

## DETAILS

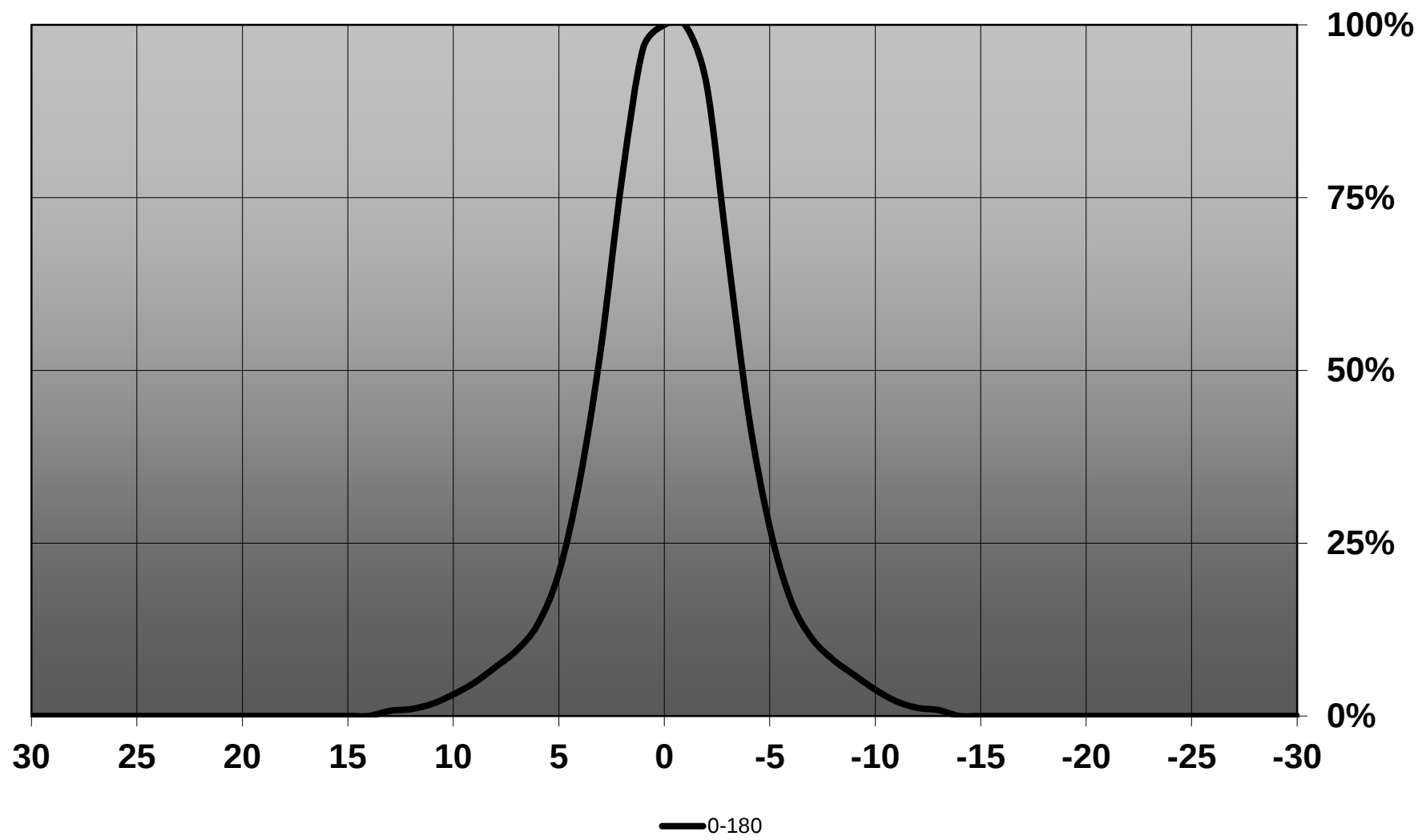
|                        |                       |
|------------------------|-----------------------|
| <b>Product Number</b>  | FCN13595_CRYSTAL-MINE |
| <b>Family</b>          | Crystal               |
| <b>Type</b>            | Pack                  |
| <b>Color</b>           | white                 |
| <b>Diameter</b>        | 50,3 mm               |
| <b>Height</b>          | 28,7 mm               |
| <b>Style</b>           | round                 |
| <b>Optic Material</b>  | PMMA                  |
| <b>Holder Material</b> |                       |
| <b>Fastening</b>       | pin, screw            |
| <b>Status</b>          | production ready      |
| <b>ROHS Compliant</b>  | Yes                   |
| <b>Date Updated</b>    | 16/12/2016            |



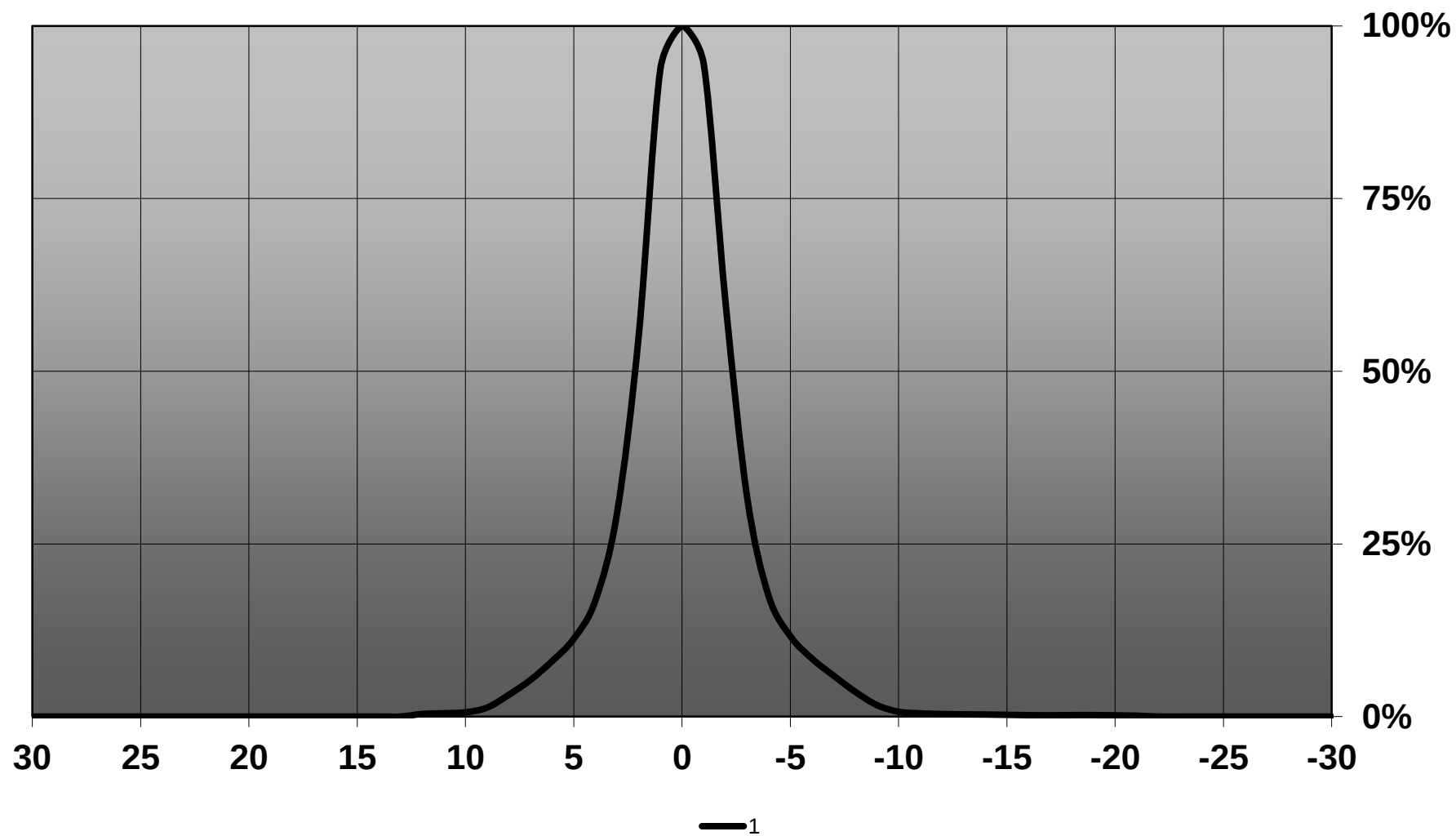
## OPTICAL PROPERTIES

| LED               | Viewing  | Light | Efficiency | cd/lm        | Connector |
|-------------------|----------|-------|------------|--------------|-----------|
|                   | Angle    | Beam  |            |              |           |
| XP-G              | 4.7 deg  | Spot  | 90 %       | 66.900       | -         |
| XM-L2             | 6.9 deg  | Spot  | 90 %       | 35.000       | -         |
| XP-G2             | 4,6 deg  | Spot  | 90 %       | 65.200       | -         |
| XP-L              | 7 deg    | Spot  | 86 %       | 33.000       | -         |
| XP-L HI           | 4.5 deg  | Spot  | 92 %       | 60.000       | -         |
| XHP35 HI          | sim: 6,2 | Spot  | sim: 94 %  | sim: 50.400- |           |
| XHP35 HD          | sim: 7,8 | Spot  | sim: 94 %  | sim: 28.600- |           |
| LUXEON A          | 4.9 deg  | Spot  | 89 %       | 58.200       | -         |
| LUXEON T          | 4.9 deg  | Spot  | 89 %       | 55.100       | -         |
| LUXEON TX         | 5.0 deg  | Spot  | 94 %       | 50.600       | -         |
| NCSxx19B          | 3,6 deg  | Spot  | 90 %       | 73.300       | -         |
| NWSx229A          | 7 deg    | Spot  | 91 %       | 26.000       | -         |
| NV4x144A          | 11 deg   | Spot  | 90 %       | 13.400       | -         |
| NVSxx19B/NVSxx19C | 6 deg    | Spot  | 93 %       | 48.000       | -         |
| LH351Z            | 4.2 deg  | Spot  | 90 %       | 71.400       | -         |
| LH351B            | 5.1 deg  | Spot  | 90 %       | 51.770       | -         |
| Z8Y22P            | sim: 7,8 | Spot  | sim: 94 %  | sim: 29.900- |           |

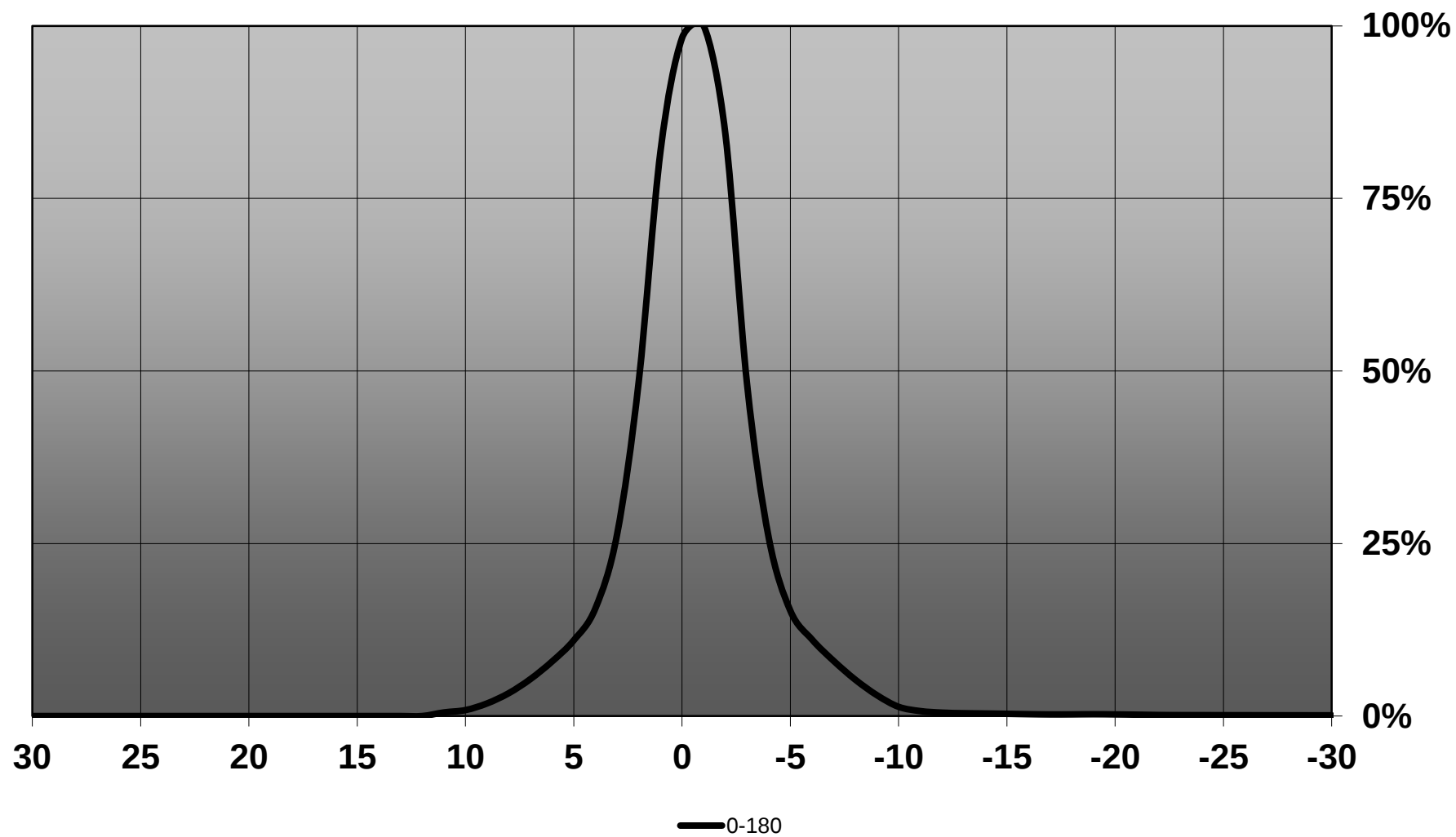
Relative intensity of CN13595\_CRYSTAL-MINE\_(XM-L2)



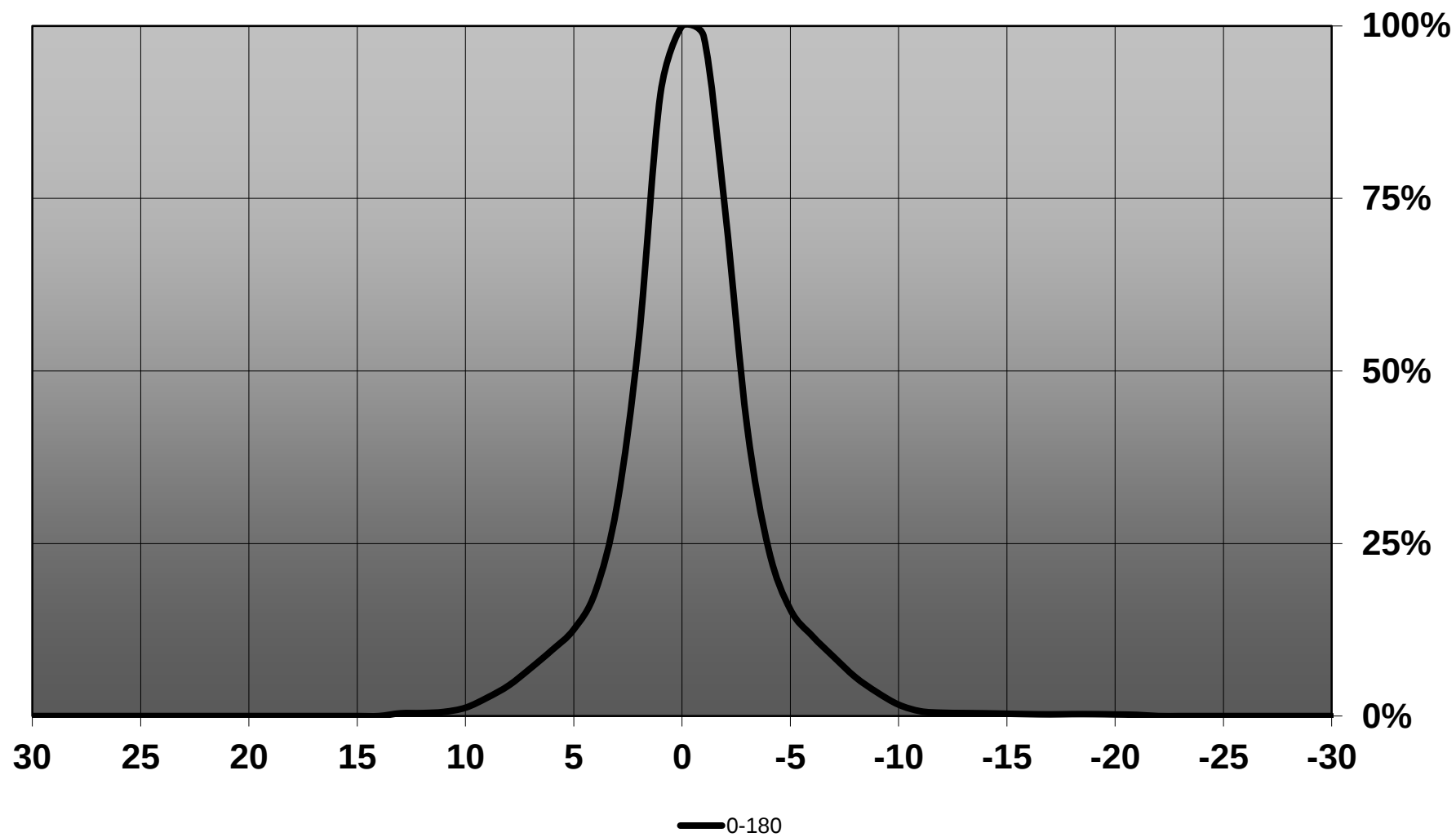
Relative intensity of CN13595\_CRYSTAL-MINE\_(XP-G2)



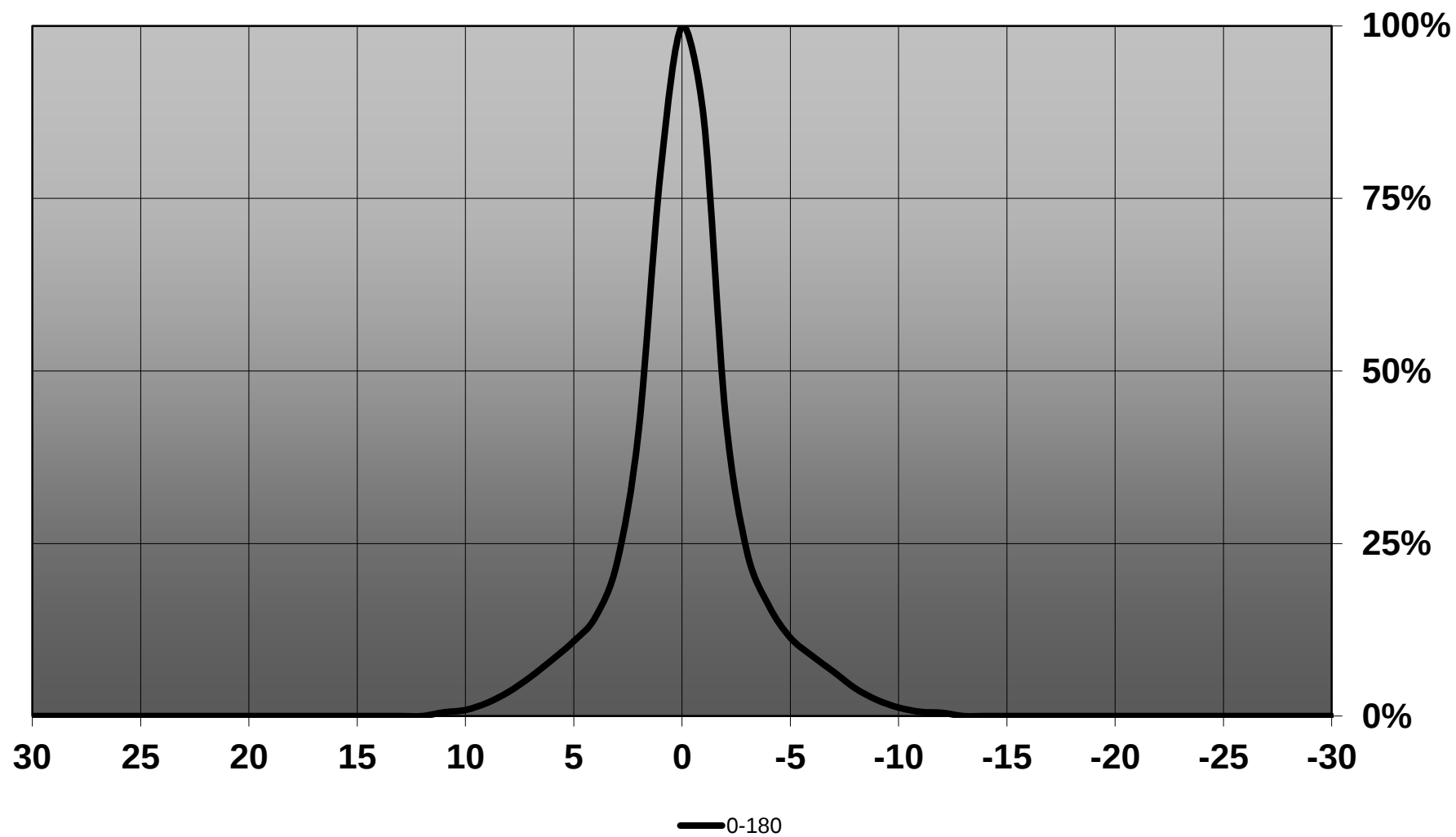
Relative intensity of CN13595\_CRYSTAL-MINE\_(Luxeon\_A)



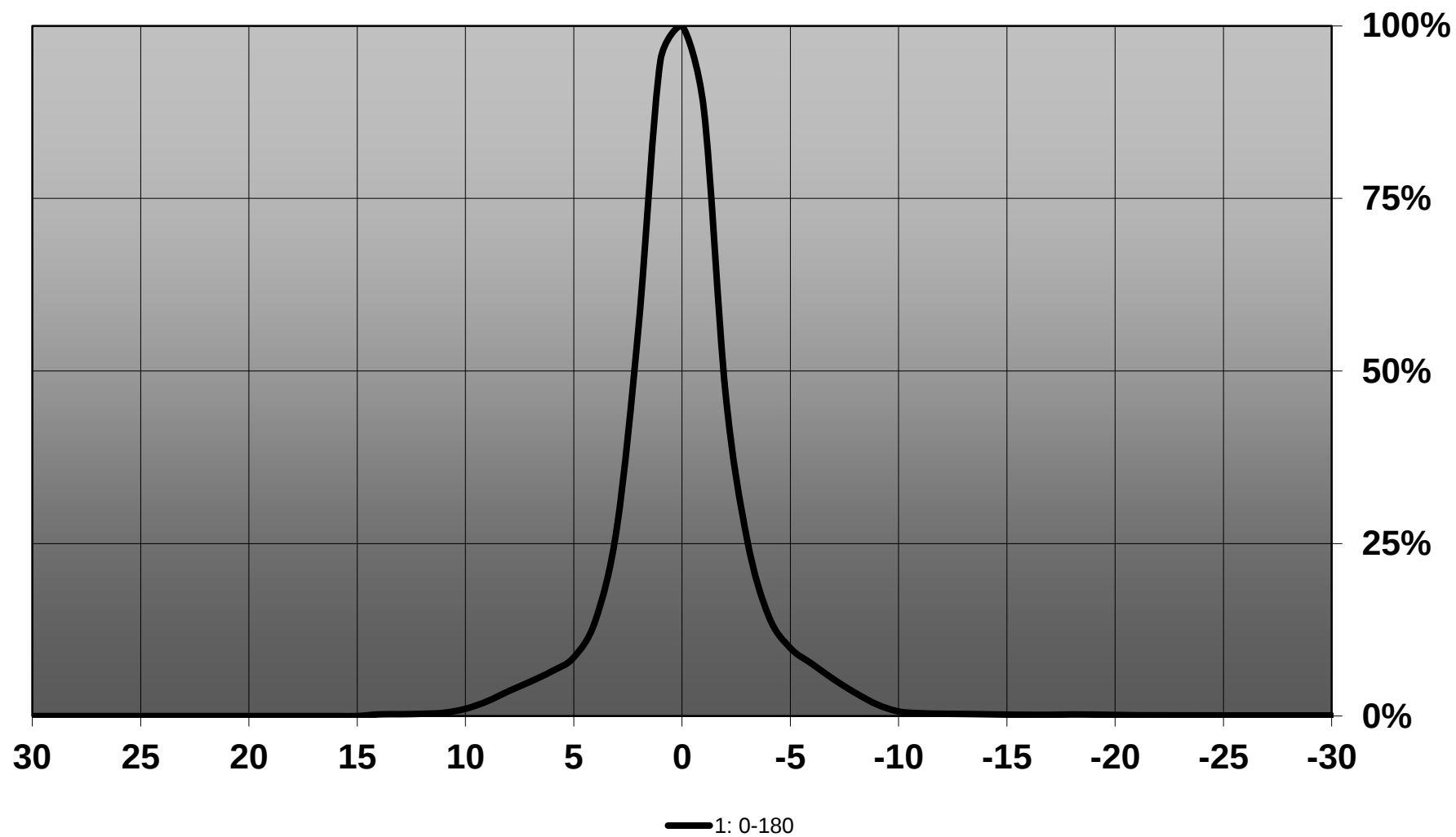
Relative intensity of CN13595\_CRYSTAL-MINE\_(Luxeon\_T)



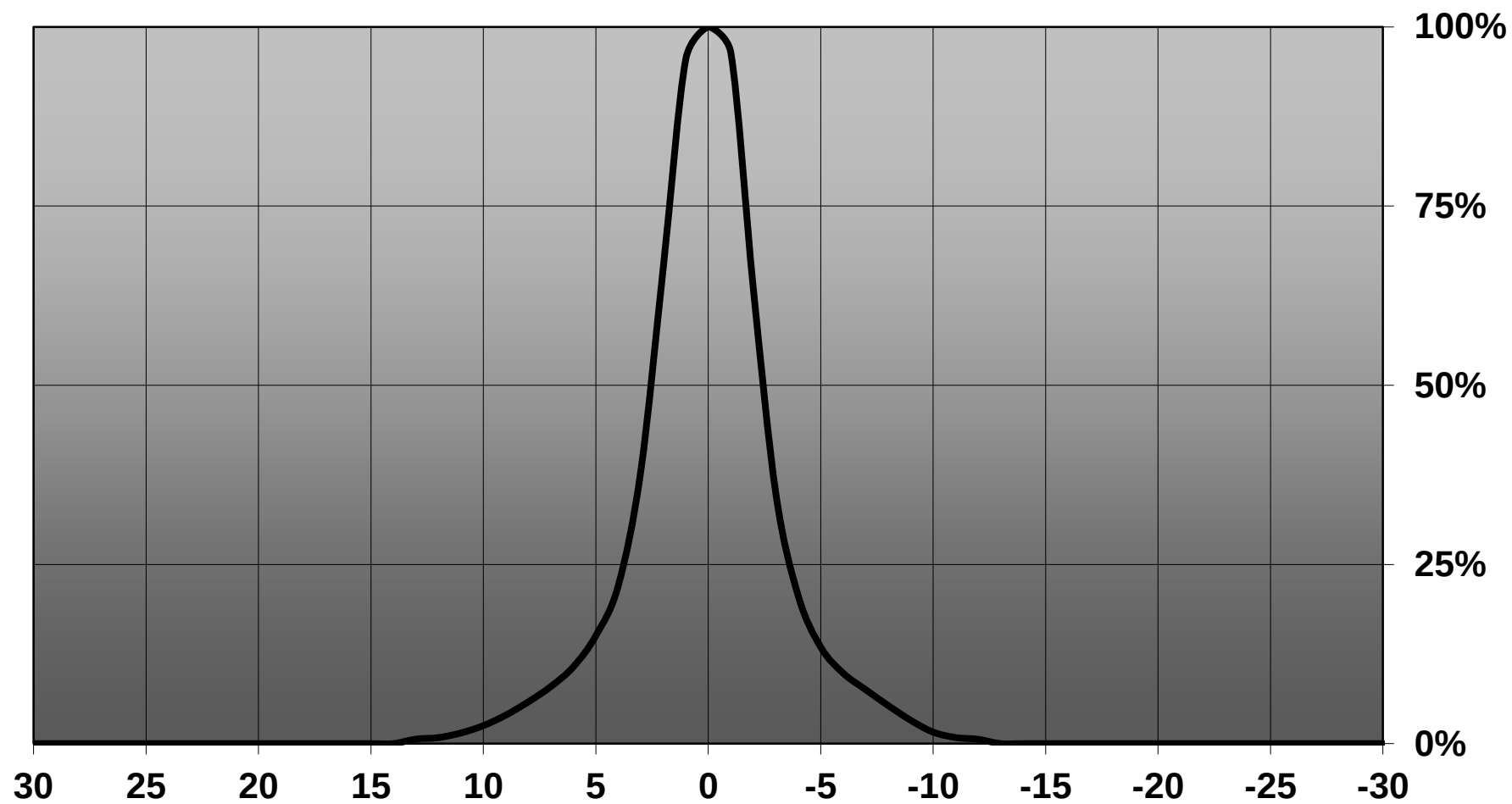
Relative intensity of CN13595\_CRYSTAL-MINE\_(NCSxx19B)

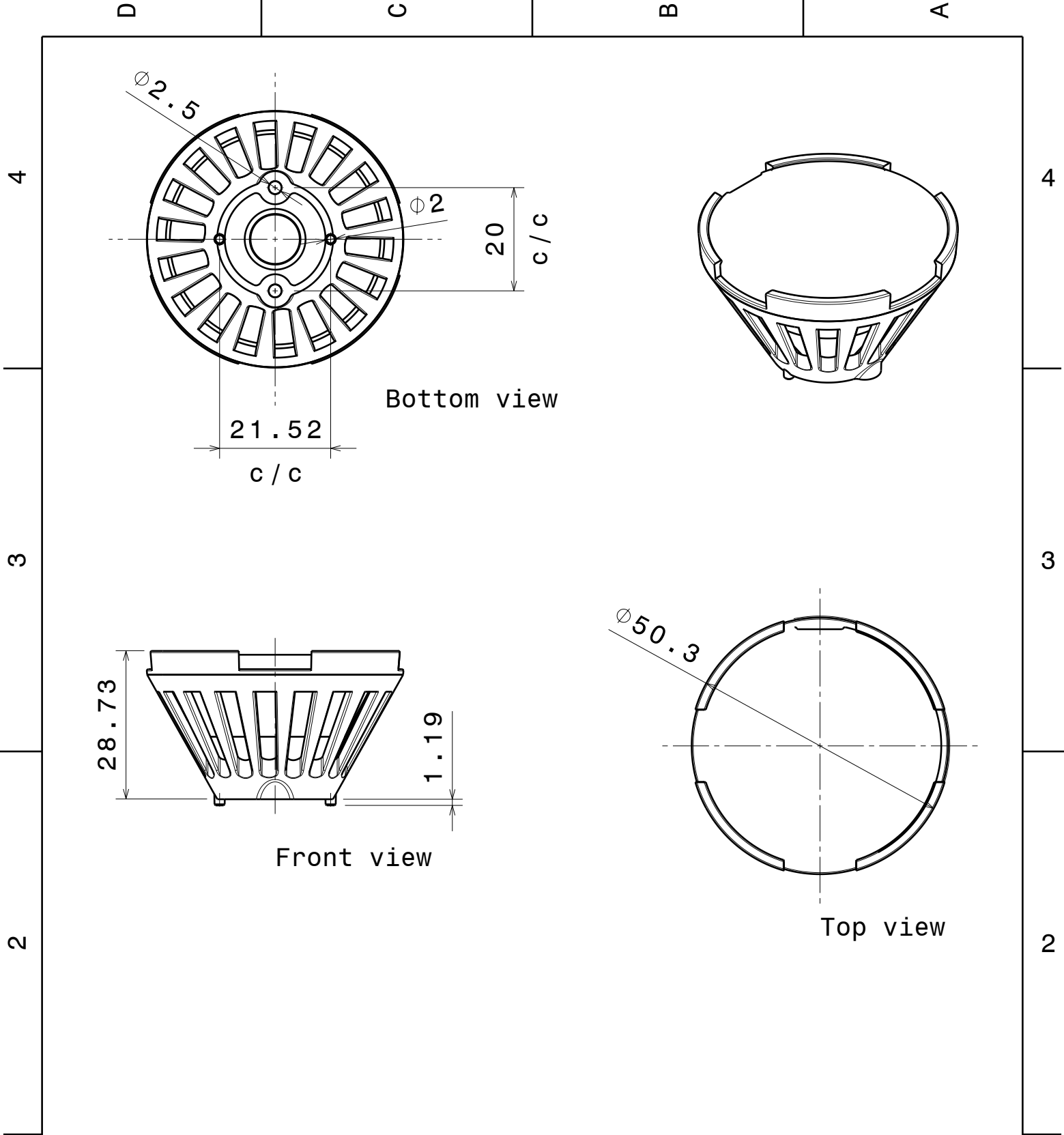


Relative intensity of CN13595\_CRYSTAL-MINE\_(LH351Z)



Relative intensity of CN13595\_CRYSTAL-MINE\_(LH351B)



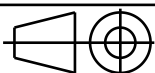


Tolerances if not otherwise shown  
According to DIN ISO 2768-1  
Linear measures: class C  
According to DIN ISO 2768-2  
Form and position: class L

LEDiL

Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:



DRAWING TITLE

Crystal Assembly MechDrawing

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

-

SCALE

1:1

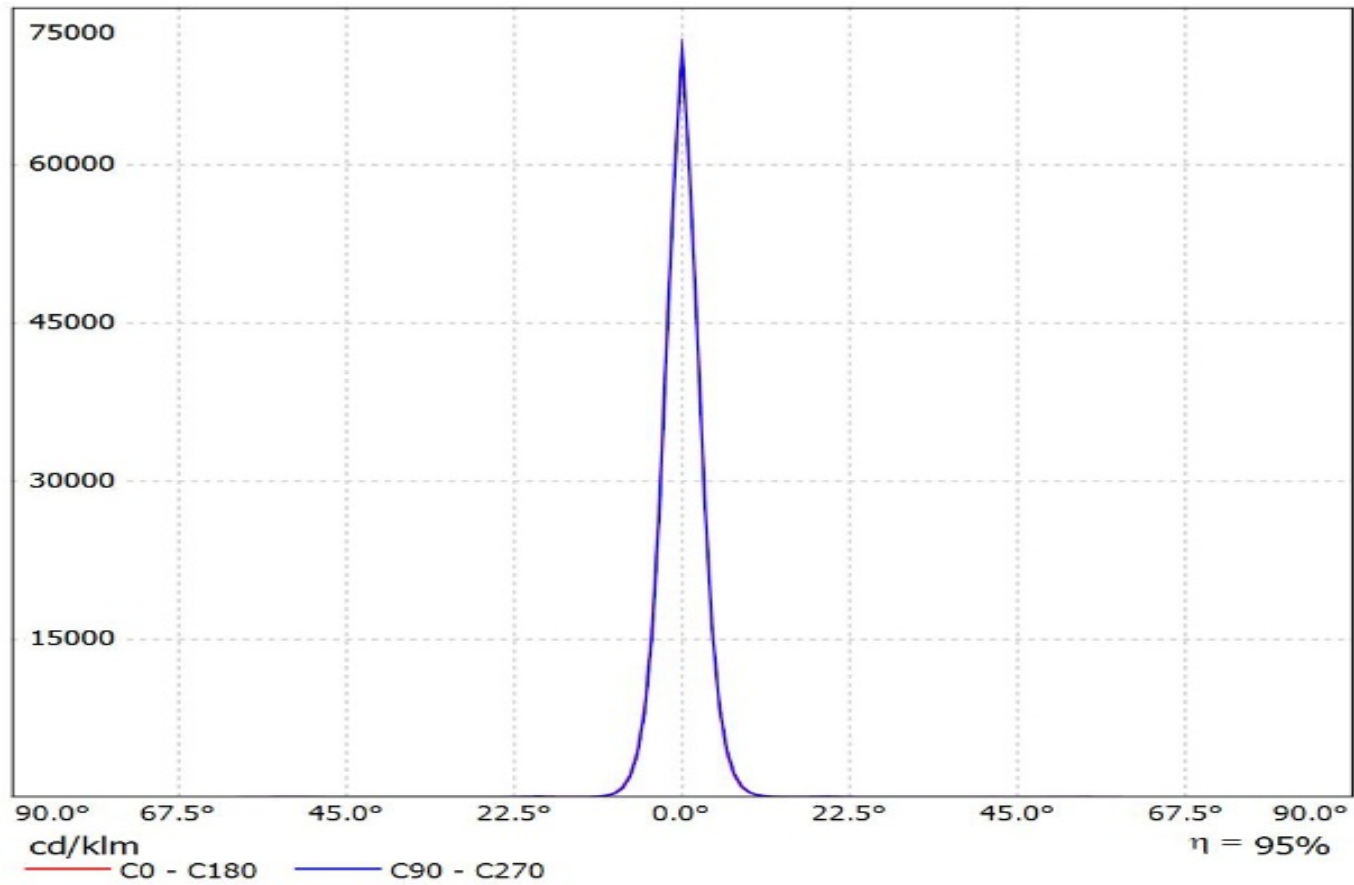
WEIGHT

-

SHEET

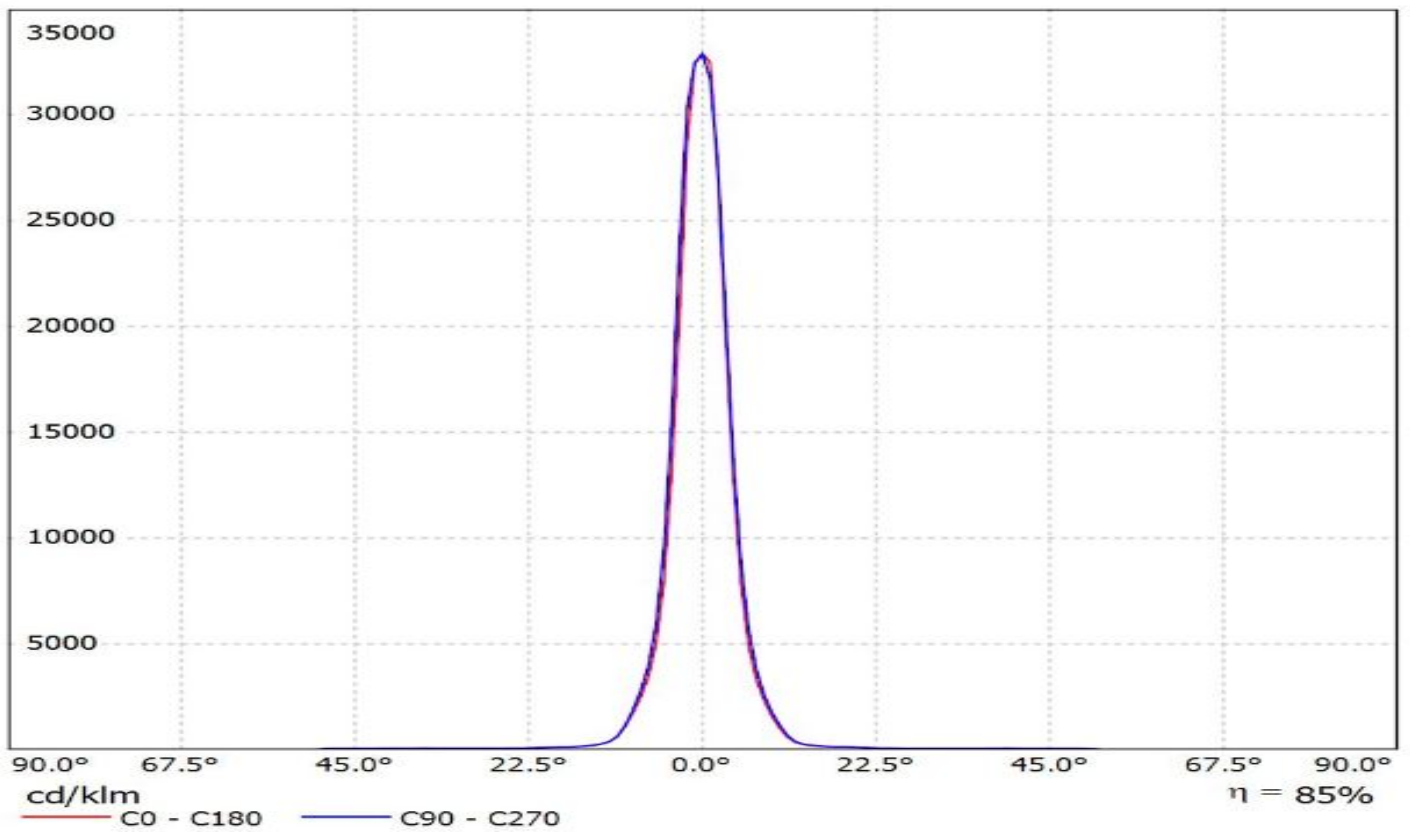
1/1

Luminaire: Ledil Oy FCN13595\_CRYSTAL-MINE\_(XP-G2)\_SIMULATED  
Lamps: 1 x Cree XP-G2



## Ledil CN13595\_CRYSTAL-MINE\_(XP-L) / LDC (Linear)

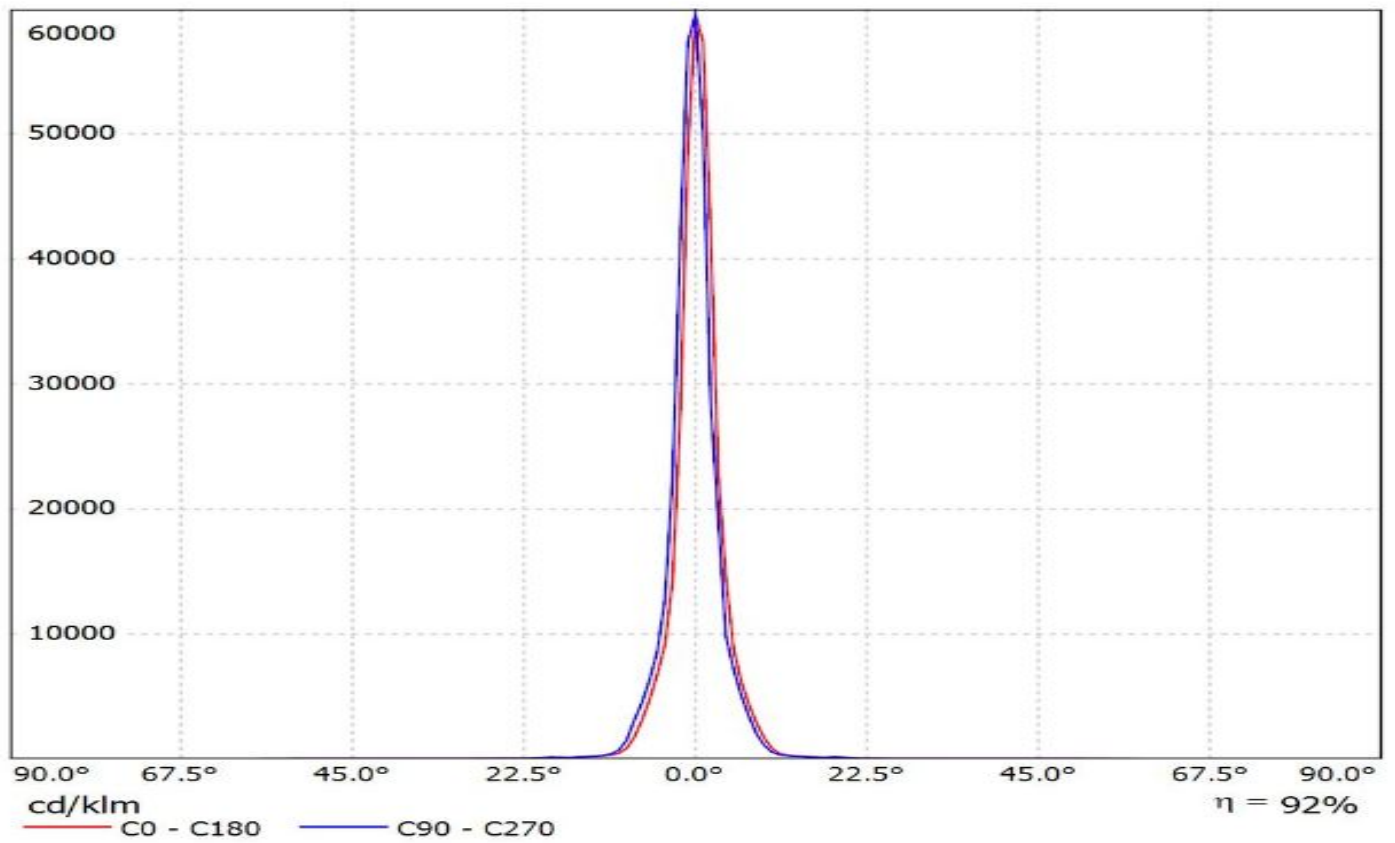
Luminaire: Ledil CN13595\_CRYSTAL-MINE\_(XP-L)  
Lamps: 1 x CREE\_XP-L\_(XPLAWT-0-7A3-U50-0H-0001)  
\_107.852lm@250mA\_CCT=3185K\_P=0.7W\_I=0.25A



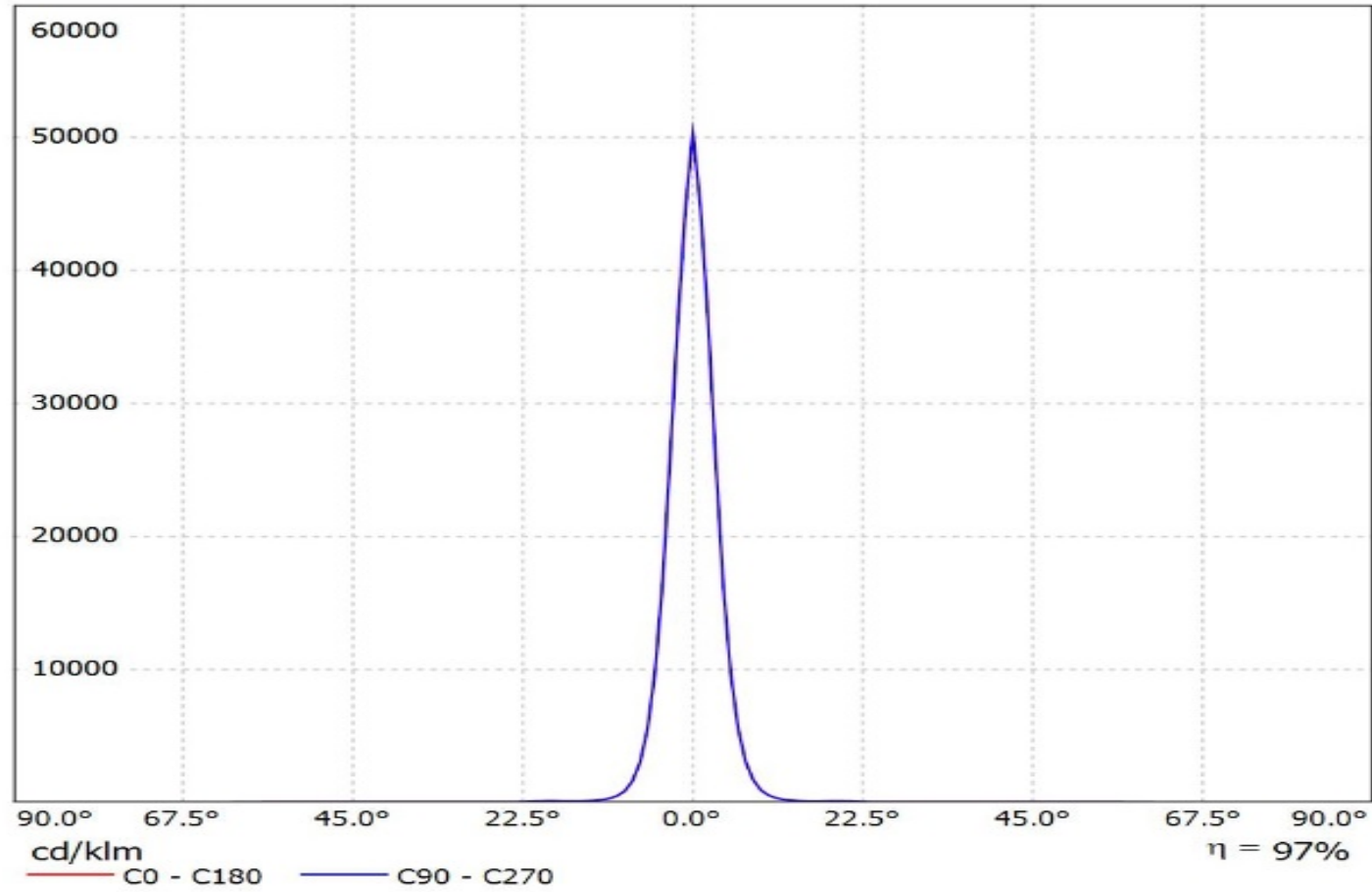
## Ledil CN13595\_CRYSTAL-MINE\_(XP-L\_HI) / LDC (Linear)

Luminaire: Ledil CN13595\_CRYSTAL-MINE\_(XP-L\_HI)

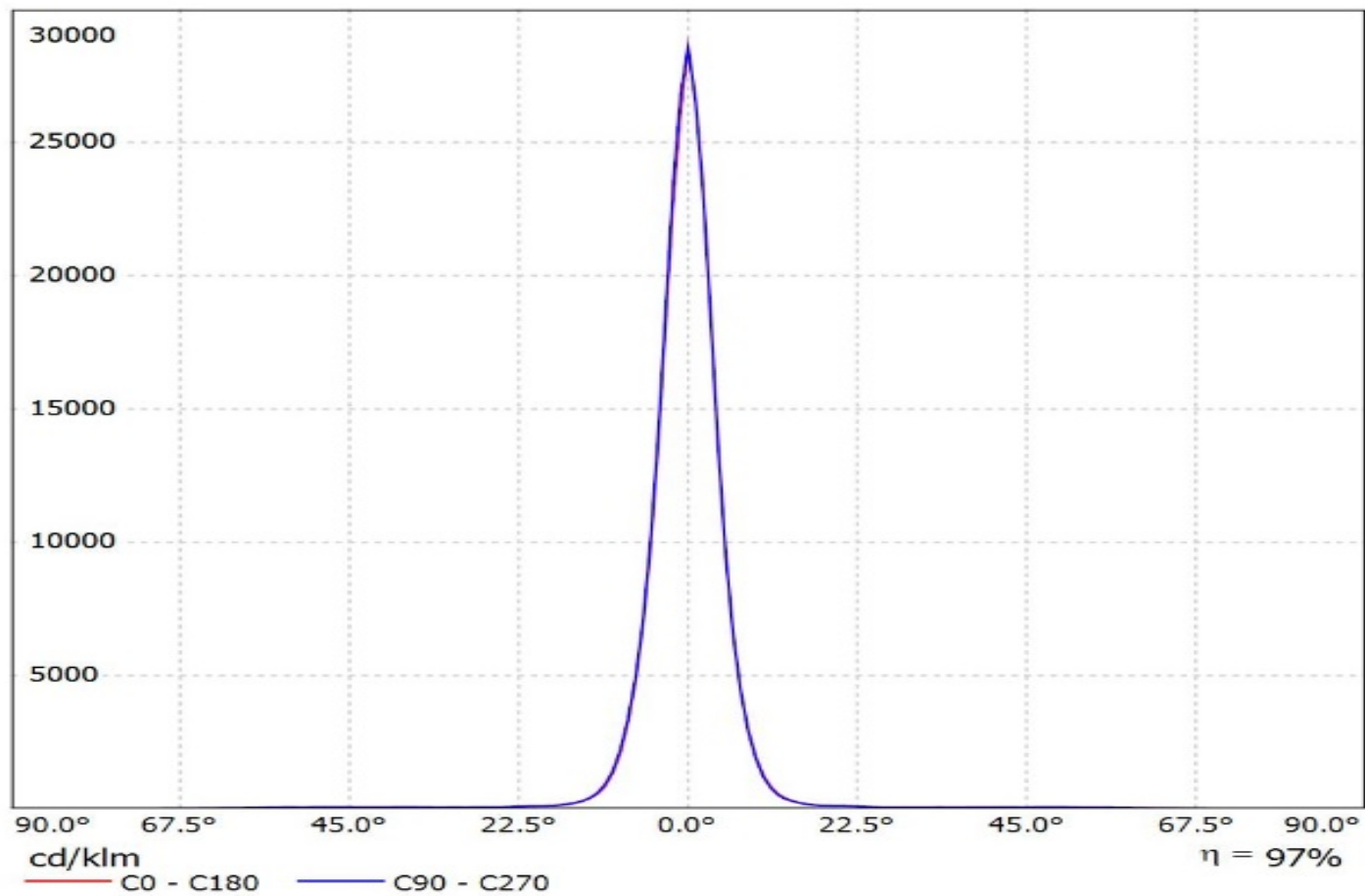
Lamps: 1 x Cree\_XP-L\_HI\_21.6891lm@250mA\_P=0.13W\_I=0.05A



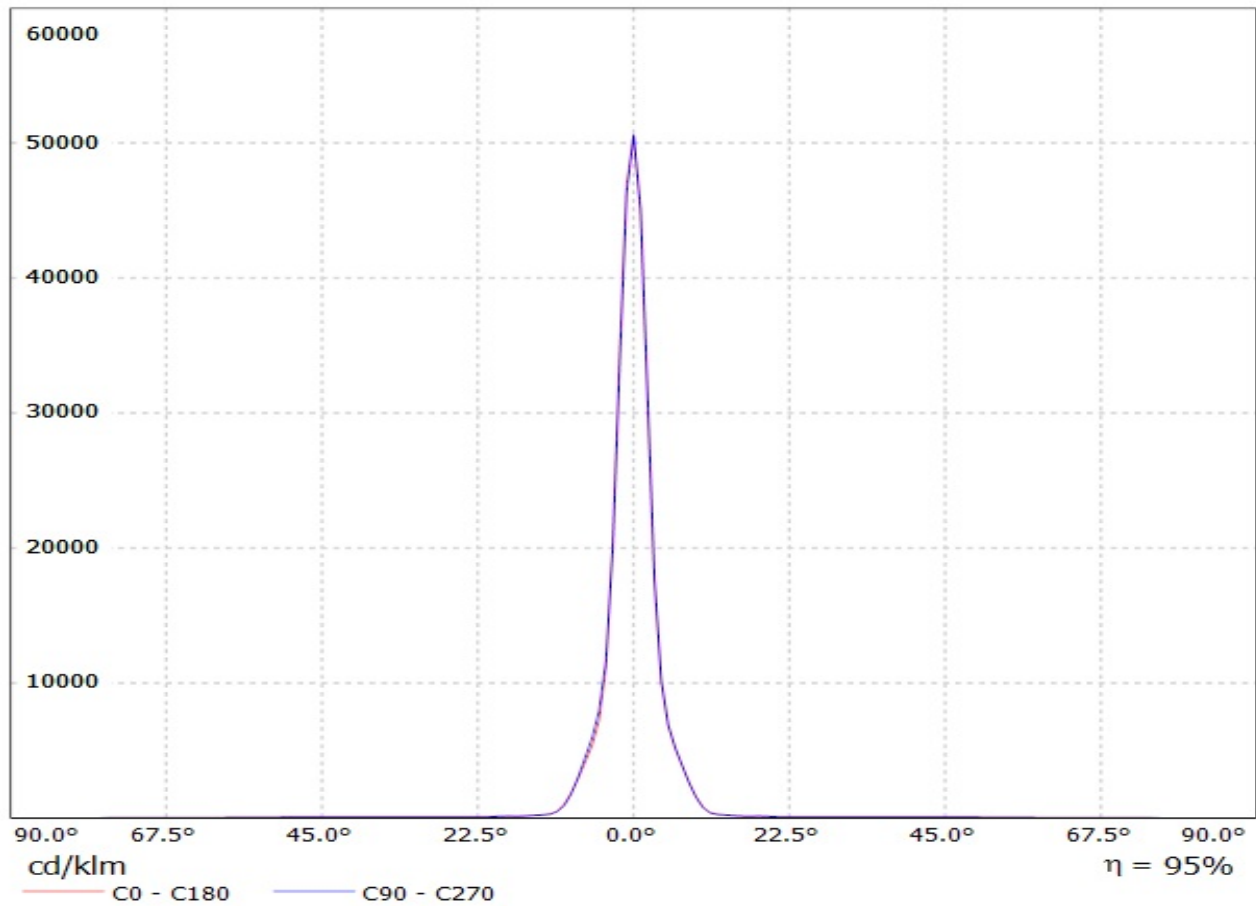
Luminaire: Ledil Oy FCN13595\_CRYSTAL-MINE\_(XHP35\_HI)\_SIMULATED  
Lamps: 1 x Cree XHP35 HI



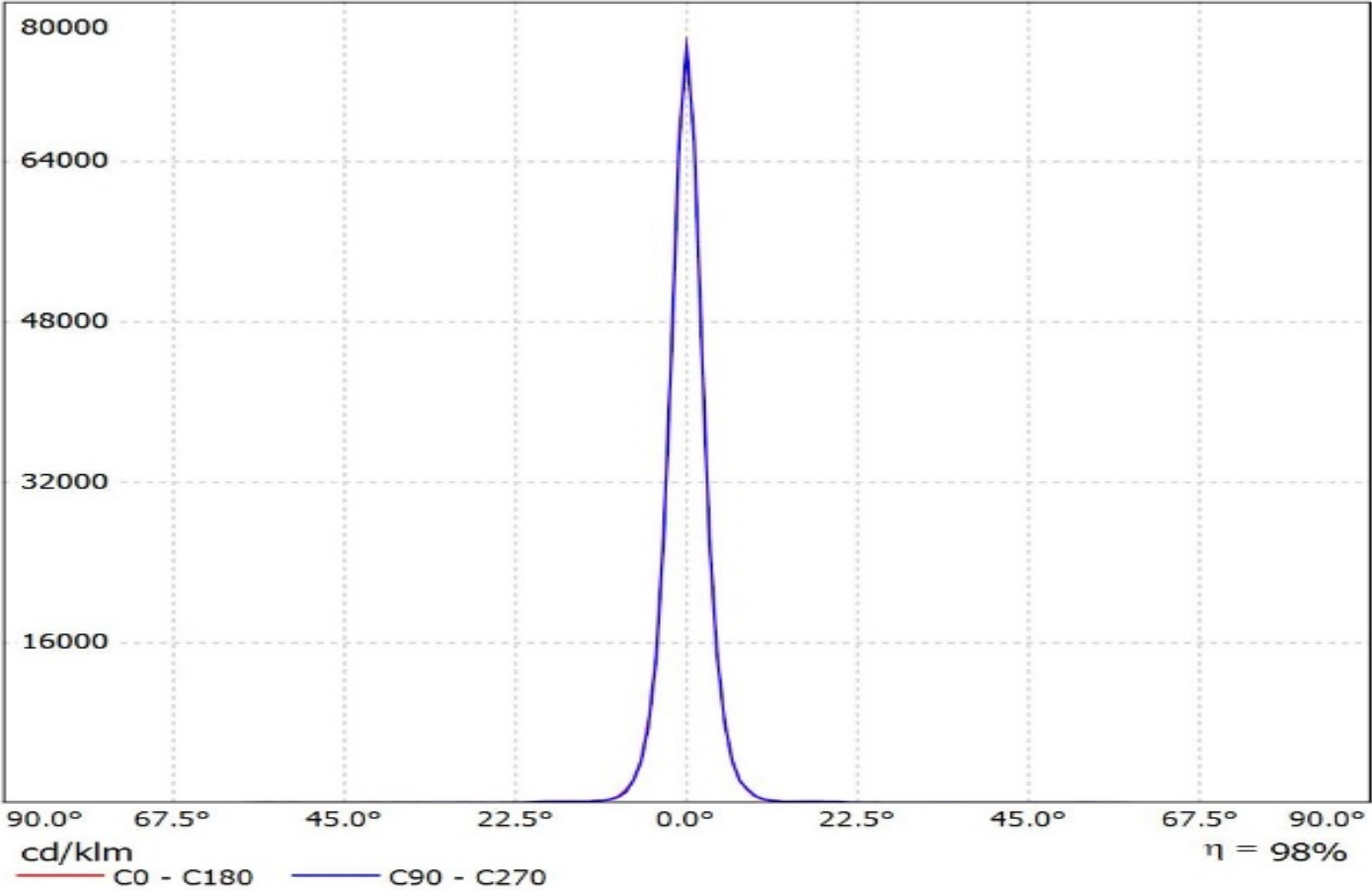
Luminaire: Ledil Oy FCN13595\_CRYSTAL-MINE\_(XHP35\_HD)\_SIMULATED  
Lamps: 1 x Cree XHP35 HD



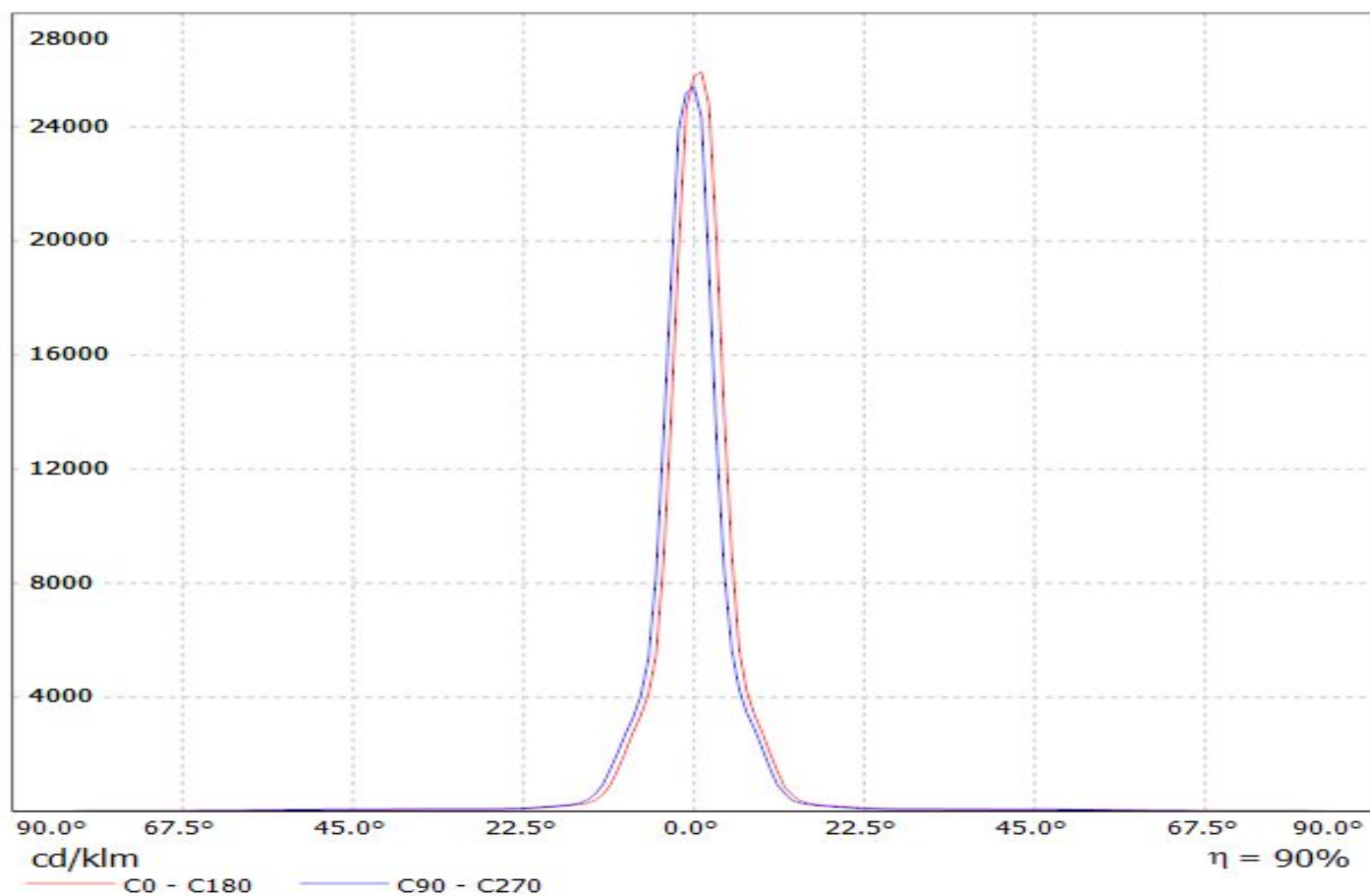
Luminaire: LEDiL Oy CN13595\_CRYSTAL-MINE\_(Luxeon\_TX)  
Lamps: 1 x Philips\_Lumileds\_Luxeon\_TX\_(L1T2-3585)\_79.5244lm@250mA\_CCT=3554K\_P=0.740729W\_I=0.2499A



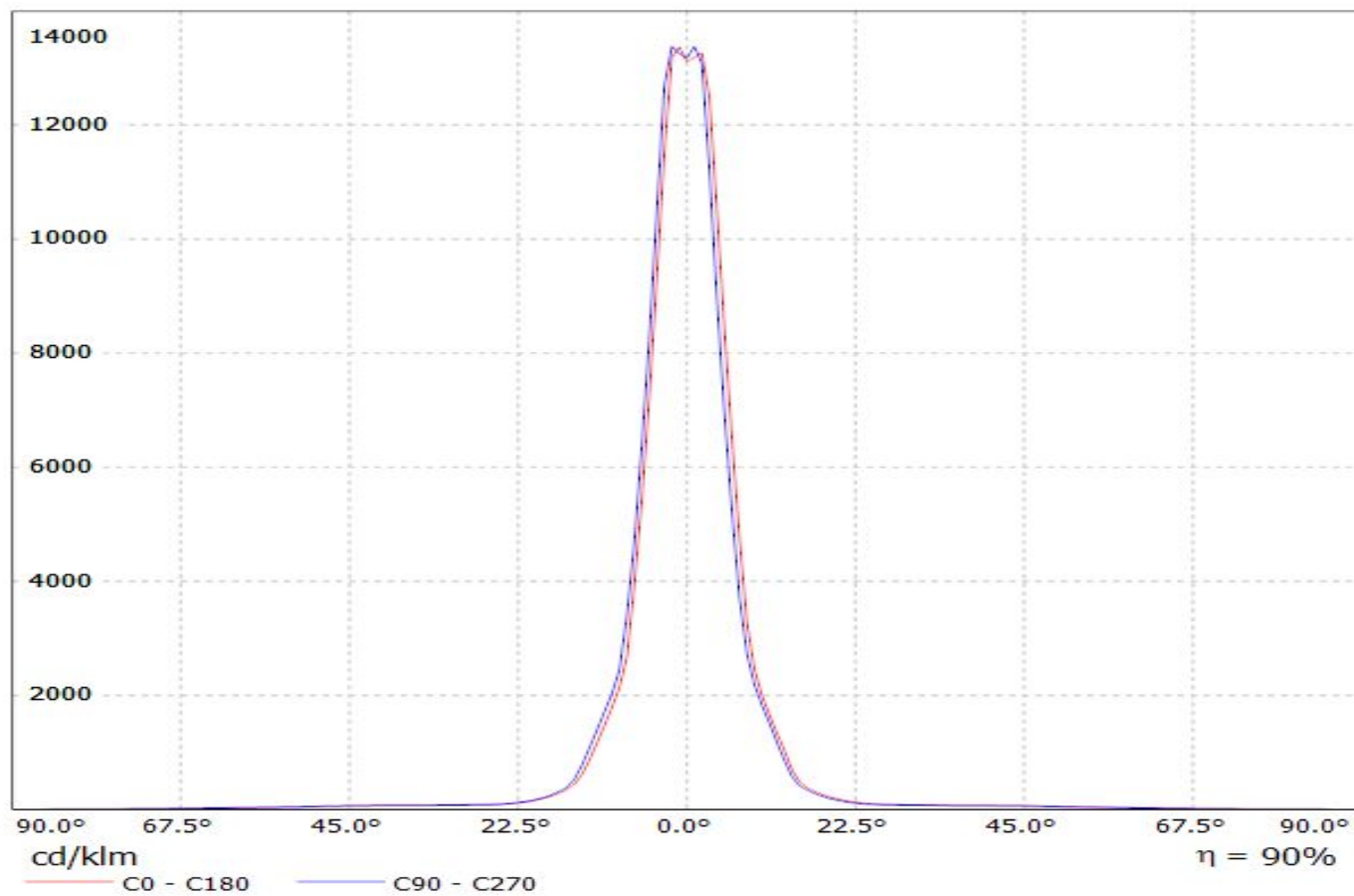
Luminaire: Ledil Oy FCN13595\_CRYSTAL-MINE\_(NCSxx19B)\_SIMULATED  
Lamps: 1 x Nichia NCSxx19B (NCSW219B)



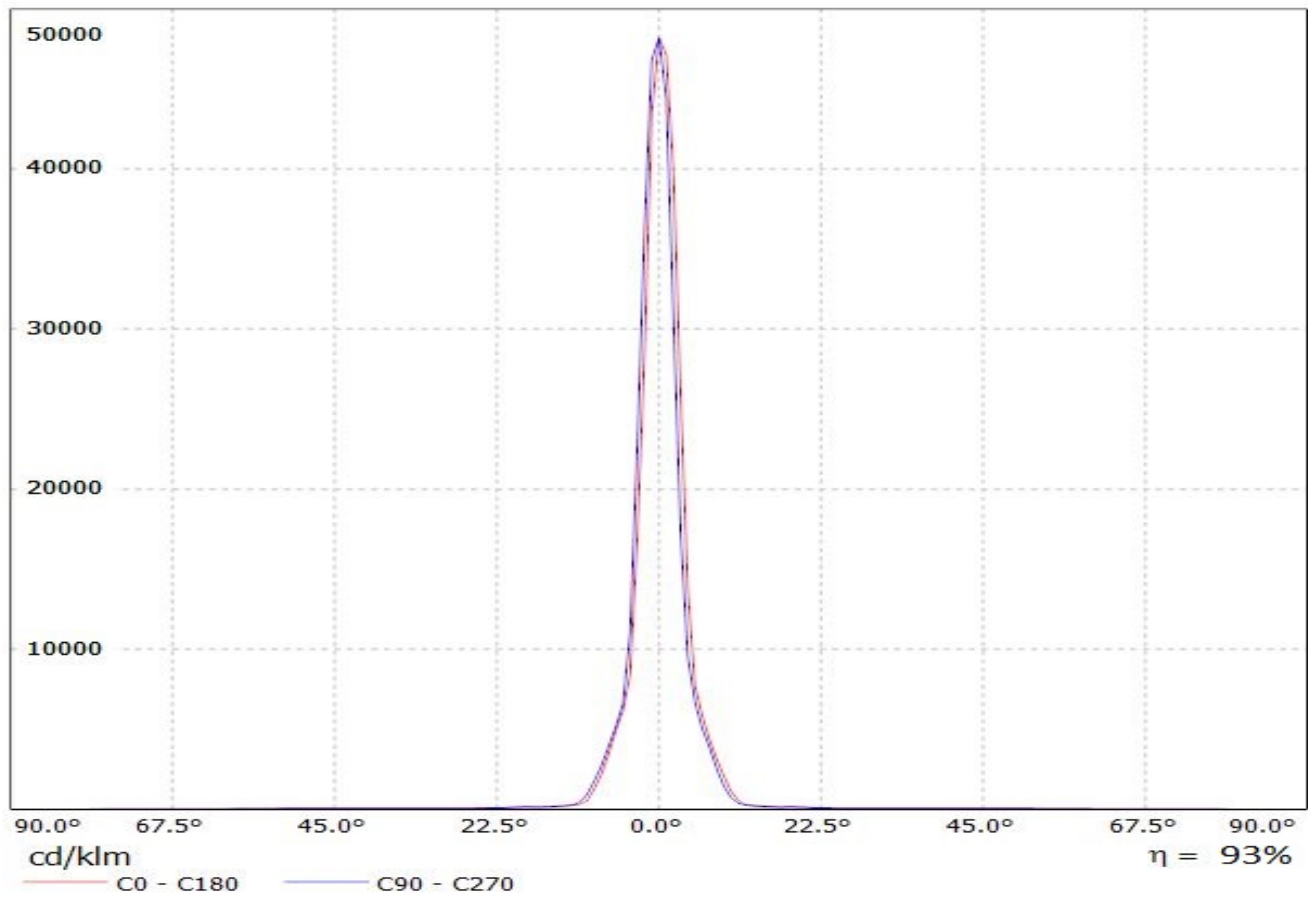
Luminaire: LEDiL Oy FCN13595\_CRYSTAL-MINE\_(NWSL229AE)  
Lamps: 1 x Nichia\_NWSL229AE\_120.514lm@250mA\_P=0.7132W\_I=0.250A



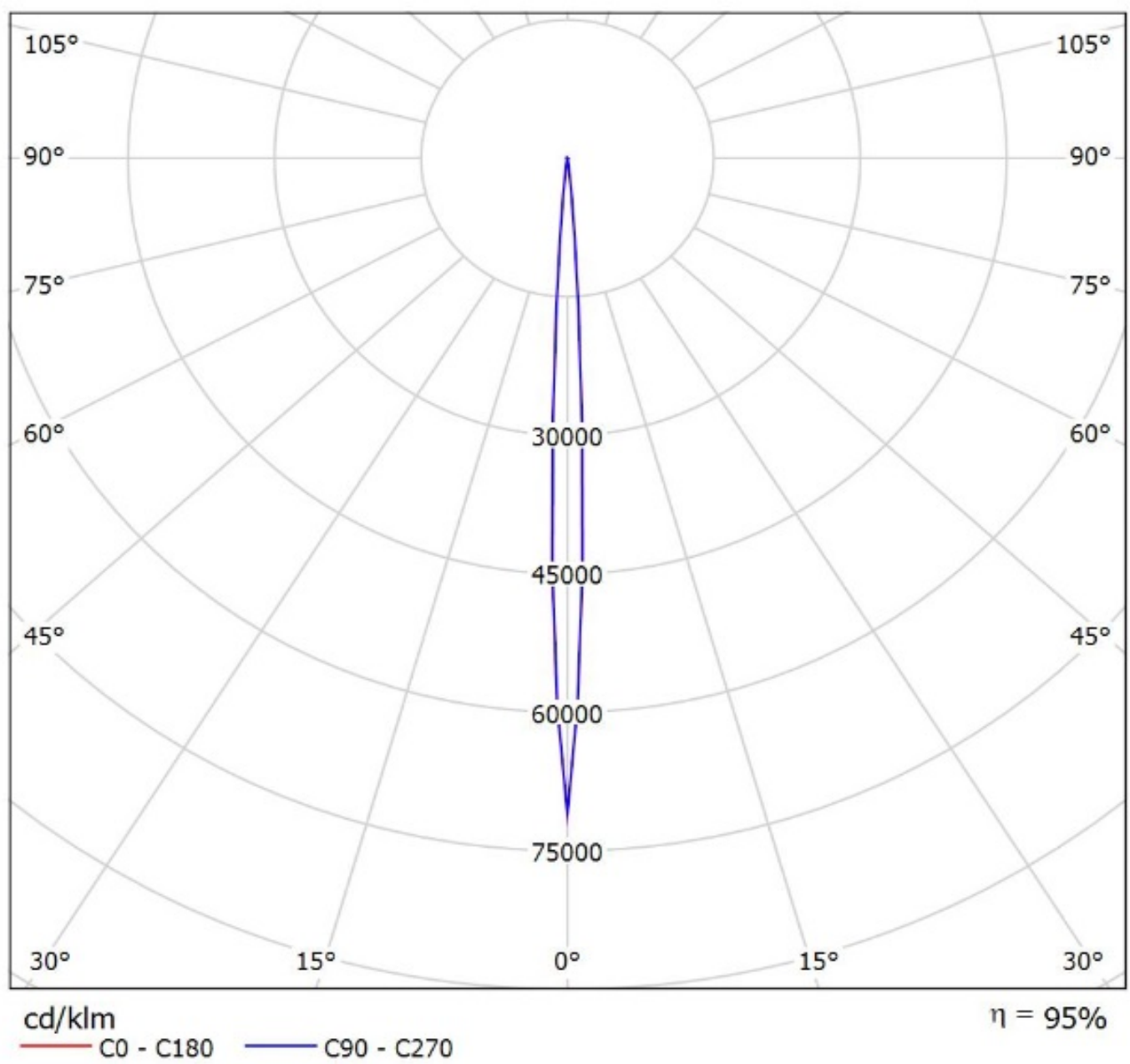
Luminaire: LEDiL Oy FCN13595\_CRYSTAL-MINE\_(Nichia\_NV4x144A)  
Lamps: 1 x Nichia\_NV4x144A\_478.709lm@250mA\_P=2.8097W\_I=0.250A



Luminaire: LEDiL Oy FCN13595\_CRYSTAL-MINE\_(NVSL219CE)  
Lamps: 1 x Nichia\_NVSL219CE\_101.052lm@250mA\_P=0.713154W\_I=0.25A

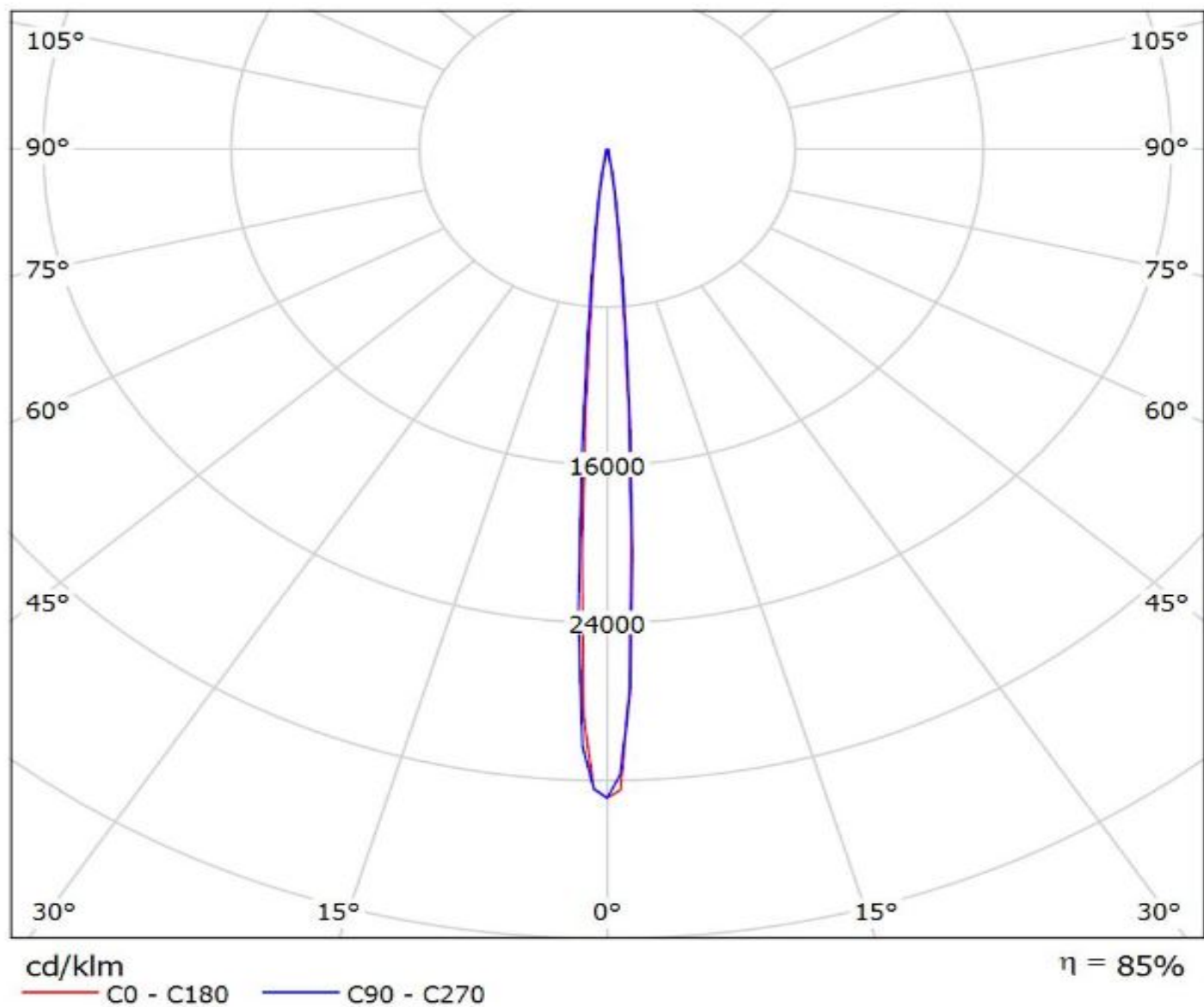


Luminaire: Ledil Oy FCN13595\_CRYSTAL-MINE\_(XP-G2)\_SIMULATED  
Lamps: 1 x Cree XP-G2



## Ledil CN13595\_CRYSTAL-MINE\_(XP-L) / LDC (Polar)

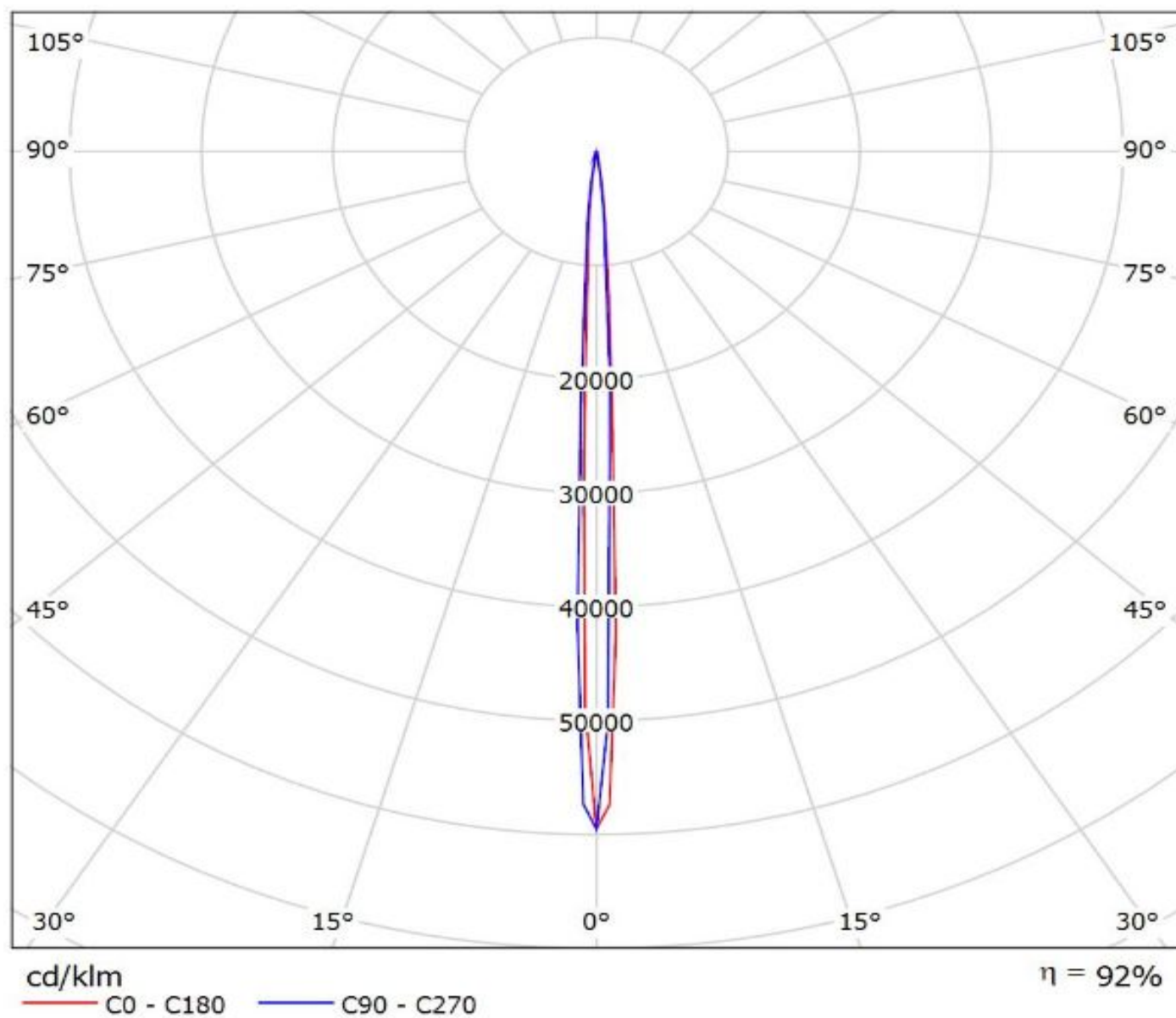
Luminaire: Ledil CN13595\_CRYSTAL-MINE\_(XP-L)  
Lamps: 1 x CREE\_XP-L\_(XPLAWT-0-7A3-U50-0H-0001)  
\_107.852lm@250mA\_CCT=3185K\_P=0.7W\_I=0.25A



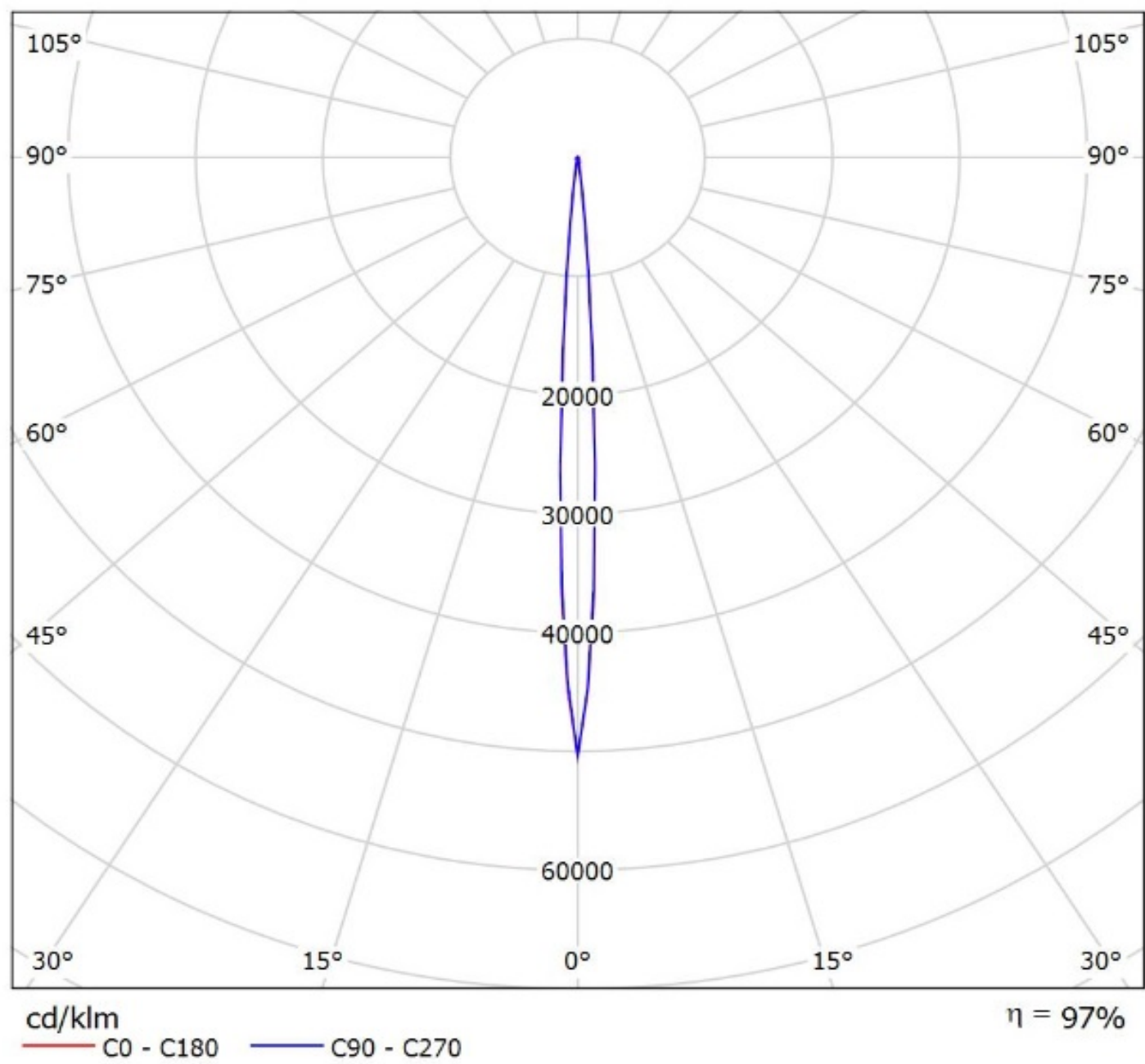
## Ledil CN13595\_CRYSTAL-MINE\_(XP-L\_HI) / LDC (Polar)

Luminaire: Ledil CN13595\_CRYSTAL-MINE\_(XP-L\_HI)

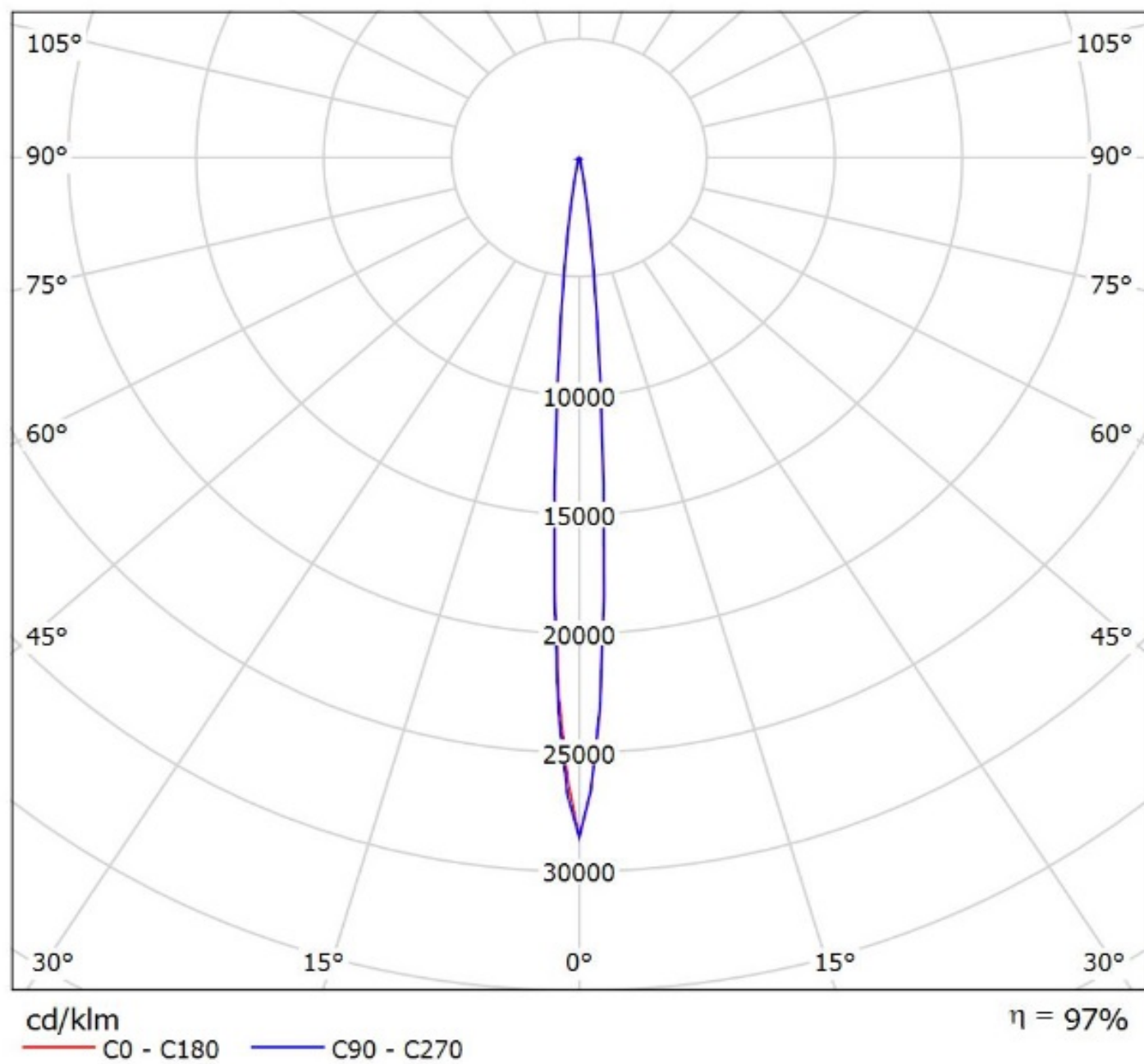
Lamps: 1 x Cree\_XP-L\_HI\_21.6891lm@250mA\_P=0.13W\_I=0.05A



Luminaire: Ledil Oy FCN13595\_CRYSTAL-MINE\_(XHP35\_HI)\_SIMULATED  
Lamps: 1 x Cree XHP35 HI

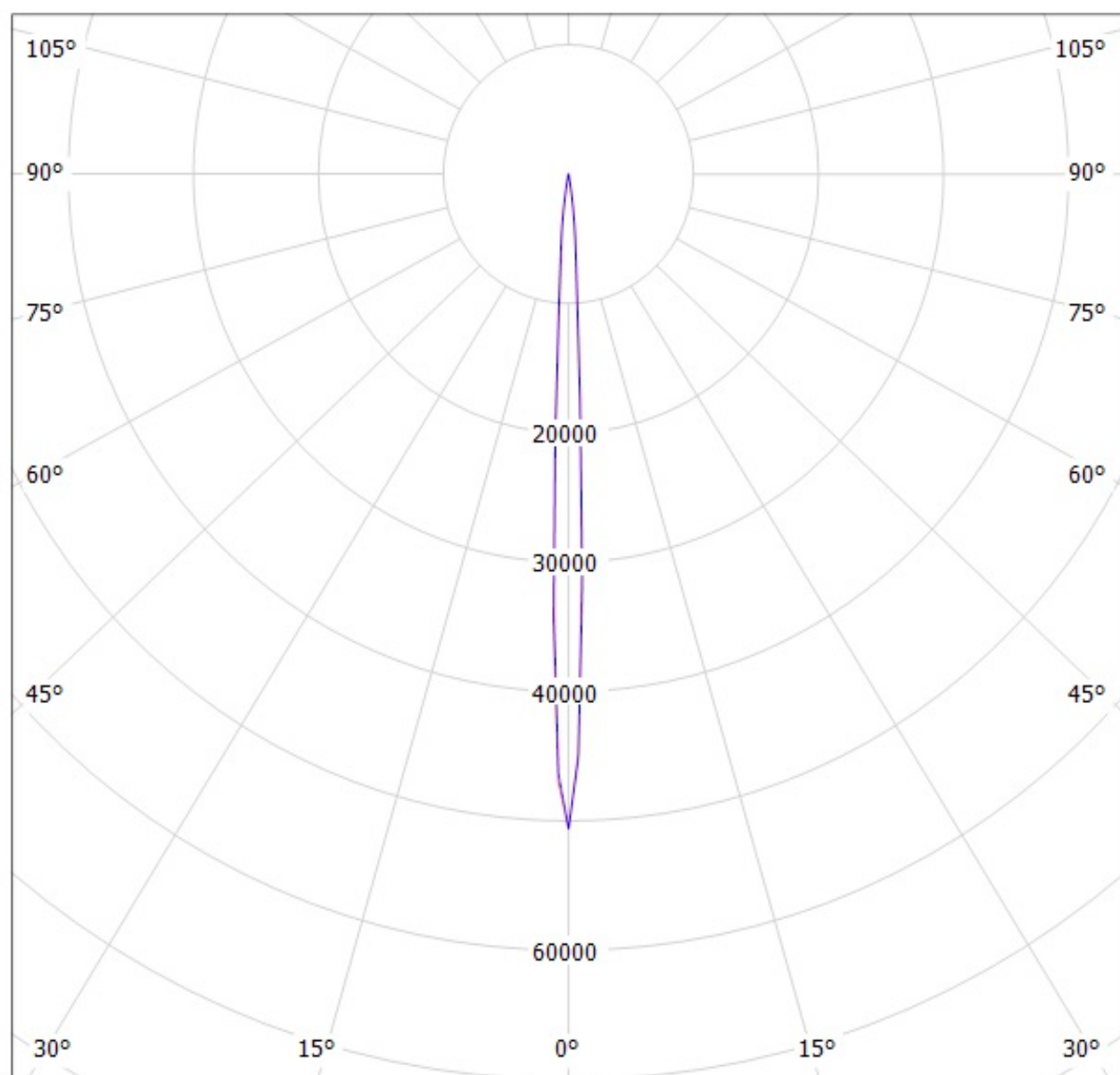


Luminaire: Ledil Oy FCN13595\_CRYSTAL-MINE\_(XHP35\_HD)\_SIMULATED  
Lamps: 1 x Cree XHP35 HD



Luminaire: LEDiL Oy CN13595\_CRYSTAL-MINE\_(Luxeon\_TX)

Lamps: 1 x Philips\_Lumileds\_Luxeon\_TX\_(L1T2-3585)\_79.5244lm@250mA\_CCT=3554K\_P=0.740729W\_I=0.2499A

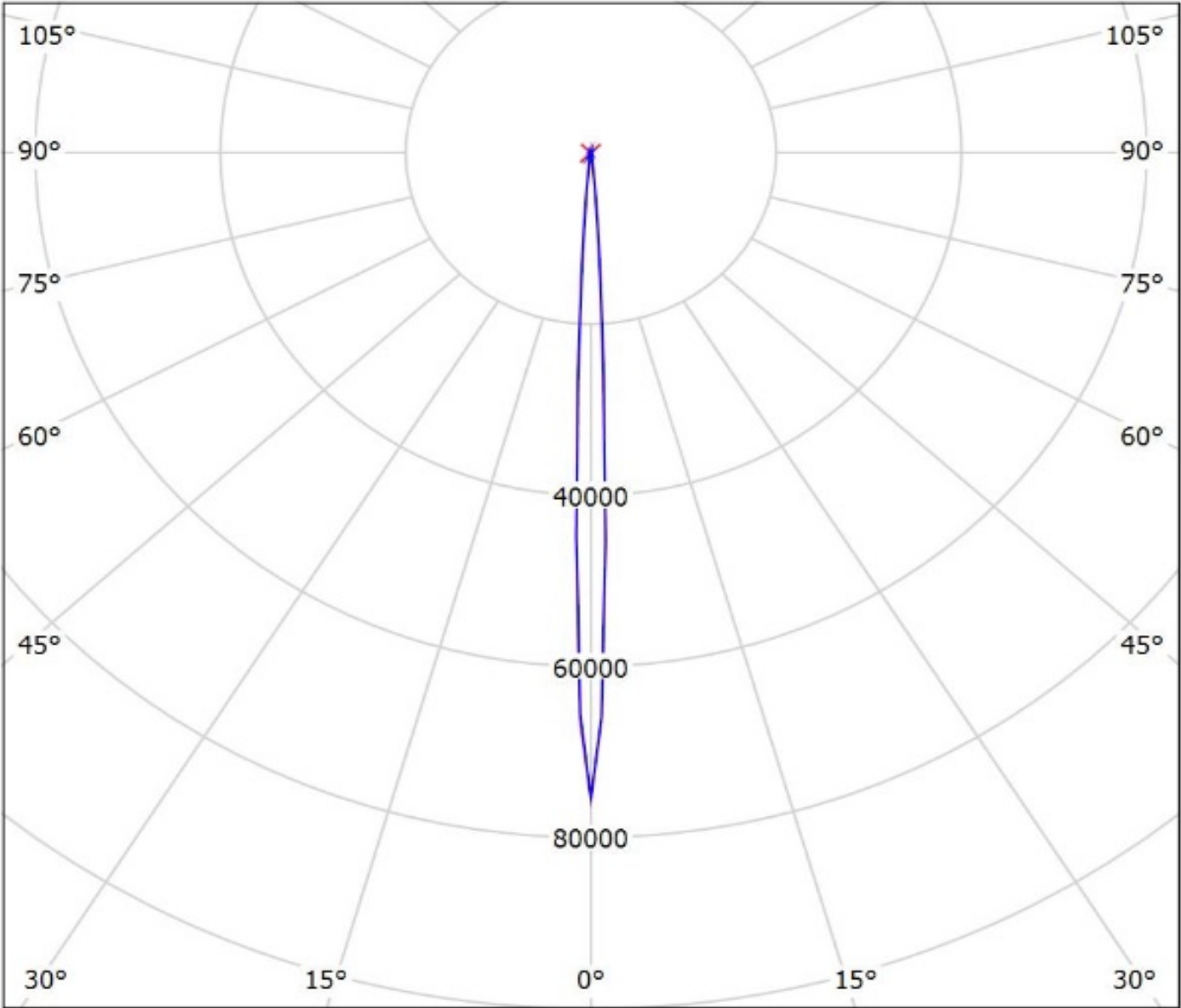


cd/klm

$\eta = 95\%$

— C0 - C180 — C90 - C270

Luminaire: Ledil Oy FCN13595\_CRYSTAL-MINE\_(NCSxx19B)\_SIMULATED  
Lamps: 1 x Nichia NCSxx19B (NCSW219B)



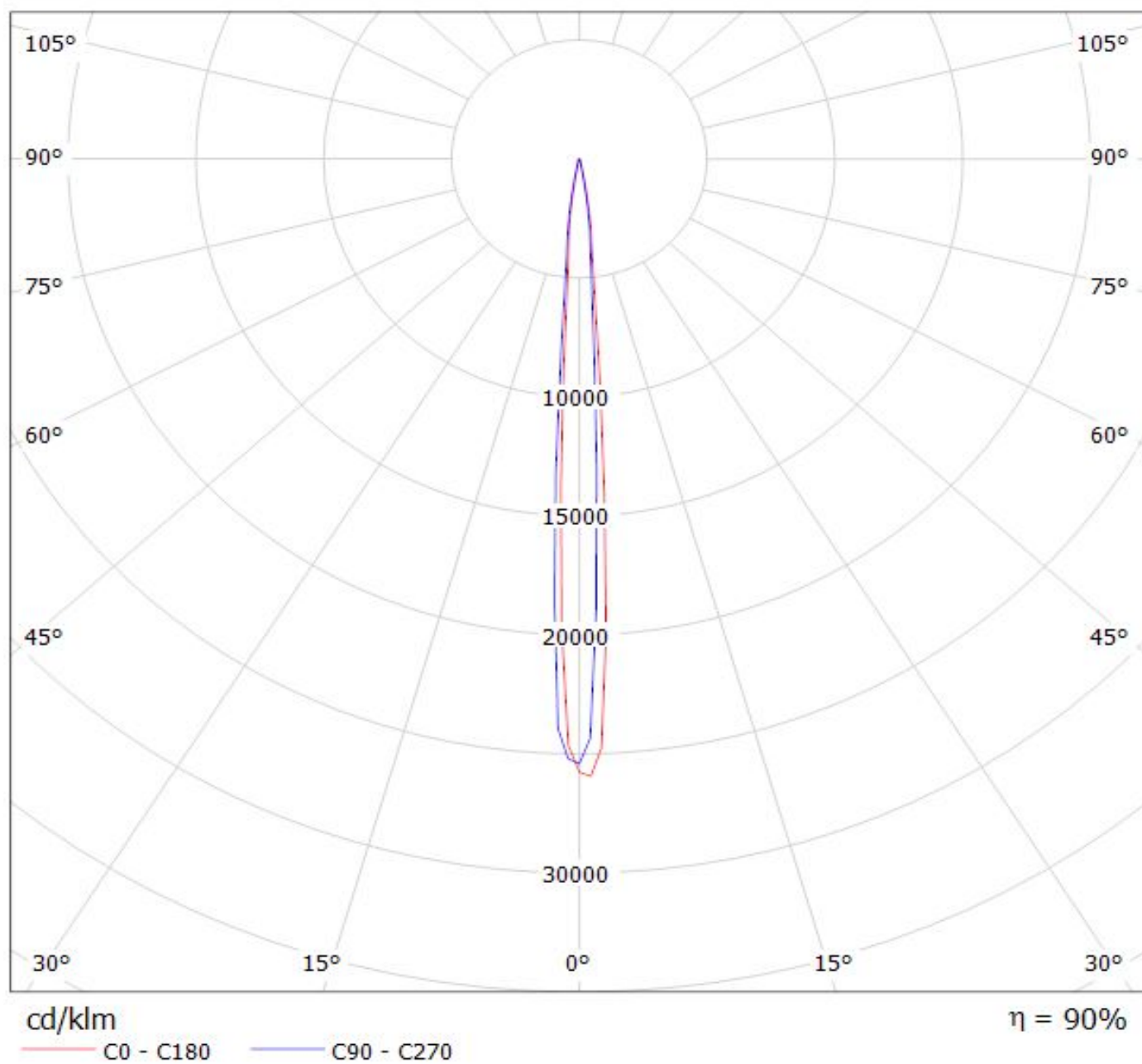
cd/klm

— C0 - C180 — C90 - C270

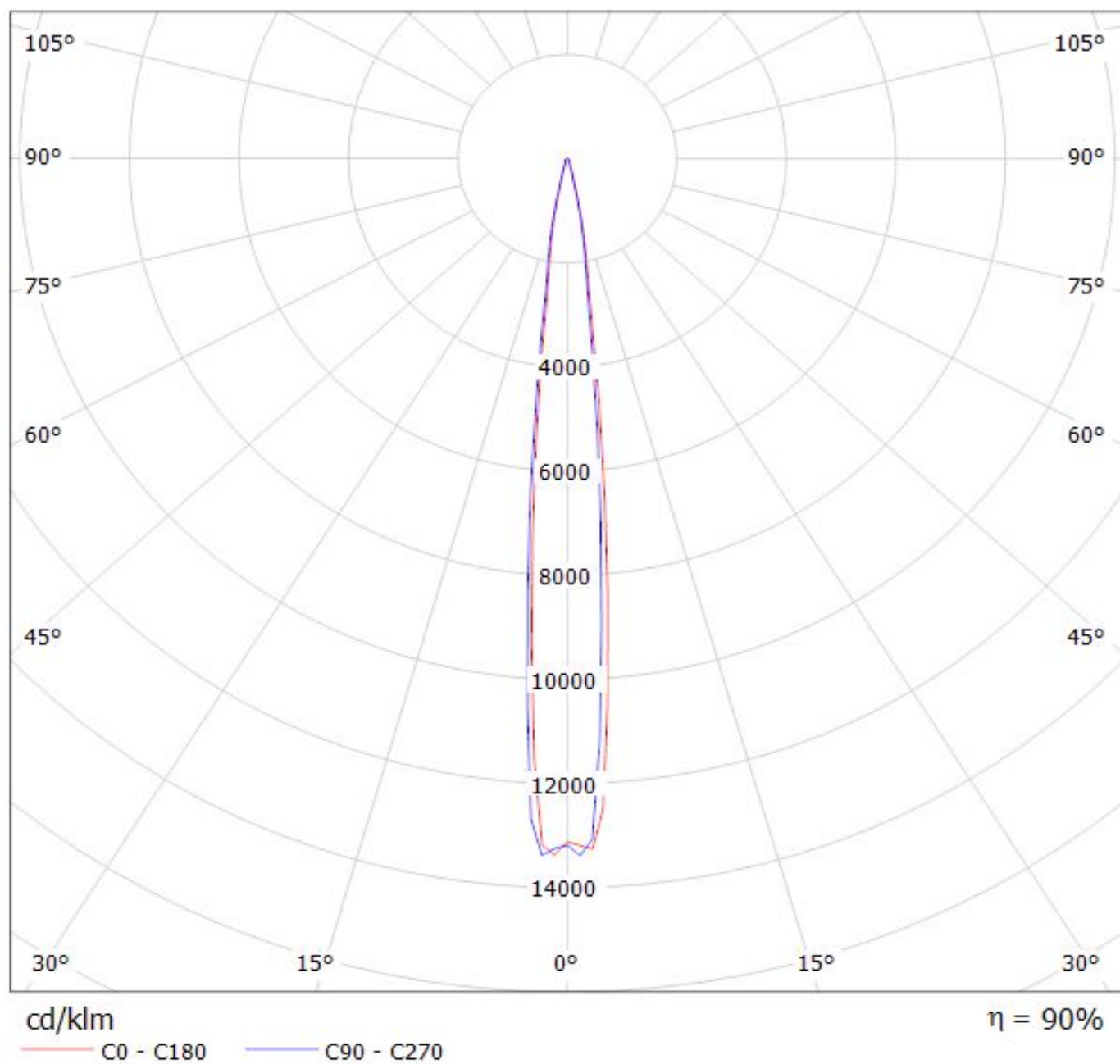
$\eta = 98\%$

Luminaire: LEDiL Oy FCN13595\_CRYSTAL-MINE\_(NWSL229AE)

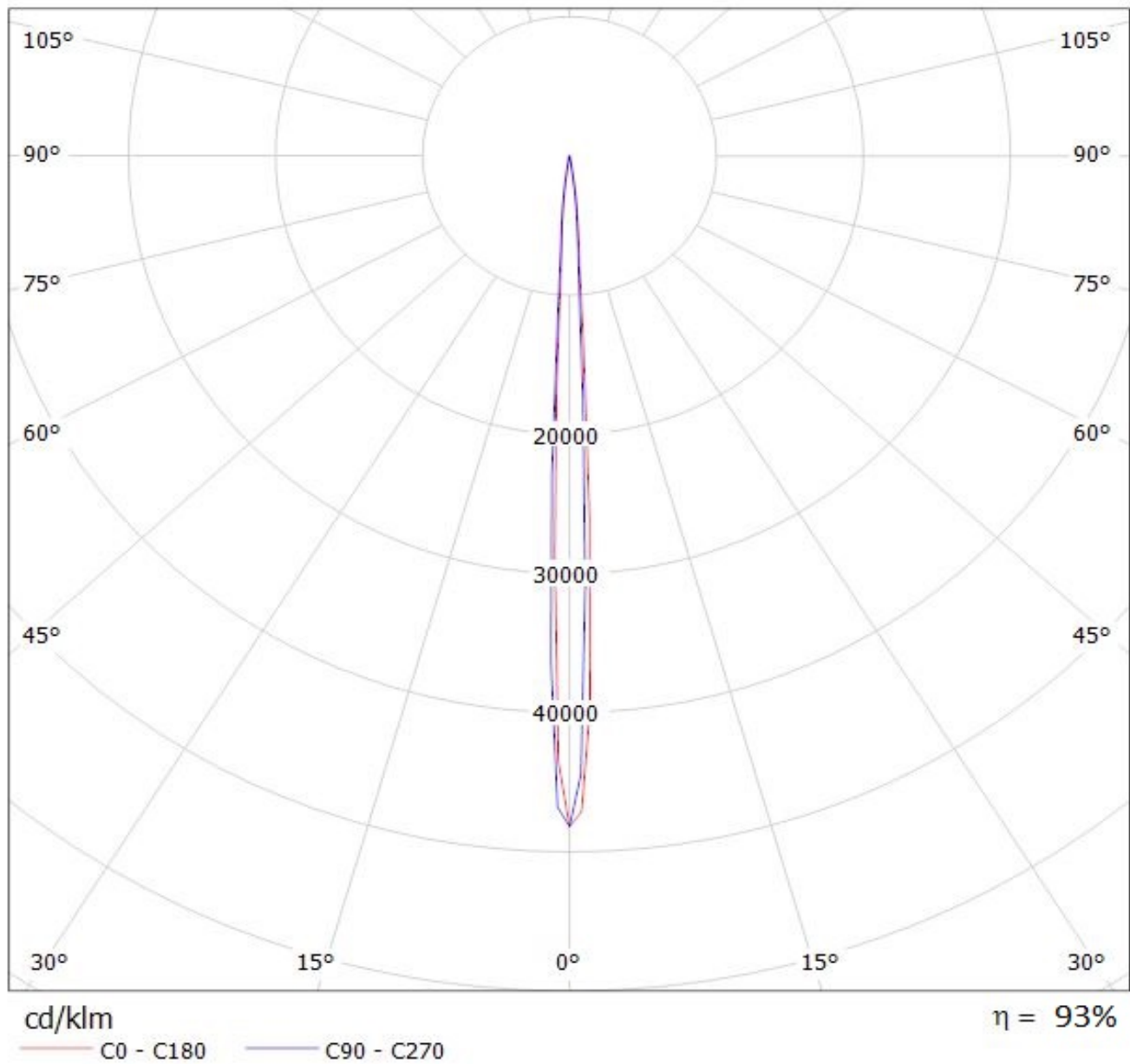
Lamps: 1 x Nichia\_NWSL229AE\_120.514lm@250mA\_P=0.7132W\_I=0.250A



Luminaire: LEDiL Oy FCN13595\_CRYSTAL-MINE\_(Nichia\_NV4x144A)  
Lamps: 1 x Nichia\_NV4x144A\_478.709lm@250mA\_P=2.8097W\_I=0.250A



Luminaire: LEDiL Oy FCN13595\_CRYSTAL-MINE\_(NVSL219CE)  
Lamps: 1 x Nichia\_NVSL219CE\_101.052lm@250mA\_P=0.713154W\_I=0.25A



**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.**