

**Special characteristics**

The PHOS 160 utilises a new, powerful LED. With an output power of 172 watts and a luminous flux of 10,700 lumens, the projector is categorised in risk group 3 (RG-3) with regard to visible light hazards. Special safety measures are therefore required during installation, maintenance and operation. Detailed information can be found in the information for use. PHOS 160 is suitable for large-format projections over medium and long distances. The housing with its IP65 protection class allows it to be used indoors and outdoors - even in dusty industrial plants or near the coast (with optional offshore coating). The PHOS 160 pole mount version is available for direct mounting on pipes or masts.

**Construction**

Housing:..... aluminium, stainless steel, powder coated  
 Weight (standard equipment):..... 7.5 kg | 16.53 lbs  
 On / Off switch:..... not available  
 IP-rating of the housing ..... IP 65  
 Protection against mechanical impacts (IEC 62262:2002):..... IK02

**Operating Conditions**

Application area..... indoors and outdoors, mounting on surfaces  
 Ambient temperature: ..... -30°C - +35°C  
 Cooling:..... active, with a fan, 31 dBA

**Light Source and Optics**

Light source: ..... High Power LED, 172 W  
 Luminous flux of the projector: ..... 10,700 lumens  
 Efficiency..... 58 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  
 Photo-biological safety (IEC62471-5:2015, EN62471-5:2015): ..... RG-3

**Electrical Specifications**

Input voltage:..... 100 - 240V AC, 50/60 Hz  
 Power consumption:..... 186 W  
 Power factor:..... 0.94 cos. φ  
 Electrical protection class:..... I  
 Maximum number of devices per circuit breaker B16A/C16A: ..... 4/6  
 Available lighting control options:..... on demand

**Item No.:** ..... 20853920 (black)

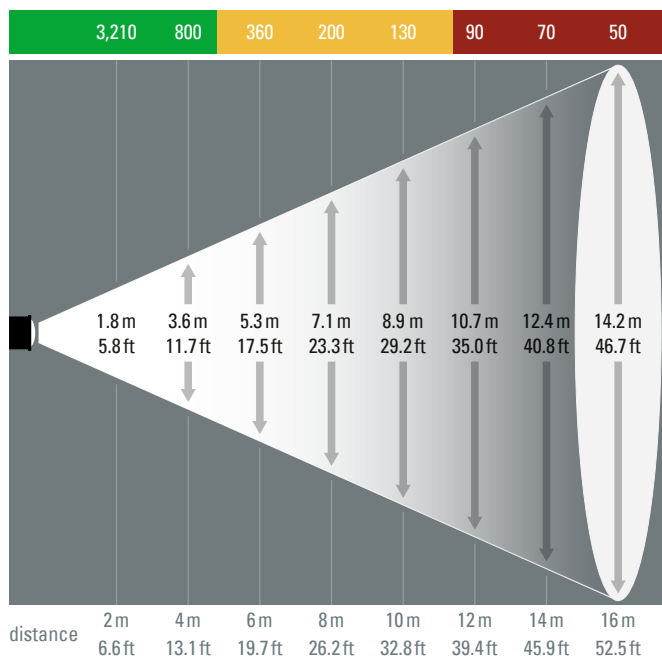
**Additional Accessories:** individual glass gobo, made with your digital artwork, Extra Wide Angle Lens, f=45 mm, Standard Lens, f=85 mm (included in delivery), Telephoto Lens, f=135 mm, Extra Telephoto Lens, f=150 mm



# PHOS 160 – Photometric Diagrams

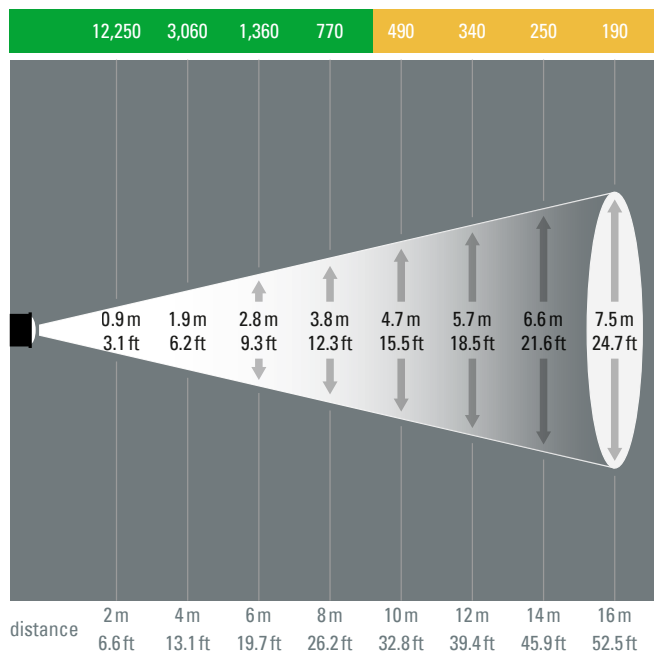
## PHOS 160, Extra Wide Angle Lens, f = 45 mm, 48°

illuminance [lux]



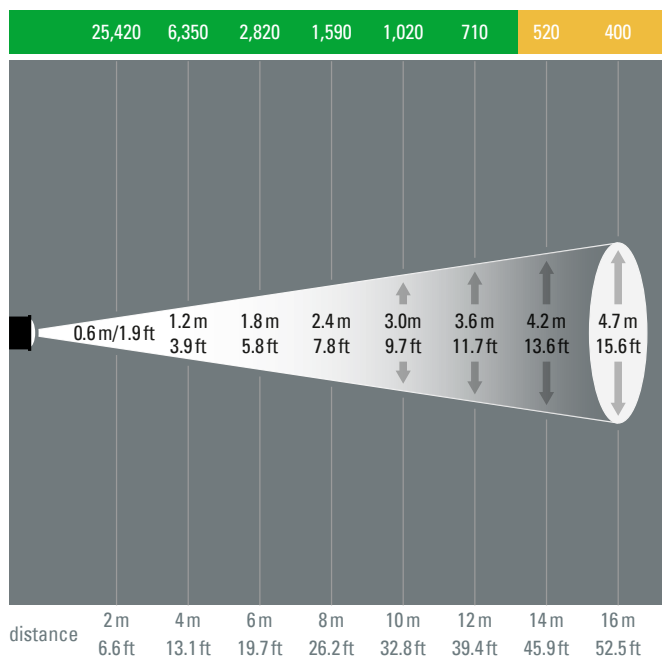
## PHOS 160, Standard Lens, f = 85 mm, 26°

illuminance [lux]



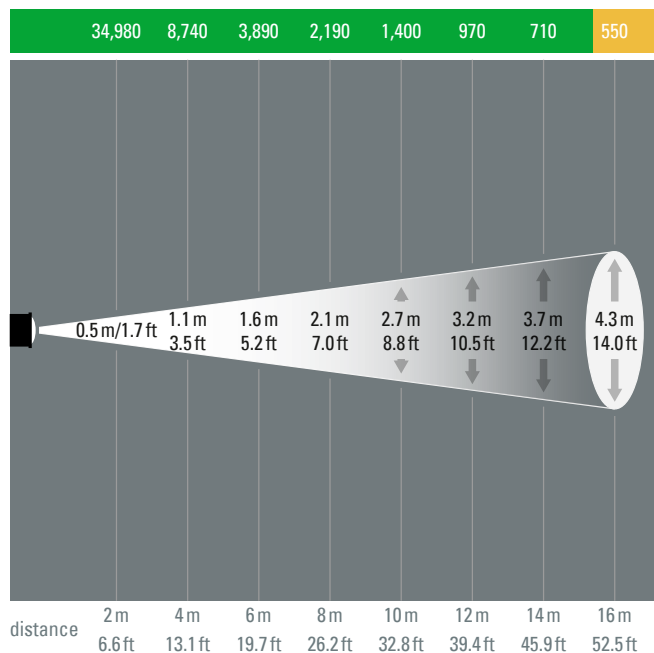
## PHOS 160, Telephoto Lens, f = 135 mm, 17°

illuminance [lux]



## PHOS 160, Extra Telephoto Lens, f = 150 mm, 15°

illuminance [lux]



### Brightness Colour Coding:

- = with normal ambient lighting, suitable for coloured motifs
- = in low-light environments, for motifs without colour
- = only recommended in dark environments

- 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 Ø 40 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)

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