



# Lighthouse™ UV Lamp Housing

Retrofittable replacement UV lamp housing delivers 20% more curing power over conventional reflector systems



US Patent Nos. 5,861,633, D404409

CON-TROL-CURE's **Lighthouse™ UV Lamp Housing** utilizes patented, highly focused reflector geometry and new housing architecture to deliver higher UV cure energy, greater energy efficiency, and cooler overall performance than comparable UV irradiators. Within each Lighthouse™, we've incorporated these innovative design features:

### Patent-pending, fully focused geometry

Incorporating a 3/4 reflector, dual end reflectors, plus reflectors mounted within the shutter (where applicable), the Lighthouse™ produces 20% more cure energy than standard reflector designs. With the addition of a v-shaped reflector positioned directly above the lamp, energy is redirected around the quartz tube and to the 3/4 reflector. Supported by a multi-rib network (designed in CAD with a Light Ray tracing tool to ensure proper focus), the 3/4 reflector gathers all available energy and directs it onto the substrate's surface for optimal performance. Field evaluations have indicated 20% additional cure energy is being received at the substrate surface as compared to competitive systems.

### Unique air flow design maximizes lamp efficiency

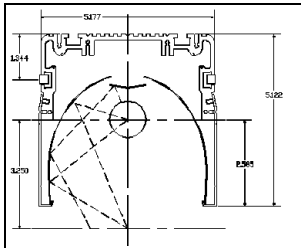
By replacing the aluminum extrusion found in most UV lamp housings with the multi-rib network, the Lighthouse's air flow pattern permits unobstructed cooling throughout the housing. The Lighthouse's innovative v-shaped reflector is also supported in a manner to create an air channel along the inside of the reflector. As the air is directed along the reflector so as not to interfere with lamp performance, overall efficiency is maintained. Fan-blown air also flows along the outside of the reflector so both sides are cooled simultaneously. Plus, since energy which accumulates around the quartz tube turns into unwanted infrared, the redirection of trapped energy by the v-shaped reflector further dissipates heat.

### Versatile design

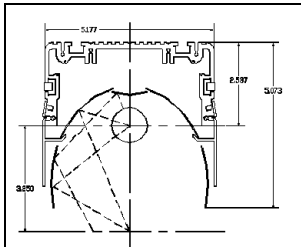
The Lighthouse's universal lamp holders feature a swivel clamping system which accepts any lamp of any manufacture - ceramic or metal end fitting. This system also permits adjustment of lamp focus to ensure that any lamp can be placed in exact focus for optimal performance.

### Easy maintenance

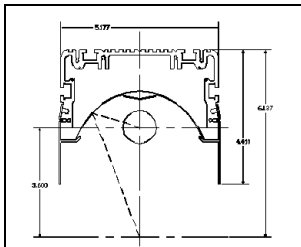
The Lighthouse's side panels, which secure the housing's reflector material in place, can be easily removed without tools. This allows yellowed, scratched or damaged reflector material to be removed and replaced in approximately 5 minutes. This quick changeover system minimizes downtime and encourages frequent replacement of reflector material so lamp efficiency is optimized. By maintaining optimum brilliance at all times, the operator can maximize performance.



Non-shuttered Lighthouse™ UV Lamp Housing Profile



Shuttered Lighthouse UV Lamp Housing Profile



Parabolic Lighthouse UV Lamp Housing Profile

## 24-HOUR PRODUCT SERVICES

Internet: [www.uvprocess.com](http://www.uvprocess.com)

E-mail: [info@uvps.com](mailto:info@uvps.com)

UV Faxts®...Service: 1-773-880-6649



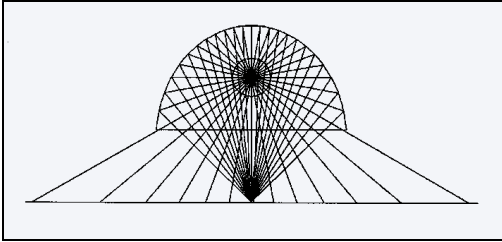
UV Process Supply • 1229 W. Cortland Street • Chicago, IL 60614 • 1-800-621-1296 • 1-773-248-0099 • Fax: 1-773-880-6647

©COPYRIGHT 1997 U. V. PROCESS SUPPLY, INC.

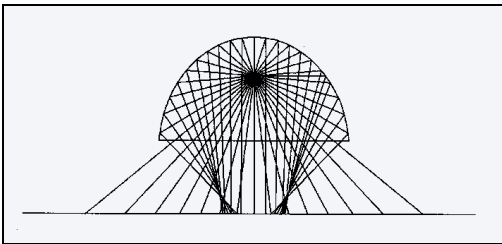


# Lighthouse™ UV Lamp Housing

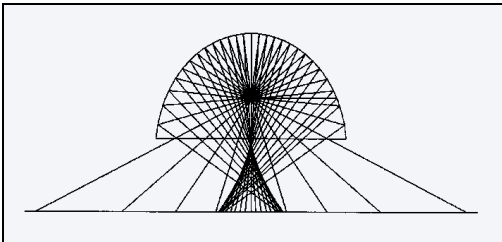
Retrofittable replacement UV lamp housing delivers 20% more curing power over conventional reflector systems



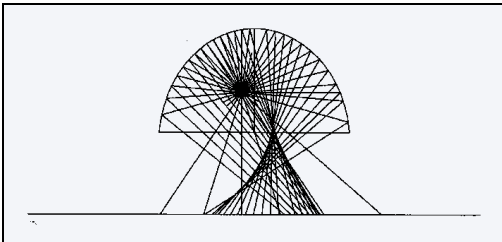
Lighthouse 3/4 reflector with adjustable lamp positioning.



Typical reflector with lamp positioned 1/4" too high.



Typical reflector with lamp positioned 1/4" too low.



Typical reflector with lamp positioned 1/4" too far left.

Also, as the Lighthouse's universal lamp holders accept any lamp and permit focus adjustment for any type of lamp, the operator can choose the lamp(s) which suits his application or purchasing requirements.

### Quick and easy retrofit into any 3rd party production system

As a universally retrofittable housing, each Lighthouse™ incorporates parallel 1/4" channels into three sides of its external extrusion (accepting 1/4"-20 bolts) for universal mounting into any production line.

### Available in 3 fully-focused configurations

Three Lighthouse™ focused reflector designs to deliver the maximum cure energy and cooling air flow required for most industrial and commercial applications: 3.25" elliptical, 10" elliptical, and wide-field parabolic. (Measurements indicate focal distance from center of lamp to substrate surface.)

### Available with or without pneumatic shutter system

Whether your application is an intermittent web operation, conveyorized or wide field production line, every Lighthouse™ is available with or without a pneumatic shutter system.

### Available with or without Thermal Sensing Package

Every Lighthouse™ irradiator can be equipped with or without thermal sensors for detecting muffin fan failure and overheating. When attached to an encased power supply equipped with thermal protected ballast, you can protect your equipment for overheating and damage.

### Pricing

By redesigning components which drive up the cost of most UV housing designs, we've been able to price our standard Lighthouse™ units well below market rates. Call for a price quote and you'll discover the cost of UV is considerably less than you ever imagined

Available in shuttered and unshuttered units, 6 to 77" in width. Extended widths also available by special order. Call for complete details.

### Fast delivery

And finally, we've reduced the lead times on nearly every Lighthouse™ system we produce. With most units shipping in less than two weeks, we can meet most critical deadlines.

Lower Total Cost of Ownership (TCO)  
than competitive UV curing systems

More affordable  
Higher efficiency  
Easier maintenance

## 24-HOUR PRODUCT SERVICES

Internet: [www.uvprocess.com](http://www.uvprocess.com)

E-mail: [info@uvps.com](mailto:info@uvps.com)

UV Faxts®...Service: 1-773-880-6649



UV Process Supply • 1229 W. Cortland Street • Chicago, IL 60614 • 1-800-621-1296 • 1-773-248-0099 • Fax: 1-773-880-6647

©COPYRIGHT 1997 U. V. PROCESS SUPPLY, INC.