



XLamp[®] XHP70.3 HI Fresnel Lens Spotlight Reference Design



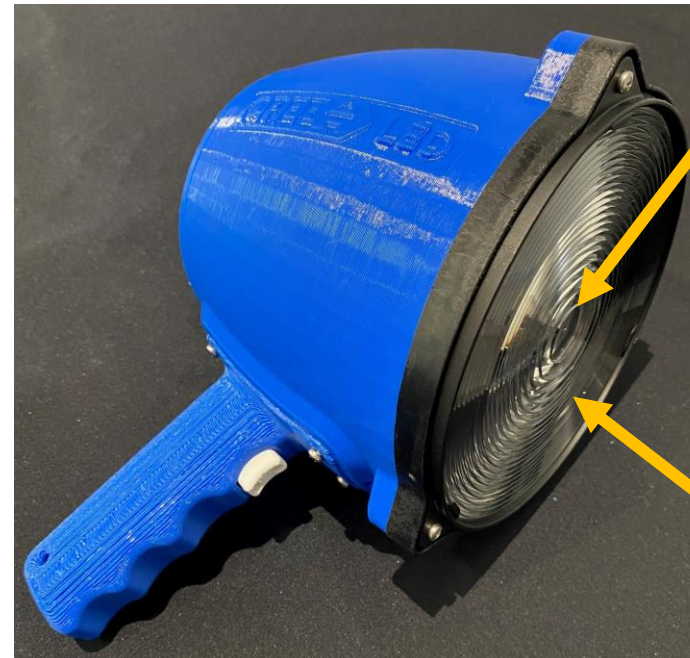
XHP70.3 HI Fresnel Lens Spotlight Reference Design Overview

Goal: Demonstrate the excellent optical performance of the XLamp® XHP70.3 High Intensity LED in a high-lumen portable application

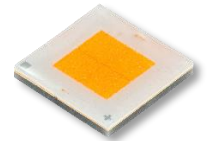
3D printed housing

Custom controls & interface

Rechargeable lithium battery



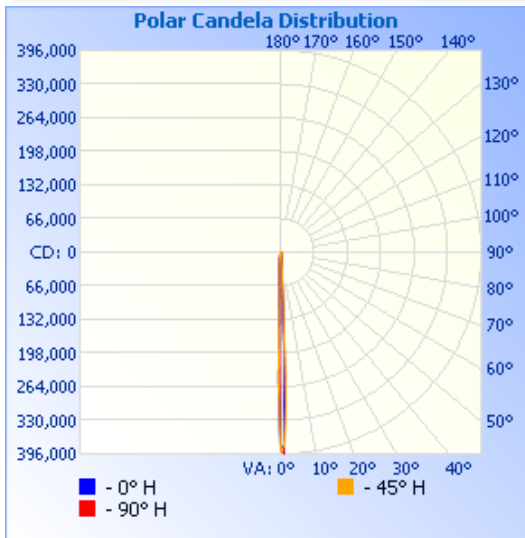
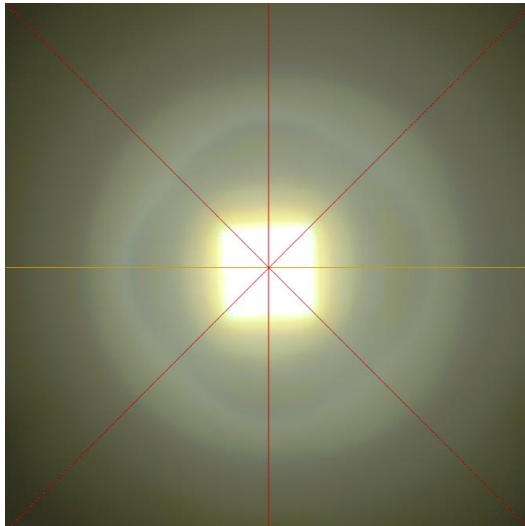
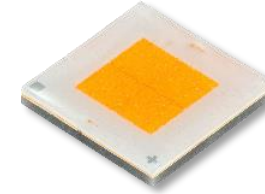
XLamp®
XHP70.3 High
Intensity LED



155 mm OD

LEDIL FCP13895_SEANNA-A
TIR + Fresnel combination

XHP70.3 HI Fresnel Lens Spotlight Reference Design Results



	As Measured	Estimated (Max Current)
LED	XHP70.3 HI 12V	
CCT (K)	5600K	
CRI	70	
Beam Angle	4.4°	
Candela/Lumen	123.3	
Max $\Delta u'v'$	0.025	
LED Current	2.4 A	3.6 A
Lum Flux (lm)	3212	~4,200
Peak Candela	395,984	~516,000
ANSI FL-1 Throw	1,259 m 0.78 miles	1,437 m 0.89 miles

Application Photos – 360 m Test



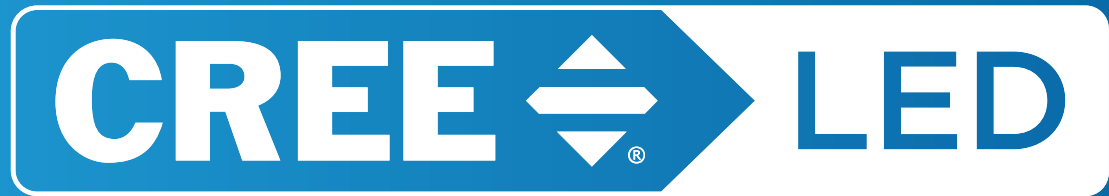
Measure distance
Click on the map to add to your path
Total distance: 1,182.35 ft (360.38 m)

Application Photo – 1,200 m Test



Application Photo – 1,200 m Test





Follow us at:



www.cree-led.com