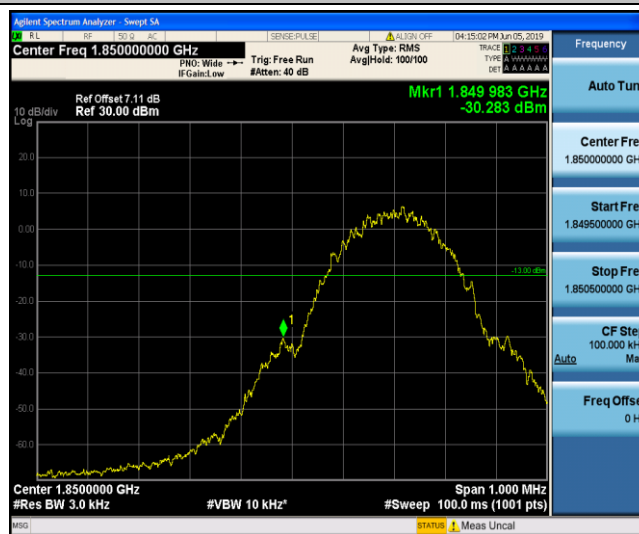




GSM1900_512



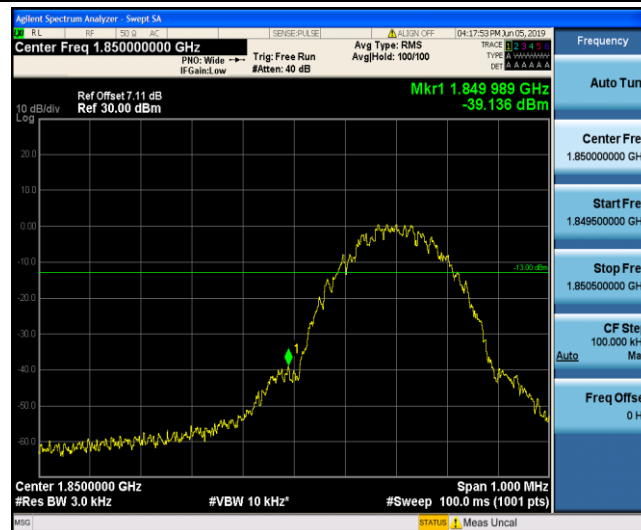
GSM1900_810



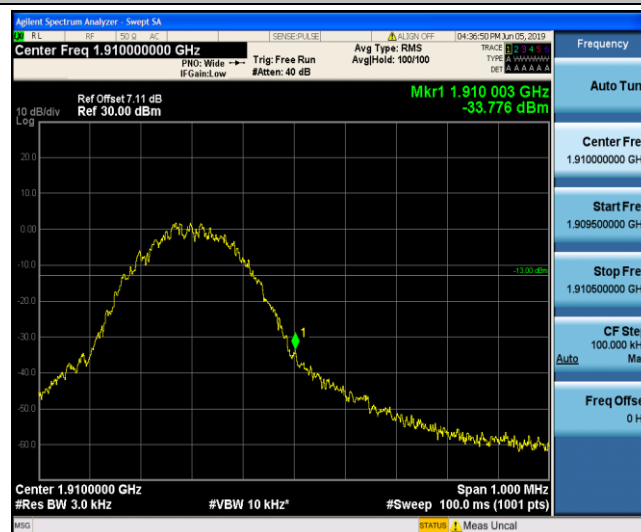
GPRS1900_512



GPRS1900_810



EGPRS1900_512



EGPRS1900_810



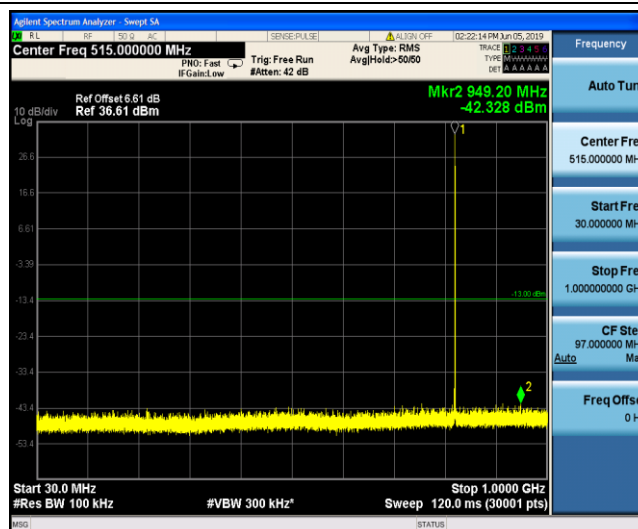
8.5 Appendix E: Conducted Spurious Emission

Test Result

Band	Channel	Frequency Rang(Mhz)	Value(dBm)	Limit(dBm)	Verdict
GSM850	128	30~1000	-42.33	-13	PASS
GSM850	128	1000~10000	-37.60	-13	PASS
GSM850	190	30~1000	-41.74	-13	PASS
GSM850	190	1000~10000	-37.26	-13	PASS
GSM850	251	30~1000	-42.09	-13	PASS
GSM850	251	1000~10000	-37.51	-13	PASS
GPRS850	128	30~1000	-42.31	-13	PASS
GPRS850	128	1000~10000	-35.97	-13	PASS
GPRS850	190	30~1000	-41.91	-13	PASS
GPRS850	190	1000~10000	-37.86	-13	PASS
GPRS850	251	30~1000	-42.41	-13	PASS
GPRS850	251	1000~10000	-38.45	-13	PASS
EGPRS850	128	30~1000	-41.69	-13	PASS
EGPRS850	128	1000~10000	-38.47	-13	PASS
EGPRS850	190	30~1000	-42.10	-13	PASS
EGPRS850	190	1000~10000	-38.57	-13	PASS
EGPRS850	251	30~1000	-42.10	-13	PASS
EGPRS850	251	1000~10000	-38.48	-13	PASS
GSM1900	512	30~1000	-41.94	-13	PASS
GSM1900	512	1000~20000	-32.00	-13	PASS
GSM1900	661	30~1000	-41.85	-13	PASS
GSM1900	661	1000~20000	-31.82	-13	PASS
GSM1900	810	30~1000	-41.94	-13	PASS
GSM1900	810	1000~20000	-31.88	-13	PASS
GPRS1900	512	30~1000	-40.96	-13	PASS
GPRS1900	512	1000~20000	-31.89	-13	PASS
GPRS1900	661	30~1000	-42.15	-13	PASS
GPRS1900	661	1000~20000	-31.89	-13	PASS
GPRS1900	810	30~1000	-42.22	-13	PASS
GPRS1900	810	1000~20000	-31.82	-13	PASS
EGPRS1900	512	30~1000	-42.29	-13	PASS
EGPRS1900	512	1000~20000	-31.81	-13	PASS
EGPRS1900	661	30~1000	-42.06	-13	PASS
EGPRS1900	661	1000~20000	-31.78	-13	PASS
EGPRS1900	810	30~1000	-42.58	-13	PASS
EGPRS1900	810	1000~20000	-31.83	-13	PASS



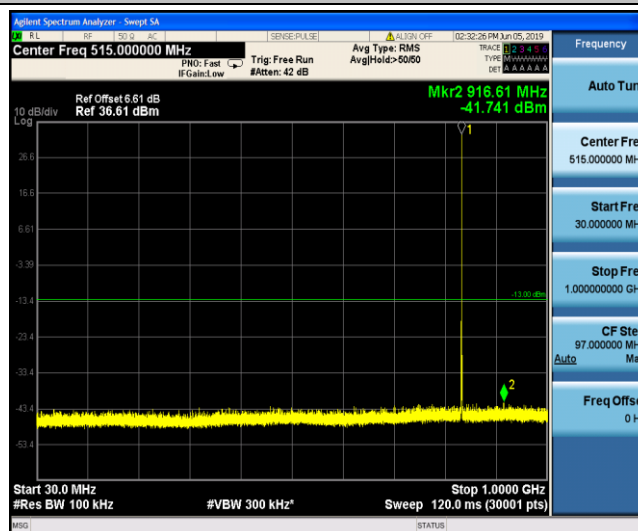
Test Graphs



GSM850_128



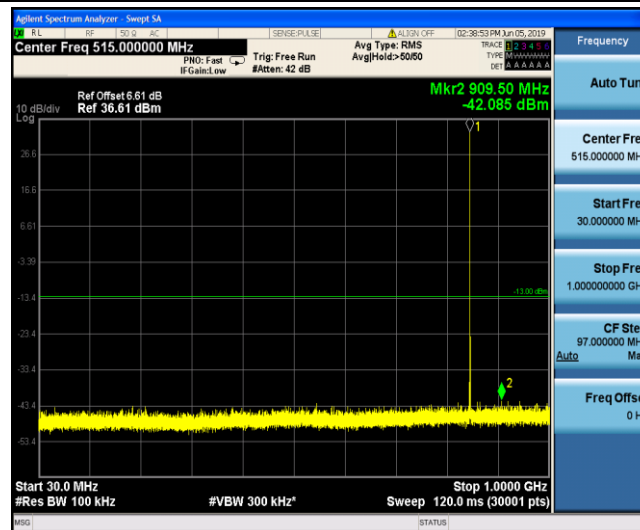
GSM850_128



GSM850_190



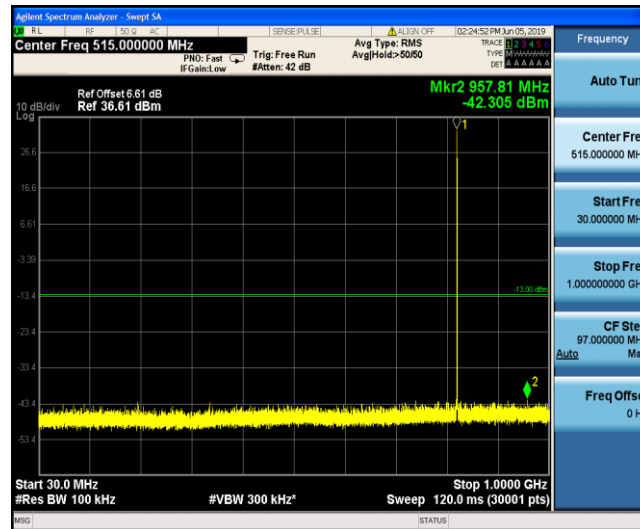
GSM850_190



GSM850_251



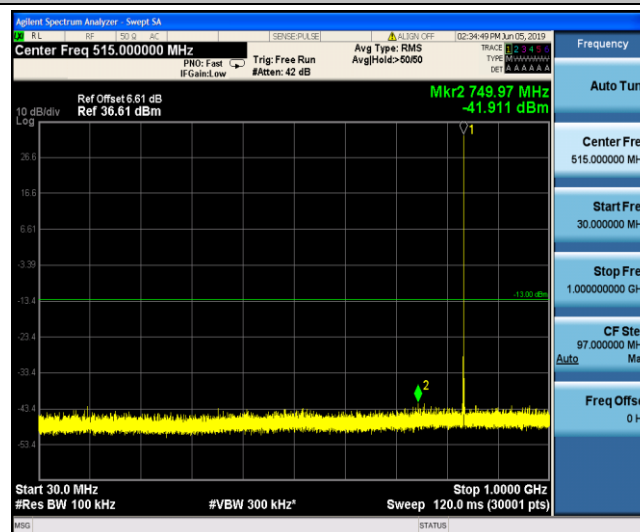
GSM850_251



GPRS850_128



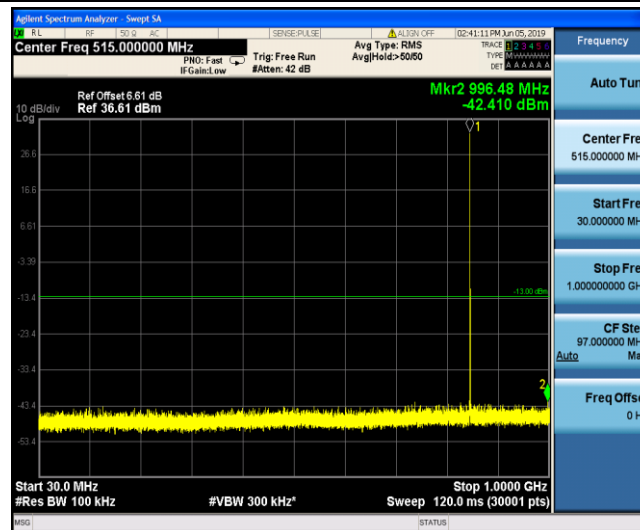
GPRS850_128



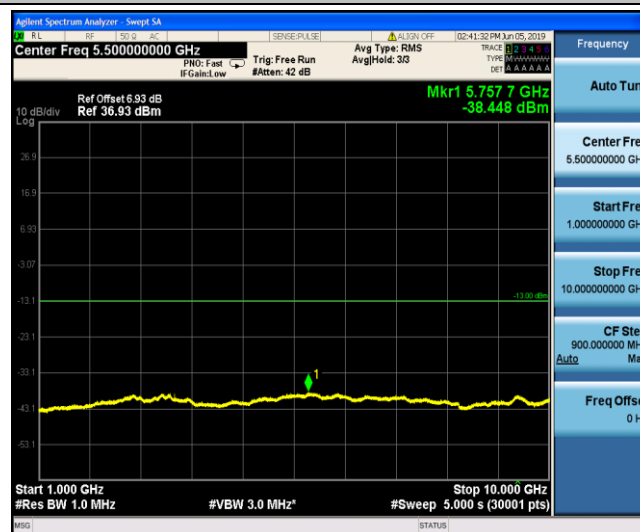
GPRS850_190



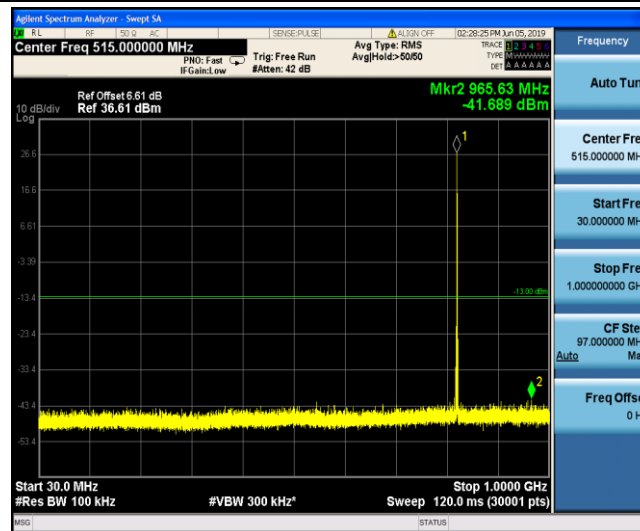
GPRS850_190



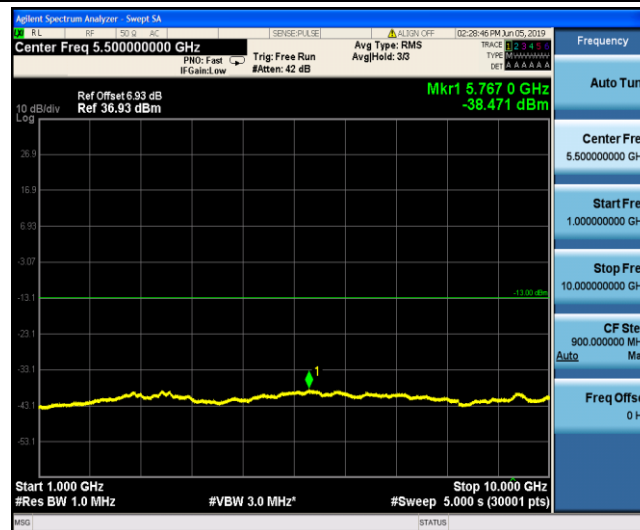
GPRS850_251



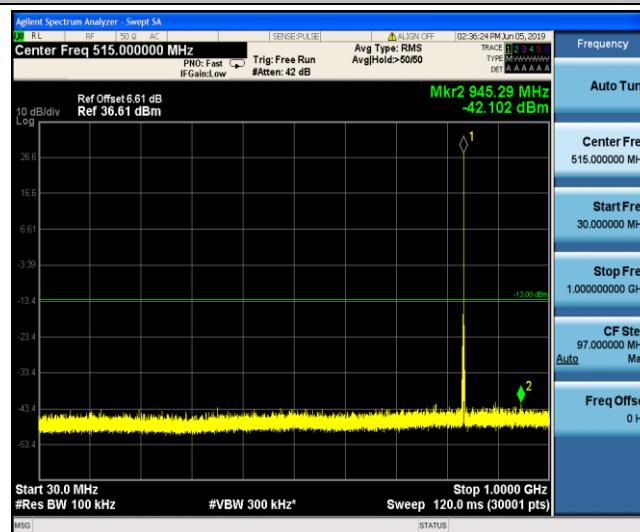
GPRS850_251



EGPRS850_128



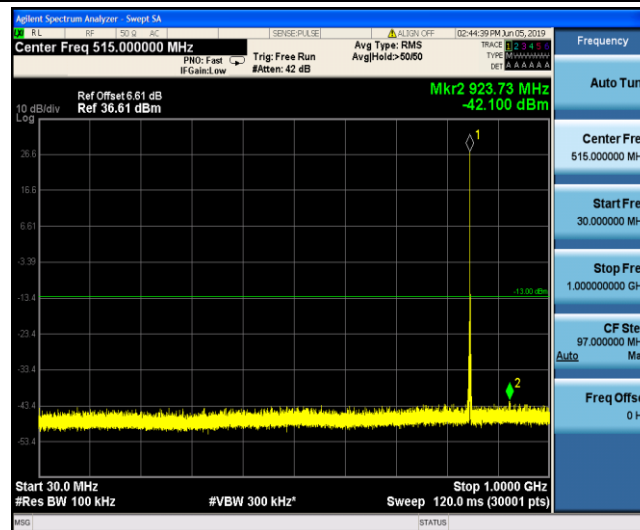
EGPRS850_128



EGPRS850_190



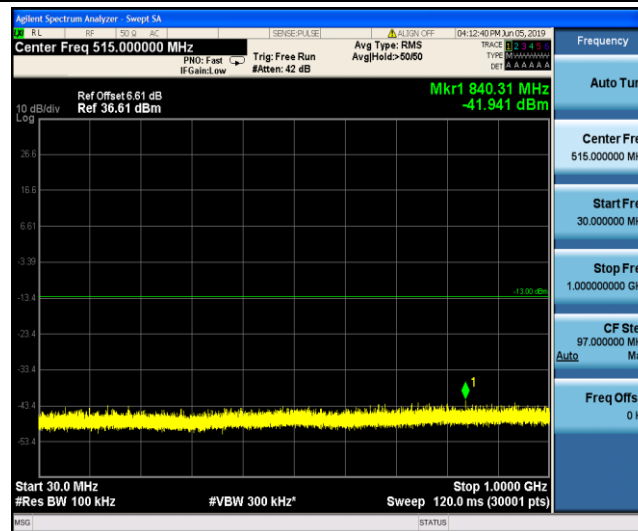
EGPRS850_190



EGPRS850_251



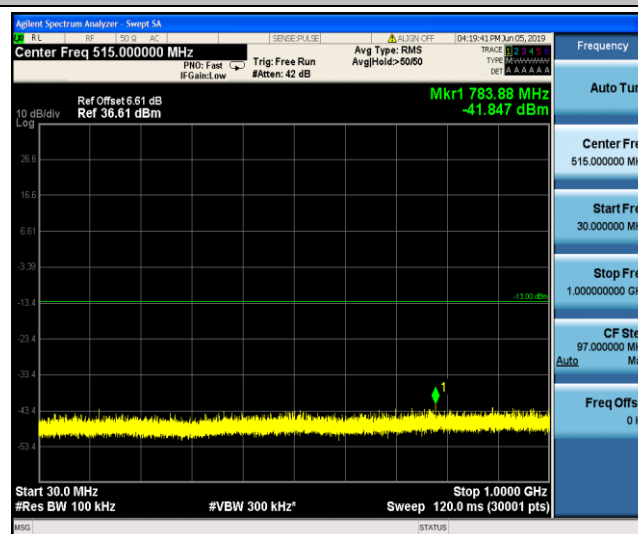
EGPRS850_251



GSM1900_512



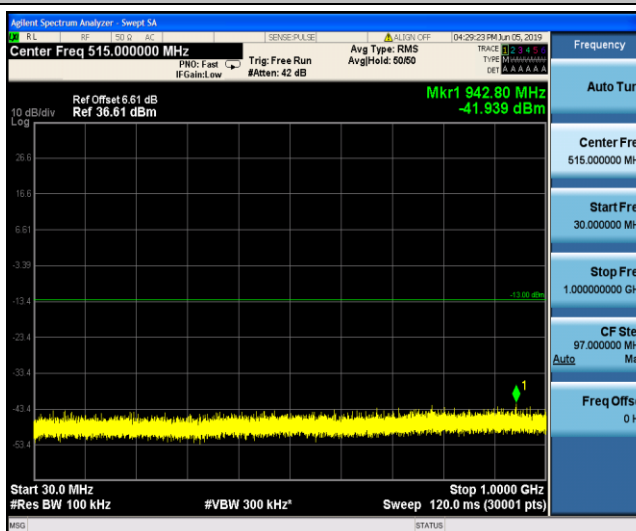
GSM1900_512



GSM1900_661



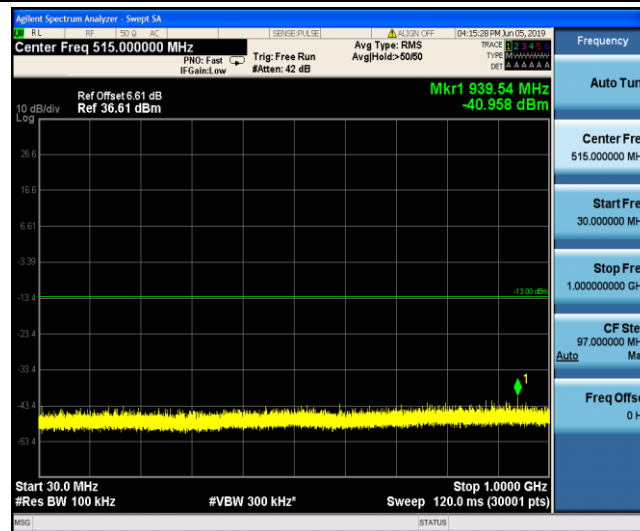
GSM1900_661



GSM1900_810



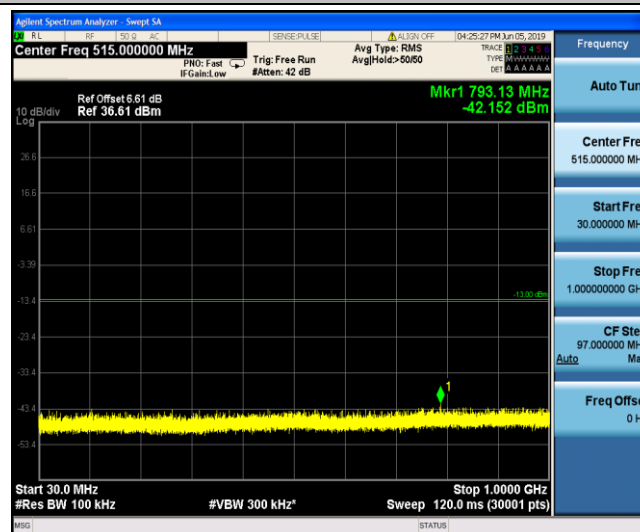
GSM1900_810



GPRS1900_512



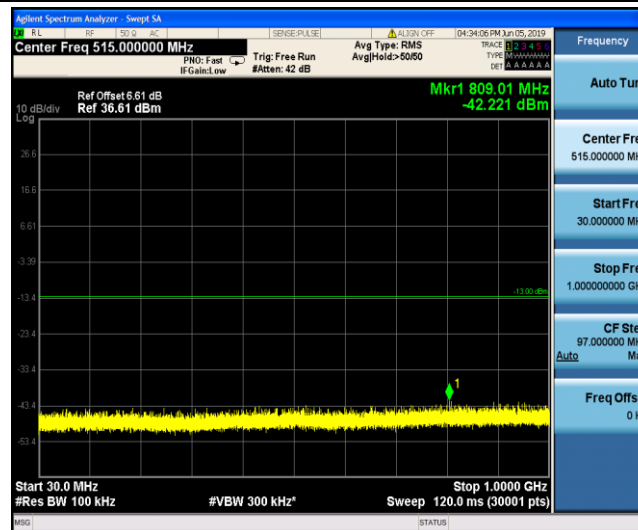
GPRS1900_512



GPRS1900_661



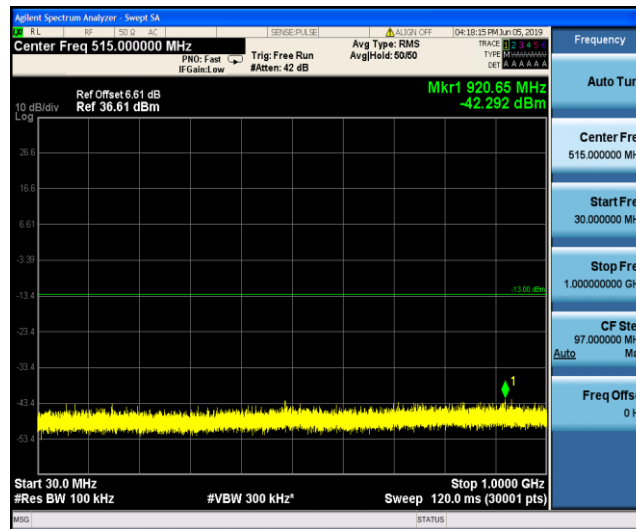
GPRS1900_661



GPRS1900_810



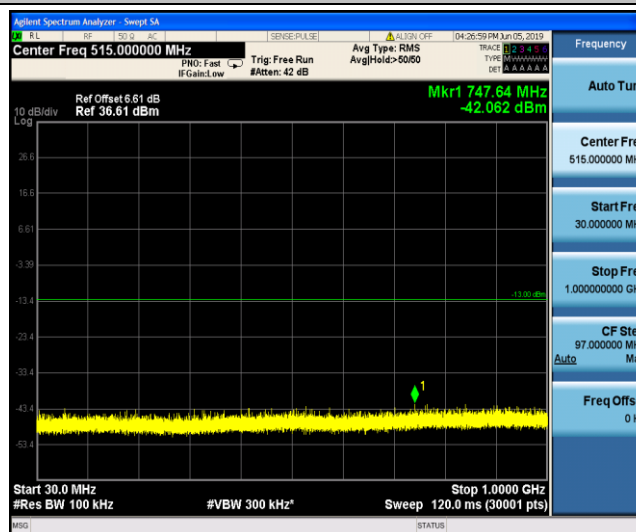
GPRS1900_810



EGPRS1900_512



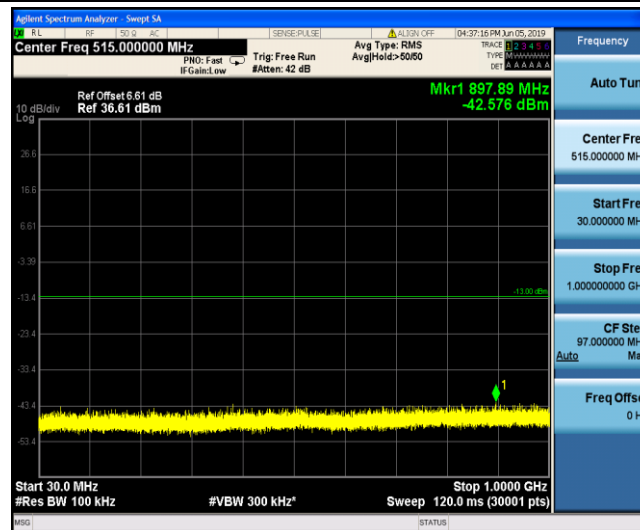
EGPRS1900_512



EGPRS1900_661



EGPRS1900_661



EGPRS1900_810



EGPRS1900_810



8.6 Appendix F: Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	VL	TN	10.01	0.012143	2.5	PASS
GSM850	128	VN	TN	10.75	0.013044	2.5	PASS
GSM850	128	VH	TN	9.27	0.011242	2.5	PASS
GSM850	190	VL	TN	9.65	0.011539	2.5	PASS
GSM850	190	VN	TN	5.68	0.006792	2.5	PASS
GSM850	190	VH	TN	4.29	0.005133	2.5	PASS
GSM850	251	VL	TN	9.56	0.011259	2.5	PASS
GSM850	251	VN	TN	9.62	0.011335	2.5	PASS
GSM850	251	VH	TN	11.36	0.013389	2.5	PASS
GPRS850	128	VL	TN	19.11	0.023190	2.5	PASS
GPRS850	128	VN	TN	9.59	0.011634	2.5	PASS
GPRS850	128	VH	TN	8.39	0.010185	2.5	PASS
GPRS850	190	VL	TN	6.46	0.007718	2.5	PASS
GPRS850	190	VN	TN	13.92	0.016633	2.5	PASS
GPRS850	190	VH	TN	14.08	0.016826	2.5	PASS
GPRS850	251	VL	TN	14.08	0.016584	2.5	PASS
GPRS850	251	VN	TN	11.33	0.013351	2.5	PASS
GPRS850	251	VH	TN	7.94	0.009357	2.5	PASS
EGPRS850	128	VL	TN	-0.77	-0.000940	2.5	PASS
EGPRS850	128	VN	TN	2.26	0.002742	2.5	PASS
EGPRS850	128	VH	TN	3.55	0.004309	2.5	PASS
EGPRS850	190	VL	TN	2.10	0.002508	2.5	PASS
EGPRS850	190	VN	TN	2.03	0.002431	2.5	PASS
EGPRS850	190	VH	TN	3.62	0.004322	2.5	PASS
EGPRS850	251	VL	TN	4.20	0.004945	2.5	PASS
EGPRS850	251	VN	TN	-1.00	-0.001179	2.5	PASS
EGPRS850	251	VH	TN	3.68	0.004336	2.5	PASS
GSM1900	512	VL	TN	30.57	0.016525	2.5	PASS
GSM1900	512	VN	TN	22.31	0.012058	2.5	PASS
GSM1900	512	VH	TN	31.22	0.016874	2.5	PASS
GSM1900	661	VL	TN	29.51	0.015696	2.5	PASS
GSM1900	661	VN	TN	24.15	0.012846	2.5	PASS
GSM1900	661	VH	TN	22.54	0.011987	2.5	PASS
GSM1900	810	VL	TN	28.61	0.014978	2.5	PASS
GSM1900	810	VN	TN	20.15	0.010549	2.5	PASS
GSM1900	810	VH	TN	23.79	0.012459	2.5	PASS
GPRS1900	512	VL	TN	29.35	0.015862	2.5	PASS
GPRS1900	512	VN	TN	27.38	0.014798	2.5	PASS
GPRS1900	512	VH	TN	35.06	0.018951	2.5	PASS
GPRS1900	661	VL	TN	20.79	0.011060	2.5	PASS
GPRS1900	661	VN	TN	29.15	0.015508	2.5	PASS
GPRS1900	661	VH	TN	26.35	0.014013	2.5	PASS
GPRS1900	810	VL	TN	38.07	0.019931	2.5	PASS
GPRS1900	810	VN	TN	34.19	0.017903	2.5	PASS
GPRS1900	810	VH	TN	41.07	0.021504	2.5	PASS
EGPRS1900	512	VL	TN	28.09	0.015181	2.5	PASS
EGPRS1900	512	VN	TN	27.15	0.014675	2.5	PASS
EGPRS1900	512	VH	TN	24.44	0.013210	2.5	PASS



EGPRS1900	661	VL	TN	18.27	0.009720	2.5	PASS
EGPRS1900	661	VN	TN	17.08	0.009085	2.5	PASS
EGPRS1900	661	VH	TN	16.92	0.008999	2.5	PASS
EGPRS1900	810	VL	TN	26.57	0.013913	2.5	PASS
EGPRS1900	810	VN	TN	23.47	0.012290	2.5	PASS
EGPRS1900	810	VH	TN	24.34	0.012747	2.5	PASS



Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	VN	-30	11.33	0.013749	2.5	PASS
GSM850	128	VN	-20	10.94	0.013279	2.5	PASS
GSM850	128	VN	-10	9.14	0.011086	2.5	PASS
GSM850	128	VN	0	6.55	0.007952	2.5	PASS
GSM850	128	VN	10	24.80	0.030084	2.5	PASS
GSM850	128	VN	20	30.99	0.037605	2.5	PASS
GSM850	128	VN	30	32.22	0.039094	2.5	PASS
GSM850	128	VN	40	27.28	0.033101	2.5	PASS
GSM850	128	VN	50	24.21	0.029379	2.5	PASS
GSM850	190	VN	-30	5.49	0.006561	2.5	PASS
GSM850	190	VN	-20	4.20	0.005017	2.5	PASS
GSM850	190	VN	-10	5.17	0.006175	2.5	PASS
GSM850	190	VN	0	7.20	0.008606	2.5	PASS
GSM850	190	VN	10	19.34	0.023116	2.5	PASS
GSM850	190	VN	20	26.51	0.031684	2.5	PASS
GSM850	190	VN	30	28.25	0.033768	2.5	PASS
GSM850	190	VN	40	25.51	0.030487	2.5	PASS
GSM850	190	VN	50	26.93	0.032186	2.5	PASS
GSM850	251	VN	-30	7.17	0.008444	2.5	PASS
GSM850	251	VN	-20	5.26	0.006200	2.5	PASS
GSM850	251	VN	-10	10.20	0.012020	2.5	PASS
GSM850	251	VN	0	5.29	0.006238	2.5	PASS
GSM850	251	VN	10	19.92	0.023469	2.5	PASS
GSM850	251	VN	20	26.70	0.031457	2.5	PASS
GSM850	251	VN	30	28.64	0.033739	2.5	PASS
GSM850	251	VN	40	26.57	0.031304	2.5	PASS
GSM850	251	VN	50	23.44	0.027615	2.5	PASS
GPRS850	128	VN	-30	10.82	0.013123	2.5	PASS
GPRS850	128	VN	-20	9.14	0.011086	2.5	PASS
GPRS850	128	VN	-10	14.14	0.017157	2.5	PASS
GPRS850	128	VN	0	10.69	0.012966	2.5	PASS
GPRS850	128	VN	10	20.60	0.024992	2.5	PASS
GPRS850	128	VN	20	21.86	0.026520	2.5	PASS
GPRS850	128	VN	30	18.60	0.022563	2.5	PASS
GPRS850	128	VN	40	21.11	0.025619	2.5	PASS
GPRS850	128	VN	50	20.08	0.024365	2.5	PASS
GPRS850	190	VN	-30	15.63	0.018678	2.5	PASS
GPRS850	190	VN	-20	13.30	0.015900	2.5	PASS
GPRS850	190	VN	-10	10.23	0.012234	2.5	PASS
GPRS850	190	VN	0	12.11	0.014472	2.5	PASS
GPRS850	190	VN	10	13.69	0.016363	2.5	PASS
GPRS850	190	VN	20	14.72	0.017598	2.5	PASS
GPRS850	190	VN	30	16.24	0.019412	2.5	PASS
GPRS850	190	VN	40	15.17	0.018138	2.5	PASS
GPRS850	190	VN	50	18.05	0.021573	2.5	PASS
GPRS850	251	VN	-30	4.78	0.005629	2.5	PASS
GPRS850	251	VN	-20	9.72	0.011449	2.5	PASS
GPRS850	251	VN	-10	13.88	0.016356	2.5	PASS
GPRS850	251	VN	0	12.14	0.014302	2.5	PASS
GPRS850	251	VN	10	17.79	0.020958	2.5	PASS
GPRS850	251	VN	20	20.73	0.024420	2.5	PASS



GPRS850	251	VN	30	23.54	0.027729	2.5	PASS
GPRS850	251	VN	40	22.89	0.026968	2.5	PASS
GPRS850	251	VN	50	24.15	0.028452	2.5	PASS
EGPRS850	128	VN	-30	4.26	0.005171	2.5	PASS
EGPRS850	128	VN	-20	8.62	0.010459	2.5	PASS
EGPRS850	128	VN	-10	-3.36	-0.004074	2.5	PASS
EGPRS850	128	VN	0	-0.16	-0.000196	2.5	PASS
EGPRS850	128	VN	10	7.88	0.009558	2.5	PASS
EGPRS850	128	VN	20	10.59	0.012849	2.5	PASS
EGPRS850	128	VN	30	12.59	0.015277	2.5	PASS
EGPRS850	128	VN	40	10.53	0.012770	2.5	PASS
EGPRS850	128	VN	50	11.49	0.013945	2.5	PASS
EGPRS850	190	VN	-30	3.10	0.003705	2.5	PASS
EGPRS850	190	VN	-20	4.58	0.005480	2.5	PASS
EGPRS850	190	VN	-10	1.81	0.002161	2.5	PASS
EGPRS850	190	VN	0	3.65	0.004361	2.5	PASS
EGPRS850	190	VN	10	7.49	0.008953	2.5	PASS
EGPRS850	190	VN	20	12.14	0.014510	2.5	PASS
EGPRS850	190	VN	30	13.17	0.015745	2.5	PASS
EGPRS850	190	VN	40	8.88	0.010613	2.5	PASS
EGPRS850	190	VN	50	10.07	0.012041	2.5	PASS
EGPRS850	251	VN	-30	1.23	0.001445	2.5	PASS
EGPRS850	251	VN	-20	1.87	0.002206	2.5	PASS
EGPRS850	251	VN	-10	1.97	0.002320	2.5	PASS
EGPRS850	251	VN	0	1.74	0.002054	2.5	PASS
EGPRS850	251	VN	10	13.50	0.015899	2.5	PASS
EGPRS850	251	VN	20	15.76	0.018562	2.5	PASS
EGPRS850	251	VN	30	17.27	0.020350	2.5	PASS
EGPRS850	251	VN	40	15.05	0.017725	2.5	PASS
EGPRS850	251	VN	50	15.17	0.017877	2.5	PASS
GSM1900	512	VN	-30	28.61	0.015461	2.5	PASS
GSM1900	512	VN	-20	27.02	0.014606	2.5	PASS
GSM1900	512	VN	-10	27.60	0.014920	2.5	PASS
GSM1900	512	VN	0	29.06	0.015705	2.5	PASS
GSM1900	512	VN	10	23.21	0.012546	2.5	PASS
GSM1900	512	VN	20	19.21	0.010383	2.5	PASS
GSM1900	512	VN	30	16.34	0.008830	2.5	PASS
GSM1900	512	VN	40	16.37	0.008847	2.5	PASS
GSM1900	512	VN	50	47.72	0.025791	2.5	PASS
GSM1900	661	VN	-30	23.28	0.012382	2.5	PASS
GSM1900	661	VN	-20	24.28	0.012914	2.5	PASS
GSM1900	661	VN	-10	19.27	0.010252	2.5	PASS
GSM1900	661	VN	0	14.92	0.007934	2.5	PASS
GSM1900	661	VN	10	76.97	0.040941	2.5	PASS
GSM1900	661	VN	20	69.22	0.036820	2.5	PASS
GSM1900	661	VN	30	64.99	0.034570	2.5	PASS
GSM1900	661	VN	40	56.44	0.030019	2.5	PASS
GSM1900	661	VN	50	65.25	0.034707	2.5	PASS
GSM1900	810	VN	-30	17.53	0.009180	2.5	PASS
GSM1900	810	VN	-20	19.08	0.009991	2.5	PASS
GSM1900	810	VN	-10	21.44	0.011225	2.5	PASS
GSM1900	810	VN	0	21.34	0.011174	2.5	PASS
GSM1900	810	VN	10	21.08	0.011039	2.5	PASS
GSM1900	810	VN	20	23.92	0.012527	2.5	PASS
GSM1900	810	VN	30	21.70	0.011360	2.5	PASS



GSM1900	810	VN	40	39.16	0.020506	2.5	PASS
GSM1900	810	VN	50	63.02	0.032999	2.5	PASS
GPRS1900	512	VN	-30	35.00	0.018916	2.5	PASS
GPRS1900	512	VN	-20	33.16	0.017921	2.5	PASS
GPRS1900	512	VN	-10	35.84	0.019369	2.5	PASS
GPRS1900	512	VN	0	34.09	0.018427	2.5	PASS
GPRS1900	512	VN	10	36.32	0.019631	2.5	PASS
GPRS1900	512	VN	20	42.55	0.022999	2.5	PASS
GPRS1900	512	VN	30	49.33	0.026663	2.5	PASS
GPRS1900	512	VN	40	49.91	0.026978	2.5	PASS
GPRS1900	512	VN	50	42.91	0.023191	2.5	PASS
GPRS1900	661	VN	-30	31.25	0.016624	2.5	PASS
GPRS1900	661	VN	-20	31.45	0.016727	2.5	PASS
GPRS1900	661	VN	-10	26.83	0.014271	2.5	PASS
GPRS1900	661	VN	0	29.57	0.015731	2.5	PASS
GPRS1900	661	VN	10	34.32	0.018255	2.5	PASS
GPRS1900	661	VN	20	42.36	0.022531	2.5	PASS
GPRS1900	661	VN	30	35.58	0.018925	2.5	PASS
GPRS1900	661	VN	40	42.91	0.022823	2.5	PASS
GPRS1900	661	VN	50	38.81	0.020642	2.5	PASS
GPRS1900	810	VN	-30	33.38	0.017480	2.5	PASS
GPRS1900	810	VN	-20	36.39	0.019052	2.5	PASS
GPRS1900	810	VN	-10	34.19	0.017903	2.5	PASS
GPRS1900	810	VN	0	39.78	0.020827	2.5	PASS
GPRS1900	810	VN	10	49.43	0.025882	2.5	PASS
GPRS1900	810	VN	20	55.08	0.028841	2.5	PASS
GPRS1900	810	VN	30	51.75	0.027099	2.5	PASS
GPRS1900	810	VN	40	48.85	0.025578	2.5	PASS
GPRS1900	810	VN	50	41.33	0.021639	2.5	PASS
EGPRS1900	512	VN	-30	24.41	0.013192	2.5	PASS
EGPRS1900	512	VN	-20	22.02	0.011901	2.5	PASS
EGPRS1900	512	VN	-10	35.13	0.018986	2.5	PASS
EGPRS1900	512	VN	0	33.45	0.018078	2.5	PASS
EGPRS1900	512	VN	10	40.07	0.021655	2.5	PASS
EGPRS1900	512	VN	20	41.36	0.022353	2.5	PASS
EGPRS1900	512	VN	30	41.58	0.022475	2.5	PASS
EGPRS1900	512	VN	40	41.52	0.022441	2.5	PASS
EGPRS1900	512	VN	50	38.68	0.020905	2.5	PASS
EGPRS1900	661	VN	-30	29.93	0.015920	2.5	PASS
EGPRS1900	661	VN	-20	23.37	0.012433	2.5	PASS
EGPRS1900	661	VN	-10	20.99	0.011163	2.5	PASS
EGPRS1900	661	VN	0	21.31	0.011334	2.5	PASS
EGPRS1900	661	VN	10	26.57	0.014134	2.5	PASS
EGPRS1900	661	VN	20	28.86	0.015353	2.5	PASS
EGPRS1900	661	VN	30	25.51	0.013567	2.5	PASS
EGPRS1900	661	VN	40	40.71	0.021656	2.5	PASS
EGPRS1900	661	VN	50	46.46	0.024712	2.5	PASS
EGPRS1900	810	VN	-30	23.96	0.012544	2.5	PASS
EGPRS1900	810	VN	-20	22.15	0.011597	2.5	PASS
EGPRS1900	810	VN	-10	24.38	0.012764	2.5	PASS
EGPRS1900	810	VN	0	29.74	0.015570	2.5	PASS
EGPRS1900	810	VN	10	34.97	0.018308	2.5	PASS
EGPRS1900	810	VN	20	39.26	0.020557	2.5	PASS
EGPRS1900	810	VN	30	39.10	0.020472	2.5	PASS
EGPRS1900	810	VN	40	35.71	0.018697	2.5	PASS



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EGPRS1900	810	VN	50	42.07	0.022028	2.5	PASS
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