

# PRODUCT DATASHEET SAGA-HB-IP-WHT

# SAGA-HB-IP-WHT

~60° high bay beam

#### **SPECIFICATION:**

Dimensions	Ø 50.0 mm
Height	12 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes 🛈

#### **MATERIALS:**

Component C13586\_SAGA-HB-IP C13591\_SAGA-FRAME-WHT **Type** Single lens Holder



Material Silicone HRPC **Colour** clear white Finish

#### **ORDERING INFORMATION:**

#### Quantities for one set:

Single lens 1 Holder 1

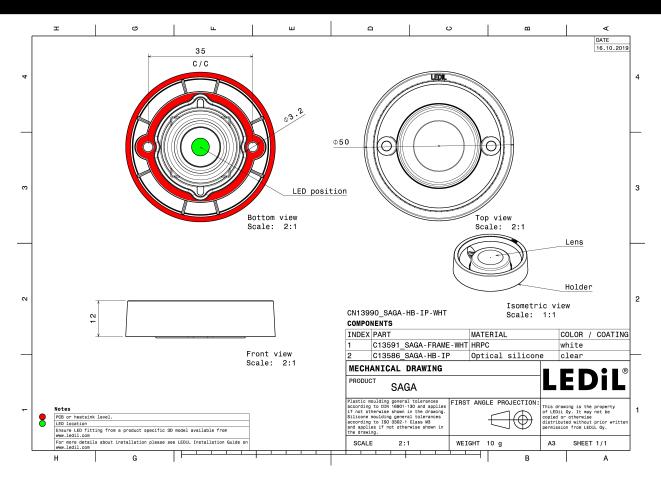


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Component		Qty in box	MOQ	MPQ	Box weight (kg)
C13586_SAGA-HB-IP » Box size: 480 x 280 x 300 mm	Single lens	650	52	26	4.7
C13591_SAGA-FRAME-WHT » Box size: 480 x 280 x 300 mm	Holder	900	52	26	6.5

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# PRODUCT DATASHEET SAGA-HB-IP-WHT



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



r		
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	V10 Gen6 58.0° / 106.0° 89 % 0.8 cd/lm 1 White hts:	
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	V6 Gen6 73.0° / 115.0° 88 % 0.6 cd/lm 1 White tts:	5 <sup>3</sup> 5 <sup>3</sup> 5 <sup>3</sup> 5 <sup>3</sup> 5 <sup>3</sup> 5 <sup>3</sup> 6 <sup>40</sup> 6 <sup>40</sup> 6
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	V8 Gen6 66.0° / 109.0° 88 % 0.7 cd/lm 1 White tts:	90° 90° 90° 90° 90° 90° 90° 90°
bridgeluX. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	VERO10 58.0° / 101.0° 92 % 0.9 cd/lm 1 White tts:	



CITIZE	Ν	90° 90°
LED	CLL01x	
FWHM / FWTM	61.0° / 93.0°	75. 75.
Efficiency	92 %	
Peak intensity	0.8 cd/lm	Eee Box
LEDs/each optic	1	40
Light colour	White	42. 42.
Required compone		
Required compone		
		800
		30° 15° 0° 15° 30°
CITIZE	N	90°
		90° 90°
LED	CLL02x/CLU02x (LES10)	75*
FWHM / FWTM	47.0° / 95.0°	
Efficiency	86 %	60° 60°
Peak intensity	1 cd/lm	400
LEDs/each optic	1	
Light colour	White	a
Required compone		
Bender Wirth: 4	34 Typ L6	
		36* 34*
OTTIGE	37	133 0 <sup>6</sup> 35 <sup>5</sup>
CITIZE	N	90° 90°
LED	CLL02x/CLU02x (LES10)	
FWHM / FWTM	58.0° / 98.0°	75*
Efficiency	91 %	60°
Peak intensity	0.9 cd/lm	
LEDs/each optic	1	
Light colour	White	gr et
Required compone	nts:	
		30* 30.5
		15 <sup>5</sup> 0 <sup>6</sup> 15 <sup>5</sup>
CITIZE	Ν	90* 90*
LED	CLL03x/CLU03x	
FWHM / FWTM	64.0° / 116.0°	73*
Efficiency	92 %	200
Peak intensity	0.7 cd/lm	60*
LEDs/each optic	1	
Light colour	White	400 45°
Required compone		
		30° 30° 30°



CITIZE	NT			F
CITIZE	N		90*	
LED	CLL03x/CLU03x		367	
FWHM / FWTM	61.0° / 125.0°			
Efficiency	84 %		69*	2006
Peak intensity	0.6 cd/lm		$\Gamma \sim I$	
LEDs/each optic	1			
Light colour	White		93°	460
Required compone				
Bender Wirth: 43	33 Typ L6			
			300	600 0 <sup>0</sup> 15°
CITIZE	N		90°	90
LED	CLU700/701/702/703			
EED FWHM / FWTM	56.0° / 90.0°		75*	
Efficiency	87 %			
Peak intensity	0.9 cd/lm		60*	
LEDs/each optic	1		$\sim$	400
Light colour	White		474	
Required compone				
			$\sim$	
				800
			$\times$ 1	
			36*	0° 15° 36
			-18	
CITIZE	Ν		90*	90
			99°	90
LED	CLU700/701/702/703			
LED FWHM / FWTM	CLU700/701/702/703 46.0° / 82.0°		35°	29
LED FWHM / FWTM Efficiency	CLU700/701/702/703 46.0° / 82.0° 86 %		10°	
LED FWHM / FWTM Efficiency Peak intensity	CLU700/701/702/703 46.0° / 82.0°		-12°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm		-15°,	600
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White		-12; -12; 	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White ents:		5°	40 - 50 - 60 - 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White ents:		10°	50 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White ents:		-15°,	00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 43	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White ents: 34 Typ L6			900 13% 15°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 43	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White I White I 34 Typ L6			900 13% 15°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 43	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White ents: 34 Typ L6			200 1200 1200 120 100 100 100 100 100 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 43 CITTIZE LED FWHM / FWTM	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White ents: 34 Typ L6		55*	200 1200 1200 120 100 100 100 100 100 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 43 <b>CITTIZE</b> LED FWHM / FWTM Efficiency	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White ents: 34 Typ L6 N CLU710/711 62.0° / 107.0° 90 %		55*	200 1200 127 X
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 43 <b>CITTIZE</b> LED FWHM / FWTM Efficiency Peak intensity	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White onts: 34 Typ L6 N CLU710/711 62.0° / 107.0° 90 % 0.7 cd/lm		55*	200 1200 127 X
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 43 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White onts: 34 Typ L6 N CLU710/711 62.0° / 107.0° 90 % 0.7 cd/lm 1		55*	200 1200 1200 120 120 120 120 120
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 43 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White onts: 34 Typ L6 N CLU710/711 62.0° / 107.0° 90 % 0.7 cd/lm 1 White		55*	200 1200 1200 120 120 120 120 120
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 43 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White onts: 34 Typ L6 N CLU710/711 62.0° / 107.0° 90 % 0.7 cd/lm 1 White		55*	200 1200 127 X
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 43 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White onts: 34 Typ L6 N CLU710/711 62.0° / 107.0° 90 % 0.7 cd/lm 1 White		55*	200 1200 127 X
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 43 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White onts: 34 Typ L6 N CLU710/711 62.0° / 107.0° 90 % 0.7 cd/lm 1 White		55*	200 1200 127 X
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 43 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU700/701/702/703 46.0° / 82.0° 86 % 1.1 cd/lm 1 White onts: 34 Typ L6 N CLU710/711 62.0° / 107.0° 90 % 0.7 cd/lm 1 White		55*	



CITTZE	NT		
CITIZE	IN	90°	90*
LED	CLU720/721/723	73.	27-1-28"
FWHM / FWTM	50.0° / 109.0°		- 200
Efficiency	85 %		60*
Peak intensity	0.9 cd/lm		
LEDs/each optic	1		
Light colour	White		42.
Required compone			
Bender Wirth: 43	33 Typ L6		
		30*	000 150 Ale
CITIZE	N	294	90*
	CLU720/721/723		
EED FWHM / FWTM	61.0° / 113.0°	75	7.75
Efficiency	89 %		
Peak intensity	0.7 cd/lm		
LEDs/each optic	1		400
Light colour	White		45*
Required compone			
riequired compone			
			0° 15°
		90*	90*
LED	CXA/B 13xx		
FWHM / FWTM	70.0° / 104.0°		
Efficiency	92 %		200
Peak intensity	0.7 cd/lm		
LEDs/each optic	1		
Light colour	White		400 45*
D a su das al			
Required compone	nts:		
Requirea compone	nts:		
Requirea compone	nts:		
requirea compone	nts:		60 0 <sup>1</sup> 15 <sup>1</sup> 3 <sup>1</sup>
<b>CREE</b> <del>\$</del>	nts:		600 0" 12" 12"
CREE ÷			
CREE ÷ LEDs LED	CXA/B 15xx		$\land$
CREE LEDs LED FWHM / FWTM	CXA/B 15xx 64.0° / 104.0°		00 00 00 00 00 00 00 00 00 00 00 00 00
CREE LEDs EDD FWHM / FWTM Efficiency	CXA/B 15xx 64.0° / 104.0° 92 %		$\land$
CREE LED FWHM / FWTM Efficiency Peak intensity	CXA/B 15xx 64.0° / 104.0° 92 % 0.8 cd/lm		$\land$
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CXA/B 15xx 64.0° / 104.0° 92 % 0.8 cd/lm 1		$\land$ $\land$
CREE S LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CXA/B 15xx 64.0° / 104.0° 92 % 0.8 cd/lm 1 White		$\land$ $\land$
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CXA/B 15xx 64.0° / 104.0° 92 % 0.8 cd/lm 1 White		$\land$
CREE S LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CXA/B 15xx 64.0° / 104.0° 92 % 0.8 cd/lm 1 White		$\land$
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CXA/B 15xx 64.0° / 104.0° 92 % 0.8 cd/lm 1 White		$\land$ $\land$



CREE ≑		
LEDs EFWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXA/B 15xx 64.0° / 102.0° 90 % 0.8 cd/lm 1 White Its:	
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXA/B 1816 & CXA/B 1820 & CXA 1850 63.0° / 111.0° 90 % 0.7 cd/lm 1 White ints:	
CREE S LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	MHD-E/G 60.0° / 105.0° 90 % 0.8 cd/lm 1 White mts:	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CoB 1202/1203 63.0° / 108.0° 89 % 0.7 cd/lm 1 White	



	.EDS	
LED	LUXEON CoB 1202s	
FWHM / FWTM	67.0° / 106.0°	
Efficiency	90 %	
Peak intensity	0.7 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	
	INUS	50°
LED	CxM-14 (19x19)	
FWHM / FWTM	66.0° / 121.0°	
Efficiency	88 %	
Peak intensity	0.6 cd/lm	
LEDs/each optic	1	
Light colour	White	e. 40 e
Required compone		
E.		100 test 40 test 70 te
	INUS	90'
LED	CxM-6 (12x13)	8
FWHM / FWTM	66.0° / 104.0°	
Efficiency	89 %	60 <sup>-</sup>
Peak intensity	0.7 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	
		30- 30 80 50 30
	INUS	20 <u>80</u> 13
LED	CXM-7 (13x13)	
FWHM / FWTM	64.0° / 105.0°	R'
Efficiency	89 %	
Peak intensity	0.8 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
		80
		24



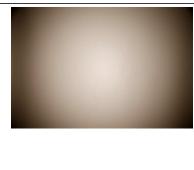
	INUS	80° 80°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CxM-9 (13.5x13.5) 63.0° / 109.0° 88 % 0.7 cd/lm 1 White ints:	
OSRAM Opto Semiconductors		
ED Sementational Constraints FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Duris S10 74.0° / 106.0° 91 % 0.7 cd/lm 1 White ents:	
OSRAM Opto Semiconductors		91* 92
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Soleriq S13 61.0° / 110.0° 91 % 0.8 cd/lm 1 White	
Required compone	ints:	20° 00° 22° 22°
scour semiconductor LED FWHM / FWTM Efficiency Peak intensity	MJT COB LES 6 46.0° / 79.0° 87 % 1.1 cd/lm	
LEDs/each optic Light colour Required compone Bender Wirth: 43	1 White Ints:	
		20 <sup>5</sup> 22 <sup>50</sup> 0 <sup>4</sup> 23 <sup>5</sup> 2

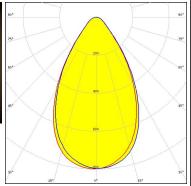


# SHARP

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

Mini Zenigata (GW6BM) 62.0° / 100.0° 92 % 0.8 cd/lm 1 White ents:







#### **OPTICAL RESULTS (SIMULATED):**

#### 

LED	LUXEON CoB Compact
FWHM / FWTM	67.0° / 106.0°
Efficiency	90 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

#### 

LED	CxM-14 (19x19)	
FWHM / FWTM	61.0° / 125.0°	
Efficiency	84 %	
Peak intensity	0.6 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
Bender Wirth: 433 Typ L6		

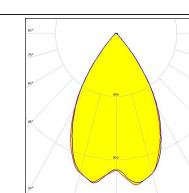
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LED CxM-9 (13.5x13.5) FWHM / FWTM 47.0° / 95.0° Efficiency 86 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 434 Typ L6

#### *Μ*NICHIΛ

LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: COB S-Type (LES 7) 64.0° / 84.0° 95 % 1 cd/lm White

1





# **OPTICAL RESULTS (SIMULATED):**

OSRAM		
Opto Semiconductors		90° 90
LED	Soleriq S9	75 77
FWHM / FWTM	56.0° / 87.0°	
Efficiency	93 %	60 <sup>6</sup> 60
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	or ∕ or
Required components:		
		30° 30 0° 35
SAMSUN	IG	90°
LED	LC020C	
EU FWHM / FWTM	42.0° / 66.0°	75* 75
Efficiency	87 %	400
Peak intensity	1.6 cd/lm	60° 60
LEDs/each optic	1	
Light colour	White	97* es
Required components:	WING .	
Bender Wirth: 479 Ty	n l 6	
Donaor Winan. Ino Ty		
		12 <sup>3</sup> 0 <sup>6</sup> 12 <sup>3</sup> 32
SAMSUN	IG	90* 90
LED	LC040C	
FWHM / FWTM	51.0° / 81.0°	75
Efficiency	87 %	
Peak intensity	1.1 cd/lm	601 <sup></sup> 400
LEDs/each optic	1	
Light colour	White	93. 92
Required components:		
Bender Wirth: 480 Ty	p L6	
		30* 30
SEOUL		15°0°35*
SEOUL SEMICONDUCTOR		
LED	ZC12/18	
FWHM / FWTM	61.0° / 125.0°	
Efficiency	84 %	
Peak intensity	0.6 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
Bender Wirth: 433 Ty	p L6	



# **OPTICAL RESULTS (SIMULATED):**

SEOUL	
SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	47.0° / 95.0°
Efficiency	86 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required component	ts:
Bender Wirth: 434	Typ L6



#### **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.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

#### **MATERIALS:**

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

#### PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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