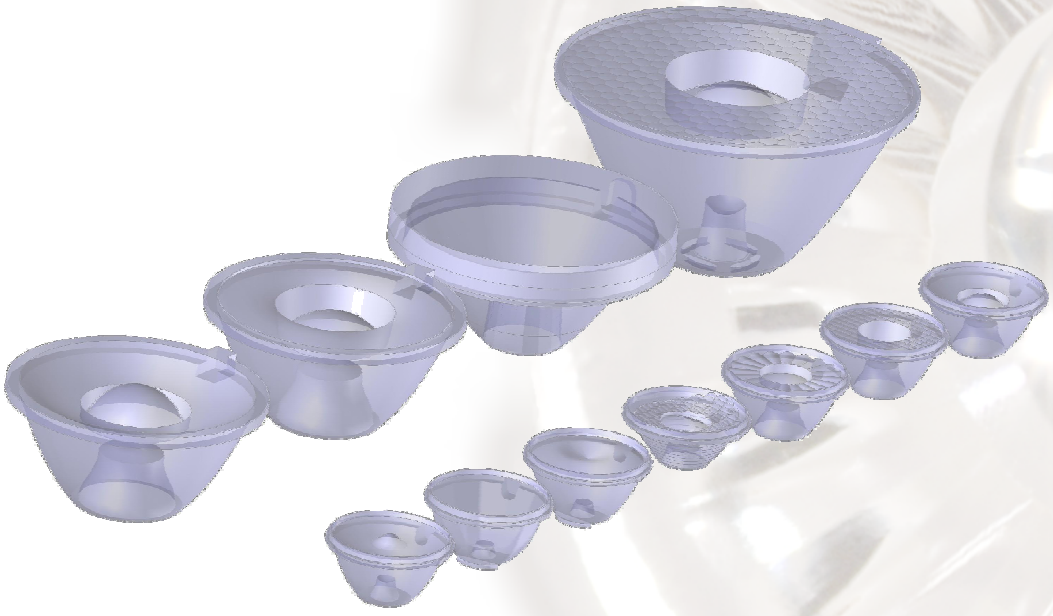
32 mm : LLC15M, LLC05M, LLC15W,LLC15E
35 mm : LLC17N

Secondary Optics suitable with CREE CXA 1304

DATASHEET

LednLight, a high performance LED collimator series, for all your high power LEDs lighting applications



Benefits of the LednLight product range:

- Innovative and unique design, which allows you to use most existing LEDs references
- Homogeneous light distribution, resulting from software optimization and quality polymer
- Available with mechanical holders and adhesive option for ease of use and production
- Ready to use and easy integration into a cluster part.

GAGGIONE SAS – 3, Rue de la Rolland – 01460 Montréal la Cluse – France
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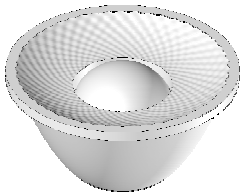
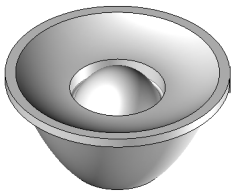
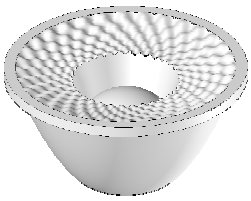
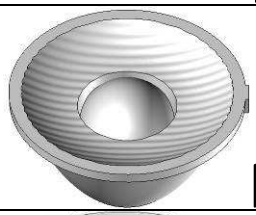
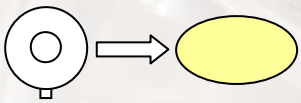
LednLight 32& 35mm to be used with CREE CXA 1304

Optical characteristics, overview table

Name of the Part	Used with	Half-width at 50% from max in degrees +/-	Half-width at 10% from max in degrees +/-	Efficacy Cd/Lm	Holders and Options
 LLC15M	**CREE CXA 1304**	9.6	17.2	6.4	Holder using screws
 LLC05M	**CREE CXA 1304**	11.4	23.0	3.6	
 LLC15W	**CREE CXA 1304**	16.3	28.4	2.2	
 LLC15E	**CREE CXA 1304**	8.5 v / 10.2 h	15.5 v / 18.9 h	6.7	
					
 LLC17N	**CREE CXA 1304**	8.2	18.1	7.1	no

Angle Tolerance +/-8% // Values are subject to change without prior notice.

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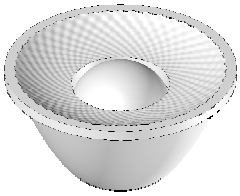
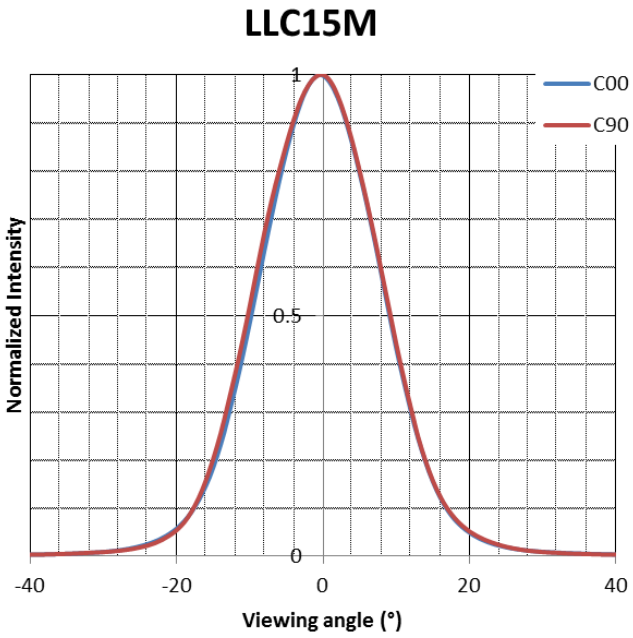
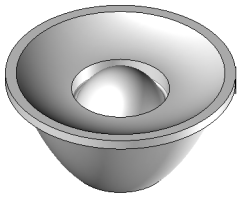


Optical characteristics and intensity distribution
Collimator LLC15M - CREE CXA1304

Measurements done with
Ledgon 100 photogoniometer

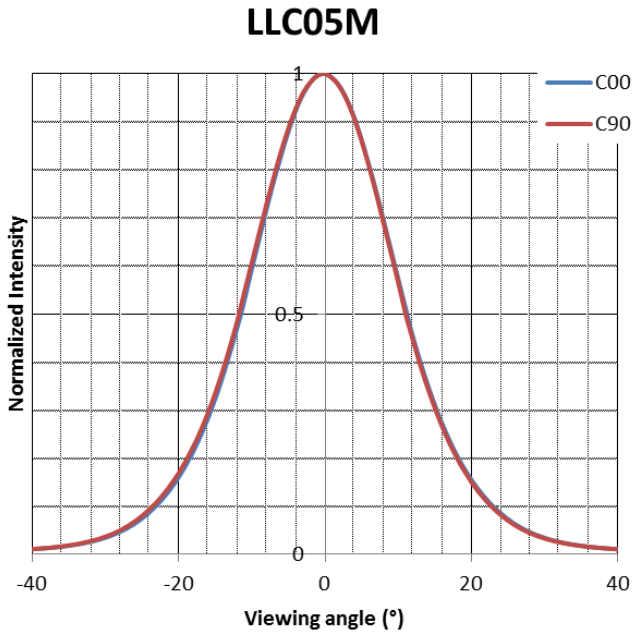


- **CREE CXA 1304**@100 mA
- Medium circular beam
- Efficiency in candelas per lumen :6.4 cd/lm
- Half-angle at 50% from maximum 9.6°
- Half-angle at 10% from maximum 17.2°
- Available with dedicated holder (LLH02AAB00) fastening using M3 screws.



Optical characteristics and intensity distribution
Collimator LLC05M - CREE CXA1304

Measurements done with
Ledgon 100 photogoniometer



- **CREE CXA 1304**@100 mA
- Medium circular beam
- Efficiency in candelas per lumen : 3.6 cd/lm
- Half-angle at 50% from maximum 11.4°
- Half-angle at 10% from maximum 23.0°
- Available with dedicated holder (LLH02AAB00) fastening using M3 screws

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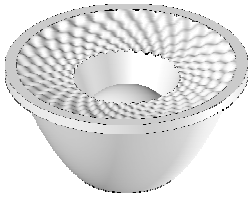
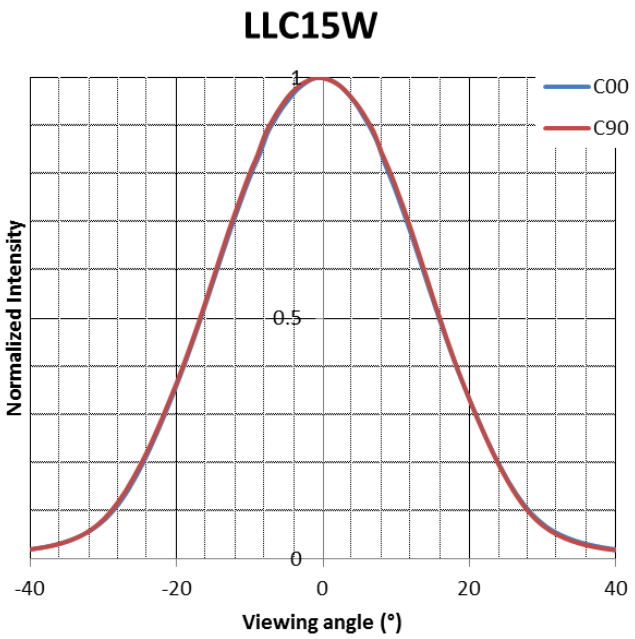
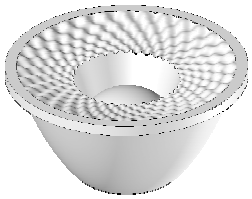


Optical characteristics and intensity distribution
Collimator LLC15W - CREE CXA1304

Measurements done with
Ledgon 100 photogoniometer

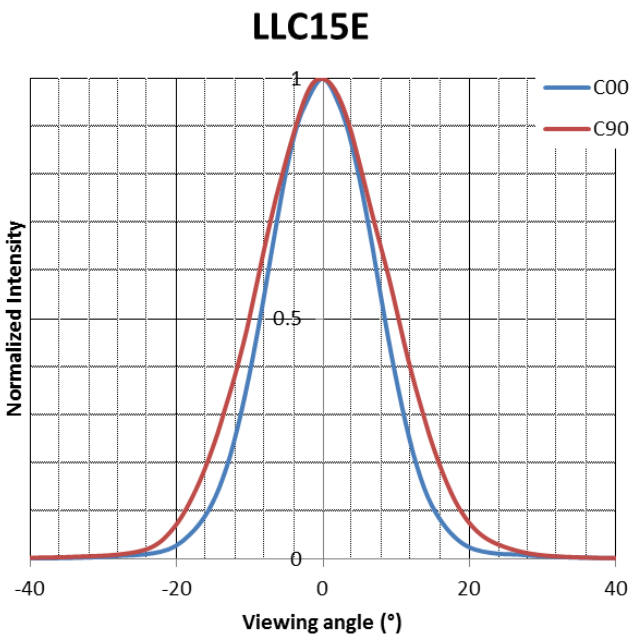


- **CREE CXA 1304**@100 mA
- Wide circular beam
- Efficiency in candelas per lumen :
  2.2 cd/lm
- Half-angle at 50% from maximum 16.3°
- Half-angle at 10% from maximum 28.4°
- Available with dedicated holder (LLH02AAB00) fastening using M3 screws



Optical characteristics and intensity distribution
Collimator LLC15E - CREE CXA1304

Measurements done with
Ledgon 100 photogoniometer



- **CREE CXA 1304**@100 mA
- Elliptical beam
- Efficiency in candelas per lumen :
  6.7 cd/lm
- Half-angle at 50% from maximum 8.5 v / 10.2 h °
- Half-angle at 10% from maximum 15.5 v / 18.9 h°
- Available with dedicated holder (LLH02AAB00) fastening using M3 screws

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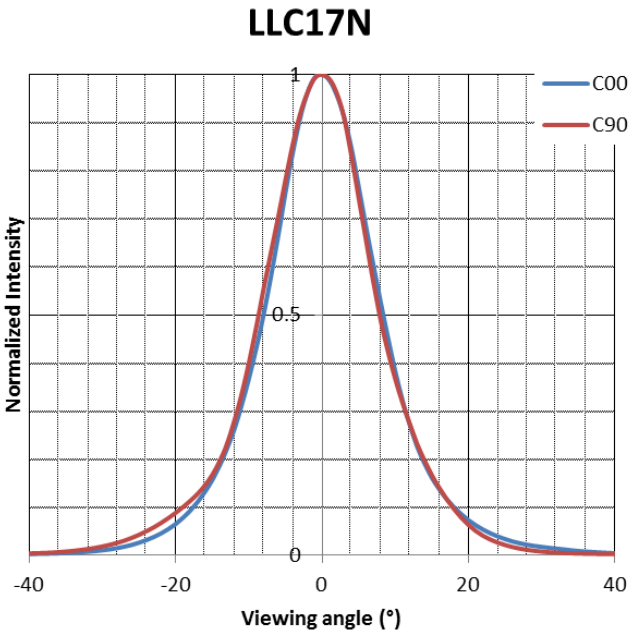
Optical characteristics and intensity distribution
Collimator LLC17N - CREE CXA1304

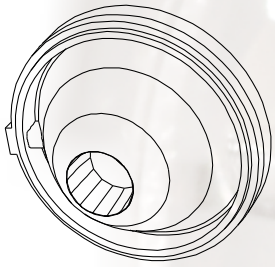
Measurements done with
Ledgon 100 photogoniometer

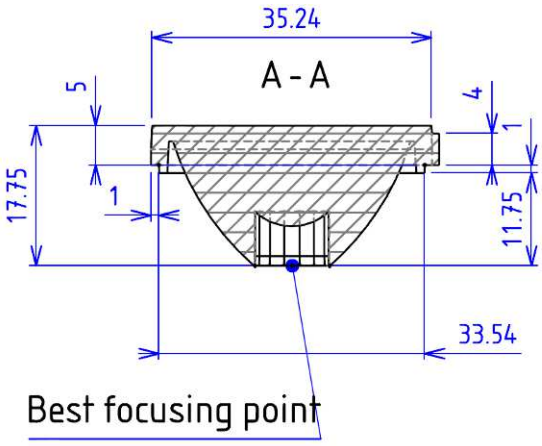


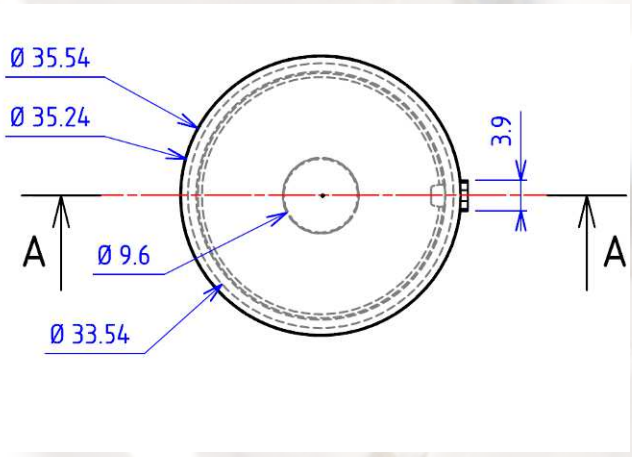
- **CREE CXA 1304**@100 mA
- Narrow circular beam
- Efficiency in candelas per lumen : 7.1 cd/lm
- Half-angle at 50% from maximum 8.2°
- Half-angle at 10% from maximum 18.1°

Mechanical characteristics LLC17N
without holder, dimensions are in millimeters

General tolerance +/-0.15 mm (standard NF T 58 -000 cat. 4, reduced class)







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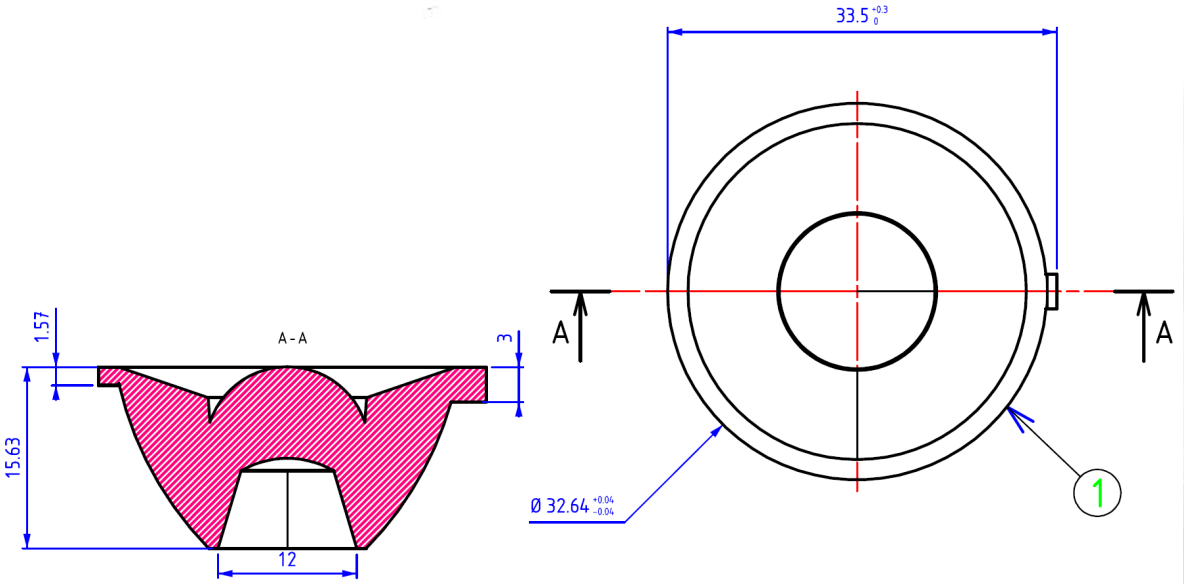
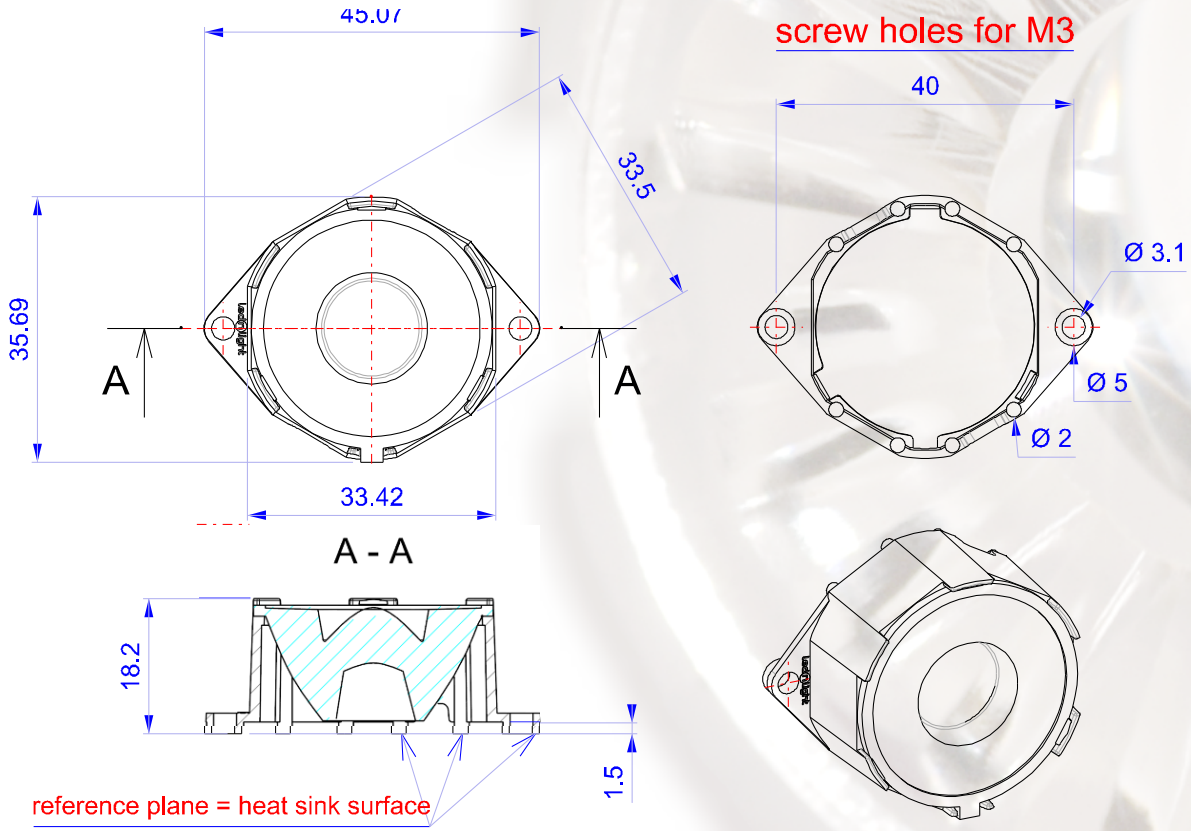
Mechanical characteristics LLC05x
Without holder, dimension in millimetres
General tolerance +/-0.15 mm (standard NF T 58 -000 cat. 4, reduced class)



Mechanical characteristics LLH02AAB00
dimension in millimetres General tolerance +/-0.15 mm (standard NF T 58 -000 cat. 4, reduced class)



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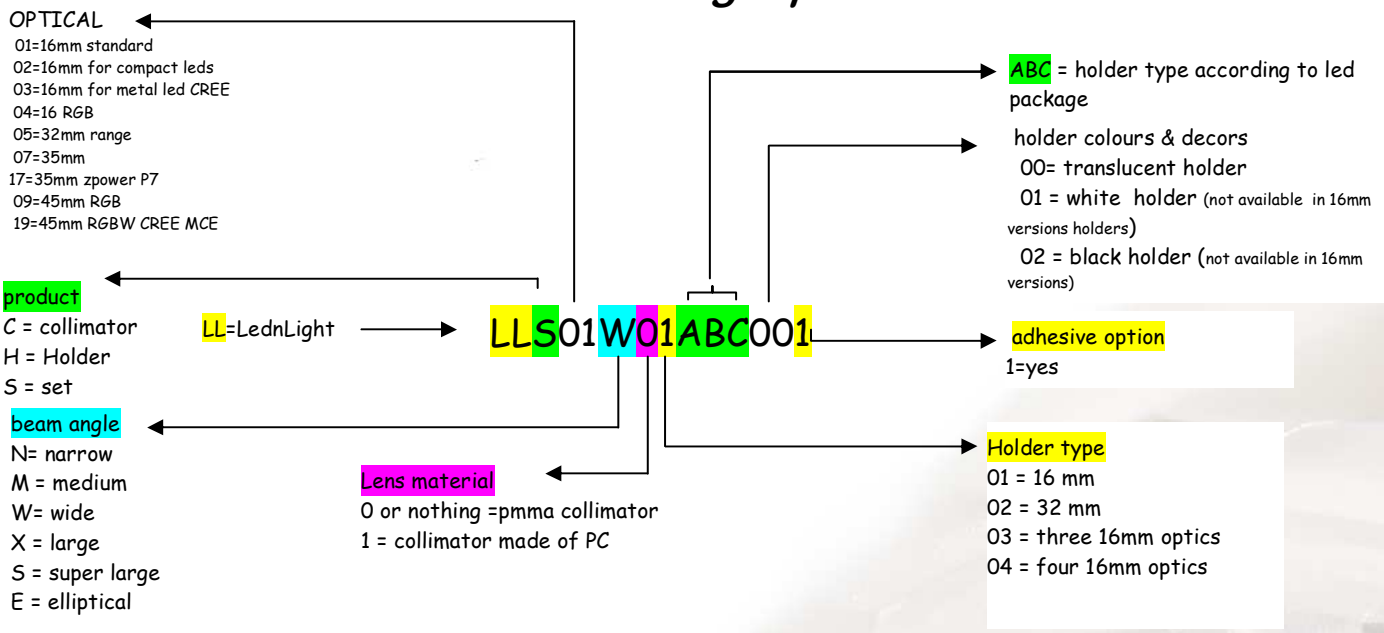
Code form of LednLight products



Ordering code for LednLight series to be used with CREE CXA1304

32 & 35 mm range

Collimateur / Holder	Ø 32mm – Medium	Ø 32mm – Medium	Ø 32mm – wide	Ø 35mm – narrow
No holder	LLC15M	LLC05M	LLC15W	LLC17N
(1) LLH02AAB00 Ø 32mm	LLS15M02AAB00	LLS05M02AAB00	LLS05M02AAB00	

(1)
Holder reference can be adapted depending of PCB height

See available holders using screw

http://www.lednlight.com/downloads_lnl/LLH02AAx.pdf

SET=COLLIMATOR+HOLDER

See also our reflector range for CXA1304:

http://www.lednlight.com/downloads_lnl/lednlight_en_CREE_CXA_1304_REFLECTOR.pdf

FAQ

Q – Of what material are Lednlight collimators made of ? Where are they manufactured ?
A – Lednlight collimators are made of a high purity grade PMMA, which guarantees a maximum luminous efficiency. Holders are made of PC. All our products are Made in France.

Q – What is Lednlight collimators luminous efficiency?
A – Luminous efficiency depends on the collimator itself and on the LED. It is between 85% and 93%.

Q – I would like to use a specific LED which is not mentioned in this datasheet. Is it possible?
A – LednLight collimators have a versatile design that can work with most LEDs references, allowing the user to choose the LED that best fits his needs. If your LED isn't mentioned in this datasheet, you can contact our engineering team which will give you more information.

Q – How can we position the LED compared to the collimator?
A – Mechanical drawings in pages 5~6 indicate the exact location of the focal point for each LednLight collimator. All you have to do is to put the LED chip at the focal point location.

Q – Can you provide CAD files of LednLight collimators?
A – The optical design is confidential, however CAD files of holder are available. You can upload them on our website. IES files and ray sets are also available on request.

Q – My project is very specific and custom. Lednlight collimator performances do not fit completely to my technical requirements.
A – Our engineers can design a custom version of the Lednlight collimators just for you, that will best fit your technical requirements, and at a very competitive price. Please do not hesitate to contact us to discuss your specifications.

Q – I would like to ask you a question which is not in the FAQ. How can I contact you?
A – Please visit our website : http://www.gaggione.com or contact us by phone :
+33 (0) 4 74 76 12 66 or by email : lednlight@gaggione.com