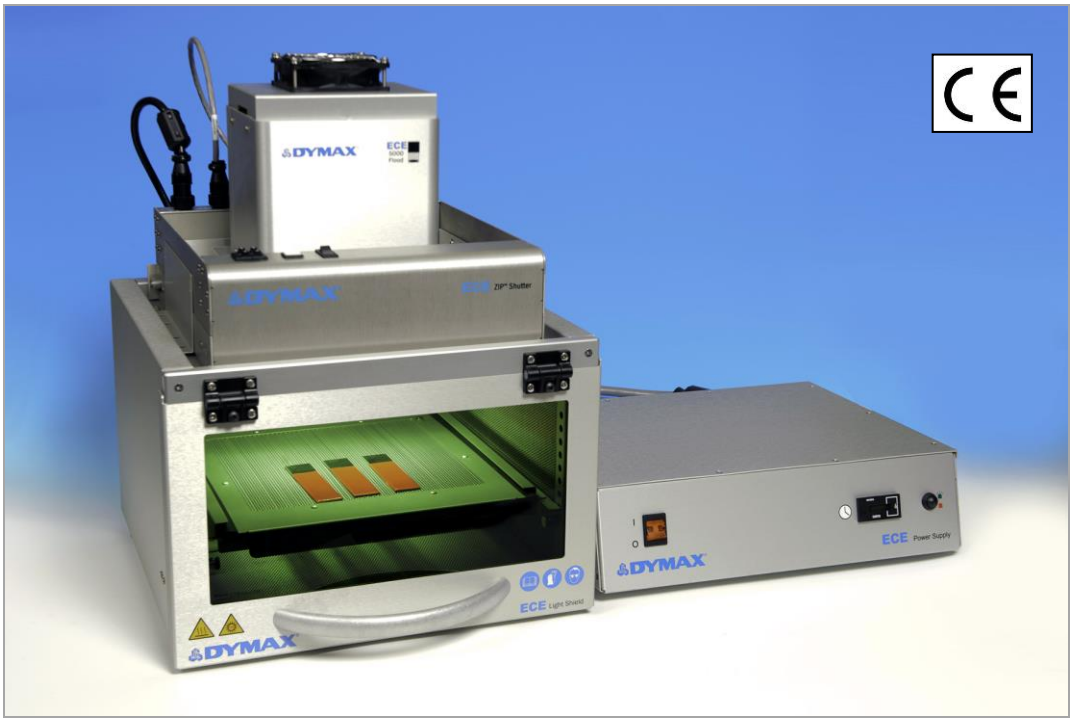
# ECE Series UV Light-Curing Flood Lamp Systems

Dymax light-curing flood lamps offer moderate- to high-intensity curing over a 12.7 cm x 12.7 cm (5" x 5") or 20.3 cm x 20.3 cm (8" x 8") area. Curing in 5-30 seconds is typical using Dymax light-curable materials. These lamps are simple to operate and are available with or without shutters. Dymax UV flood lamps can be used as bench-top curing systems or integrated into automated assembly systems. They offer the industry's most consistent intensity over the 2,000 hour bulb warranty.




ECE 5000 UV-Curing Flood Lamp System

| FEATURES | |
|---|---|
| Powerful UV light-curing lamps (up to 225 mW/cm$^2$)* | Standard systems contain a metal halide bulb (longwave) but two additional bulb options (shortwave and visible) are available for order |
| Two flood lamp options available: 12.7 cm x 12.7 cm (5" x 5") and 20.3 cm x 20.3 cm (8" x 8") | 100% shielding with safety interlock |
| | Easy-to-adjust tray height |
| Shutter that can be actuated by foot pedal or PLC | Bulbs are warranted for 2,000 hours** |
| Lamp turn-off when the Light Shield door is open | Containment of non-passive lamp failure |
| Reduced light leakage with the new ECE Light Shield design | Redesigned mounting plate for the ZIP Shutter reduces light leakage |

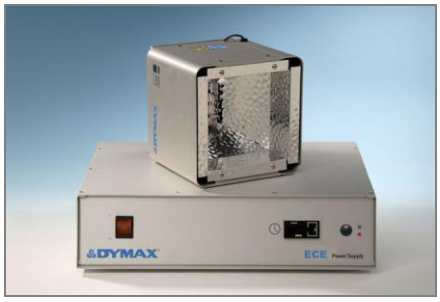
* *Measured with a Dymax ACCU-CAL™ 50 Radiometer (320-395 nm) at a lamp height of 7.62 cm (3") using a standard metal halide bulb.*

** *Warranty covers bulb ignition only. Intensity is not warranted.*

# ECE Series UV Light-Curing Flood Lamps

Dymax offers two flood-lamp options, the ECE 2000 and 5000, for rapid curing of UV adhesives, coatings, and inks. These UV flood lamps offer moderate to high intensity over an area up to 20.3 cm x 20.3 cm (8" x 8"). By adding shielding and/or shutters, these UV light-curing flood lamps can be used as either turnkey bench-top systems or integrated into an automated assembly process. Either unit model can be configured with bulb options to deliver enhanced short-wavelength (UVB), Long wave (UVA), or Optimized Visible (V) energy emissions.

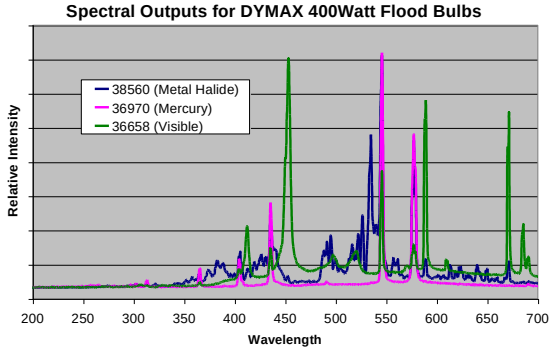
ECE 2000 modular power supply and housing



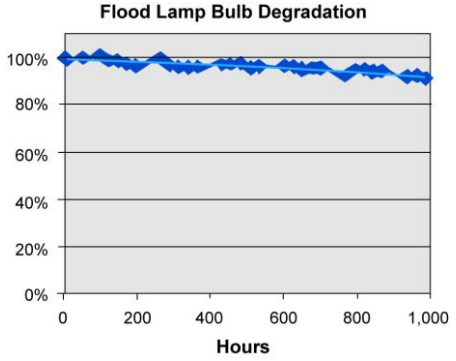
ECE 5000 modular power supply and housing

| SPECIFICATIONS | ECE 2000 Modular | ECE 5000 Modular |
|---|---|---|
| **Part Numbers** (No Power Cord*) | **40965** | **40915** |
| Asian Version (Type G Power Cord) | **40995** | **40935** |
| **Typical Initial Output Intensity at UVA (365 nm)*** | 105 mW/cm$^2$ | 225 mW/cm$^2$ |
| **Curing Area** | 20.3 cm x 20.3 cm (8" x 8") | 12.7 cm x 12.7 cm (5" x 5") |
| **Working Distance** | 5.08 cm – 15.24 cm (2" - 6") | 5.08 cm – 15.24 cm (2" - 6") |
| **Reflector Housing Dimensions, L x W x H** | 22.9 cm x 26.7 cm x 19.1 cm (9" x 10.5" x 7.5") | 17.2 cm x 17.2 cm x 20.3 cm (6.75" x 6.75" x 8") |
| **Power Supply Dimensions, L x W x H** | 30.5 cm x 40.6 cm x 10.8 cm (12" x 16" x 4.25") | |
| **Bulb Warranty** | 2,000 hours (no intensity warranty, only bulb ignition) | |
| **Typical Degradation** | < 20% over 2,000 hours | |
| **Power Requirements** | 100 - 240 VAC +/-10% Single Phase 47 – 63 Hz | |
| **Replacement Bulb Part Numbers** | **38560** Metal Halide (Standard, UVA, Longwave)<br>**36970** Mercury (UVB, Shortwave)<br>**36658** Visible | |

* Intensity readings vary widely depending on the make and model of the radiometer. These intensities were measured with the ACCU-CAL™ 50 radiometer.



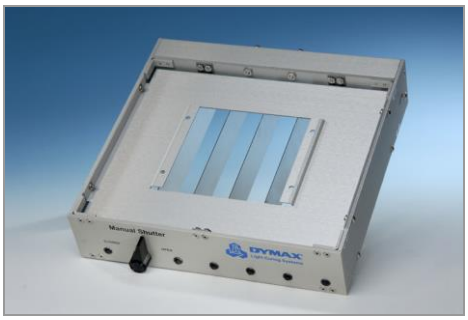
ECE 2000 & 5000 UV light-curing flood lamps spectral distribution using a standard metal halide bulb (**PN 38560**)



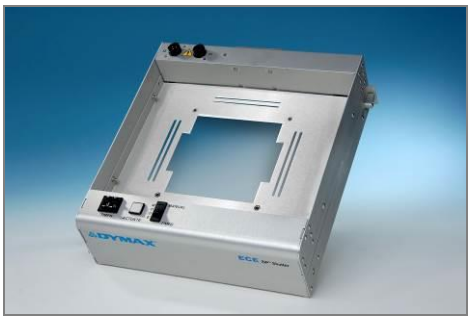
The intensity generated by Dymax flood systems is very consistent. With continuous use, bulb degradation of less than 20% over the first 2,000 hours is typical. Power on/off cycle's temperature, humidity, and operating environment all have an effect on intensity degradation and will affect bulb life.

## Shutters

Dymax UV light-curing flood lamps require warm-up and cool-down time. For that reason, it is not possible to control exposure by turning lamp power on/off. Shutters, however, can be used to control exposure time. Dymax offers the following shutters for use with the ECE 2000 and 5000 flood-lamp curing systems.



Manual shutter shown open

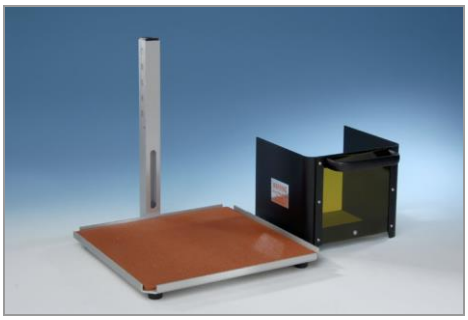


ZIP™ shutter shown open

| Manual Shutter | | ECE ZIP™ Shutter | |
|---|---|---|---|
| **Part Number** | **35572** | **Part Number** | **40885**<br>**38071** - Replacement Curtain<br>**41097** - SS Curtain Kit |
| **Dimensions** (W x D x H) | 28.7 cm x 28.2 cm x 6.4 cm<br>(11.3" x 11.1" x 2.5") | **Dimensions** (W x D x H) | 31.8 cm x 32.8 cm x 9.7 cm<br>(12.5" x 12.9" x 3.8") |
| **Description** | Low-cost louvered shutter. Simple hand turn knob opens and closes shutter. | **Description** | Electronic, curtain-style shutter. Actuated via finger switch, foot pedal, or customer supplied switch (or PLC). |

## Shielding

Dymax offers two shielding options for its UV-curing flood systems, a mounting stand kit and a light shield.



Flood Lamp Mounting Stand Kit

Light Shield

| Mounting Stand Kits | | ECE Light Shield | |
|---|---|---|---|
| **Part Number** | **38290** – ECE 2000 Mounting Stand Kit<br>**38289** – ECE 5000 Mounting Stand Kit | **Part Number** | **40785** |
| **Dimensions** (L x W) | ECE 2000: 21.6 x 27.4 cm (8.5" x 10.8")<br>ECE 5000: 17.8 x 15.5 cm (7.0" x 6.1") | **Inside Dimensions** (W x D x H) | 35.53 cm x 31.75 cm x 21.08 cm<br>(13.2" x 12.5" x 8.3") |
| **Description** | A simple and cost effective 3-sided shield that is removed manually. Not compatible with Dymax shutters. | **Outside Dimensions** (W x D x H) | 38.42 cm x 46.25 cm x 26.83 cm<br>(15.1" x 18.2" x 10.6") |

| | |
|---|---|
| **Description** | 360° shielding.  Swing up door and slide out shelf. Compatible with Dymax shutters. |

## Part Number for Various Lamp/Shutter/Shielding Combinations

| Description | ECE 2000 | | ECE 5000 | |
|---|---|---|---|---|
| | No Power Cord | Asian Version, Type G Power Cord | No Power Cord | Asian Version, Type G Power Cord |
| **Modular (no shielding or shutter)** | **40965** | **40995** | **40915** | **40935** |
| **With Mounting Stand** | **40920** | **41180** | **40970** | **41140** |
| **With ECE Light Shield** | **40870** | **41200** | **40900** | **41160** |
| **With ECE Light Shield and Manual Shutter** | **40790** | **40860** | **40850** | **41100** |
| **With ECE Light Shield and ECE ZIP™ Shutter** | **40830** | **41060** | **40840** | **41050** |


The ACCU-CAL™ 160 radiometer is simple to operate and offers repeatable measurement of curing energy. The Dymax ACCU-CAL™ 160 can measure UV light emitted from UV flood system, and UV conveyors.

**PN 41590**

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