

**Product number CA11016\_TINA2-RS**

Family	Tina2	FWHM	15 degrees
Type	Assembly	Efficiency	93 %
LED	XP-G	cd/lm	9.000
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["tape"]		
Status	Production ready		

**Product number CP12677\_TINA2-RS**

Family	Tina2	FWHM	15 degrees
Type	Assembly	Efficiency	93 %
LED	XP-G	cd/lm	9.000
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.65 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue"]		
Status	Production ready		

**Product number CP12678\_TINA2-D**

Family	Tina2	FWHM	16 degrees
Type	Assembly	Efficiency	91 %
LED	XP-G	cd/lm	7.000
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.65 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue"]		
Status	Production ready		

**Product number CA11420\_TINA2-D**

Family	Tina2	FWHM	17 degrees
Type	Assembly	Efficiency	91 %
LED	XP-G	cd/lm	5.520
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.66 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["tape"]		
Status	Production ready		

**Product number CA11017\_TINA2-M**

Family	Tina2	FWHM	30 degrees
Type	Assembly	Efficiency	88 %
LED	XP-G	cd/lm	2.800
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["tape"]		
Status	Production ready		

**Product number CP12679\_TINA2-M**

Family	Tina2	FWHM	30 degrees
Type	Assembly	Efficiency	88 %
LED	XP-G	cd/lm	2.800
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.65 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue"]		
Status	Production ready		

**Product number CA11052\_TINA2-O**

Family	Tina2	FWHM	35+16 degrees
Type	Assembly	Efficiency	87 %
LED	XP-G	cd/lm	3.900
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["tape"]		
Status	Production ready		

**Product number CP12680\_TINA2-O**

Family	Tina2	FWHM	35+16 degrees
Type	Assembly	Efficiency	87 %
LED	XP-G	cd/lm	3.900
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.82 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue"]		
Status	Production ready		

# PRODUCT DATASHEET

## Tina2 series

last update 24/10/2014

**Product number CA12056\_TINA2-W**

Family	Tina2	FWHM	57 degrees
Type	Assembly	Efficiency	88 %
LED	XP-G	cd/lm	1.000
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["tape"]		
Status	Production ready		

**Product number CP12681\_TINA2-W**

Family	Tina2	FWHM	57 degrees
Type	Assembly	Efficiency	88 %
LED	XP-G	cd/lm	-
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.65 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue"]		
Status	Production ready		

**Product number C13253\_TINA2-R-CLIP16**

Family	Tina2	FWHM	77 degrees
Type	Reflector	Efficiency	90 %
LED	XP-G	cd/lm	0.506
Color	Clear	Gerber File	Available
Diameter	16.1 mm		
Height	10.1 mm		
Style	Round		
Optic Material	HRPC		
Holder Material	-		
Fastening	["clips"]		
Status	Production 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

### Tina2 series

last update 24/10/2014

#### GENERAL INFORMATION

- Product series especially designed & optimized for XP-G series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PMMA with high UV and temperature resistance. Allows use of high current and temperature conditions.

Please find more information about used material from below:

[http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20UL94\\_Yellow%20Card.pdf](http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20UL94_Yellow%20Card.pdf)

<http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20PLEXIGLAS-Datasheet.pdf>

D

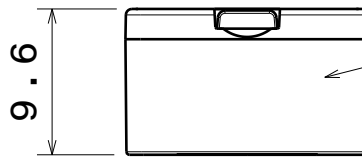
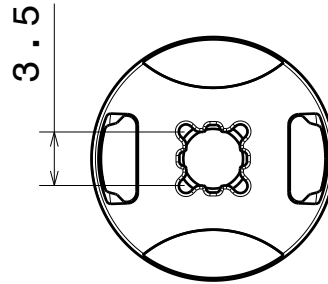
C

B

A

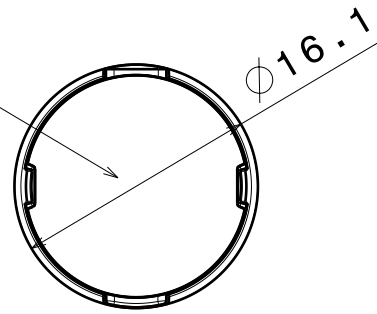


Isometric view  
Scale: 1:1



Holder

Lens



Materials:  
Lens PMMA  
Holder PC, Black

Tolerances for dimensions:  
0-20mm tolerance value  $\pm 0.1\text{mm}$   
21-45mm tolerance value  $\pm 0.2\text{mm}$   
46-90mm tolerance value  $\pm 0.3\text{mm}$   
91-100mm tolerance value  $\pm 0.4\text{mm}$   
101-mm tolerance value  $\pm 0.5\text{mm}$

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Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

DRAWING TITLE

Datasheet Tina2 XP Glue Assy

DRAWN BY

pv

DATE

11.04.2012

CHECKED BY

sn

DATE

12.03.2012

DESIGNED BY

pv

DATE

12.03.2012

SIZE

A4

DRAWING NUMBER

-

REV

1

SCALE

2:1

WEIGHT (g)

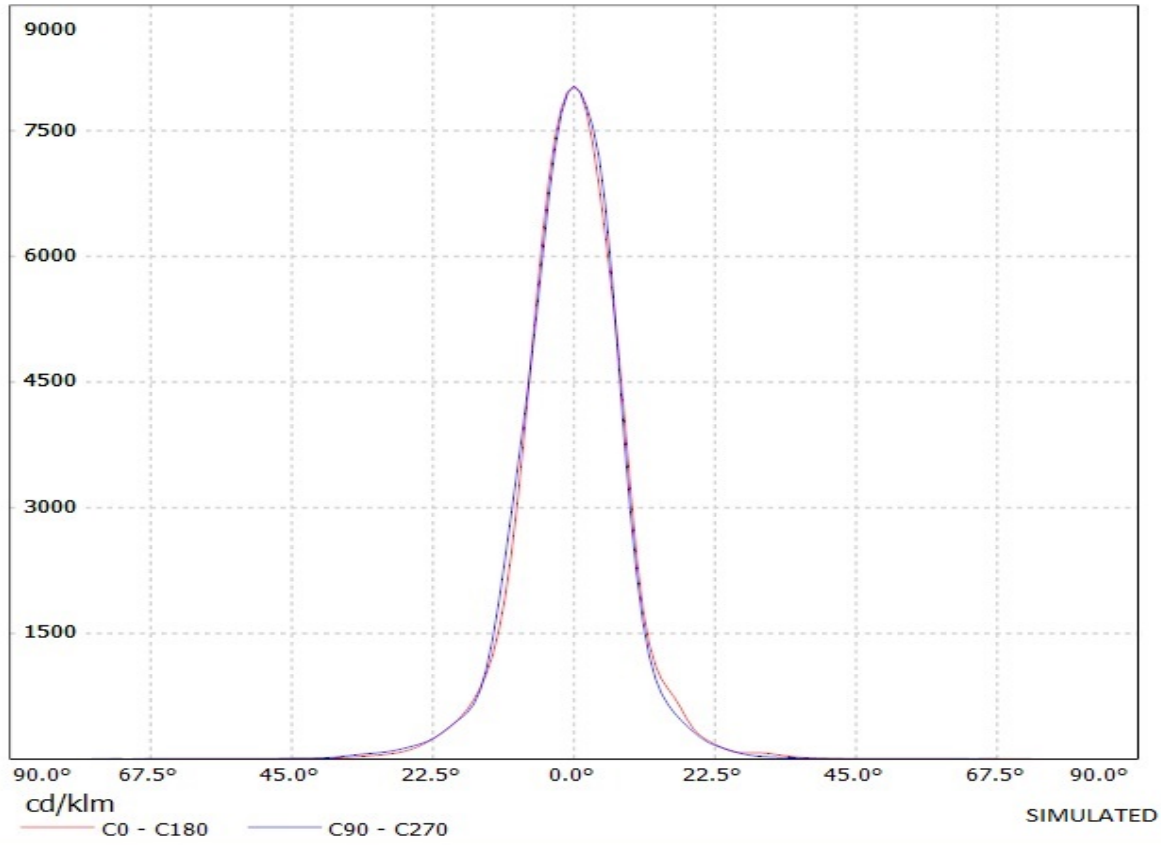
SHEET

1/1

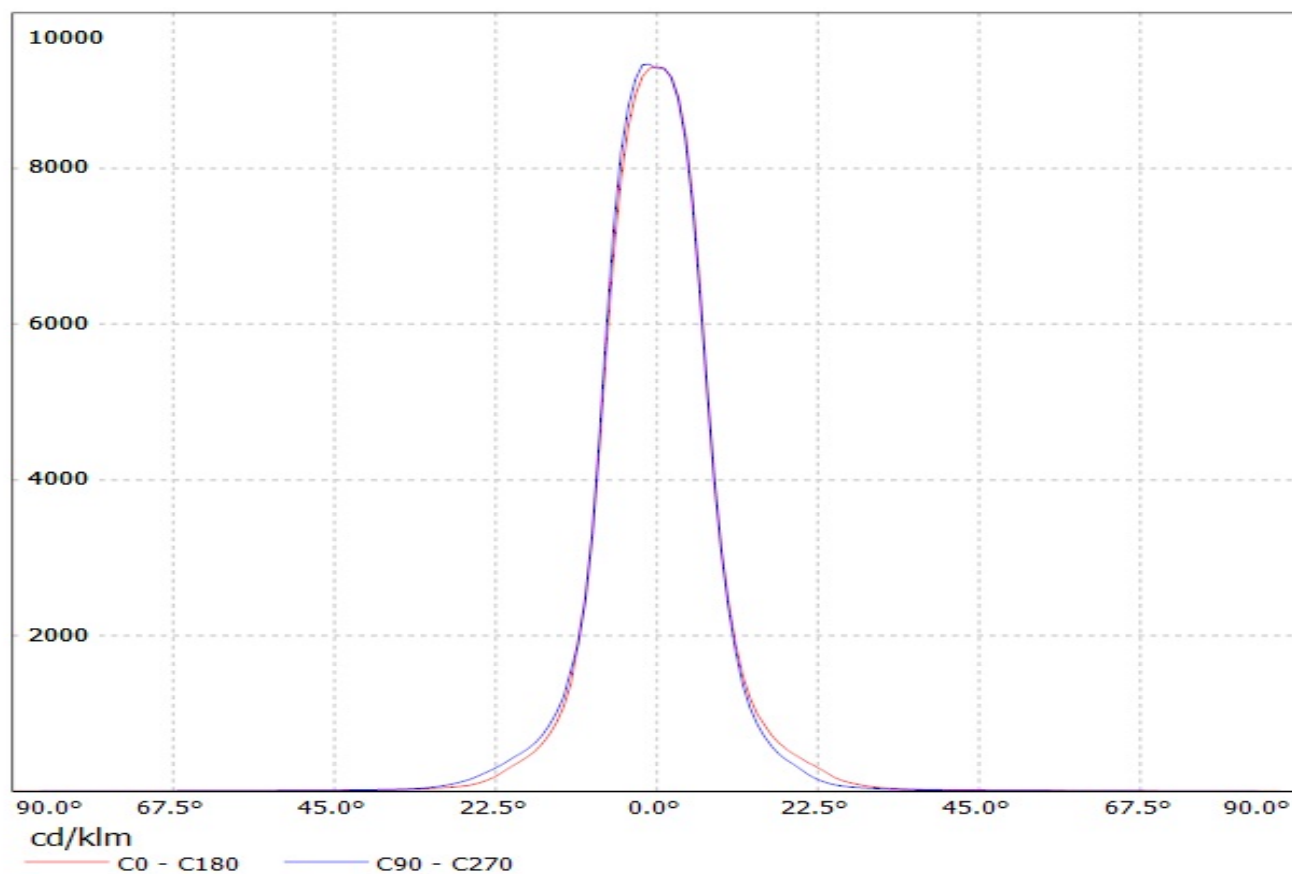
A

Ledil Oy CA11016\_Tina2-XP-G-RS-black LOR=95% / LDC (Linear)

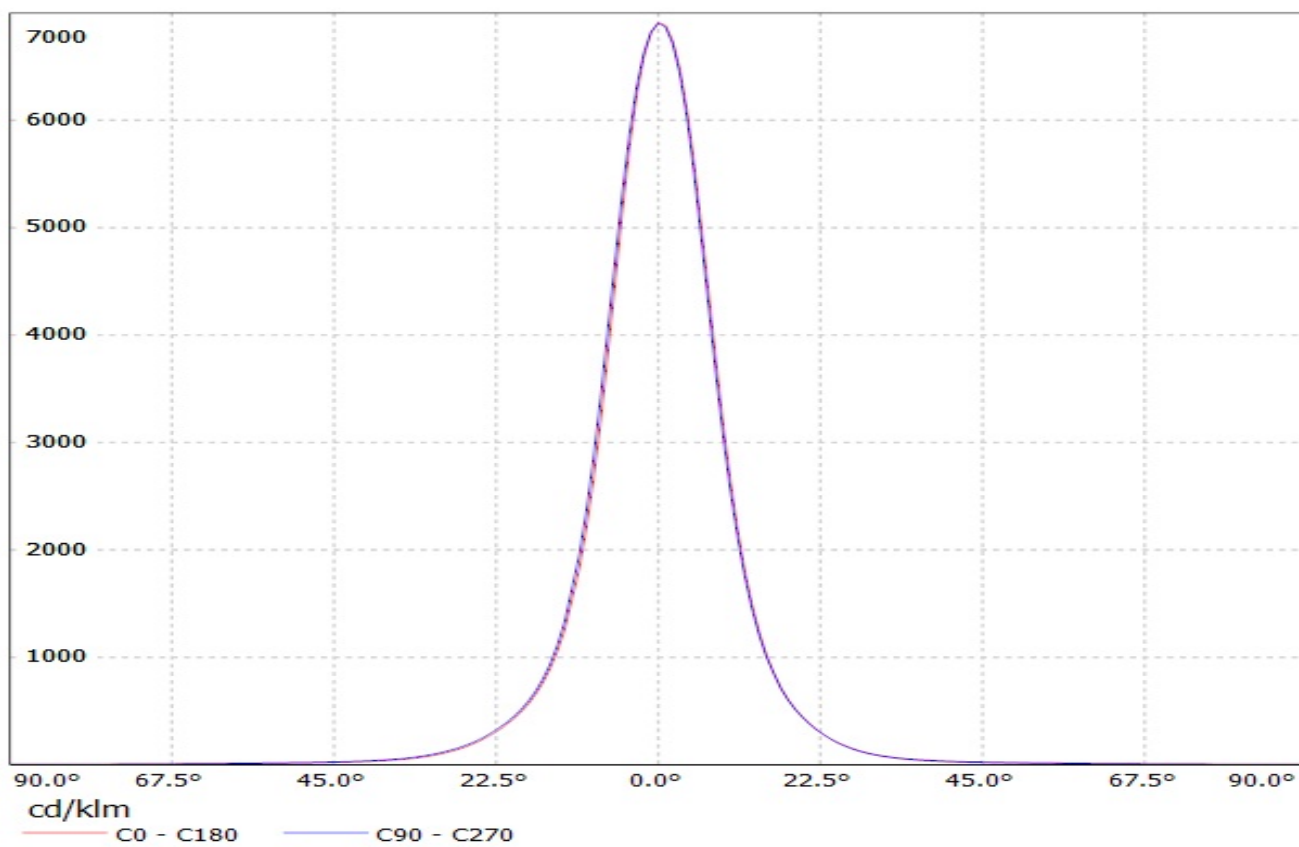
Luminaire: Ledil Oy CA11016\_Tina2-XP-G-RS-black LOR=95%  
Lamps: 1 x Cree XP-G 250mA 89lm



Luminaire: LEDIL OY CP12677\_TINA2-RS (XP-G) Efficiency=92%  
Lamps: 1 x Cree XP-G (92lm@250mA)



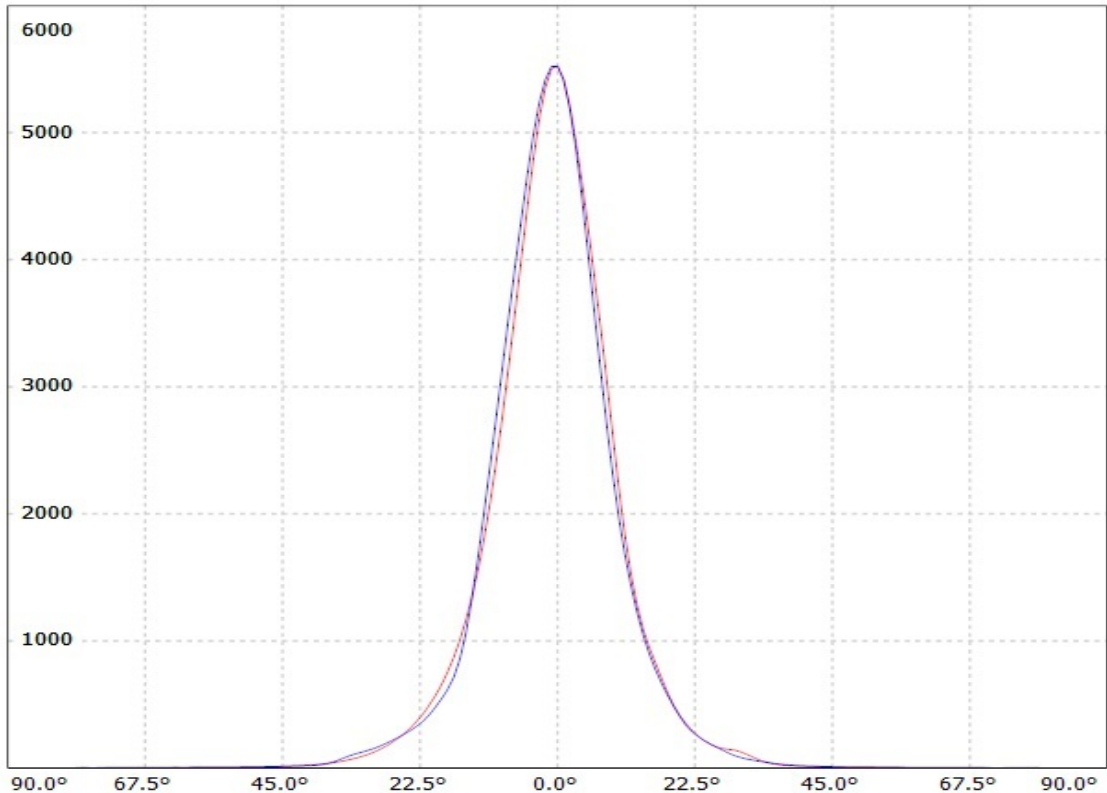
Luminaire: LEDIL OY CP12678\_TINA2-D (XP-G) Efficiency=91%  
Lamps: 1 x Cree XP-G (92lm@250mA)





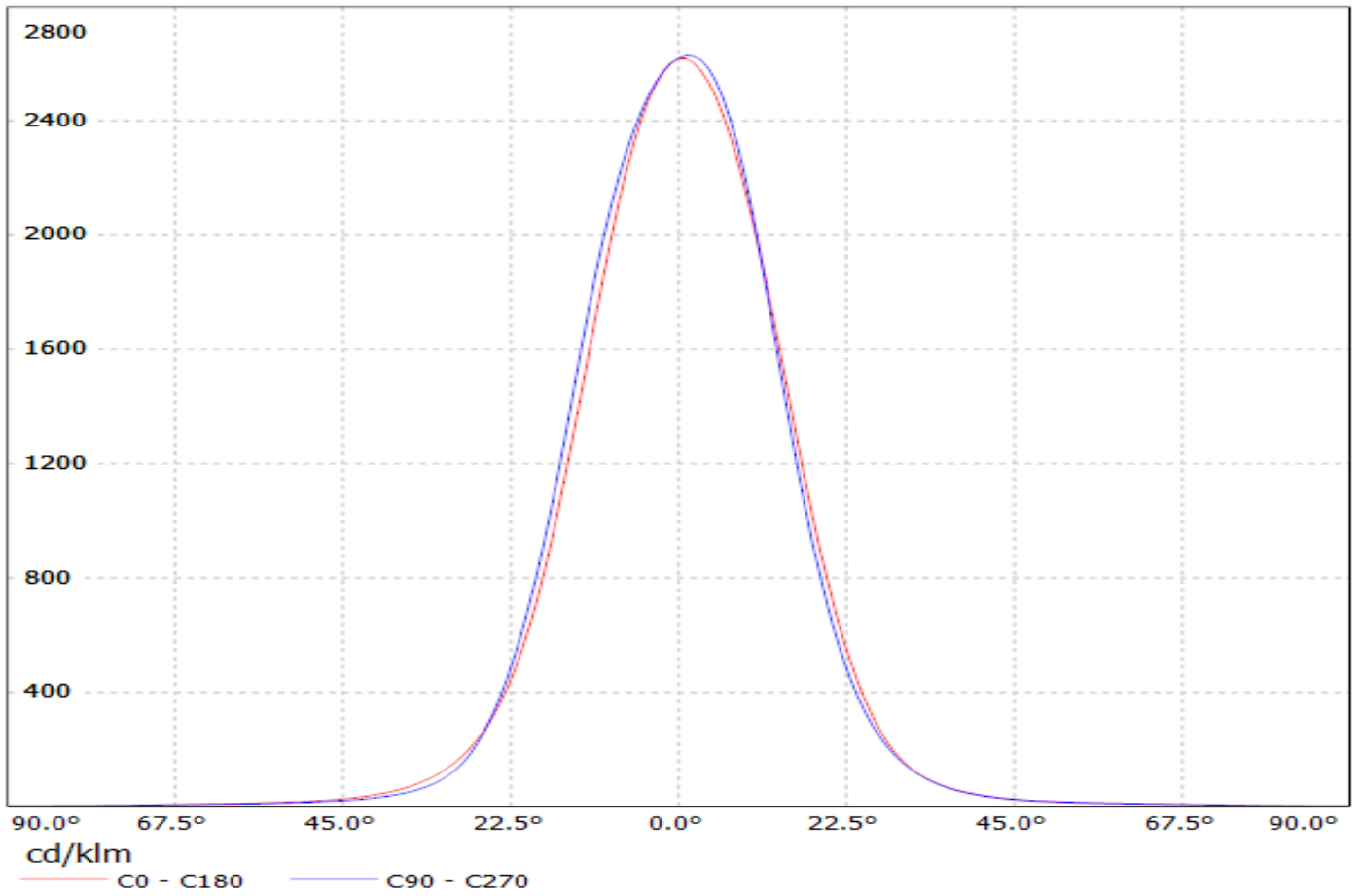
Ledil Oy CA11420\_Tina2-XP-G-D-black LOR=95% / LDC (Linear)

Luminaire: Ledil Oy CA11420\_Tina2-XP-G-D-black LOR=95%  
Lamps: 1 x Cree XP-G 89lm 250mA

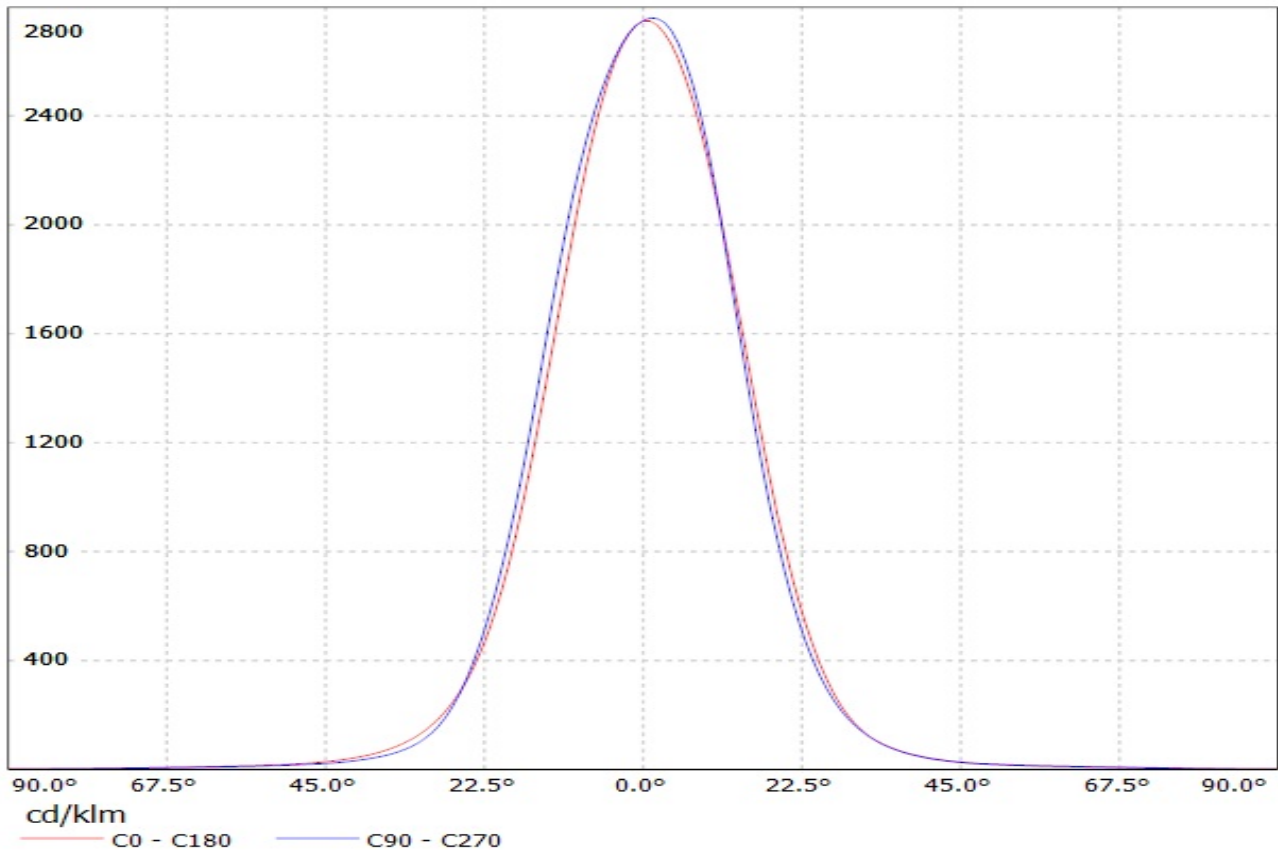


SIMULATED

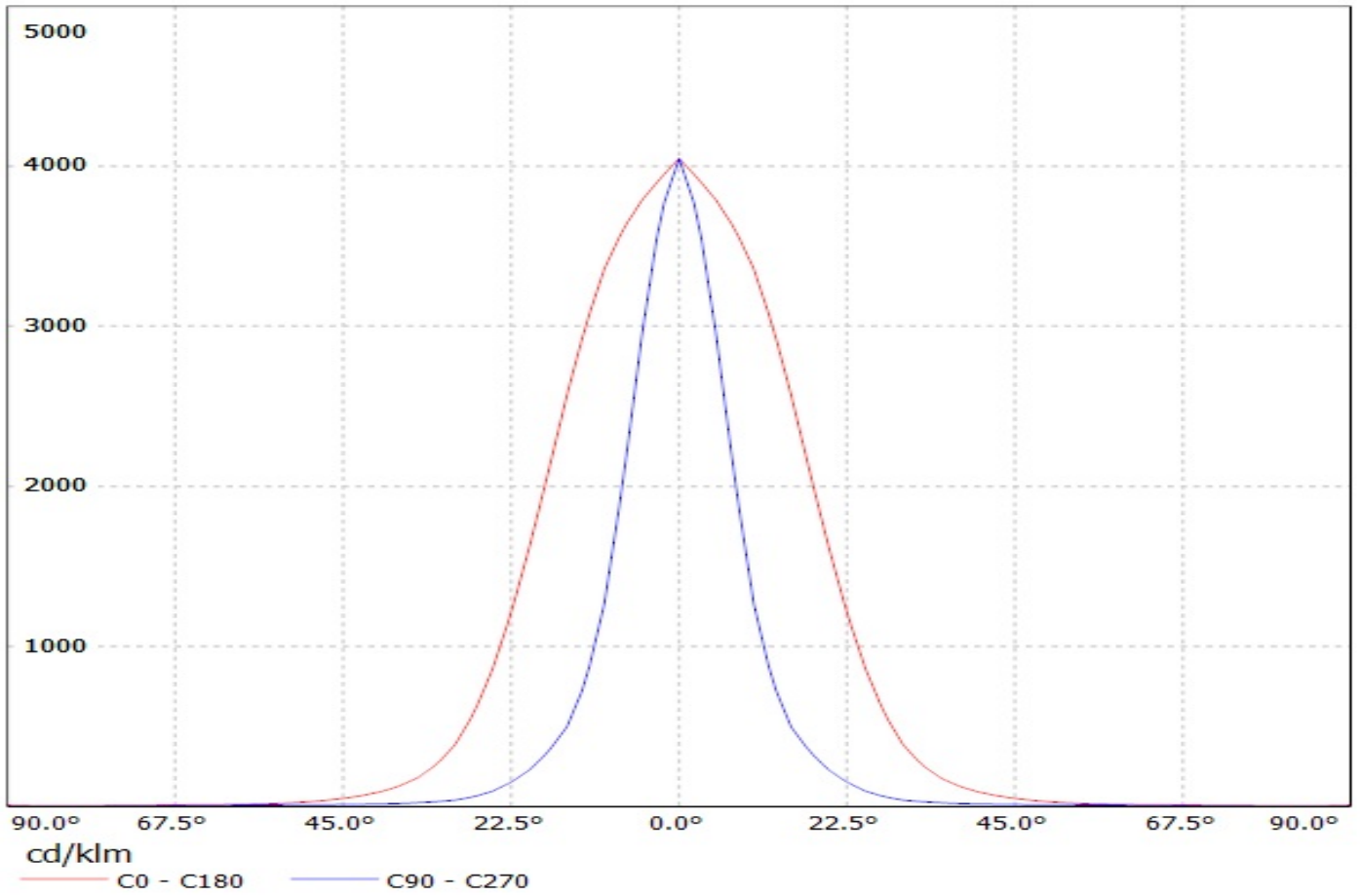
Luminaire: LEDIL OY CA11017\_TINA2-M (XP-G) Efficiency=91%  
Lamps: 1 x Cree XP-G (92lm@250mA)



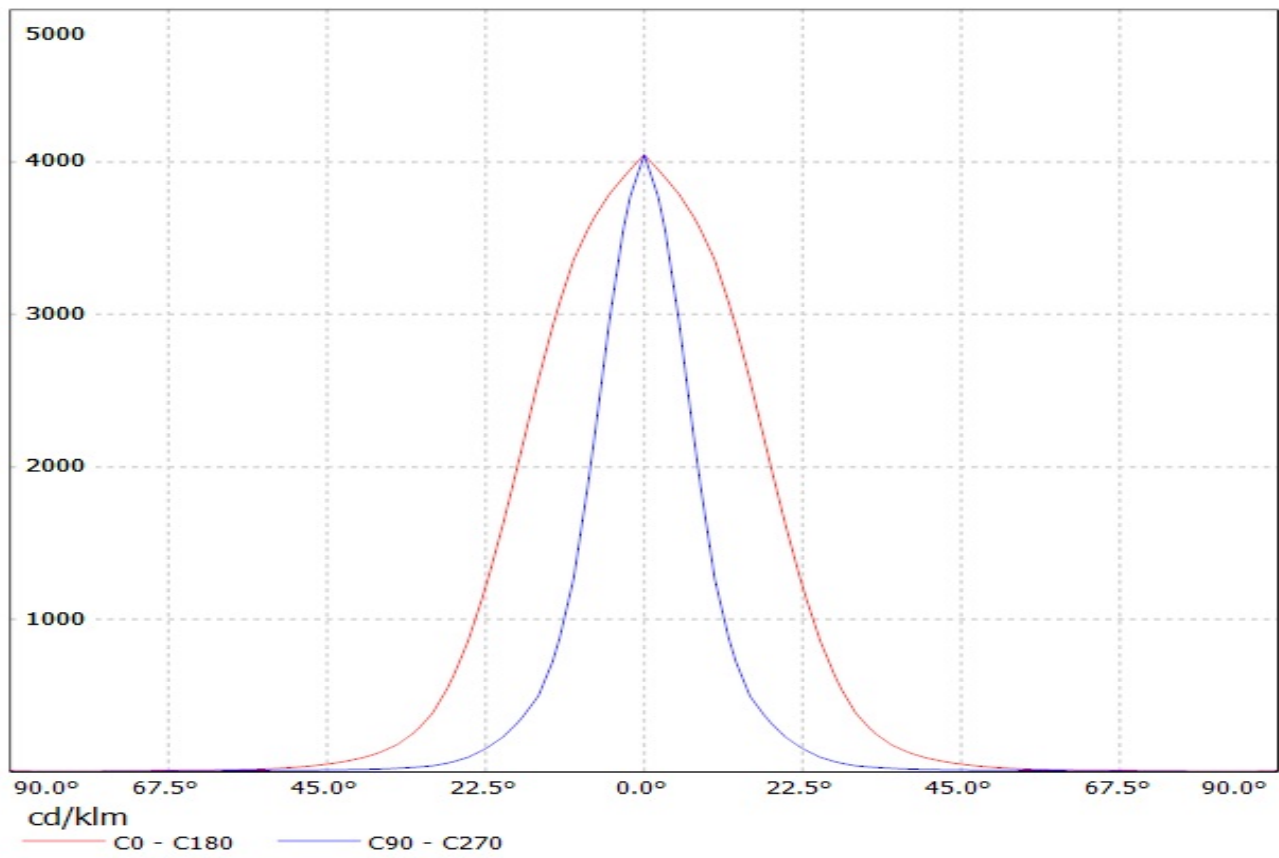
Luminaire: LEDIL OY CP12679\_TINA2-M (XP-G) Efficiency=87%  
Lamps: 1 x Cree XP-G (92lm@250mA)



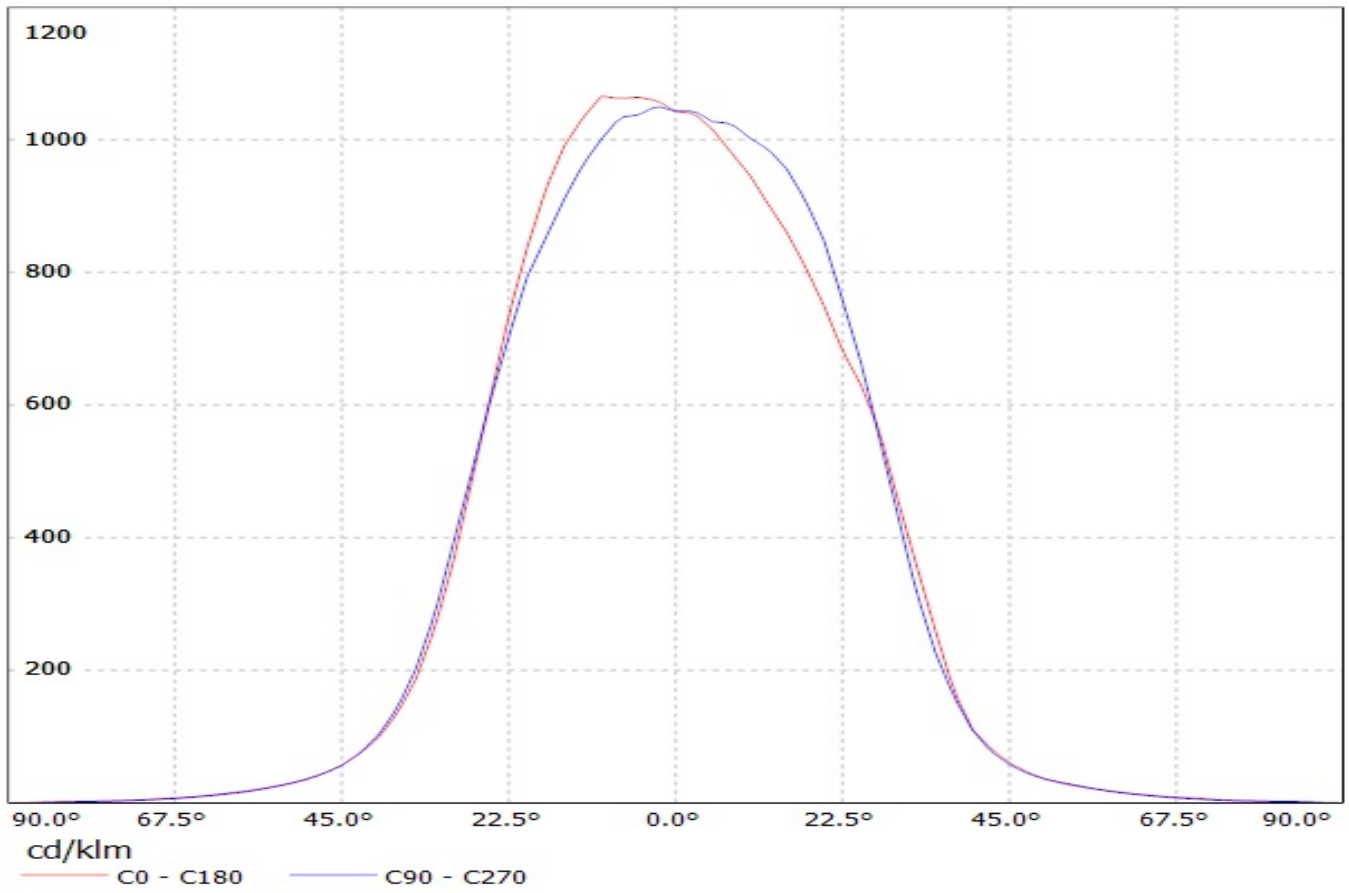
Luminaire: LEDIL OY CA11052\_Tina2-O (XP-G) Efficiency=87%  
Lamps: 1 x Cree XP-G (92lm@250mA)



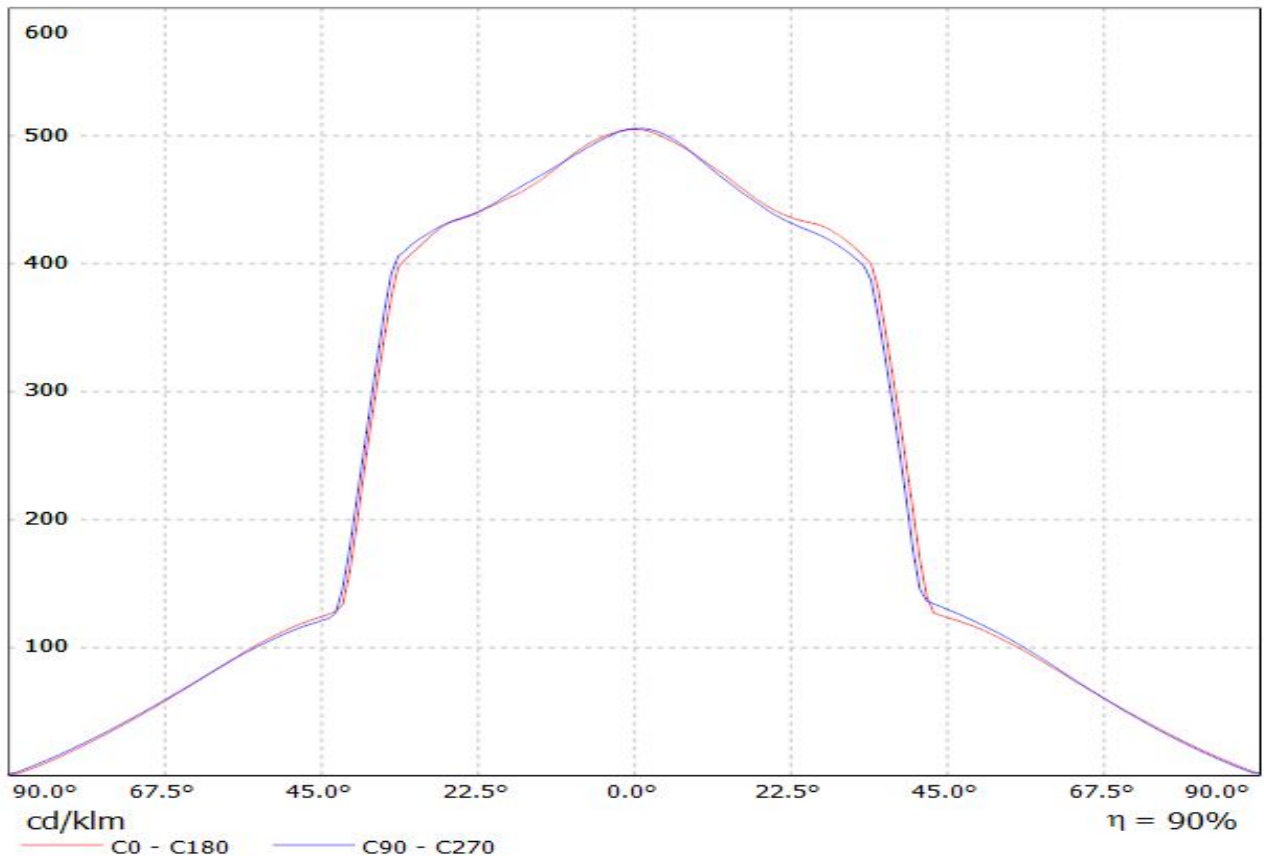
Luminaire: LEDIL OY CP12680\_TINA2-O (XP-G) Efficiency=87%  
Lamps: 1 x Cree XP-G (92lm@250mA)



Luminaire: Ledil Oy CA12056\_TINA2-W (Cree XP-G 92lm @ 250mA) Efficiency=88%  
Lamps: 1 x Cree XP-G 92lm @ 250mA



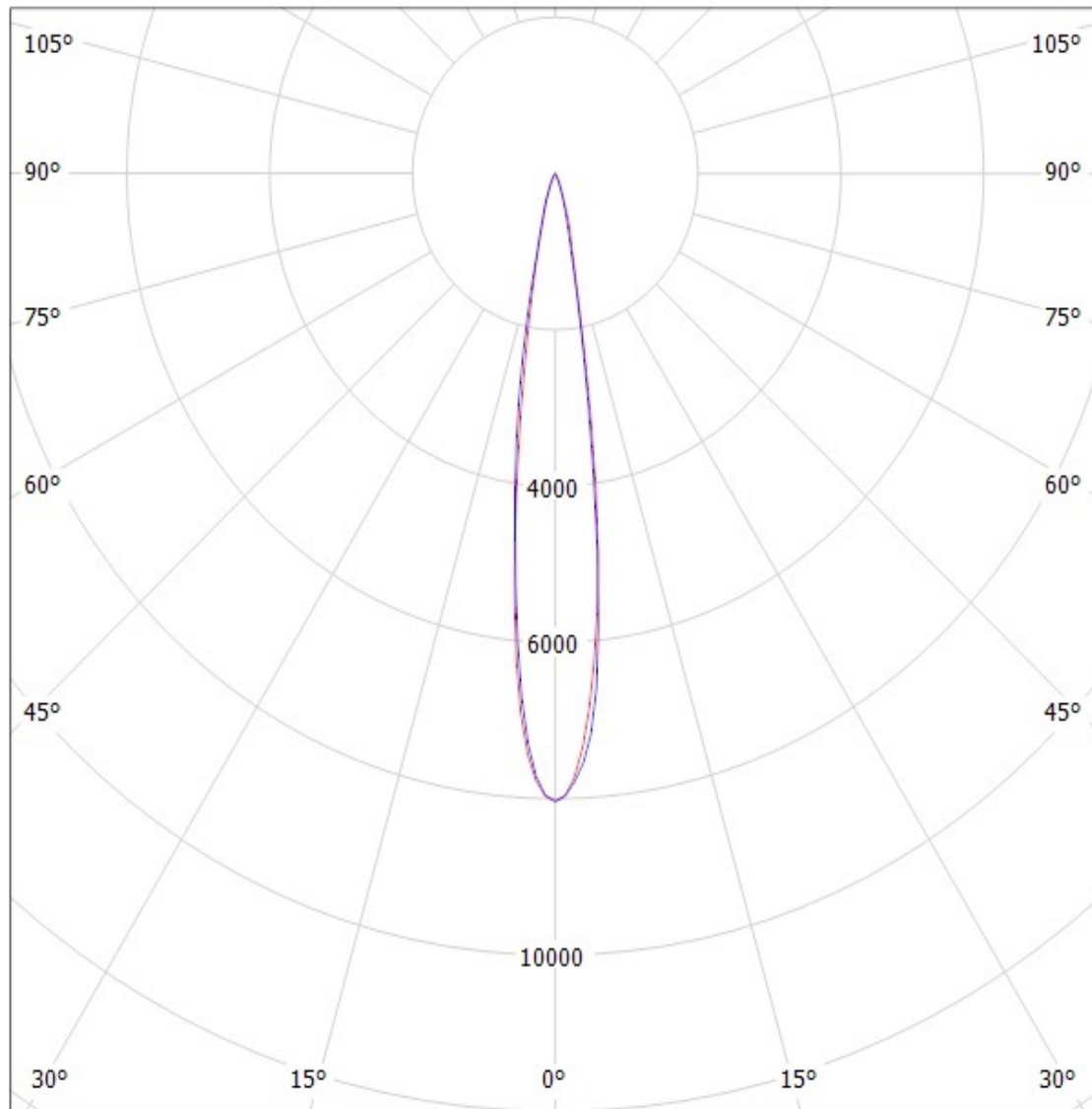
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XP-G) Eff. 90,1%  
Lamps: 1 x Cree XP-G (66lm@250mA)



# Ledil Oy CA11016\_Tina2-XP-G-RS-black LOR=95% / LDC (Polar)

Luminaire: Ledil Oy CA11016\_Tina2-XP-G-RS-black LOR=95%

Lamps: 1 x Cree XP-G 250mA 89lm



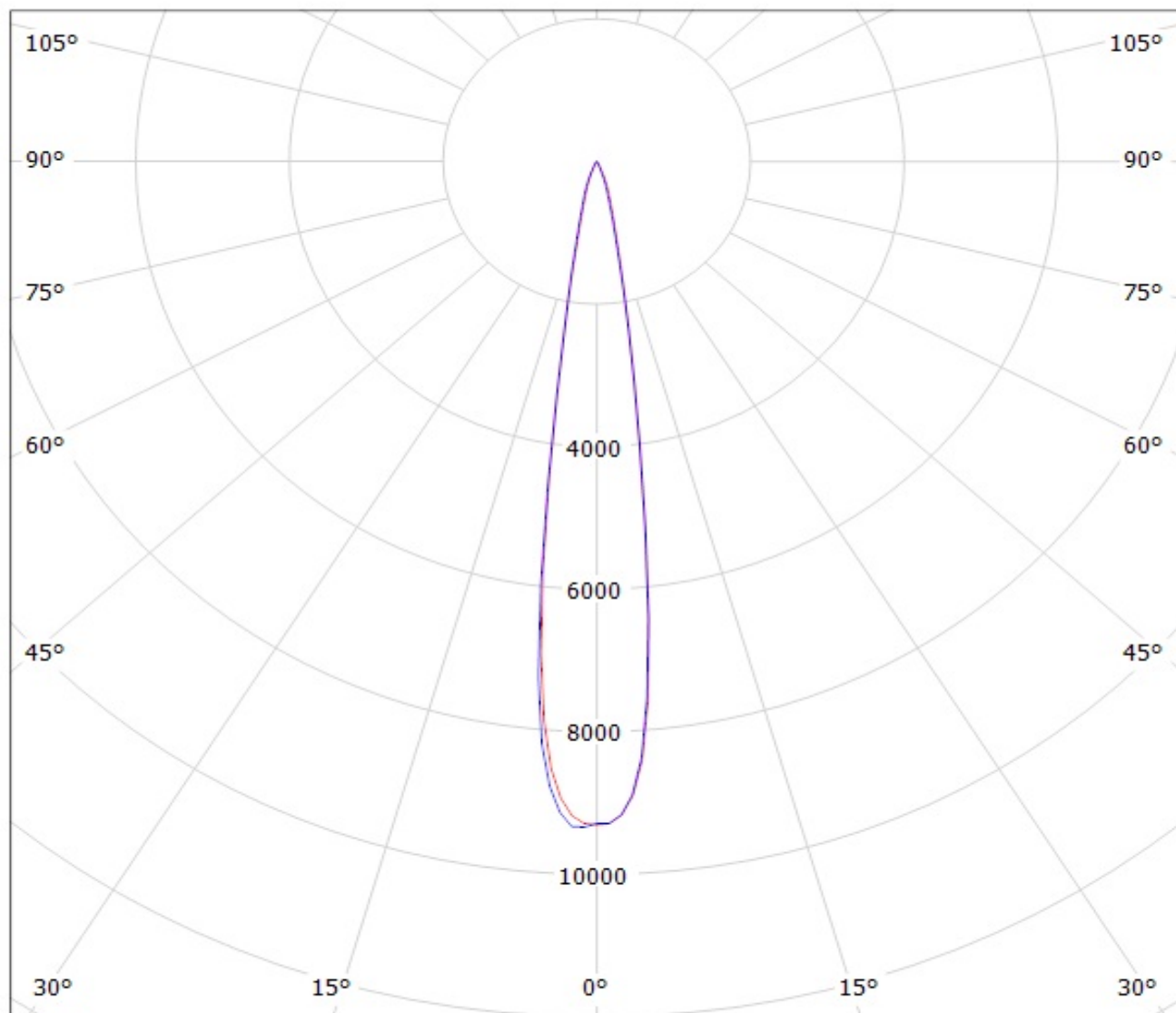
cd/klm

— C0 - C180 — C90 - C270

SIMULATED



Luminaire: LEDIL OY CP12677\_TINA2-RS (XP-G) Efficiency=92%  
Lamps: 1 x Cree XP-G (92lm@250mA)

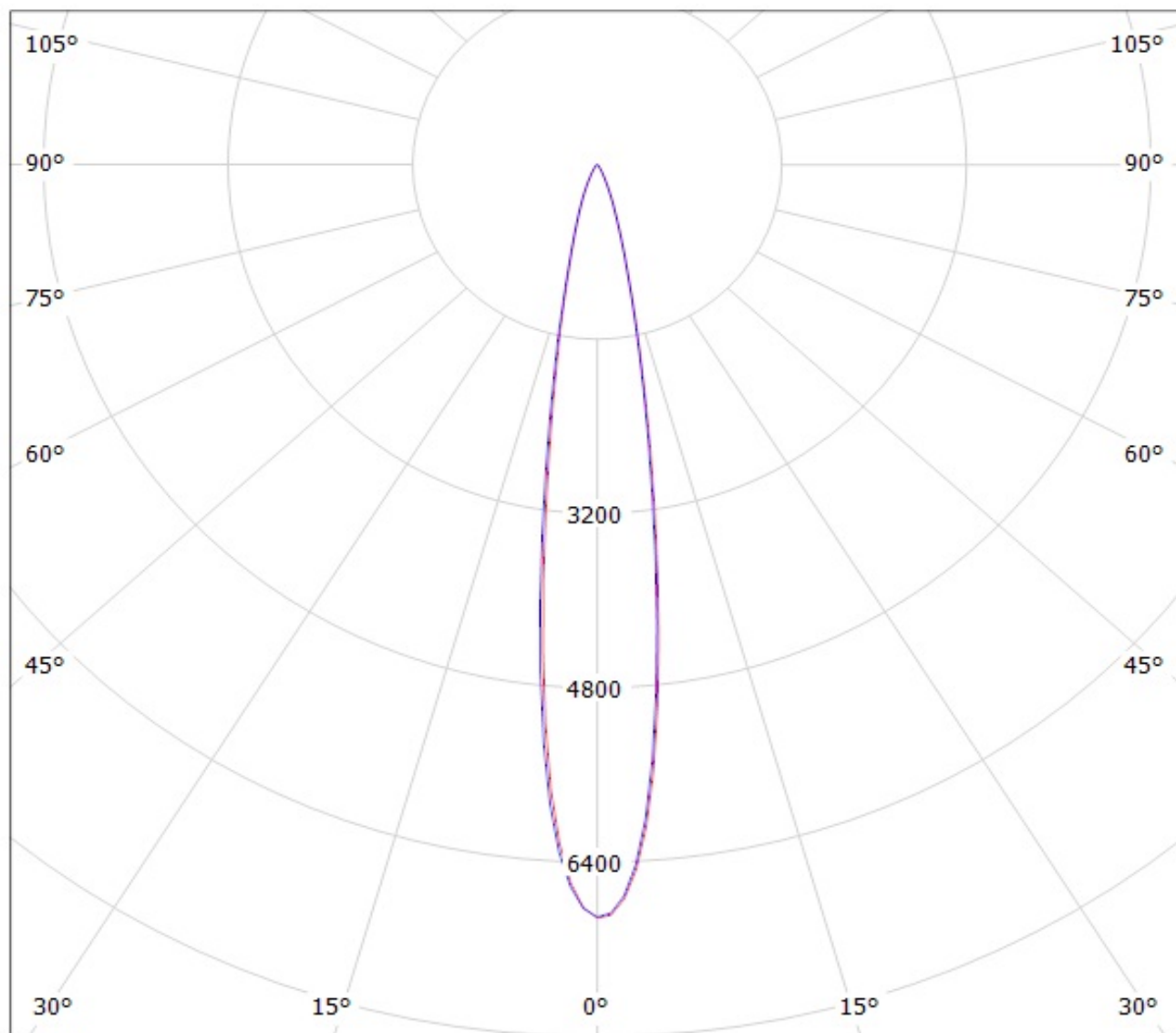


cd/klm

— C0 - C180

— C90 - C270

Luminaire: LEDIL OY CP12678\_TINA2-D (XP-G) Efficiency=91%  
Lamps: 1 x Cree XP-G (92lm@250mA)



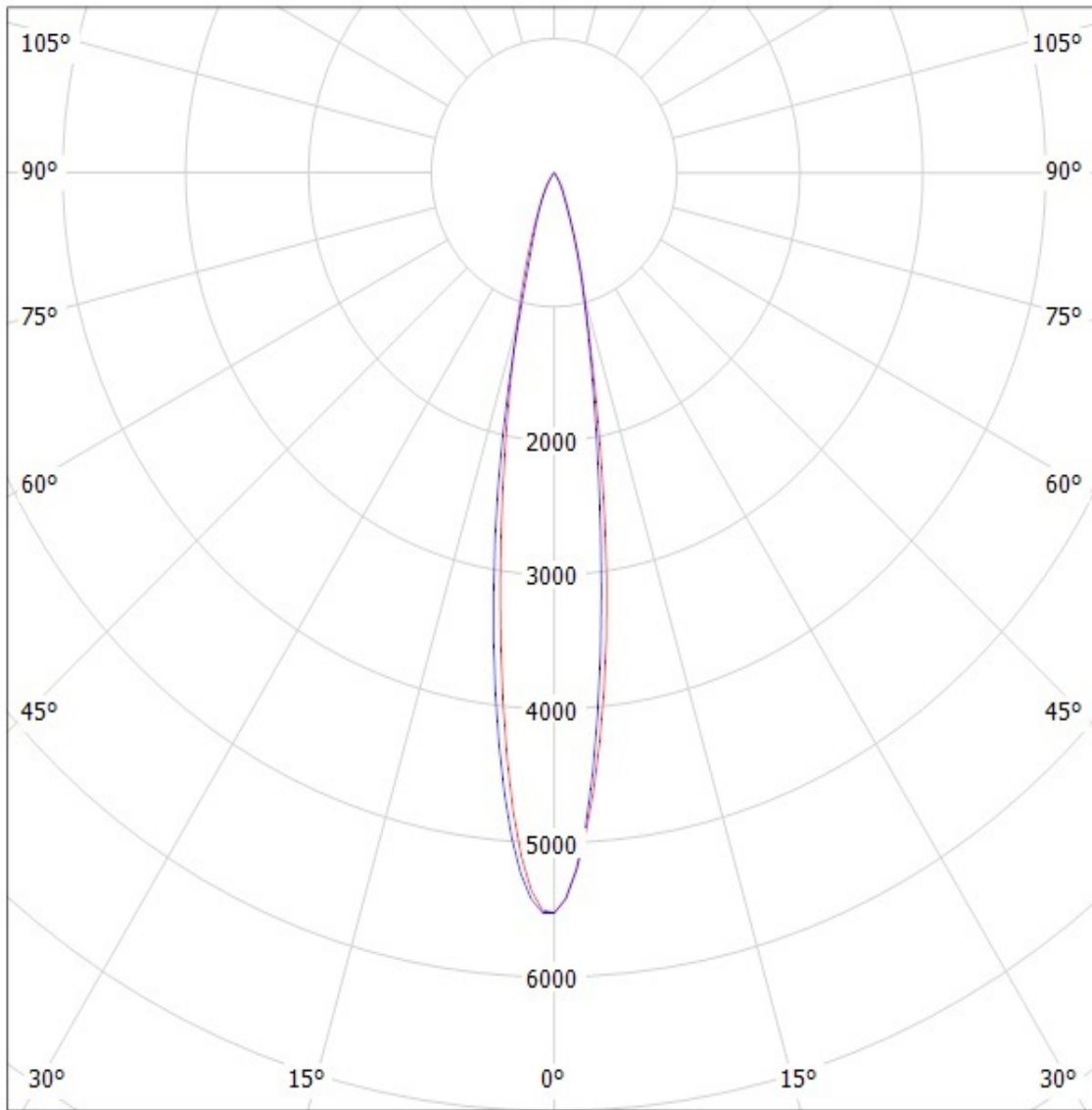
cd/klm

— C0 - C180    — C90 - C270

# Ledil Oy CA11420\_Tina2-XP-G-D-black LOR=95% / LDC (Polar)

Luminaire: Ledil Oy CA11420\_Tina2-XP-G-D-black LOR=95%

Lamps: 1 x Cree XP-G 89lm 250mA



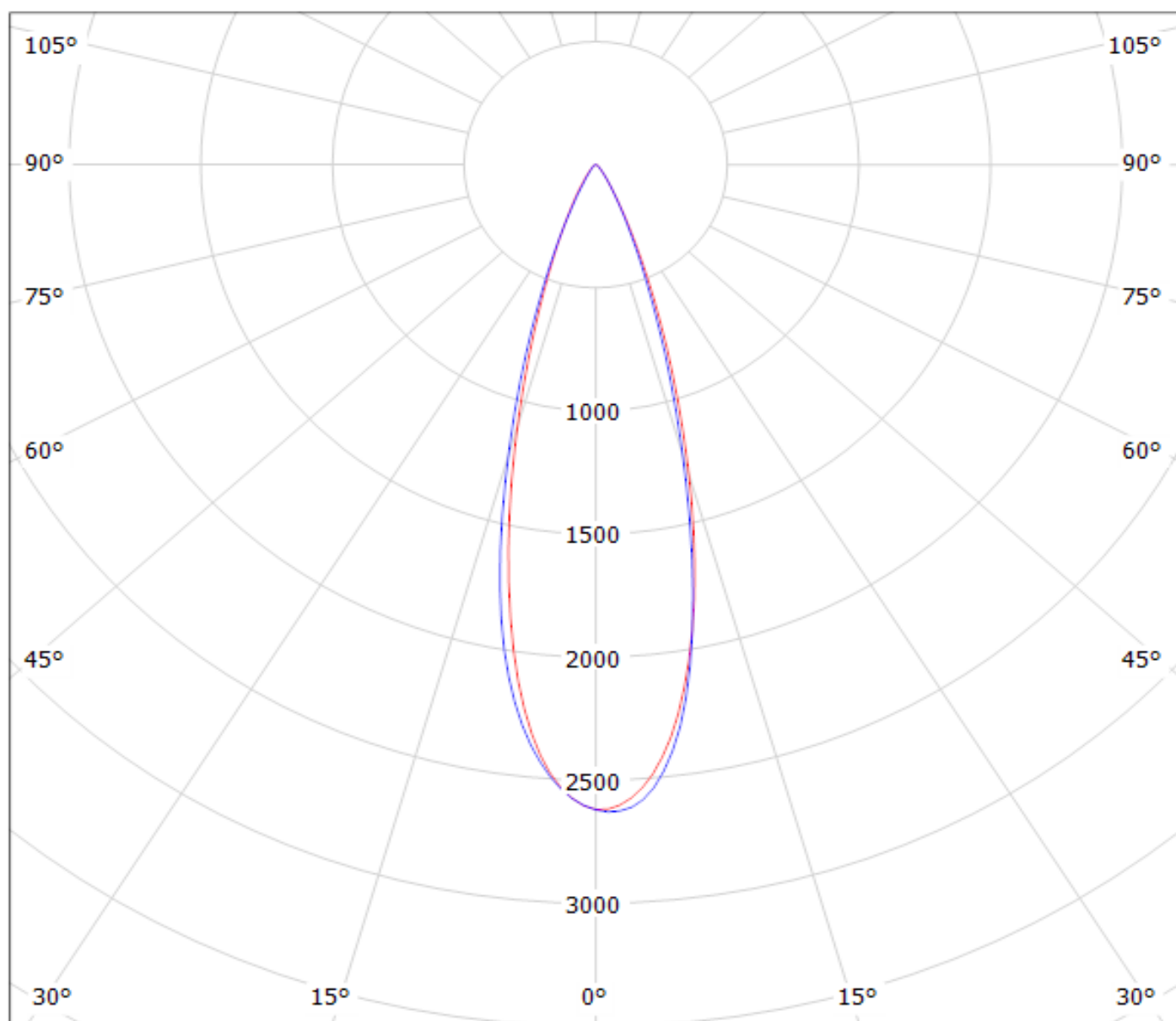
cd/klm

— C0 - C180

— C90 - C270

**SIMULATED**

Luminaire: LEDIL OY CA11017\_TINA2-M (XP-G) Efficiency=91%  
Lamps: 1 x Cree XP-G (92lm@250mA)

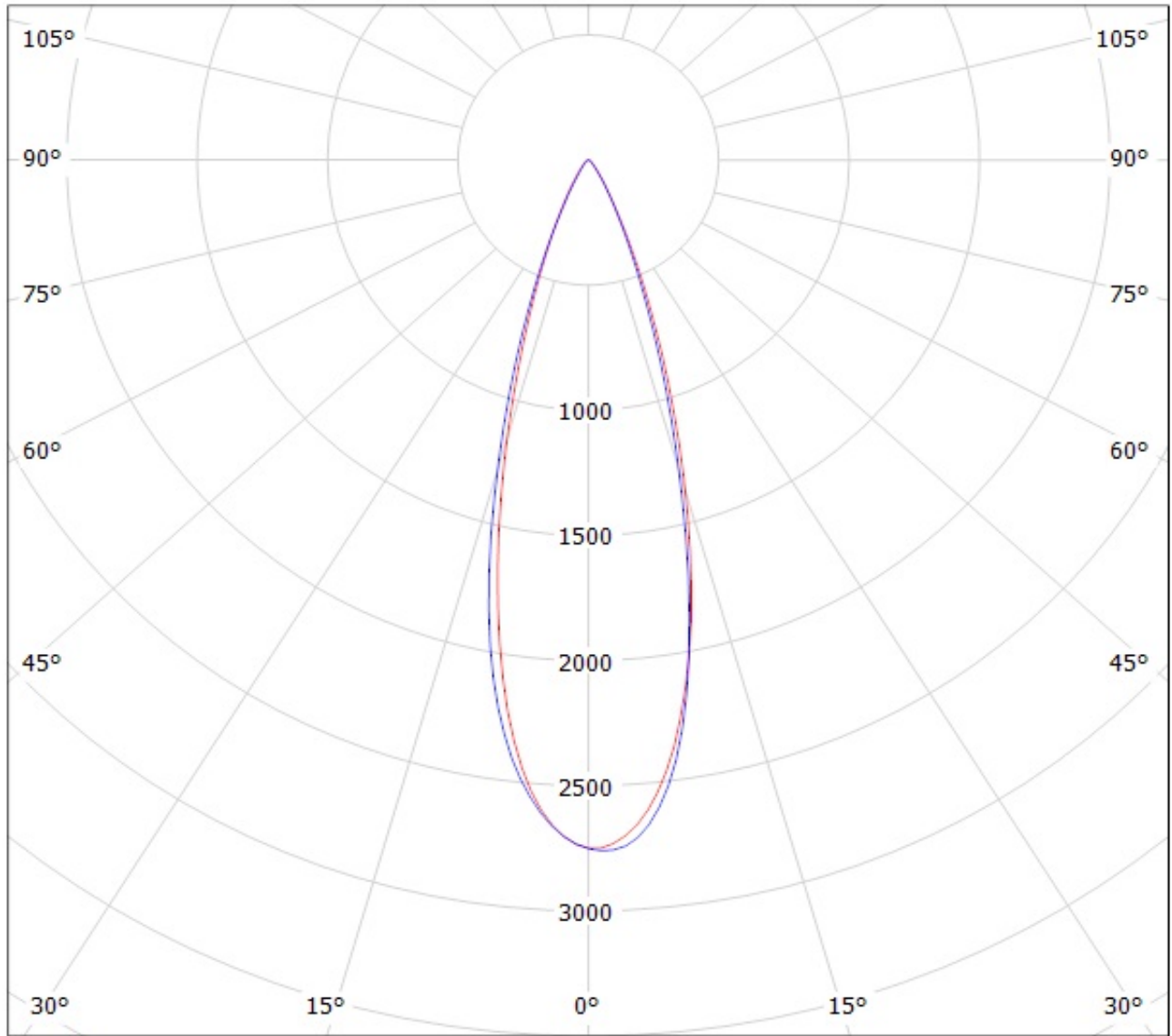


cd/klm

— C0 - C180

— C90 - C270

Luminaire: LEDIL OY CP12679\_TINA2-M (XP-G) Efficiency=87%  
Lamps: 1 x Cree XP-G (92lm@250mA)

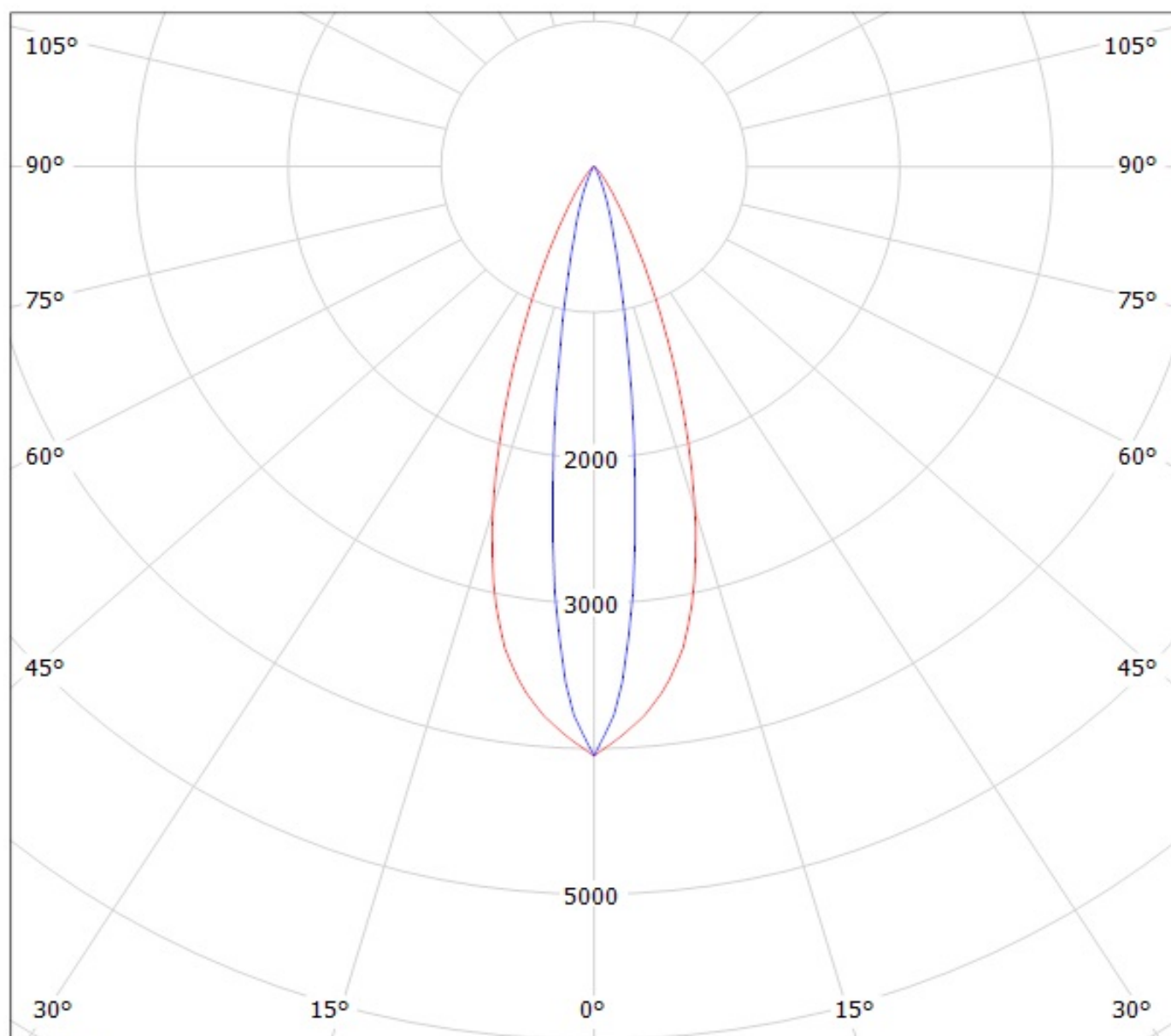


cd/klm

— C0 - C180

— C90 - C270

Luminaire: LEDIL OY CA11052\_Tina2-O (XP-G) Efficiency=87%  
Lamps: 1 x Cree XP-G (92lm@250mA)

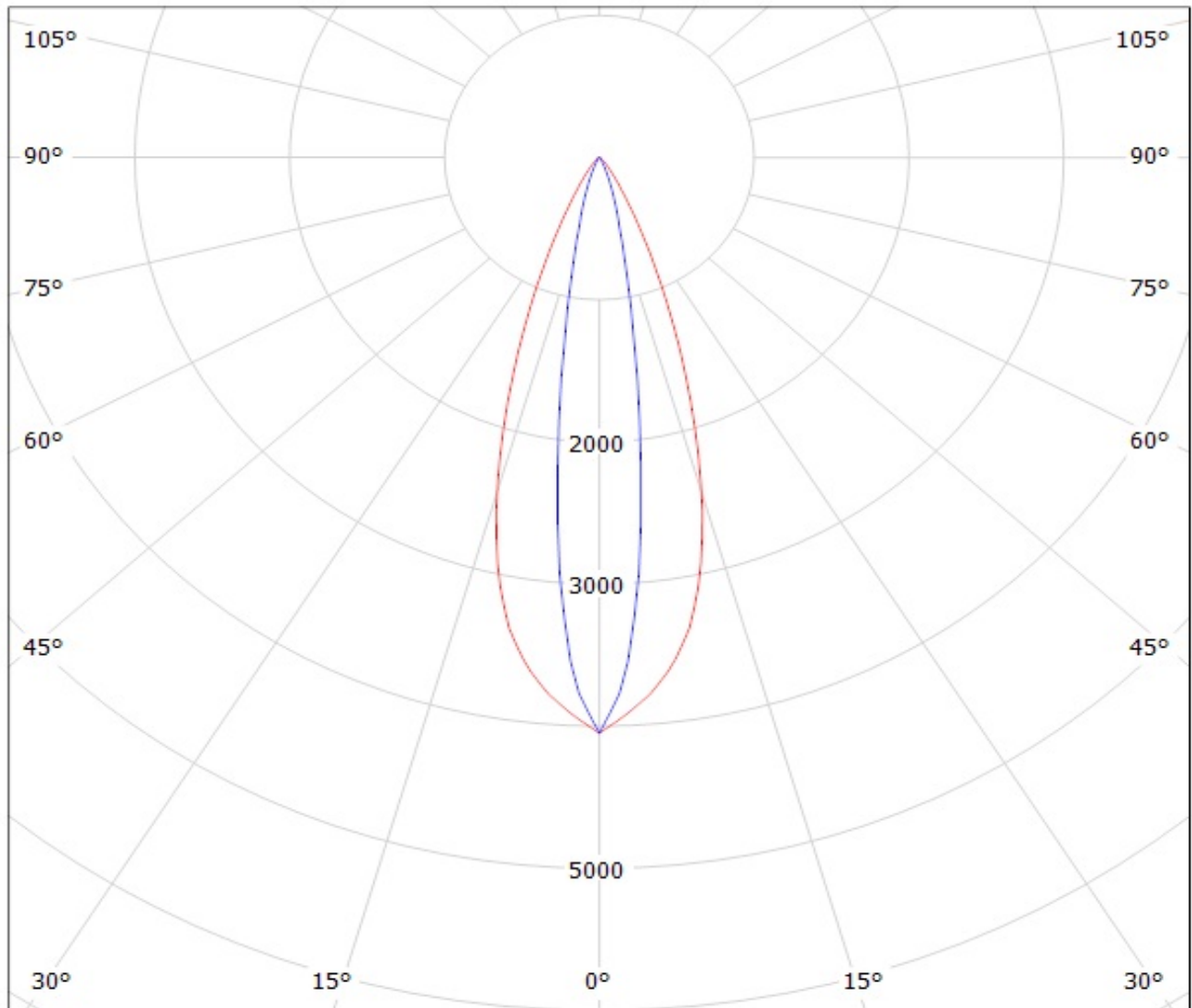


cd/klm

— C0 - C180

— C90 - C270

Luminaire: LEDIL OY CP12680\_TINA2-O (XP-G) Efficiency=87%  
Lamps: 1 x Cree XP-G (92lm@250mA)

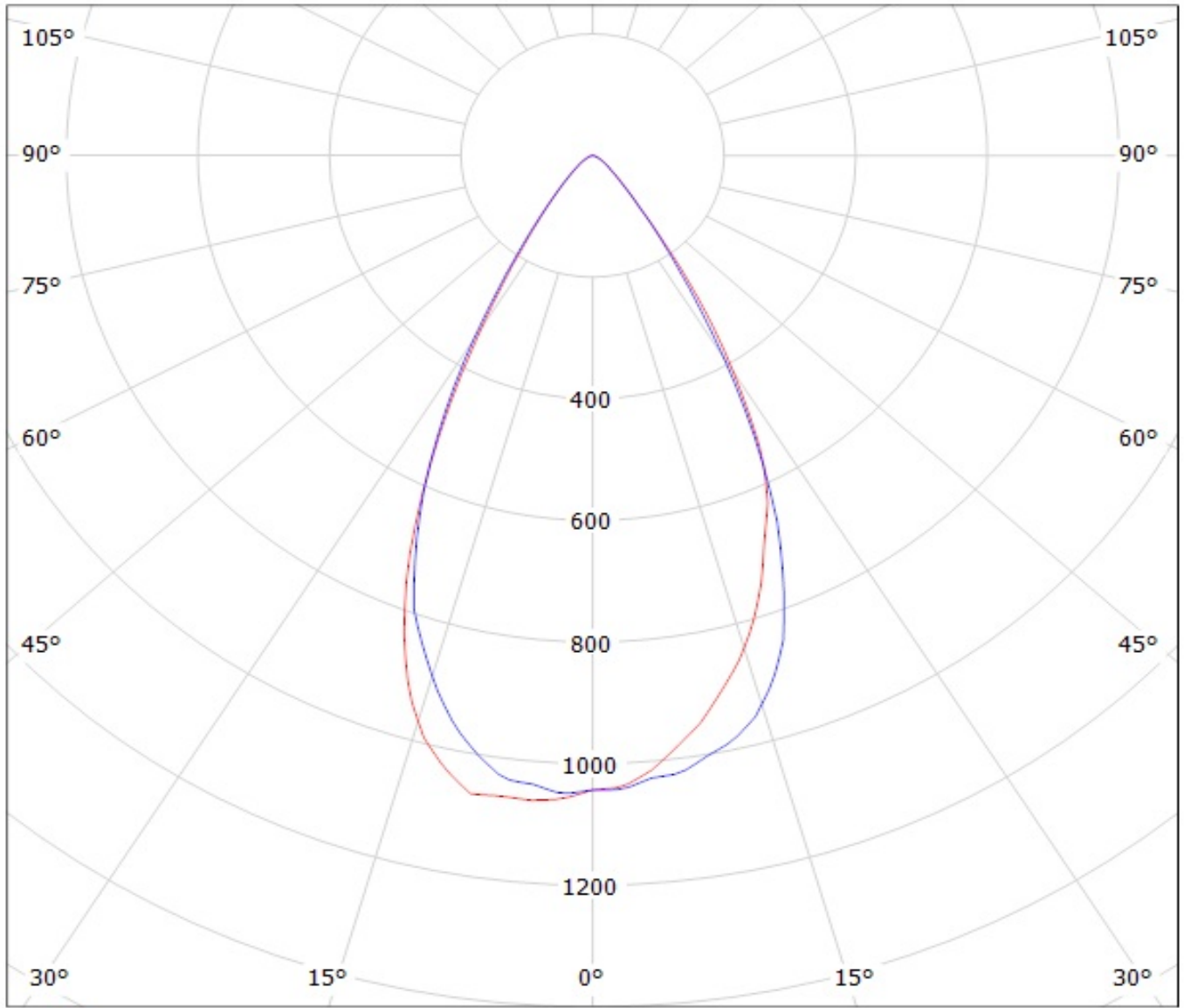


cd/klm

— C0 - C180

— C90 - C270

Luminaire: Ledil Oy CA12056\_TINA2-W (Cree XP-G 92lm @ 250mA) Efficiency=88%  
Lamps: 1 x Cree XP-G 92lm @ 250mA



cd/klm

— C0 - C180    — C90 - C270



Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XP-G) Eff. 90,1%  
Lamps: 1 x Cree XP-G (66lm@250mA)

