



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



**Ordering number CN12712\_LENA-S**

Family	Lena	FWHM	12 degrees
Type	Reflector	Efficiency	88 %
LED	CLL030	cd/lm	-
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	85.4 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	Ready		

**Ordering number CN12718\_LENA-S-DL**

Family	Lena	FWHM	12 degrees
Type	Reflector	Efficiency	83 %
LED	CLL030	cd/lm	-
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	85.4 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	Ready		

**Ordering number CN12713\_LENA-M**

Family	Lena	FWHM	19 degrees
Type	Reflector	Efficiency	86 %
LED	CLL030	cd/lm	-
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	85.4 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	Ready		

**Ordering number CN12719\_LENA-M-DL**

Family	Lena	FWHM	20 degrees
Type	Reflector	Efficiency	81 %
LED	CLL030	cd/lm	-
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	85.4 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	Ready		

**Ordering number CN12714\_LENA-W**

Family	Lena	FWHM	43 degrees
Type	Reflector	Efficiency	83 %
LED	CLL030	cd/Im	-
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	85.4 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	Ready		

**Ordering number CN12720\_LENA-W-DL**

Family	Lena	FWHM	44 degrees
Type	Reflector	Efficiency	78 %
LED	CLL030	cd/Im	-
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	85.4 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	Ready		

**NOTE: The typical divergence will be changed by different color, chip size and chip position tolerance. The typical total divergence is the full angle measured where the luminous intensity is half of the peak value.**



## PRODUCT DATASHEET

### Lena series

last update 5/7/2012

CITIZEN

#### GENERAL INFORMATION

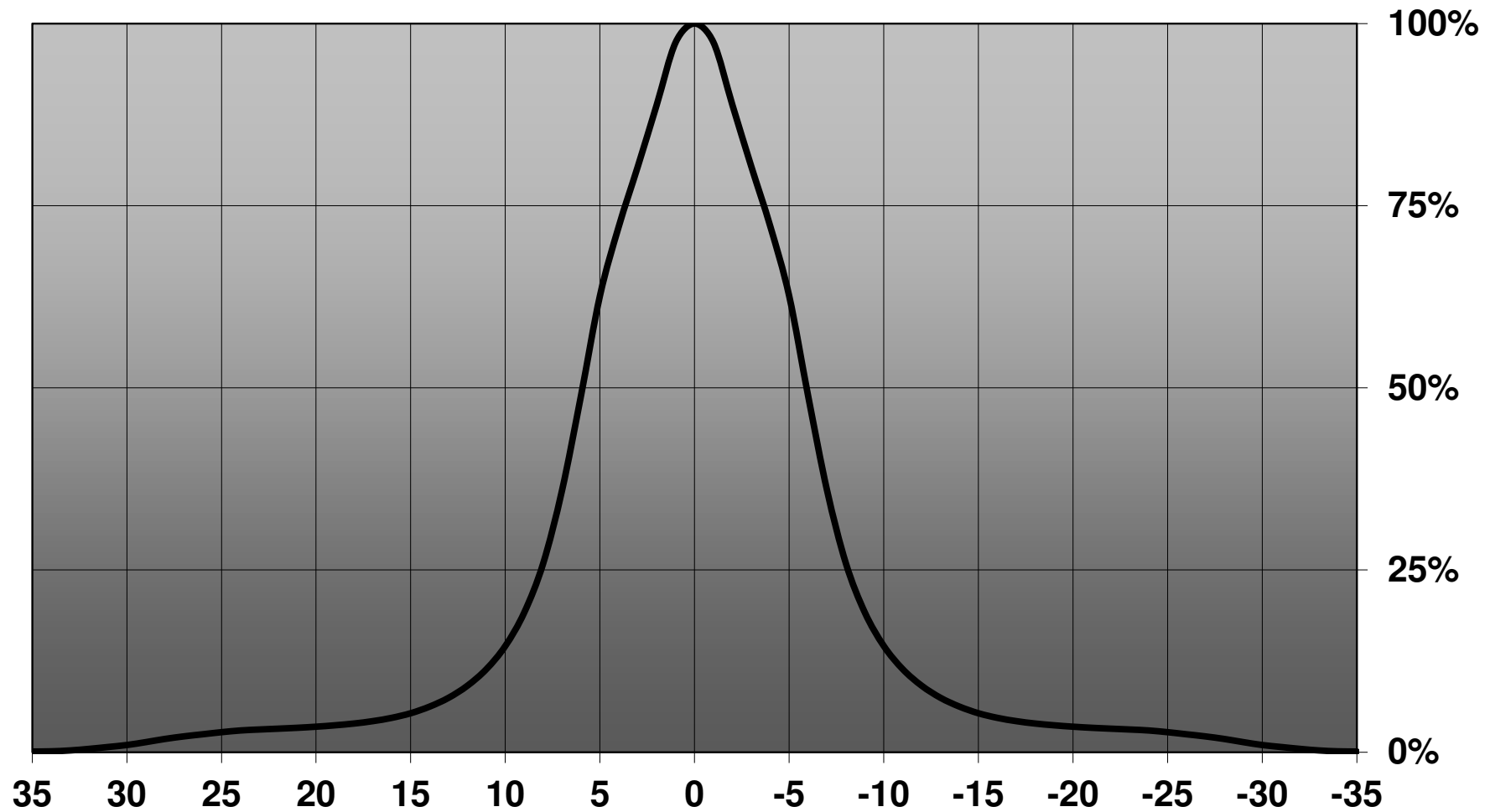
- Product series especially designed & optimized for CLL030 series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PC with high UV and temperature resistance (120 degrees of Celcius / 248 degrees of Fahrenheit). Allows use of high current and temperature conditions.

Please find more information about used materials from below:

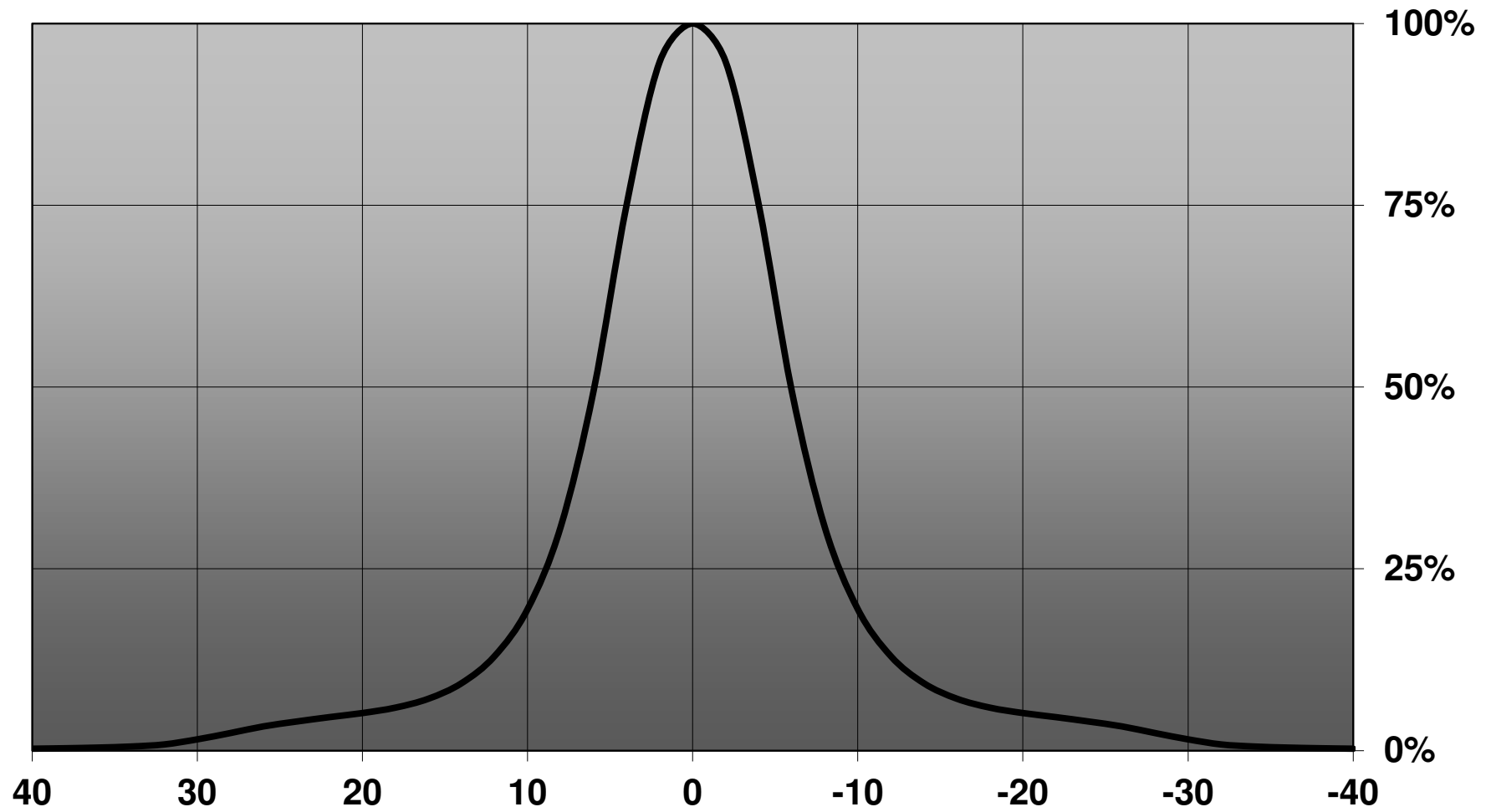
[http://ledil.fi/sites/default/files/Documents/Technical/Material/PC%20Makrolon%202400\\_2407\\_2456\\_2458-UL.pdf](http://ledil.fi/sites/default/files/Documents/Technical/Material/PC%20Makrolon%202400_2407_2456_2458-UL.pdf)

- Reflector is made of aluminium coated PC (120 degrees of Celcius / 248 degrees of Fahrenheit) with protective lacquer (110 degrees of Celcius / 230 degrees of Fahrenheit).
- Optic holder molded by high quality PC material (120 degees of Celcius / 248 degrees of Fahrenheit).

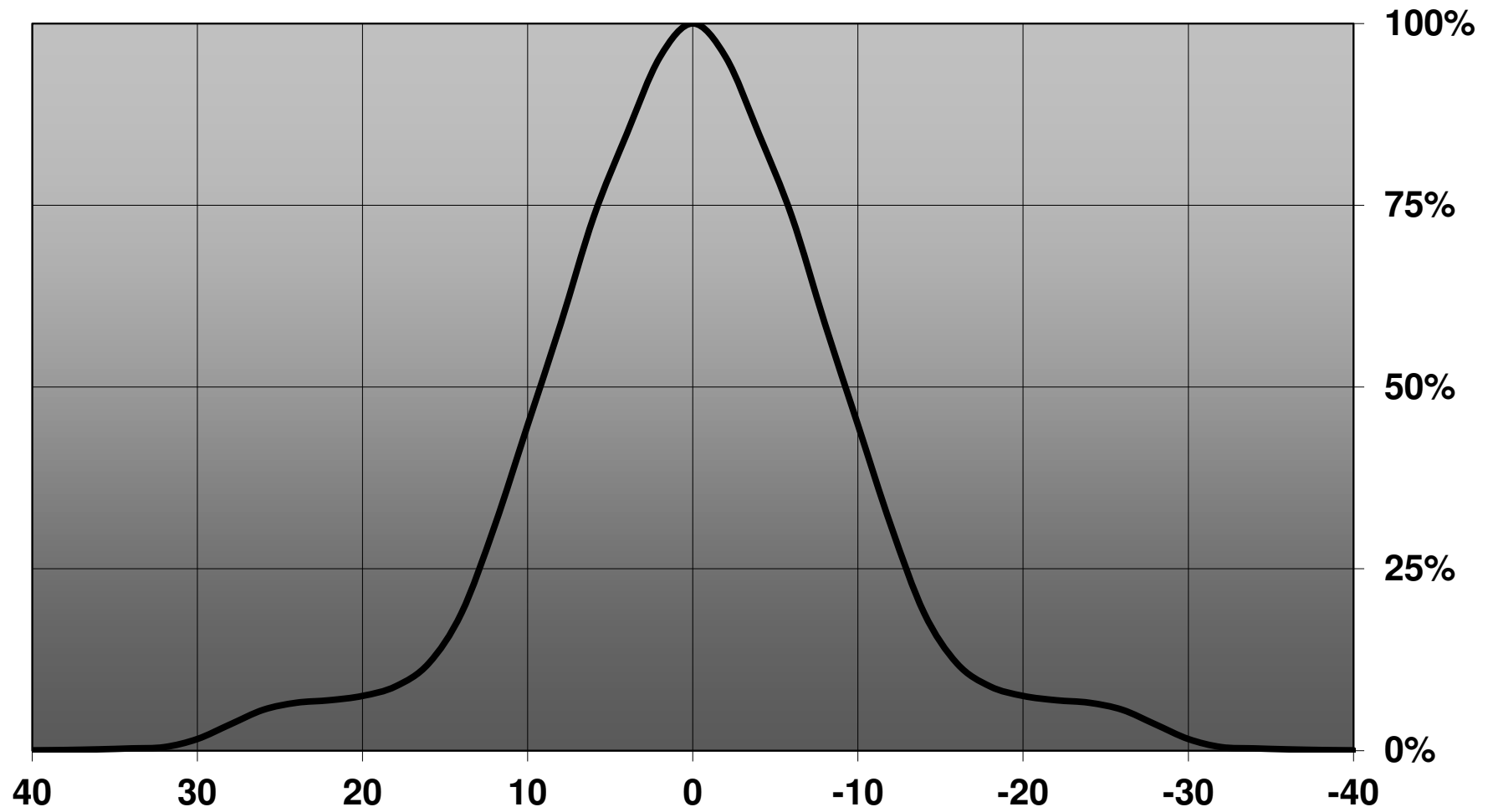
Relative intensity of CN12712\_LENA-S (CLL030-1208)



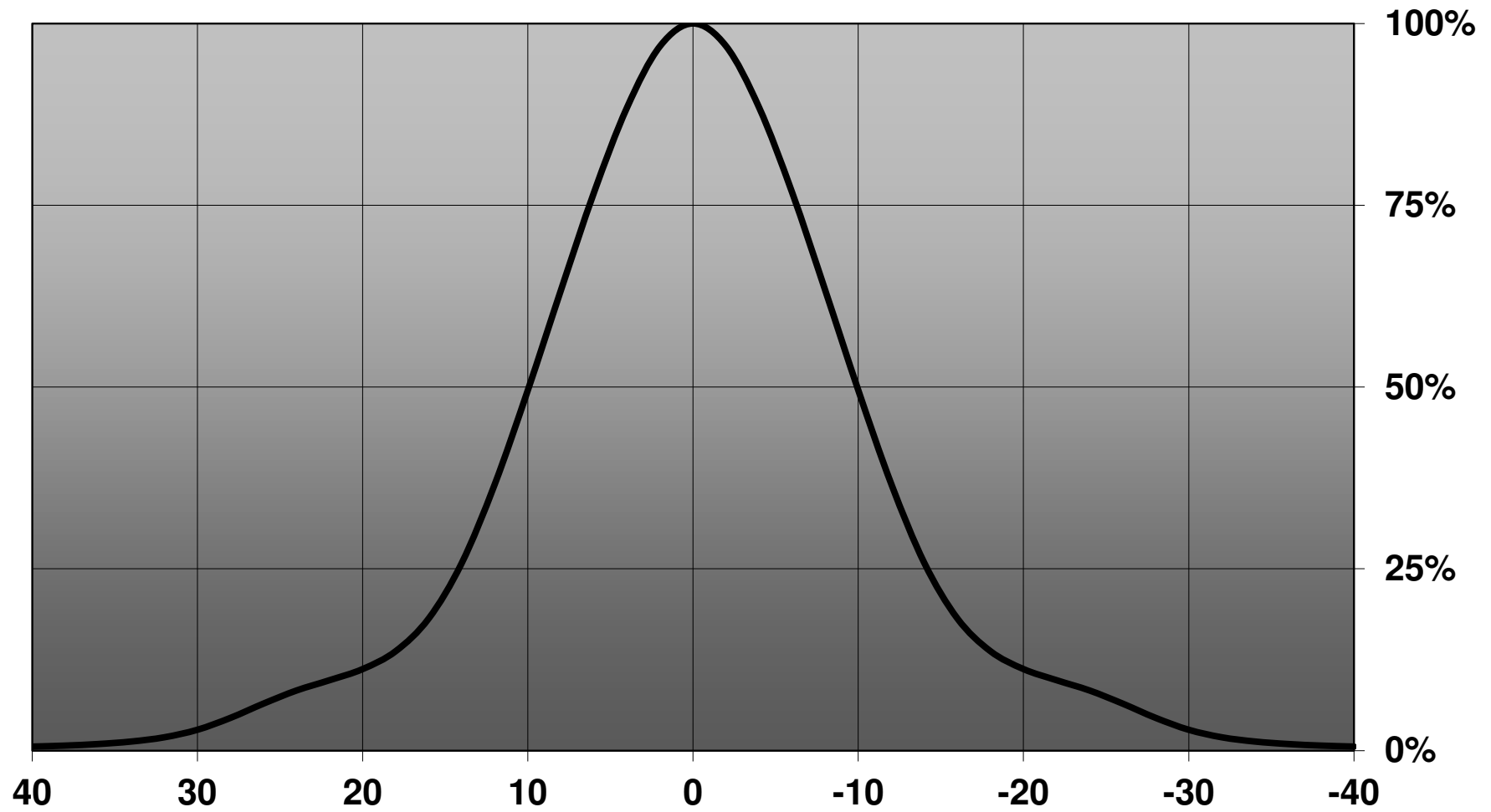
Relative intensity of CN12718\_LENA-S-DL (CLL030-1208)



**Relative intensity of CN12713\_LENA-M (CLL030-1208)**

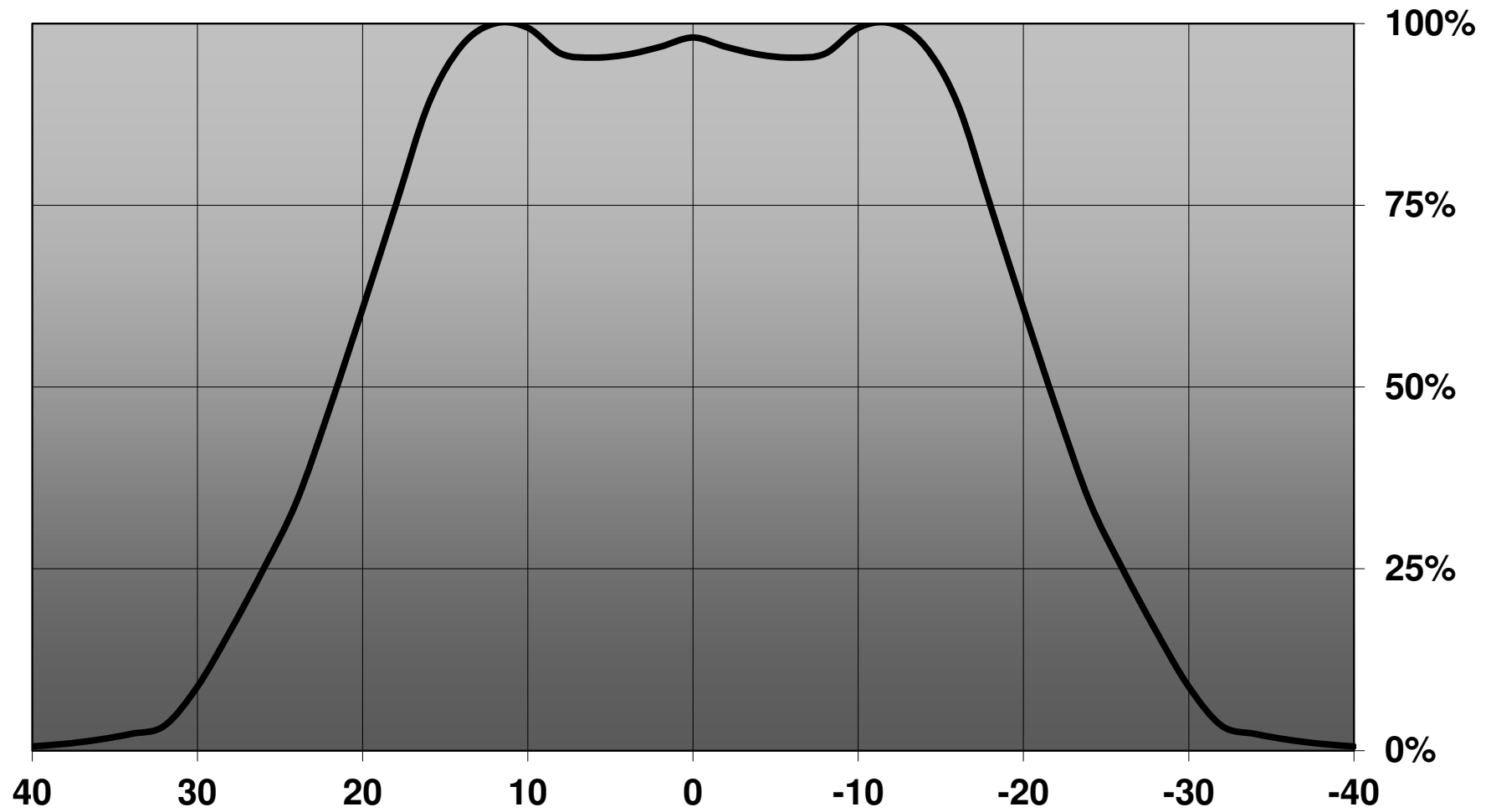


**Relative intensity of CN12719\_LENA-M-DL (CLL030-1208)**

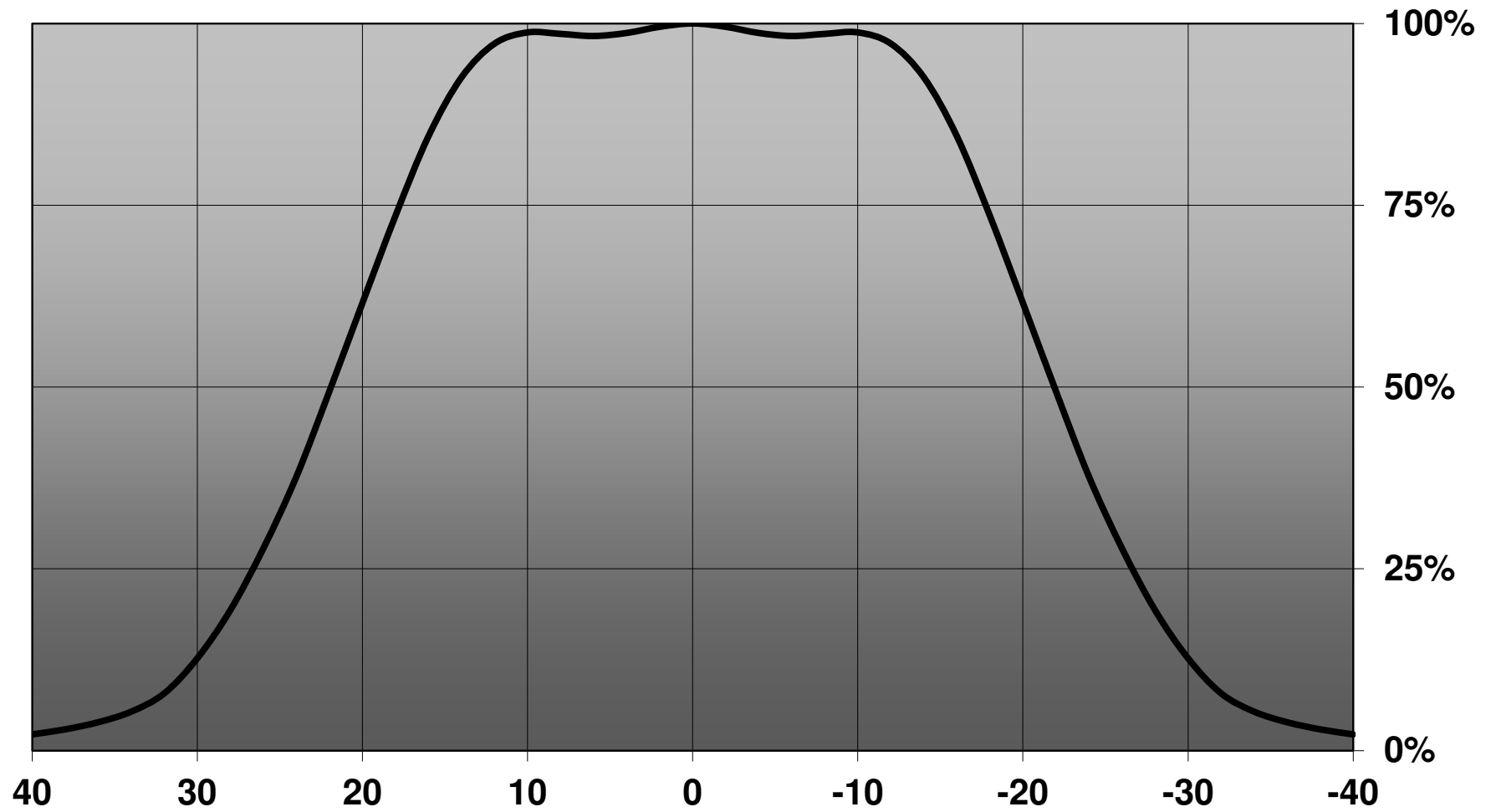




Relative intensity of CN12714\_LENA-W (CLL030-1208)



Relative intensity of CN12720\_LENA-W-DL (CLL030-1208)



D

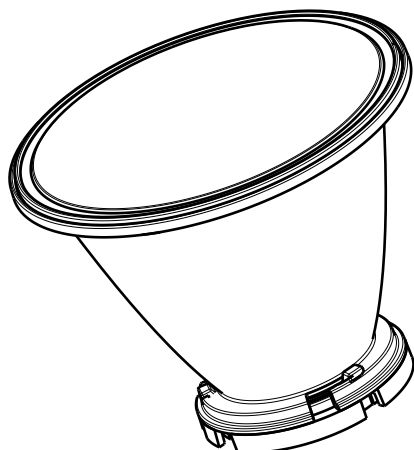
C

B

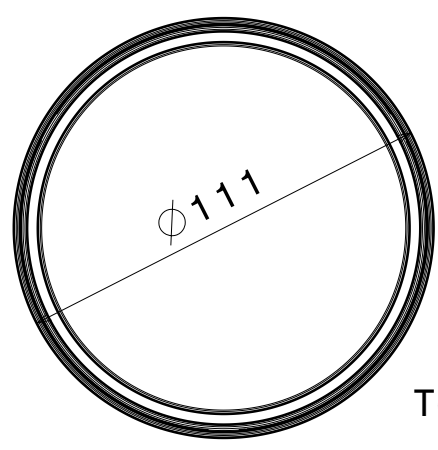
A

4

4



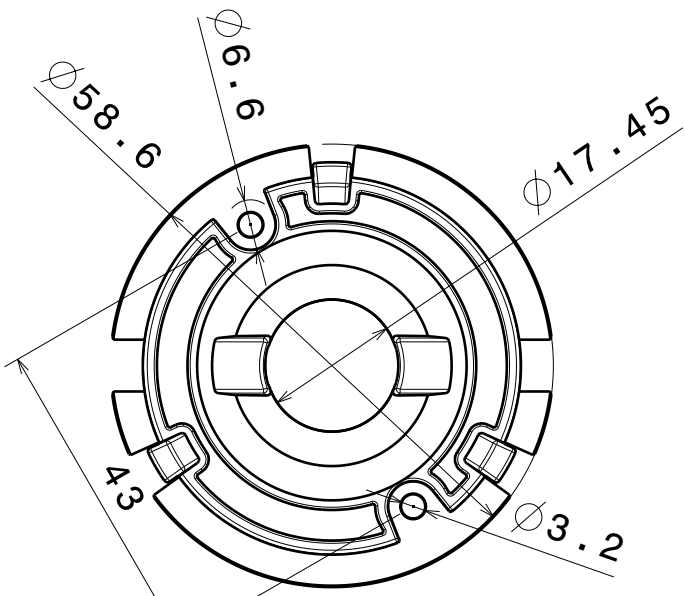
Isometric view



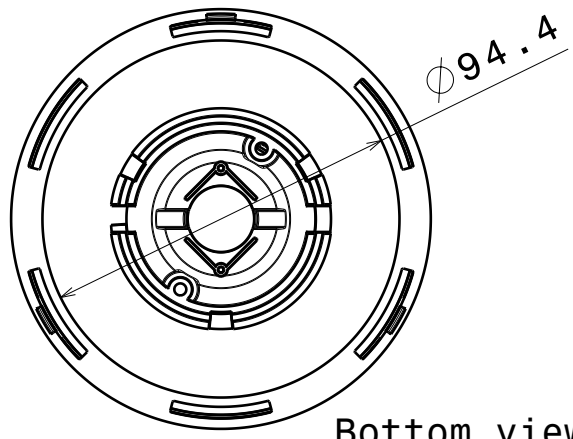
Top view

3

3



Front view  
Scale: 1:1

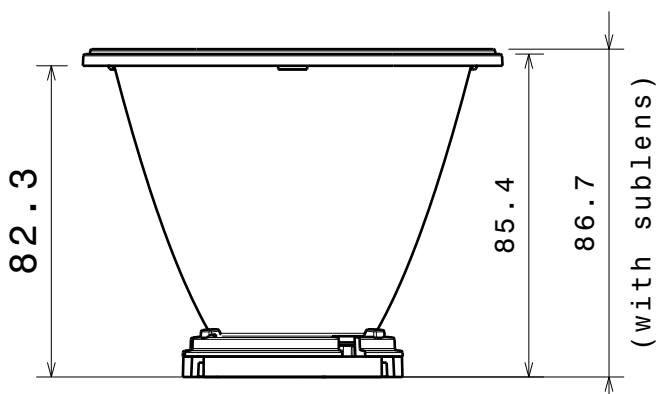


Bottom view

2

2

- Material:
- subLens - PMMA
  - Reflector - PC  
- Metal coating and clear lacquer
  - Holder base - PC  
- Color white



Front view

This drawing is our property. It can't be reproduced or communicated without our written agreement.



L  
S  
F  
F

e  
i  
i

N  
n

d  
l

DRAWING TITLE

Datasheet Lena-CLL030 series Assy

1

1

DRAWN BY  
ca

DATE  
10.04.2012

CHECKED BY

DATE

SIZE  
A4

DRAWING NUMBER

REV  
1

DESIGNED BY  
pl

DATE  
15.03.2012

SCALE 1:2

WEIGHT (g)

SHEET 1/1

D

A