COBRA Cure FX3™

UV LED Curing System

PATENT PENDING

Compact, UV LED Curing System with IntelliSense™ smart sensing technology

The COBRA Cure FX3 is an innovative UV LED Curing system, delivering up to 16 W/cm^2 or 42 J/cm^2. Its unique design incorporates the many benefits of a LED curing systems as well as novel features to guarantee a consistent, reliable cure over the lifetime of the system.

LED systems offer vastly improved lifetimes, reduced maintenance costs, significant energy savings, and with no ozone or mercury, offer a safer working environment. In addition, the cold cure offered is ideal for heat sensitive substrates.

The COBRA Cure FX3 offers all of the benefits of an LED system and also incorporates a field replaceable window to ensure the system delivers consistent output. This innovative patent pending feature is easy to use, requires no special tools for window replacement, thus minimizing system downtime. In addition the COBRA Cure FX3's compact design offers edge to edge illumination without any drop in intensity at the edges. Due to the ability to monitor and drive each LED segment, the COBRA Cure FX3 offers excellent intensity control.

Options available include a number of optical configurations, wavelength and multi-wavelength options.

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Key Features

- Compact UV LED System
- Delivers Intensities of up to 16 W/cm^2 at 2mm
- Provides a dose of up to 42 J/cm^2
- Lifetime: 20,000 hours
- Instant on/off and intensity control
- Cold cure – ideal for heat sensitive substrates
- No ozone. No mercury
- Replaceable window for consistent curing results
- 365nm, 385nm, 395nm, 405nm & multi-wavelength options available

Key Applications

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

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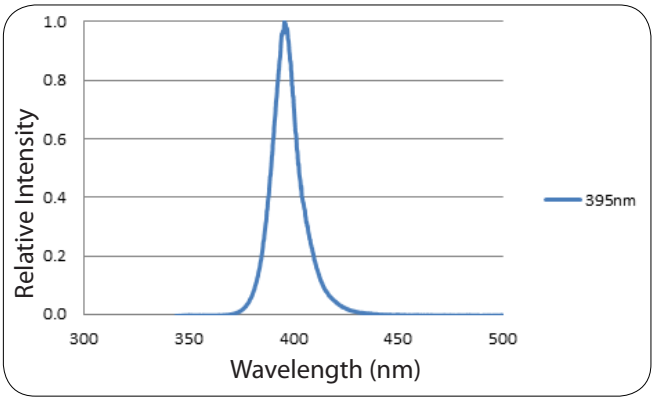
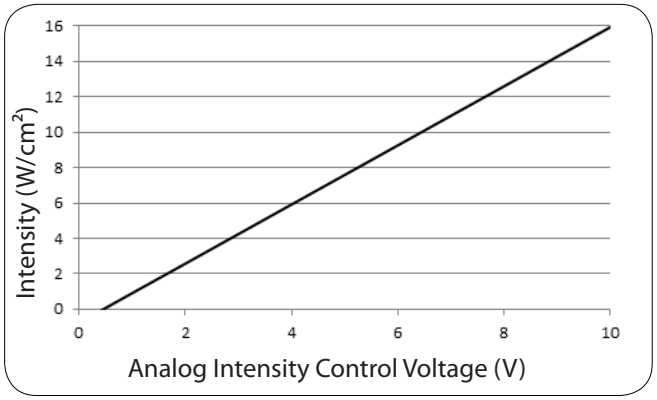
Relative Intensity vs Wavelength Spectrum

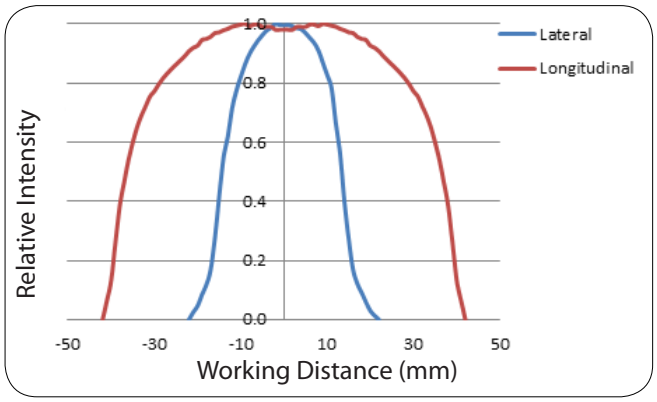


Intensity response to analog intensity control



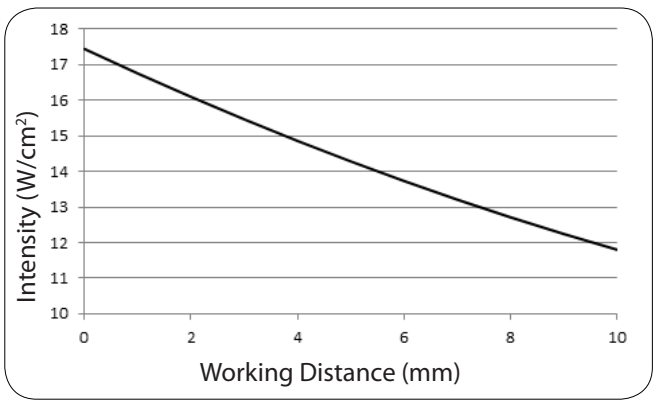
(at a 2mm working distance)

Lateral and longitudinal intensity profiles



Measured at 2mm. Lateral linewidth (FWHM) approx. – 28mm. Longitudinal linewidth (FWHM) approx.. – 73mm.

Intensity versus working distance



Wavelength (nm)	Optical Configuration	Working Distance (mm)	Factory set dose ($J/cm^{2)}$	Intensity ($W/cm^{2)}$
395nm	Divergent	2.0	42.0	16.0

The stated wavelength is the peak wavelength ±5nm.

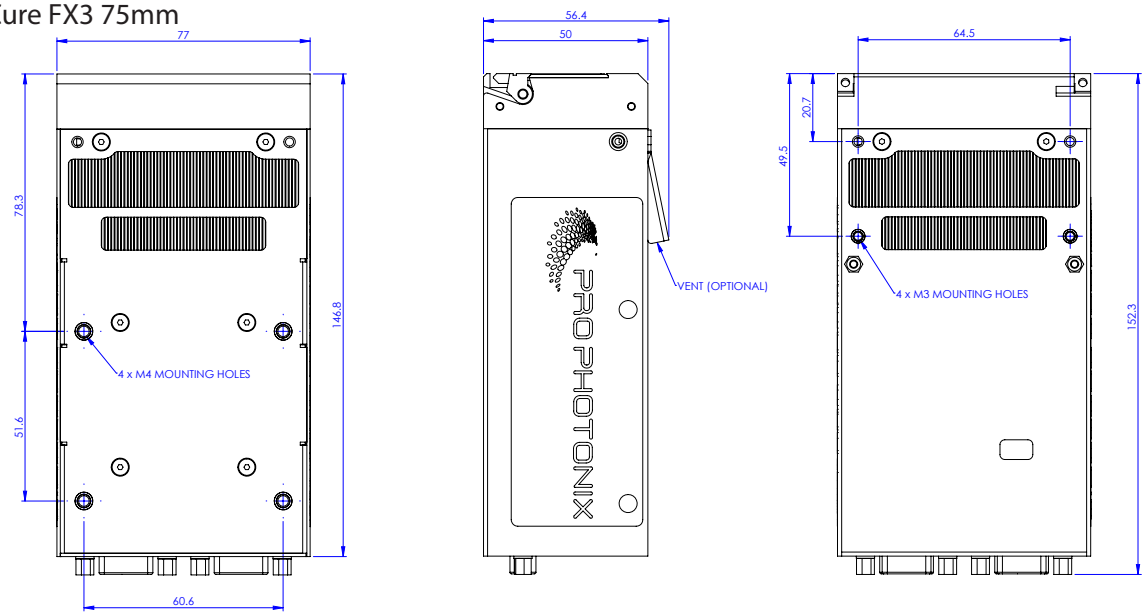
Working distance is the distance from the window to the point at which the intensity and dose is measured.

The dose is set at the factory. The dose is measured using a Loctite Radiometer Dosimeter. It is scanned at a speed of 10mm/sec (0.6m/min).

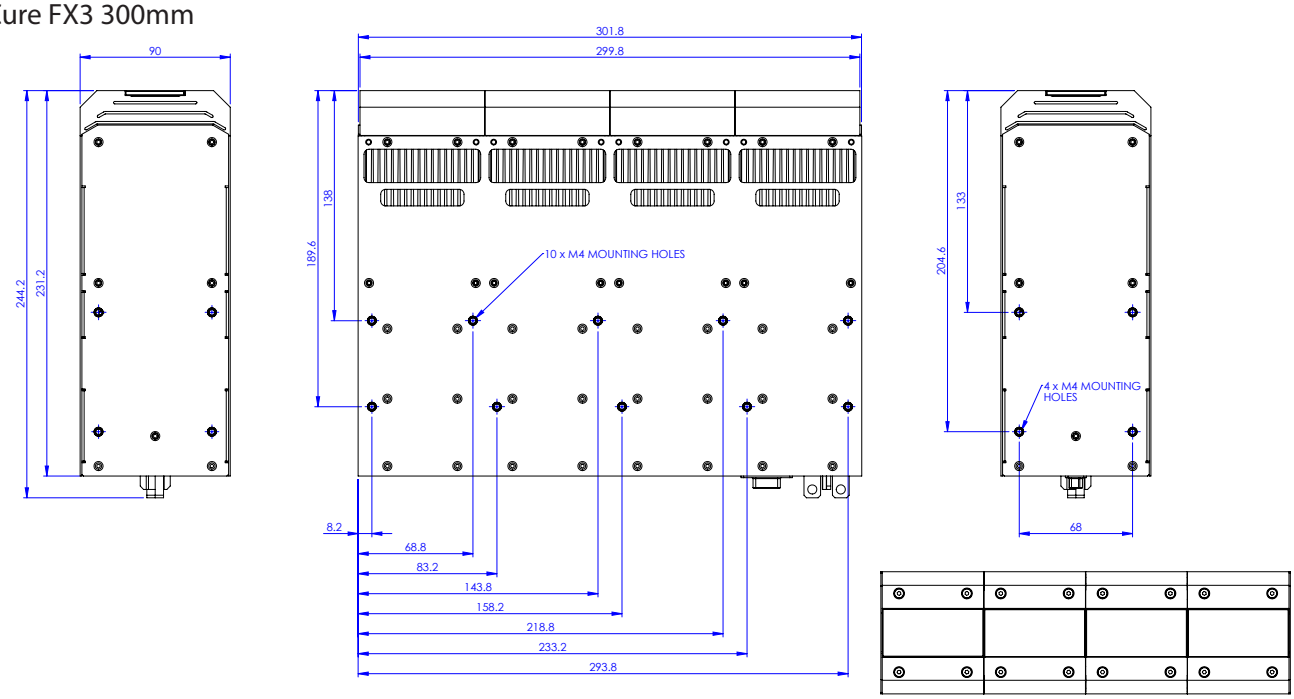
Nominal intensity is the intensity expected at the specified dose level.

Dimensional Diagram

Cobra Cure FX3 75mm



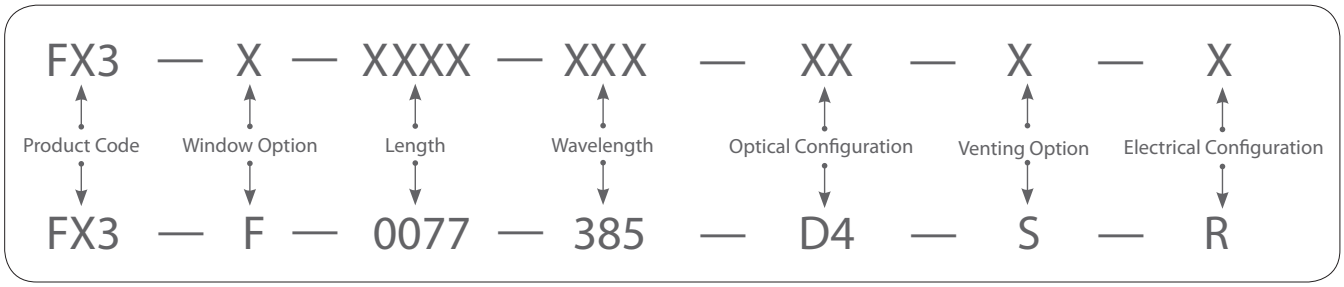
Cobra Cure FX3 300mm



Part Number

Product Code	Window Option	Length (mm)	Wavelength (nm)	Optical Configuration	Venting Option	Electrical Configuration
FX3	F - Fixed	0077	405	D4 - Divergent	S-Side Vented	R
			395			
			385			
			365			

To order your COBRA Cure FX3– Use product code (FX3) – Window Option (X) -Select Length (XXXX) – Select Wavelength (XXX) - Select Optical configuration (XX) - Select Venting Option (X) - Select Electrical Configuration (X)



Accessories Part Number

Accessories	Part Number
48V Power Supply – 77mm FX3	PSU-48V-960W-LLL
48V Power Supply - 302mm FX3	PSU-48V-3KW-LLL
Flying Lead Power Cable	FX3-CAB-F-PD-LLL
15 way Flying Lead to DB15 Control Cable	FX3-CAB-F-CD-LLL

LLL represents length of cable. The standard length is 2m. Example 1: Require 2m cable, the product number is then FX3-CAB-F-A-020. Example 2: Require 0.5m cable, the product number is then FX3-CAB-F-A-0.5. XX represents Region Code: US, EU, UK.

220816

Corporate
32 Hampshire Road
Salem, NH 03079
sales@prophotonix.com
Tel: +1 603-893-8778
Fax: +1 603-898-8851

LED Solutions
3020 Euro Business Park, Little Island
Cork, Ireland T45 X211
sales@prophotonix.com
Tel: +353-21-5001313
Fax: +353-21-4297749

Laser Solutions
Sparrow Lane, Hatfield Broad Oak
Hertfordshire, CM22 7BA, UK
sales@prophotonix.com
Tel: +44-1279-717170
Fax: +44-1279-717171

PRO PHOTONIX Álava Ingenieros GRUPO ÁLAVA Visit us on the Web: www.prophotonix.com