# PRODUCT DATASHEET
# Leila series
last update 18/8/2016

## DETAILS

| | |
|---|---|
| **Product Number** | CA14509_G2-LXP2-M-P |
| **Family** | Leila |
| **Type** | Assembly |
| **Color** | black |
| **Diameter** | 21,8 mm |
| **Height** | 14,7 mm |
| **Style** | round |
| **Optic Material** | |
| **Holder Material** | |
| **Fastening** | tape, pin |
| **Status** | production ready |
| **ROHS Compliant** | Yes |
| **Date Updated** | 18/08/2016 |

## OPTICAL PROPERTIES

| LED | Viewing Angle | Light Beam | Effi-ciency | cd/lm | Connector |
|---|---|---|---|---|---|
| XP-E | 22 deg | Medium | 88 % | 5.170 | - |
| XP-L | 24 deg | Medium | 86 % | 4.100 | - |
| XP-G2 | sim: 25 | Medium | sim: 93 % | sim: 4.800 | - |
| XT-E | sim: 26 | Medium | sim: 89 % | sim: 4.300 | - |
| XP-G3 | sim: 26 | Medium | sim: 89 % | sim: 4.000 | - |
| H35C1 (LEMWA33) | sim: 26 | Medium | sim: 91 % | sim: 4.300 | - |
| LUXEON C | 23 deg | Medium | 82 % | 5.300 | - |
| LUXEON T | sim: 26 | Medium | sim: 92 % | sim: 4.300 | - |
| LUXEON TX | sim: 26 | Medium | sim: 91 % | sim: 4.200 | - |
| LUXEON IR Compact | sim: 26 | Medium | sim: 84 % | sim: 0.000 | - |
| LUXEON IR Domed 60 | sim: 24 | Medium | sim: 88 % | sim: 0.000 | - |
| LUXEON IR Domed 90 | sim: 26 | Medium | sim: 90 % | sim: 0.000 | - |
| LUXEON V | 26 deg | Medium | 86 % | 3.600 | - |
| NCSxx19A | 22 deg | Medium | 86 % | 4.600 | - |
| NWSx229A | 25 deg | Medium | 86 % | 3.600 | - |
| NVSxx19B/NVSxx19C | sim: 25 | Medium | sim: 88 % | sim: 4.100 | - |
| NVSW3x9A | 24 deg | Medium | 86 % | 4.300 | - |
| Oslon Square Gen3 | sim: 26 | Medium | sim: 92 % | sim: 4.400 | - |
| Oslon SSL 80 | sim: 27 | Medium | sim: 91 % | sim: 4.600 | - |
| SFH 4770S | sim: 25 | Medium | sim: 84 % | - | - |
| Oslon Black Flat | sim: 24 | Medium | sim: 91 % | sim: 4.800 | - |
| LH351B | sim: 25 | Medium | sim: 91 % | sim: 4.500 | - |
| LH351A(3535) | sim: 25 | Medium | sim: 91 % | sim: 4.400 | - |
| Z5P | sim: 26 | Medium | sim: 91 % | sim: 4.300 | - |
| Z5M1/Z5M2 | sim: 24 | Medium | sim: 92 % | sim: 4.800 | - |



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# PRODUCT DATASHEET
# Leila series
last update 18/8/2016

## OPTICAL PROPERTIES

| LED | Viewing Angle | Light Beam | Effi-ciency | cd/lm | Connector |
|---|---|---|---|---|---|
| Z8Y22P | 26 deg | Medium | 81 % | 3.700 | - |



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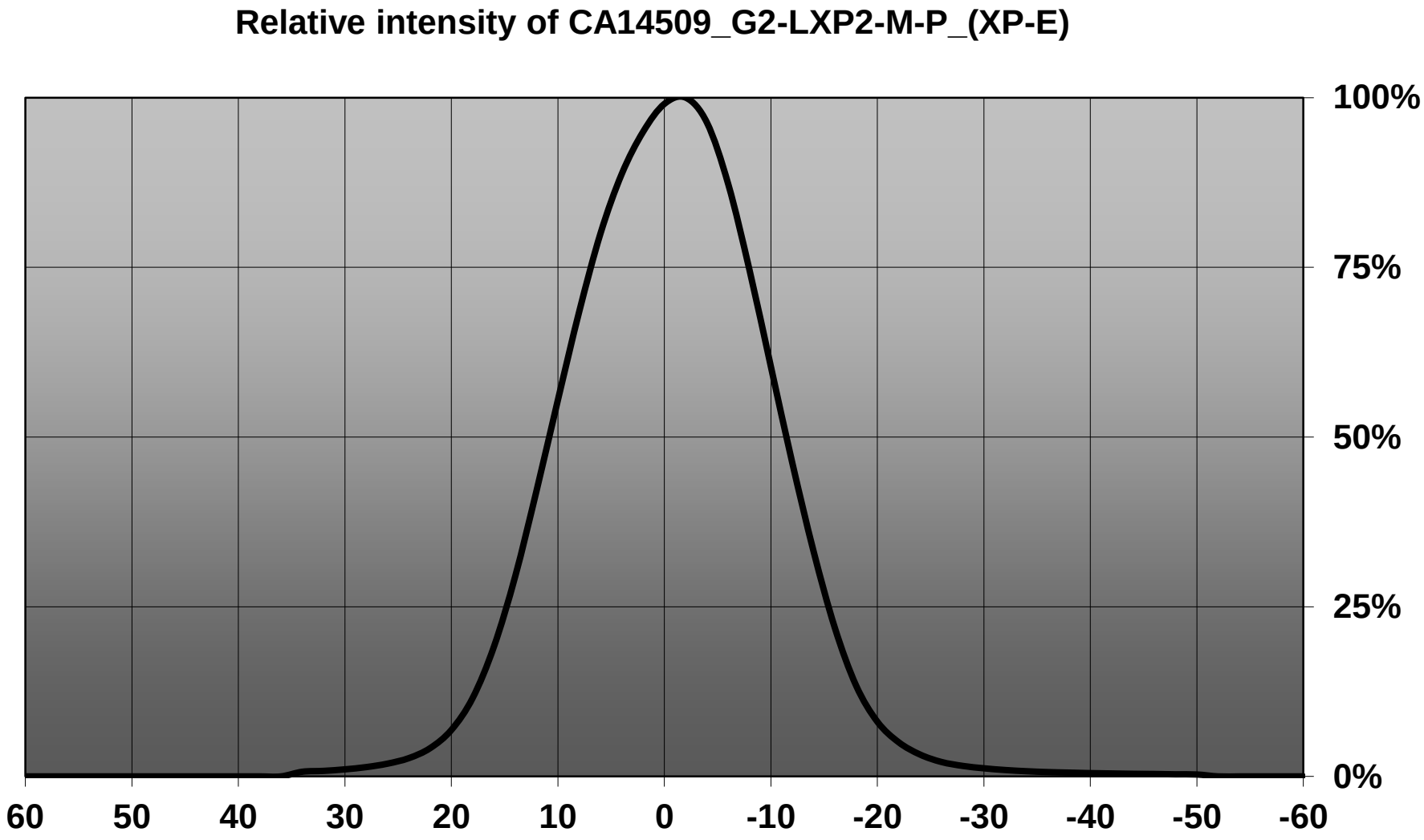
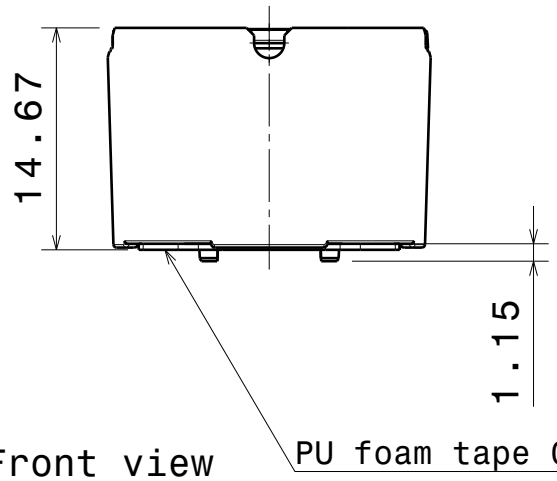
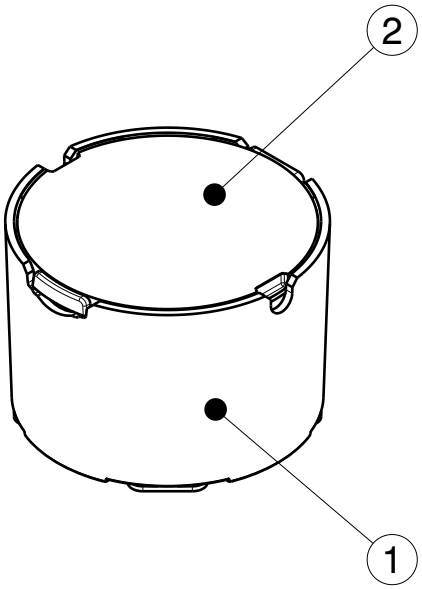

Relative intensity of CA14509_G2-LXP2-M-P_(XP-E)
100%
75%
50%
25%
0%
60
50
40
30
20
10
0
-10
-20
-30
-40
-50
-60

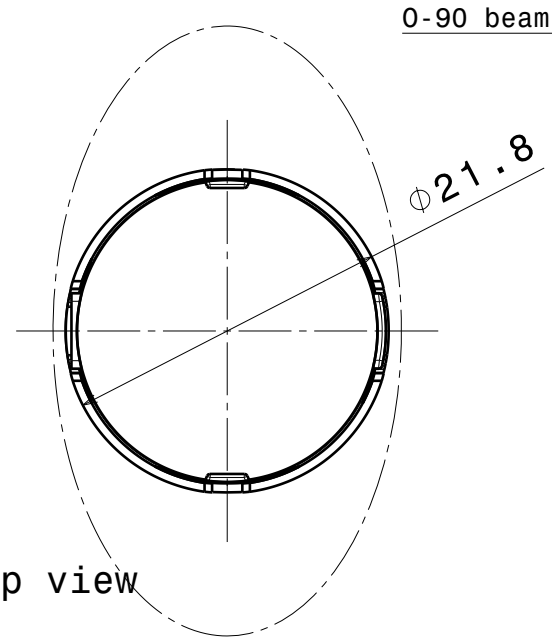
| Applies to: |
|---|
| CA14503 |
| CA14505 |
| CA14507 |
| CA14509 |
| CA14511 |



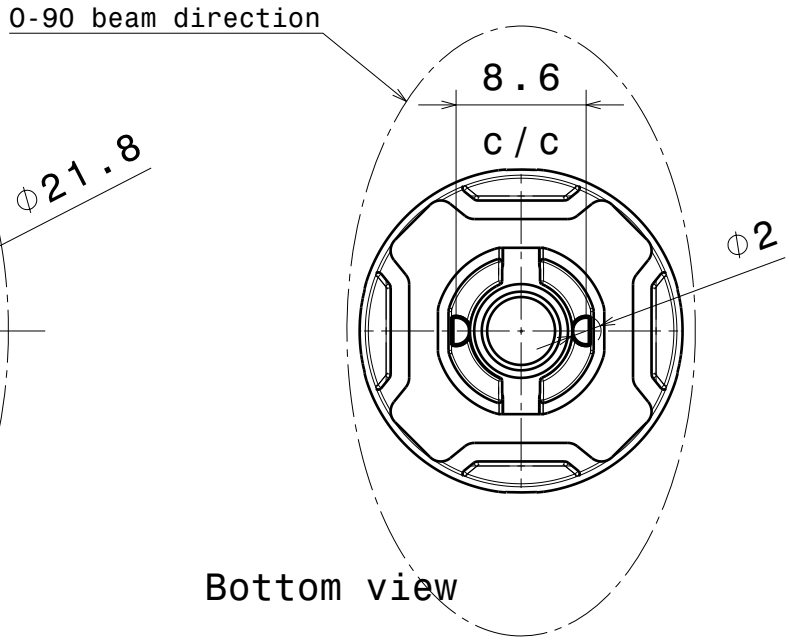

Front view




Isometric view




Top view




Bottom view

| INDEX | PART NO | DESCRIPTION | MATERIAL | COLOUR |
|---|---|---|---|---|
| 1 | C14443 | LXP2-LT-HLD | PC | black |
| 2 | - | LXP2-series_mech lens | PMMA | clear |

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 Oy
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FIN 24240 SALO
Finland

THIRD ANGLE PROJECTION:



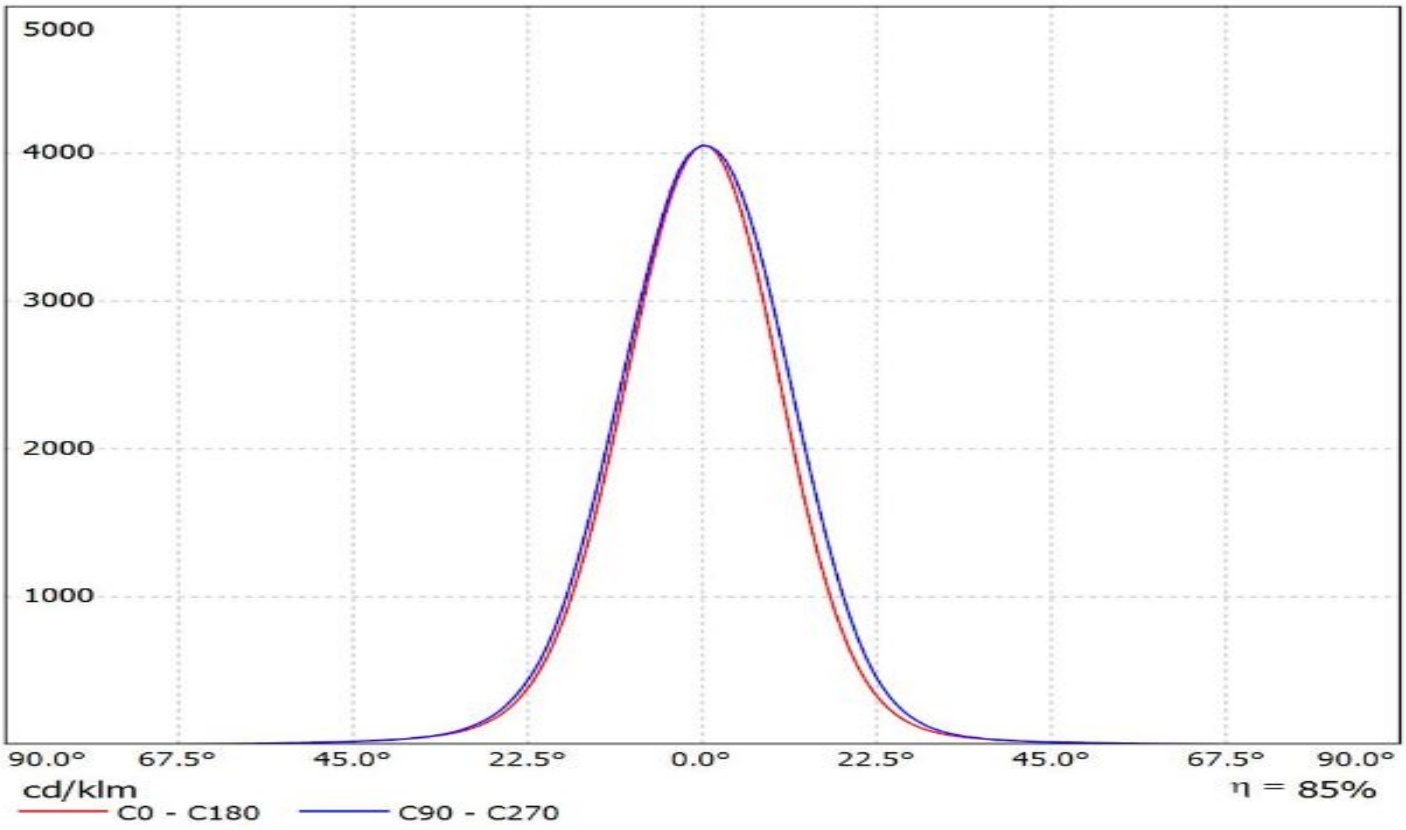
DRAWING TITLE

# LEILA-G2-LXP2-PIN

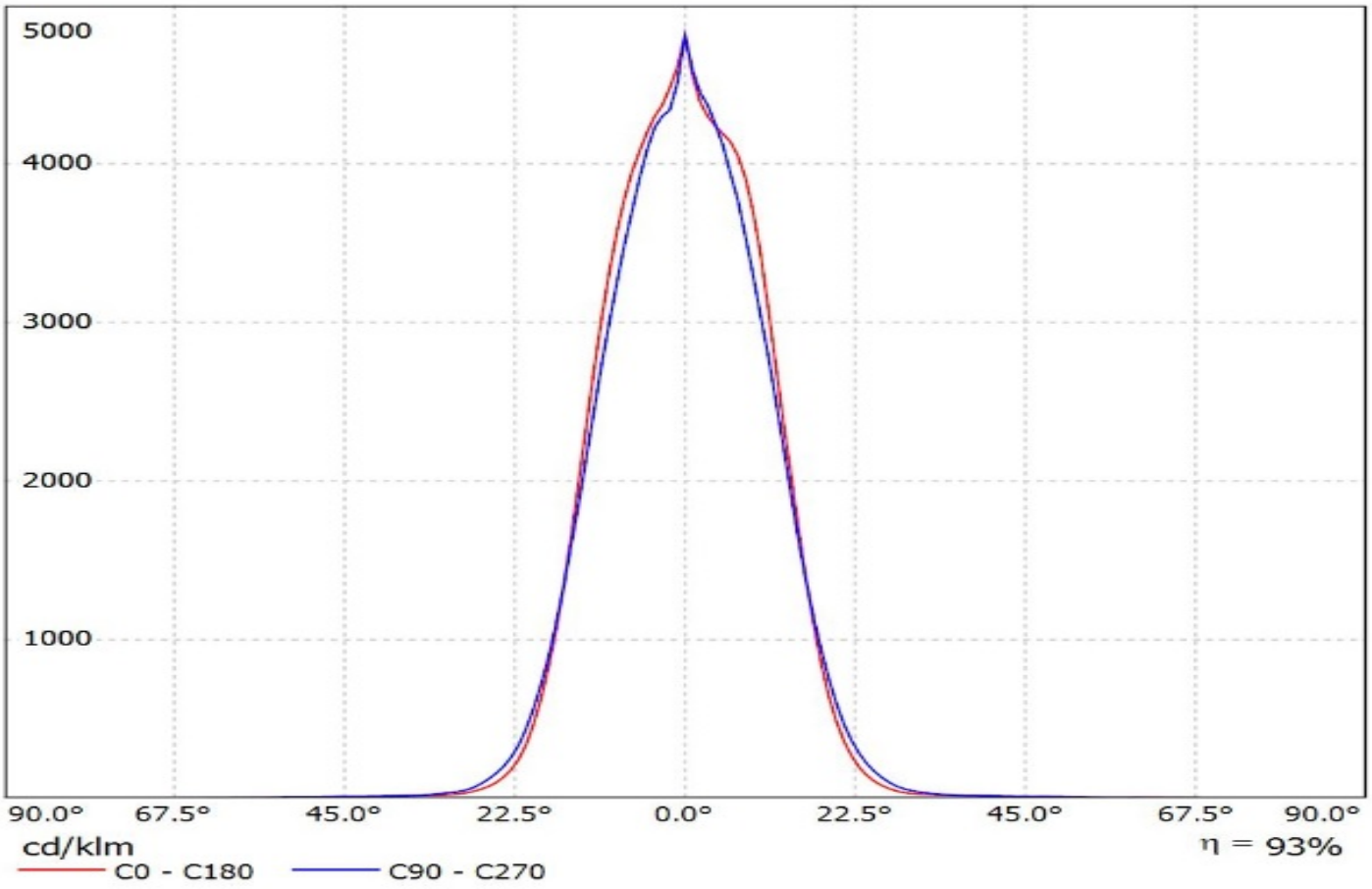
| SIZE | PART NUMBER |
|---|---|
| A4 | - |

| SCALE | WEIGHT | | SHEET |
|---|---|---|---|
| 2:1 | 4,0 g | | 1/1 |

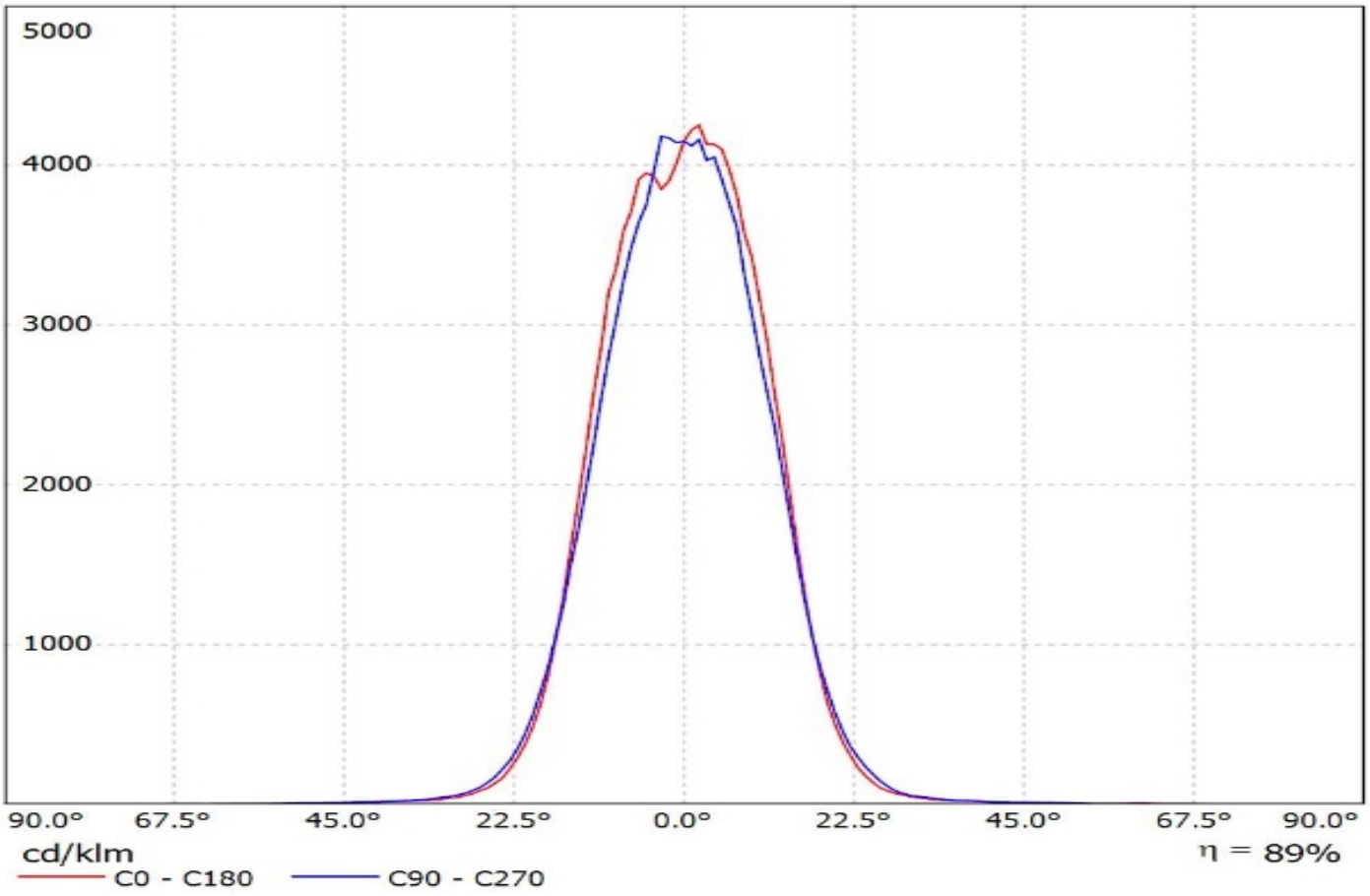
Luminaire: Ledil CA14509_G2-LXP2-M-P_(XP-L)
Lamps: 1 x CREE_XP-L_(XPLAWT-0-7A3-U50-0H-0001)
_107.852lm@250mA_CCT=3185K_P=0.7W_I=0.25A



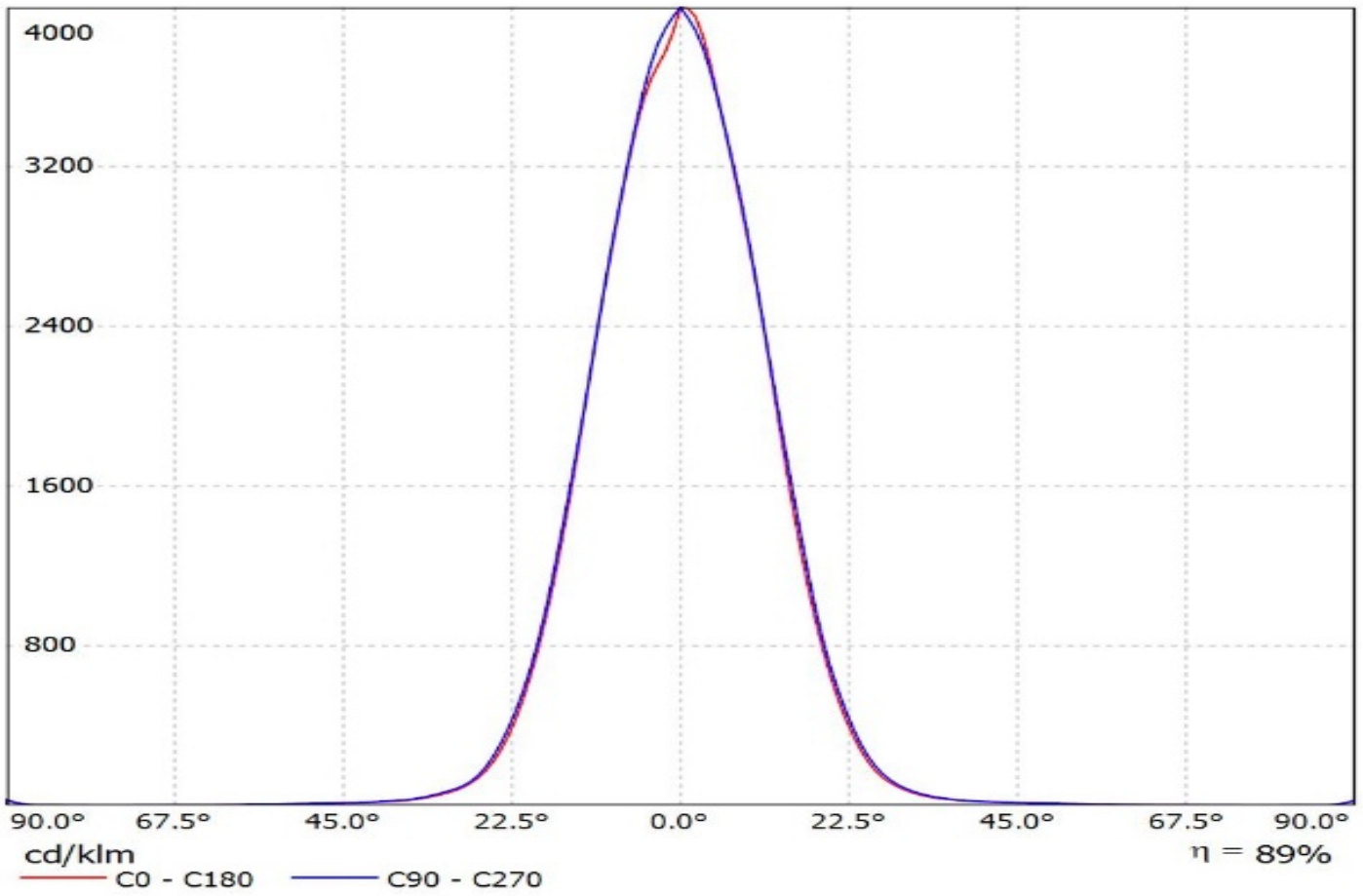
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_XP-G2_SIMULATED
Lamps: 1 x CREE XP-G2



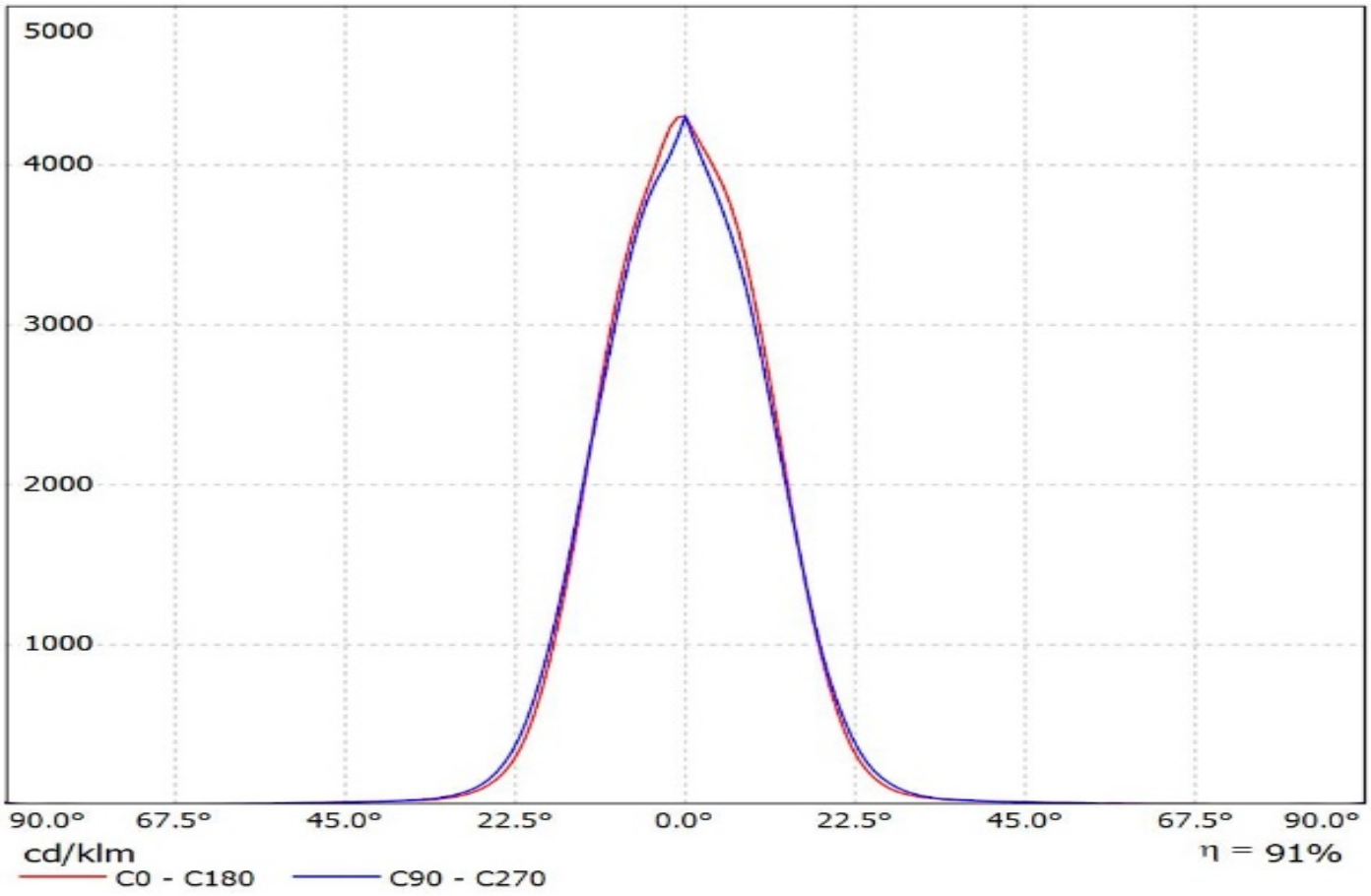
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_XT-E_SIMULATED
Lamps: 1 x CREE XT-E



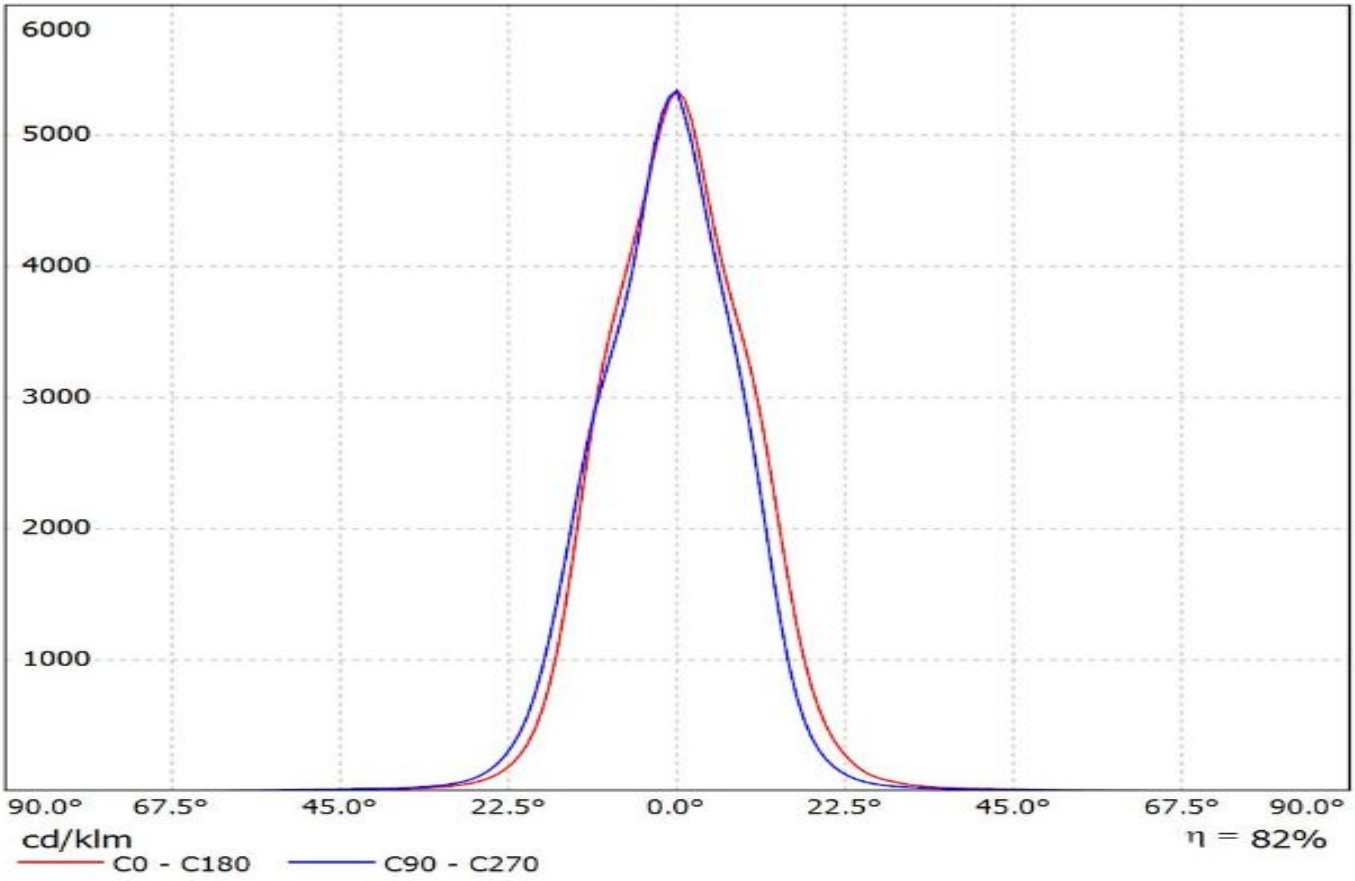
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(XP-G3)_SIMULATED
Lamps: 1 x Cree XP-G3



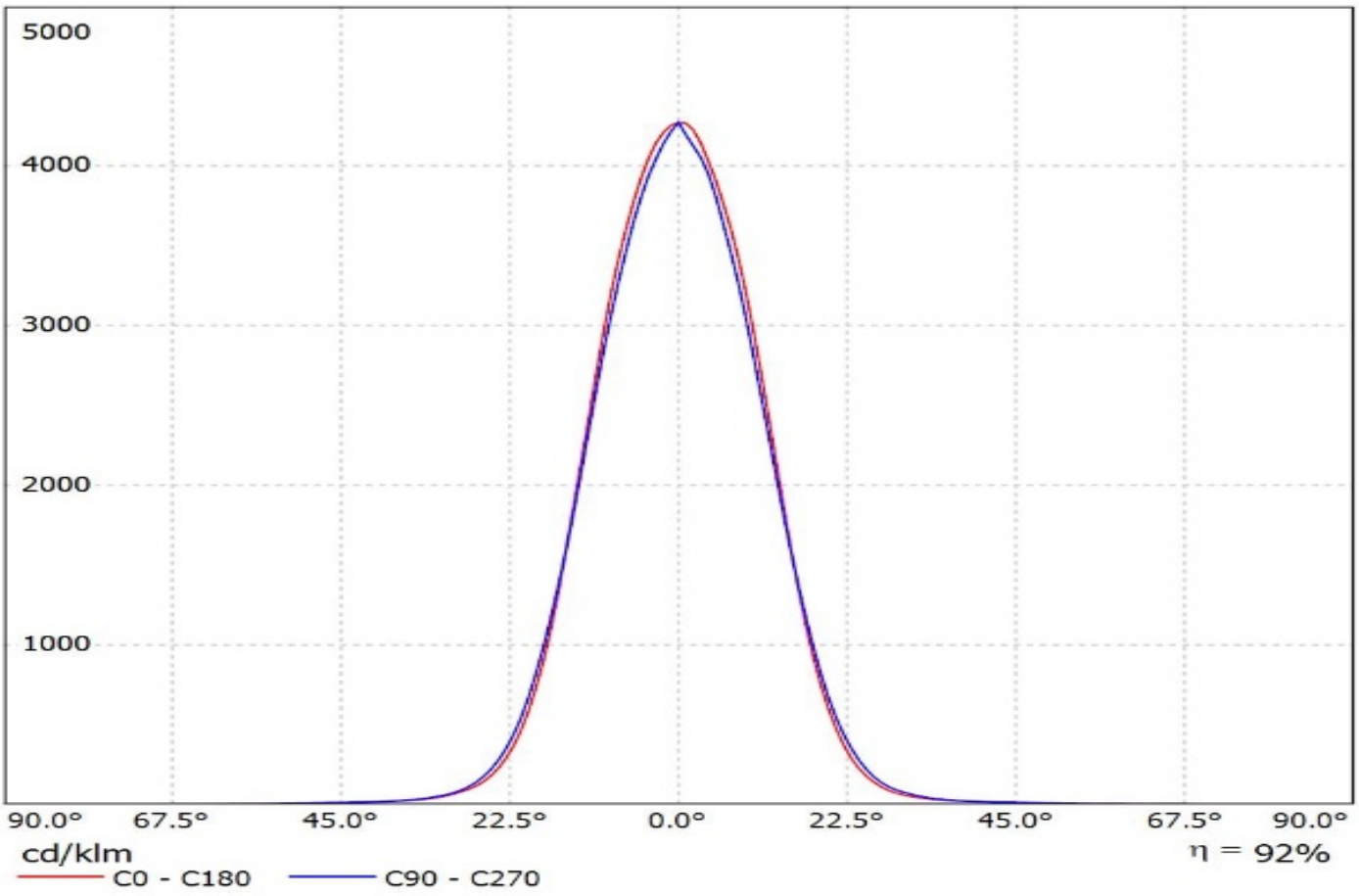
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(LG_H35C1)_SIMULATED
Lamps: 1 x LG H35C1



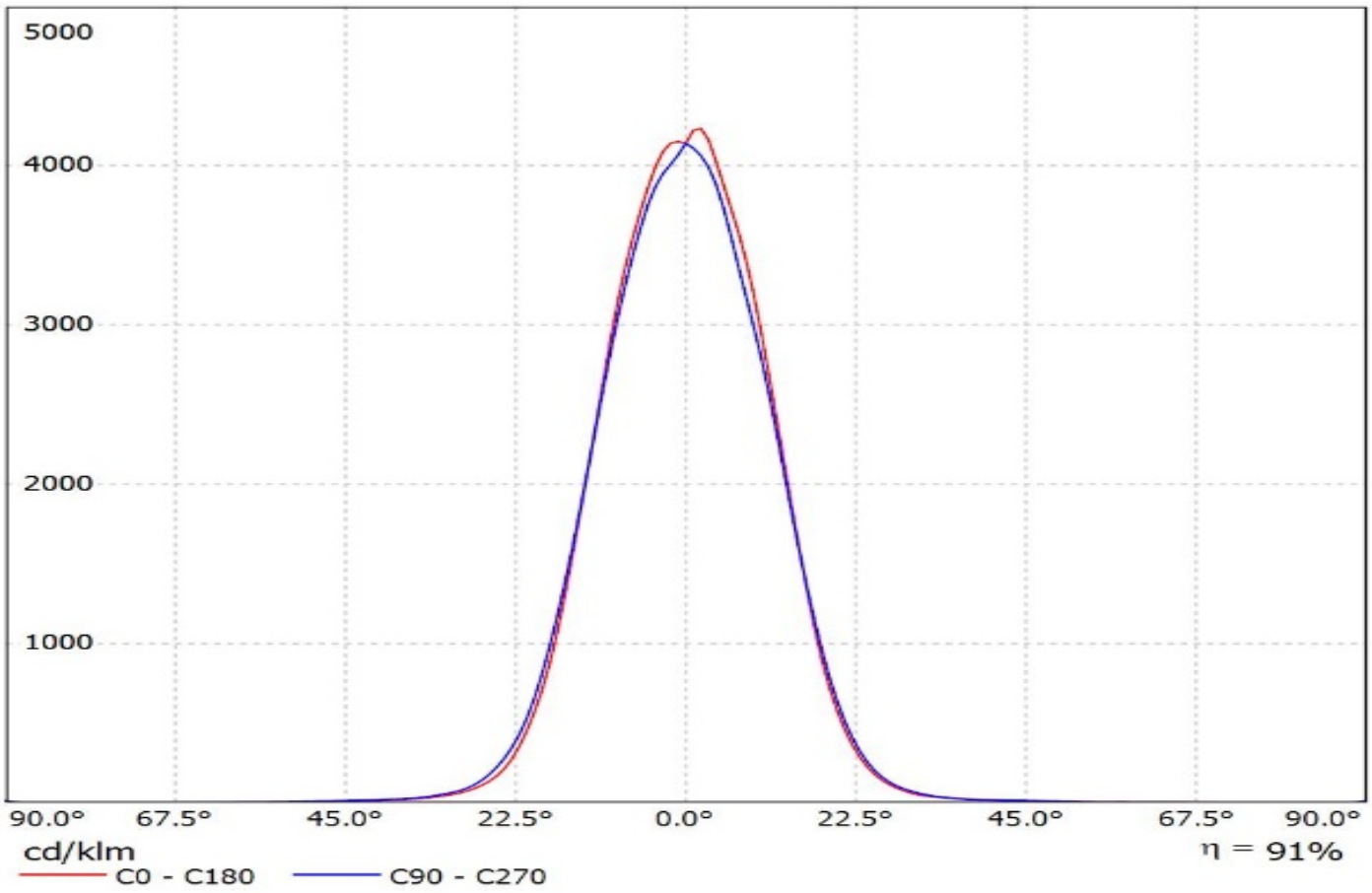
Luminaire: Ledil CA14509_G2-LXP2-M-P_(LUXEON_C)
Lamps: 1 x LUXEON_C_white_85.7286lm@250mA_P=0.7463W_I=0.250A



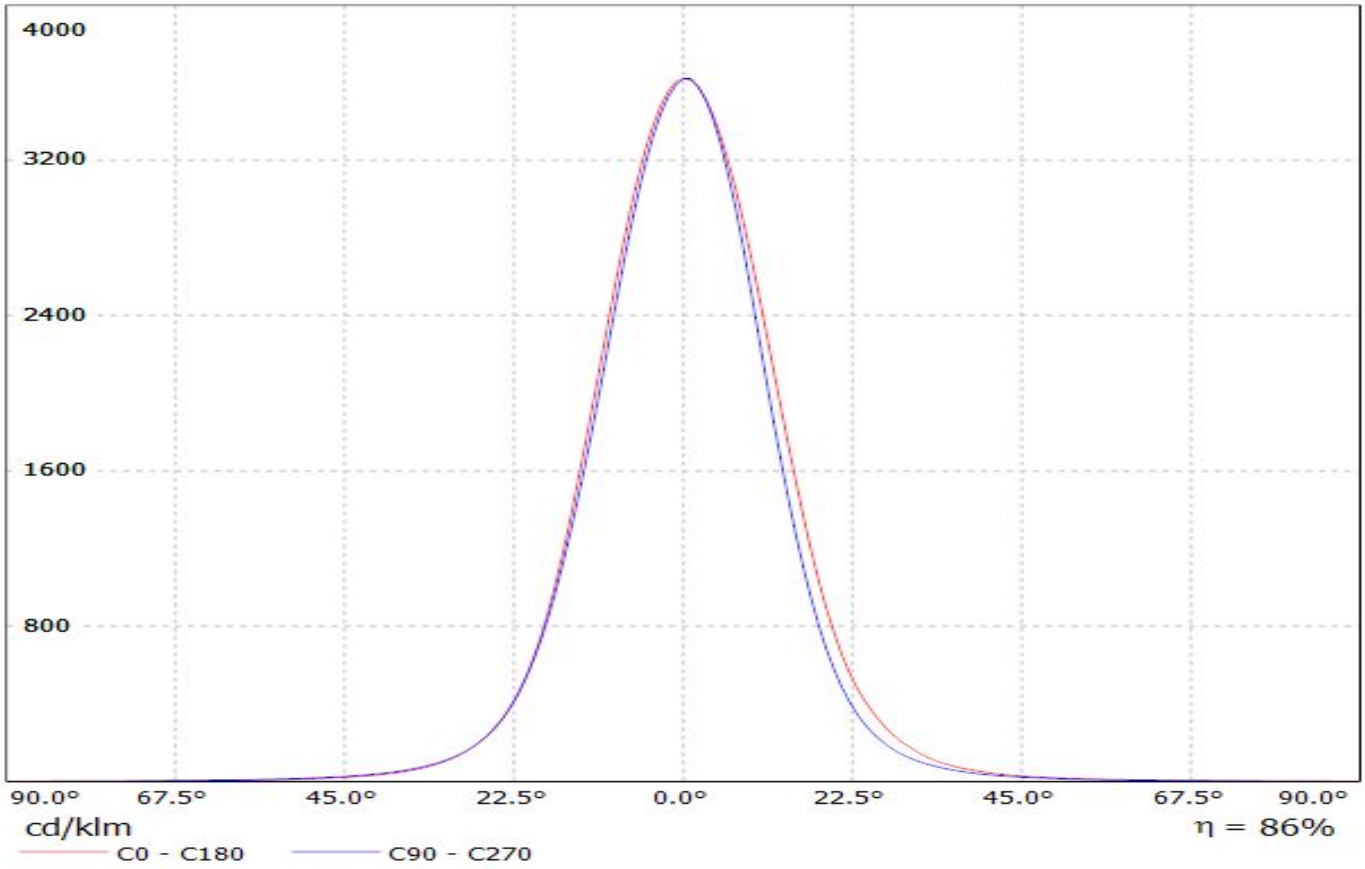
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(Luxeon_T)_SIMULATED
Lamps: 1 x Lumileds Luxeon T



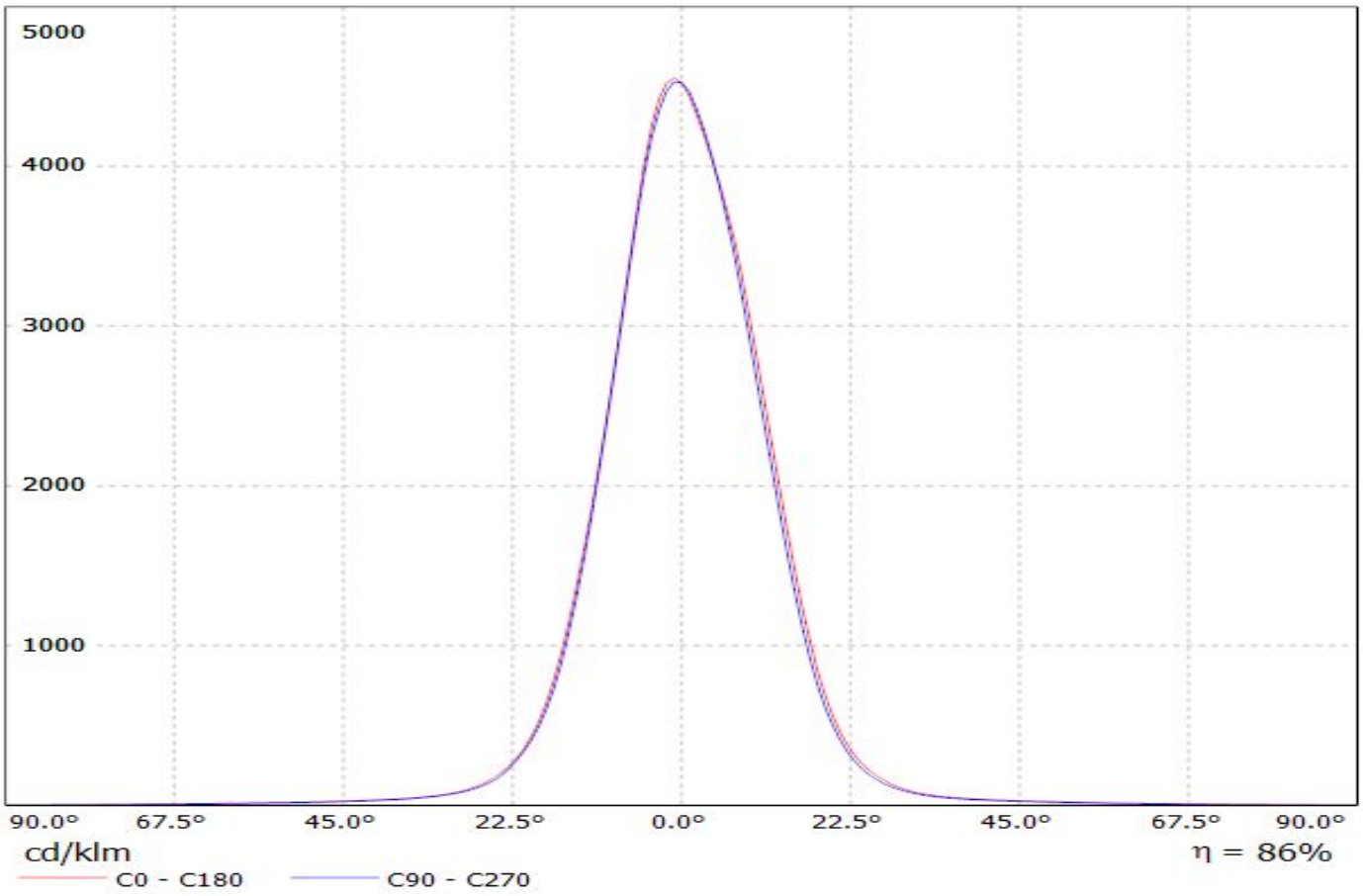
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(Luxeon_TX)_SIMULATED
Lamps: 1 x Lumileds Luxeon TX



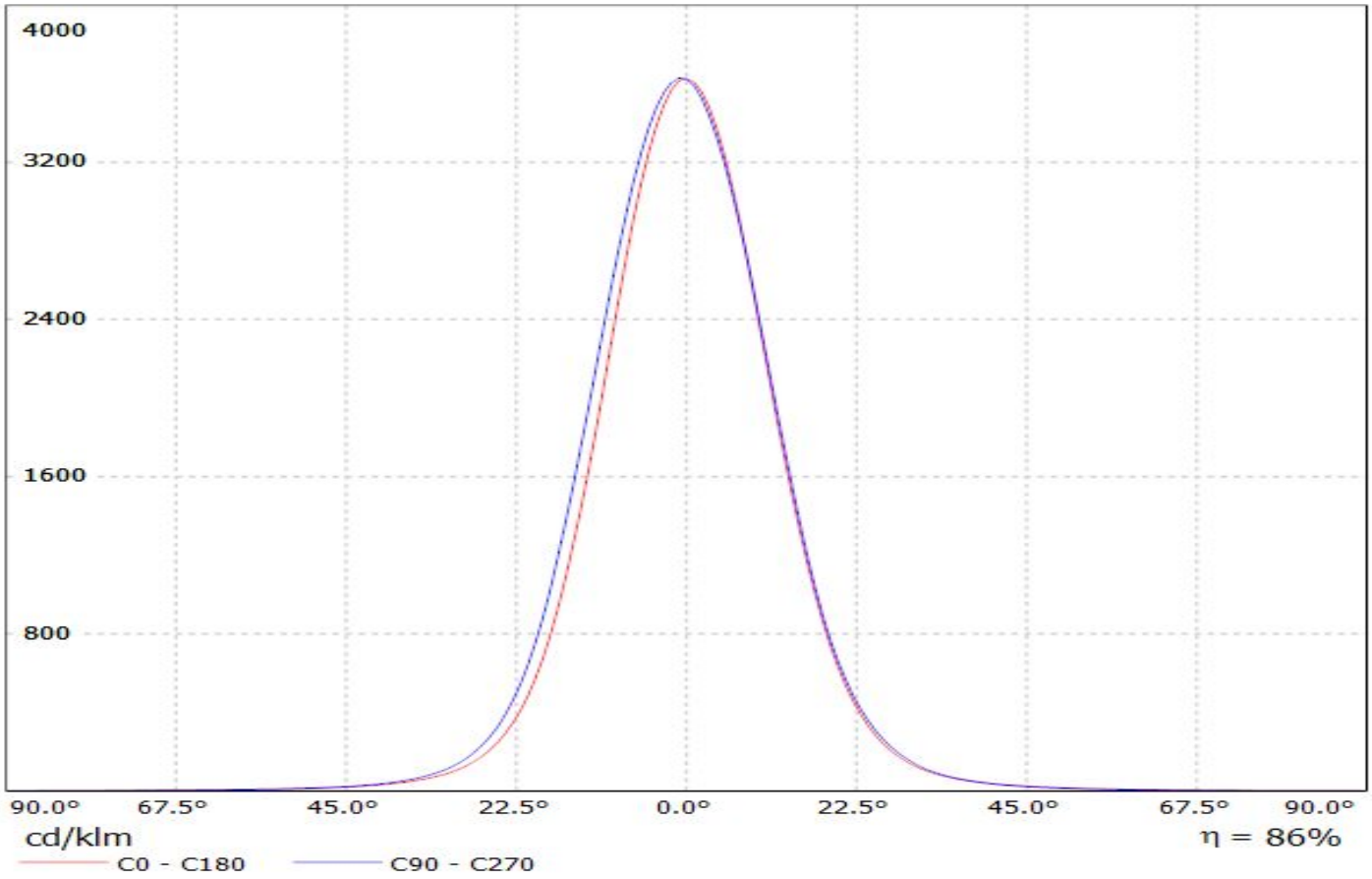
Luminaire: LEDiL Oy CA14509_G2-LXP2-M-P_(Luxeon_V)
Lamps: 1 x Lumileds_Luxeon_V_122.923lm@250mA_CCT=4000K_P=0.704836W_I=0.25A



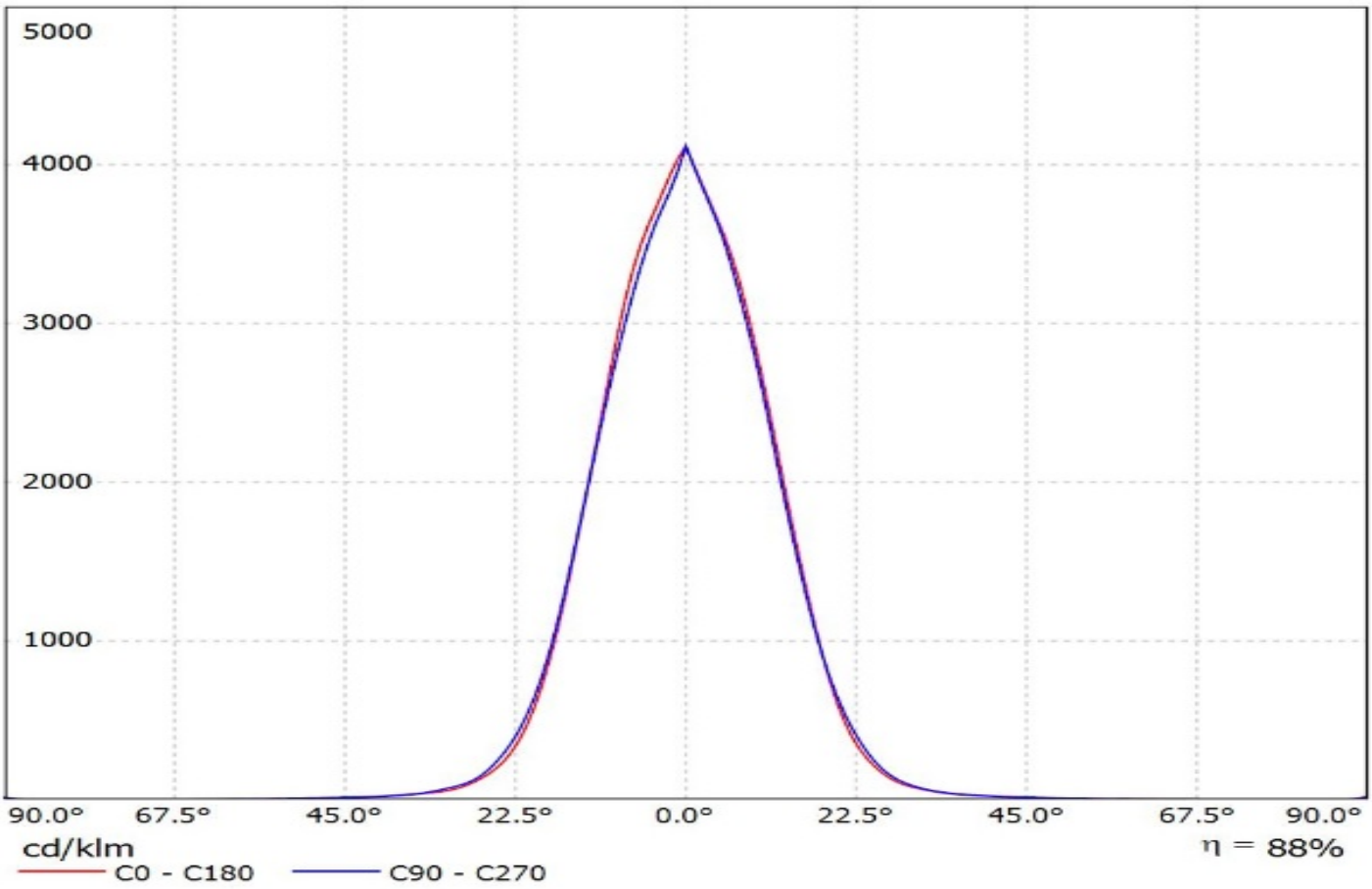
Luminaire: LEDiL Oy CA14509_G2-LXP2-M-P_(Nichia_NCSxx19A)
Lamps: 1 x Nichia_NCSxx19A_66.5093lm@250mA_P=0.78701W_I=0.2499A



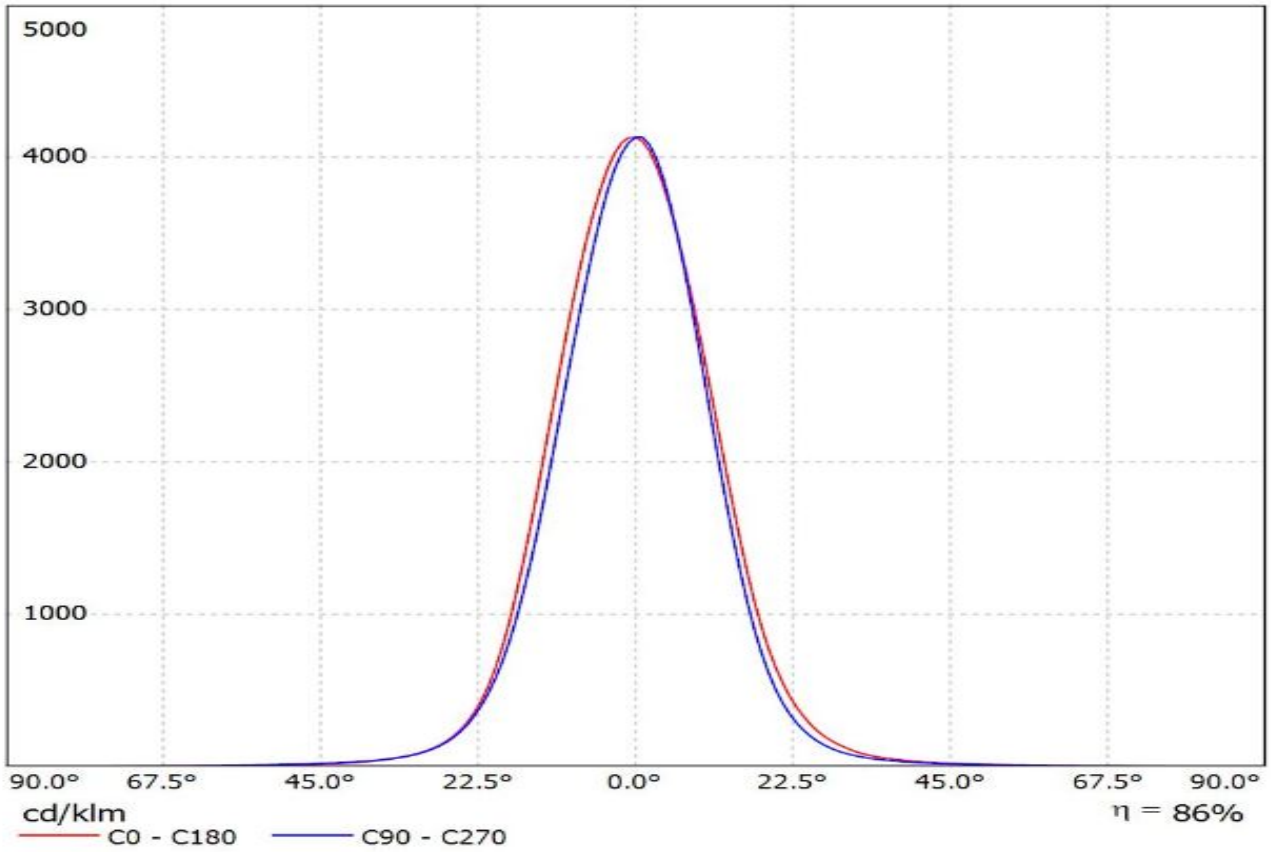
Luminaire: LEDiL Oy CA14509_G2-LXP2-M_(NWSL229AE)
Lamps: 1 x Nichia_NWSL229AE_120.54lm@250mA_P=0.7128W_I=0.250A



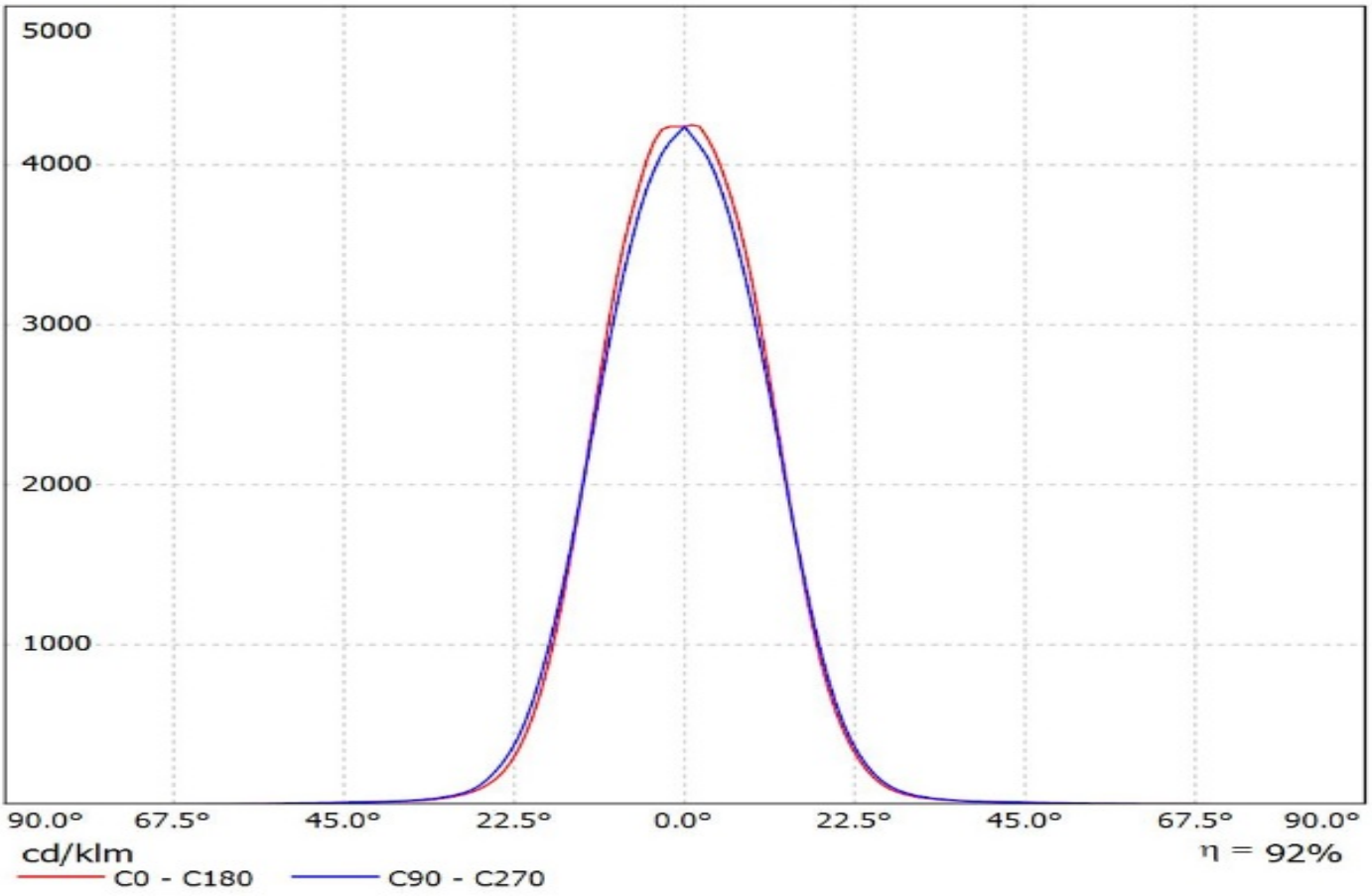
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(NVSxx19B)_SIMULATED
Lamps: 1 x Nichia NVSxx19V (NVSW219B)



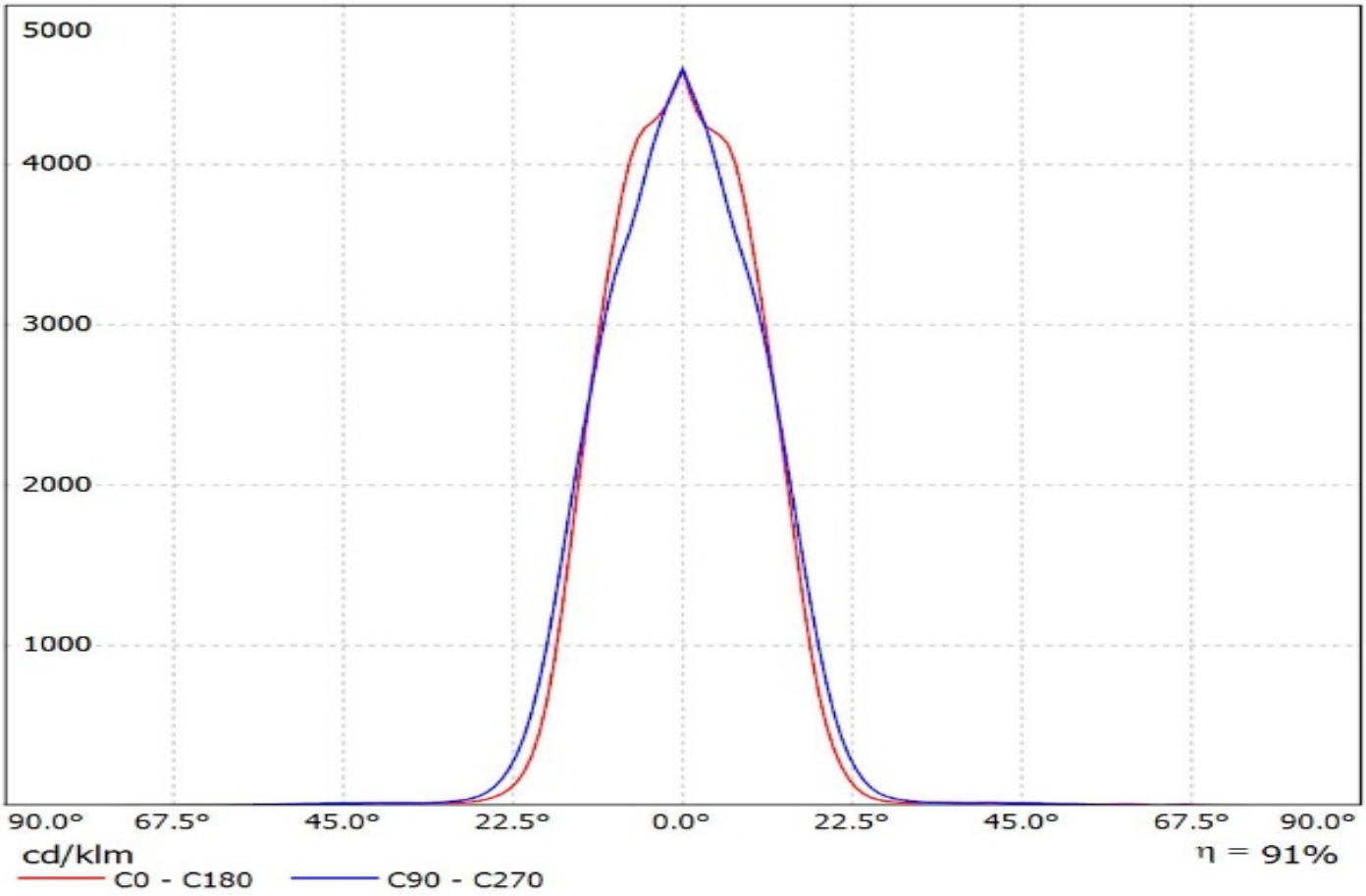
Luminaire: LEDiL Oy CA14509_G2-LXP2-M-P_(NVSW3x9A)
Lamps: 1 x Nichia_NVSW3x9A_(sm405/R70)_122.334lm@250mA_P=0.705435W_I=0.250A



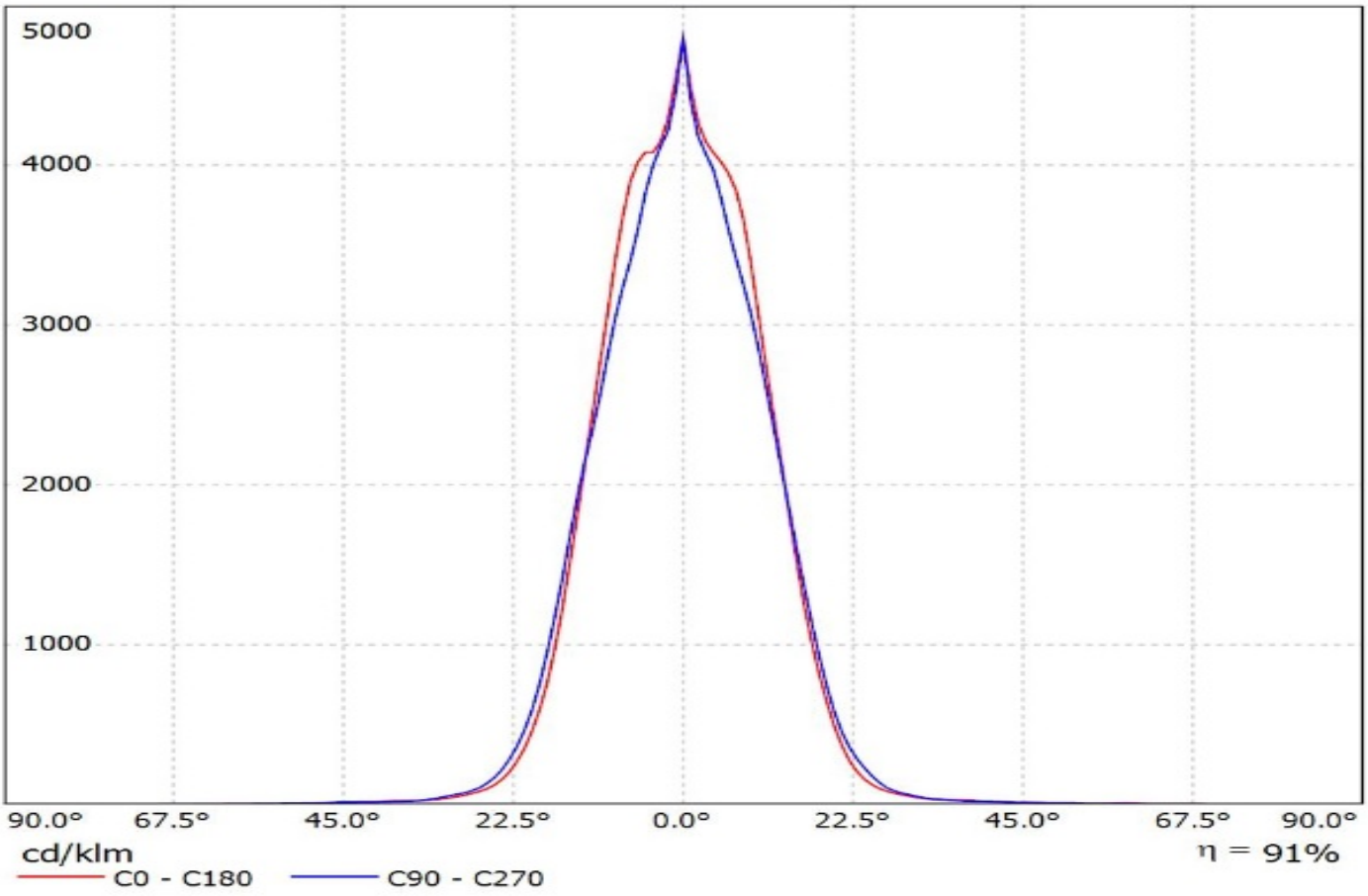
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(Oslon_Square_Gen3)_SIMULATED
Lamps: 1 x Osram Oslon Square Gen 3 (GW_CSSRM2.PC)



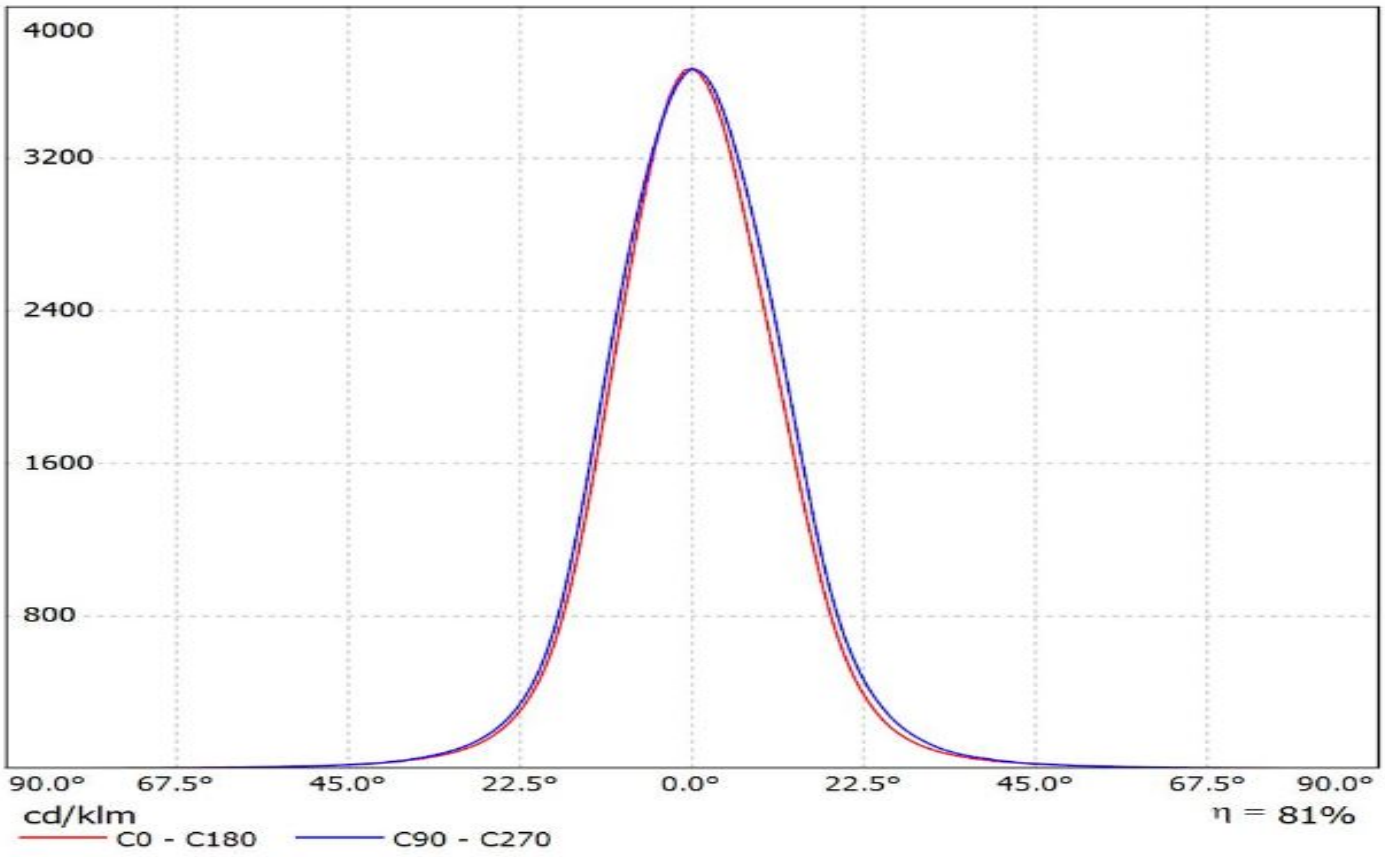
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(Oslon_SSL_80)_SIMULATED
Lamps: 1 x Osram Oslon SSL 80 (LA CP7P)



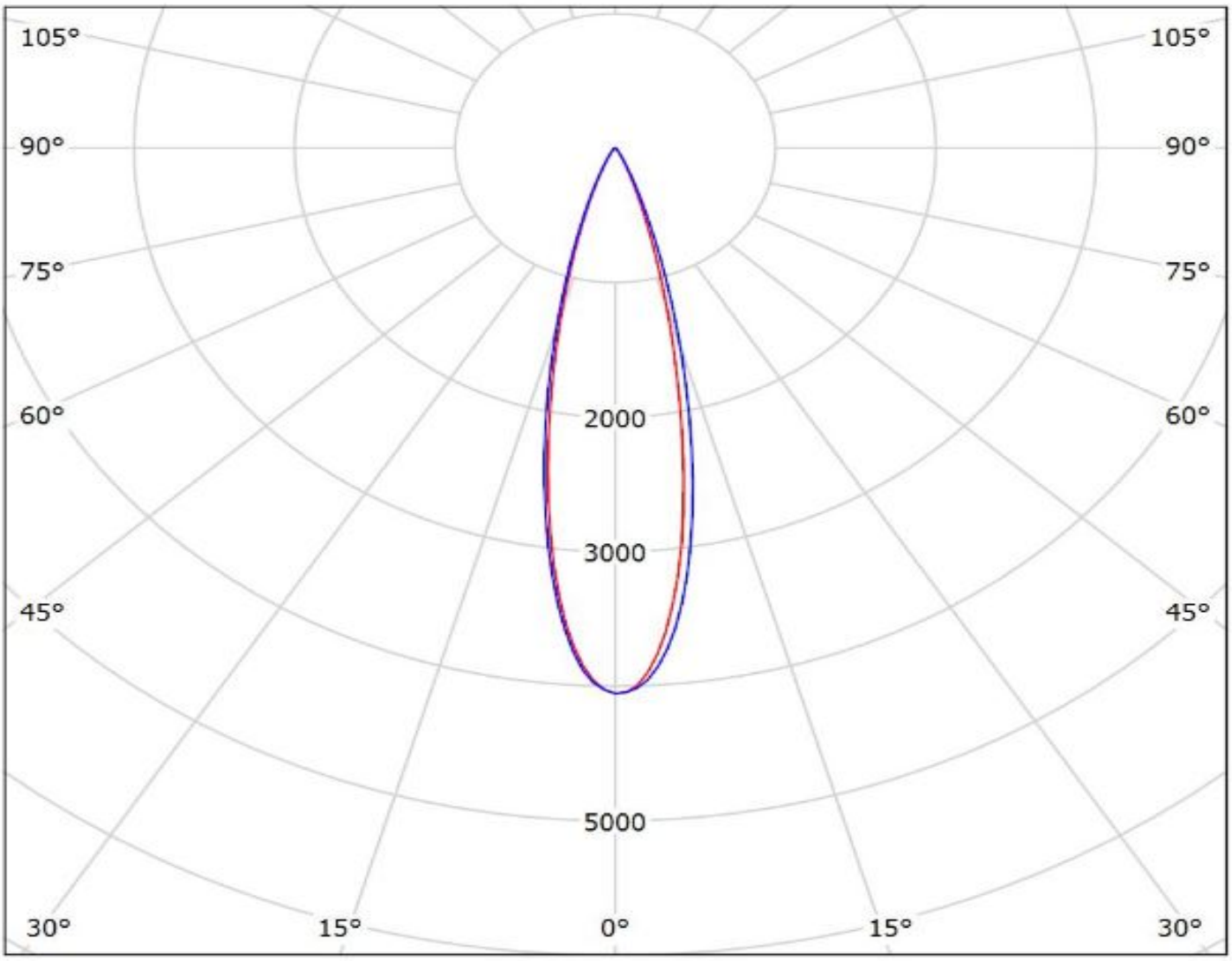
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(Oslon_Black_Flat)_SIMULATED
Lamps: 1 x Osram Oslon Black Flat (LUW HWQP)



Luminaire: LEDiL Oy CA14509_G2-LXP2-M-P_(Z8Y22plus)
Lamps: 1 x Seoul_Z8Y22plus_(W6E2G)_125.652lm@250mA_P=0.69312W_I=0.250A

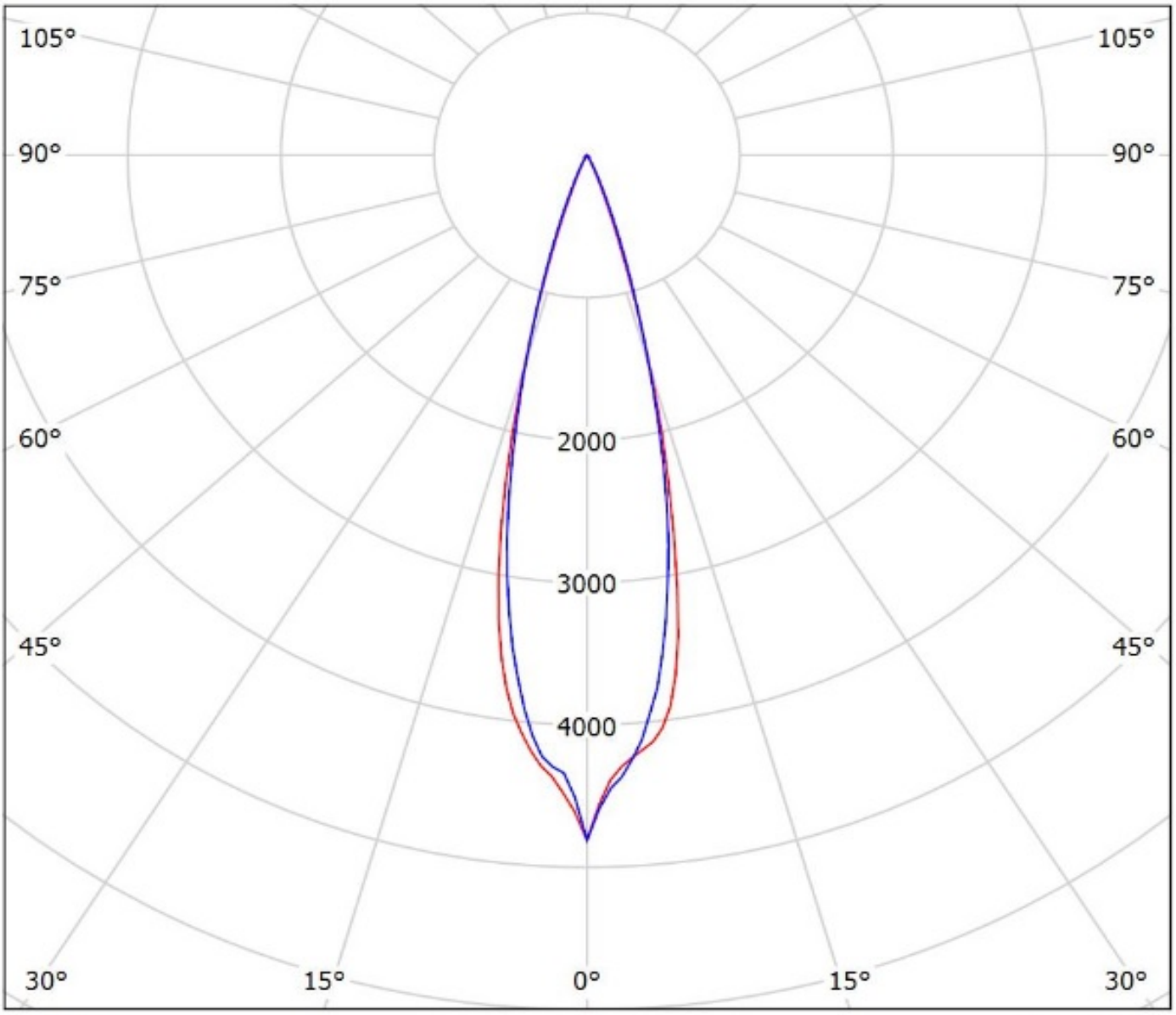


Luminaire: Ledil CA14509_G2-LXP2-M-P_(XP-L)
Lamps: 1 x CREE_XP-L_(XPLAWT-0-7A3-U50-0H-0001)
_107.852lm@250mA_CCT=3185K_P=0.7W_I=0.25A




cd/klm
η = 85%
C0 - C180
C90 - C270

Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_XP-G2_SIMULATED
Lamps: 1 x CREE XP-G2

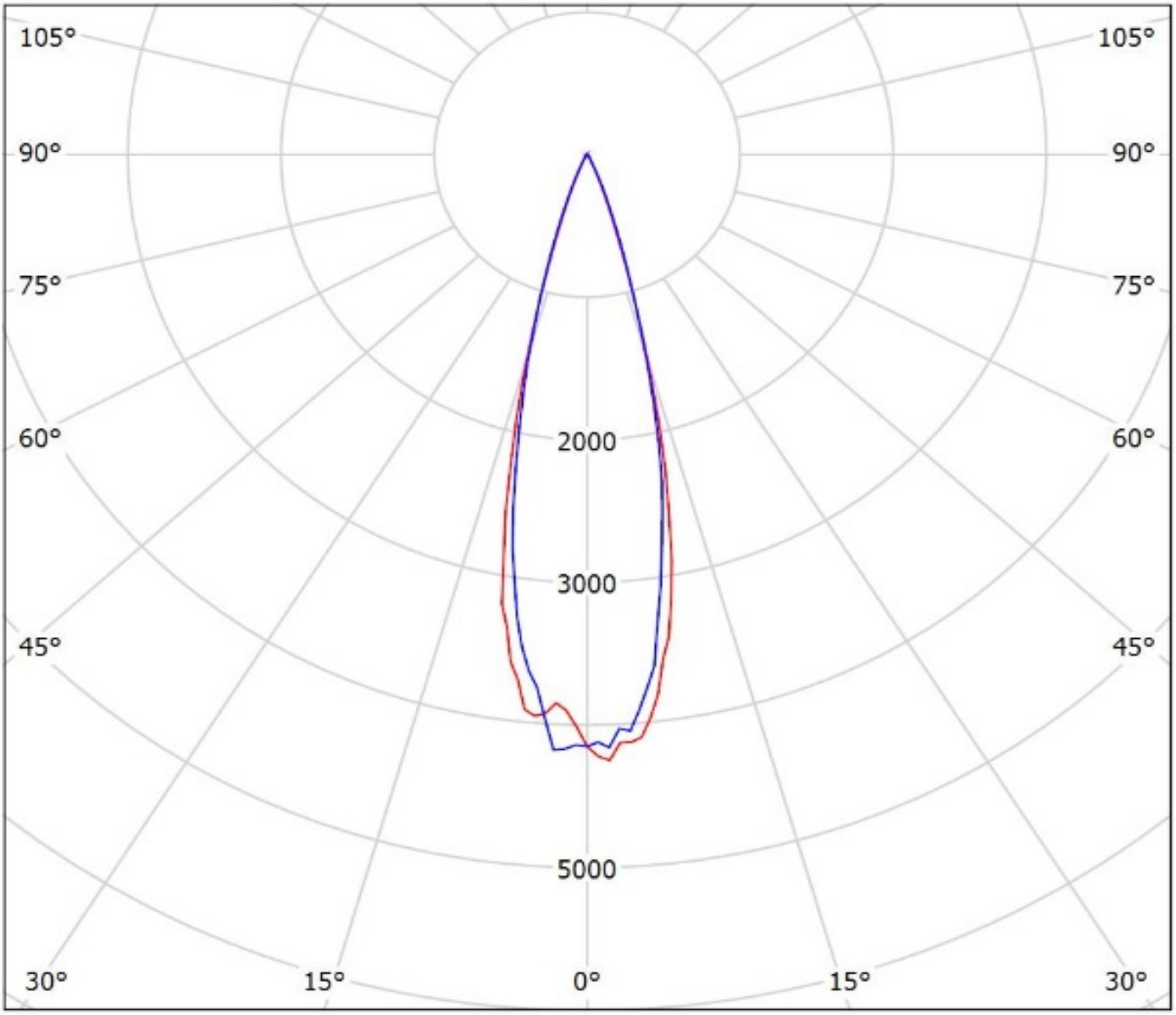



cd/klm

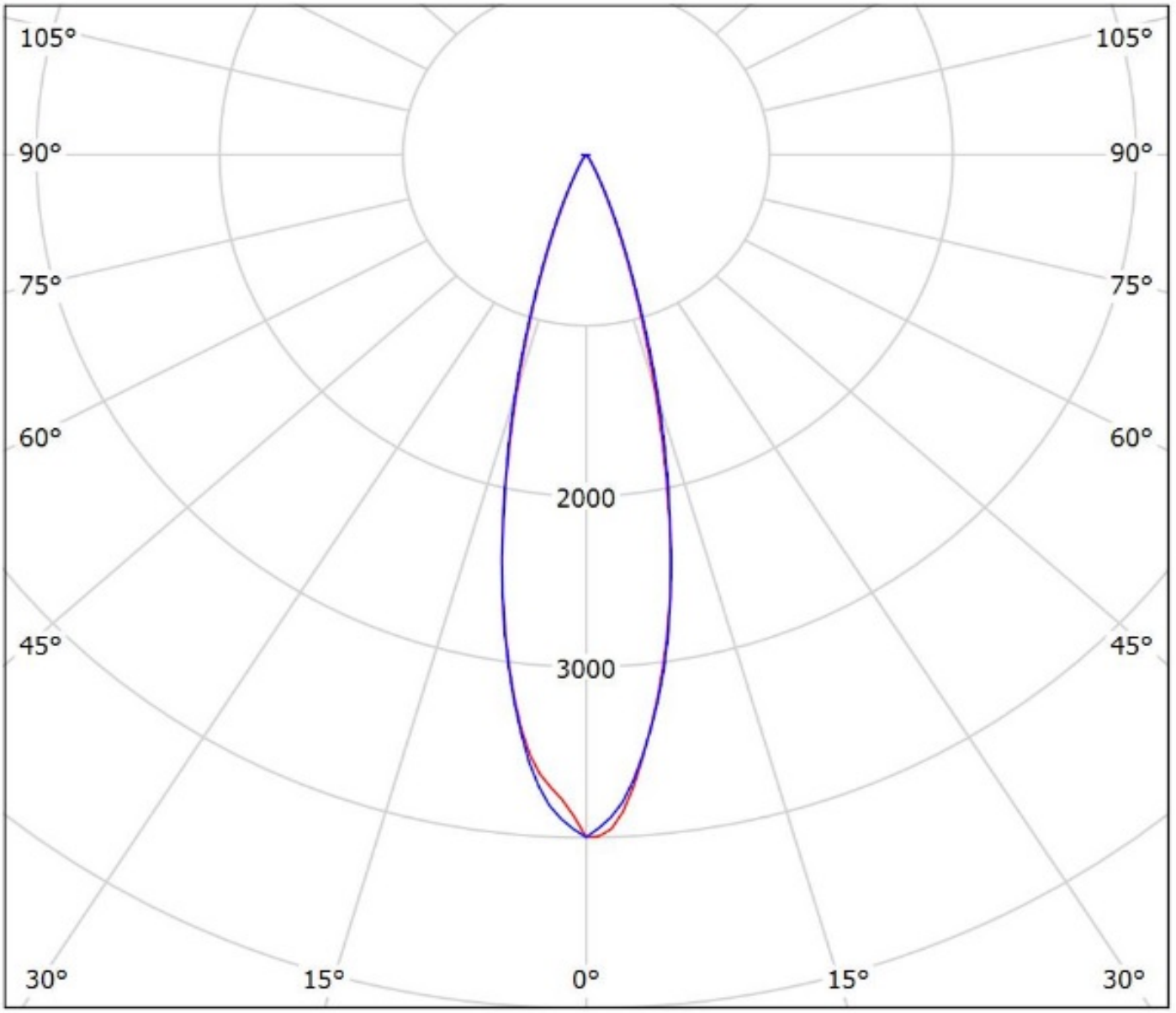
η = 93%

C0 - C180 C90 - C270

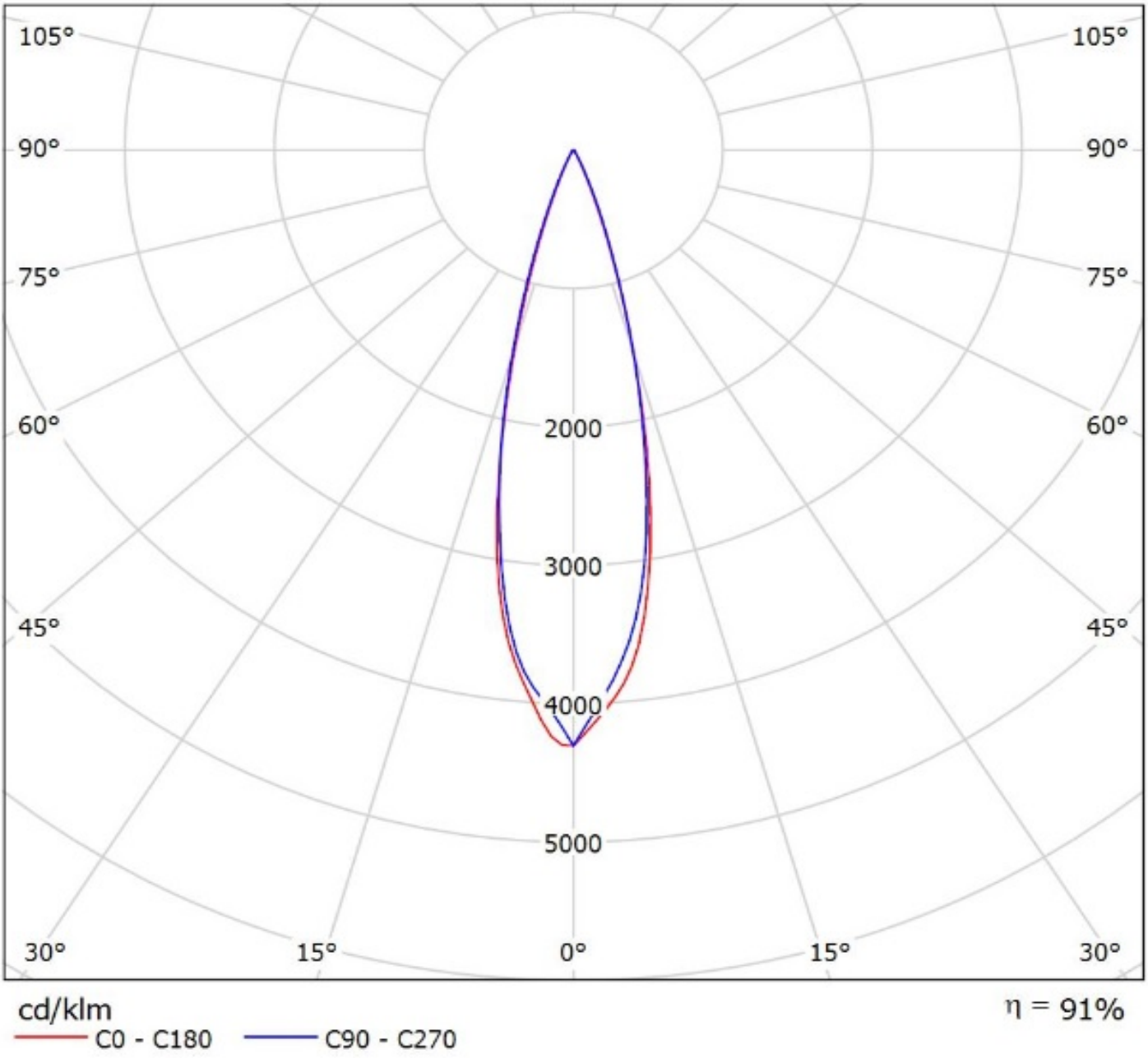
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_XT-E_SIMULATED
Lamps: 1 x CREE XT-E



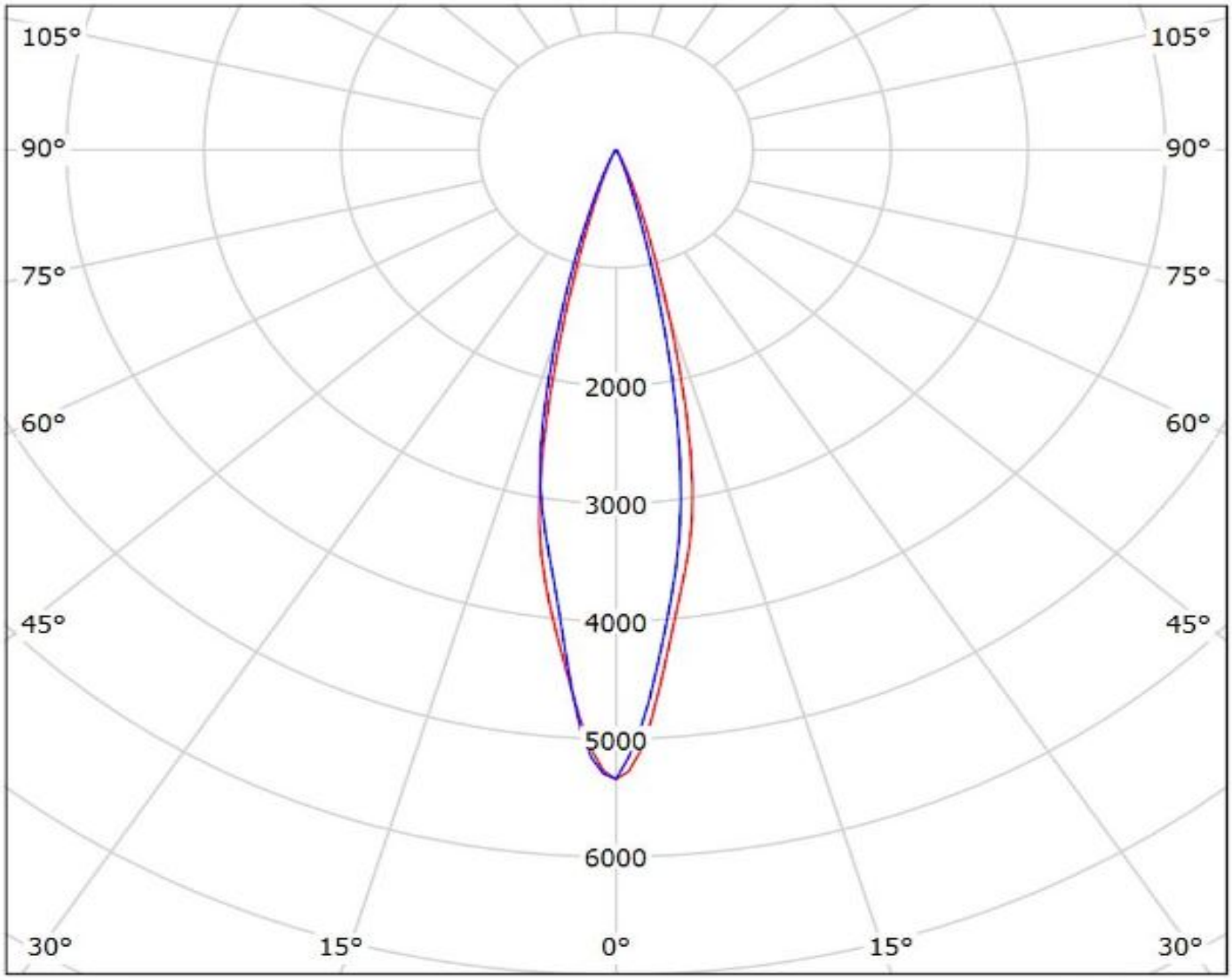
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(XP-G3)_SIMULATED
Lamps: 1 x Cree XP-G3



Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(LG_H35C1)_SIMULATED
Lamps: 1 x LG H35C1



Luminaire: Ledil CA14509_G2-LXP2-M-P_(LUXEON_C)
Lamps: 1 x LUXEON_C_white_85.7286lm@250mA_P=0.7463W_I=0.250A

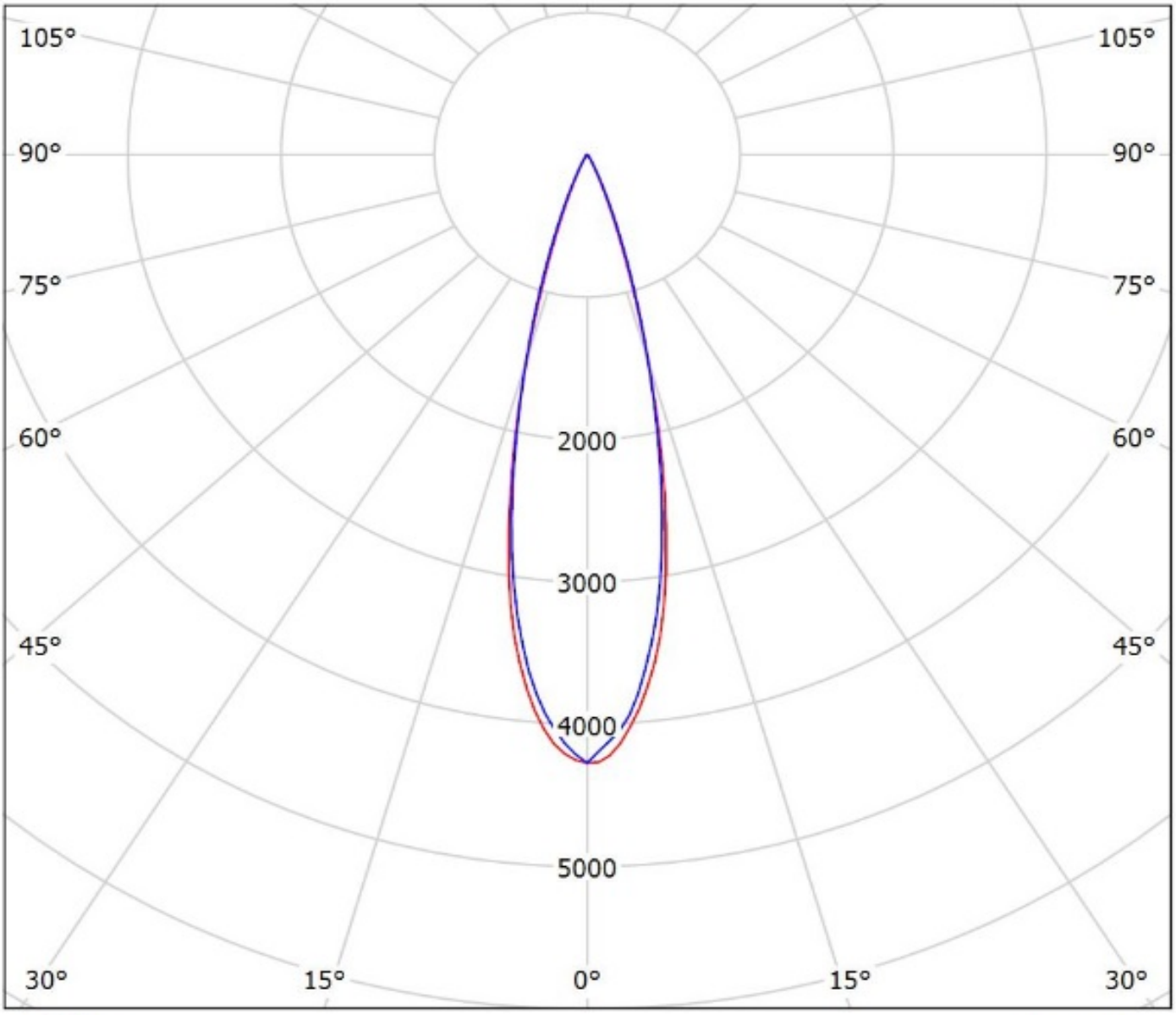



cd/klm

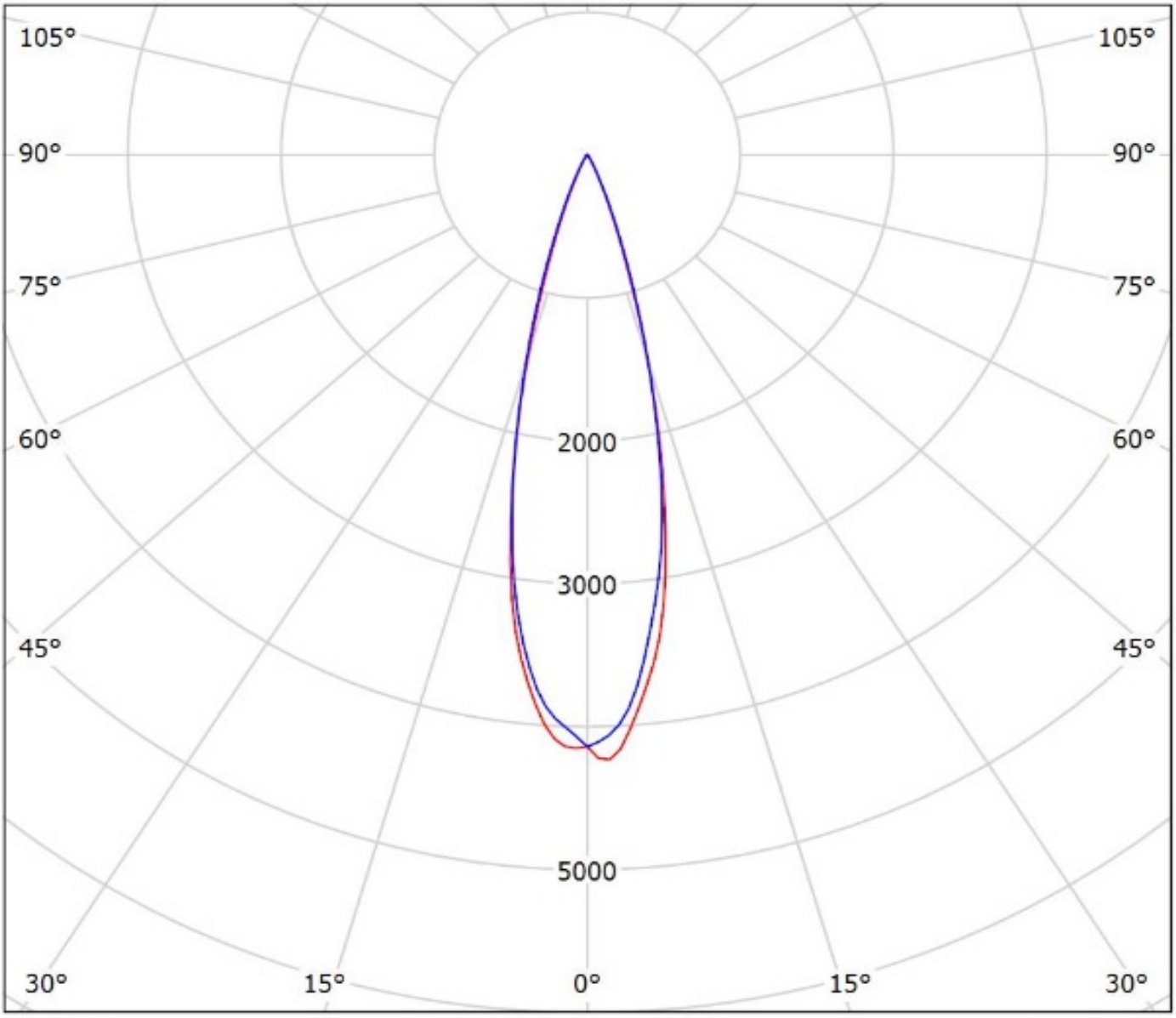
η = 82%

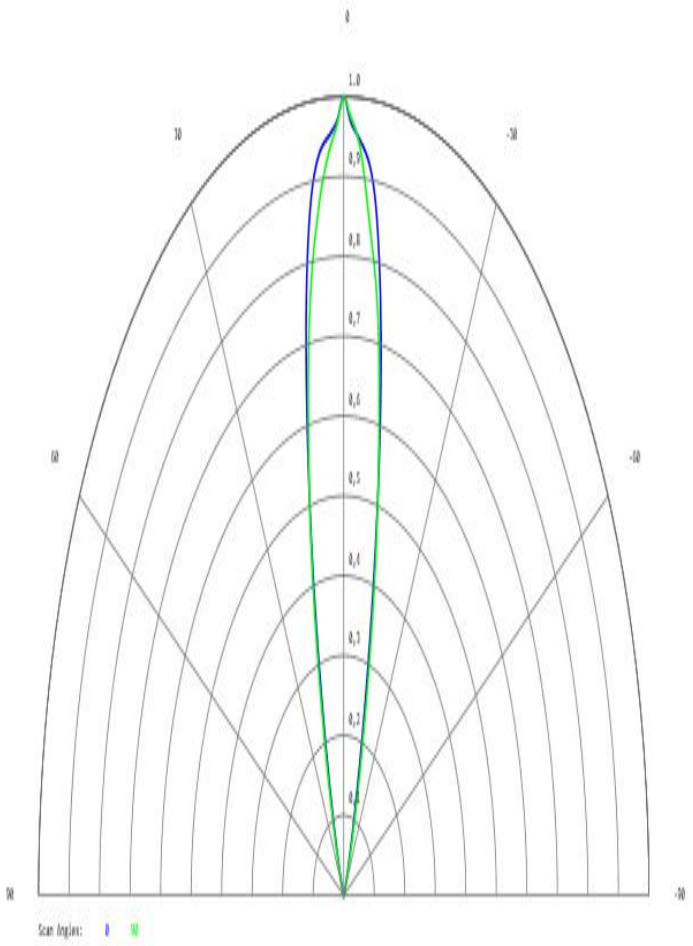
C0 - C180 C90 - C270

Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(Luxeon_T)_SIMULATED
Lamps: 1 x Lumileds Luxeon T



Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(Luxeon_TX)_SIMULATED
Lamps: 1 x Lumileds Luxeon TX



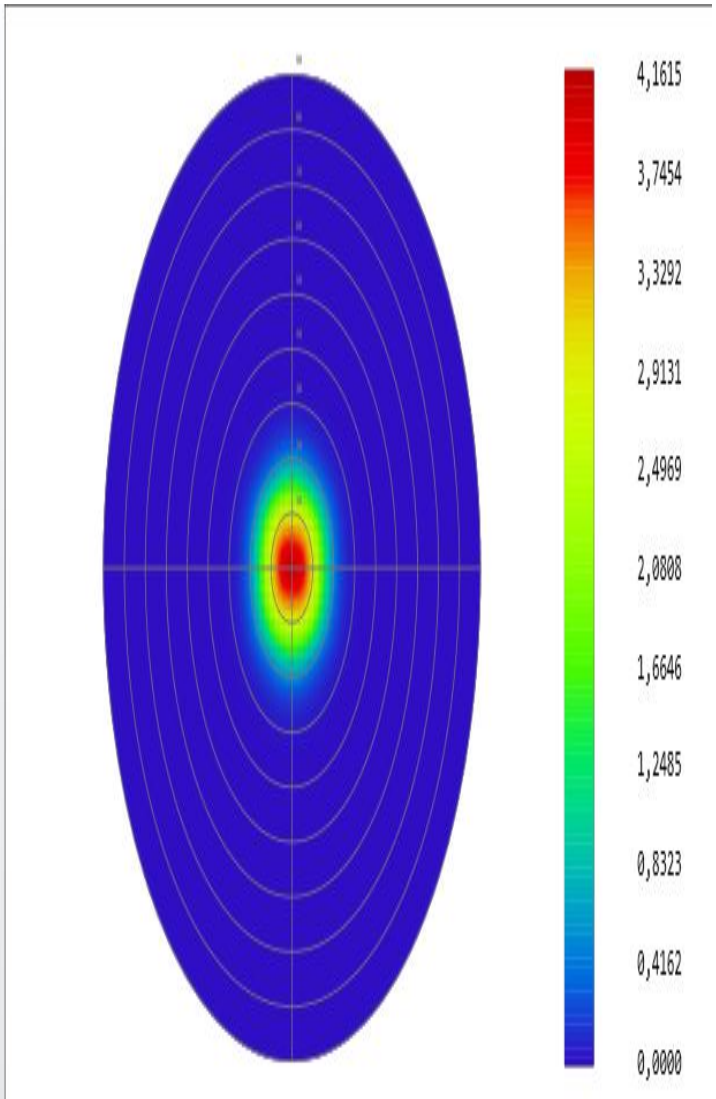



Detector Image: Radiant Intensity

16.5.2017
Detector 4, NSCG Surface 1:
Scan Angles: 0, 90
Peak Intensity : 4,278E+00 Watts/Steradian

Zemax
Zemax OpticStudio 15.5 SP2

Luxeon IR compact.zmx
Configuration 1 of 1

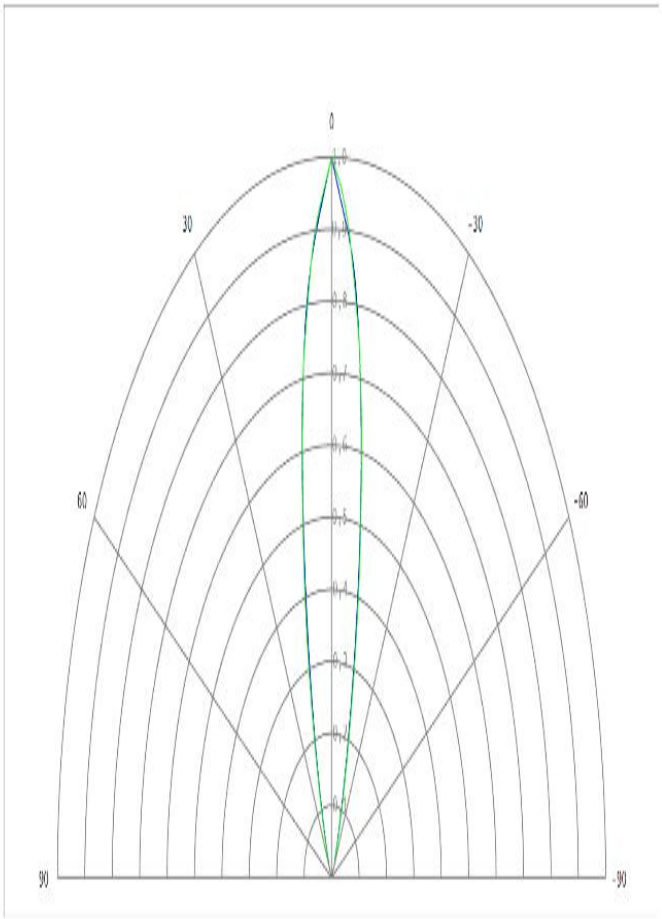



Detector Image: Radiant Intensity

16.5.2017
Detector 4, NSCG Surface 1:
Max polar angle: 90,00 deg, Total Hits = 2305355
Peak Intensity : 4,162E+00 Watts/Steradian
Total Power : 8,373E-01 Watts

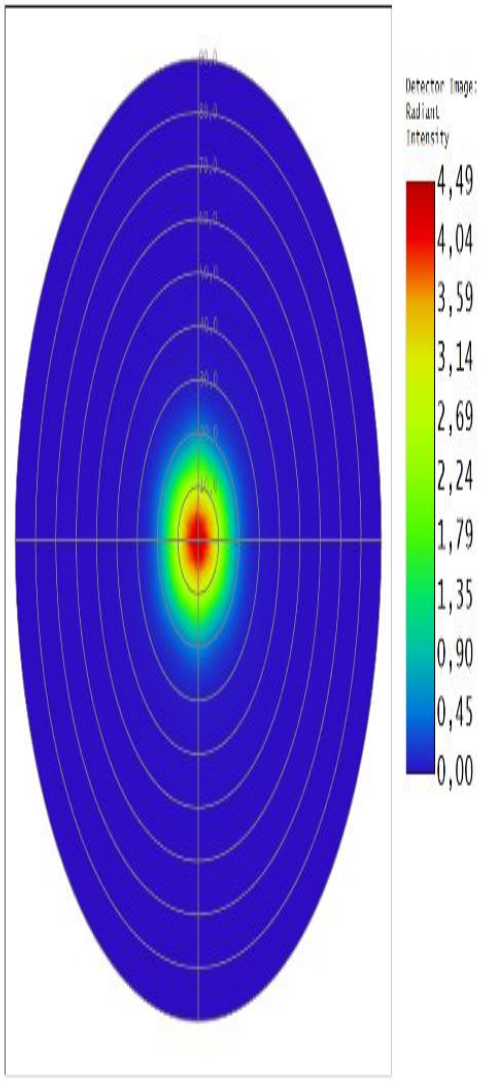
Zemax
Zemax OpticStudio 15.5 SP2

Luxeon IR compact.zmx
Configuration 1 of 1



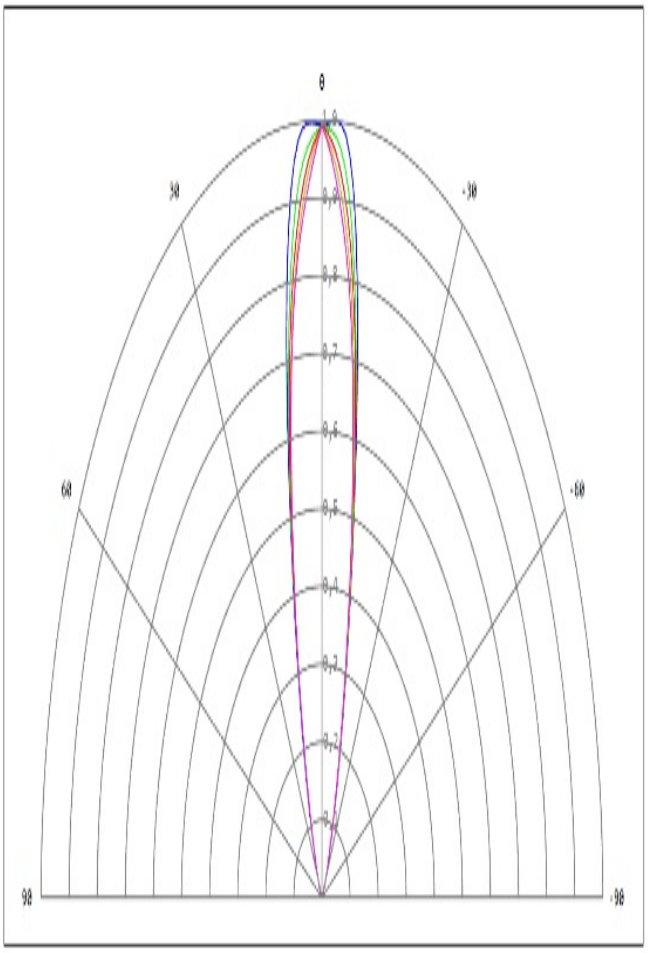

Detector Image: Radiant Intensity

| | |
|---|---|
| 25.7.2017<br>Detector 7, NSCG Surface 1:<br>Scan Angles: 0, 90<br>Peak Intensity : 4,486E+00 Watts/Steradian | Zemax<br>Zemax OpticStudio 16.5 SP3<br>CAL4SOL_C2-LXP2-W-P_(Luxeon IR domes 80)_SIMULATED.zmx<br>Configuration 1 of 1 |




Detector Image: Radiant Intensity

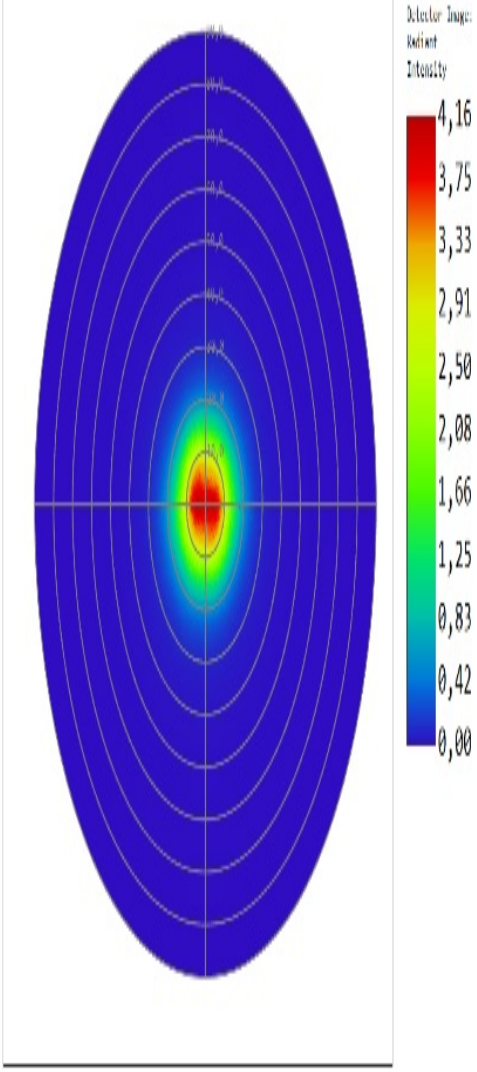
| | |
|---|---|
| 25.7.2017<br>Detector 7, NSCG Surface 1:<br>Max polar angle: 90,00 deg, Total Hits = 4410570<br>Peak Intensity : 4,486E+00 Watts/Steradian<br>Total Power : 8,793E-01 Watts | Zemax<br>Zemax OpticStudio 16.5 SP3<br>CAL4SOL_C2-LXP2-W-P_(Luxeon IR domes 80)_SIMULATED.zmx<br>Configuration 1 of 1 |




□-0 □-30 □-45 □-60 □-90

Detector Image: Radiant Intensity

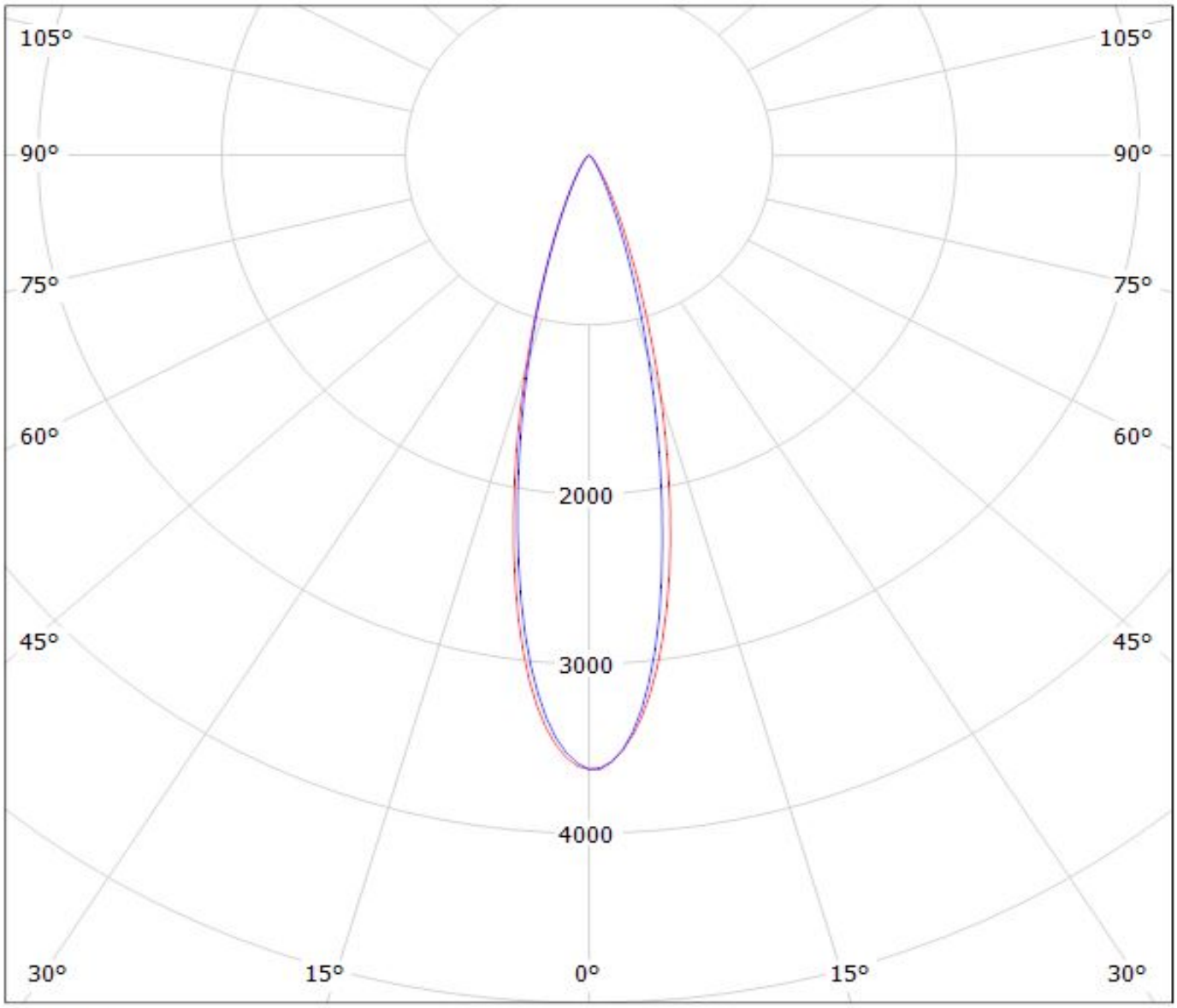
| | |
|---|---|
| 26.7.2017<br>Detector 7, NSCG Surface 1:<br>Scan Angles: 0, 30, 45, 60, 90<br>Peak Intensity : 3,963E+00 Watts/Steradian | Zemax<br>Zemax OpticStudio 16.5 SP1<br><br>CA1480_G2-LXP2-N-P (LUMEON IR DOME90)_SIMULATED.zmx<br>Configuration 1 of 1 |



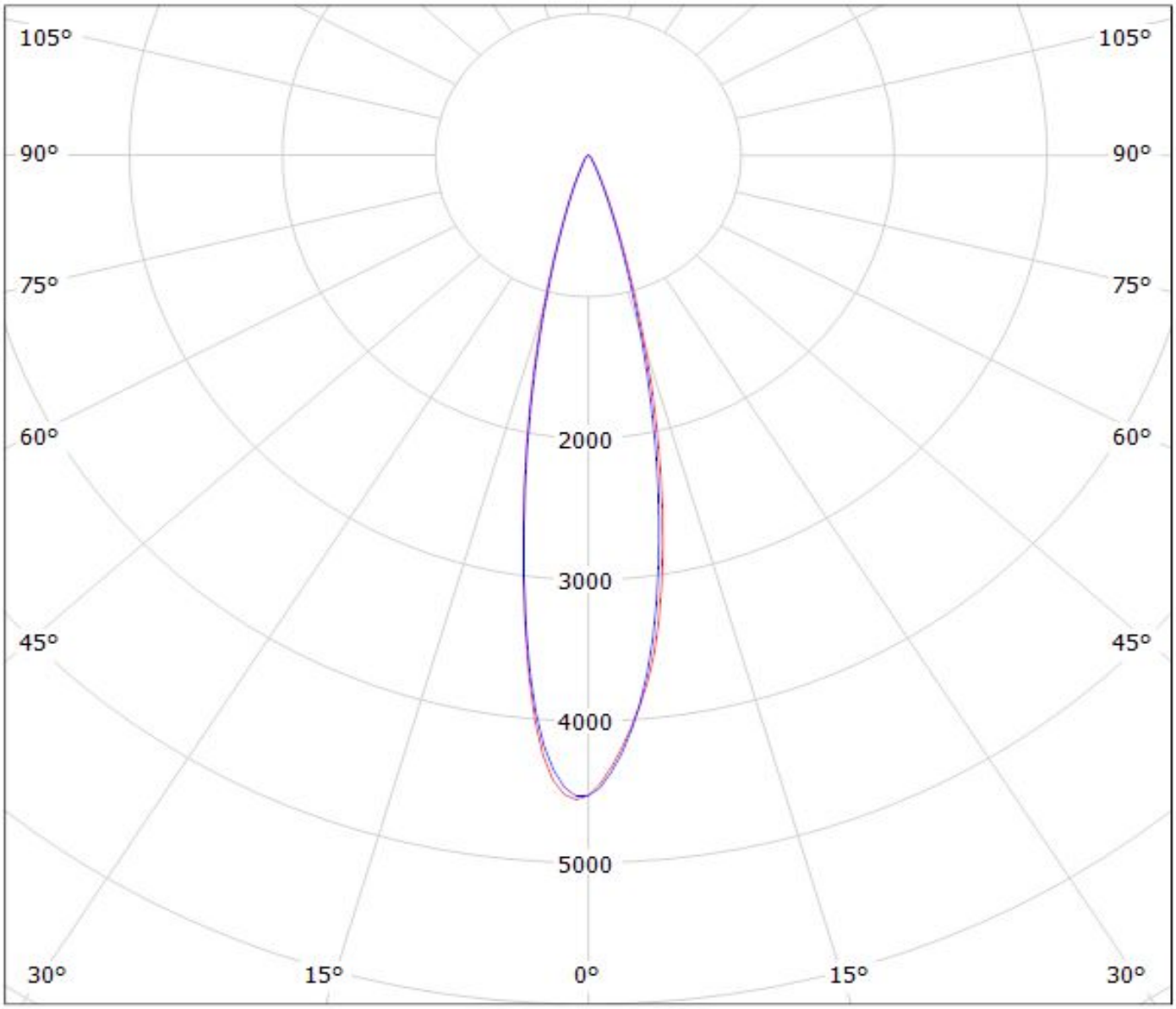

Detector Image: Radiant Intensity

| | |
|---|---|
| 26.7.2017<br>Detector 7, NSCG Surface 1:<br>Max polar angle: 90,00 deg, Total Hits = 37168805<br>Peak Intensity : 4,162E+00 Watts/Steradian<br>Total Power : 8,986E-01 Watts | Zemax<br>Zemax OpticStudio 16.5 SP1<br><br>CA1480_G2-LXP2-N-P (LUMEON IR DOME90)_SIMULATED.zmx<br>Configuration 1 of 1 |

Luminaire: LEDiL Oy CA14509_G2-LXP2-M-P_(Luxeon_V)
Lamps: 1 x Lumileds_Luxeon_V_122.923lm@250mA_CCT=4000K_P=0.704836W_I=0.25A



Luminaire: LEDiL Oy CA14509_G2-LXP2-M-P_(Nichia_NCSxx19A)
Lamps: 1 x Nichia_NCSxx19A_66.5093lm@250mA_P=0.78701W_I=0.2499A

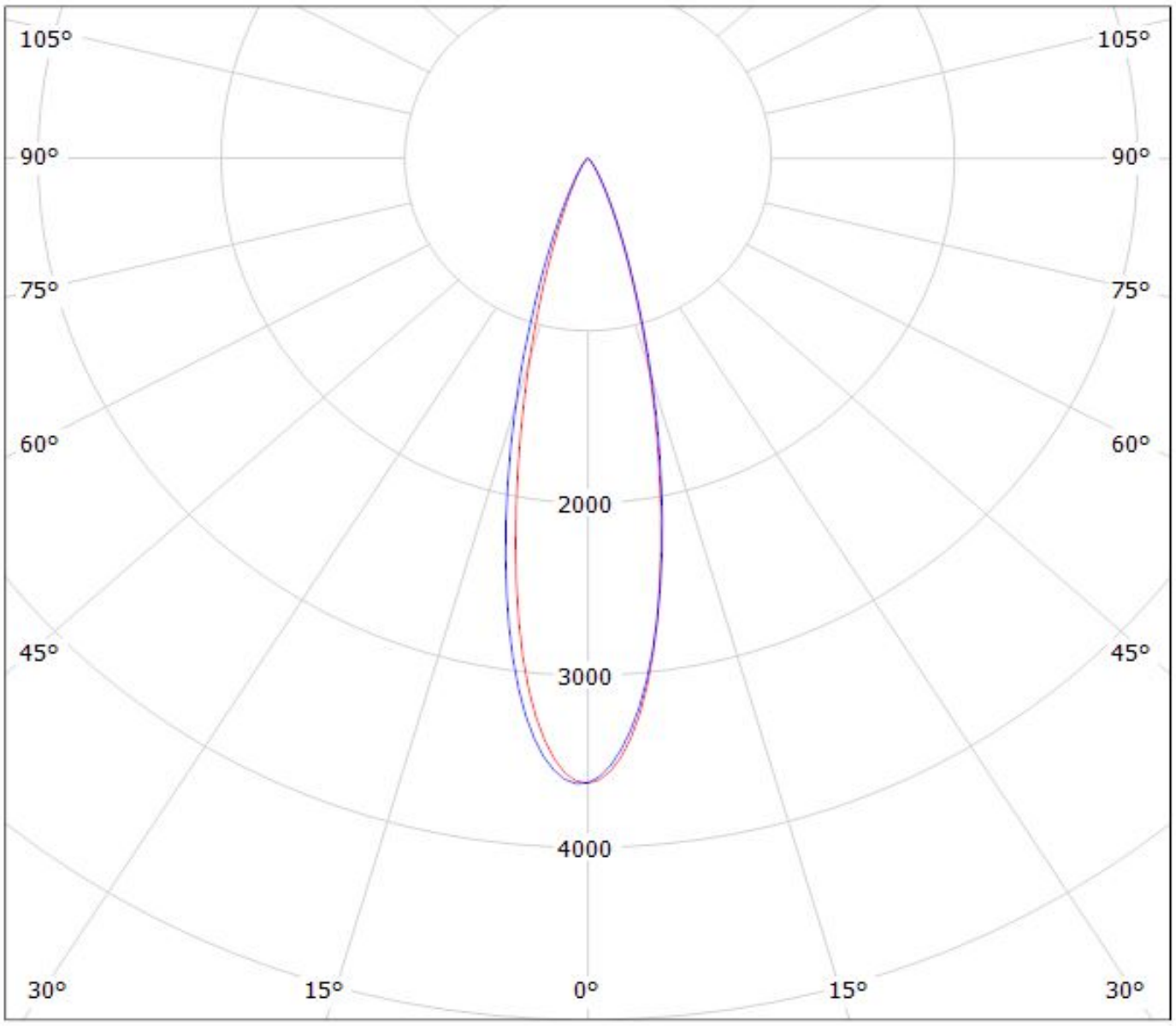



cd/klm

η = 86%

C0 - C180 C90 - C270

Luminaire: LEDiL Oy CA14509_G2-LXP2-M_(NWSL229AE)
Lamps: 1 x Nichia_NWSL229AE_120.54lm@250mA_P=0.7128W_I=0.250A

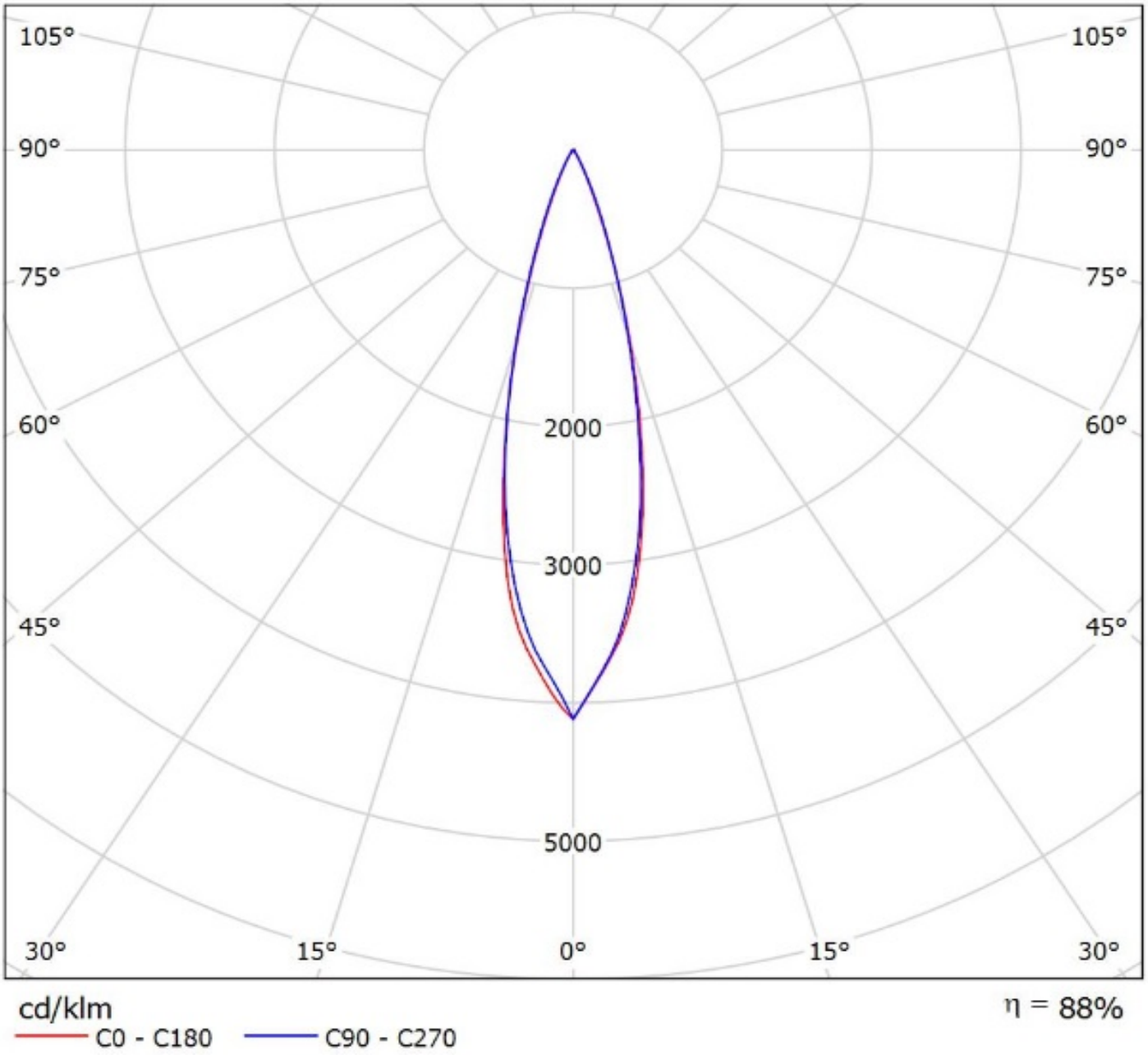



cd/klm

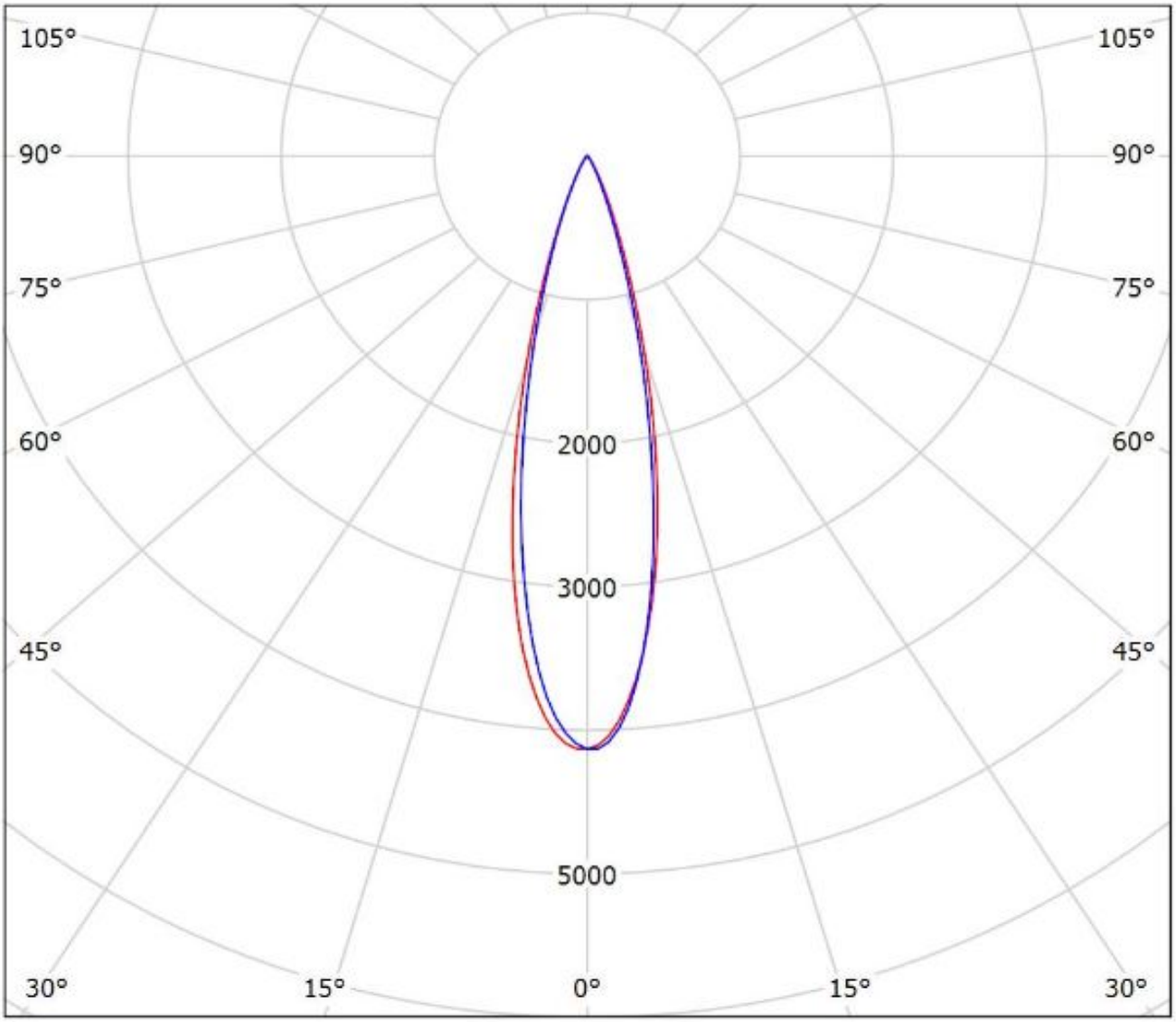
η = 86%

C0 - C180 C90 - C270

Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(NVSxx19B)_SIMULATED
Lamps: 1 x Nichia NVSxx19V (NVSW219B)



Luminaire: LEDiL Oy CA14509_G2-LXP2-M-P_(NVSW3x9A)
Lamps: 1 x Nichia_NVSW3x9A_(sm405/R70)_122.334lm@250mA_P=0.705435W_I=0.250A

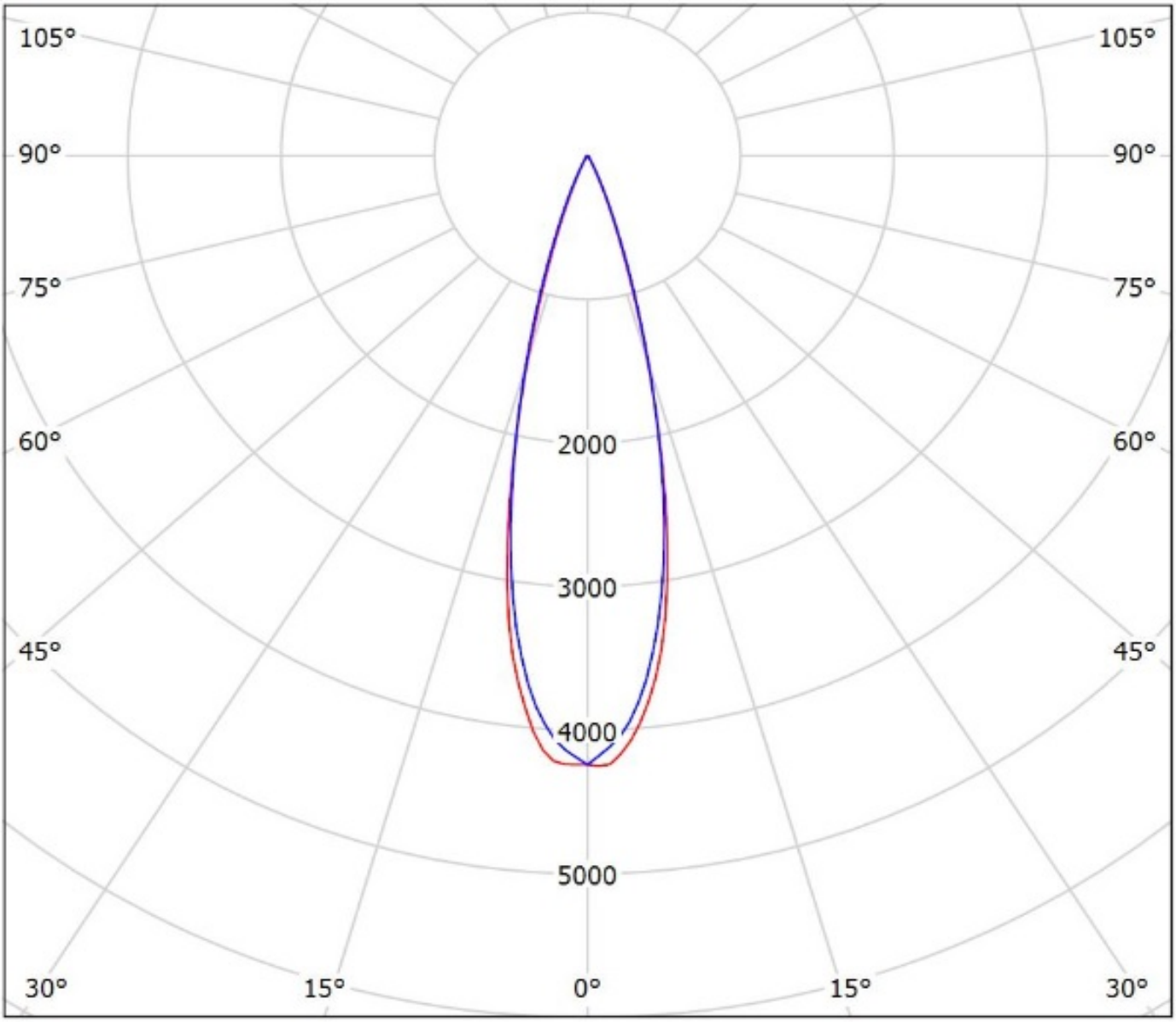



cd/klm

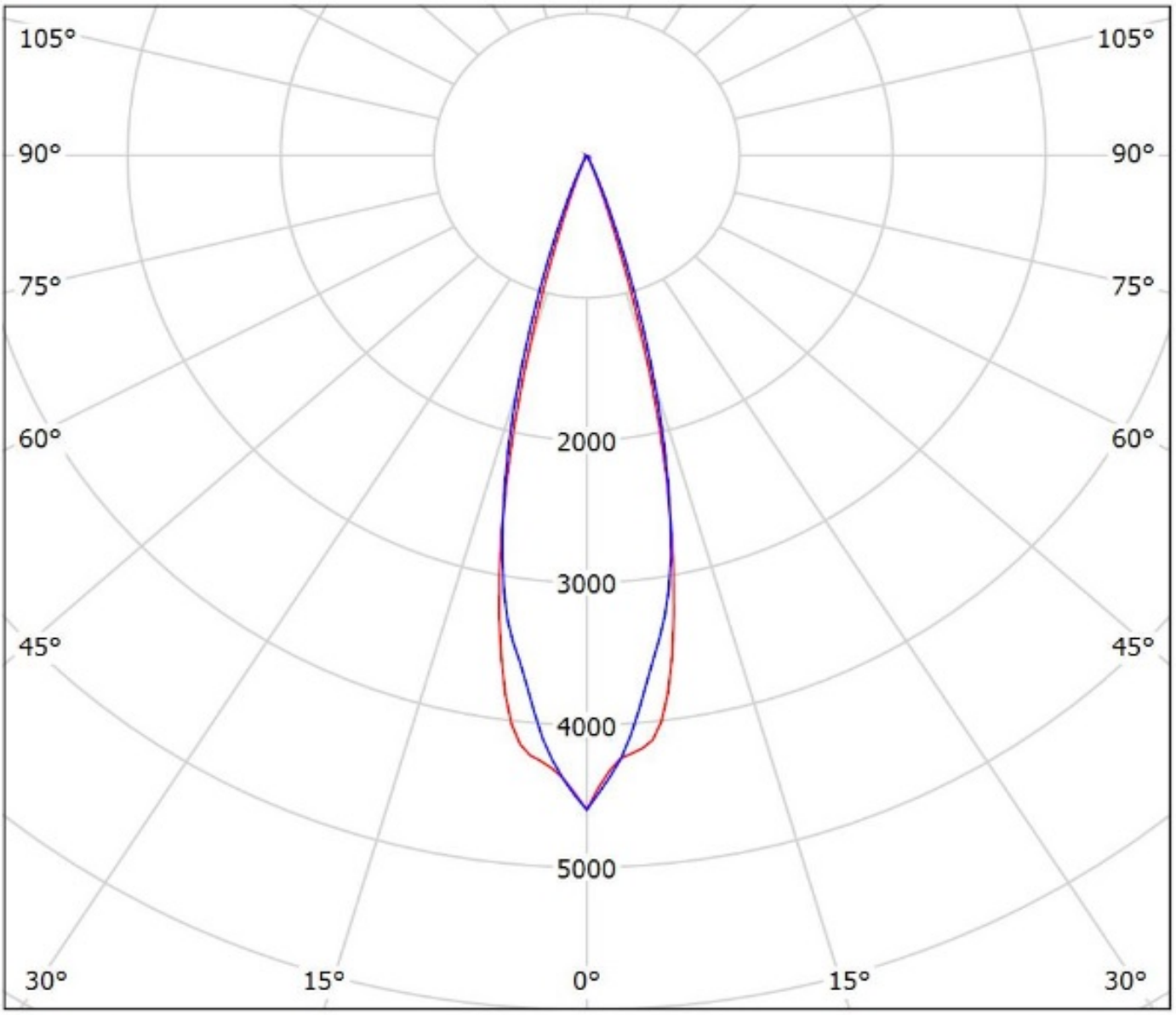
η = 86%

C0 - C180 C90 - C270

Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(Oslon_Square_Gen3)_SIMULATED
Lamps: 1 x Osram Oslon Square Gen 3 (GW_CSSRM2.PC)



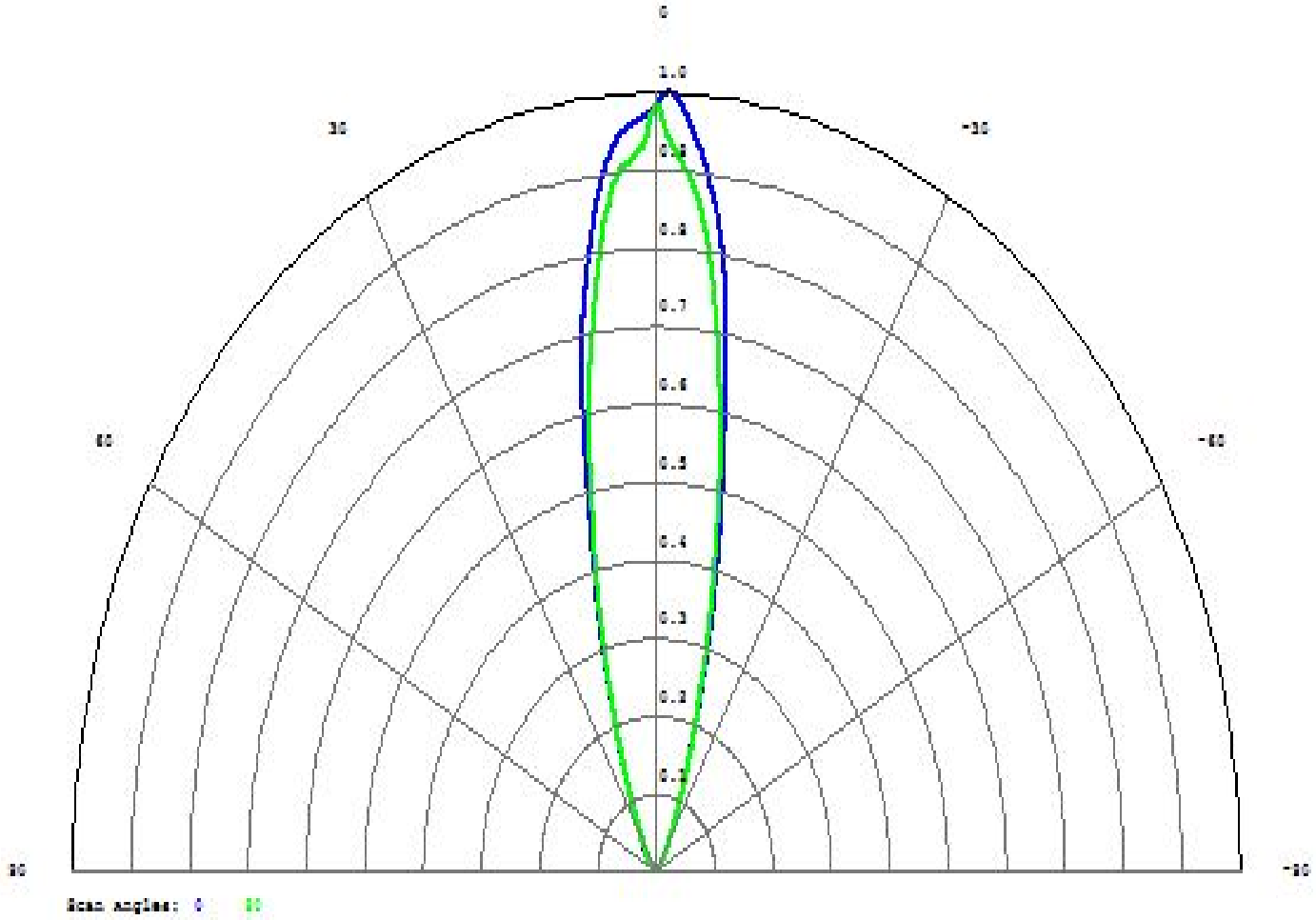
Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(Oslon_SSL_80)_SIMULATED
Lamps: 1 x Osram Oslon SSL 80 (LA CP7P)




cd/klm

η = 91%

C0 - C180 C90 - C270

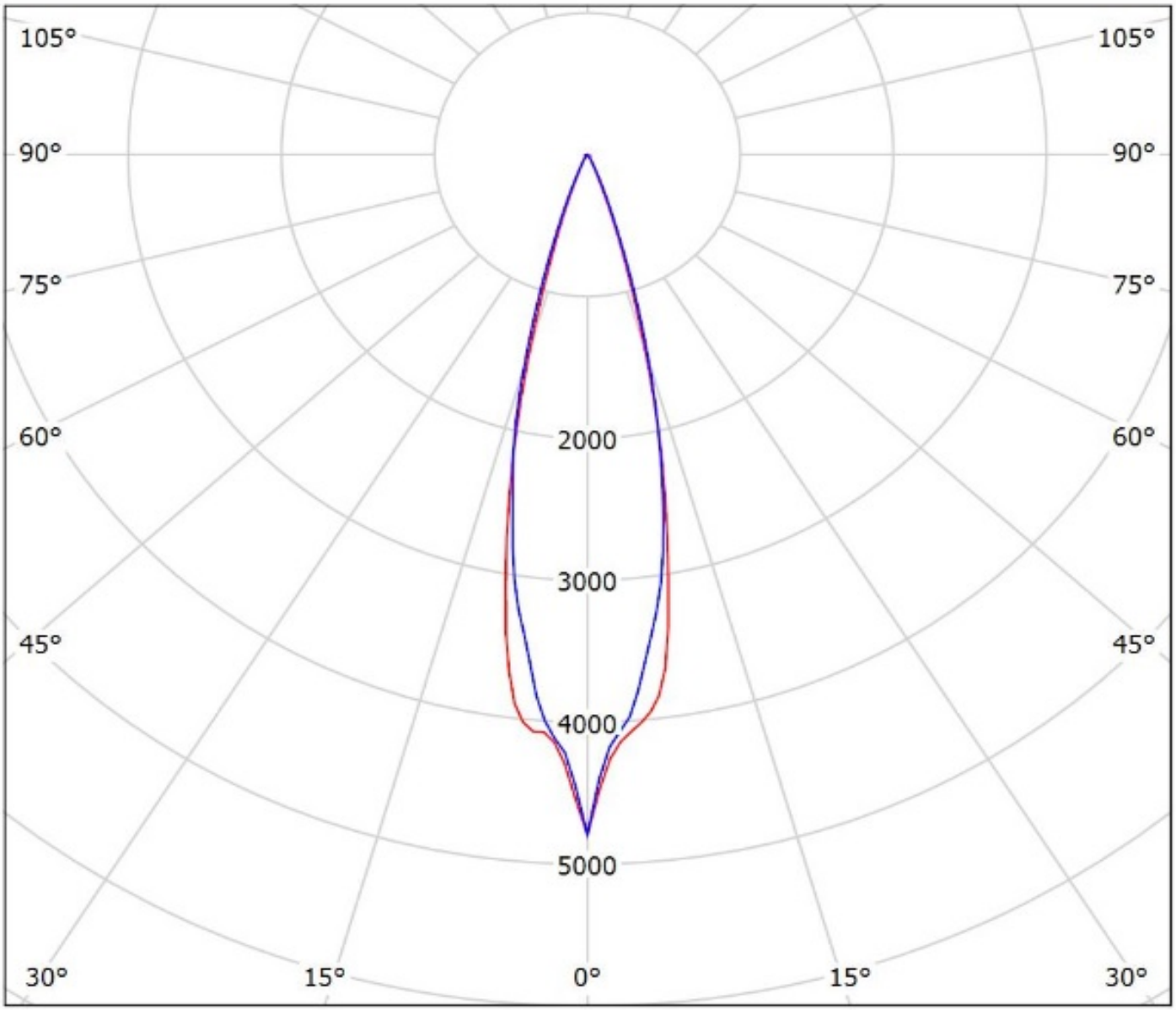



## Detector Image: Radiant Intensity

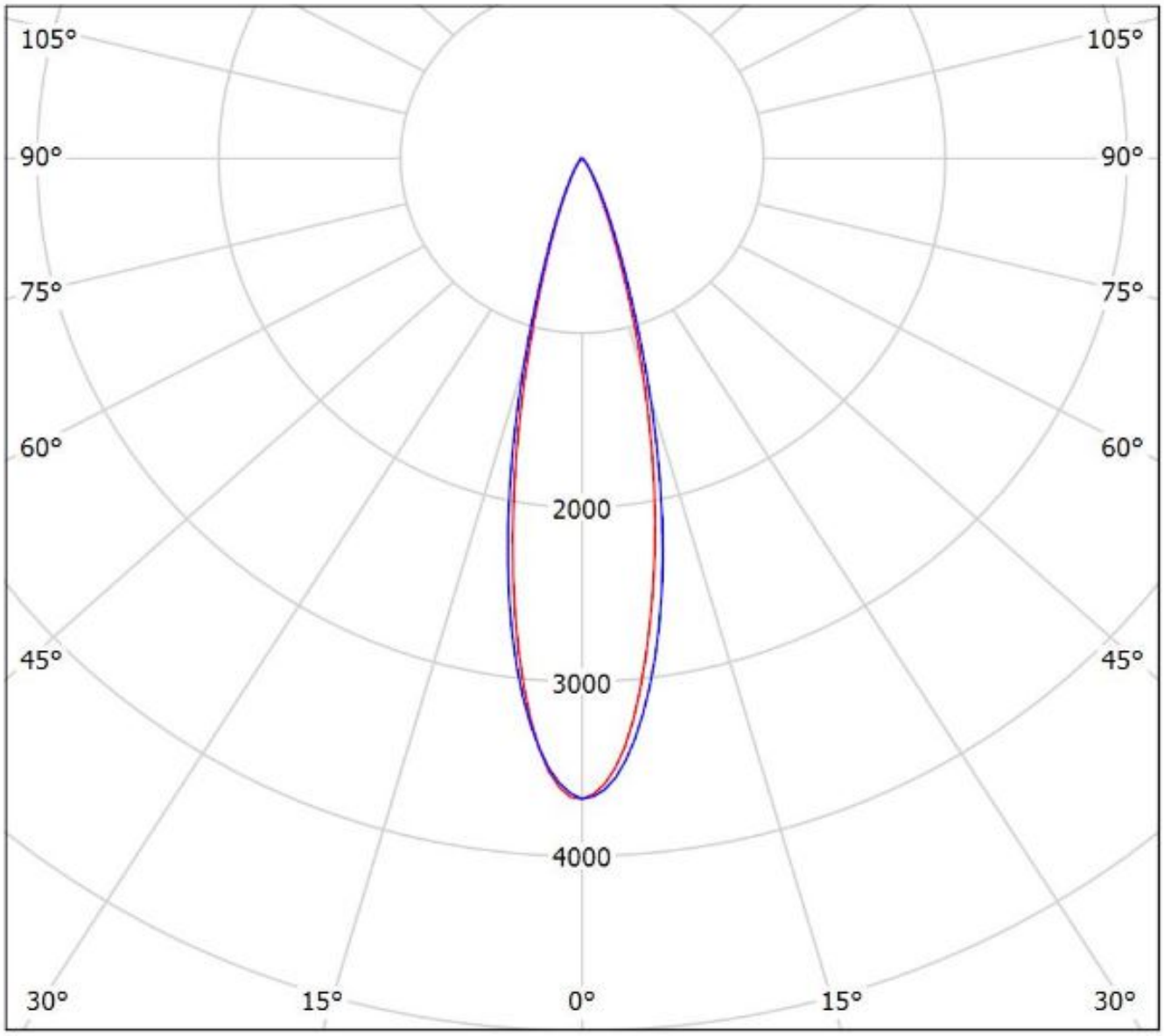
8.4.2016
Detector 4, NSCG Surface 1:
Scan Angles: 0, 90
Peak Intensity : 3.254E+000 Watts/Steradian

CA14509_G2-LXP2-M-P_SFH_4770S.ZMX
Configuration 1 of 1

Luminaire: Ledil Oy CA14509_G2-LXP2-M-P_(Oslon_Black_Flat)_SIMULATED
Lamps: 1 x Osram Oslon Black Flat (LUW HWQP)



Luminaire: LEDiL Oy CA14509_G2-LXP2-M-P_(Z8Y22plus)
Lamps: 1 x Seoul_Z8Y22plus_(W6E2G)_125.652lm@250mA_P=0.69312W_I=0.250A




cd/klm

η = 81%

C0 - C180 C90 - C270

**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.**