

## **TECHNICAL SPECIFICATIONS**

### **BIRNS Blackbirn-II Model 7710**

#### **Materials**

All Housing Parts:	Aluminum 357, hard black anodized per MIL-A-8625, Type III, Class 2, vacuum-impregnated per MIL-STD-276, and painted BIRNS Yellow
Lens:	Tempered 1041 UV-filtered soda-lime glass
Lens Gasket:	BUNA N (Nitrile-NBR) acrylonitrile-butadiene
O-rings:	Nitrile compound N674-70
Connector shell:	Stainless Steel 316, passivated per QQ-P-35 type VI
Connector insert:	Glass-reinforced epoxy 52G-012 (GRE)
Connector pins:	Brass 360 per ASTM B16, gold-plated per MIL-G-45204
Lamp socket:	Ceramic
Internal wiring:	Teflon (PTFE) coated high-temperature 16 AWG wire

#### **Physical**

Length, overall:	310 mm (12.2 inches)
Width:	168 mm (6.6 inches)
Height (without handle):	175 mm (6.9 inches)
Weight in air:	5.23 Kg (11.5 pounds)

#### **Electrical**

Input voltage:	115 <sup>1</sup> +/- 15 VAC (nominal standard); 240 VAC ballast inputs also available
Lamp wattage:	100 watts
Supply frequency:	60 Hz

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<sup>1</sup>This lamp requires an auto-transforming ballast ("control gear"), e.g. BIRNS Models 3051 or 3062, which supplies an initial high-voltage surge to start the mercury arc and then subsides to below-mains voltages.

### Lighting/Photometric

Lamp type: Mercury Vapor PAR38 spot, admedium base, with integral glass reflector  
Time to full brightness: 180 seconds after application of power  
Operating Position: Universal (i.e. any position)  
Rated Average<sup>2</sup> Lifetime: 16,000 hours<sup>3</sup>

### Light Output

UV Light Output: 1,250  $\mu\text{w}/\text{cm}^2$  of UV energy  
UV spectral peak: 360 nanometers

### Environmental

Protection level: IP68  
Depth rating: 2,000 M (6,600 FSW)

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<sup>2</sup>The time after which 50% of test lamps were no longer operating.

<sup>3</sup>These ratings are determined by the lamp manufacturer based on laboratory tests under controlled conditions. Your own field results may vary.