



PHOS 85 outdoor is the most powerful outdoor system and its 80 watts, air-cooled High-Power LED provides uncompromised brightness, which guarantees a brilliant and crisp projection in almost any situation. PHOS 85 outdoor is the optimal solution, when projecting on coloured or dark surfaces or when colourful artworks are to be displayed. The projector is suitable for damp interiors or year-round outdoor use. Recommended application are: projections on facades or architectural elements, messages on pavements. The projection motif (gobo) can be changed without tools.

**Construction**

housing: ..... aluminium, steel, powder coated  
weight (standard equipment): ..... 3.45 kg | 7.61 lbs  
On / Off switch: ..... not available  
IP-rating of the housing ..... IP 64

**Operating Conditions**

application area ..... outdoor locations, humid interiors  
ambient temperature: ..... -30°C - +35°C  
cooling: ..... active, with a fan, 25 dBA

**Light Source and Optics**

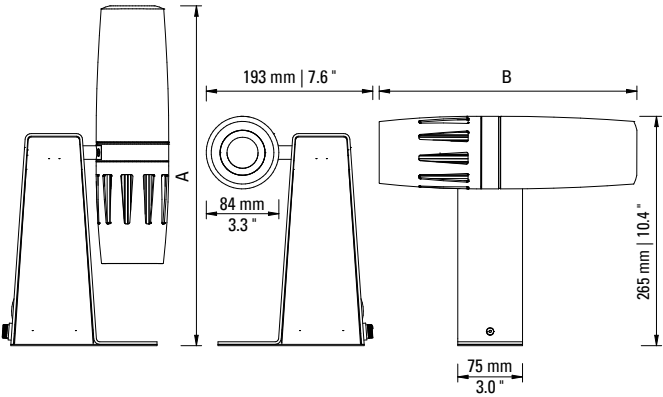
light source: ..... High Power LED, 80 W  
luminous flux of the projector: ..... 4,729 lumens  
efficiency ..... 51 lumens / watt  
colour temperature: ..... 6,300 – 6,700 K  
colour rendering index: ..... Ra >70  
estimated lifetime of the LED (L70): ..... 35,000 operating hours  
projection lens: ..... Standard Lens, f=85 mm (included)  
gobo size / image size: ..... Ø 50.0 mm / Ø 40.0 mm  
photobiological safety (IEC62471-5:2015, EN62471-5:2015): ..... RG-2

**Electrical Specifications**

input voltage: ..... 100 - 240V AC, 50/60 Hz  
power consumption: ..... 92 W  
power factor: ..... 0.58 cos. φ  
electrical protection class: ..... I  
max. number of devices per circuit breaker B16A/C16A: ..... 1/2  
device is dimmable: ..... no

**Item No.:** 20085410 (white), 20085420 (black), 20065430 (silver)

**Additional Accessories:** individual glass gobo according to your digital artwork, Extra Wide Angle Lens, f=45 mm, Wide Angle Lens, f=63 mm, Telephoto Lens, f=135 mm



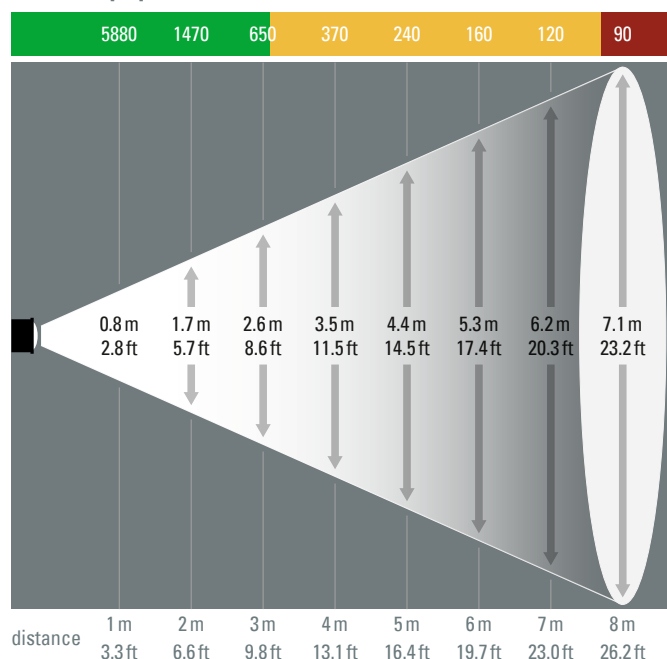
Projection Lens	Height A	Width B
Extra Wide Angle, f=45 mm	417 mm   16.4 "	322 mm   12.7 "
Wide Angle, f=63 mm	394 mm   15.5 "	298 mm   11.7 "
Standard, f=85 mm	394 mm   15.5 "	298 mm   11.7 "
Telephoto, f=135 mm	465 mm   18.3 "	370 mm   14.6 "



# PHOS 85 outdoor – Photometric Diagrams

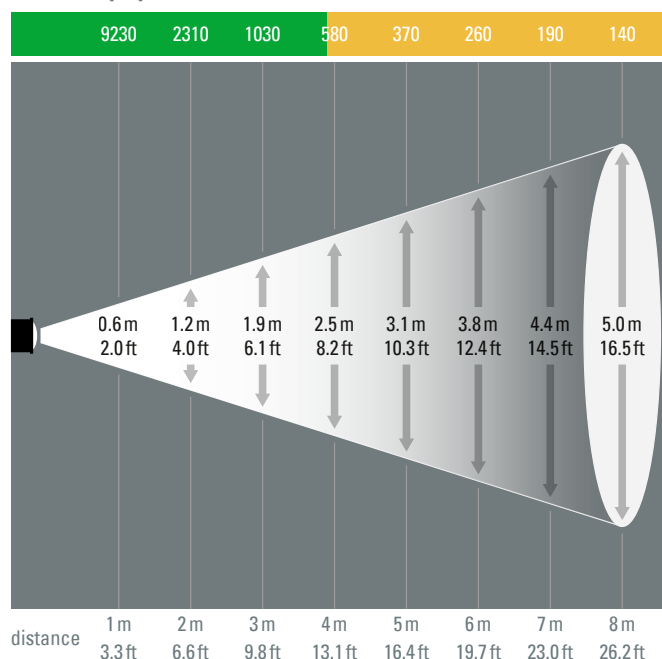
## PHOS 85, Extra Wide Angle Lens, $f = 45 \text{ mm}$ , $48^\circ$

illuminance [lux]



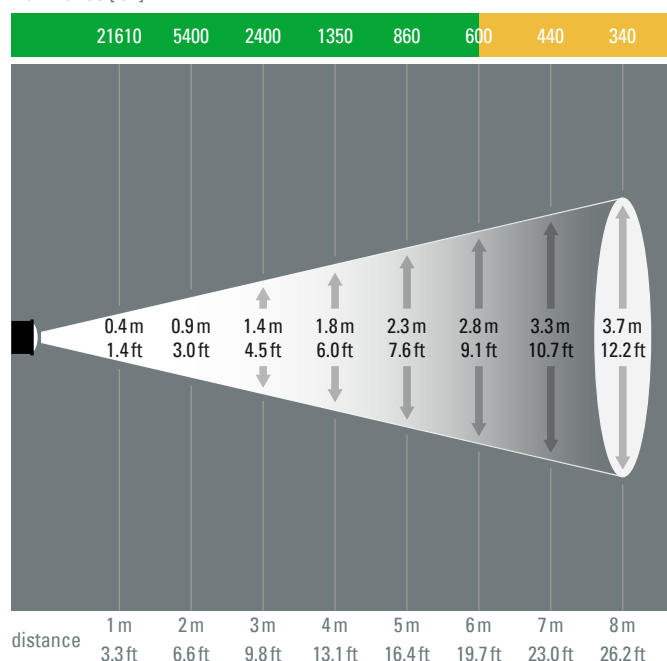
## PHOS 85, Wide Angle Lens, $f = 63 \text{ mm}$ , $35^\circ$

illuminance [lux]



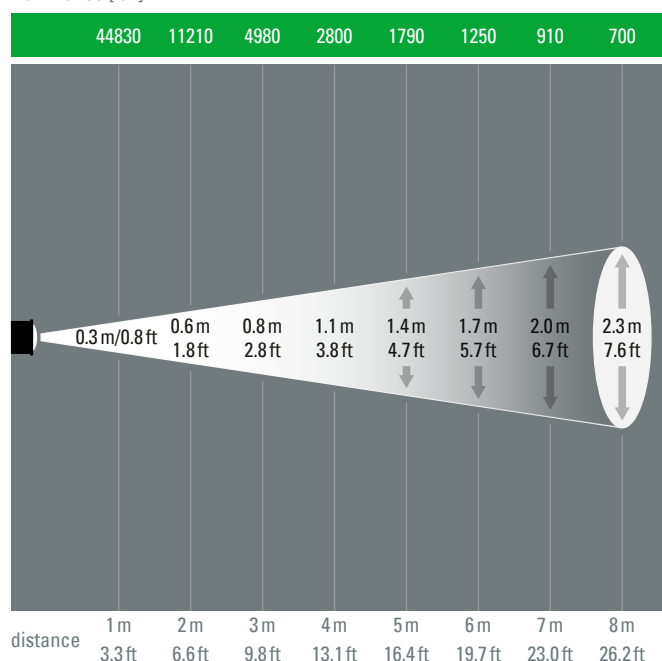
## PHOS 85, Standard Lens, $f = 85 \text{ mm}$ , $26^\circ$

illuminance [lux]



## PHOS 85, Telephoto Lens, $f = 135 \text{ mm}$ , $17^\circ$

illuminance [lux]



### Brightness Colour Coding:

- = with standard room lighting, suitable for coloured motifs
- = in low-light rooms, for motifs without colour
- = recommended only in darkened rooms

- The results shown are approximate values. The result may differ slightly in reality.
- The projection sizes indicate the maximum diameter that can be projected with a  $\varnothing 40 \text{ mm}$  image.
- The projection motif is circular and fills the image area of the gobo. Other objects, e.g. rectangles or texts are fitted into the circular projection area.
- The projection is at right angles to the projection surface.

Detailed projection calculator at: [www.derksen.de](http://www.derksen.de)

**derksen®**  
lichttechnik

Derksen Lichttechnik GmbH  
Johannes-Rau-Allee 4  
45889 Gelsenkirchen  
Germany

Tel.: +49 209 98070-0  
[info@derksen.de](mailto:info@derksen.de)  
[www.derksen.de](http://www.derksen.de)