



"Out Shines All Others"

## STEADY STATE IR SOURCE Model EK-827X

HelioWorks, Inc. offers a unique steady state black body infrared emitter in an industry standard TO-8 package with approximately 1.5 Watts input power at up to 950°C (1223°K). Window options (X) include: 0 = no window 1 = sapphire, 2 = Calcium Fluoride

### Key features include:

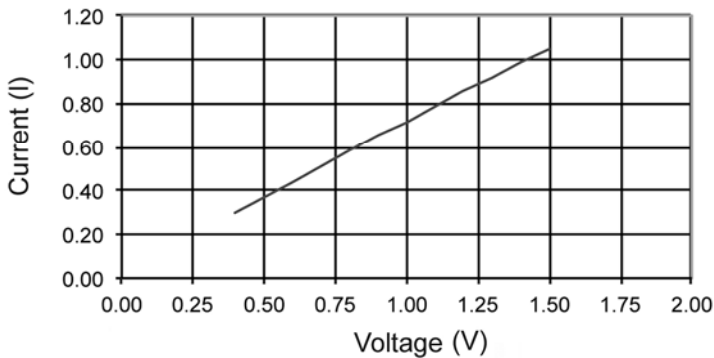
- Kanthal Filament with Emissivity = 0.7
- Approximately 1.50 Watts input at 950°C (1223°K)
- Internal Gold Plated Parabolic Reflector
- Industry Standard TO-8 Package
- Window Options (X) include:
  - 0 = No Window
  - 1 = Sapphire
  - 2 = Calcium Fluoride (CaF<sub>2</sub>)



### Electrical Specifications:

Peak Voltage = 1.5 Volts MAXIMUM  
Peak Current = 1.0 Amps  
Peak Power = 1.50 Watts

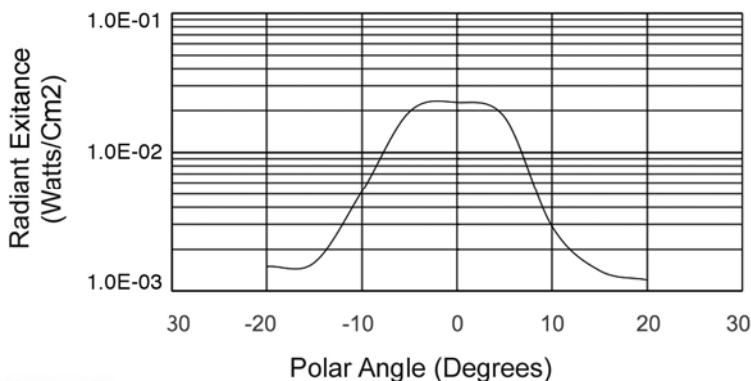
**Current vs Voltage**



Volts	I(Amps)	V/I (Ohms)	V*I (W)
0.20	0.15	0.27	1.32
0.40	0.30	0.47	1.34
0.60	0.44	0.59	1.35
0.80	0.58	0.47	1.37
0.90	0.65	0.59	1.38
1.00	0.72	0.72	1.40
1.20	0.85	1.02	1.41
1.30	0.92	1.19	1.41
1.40	0.99	1.39	1.41
1.50	1.05	1.58	1.42

### Radiant Exitance (Watts/Cm<sup>2</sup>):

Volts = 1.50, Distance = 3.0 inches from source



Polar Angle	Average (W/Cm <sup>2</sup> )
-20	1.50E-03
-15	1.60E-03
-10	5.20E-03
-5	1.97E-02
0	2.30E-02
5	1.80E-02
10	2.90E-03
15	1.40E-03
20	1.20E-03