

**Ordering number CN13165_LENA-WAS**

Family	Lena
Type	Pack
LED	LUXEON K16
Color	Metal
Diameter	111 mm
Height	39.1 mm
Style	Round
Optic Material	PC
Holder Material	PC
Fastening	Socket, screw, socket
Status	Ready

FWHM	Asym degrees
Efficiency	81 %
cd/lm	1.140
Gerber File	Available

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

Ordering number CN13175_LENA-WAS-DL

Family	Lena
Type	Pack
LED	LUXEON K16
Color	Metal
Diameter	111 mm
Height	41.2 mm
Style	Round
Optic Material	PC
Holder Material	PC
Fastening	Socket, screw
Status	Ready

FWHM	Asym degrees
Efficiency	76 %
cd/lm	0.970
Gerber File	Available

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

Ordering number CN13277_LENA-X-WAS

Family	Lena
Type	Pack
LED	LUXEON K16
Color	White
Diameter	111 mm
Height	39.1 mm
Style	Round
Optic Material	PC
Holder Material	PC
Fastening	Screw, socket
Status	Ready

FWHM	(simulated) Asym
Efficiency	(simulated) 0 %
cd/lm	-
Gerber File	Available

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

Ordering number CN13278_LENA-X-WAS-DL

Family	Lena
Type	Pack
LED	LUXEON K16
Color	White
Diameter	111 mm
Height	39.1 mm
Style	Round
Optic Material	PC
Holder Material	PC
Fastening	Screw, socket
Status	Ready

FWHM	(simulated) Asym
Efficiency	(simulated) 0 %
cd/lm	-
Gerber File	Available

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

**Ordering number CN13261_LENA-SS-DL**

Family	Lena	FWHM	15 degrees
Type	Pack	Efficiency	73 %
LED	LUXEON K16	cd/lm	5.000
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	88.1 mm		
Style	Round		Reflector twist-and-locks into included base part that holds COE
Optic Material	PC		
Holder Material	PC		
Fastening	Socket, screw, socket		
Status	Ready		

**Ordering number CN12927_LENA-M**

Family	Lena	FWHM	20 degrees
Type	Pack	Efficiency	77 %
LED	LUXEON K16	cd/lm	0.460
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	86.5 mm		
Style	Round		Reflector twist-and-locks into included base part that holds COE
Optic Material	PC		
Holder Material	PC		
Fastening	Socket, screw		
Status	Ready		

**Ordering number CN12930_LENA-M-DL**

Family	Lena	FWHM	22 degrees
Type	Pack	Efficiency	72 %
LED	LUXEON K16	cd/lm	3.450
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	88.1 mm		
Style	Round		Reflector twist-and-locks into included base part that holds COE
Optic Material	PC		
Holder Material	PC		
Fastening	Screw, socket		
Status	Ready		

**Ordering number CN12931_LENA-W-DL**

Family	Lena	FWHM	46 degrees
Type	Pack	Efficiency	72 %
LED	LUXEON K16	cd/lm	1.300
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	88.1 mm		
Style	Round		Reflector twist-and-locks into included base part that holds COE
Optic Material	PC		
Holder Material	PC		
Fastening	Socket, screw		
Status	Ready		



PRODUCT DATASHEET

Lena series

last update 8/3/2013

PHILIPS
LUMILEDS

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 8/3/2013

PHILIPS
LUMILEDS

GENERAL INFORMATION

- Product series especially designed & optimized for LUXEON K16 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).

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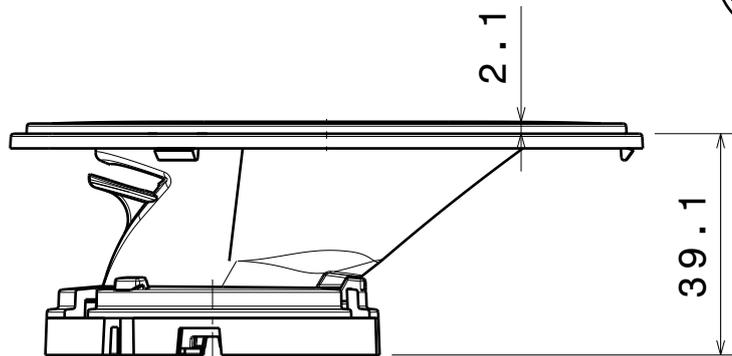
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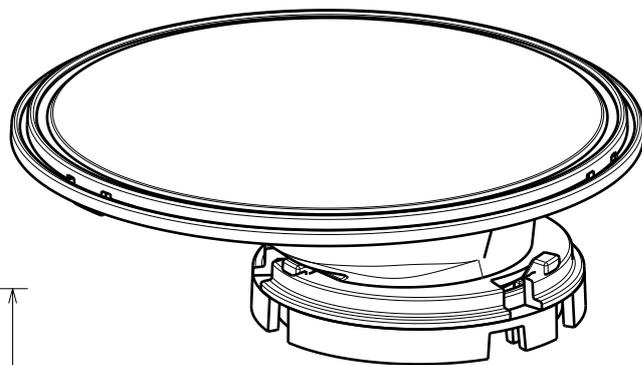
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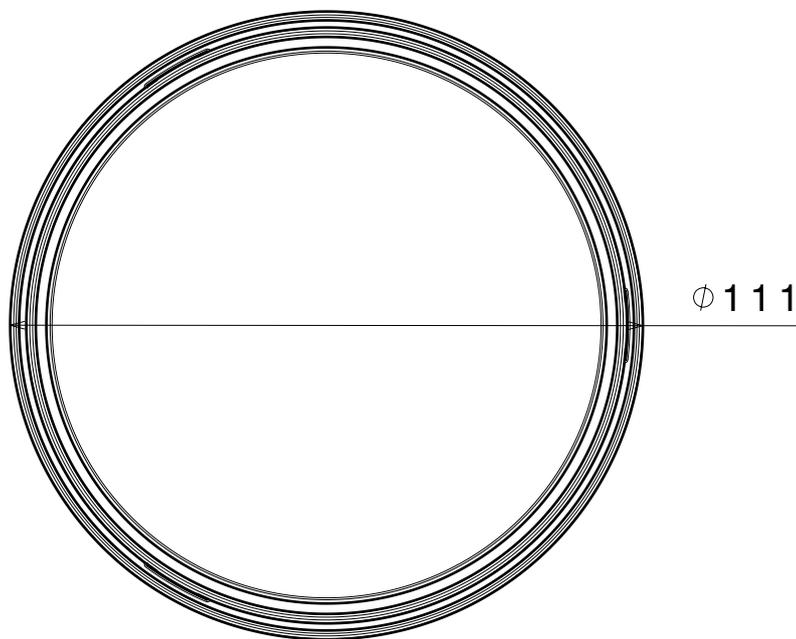
Front view



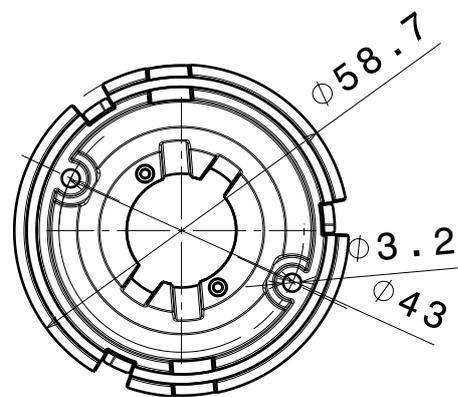
Isometric view

3

3



Top view



Materials

Reflector: PC
 Base part: PC
 Sublens: PC

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

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Ledil Oy
 Salorankatu 10
 FIN 24240 SALO
 Finland

DRAWING TITLE Mechanical drawing

DRAWN BY as
 DATE 26.9.2012

LENA-WAS

CHECKED BY VS
 DATE -

SIZE A4 PART NUMBER REV 001

DESIGNED BY -
 DATE -

SCALE 1:4 WEIGHT - mg SHEET 1/1

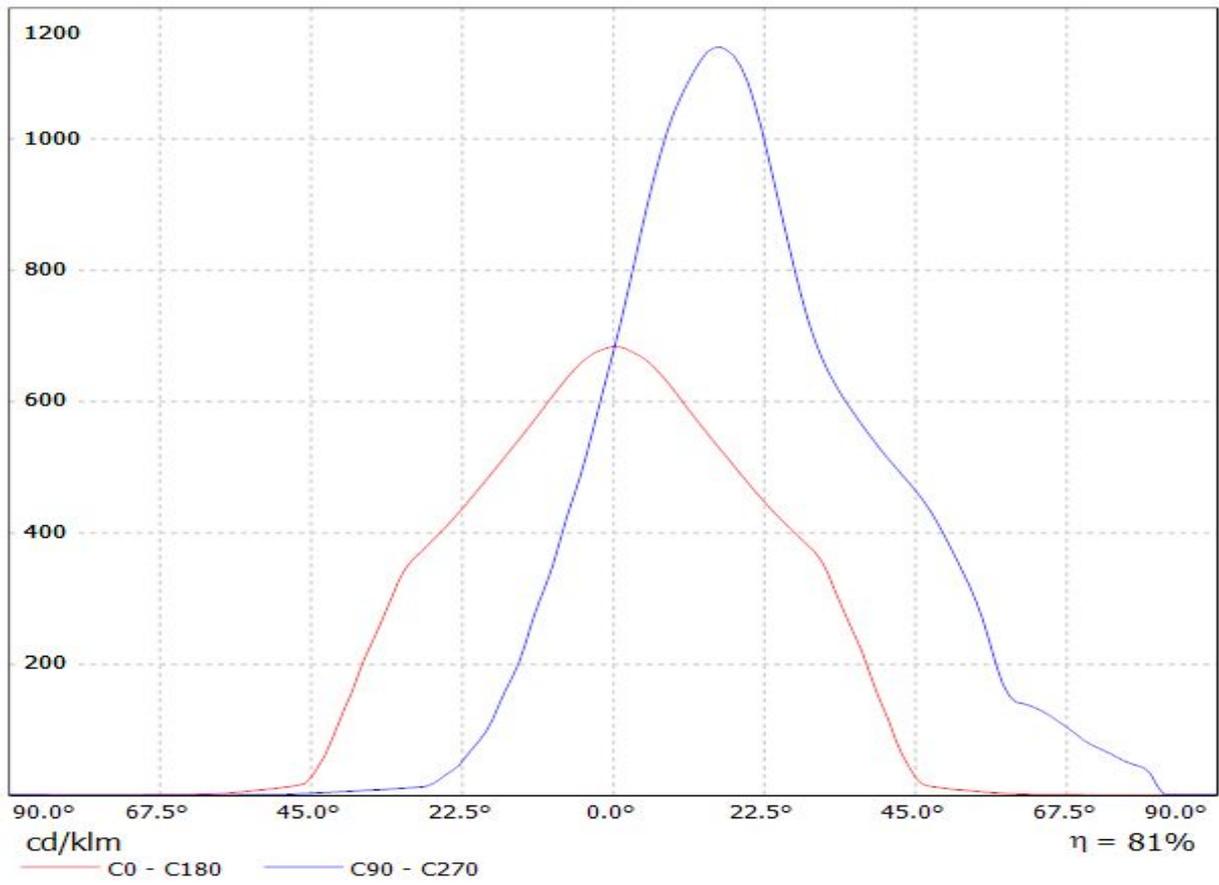
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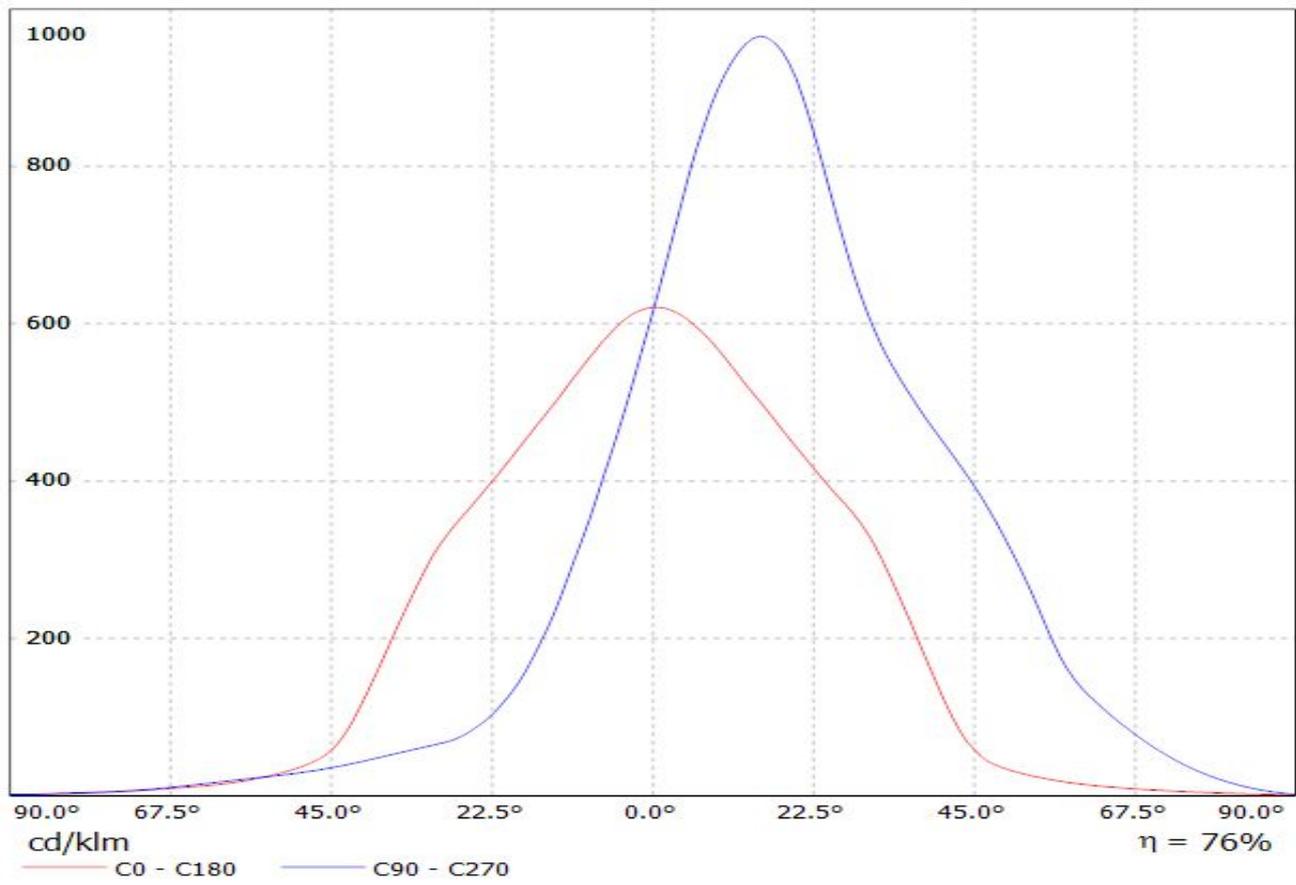
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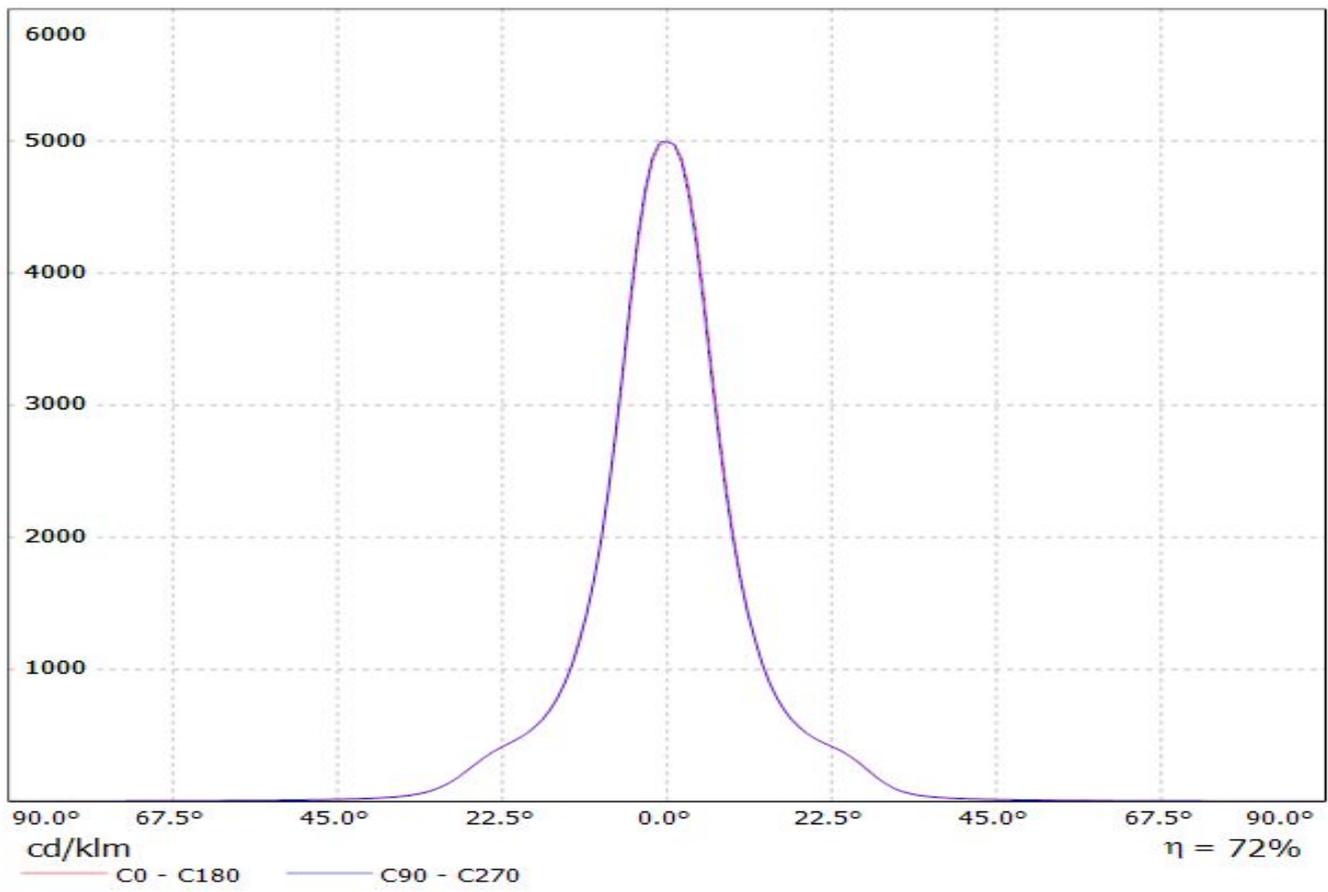
Luminaire: LEDiL Oy CN13165_LENA-WAS_(Luxeon_K16)
Lamps: 1 x Luxeon_K16 (1208.05lm@250mA)



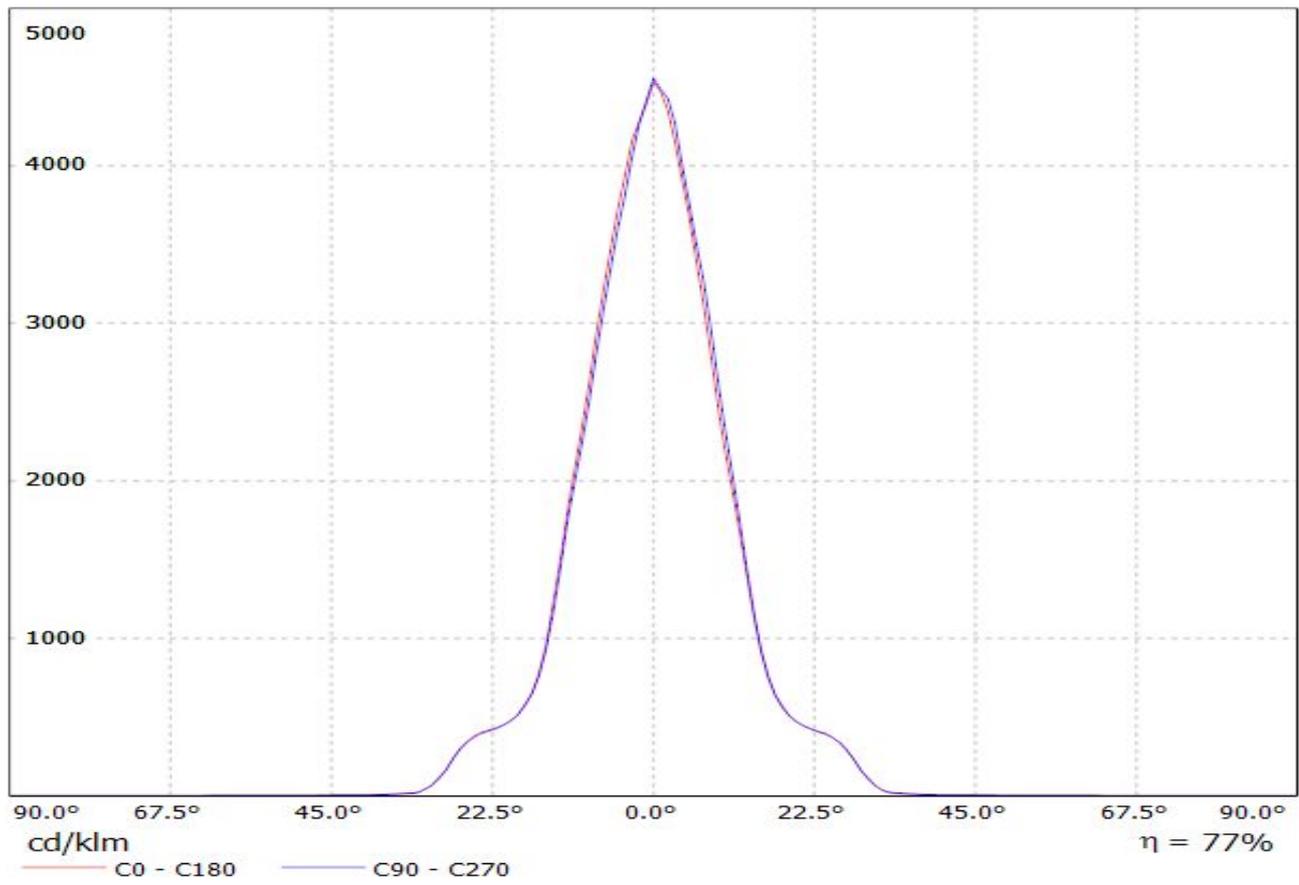
Luminaire: LEDiL Oy CN13175_LENA-WAS-DL_(Luxeon_K16)
Lamps: 1 x Luxeon_K16 (1208.05lm@250mA)



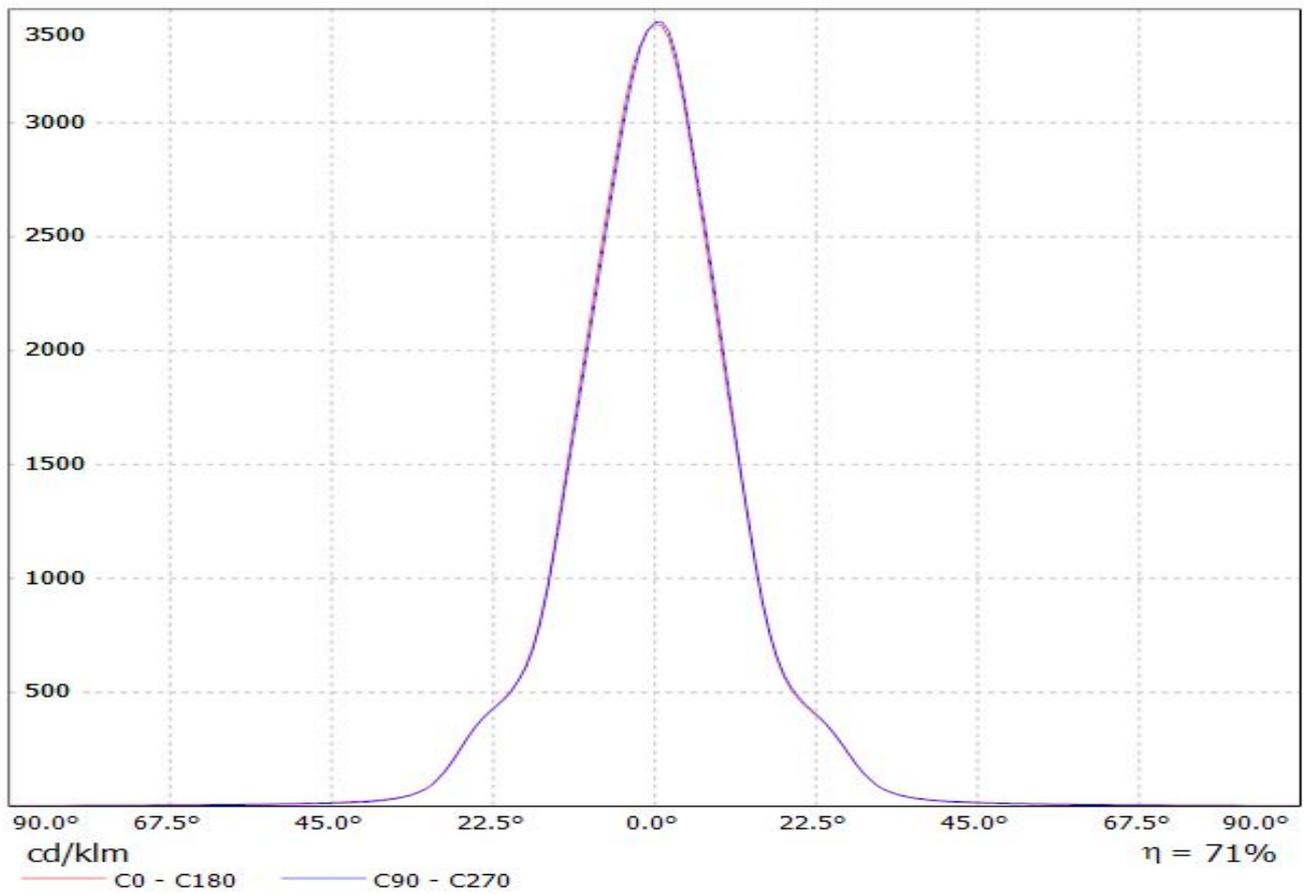
Luminaire: LEDiL Oy CN13261_LENA-SS-DL_(Luxeon_K16) Eff.72.4%
Lamps: 1 x Luxeon_K16 (1208.05lm@250mA)



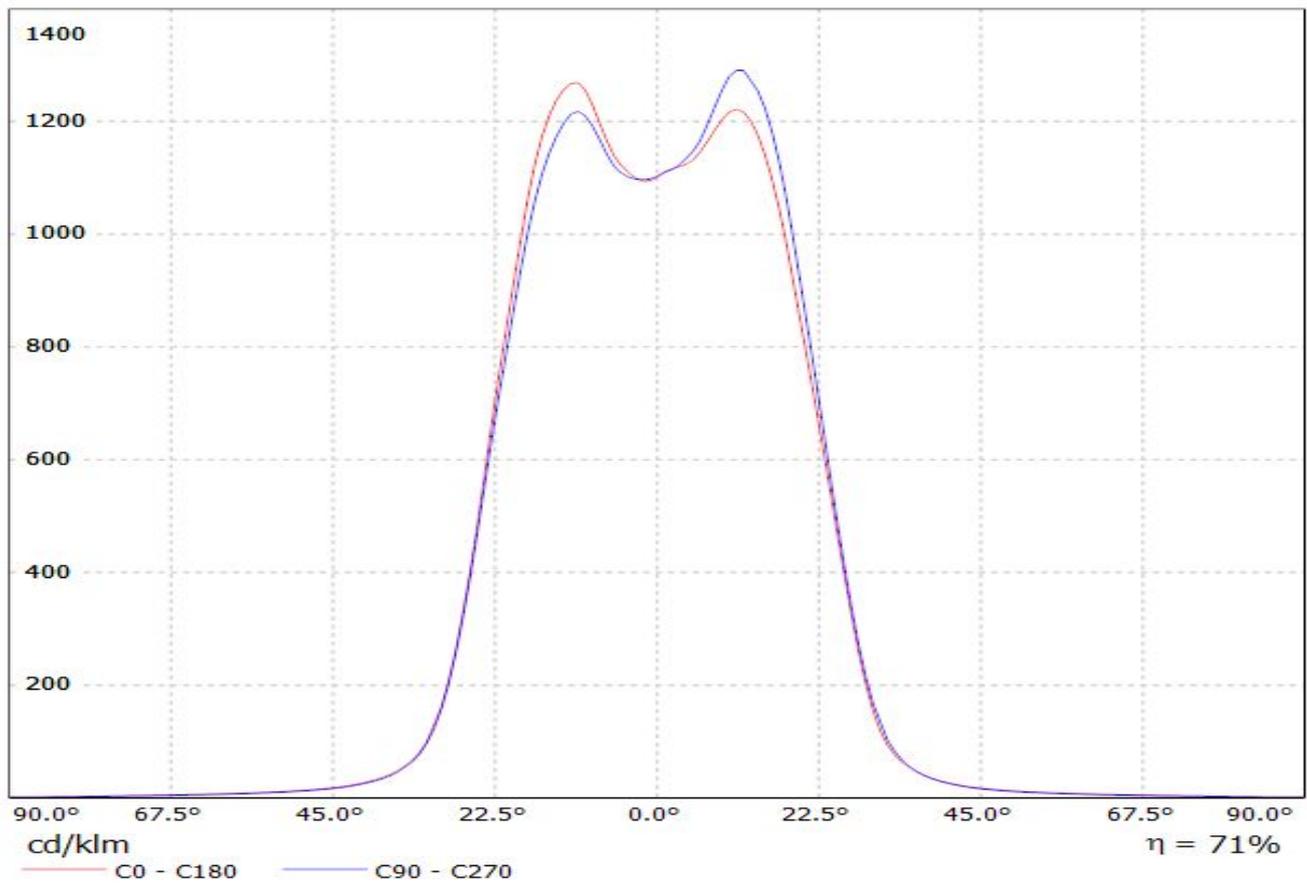
Luminaire: LEDiL Oy CN12927_LENA-M_(Luxeon_K16) Eff.77.2%
Lamps: 1 x Luxeon_K16 (1208.05lm@250mA)



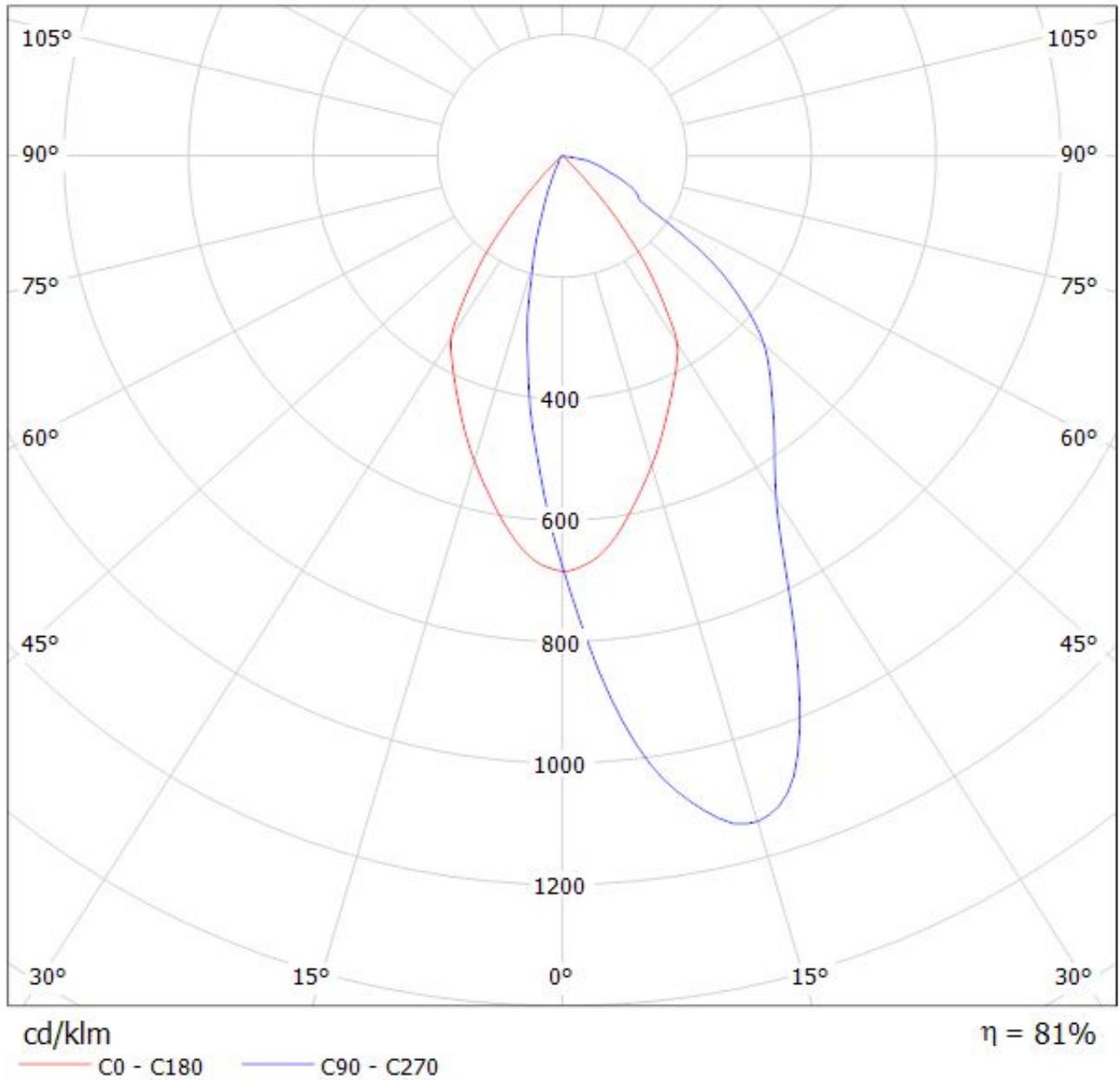
Luminaire: LEDiL Oy CN12930_LENA-M-DL_(Luxeon_K16) Eff.71.3%
Lamps: 1 x Luxeon_K16 (1208.05lm@250mA)



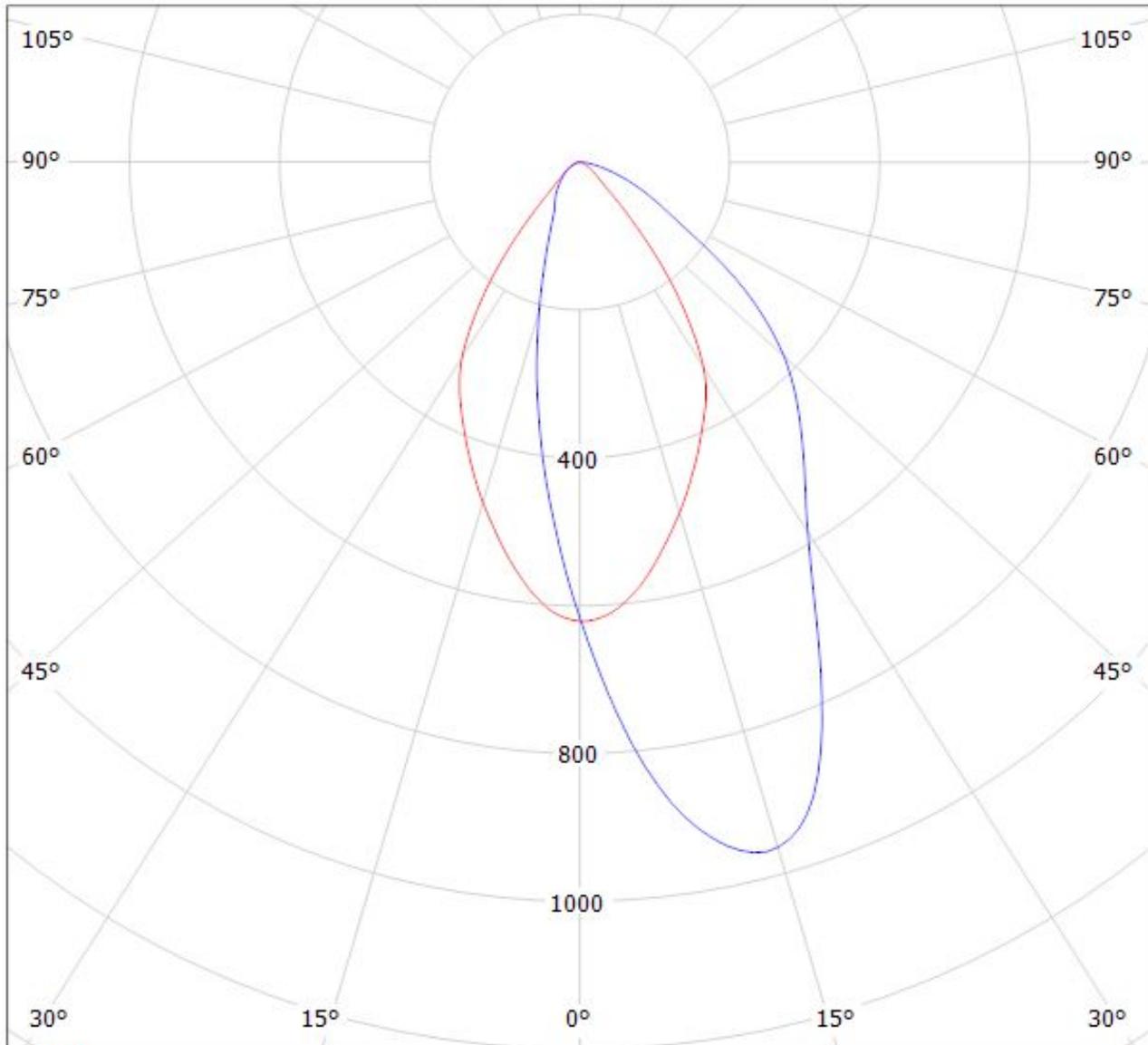
Luminaire: LEDiL Oy CN12931_LENA-W-DL_(Luxeon_K16) Eff.71.4%
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Luminaire: LEDiL Oy CN13175_LENA-WAS-DL_(Luxeon_K16)
Lamps: 1 x Luxeon_K16 (1208.05lm@250mA)

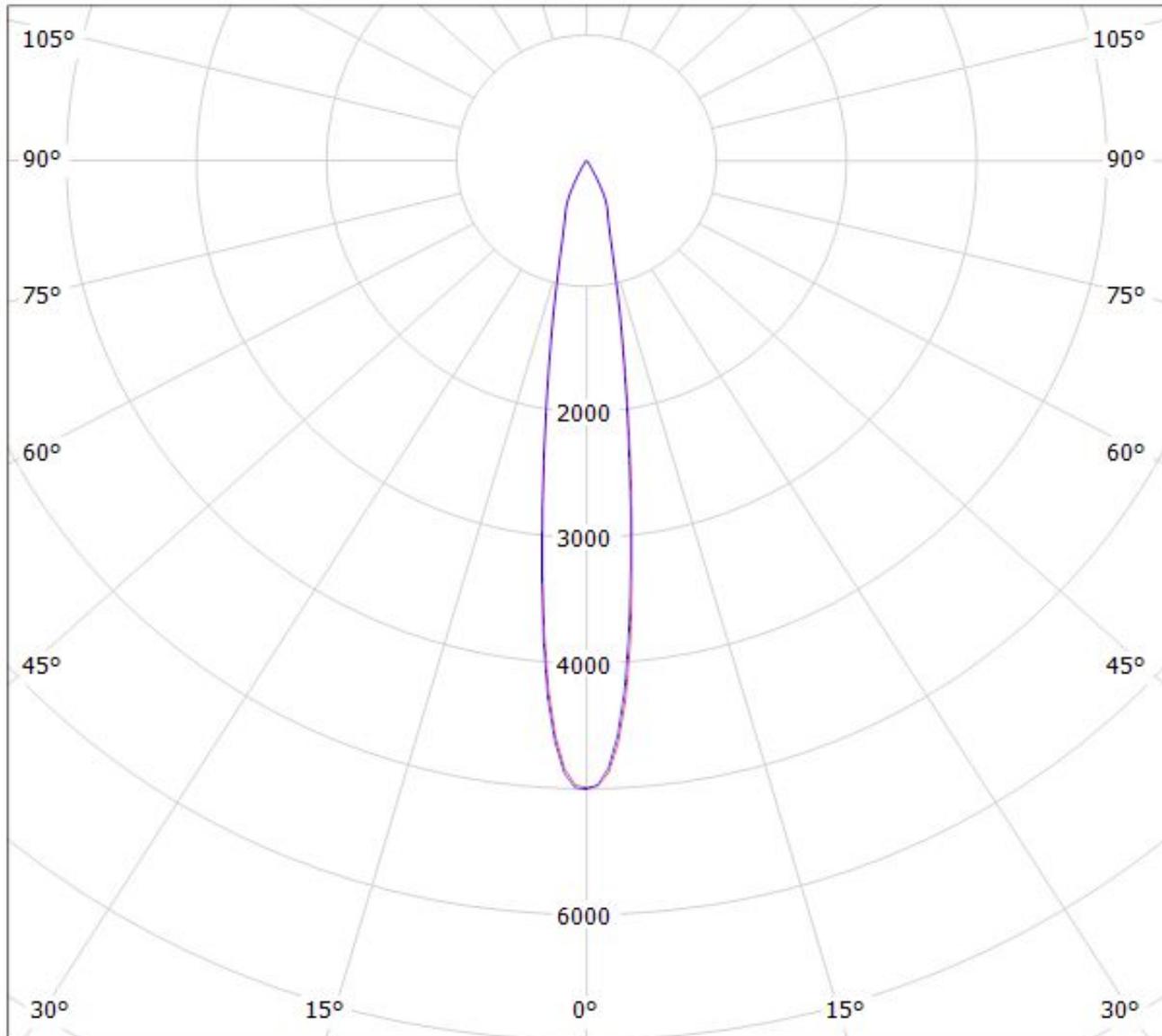


cd/klm

$\eta = 76\%$

— C0 - C180 — C90 - C270

Luminaire: LEDiL Oy CN13261_LENA-SS-DL_(Luxeon_K16) Eff.72.4%
Lamps: 1 x Luxeon_K16 (1208.05lm@250mA)

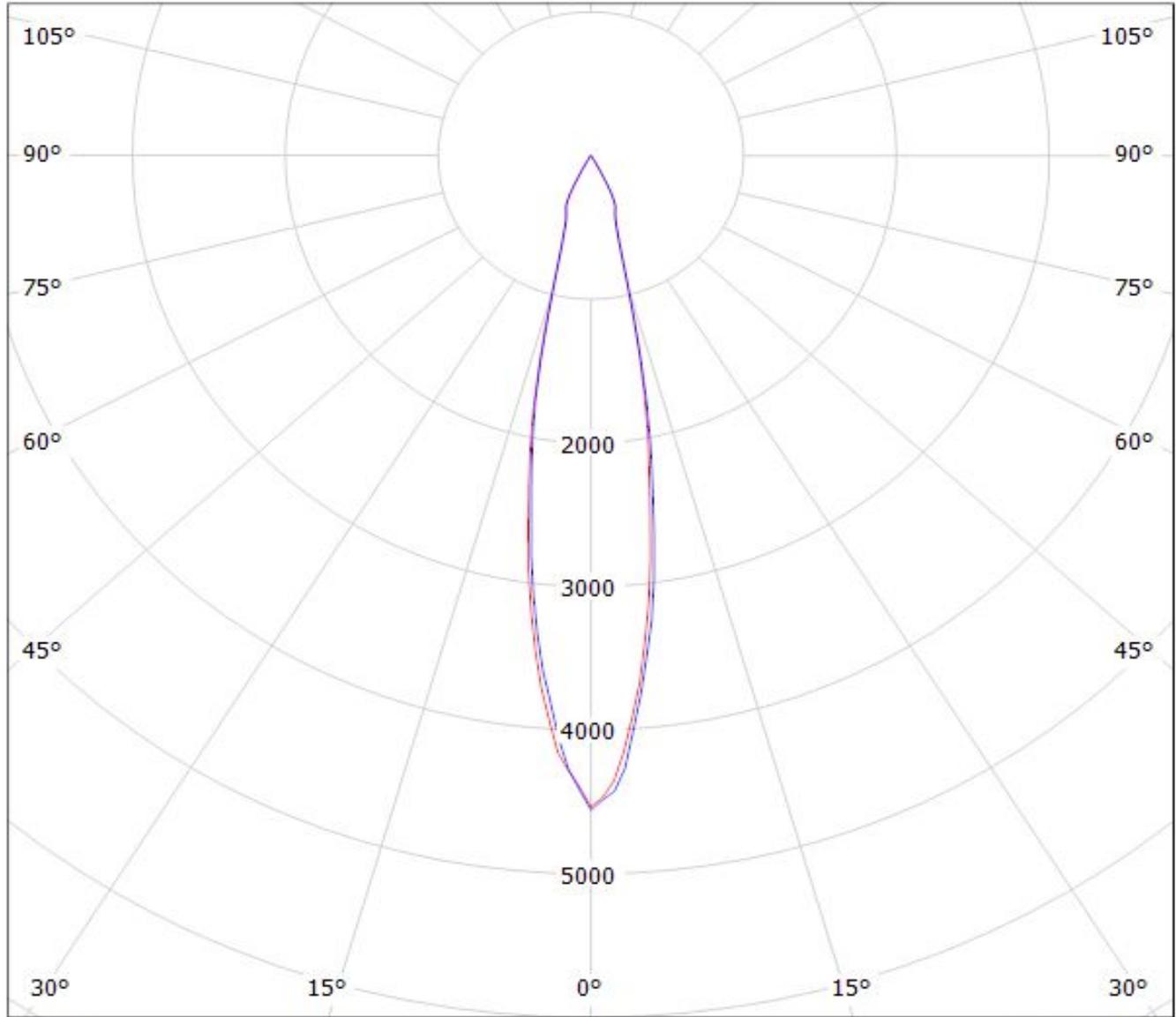


cd/klm

$\eta = 72\%$

— C0 - C180 — C90 - C270

Luminaire: LEDiL Oy CN12927_LENA-M_(Luxeon_K16) Eff.77.2%
Lamps: 1 x Luxeon_K16 (1208.05lm@250mA)

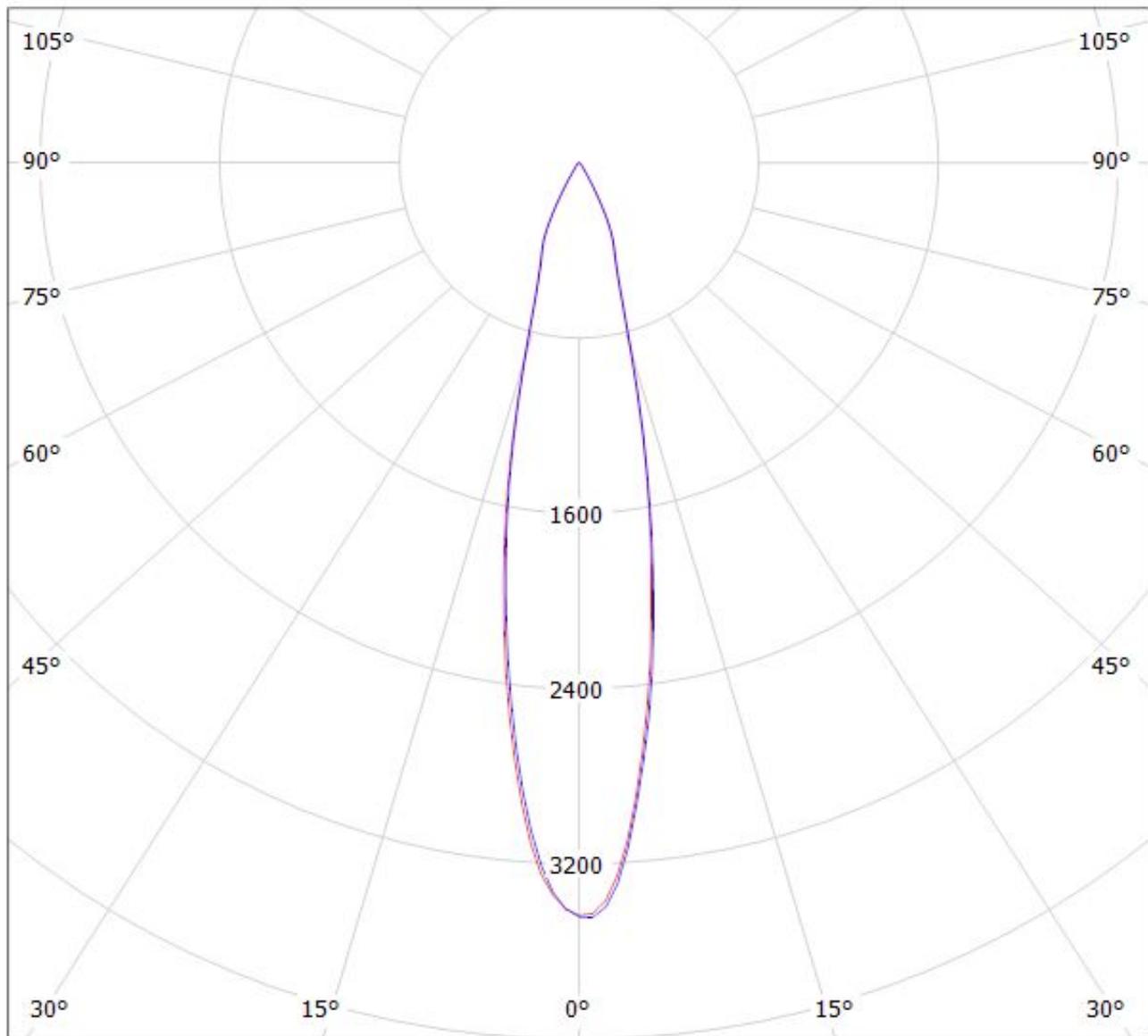


cd/klm

— C0 - C180 — C90 - C270

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Luminaire: LEDiL Oy CN12930_LENA-M-DL_(Luxeon_K16) Eff.71.3%
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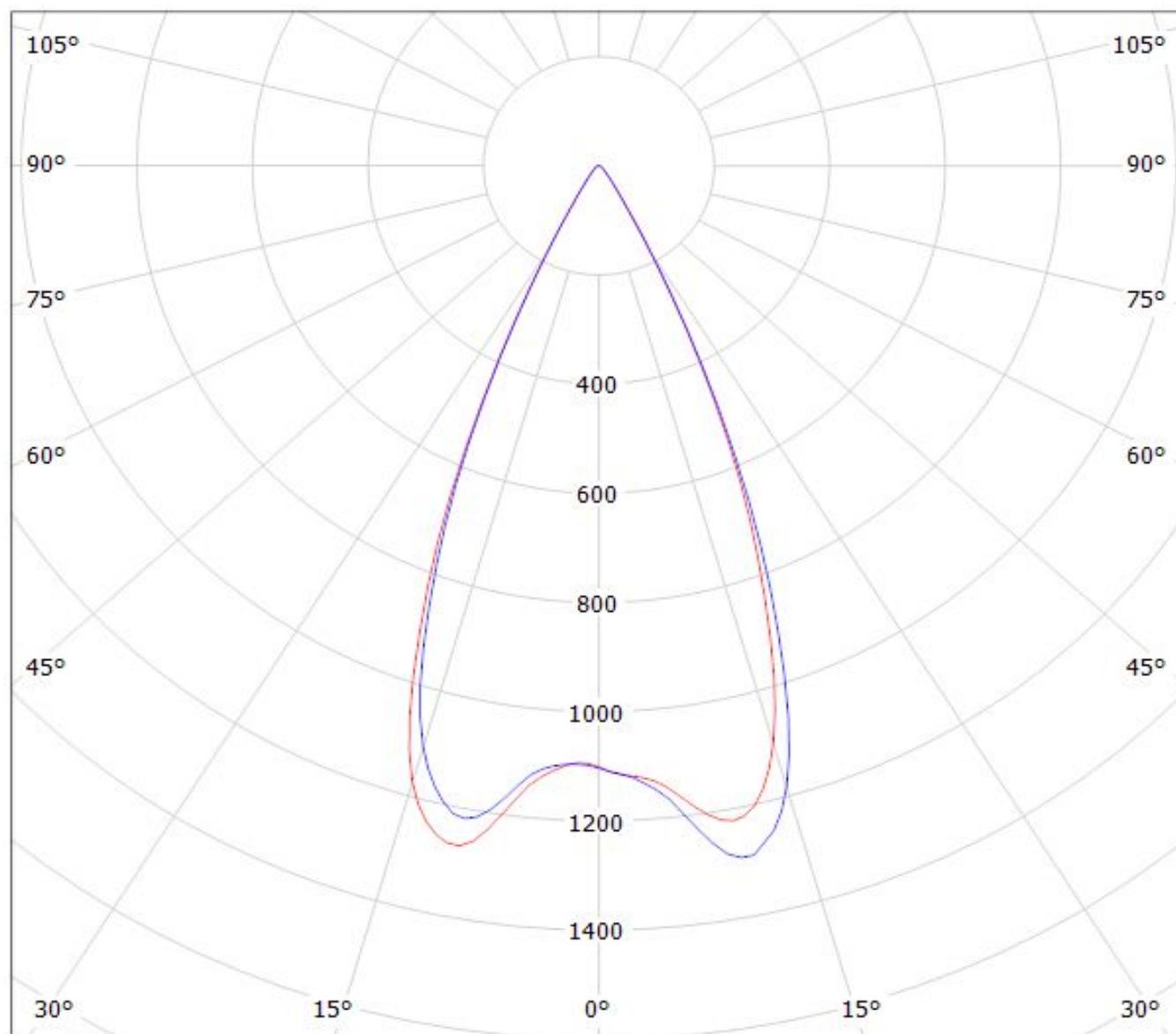
cd/klm

— C0 - C180 — C90 - C270

$\eta = 71\%$

Luminaire: LEDiL Oy CN12931_LENA-W-DL_(Luxeon_K16) Eff.71.4%

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— C0 - C180 — C90 - C270