

COBRA Cure™ Mini

UV LED Curing System



Low Weight, Compact, Fan-Cooled UV LED Curing System

Designed to maximize intensity and dose within a compact, light form factor, COBRA Cure™ Mini offers an excellent solution for high-speed single and multi-pass printers where installation space is restricted and weight is a concern.

This innovative product offers the high performance of our COBRA Cure products in a more compact package. Control electronics are housed separately achieving a much more compact light head module, measuring just 33.4mm x 57mm x 30mm (1.3" x 2.24" x 1.18"). Weighing less than 175gm (0.4 lb) the light head is suitable for compact translation systems, providing ease of installation without any compromise on performance.

With COBRA Cure Mini, ProPhotonix has utilized its expertise in Chip-on-Board LED array design and mechanical engineering to deliver the optimum solution for applications where space and weight are restricted but higher intensity and dose levels are required. COBRA Cure Mini delivers intensities up to 6W/cm² and a factory set dose of up to 9 J/cm² at 2mm across an illumination area of 36mm x 13.5mm (1.42" x 0.53").

ProPhotonix builds the light engine used to power the COBRA Cure FX series in-house and has engineered each step of the design and manufacturing process to ensure that intensity, dose as well as lifetime are maximized in the COBRA Cure Mini.

COBRA Cure Mini offers an ideal solution for UV curing of inks, coatings and adhesives as well as 3D printing applications.

Key Features

- Compact, Fan-Cooled LED Curing Lamp 33.4mm x 57mm x 30mm
- Weight: Less than 175g
- Delivers Intensities of up to 6W/cm² at 2 mm
- Provides a Maximum Dose of 9J/cm² at 2 mm
- Illumination Area: 36mm x 13.5mm
- Linear Intensity Control Options

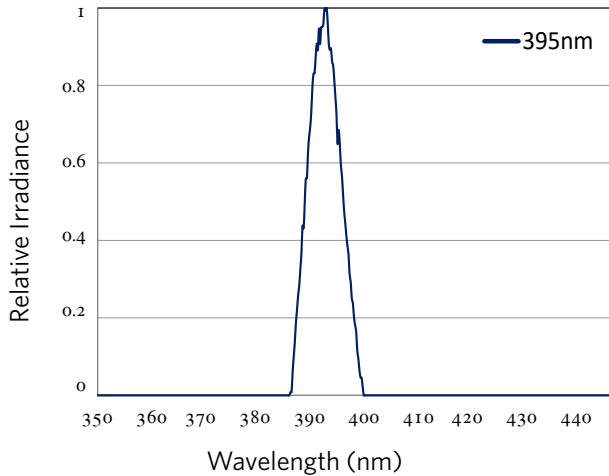
Options Available

- 365nm, 385nm and 395nm

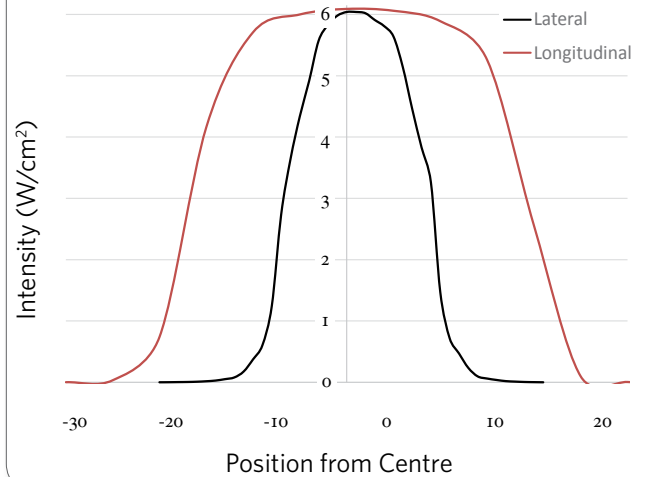
Key Applications

- UV Curing of:
 - Inks
 - Coatings
 - Adhesives
- 3D Printing

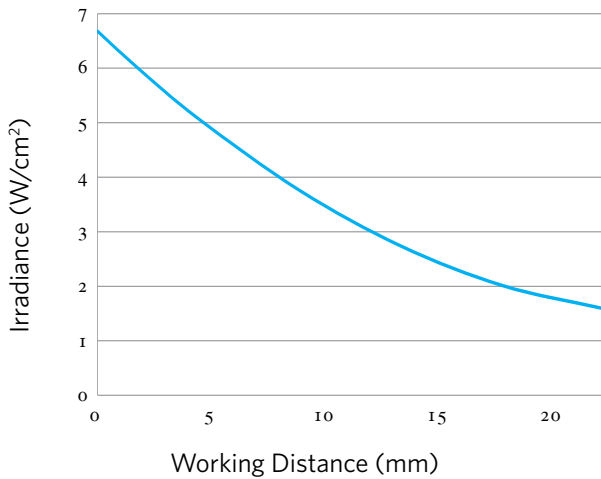
RELATIVE INTENSITY VERSUS WAVELENGTH



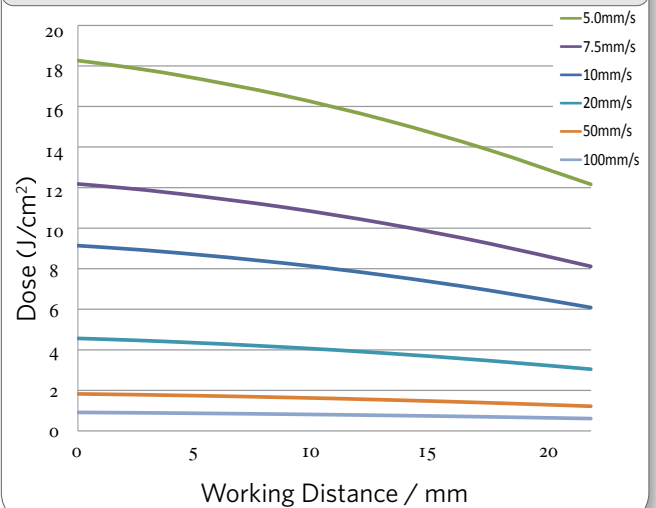
LATERAL & LONGITUDINAL INTENSITY PROFILES



INTENSITY VERSUS WORKING DIS-

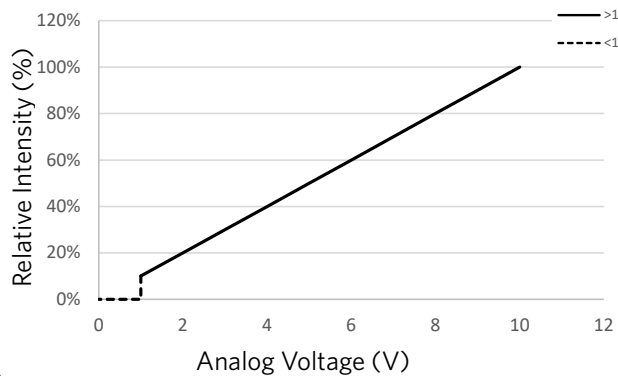


DOSE VARIATION WITH WORKING DISTANCE & CONVEYORSPEED



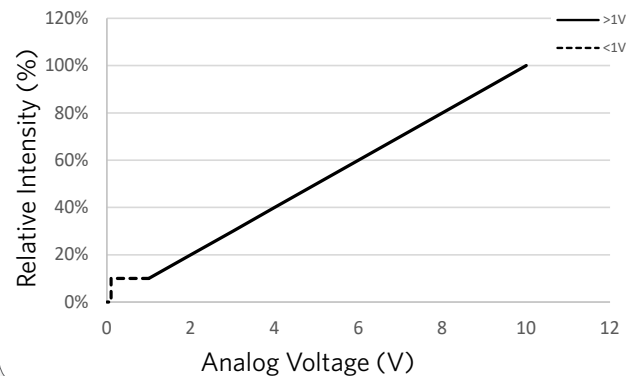
Intensity Response to Analog Control

ANALOG MODE (A)



Turns off at 1V

SUSTAIN MODE (S)

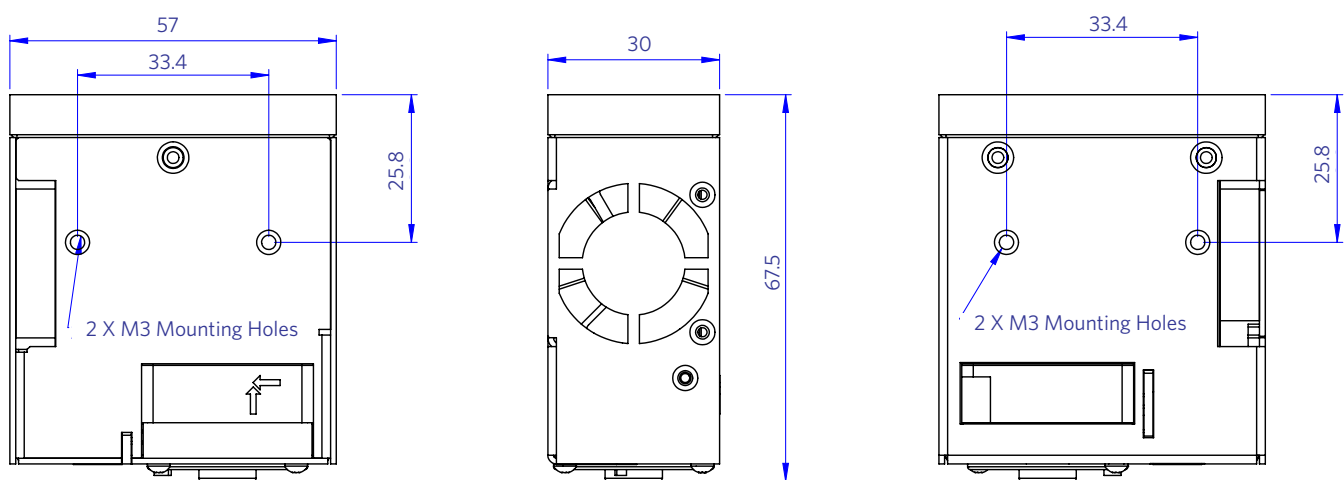


Turns off at 300mV. From 300mV to 1V lamp operates at 10% intensity

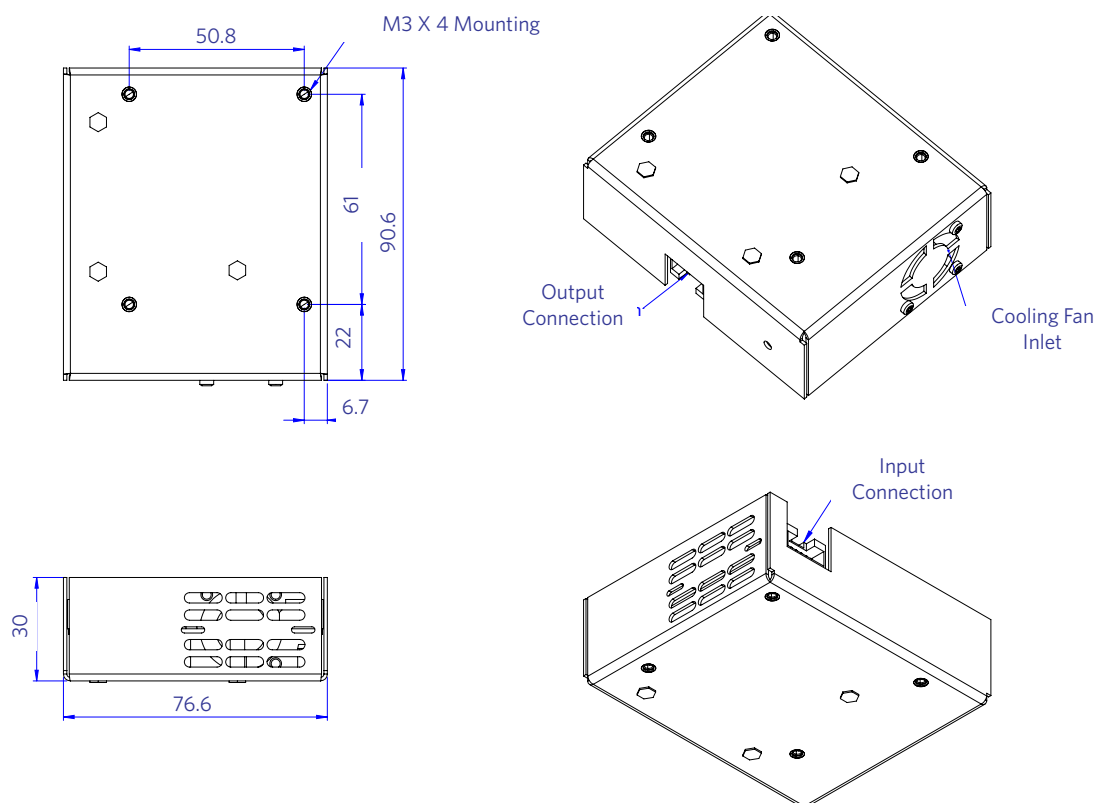
General Characteristics (per 75mm lamp)	Values	Units
Weight of Light Head	150	g
Weight of Controller	160	g
Noise sound pressure level at 0m	75*	dBA
Noise sound pressure level at 1m	54*	dBA
Maximum Ambient Temperature	35	°C
Humidity Range	45-65	RH
Thermal Safety Switch	Thermal safety sensor is mounted on the substrate. The LED junction is never exposed to over temperature.	

*For every subsequent module add 3dBA.

Dimensional Diagram



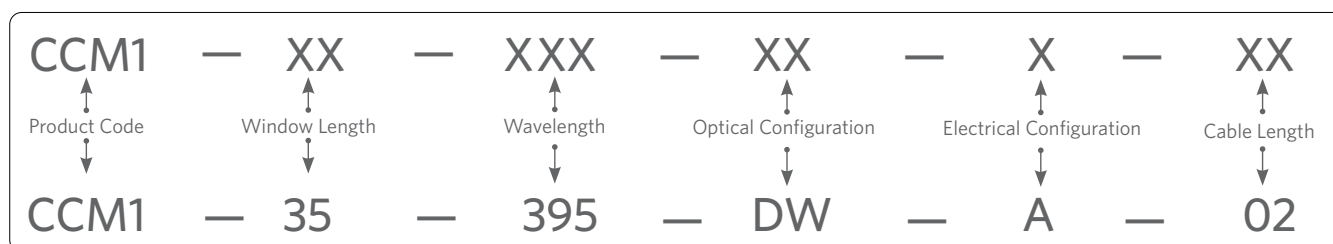
COBRA Cure Mini Controller



Part Number

Product Code	Window Length (mm)	Wavelength (nm)	Optical Configuration	Electrical Configuration	Cable Length
CCM1	35	365	DW	A - Analog	01
		385		S - Sustain	02
		395			

To order your COBRA Cure™ Mini- Use product code (CCM1) - Select Window Length (35) - Select Wavelength (XXX) - Select Optical configuration (DW) - Select Electrical Configuration (X) - Select Cable Length (XX)



Accessories Part Number

Accessory	Part Number
Input Power Cable	CCM1-CAB-F-P-LL
14 Pin to Pwd Cable	CCM1-CAB-A-P-LL
Intensity Controller	FX-CTL-A
2-way Flying Lead to Circular Power Cable	CAB0053-LL
Air Filters & Adaptors (Pack of 25 + 5 Adaptors)	CCM1-FLT-25

LL represents the cable length in meter. The standard length is 2m

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