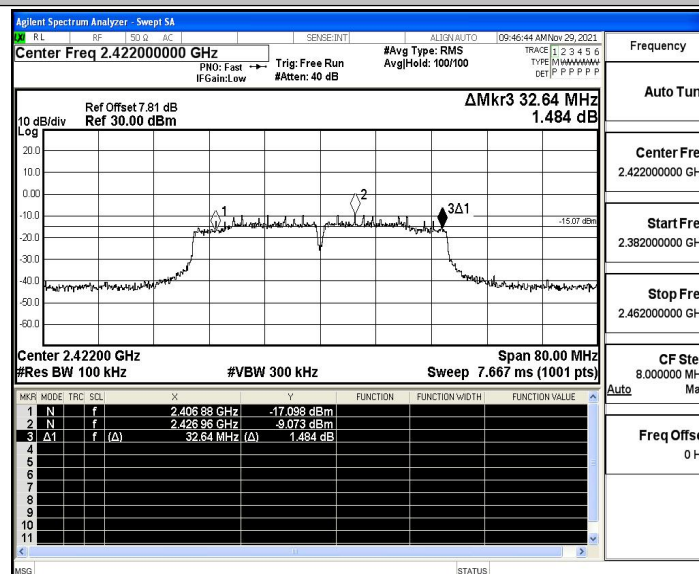
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

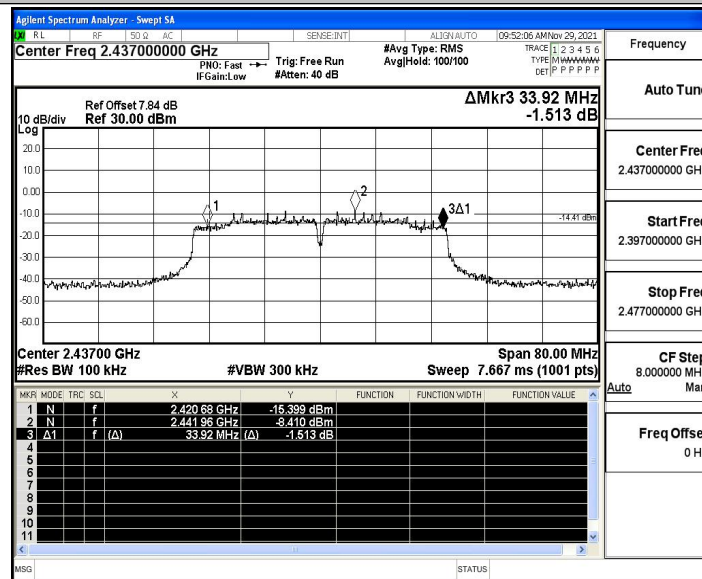


11N40SISO_Ant1_2422

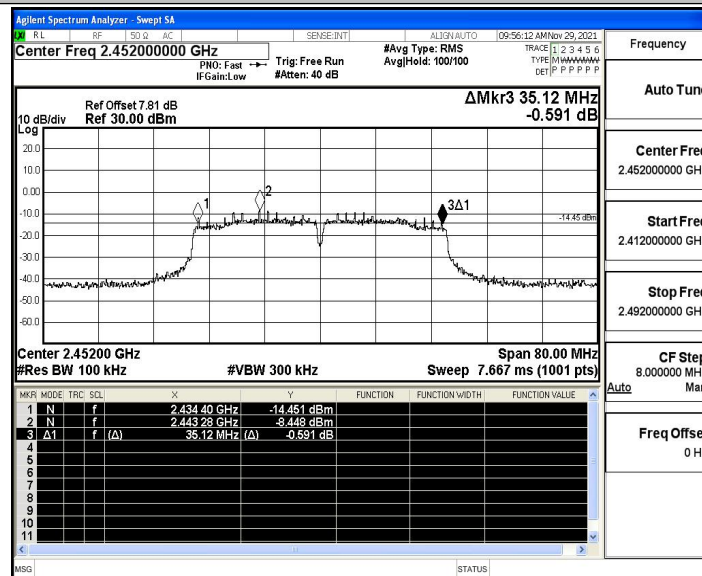




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





A.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	15.57	≤30	PASS
		2437	15.00	≤30	PASS
		2462	15.27	≤30	PASS
11G	Ant1	2412	12.60	≤30	PASS
		2437	13.66	≤30	PASS
		2462	12.59	≤30	PASS
11N20SISO	Ant1	2412	11.86	≤30	PASS
		2437	12.26	≤30	PASS
		2462	12.52	≤30	PASS
11N40SISO	Ant1	2422	11.88	≤30	PASS
		2437	12.06	≤30	PASS
		2452	12.55	≤30	PASS



A.3 Maximum power spectral density

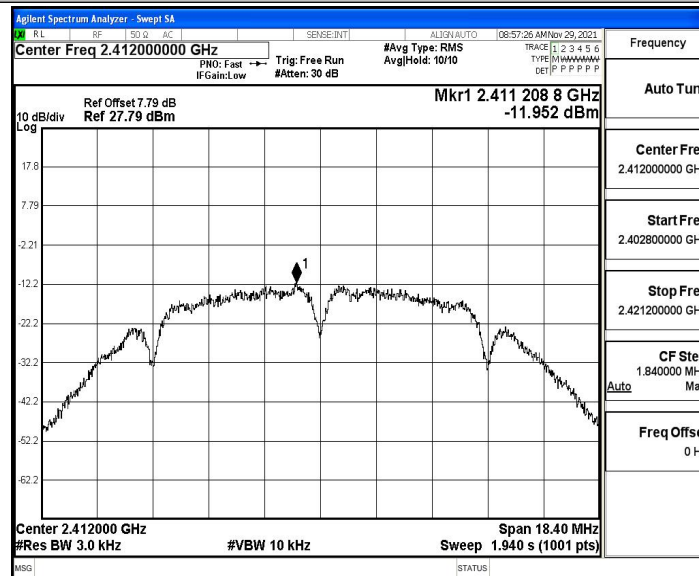
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.95	≤8	PASS
		2437	-12.41	≤8	PASS
		2462	-12.42	≤8	PASS
11G	Ant1	2412	-19.35	≤8	PASS
		2437	-18.73	≤8	PASS
		2462	-19.92	≤8	PASS
11N20SISO	Ant1	2412	-19.6	≤8	PASS
		2437	-19.15	≤8	PASS
		2462	-18.69	≤8	PASS
11N40SISO	Ant1	2422	-22.12	≤8	PASS
		2437	-21.93	≤8	PASS
		2452	-21.34	≤8	PASS

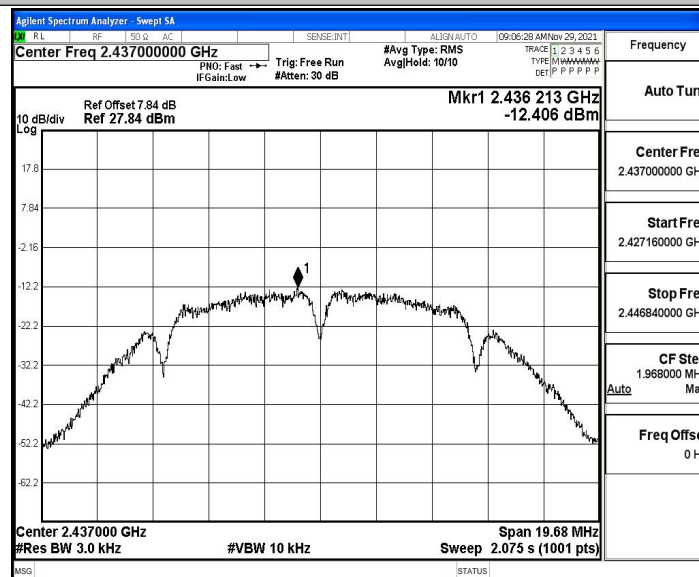


Test Graphs

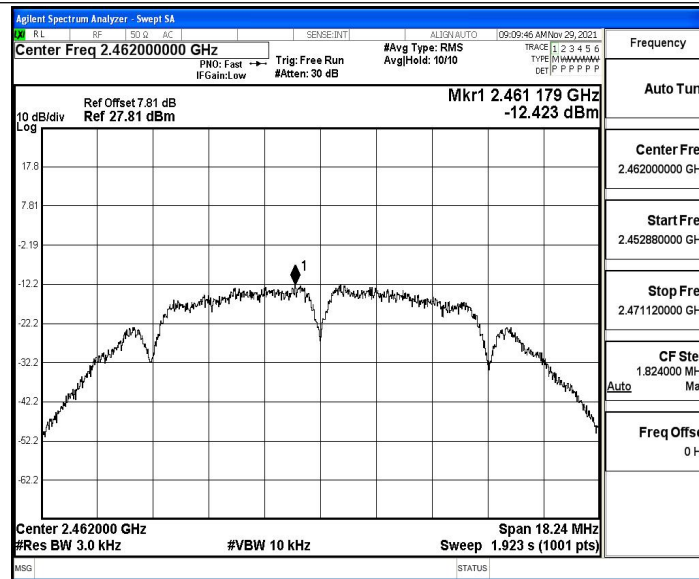
11B_Ant1_2412



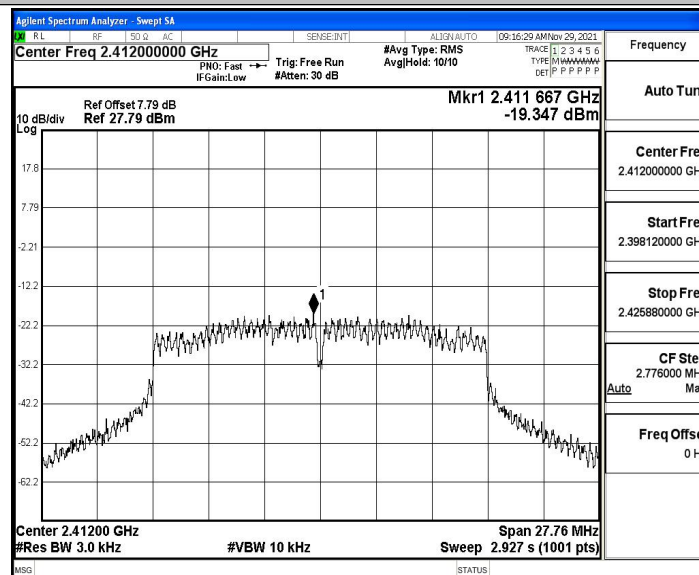
11B_Ant1_2437



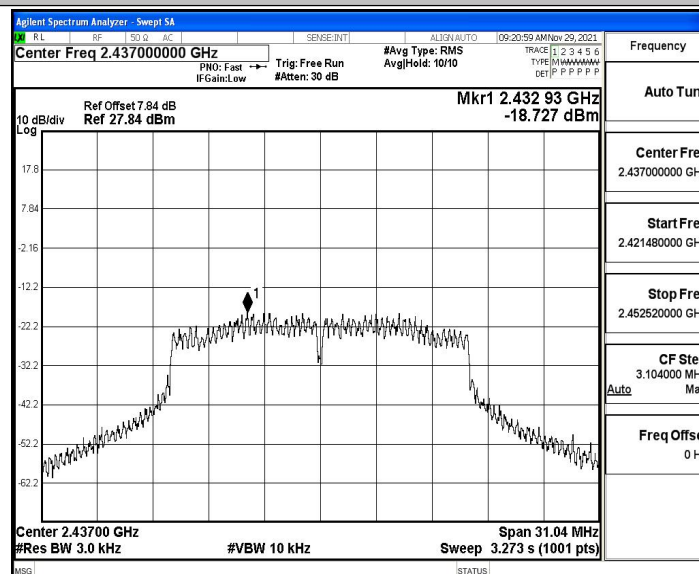
11B_Ant1_2462



11G_Ant1_2412

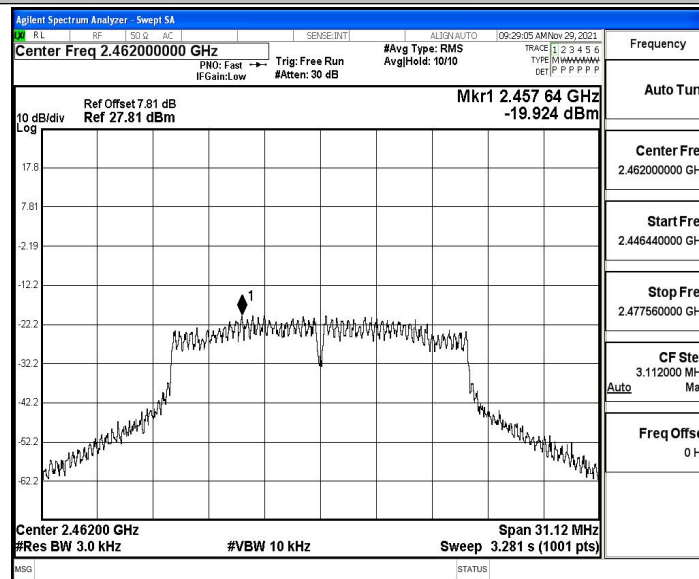


11G_Ant1_2437

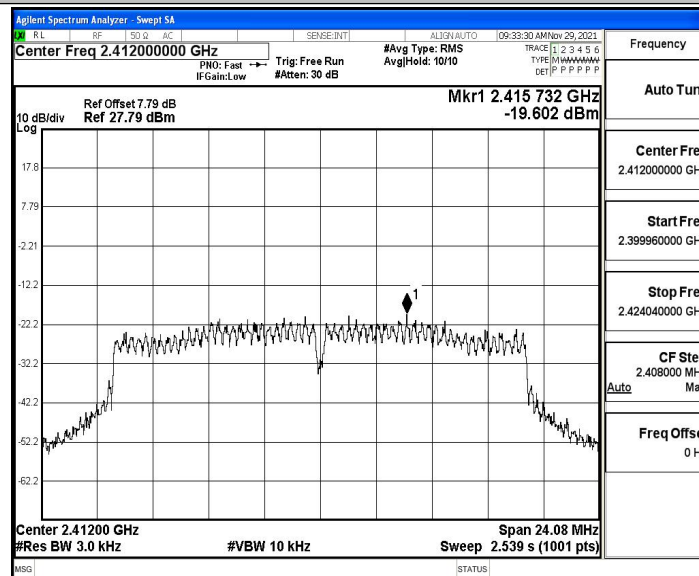




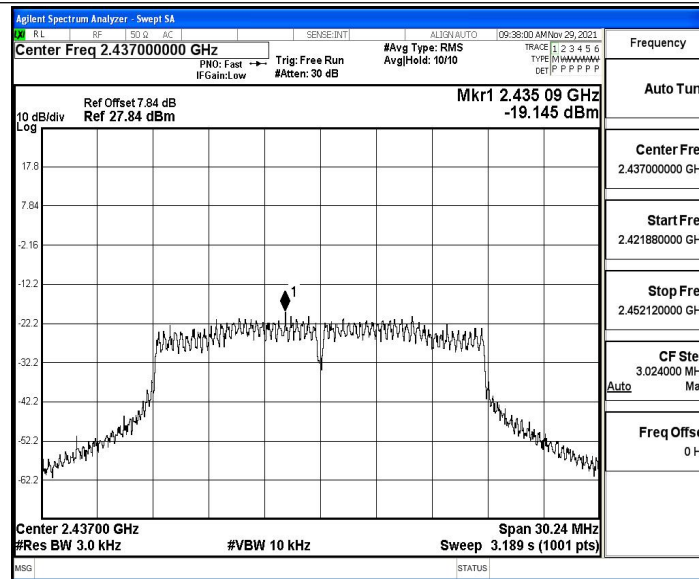
11G_Ant1_2462



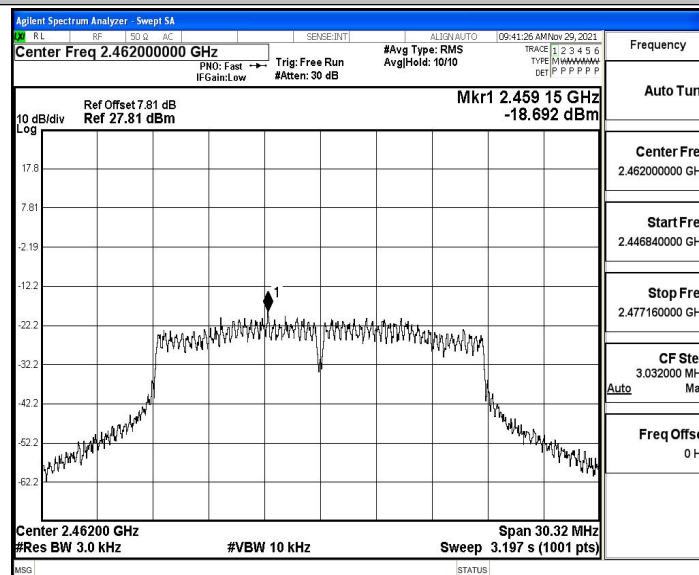
11N20SISO_Ant1_2412



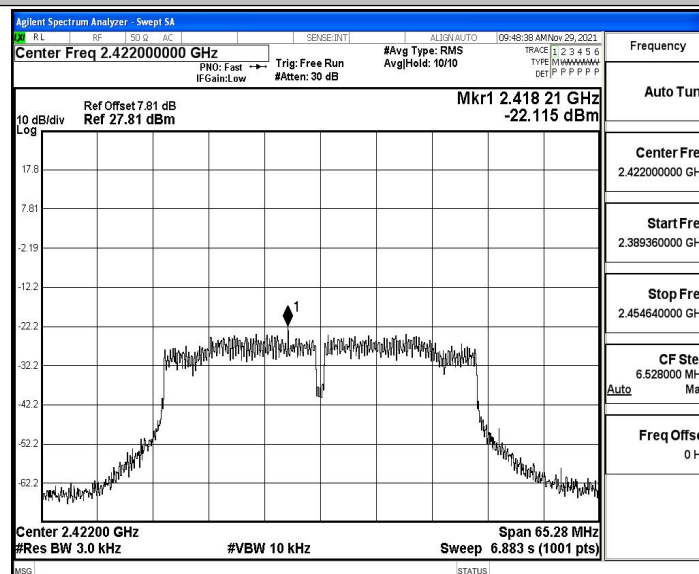
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

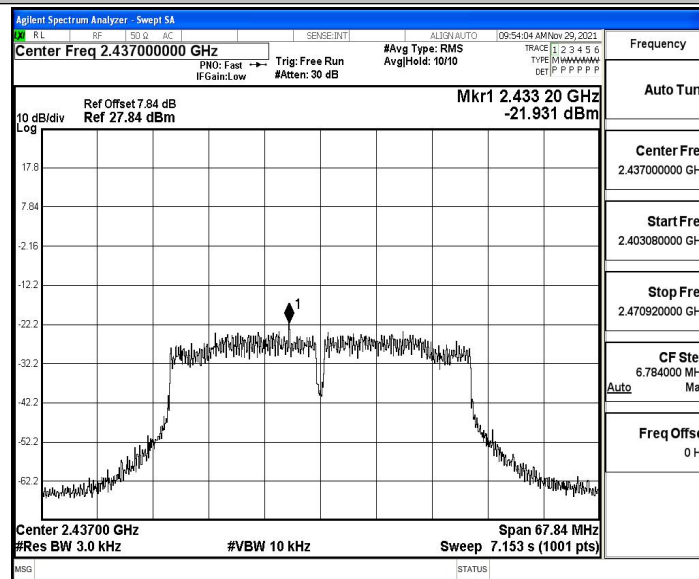


11N40SISO_Ant1_2422

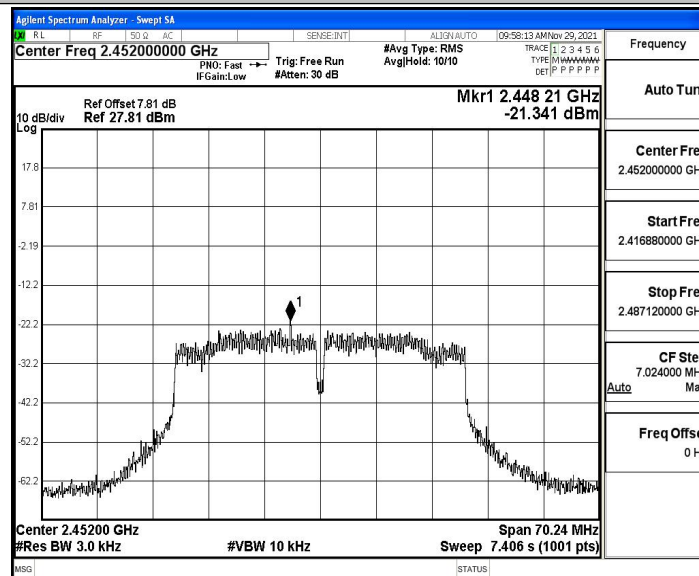




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





A.4 Band edge measurements

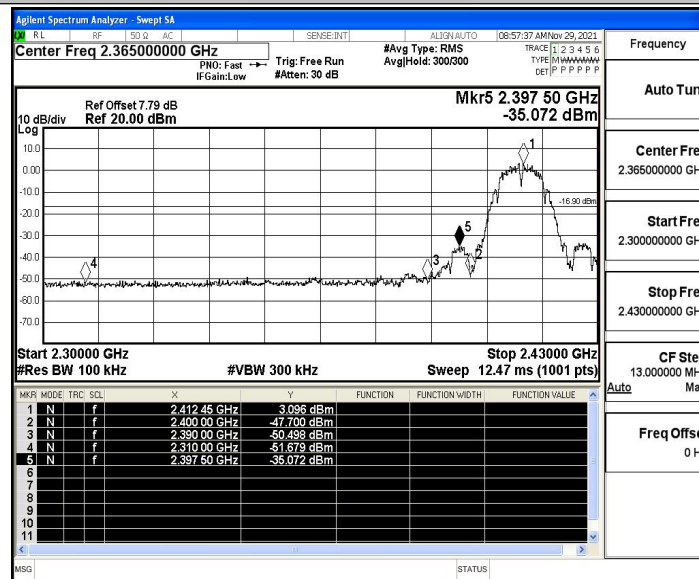
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	3.10	-35.07	≤ -16.9	PASS
		High	2462	2.93	-46.58	≤ -17.07	PASS
11G	Ant1	Low	2412	-5.22	-34.18	≤ -25.22	PASS
		High	2462	-4.65	-48.95	≤ -24.65	PASS
11N20SISO	Ant1	Low	2412	-5.49	-36.23	≤ -25.49	PASS
		High	2462	-4.89	-49.12	≤ -24.89	PASS
11N40SISO	Ant1	Low	2422	-8.81	-39.7	≤ -28.81	PASS
		High	2452	-8.04	-42.66	≤ -28.04	PASS

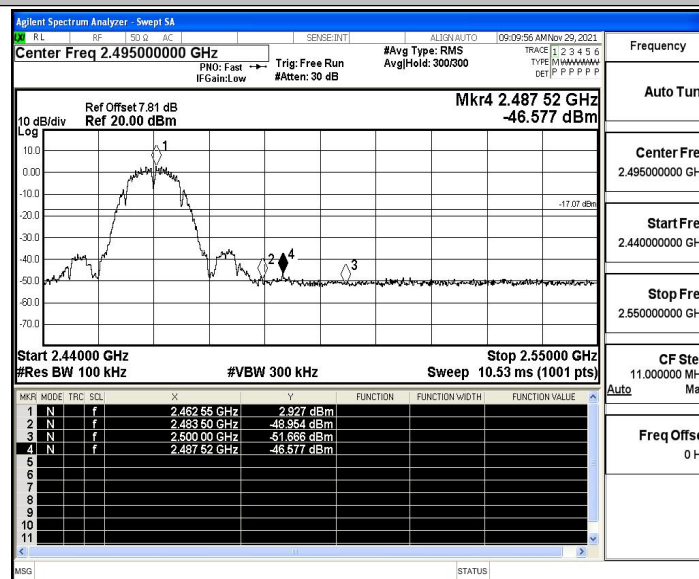


Test Graphs

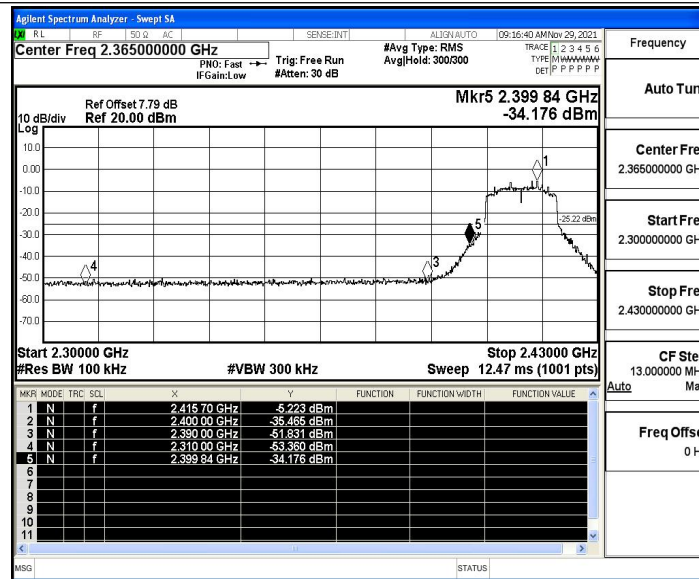
11B_Ant1_Low_2412



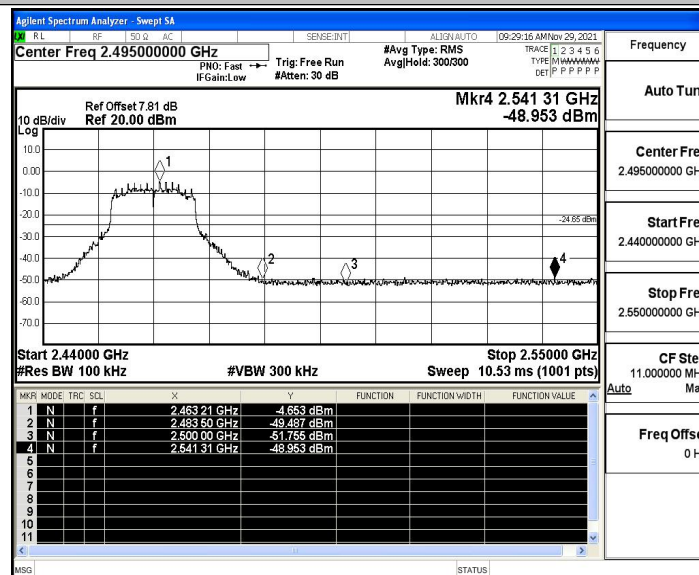
11B_Ant1_High_2462



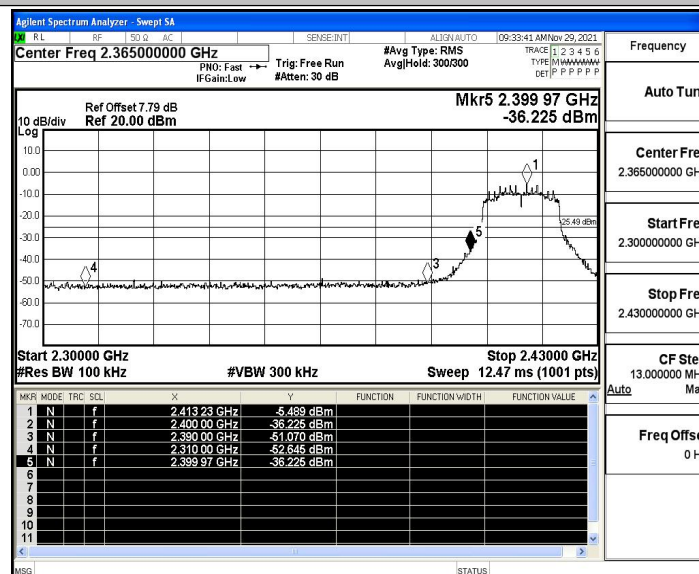
11G_Ant1_Low_2412



11G_Ant1_High_2462

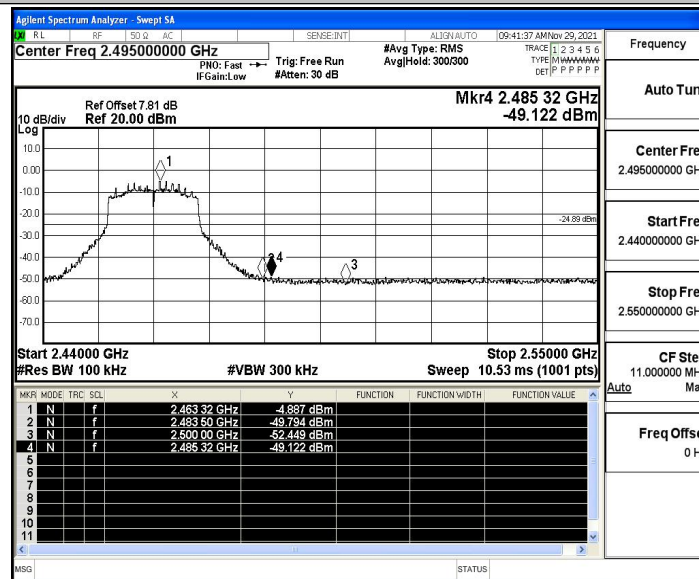


11N20SISO_Ant1_Low_2412

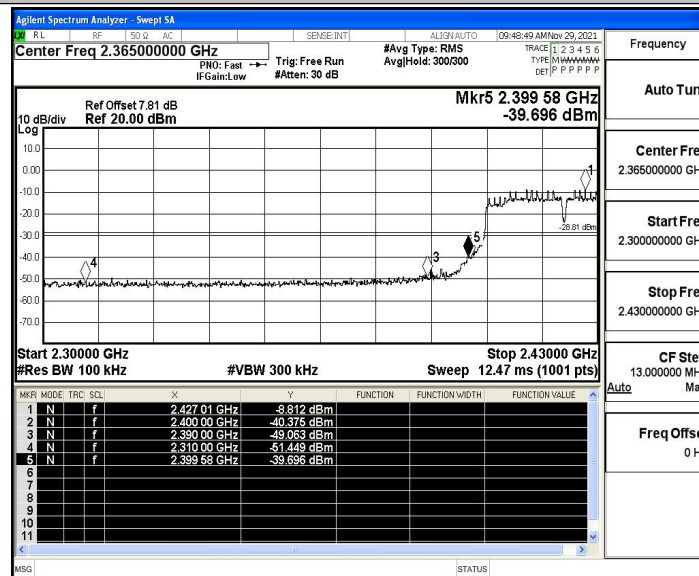




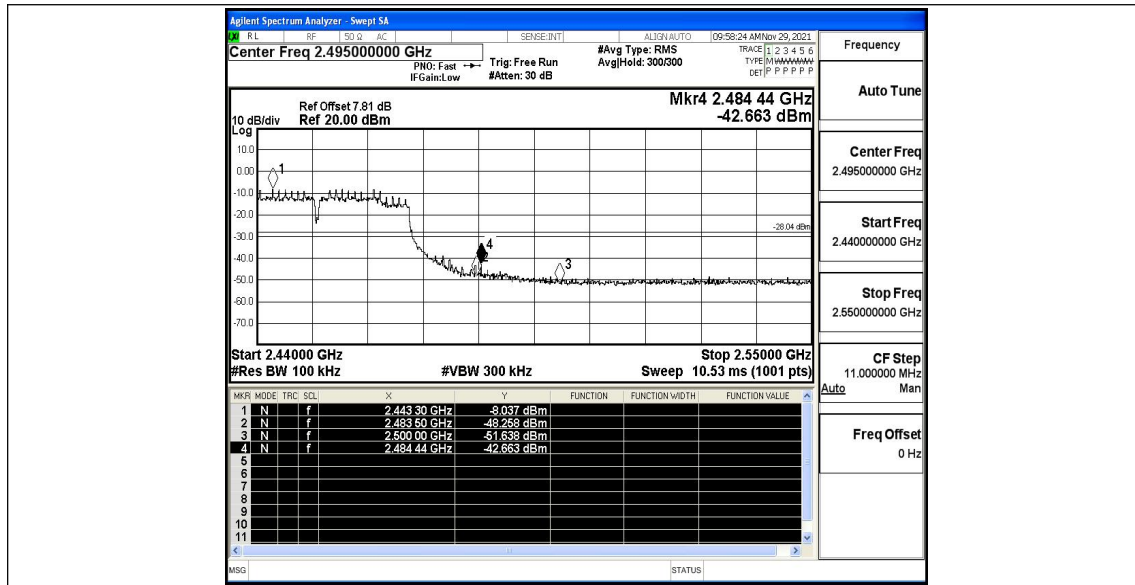
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452





A.5 Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.83	2.83	---	PASS
			30~1000	2.83	-61.3	≤-17.17	PASS
			1000~26500	2.83	-47.48	≤-17.17	PASS
		2437	Reference	1.78	1.78	---	PASS
			30~1000	1.78	-62.27	≤-18.22	PASS
			1000~26500	1.78	-46.78	≤-18.22	PASS
		2462	Reference	2.94	2.94	---	PASS
			30~1000	2.94	-61.45	≤-17.06	PASS
			1000~26500	2.94	-46.96	≤-17.06	PASS
11G	Ant1	2412	Reference	-5.37	-5.37	---	PASS
			30~1000	-5.37	-61.97	≤-25.37	PASS
			1000~26500	-5.37	-47.45	≤-25.37	PASS
		2437	Reference	-4.01	-4.01	---	PASS
			30~1000	-4.01	-61.49	≤-24.01	PASS
			1000~26500	-4.01	-46.95	≤-24.01	PASS
		2462	Reference	-5.09	-5.09	---	PASS
			30~1000	-5.09	-61.41	≤-25.09	PASS
			1000~26500	-5.09	-46.91	≤-25.09	PASS
11N20SISO	Ant1	2412	Reference	-5.73	-5.73	---	PASS
			30~1000	-5.73	-61.27	≤-25.73	PASS
			1000~26500	-5.73	-47.29	≤-25.73	PASS
		2437	Reference	-5.82	-5.82	---	PASS
			30~1000	-5.82	-61	≤-25.82	PASS
			1000~26500	-5.82	-46.31	≤-25.82	PASS
		2462	Reference	-5.25	-5.25	---	PASS
			30~1000	-5.25	-61.13	≤-25.25	PASS
			1000~26500	-5.25	-47.39	≤-25.25	PASS
11N40SISO	Ant1	2422	Reference	-8.60	-8.60	---	PASS
			30~1000	-8.60	-61.83	≤-28.6	PASS
			1000~26500	-8.60	-47.01	≤-28.6	PASS
		2437	Reference	-9.07	-9.07	---	PASS
			30~1000	-9.07	-61.72	≤-29.07	PASS
			1000~26500	-9.07	-47.16	≤-29.07	PASS
		2452	Reference	-8.12	-8.12	---	PASS
			30~1000	-8.12	-61.54	≤-28.12	PASS
			1000~26500	-8.12	-39.6	≤-28.12	PASS



Test Graphs

