

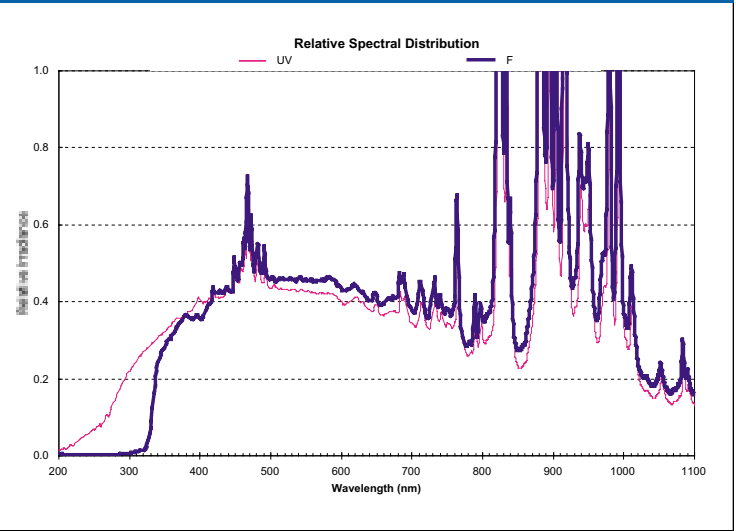
# Type A Elliptical

		PE80A-10F	PE80A-10UV	PE80A-13F	PE80A-13UV	PE150A-10F	PE150A-10UV	PE150A-13F	PE150A-13UV
<b>Power (Watts)</b>	Nominal	85	85	85	85	150	150	150	150
	Range	85 - 100	85 - 100	85 - 100	85 - 100	100 - 150	100 - 150	100 - 150	100 - 150
<b>Current (Amps DC)</b>	Nominal	7.7	7.7	7.7	7.7	12.5	12.5	12.5	12.5
	Range	7.0 - 10.0	7.0 - 10.0	7.0 - 10.0	7.0 - 10.0	10.0 - 14.0	10.0 - 14.0	10.0 - 14.0	10.0 - 14.0
<b>Voltage (Volts DC)</b>	Nominal	11.0	11.0	11.0	11.0	11.7	11.7	11.7	11.7
	Range	10.5 - 13.5	10.5 - 13.5	10.5 - 13.5	10.5 - 13.5	10.0 - 13.6	10.0 - 13.6	10.0 - 13.6	10.0 - 13.6
Maximum Top Ceramic Operating Temperature (°C) <sup>1</sup>		120	120	120	120	120	120	120	120
Minimum Ignition Voltage at Lamp (kV) <sup>2</sup>		28	28	28	28	28	28	28	28
Minimum Ignition Pulse Duration (nS)		100	100	100	100	100	100	100	100
Radiant Output (Watts) <sup>3</sup>		7.0	7.0	7.0	7.0	21.0	21.0	21.0	21.0
UV Output, <390nm (Watts) <sup>3</sup>		0.4	0.9	0.4	0.9	1.1	2.5	1.1	2.5
IR Output, >770nm (Watts) <sup>3</sup>		4.0	3.6	4.0	3.6	12.0	10.8	12.0	10.8
Visible Output, 390-770nm (Lumens) <sup>3</sup>		800	720	800	720	1800	1620	1800	1620
Color Temperature (Kelvin) <sup>4</sup>		5900	5050	5900	5050	5900	5050	5900	5050
<b>Spot Size at Crossover (inches / mm)</b>	@ 50% points <sup>4</sup>	.10 / 2.5	.10 / 2.6	.11 / 2.8	.11 / 2.9	.10 / 2.5	.10 / 2.6	.11 / 2.8	.11 / 2.9
	@ 10% points <sup>4</sup>	.25 / 6.4	.25 / 6.5	.25 / 6.4	.25 / 6.5	.25 / 6.4	.25 / 6.5	.25 / 6.4	.25 / 6.5
f-Number		1.0	1.0	1.3	1.3	1.0	1.0	1.3	1.3
Focal Distance "A" (inches / mm)		.242 / 6.15	.242 / 6.15	.490 / 12.45	.490 / 12.45	.242 / 6.15	.242 / 6.15	.490 / 12.45	.490 / 12.45
Cathode Defocus "D" (inches / mm)		.014 / .36	.014 / .36	.014 / .36	.014 / .36	.014 / .36	.014 / .36	.014 / .36	.014 / .36
Arc Gap (inches / mm)		.025 / .64	.025 / .64	.025 / .64	.025 / .64	.032 / .81	.032 / .81	.032 / .64	.032 / .64
Window Diameter (inches / mm)		.770 / 19.56	.770 / 19.56	.770 / 19.56	.770 / 19.56	.770 / 19.56	.770 / 19.56	.770 / 19.56	.770 / 19.56
<b>Focused Output (Lumens / Watts)</b>	6mm Aperture	920 / 8.4	-	660 / 6.0	-	1500 / 14.0	-	1100 / 10.0	-
	3mm Aperture	590 / 5.2	-	420 / 3.7	-	1000 / 8.5	-	700 / 6.3	-

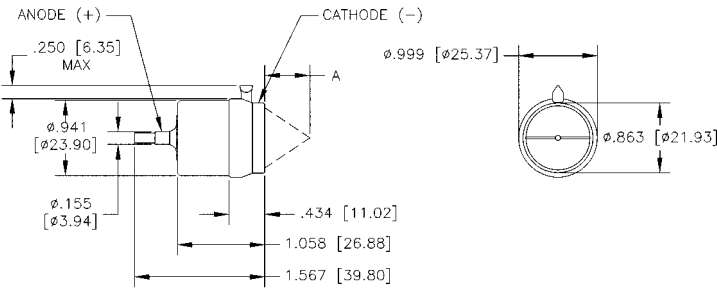
<sup>1</sup> Optimum operating temperature 120-130 (°C). <sup>2</sup> With a PKI approved power supply. <sup>3</sup> Total nominal output from lamp in all directions. <sup>4</sup> Nominal value. All specifications subject to change without notice.



## Spectral Output



## Type A Elliptical Dimensions

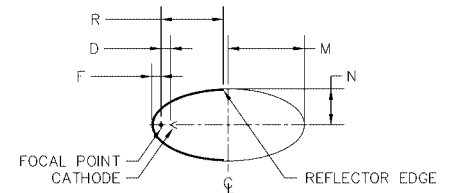


DIMENSIONS IN BRACKETS ARE IN MILLIMETERS.

## Type A Elliptical Reflector

f/1.0	f/1.3
M = .6875	M = .8000
N = .3772	N = .3873
R = .500	R = .500
F = .113	F = .100

$$1 = \frac{x^2}{M^2} + \frac{y^2}{N^2}$$



**NOTES:** **A.** Lamp must not be operated with window facing upwards within 45° of vertical. **B.** Seal temperature must not exceed 150°C. **C.** Current/power regulated power supplies and PerkinElmer lamp housing units are recommended. **D.** Lamp must be operated within recommended current and power range. Over powering may lead to arc instability, hard starting and premature aging. **E.** Hot mirror assembly is available for IR filtering for 300W lamps and below. **F.** Cermax® lamps are much safer lamps to use than their quartz xenon arc lamp equivalents. However, caution must be practiced when operating lamps because they are under high pressure, require high voltage, reach temperatures up to 200°C, and their IR and UV radiation can cause skin burns and eye damage. Read hazard sheet included with each lamp shipment.