

## BILLIE-A

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

### SPECIFICATION:

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

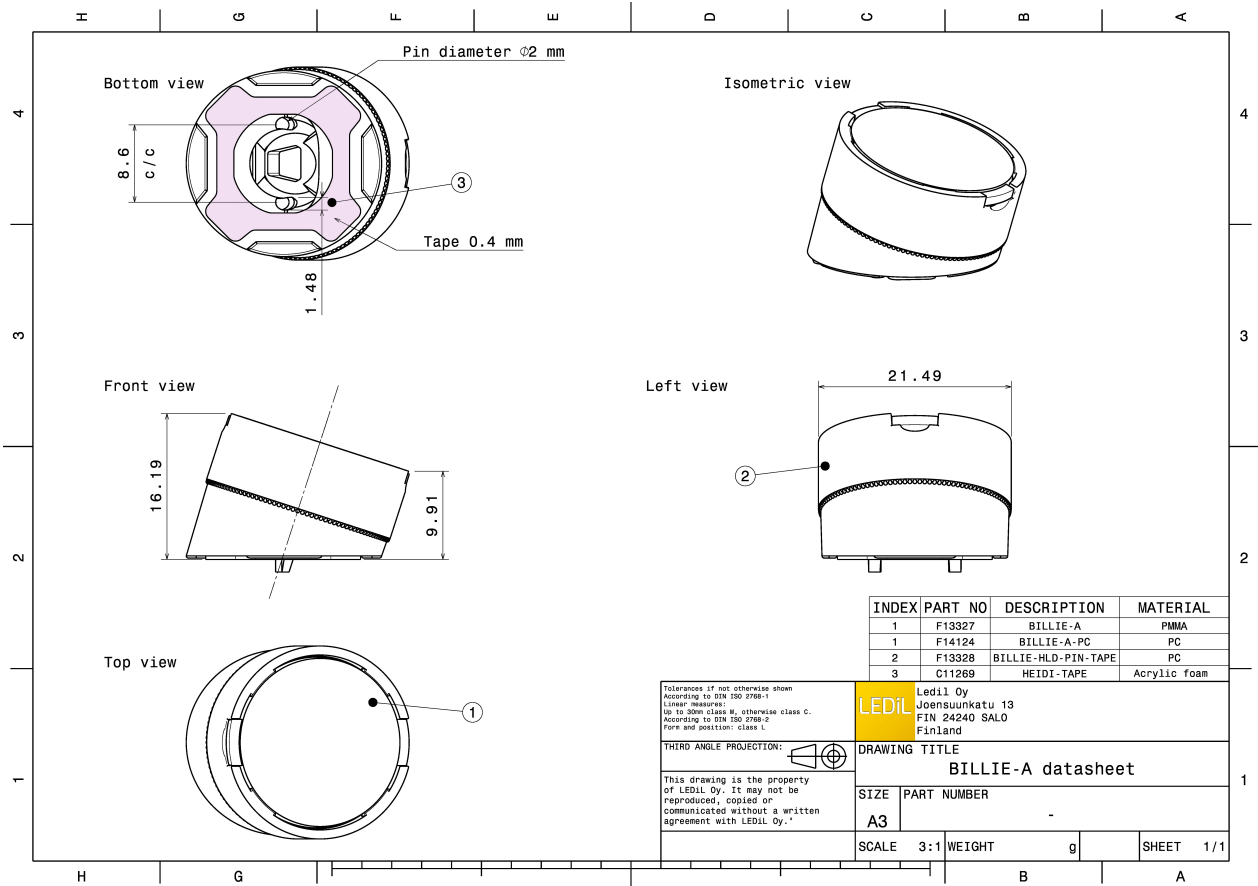


### MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
BILLIE-A	Single lens	PMMA	clear		
BILLIE-HLD-PIN-TAPE	Holder	PC	white		
HEIDI-TAPE	Tape	Acryl tape	black		

### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
FCA13329_BILLIE-A » Box size: 480 x 280 x 300 mm	1792	336	112	7.7

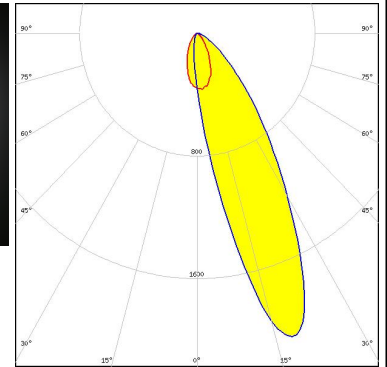


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

### OPTICAL RESULTS (MEASURED):



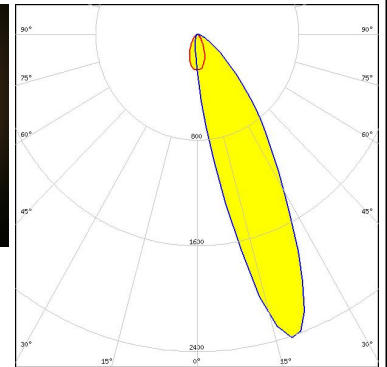
**LED** XB-D  
**FWHM / FWTM** Asymmetric  
**Efficiency** 85 %  
**Peak intensity** 2.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



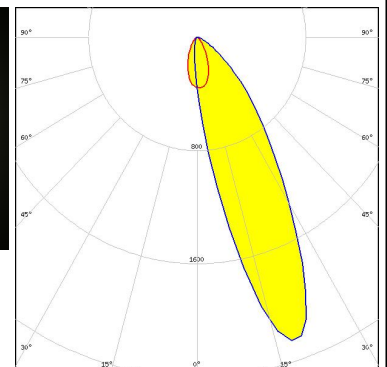
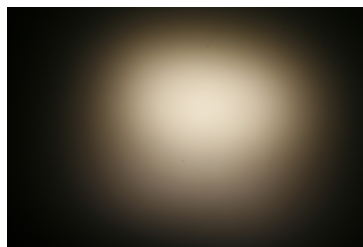
**LED** XP-E  
**FWHM / FWTM** Asymmetric  
**Efficiency** 89 %  
**Peak intensity** 2.4 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



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

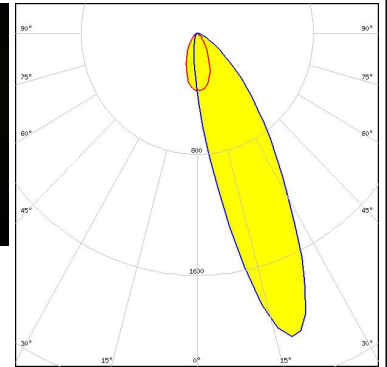


Light distribution files

#### OPTICAL RESULTS (MEASURED):



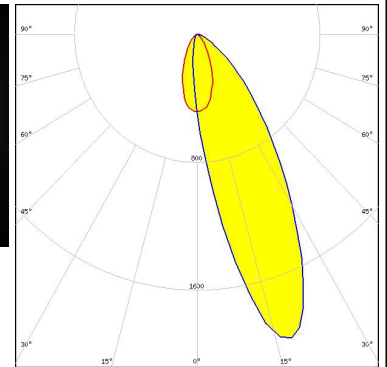
**LED** LUXEON A  
**FWHM / FWTM** Asymmetric  
**Efficiency** 88 %  
**Peak intensity** 2.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



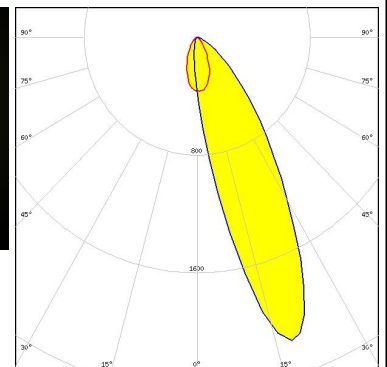
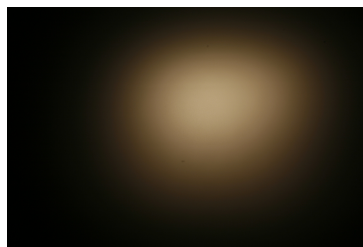
**LED** LUXEON R  
**FWHM / FWTM** Asymmetric  
**Efficiency** 88 %  
**Peak intensity** 2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



**LED** LUXEON Rebel  
**FWHM / FWTM** Asymmetric  
**Efficiency** 87 %  
**Peak intensity** 2.2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**

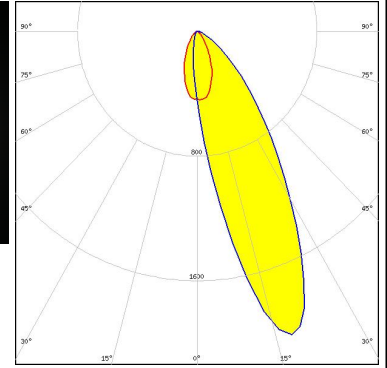


Light distribution files

#### OPTICAL RESULTS (MEASURED):



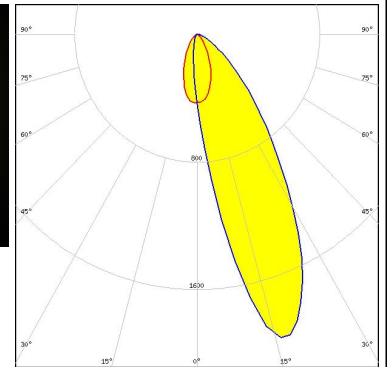
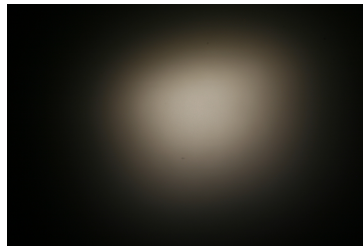
LED LUXEON Rebel ES  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



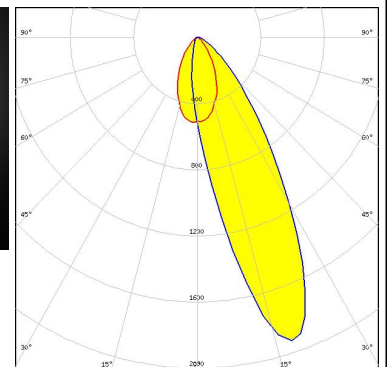
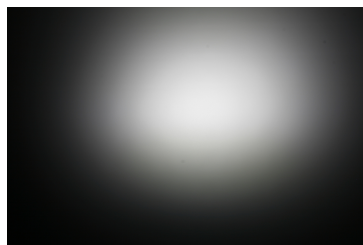
LED NCSxx19A  
 FWHM / FWTM Asymmetric  
 Efficiency 86 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED NF2x757A  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

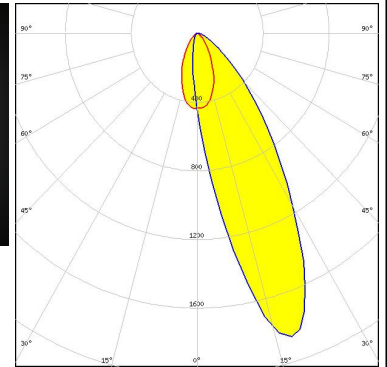


Light distribution files

#### OPTICAL RESULTS (MEASURED):



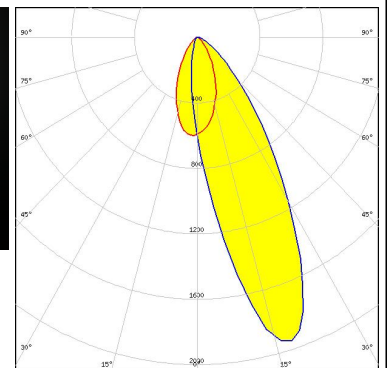
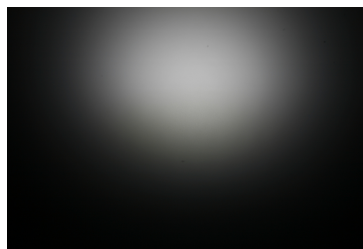
LED NVSxx19A  
 FWHM / FWTM Asymmetric  
 Efficiency 85 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



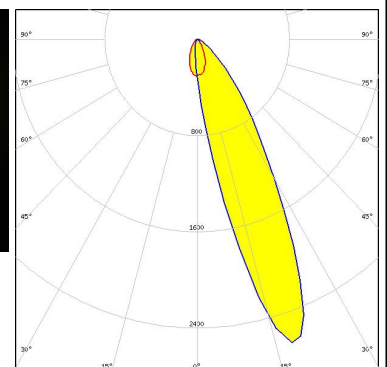
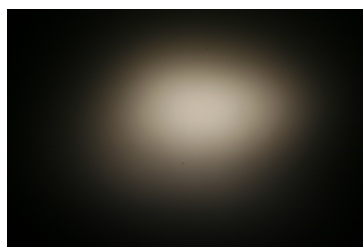
LED Duris S5 (2 chip)  
 FWHM / FWTM Asymmetric  
 Efficiency 90 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED OSLOM SSL 150  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

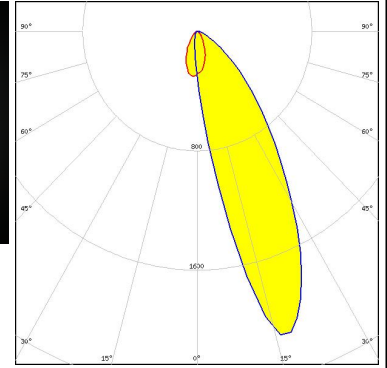


Light distribution files

### OPTICAL RESULTS (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/type	White
Required components:	

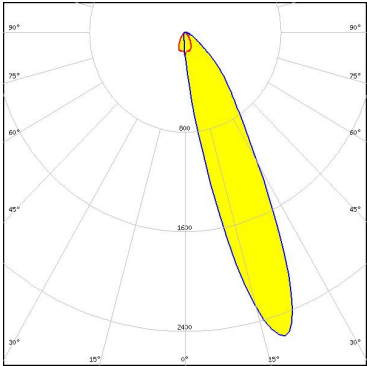


Light distribution files

### OPTICAL RESULTS (SIMULATED):

**LUMILEDS**

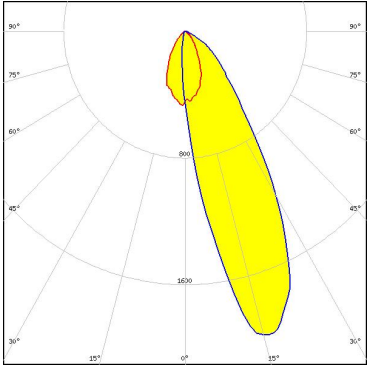
LED	LUXEON C
FWHM / FWTM	Asymmetric
Efficiency	90 %
Peak intensity	2.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

**NICHIA**

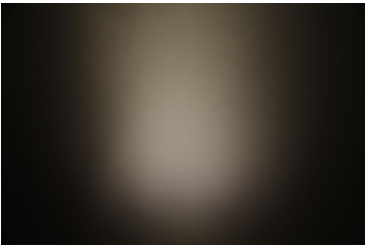
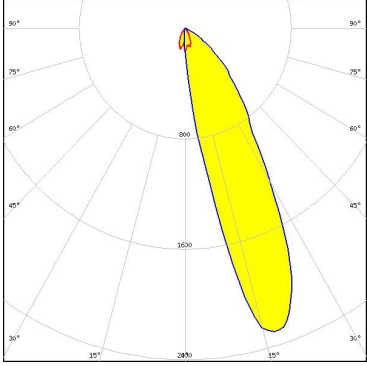
LED	NF2x757G
FWHM / FWTM	Asymmetric
Efficiency	93 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

**OSRAM**  
Opto Semiconductors

LED	OSLON Square EC
FWHM / FWTM	Asymmetric
Efficiency	86 %
Peak intensity	2.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files



### 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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