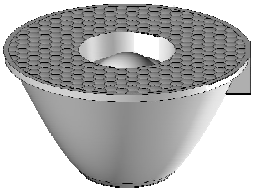
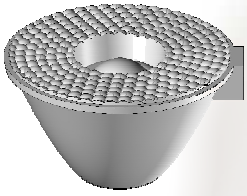
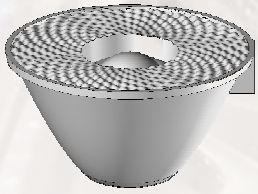
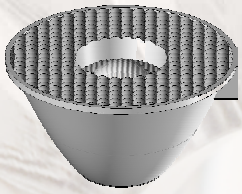
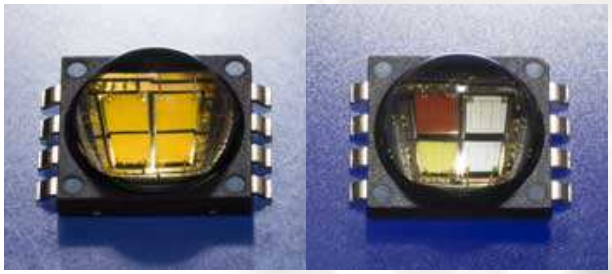
LLC05M & LLC05W

LLC19R

LLC19N – LLC19M – LLC19W – LLC19E

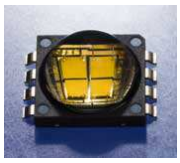


MCE WHITE / MCE COLOR

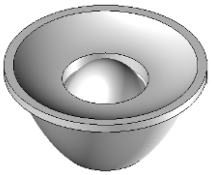
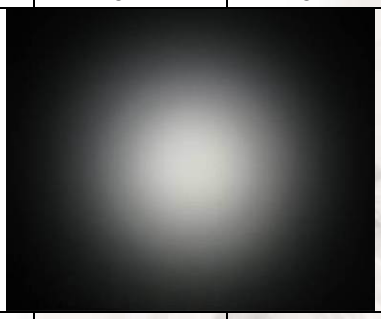
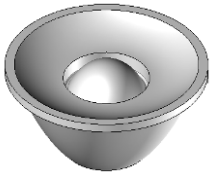
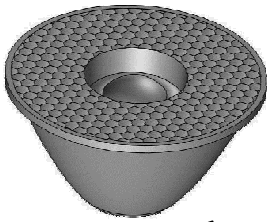
Lednlight, a high performance LED collimator series,
for all your high power LEDs lighting applications

GAGGIONE SAS – 3, Rue de la Rolland – 01460 Montréal la Cluse – France
Tel : +33 (0)4 74 76 12 66 – Fax : +33 (0)4 74 76 76 77 – E-mail : lednlight@gaggione.com – Web : www.lednlight.com

LednLight used with CREE MCE White

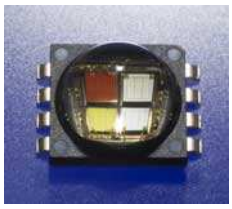


Optical Characteristics, overview table

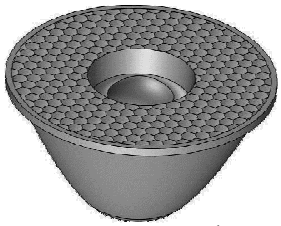
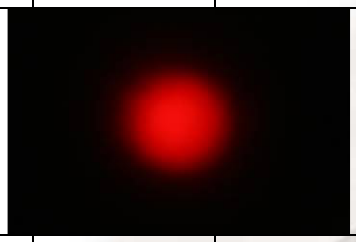
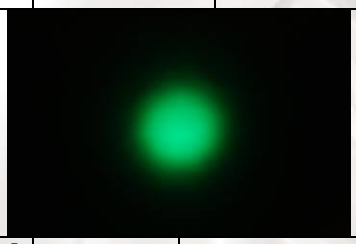
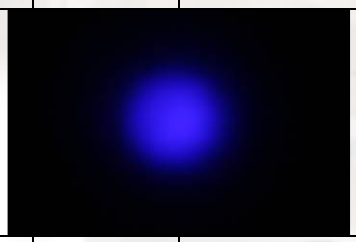
Collimator	LED	half-angle at 50% (°)	half-angle at 10% (°)	Efficacity Cd/Lm	Holder & options
 LLC05M	CREE MCE	9.4	19.7	5.0	LLH02AAB00
					
 LLC05W	CREE MCE	11.8	22.5	3.6	LLH02AAB00
 LLC19N	CREE MCE	5.1	10.3	19.0	No
LLC19R	CREE MCE	4.4	8.2	26.9	No

GAGGIONE SAS – 3, Rue de la Rolland – 01460 Montréal la Cluse – France
Tel : +33 (0)4 74 76 12 66 – Fax : +33 (0)4 74 76 76 77 – E-mail : lednlight@gaggione.com – Web : www.lednlight.com

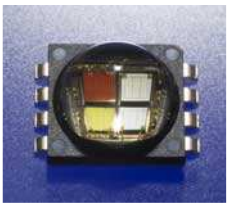
LednLight used with CREE MCE Color



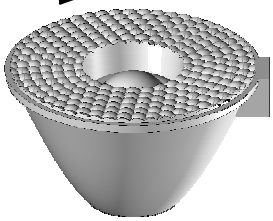
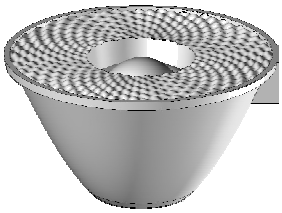
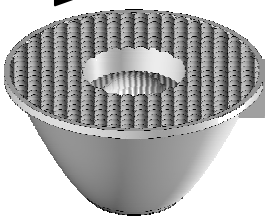
Optical Characteristics, overview table

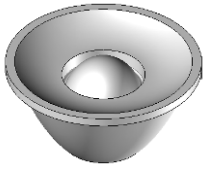
Collimator	*LED*	*half-angle at 50% (°)*	*half-angle at 10% (°)*	*Efficacity Cd/Lm*	*Holder & options*
 LLC19N EXTREME NARROW	CREE MCE RGBW RED	5.1	9.7	20.5	No
					
	CREE MCE RGBW GREEN	5.7	9.9	17.9	
					
	CREE MCE RGBW BLUE	5.2	10.0	18,3	
					
	CREE MCE RGBW WHITE	5.2	9.6	21.0	
	CREE MCE RGBW RGBW	5.5	9.8	19.3	

LednLight used with CREE MCE Color



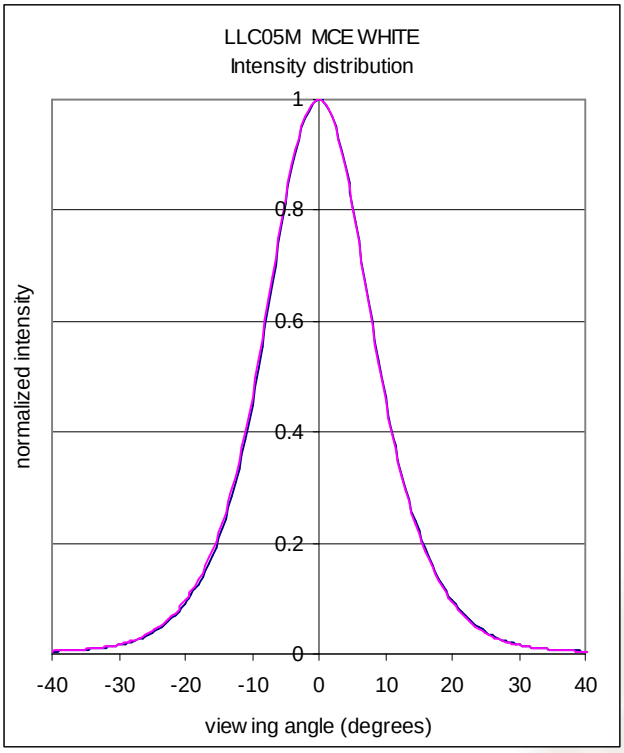
Optical Characteristics, overview table

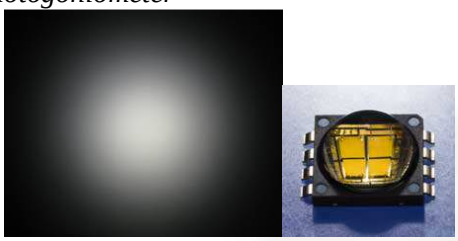
Collimator	*LED*	*half-angle at 50% (°)*	*half-angle at 10% (°)*	*Efficacity Cd/Lm*	*Holder & options*
LLC19M  MEDIUM >BEAM	CREE MCE RGBW RGBW	10.3	20.8	7	No
	See page 10				
LLC19W  WIDE >BEAM	CREE MCE RGBW RGBW	17.1	28.6	2.1	
	See page 11				
LLC19E  ELLIPTICAL >BEAM	CREE MCE RGBW RGBW	5.3 /19.6	10.2v/ 30.1h	5.4	No



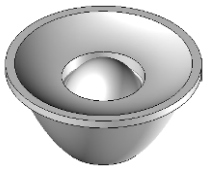
Optical characteristics and intensity distribution
Collimator LLC05M – CREE MCE WHITE

Measurements done with
Ledgon 100 photogoniometer



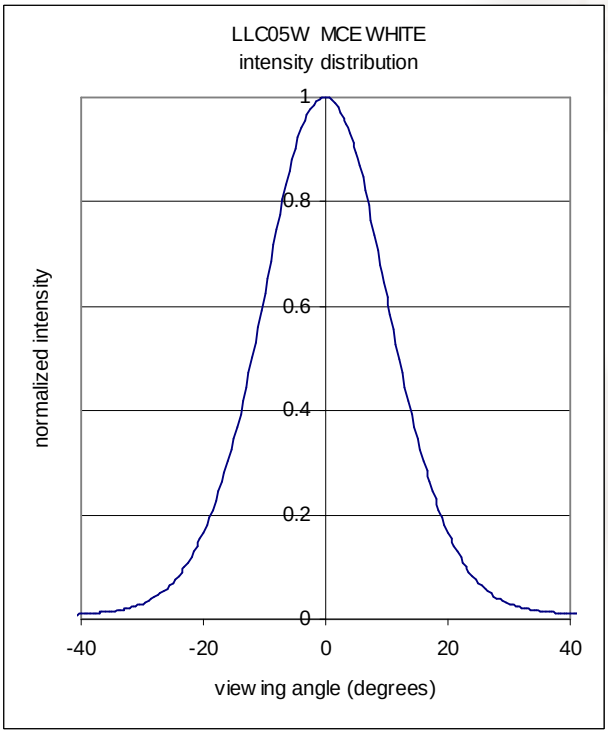


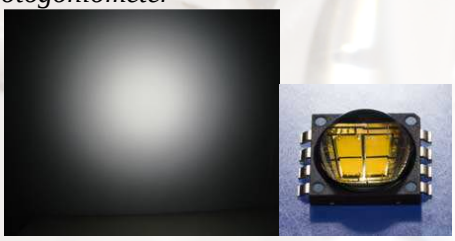
- CREE MCE white @350mA
  ref MCE4WT-A2-0000-000JE4
- Medium circular beam
- Efficiency in candelas per lumen : 5 cd/lm
- Half-angle at 50% from maximum 9.4°
- Half-angle at 10% from maximum 19.7°
- AVAILABLE with specific holder ref LLH02AAB00



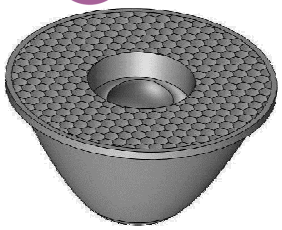
Optical characteristics and intensity distribution
Collimator LLC05W- CREE MCE WHITE

Measurements done with
Ledgon 100 photogoniometer



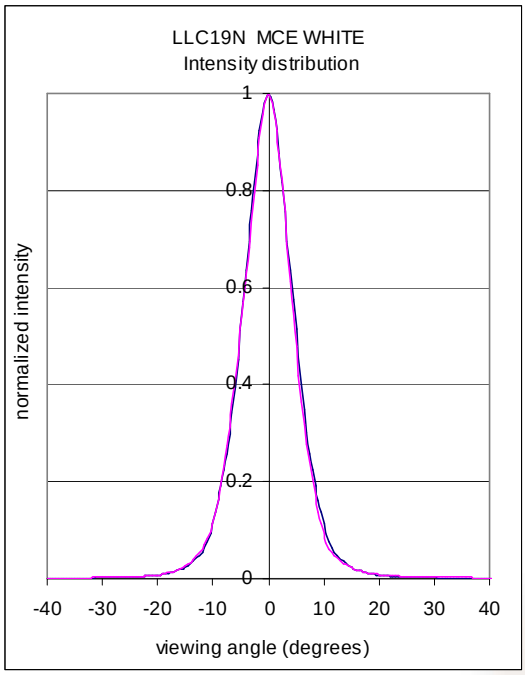


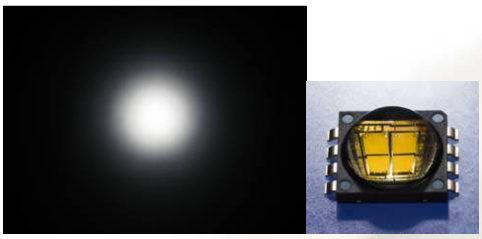
- CREE MCE white @350mA
  ref MCE4WT-A2-0000-000JE4
- Wide circular beam
- Efficiency in candelas per lumen : 3.6 cd/lm
- Half-angle at 50% from maximum 11.8°
- Half-angle at 10% from maximum 22.5°
- AVAILABLE with specific holder ref LLH02AAB00



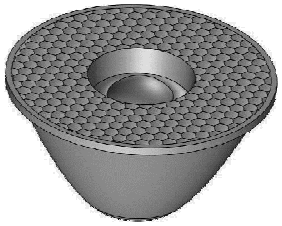
Optical characteristics and intensity distribution
Collimator LLC19N – CREE MCE WHITE

Measurements done with
Ledgon 100 photogoniometer



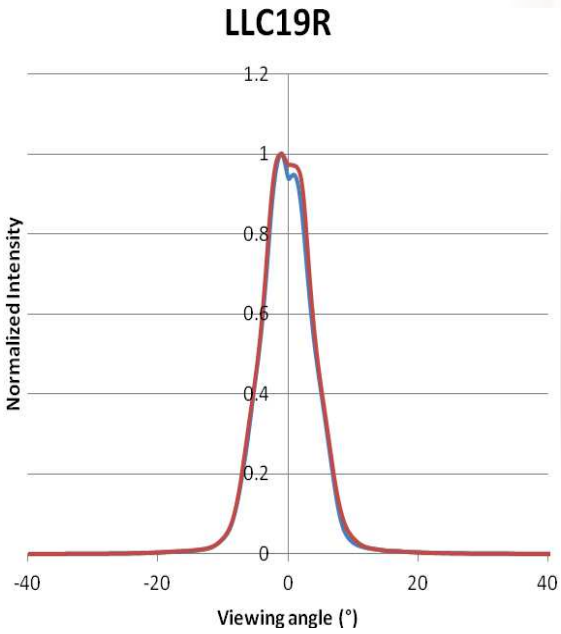


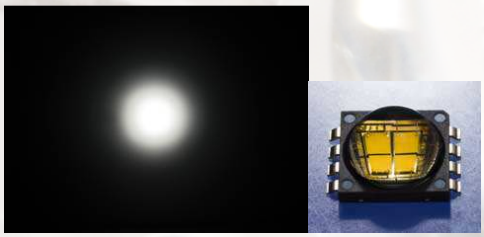
- CREE MCE White @350mA
  ref MCE4WT-A2-0000-000JE4
- Narrow circular beam
- Efficiency in candelas per lumen : 19.0 cd/lm
- Half-angle at 50% from maximum 5.1°
- Half-angle at 10% from maximum 10.3°



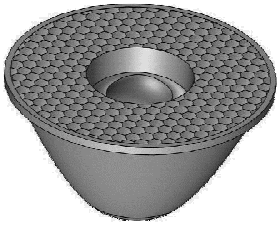
Optical characteristics and intensity distribution
Collimator LLC19R – CREE MCE WHITE

Measurements done with
Ledgon 100 photogoniometer



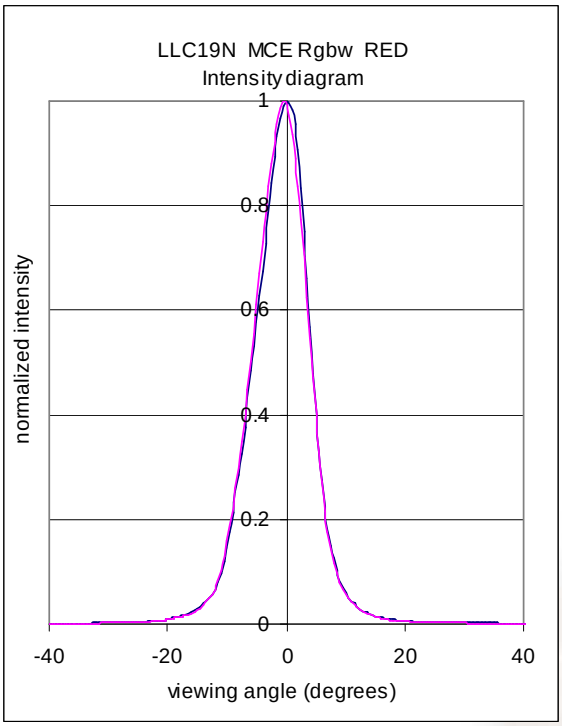


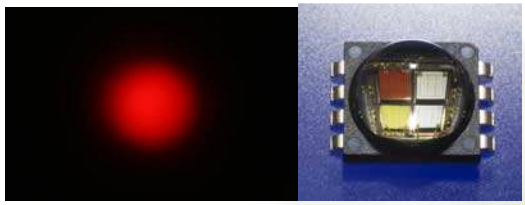
- CREE MCE White @350mA
  ref MCE4WT-A2-0000-000JE4
- Narrow circular beam
- Efficiency in candelas per lumen : 26.9cd/lm
- Half-angle at 50% from maximum 4.4°
- Half-angle at 10% from maximum 8.2°



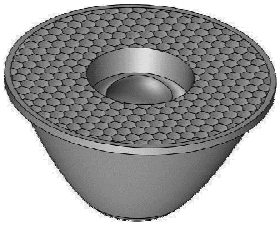
Optical characteristics and intensity distribution
Collimator LLC19N – CREE MCE RED

Measurements done with
Ledgon 100 photogoniometer



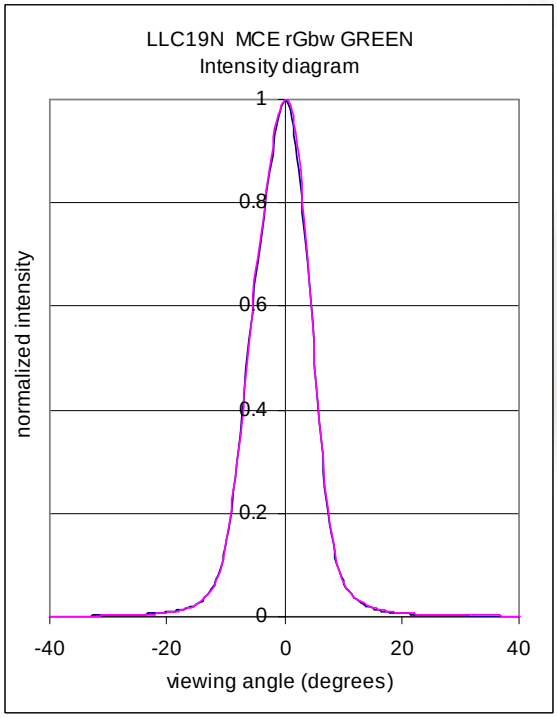


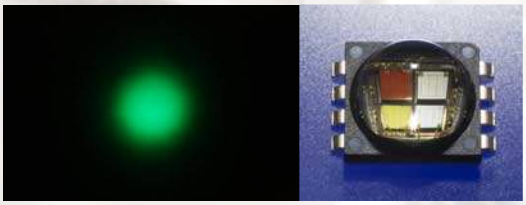
- CREE MCE color red die supplied@350mA
- Narrow circular beam
- Efficiency in candelas per lumen : 20.5 cd/lm
- Half-angle at 50% from maximum 5.1°
- Half-angle at 10% from maximum 9.7°



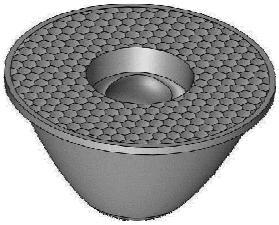
Optical characteristics and intensity distribution
Collimator LLC19N- CREE MCE GREEN

Measurements done with
Ledgon 100 photogoniometer



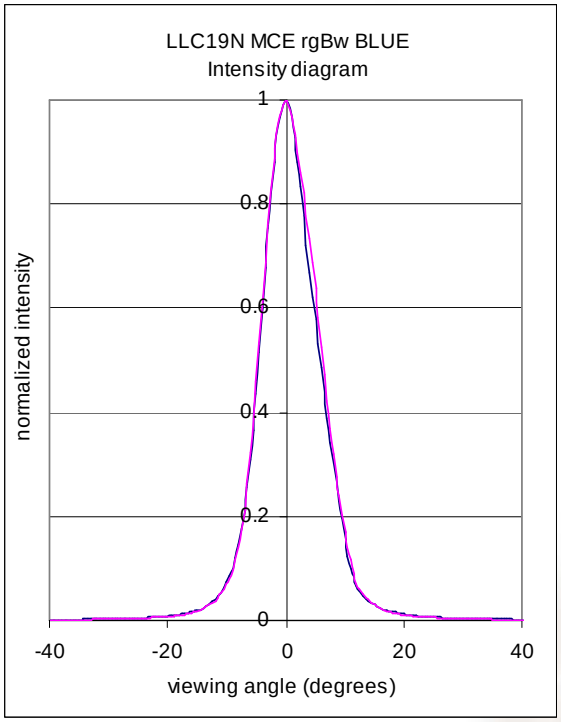


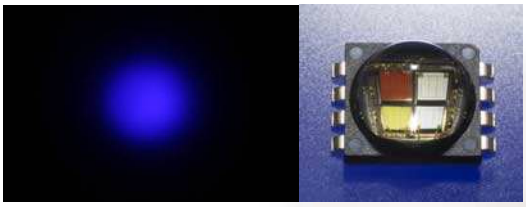
- CREE MCE color green die supplied@350mA
- Narrow circular beam
- Efficiency in candelas per lumen : 17.9 cd/lm
- Half-angle at 50% from maximum 5.7°
- Half-angle at 10% from maximum 9.9°



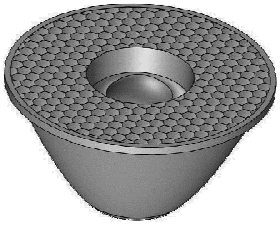
Optical characteristics and intensity distribution
Collimator LLC19N – CREE MCE BLUE

Measurements done with
Ledgon 100 photogoniometer



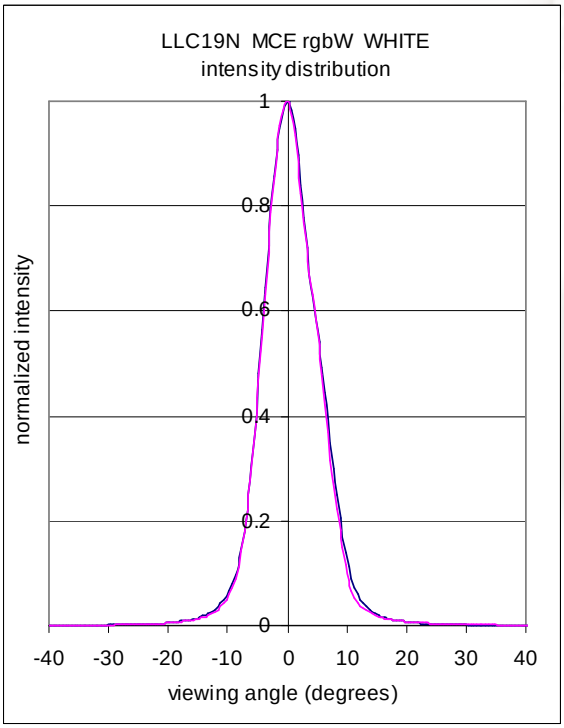


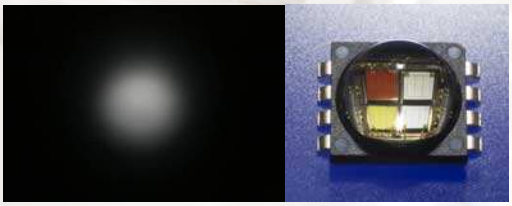
- CREE MCE color Blue die supplied @350mA
- Narrow circular beam
- Efficiency in candelas per lumen : 18,3 cd/lm
- Half-angle at 50% from maximum 5.2°
- Half-angle at 10% from maximum 10.0°



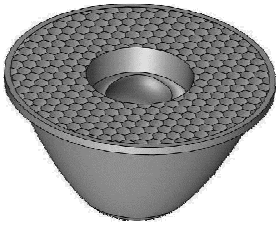
Optical characteristics and intensity distribution
Collimator LLC19N- CREE MCE WHITE

Measurements done with
Ledgon 100 photogoniometer



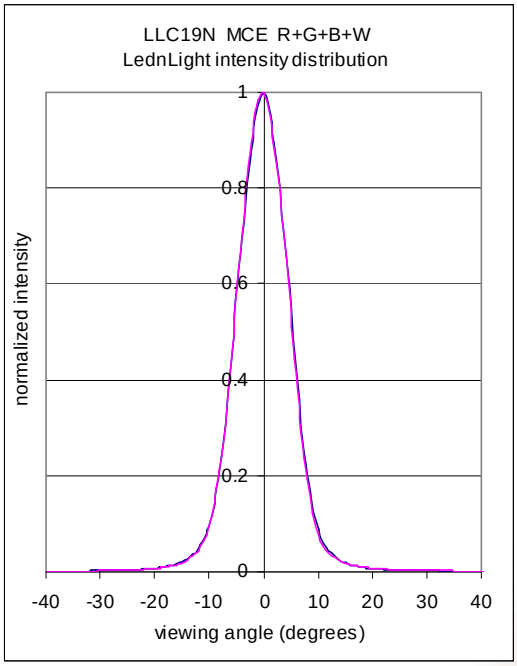


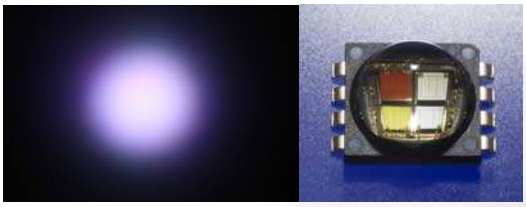
- CREE MCE color white die supplied @350mA
- Narrow circular beam
- Efficiency in candelas per lumen : 21.0 cd/lm
- Half-angle at 50% from maximum 5.2°
- Half-angle at 10% from maximum 9.6°



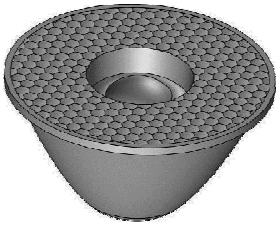
Optical characteristics and intensity distribution
Collimator LLC19N – CREE MCE RGBW

Measurements done with
Ledgon 100 photogoniometer



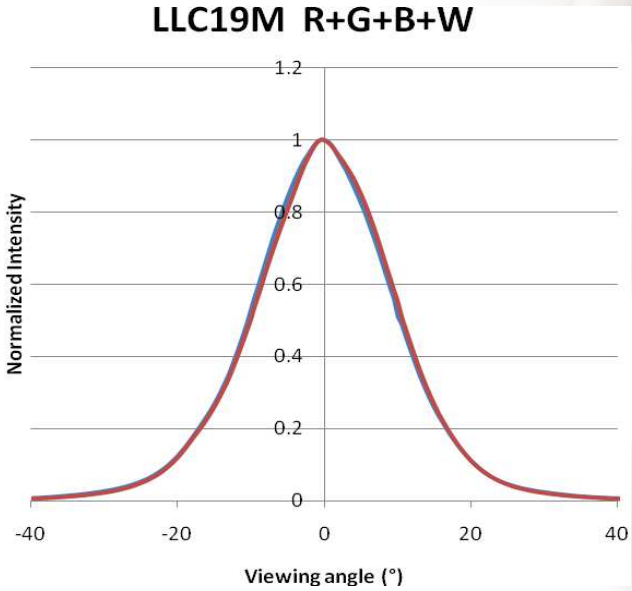


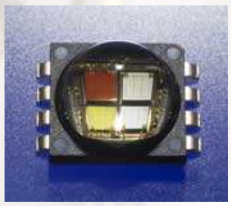
- CREE MCE color all color dies Supplied@350mA
- Narrow circular beam
- Efficiency in candelas per lumen : 19.3 cd/lm
- Half-angle at 50% from maximum 5.5°
- Half-angle at 10% from maximum 9.8°



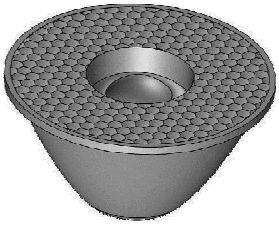
Optical characteristics and intensity distribution
Collimator LLC19M – CREE MCE RGBW

Measurements done with
Ledgon 100 photogoniometer



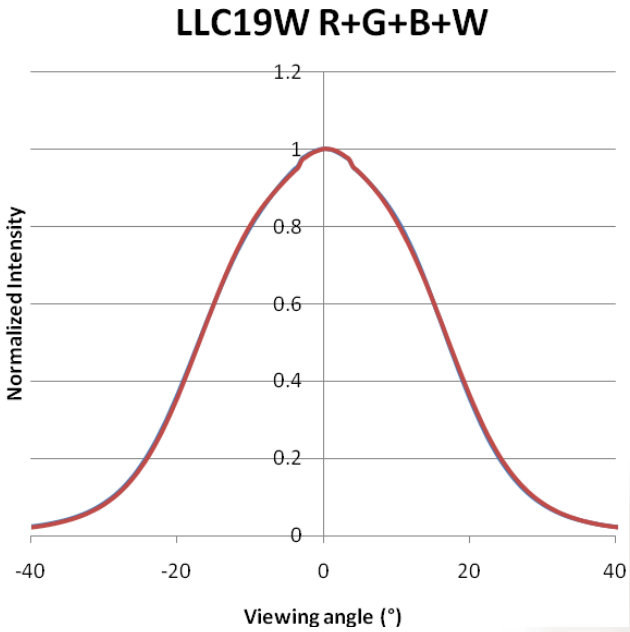


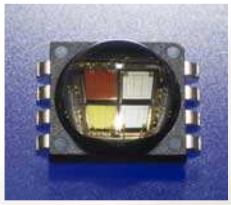
- CREE MCE color all color dies Supplied@350mA
- Narrow circular beam
- Efficiency in candelas per lumen : 7 cd/lm
- Half-angle at 50% from maximum 10.3°
- Half-angle at 10% from maximum 20.8°



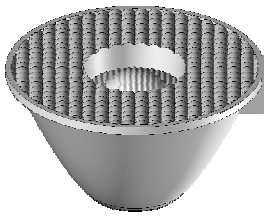
Optical characteristics and intensity distribution
Collimator LLC19W – CREE MCE RGBW

Measurements done with
Ledgon 100 photogoniometer



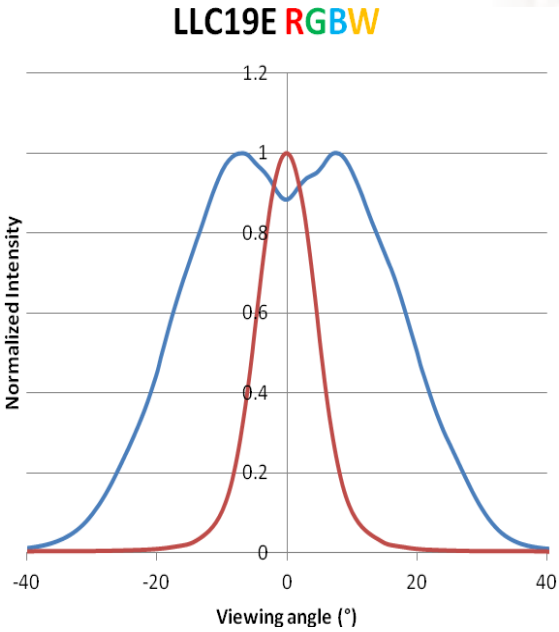


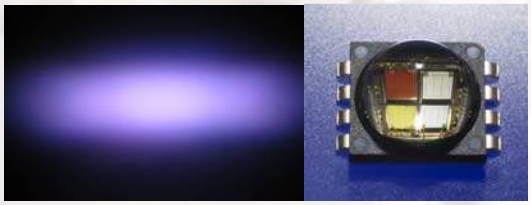
- CREE MCE color all color dies Supplied@350mA
- Narrow circular beam
- Efficiency in candelas per lumen : 2.1 cd/lm
- Half-angle at 50% from maximum 17.1°
- Half-angle at 10% from maximum 28.6°



Optical characteristics and intensity distribution
Collimator LLC19E – CREE MCE RGBW

Measurements done with
Ledgon 100 photogoniometer



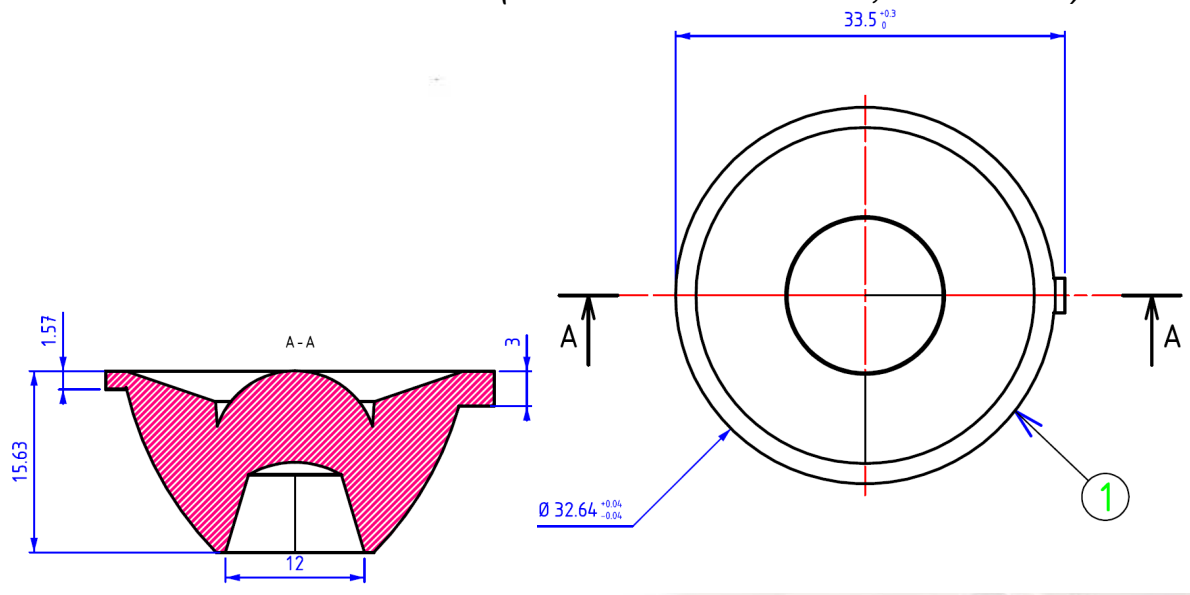


- CREE MCE color all colored dies Supplied@350mA
- Narrow circular beam
- Efficiency in candelas per lumen : 5.4 cd/lm
- Half-angle at 50% from maximum 5.3 /19.6°
- Half-angle at 10% from maximum 10.2v/ 30.1h°

Mechanical characteristics LLC05N LLC05M LLC05W

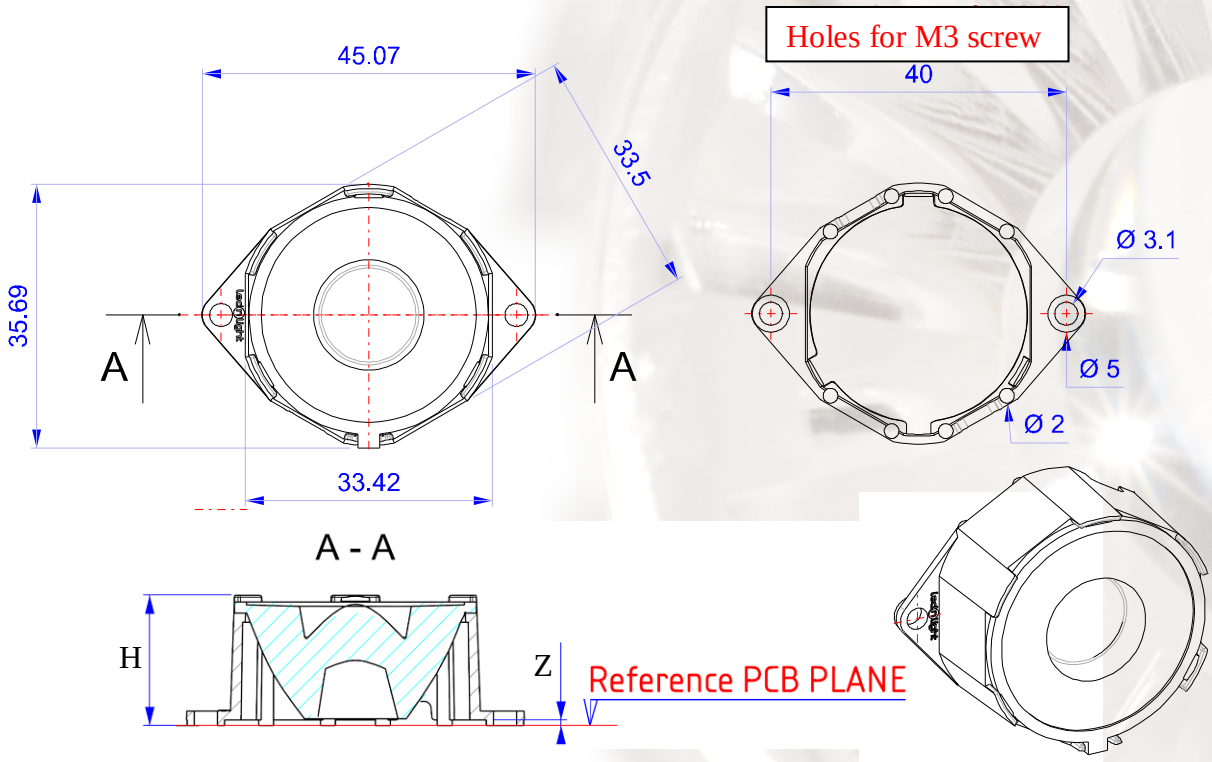
Without holder, dimension is in millimetres

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



Mechanical characteristics LLH02AAx
32 mm holder, dimensions are in millimeters

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

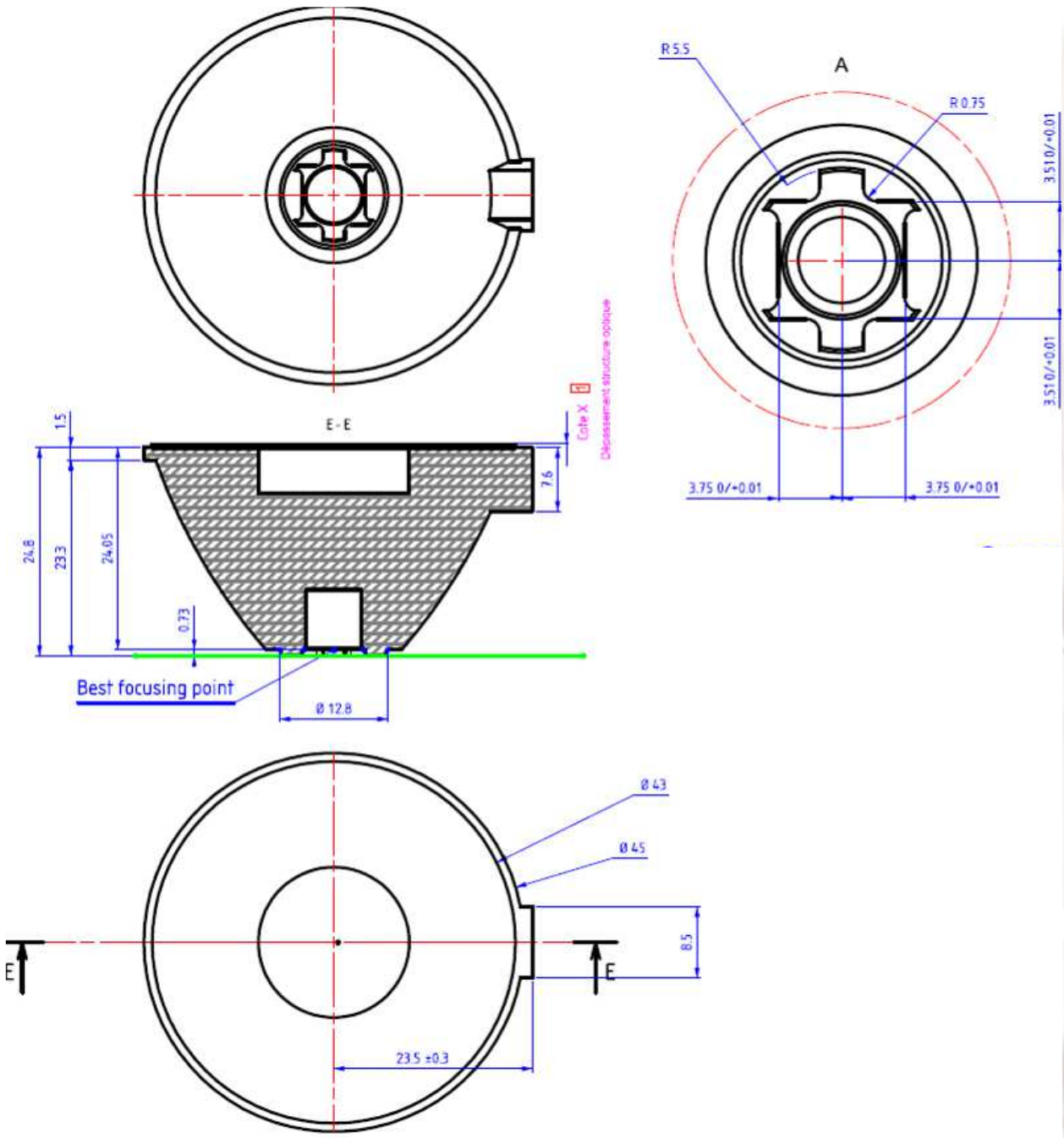


The LLH02AAx holder is available in 4 versions :

Please visit

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

Mechanical characteristics
LLC19N, LLC19M, LLC19W, LLC19E, LLC19R
Without holder, all dimensions are in millimeters
General tolerance +/-0.15 mm (standard NF T 58 -000 cat. 4, reduceduced class)



Code form of LednLight products

OPTICAL
01=16mm standard
02=16mm for compact leds
12=16mm for compact leds V2
03=16mm for metal led CREE
04=16 RGB
05=32mm range
07=35mm
17=35mm Zower P7
19=45mm RGBW CREE MCE
49 =45mm RGBW Ostar SMT

ABC = holder type according to led package

holder colours & decors
00= translucent holder
01 = white holder (not available in 16mm versions holders)
02 = black holder (not available in 16mm versions)

product
C = collimator
H = Holder
S = set

LL=LednLight

LLS01W01ABC001

adhesive option
1=yes

beam angle
N= narrow
M = medium
W= wide
X = large
S = super large
E = elliptical
Z= Zoom

Lens material
0 or nothing =pmma collimator
1 = collimator made of PC

Holder type
01 = 16 mm
02 = 32 mm
03 = three 16mm optics
04 = four 16mm optics

Ordering code for LednLight series
To be used with CREE MCE

32mm (MCE white only)

Collimator / Holder	Ø 32mm – medium (MCE White only)	Ø 32mm –large (MCE White only)
No holder	LLC05M	LLC05W
With holder 32mm LLH02AAAB00	LLS05M02AAB00	LLS05W02AAB00

45mm (MCE white and color)

Collimator / Holder	Ø 45mm –VERY NARROW (white only)	Ø 45mm –NARROW	Ø 45mm –MEDIUM	Ø 45mm –WIDE	Ø 45mm –ELLIPTIC	Ø 45mm –Zoom Module see specific datasheet on our website
No holder	LLC19R	LLC19N	LLC19M	LLC19W	LLC19E	LLC19Z + LLW19Z

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. If you need high temperature resistance this optical can be made of PC. 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 page 11&12 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.lednlight.com or contact us by phone :
+33 (0) 4 74 76 12 66 or by email : lednlight@gaggione.com