

**Product number C11995\_LENA-STD-BASE-CL340**

Family	Lena	FWHM	N/A degrees
Type	Base part	Efficiency	-
LED	CL-L340	cd/Im	(simulated) 0.000
Color	White	Gerber File	Available
Diameter	58.63 mm		
Height	13.25 mm		
Style	Round		
Optic Material	-		
Holder Material	PC		
Fastening	Screw		
Status	On production		

**Product number CN13158\_LENA-WAS**

Family	Lena	FWHM	Asymmetric degrees
Type	RefPack	Efficiency	84 %
LED	CL-L340	cd/Im	1.170
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	38.7 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Socket		
Status	On production		

Reflector twist-and-locks into included base part that holds COB in place. Base part is attached into heat sink with screws.

**Product number CN13168\_LENA-WAS-DL**

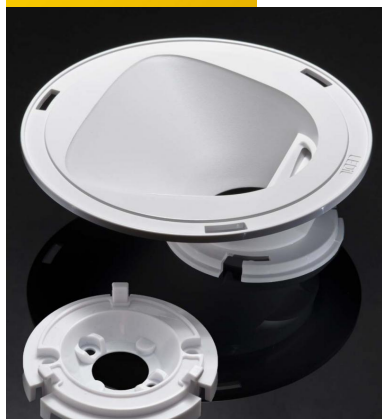
Family	Lena	FWHM	Asymmetric degrees
Type	RefPack	Efficiency	73 %
LED	CL-L340	cd/Im	0.900
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	-		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Socket		
Status	On production		

Reflector twist-and-locks into included base part that holds COB in place. Base part is attached into heat sink with screws.

**Product number CN13373\_LENA-X-WAS-DL**

Family	Lena	FWHM	Asymmetric degrees
Type	RefPack	Efficiency	82 %
LED	CL-L340	cd/Im	0.500
Color	White	Gerber File	Available
Diameter	111 mm		
Height	42 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Socket, screw		
Status	On production		

Reflector twist-and-locks into included base part that holds COB in place. Base part is attached into heat sink with screws.

**Product number CN13374\_LENA-X-WAS**

Family Lena  
 Type RefPack  
 LED CL-L340  
 Color White  
 Diameter 111 mm  
 Height 39.9 mm  
 Style Round  
 Optic Material PC  
 Holder Material PC  
 Fastening Socket, screw  
 Status On production

FWHM Asymmetric degrees  
 Efficiency 84 %  
 cd/Im 1.170  
 Gerber File Available

Reflector twist-and-locks into included base part that holds COB in place. Base part is attached into heat sink with screws.

**Product number CN12367\_LENA-FRESNEL**

Family Lena  
 Type RefPack  
 LED CL-L340  
 Color Black  
 Diameter 111 mm  
 Height 87.7 mm  
 Style Round  
 Optic Material PC  
 Holder Material PC  
 Fastening Socket, screw  
 Status On production

FWHM 8 degrees  
 Efficiency 36 %  
 cd/Im 9.600  
 Gerber File Available

**Product number CN12101\_LENA-S**

Family Lena  
 Type RefPack  
 LED CL-L340  
 Color Metal  
 Diameter 111 mm  
 Height 86.1 mm  
 Style Round  
 Optic Material PC  
 Holder Material PC  
 Fastening Screw  
 Status On production

FWHM 11 degrees  
 Efficiency 84 %  
 cd/Im 10.100  
 Gerber File Available

**Product number CN12112\_LENA-S-DL**

Family Lena  
 Type RefPack  
 LED CL-L340  
 Color Metal  
 Diameter 111 mm  
 Height 87.7 mm  
 Style Round  
 Optic Material PC  
 Holder Material PC  
 Fastening Screw  
 Status On production

FWHM 14 degrees  
 Efficiency 79 %  
 cd/Im 8.000  
 Gerber File Available

**Product number** CN12161\_LENA-M

Family	Lena	FWHM	22 degrees
Type	RefPack	Efficiency	83 %
LED	CL-L340	cd/Im	4.700
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	86.1 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	-		
Status	On production		

**Product number** CN12166\_LENA-M-DL

Family	Lena	FWHM	24 degrees
Type	RefPack	Efficiency	78 %
LED	CL-L340	cd/Im	3.800
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	86.1 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	On production		

**Product number** CN12113\_LENA-W-DL

Family	Lena	FWHM	45 degrees
Type	RefPack	Efficiency	75 %
LED	CL-L340	cd/Im	1.400
Color	Metal	Gerber File	Available
Diameter	111 mm		
Height	87.7 mm		
Style	Round		
Optic Material	PC		
Holder Material	PC		
Fastening	Screw		
Status	On production		

**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

### Lena series

last update 23/2/2014



#### GENERAL INFORMATION

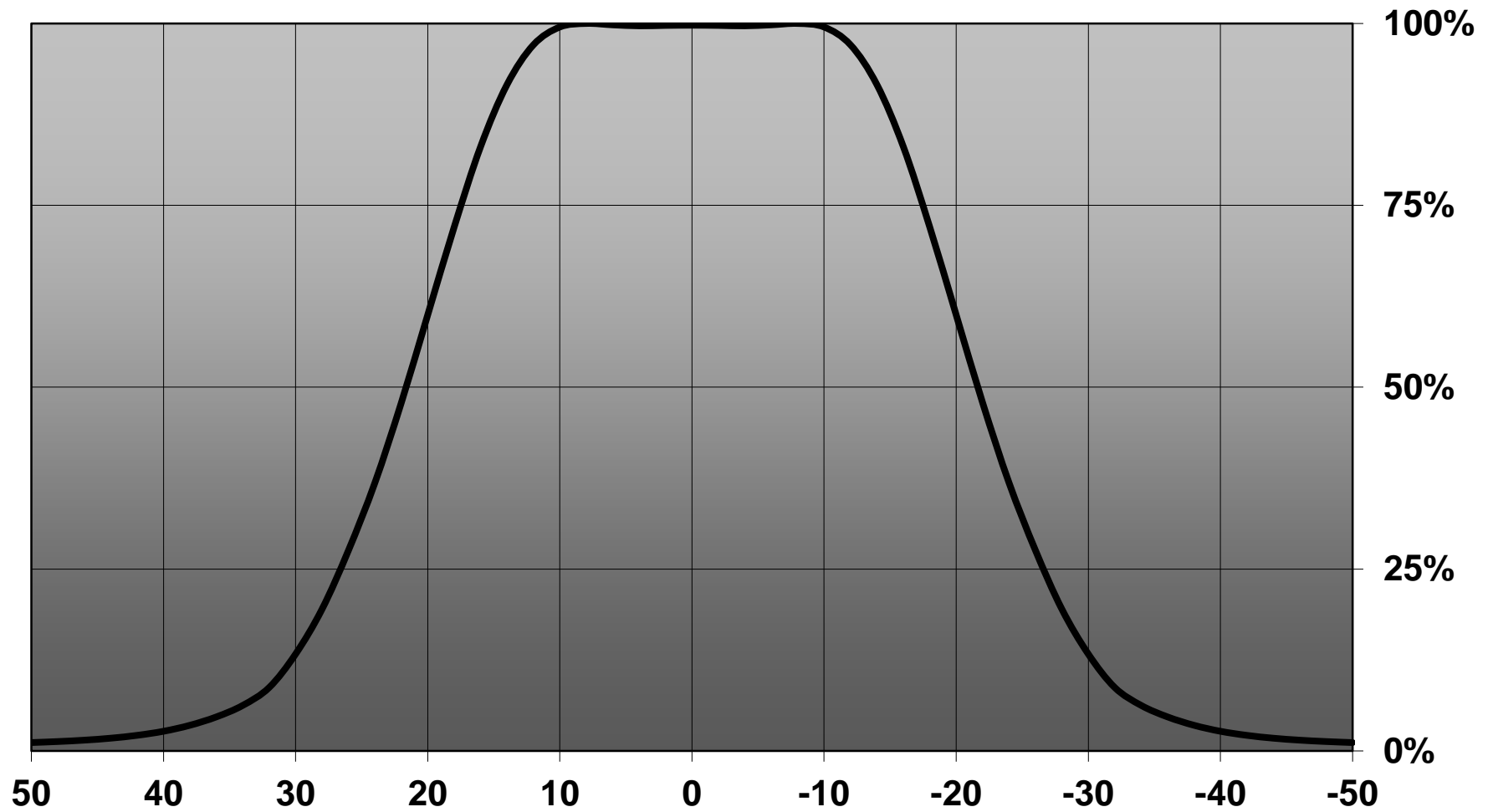
- Product series especially designed & optimized for CL-L340 series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PC with high UV and temperature resistance (120 degrees of Celcius / 248 degrees of Fahrenheit). Allows use of high current and temperature conditions.

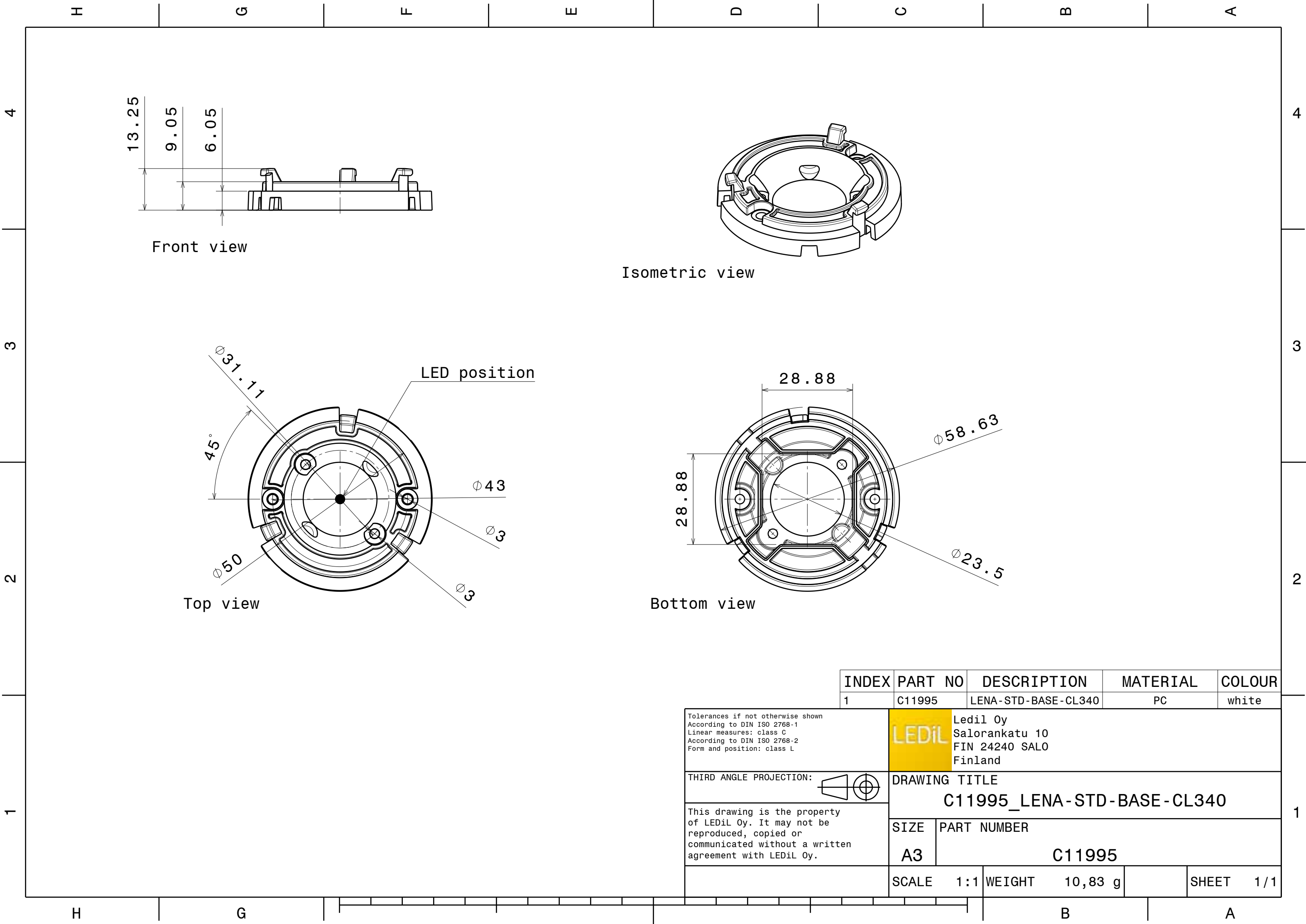
Please find more information about used materials from below:

[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).
- Optic holder molded by high quality PC material (120 dergees of Celcius / 248 degrees of Fahrenheit).

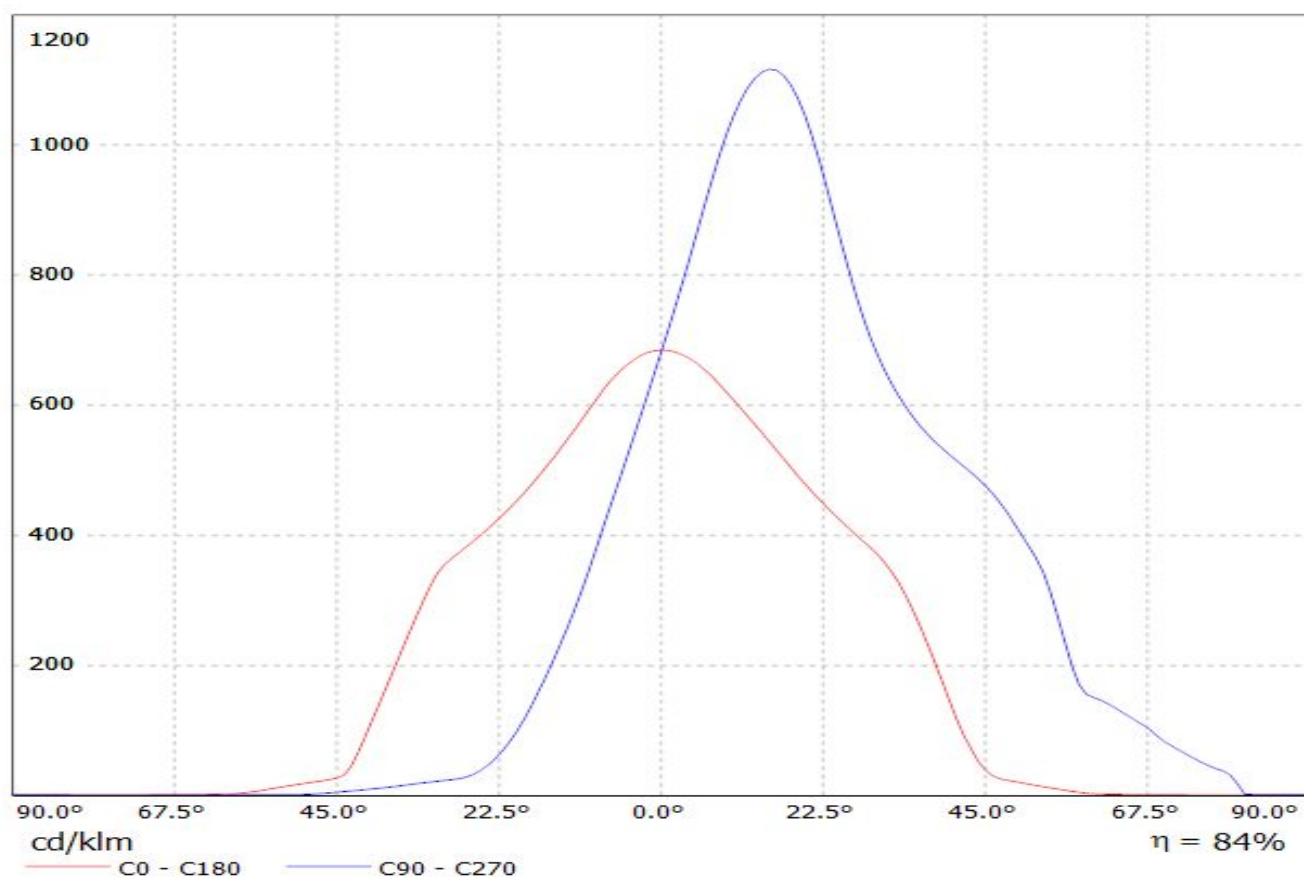
**Relative intensity of CA12113\_Lena-W-Diffuser-Lens-CL340**



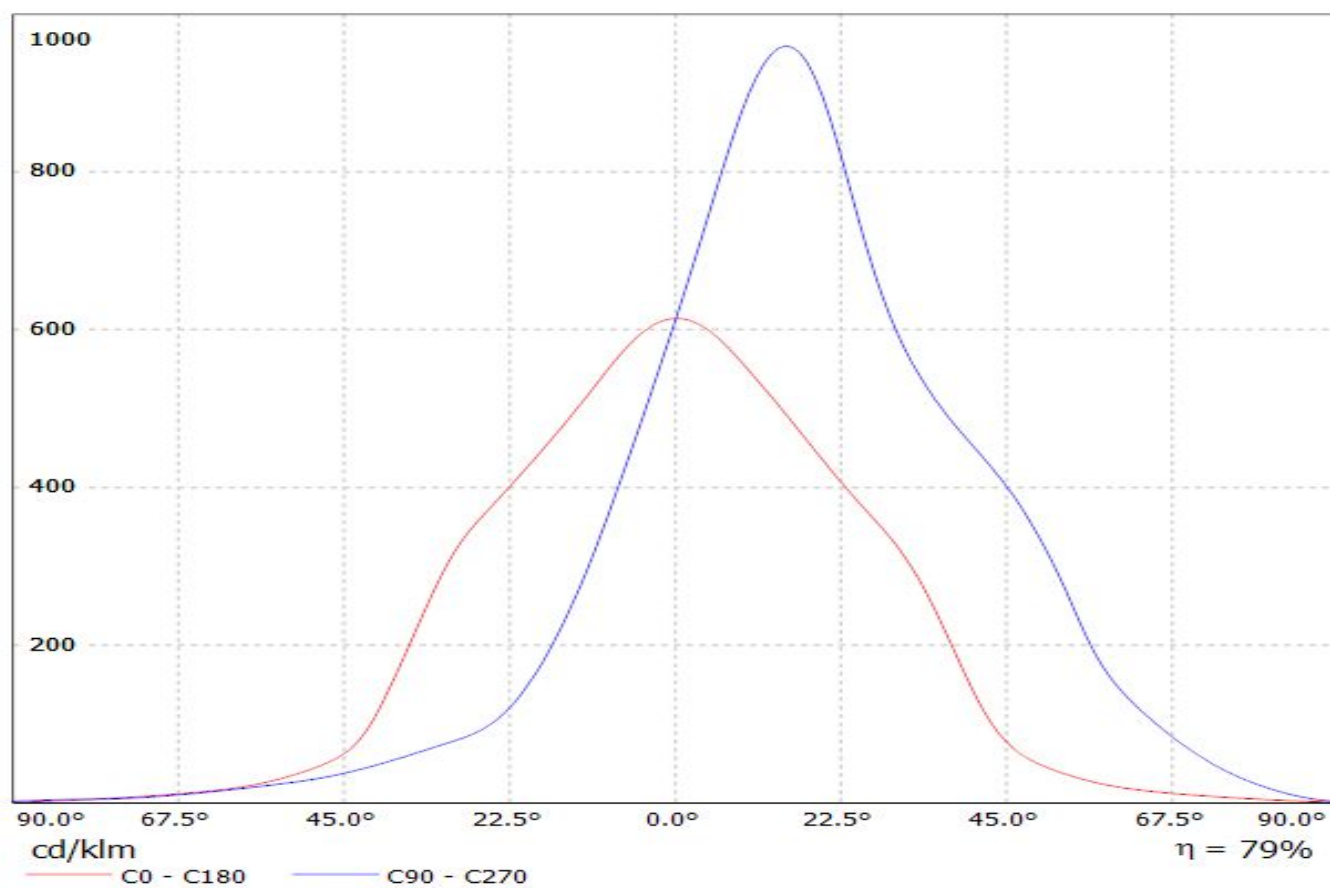




Luminaire: LEDiL Oy CN13158\_LENA-WAS\_(CL-L340) Eff.83.7%  
Lamps: 1 x CL-L340 (929.39lm@250mA)

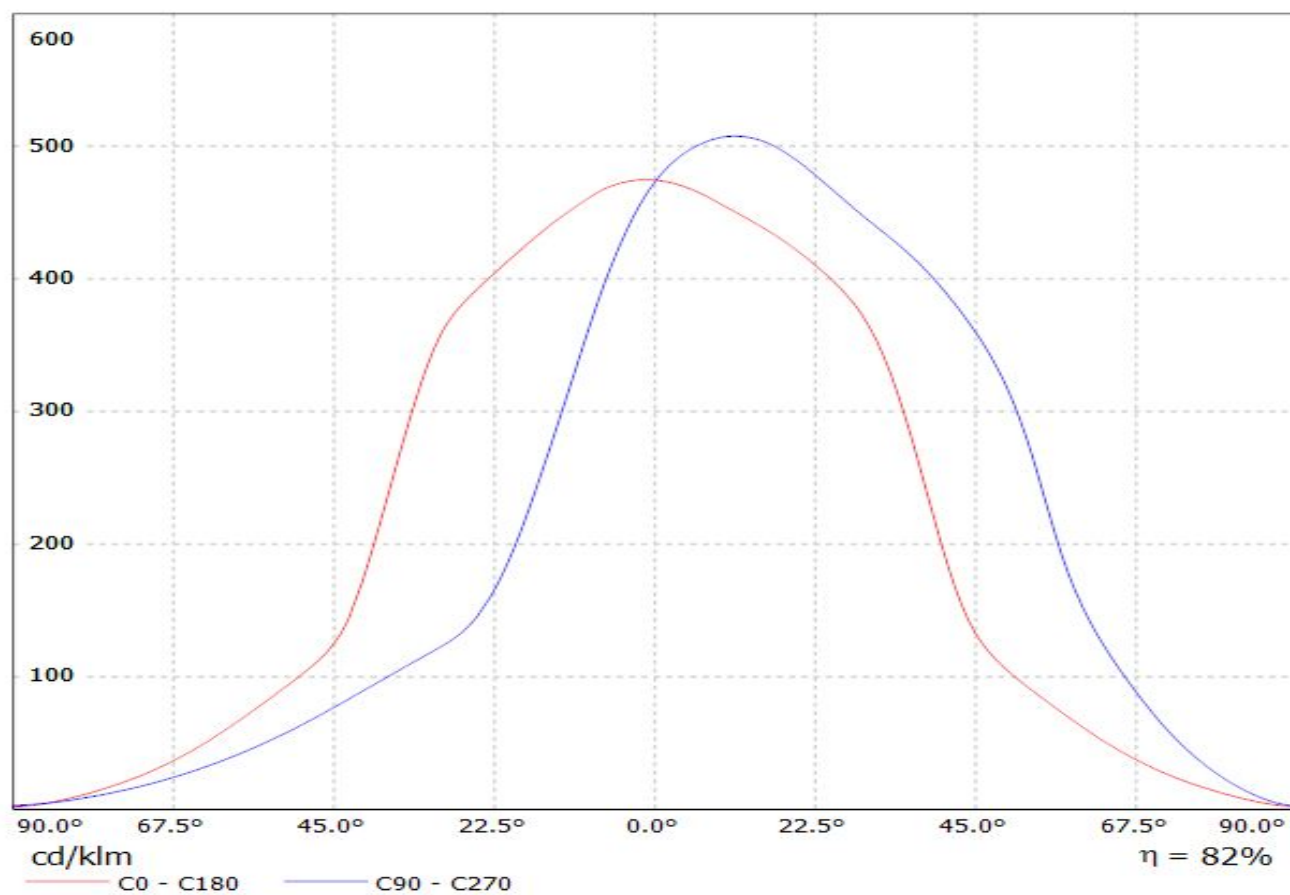


Luminaire: LEDiL Oy CN13168\_LENA-WAS-DL\_(CL-L340) Eff.79.2%  
Lamps: 1 x CL-L340 (929.39lm@250mA)

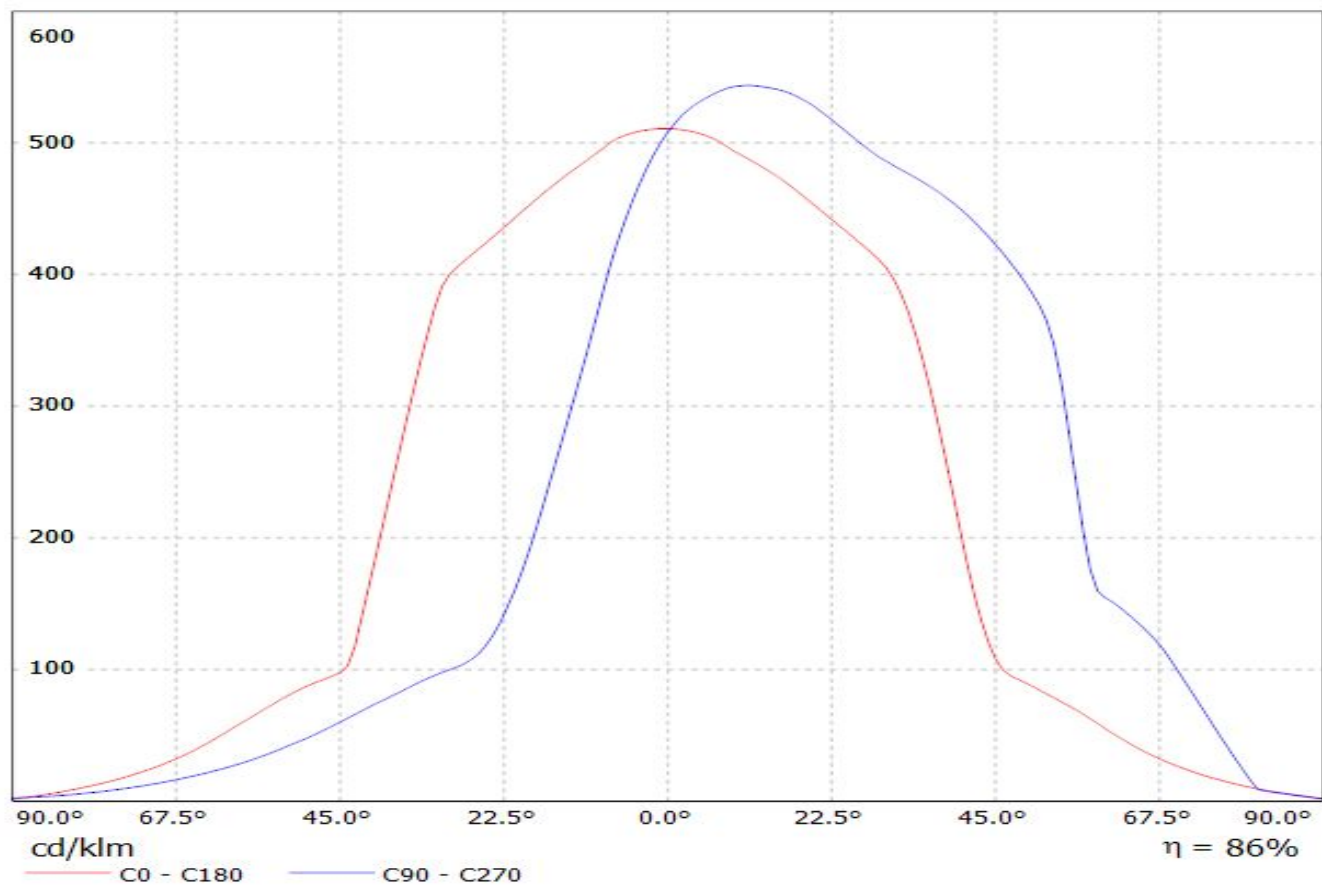




Luminaire: LEDiL Oy CN13373\_LENA-X-WAS-DL\_(CL-L340) Eff.82.2%  
Lamps: 1 x CL-L340 (929.39lm@250mA)



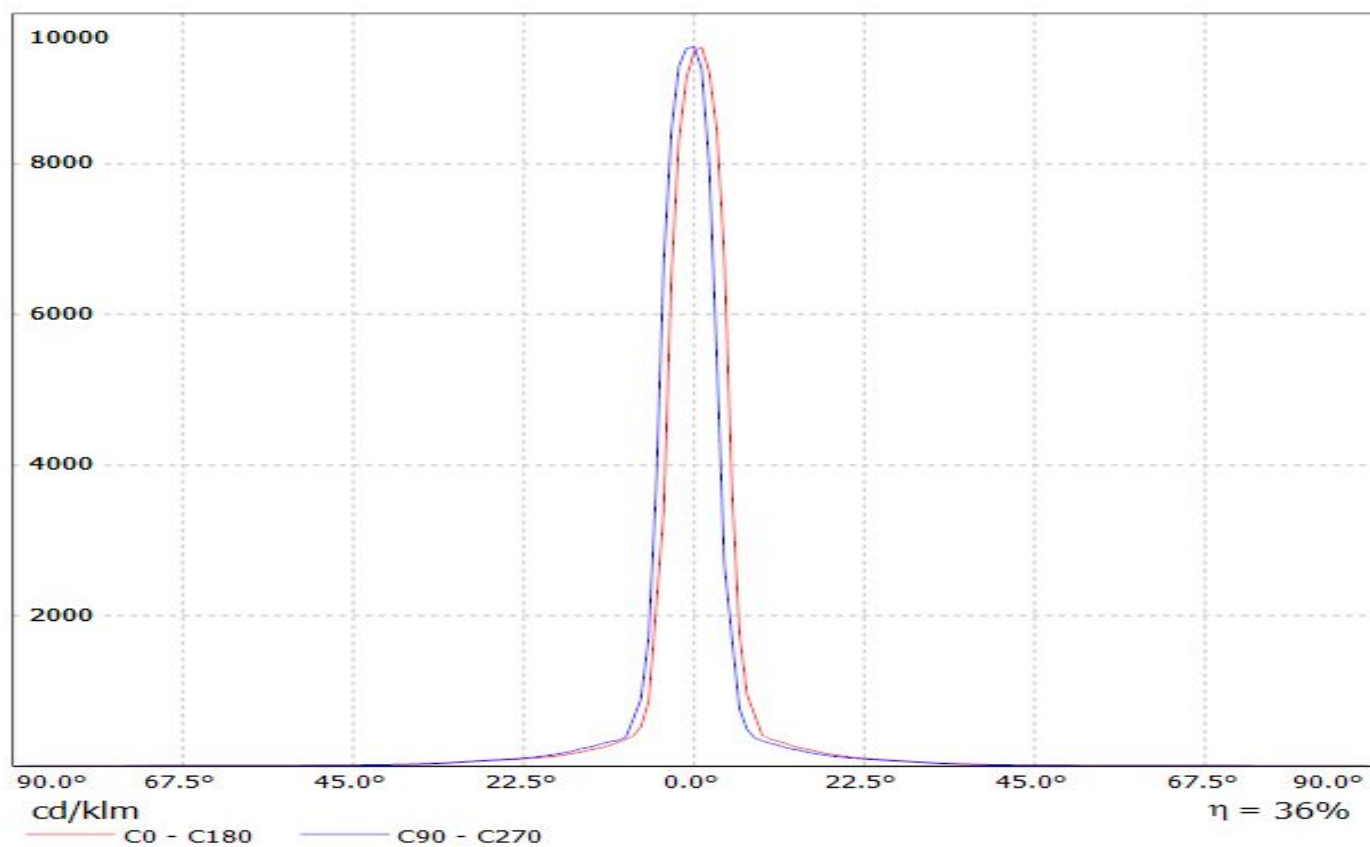
Luminaire: LEDiL Oy CN13374\_LENA-X-WAS\_(CL-L340) Eff.86.3%  
Lamps: 1 x CL-L340 (929.39lm@250mA)



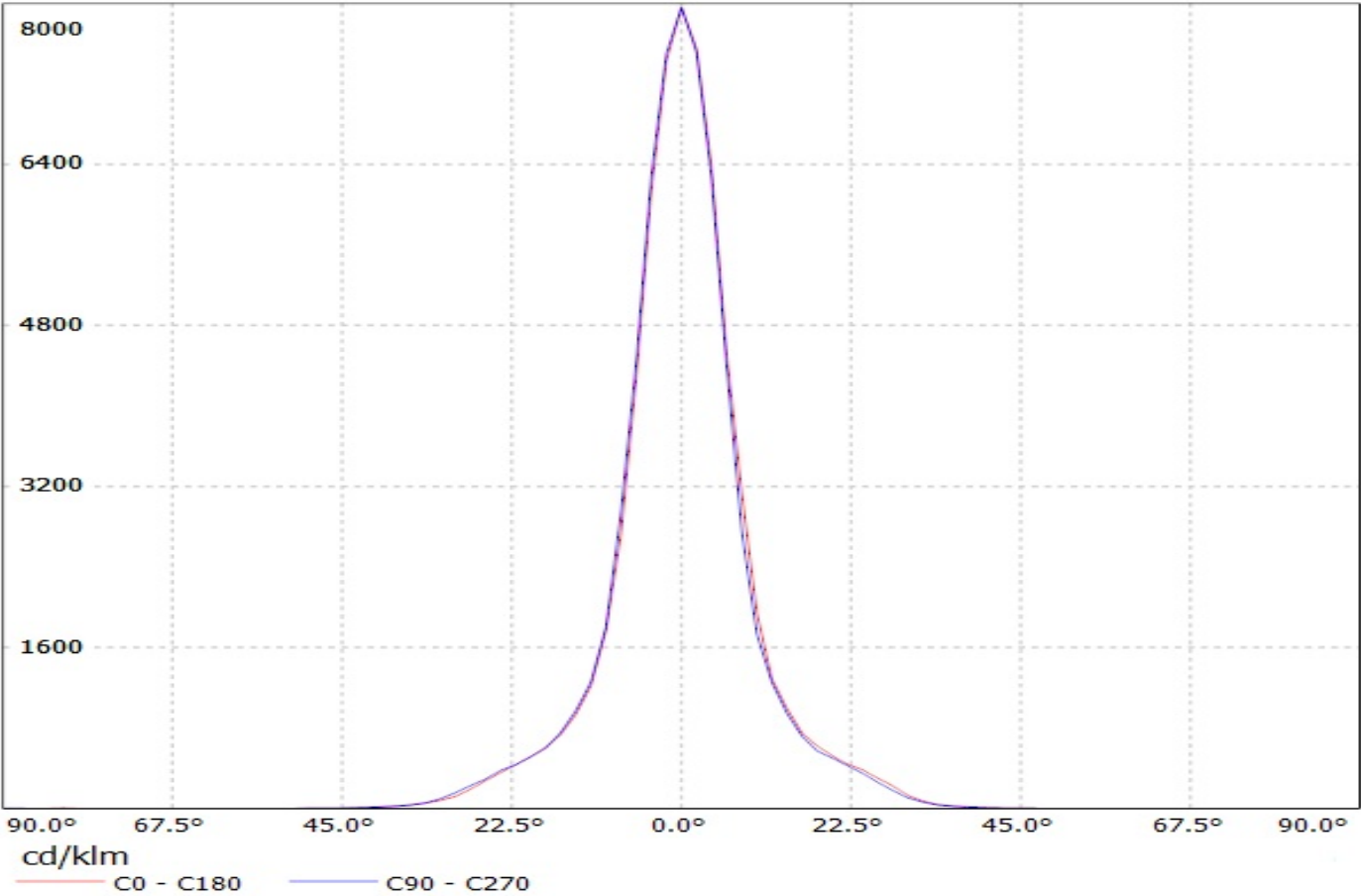
## LEDiL Oy CN12367\_LENA-FRESNEL-CL-L340 Eff.36.1% / LDC (Linear)

Luminaire: LEDiL Oy CN12367\_LENA-FRESNEL-CL-L340 Eff.36.1%

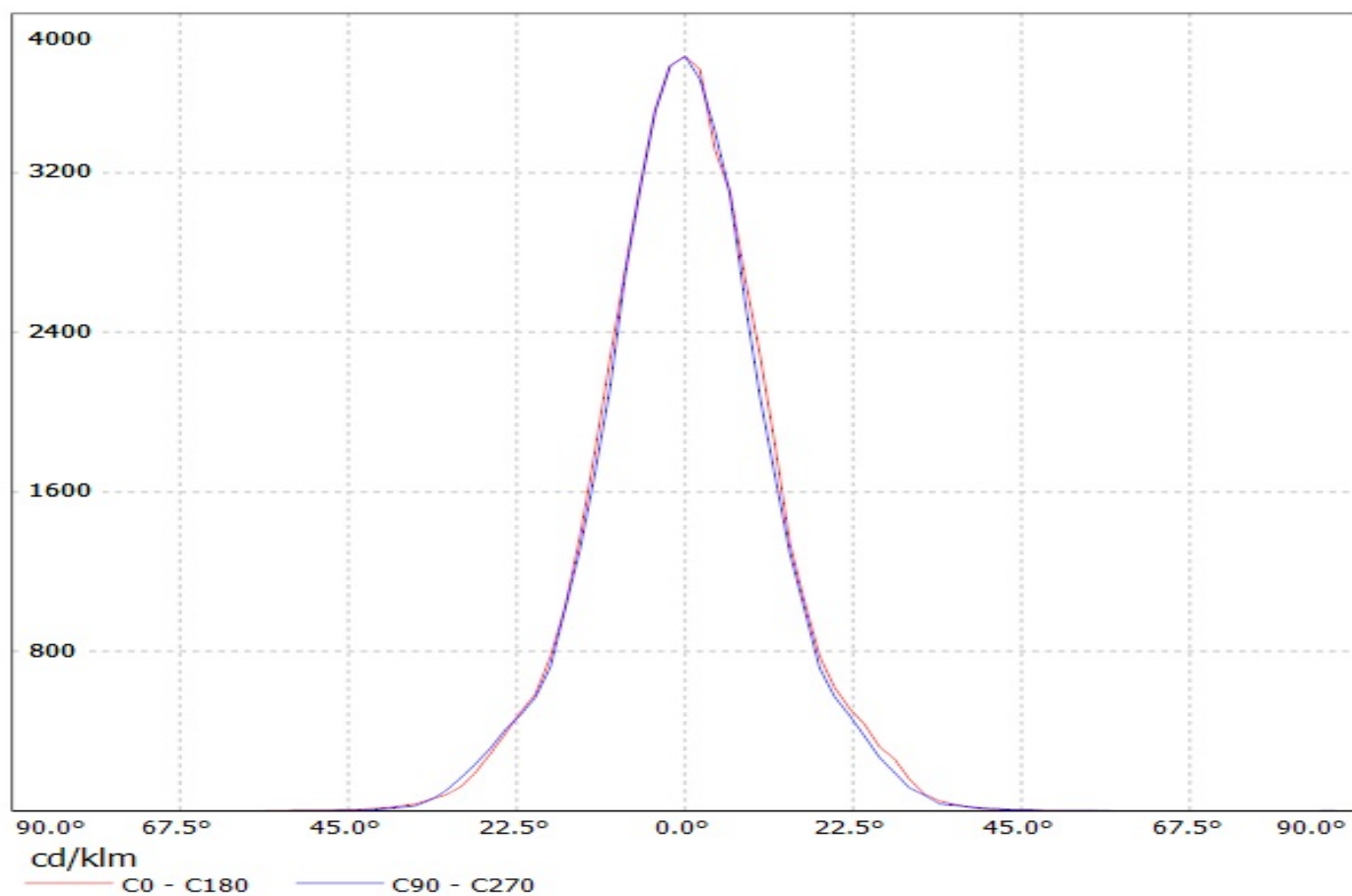
Lamps: 1 x Citizen CL-340 (1151.01lm@250mA)



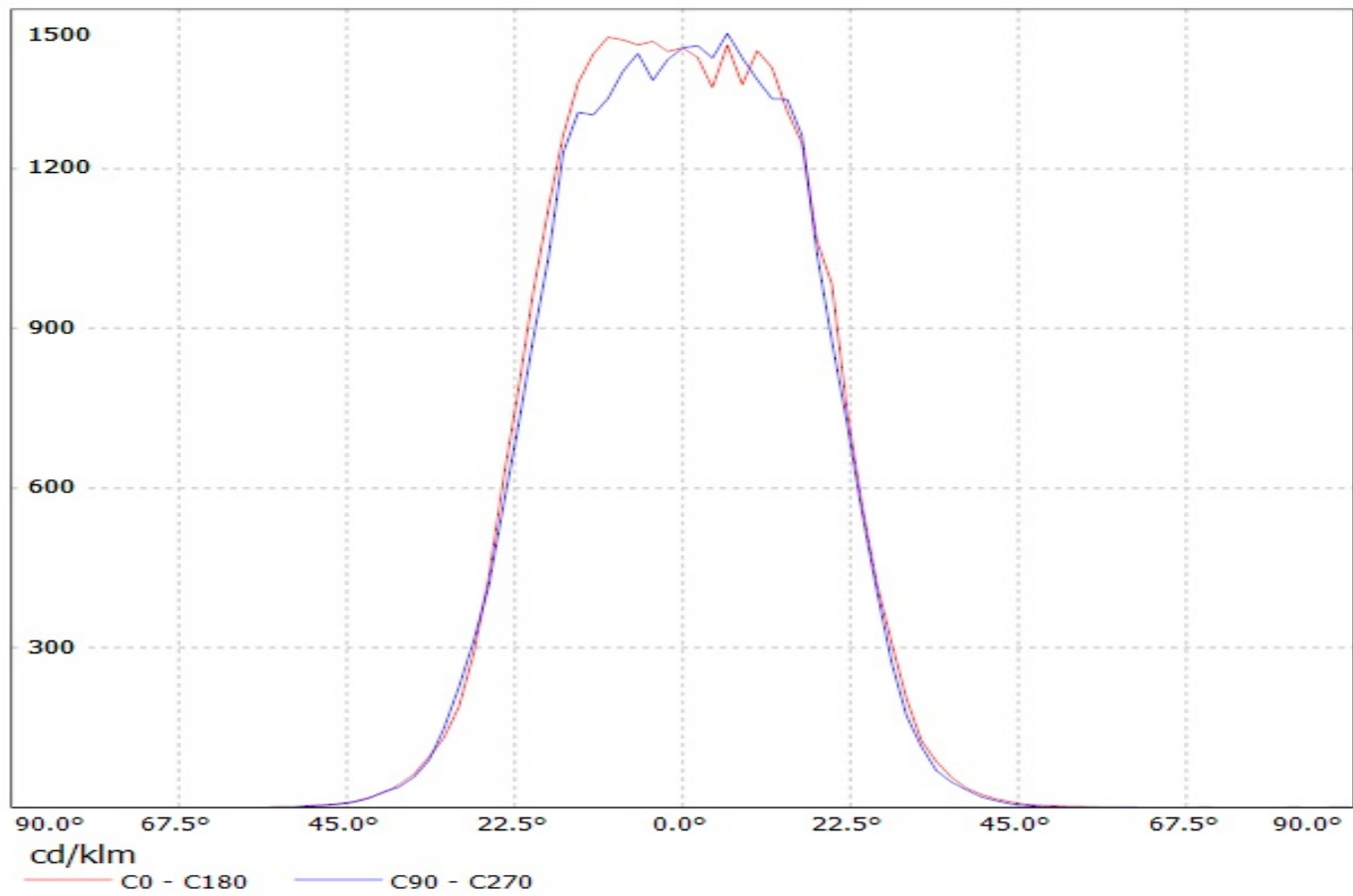
Luminaire: Ledil Oy CN12112\_LENA-S-DL (Citizen CL-L340 1393lm @ 250mA) Efficiency=79%  
Lamps: 1 x Citizen CL-L340 1393lm @ 250mA



Luminaire: Ledil Oy CN12166\_LENA-M-DL (Citizen CL-L340 1393lm @ 250mA) Efficiency=78%  
Lamps: 1 x Citizen CL-L340 1393lm @ 250mA

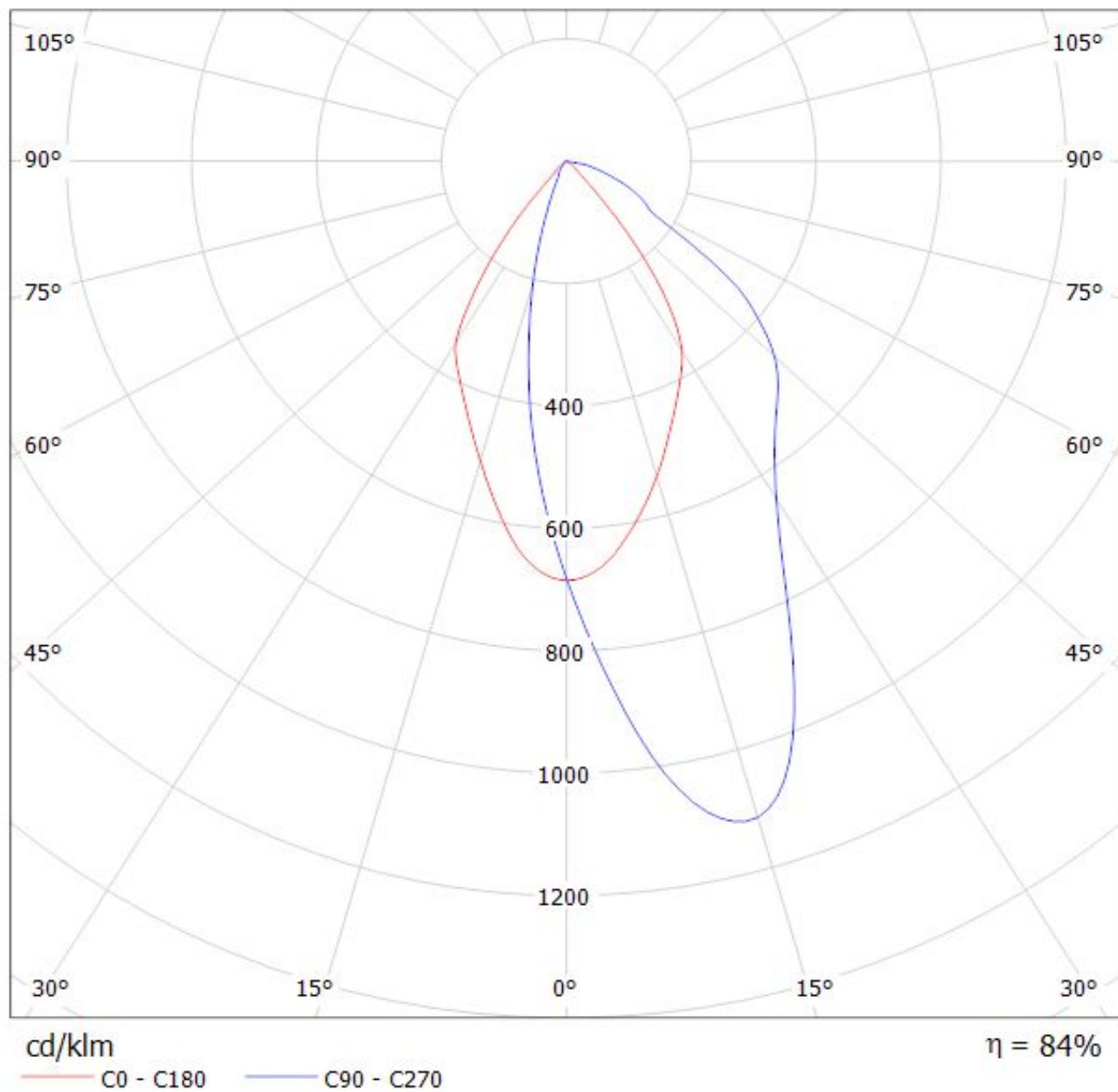


Luminaire: Ledil Oy CN12113\_LENA-W-DL (Citizen CL-L340 1393lm @ 250mA) Efficiency=75%  
Lamps: 1 x Citizen CL-L340 1393lm @ 250mA

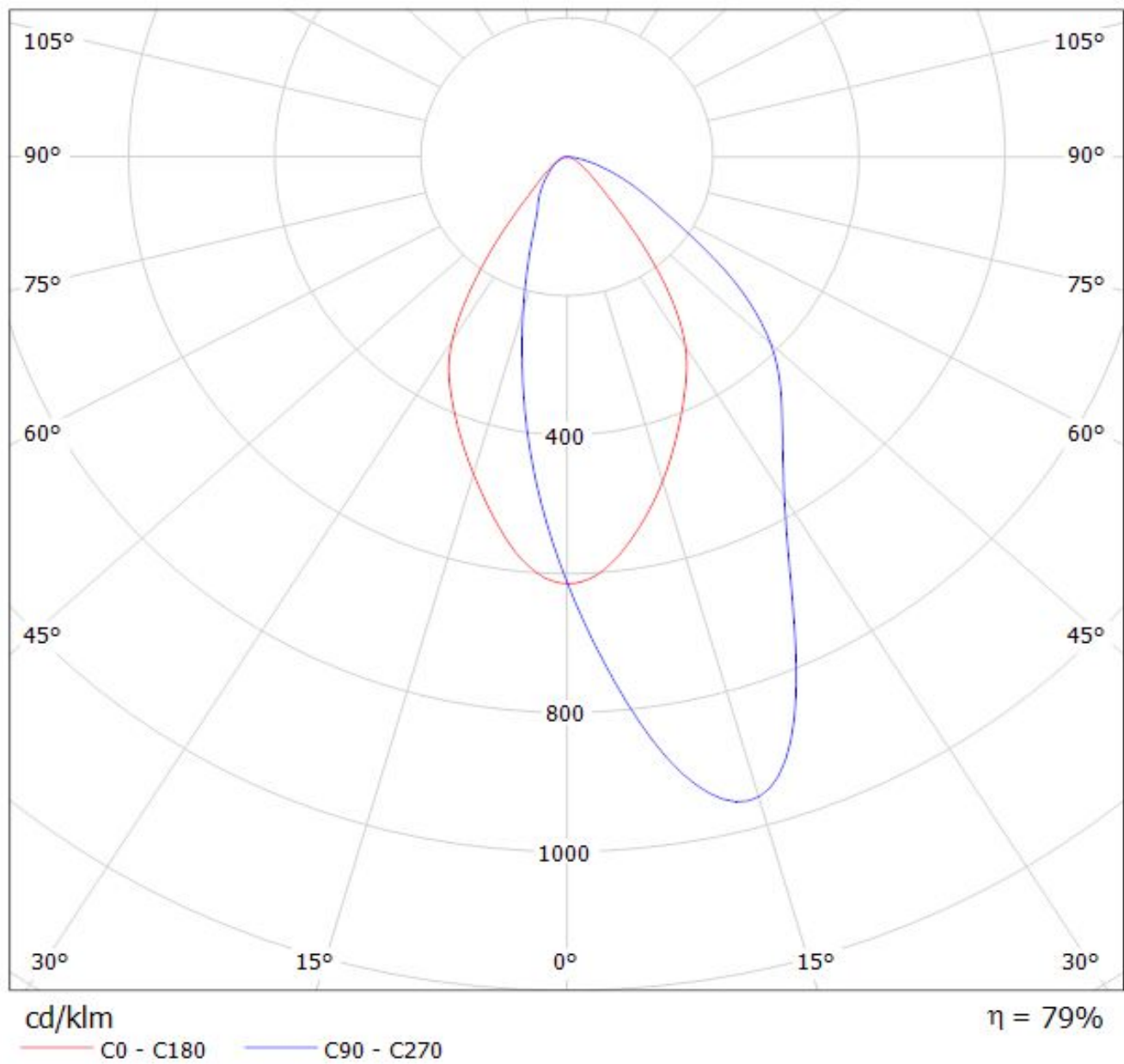




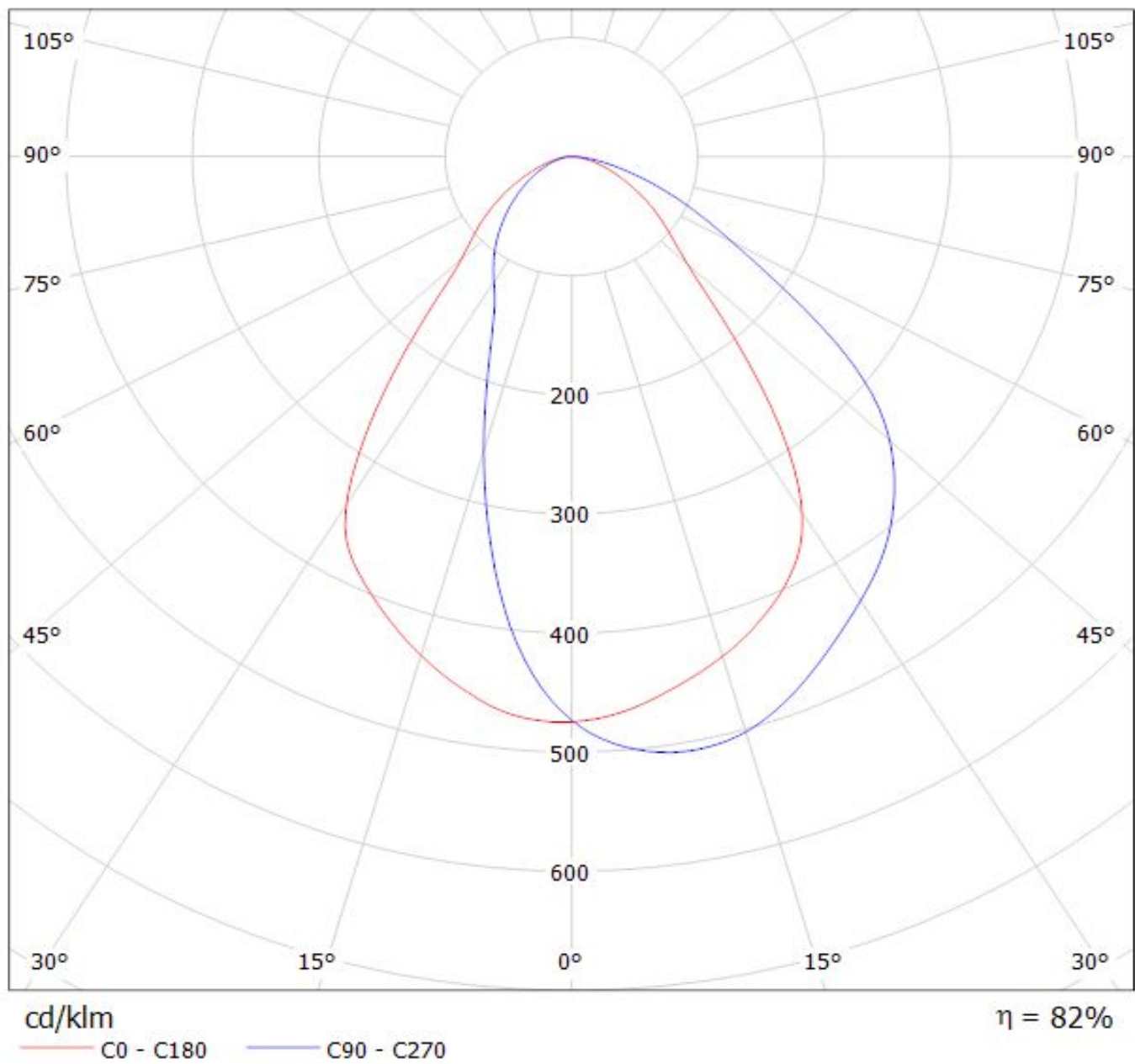
Luminaire: LEDiL Oy CN13158\_LENA-WAS\_(CL-L340) Eff.83.7%  
Lamps: 1 x CL-L340 (929.39lm@250mA)



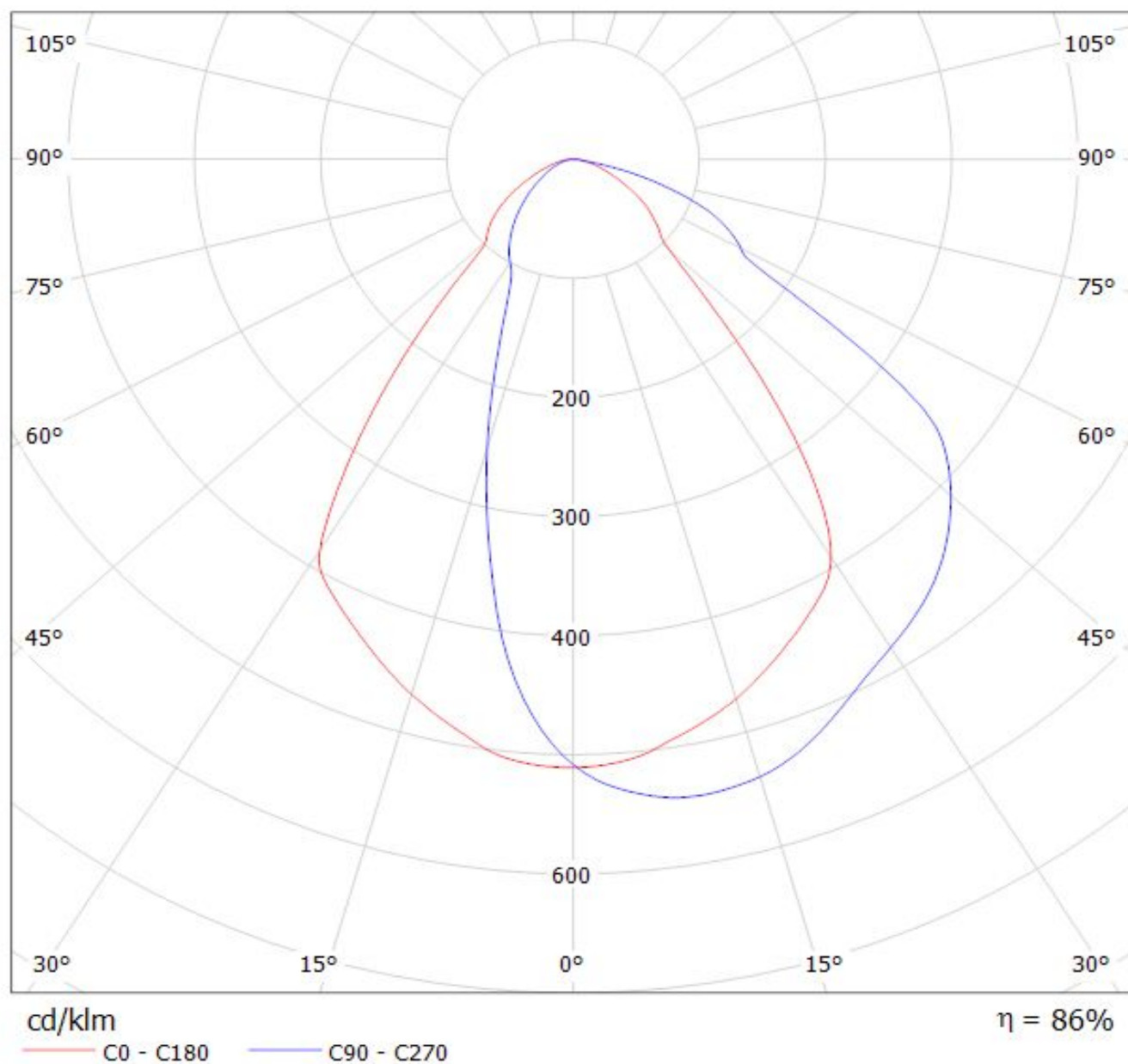
Luminaire: LEDiL Oy CN13168\_LENA-WAS-DL\_(CL-L340) Eff.79.2%  
Lamps: 1 x CL-L340 (929.39lm@250mA)



Luminaire: LEDiL Oy CN13373\_LENA-X-WAS-DL\_(CL-L340) Eff.82.2%  
Lamps: 1 x CL-L340 (929.39lm@250mA)



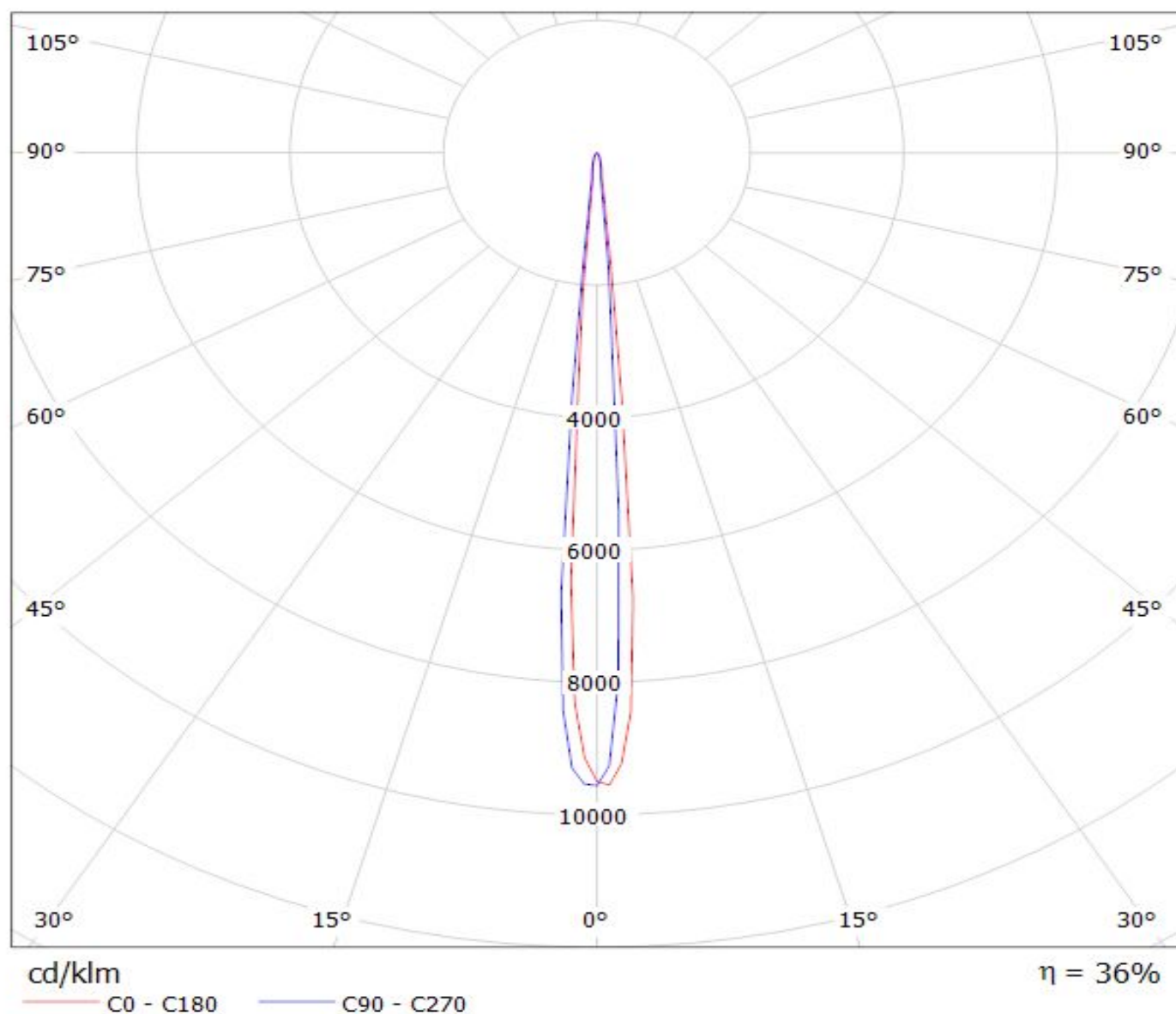
Luminaire: LEDiL Oy CN13374\_LENA-X-WAS\_(CL-L340) Eff.86.3%  
Lamps: 1 x CL-L340 (929.39lm@250mA)



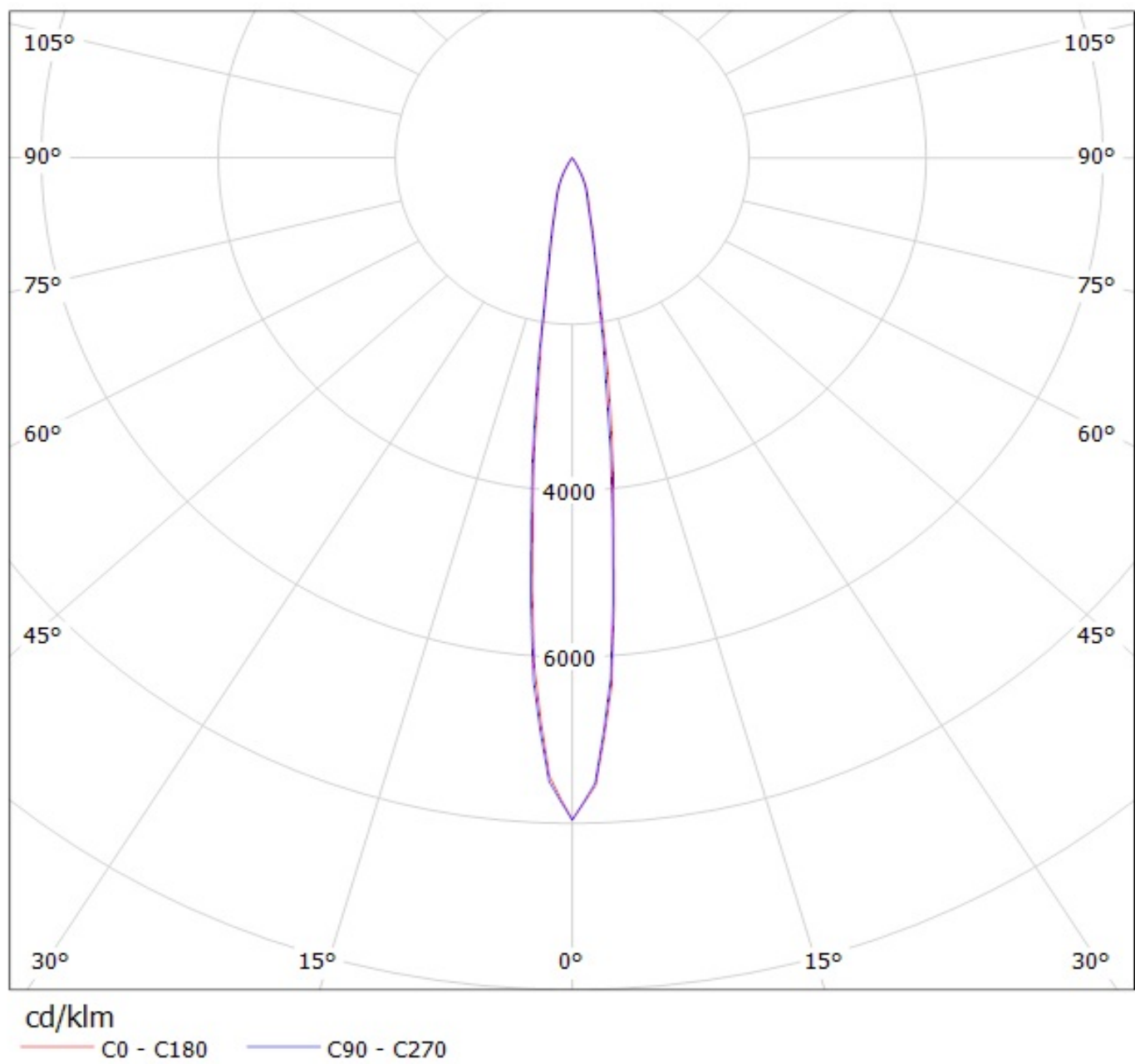
## LEDiL Oy CN12367\_LENA-FRESNEL-CL-L340 Eff.36.1% / LDC (Polar)

Luminaire: LEDiL Oy CN12367\_LENA-FRESNEL-CL-L340 Eff.36.1%

Lamps: 1 x Citizen CL-340 (1151.01lm@250mA)

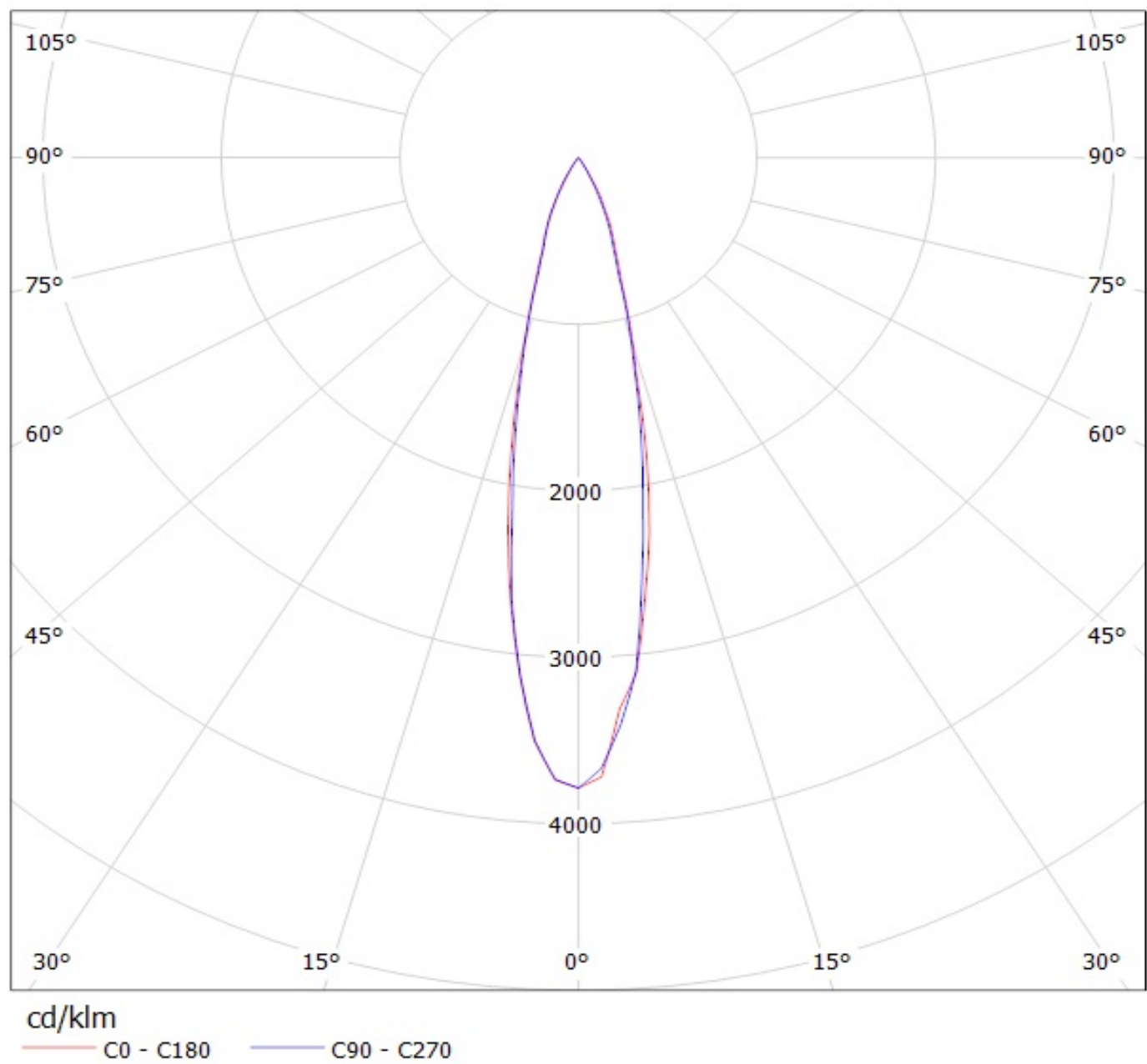


Luminaire: Ledil Oy CN12112\_LENA-S-DL (Citizen CL-L340 1393lm @ 250mA) Efficiency=79%  
Lamps: 1 x Citizen CL-L340 1393lm @ 250mA





Luminaire: Ledil Oy CN12166\_LENA-M-DL (Citizen CL-L340 1393lm @ 250mA) Efficiency=78%  
Lamps: 1 x Citizen CL-L340 1393lm @ 250mA



Luminaire: Ledil Oy CN12113\_LENA-W-DL (Citizen CL-L340 1393lm @ 250mA) Efficiency=75%  
Lamps: 1 x Citizen CL-L340 1393lm @ 250mA

