

## DETAILS

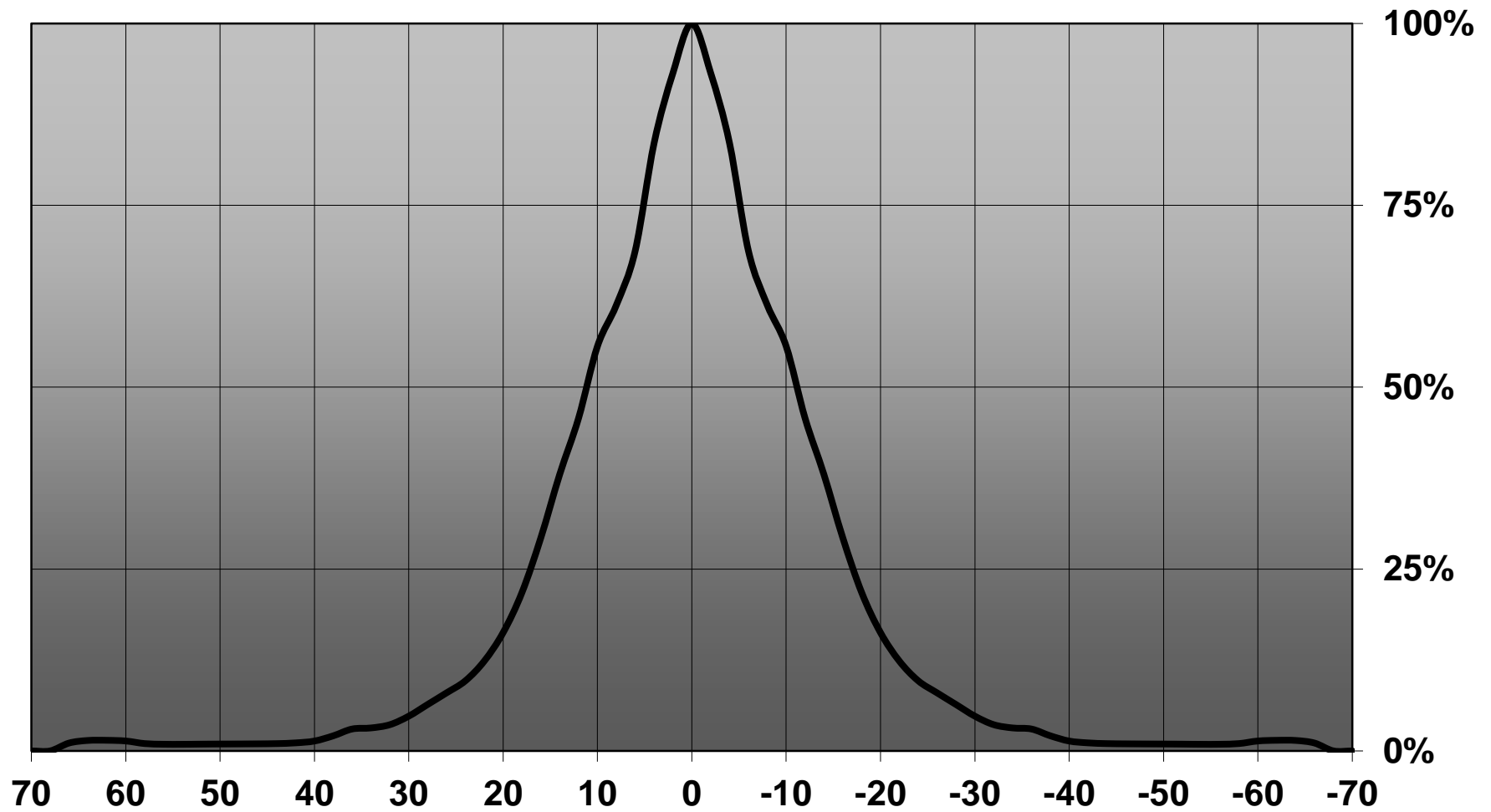
|                        |                      |
|------------------------|----------------------|
| <b>Product Number</b>  | FP13030_LISA2-M-CLIP |
| <b>Family</b>          | Lisa                 |
| <b>Type</b>            | Assembly             |
| <b>Color</b>           | black                |
| <b>Diameter</b>        | 9,9 mm               |
| <b>Height</b>          | 6,8 mm               |
| <b>Style</b>           | round                |
| <b>Optic Material</b>  | PMMA                 |
| <b>Holder Material</b> |                      |
| <b>Fastening</b>       | glue, clips          |
| <b>Status</b>          | production ready     |
| <b>ROHS Compliant</b>  | Yes                  |
| <b>Date Updated</b>    | 14/04/2016           |



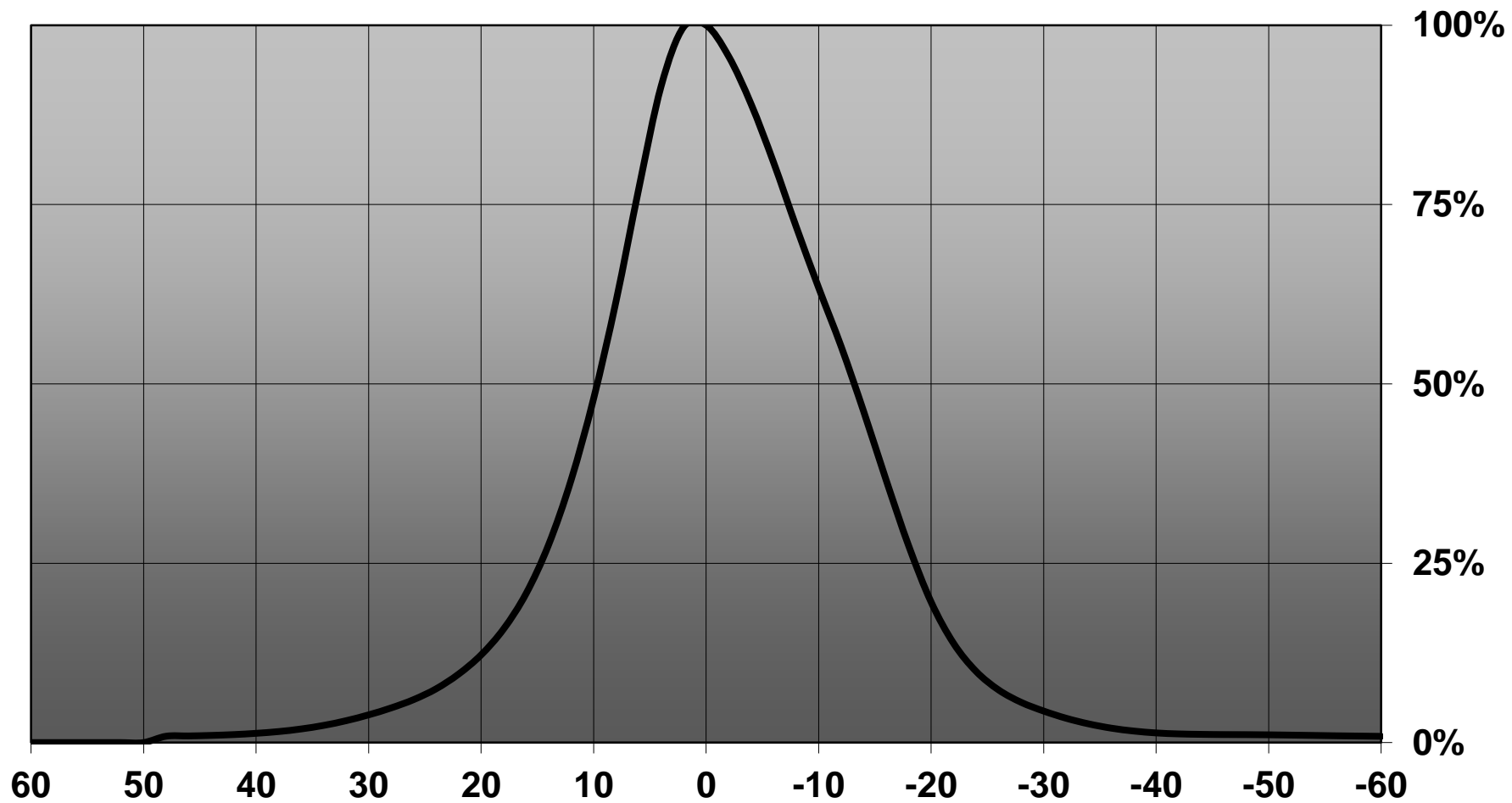
## OPTICAL PROPERTIES

| LED               | Viewing | Light  | Effi-     |            | Connector |
|-------------------|---------|--------|-----------|------------|-----------|
|                   | Angle   | Beam   | ciency    | cd/lm      |           |
| XT-E              | 26 deg  | Medium | 89 %      | 3.260      | -         |
| XP-G2             | 25 deg  | Medium | 89 %      | 3.500      | -         |
| XP-G3             | 29 deg  | Medium | 85 %      | 2.390      | -         |
| LUXEON T          | 28 deg  | Medium | 87 %      | 2.700      | -         |
| LUXEON H50-2      | sim: 24 | Medium | sim: 89 % | sim: 3.100 | -         |
| LUXEON TX         | 26 deg  | Medium | 88 %      | 3.380      | -         |
| NCSxx19B          | 23 deg  | Medium | 85 %      | 4.100      | -         |
| NVSxx19B/NVSxx19C | 27 deg  | Medium | 86 %      | 2.600      | -         |
| SFH 4715S         | 22 deg  | Medium | -         | -          | -         |
| SFH 4725S         | 23 deg  | Medium | -         | -          | -         |
| Oslon Square EC   | 26 deg  | Medium | 85 %      | 3.400      | -         |
| LH351Z            | 26 deg  | Medium | 87 %      | 3.500      | -         |
| Z8Y22P            | sim: 25 | Medium | sim: 84 % | sim: 2.660 | -         |

Relative intensity of FP13030&FP13028\_LISA2-M\_SFH-IR



Relative intensity of FP13030\_LISA2-M-CLIP\_(SFH4725S)

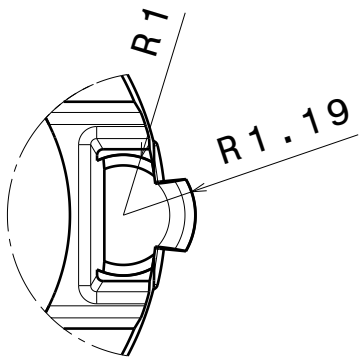


D

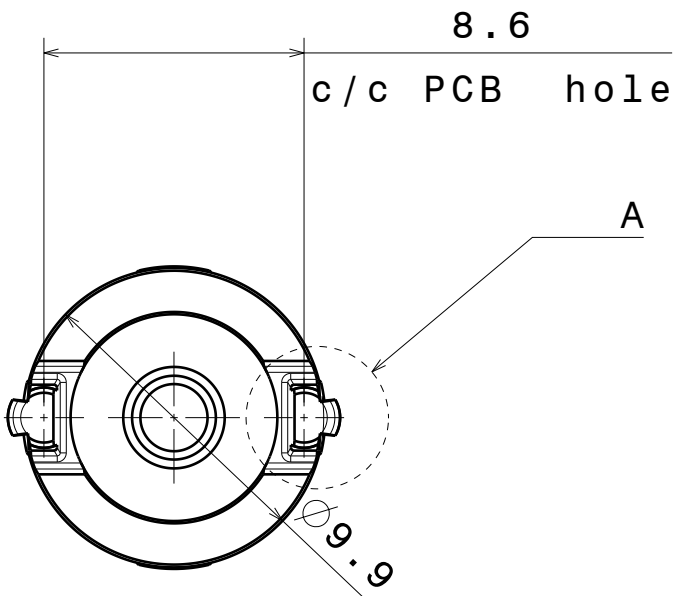
C

B

A



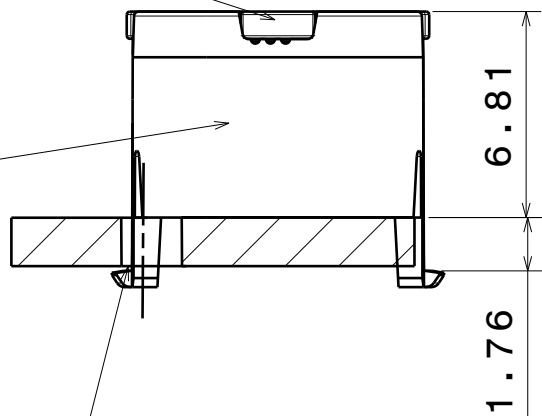
Detail A  
Scale: 8:1



Bottom view  
Scale: 4:1

Lens

Holder



Front view  
Scale: 4:1

Materials:  
Lens PMMA  
Holder PC

Note:  
Take tolerances  
into account  
when specifying  
holes for PCB

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Ledil Oy  
Salorankatu 10  
FIN-24240 SALO  
Finland

DRAWING TITLE  
Datasheet Lisa2-clip16-XT series Assy

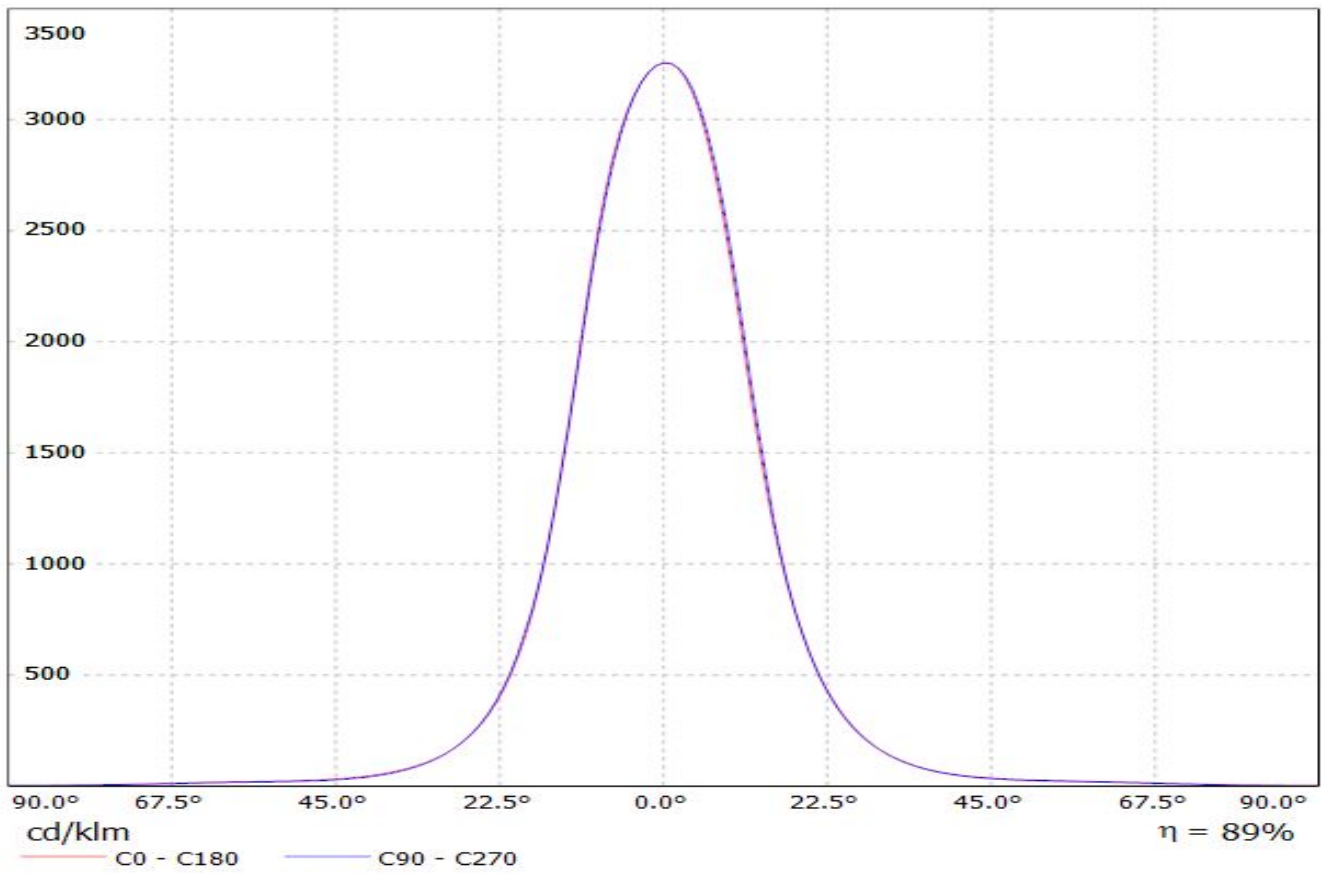
|                   |                    |
|-------------------|--------------------|
| DRAWN BY<br>pl    | DATE<br>20.06.2012 |
| CHECKED BY<br>sn  | DATE<br>20.7.2011  |
| DESIGNED BY<br>pl | DATE<br>20.06.2012 |

|              |                |              |
|--------------|----------------|--------------|
| SIZE<br>A4   | DRAWING NUMBER | REV<br>1     |
| SCALE<br>4:1 | WEIGHT (g)     | SHEET<br>1/1 |

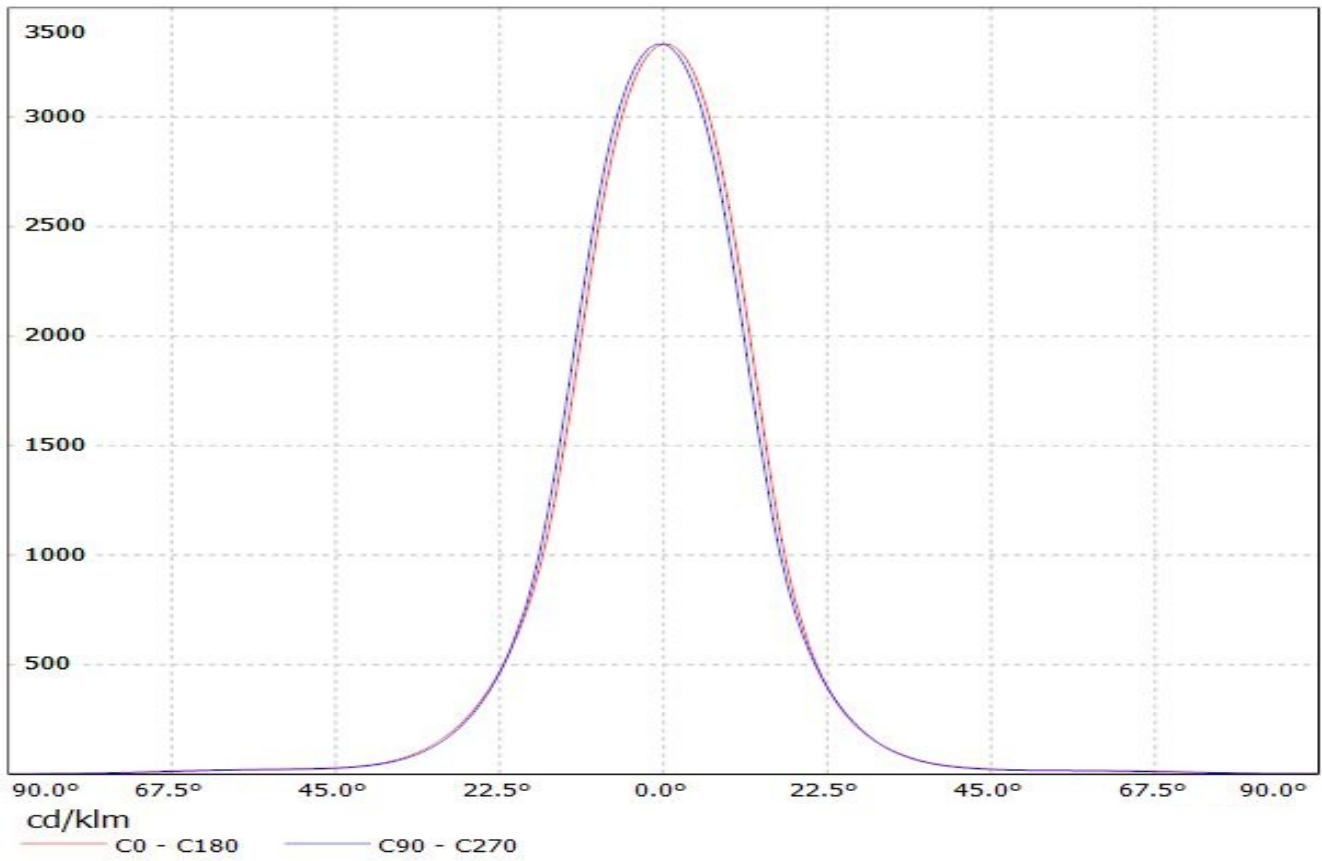
D

A

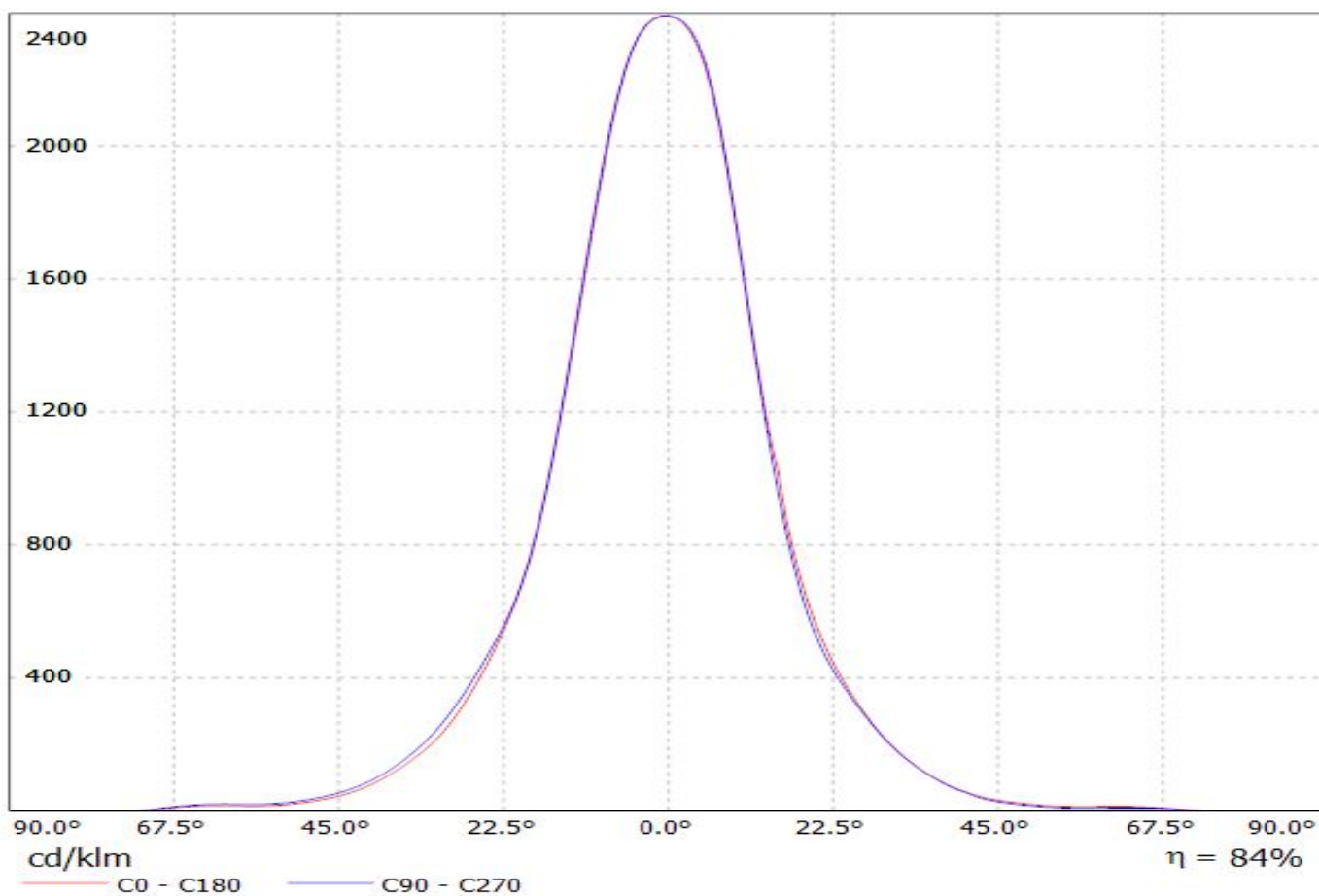
Luminaire: LEDiL Oy FP13030&FP13028\_LISA2-M\_PIN&CLIP Ef. 89%  
Lamps: 1 x Cree XT-E 104lm@250mA CCT=5000K P=0.77W I=250mA



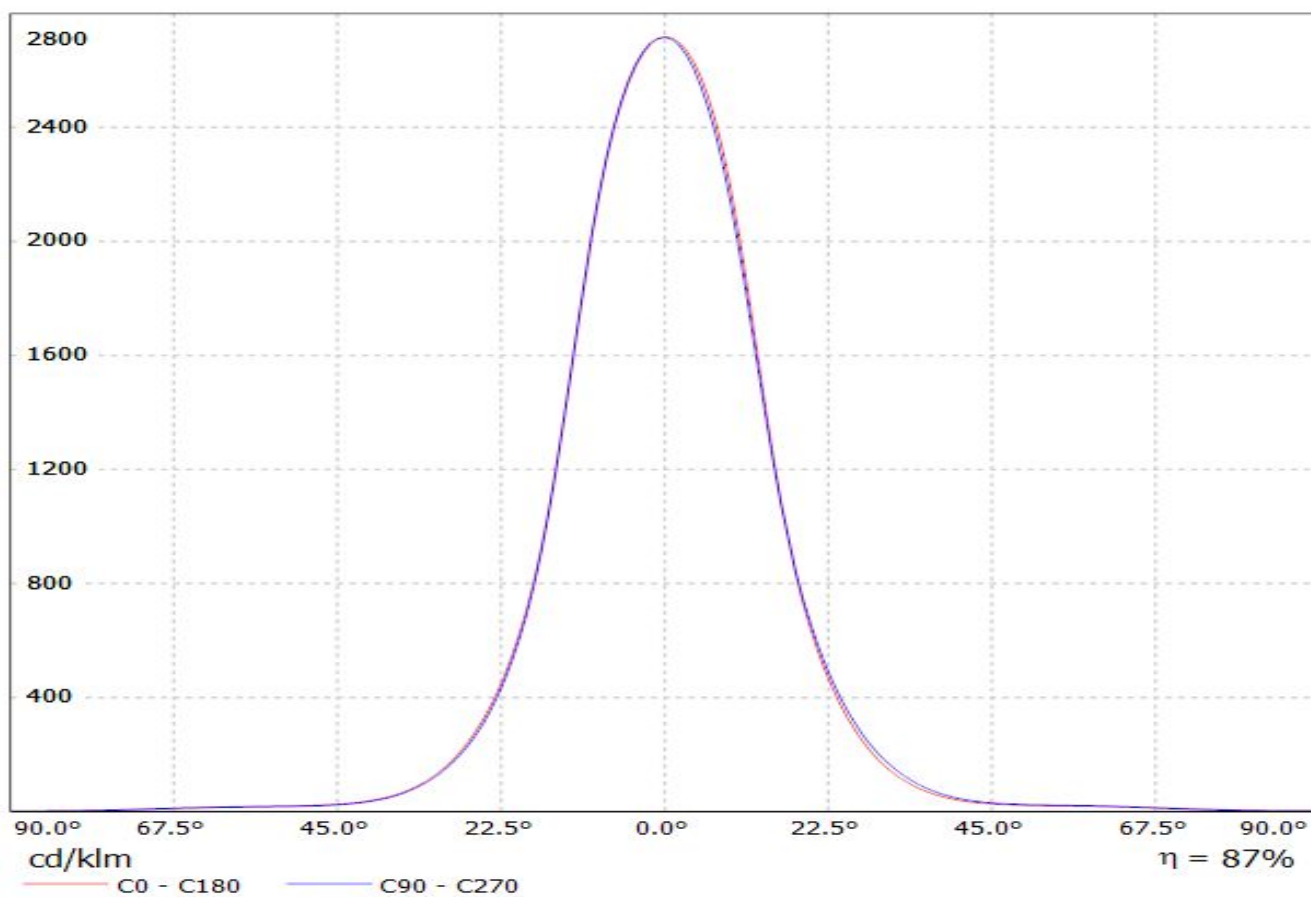
Luminaire: LEDiL Oy FP13028&FP13030\_LISA2-M\_(XP-G2) Eff. 89%  
Lamps: 1 x Cree\_(XP-G2) 104lm@250mA CCT=6600K P=0.76W I=250mA



Luminaire: Ledil Oy  
Lamps: 1 x

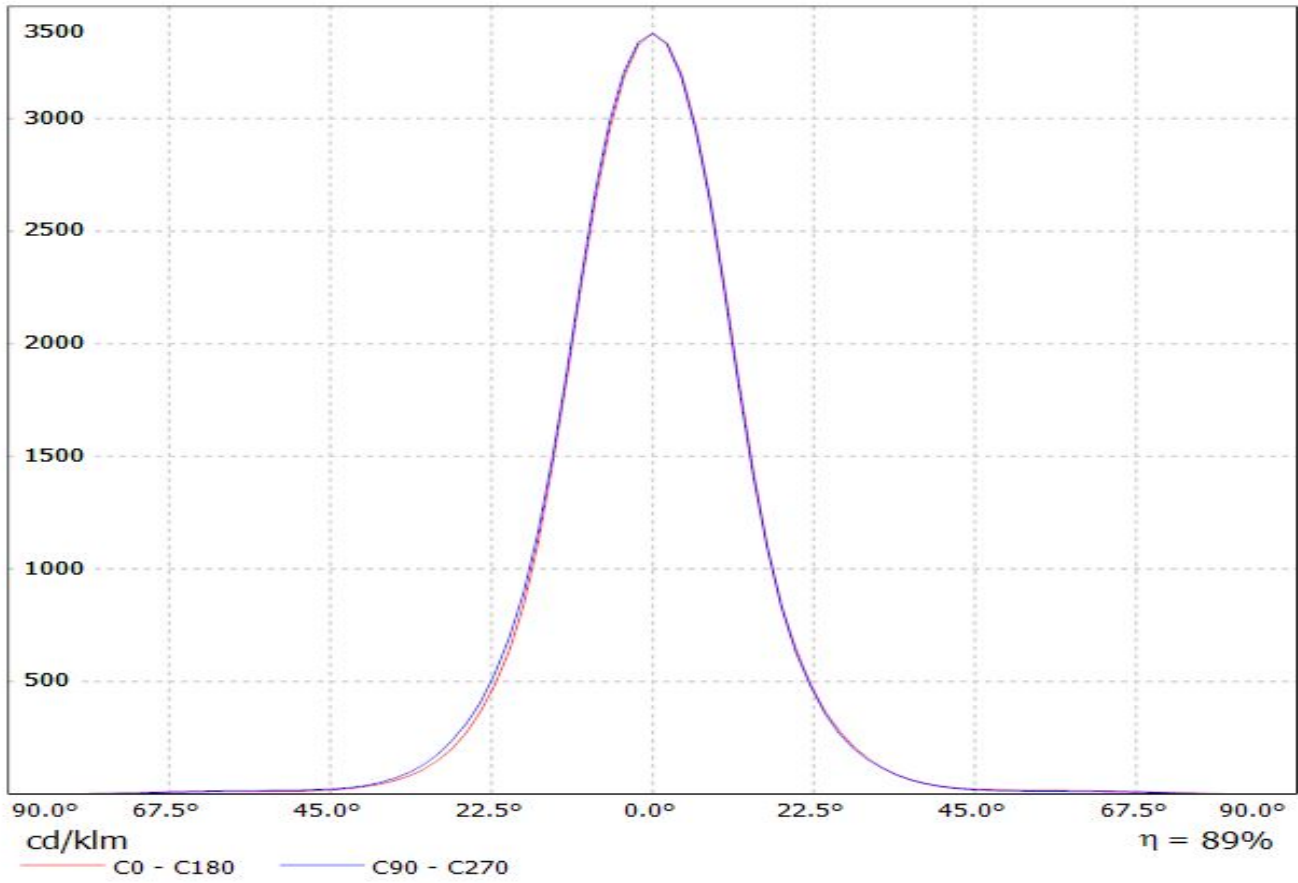


Luminaire: LEDiL Oy FP13030&FP13028\_LISA2-M\_(CLIP&PIN) Eff.86.6%  
Lamps: 1 x LUXEON\_T (74lm@250mA)

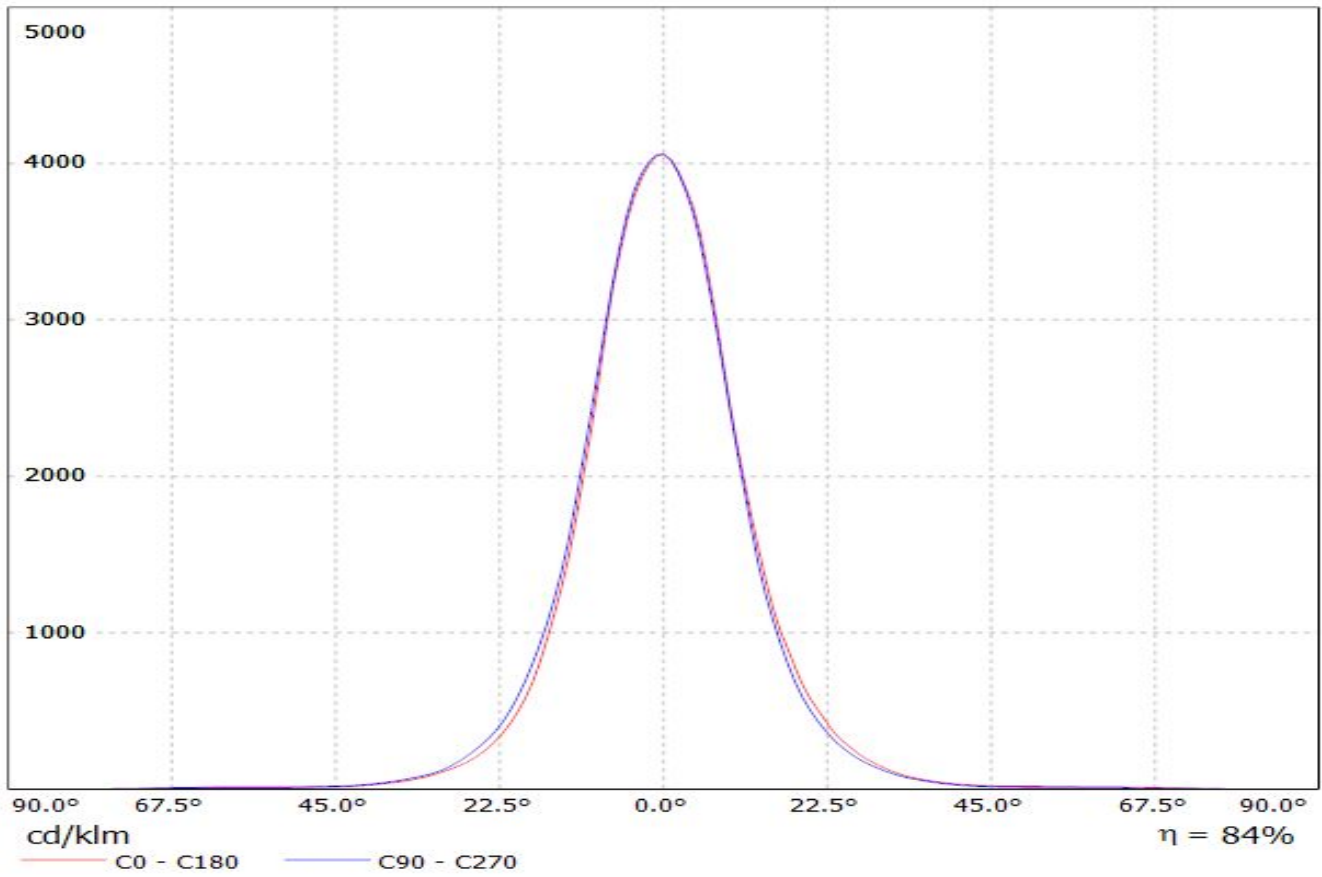




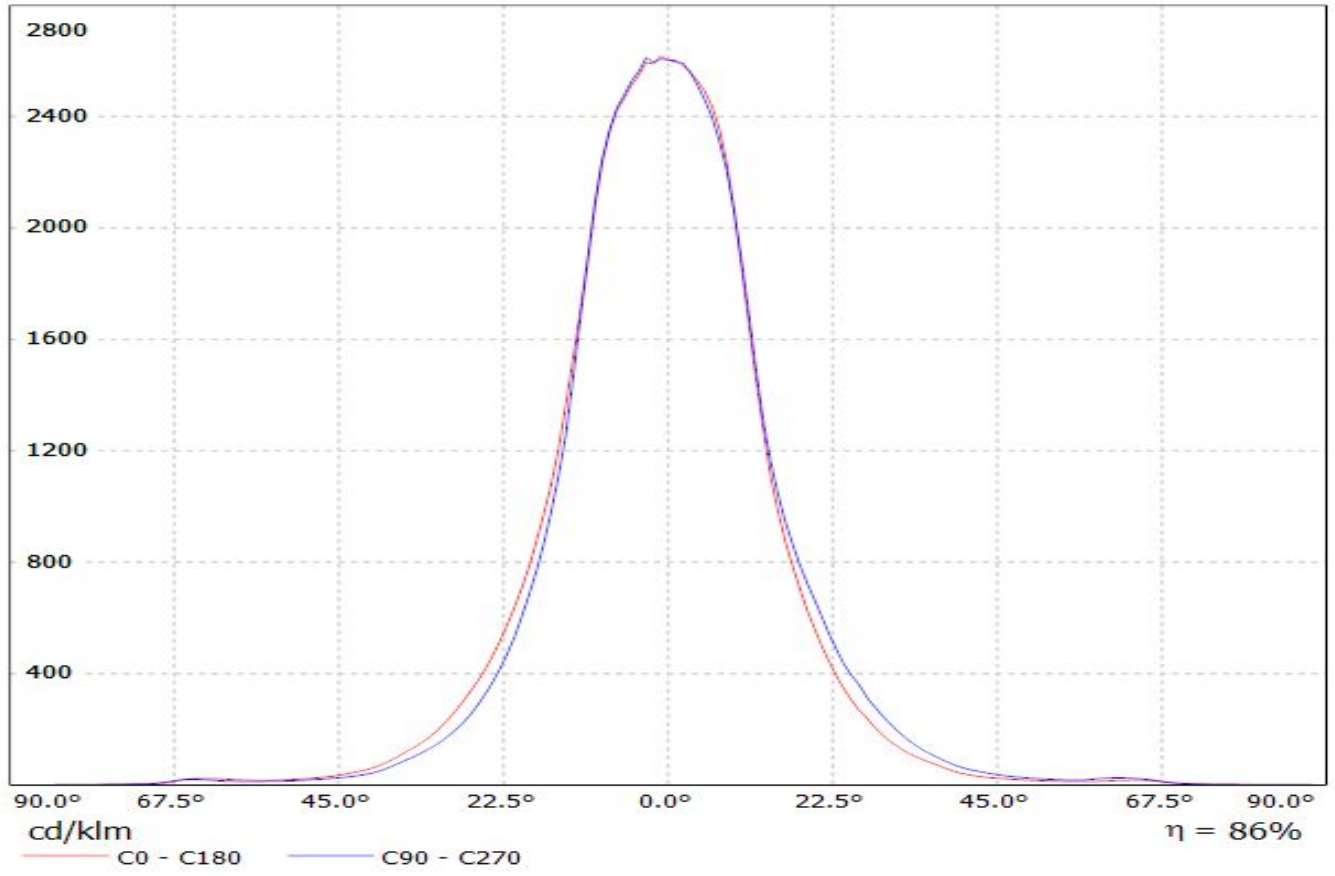
Luminaire: Ledil Oy FP13030\_LISA2-M-CLIP\_(Luxeon\_TX) Efficiency=88%  
Lamps: 1 x Luxeon TX (L1T2-3585) 108lm @ 250mA CCT=3521K P=0.73W I=250mA



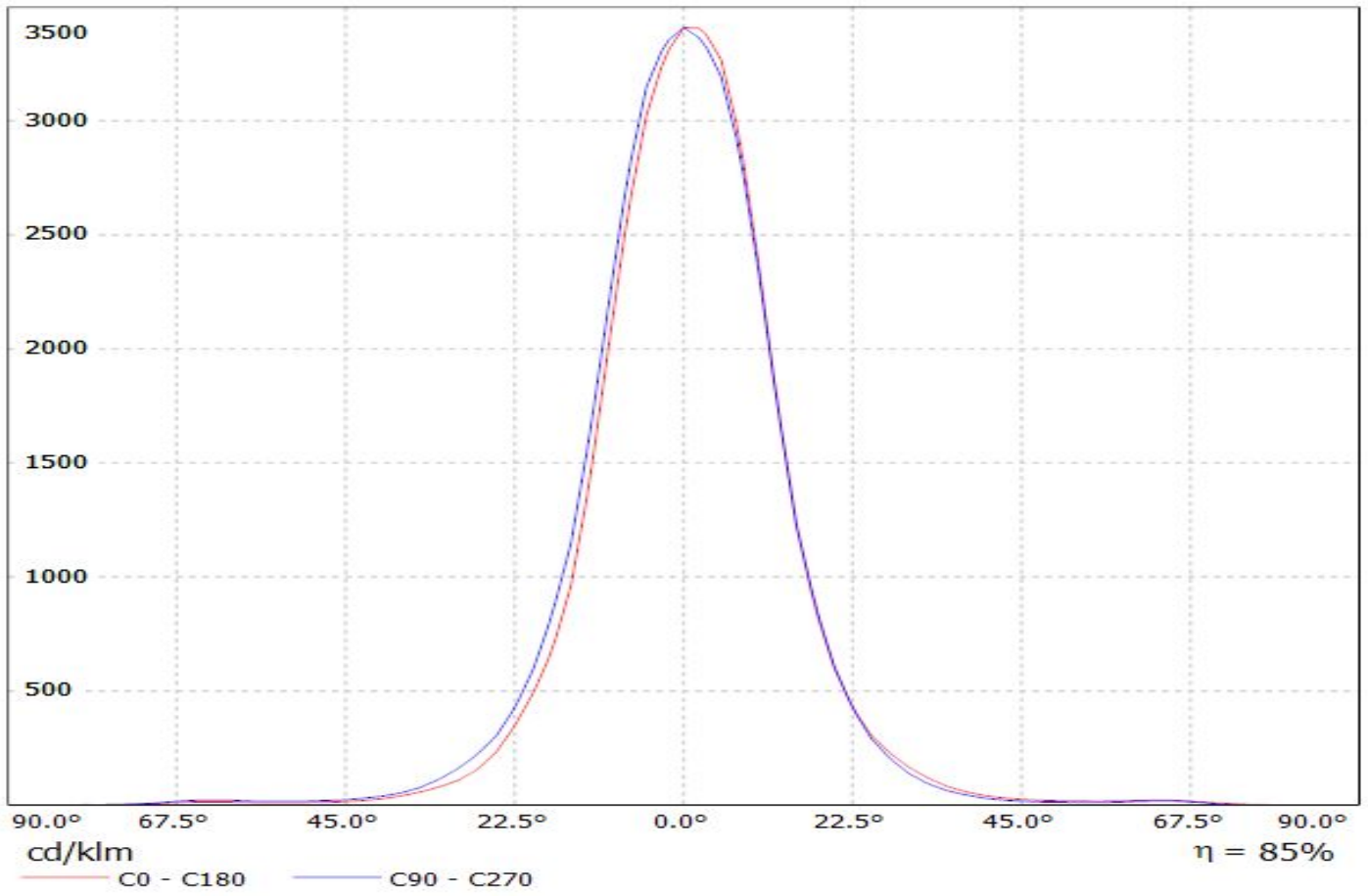
Luminaire: Ledil Oy FP13030\_LISA2-M-CLIP\_(NCSxx19B) Efficiency=85%  
Lamps: 1 x Nichia NCSxx19B (NCSL119BE) 88lm @ 250mA CCT=3000K P=0.8W I=250mA



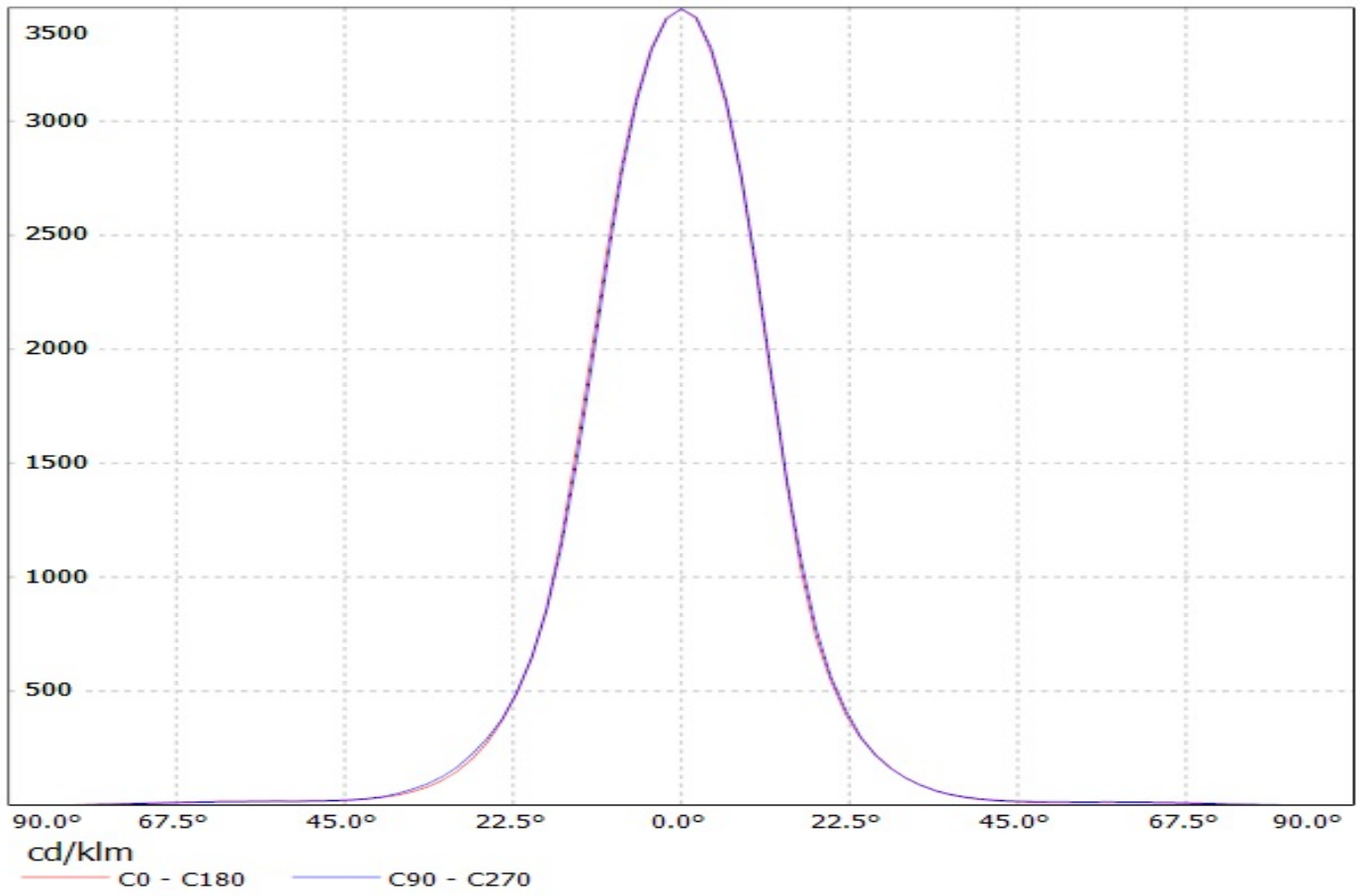
Luminaire: LEDiL Oy FP13030\_LISA2-M-CLIP\_(NVSL219CE)  
Lamps: 1 x Nichia\_NVSL219CE\_101.052lm@250mA\_P=0.713154W\_I=0.25A



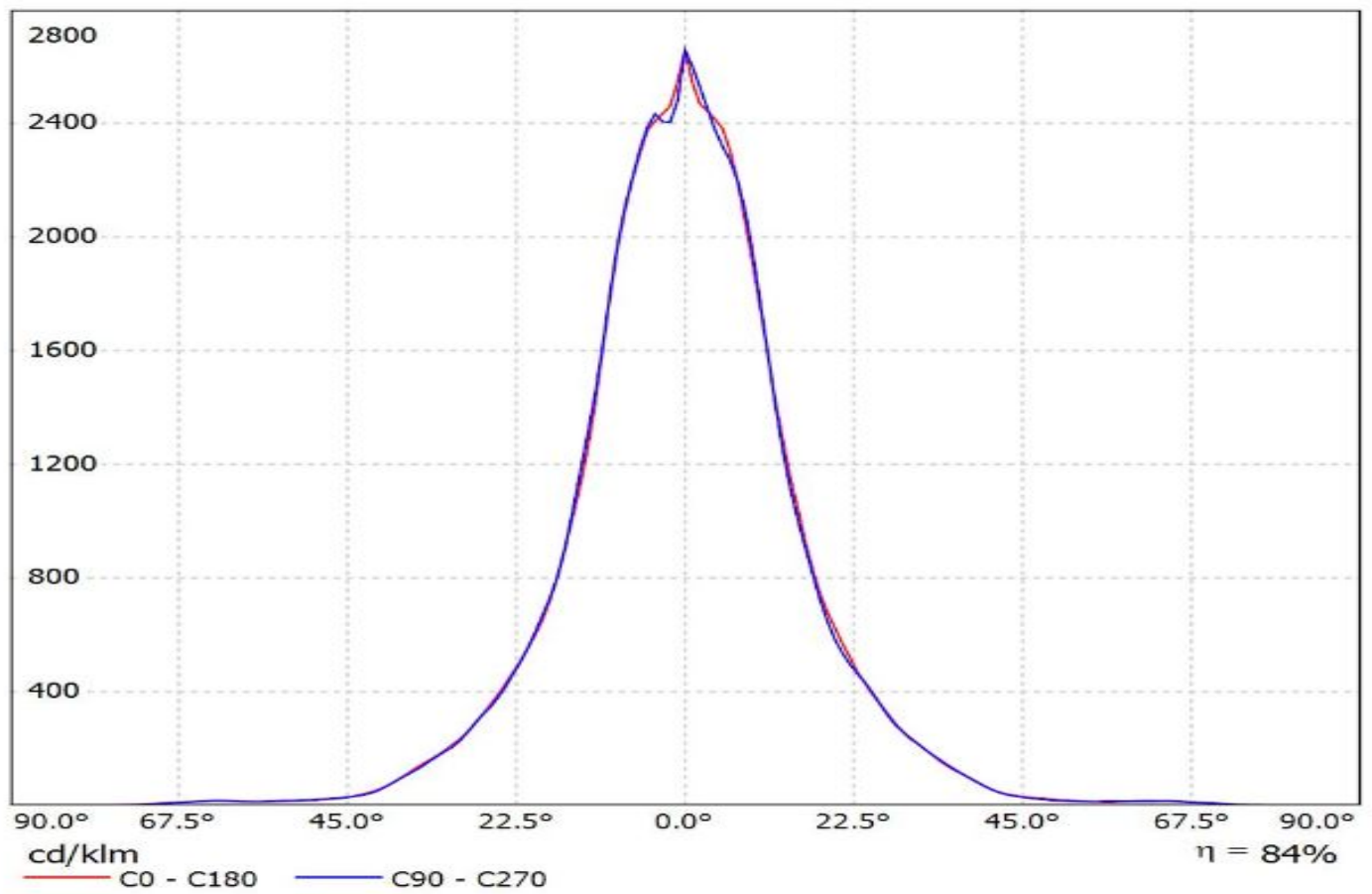
Luminaire: LEDiL Oy  
Lamps: 1 x FP13030\_LISA2-M-CLIP\_(SQ)



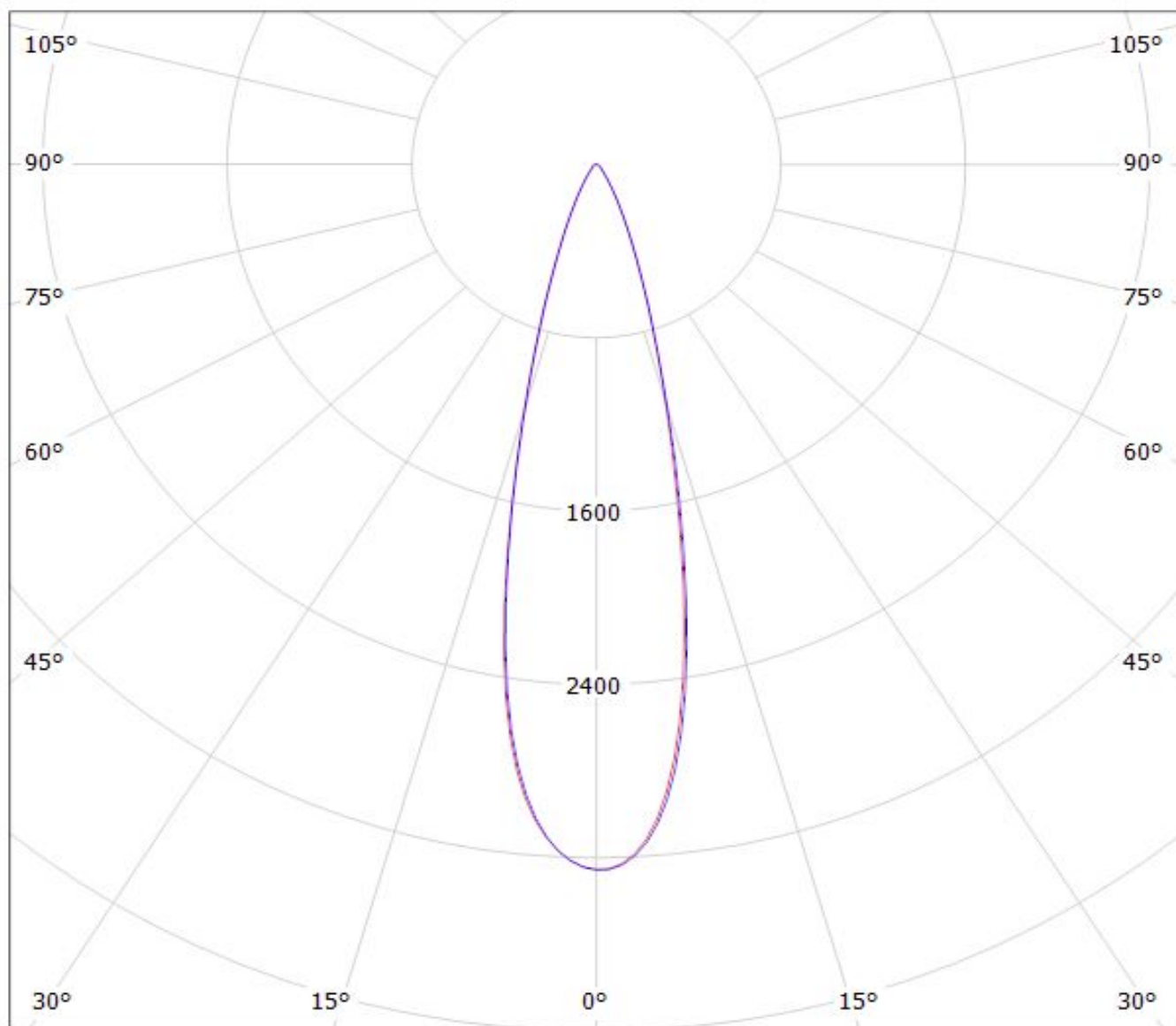
Luminaire: Ledil Oy FP13030\_LISA2-M-CLIP\_(LH351Z) Efficiency=87%  
Lamps: 1 x Samsung LH351Z (90.14lm @ 250mA) CCT=6500K P=0.7W I=250mA



Luminaire: Ledil Oy FP13030\_LISA2-M-CLIP\_Seoul\_Z8Y22P\_SIMULATED  
Lamps: 1 x Seoul Z8Y22P



Luminaire: LEDiL Oy FP13030&FP13028\_LISA2-M\_PIN&CLIP Ef. 89%  
Lamps: 1 x Cree XT-E 104lm@250mA CCT=5000K P=0.77W I=250mA



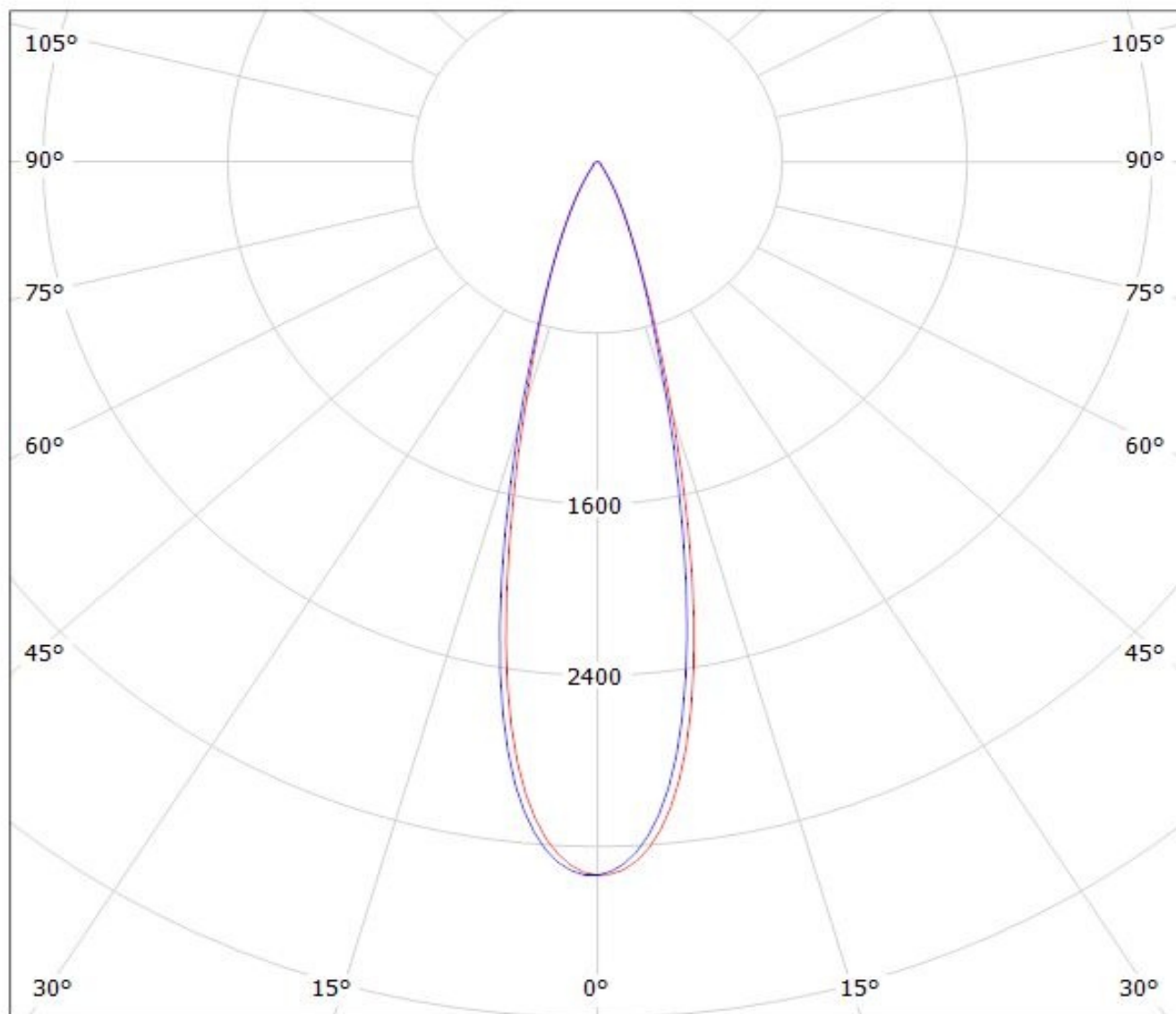
cd/klm

$\eta = 89\%$

— C0 - C180

— C90 - C270

Luminaire: LEDiL Oy FP13028&FP13030\_LISA2-M\_(XP-G2) Eff. 89%  
Lamps: 1 x Cree\_(XP-G2) 104lm@250mA CCT=6600K P=0.76W I=250mA

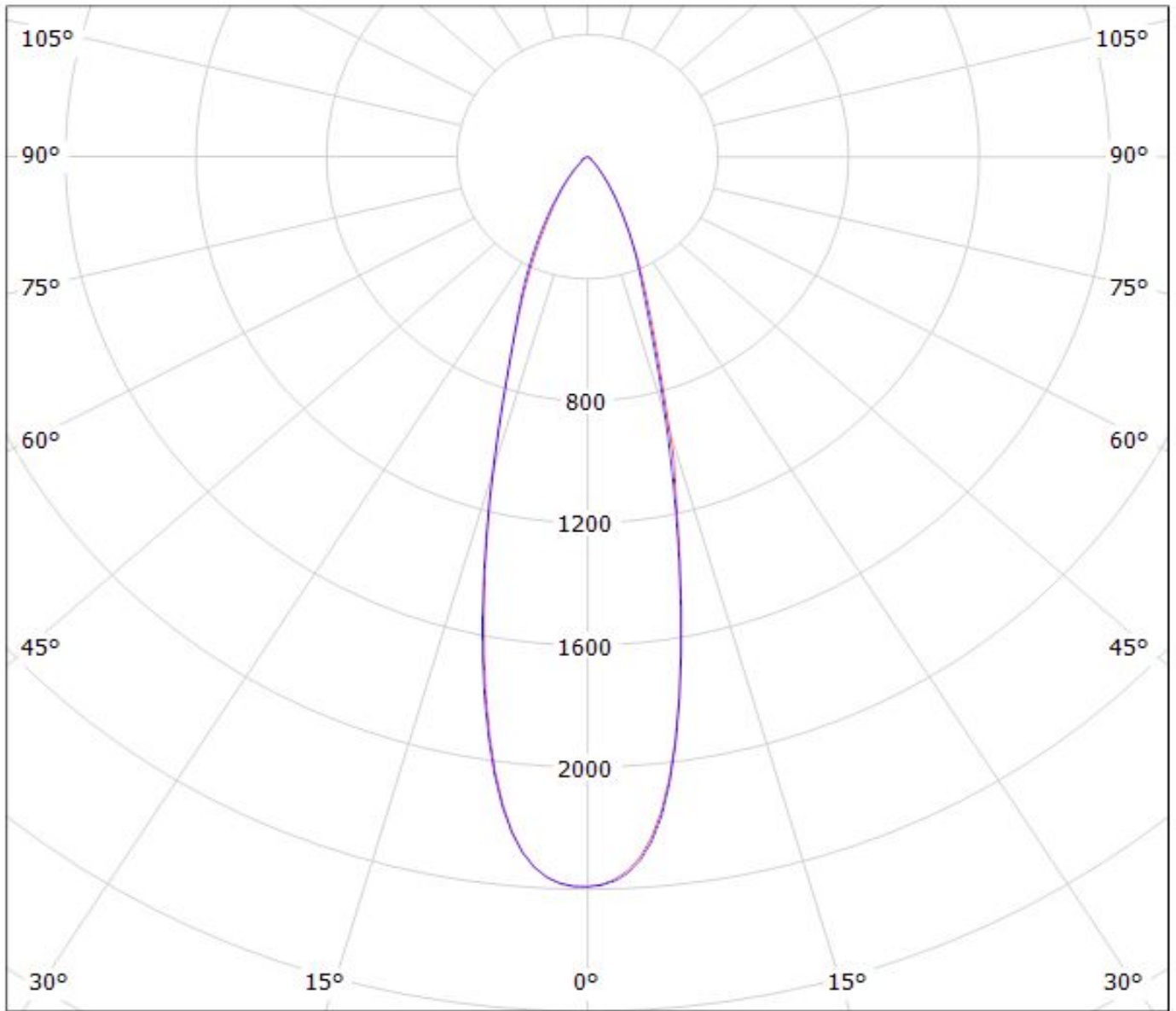


cd/klm

— C0 - C180 — C90 - C270



Luminaire: Ledil Oy  
Lamps: 1 x



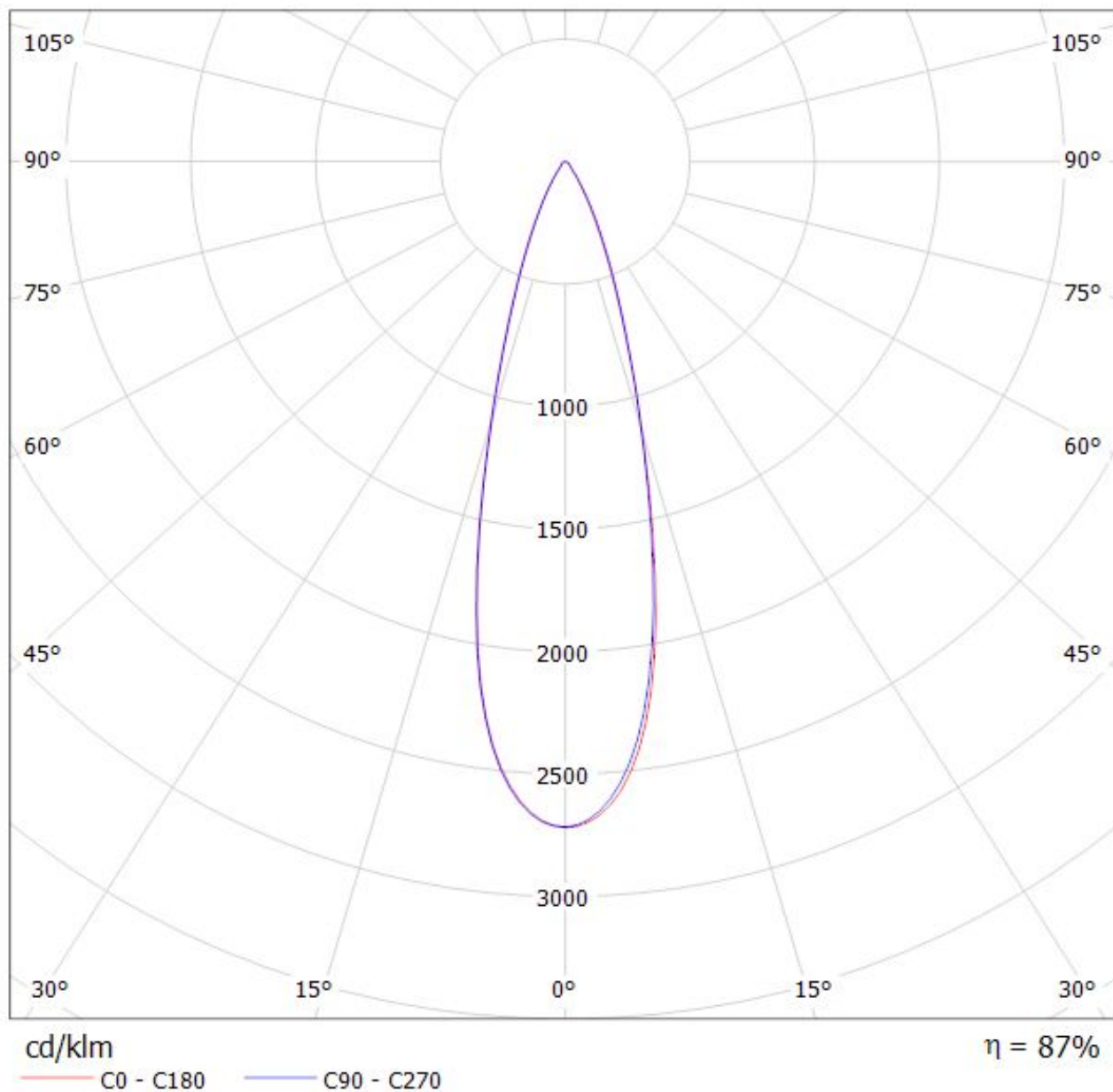
cd/klm

— C0 - C180

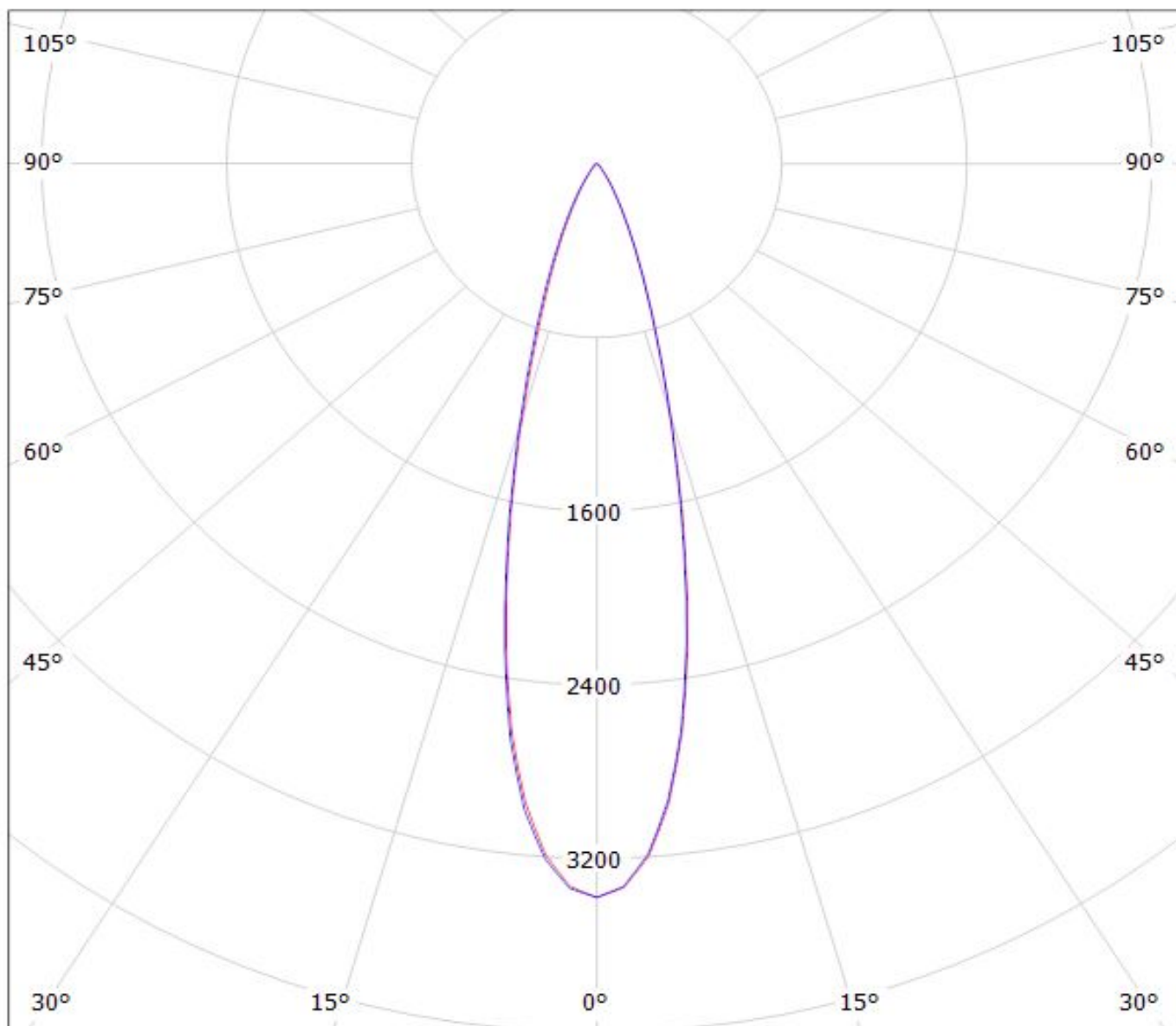
— C90 - C270

$\eta = 84\%$

Luminaire: LEDiL Oy FP13030&FP13028\_LISA2-M\_(CLIP&PIN) Eff.86.6%  
Lamps: 1 x LUXEON\_T (74lm@250mA)



Luminaire: Ledil Oy FP13030\_LISA2-M-CLIP\_(Luxeon\_TX) Efficiency=88%  
Lamps: 1 x Luxeon TX (L1T2-3585) 108lm @ 250mA CCT=3521K P=0.73W I=250mA

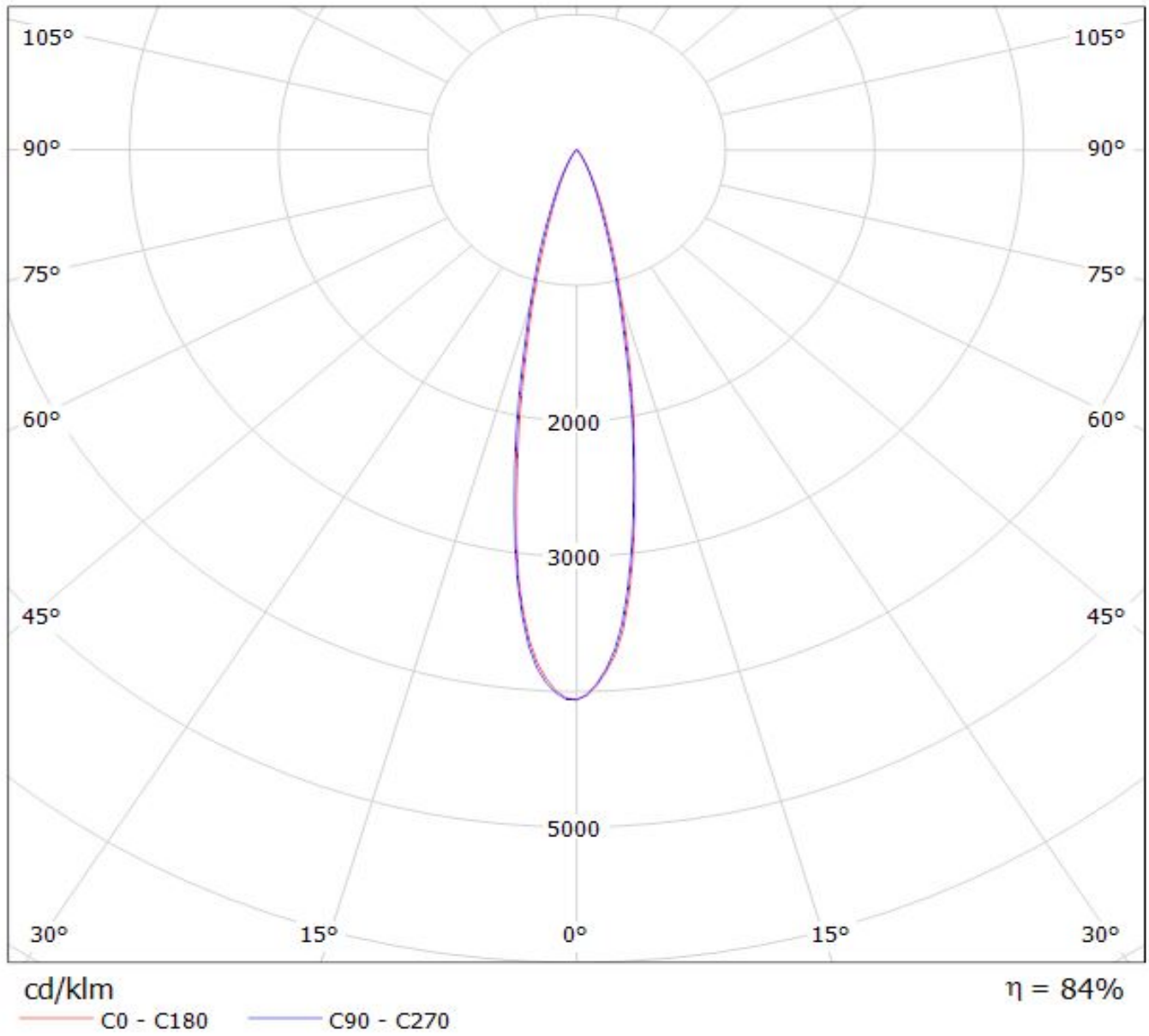


cd/klm

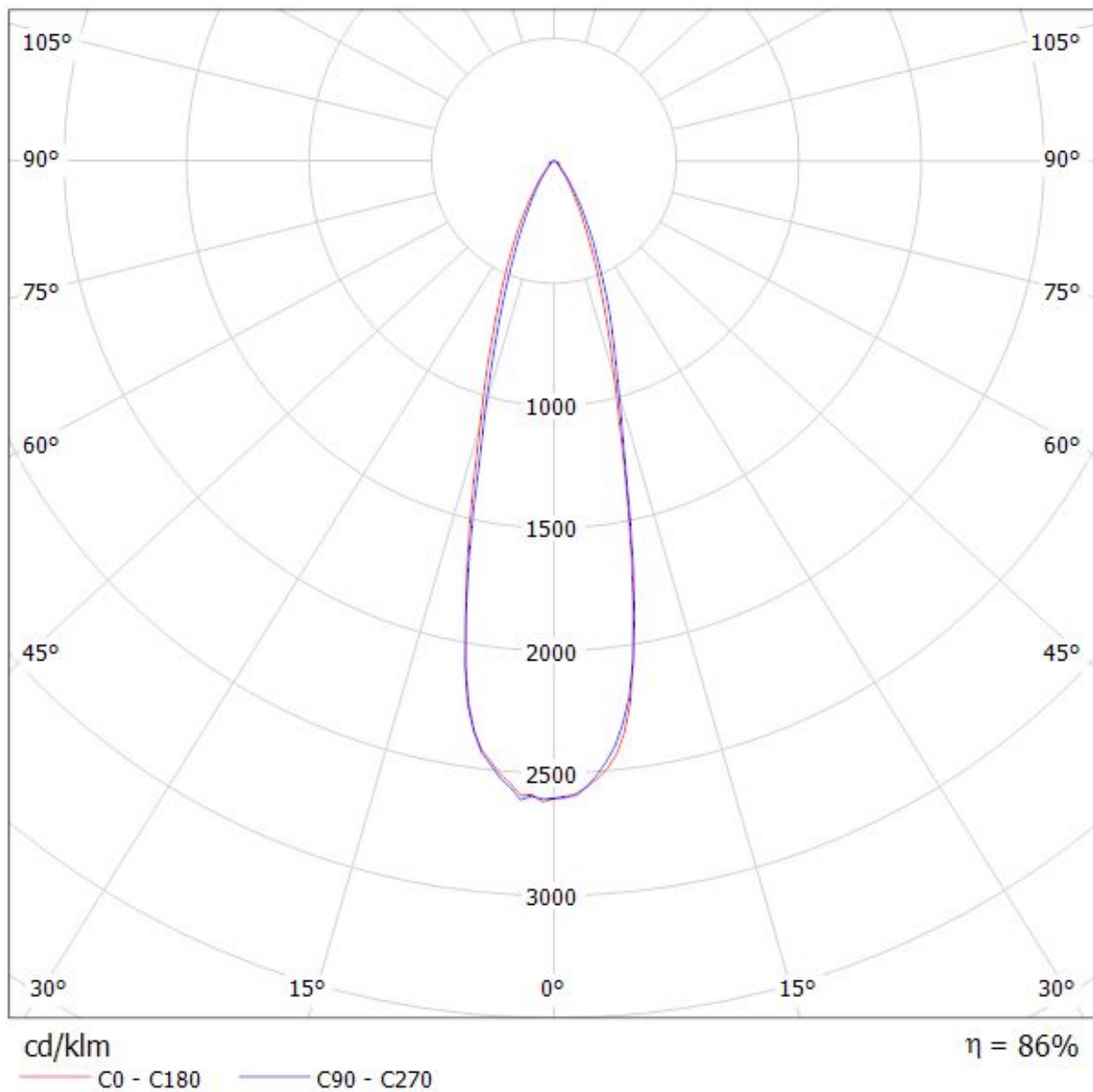
— C0 - C180 — C90 - C270

$\eta = 89\%$

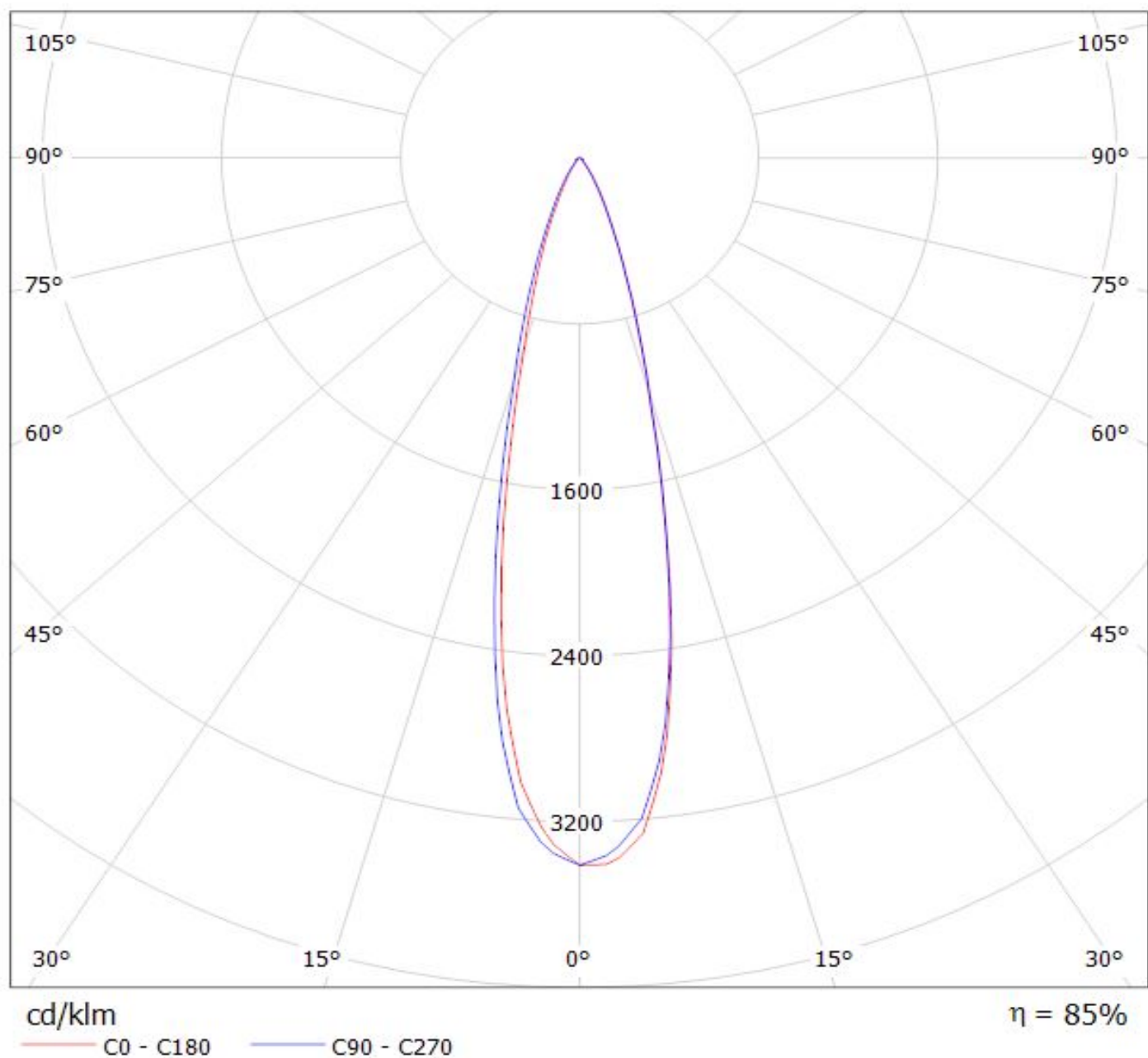
Luminaire: Ledil Oy FP13030\_LISA2-M-CLIP\_(NCSxx19B) Efficiency=85%  
Lamps: 1 x Nichia NCSxx19B (NCSL119BE) 88lm @ 250mA CCT=3000K P=0.8W I=250mA



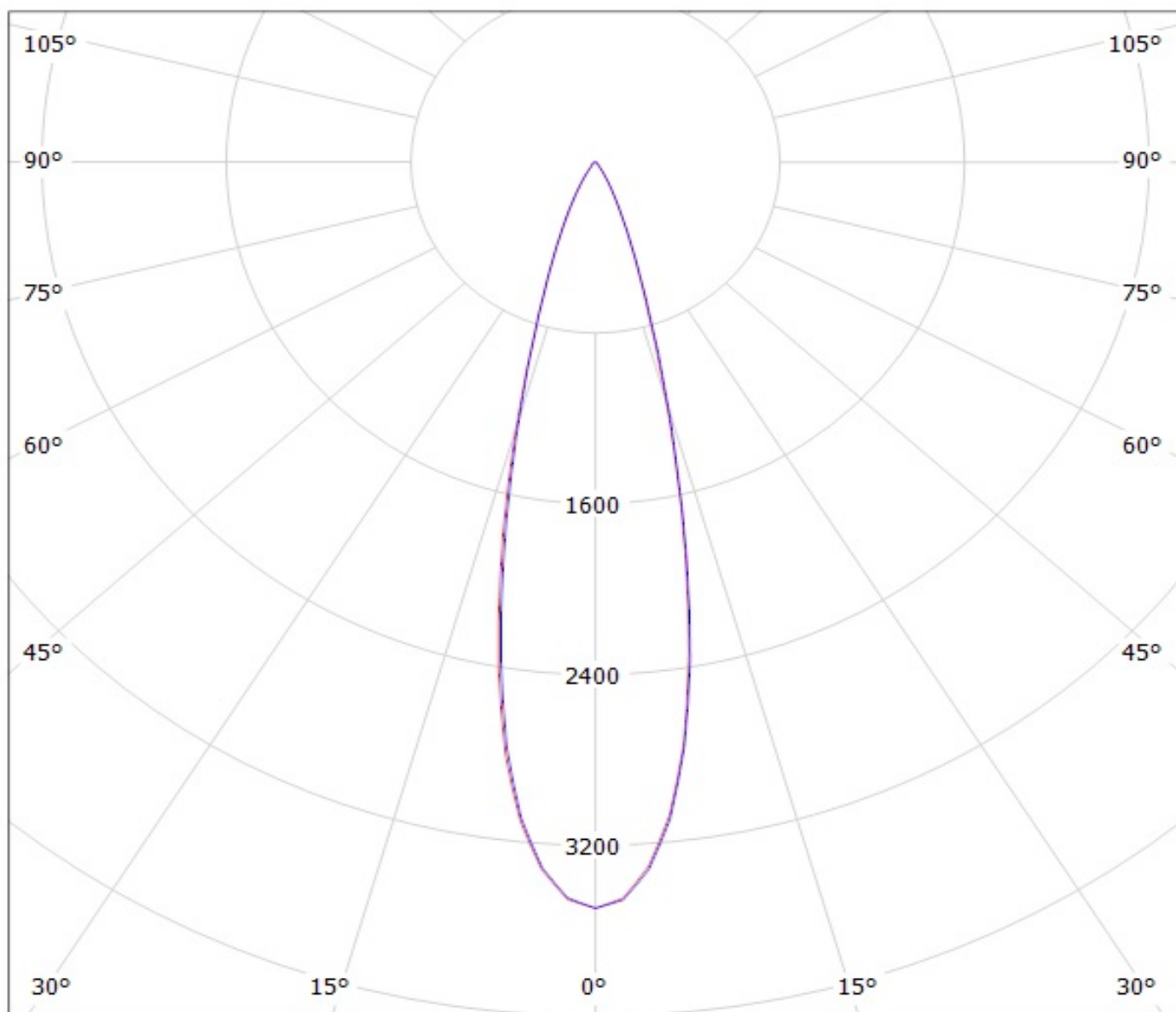
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Lamps: 1 x Nichia\_NVSL219CE\_101.052lm@250mA\_P=0.713154W\_I=0.25A



Luminaire: LEDiL Oy  
Lamps: 1 x FP13030\_LISA2-M-CLIP\_(SQ)



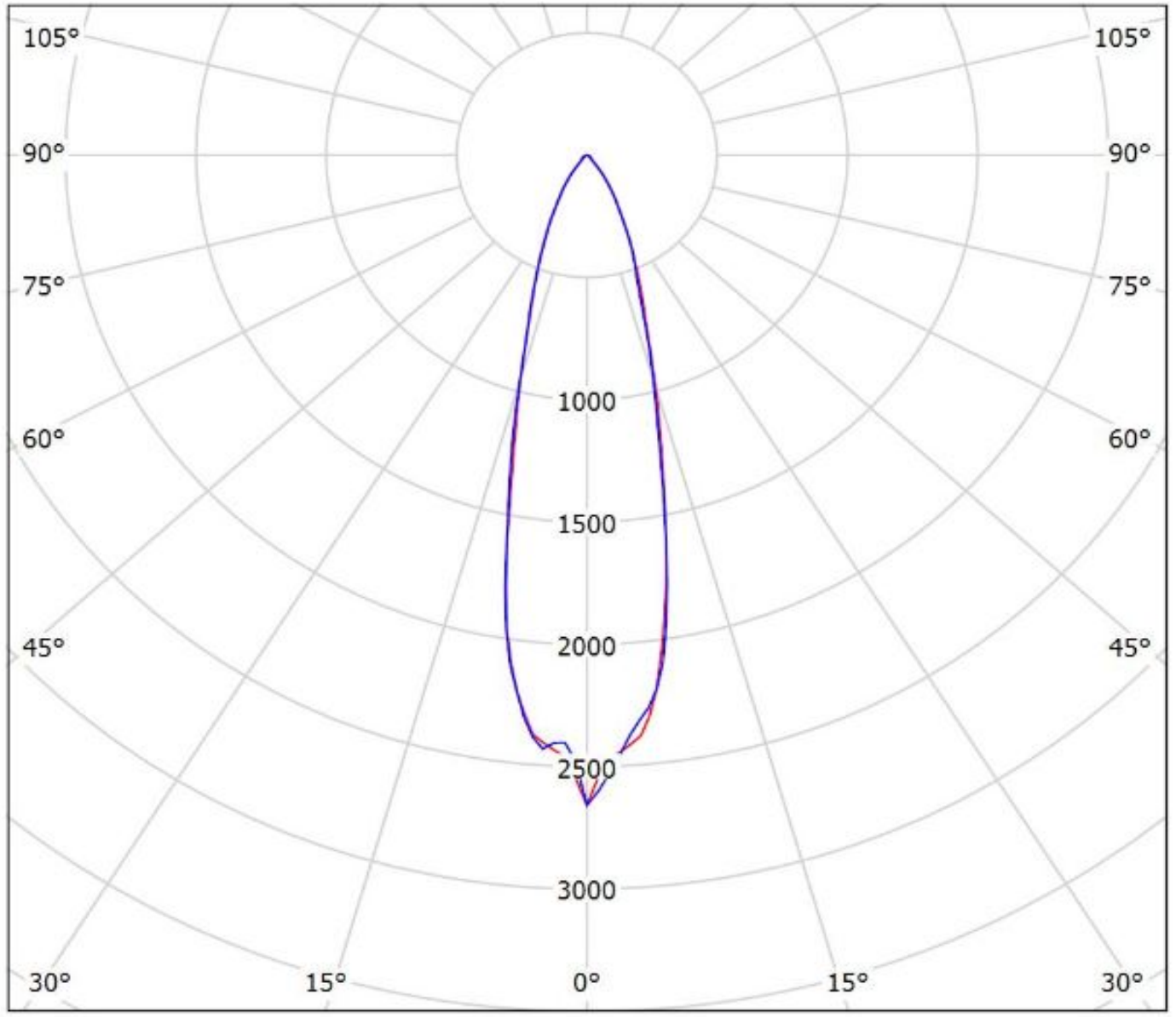
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cd/klm

— C0 - C180    — C90 - C270

Luminaire: Ledil Oy FP13030\_LISA2-M-CLIP\_Seoul\_Z8Y22P\_SIMULATED  
Lamps: 1 x Seoul Z8Y22P



cd/klm  
— C0 - C180 — C90 - C270

$\eta = 84\%$



**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.**