

# **ECE Series UV Light-Curing Flood Lamp Systems**

Dymax light-curing flood lamps offer moderate- to high-intensity curing over a 5" x 5" (12.7 cm x 12.7 cm) or 8" x 8" (20.3 cm x 20.3 cm) 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 <sup>2</sup> )*	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: 5" x 5" (12.7 cm x 12.7 cm) and 8" x 8" (20.3 cm x 20.3 cm)	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		

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

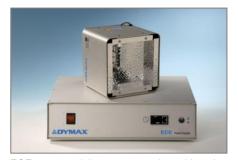
<sup>\*\*</sup> Warranty covers bulb ignition only. Intensity is not warranted.

#### **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 8" x 8" (20.3 cm x 20.3 cm). 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

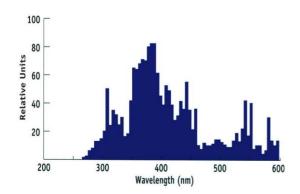


ECE 5000 modular power supply and housing

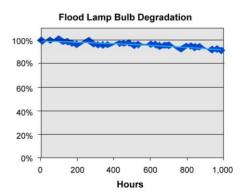
SPECIFICATIONS	ECE 2000 Modular	ECE 5000 Modular		
Part Numbers (No Power Cord*)	40965	40915		
Asian Version (Type G Power Cord)	40995	40935		
North American Version (Cord with 120V Plug)	40985	40925		
Typical Initial Output Intensity at UVA (365 nm)**	105 mW/cm <sup>2</sup>	225 mW/cm <sup>2</sup>		
Curing Area	8" x 8" (20.3 cm x 20.3 cm)	5" x 5" (12.7 cm x 12.7 cm)		
Working Distance	2" - 6" (5.08 cm - 15.24 cm)	2" - 6" (5.08 cm - 15.24 cm)		
Reflector Housing Dimensions	9" L x 10.5" W x 7.5" H (22.9 cm x 26.7 cm x 19.1 cm)	6.75" L x 6.75" W x 8" H (17.2 cm x 17.2 cm x 20.3 cm)		
Power Supply Dimensions	12" L x 16" W x 4.25" H (30.5 cm x 40.6 cm x 10.8 cm)			
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) 36970 Mercury (UVB, Shortwave) 36658 Visible			

<sup>\*</sup> For customer in Europe, the appropriate power cord will be added

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



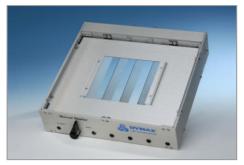
ECE 2000 & 5000 UV light-curing flood lamps spectral distribution using a standard metal halide bulb (PN 38560)



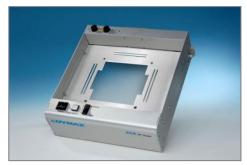
The intensity generated by Dymax flood systems is very consistent. With continuous use, bulb degradation of less than 20% over the first 2,000 hours is typical. Power on/off cycle's temperature, humidity, and operating environment all have an effect on intensity degradation and will affect bulb life.

### **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 38071 - Replacement Curtain		
Dimensions (L x D x H)	11.3" x 11.1" x 2.5" (28.7 cm x 28.2 cm x 6.4 cm)	Dimensions (L x D x H)	12.5" x 12.9" x 3.8" (31.8 cm x 32.8 cm x 9.7 cm)	
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

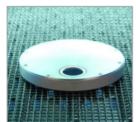


Light Shield

Mounting Stand Kits		ECE Light Shield			
Part Number	38290 – ECE 2000 Mounting Stand Kit 38289 – ECE 5000 Mounting Stand Kit	Part Number	40785		
Dimensions (L x W)	ECE 2000: 8.5" x 10.8" (21.6 x 27.4 cm) ECE 5000: 7.0" x 6.1" (17.8 x 15.5 cm)	Inside Dimensions (L x W x H)	12.5" x 13.2" x 8.3" (31.75 cm x 35.53 cm x 21.08 cm)		
Description	A simple and cost effective 3-sided shield that is removed manually. Not compatible with Dymax shutters.	Outside Dimensions (L x W x H)	18.2" x 15.1" x 10.6" (46.25 cm x 38.42 cm x 26.83 cm)		
		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	North American, Power Cord with 120V Plug	No Power Cord	Asian Version, Type G Power Cord	North American, Power Cord with 120V Plug	
Modular (no shielding or shutter)	40965	40995	40985	40915	40935	40925	
With Mounting Stand	40920	41180	41170	40970	41140	41130	
With ECE Light Shield	40870	41200	41190	40900	41160	41150	
With ECE Light Shield and Manual Shutter	40790	40860	40810	40850	41100	40940	
With ECE Light Shield and ECE ZIP™ Shutter	40830	41060	41040	40840	41050	41030	





The ACCU-CAL™ 150 radiometer is simple to operate and offers repeatable measurement of curing energy. The Dymax ACCU-CAL™ 150 can measure UV light emitted from UV flood system, and UV conveyors.

PN 40550

#### FREE DYMAX EQUIPMENT EVALUATION

Contact your Dymax representative to initiate rental of Dymax UV curing equipment. The highlights of the Dymax Trial Rental/Lease program are:

- Four (4) weeks free evaluation and 3% per week thereafter
- Eight (8) weeks of rental fees are deducted from the price at purchase
- 50% of additional rental fees are deducted
- Customer pays shipping both ways



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