

The BIRNS Curie II™ is the world's most advanced general purpose underwater 360° droplight. Only 89mm diameter, its 120V/2,000W lamp emits a powerful 59,000 lumens of 3200K light, using ballast-less mercury-free lamps. With 304 stainless construction throughout, it also features a redundantly-sealed stainless steel electrical connector.



High Performance . . . Under Pressure®

The BIRNS Curie II™, BIRNS Model 5741, is engineered so that its connector is fully integral to the light housing—both are made of a single block of Type 304 stainless steel and are indexed (keyed) such that it is impossible to mis-mate or damage the connectors. The BIRNS Curie connector

does not depend on the rubber-coated pin method of sealing seen in competing units. Instead, it has redundant captivated o-ring seals in stainless steel grooves, to preclude any possibility of electrical leakage. So the BIRNS Curie, like all BIRNS lights, will operate reliably on GFCIs (ground-fault circuit interrupters) without tripping. Plus, GFCI/ELCB (earth leakage circuit breaker) compatibility makes it extremely versatile.



EXCLUSIVE FEATURES

- Brilliant 59,000 lumens of 3200K true-white light
- 60-second tool-free relamping
- Commercially-available, Hg-free lamps
- Compatible with all Class A GFCIs (ELCBs)
- Small size (Ø8.9cm/3.5" OD)
- Rugged, stainless steel inside-containment construction
- Ballast-free operation
- Integral stainless-steel connectors, indexed (keyed) for easy operation
- Instant ON/OFF; Hot-Restrike; 0-100% dimming

APPLICATIONS

The BIRNS Curie is incredibly rugged and trusted worldwide for use in areas with high levels of radiation and nuclear contamination, and for localized inspection and filming. Tailored for use in reactor cavities, its high light output and small size make it perfect for tight spaces requiring intense illumination. It is rated to 100M and can be suspended by its cable for general-purpose drop light use, but can also be mounted.



BIRNS' Quality Management System is
ISO 9001:2015 Certified;
NRC 10CFR50, App. B Compliant

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SPECIFICATIONS

EQUIPMENT

BIRNS Curie Light

Power Cable Assembly (17E-011)

Available in unbroken lengths up to 1,000 feet. Special configurations and/or cable jacket materials are also available.

Lens

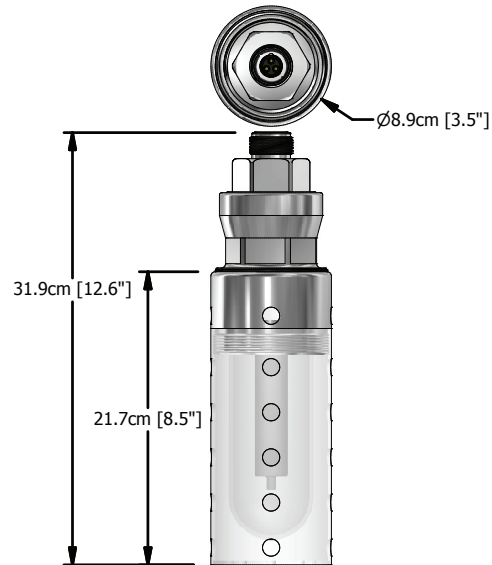
Two lenses are available: **Standard** (35B-021), for general purpose use, and **Non-Browning** (35B-031), which is impervious to radiation-induced coloration.

Reflector

Two types of reflectors are available for different applications, and changing them is quick and simple.

The **Flat Reflector** (54C-006) eliminates glare and wasteful "overthrow."

The **Axial Reflector** (54B-002, shown), changes the 360° radial beam to a medium-flood downward beam.



PHYSICAL

Length:	31.9cm (12.6 in.)
Diameter:	8.9cm (3.5 in.)
Weight in Air:	4kg (9 lbs.)

LIGHTING/PHOTOMETRIC

Lamp Type:	Incandescent Tungsten-Halogen; Mogul base; Type T-8 bulb
Time To Full Brightness:	<1 s after application of power
Operating Position:	Universal (i.e. any position)
Rated Average Lifetime:	500 hours
Dimming Range:	0-100%
Light Output:	59,000 initial lumens
Correlated Color Temp.:	3200K

ENVIRONMENTAL

Protection Level:	IP68
Depth Rating:	100m (330 FSW) plus 50% safety margin

ELECTRICAL

Input Voltage:	115 +/- 15 VAC or VDC
Supply Frequency:	60Hz
Cable Size:	12 AWG, 3 conductor (standard)
Cable Current Rating:	25 amperes maximum
Cable Voltage Rating:	600 volts maximum

LAMP

Nominal Lamp Wattage:	2000 watts
Nominal Lamp Voltage:	120 (RMS)

MATERIALS

All Housing Parts:	Stainless steel type 304, electropolished
Dome:	Borosilicate Pyrex Glass (standard); optional non-browning quartz also available
Dome Protector Assembly:	Lexan Polycarbonate
Lamp Socket:	Ceramic
Connector Insert:	Glass-reinforced epoxy (GRE)
Connector Pins:	Copper alloy, gold-plated per MIL-G-45204
Cable (Super-Vutron):	CSPE jacket; EPDM insulation

ORDERING INFORMATION

- BIRNS Model 5741
- Power Cable Assembly 17E-011 (30M/100 ft. standard) [specify length]

Optional Upgrades

- Non-Browning Lens 35B-031 (silica crystal)
- Flat Reflector 54C-006
- Axial Reflector 54B-002