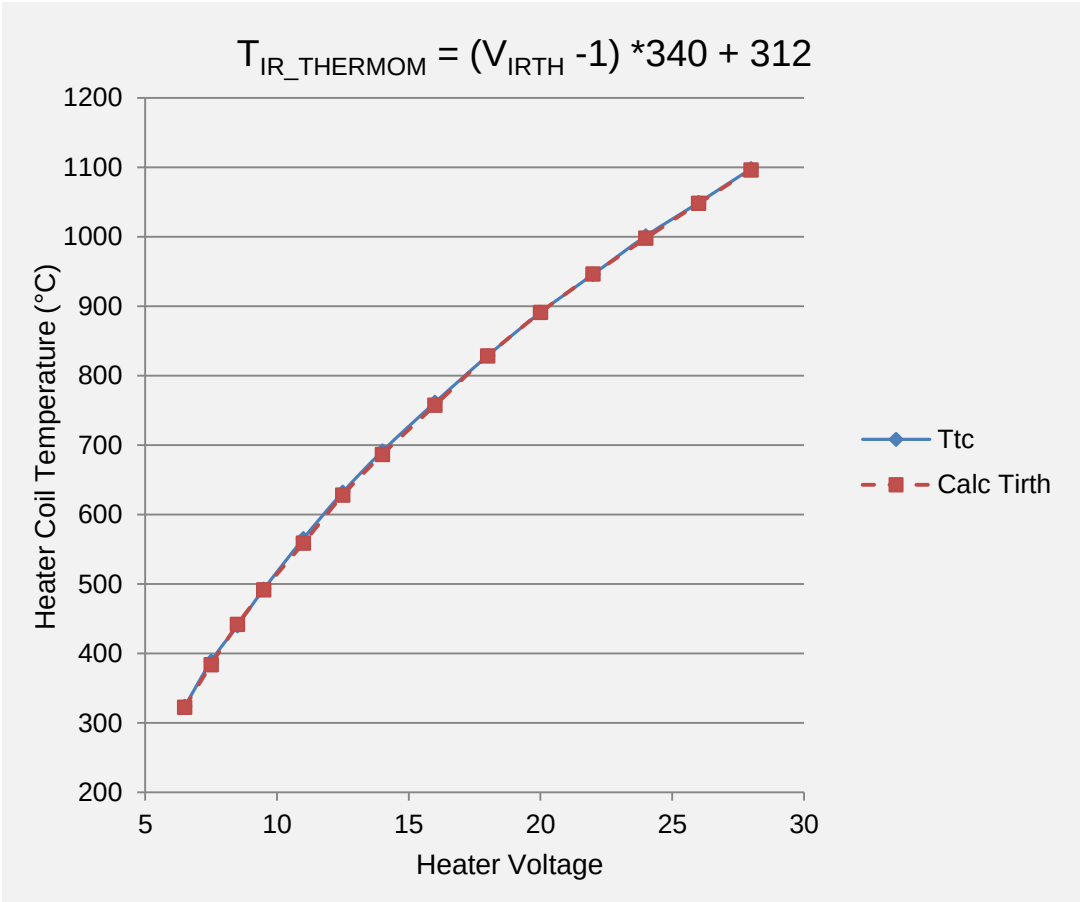
Fitting IR Thermometer Output Voltage to Thermocouple Data

IR thermometer operated in
4-20 ma mode into 250Ω
resistor yielding 1.0V-5.0V span

Vhtr	Ttc	Virth	Calc Tirth
0.0	22.6	0.989	306.2
6.5	323.8	1.031	320.5
7.5	388.8	1.212	382.4
8.5	440.1	1.381	440.4
9.5	492.7	1.528	490.6
11.0	565.3	1.726	558.3
12.5	632.2	1.929	627.7
14.0	691.3	2.102	686.8
16.0	761.5	2.310	758.0
18.0	828.7	2.519	829.6
20.0	891.0	2.702	892.2
22.0	945.9	2.865	947.8
24.0	1001	3.017	999.8
26.0	1049	3.165	1050.3
28.0	1098	3.306	1098.7



Vtc = type K thermocouple indicated temperature
Calc Tirth = fitted curve for IR thermometer