

# PRODUCT DATASHEET

## ANGELA series

last update 17/10/2014



### Product number F13379\_ANGELA-S

|                 |                      |             |                    |
|-----------------|----------------------|-------------|--------------------|
| Family          | ANGELA               | FWHM        | (simulated) 10     |
| Type            | Reflector            | Efficiency  | (simulated) 92 %   |
| LED             | LUXEON CoB 1204/1205 | cd/Im       | (simulated) 20.700 |
| Color           | Metal                | Gerber File | Available          |
| Diameter        | 119.5 mm             |             |                    |
| Height          | 74.27 mm             |             |                    |
| Style           | Round                |             |                    |
| Optic Material  | PC                   |             |                    |
| Holder Material | -                    |             |                    |
| Fastening       | Socket               |             |                    |
| Status          | On production        |             |                    |



### Product number F13379\_ANGELA-S

|                 |                      |             |           |
|-----------------|----------------------|-------------|-----------|
| Family          | ANGELA               | FWHM        | 8 degrees |
| Type            | Reflector            | Efficiency  | 94 %      |
| LED             | LUXEON CoB 1204/1205 | cd/Im       | 19.940    |
| Color           | Metal                | Gerber File | Available |
| Diameter        | 119.5 mm             |             |           |
| Height          | 74.27 mm             |             |           |
| Style           | Round                |             |           |
| Optic Material  | PC                   |             |           |
| Holder Material | -                    |             |           |
| Fastening       | Socket               |             |           |
| Status          | On production        |             |           |



### Product number F13662\_ANGELA-S-B

|                 |                      |             |           |
|-----------------|----------------------|-------------|-----------|
| Family          | ANGELA               | FWHM        | 9 degrees |
| Type            | Reflector            | Efficiency  | 93 %      |
| LED             | LUXEON CoB 1204/1205 | cd/Im       | 19.200    |
| Color           | Metal                | Gerber File | Available |
| Diameter        | 119.5 mm             |             |           |
| Height          | 74.5 mm              |             |           |
| Style           | Round                |             |           |
| Optic Material  | PC                   |             |           |
| Holder Material | -                    |             |           |
| Fastening       | -                    |             |           |
| Status          | On production        |             |           |

For BJB solderless connector



### Product number FC13991\_ANGELA-RZ-S

|                 |                      |             |            |
|-----------------|----------------------|-------------|------------|
| Family          | ANGELA               | FWHM        | 10 degrees |
| Type            | RefPack              | Efficiency  | 85 %       |
| LED             | LUXEON CoB 1204/1205 | cd/Im       | 13.100     |
| Color           | Metal                | Gerber File | Available  |
| Diameter        | 119.5 mm             |             |            |
| Height          | 74.5 mm              |             |            |
| Style           | Round                |             |            |
| Optic Material  | PC                   |             |            |
| Holder Material | -                    |             |            |
| Fastening       | Socket, screw        |             |            |
| Status          | On production        |             |            |

PRODUCT DATASHEET  
ANGELA series

last update 17/10/2014

**Product number F13380\_ANGELA-M**

|                 |                      |             |            |
|-----------------|----------------------|-------------|------------|
| Family          | ANGELA               | FWHM        | 15 degrees |
| Type            | Reflector            | Efficiency  | 85 %       |
| LED             | LUXEON CoB 1204/1205 | cd/Im       | 3.930      |
| Color           | Metal                | Gerber File | Available  |
| Diameter        | 119.5 mm             |             |            |
| Height          | 74.5 mm              |             |            |
| Style           | Round                |             |            |
| Optic Material  | PC                   |             |            |
| Holder Material | -                    |             |            |
| Fastening       | -                    |             |            |
| Status          | On production        |             |            |

**Product number F13663\_ANGELA-M-B**

|                 |                      |             |            |
|-----------------|----------------------|-------------|------------|
| Family          | ANGELA               | FWHM        | 16 degrees |
| Type            | Reflector            | Efficiency  | 82 %       |
| LED             | LUXEON CoB 1204/1205 | cd/Im       | 3.840      |
| Color           | Metal                | Gerber File | Available  |
| Diameter        | 119.5 mm             |             |            |
| Height          | 74.5 mm              |             |            |
| Style           | Round                |             |            |
| Optic Material  | PC                   |             |            |
| Holder Material | -                    |             |            |
| Fastening       | -                    |             |            |
| Status          | On production        |             |            |

For BJB solderless connector

**Product number F13381\_ANGELA-W**

|                 |                      |             |            |
|-----------------|----------------------|-------------|------------|
| Family          | ANGELA               | FWHM        | 33 degrees |
| Type            | Reflector            | Efficiency  | 84 %       |
| LED             | LUXEON CoB 1204/1205 | cd/Im       | 1.680      |
| Color           | Metal                | Gerber File | Available  |
| Diameter        | 119.5 mm             |             |            |
| Height          | 74.5 mm              |             |            |
| Style           | Round                |             |            |
| Optic Material  | PC                   |             |            |
| Holder Material | -                    |             |            |
| Fastening       | -                    |             |            |
| Status          | On production        |             |            |

**Product number F13664\_ANGELA-W-B**

|                 |                      |             |            |
|-----------------|----------------------|-------------|------------|
| Family          | ANGELA               | FWHM        | 33 degrees |
| Type            | Reflector            | Efficiency  | 83 %       |
| LED             | LUXEON CoB 1204/1205 | cd/Im       | 1.660      |
| Color           | Metal                | Gerber File | Available  |
| Diameter        | 119.5 mm             |             |            |
| Height          | 74.5 mm              |             |            |
| Style           | Round                |             |            |
| Optic Material  | PC                   |             |            |
| Holder Material | -                    |             |            |
| Fastening       | -                    |             |            |
| Status          | On production        |             |            |

For BJB solderless connector

**PRODUCT DATASHEET**  
**ANGELA series**

last update 17/10/2014

**Product number F13840\_ANGELA-XW**

|                 |                      |             |            |
|-----------------|----------------------|-------------|------------|
| Family          | ANGELA               | FWHM        | 72 degrees |
| Type            | Reflector            | Efficiency  | 93 %       |
| LED             | LUXEON CoB 1204/1205 | cd/Im       | 0.600      |
| Color           | White                | Gerber File | Available  |
| Diameter        | 119.5 mm             |             |            |
| Height          | 74.5 mm              |             |            |
| Style           | Round                |             |            |
| Optic Material  | PC                   |             |            |
| Holder Material | -                    |             |            |
| Fastening       | -                    |             |            |
| Status          | On production        |             |            |

**Product number F13841\_ANGELA-XW-B**

|                 |                      |             |            |
|-----------------|----------------------|-------------|------------|
| Family          | ANGELA               | FWHM        | 73 degrees |
| Type            | Reflector            | Efficiency  | 94 %       |
| LED             | LUXEON CoB 1204/1205 | cd/Im       | 0.640      |
| Color           | White                | Gerber File | Available  |
| Diameter        | 119.5 mm             |             |            |
| Height          | 74.5 mm              |             |            |
| Style           | Round                |             |            |
| Optic Material  | PC                   |             |            |
| Holder Material | -                    |             |            |
| Fastening       | -                    |             |            |
| Status          | On production        |             |            |

For BJB solderless connector

**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**  
**ANGELA series**

last update 17/10/2014

**GENERAL INFORMATION**

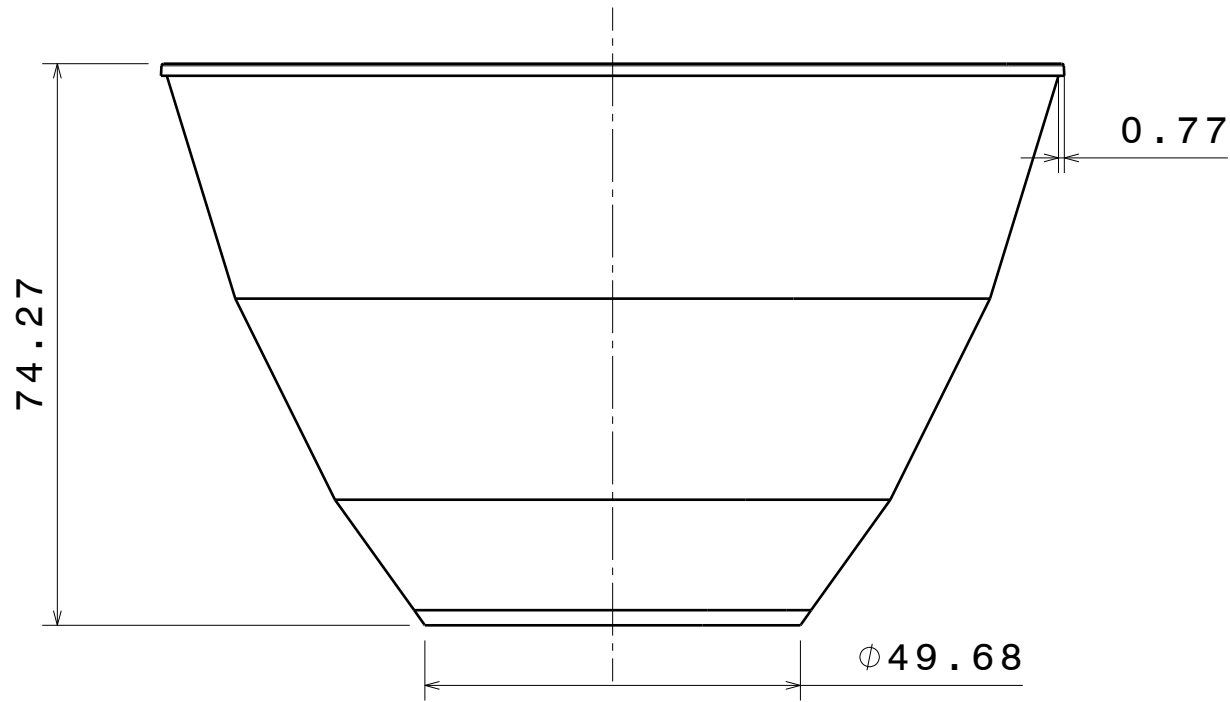
- Product series especially designed & optimized for LUXEON CoB 1204/1205 series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PC with high UV and temperature resistance (120 degrees of Celcius / 248 degrees of Fahrenheit). Allows use of high current and temperature conditions.

Please find more information about used materials from below:

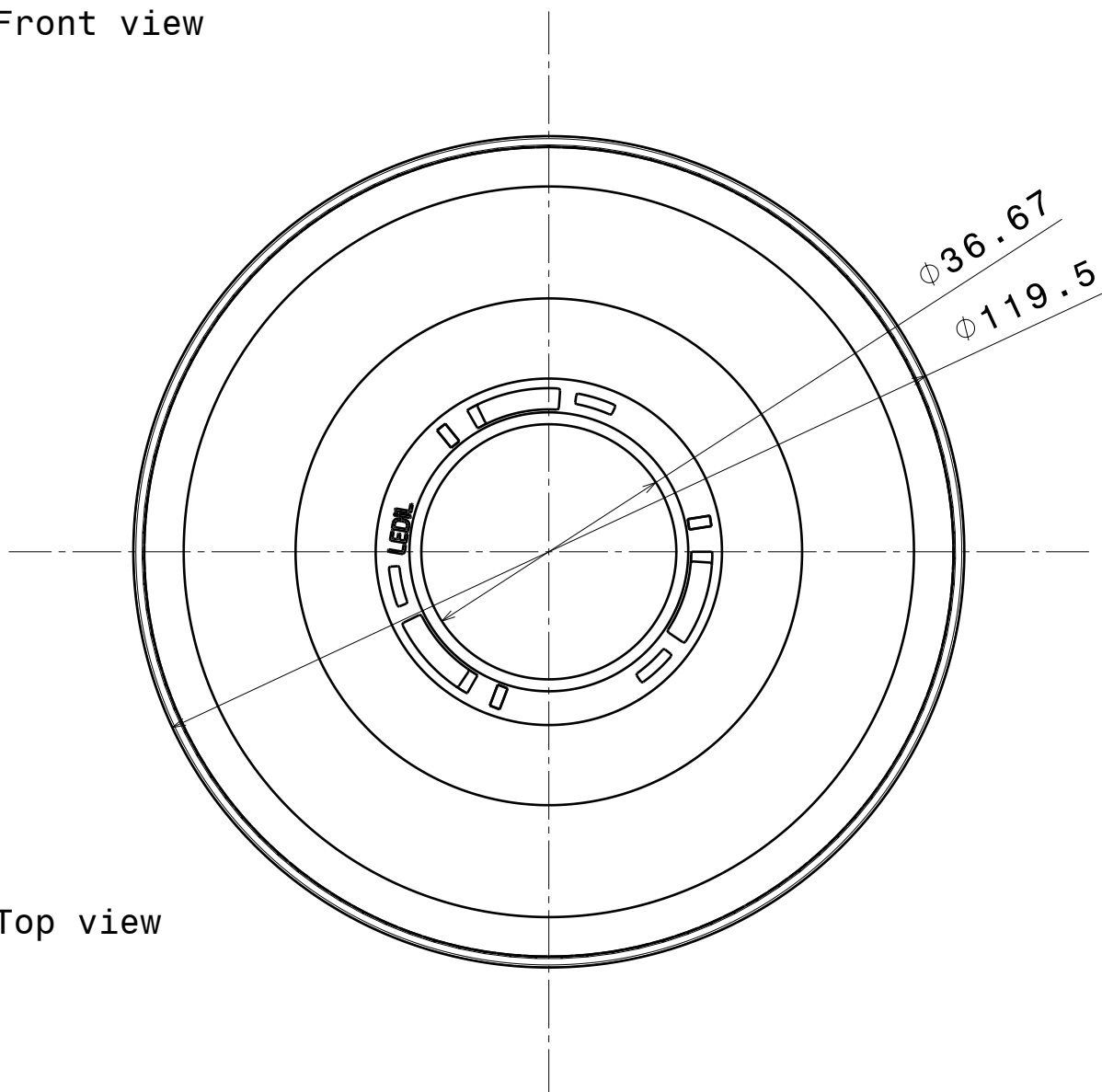
[http://ledil.fi/sites/default/files/Documents/Technical/Material/PC%20Makrolon%202400\\_2407\\_2456\\_2458-UL.pdf](http://ledil.fi/sites/default/files/Documents/Technical/Material/PC%20Makrolon%202400_2407_2456_2458-UL.pdf)

- Reflector is made of aluminium coated PC (120 degrees of Celcius / 248 degrees of Fahrenheit) with protective lacquer (short term 100 degrees of Celcius / 212 degrees of Fahrenheit).

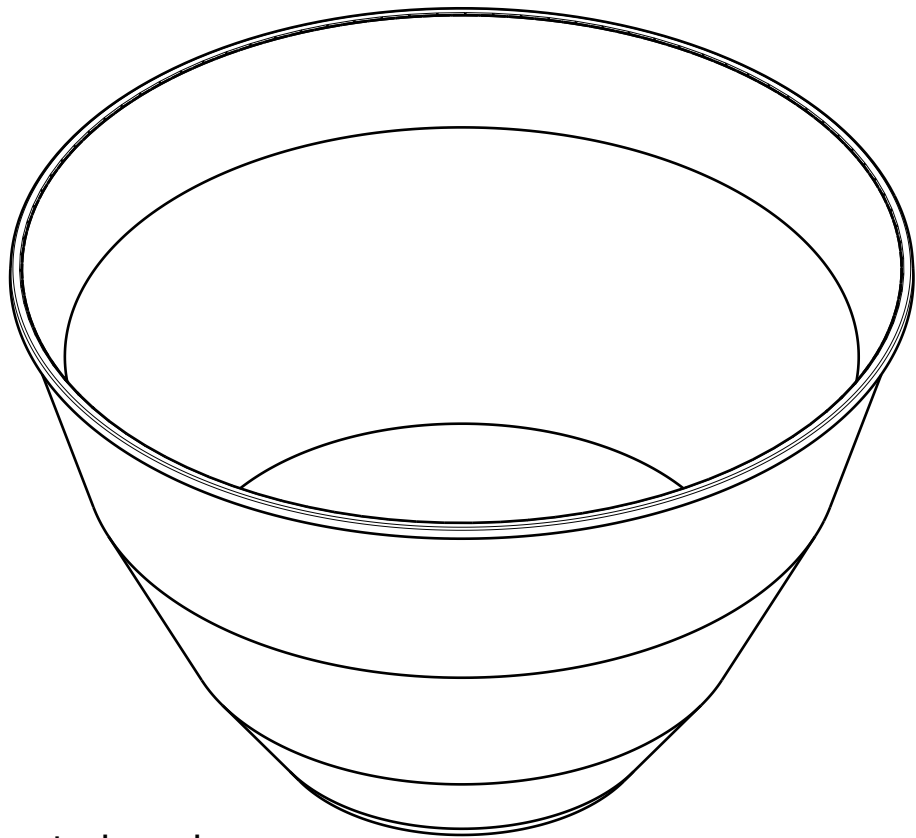
Note! Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.



Front view



Top view



Isometric view

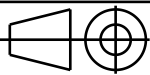
| INDEX | PART NO | DESCRIPTION | MATERIAL | COLOUR |
|-------|---------|-------------|----------|--------|
| 1     | F13379  | Angela-S    | PC       | metal  |

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:



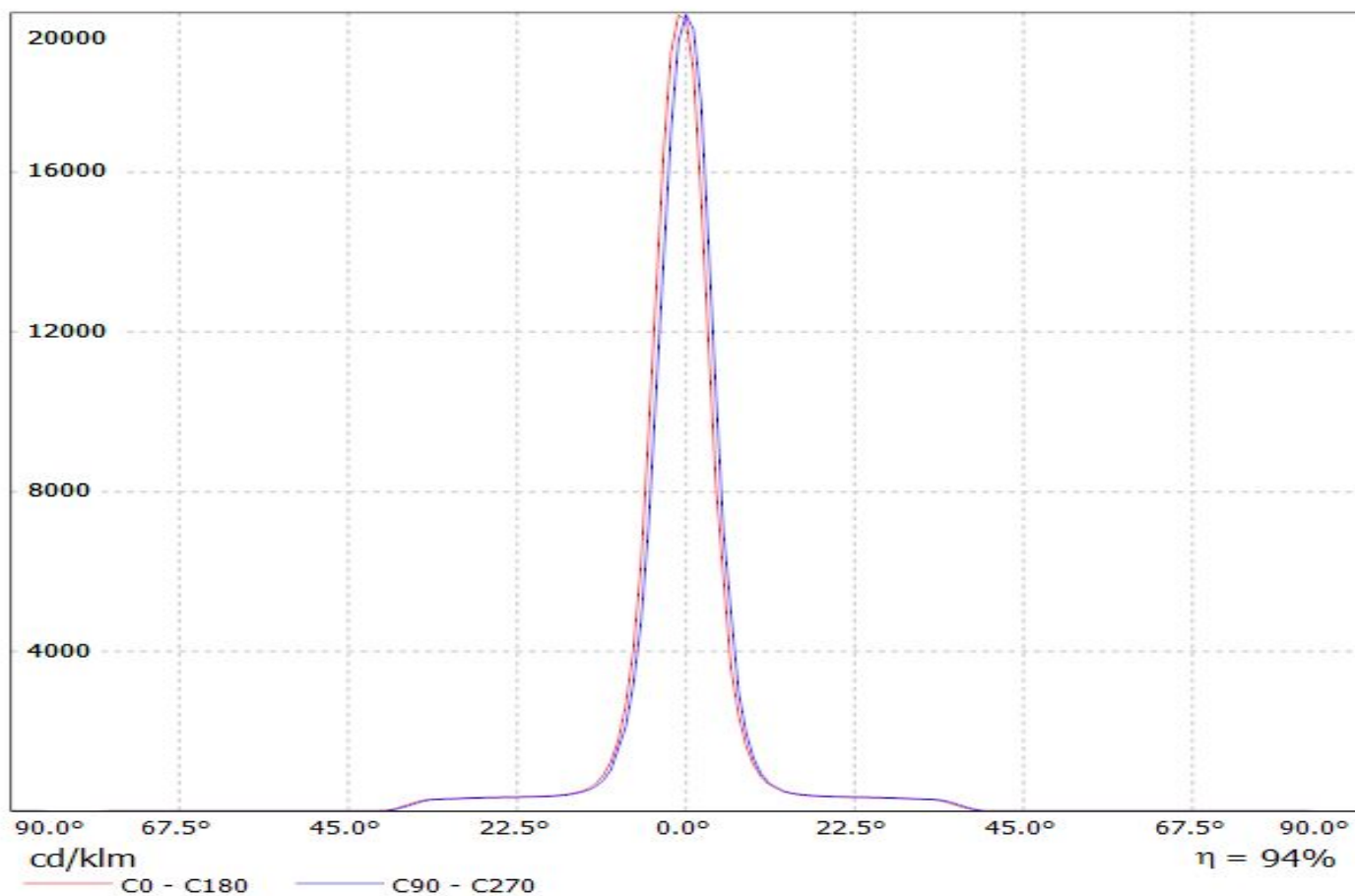
DRAWING TITLE  
F13379\_Angela-S

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

| SIZE | PART NUMBER |
|------|-------------|
| A3   | F13379      |

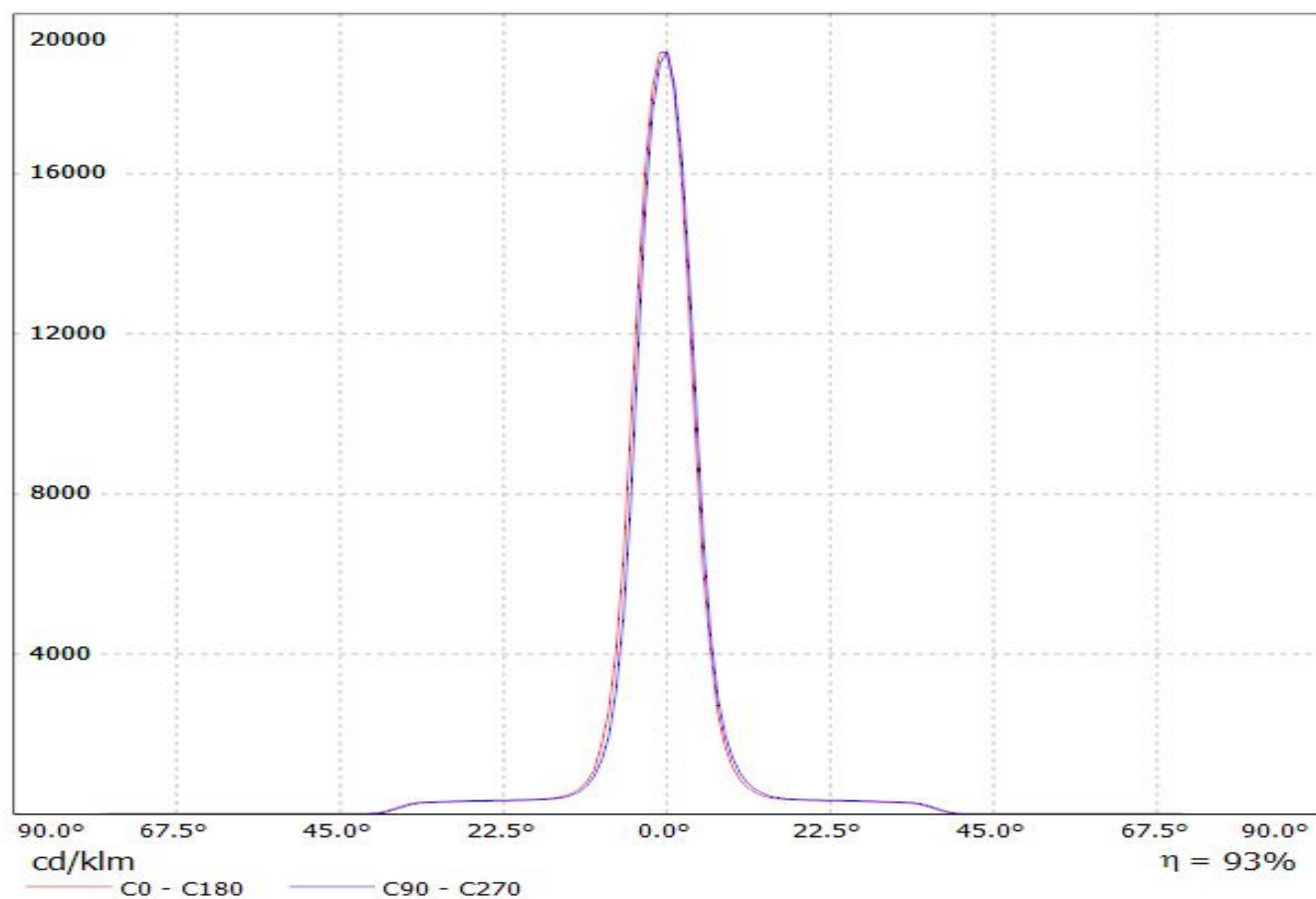
|       |     |        |         |       |     |
|-------|-----|--------|---------|-------|-----|
| SCALE | 1:1 | WEIGHT | 78,76 g | SHEET | 1/1 |
|-------|-----|--------|---------|-------|-----|

Luminaire: LEDiL Oy F13379\_ANGELA-S\_(COB\_1205) Eff.94.0%  
Lamps: 1 x Luxeon\_COB\_1205\_1092.75lm@250mA\_P=8.33092W\_I=249.9mA

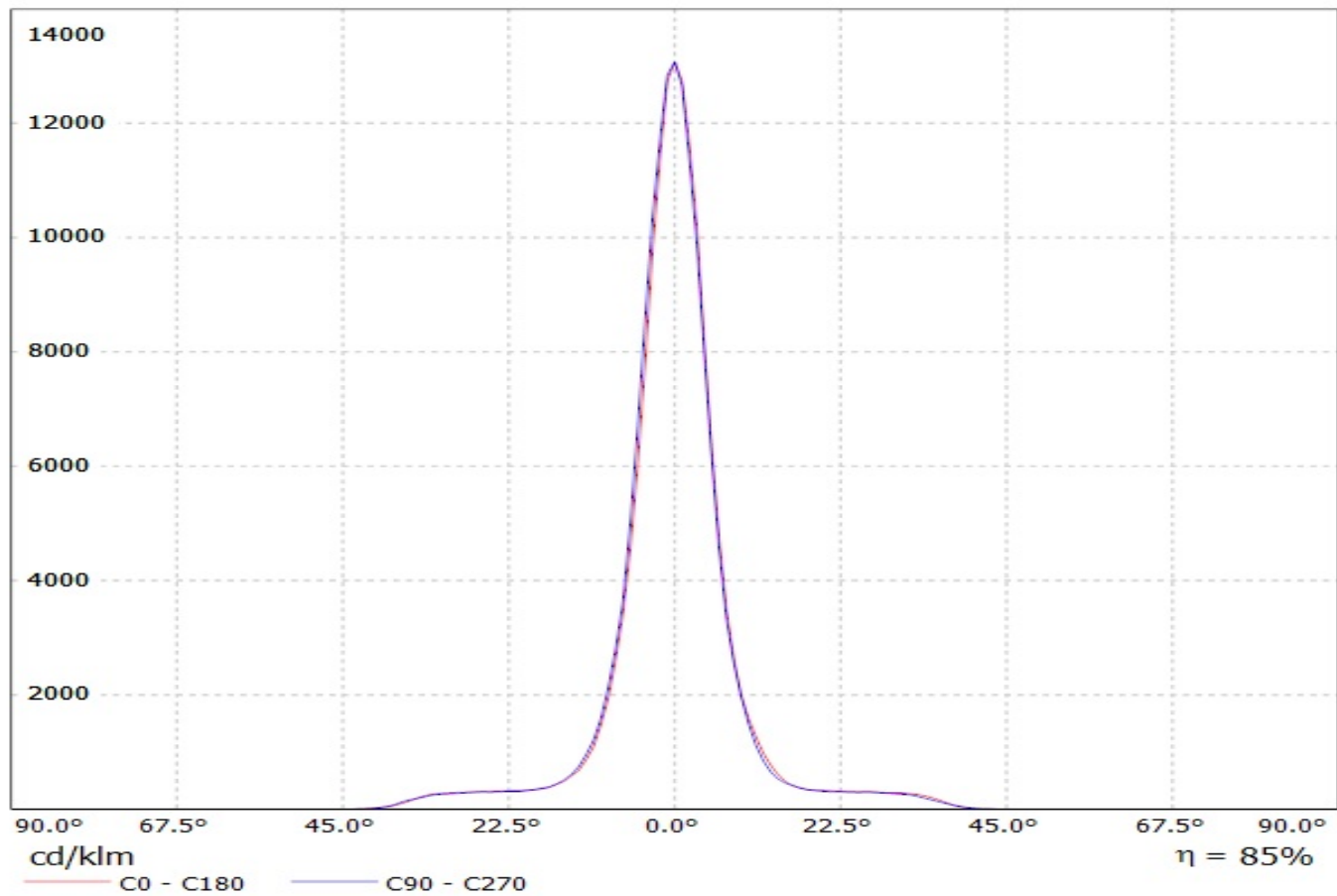


Luminaire: LEDiL Oy F13662\_ANGELA-S-B\_(Luxeon\_CoB\_1205)

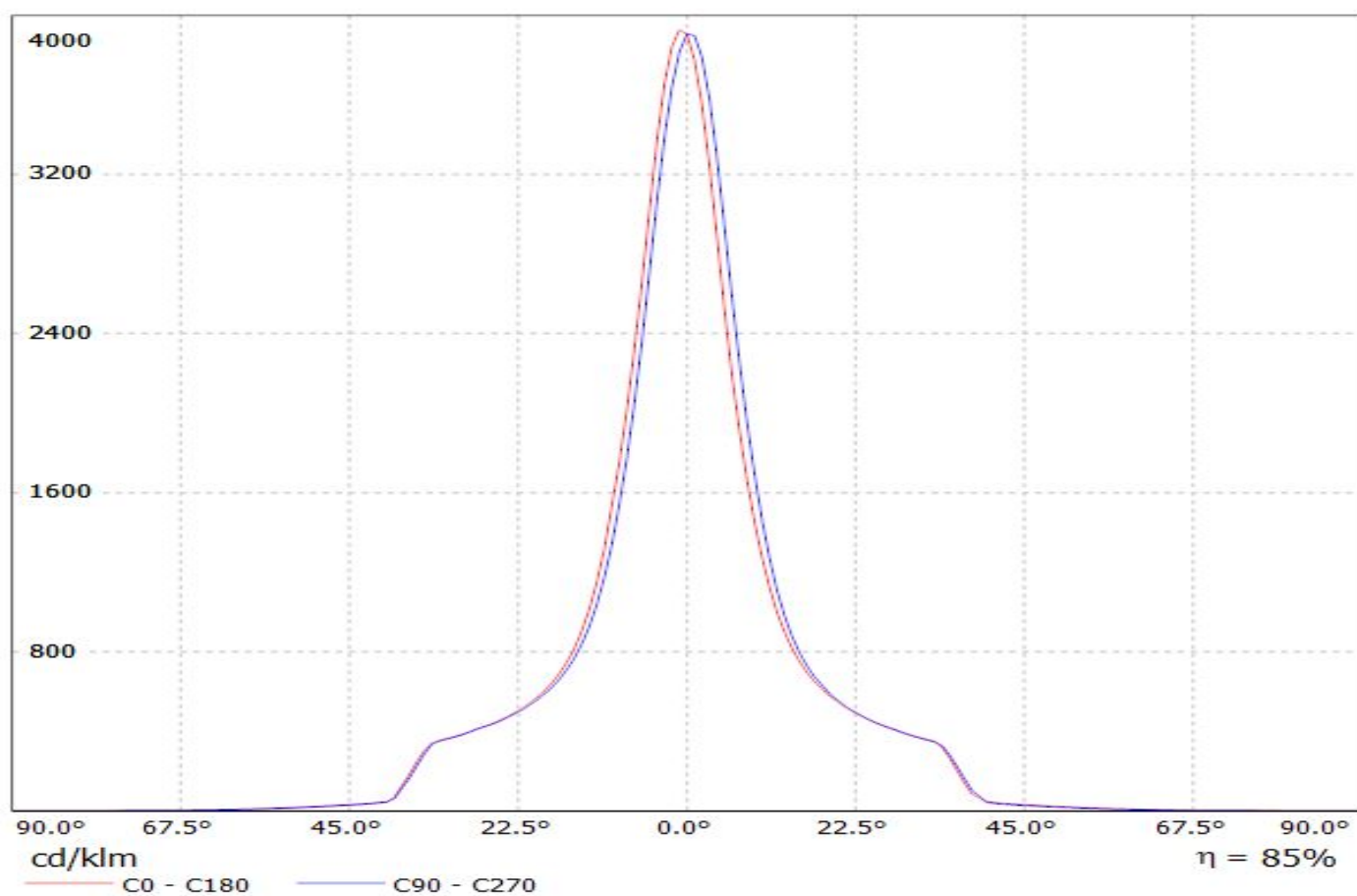
Lamps: 1 x LUXEON\_COB\_1205\_(LHC1-3080-1205)\_1115lm@250mA\_CCT=3000K\_P=11.183W\_I=249.8mA



Luminaire: LEDil Oy FC13991\_ANGELA-RZ-S (Luxeon\_CoB\_1205)  
Lamps: 1 x Philips Lumileds Luxeon CoB 1205 (LHC1-3080-1205) 1078.92lm @ 250mA P=8.4W I=250mA

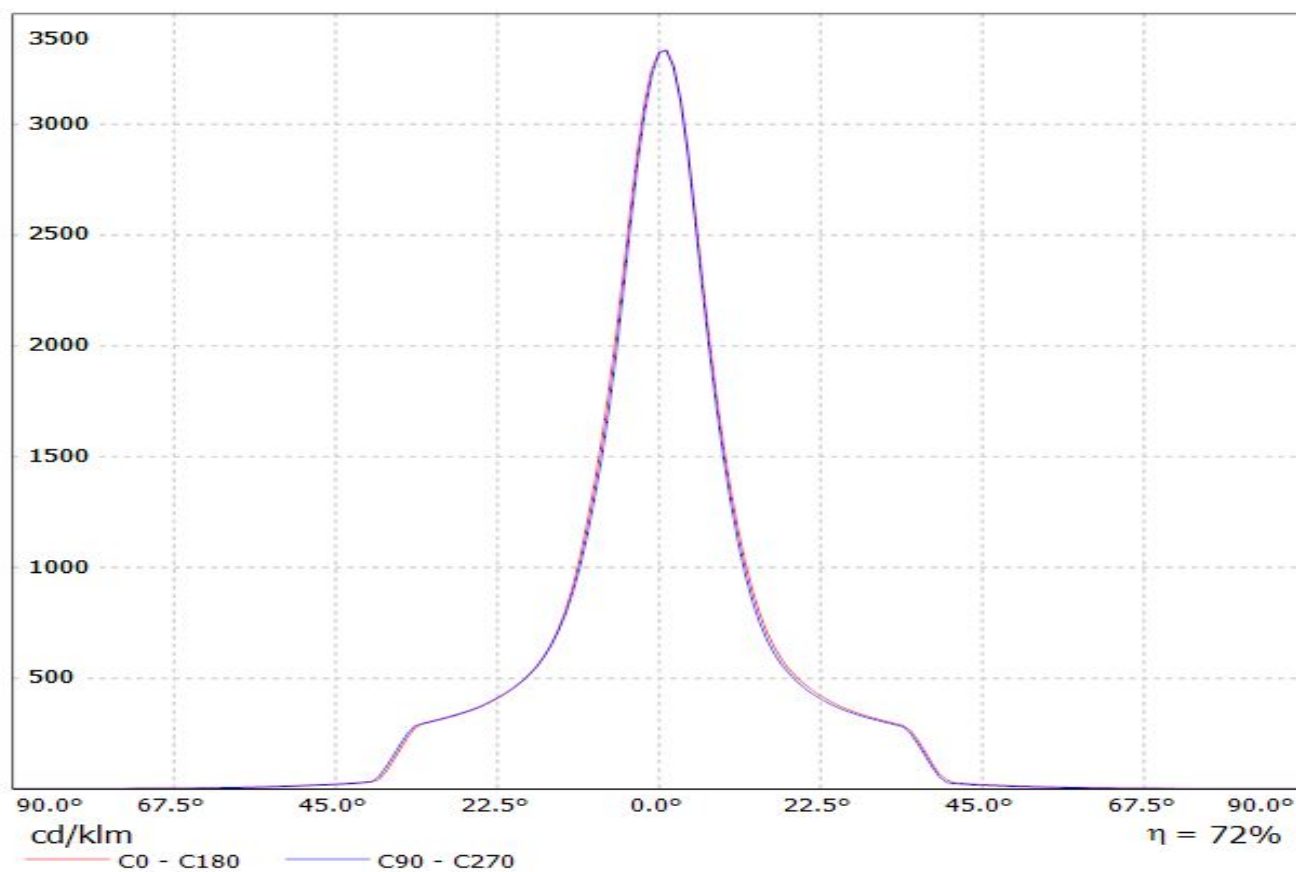


Luminaire: LEDiL Oy F13380\_ANGELA-M\_(COB\_1205) Eff.85.3%  
Lamps: 1 x Luxeon\_COB\_1205\_1092.75lm@250mA\_P=8.33092W\_I=249.9mA

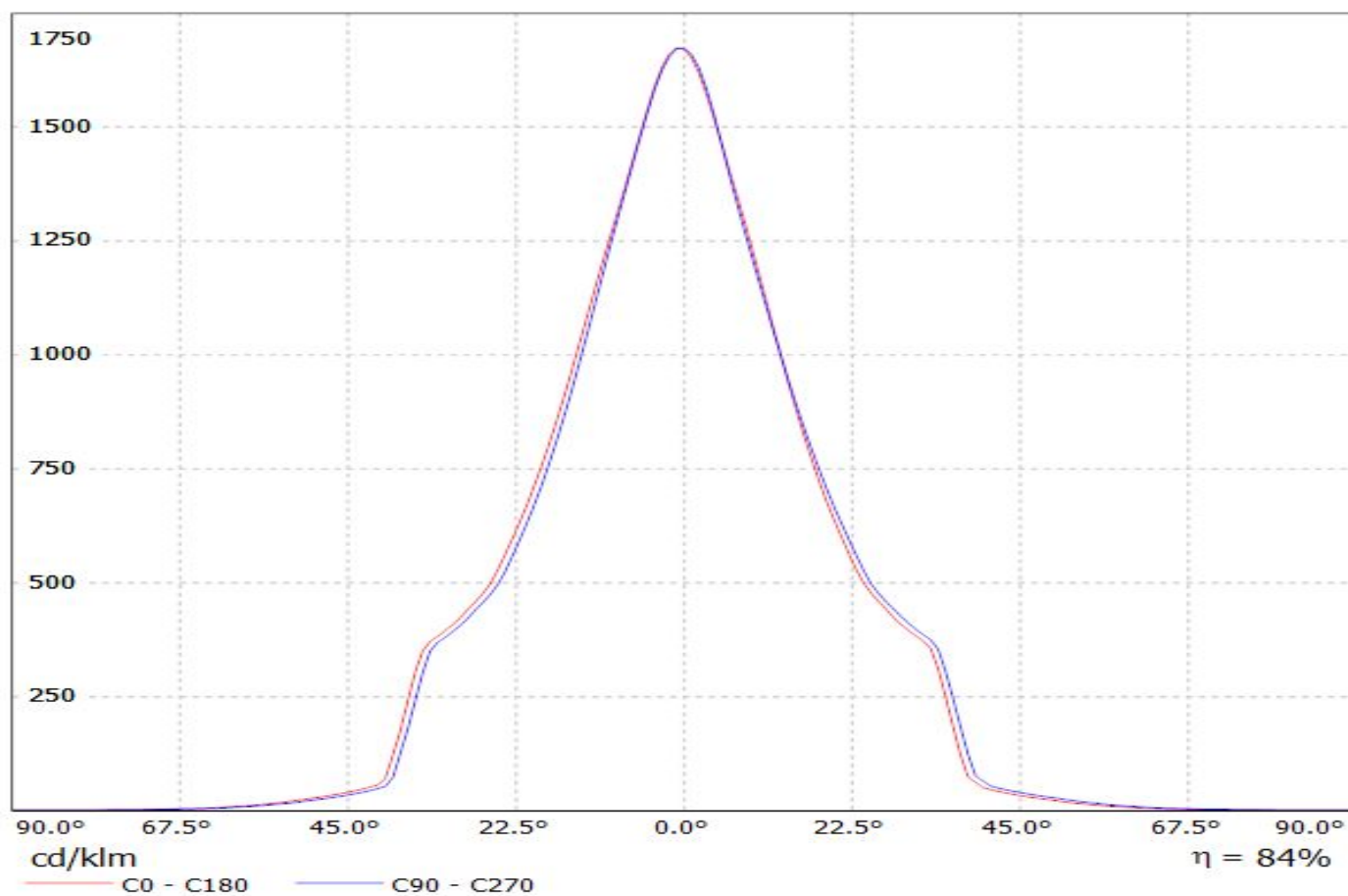


Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(Luxeon\_CoB\_1205)

Lamps: 1 x LUXEON\_COB\_1205\_(LHC1-3080-1205)\_1274.35lm@250mA\_CCT=3000K\_P=11.183W\_I=249.8mA

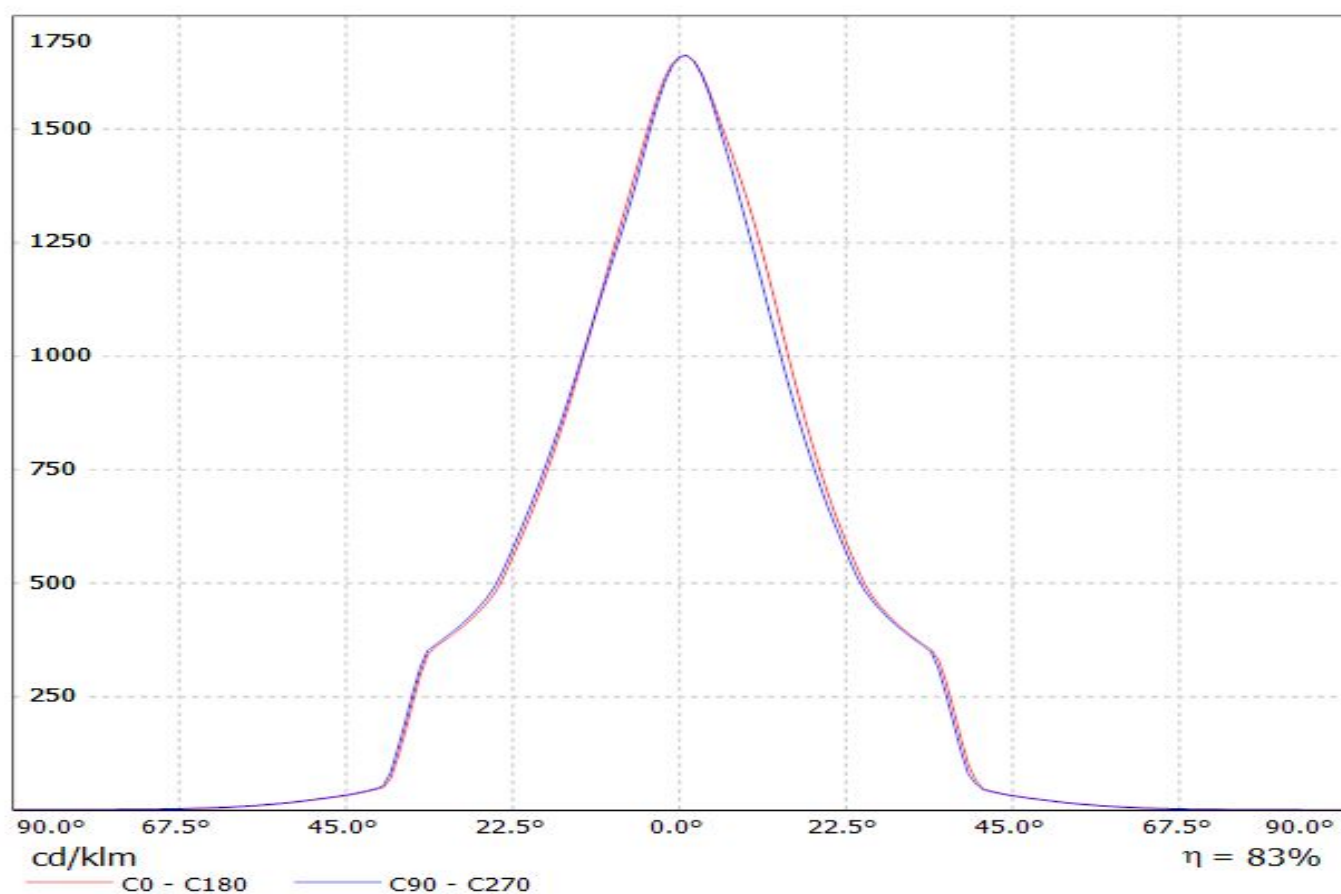


Luminaire: LEDiL Oy F13381\_ANGELA-W\_(COB\_1205) Eff.83.8%  
Lamps: 1 x Luxeon\_COB\_1205\_1092.75lm@250mA\_P=8.33092W\_I=249.9mA

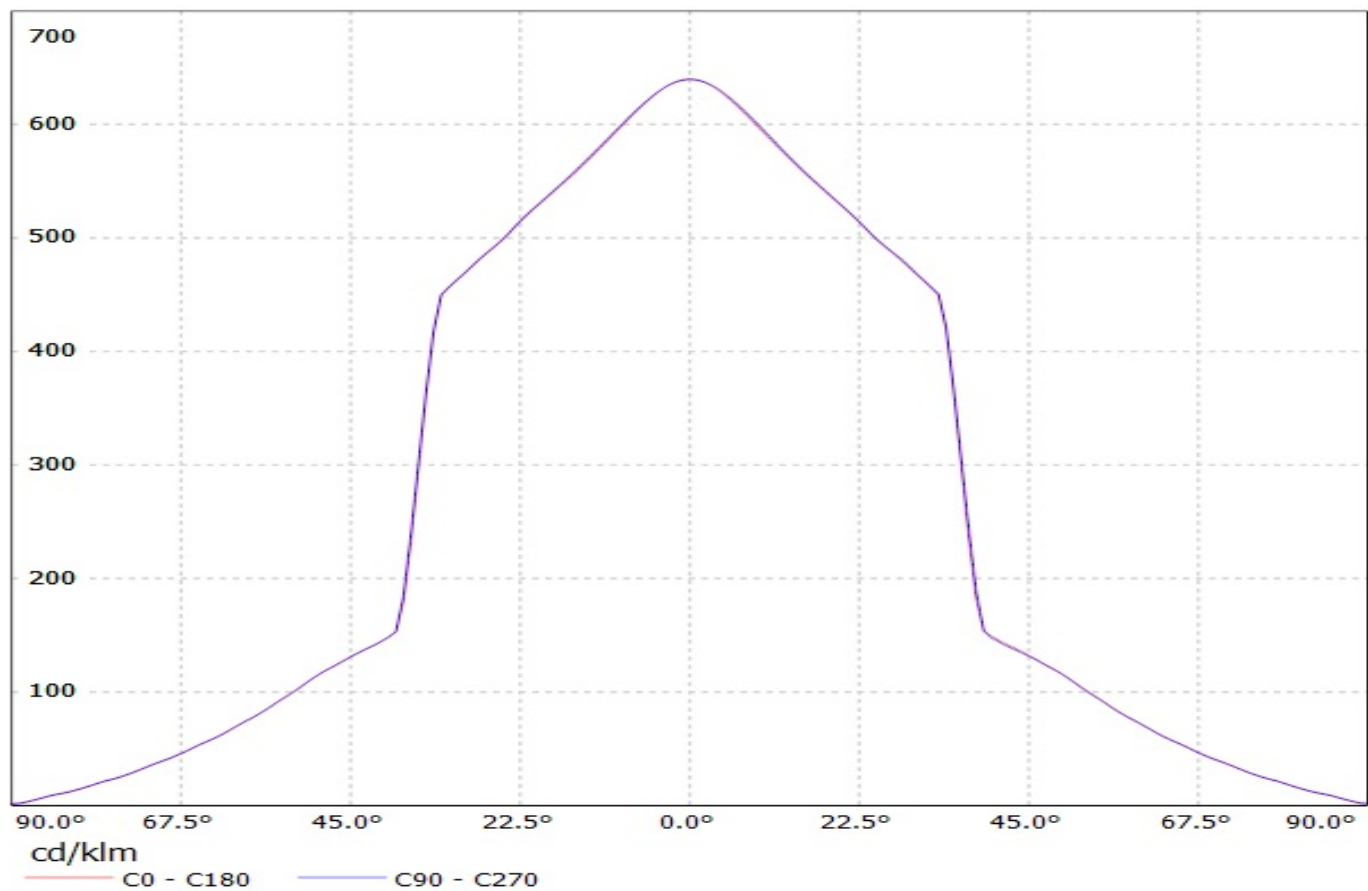


Luminaire: LEDiL Oy F13664\_ANGELA-W-B\_(Luxeon\_CoB\_1205)

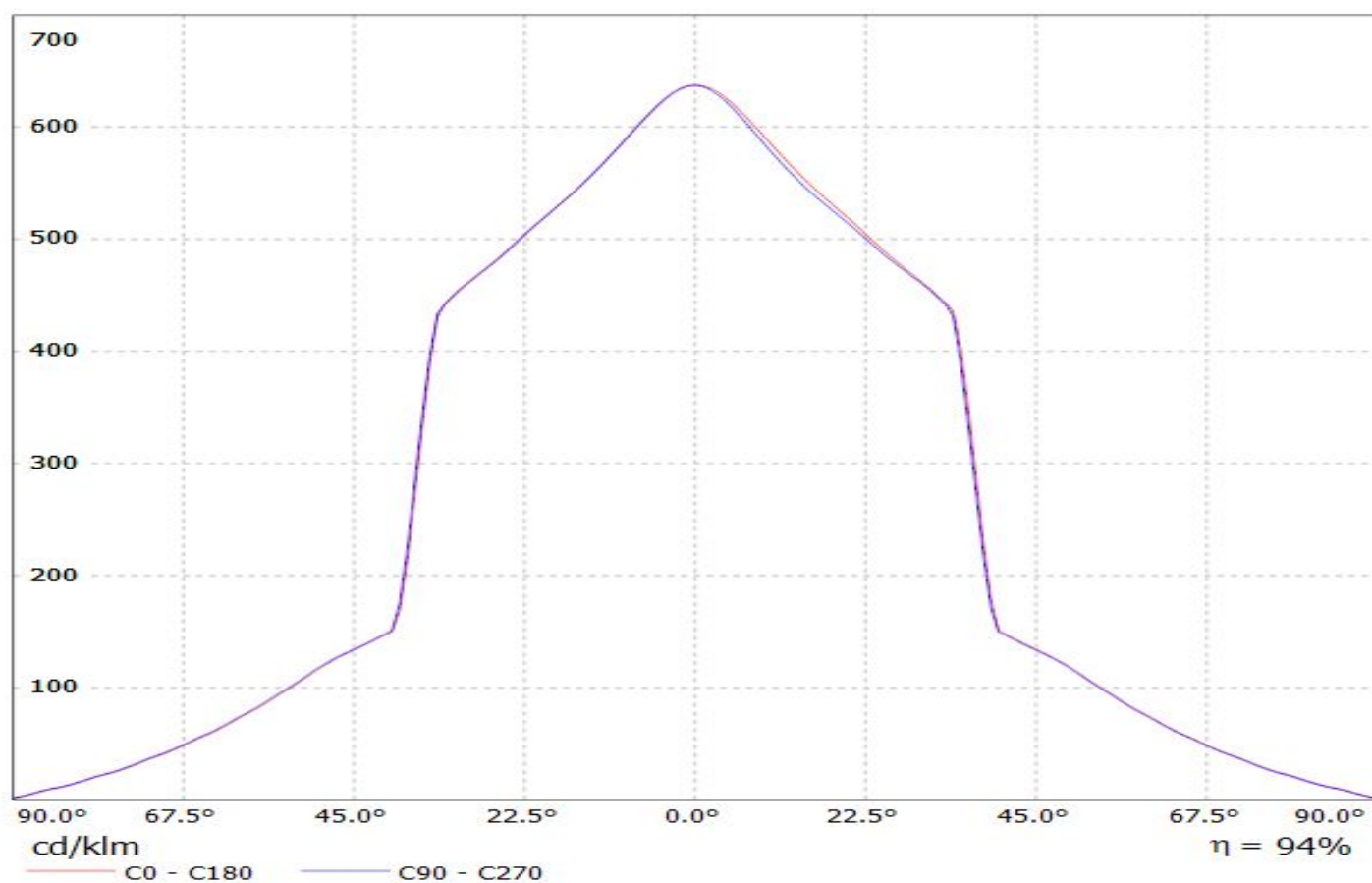
Lamps: 1 x LUXEON\_COB\_1205\_(LHC1-3080-1205)\_1115lm@250mA\_CCT=3000K\_P=11.183W\_I=249.8mA



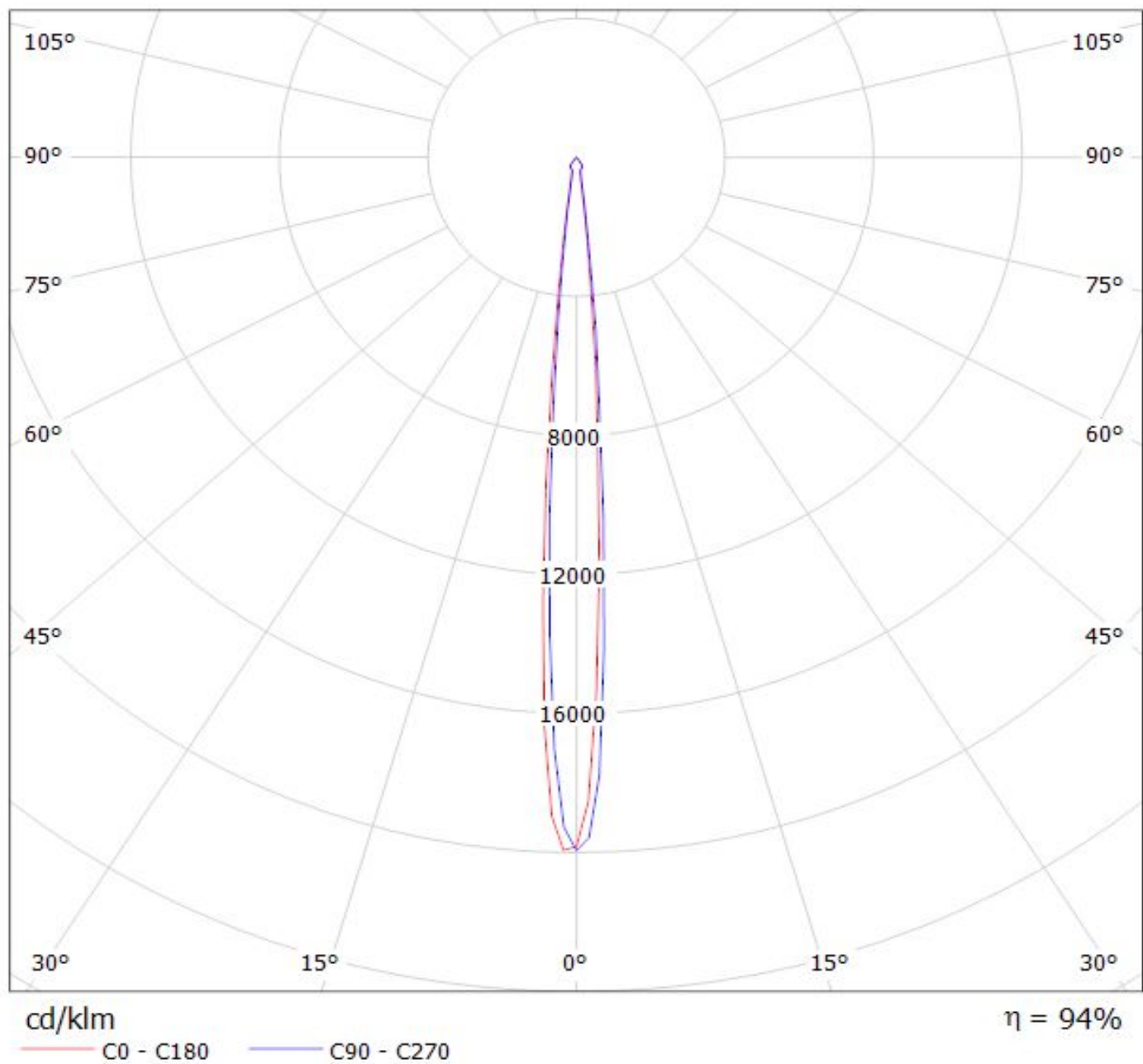
Luminaire: LEDiL Oy F13840\_ANGELA-XW\_(COB\_1205) Eff: 93%  
Lamps: 1 x Luxeon\_COB\_1205\_1088.09lm@250mA\_P=8.32942W\_I=249.9mA



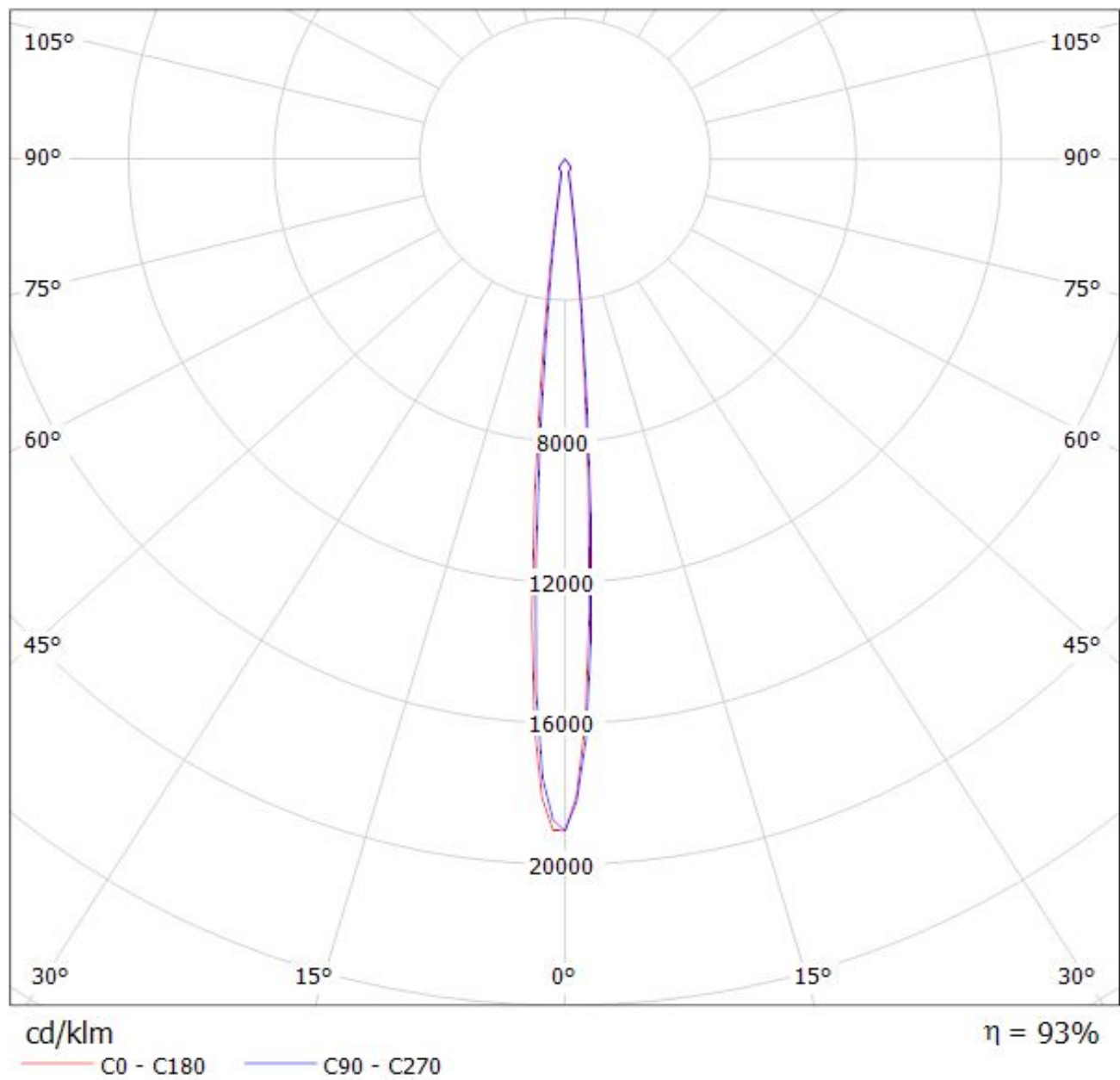
Luminaire: LEDiL Oy F13841\_ANGELA-XW-B\_(Luxeon\_CoB\_1205)  
Lamps: 1 x LUXEON\_COB\_1205\_(LHC1-3080-1205)  
\_1115lm@250mA\_CCT=3000K\_P=11.183W\_I=249.8mA



Luminaire: LEDiL Oy F13379\_ANGELA-S\_(COB\_1205) Eff.94.0%  
Lamps: 1 x Luxeon\_COB\_1205\_1092.75lm@250mA\_P=8.33092W\_I=249.9mA

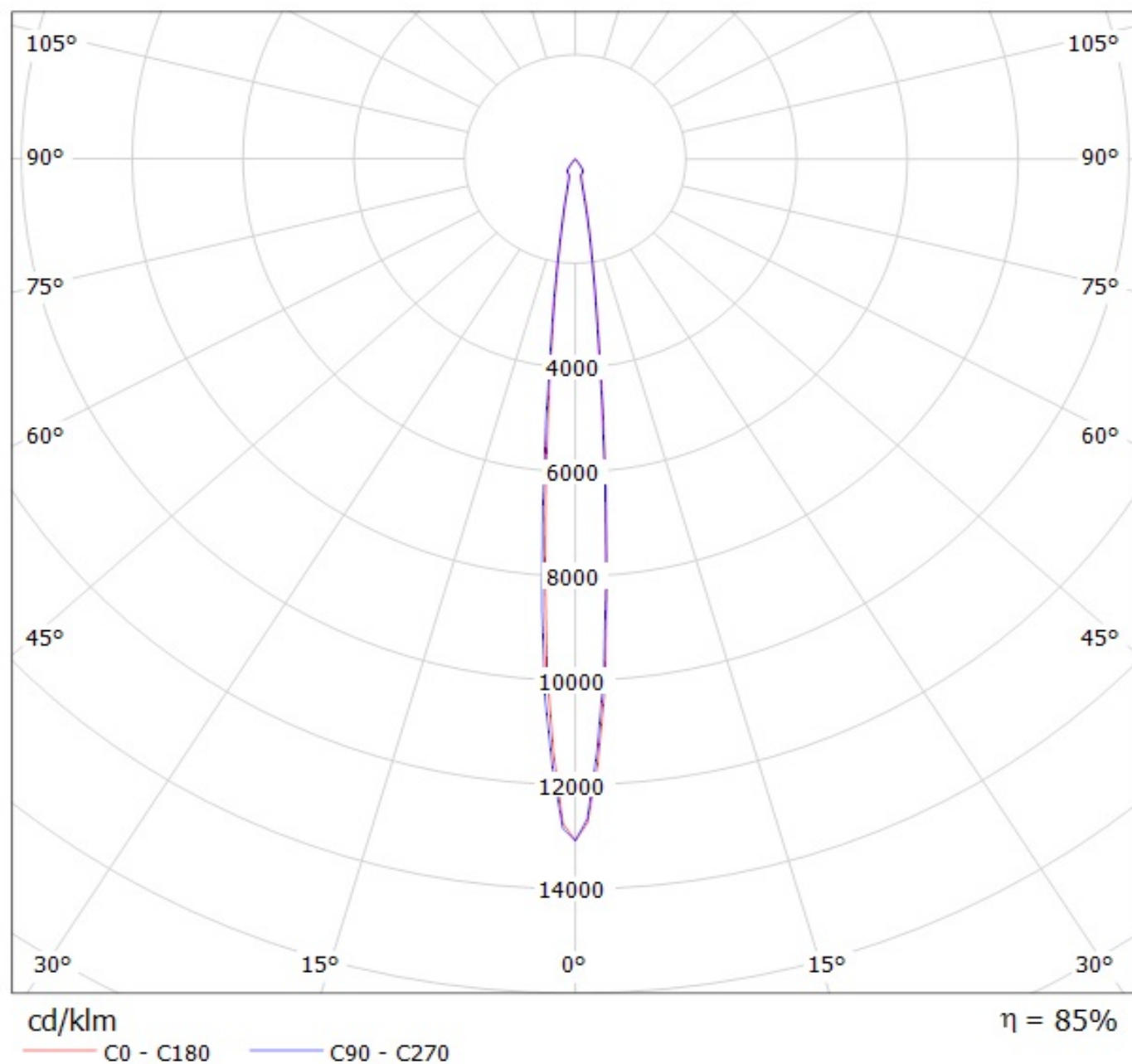


Luminaire: LEDiL Oy F13662\_ANGELA-S-B\_(Luxeon\_CoB\_1205)  
Lamps: 1 x LUXEON\_COB\_1205\_(LHC1-3080-1205)\_1115lm@250mA\_CCT=3000K\_P=11.183W\_I=249.8mA

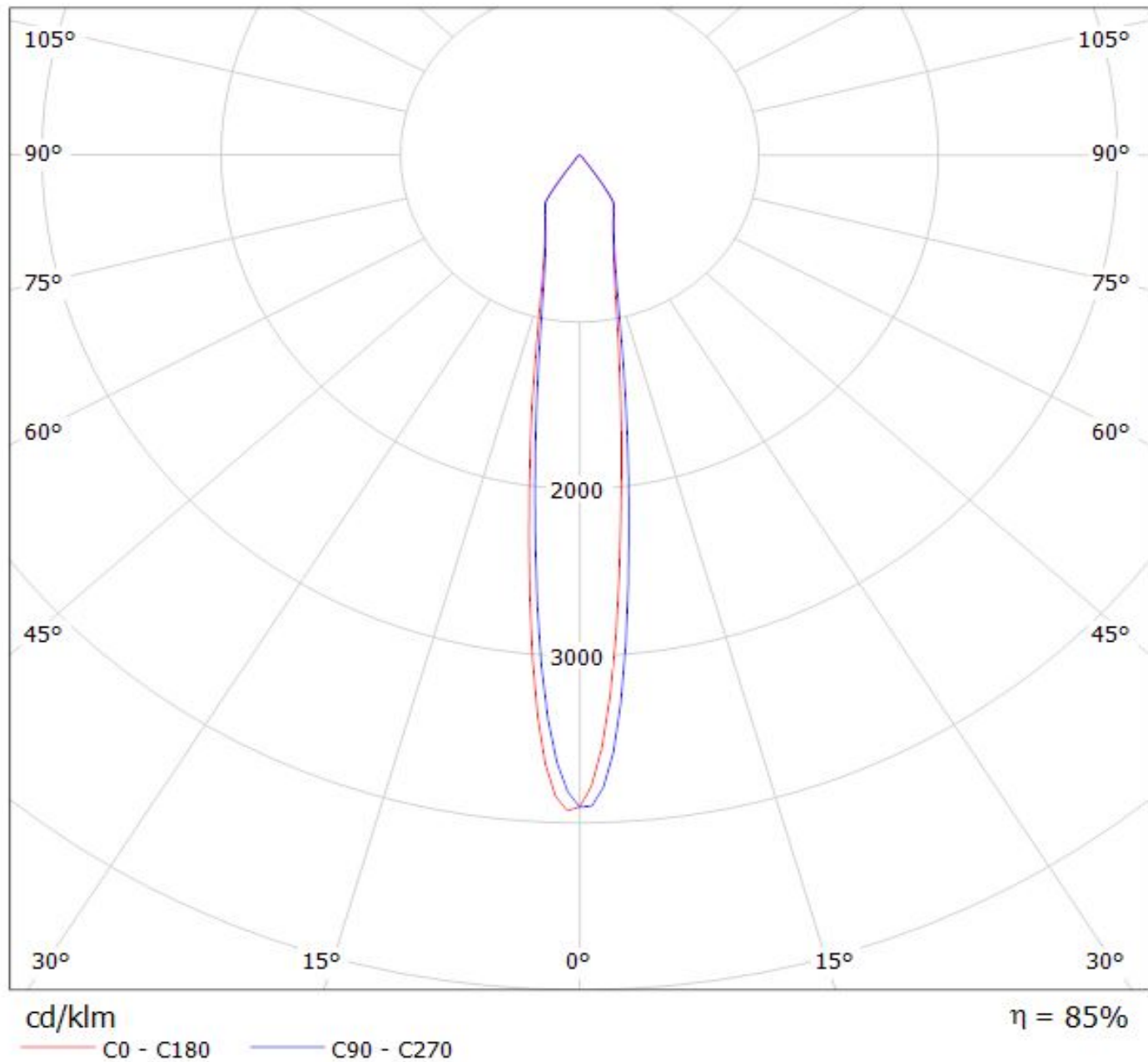


Luminaire: LEDil Oy FC13991\_ANGELA-RZ-S\_(Luxeon\_CoB\_1205)

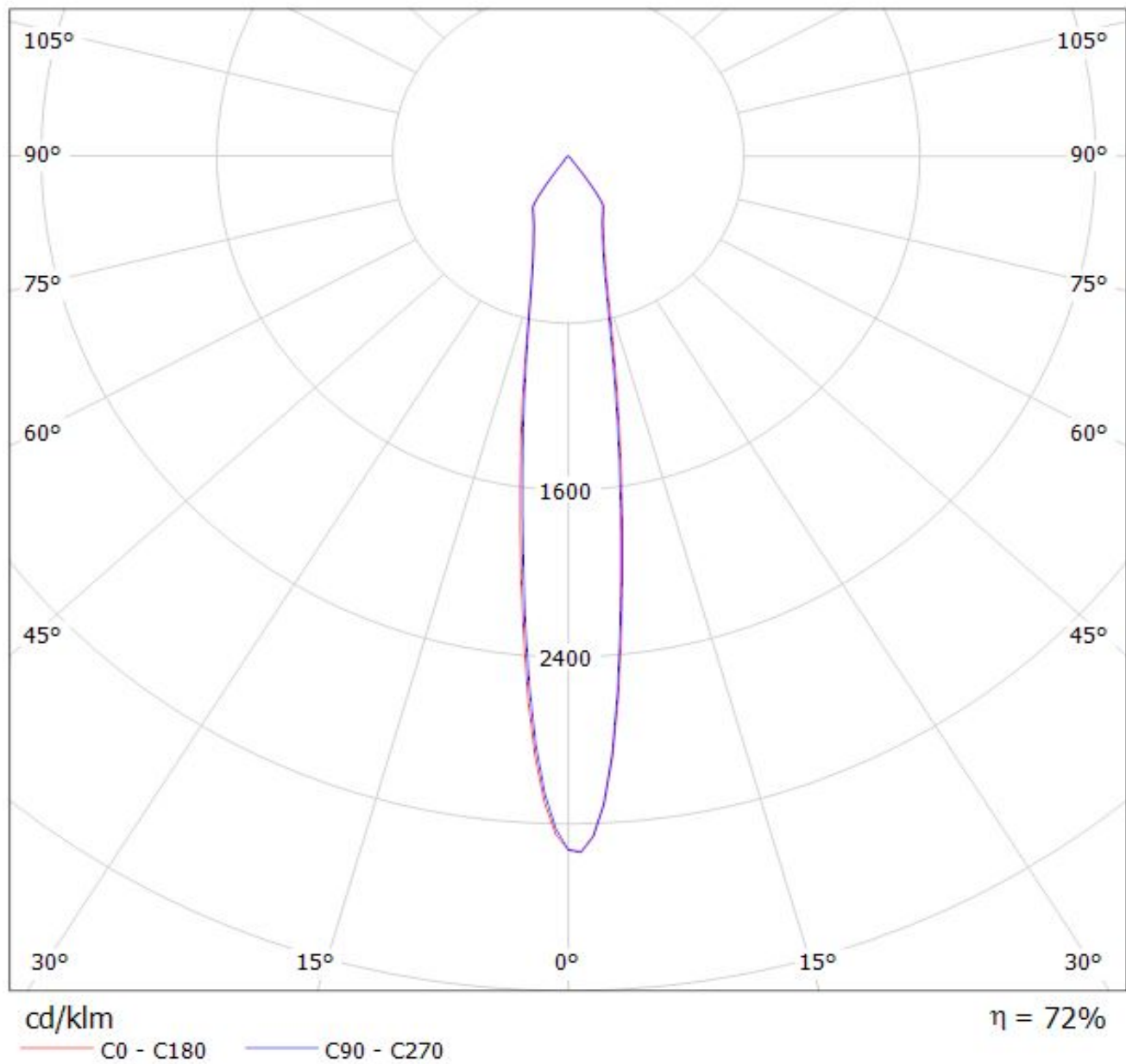
Lamps: 1 x Philips Lumileds Luxeon CoB 1205 (LHC1-3080-1205) 1078.92lm @ 250mA P=8.4W I=250mA



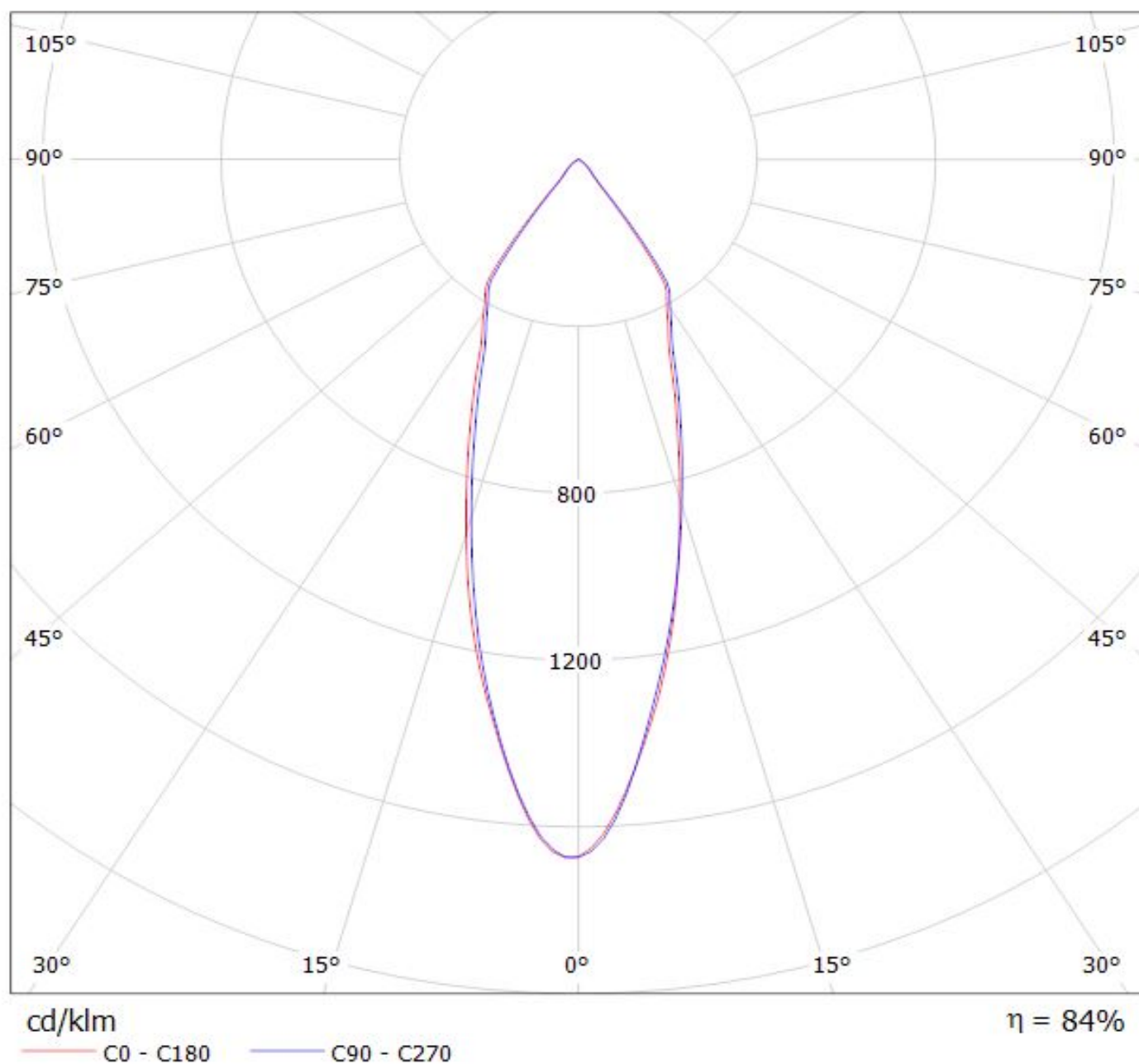
Luminaire: LEDiL Oy F13380\_ANGELA-M\_(COB\_1205) Eff.85.3%  
Lamps: 1 x Luxeon\_COB\_1205\_1092.75lm@250mA\_P=8.33092W\_I=249.9mA



Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(Luxeon\_CoB\_1205)  
Lamps: 1 x LUXEON\_COB\_1205\_(LHC1-3080-1205)\_1274.35lm@250mA\_CCT=3000K\_P=11.183W\_I=249.8mA

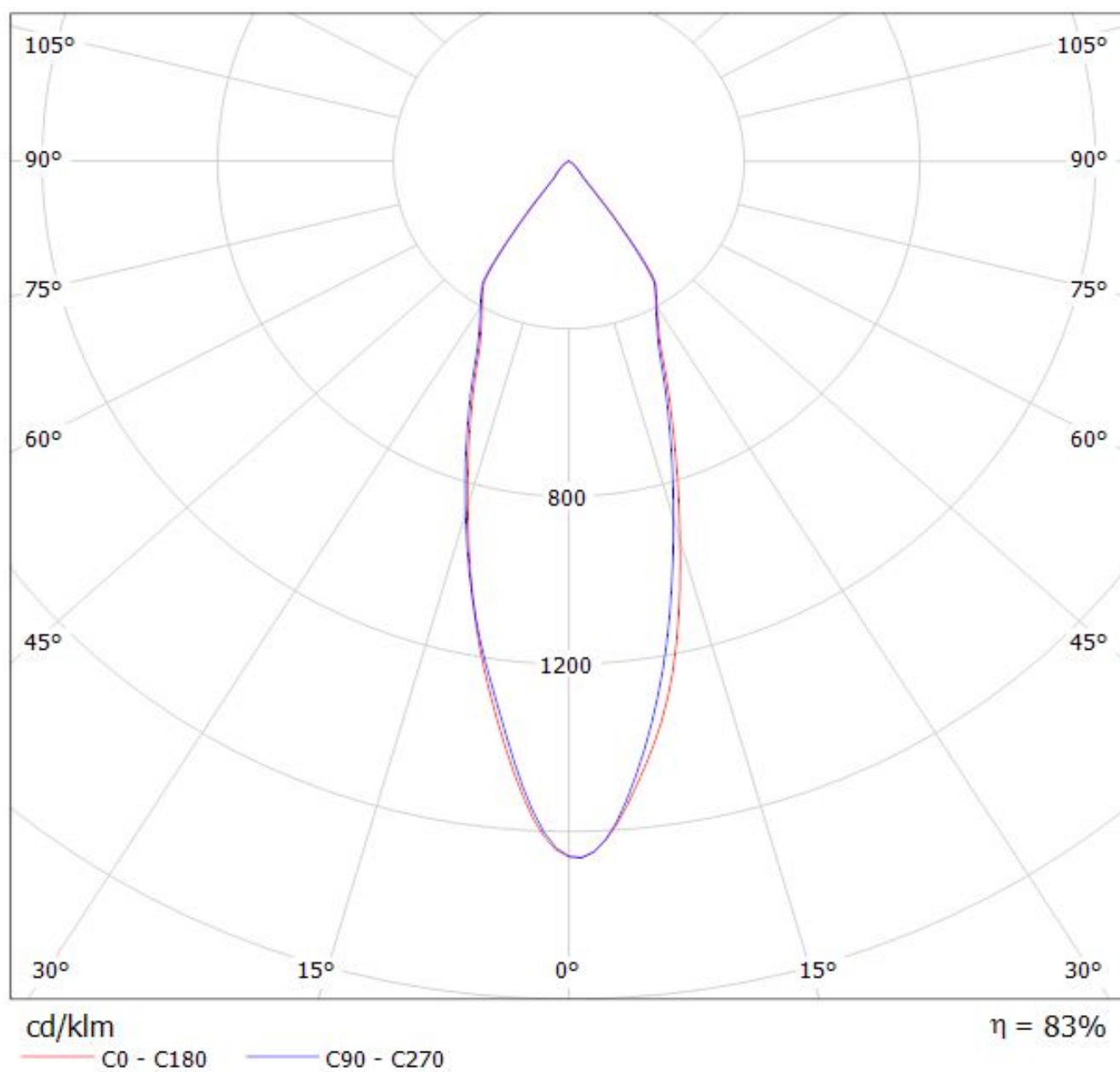


Luminaire: LEDiL Oy F13381\_ANGELA-W\_(COB\_1205) Eff.83.8%  
Lamps: 1 x Luxeon\_COB\_1205\_1092.75lm@250mA\_P=8.33092W\_I=249.9mA

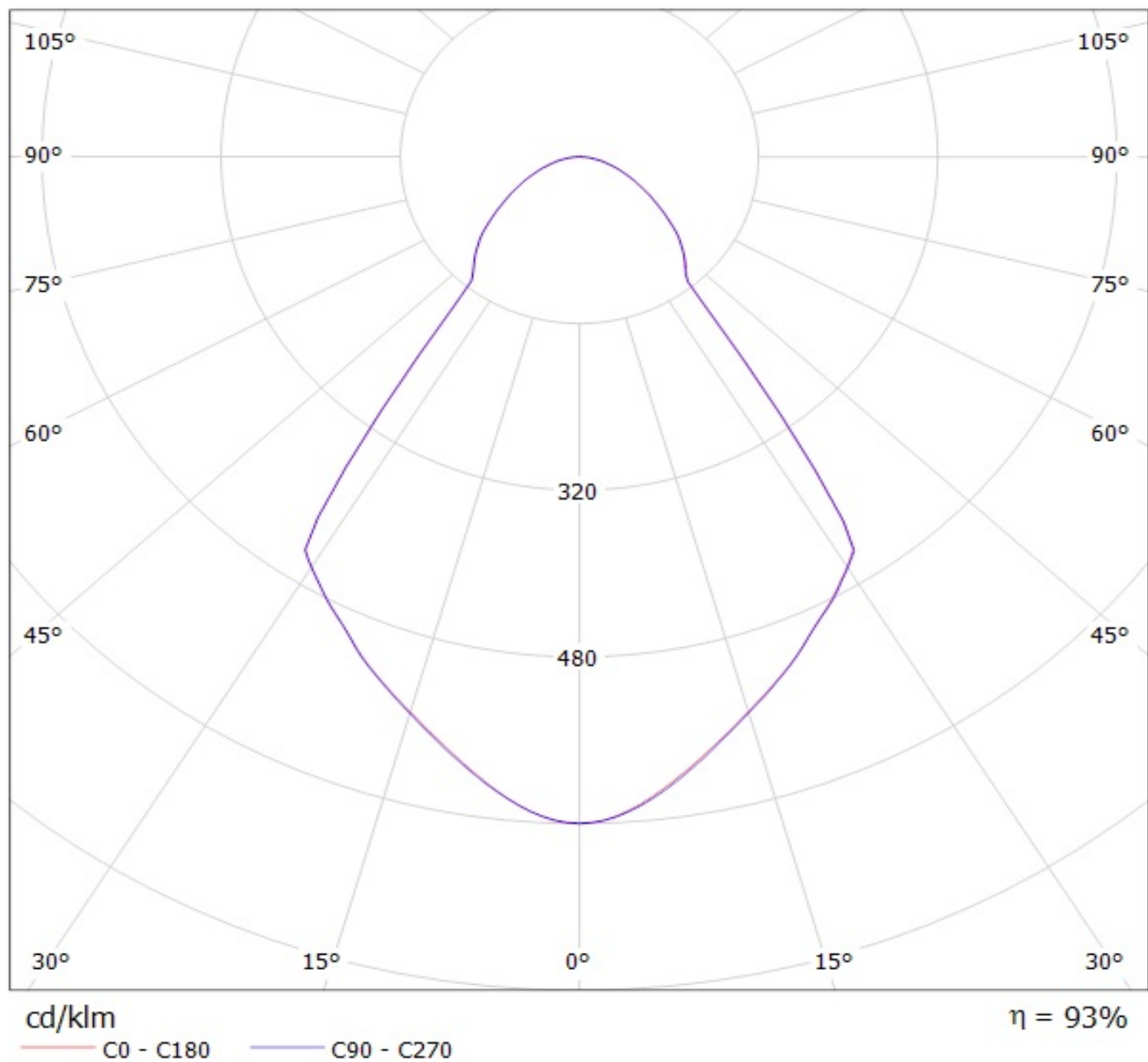


Luminaire: LEDiL Oy F13664\_ANGELA-W-B\_(Luxeon\_CoB\_1205)

Lamps: 1 x LUXEON\_COB\_1205\_(LHC1-3080-1205)\_1115lm@250mA\_CCT=3000K\_P=11.183W\_I=249.8mA



Luminaire: LEDiL Oy F13840\_ANGELA-XW\_(COB\_1205) Eff. 93%  
Lamps: 1 x Luxeon\_COB\_1205\_1088.09lm@250mA\_P=8.32942W\_I=249.9mA



Luminaire: LEDiL Oy F13841\_ANGELA-XW-B\_(Luxeon\_CoB\_1205)  
Lamps: 1 x LUXEON\_COB\_1205\_(LHC1-3080-1205)  
\_1115lm@250mA\_CCT=3000K\_P=11.183W\_I=249.8mA

