

# PRODUCT DATASHEET FCA13329\_BILLIE-A

# **BILLIE-A**

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

#### **SPECIFICATION:**

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



#### MATERIALS:

**Component** BILLIE-A BILLIE-HLD-PIN-TAPE HEIDI-TAPE

Туре
Single lens
Holder
Таре

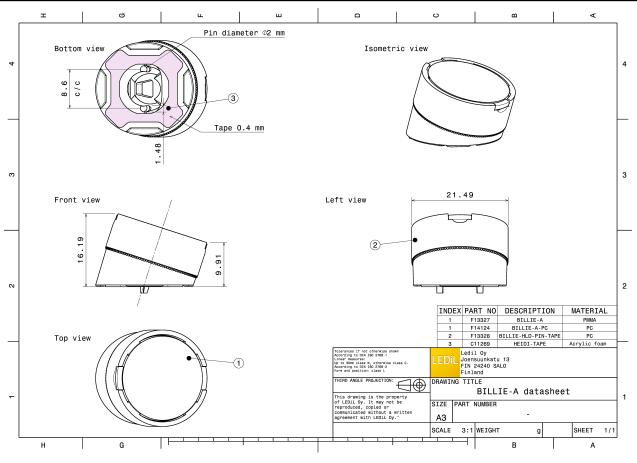
Material	Colour	Finish
PMMA	clear	
PC	white	
Acrylic for	am black	

#### **ORDERING INFORMATION:**

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



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See also our general installation guide: www.ledil.com/installation\_guide



		90* 90*
LED	XB-D	
FWHM / FWTM	Asymmetric	
Efficiency	85 %	60 <sup>5</sup>
Peak intensity	2.1 cd/lm	
LEDs/each optic	1	
Light colour	White	97
Required compone	nts:	
		1500
		36* 36*
		15% of 15%
		90* 90*
LED	XP-E	
FWHM / FWTM	Asymmetric	
Efficiency	89 %	60 <sup>4</sup> 000 50°
Peak intensity	2.4 cd/lm	$  \langle / / \rangle \rangle$
LEDs/each optic	1	
Light colour	White	\$7. \$2.
Required compone	nts:	1600
		30° 2400 34°
		15° 0° 15°
		90 <sup>4</sup>
CREE ÷	XP-G	50 <sup>4</sup>
	XP-G Asymmetric	31 31 31
LED		61 21 21 21 21 21 21 21 21 21 21 21 21 21
LED FWHM / FWTM	Asymmetric	By 00 00   Zi Zi Zi   Biy 2i 2i
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 88 %	84 00 65 25 25 26 25
LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 88 % 2.2 cd/lm	a. 90 90 90 90 90 90 90 90 90 90 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 88 % 2.2 cd/lm 1 White	6, 6, 3, 3, 5, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 88 % 2.2 cd/lm 1 White	gr
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 88 % 2.2 cd/lm 1 White	100 61 61 100 100 100 100 100 100 100 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 88 % 2.2 cd/lm 1 White	24 W OF CALL ST
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	Asymmetric 88 % 2.2 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric 88 % 2.2 cd/lm 1 White hts: EDS	2, 2, 6, 90 7, 7, 7, 7, 7,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric 88 % 2.2 cd/lm 1 White hts: EDS LUXEON A	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Mequired component LUMIL LED FWHM / FWTM	Asymmetric 88 % 2.2 cd/lm 1 White hts: EDS LUXEON A Asymmetric	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Mequired component LED FWHM / FWTM Efficiency	Asymmetric 88 % 2.2 cd/m 1 White hts: EDS LUXEON A Asymmetric 88 %	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Mequired component LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 88 % 2.2 cd/lm 1 White hts: EDS LUXEON A Asymmetric 88 % 2.1 cd/lm	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Mequired component <b>Composition</b> <b>Composition</b> <b>Composition</b>	Asymmetric 88 % 2.2 cd/lm 1 White hts: EDS LUXEON A Asymmetric 88 % 2.1 cd/lm 1	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component <b>Composition</b> LUMIL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 88 % 2.2 cd/lm 1 White hts: EDS LUXEON A Asymmetric 88 % 2.1 cd/lm 1 White	21 21 21 21 21 22 22 22 22 22
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Mequired component <b>Composition</b> <b>Composition</b> <b>Composition</b>	Asymmetric 88 % 2.2 cd/lm 1 White hts: EDS LUXEON A Asymmetric 88 % 2.1 cd/lm 1 White	21 21 21 21 21 22 22 22 22 22
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component <b>Composition</b> LUMIL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 88 % 2.2 cd/lm 1 White hts: EDS LUXEON A Asymmetric 88 % 2.1 cd/lm 1 White	21 21 21 21 21 22 22 22 22 22
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component <b>Composition</b> LUMIL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 88 % 2.2 cd/lm 1 White hts: EDS LUXEON A Asymmetric 88 % 2.1 cd/lm 1 White	21 21 21 21 21 22 22 22 22 22
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Composition Required component Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 88 % 2.2 cd/lm 1 White hts: EDS LUXEON A Asymmetric 88 % 2.1 cd/lm 1 White	



•		
CUMIL	.EDS	24*
LED	LUXEON R	
FWHM / FWTM	Asymmetric	73
Efficiency	88 %	
Peak intensity	2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
		×*
<b>A</b>		**************************************
LUMIL	.EDS	38*
LED	LUXEON Rebel	
FWHM / FWTM	Asymmetric	
Efficiency	87 %	91
Peak intensity	2.2 cd/lm	
LEDs/each optic	1	
Light colour	White	a.
Required compone	ents:	
		34
•		
LUMIL	.EDS	50°
		×**
LED	LUXEON Rebel ES	984 172
LED FWHM / FWTM	LUXEON Rebel ES Asymmetric	28-
LED FWHM / FWTM Efficiency	LUXEON Rebel ES Asymmetric 88 %	5%* 5%* 5%*
LED FWHM / FWTM Efficiency Peak intensity	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm	90* 25 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1	57 60 23 24 24
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White	5°*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White ents: NCSxx19A Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White ents: NCSxx19A Asymmetric 86 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MICHI/ LED FWHM / FWTM Efficiency Peak intensity	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White ents: NCSxx19A Asymmetric 86 % 2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MICHI/ LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White ents: NCSxx19A Asymmetric 86 % 2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White ents: NCSxx19A Asymmetric 86 % 2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White ents: NCSxx19A Asymmetric 86 % 2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White ents: NCSxx19A Asymmetric 86 % 2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MICHIA Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White ents: NCSxx19A Asymmetric 86 % 2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MICHIA Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel ES Asymmetric 88 % 2 cd/lm 1 White ents: NCSxx19A Asymmetric 86 % 2 cd/lm 1 White	



ØNICHI∕	N Contraction of the second seco		90*	90*
LED	NF2x757A			
FWHM / FWTM	Asymmetric		75*	25
Efficiency	88 %			
Peak intensity	1.9 cd/lm		60*	
LEDs/each optic	1			
Light colour	White		45.0	43*
Required compone				1200
			17	1600
			300	30°
			15%	2000 25°
ØNICHI/	N Contraction of the second seco		90*	90*
LED	NVSxx19A		25*	
FWHM / FWTM	Asymmetric			
Efficiency	85 %		60.8	694
Peak intensity	1.9 cd/lm		$ \land \land \land \land$	
LEDs/each optic	1		X	
Light colour	White		45°	43.
Required compone	ents:			1200
			1 7	1600
			30*	0 <sup>0</sup> 10 <sup>0</sup> 30 <sup>0</sup>
OSRAM			90*	1 90*
Opto Semiconductors	Duria 25 (2 ship)		90*	90*
Opto Semiconductors	Duris S5 (2 chip)		90° 73°	27
opto Semiconductors LED FWHM / FWTM	Asymmetric		99°	
opto Semiconductors LED FWHM / FWTM Efficiency	Asymmetric 90 %		99 <sup>4</sup>	10 10 10 10 10 10 10 10 10
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 90 % 2 cd/lm		99 <sup>4</sup>	
<sup>opto Semiconductors</sup> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 90 % 2 cd/lm 1		99 <sup>4</sup> 99 <sup>4</sup> 99 <sup>4</sup>	90 90 90 90 90
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 90 % 2 cd/lm 1 White		64. 26. 26.	500 500 500 500 500 500 500 500 500 500
<sup>opto Semiconductors</sup> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 90 % 2 cd/lm 1 White		99°* 725 60°	100 60 60 70 70 70 70 70 70 70 70
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 90 % 2 cd/lm 1 White		55°	99 97 97 97 97 97 97 97 97 97 97 97 97 9
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 90 % 2 cd/lm 1 White		39 <sup>4</sup> 39 <sup>4</sup> 9 <sup>3</sup>	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 90 % 2 cd/lm 1 White		37. 22. 22. 23. 33.	500 500 500 500 500 500 500 500 500 500
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 90 % 2 cd/lm 1 White		25° 25° 25° 25° 25° 25°	109
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 90 % 2 cd/lm 1 White ents:			200 200 120 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 90 % 2 cd/lm 1 White			200 200 120 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED	Asymmetric 90 % 2 cd/lm 1 White ents: OSLON SSL 150			200 200 120 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM	Asymmetric 90 % 2 cd/lm 1 White ents: OSLON SSL 150 Asymmetric			200 200 120 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	Asymmetric 90 % 2 cd/lm 1 White ents: OSLON SSL 150 Asymmetric 88 %			200 200 120 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 90 % 2 cd/lm 1 White ents: OSLON SSL 150 Asymmetric 88 % 2.7 cd/lm			200 200 120 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 90 % 2 cd/lm 1 White ents: OSLON SSL 150 Asymmetric 88 % 2.7 cd/lm 1 White			200 200 120 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 90 % 2 cd/lm 1 White ents: OSLON SSL 150 Asymmetric 88 % 2.7 cd/lm 1 White			200 200 120 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 90 % 2 cd/lm 1 White ents: OSLON SSL 150 Asymmetric 88 % 2.7 cd/lm 1 White			200 200 120 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSCRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 90 % 2 cd/lm 1 White ents: OSLON SSL 150 Asymmetric 88 % 2.7 cd/lm 1 White			200 200 120 200

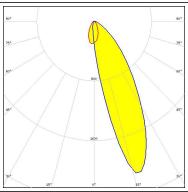


#### OSRAM

LED
FWHM / FWTM
Efficiency
Peak intensity
LEDs/each optic
Light colour
Required compone

OSLON SSL 80 Asymmetric 88 % 2.1 cd/lm 1 White ents:







# **OPTICAL RESULTS (SIMULATED):**

	5	90 <sup>4</sup> 90 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON C Asymmetric 90 % 2.6 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NF2x757G Asymmetric 93 % 2 cd/lm 1 White	30, 10, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSLON Square EC Asymmetric 86 % 2.3 cd/lm 1 White	94 97 97 97 97 97 97 97 97 97 97 97 97 97