

**Ordering number** CN13164_LENA-WAS

Family Lena
 Type Pack
 LED CLL040
 Color Metal
 Diameter 111 mm
 Height -
 Style Round
 Optic Material PC
 Holder Material -
 Fastening Socket
 Status Ready

FWHM 0Asymmetric degrees
 Efficiency 82 %
 cd/Im 0.950
 Gerber File Available

Reflector twist-and-locks into included base part that holds COE

**Ordering number** CN13174_LENA-WAS-DL

Family Lena
 Type Pack
 LED CLL040
 Color Metal
 Diameter 111 mm
 Height -
 Style Round
 Optic Material PC
 Holder Material -
 Fastening Socket
 Status Ready

FWHM Asymmetric degrees
 Efficiency 78 %
 cd/Im 0.810
 Gerber File Available

Reflector twist-and-locks into included base part that holds COE

**Ordering number** CN13370_LENA-X-WAS

Family Lena
 Type Pack
 LED CLL040
 Color White
 Diameter 111 mm
 Height 39.1 mm
 Style Round
 Optic Material PC
 Holder Material PC
 Fastening Screw, socket
 Status Ready

FWHM Asymmetric degrees
 Efficiency 82 %
 cd/Im 0.950
 Gerber File Available

Reflector twist-and-locks into included base part that holds COE

**Ordering number** CN13372_LENA-X-WAS-DL

Family Lena
 Type Pack
 LED CLL040
 Color White
 Diameter 111 mm
 Height 42 mm
 Style Round
 Optic Material PC
 Holder Material PC
 Fastening Screw, socket
 Status Ready

FWHM Asymmetric degrees
 Efficiency 74 %
 cd/Im 0.500
 Gerber File Available

Reflector twist-and-locks into included base part that holds COE

**Ordering number CN12715_LENA-S**

Family	Lena	FWHM	15 degrees
Type	Pack	Efficiency	84 %
LED	CLL040	cd/Im	5.250
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	86.3 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	Ready		

**Ordering number CN12721_LENA-S-DL**

Family	Lena	FWHM	16 degrees
Type	Pack	Efficiency	79 %
LED	CLL040	cd/Im	3.820
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	87.6 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	Ready		

**Ordering number CN12716_LENA-M**

Family	Lena	FWHM	23 degrees
Type	Pack	Efficiency	82 %
LED	CLL040	cd/Im	3.400
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	86.3 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	Ready		

**Ordering number CN12722_LENA-M-DL**

Family	Lena	FWHM	24 degrees
Type	Pack	Efficiency	77 %
LED	CLL040	cd/Im	2.670
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	87.6 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	Ready		

**Ordering number** CN12717_LENA-W

Family	Lena	FWHM	46 degrees
Type	Pack	Efficiency	81 %
LED	CLL040	cd/Im	1.240
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	86.3 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	Ready		

**Ordering number** CN12723_LENA-W-DL

Family	Lena	FWHM	46 degrees
Type	Pack	Efficiency	76 %
LED	CLL040	cd/Im	1.090
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	87.6 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

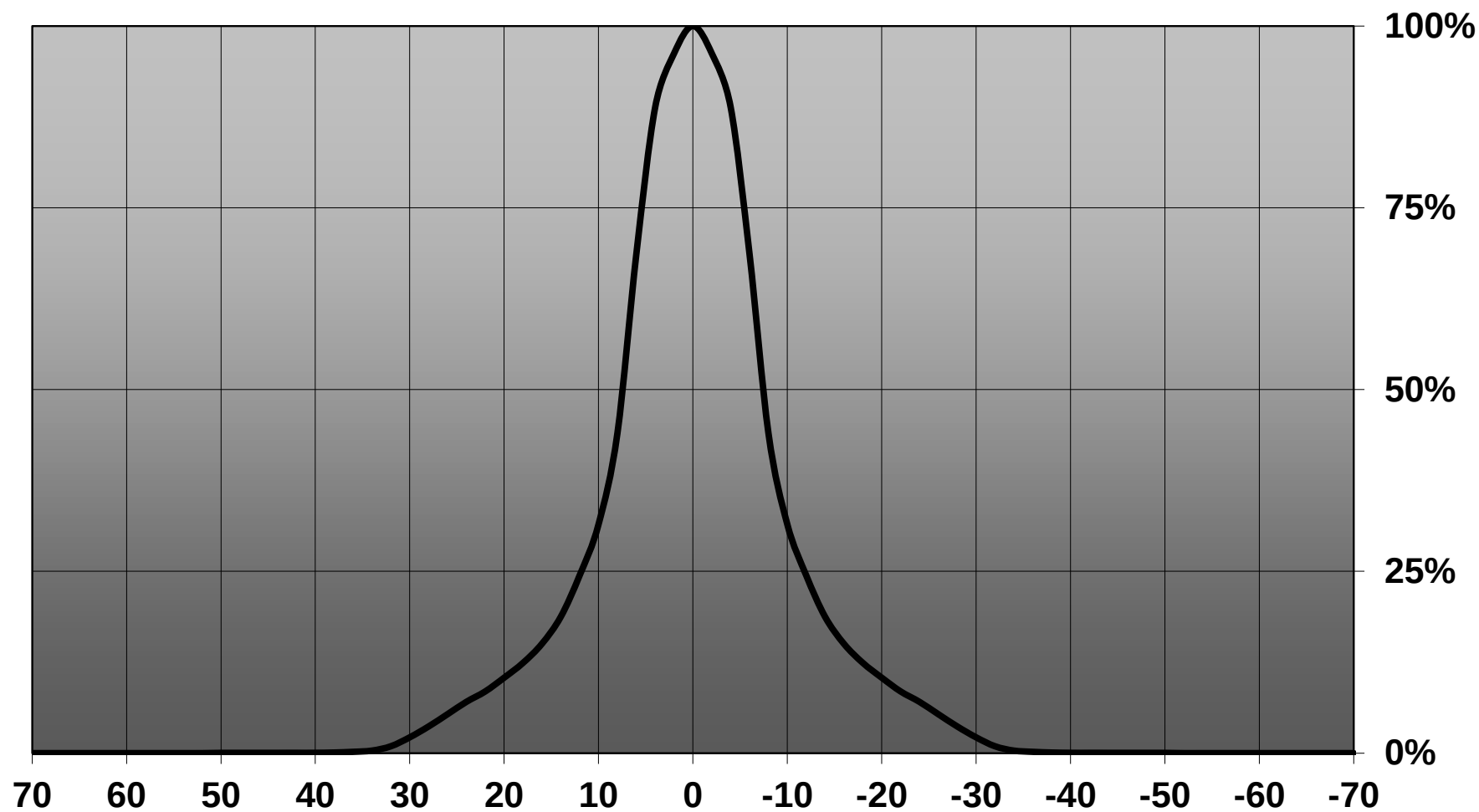
- Product series especially designed & optimized for CLL040 series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PC with high UV and temperature resistance (120 degrees of Celcius / 248 degrees of Fahrenheit). Allows use of high current and temperature conditions.

Please find more information about used materials from below:

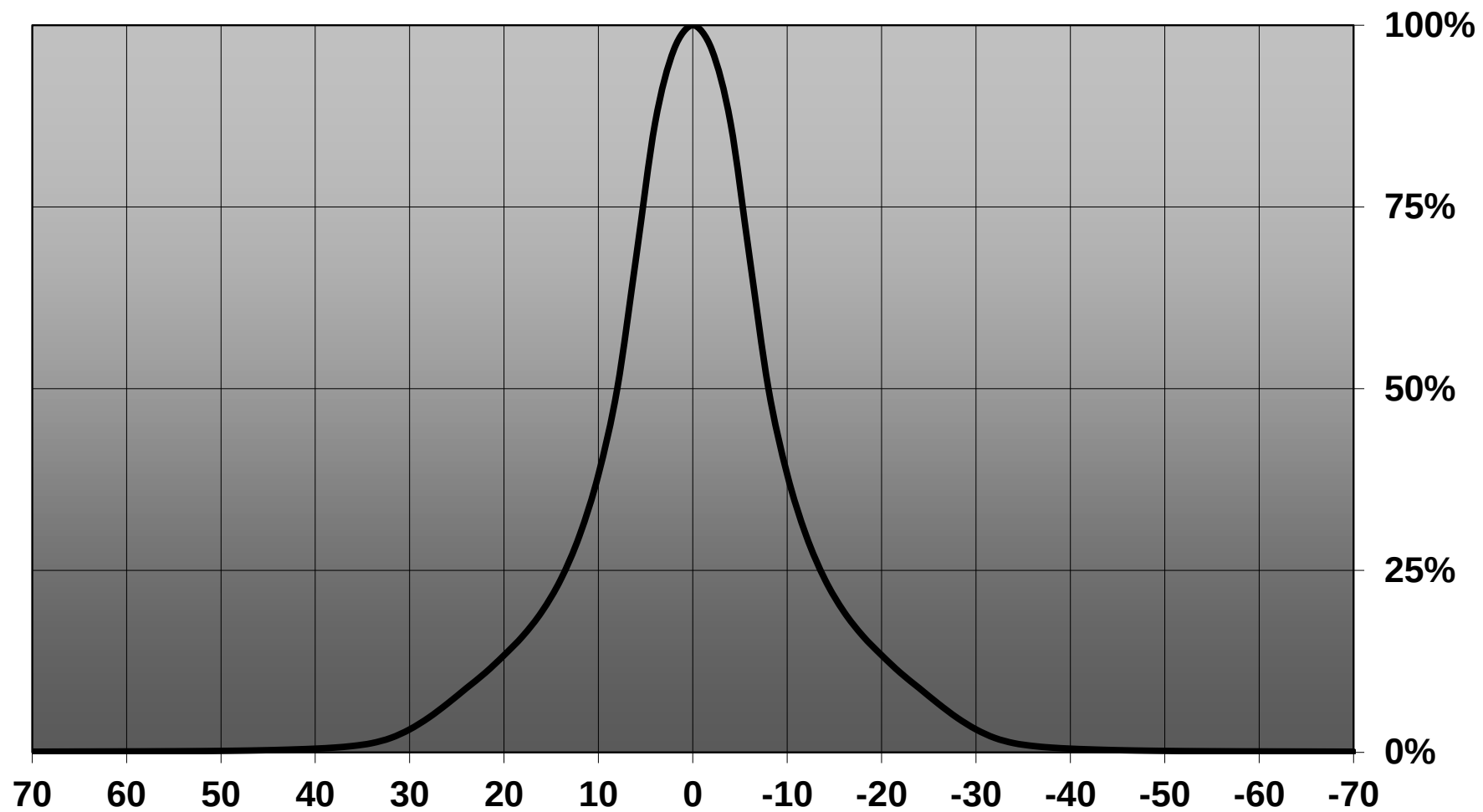
http://ledil.fi/sites/default/files/Documents/Technical/Material/PC%20Makrolon%202400_2407_2456_2458-UL.pdf

- 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 dergees of Celcius / 248 degrees of Fahrenheit).

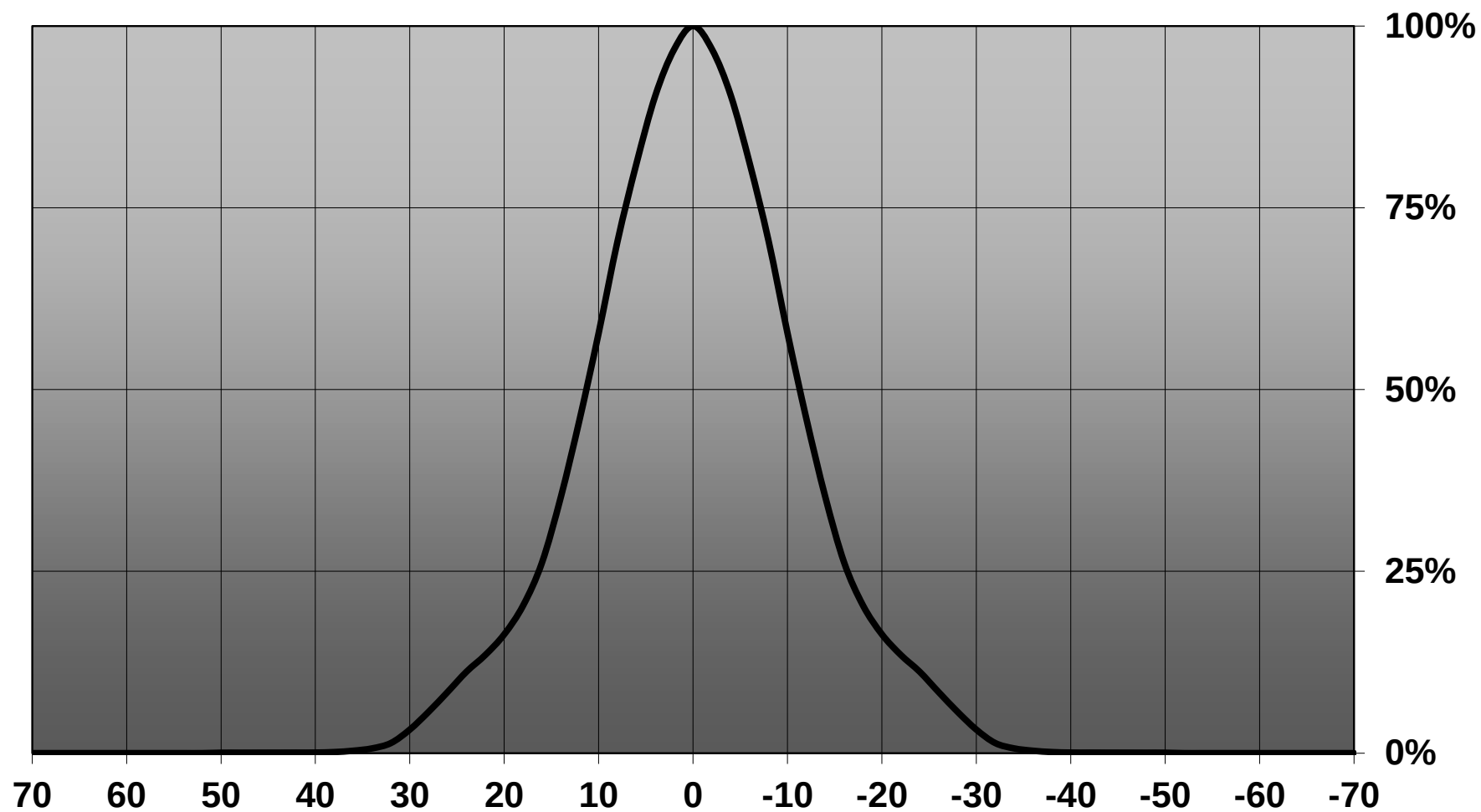
Relative intensity of CN12715_LENA-S_(CLL040)



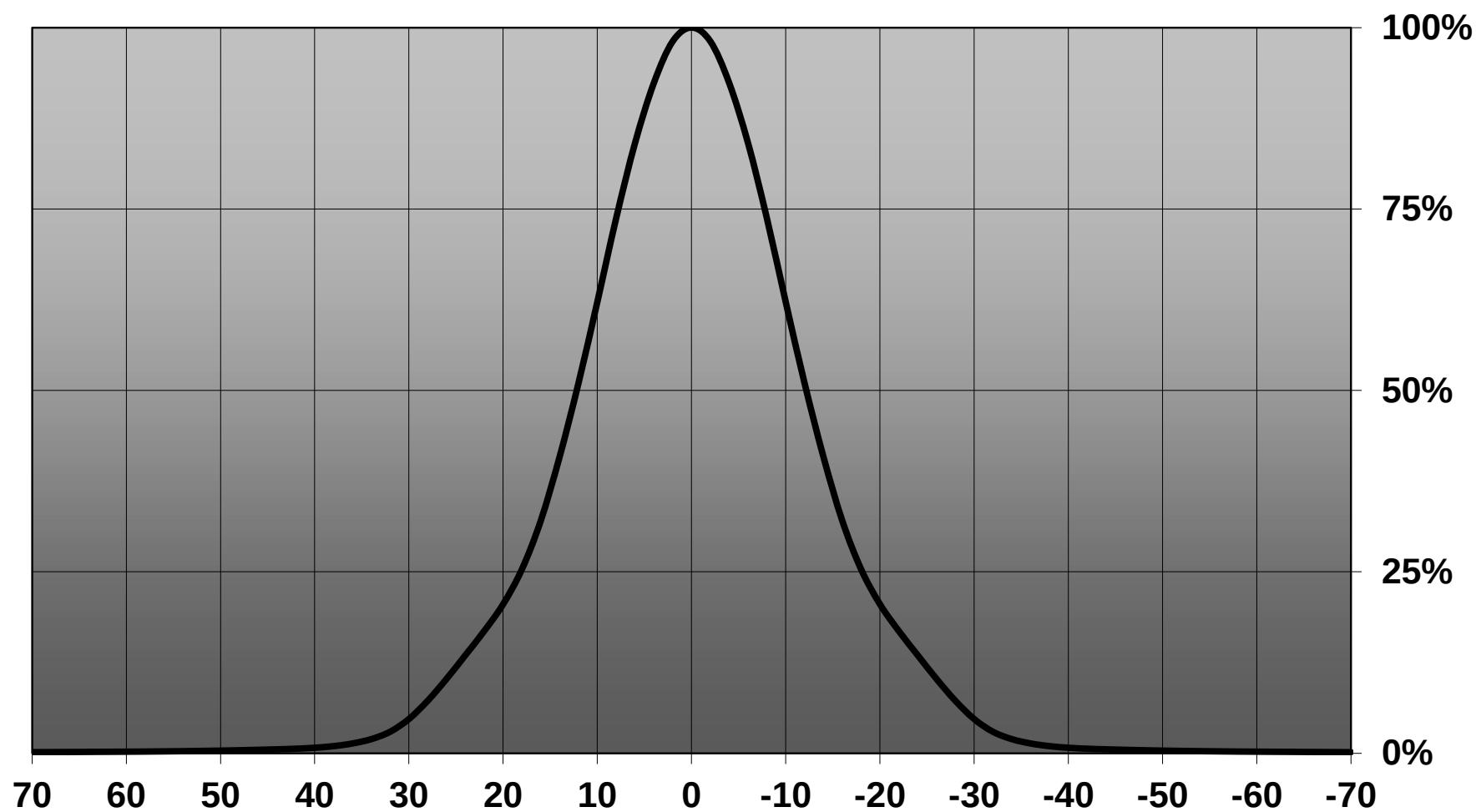
Relative intensity of CN12721_LENA-S-DL_(CLL040)



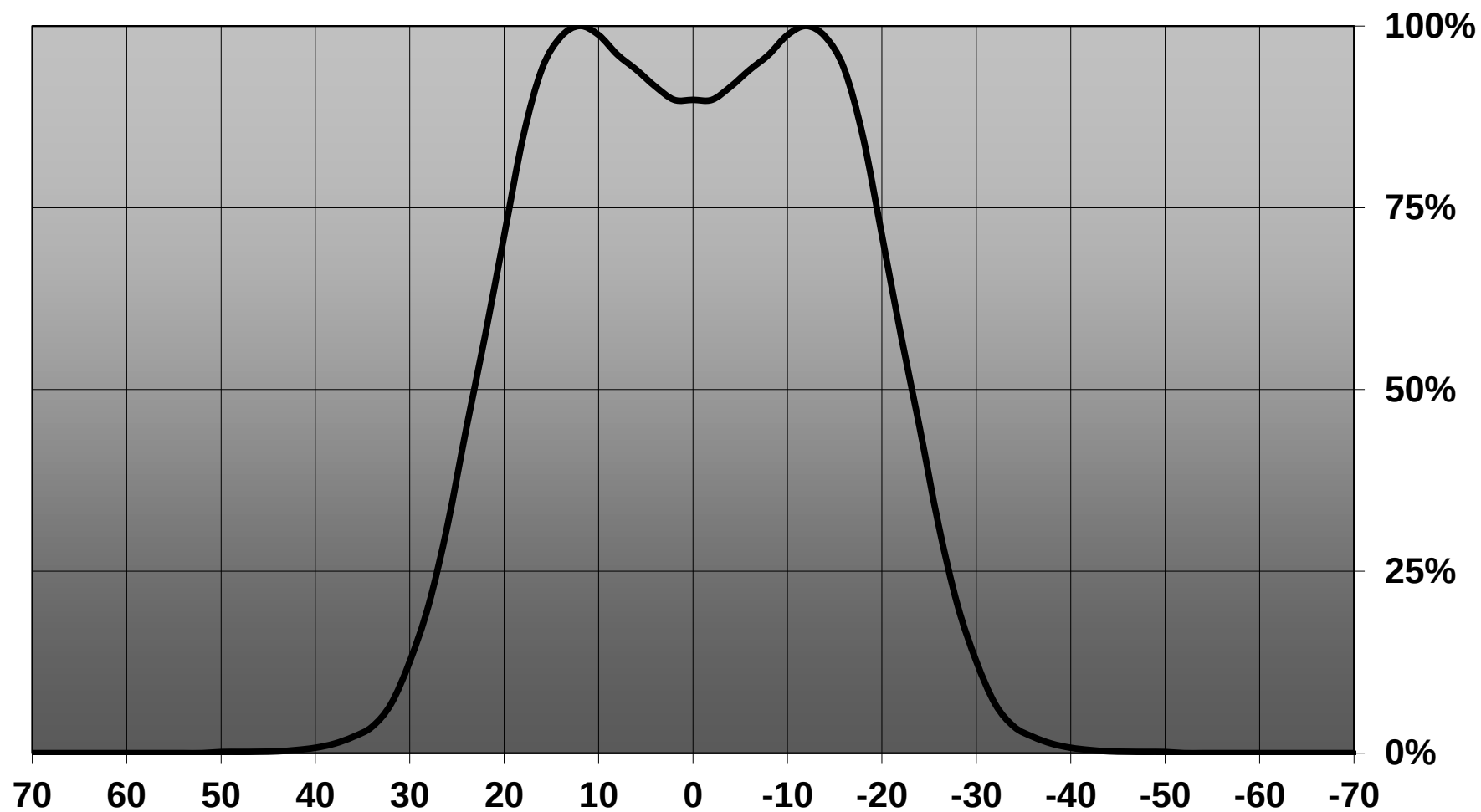
Relative intensity of CN12716_LENA-M_(CLL040)



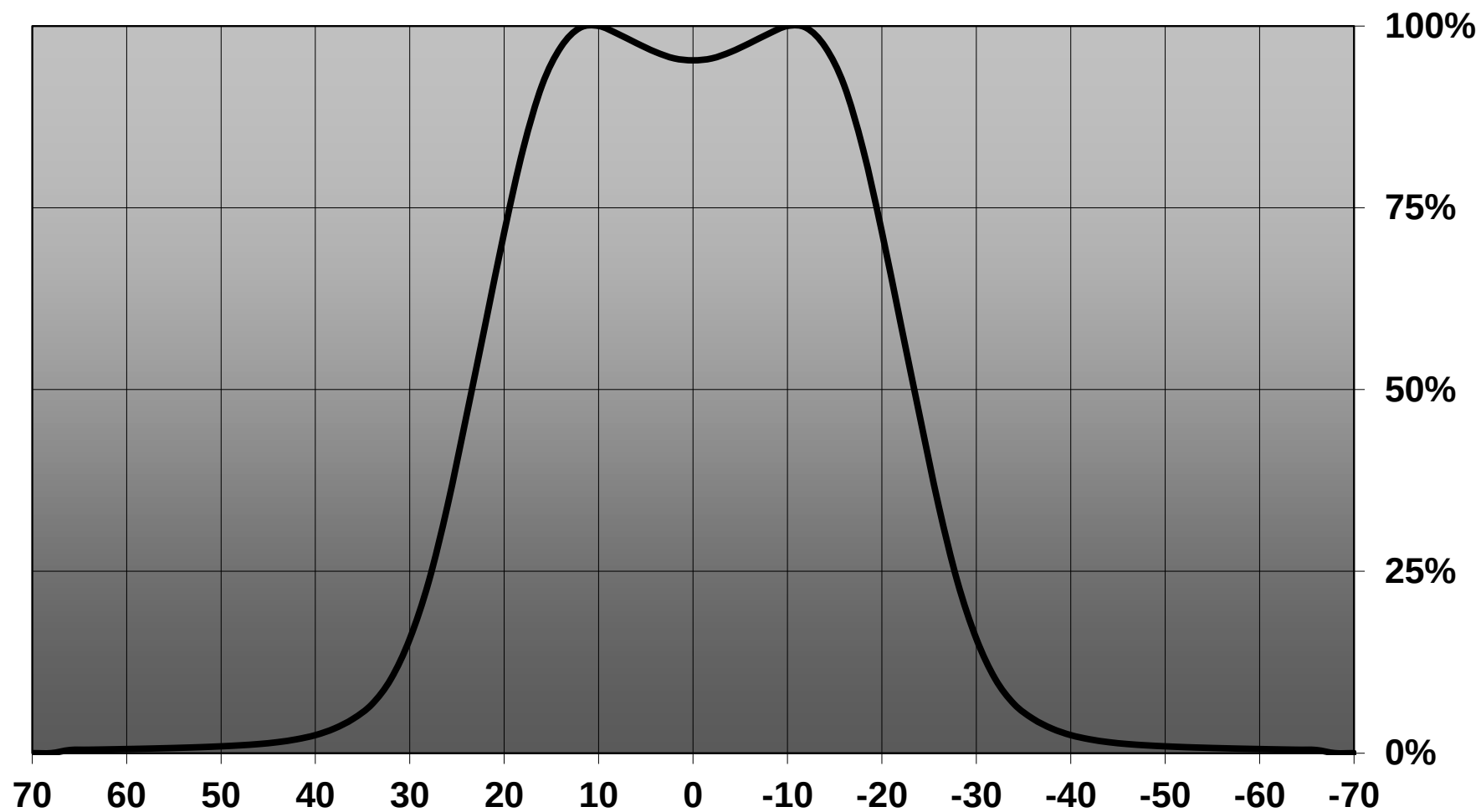
Relative intensity of CN12722_LENA-M-DL_(CLL040)



Relative intensity of CN12717_LENA-W_(CLL040)



Relative intensity of CN12723_LENA-W-DL_(CLL040)



D

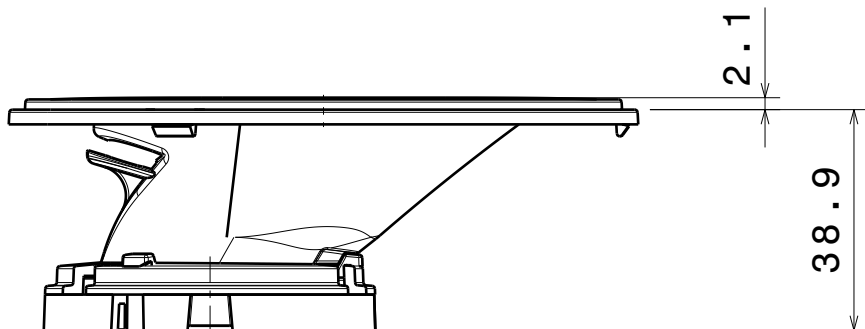
C

B

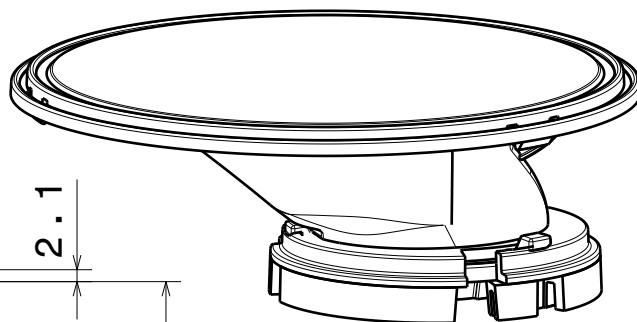
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4

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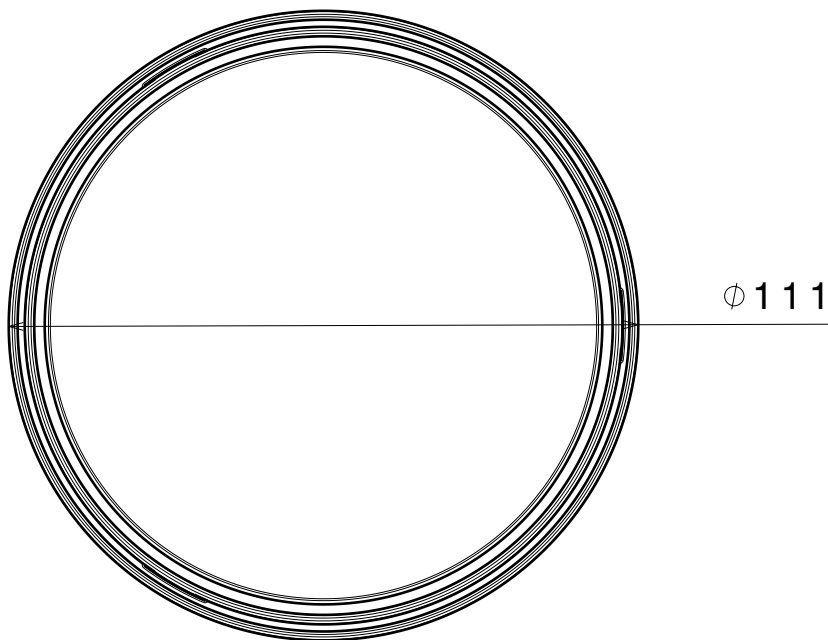
Front view



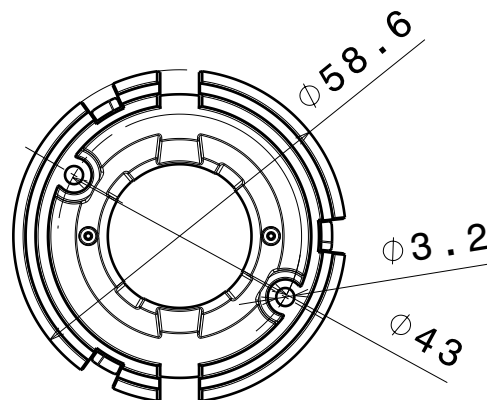
Isometric view

3

3



Top view



Materials

Reflector: PC
Base part: PC
Sublens: PC

2

2

Note: Using additional sublens add
2,1mm to total height.

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LEDiL

Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

DRAWING TITLE

Mechanical drawing

DRAWN BY

DATE

as

26.9.2012

LENA-WAS

CHECKED BY

DATE

VS

SIZE

PART NUMBER

REV

A4

001

DESIGNED BY

DATE

-

SCALE

1:4

WEIGHT

- mg

SHEET

1/1

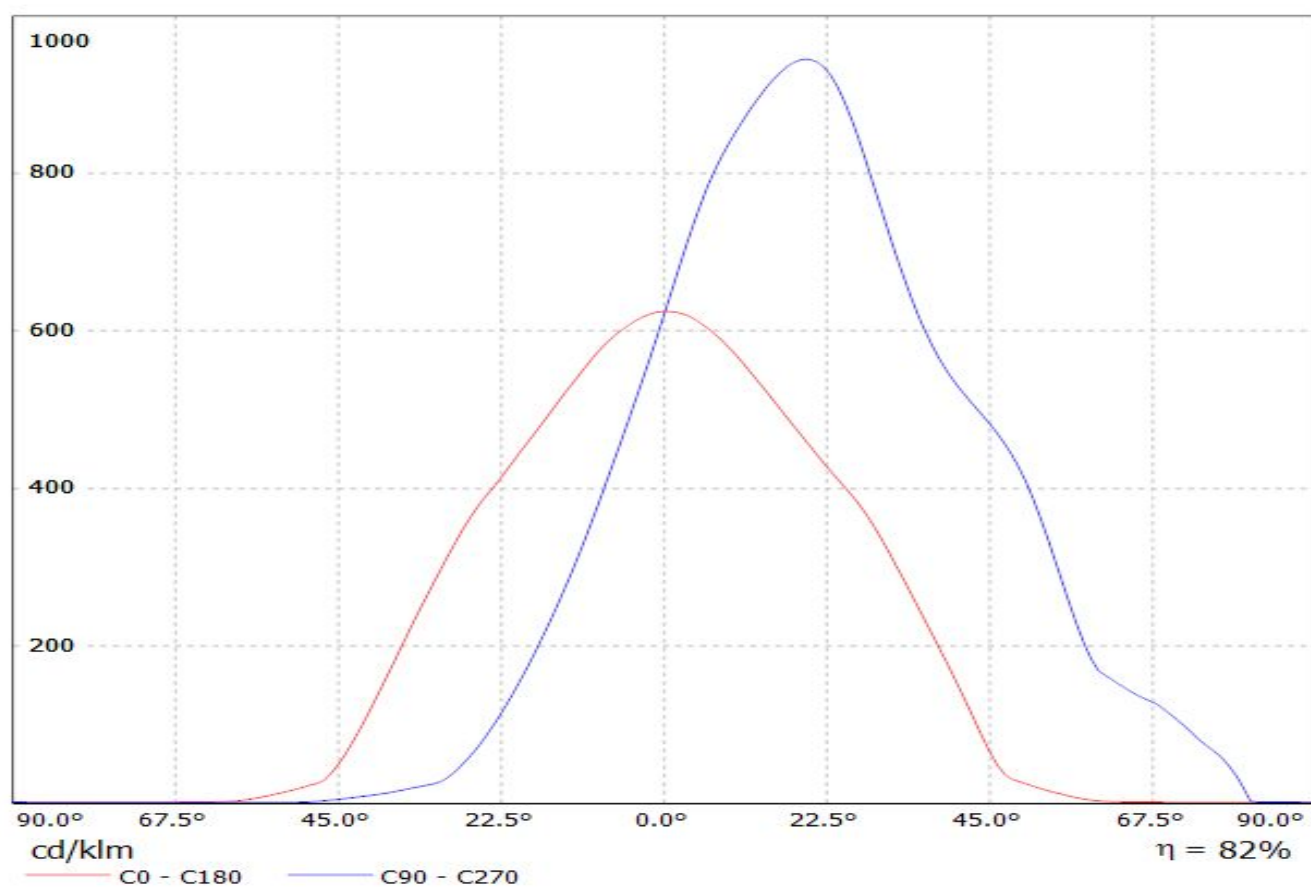
D

A

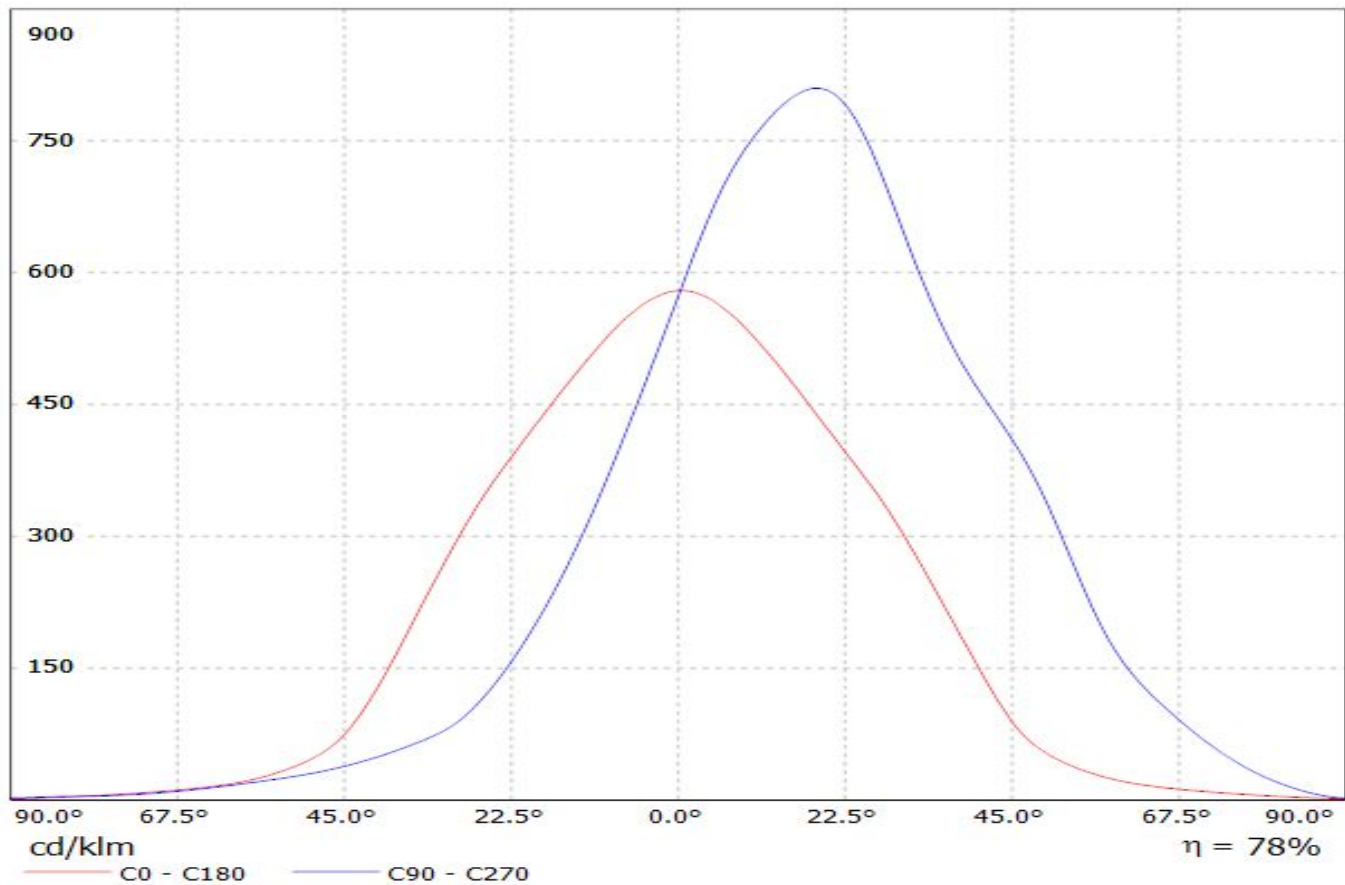
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1

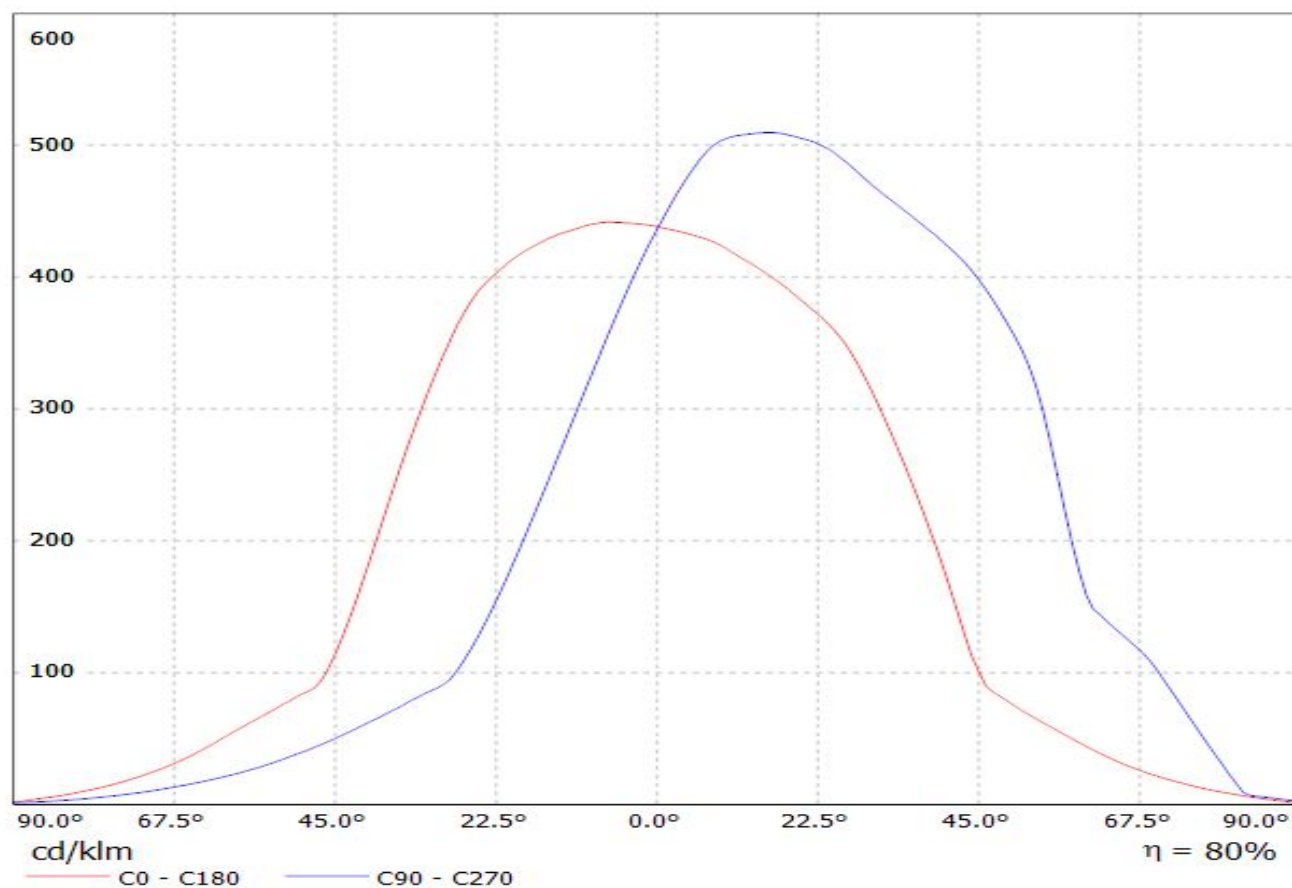
Luminaire: LEDiL Oy CN13164_LENA-WAS_(CLL040) Eff.81.7%
Lamps: 1 x CLL040 (696.603lm@250mA)



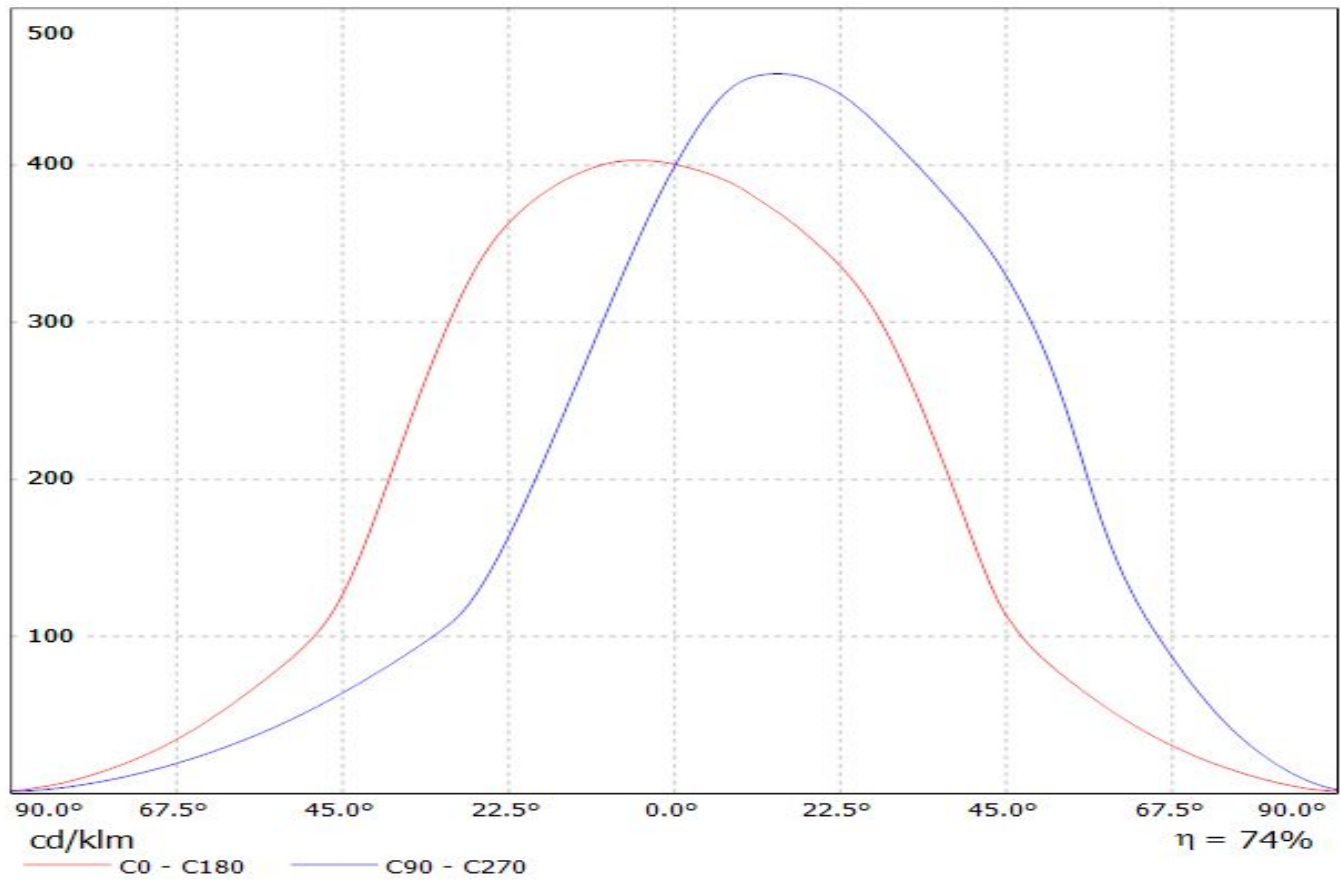
Luminaire: LEDiL Oy CN13174_LENA-WAS-DL_(CLL040) Eff.77.8%
Lamps: 1 x CLL040 (696.603lm@250mA)



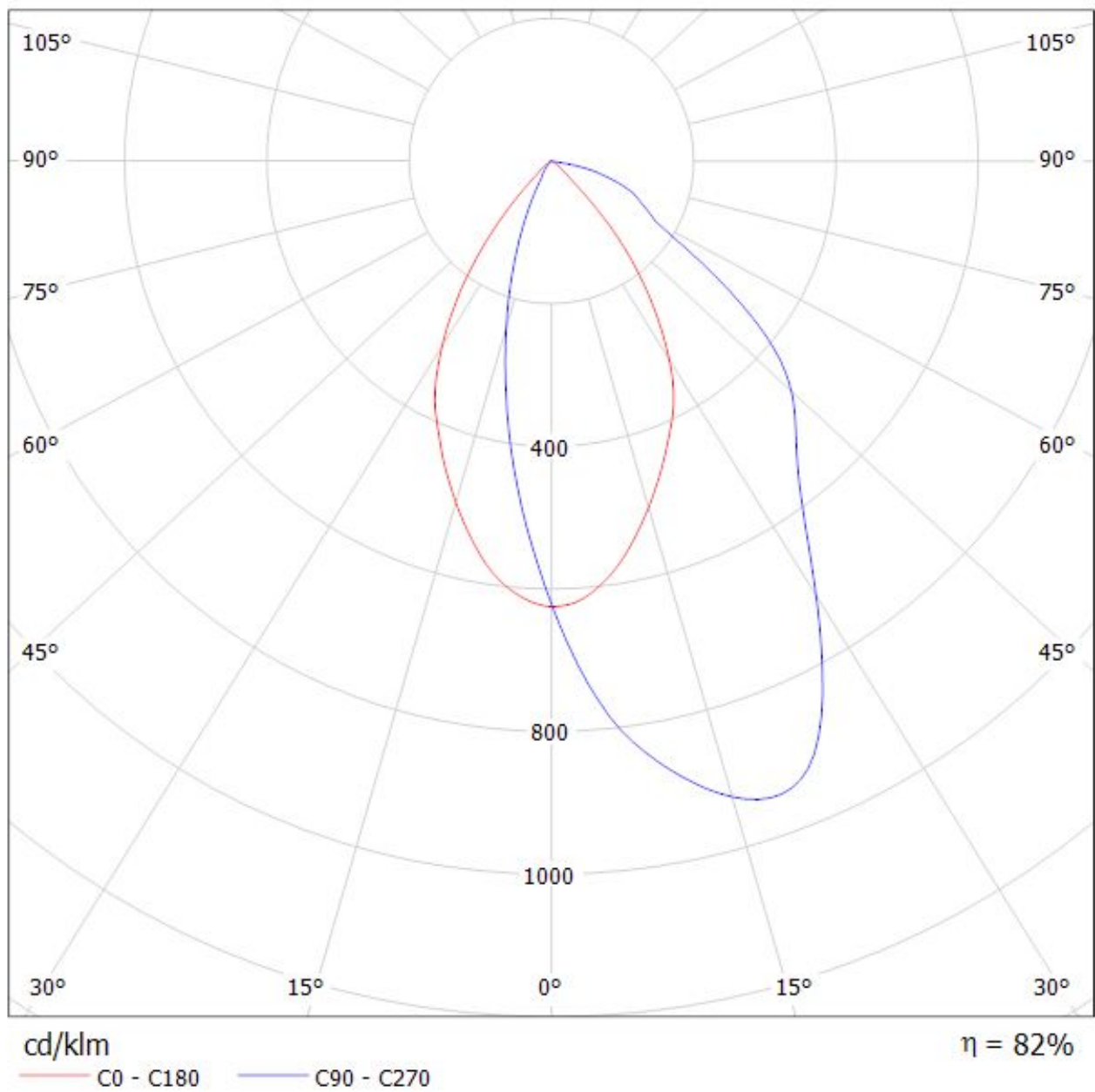
Luminaire: LEDiL Oy C13101_LENA-X-WAS_(CLL040)_2 Eff.79.7%
Lamps: 1 x CLL040 (696.603lm@250mA)



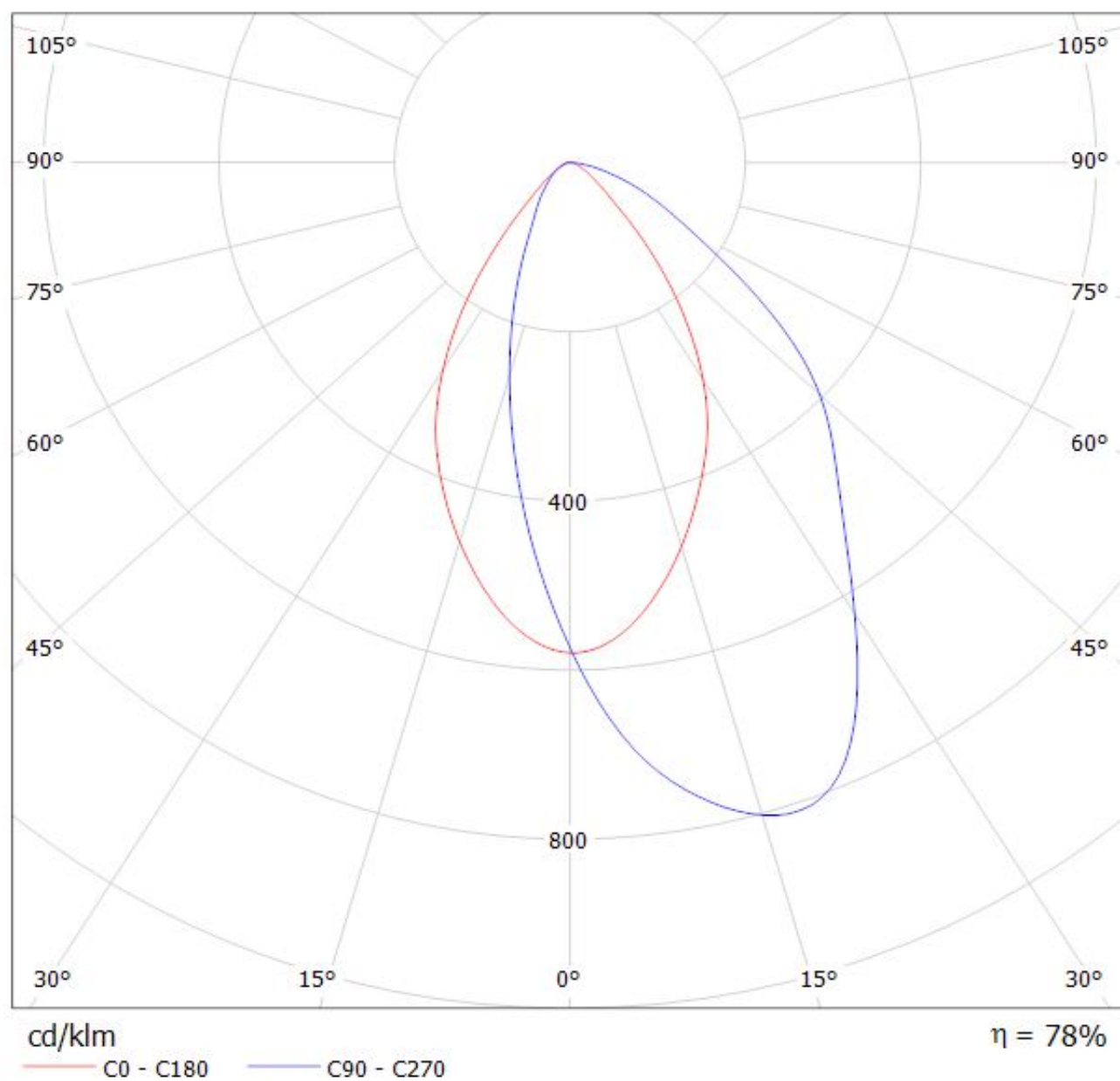
Luminaire: LEDiL Oy CN13372_LENA-X-WAS-DL_(CLL040) Eff.73.7%
Lamps: 1 x CLL040 (696.603lm@250mA)



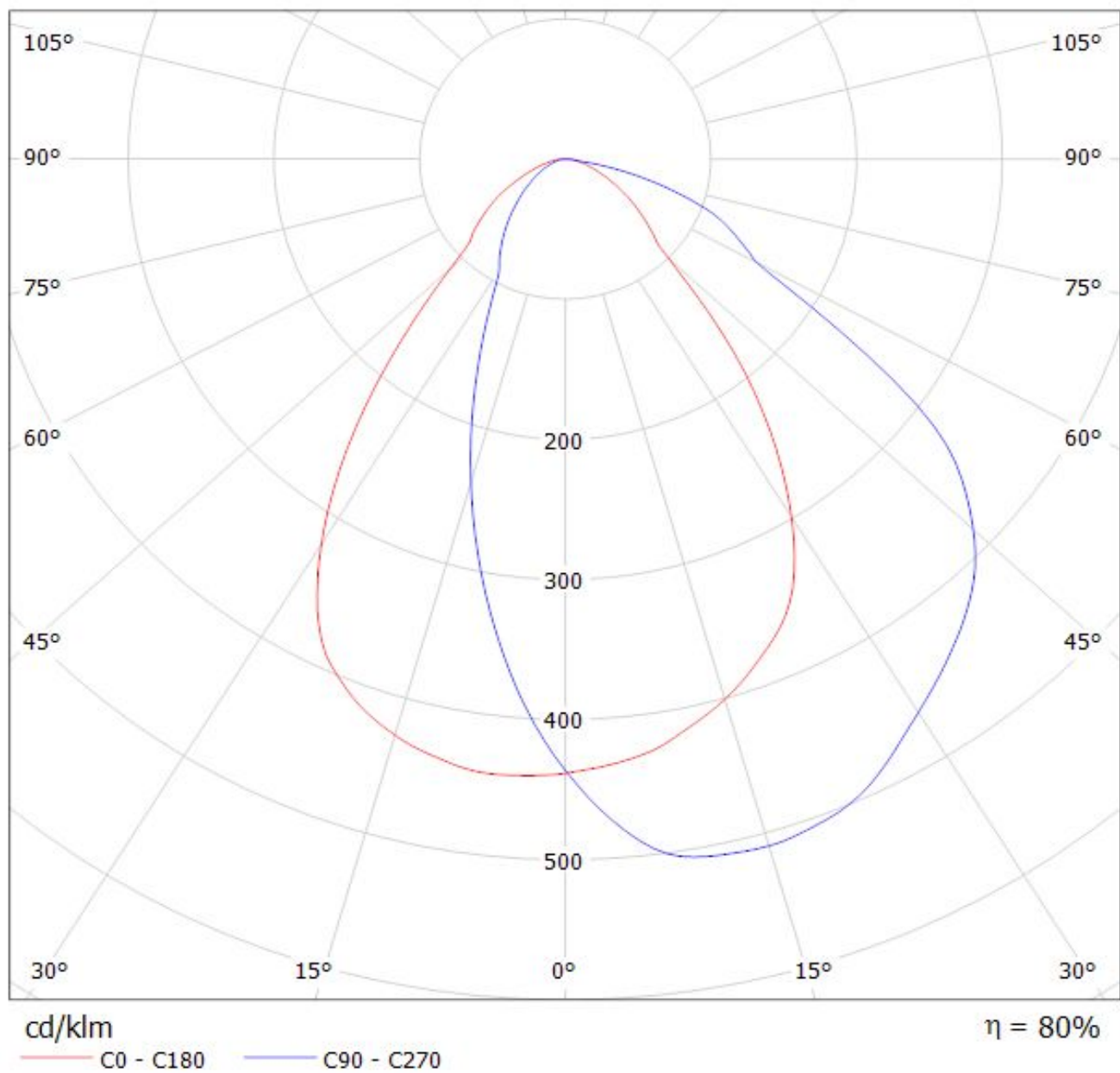
Luminaire: LEDiL Oy CN13164_LENA-WAS_(CLL040) Eff.81.7%
Lamps: 1 x CLL040 (696.603lm@250mA)



Luminaire: LEDiL Oy CN13174_LENA-WAS-DL_(CLL040) Eff.77.8%
Lamps: 1 x CLL040 (696.603lm@250mA)



Luminaire: LEDiL Oy C13101_LENA-X-WAS_(CLL040)_2 Eff.79.7%
Lamps: 1 x CLL040 (696.603lm@250mA)



Luminaire: LEDiL Oy CN13372_LENA-X-WAS-DL_(CLL040) Eff.73.7%
Lamps: 1 x CLL040 (696.603lm@250mA)

