

Appendix – GSM Test Data

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1. Conducted output power (ERP)

1.1. Test Data

Band	Channel	Frequency (MHz)	Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	ERP Limit (mW)	Verdict
GSM850	128	824.2	32.46	-2.42	27.89	615.18	7000	PASS
	190	836.6	32.54	-2.42	27.97	626.61	7000	PASS
	251	848.8	32.54	-2.42	27.97	626.61	7000	PASS
GPRS850 1 Slot	128	824.2	32.52	-2.42	27.95	623.73	7000	PASS
	190	836.6	32.62	-2.42	28.05	638.26	7000	PASS
	251	848.8	32.57	-2.42	28.00	630.96	7000	PASS
GPRS850 2 Slot	128	824.2	30.47	-2.42	25.90	389.05	7000	PASS
	190	836.6	30.46	-2.42	25.89	388.15	7000	PASS
	251	848.8	30.14	-2.42	25.57	360.58	7000	PASS
GPRS850 3 Slot	128	824.2	28.47	-2.42	23.90	245.47	7000	PASS
	190	836.6	28.43	-2.42	23.86	243.22	7000	PASS
	251	848.8	28.12	-2.42	23.55	226.46	7000	PASS
GPRS850 4 Slot	128	824.2	26.19	-2.42	21.62	145.21	7000	PASS
	190	836.6	26.24	-2.42	21.67	146.89	7000	PASS
	251	848.8	25.85	-2.42	21.28	134.28	7000	PASS
EGPRS850 1 Slot	128	824.2	25.34	-2.42	20.77	119.40	7000	PASS
	190	836.6	24.84	-2.42	20.27	106.41	7000	PASS
	251	848.8	24.59	-2.42	20.02	100.46	7000	PASS
EGPRS850 2 Slot	128	824.2	23.92	-2.42	19.35	86.10	7000	PASS
	190	836.6	23.92	-2.42	19.35	86.10	7000	PASS
	251	848.8	23.96	-2.42	19.39	86.90	7000	PASS
EGPRS850 3 Slot	128	824.2	21.67	-2.42	17.10	51.29	7000	PASS
	190	836.6	21.68	-2.42	17.11	51.40	7000	PASS
	251	848.8	21.25	-2.42	16.68	46.56	7000	PASS
EGPRS850 4 Slot	128	824.2	19.30	-2.42	14.73	29.72	7000	PASS
	190	836.6	19.28	-2.42	14.71	29.58	7000	PASS
	251	848.8	18.87	-2.42	14.30	26.92	7000	PASS

2. Conducted output power (EIRP)

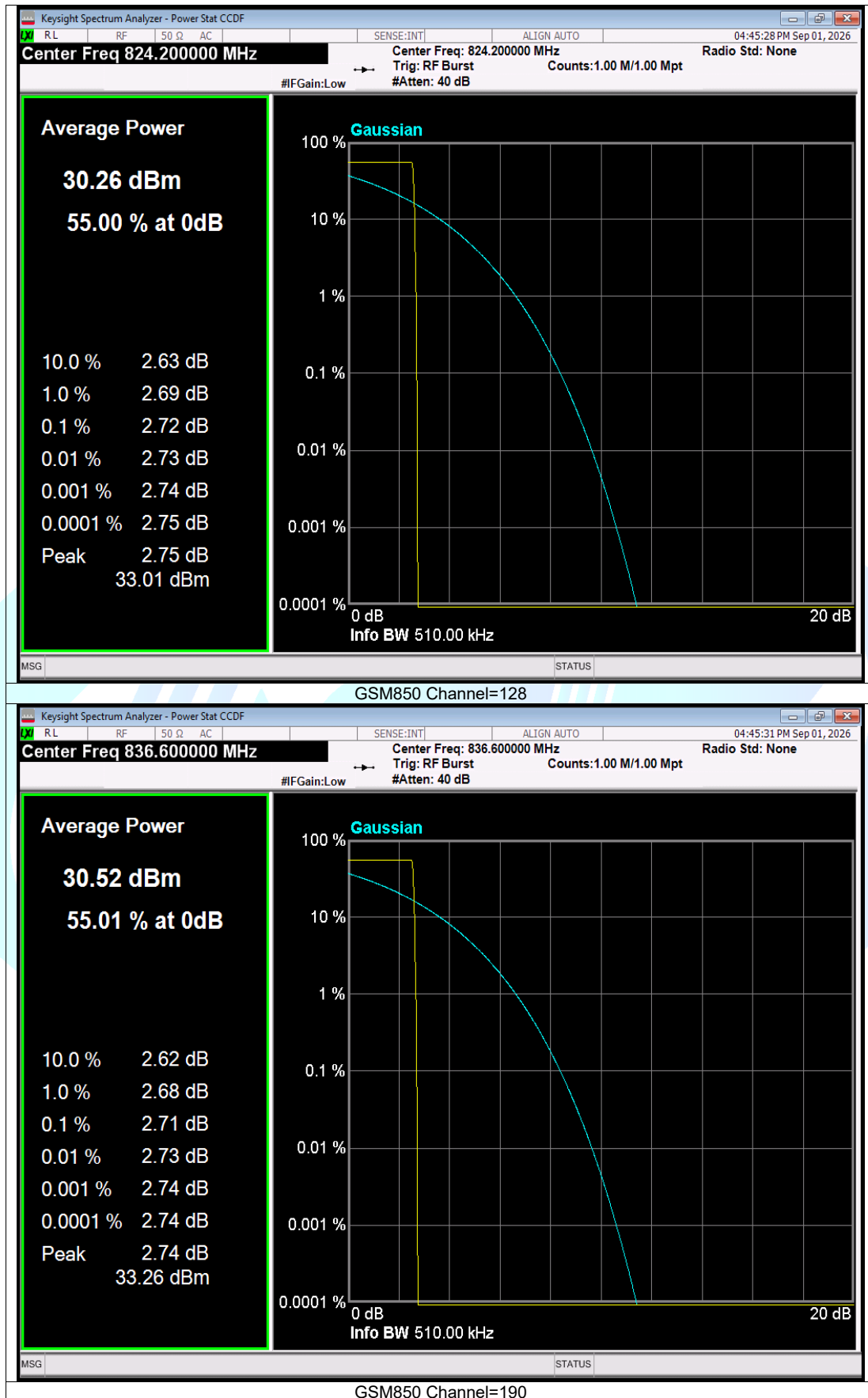
2.1. Test Data

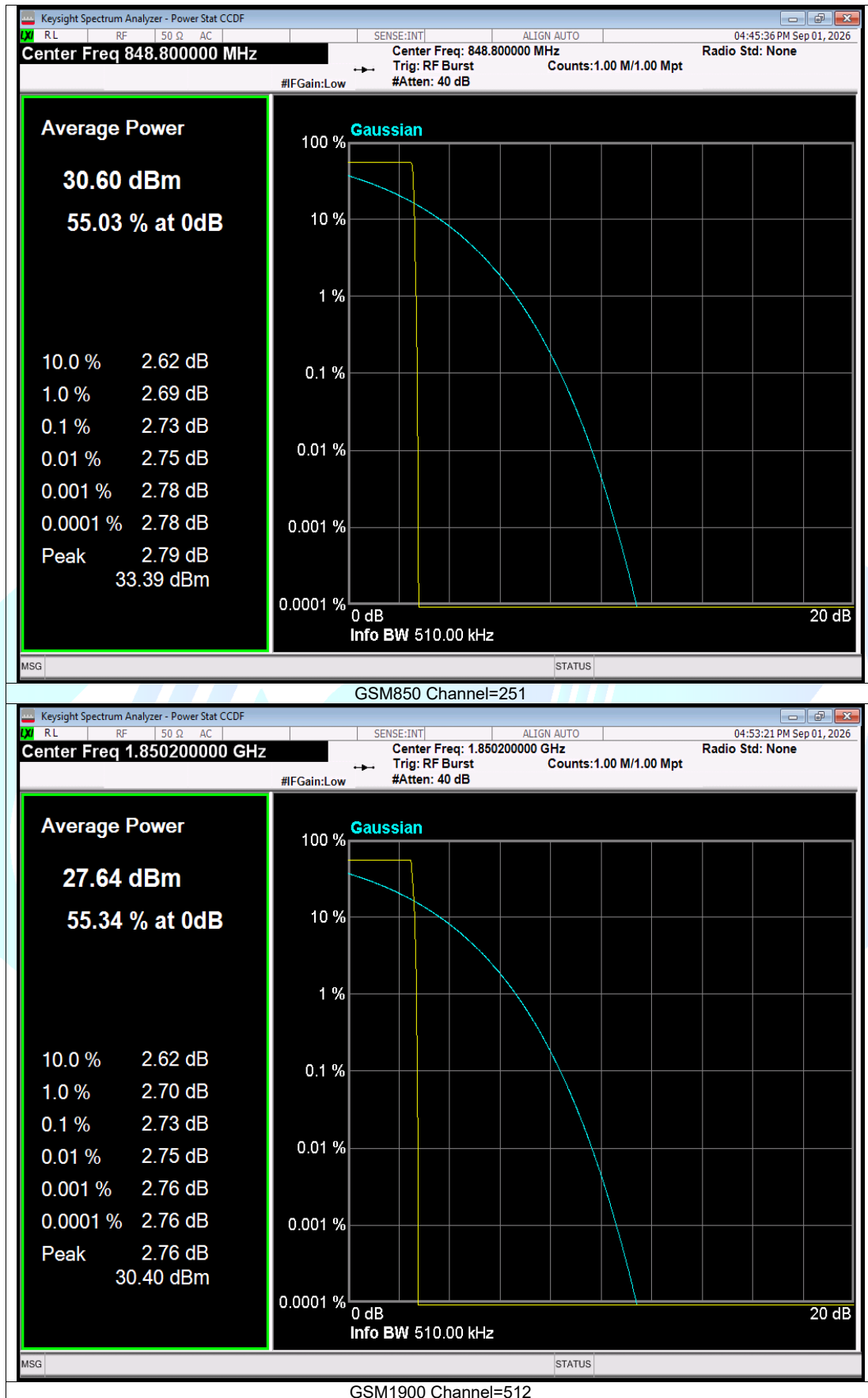
Band	Channel	Frequency (MHz)	Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	EIRP Limit (mW)	Verdict
GSM1900	512	1850.2	29.62	0.65	30.27	1064.14	2000	PASS
	661	1880	29.67	0.65	30.32	1076.47	2000	PASS
	810	1909.8	29.87	0.65	30.52	1127.20	2000	PASS
GPRS1900 1 Slot	512	1850.2	29.56	0.65	30.21	1049.54	2000	PASS
	661	1880	29.64	0.65	30.29	1069.05	2000	PASS
	810	1909.8	29.94	0.65	30.59	1145.51	2000	PASS
GPRS1900 2 Slot	512	1850.2	27.40	0.65	28.05	638.26	2000	PASS
	661	1880	27.11	0.65	27.76	597.04	2000	PASS
	810	1909.8	26.93	0.65	27.58	572.80	2000	PASS
GPRS1900 3 Slot	512	1850.2	25.70	0.65	26.35	431.52	2000	PASS
	661	1880	25.39	0.65	26.04	401.79	2000	PASS
	810	1909.8	25.19	0.65	25.84	383.71	2000	PASS
GPRS1900 4 Slot	512	1850.2	23.54	0.65	24.19	262.42	2000	PASS
	661	1880	23.22	0.65	23.87	243.78	2000	PASS
	810	1909.8	22.96	0.65	23.61	229.61	2000	PASS
EGPRS1900 1 Slot	512	1850.2	25.87	0.65	26.52	448.75	2000	PASS
	661	1880	26.38	0.65	27.03	504.66	2000	PASS
	810	1909.8	26.05	0.65	26.70	467.74	2000	PASS
EGPRS1900 2 Slot	512	1850.2	24.52	0.65	25.17	328.85	2000	PASS
	661	1880	24.74	0.65	25.39	345.94	2000	PASS
	810	1909.8	23.96	0.65	24.61	289.07	2000	PASS
EGPRS1900 3 Slot	512	1850.2	22.17	0.65	22.82	191.43	2000	PASS
	661	1880	22.30	0.65	22.95	197.24	2000	PASS
	810	1909.8	21.74	0.65	22.39	173.38	2000	PASS
EGPRS1900 4 Slot	512	1850.2	19.07	0.65	19.72	93.76	2000	PASS
	661	1880	19.71	0.65	20.36	108.64	2000	PASS
	810	1909.8	18.72	0.65	19.37	86.50	2000	PASS

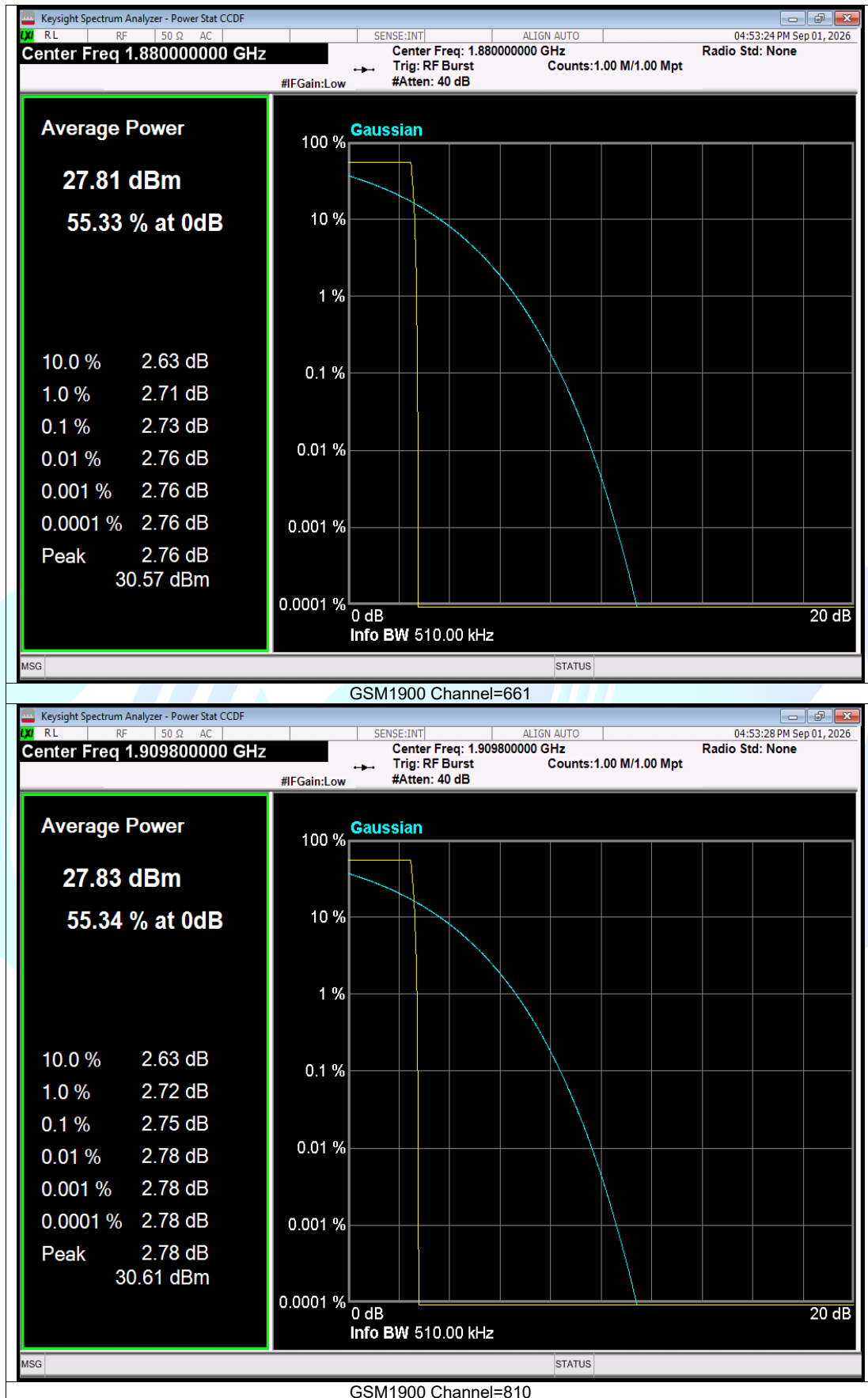
3. Peak-to-Average Ratio

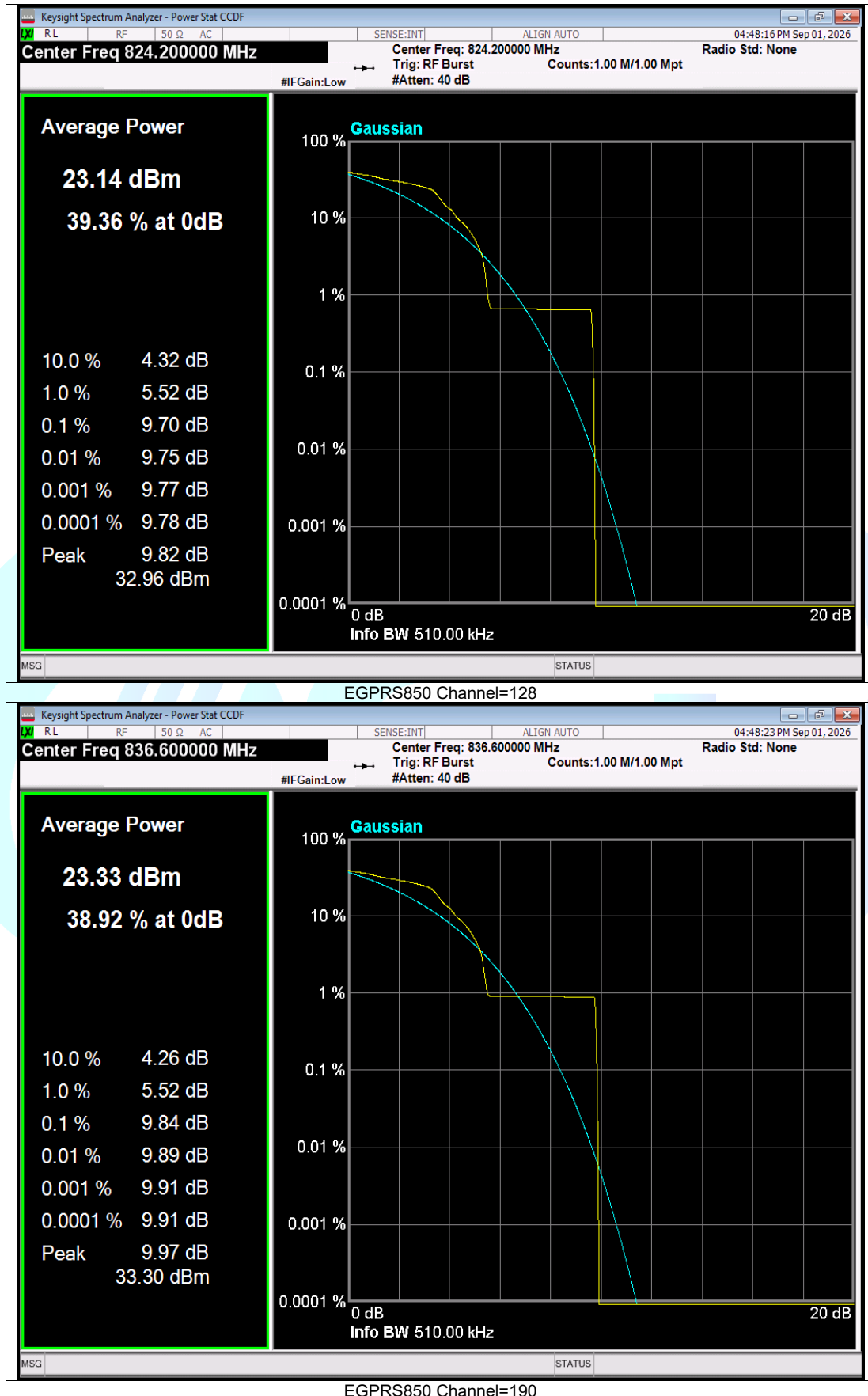
3.1. Test Data

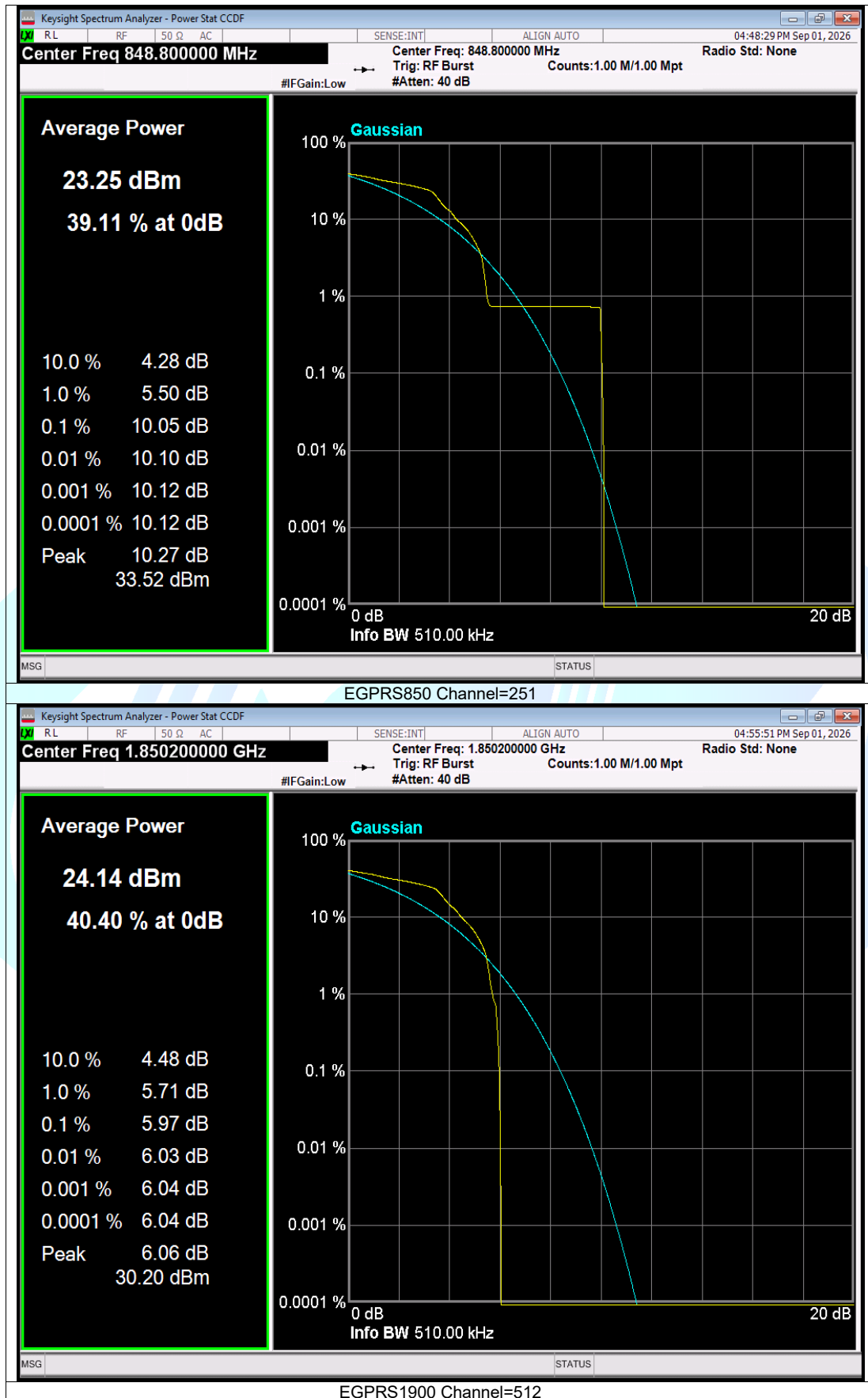
<i>Band</i>	<i>Channel</i>	<i>Frequency (MHz)</i>	<i>Result (dB)</i>	<i>high Limit (dB)</i>	<i>Verdict</i>
GSM850	128	824.2	2.72	13.00	PASS
	190	836.6	2.71	13.00	PASS
	251	848.8	2.73	13.00	PASS
GSM1900	512	1850.2	2.73	13.00	PASS
	661	1880	2.73	13.00	PASS
	810	1909.8	2.75	13.00	PASS
EGPRS850	128	824.2	9.70	13.00	PASS
	190	836.6	9.84	13.00	PASS
	251	848.8	10.05	13.00	PASS
EGPRS1900	512	1850.2	5.97	13.00	PASS
	661	1880	5.79	13.00	PASS
	810	1909.8	6.319	13.00	PASS

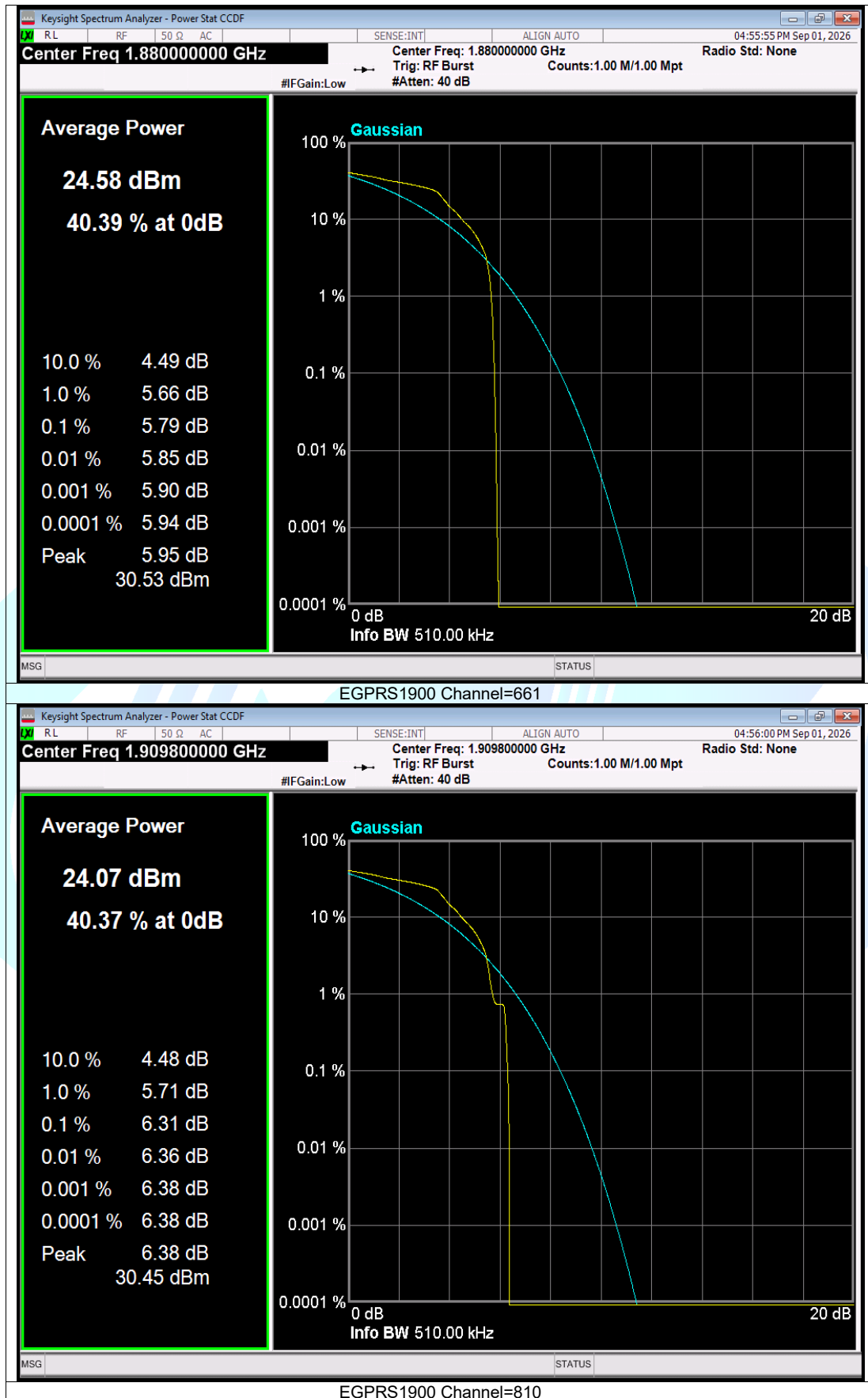








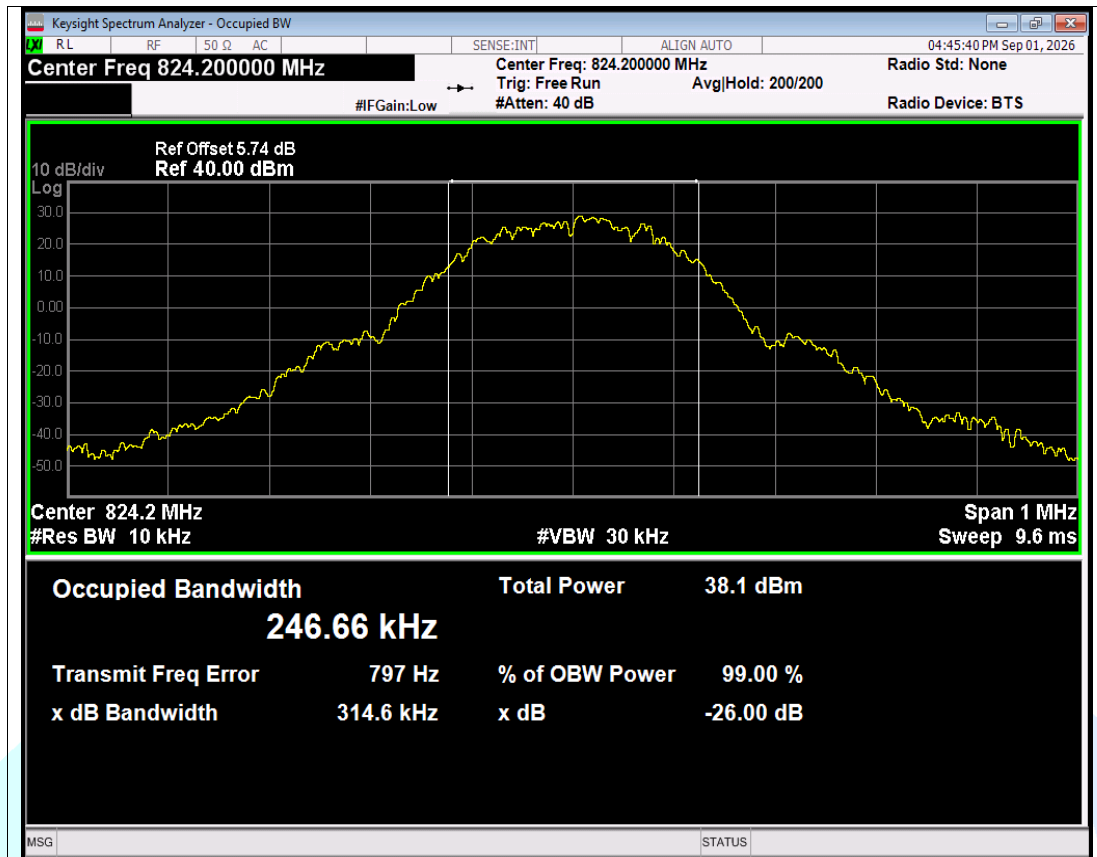




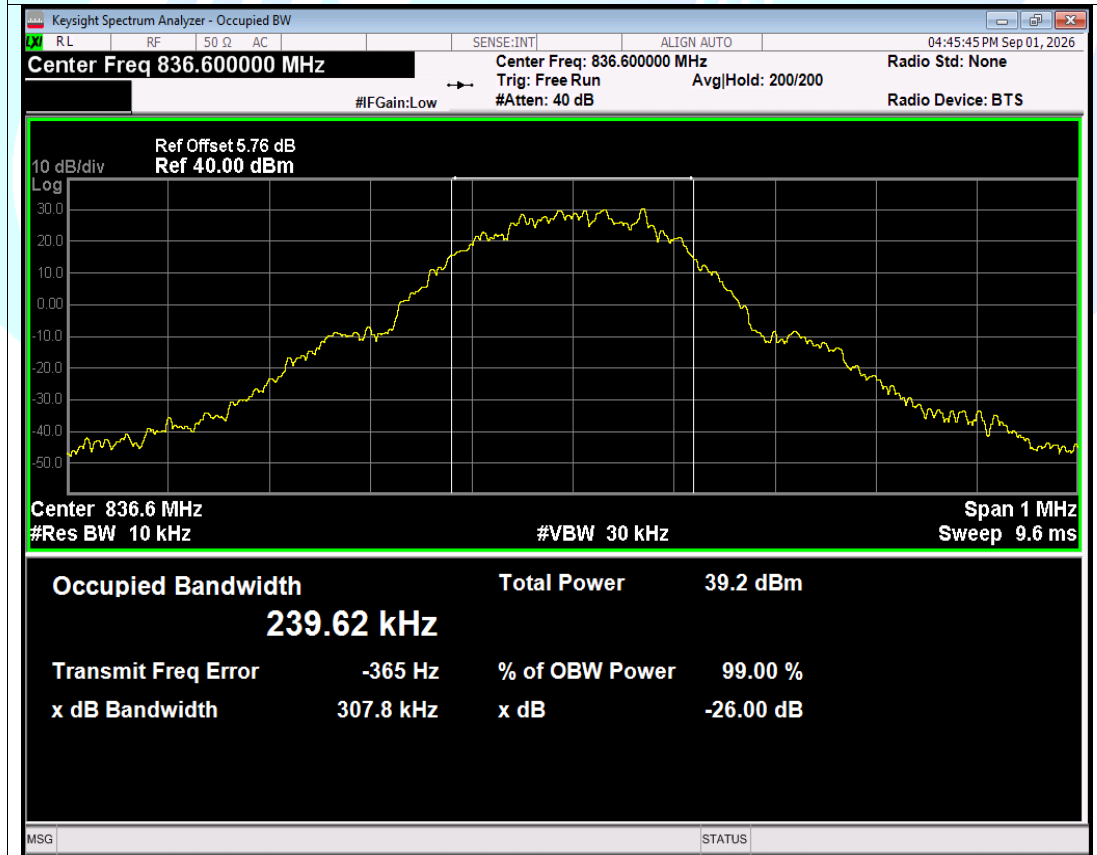
4. Occupied bandwidth

4.1. Test Data

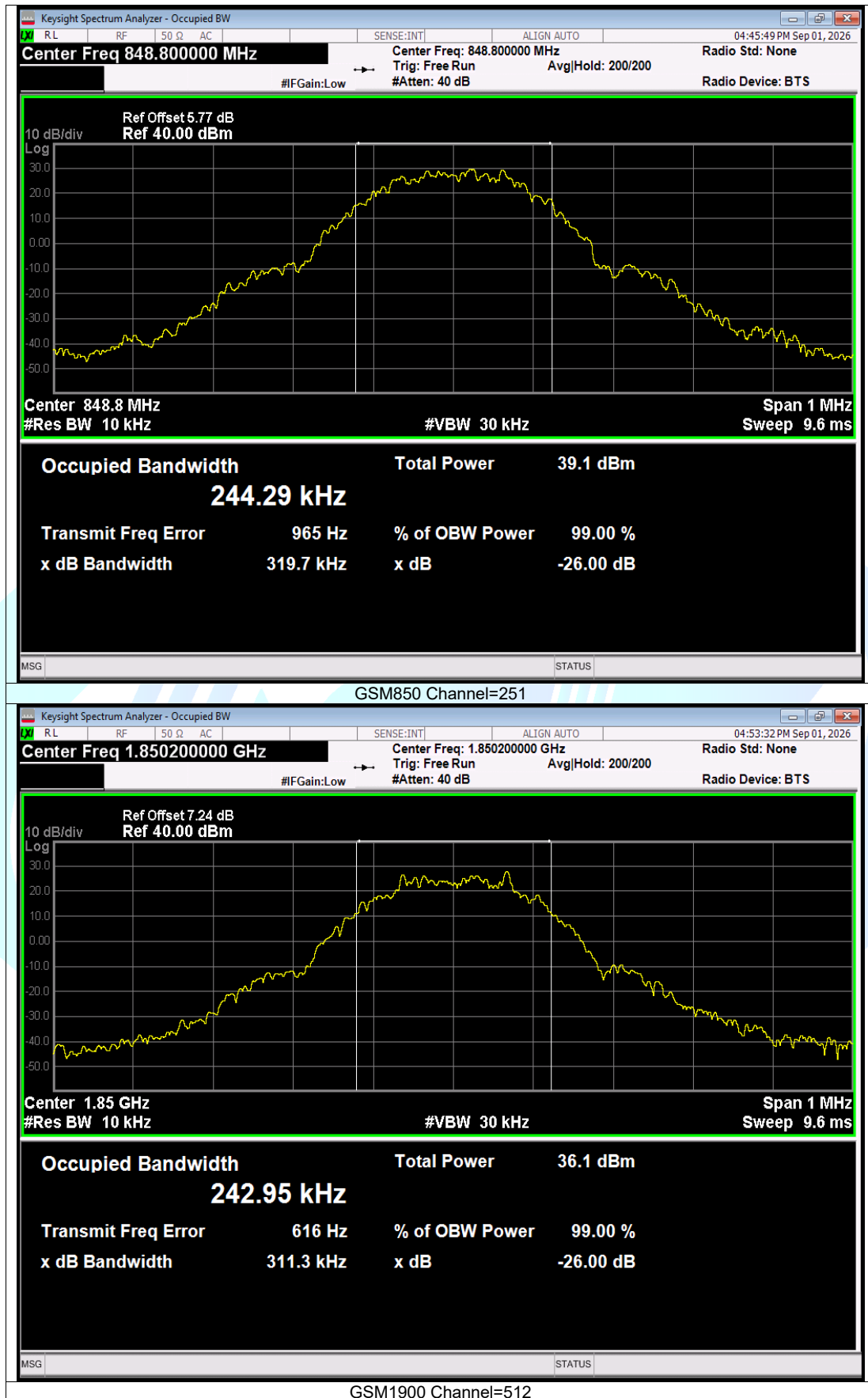
Band	Channel	Frequency (MHz)	99% OBW (kHz)	-26dB EBW (kHz)	Verdict
GSM850	128	824.2	246.662	314.560	PASS
	190	836.6	239.623	307.808	PASS
	251	848.8	244.291	319.743	PASS
GSM1900	512	1850.2	242.954	311.292	PASS
	661	1880.0	241.950	305.675	PASS
	810	1909.8	242.043	311.480	PASS
EGPRS850	128	824.2	238.133	294.918	PASS
	190	836.6	240.334	290.133	PASS
	251	848.8	239.281	286.036	PASS
EGPRS1900	512	1850.2	240.008	309.679	PASS
	661	1880.0	235.956	306.577	PASS
	810	1909.8	247.004	301.850	PASS

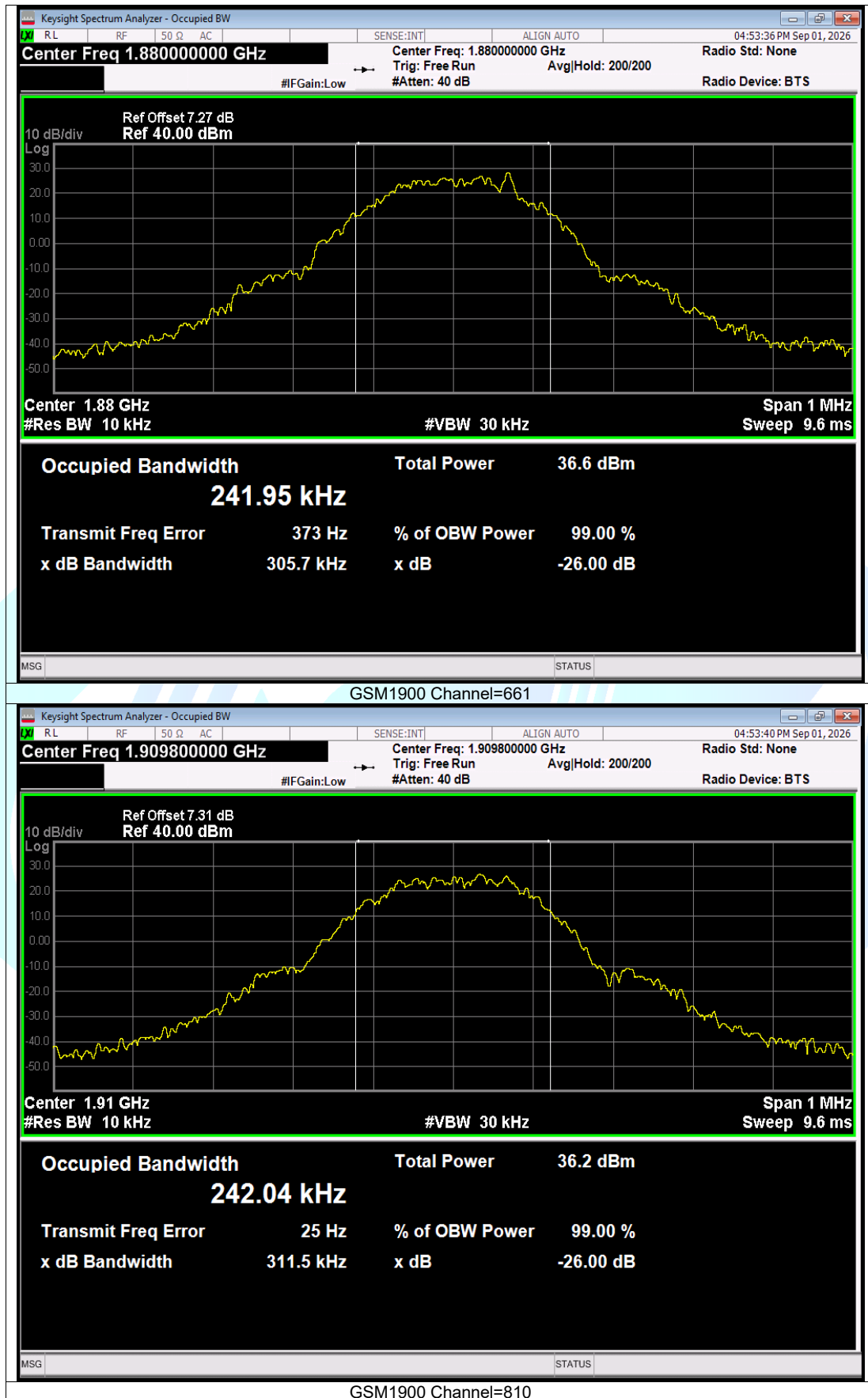


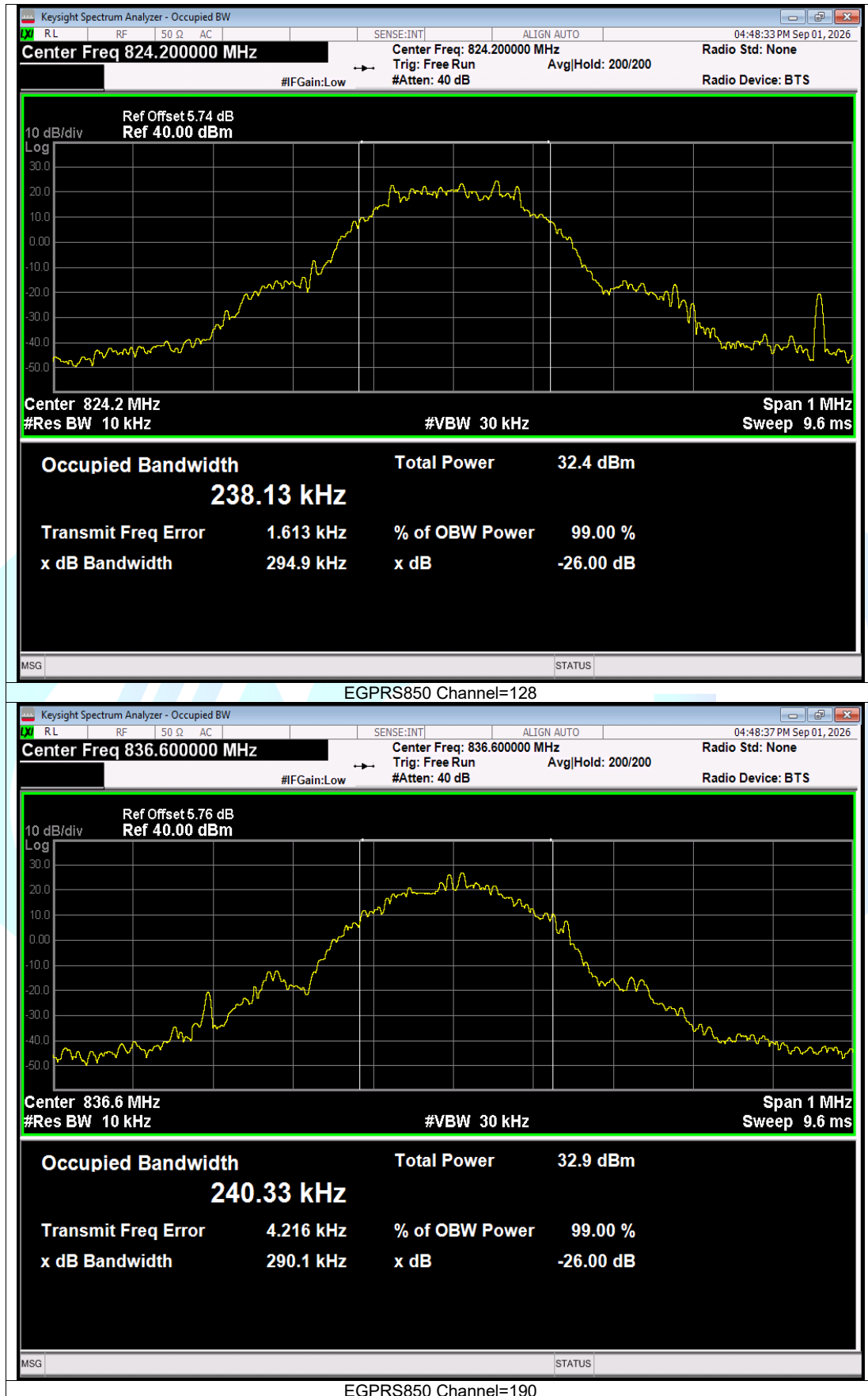
GSM850 Channel=128

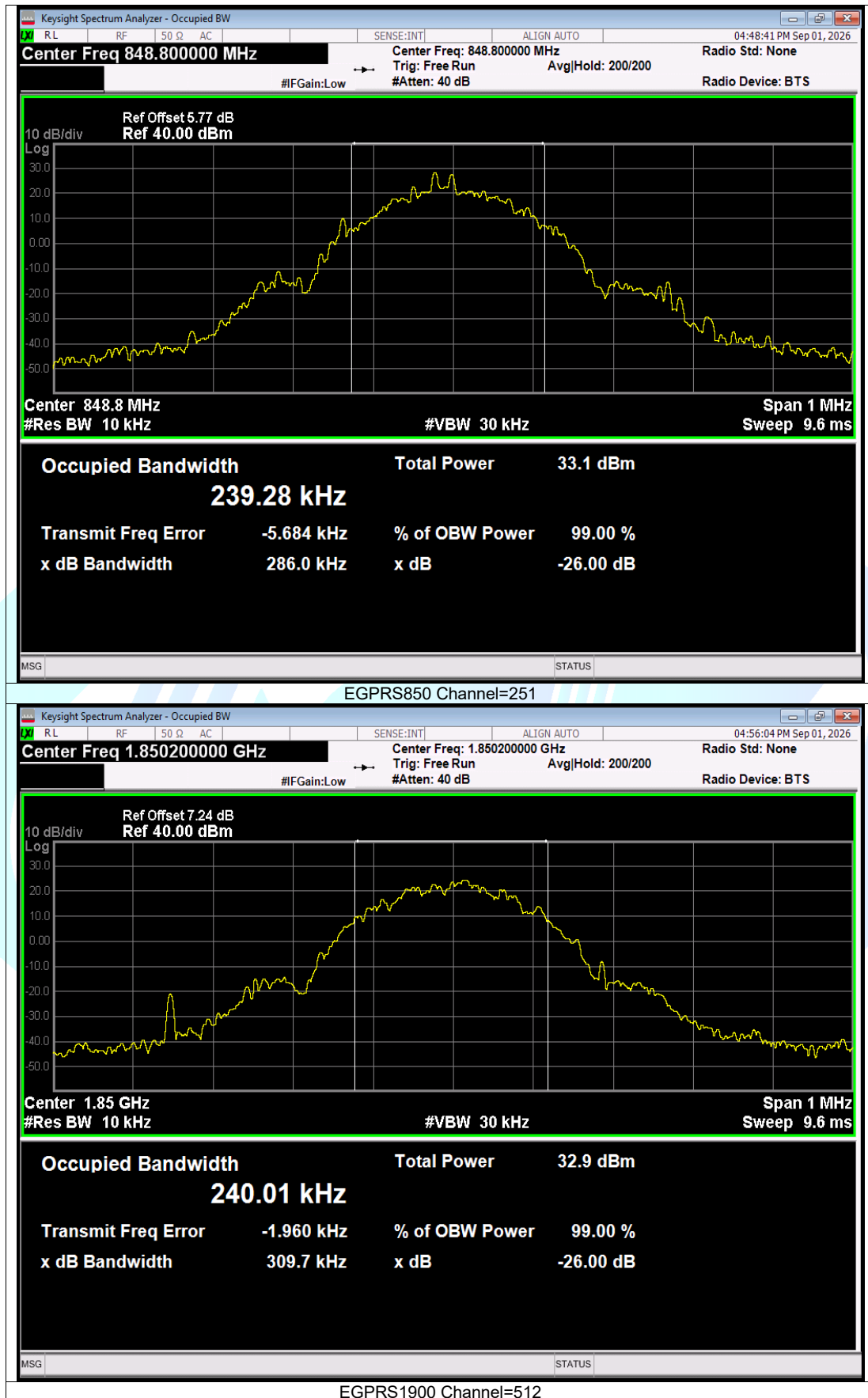


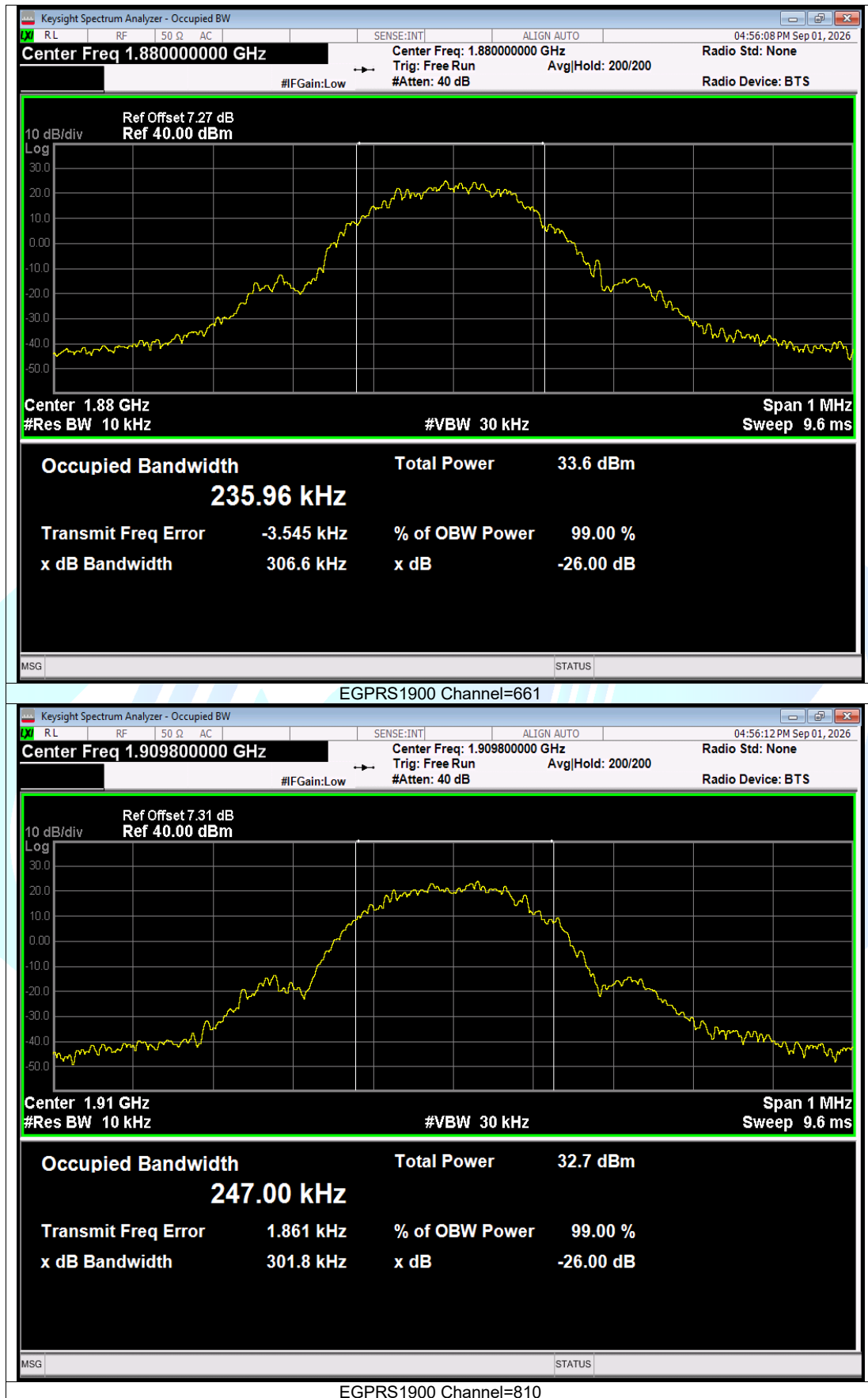
GSM850 Channel=190







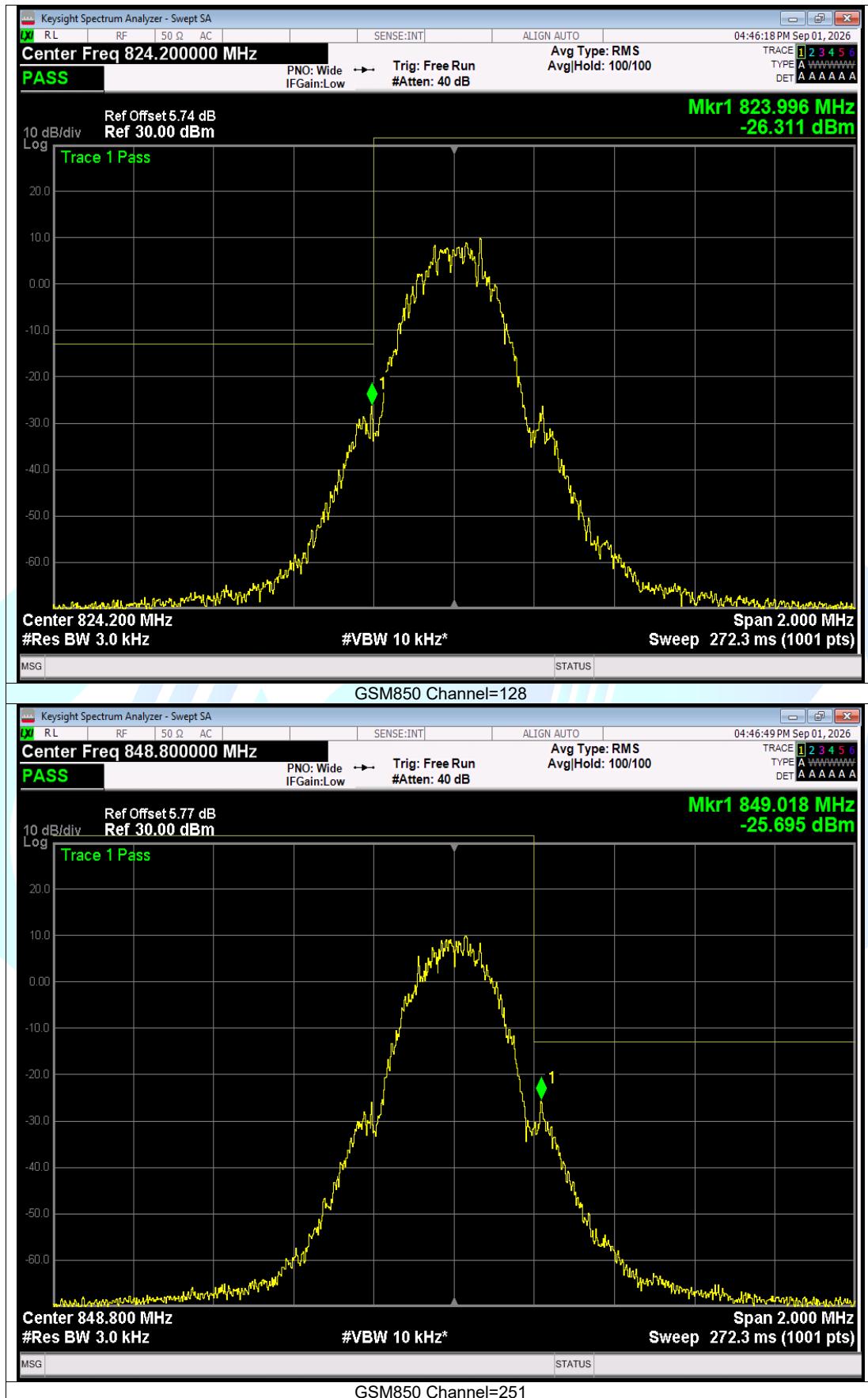


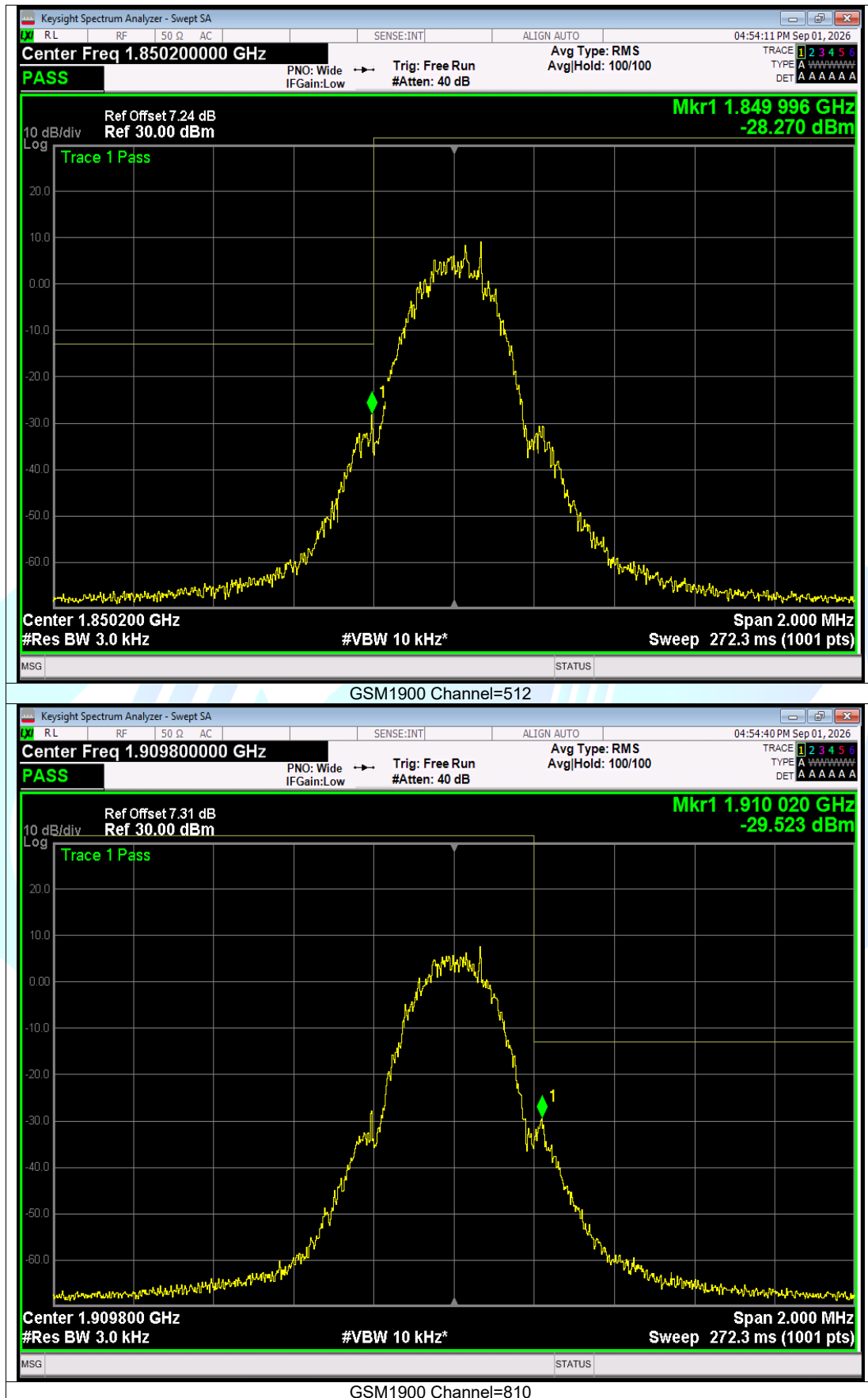


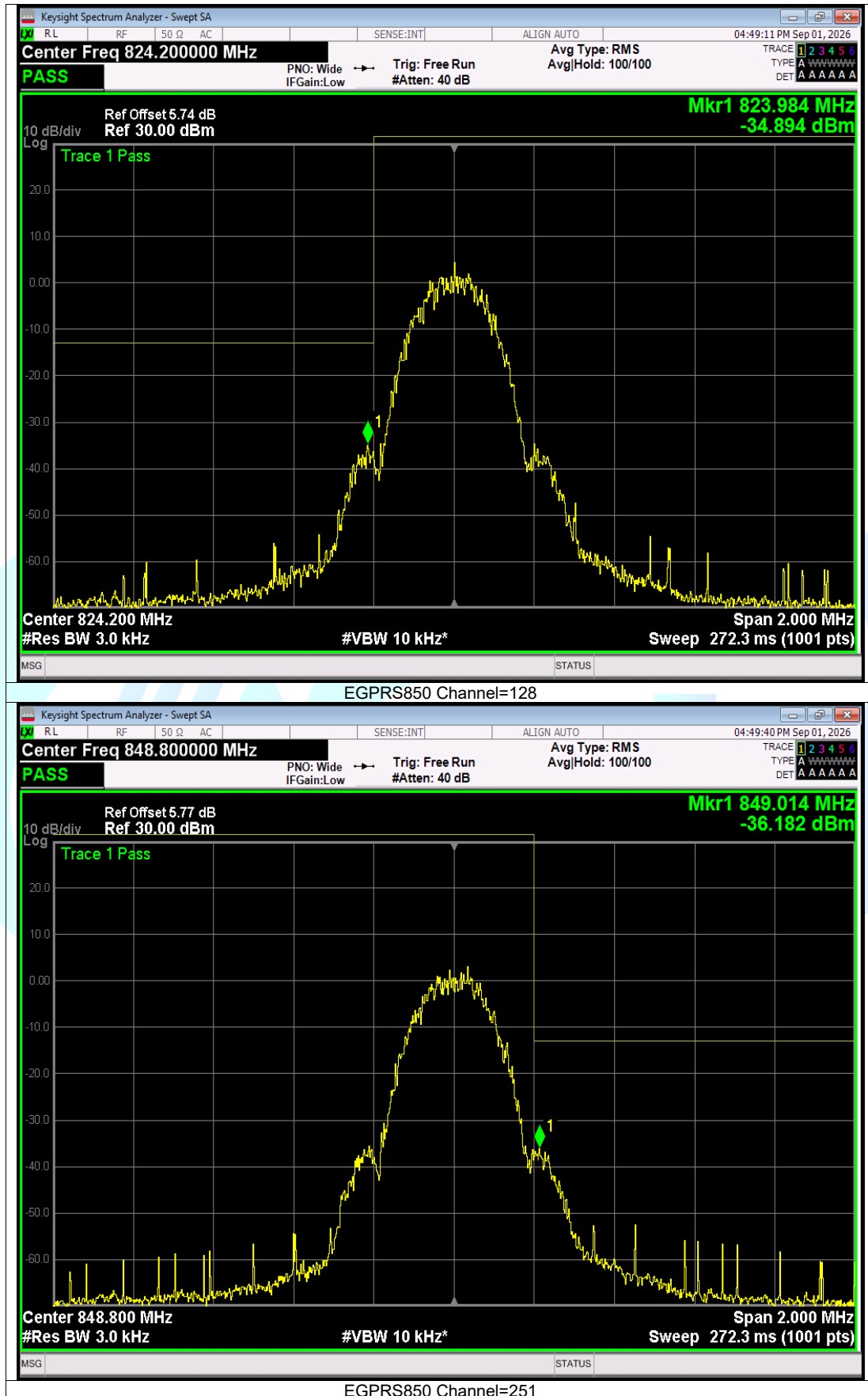
5. Band edge

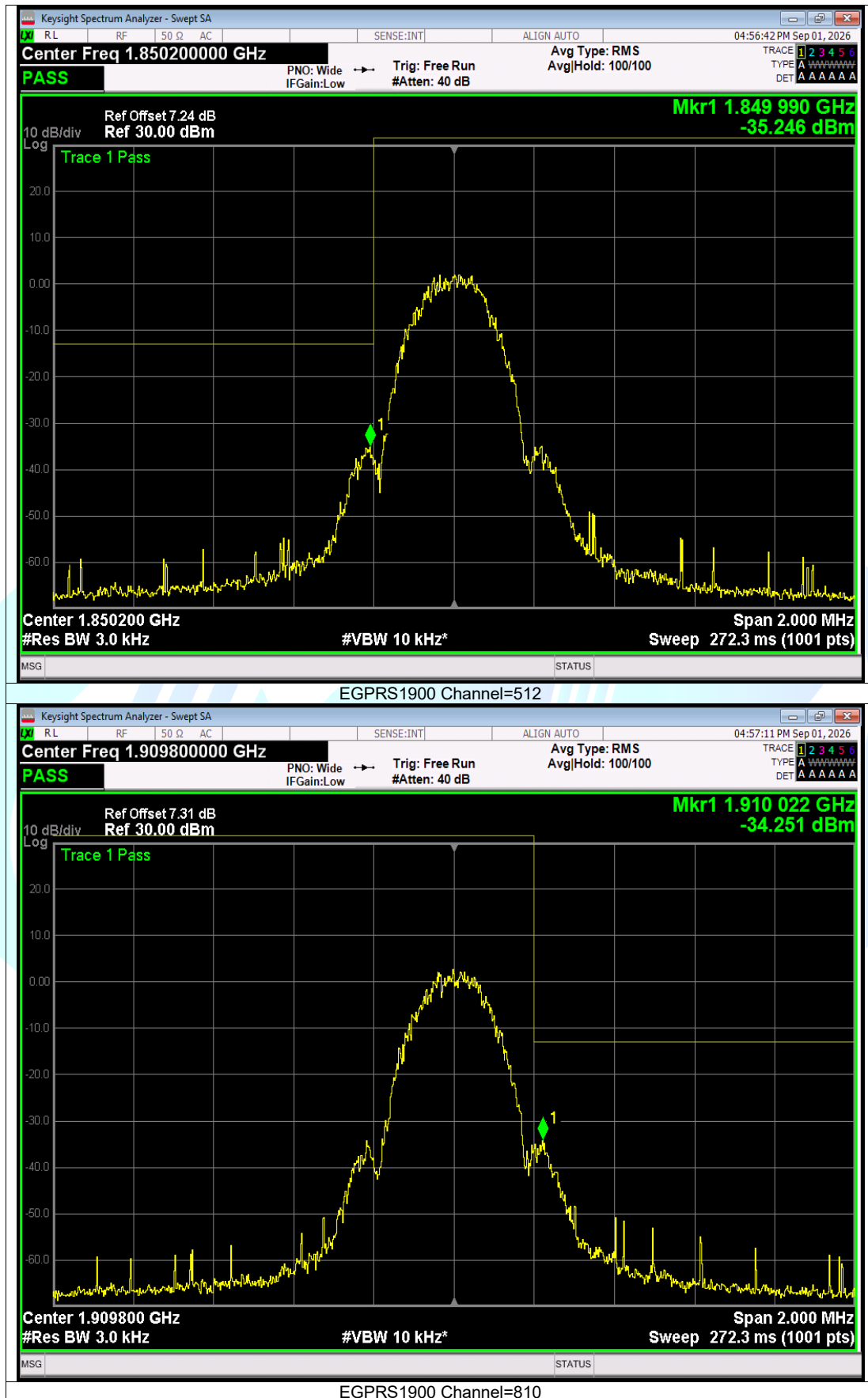
5.1. Test Data

<i>Band</i>	<i>Channel</i>	<i>Frequency (MHz)</i>	<i>Spur Freq (MHz)</i>	<i>Spur Level (dBm)</i>	<i>Limit (dBm)</i>	<i>Verdict</i>
GSM850	128	824.2	824.00	-26.31	-13	PASS
	251	848.8	849.02	-25.69	-13	PASS
GSM1900	512	1850.2	1850.00	-28.26	-13	PASS
	810	1909.8	1910.02	-29.52	-13	PASS
EGPRS850	128	824.2	823.98	-34.89	-13	PASS
	251	848.8	849.01	-36.18	-13	PASS
EGPRS1900	512	1850.2	1849.99	-35.24	-13	PASS
	810	1909.8	1910.02	-34.25	-13	PASS





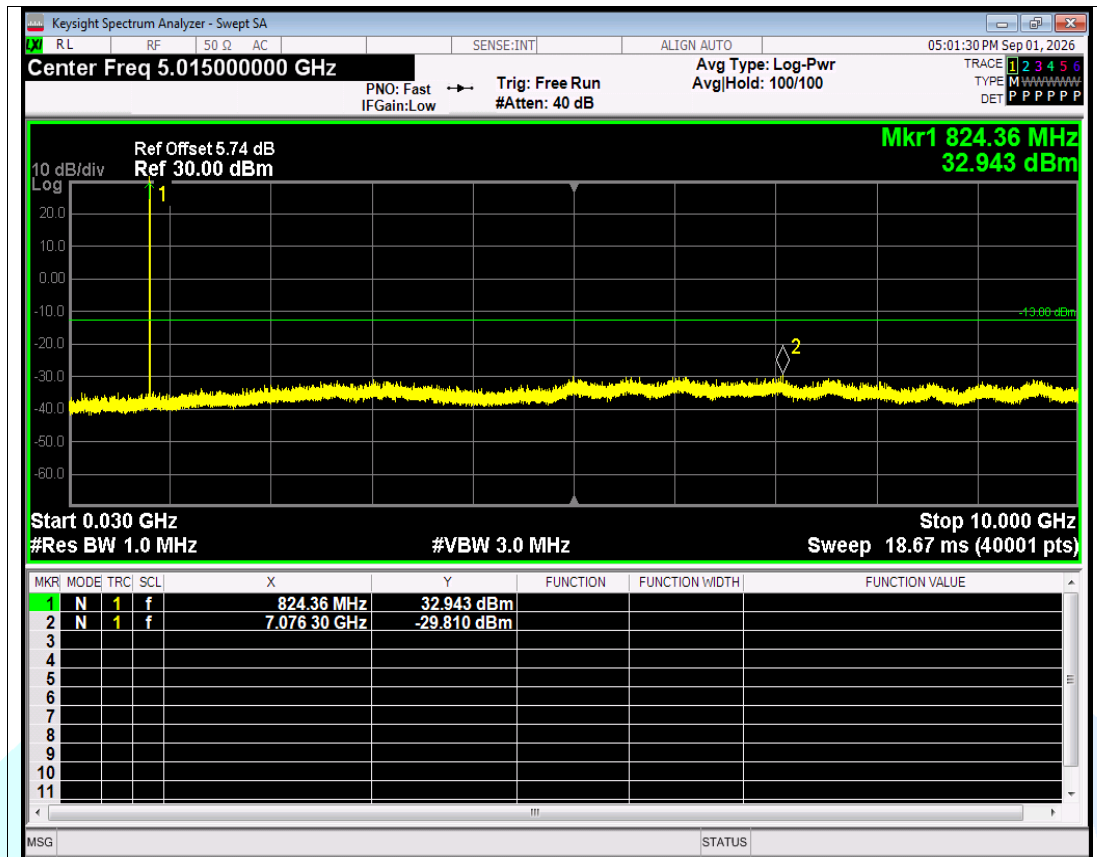




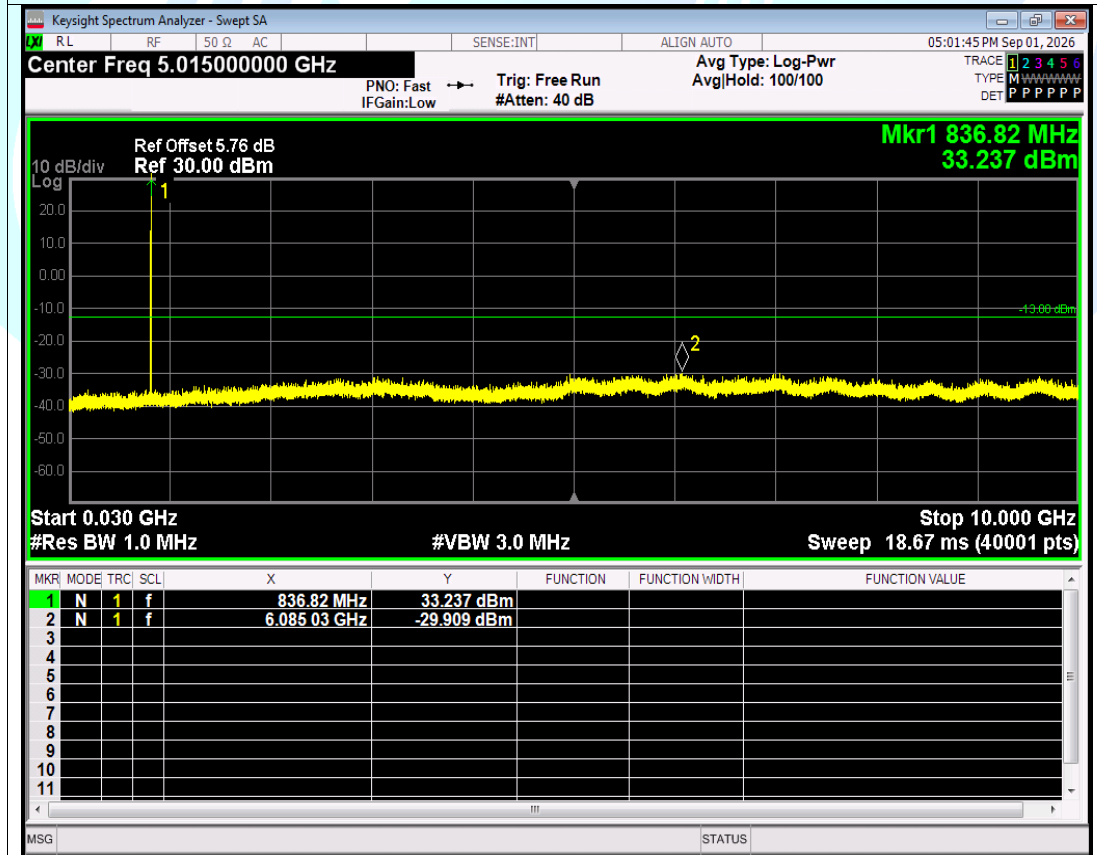
6. Out-of-band emissions

6.1. Test Data

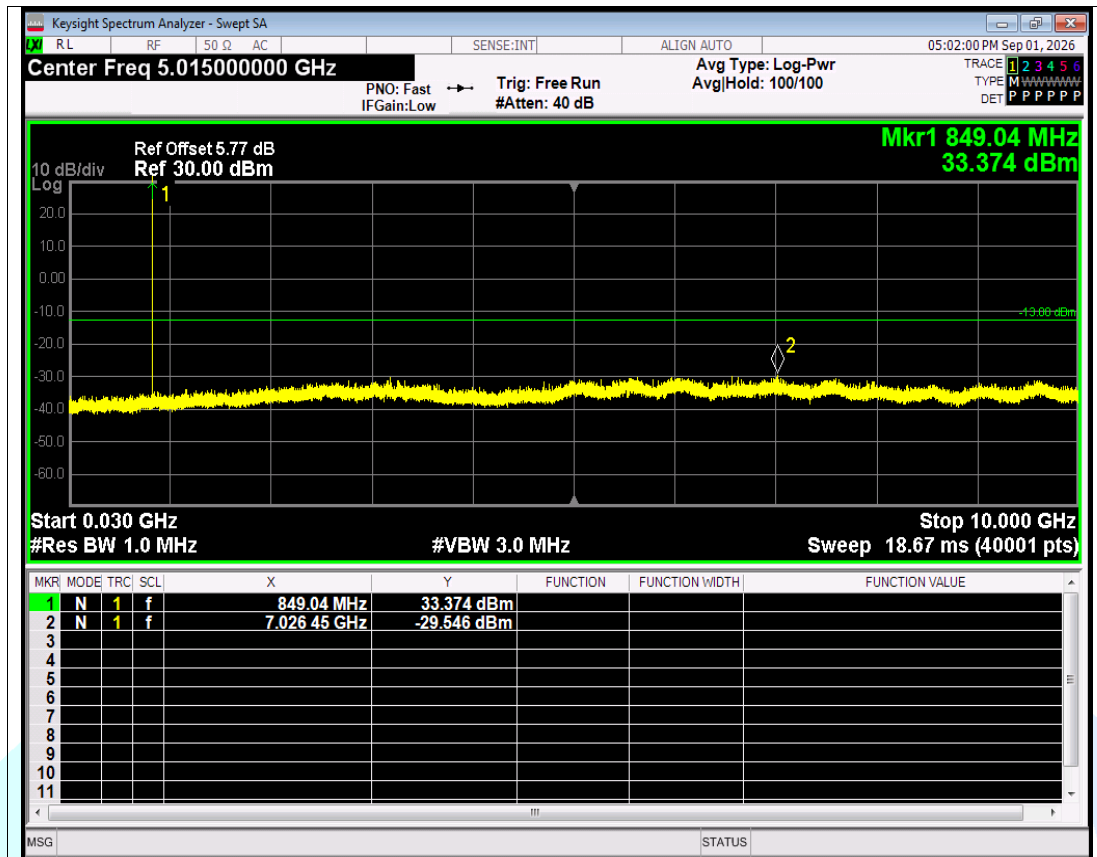
<i>Band</i>	<i>Channel</i>	<i>Frequency (MHz)</i>	<i>Spur Freq (MHz)</i>	<i>Spur Level (dBm)</i>	<i>Limit (dBm)</i>	<i>Verdict</i>
GSM850	128	824.2	7076.30	-29.80	-13	PASS
	190	836.6	6085.03	-29.90	-13	PASS
	251	848.8	7026.45	-29.54	-13	PASS
GSM1900	512	1850.2	16537.70	-22.76	-13	PASS
	661	1880	16643.54	-23.11	-13	PASS
	810	1909.8	18792.31	-22.99	-13	PASS



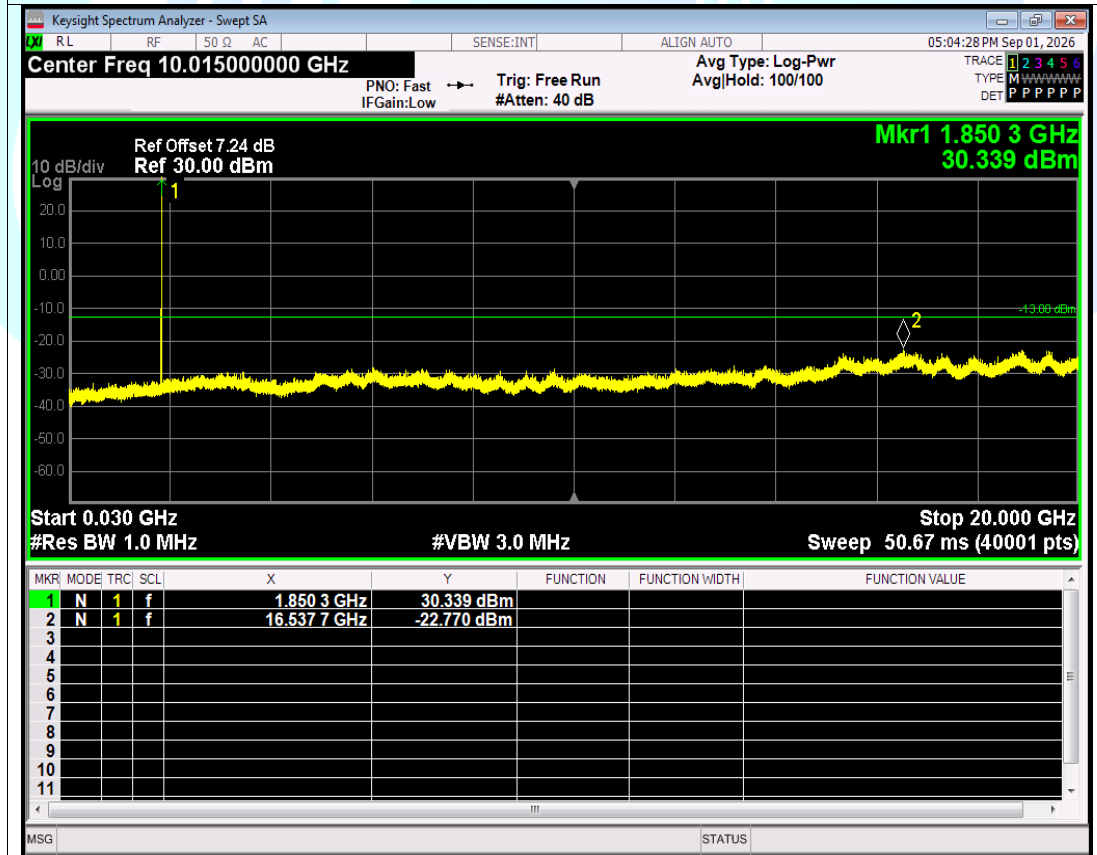
GSM850 Channel=128



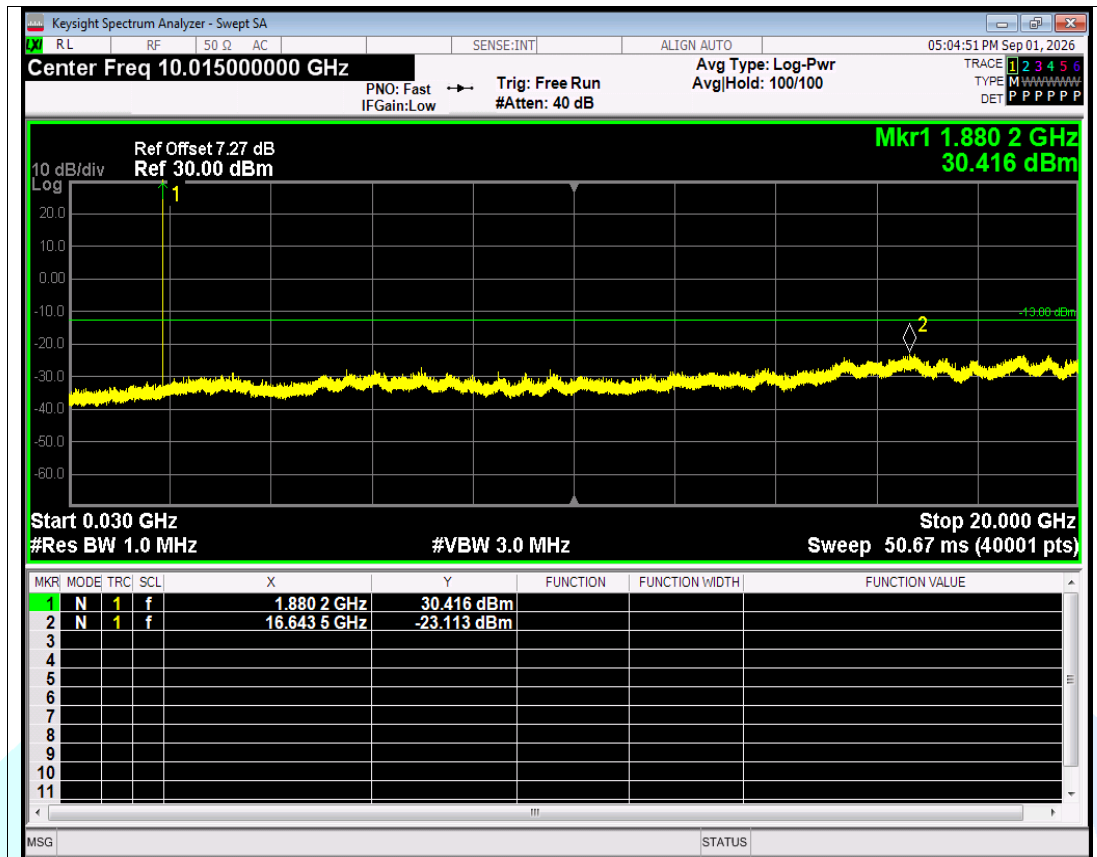
GSM850 Channel=190



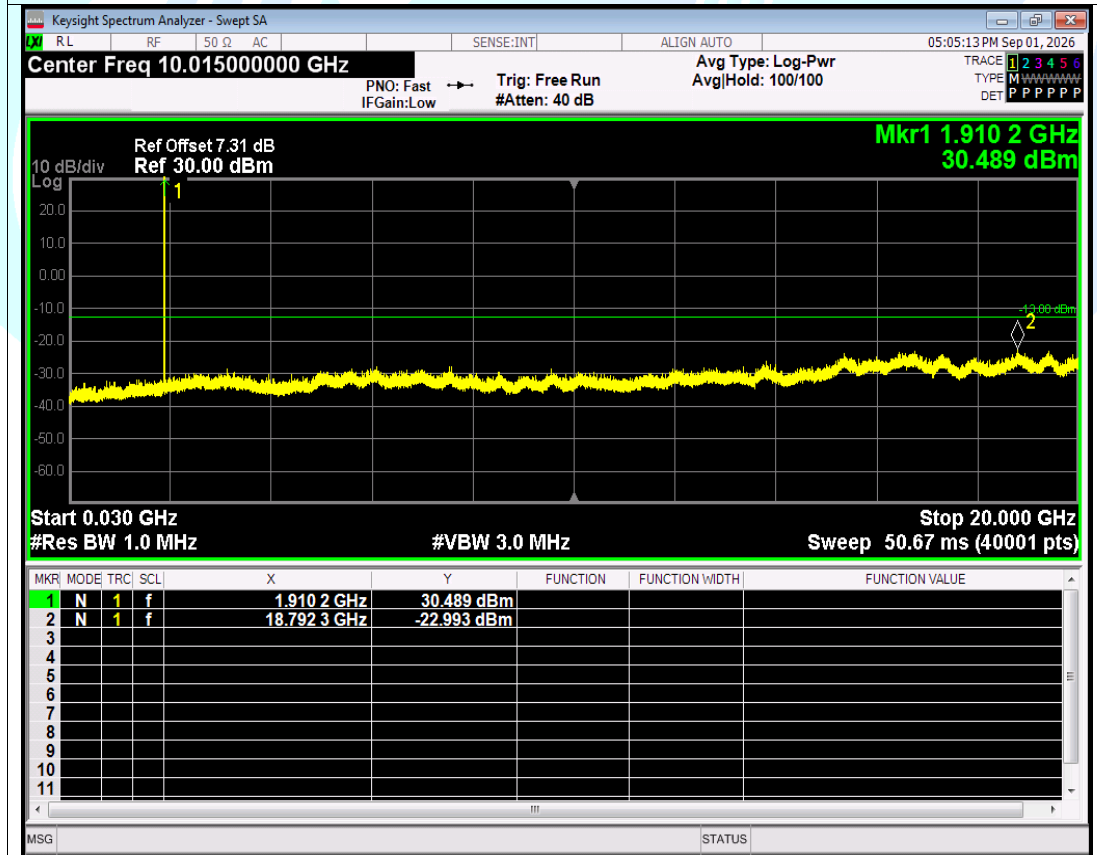
GSM850 Channel=251



GSM1900 Channel=512



GSM1900 Channel=661



GSM1900 Channel=810

7. Frequency stability

7.1. Test Data

Band	Channel	Frequency (MHz)	P. S. (Vdc)	Temp. (°C)	Result(Hz)	Result (ppm)	Limit (ppm)	Verdict
GSM850	190	836.6	3.85	-30	-0.42	-0.001	±2.5	PASS
				-20	-1.55	-0.002	±2.5	PASS
				-10	-0.19	0.000	±2.5	PASS
				0	-2.58	-0.003	±2.5	PASS
				10	-1.84	-0.002	±2.5	PASS
				20	-0.51	-0.001	±2.5	PASS
				30	0.58	0.001	±2.5	PASS
				40	1.68	0.002	±2.5	PASS
				50	-0.58	-0.001	±2.5	PASS
			3.50	25	-4.15	-0.005	±2.5	PASS
			3.85		1.85	0.002	±2.5	PASS
			4.30		4.21	0.005	±2.5	PASS
GSM1900	661	1880.0	3.85	-30	-9.17	-0.005	±2.5	PASS
				-20	-1.78	-0.001	±2.5	PASS
				-10	-1.94	-0.001	±2.5	PASS
				0	-6.45	-0.003	±2.5	PASS
				10	-5.74	-0.003	±2.5	PASS
				20	2.98	0.002	±2.5	PASS
				30	5.41	0.003	±2.5	PASS
				40	-2.98	-0.002	±2.5	PASS
				50	-6.47	-0.003	±2.5	PASS
			3.50	25	6.54	0.003	±2.5	PASS
			3.85		5.12	0.003	±2.5	PASS
			4.30		5.39	0.003	±2.5	PASS
EGPRS850	190	836.6	3.85	-30	-3.29	-0.004	±2.5	PASS
				-20	10.07	0.012	±2.5	PASS
				-10	13.85	0.017	±2.5	PASS
				0	9.12	0.011	±2.5	PASS
				10	2.36	0.003	±2.5	PASS
				20	-2.74	-0.003	±2.5	PASS
				30	12.36	0.015	±2.5	PASS
				40	-11.02	-0.013	±2.5	PASS
				50	-2.59	-0.003	±2.5	PASS
			3.50	25	-4.89	-0.006	±2.5	PASS
			3.85		5.36	0.006	±2.5	PASS
			4.30		9.14	0.011	±2.5	PASS
EGPRS1900	661	1880.0	3.85	-30	13.85	0.007	±2.5	PASS
				-20	1.19	0.001	±2.5	PASS
				-10	0.87	0.000	±2.5	PASS
				0	-13.40	-0.007	±2.5	PASS
				10	5.14	0.003	±2.5	PASS
				20	7.25	0.004	±2.5	PASS
				30	-5.98	-0.003	±2.5	PASS
				40	-12.36	-0.007	±2.5	PASS
				50	-5.54	-0.003	±2.5	PASS
			3.50	25	-7.12	-0.004	±2.5	PASS
			3.85		1.68	0.001	±2.5	PASS
			4.30		2.78	0.001	±2.5	PASS

----END----