



8 degree optic for CREE XB-D LED

Optics for Hire



optics, electronics, and systems

Optics for Hire

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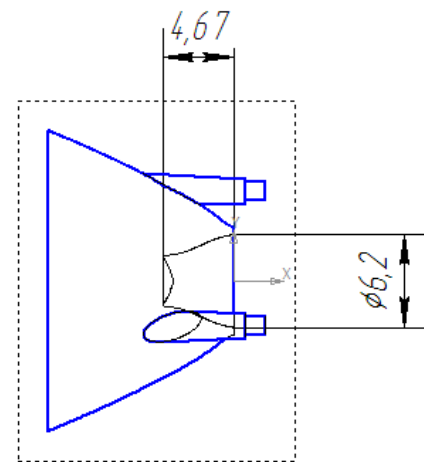
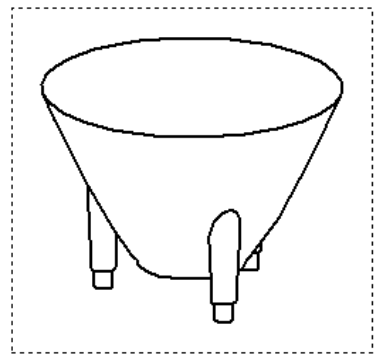
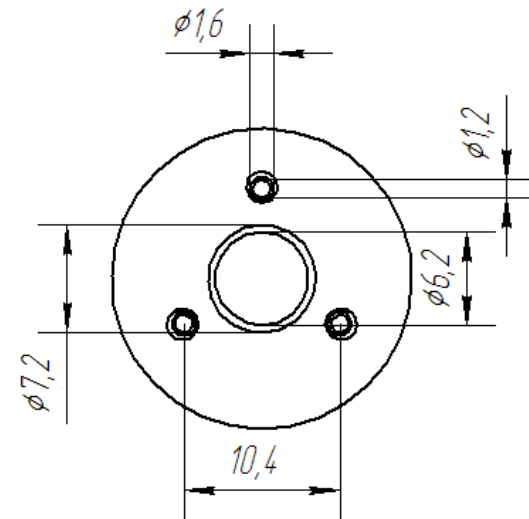
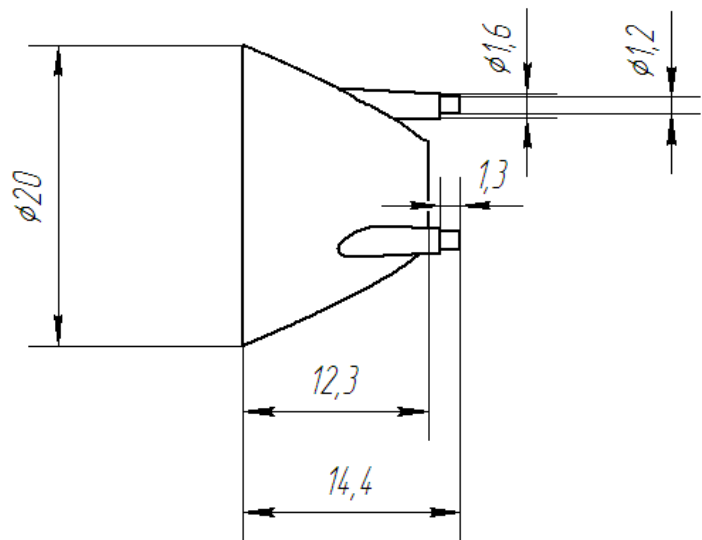
Fax: 781 583 7812

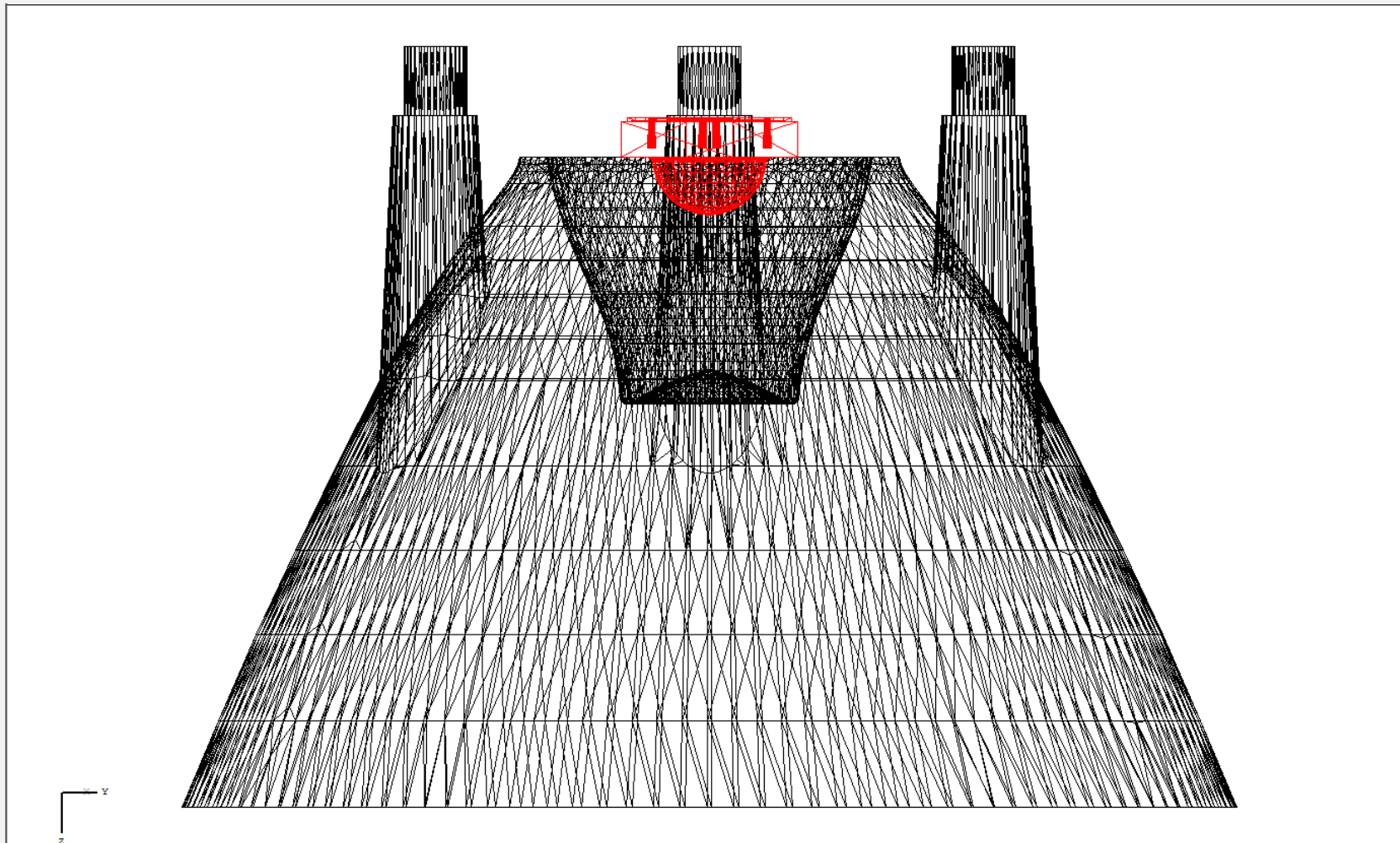
E-mail: info@opticsforhire.com

Attn: John Ellis



Designed optics

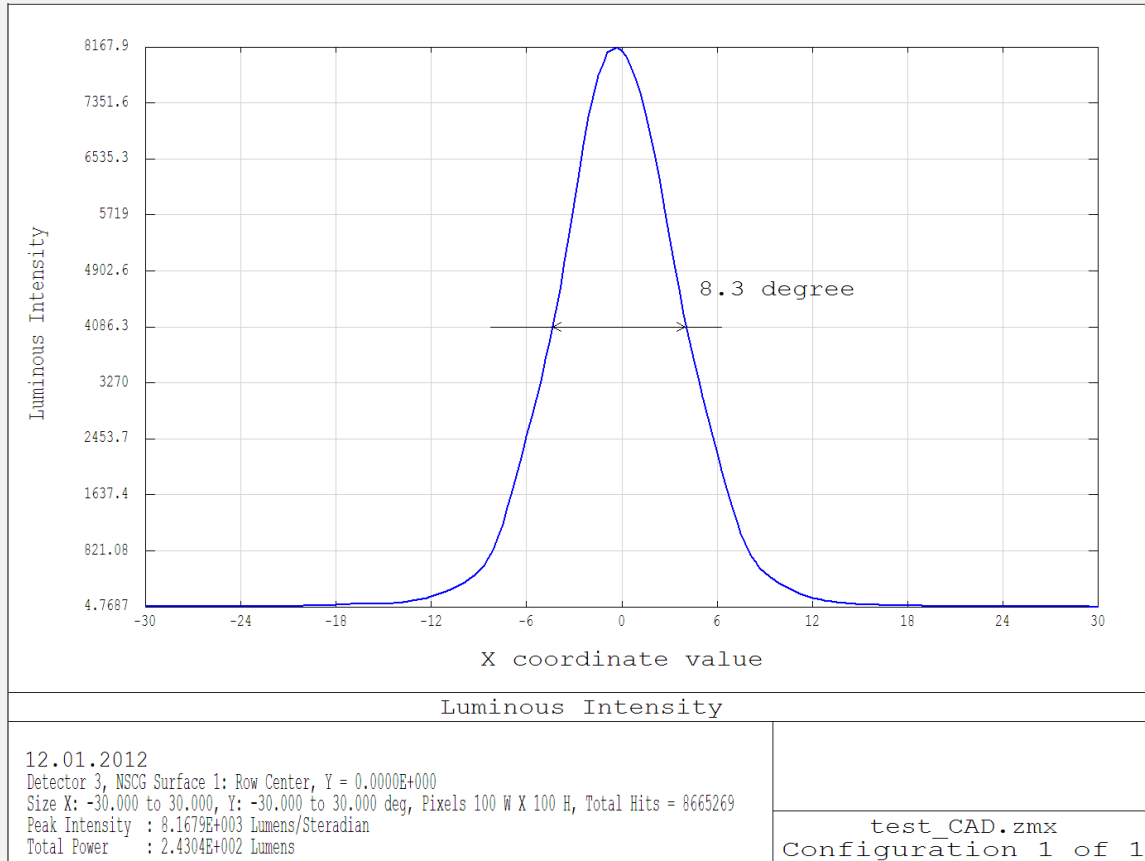






Intensity vs. angle

Angle is +/- 8.3 degree at half maximum, LED flux is used for chart is 300 lumen.





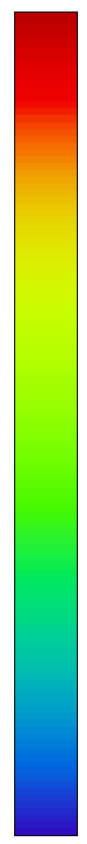
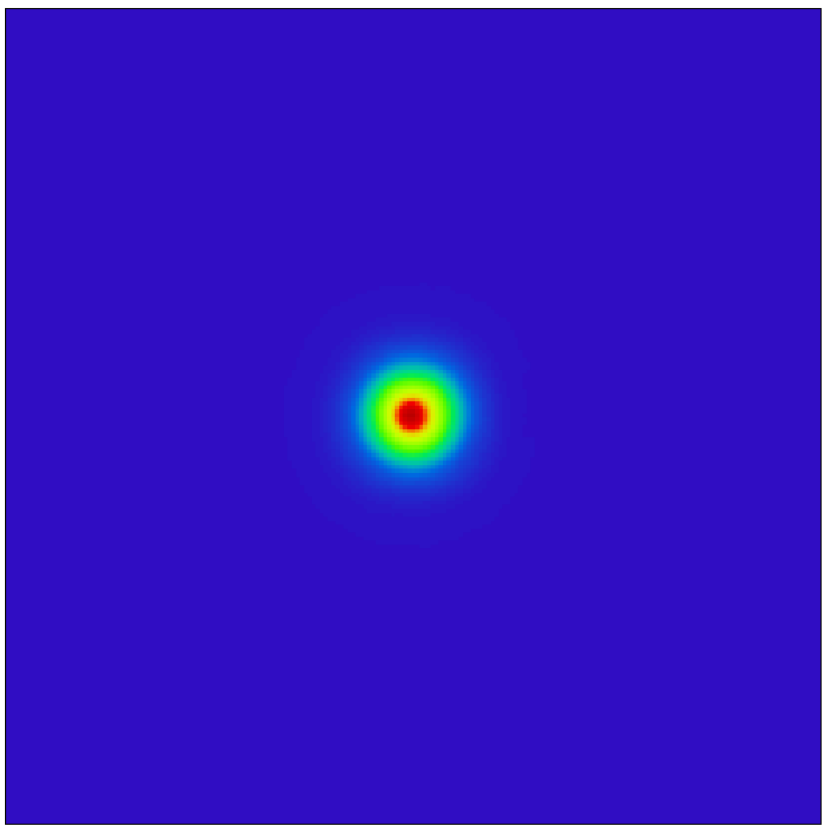
Detector Image: Illuminance

12.01.2012
Detector 6, NSCG Surface 1:
Size 20000.000 W X 20000.000 H Millimeters, Pixels 205 W X 205 H, Total Hits = 10386271
Peak Illuminance: 8.227E+001 Lumens/M²
Total Power : 2.498E+002 Lumens





Light spot in false color



82.3308
74.0977
65.8646
57.6315
49.3985
41.1654
32.9323
24.6992
16.4662
8.2331
0.0000

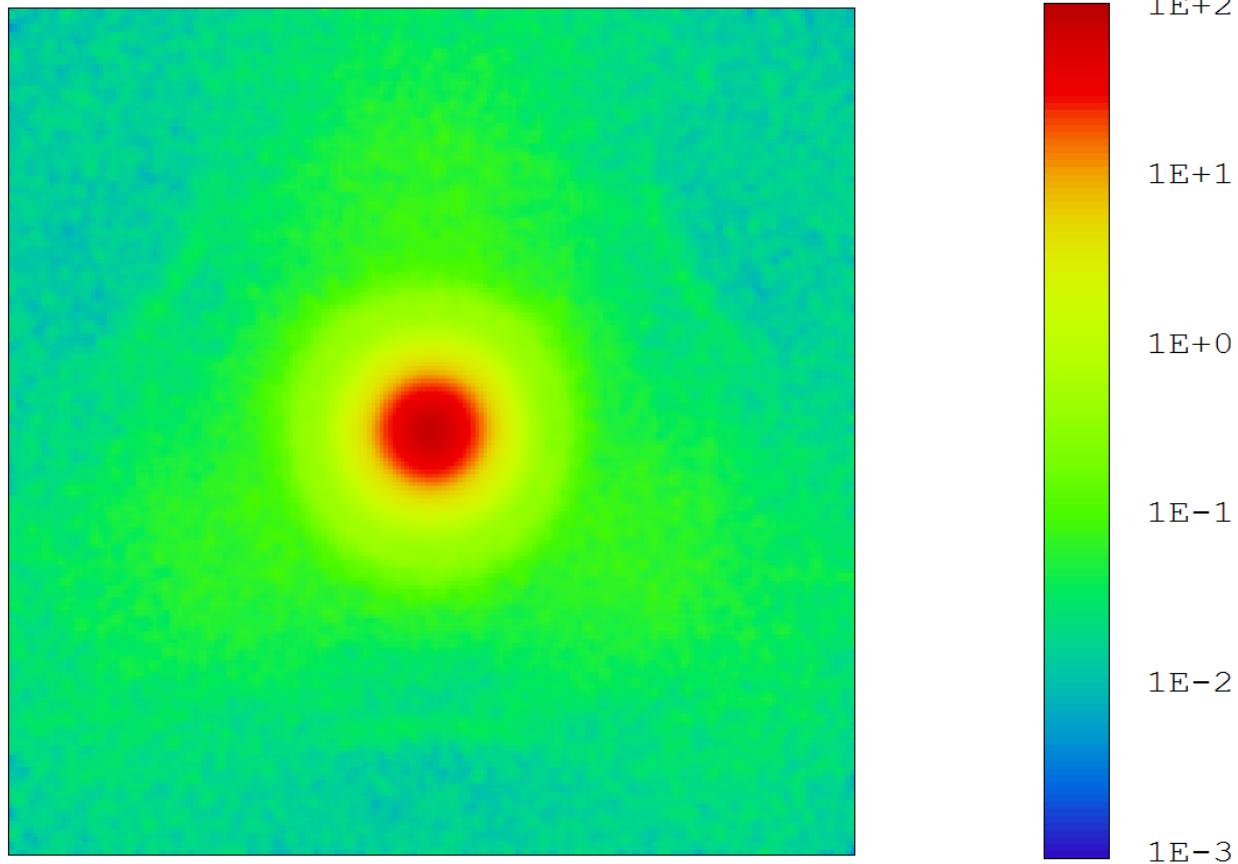
Detector Image: Illuminance

23.01.2012
Detector 6, NSCG Surface 1:
Size 20000.000 W X 20000.000 H Millimeters, Pixels 205 W X 205 H, Total Hits = 10388222
Peak Illuminance: 8.233E+001 Lumens/M²
Total Power : 2.497E+002 Lumens





Light spot in false color in log scale



Detector Image: Illuminance

23.01.2012
Detector 6, NSCG Surface 1:
Size 20000.000 W X 20000.000 H Millimeters, Pixels 205 W X 205 H, Total Hits = 10388222
Peak Illuminance: $8.233\text{E}+001$ Lumens/M²
Total Power : $2.497\text{E}+002$ Lumens





Performance Data

- Theoretical efficiency is 93% but depends of manufacturing process. This is defined as 93% of light is directed to target from lens. Typically molded part has 85-90% total efficiency

