

## BILLIE-A

Asymmetric beam for billboards. Assembly with holder and installation tape.

### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 21.5 mm
Height	16.1 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ

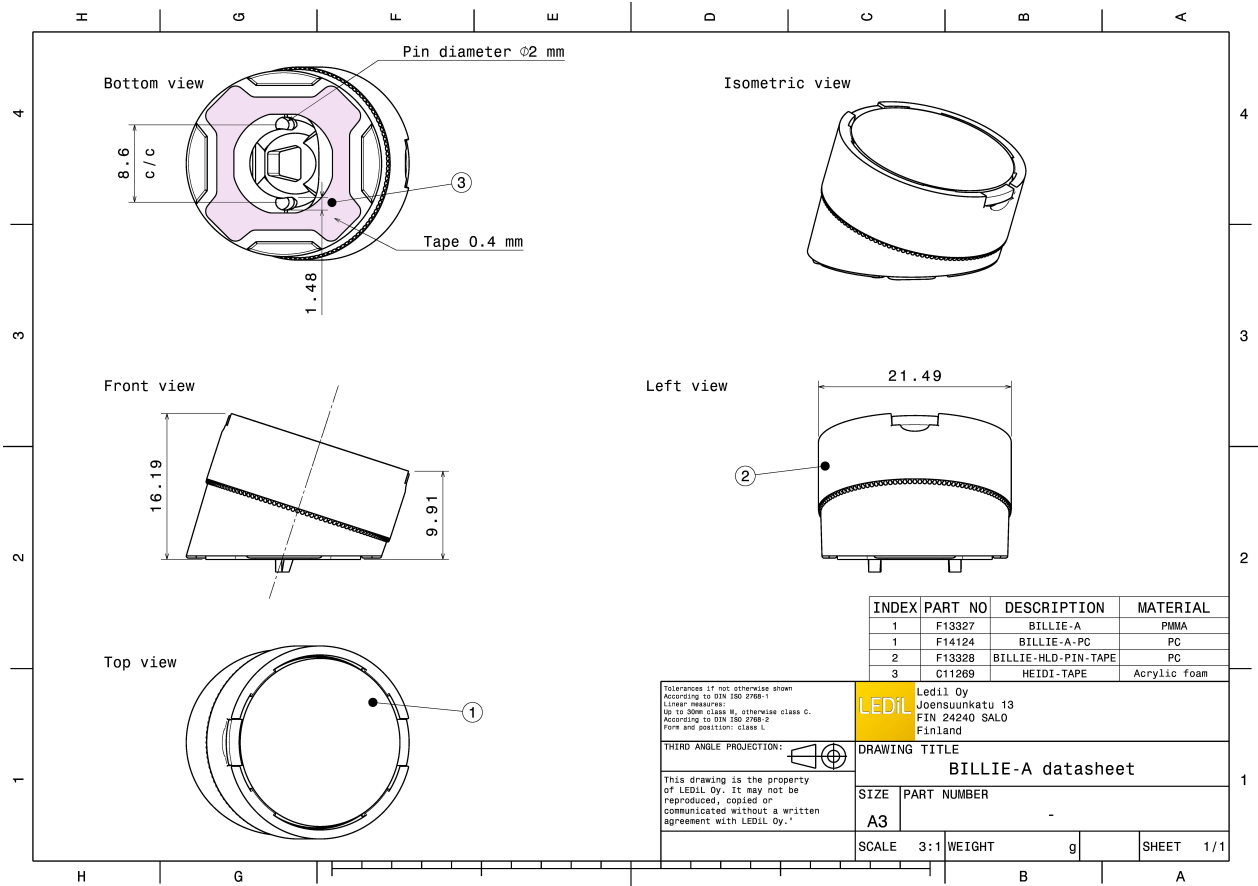
### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
BILLIE-A	Single lens	PMMA	clear	
BILLIE-HLD-PIN-TAPE	Holder	PC	white	
HEIDI-TAPE	Tape	PU tape	black	

### ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FCA13329_BILLIE-A	Single lens	1792	336	112	7.9
» Box size: 480 x 280 x 300 mm					



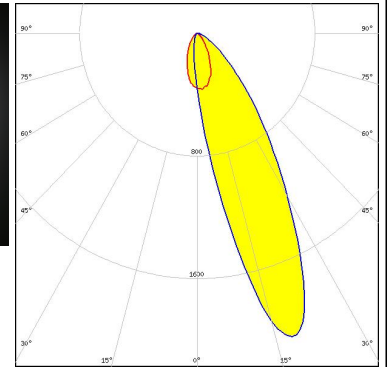


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### PHOTOMETRIC DATA (MEASURED):

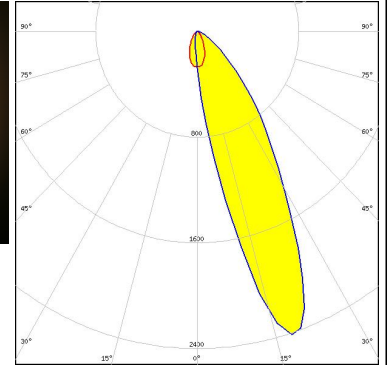
##### CREE LED

LED XB-D  
 FWHM / FWTM Asymmetric  
 Efficiency 85 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



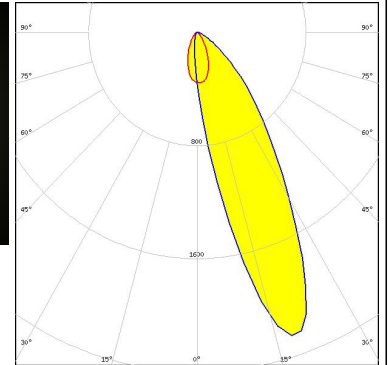
##### CREE LED

LED XP-E  
 FWHM / FWTM Asymmetric  
 Efficiency 89 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



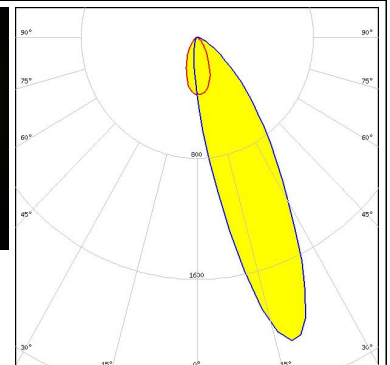
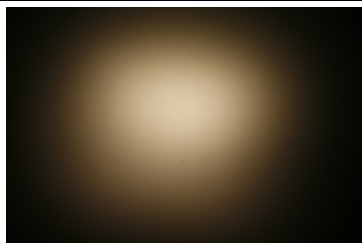
##### CREE LED

LED XP-G  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:


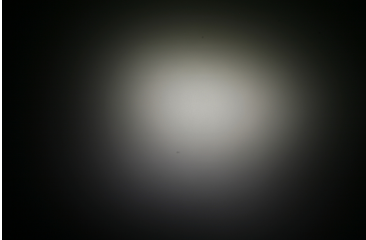
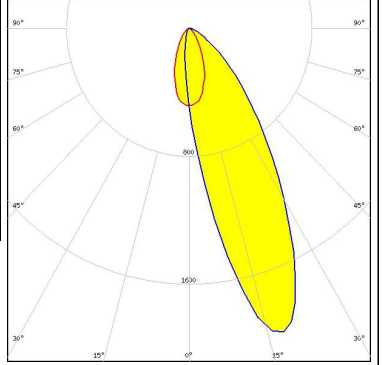


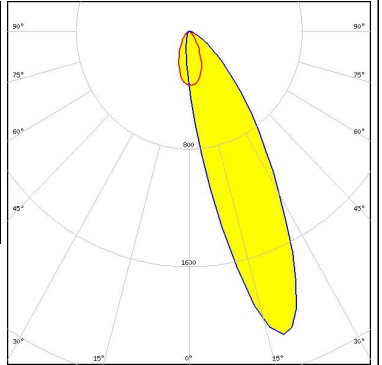

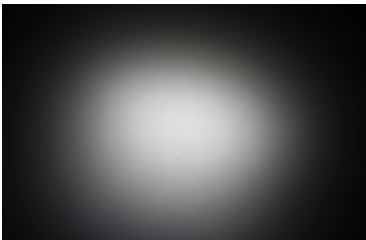
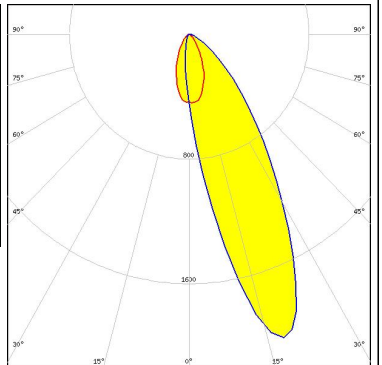

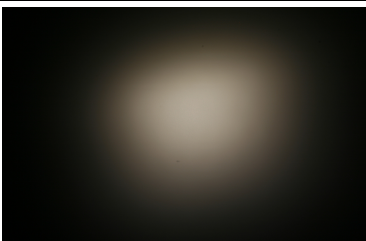
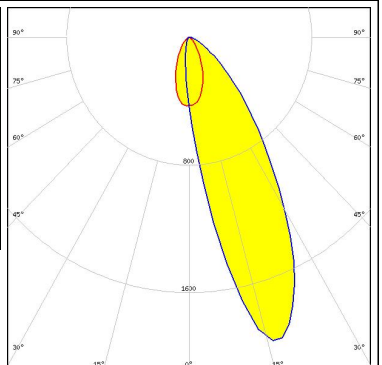


##### LUMILEDS


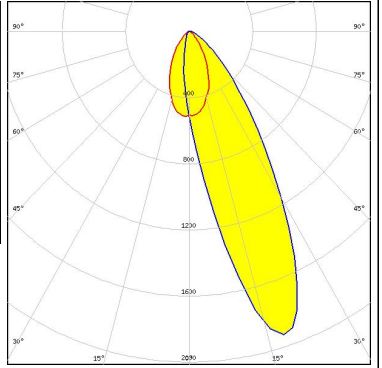

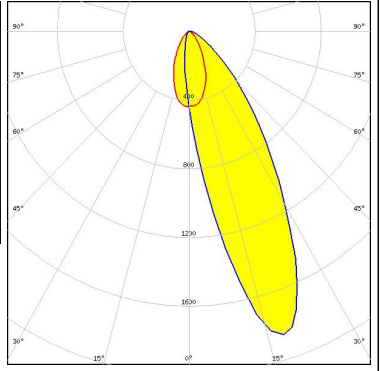
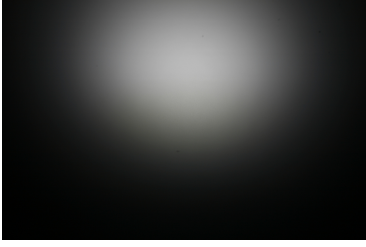
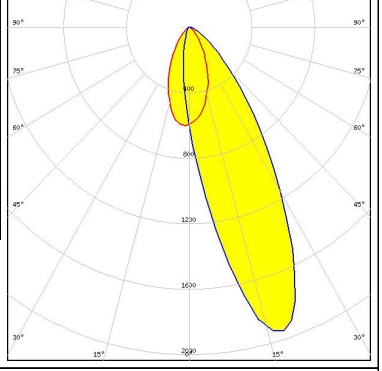

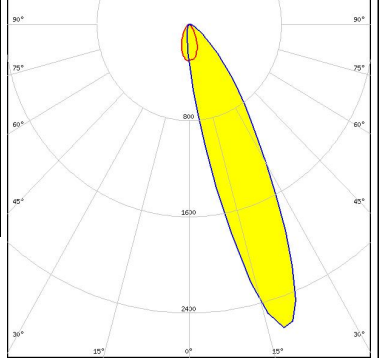
LED LUXEON A  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHOTOMETRIC DATA (MEASURED):

	<p>LED LUXEON R</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 88 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
	<p>LED LUXEON Rebel</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
	<p>LED LUXEON Rebel ES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 88 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
	<p>LED NCSxx19A</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 86 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

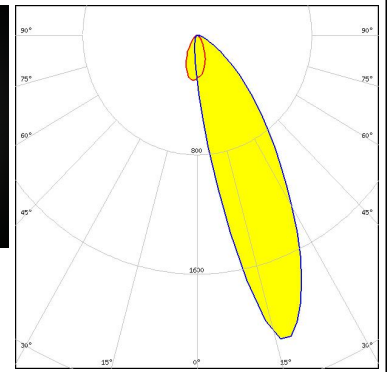
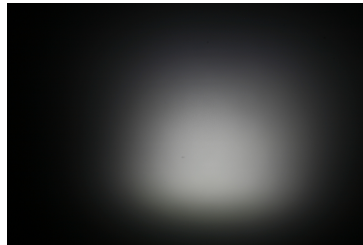
#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED NF2x757A            FWHM / FWTM Asymmetric            Efficiency 88 %            Peak intensity 1.9 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NVSxx19A            FWHM / FWTM Asymmetric            Efficiency 85 %            Peak intensity 1.9 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED Duris S5 (2 chip)            FWHM / FWTM Asymmetric            Efficiency 90 %            Peak intensity 2 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED OSLON SSL 150            FWHM / FWTM Asymmetric            Efficiency 88 %            Peak intensity 2.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		

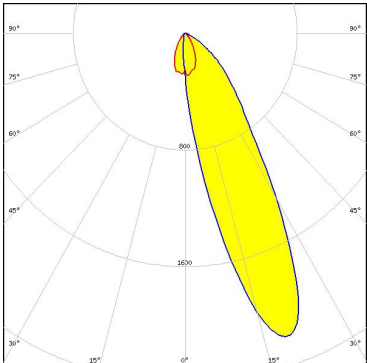
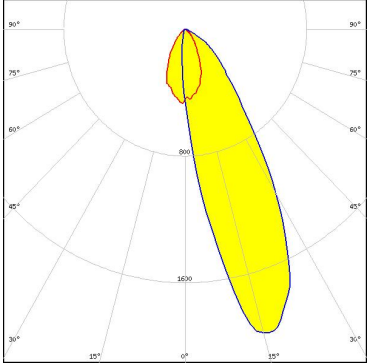
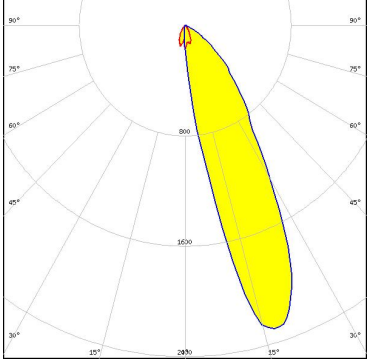

## PHOTOMETRIC DATA (MEASURED):

**OSRAM**  
Opto Semiconductors

LED OSLON SSL 80  
FWHM / FWTM Asymmetric  
Efficiency 88 %  
Peak intensity 2.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



#### PHOTOMETRIC DATA (SIMULATED):

<p><b>LUMILEDS</b></p> <p>LED: LUXEON TX            FWHM / FWTM: Asymmetric            Efficiency: 91 %            Peak intensity: 2.2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NF2x757G            FWHM / FWTM: Asymmetric            Efficiency: 93 %            Peak intensity: 2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED: OSLOM Square EC            FWHM / FWTM: Asymmetric            Efficiency: 86 %            Peak intensity: 2.3 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	 

### GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

### MATERIALS:

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#### LEDiL Oy

Joensuunkatu 13  
FI-24240 SALO  
Finland

#### LEDiL Inc.

228 West Page Street  
Suite D  
Sycamore IL 60178  
USA

#### Ledil Optics Technology (Shenzhen) Co., Ltd.

# 405 , Block B  
Casic Motor Building  
Shenzhen 518057  
P.R.CHINA

#### Local sales and technical support

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