

**Ordering number C13236\_SANDRA-12-S**

Family	Sandra	FWHM	10 degrees
Type	Lens array	Efficiency	91 %
LED	XP-E	cd/lm	18.700
Color	Clear	Gerber File	Available
Diameter	67 mm		
Height	11.1 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	Pin, glue		
Status	Ready		

**Ordering number C11700\_SANDRA-12-W**

Family	Sandra	FWHM	26 degrees
Type	Lens array	Efficiency	83 %
LED	XP-E	cd/lm	3.000
Color	Clear	Gerber File	Available
Diameter	67 mm		
Height	11.1 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	Pin, glue		
Status	Ready		

**Ordering number C11814\_SANDRA-12-M**

Family	Sandra	FWHM	30 degrees
Type	Lens array	Efficiency	84 %
LED	XP-E	cd/lm	2.100
Color	Clear	Gerber File	Available
Diameter	67 mm		
Height	11.1 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	Pin, glue		
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

### Sandra series

last update 15/2/2013

#### GENERAL INFORMATION

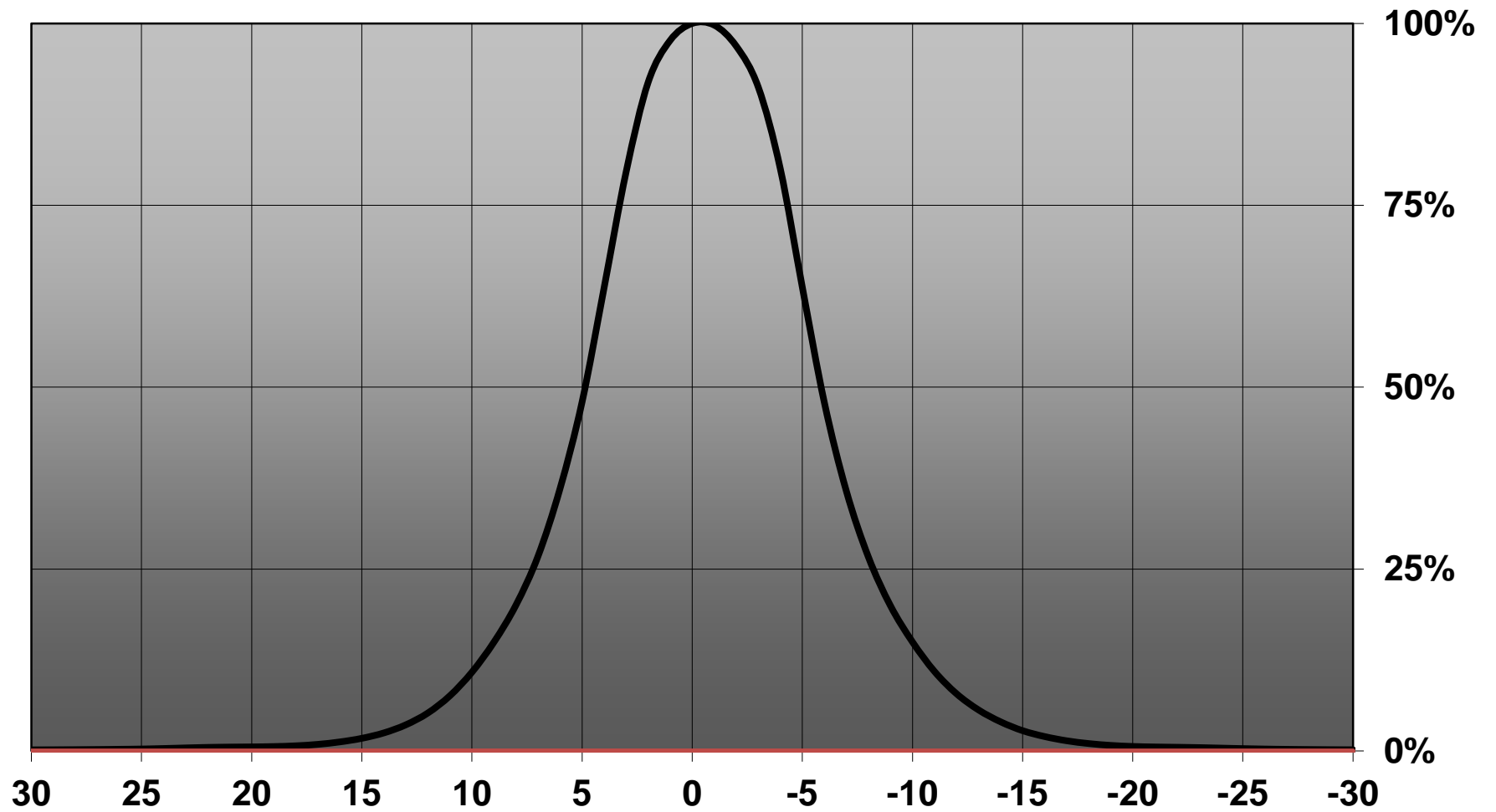
- Product series especially designed & optimized for XP-E series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PMMA with high UV and temperature resistance. Allows use of high current and temperature conditions.

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>

Relative intensity of C13236\_SANDRA-12-S-XPE

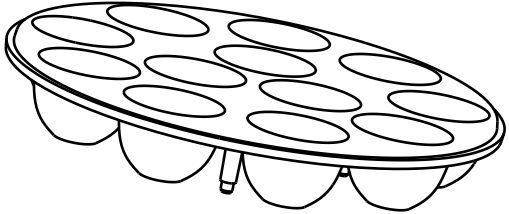


D

C

B

A



Isometric view  
Scale: 1:1

4

4

3

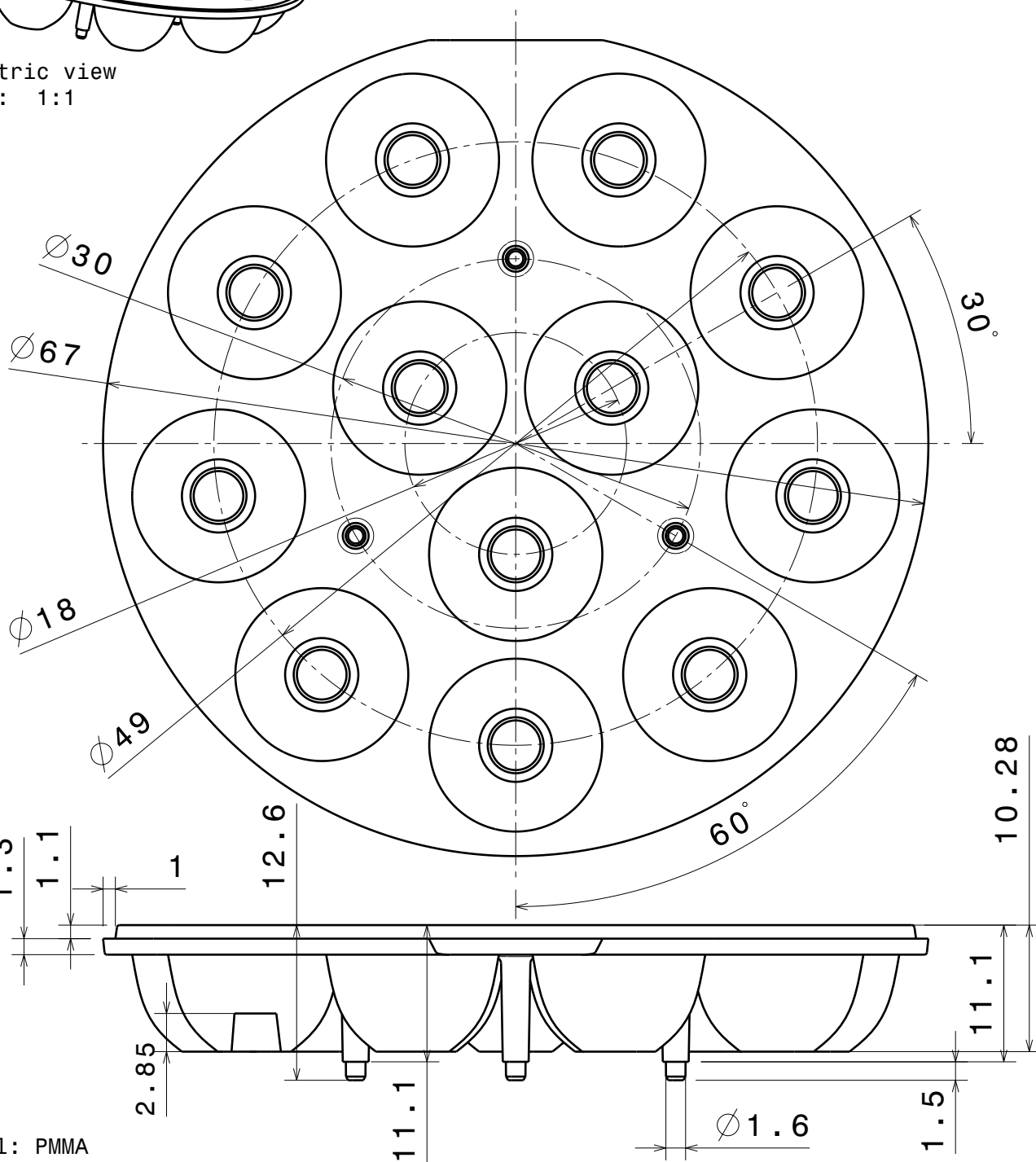
3

2

2

1

1



Material: PMMA

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our written agreement.



Ledil Oy  
Salorankatu 10  
FIN-24100 SALO  
Finland

DRAWING TITLE  
**Datasheet Sandra-12 series lens**

DRAWN BY  
ah  
DATE  
31.12.2012

CHECKED BY  
DATE  
SIZE  
A4

DRAWING NUMBER  
-  
REV  
1

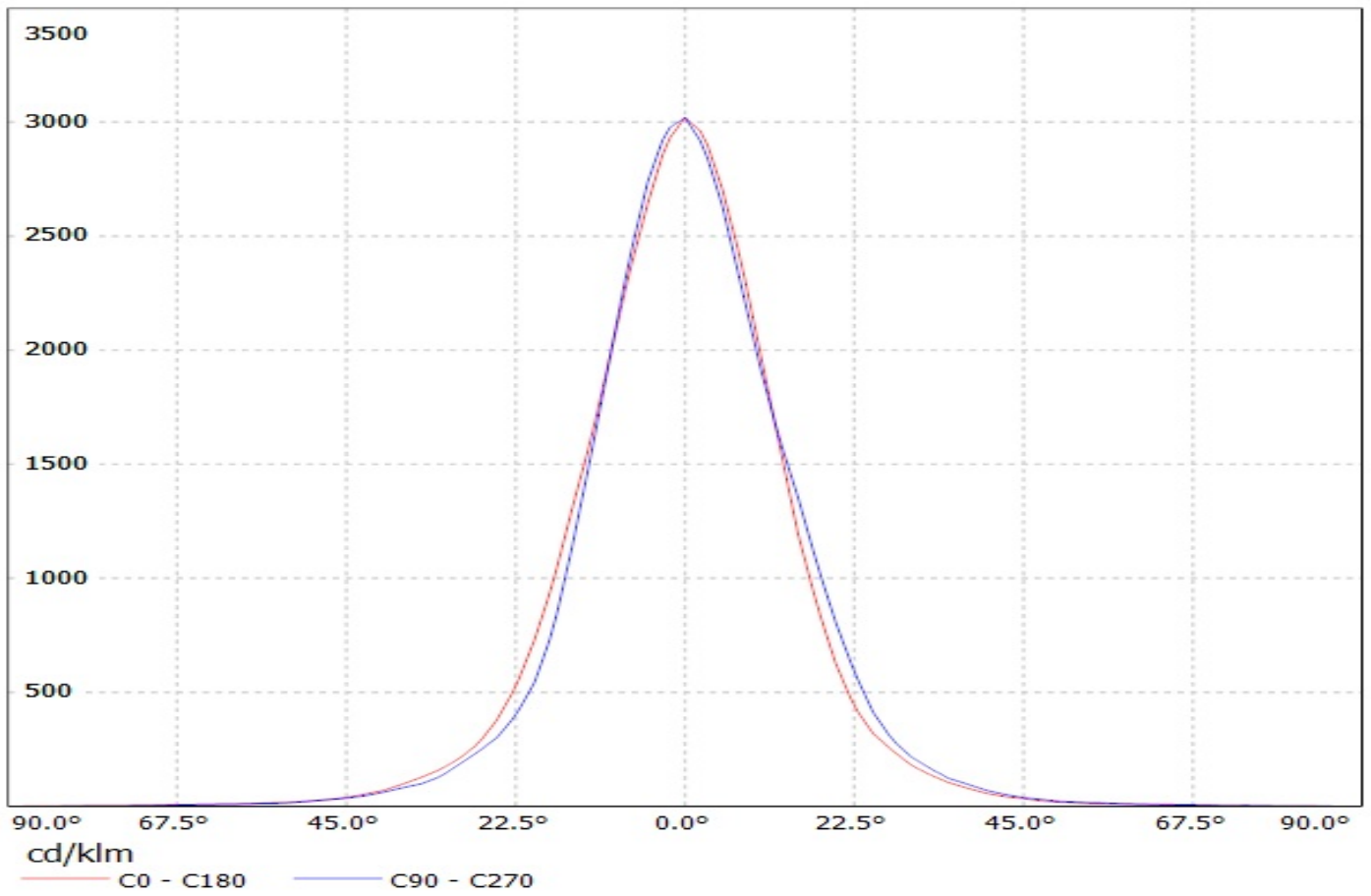
DESIGNED BY  
hh  
DATE  
27.08.2010

SCALE  
2:1  
WEIGHT (g)  
SHEET  
1/1

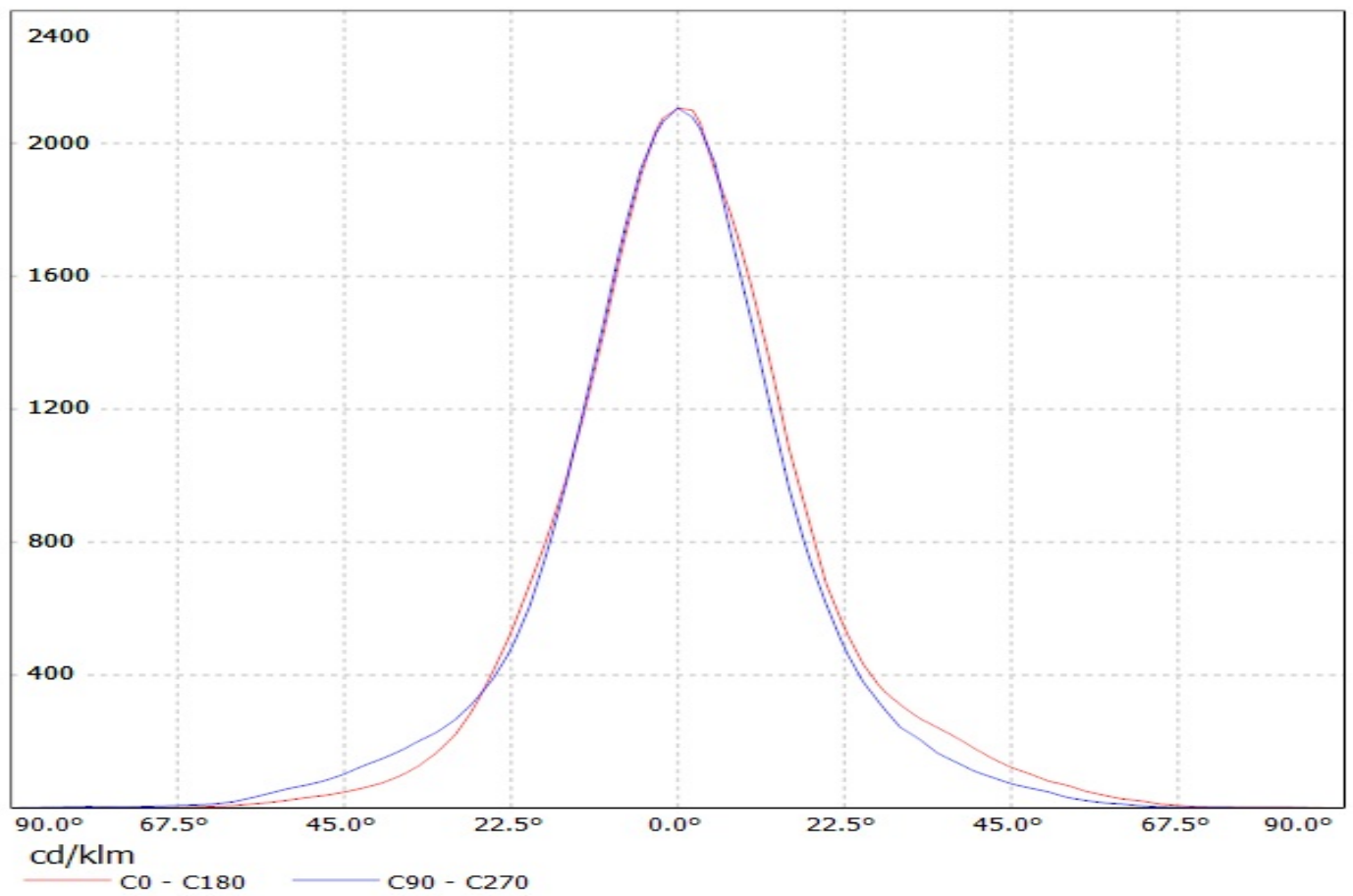
D

A

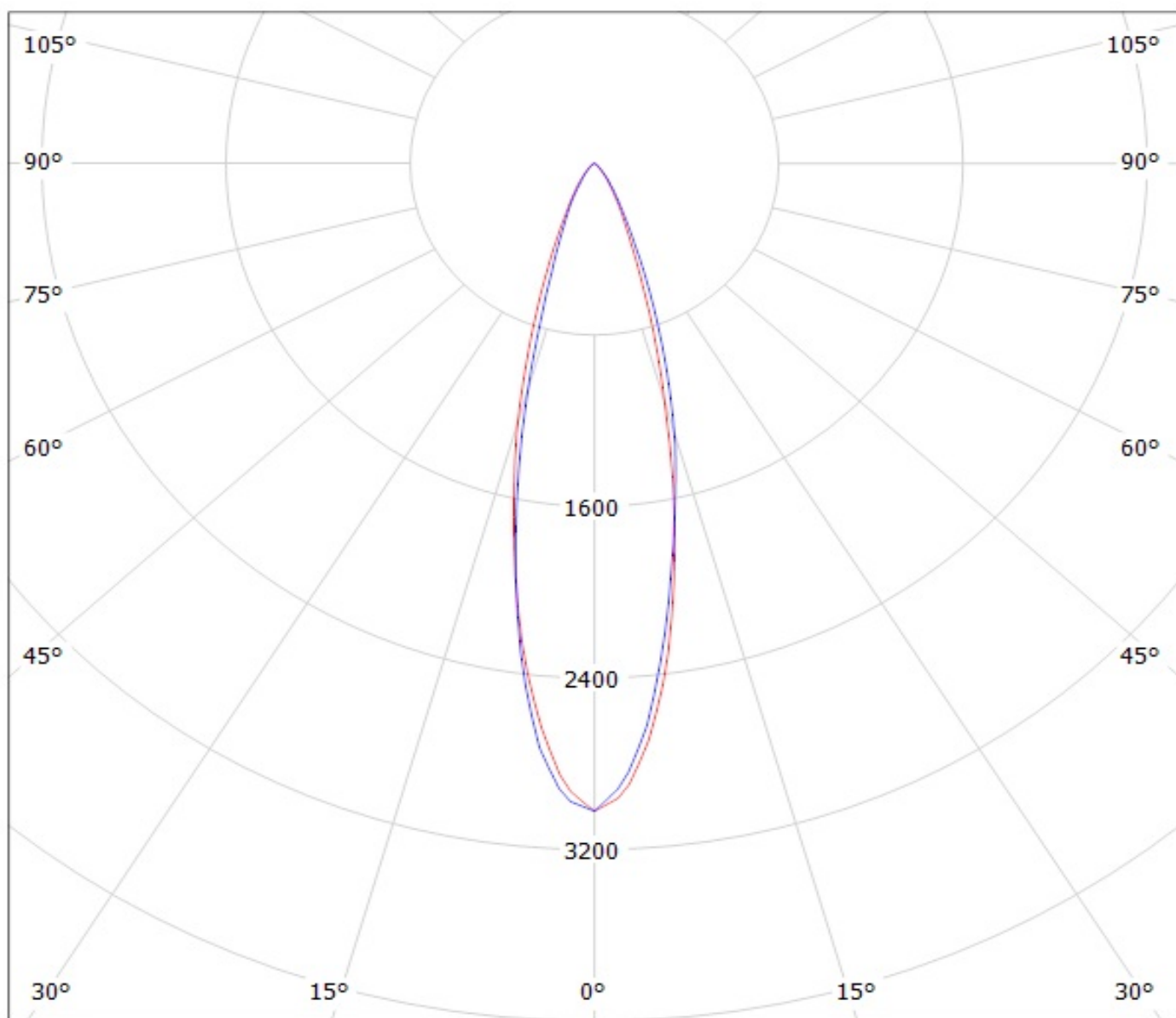
Luminaire: Ledil Oy C11700\_SANDRA-12-W (Cree XP-E 817lm@ 250mA) Efficiency=83%  
Lamps: 1 x Cree XP-E 817lm@ 250mA



Luminaire: Ledil Oy C11814\_SANDRA-12-M (Cree XP-E 817lm @ 250mA) Efficiency=84%  
Lamps: 1 x Cree XP-E 817lm @ 250mA



Luminaire: Ledil Oy C11700\_SANDRA-12-W (Cree XP-E 817lm@ 250mA) Efficiency=83%  
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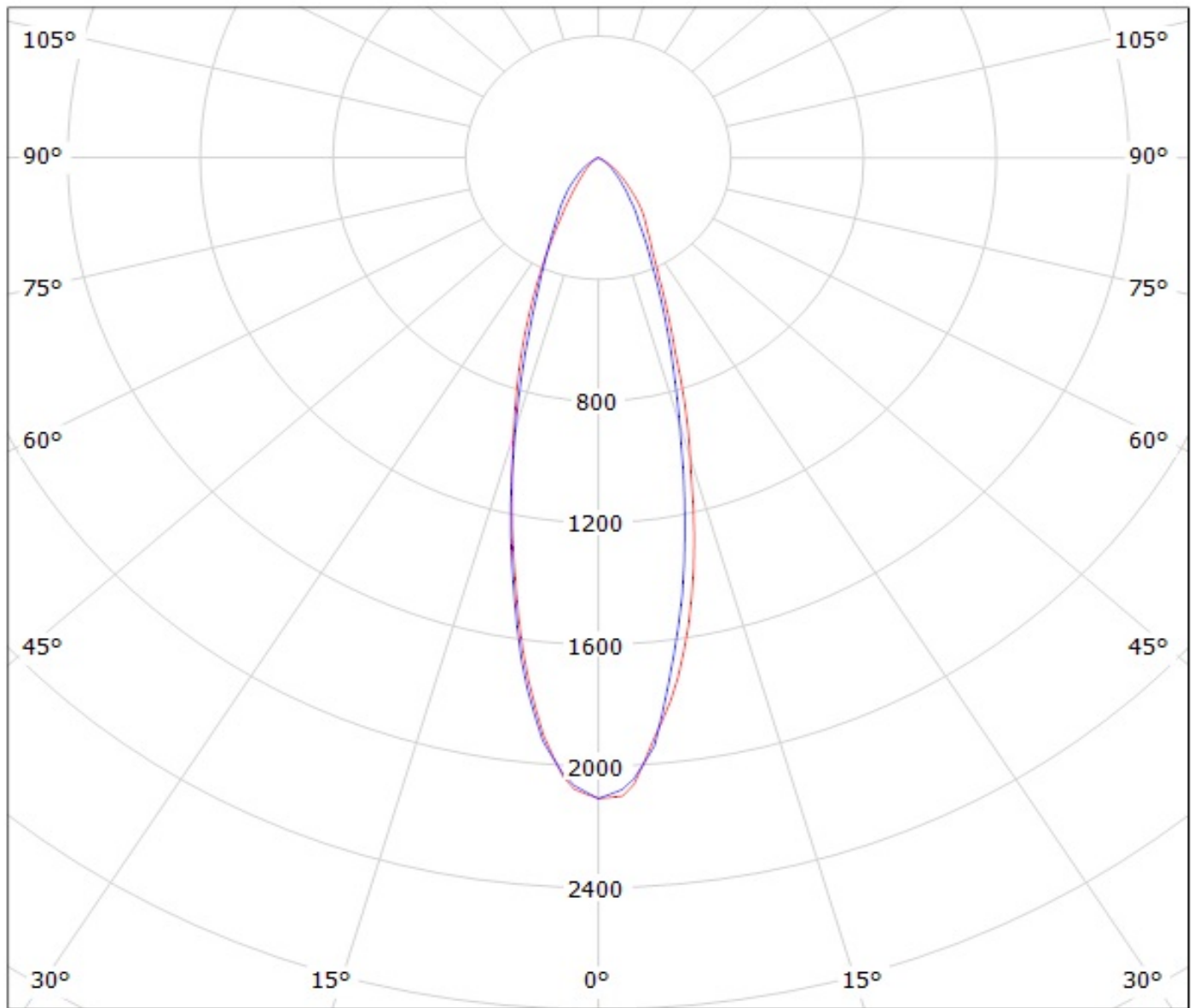


cd/klm

— C0 - C180

— C90 - C270

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