

Appendix Q

Test Information:

Sample No.:	2UIA-7	Test Date:	2024/12/23
Test Site:	RF	Test Mode:	Transmitting
Tester:	Leo Lin	Test Result:	Pass

Environmental Conditions:

Temperature: (°C):	24.7	Relative Humidity: (%)	42	ATM Pressure: (kPa)	101
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Transmitter Conducted Output Power And ERP/EIRP

Band	Channel	PCL	Freq (MHz)	Conducted Power(dBm)	ERP/EIRP (dBm)	ERP/EIRP(limit) (dBm)	Verdict
GSM 850	251	5	848.8	33.46	26.94	38.45	PASS
GSM 850	190	5	836.6	33.49	26.97	38.45	PASS
GSM 850	128	5	824.2	33.45	26.93	38.45	PASS
PCS 1900	810	0	1909.8	30.90	31.69	33.01	PASS
PCS 1900	661	0	1880.0	30.81	31.60	33.01	PASS
PCS 1900	512	0	1850.2	30.58	31.37	33.01	PASS

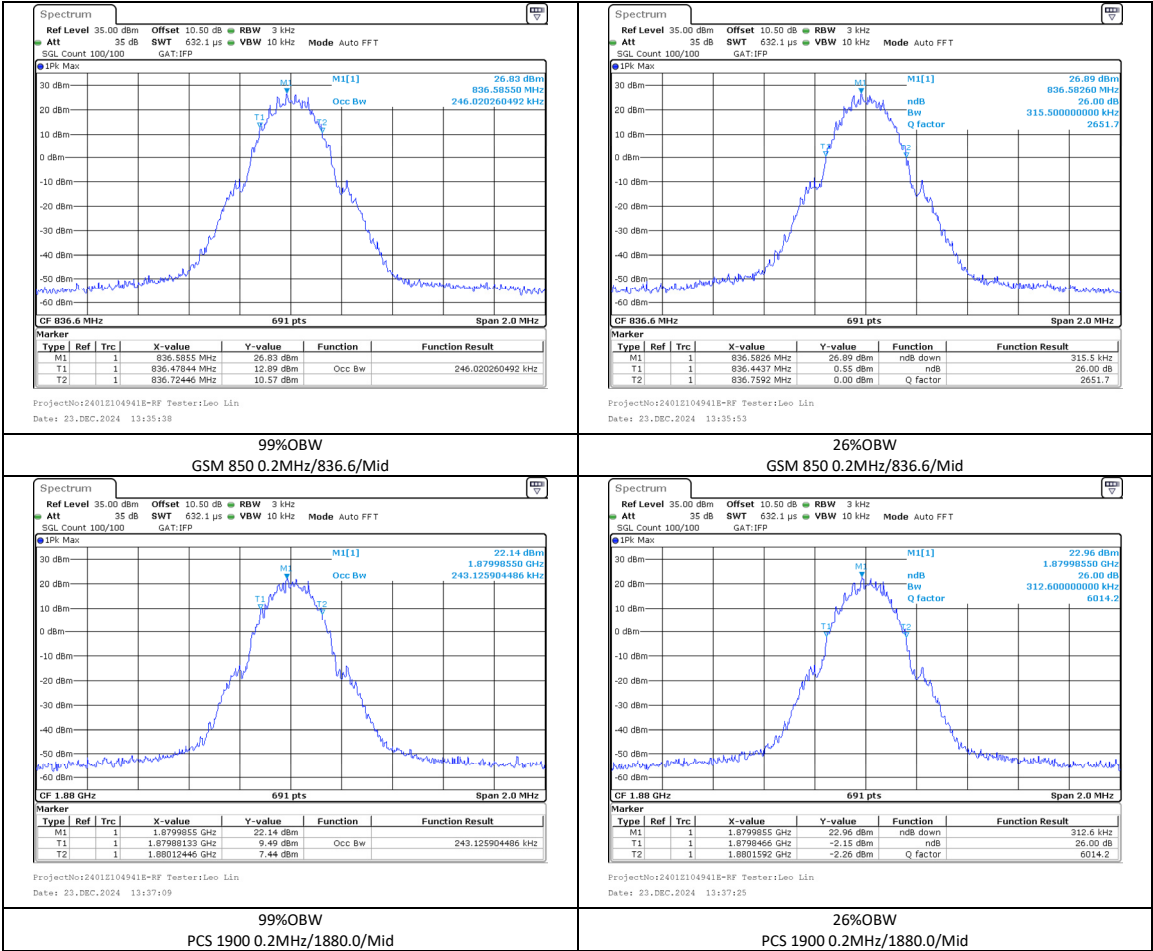
Note:
 The ERP is for below 1GHz, EIRP is for above 1GHz
 $EIRP = \text{Conducted Power(dBm)} - L_c(\text{dB}) + G_T(\text{dBi})$
 $ERP = \text{Conducted Power(dBm)} - L_c(\text{dB}) + G_T(\text{dBd})$
 $G_T(\text{dBd}) = G_T(\text{dBi}) - 2.15$

Peak to Average Ratio

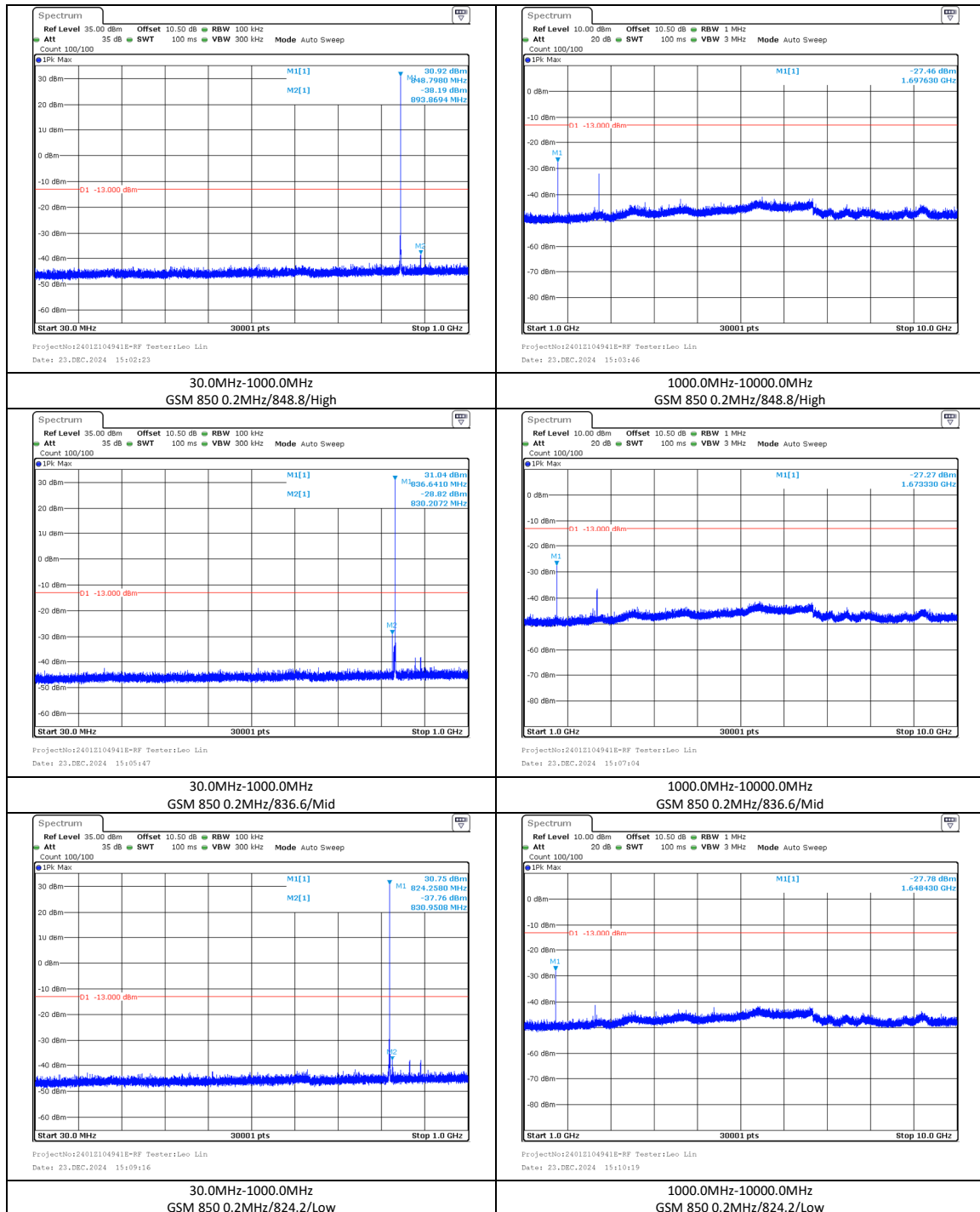
Band	Channel	Freq (MHz)	Result (dB)	Limit (dB)	Verdict
GSM 850	251	848.8	2.83	13	PASS
GSM 850	190	836.6	2.85	13	PASS
GSM 850	128	824.2	2.88	13	PASS
PCS 1900	810	1909.8	2.82	13	PASS
PCS 1900	661	1880.0	2.85	13	PASS
PCS 1900	512	1850.2	2.82	13	PASS

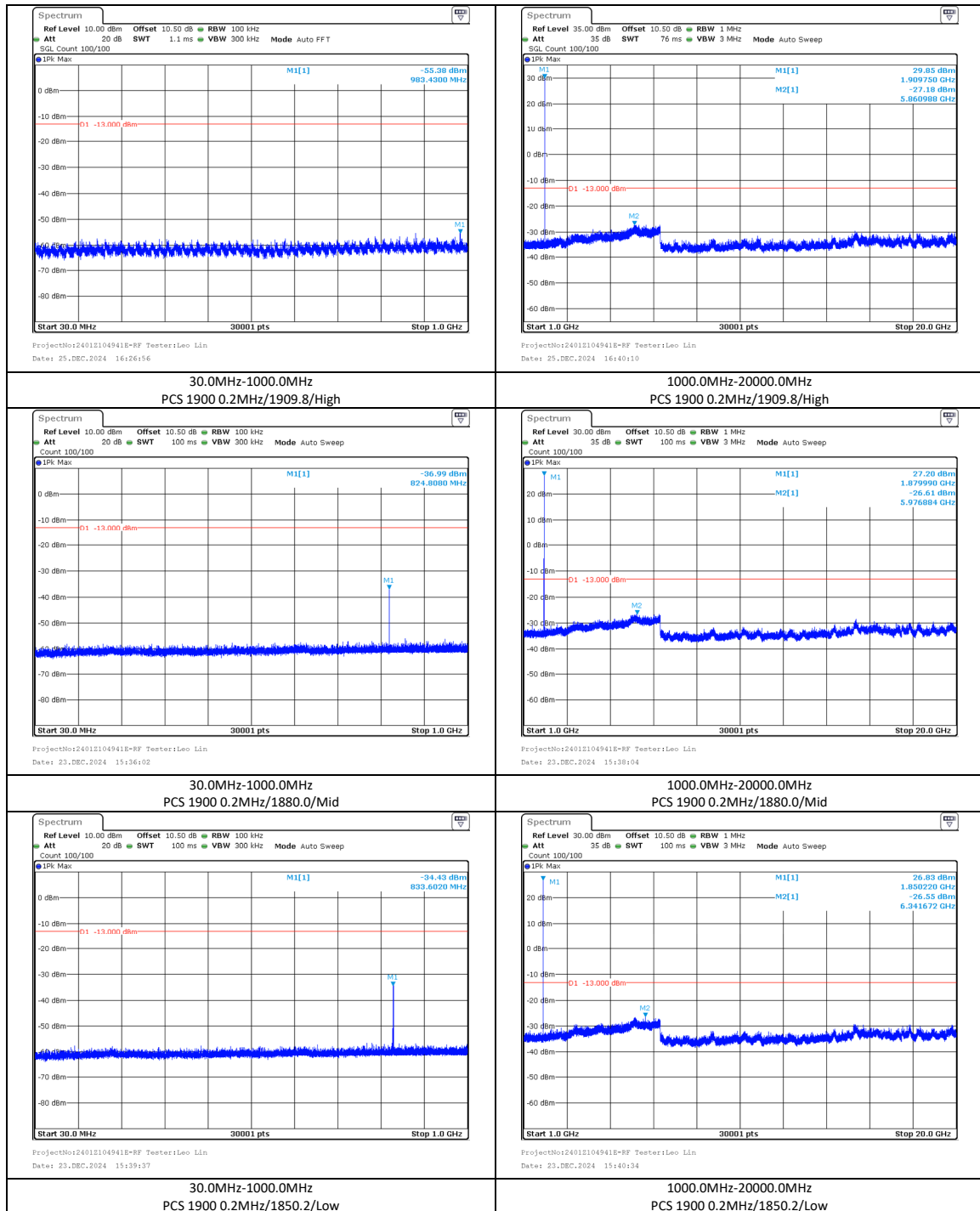
Occupied Bandwidth

Band	Channel	Freq (MHz)	OBW (MHz)	26dB BW (MHz)	Verdict
GSM 850	190	836.6	0.24602	0.3155	PASS
PCS 1900	661	1880.0	0.24313	0.3126	PASS



Conducted Spurious Emissions





PCS 1900 0.2MHz/1909.8/High	PCS 1900 0.2MHz/1850.2/Low
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Frequency Stability Error

Band	Channel	Freq (MHz)	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
GSM 850	251	848.8	-13.27	-0.01563	±2.5	PASS	20℃/3.4V
GSM 850	251	848.8	6.47	0.00762	±2.5	PASS	20℃/4.4V
GSM 850	251	848.8	10.08	0.01188	±2.5	PASS	50℃/3.85V
GSM 850	251	848.8	-9.79	-0.01153	±2.5	PASS	40℃/3.85V
GSM 850	251	848.8	12.73	0.01500	±2.5	PASS	30℃/3.85V
GSM 850	251	848.8	10.39	0.01224	±2.5	PASS	20℃/3.85V
GSM 850	251	848.8	-11.41	-0.01344	±2.5	PASS	10℃/3.85V
GSM 850	251	848.8	-4.00	-0.00471	±2.5	PASS	0℃/3.85V
GSM 850	251	848.8	-4.25	-0.00501	±2.5	PASS	-10℃/3.85V
GSM 850	251	848.8	-11.48	-0.01352	±2.5	PASS	-20℃/3.85V
GSM 850	251	848.8	11.78	0.01388	±2.5	PASS	-30℃/3.85V
GSM 850	190	836.6	12.00	0.01434	±2.5	PASS	20℃/3.4V
GSM 850	190	836.6	-6.76	-0.00808	±2.5	PASS	20℃/4.4V
GSM 850	190	836.6	-12.02	-0.01437	±2.5	PASS	50℃/3.85V
GSM 850	190	836.6	2.72	0.00325	±2.5	PASS	40℃/3.85V
GSM 850	190	836.6	-10.30	-0.01231	±2.5	PASS	30℃/3.85V
GSM 850	190	836.6	-2.65	-0.00317	±2.5	PASS	20℃/3.85V
GSM 850	190	836.6	-7.94	-0.00949	±2.5	PASS	10℃/3.85V
GSM 850	190	836.6	-11.40	-0.01363	±2.5	PASS	0℃/3.85V
GSM 850	190	836.6	-11.15	-0.01333	±2.5	PASS	-10℃/3.85V
GSM 850	190	836.6	12.30	0.01470	±2.5	PASS	-20℃/3.85V
GSM 850	190	836.6	5.14	0.00614	±2.5	PASS	-30℃/3.85V
GSM 850	128	824.2	5.39	0.00654	±2.5	PASS	20℃/3.4V
GSM 850	128	824.2	4.74	0.00575	±2.5	PASS	20℃/4.4V
GSM 850	128	824.2	13.18	0.01599	±2.5	PASS	50℃/3.85V
GSM 850	128	824.2	4.70	0.00570	±2.5	PASS	40℃/3.85V
GSM 850	128	824.2	0.40	0.00049	±2.5	PASS	30℃/3.85V
GSM 850	128	824.2	13.37	0.01622	±2.5	PASS	20℃/3.85V
GSM 850	128	824.2	-12.23	-0.01484	±2.5	PASS	10℃/3.85V
GSM 850	128	824.2	7.52	0.00912	±2.5	PASS	0℃/3.85V
GSM 850	128	824.2	-2.72	-0.00330	±2.5	PASS	-10℃/3.85V
GSM 850	128	824.2	13.47	0.01634	±2.5	PASS	-20℃/3.85V
GSM 850	128	824.2	0.64	0.00078	±2.5	PASS	-30℃/3.85V

Frequency Stability Range

Band	Channel (Low/High)	Freq (MHz)	Lower Edge (MHz) (Result)	Limit (1850MHz)	Upper Edge (MHz) (Result)	Limit (1910MHz)	Environment
PCS 1900	512/810	1850.2/1909.8	1850.194	1850.000	1909.891	1910.000	20°C/3.4V
PCS 1900	512/810	1850.2/1909.8	1850.181	1850.000	1909.902	1910.000	20°C/4.4V
PCS 1900	512/810	1850.2/1909.8	1850.079	1850.000	1909.894	1910.000	50°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.064	1850.000	1909.901	1910.000	40°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.129	1850.000	1909.914	1910.000	30°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.068	1850.000	1909.840	1910.000	20°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.038	1850.000	1909.913	1910.000	10°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.154	1850.000	1909.900	1910.000	0°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.016	1850.000	1909.952	1910.000	-10°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.137	1850.000	1909.844	1910.000	-20°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.115	1850.000	1909.896	1910.000	-30°C/3.85V

Transmitter Conducted Output Power And ERP/EIRP GPRS

Band	Channel	Gamma	Freq (MHz)	Modulation	Slots	Conducted Power(dBm)	ERP/EIRP (dBm)	ERP/EIRP(limit) (dBm)	Verdict
GSM 850	251	3	848.8	GMSK	1 Tx	33.48	26.96	38.45	PASS
GSM 850	251	3	848.8	GMSK	2 Tx	32.75	26.23	38.45	PASS
GSM 850	251	3	848.8	GMSK	3 Tx	30.95	24.43	38.45	PASS
GSM 850	251	3	848.8	GMSK	4 Tx	29.85	23.33	38.45	PASS
GSM 850	190	3	836.6	GMSK	1 Tx	33.57	27.05	38.45	PASS
GSM 850	190	3	836.6	GMSK	2 Tx	32.78	26.26	38.45	PASS
GSM 850	190	3	836.6	GMSK	3 Tx	31.01	24.49	38.45	PASS
GSM 850	190	3	836.6	GMSK	4 Tx	29.92	23.40	38.45	PASS
GSM 850	128	3	824.2	GMSK	1 Tx	33.53	27.01	38.45	PASS
GSM 850	128	3	824.2	GMSK	2 Tx	32.79	26.27	38.45	PASS
GSM 850	128	3	824.2	GMSK	3 Tx	31.03	24.51	38.45	PASS
GSM 850	128	3	824.2	GMSK	4 Tx	29.94	23.42	38.45	PASS
PCS 1900	810	3	1909.8	GMSK	1 Tx	30.94	31.73	33.01	PASS
PCS 1900	810	3	1909.8	GMSK	2 Tx	30.11	30.90	33.01	PASS
PCS 1900	810	3	1909.8	GMSK	3 Tx	28.31	29.10	33.01	PASS
PCS 1900	810	3	1909.8	GMSK	4 Tx	27.22	28.01	33.01	PASS
PCS 1900	661	3	1880.0	GMSK	1 Tx	30.83	31.62	33.01	PASS
PCS 1900	661	3	1880.0	GMSK	2 Tx	30.01	30.80	33.01	PASS
PCS 1900	661	3	1880.0	GMSK	3 Tx	28.12	28.91	33.01	PASS
PCS 1900	661	3	1880.0	GMSK	4 Tx	27.04	27.83	33.01	PASS
PCS 1900	512	3	1850.2	GMSK	1 Tx	30.67	31.46	33.01	PASS
PCS 1900	512	3	1850.2	GMSK	2 Tx	29.85	30.64	33.01	PASS
PCS 1900	512	3	1850.2	GMSK	3 Tx	27.98	28.77	33.01	PASS
PCS 1900	512	3	1850.2	GMSK	4 Tx	26.87	27.66	33.01	PASS
Note: The ERP is for below 1GHz, EIRP is for above 1GHz $EIRP = \text{Conducted Power(dBm)} - L_c(\text{dB}) + G_T(\text{dBi})$ $ERP = \text{Conducted Power(dBm)} - L_c(\text{dB}) + G_T(\text{dBd})$ $G_T(\text{dBd}) = G_T(\text{dBi}) - 2.15$									

Transmitter Conducted Output Power And ERP/EIRP EGPRS

Band	Channel	Gamma	Freq (MHz)	Modulation	Slots	Conducted Power(dBm)	ERP/EIRP (dBm)	ERP/EIRP(limit) (dBm)	Verdict
GSM 850	251	6	848.8	8PSK	1 Tx	27.53	21.01	38.45	PASS
GSM 850	251	6	848.8	8PSK	2 Tx	26.85	20.33	38.45	PASS
GSM 850	251	6	848.8	8PSK	3 Tx	24.32	17.80	38.45	PASS
GSM 850	251	6	848.8	8PSK	4 Tx	23.44	16.92	38.45	PASS
GSM 850	190	6	836.6	8PSK	1 Tx	27.41	20.89	38.45	PASS
GSM 850	190	6	836.6	8PSK	2 Tx	26.36	19.84	38.45	PASS
GSM 850	190	6	836.6	8PSK	3 Tx	24.68	18.16	38.45	PASS
GSM 850	190	6	836.6	8PSK	4 Tx	23.80	17.28	38.45	PASS
GSM 850	128	6	824.2	8PSK	1 Tx	28.16	21.64	38.45	PASS
GSM 850	128	6	824.2	8PSK	2 Tx	26.19	19.67	38.45	PASS
GSM 850	128	6	824.2	8PSK	3 Tx	24.88	18.36	38.45	PASS
GSM 850	128	6	824.2	8PSK	4 Tx	23.80	17.28	38.45	PASS
PCS 1900	810	5	1909.8	8PSK	1 Tx	27.22	28.01	33.01	PASS
PCS 1900	810	5	1909.8	8PSK	2 Tx	26.25	27.04	33.01	PASS
PCS 1900	810	5	1909.8	8PSK	3 Tx	24.08	24.87	33.01	PASS
PCS 1900	810	5	1909.8	8PSK	4 Tx	22.94	23.73	33.01	PASS
PCS 1900	661	5	1880.0	8PSK	1 Tx	27.23	28.02	33.01	PASS
PCS 1900	661	5	1880.0	8PSK	2 Tx	26.21	27.00	33.01	PASS
PCS 1900	661	5	1880.0	8PSK	3 Tx	24.24	25.03	33.01	PASS
PCS 1900	661	5	1880.0	8PSK	4 Tx	22.74	23.53	33.01	PASS
PCS 1900	512	5	1850.2	8PSK	1 Tx	27.12	27.91	33.01	PASS
PCS 1900	512	5	1850.2	8PSK	2 Tx	25.96	26.75	33.01	PASS
PCS 1900	512	5	1850.2	8PSK	3 Tx	24.26	25.05	33.01	PASS
PCS 1900	512	5	1850.2	8PSK	4 Tx	23.04	23.83	33.01	PASS

Note:

The ERP is for below 1GHz, EIRP is for above 1GHz

$EIRP = \text{Conducted Power(dBm)} - L_c(\text{dB}) + G_T(\text{dBi})$

$ERP = \text{Conducted Power(dBm)} - L_c(\text{dB}) + G_T(\text{dBd})$

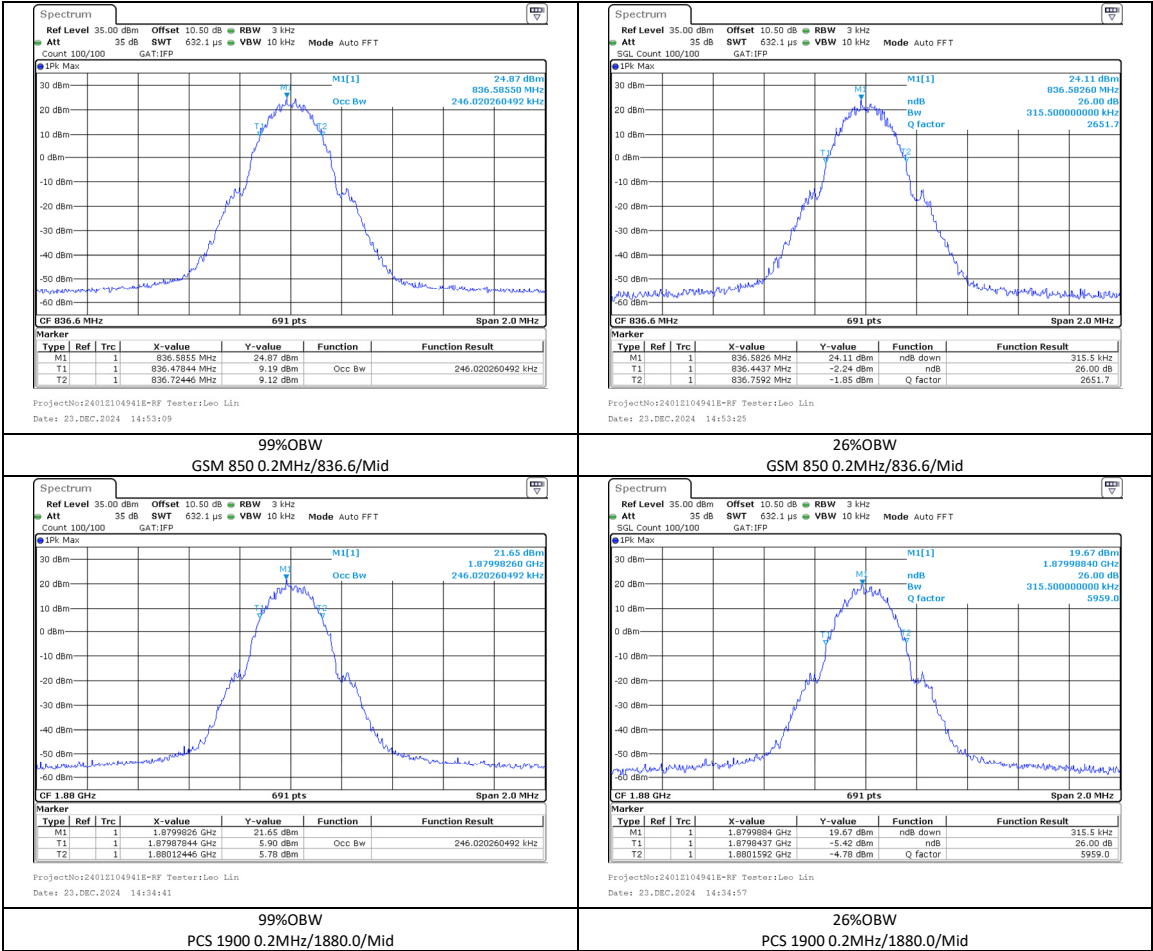
$G_T(\text{dBd}) = G_T(\text{dBi}) - 2.15$

Peak to Average Ratio EGPRS

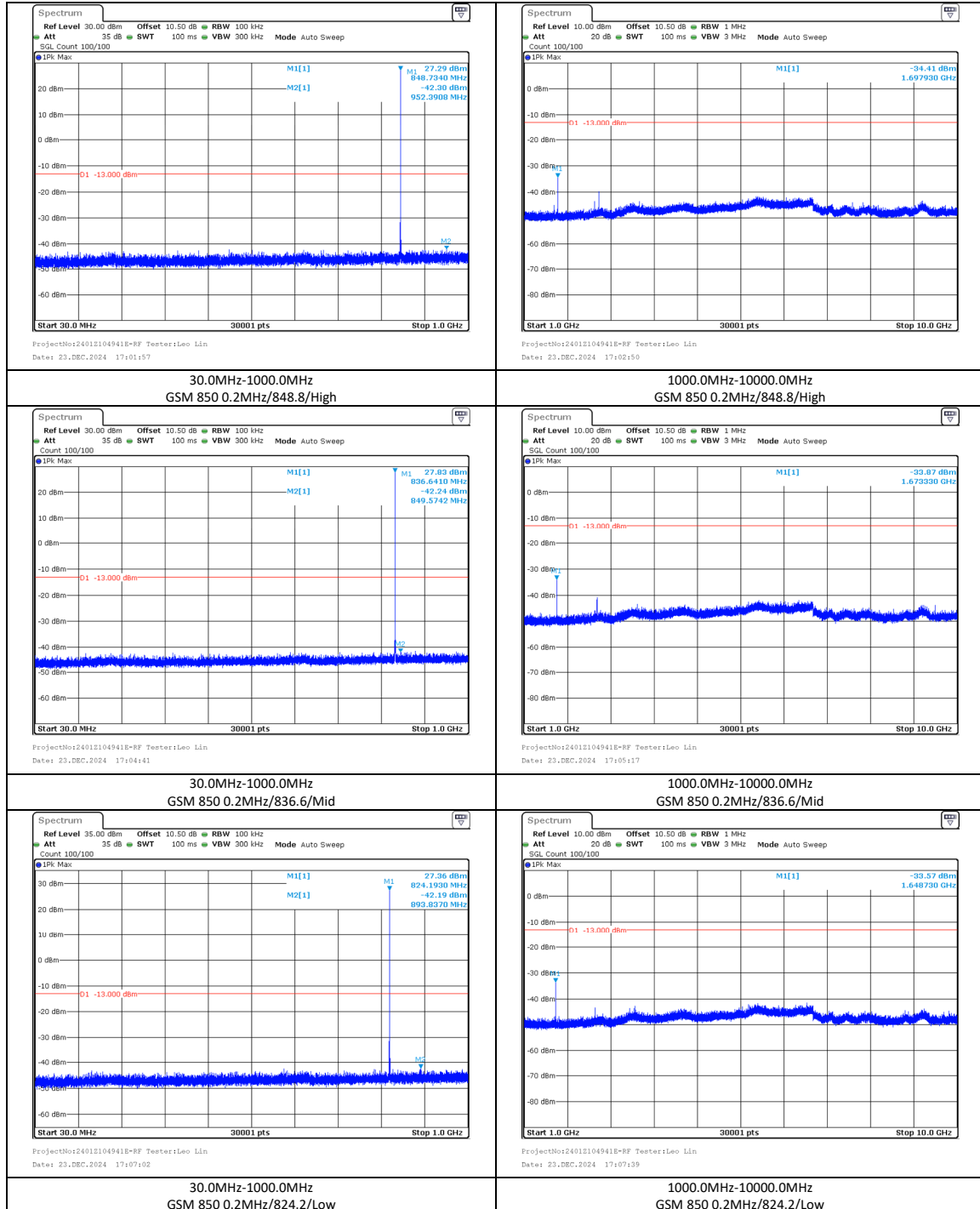
Band	Channel	Freq (MHz)	Slots	Result (dB)	Limit (dB)	Verdict
GSM 850	251	848.8	1 Tx	3.26	13	PASS
GSM 850	190	836.6	1 Tx	3.12	13	PASS
GSM 850	128	824.2	1 Tx	2.80	13	PASS
PCS 1900	810	1909.8	1 Tx	3.03	13	PASS
PCS 1900	661	1880.0	1 Tx	3.03	13	PASS
PCS 1900	512	1850.2	1 Tx	3.06	13	PASS

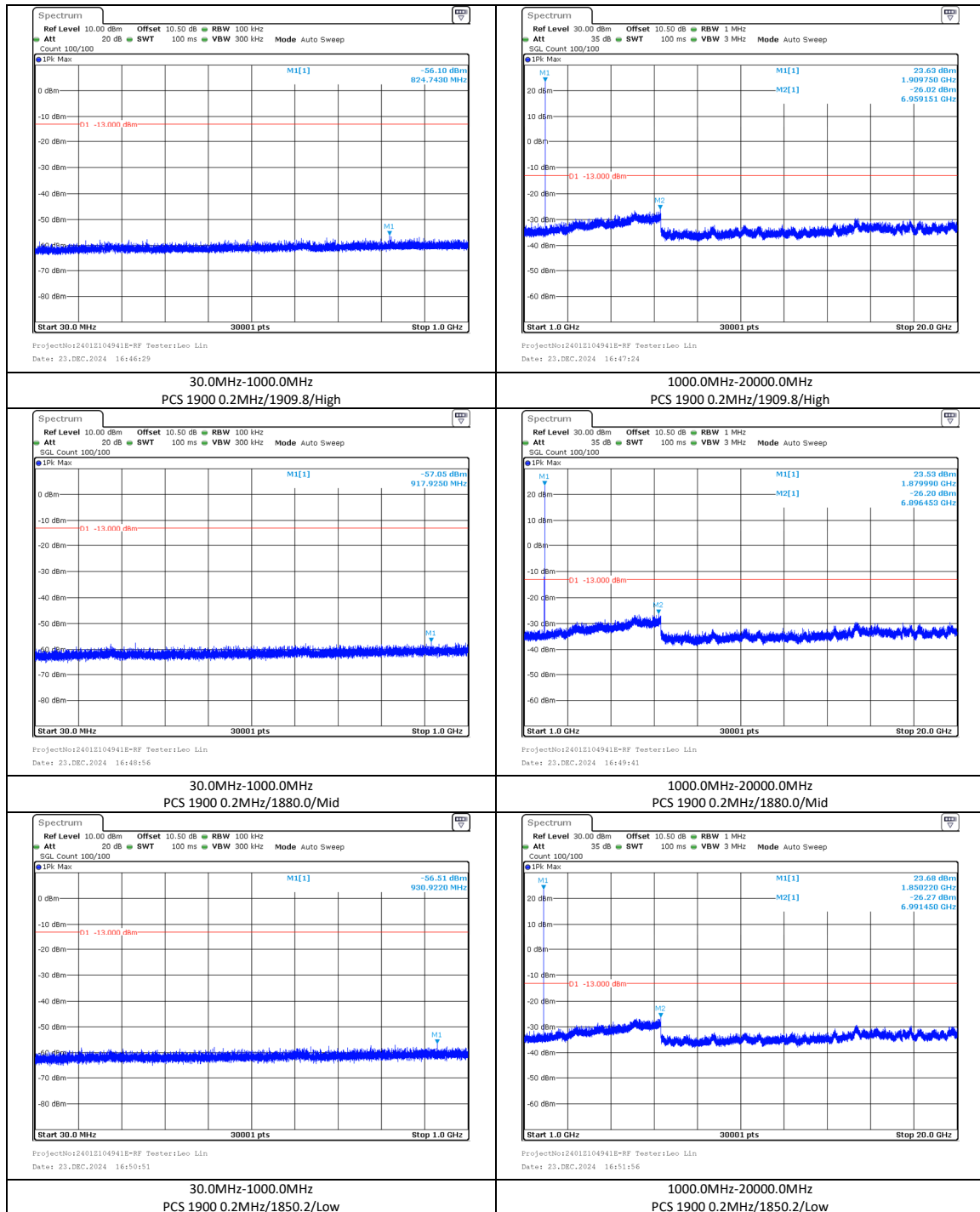
Occupied Bandwidth EGPRS

Band	Channel	Freq (MHz)	Slots	OBW (MHz)	26dB BW (MHz)	Verdict
GSM 850	190	836.6	1 Tx	0.24602	0.3155	PASS
PCS 1900	661	1880.0	1 Tx	0.24602	0.3155	PASS



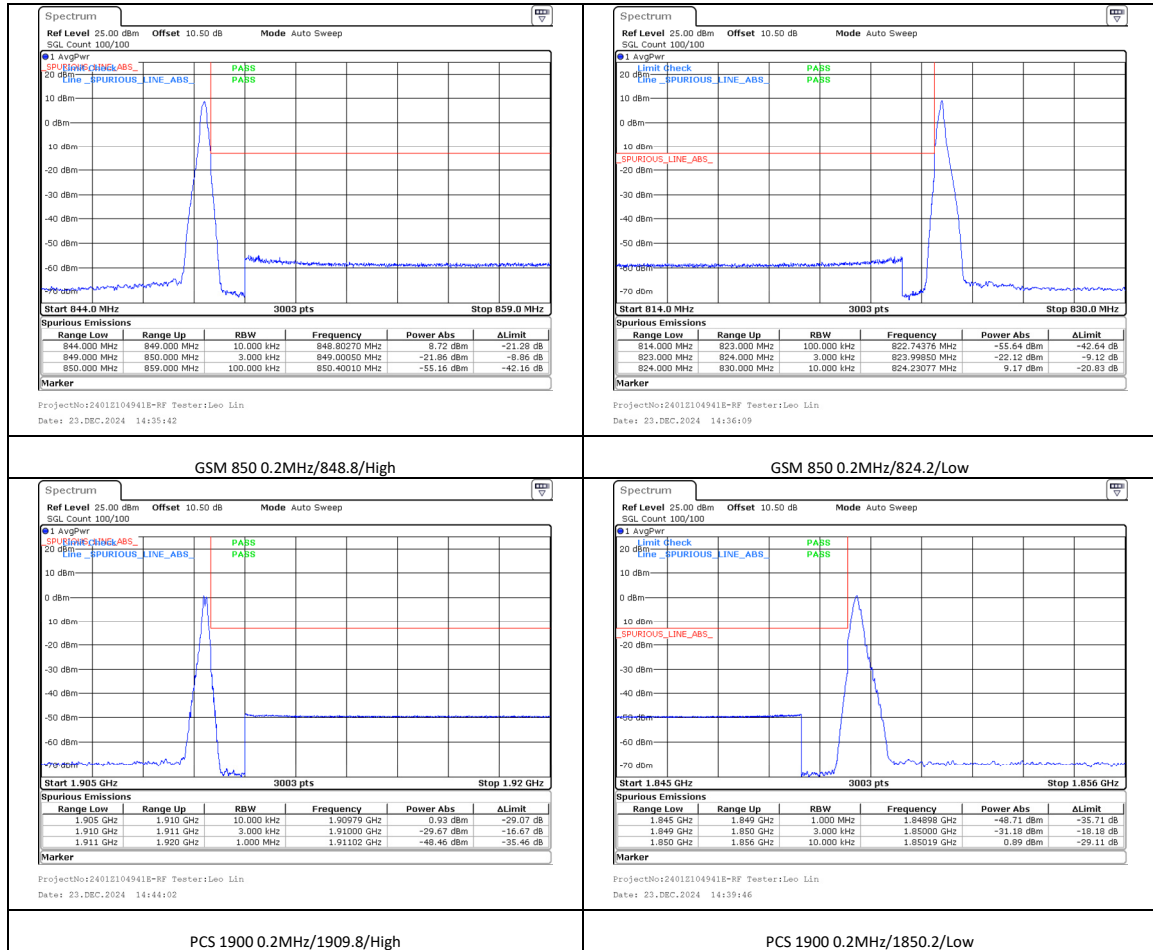
Conducted Spurious Emissions EGPRS





Conducted Band Edge EGPRS

Band	Channel	Freq (MHz)	Slots	Result	Verdict
GSM 850	251	848.8	1 Tx	see graph	PASS
GSM 850	128	824.2	1 Tx	see graph	PASS
PCS 1900	810	1909.8	1 Tx	see graph	PASS
PCS 1900	512	1850.2	1 Tx	see graph	PASS



Frequency Stability Error EGPRS

Band	Channel	Freq (MHz)	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
GSM 850	251	848.8	0.50	0.00059	±2.5	PASS	20°C/3.4V
GSM 850	251	848.8	2.51	0.00296	±2.5	PASS	20°C/4.4V
GSM 850	251	848.8	-1.37	-0.00161	±2.5	PASS	50°C/3.85V
GSM 850	251	848.8	1.56	0.00184	±2.5	PASS	40°C/3.85V
GSM 850	251	848.8	-4.61	-0.00543	±2.5	PASS	30°C/3.85V
GSM 850	251	848.8	-7.57	-0.00892	±2.5	PASS	20°C/3.85V
GSM 850	251	848.8	0.01	0.00001	±2.5	PASS	10°C/3.85V
GSM 850	251	848.8	-1.16	-0.00137	±2.5	PASS	0°C/3.85V
GSM 850	251	848.8	1.44	0.00170	±2.5	PASS	-10°C/3.85V
GSM 850	251	848.8	-2.92	-0.00344	±2.5	PASS	-20°C/3.85V
GSM 850	251	848.8	-4.51	-0.00531	±2.5	PASS	-30°C/3.85V
GSM 850	190	836.6	-0.19	-0.00023	±2.5	PASS	20°C/3.4V
GSM 850	190	836.6	0.12	0.00014	±2.5	PASS	20°C/4.4V
GSM 850	190	836.6	3.06	0.00366	±2.5	PASS	50°C/3.85V
GSM 850	190	836.6	-2.94	-0.00351	±2.5	PASS	40°C/3.85V
GSM 850	190	836.6	1.46	0.00175	±2.5	PASS	30°C/3.85V
GSM 850	190	836.6	1.92	0.00230	±2.5	PASS	20°C/3.85V
GSM 850	190	836.6	2.59	0.00310	±2.5	PASS	10°C/3.85V
GSM 850	190	836.6	-0.22	-0.00026	±2.5	PASS	0°C/3.85V
GSM 850	190	836.6	5.82	0.00696	±2.5	PASS	-10°C/3.85V
GSM 850	190	836.6	-0.77	-0.00092	±2.5	PASS	-20°C/3.85V
GSM 850	190	836.6	0.69	0.00082	±2.5	PASS	-30°C/3.85V
GSM 850	128	824.2	5.72	0.00694	±2.5	PASS	20°C/3.4V
GSM 850	128	824.2	-4.77	-0.00579	±2.5	PASS	20°C/4.4V
GSM 850	128	824.2	2.45	0.00297	±2.5	PASS	50°C/3.85V
GSM 850	128	824.2	-3.78	-0.00459	±2.5	PASS	40°C/3.85V
GSM 850	128	824.2	2.66	0.00323	±2.5	PASS	30°C/3.85V
GSM 850	128	824.2	0.42	0.00051	±2.5	PASS	20°C/3.85V
GSM 850	128	824.2	0.82	0.00099	±2.5	PASS	10°C/3.85V
GSM 850	128	824.2	0.66	0.00080	±2.5	PASS	0°C/3.85V
GSM 850	128	824.2	-0.90	-0.00109	±2.5	PASS	-10°C/3.85V
GSM 850	128	824.2	-3.22	-0.00391	±2.5	PASS	-20°C/3.85V
GSM 850	128	824.2	3.38	0.00410	±2.5	PASS	-30°C/3.85V

Frequency Stability Range EGPRS

Band	Channel (Low/High)	Freq (MHz)	Lower Edge (MHz) (Result)	Limit (1850MHz)	Upper Edge (MHz) (Result)	Limit (1910MHz)	Environment
PCS 1900	512/810	1850.2/1909.8	1850.088	1850.000	1909.712	1910.000	20°C/3.4V
PCS 1900	512/810	1850.2/1909.8	1850.161	1850.000	1909.945	1910.000	20°C/4.4V
PCS 1900	512/810	1850.2/1909.8	1850.010	1850.000	1909.672	1910.000	50°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.005	1850.000	1909.891	1910.000	40°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.050	1850.000	1909.781	1910.000	30°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.189	1850.000	1909.839	1910.000	20°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.073	1850.000	1909.923	1910.000	10°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.199	1850.000	1909.934	1910.000	0°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.093	1850.000	1909.598	1910.000	-10°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.173	1850.000	1909.952	1910.000	-20°C/3.85V
PCS 1900	512/810	1850.2/1909.8	1850.131	1850.000	1909.618	1910.000	-30°C/3.85V