

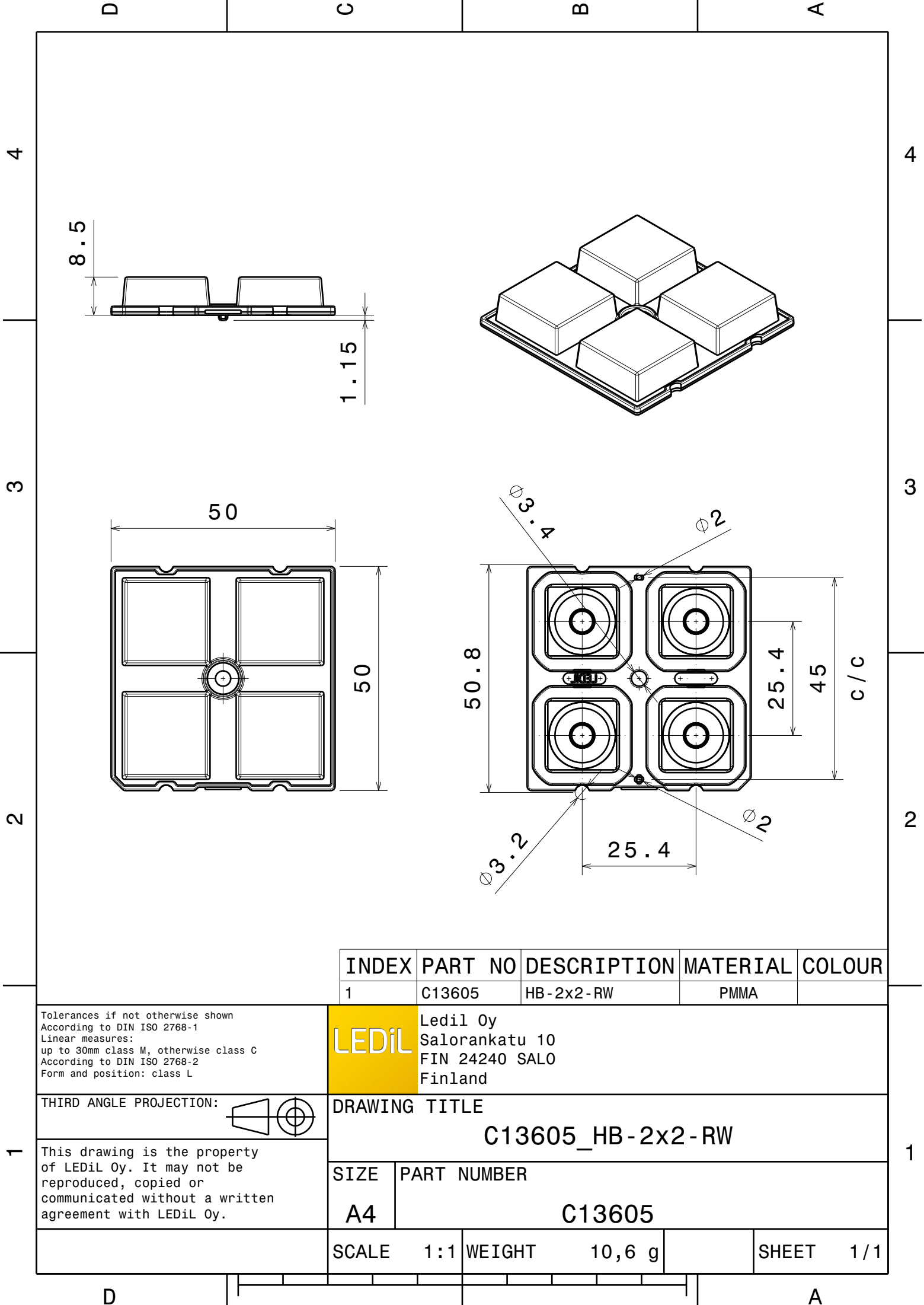
## DETAILS

|                        |                  |
|------------------------|------------------|
| <b>Product Number</b>  | C13605_HB-2X2-RW |
| <b>Family</b>          | HighBay          |
| <b>Type</b>            | Lens array       |
| <b>Color</b>           | clear            |
| <b>Diameter</b>        | 50x50 mm         |
| <b>Height</b>          | 8,5 mm           |
| <b>Style</b>           | square           |
| <b>Optic Material</b>  | PMMA             |
| <b>Holder Material</b> |                  |
| <b>Fastening</b>       | glue, screw, pin |
| <b>Status</b>          | production ready |
| <b>ROHS Compliant</b>  | Yes              |
| <b>Date Updated</b>    | 21/04/2016       |



## OPTICAL PROPERTIES

| LED                               | Viewing | Light | Efficiency | cd/lm | Connector |
|-----------------------------------|---------|-------|------------|-------|-----------|
|                                   | Angle   | Beam  |            |       |           |
| XT-E                              | 44 deg  | Wide  | 91 %       | 1.600 | -         |
| XP-G2                             | 48 deg  | Wide  | 91 %       | 1.400 | -         |
| XP-G                              | 50 deg  | Wide  | 89 %       | 1.300 | -         |
| XP-E                              | 51 deg  | Wide  | 89 %       | 1.400 | -         |
| XB-D                              | 46 deg  | Wide  | 88 %       | 1.600 | -         |
| NCSxx19A                          | 49 deg  | Wide  | 90 %       | 1.500 | -         |
| NVSxx19A                          | 52 deg  | Wide  | 88 %       | 1.300 | -         |
| NVSxx19B/NVSxx19C                 | 51 deg  | Wide  | 90 %       | 1.300 | -         |
| NVSxE21A                          | 37 deg  | Wide  | 84 %       | 1.600 | -         |
| PrevaLED Brick DC 2x8             | 49 deg  | Wide  | 89 %       | 1.300 | -         |
| Oslon Square PC                   | 50 deg  | Wide  | 90 %       | 1.400 | -         |
| Oslon SSL 80                      | 46 deg  | Wide  | 90 %       | 1.700 | -         |
| Oslon Square Gen3                 | 49 deg  | Wide  | 89 %       | 1.300 | -         |
| LH351Z                            | 48 deg  | Wide  | 90 %       | 1.400 | -         |
| Z5M1/Z5M2                         | 49 deg  | Wide  | 90 %       | 1.400 | -         |
| Z8Y15                             | 46 deg  | Wide  | 88 %       | 1.400 | -         |
| Z8Y19                             | 47 deg  | Wide  | 87 %       | 1.300 | -         |
| Z8Y22                             | 45 deg  | Wide  | 93 %       | 1.200 | -         |
| TL1L4                             | 47 deg  | Wide  | 83 %       | 1.300 | -         |
| RLE G1 49x223mm 4000lm xxx EXC OT | 45 deg  | Wide  | 94 %       | 1.400 | -         |
| RLE G1 49x245mm 4000lm xxx EXC OT | 45 deg  | Wide  | 94 %       | 1.400 | -         |
| RLE G1 49x121mm 2000lm xxx EXC OT | 45 deg  | Wide  | 94 %       | 1.400 | -         |
| RLE G1 49x133mm 2000lm xxx EXC OT | 45 deg  | Wide  | 94 %       | 1.400 | -         |



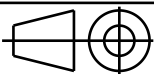
| INDEX | PART NO | DESCRIPTION | MATERIAL | COLOUR |
|-------|---------|-------------|----------|--------|
| 1     | C13605  | HB -2x2 -RW | PMMA     |        |

Tolerances if not otherwise shown  
According to DIN ISO 2768-1  
Linear measures:  
up to 30mm class M, otherwise class C  
According to DIN ISO 2768-2  
Form and position: class L

LEDiL

Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:



DRAWING TITLE

C13605\_HB-2x2-RW

This drawing is the property  
of LEDiL Oy. It may not be  
reproduced, copied or  
communicated without a written  
agreement with LEDiL Oy.

SIZE

A4

PART NUMBER

C13605

SCALE

1:1

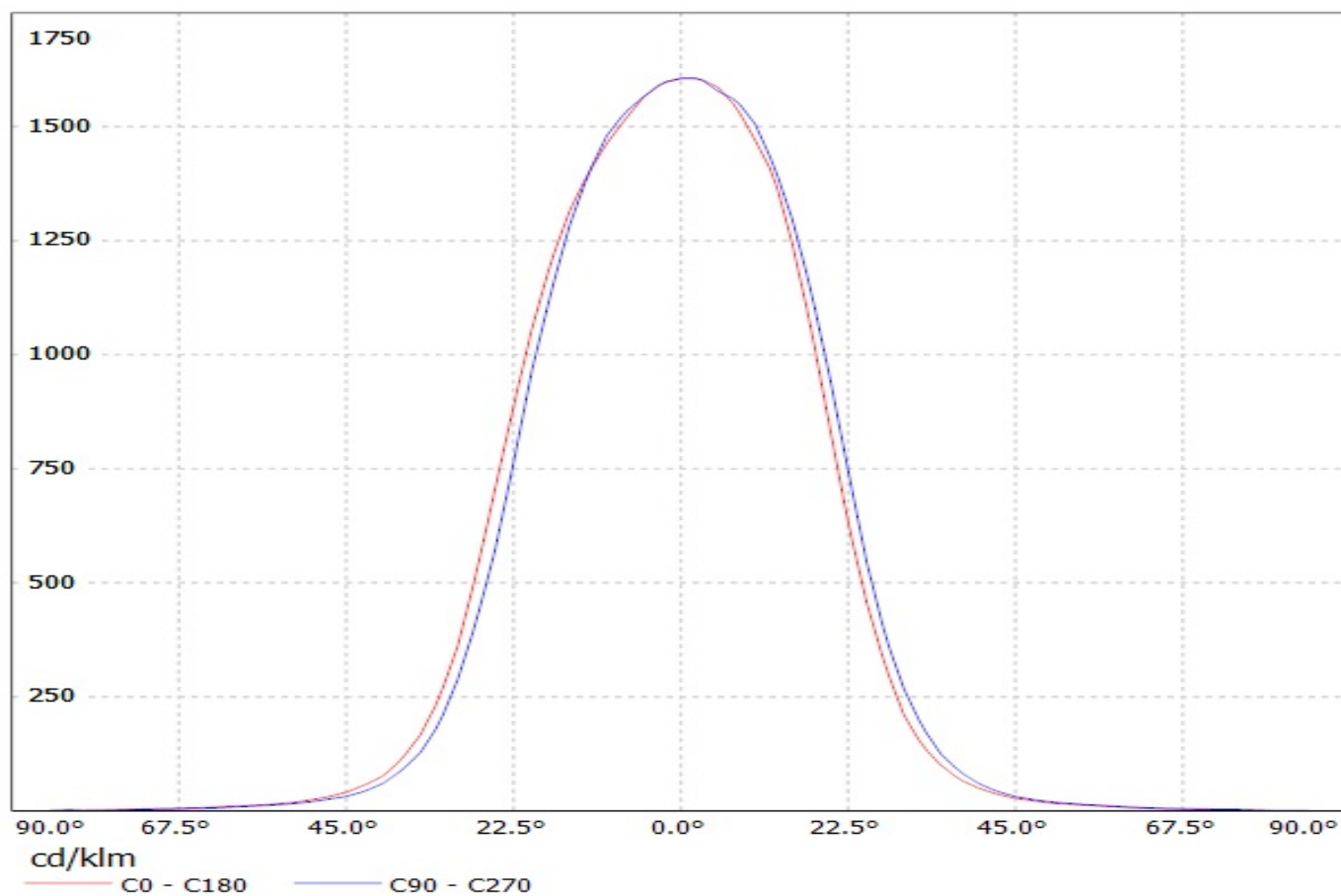
WEIGHT

10,6 g

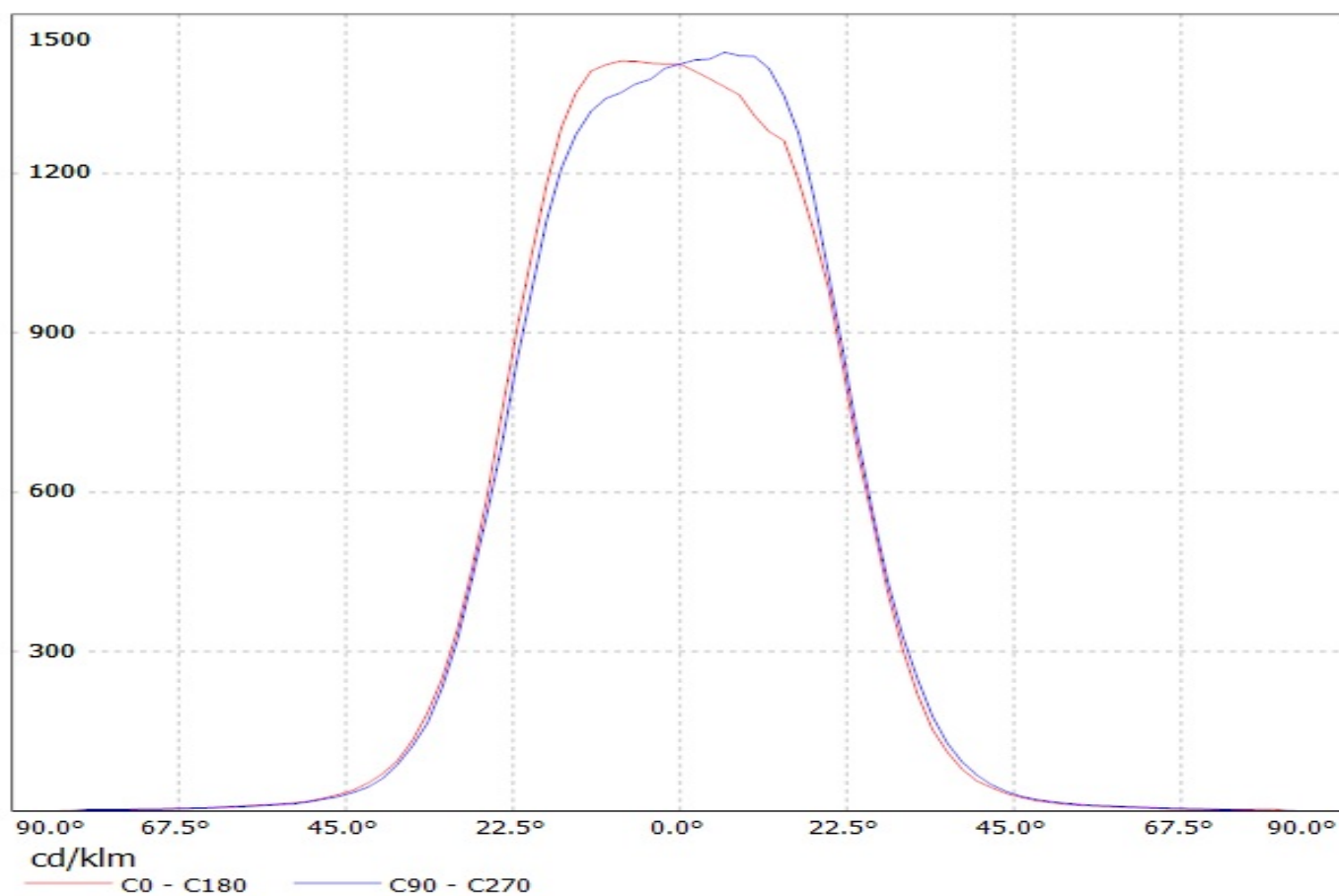
SHEET

1/1

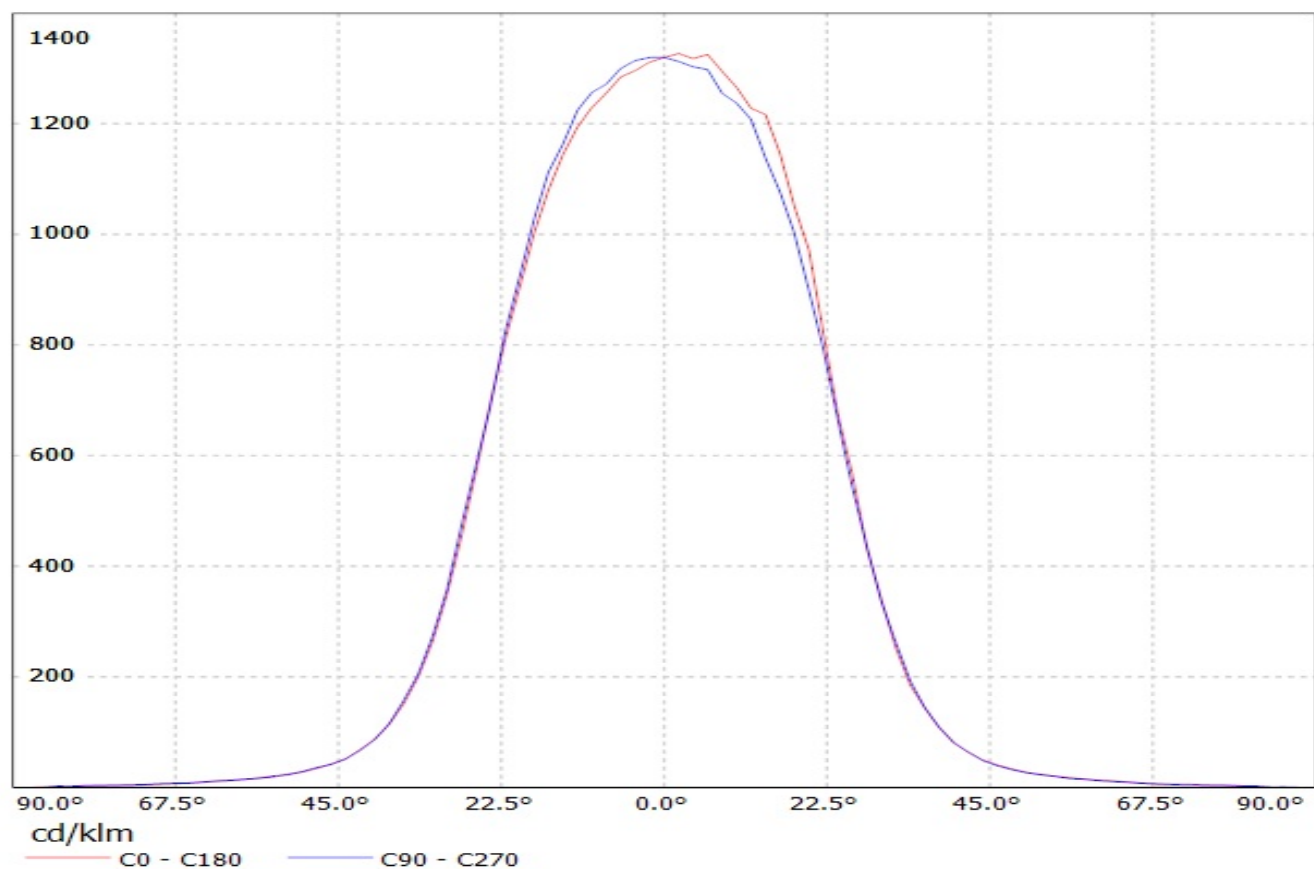
Luminaire: Ledil Oy C13605\_HB-2X2-RW (Cree XT-E 390lm @ 250mA) Efficiency=89%  
Lamps: 1 x Cree XT-E 390lm @ 250mA CCT=5717K P=3W I=250mA



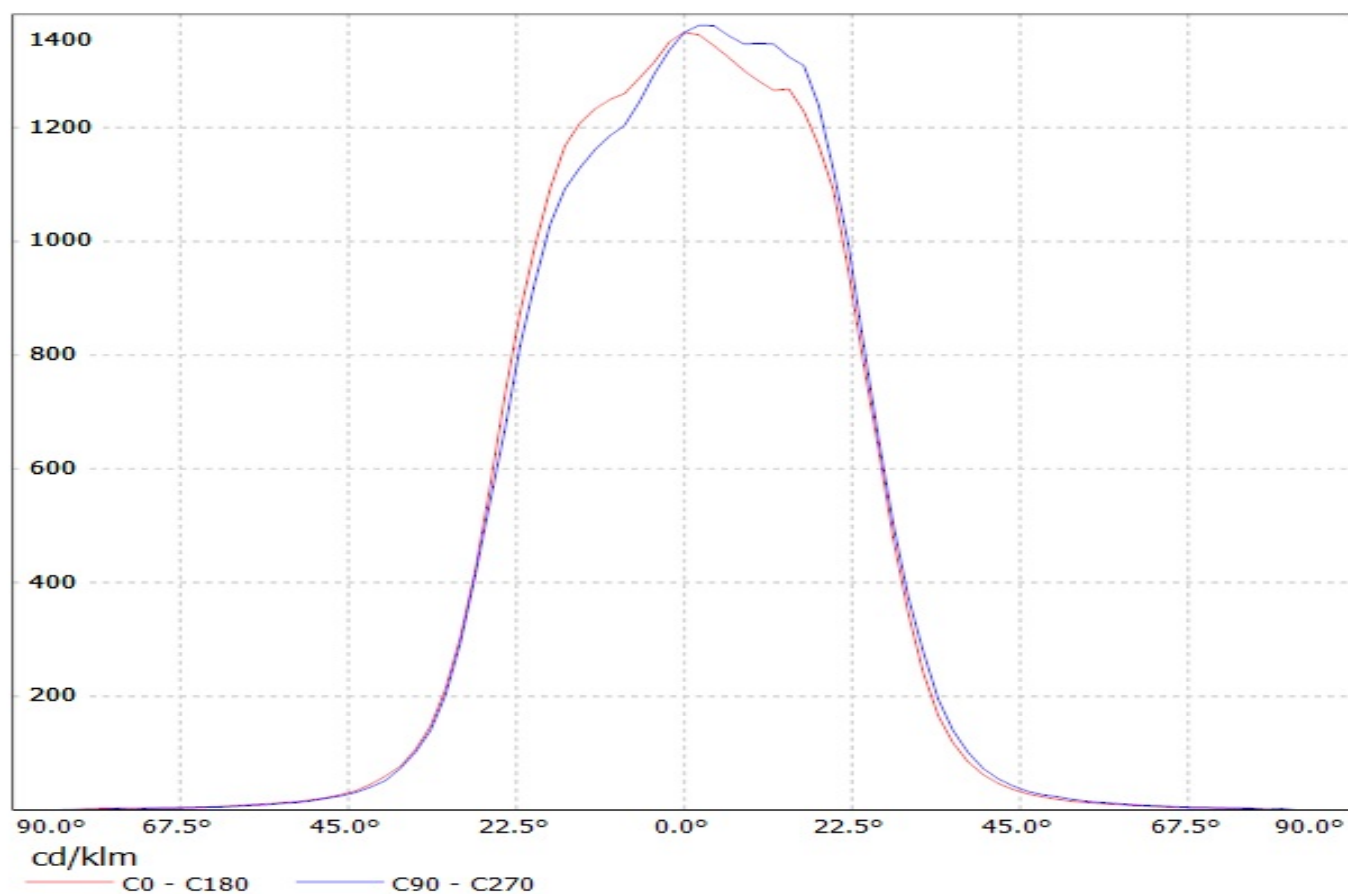
Luminaire: Ledil Oy C13605\_HB-2X2-RW (Cree XP-G2 408lm lm @ 250mA) Efficiency=91%  
Lamps: 1 x Cree XP-G2 408lm lm @ 250mA CCT=7181K P=3W I=250mA



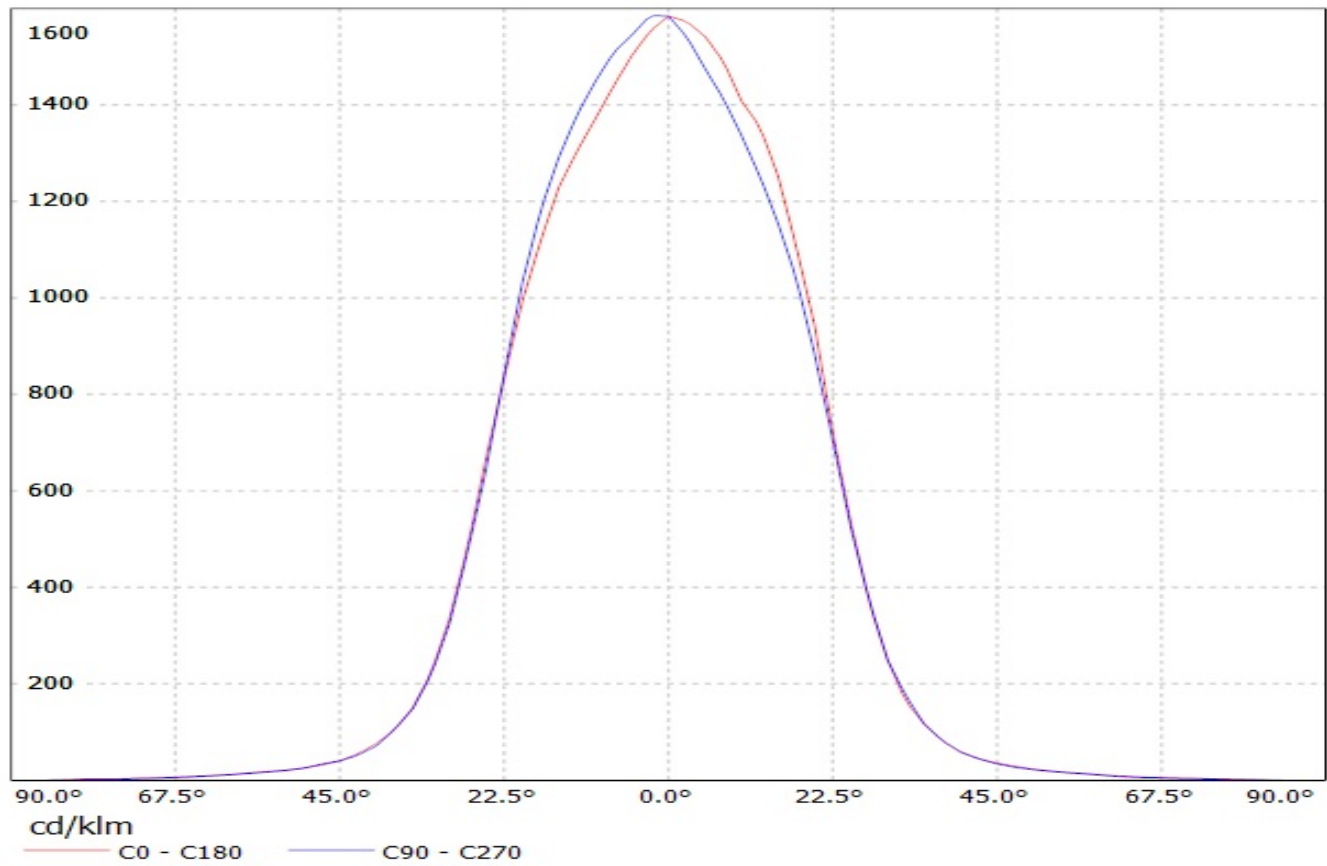
Luminaire: Ledil Oy C13605\_HB-2X2-RW\_(XP-G) Efficiency=89%  
Lamps: 1 x Cree XP-G (254lm @ 250mA) CCT=3300K P=2.9W I=250mA



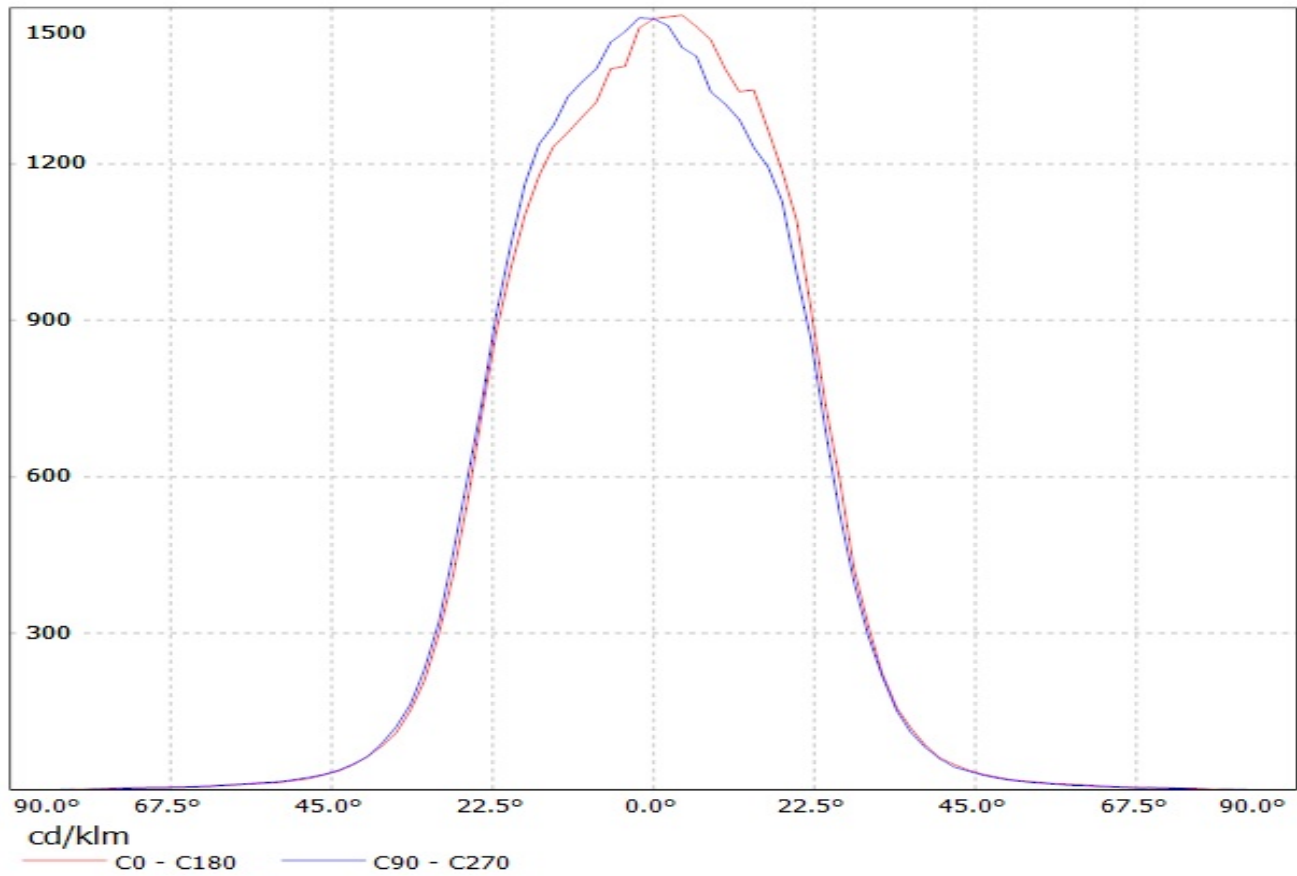
Luminaire: Ledil Oy C13605\_HB-2x2-RW\_(XP-E) Efficiency=89%  
Lamps: 1 x Cree XP-E (XPEWHT-L1-3C0-W5-0-06) 302lm @ 250mA CCT=5400K P=3.1W I=250mA



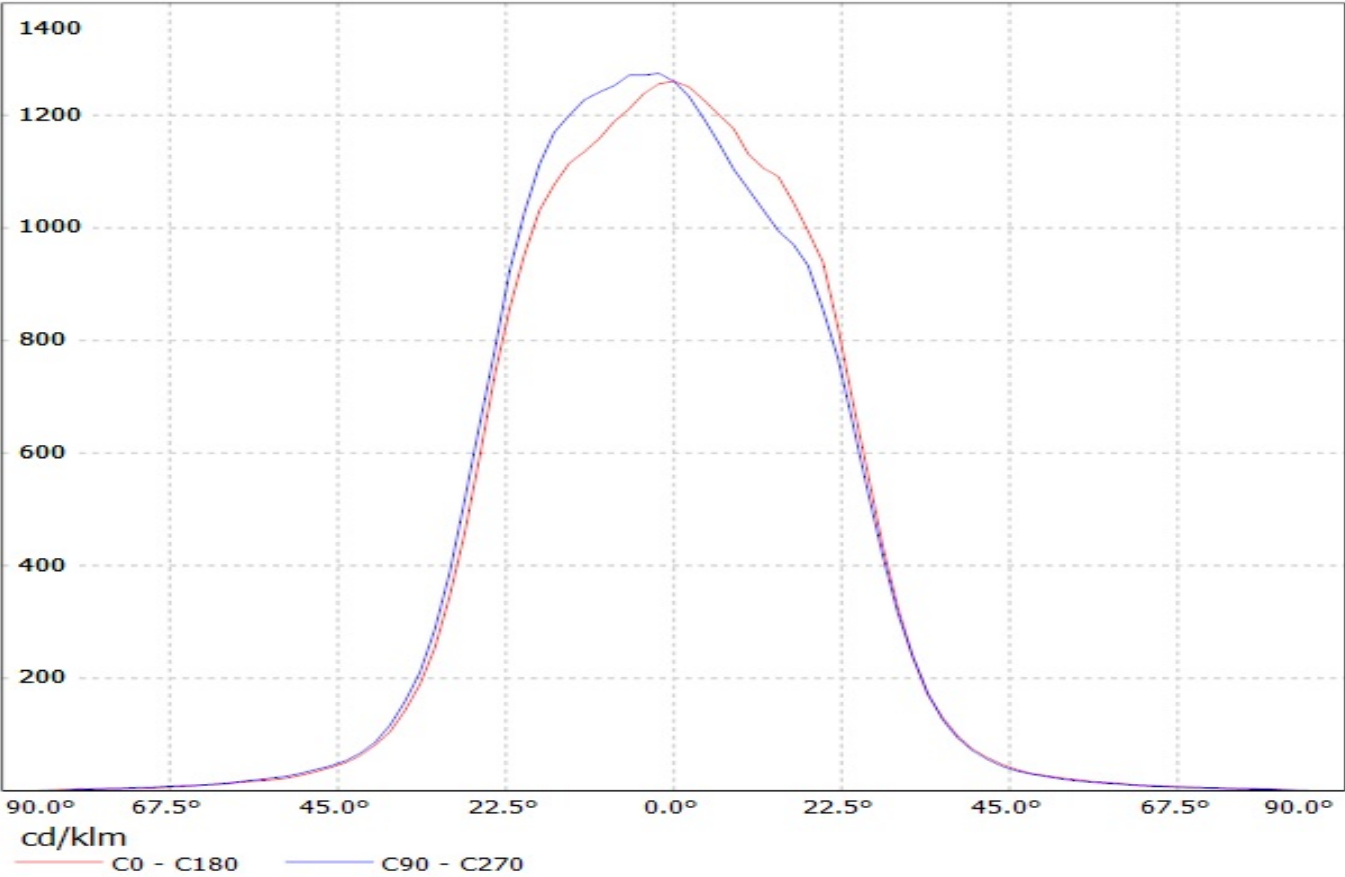
Luminaire: Ledil Oy C13605\_HB-2X2-RW\_(XB-D) Efficiency=88%  
Lamps: 1 x Cree XB-D (365lm @ 250mA) CCT=6800K P=3.1W I=250mA



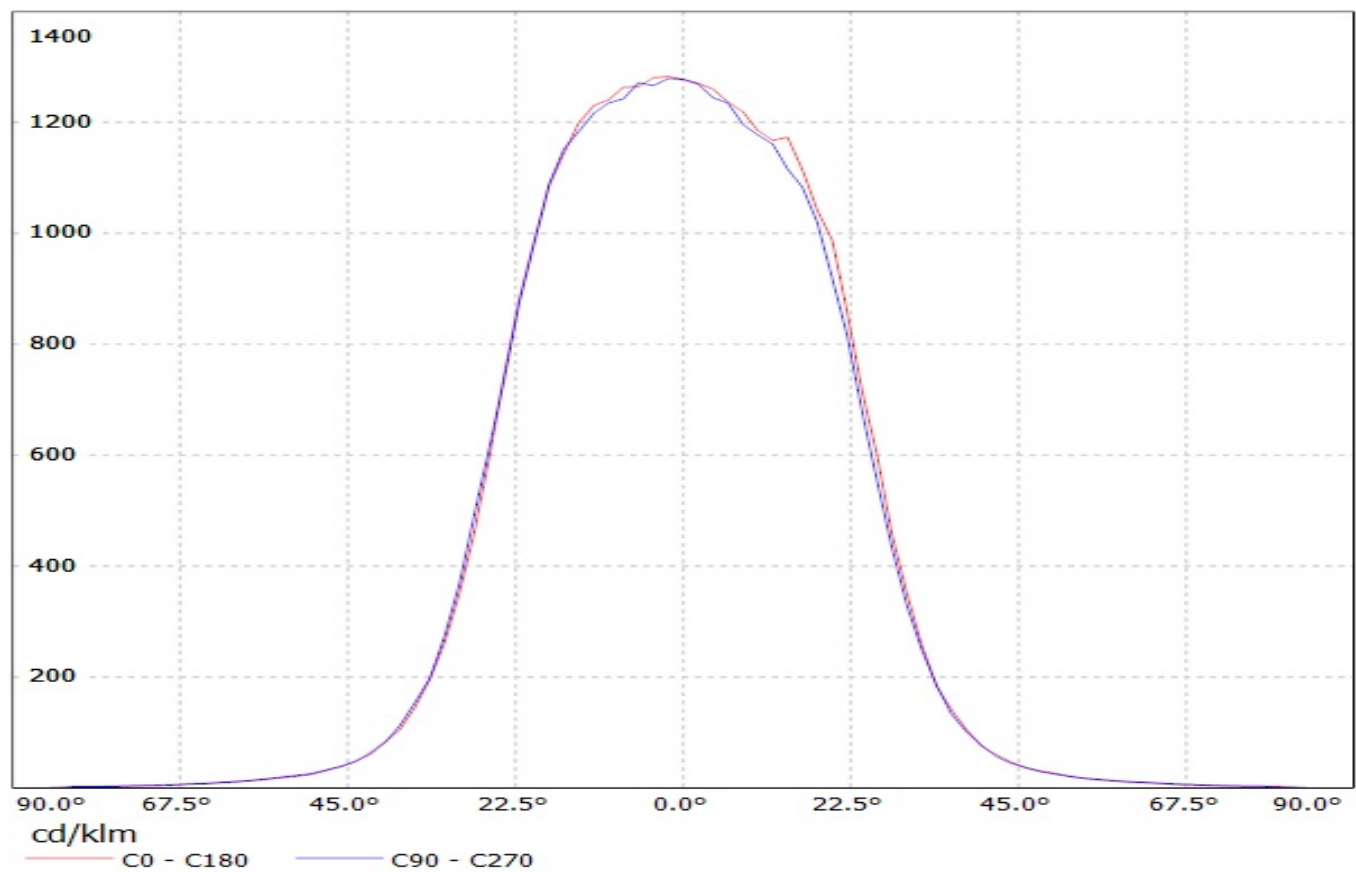
Luminaire: Ledil Oy C13605\_HB-2X2-RW\_(NCSxx19A) Efficiency=90%  
Lamps: 1 x Nichia NCSxx19A (NCSL119AT-H1) (229lm @ 250mA) CCT=2800K P=3.1W I=250mA



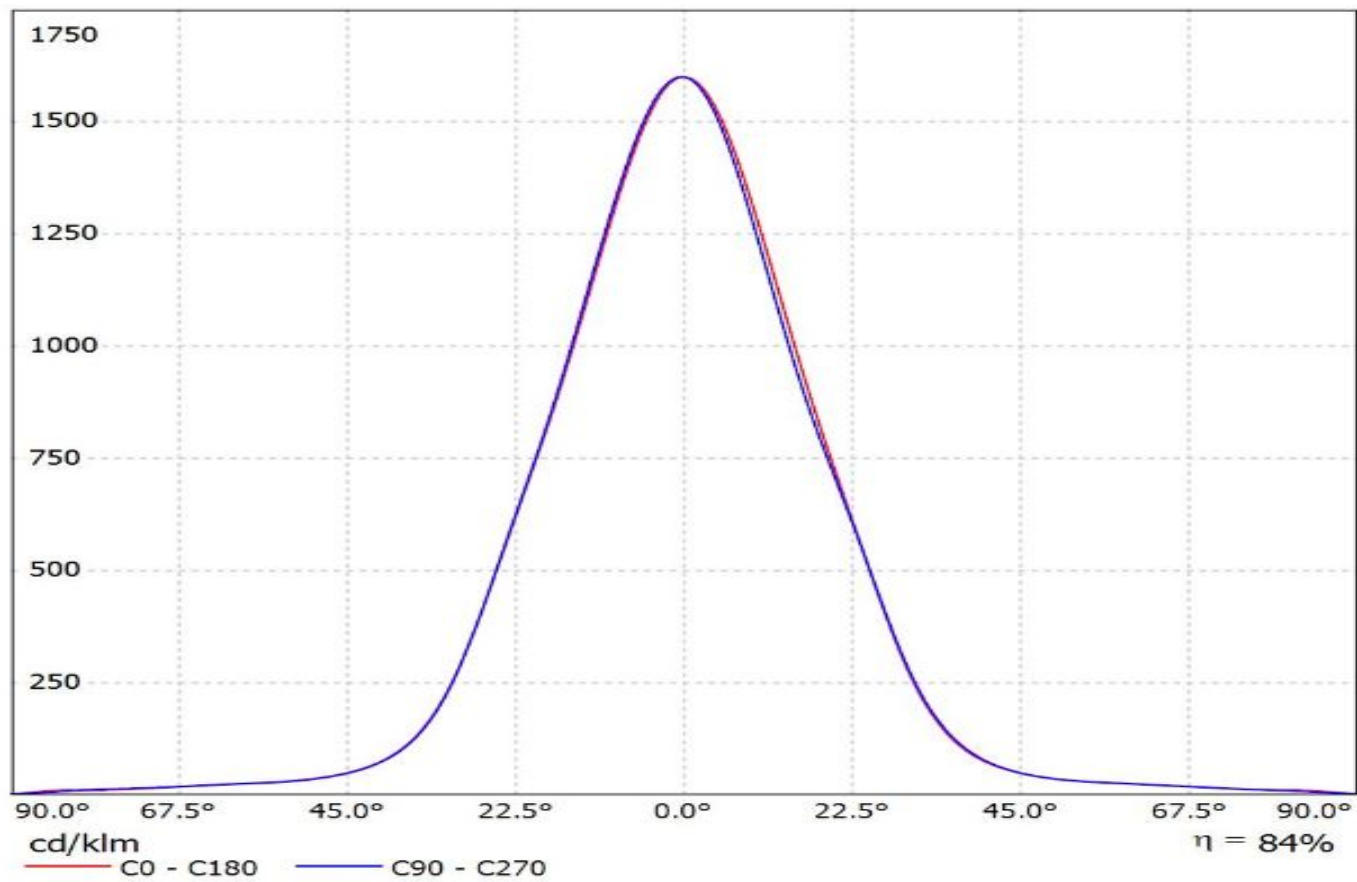
Luminaire: Ledil Oy C13605\_HB-2x2-RW\_(NVSxx19A) Efficiency=88%  
Lamps: 1 x Nichia NVSxx19A (NVS219AT) 382lm @ 250mA CCT=5290K P=2.9W I=250mA



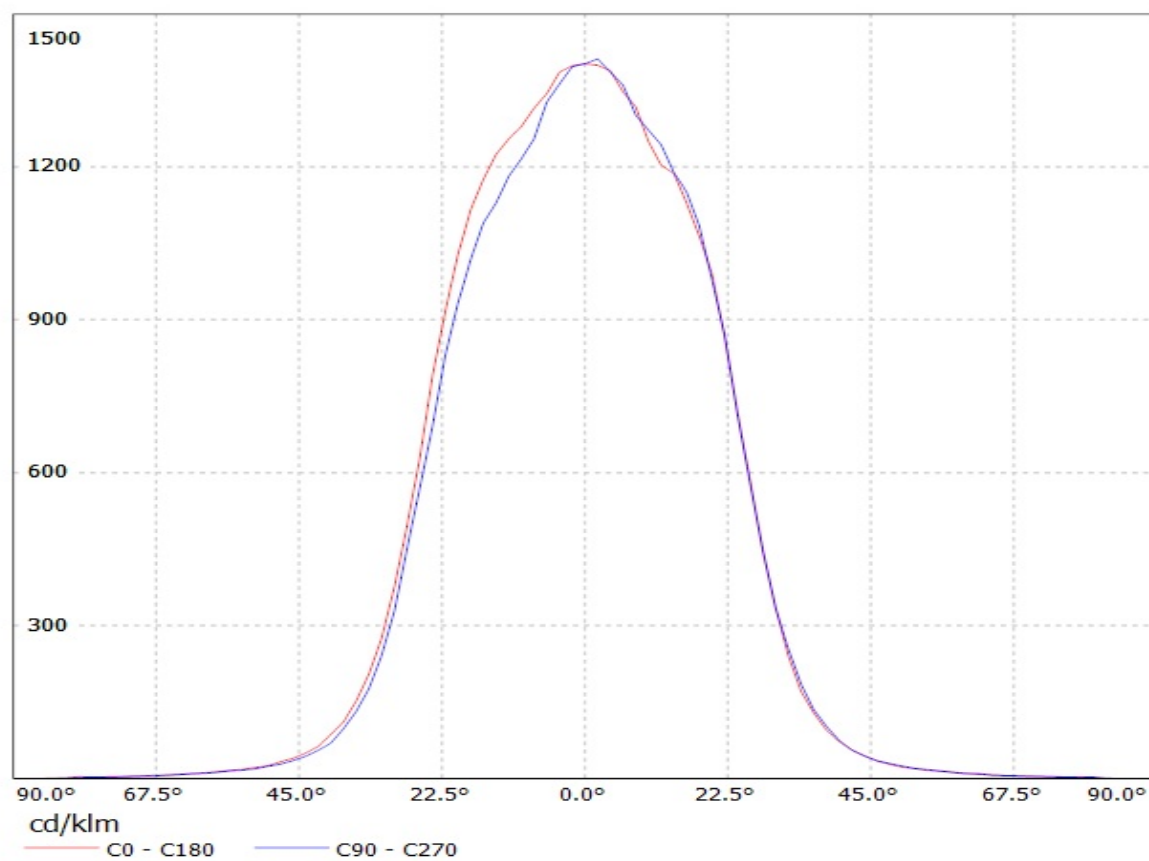
Luminaire: Ledil Oy C13605\_HB-2X2-RW\_(NVSxx19B) Efficiency=90%  
Lamps: 1 x Nichia NVSxx19B (NVSL219BE) 308lm @ 250mA CCT=3100K P=2.9W I=250mA



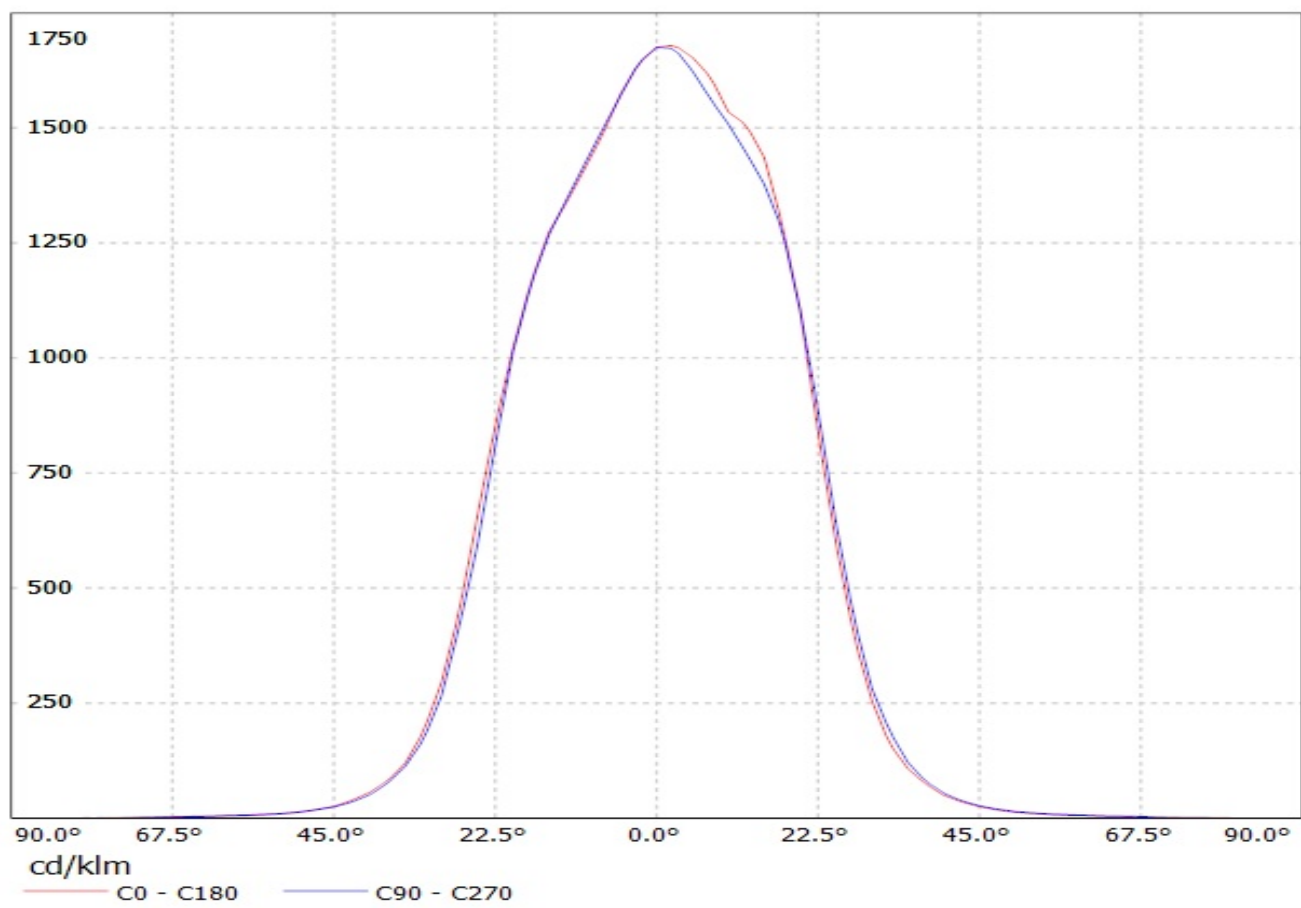
Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(E21A)  
Lamps: 1 x Nichia\_E21A\_2X2\_454.11lm@250mA\_P=2.81W\_I=0.250A



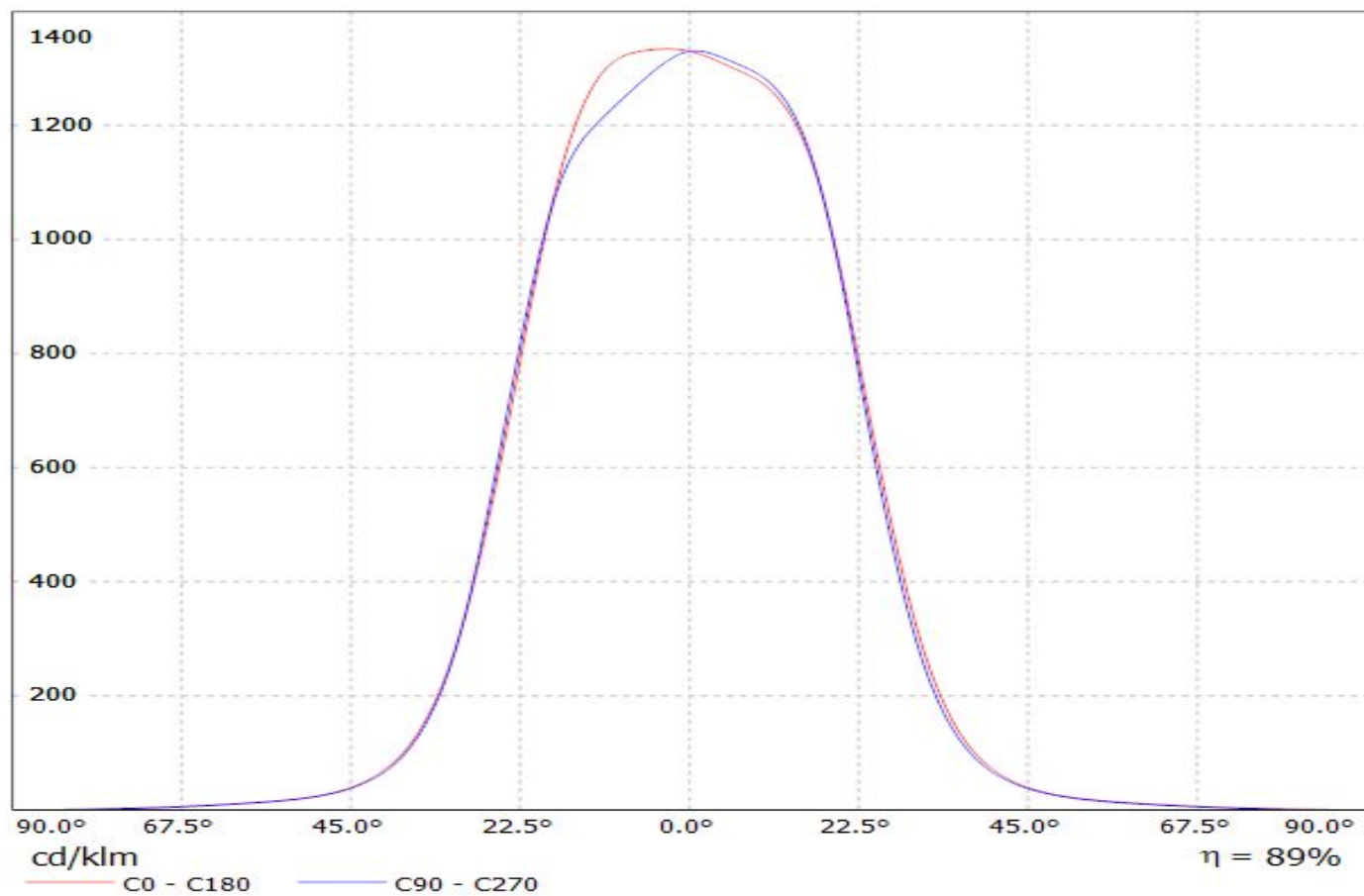
Luminaire: Ledil Oy C13605\_HB-2X2-RW\_(Oslon\_Square\_PC) Efficiency=90%  
Lamps: 1 x Osram Oslon Square PC (LCW-CQAR.PC-MSMU-5H71-1) 389lm @ 250mA CCT=6000K P=3.0W I=250mA



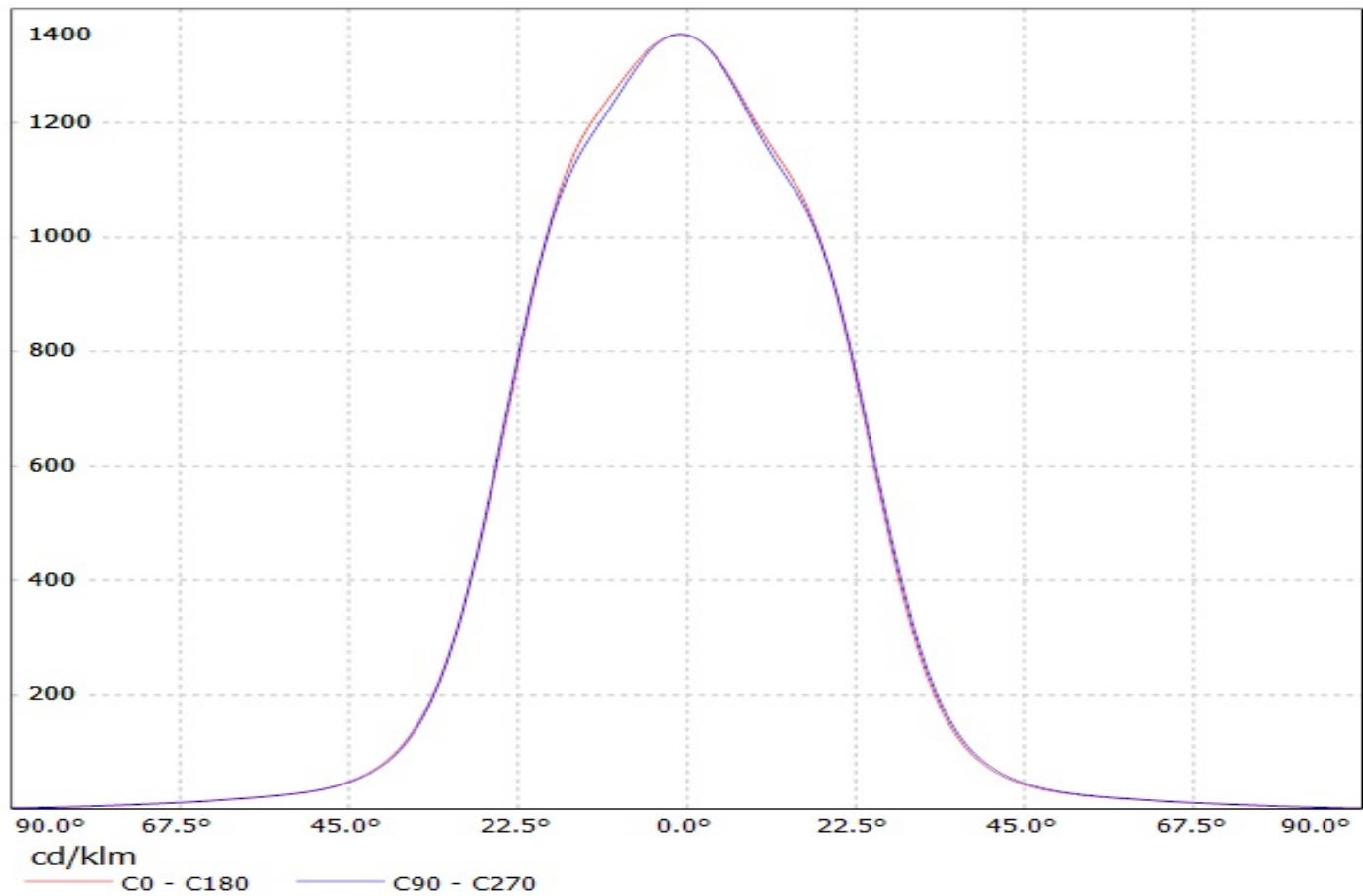
Luminaire: Ledil Oy C13605\_HB-2X2-RW\_(SSL\_80) Efficiency=90%  
Lamps: 1 x Osram Oslon SSL 80 (310lm @ 250mA) CCT=6800K P=3.2W I=250mA



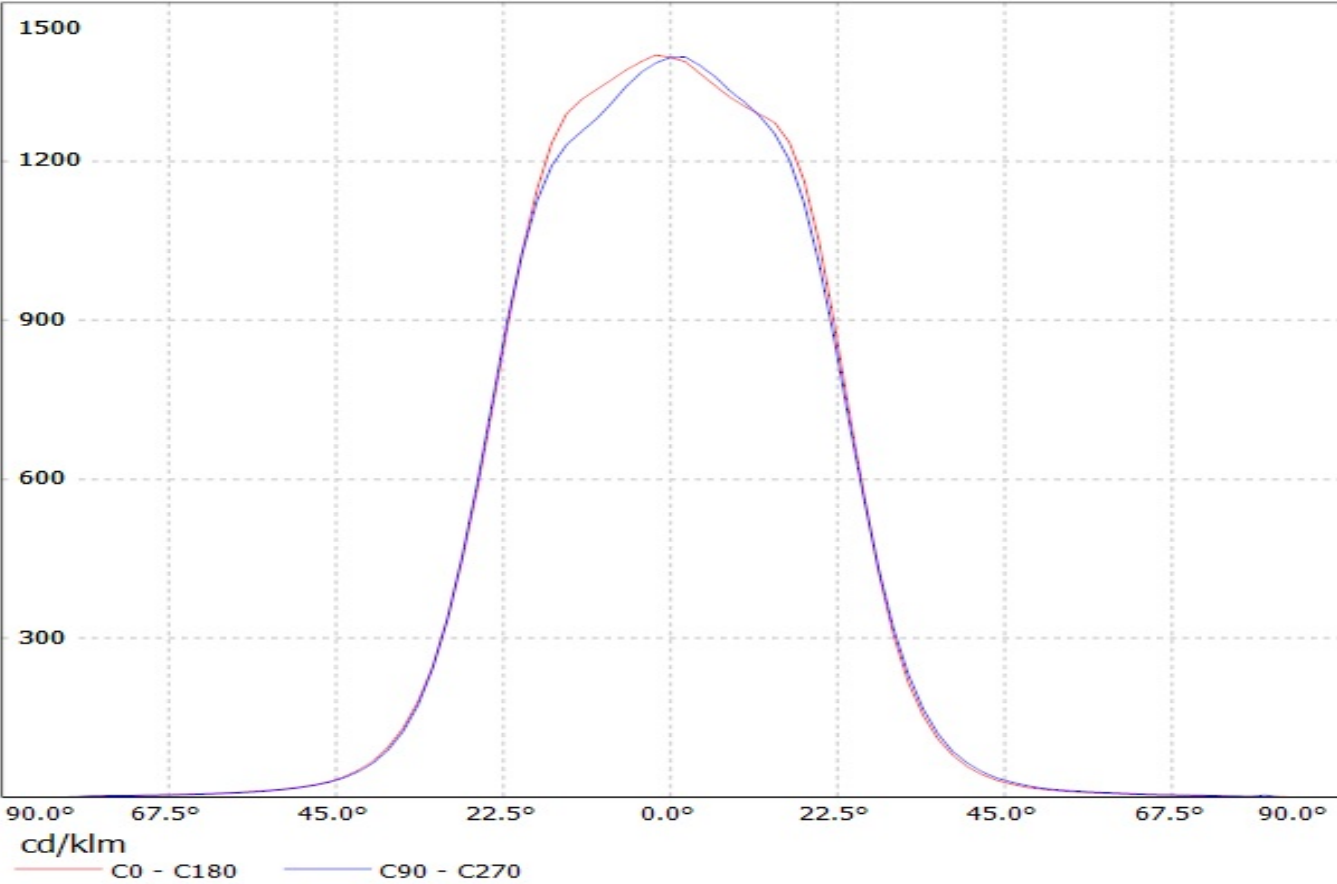
Luminaire: LEDiL Oy  
Lamps: 1 x C13605-HB-2x2-RW\_(SQ\_Gen3)



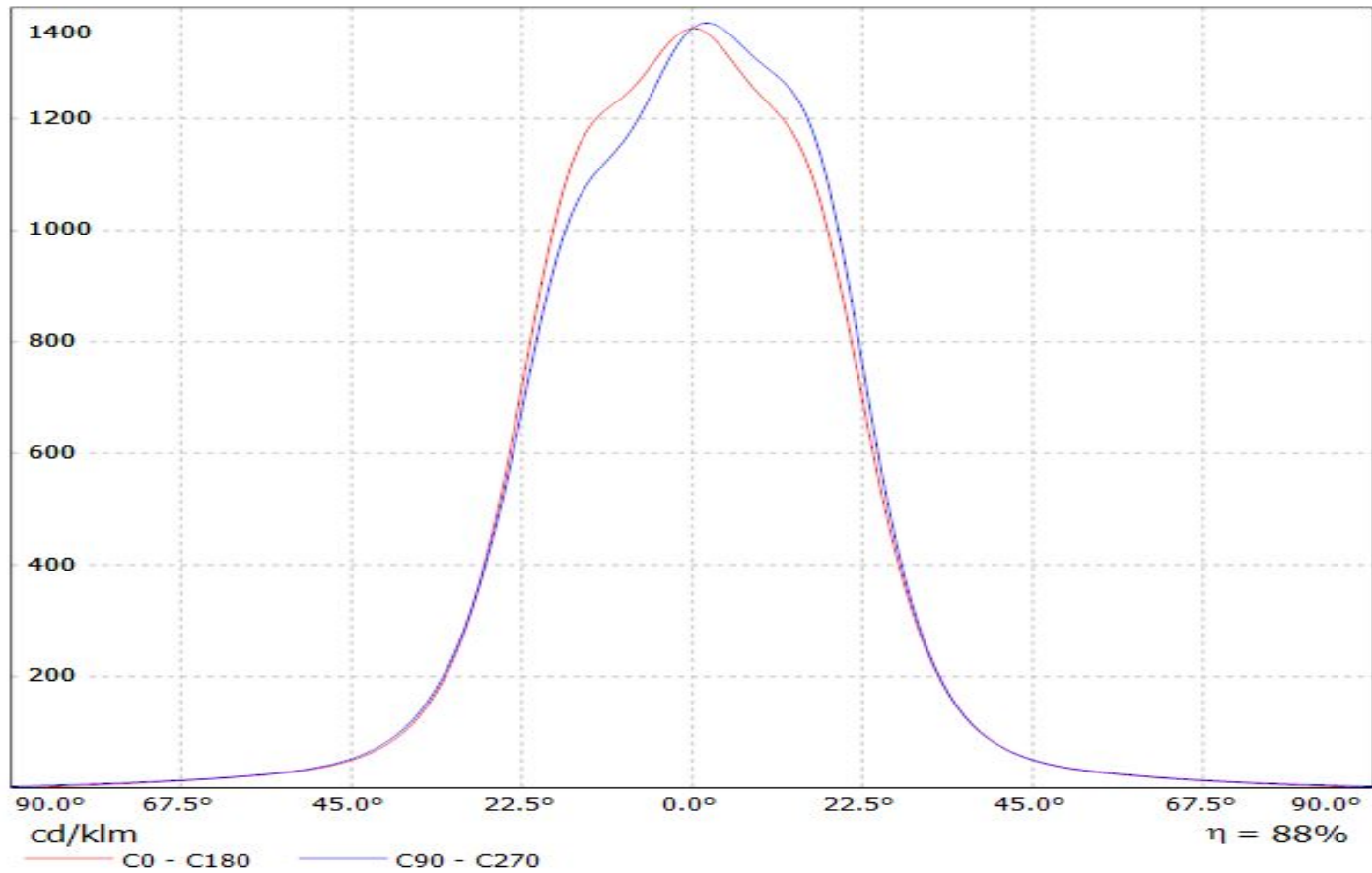
Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(LH351Z) Eff.90.2%  
Lamps: 1 x SAMSUNG\_LH351Z\_2x2\_359.49lm@250mA\_P=2.86371W\_I=249.8mA



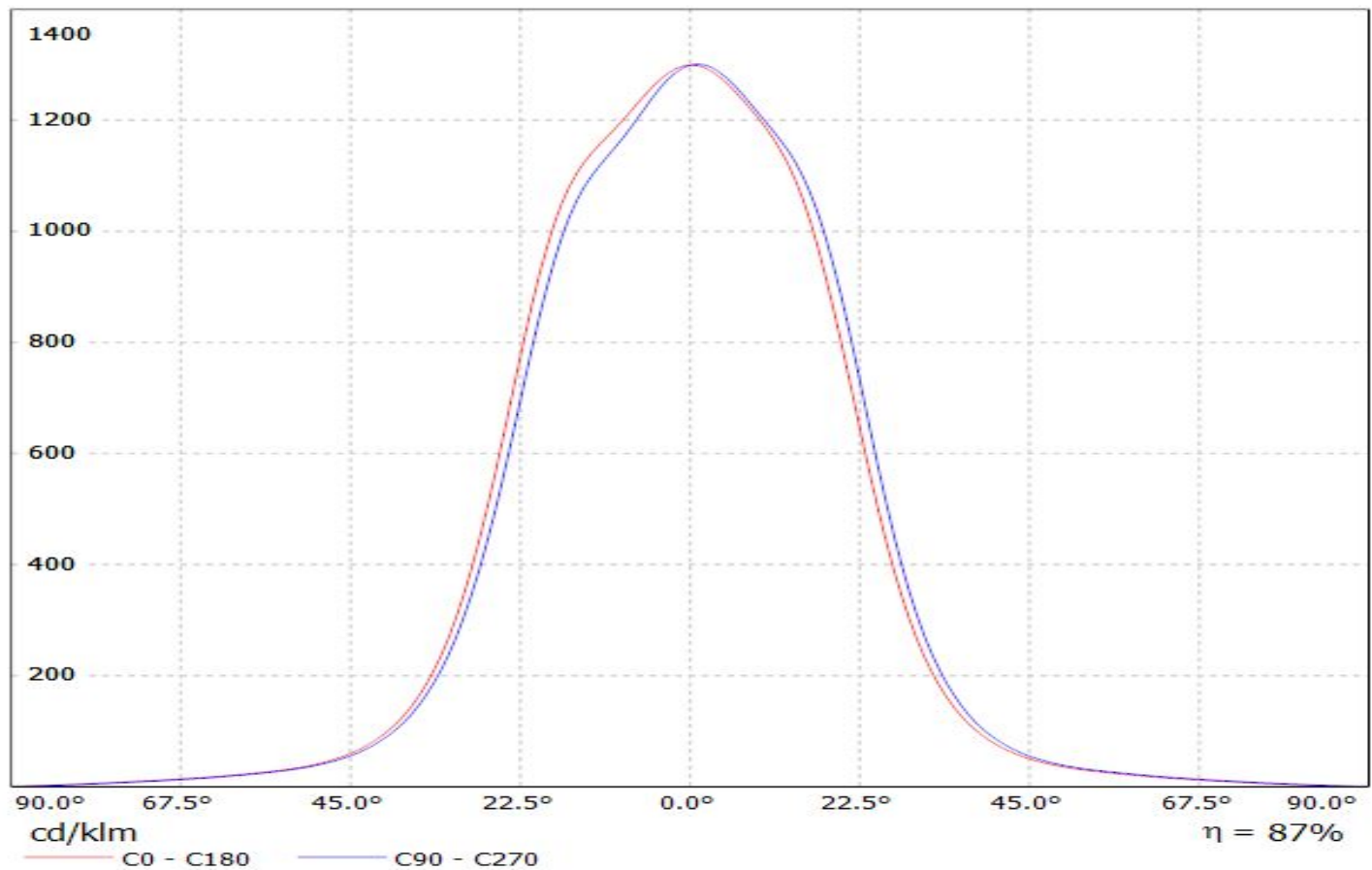
Luminaire: LEDil Oy C13605\_HB-2x2-RW\_(Z5M1) Efficiency=90%  
Lamps: 1 x Seoul (SZ5-M1-WN-C8) 379lm @ 250mA CCT=4600K P=2.9W I=250mA



Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(WICOP2\_Z8Y15)  
Lamps: 1 x SEOUL\_WICOP2\_Z8Y15\_336.842lm@250mA\_P=2.9399W\_I=0.250A

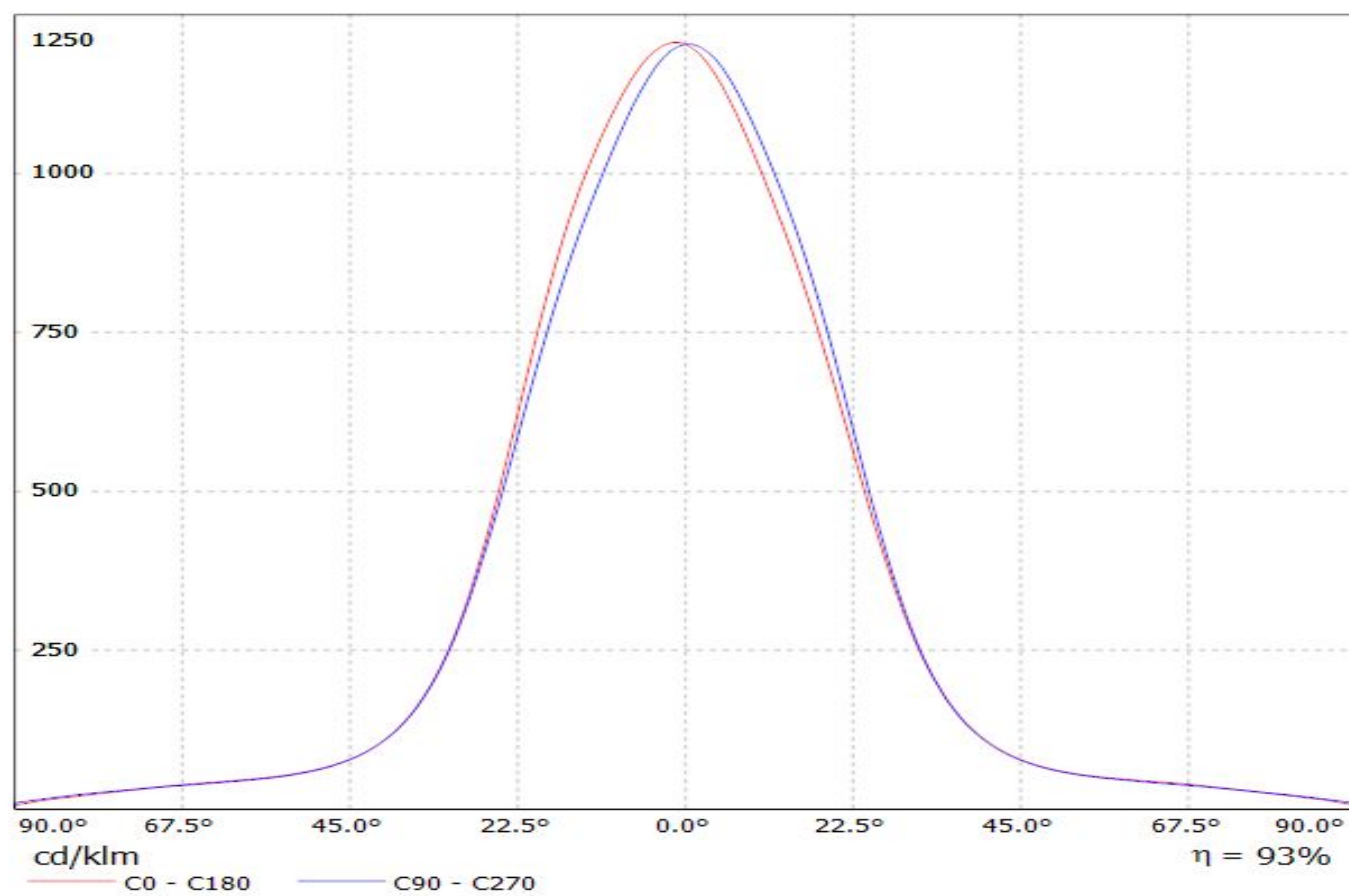


Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(WICOP2\_Z8Y19)  
Lamps: 1 x SEOUL\_WICOP2\_Z8Y19\_450.124lm@250mA\_P=2.8579W\_I=0.250A



Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(Z8Y22)

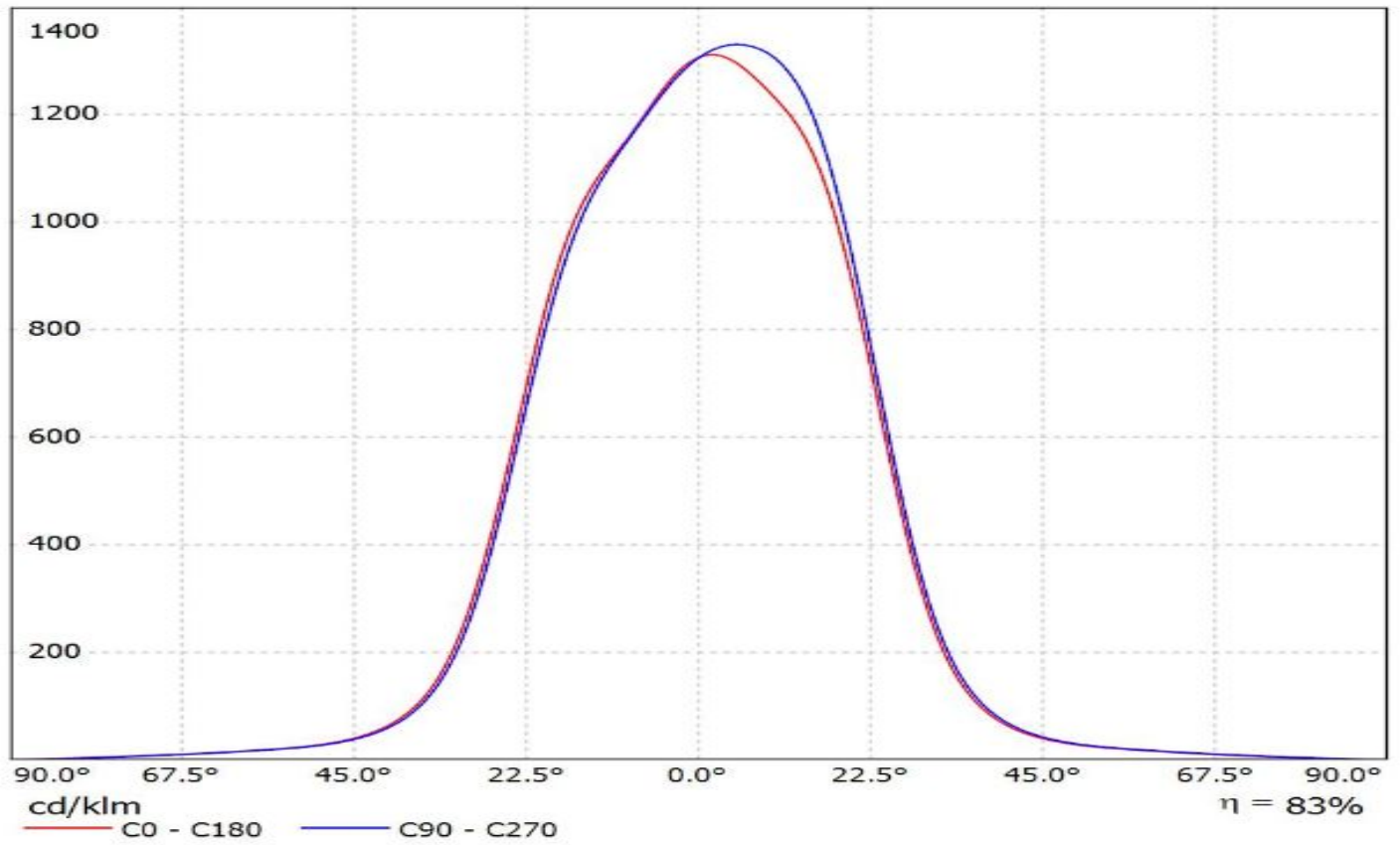
Lamps: 1 x Seoul\_Wicop\_Z8Y22\_497.373lm@250mA\_P=2.80076W\_U=11.211V



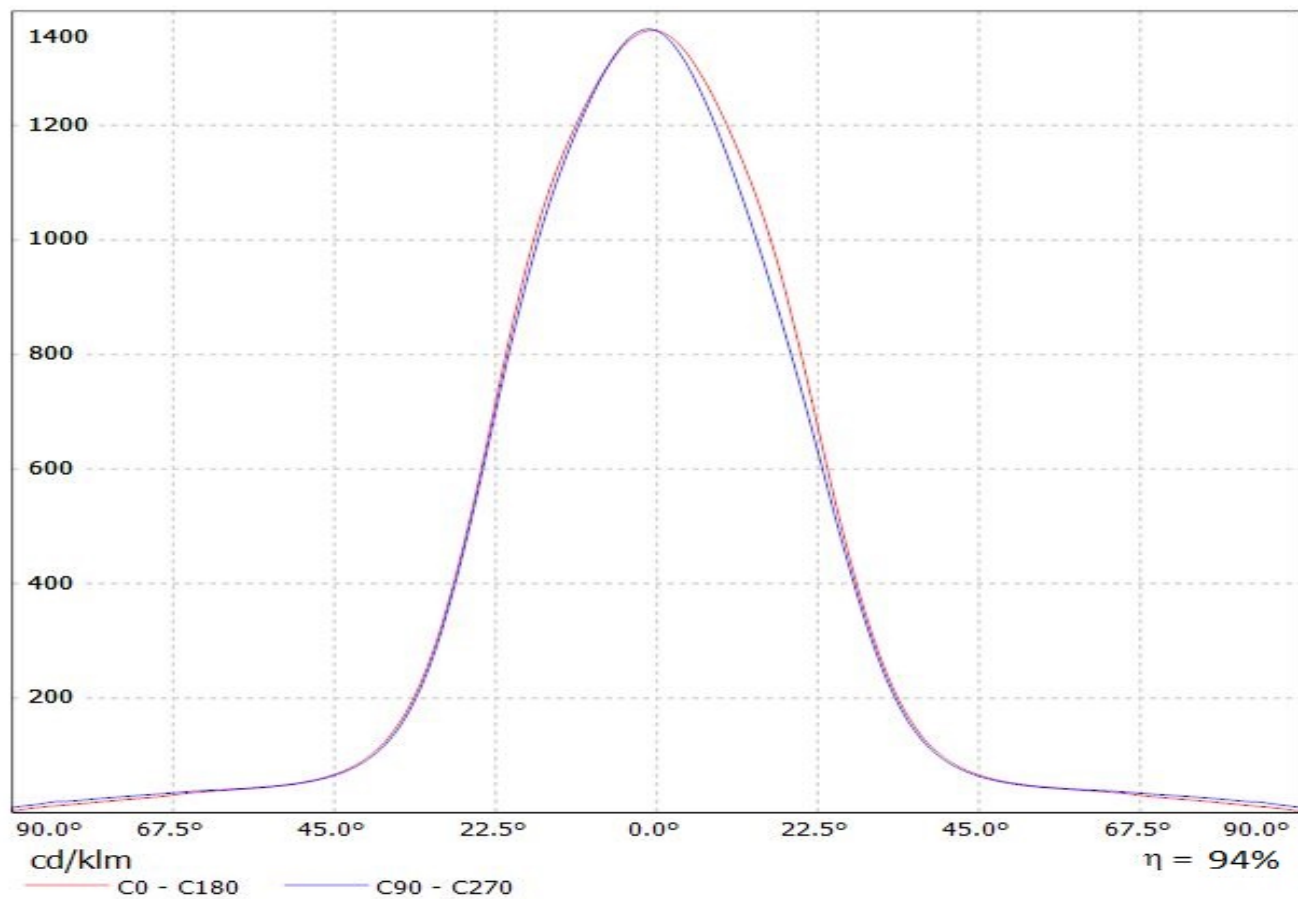
## Ledil C13605\_HB-2X2-RW\_(TL1L4) / LDC (Linear)

Luminaire: Ledil C13605\_HB-2X2-RW\_(TL1L4)

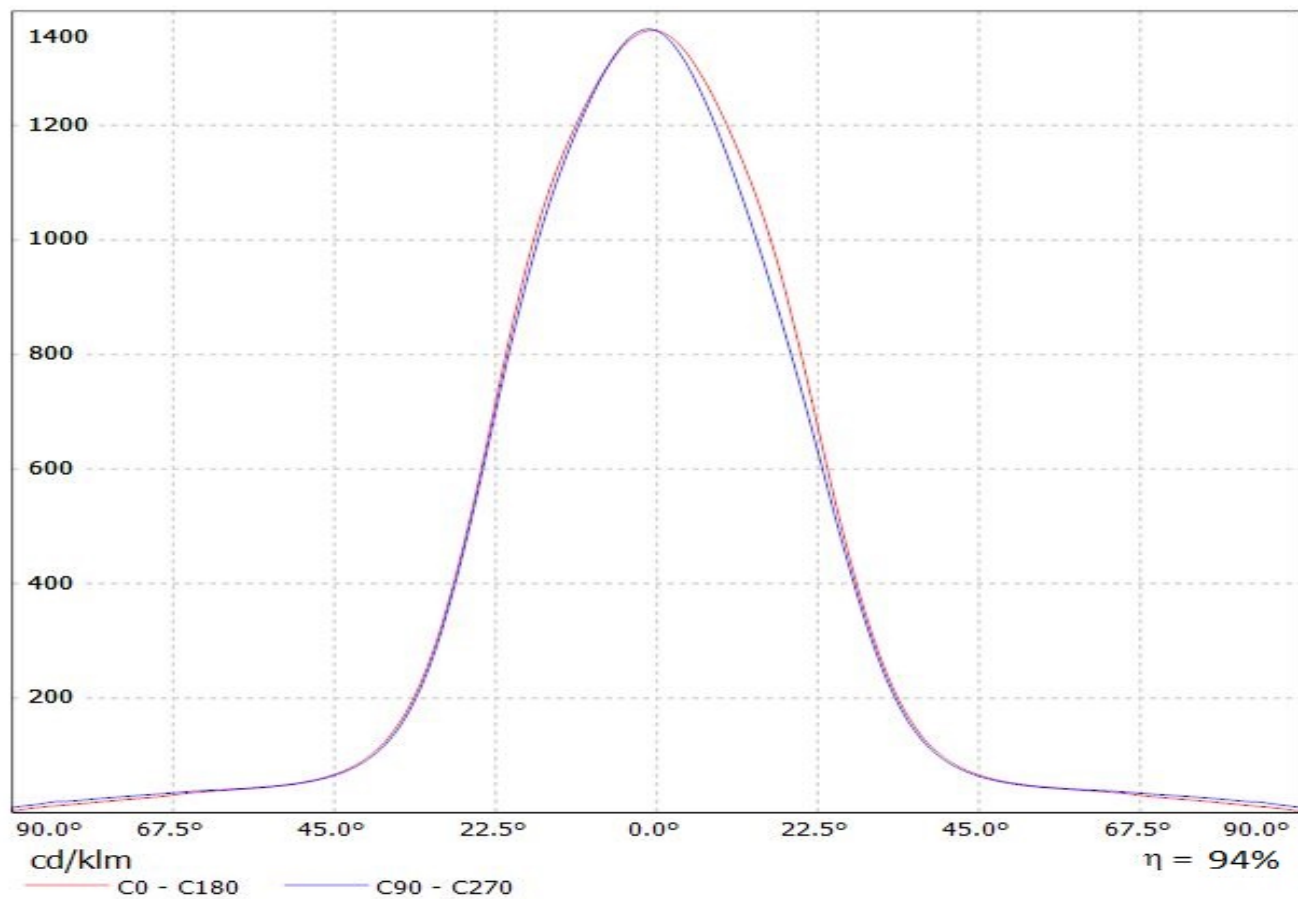
Lamps: 1 x Toshiba\_TL1L4\_2x2\_(TL1L4-DW0)\_472.639lm@250mA\_CCT=6500K\_P=2.9W\_I=0.25A



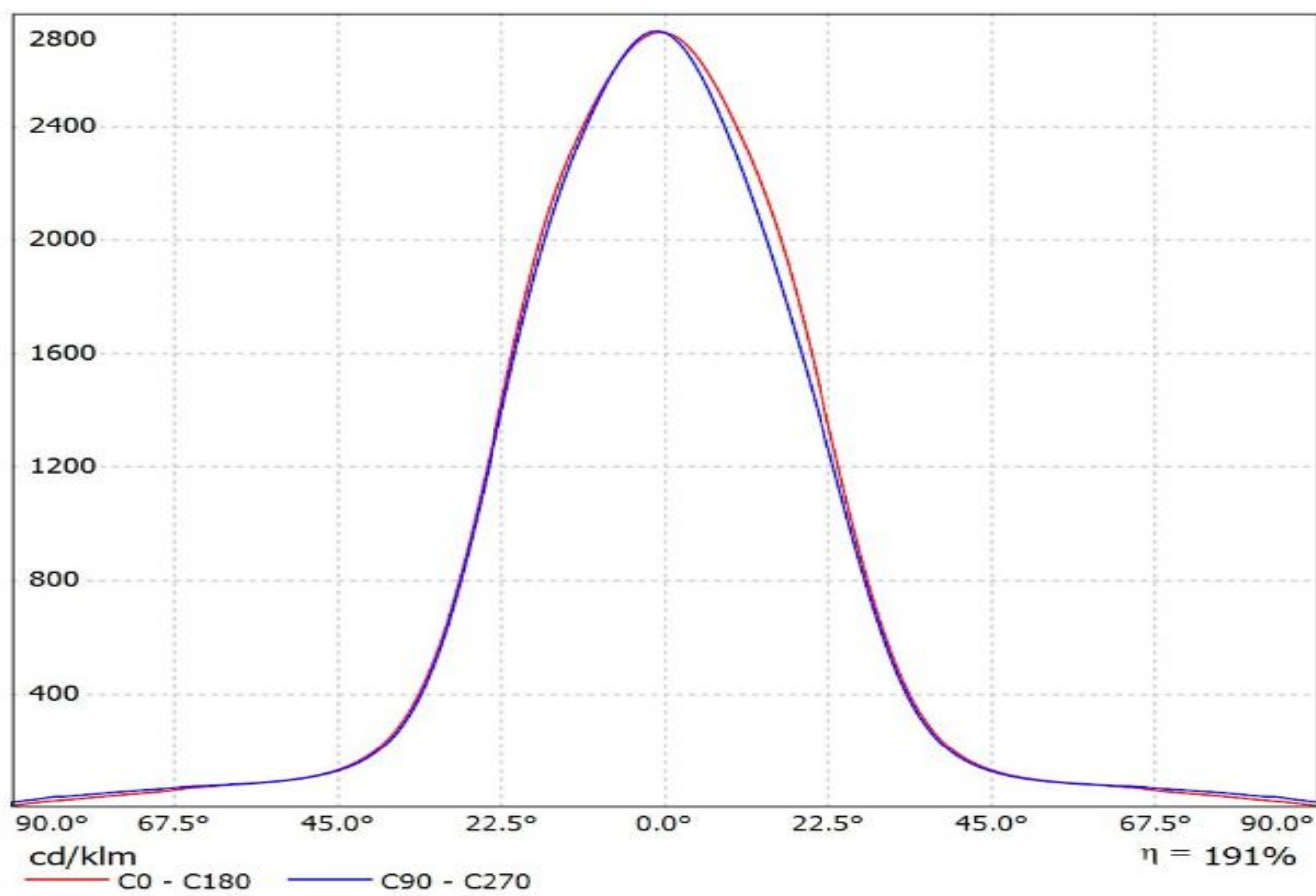
Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(Tridonic\_Module\_RLE\_G1)  
Lamps: 1 x Tridonic\_Module\_RLE\_G1\_4576.03lm@700mA\_P=32.0681W\_I=0.700A



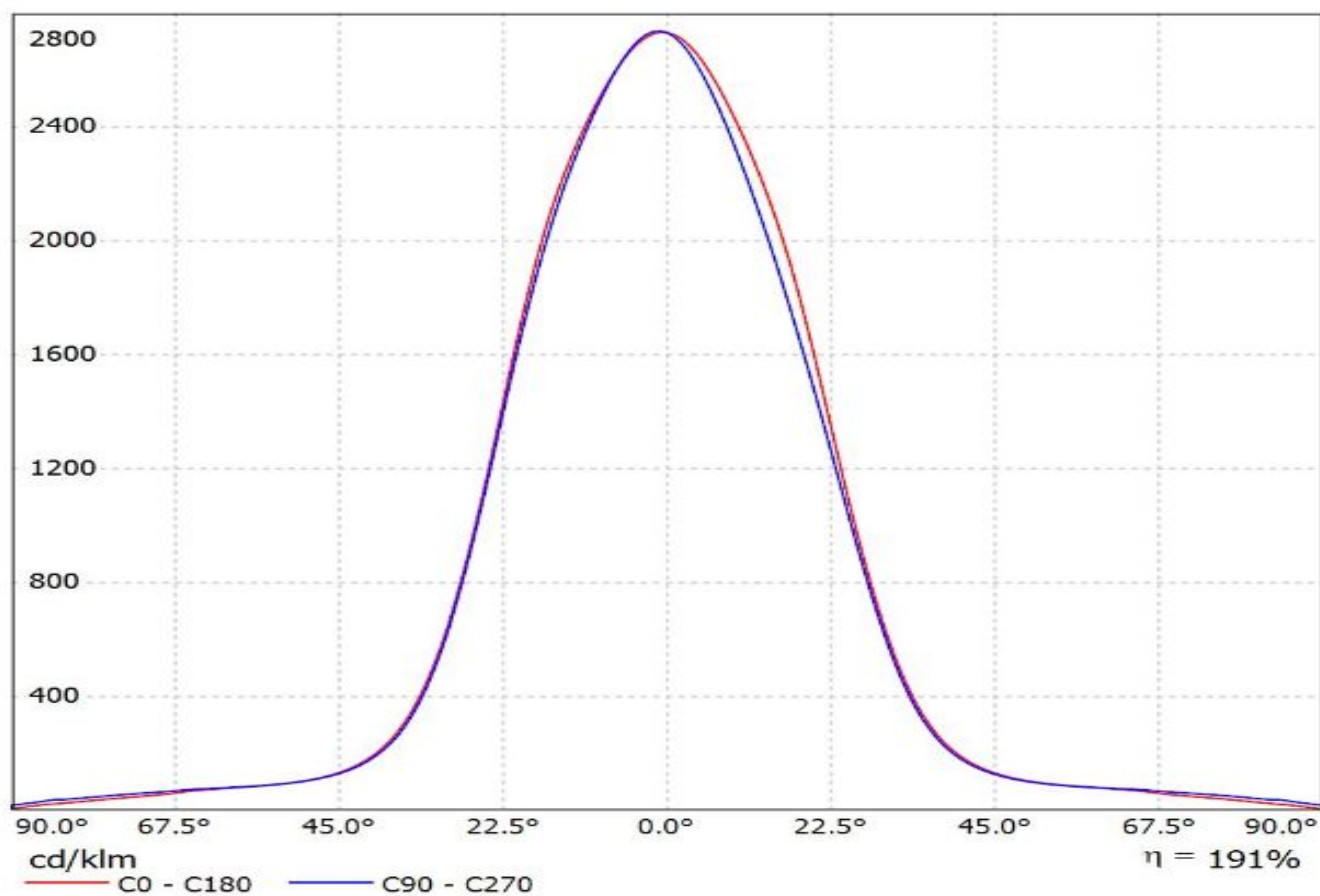
Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(Tridonic\_Module\_RLE\_G1)  
Lamps: 1 x Tridonic\_Module\_RLE\_G1\_4576.03lm@700mA\_P=32.0681W\_I=0.700A



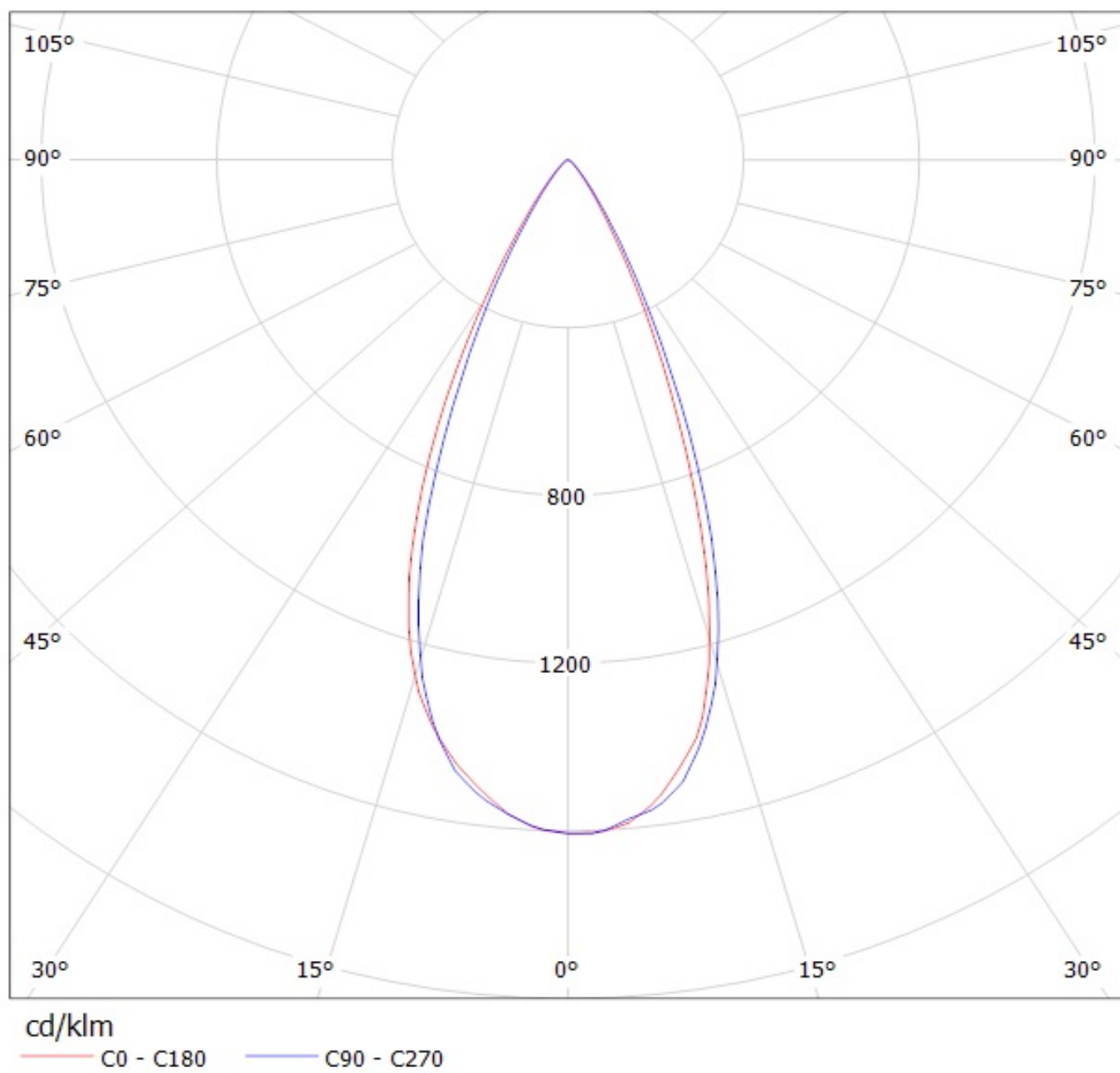
Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(Tridonic\_Module\_RLE\_G1)  
Lamps: 1 x Tridonic\_Module\_RLE\_G1\_2288lm@700mA\_P=16W\_I=0.700A



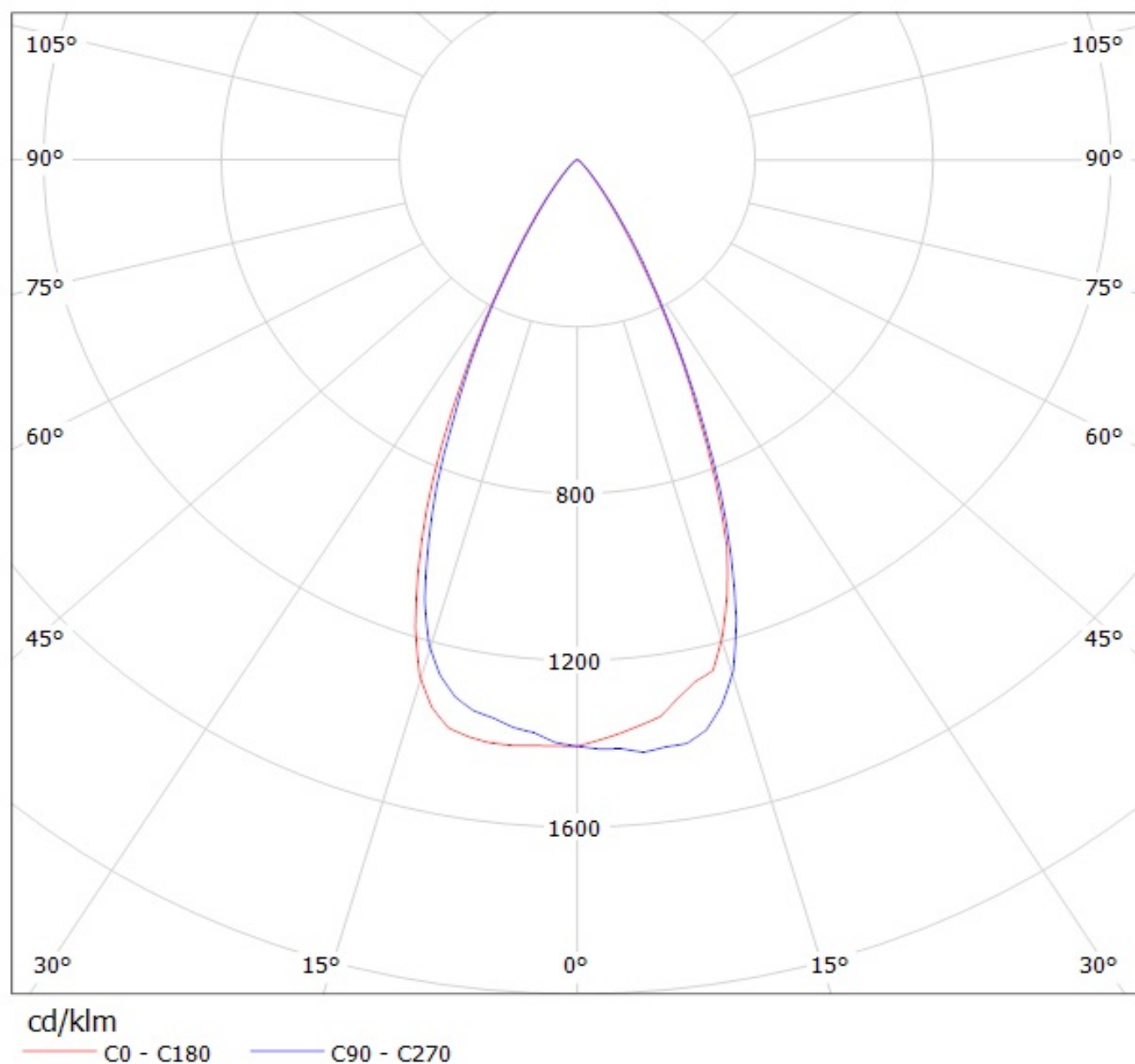
Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(Tridonic\_Module\_RLE\_G1)  
Lamps: 1 x Tridonic\_Module\_RLE\_G1\_2288lm@700mA\_P=16W\_I=0.700A



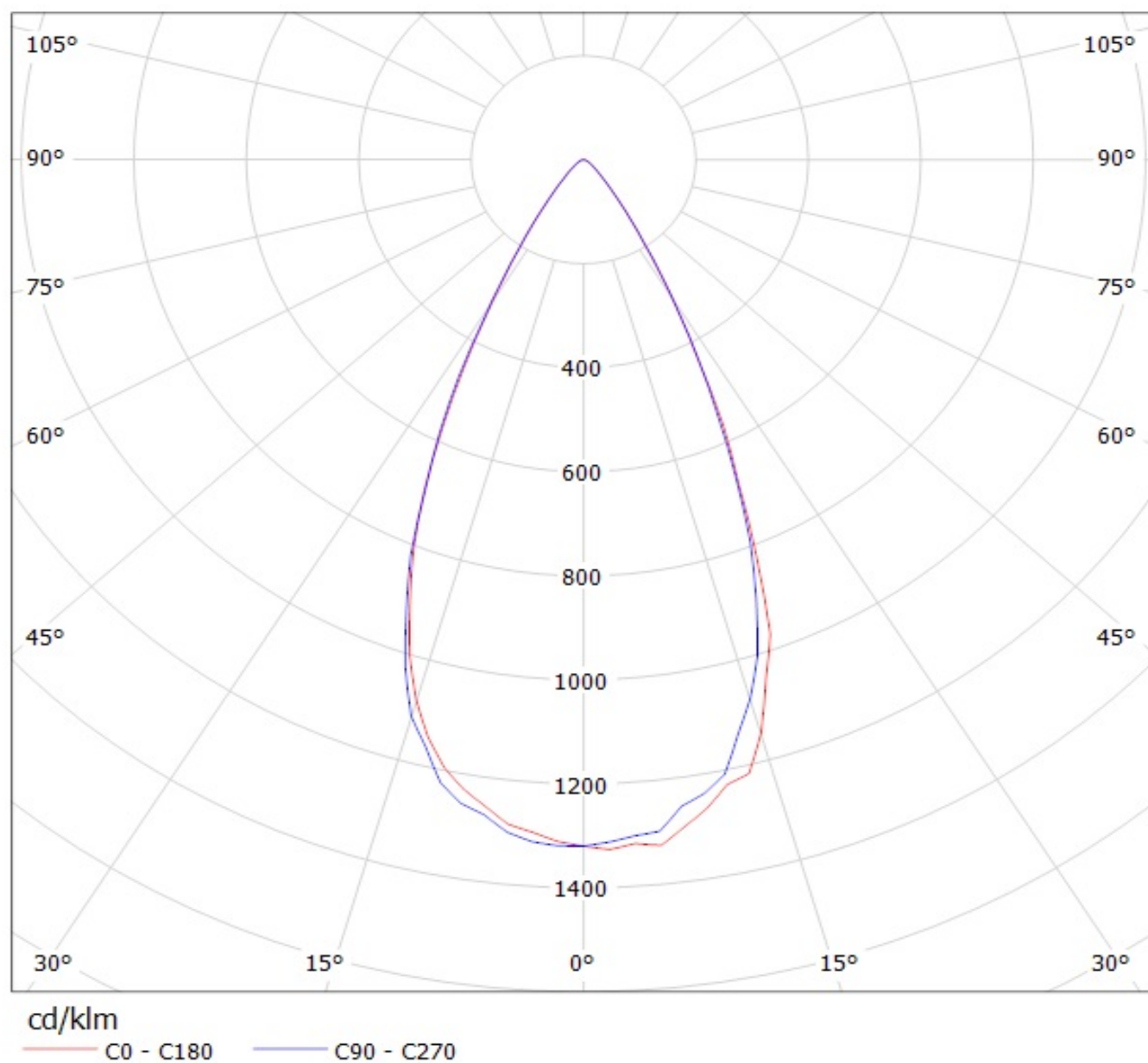
Luminaire: Ledil Oy C13605\_HB-2X2-RW (Cree XT-E 390lm @ 250mA) Efficiency=89%  
Lamps: 1 x Cree XT-E 390lm @ 250mA CCT=5717K P=3W I=250mA



Luminaire: Ledil Oy C13605\_HB-2X2-RW (Cree XP-G2 408lm lm @ 250mA) Efficiency=91%  
Lamps: 1 x Cree XP-G2 408lm lm @ 250mA CCT=7181K P=3W I=250mA

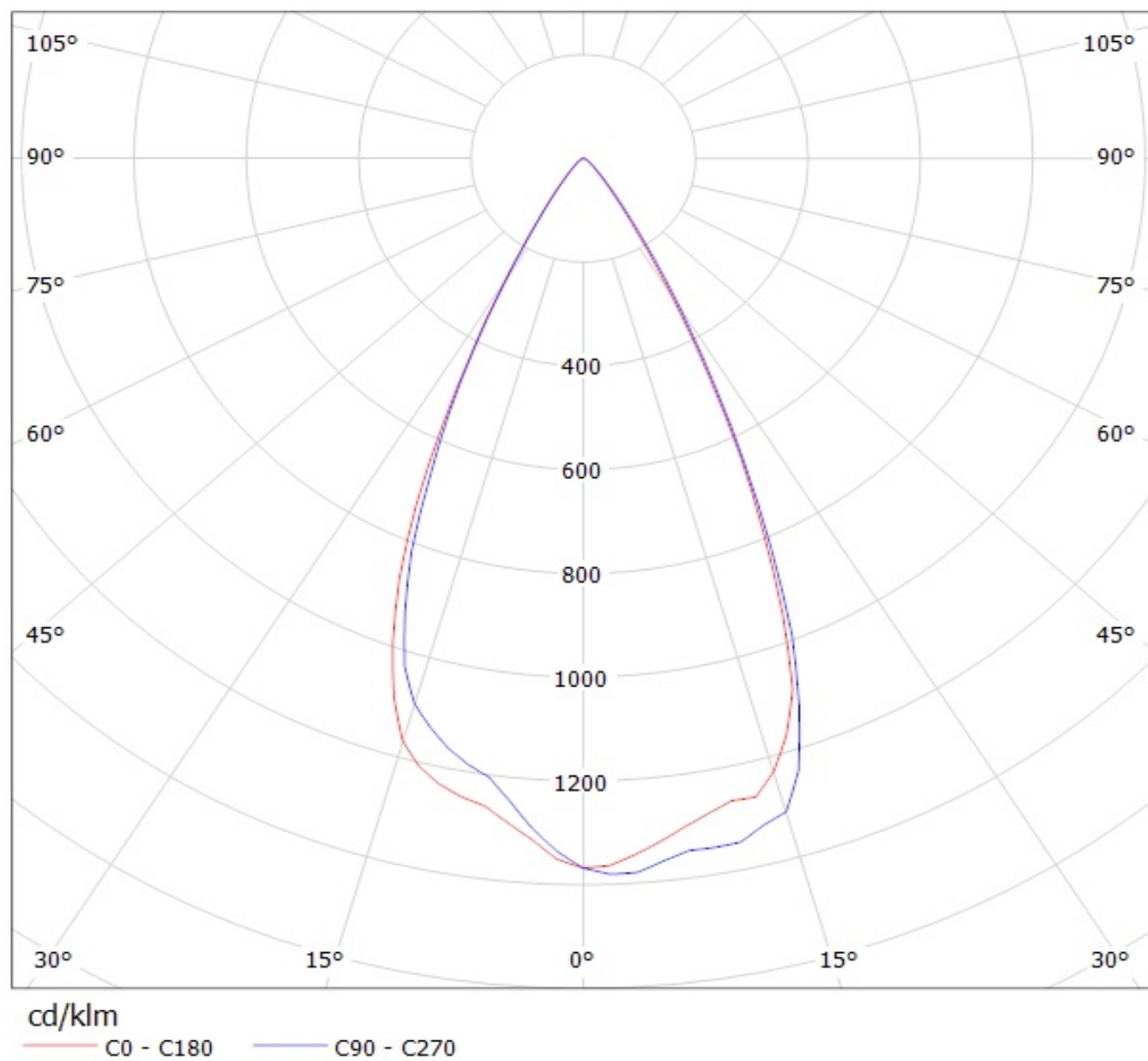


Luminaire: Ledil Oy C13605\_HB-2X2-RW\_(XP-G) Efficiency=89%  
Lamps: 1 x Cree XP-G (254lm @ 250mA) CCT=3300K P=2.9W I=250mA

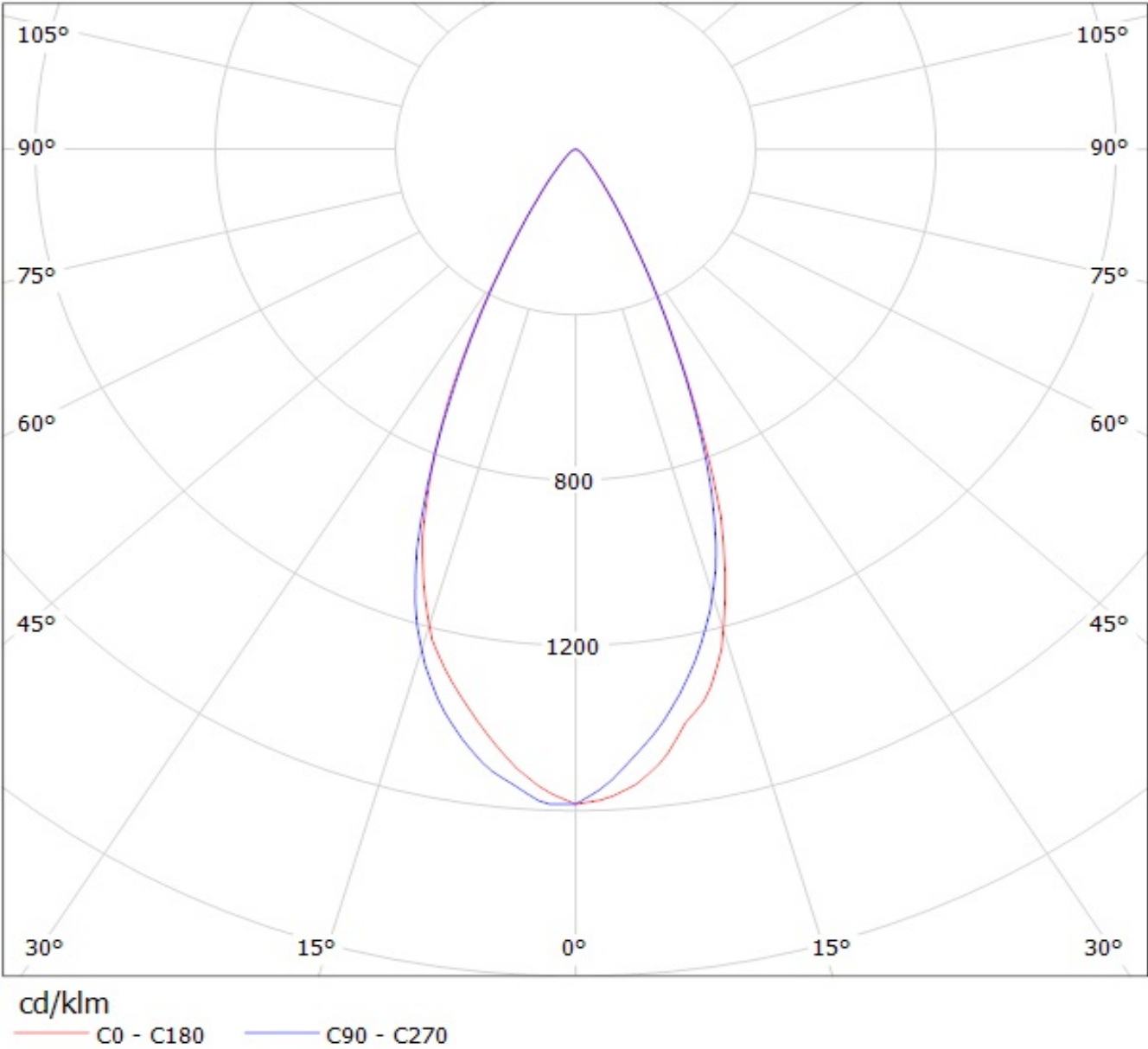


Luminaire: Ledil Oy C13605\_HB-2x2-RW\_(XP-E) Efficiency=89%

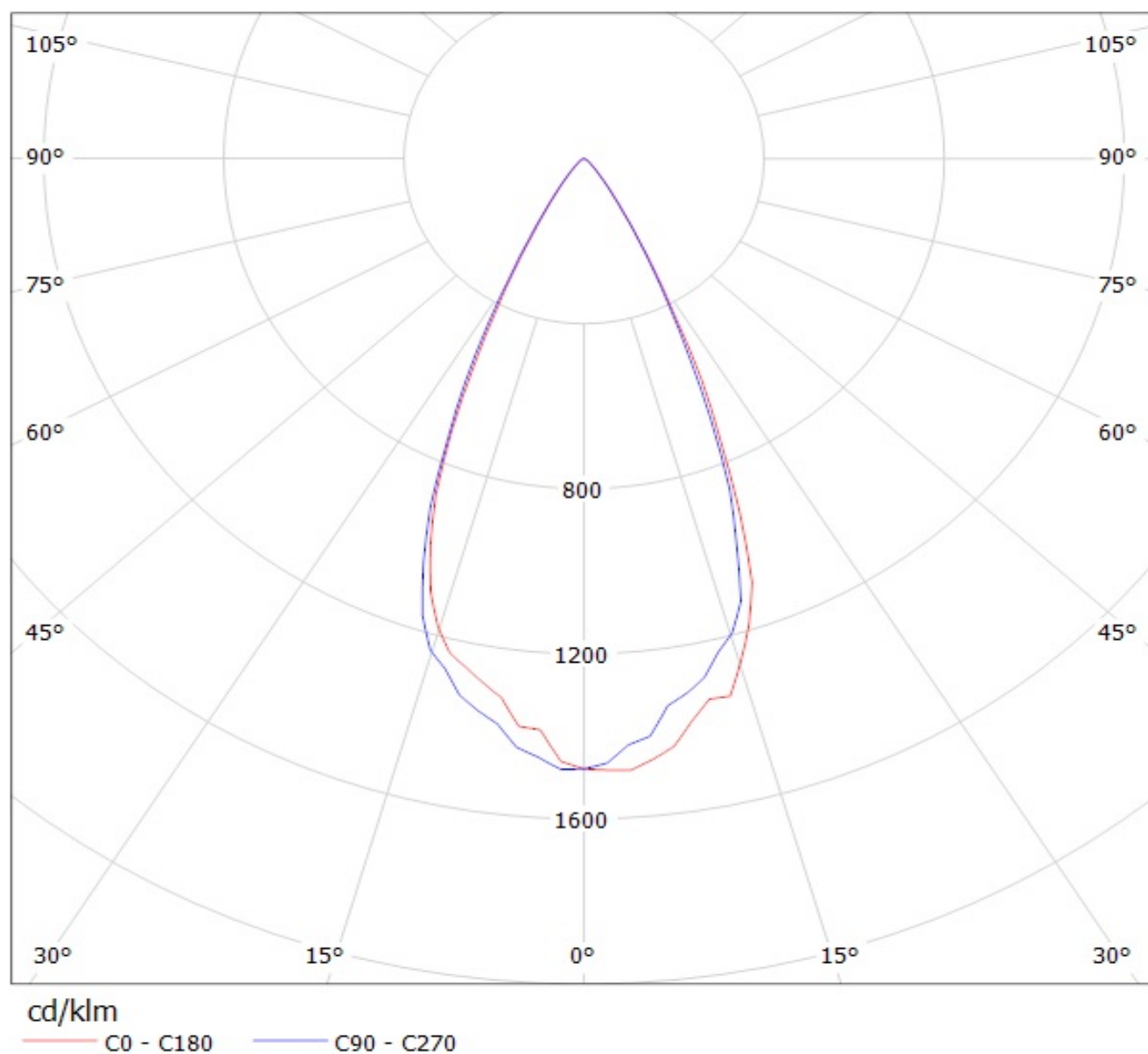
Lamps: 1 x Cree XP-E (XPEWHT-L1-3C0-W5-0-06) 302lm @ 250mA CCT=5400K P=3.1W I=250mA



Luminaire: Ledil Oy C13605\_HB-2X2-RW\_(XB-D) Efficiency=88%  
Lamps: 1 x Cree XB-D (365lm @ 250mA) CCT=6800K P=3.1W I=250mA

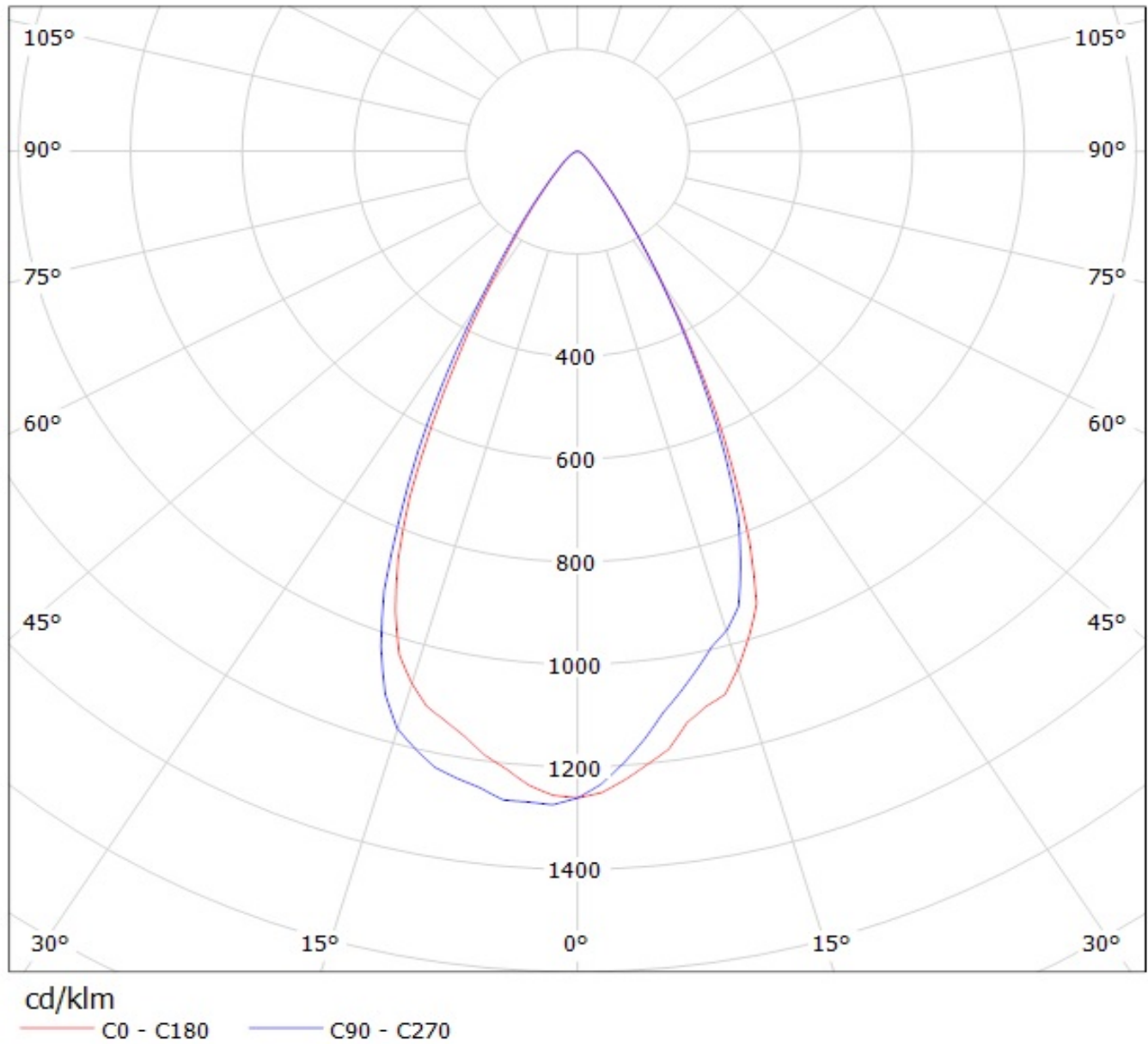


Luminaire: Ledil Oy C13605\_HB-2X2-RW\_(NCSxx19A) Efficiency=90%  
Lamps: 1 x Nichia NCSxx19A (NCSL119AT-H1) (229lm @ 250mA) CCT=2800K P=3.1W I=250mA

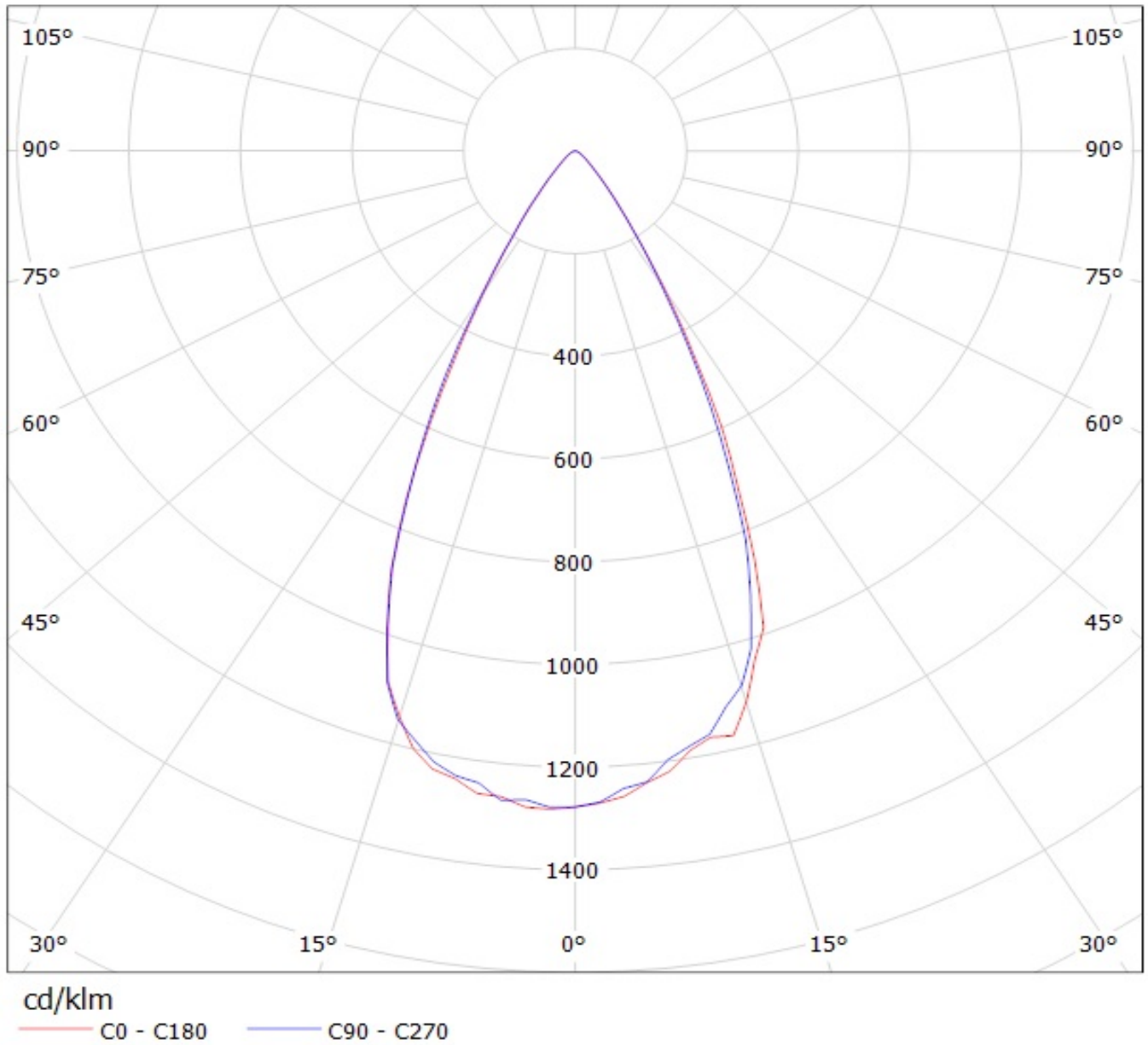


Luminaire: Ledil Oy C13605\_HB-2x2-RW\_(NVSxx19A) Efficiency=88%

Lamps: 1 x Nichia NVSxx19A (NVS219AT) 382lm @ 250mA CCT=5290K P=2.9W I=250mA

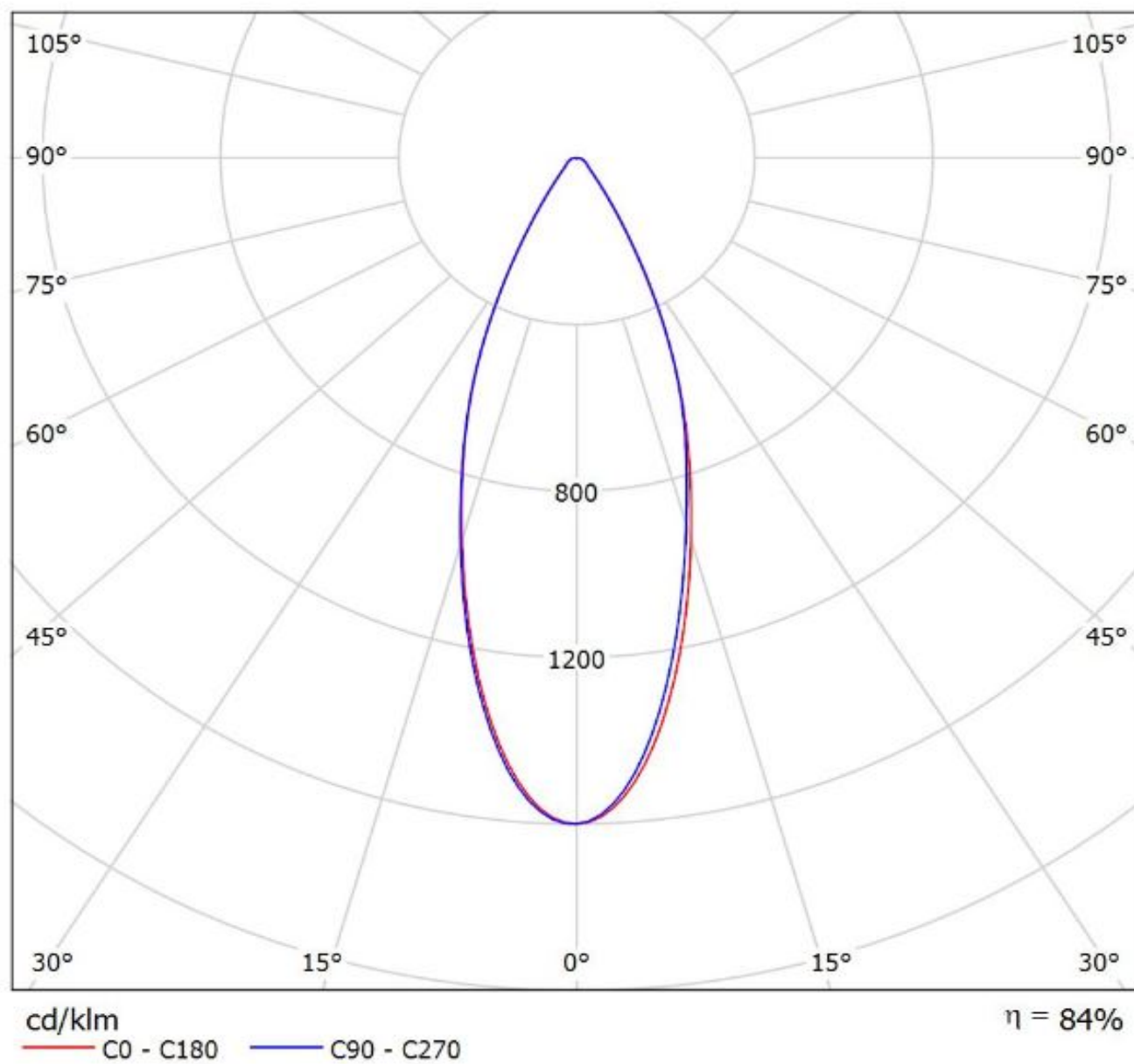


Luminaire: Ledil Oy C13605\_HB-2X2-RW\_(NVSxx19B) Efficiency=90%  
Lamps: 1 x Nichia NVSxx19B (NVSL219BE) 308lm @ 250mA CCT=3100K P=2.9W I=250mA

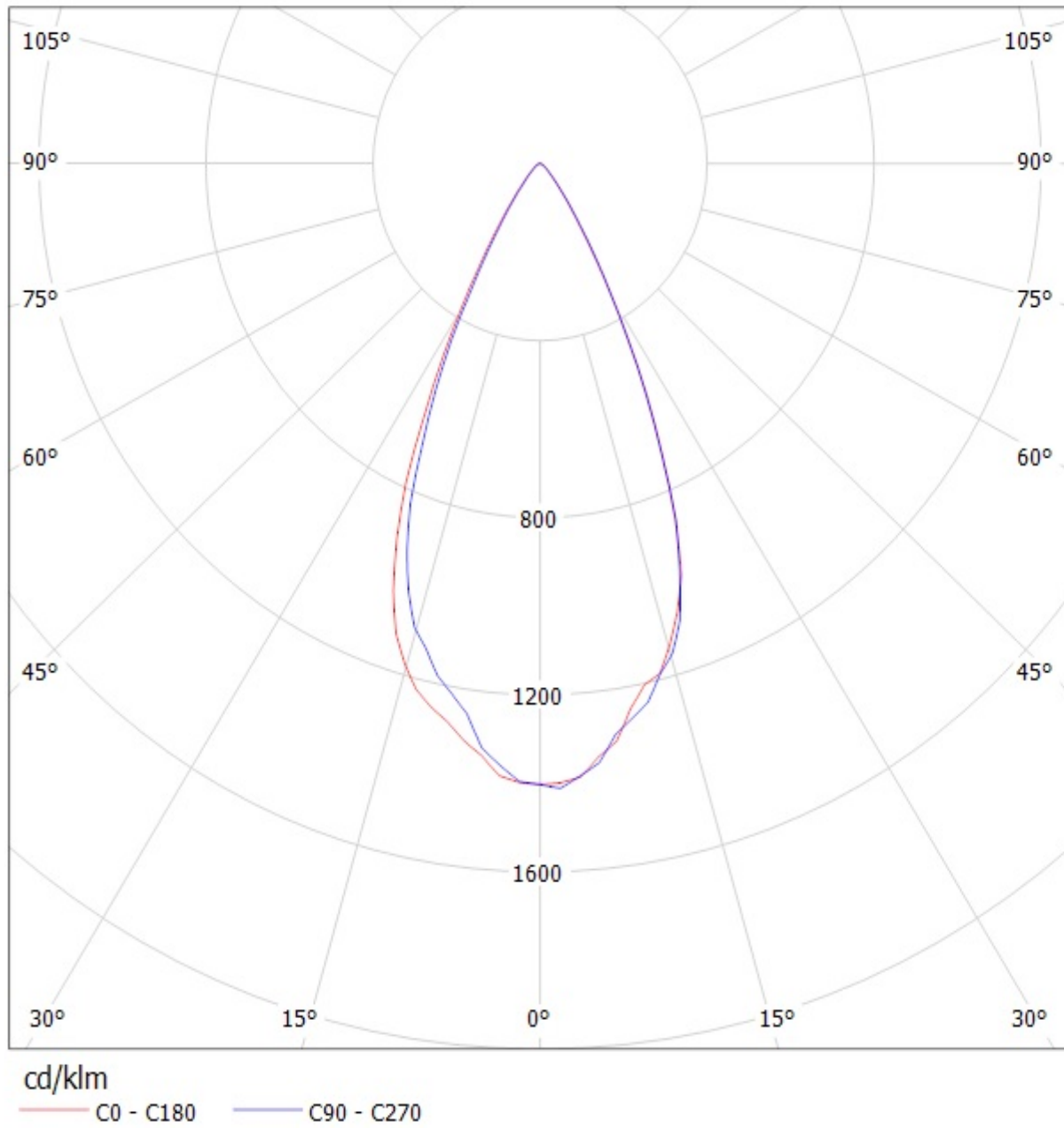


Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(E21A)

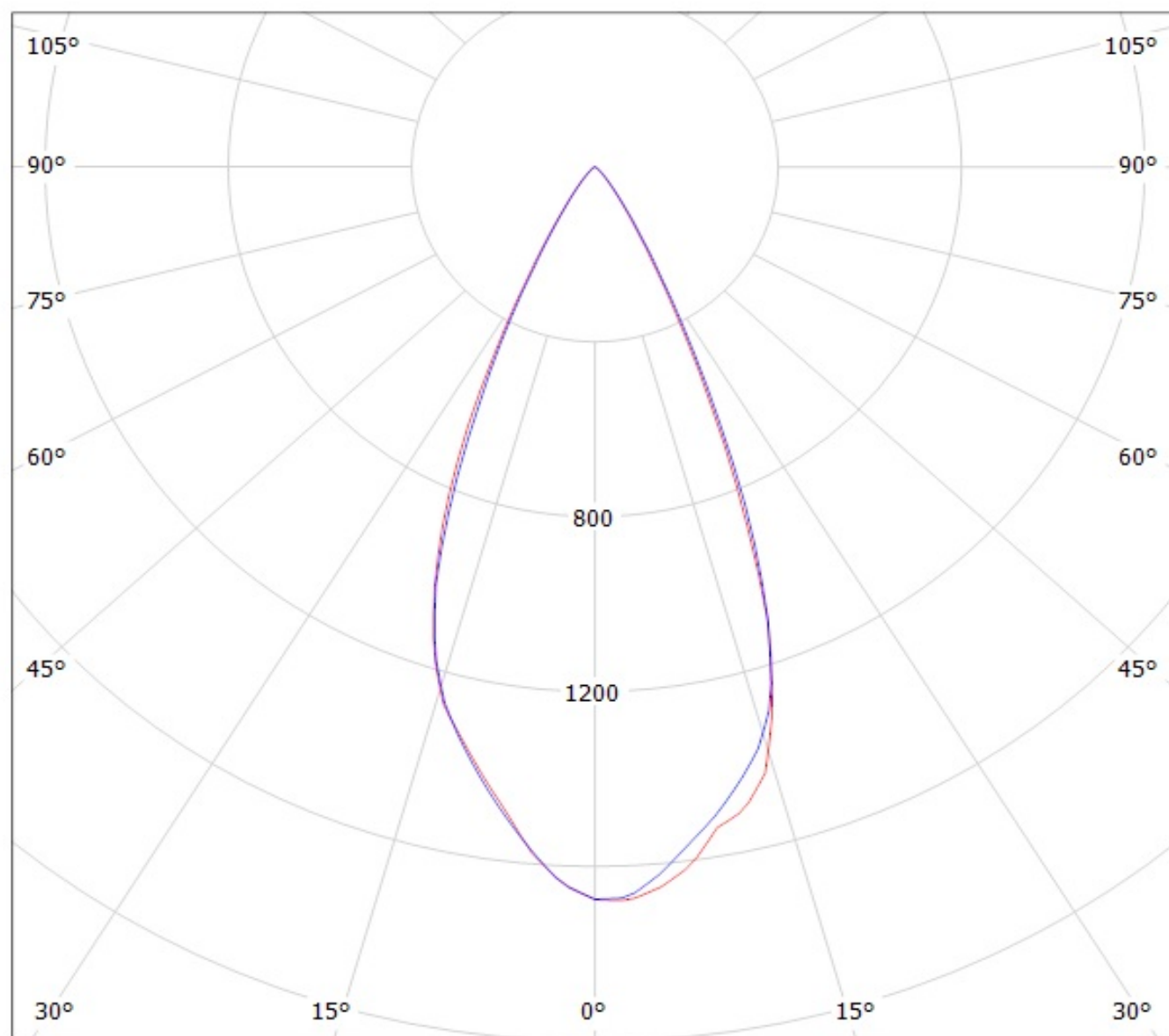
Lamps: 1 x Nichia\_E21A\_2X2\_454.11lm@250mA\_P=2.81W\_I=0.250A



Luminaire: Ledil Oy C13605\_HB-2X2-RW\_(Oslon\_Square\_PC) Efficiency=90%  
Lamps: 1 x Osram Oslon Square PC (LCW-CQAR.PC-MSMU-5H71-1) 389lm @ 250mA CCT=6000K P=3.0W I=250mA



Luminaire: Ledil Oy C13605\_HB-2X2-RW\_(SSL\_80) Efficiency=90%  
Lamps: 1 x Osram Oslon SSL 80 (310lm @ 250mA) CCT=6800K P=3.2W I=250mA

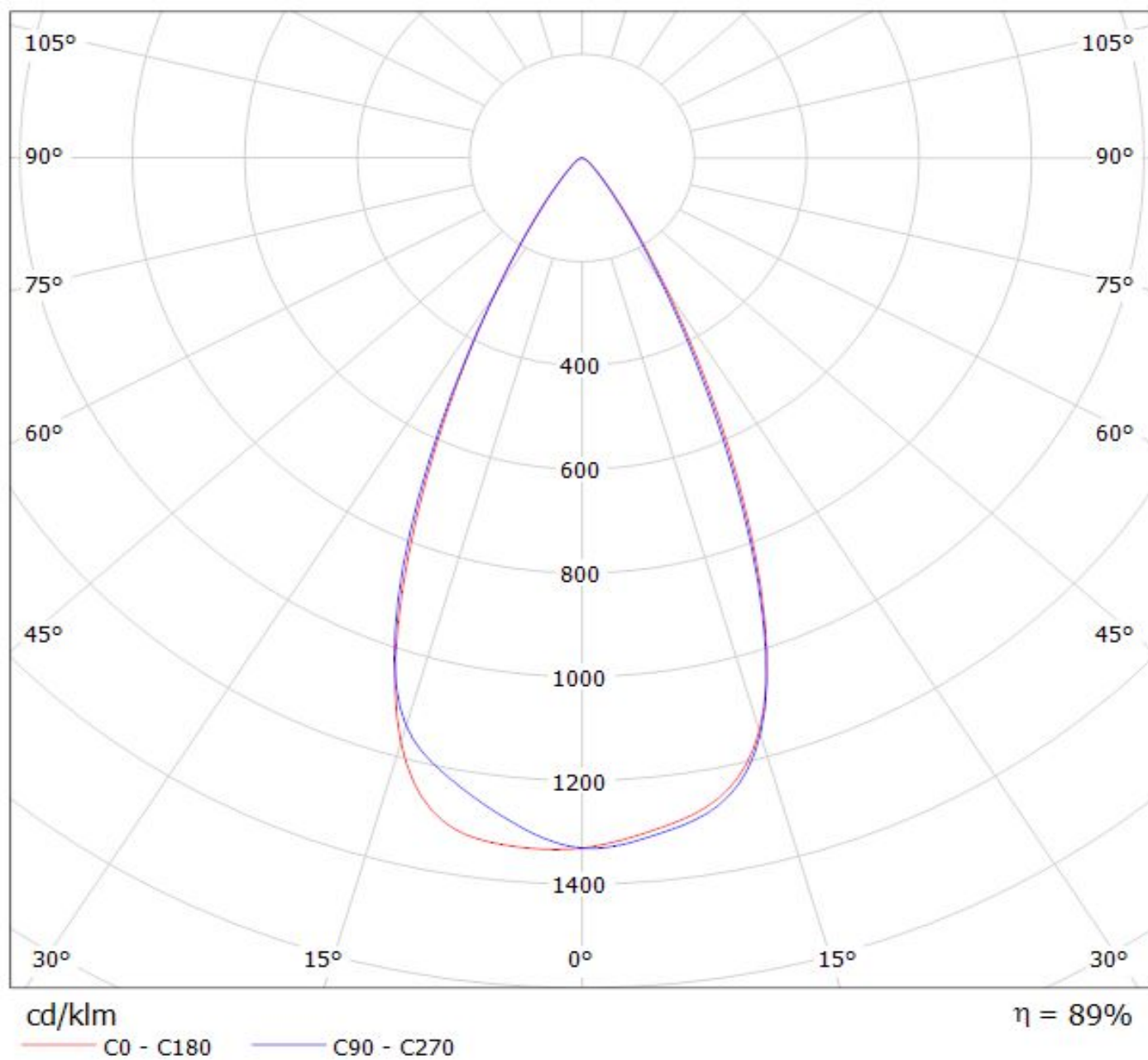


cd/klm

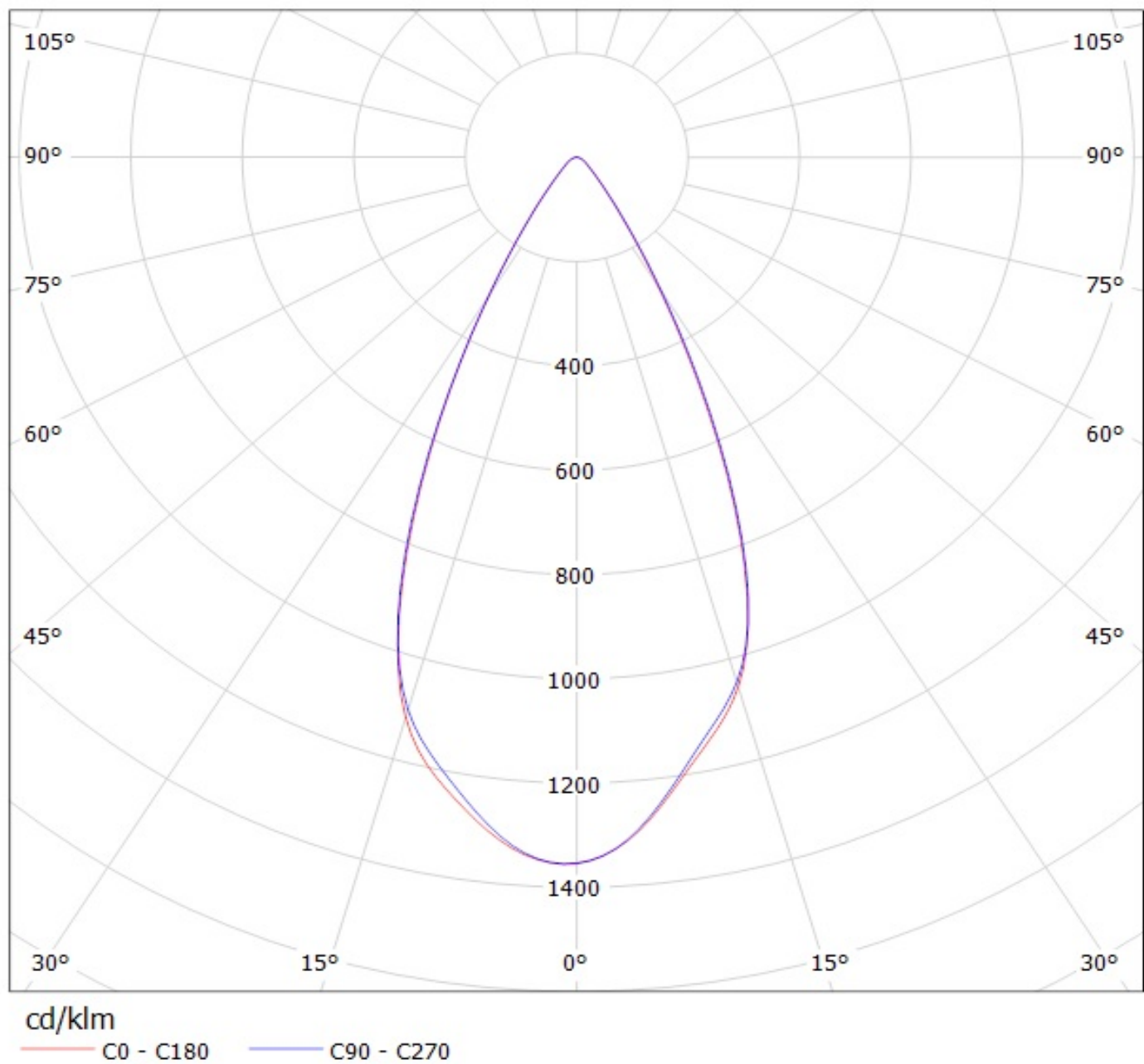
— C0 - C180

— C90 - C270

Luminaire: LEDiL Oy  
Lamps: 1 x C13605-HB-2x2-RW\_(SQ\_Gen3)

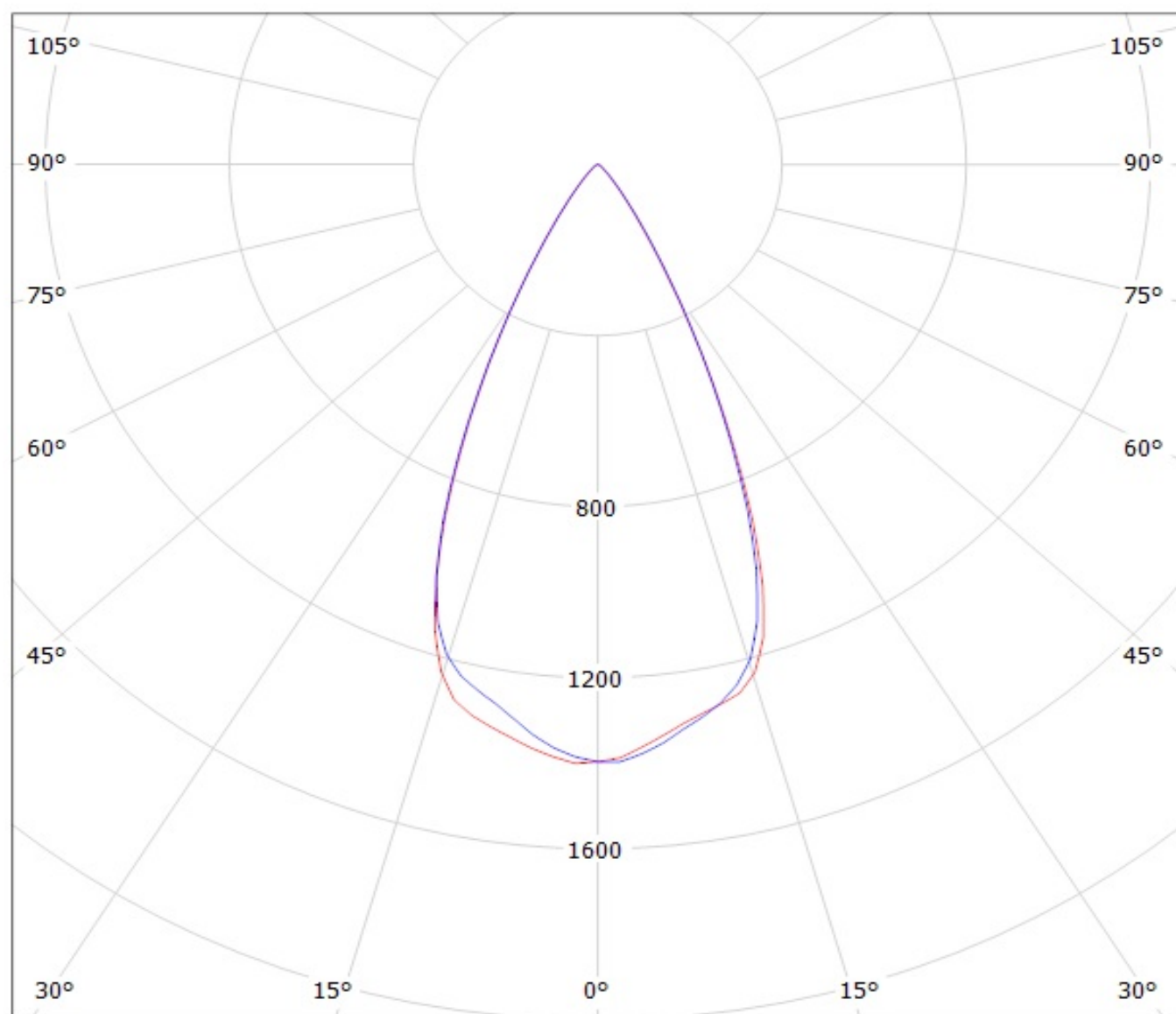


Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(LH351Z) Eff.90.2%  
Lamps: 1 x SAMSUNG\_LH351Z\_2x2\_359.49lm@250mA\_P=2.86371W\_I=249.8mA



Luminaire: LEDil Oy C13605\_HB-2x2-RW\_(Z5M1) Efficiency=90%

Lamps: 1 x Seoul (SZ5-M1-WN-C8) 379lm @ 250mA CCT=4600K P=2.9W I=250mA



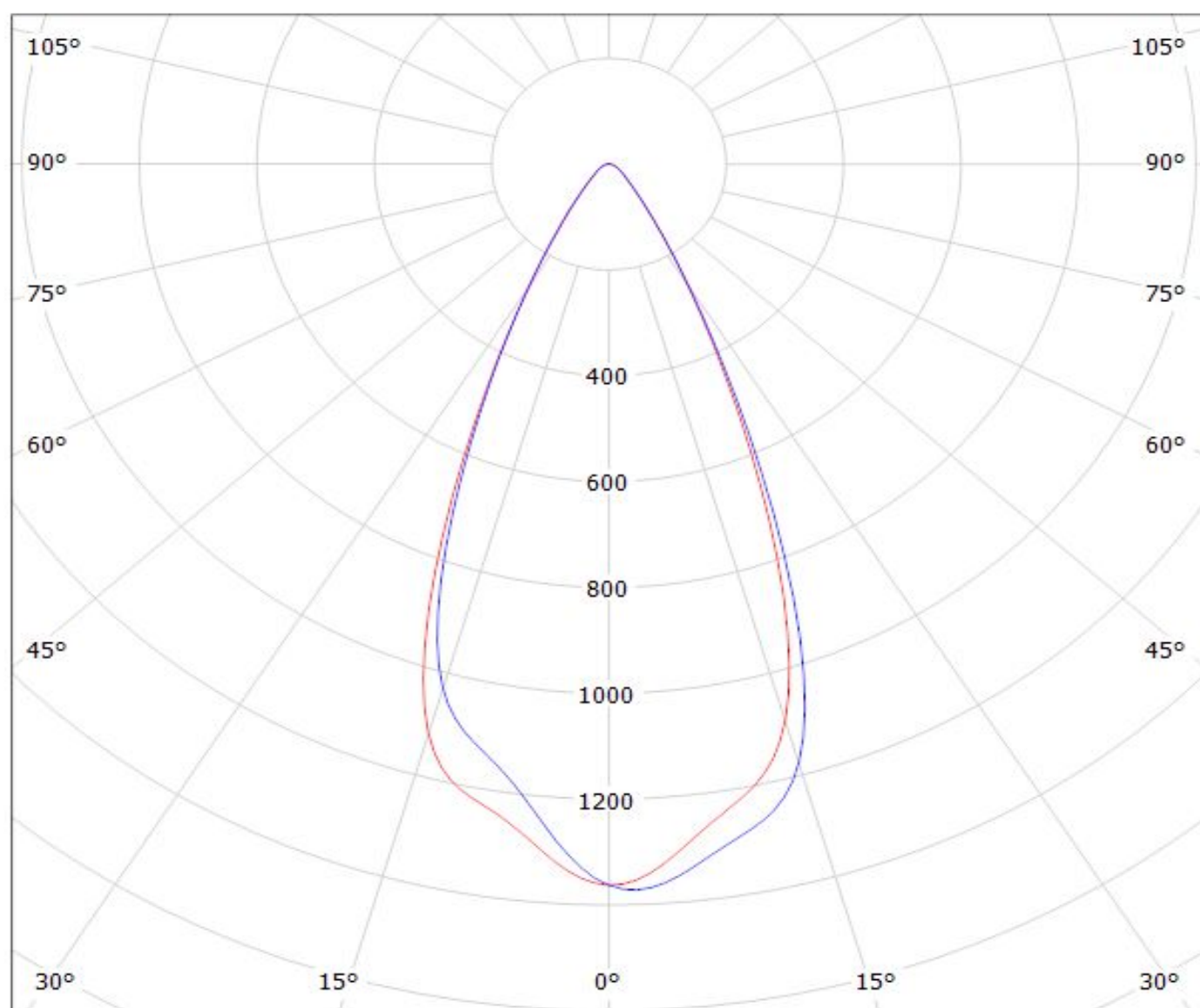
cd/klm

— C0 - C180

— C90 - C270

Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(WICOP2\_Z8Y15)

Lamps: 1 x SEOUL\_WICOP2\_Z8Y15\_336.842lm@250mA\_P=2.9399W\_I=0.250A



cd/klm

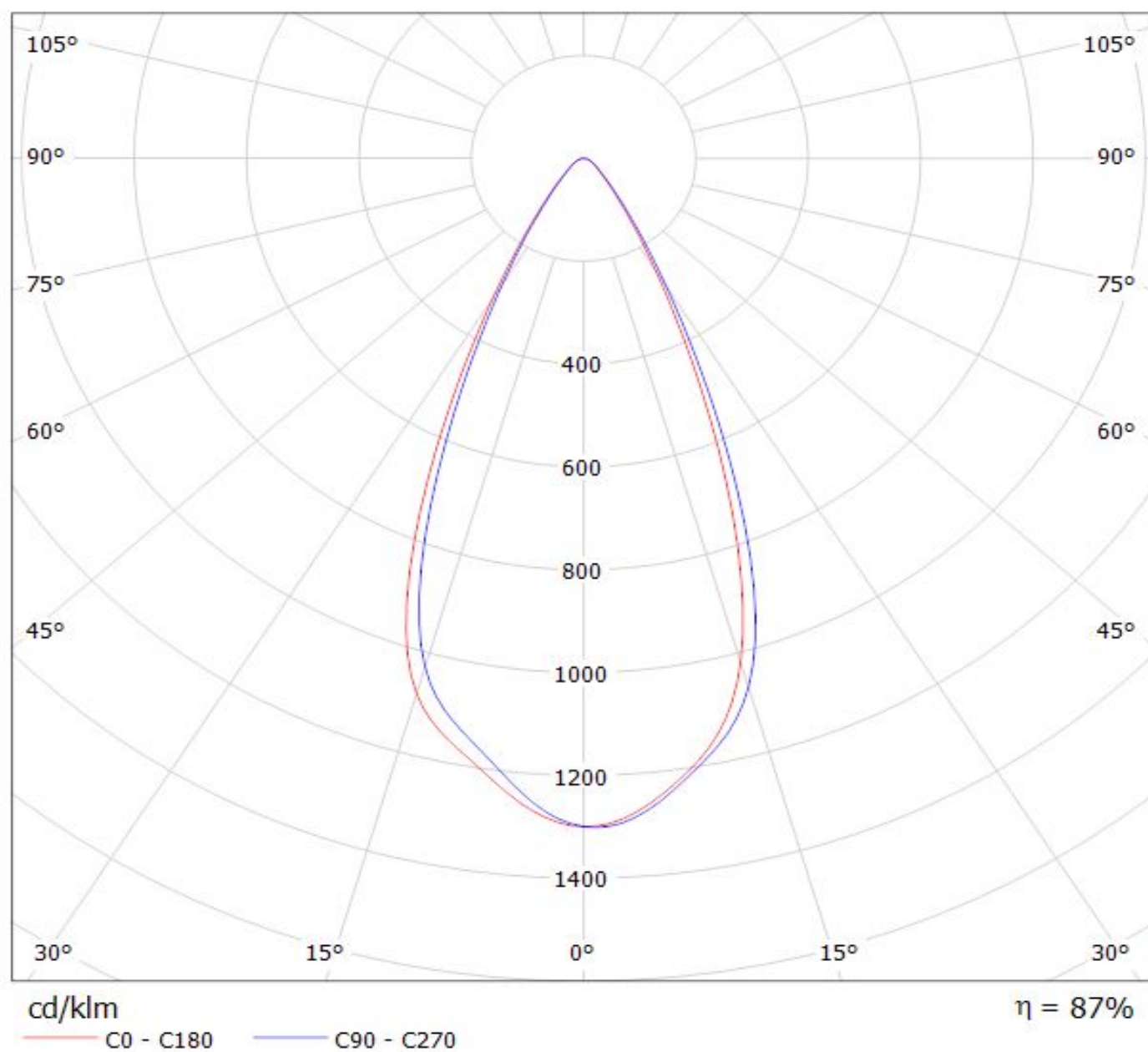
— C0 - C180

— C90 - C270

$\eta = 88\%$

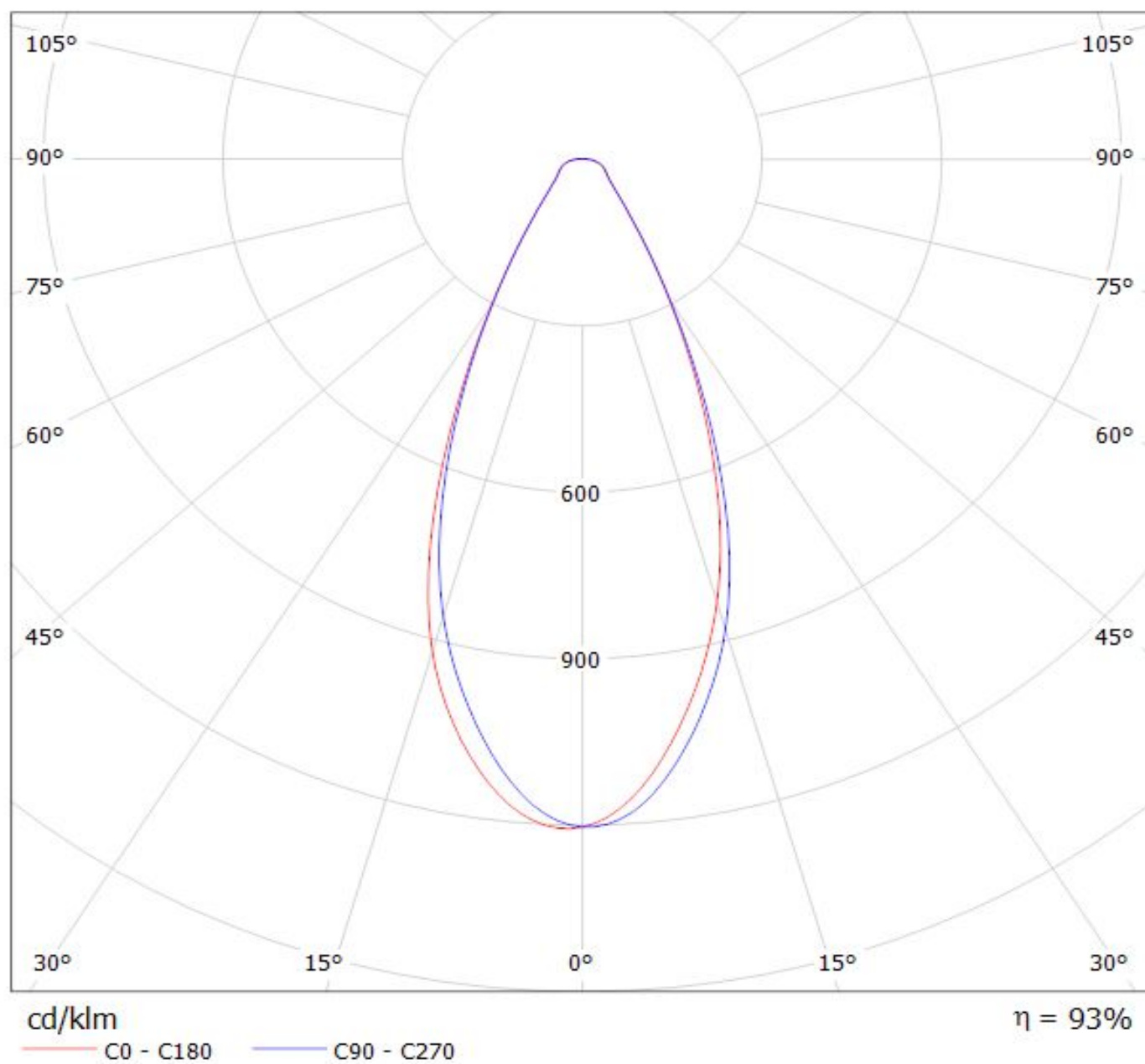
Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(WICOP2\_Z8Y19)

Lamps: 1 x SEOUL\_WICOP2\_Z8Y19\_450.124lm@250mA\_P=2.8579W\_I=0.250A



Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(Z8Y22)

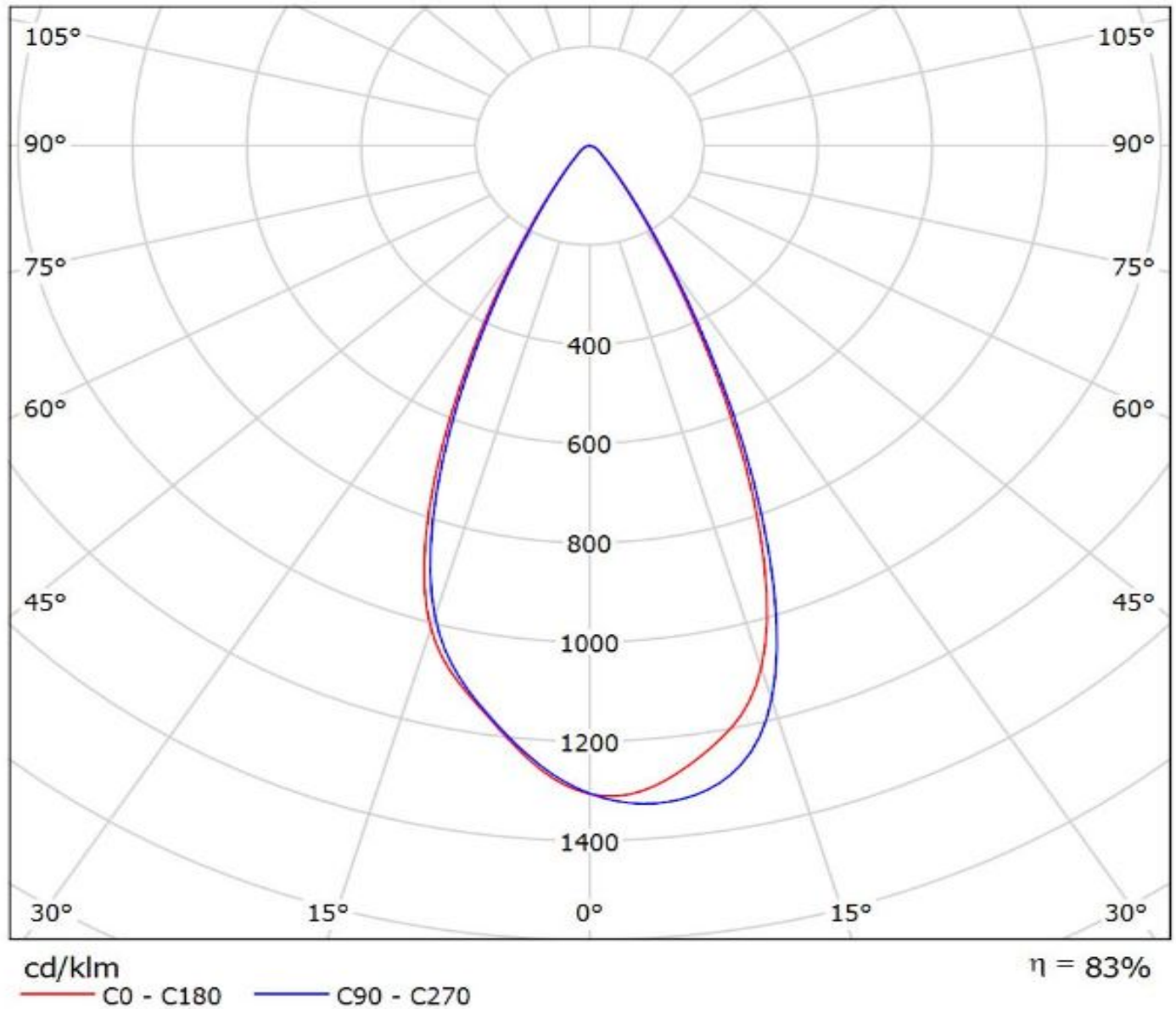
Lamps: 1 x Seoul\_Wicop\_Z8Y22\_497.373lm@250mA\_P=2.80076W\_U=11.211V



## Ledil C13605\_HB-2X2-RW\_(TL1L4) / LDC (Polar)

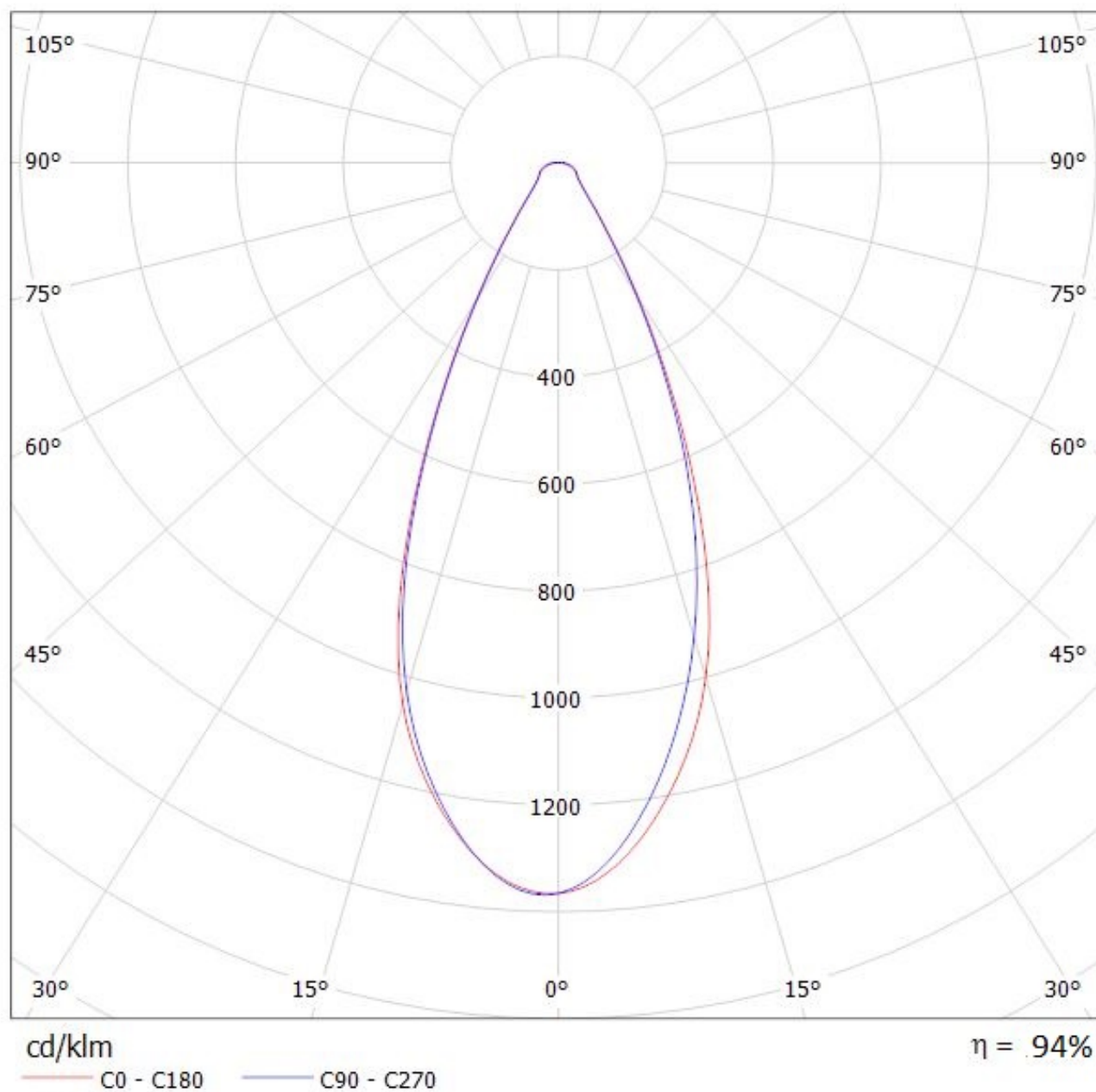
Luminaire: Ledil C13605\_HB-2X2-RW\_(TL1L4)

Lamps: 1 x Toshiba\_TL1L4\_2x2\_(TL1L4-DW0)\_472.639lm@250mA\_CCT=6500K\_P=2.9W\_I=0.25A



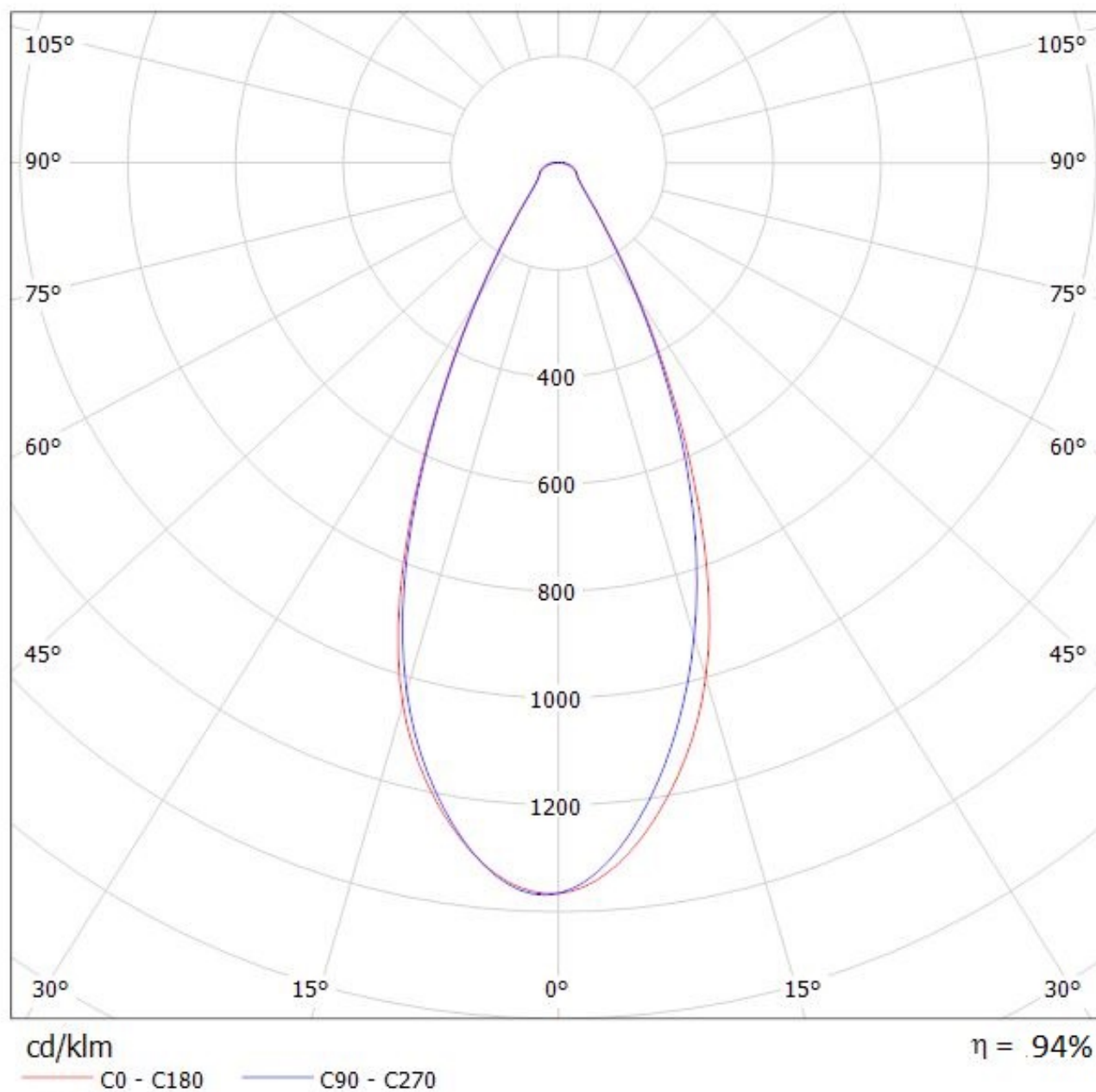
Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(Tridonic\_Module\_RLE\_G1)

Lamps: 1 x Tridonic\_Module\_RLE\_G1\_4576.03lm@700mA\_P=32.0681W\_I=0.700A

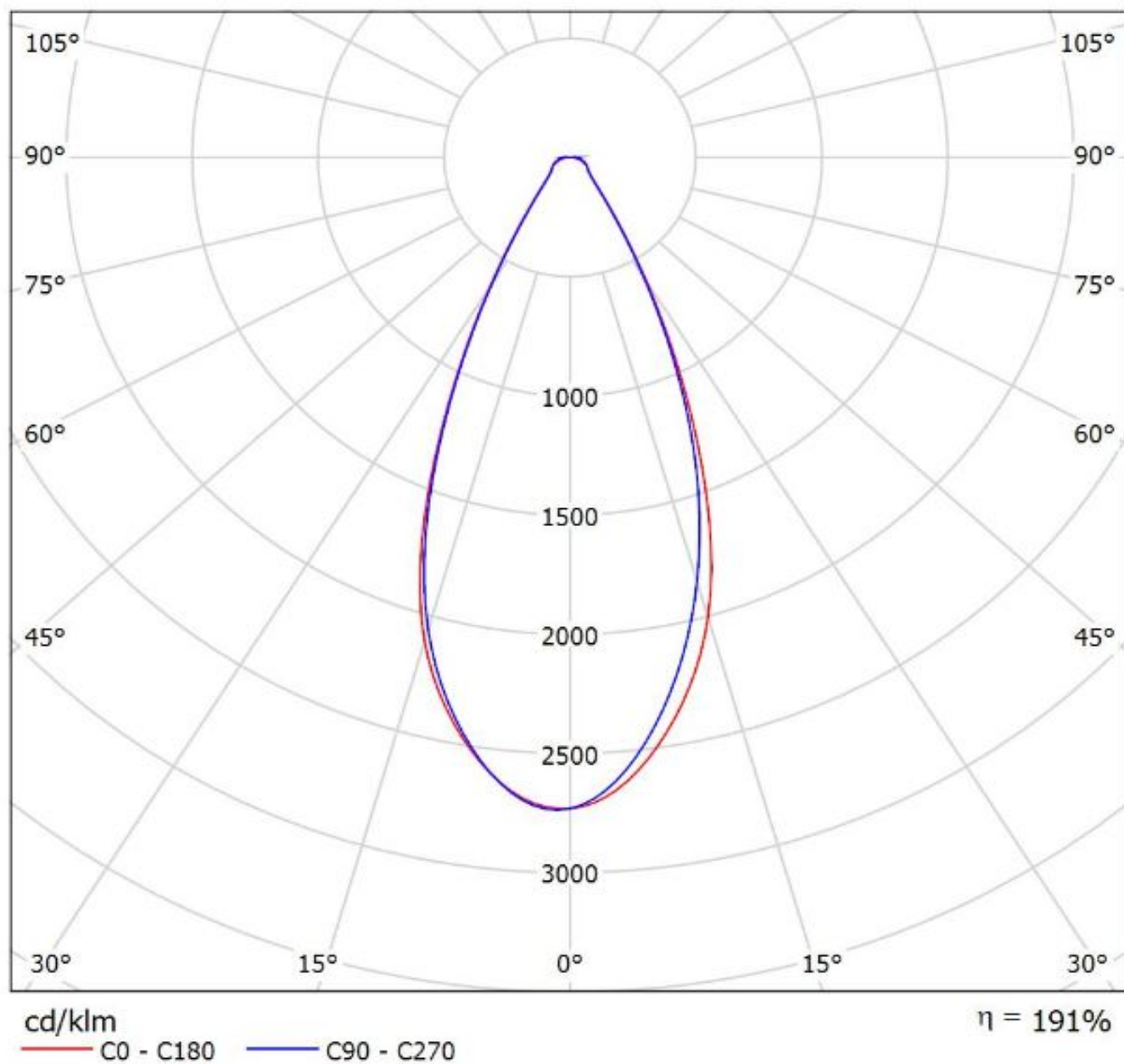


Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(Tridonic\_Module\_RLE\_G1)

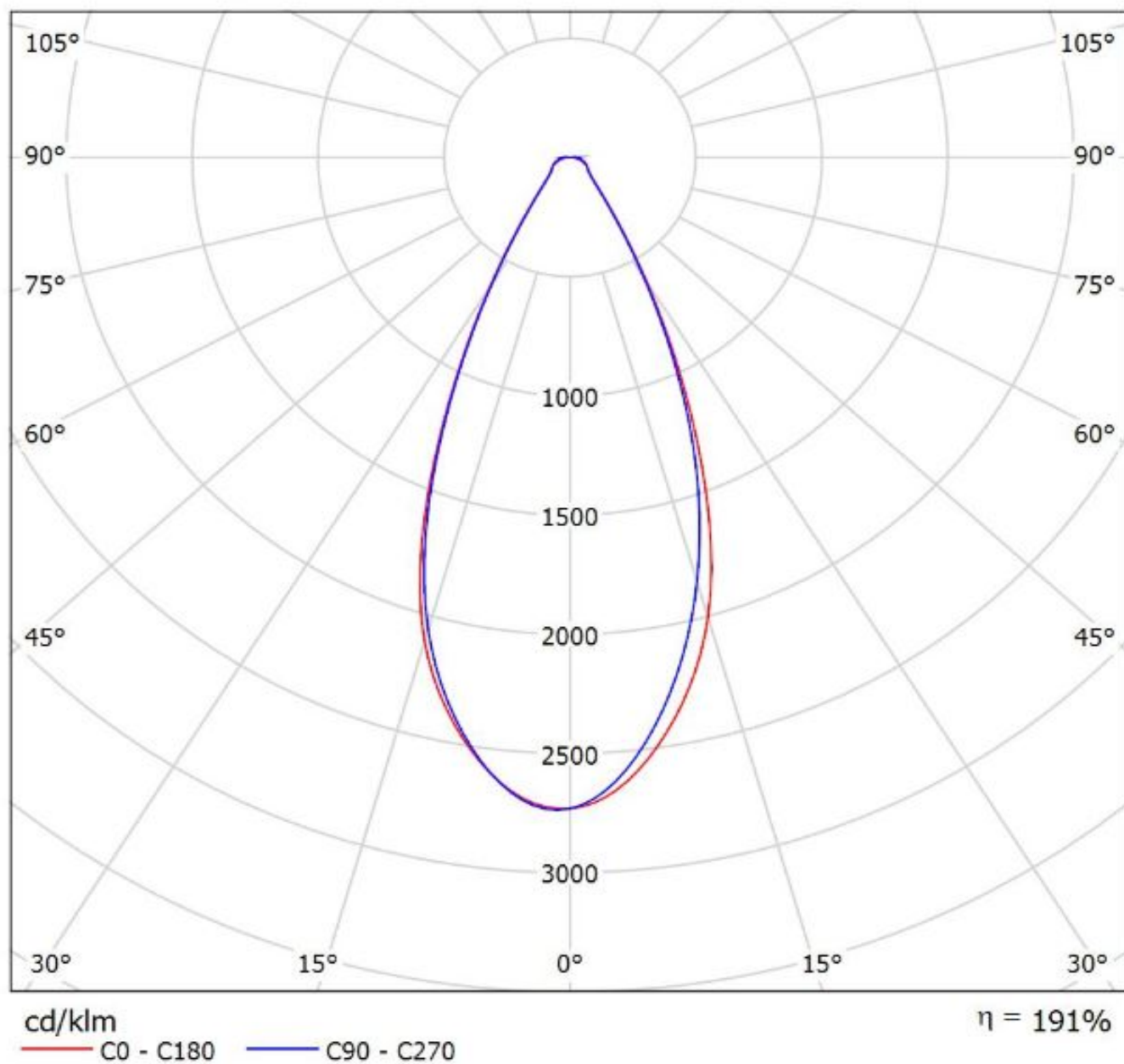
Lamps: 1 x Tridonic\_Module\_RLE\_G1\_4576.03lm@700mA\_P=32.0681W\_I=0.700A



Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(Tridonic\_Module\_RLE\_G1)  
Lamps: 1 x Tridonic\_Module\_RLE\_G1\_2288lm@700mA\_P=16W\_I=0.700A



Luminaire: LEDiL Oy C13605\_HB-2X2-RW\_(Tridonic\_Module\_RLE\_G1)  
Lamps: 1 x Tridonic\_Module\_RLE\_G1\_2288lm@700mA\_P=16W\_I=0.700A



**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.**