


**Ordering number CA11420\_TINA2-D**

Family	Tina2	FWHM	16 degrees
Type	Assembly	Efficiency	(simulated) 0 %
LED	XT-E	cd/lm	6.170
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.66 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	Ready		


**Ordering number CP12678\_TINA2-D**

Family	Tina2	FWHM	16 degrees
Type	Assembly	Efficiency	89 %
LED	XT-E	cd/lm	7.000
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.65 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Glue		
Status	Ready		


**Ordering number CP12679\_TINA2-M**

Family	Tina2	FWHM	29 degrees
Type	Assembly	Efficiency	81 %
LED	XT-E	cd/lm	2.600
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.65 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Glue		
Status	Ready		


**Ordering number CA11017\_TINA2-M**

Family	Tina2	FWHM	31 degrees
Type	Assembly	Efficiency	81 %
LED	XT-E	cd/lm	2.600
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	Ready		

**Ordering number CA11052\_TINA2-O**

Family	Tina2	FWHM	35+16 degrees
Type	Assembly	Efficiency	85 %
LED	XT-E	cd/lm	3.800
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	Ready		

**Ordering number CP12680\_TINA2-O**

Family	Tina2	FWHM	35+16 degrees
Type	Assembly	Efficiency	82 %
LED	XT-E	cd/lm	3.800
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.82 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Glue		
Status	Ready		

**Ordering number CA12056\_TINA2-W**

Family	Tina2	FWHM	46 degrees
Type	Assembly	Efficiency	87 %
LED	XT-E	cd/lm	1.400
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
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 Tina2 series

last update 29/11/2012

### GENERAL INFORMATION

- Product series especially designed & optimized for XT-E 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>

- Optic holder molded by high quality PC material (120 degrees of Celcius / 248 degrees of Fahrenheit).

- Fastening to heat sink with a PU foam adhesive tape of automotive grade. Please find fastening details by clicking link: [http://www.ledil.com/datasheets/DataSheet\\_TAPE.pdf](http://www.ledil.com/datasheets/DataSheet_TAPE.pdf)

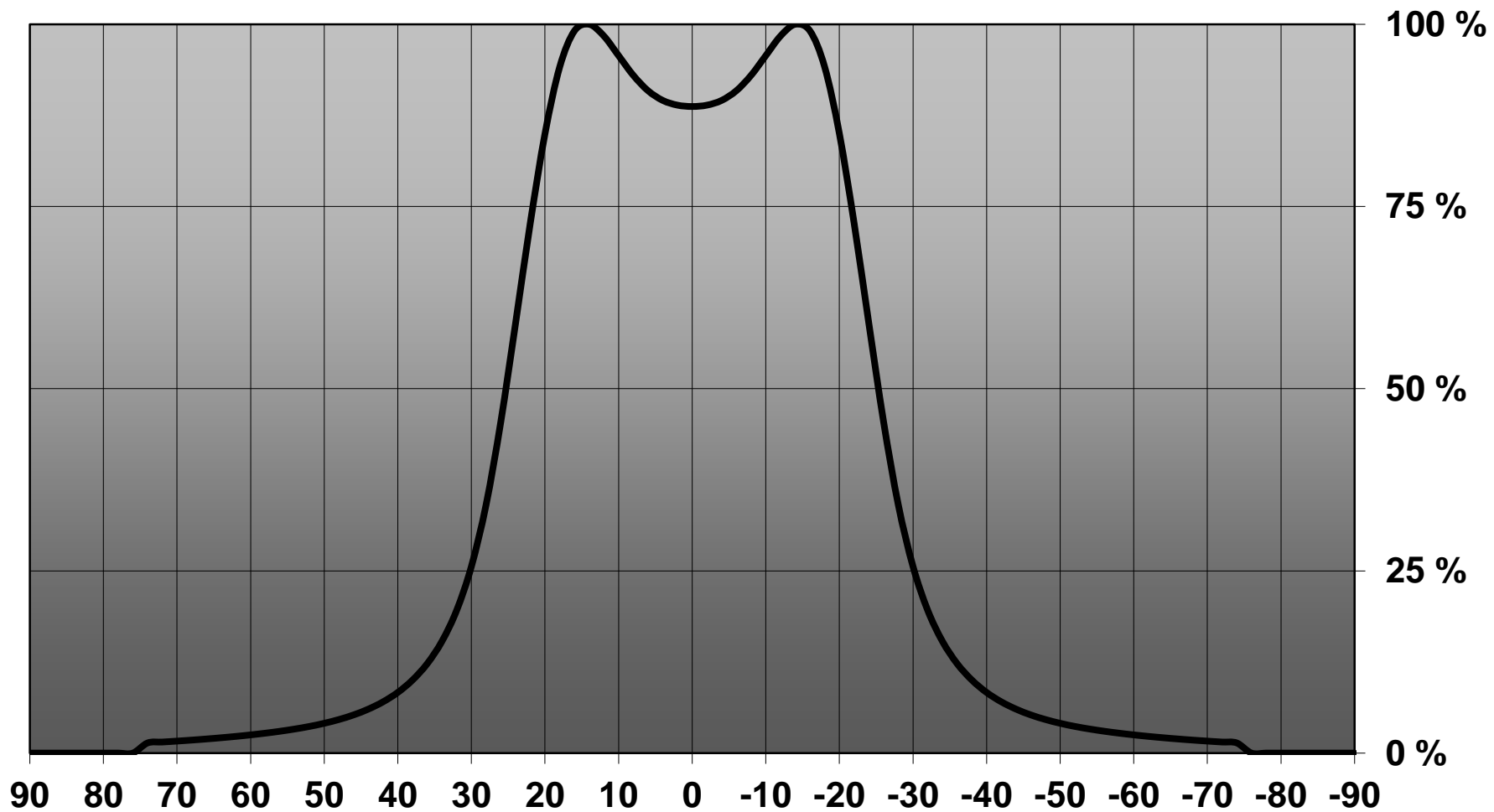
**NOTE 1: We advise customer to ensure the suitability and sufficiency of the bond in the end product. For example, mechanical stress, vibration and holes on the surface of the circuit board weaken the strength of the tape.**

**NOTE 2: Assembly to the surface must be made straight, so the tape bonds constant and balanced with fastening surface. Slanted assembly might cause unbalanced bond to the surface. All surfaces where tape is applied must be clean, dry and free from grease and dirt.**

**If cleaning of PCB surfaces is needed, please follow strictly the cleaning instructions of your LED manufacturer - this is important as cleaning shall under no circumstances damage LEDs or other electronics components on the PCB.**

**Further note that optical components shall not be cleaned with any chemicals - only micro fiber cloth may be used to remove fingerprints or other traces from handling.**

# Relative intensity of Tina2-XP-W



D

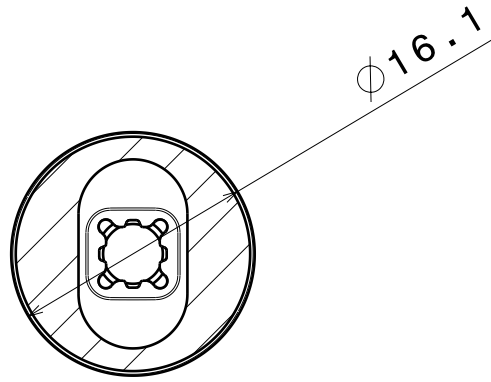
C

B

A

4

4

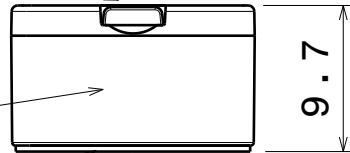


Lens

3

3

Holder



Tape

2

2

MATERIALS  
 Lens: PMMA  
 Holder: PC  
 Tape: PU Foam with PSA

Part no.s:  
 CA11016\_Tina2-XP-RS  
 CA11017\_Tina2-XP-M  
 CA11052\_Tina2-XP-O  
 CA11420\_Tina2-XP-D

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 or communicated without  
 our written agreement.



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d

h

DRAWING TITLE

Datasheet Tina2-XP Tape series

1

1

DRAWN BY

DATE

a

18.5.2011

CHECKED BY

DATE

s

n

28.07.2010

DESIGNED BY

DATE

HH

09.11.2009

SIZE

A4

DRAWING NUMBER

-

REV

2

SCALE

2:1

WEIGHT (g)

-

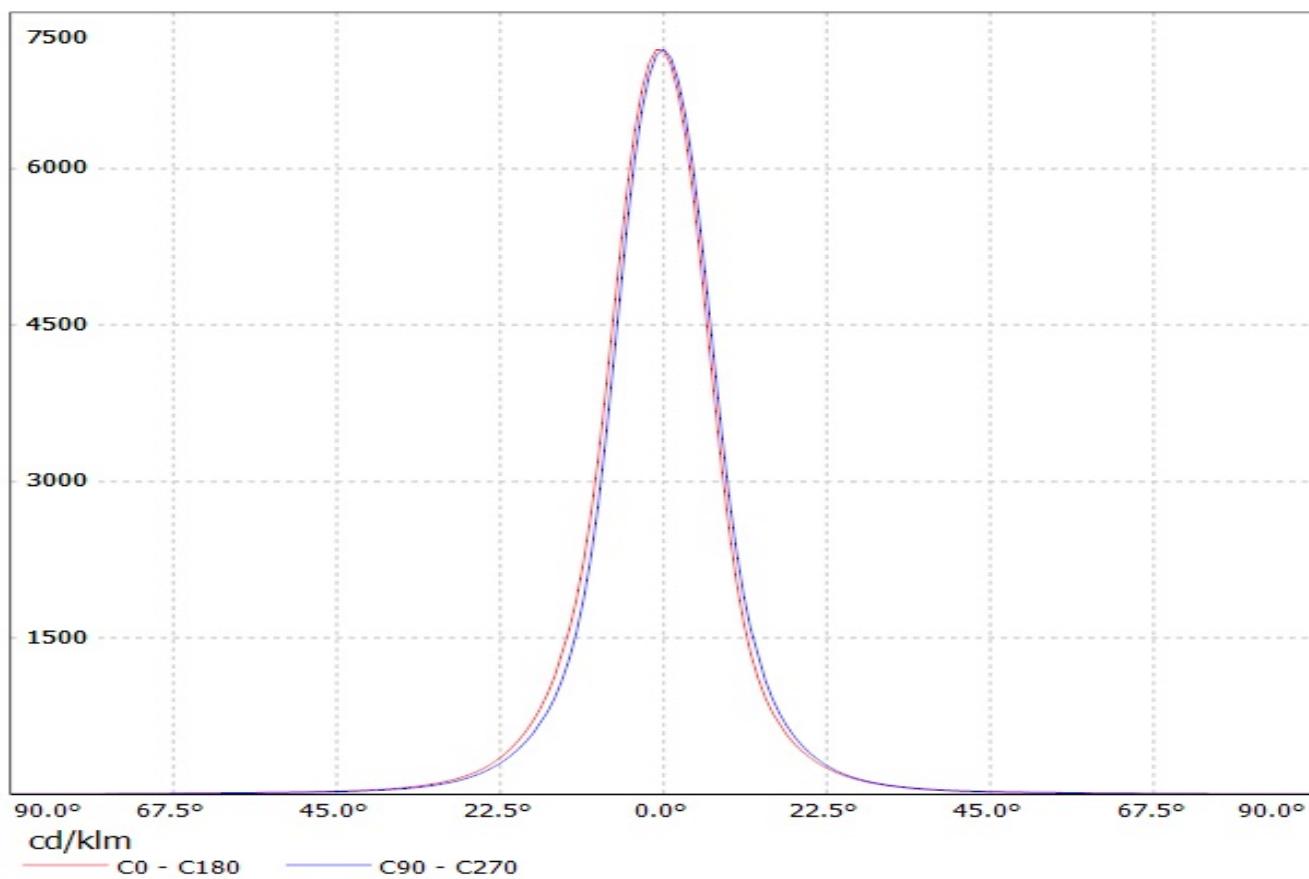
SHEET

1/1

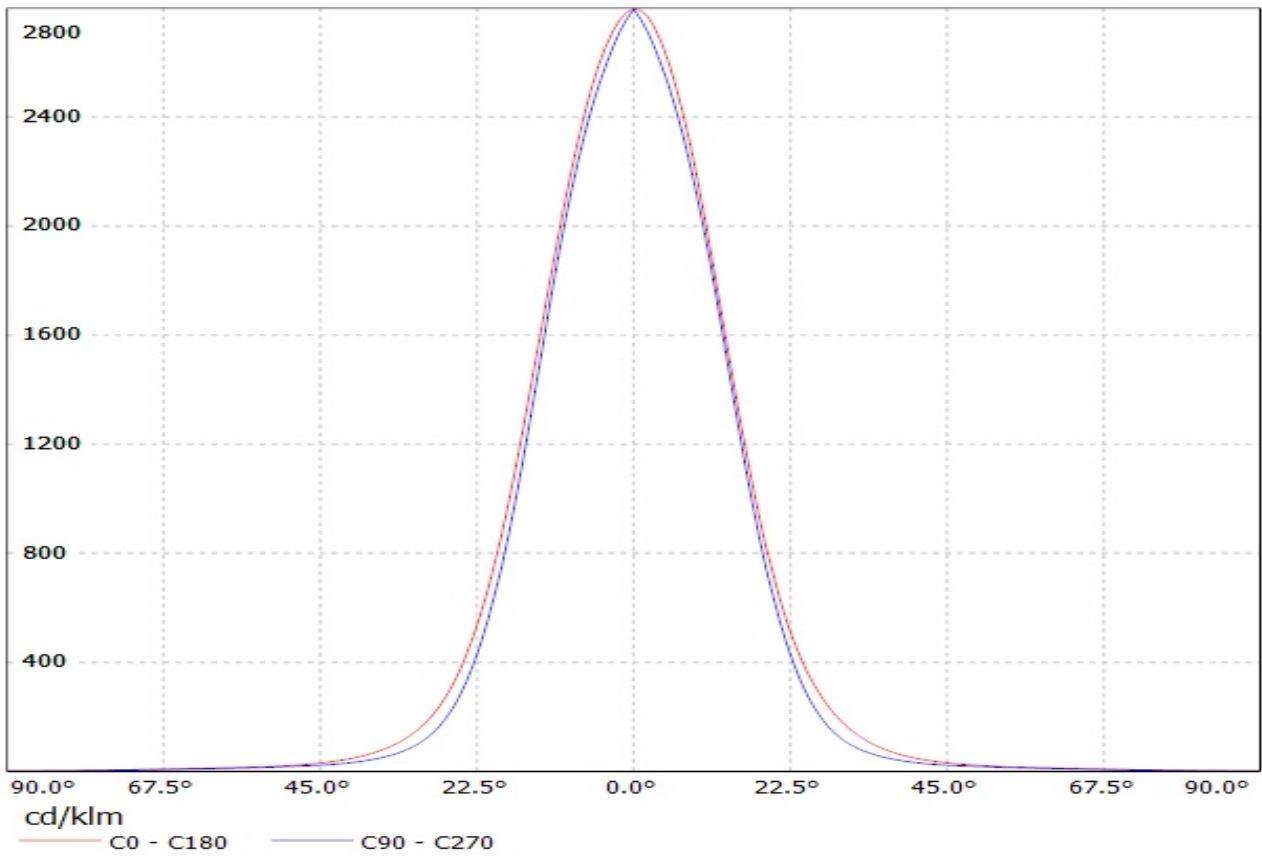
D

A

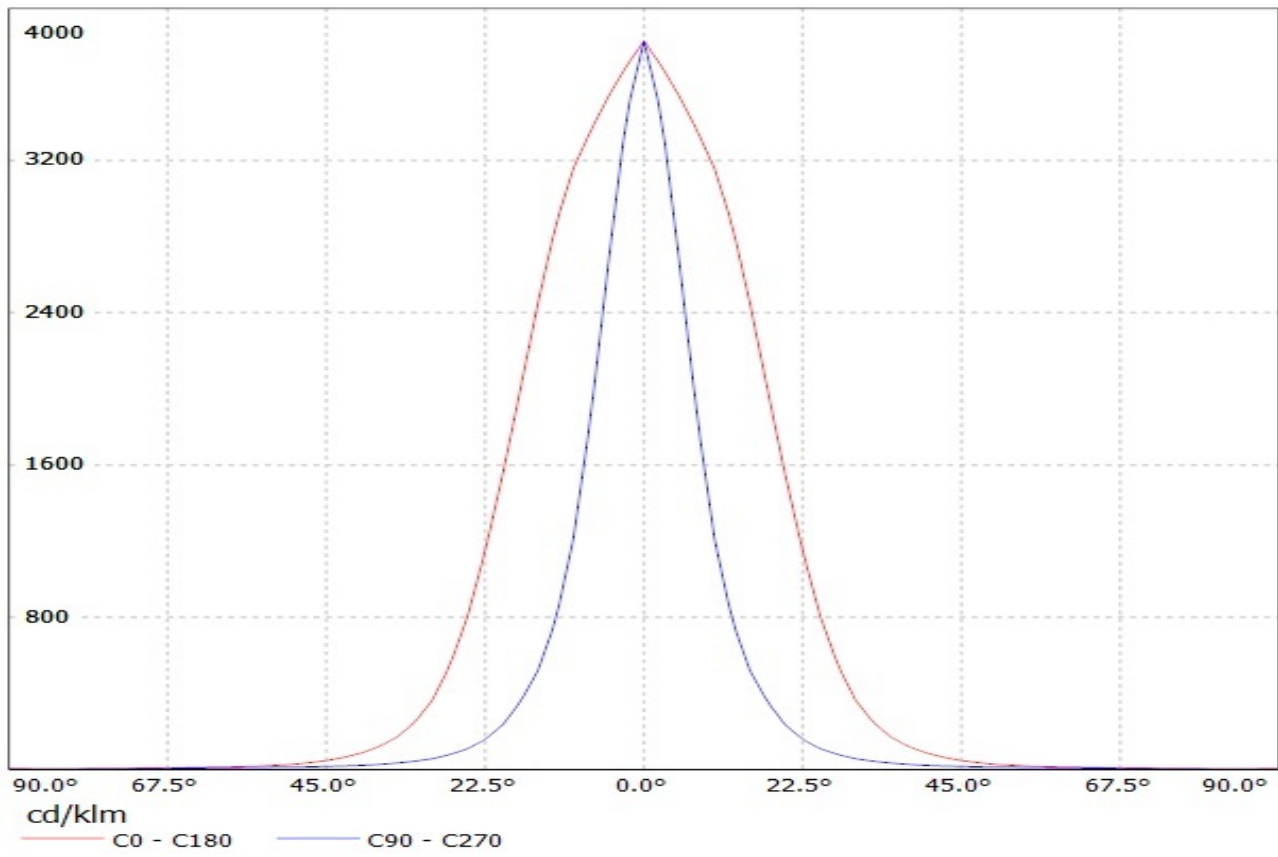
Luminaire: LEDIL OY CP12678\_TINA2-D (XT-E AWT) Efficiency=89%  
Lamps: 1 x Cree XT-E AWT (113lm @ 250mA)



Luminaire: LEDIL OY CP12679\_TINA2-M (XT-E AWT) Efficiency=82%  
Lamps: 1 x Cree XT-E AWT (113lm @ 250mA)

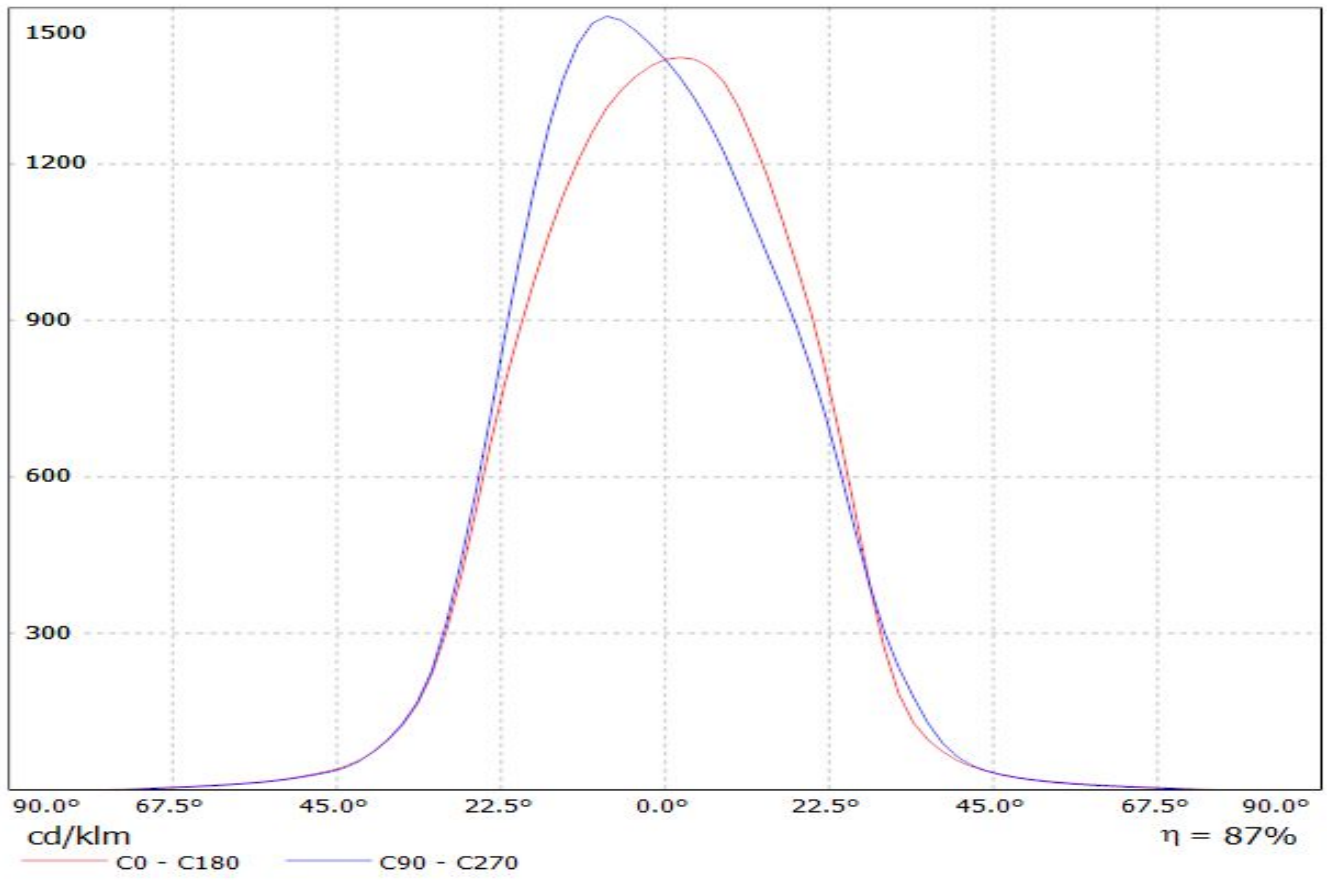


Luminaire: LEDIL OY CP12680\_TINA2-O (XT-E AWT) Efficiency=82%  
Lamps: 1 x Cree XT-E AWT (113lm @ 250mA)

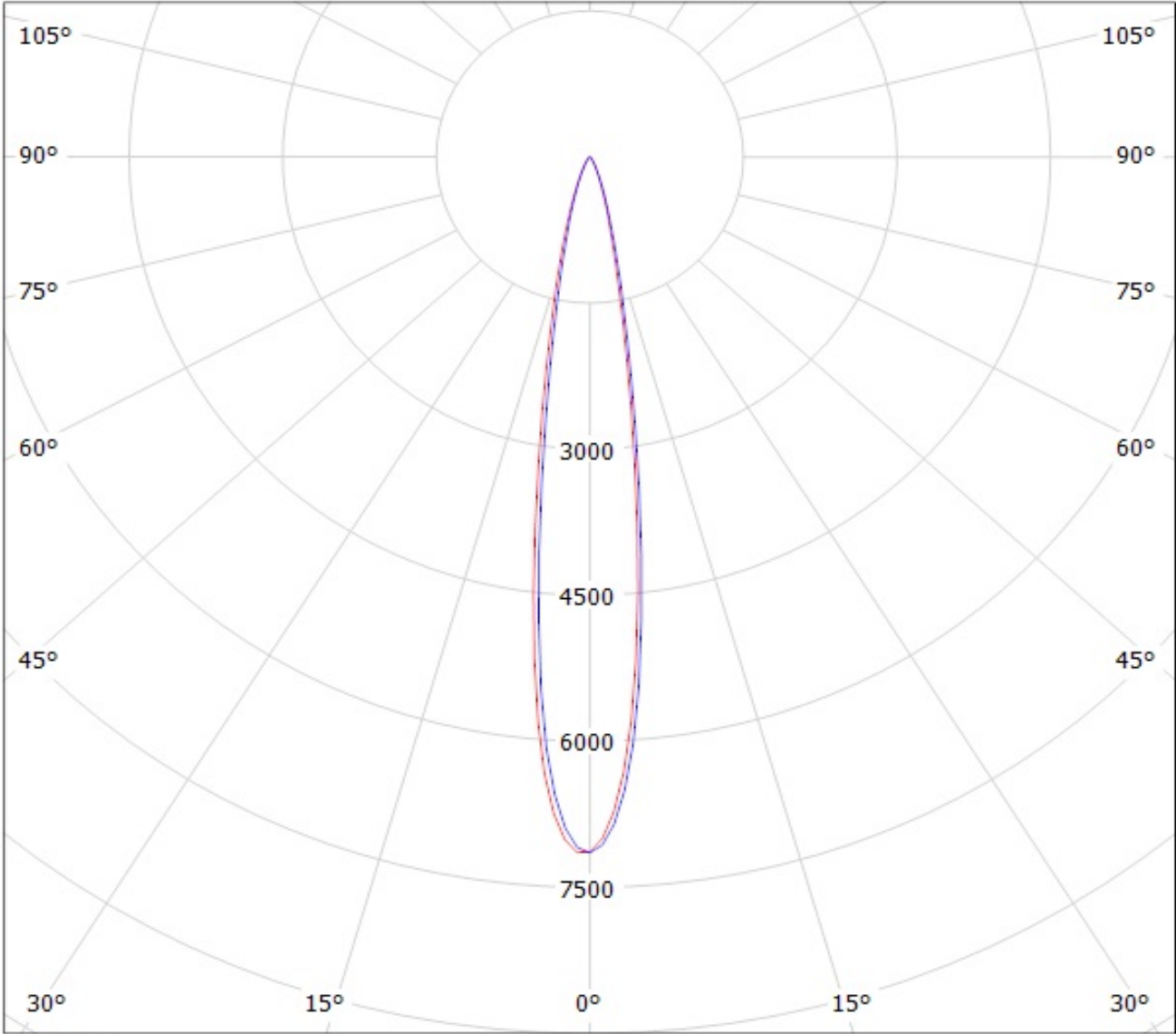




Luminaire: LEDiL CA12056\_TINA2-W\_(XT-E) Eff. 87%  
Lamps: 1 x Cree XT-E (102lm@250mA)



Luminaire: LEDIL OY CP12678\_TINA2-D (XT-E AWT) Efficiency=89%  
Lamps: 1 x Cree XT-E AWT (113lm @ 250mA)

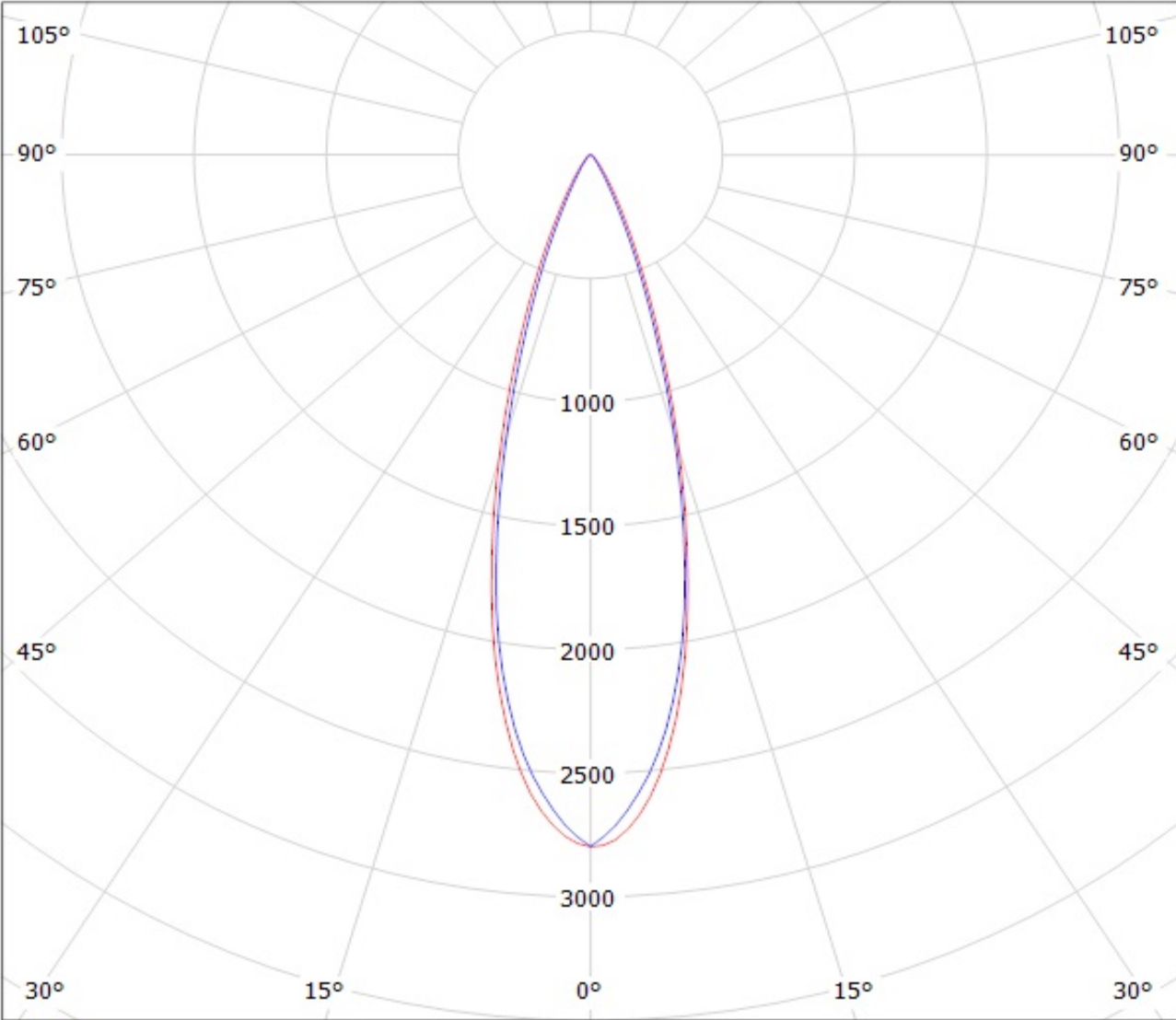


cd/klm

— C0 - C180

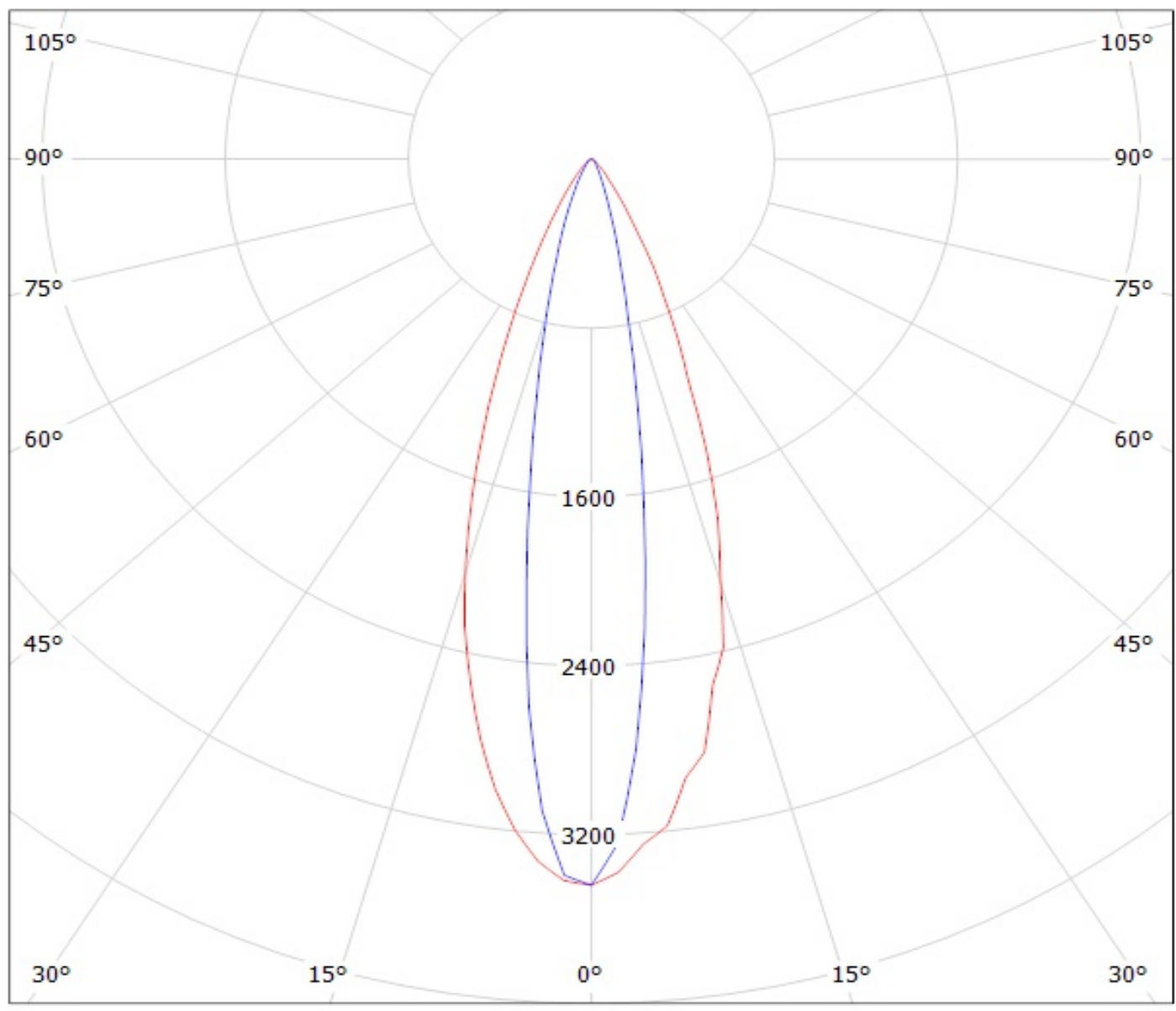
— C90 - C270

Luminaire: LEDIL OY CP12679\_TINA2-M (XT-E AWT) Efficiency=82%  
Lamps: 1 x Cree XT-E AWT (113lm @ 250mA)



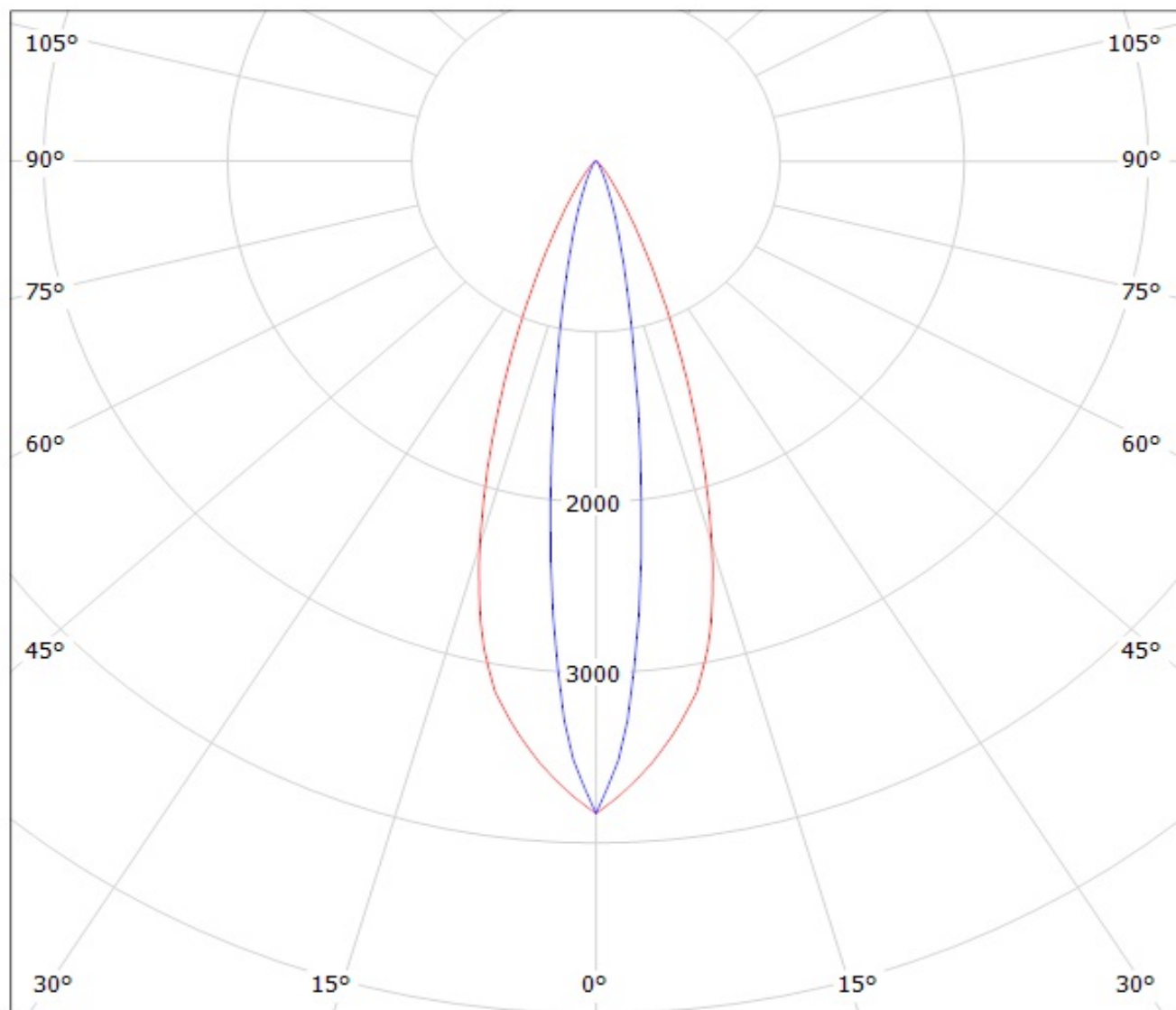
cd/klm  
— C0 - C180    — C90 - C270

Luminaire: Ledil Oy CA11052\_TINA2-O-XT-E (AWT) Efficiency=88%  
Lamps: 1 x Cree XT-E (AWT) 250mA



cd/klm  
— C0 - C180    — C90 - C270

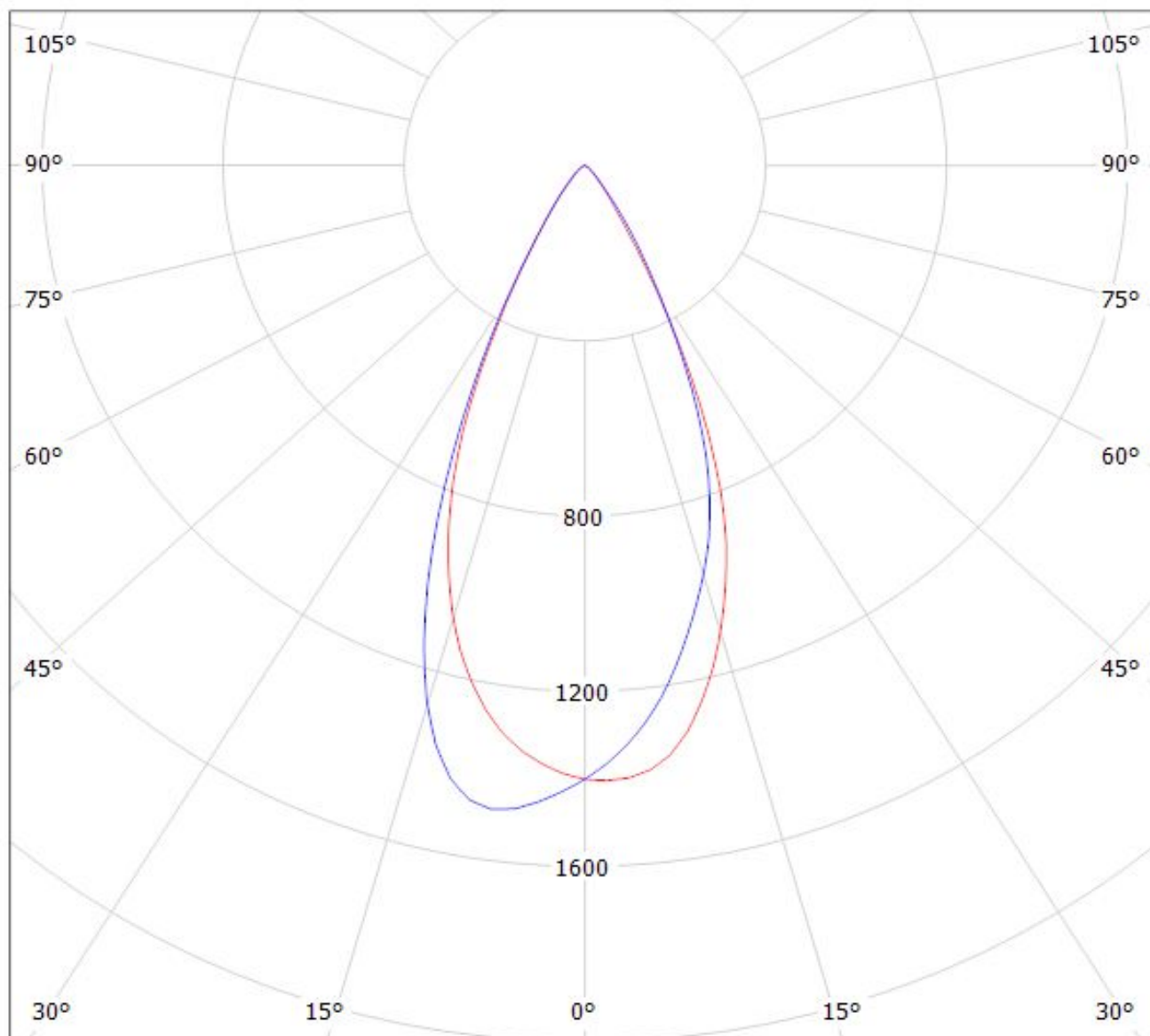
Luminaire: LEDIL OY CP12680\_TINA2-O (XT-E AWT) Efficiency=82%  
Lamps: 1 x Cree XT-E AWT (113lm @ 250mA)



cd/klm

— C0 - C180    — C90 - C270

Luminaire: LEDiL CA12056\_TINA2-W\_(XT-E) Eff. 87%  
Lamps: 1 x Cree XT-E (102lm@250mA)



cd/klm

$\eta = 87\%$

— C0 - C180    — C90 - C270