

## DETAILS

<b>Product Number</b>	C12608_VIRPI-M
<b>Family</b>	Virpi
<b>Type</b>	Lens array
<b>Color</b>	clear
<b>Diameter</b>	74,9 x 74,9 mm
<b>Height</b>	9,5 mm
<b>Style</b>	square
<b>Optic Material</b>	PMMA
<b>Holder Material</b>	
<b>Fastening</b>	glue, pin
<b>Status</b>	production ready
<b>ROHS Compliant</b>	Yes
<b>Date Updated</b>	2/03/2017

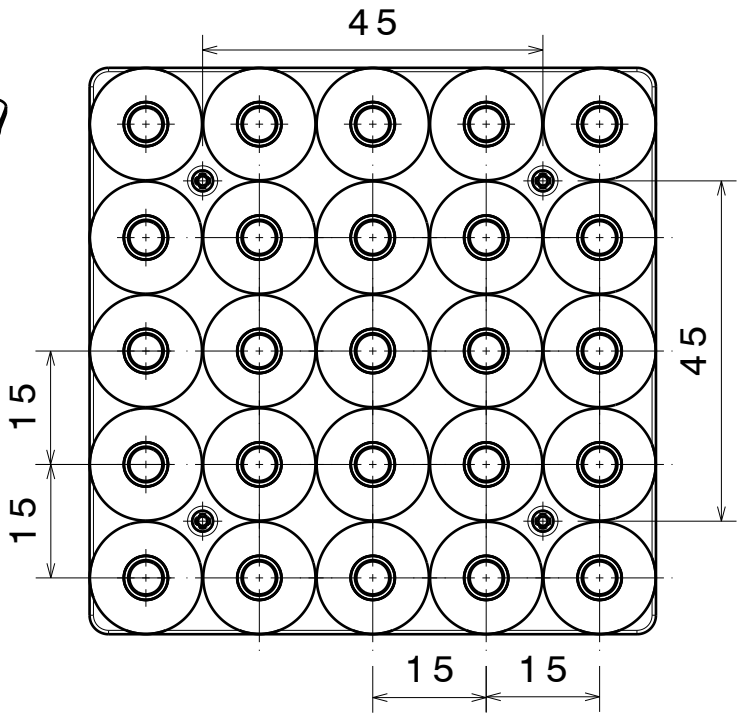
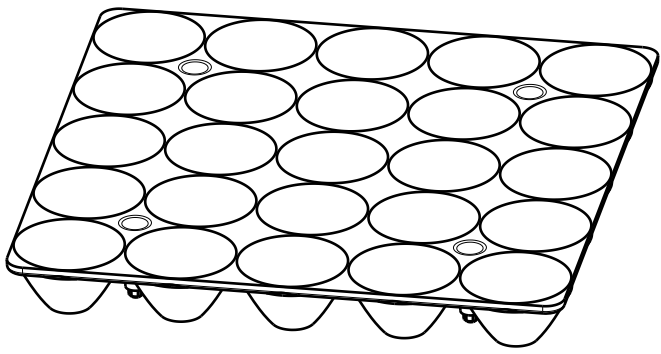


## OPTICAL PROPERTIES

LED	Viewing	Light	Effi-		Connector
	Angle	Beam	ciency	cd/lm	
XP-G	29 deg	Medium	92 %	2.530	-
XT-E	29 deg	Medium	91 %	2.620	-
XB-D	28 deg	Medium	92 %	2.830	-
XP-E2	28 deg	Medium	91 %	3.000	-
XP-G2	29 deg	Medium	91 %	2.700	-
XH-B/G	30 deg	Medium	90 %	2.400	-
ML-E	29 deg	Medium	91 %	2.500	-
LG 3030	28 deg	Medium	91 %	2.800	-
LUXEON Rebel ES	28 deg	Medium	91 %	2.620	-
LUXEON T	sim: 26	Medium	sim: 91 %	sim: 3.350	-
LUXEON TX	sim: 27	Medium	sim: 92 %	sim: 3.250	-
LUXEON C	sim: 23	Medium	sim: 86 %	sim: 3.700	-
LUXEON SunPlus 20 Line	sim: 27	Medium	sim: 88 %	sim: 3.400	-
LUXEON SunPlus 35 Line	sim: 26	Medium	sim: 93 %	sim: 3.600	-
NVSxx19A	29 deg	Medium	90 %	2.580	-
NF2x757A	28 deg	Medium	92 %	2.900	-
NVSxx19B/NVSxx19C	sim: 27	Medium	sim: 94 %	sim: 3.190	-
Oslon Square EC	28 deg	Medium	91 %	2.820	-
Duris S5 (Single chip)	28 deg	Medium	92 %	3.100	-
Duris P5	29 deg	Medium	90 %	2.600	-
Oslon Square Gen3	sim: 26	Medium	sim: 93 %	sim: 3.400	-
LM231 A/B	28 deg	Medium	92 %	3.100	-

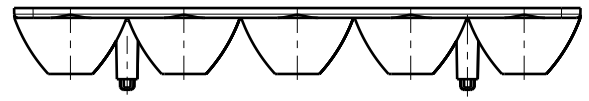
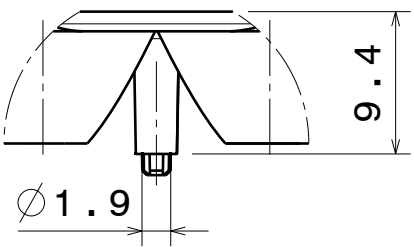
D C B A

4



4

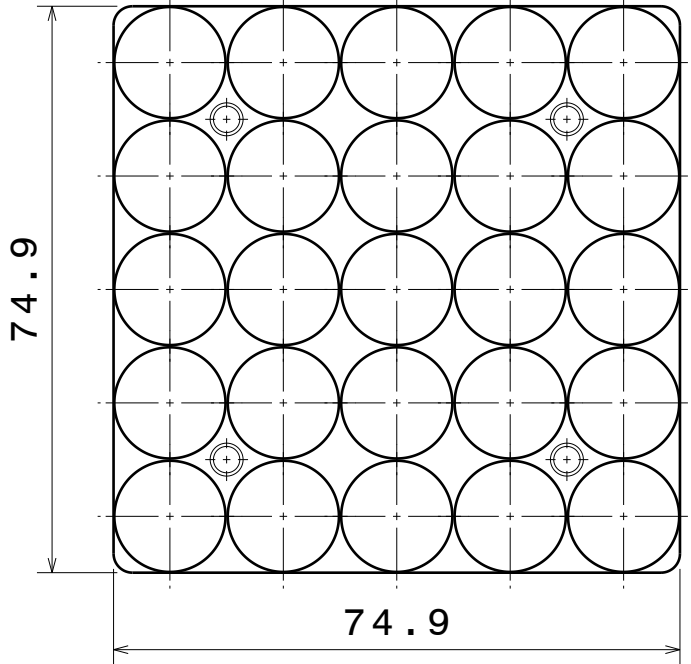
3



3

Detail A  
Scale: 2:1

2



2

Material:  
- 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

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or communicated without  
our written agreement.



Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

DRAWING TITLE

Datasheet Virpi series

1

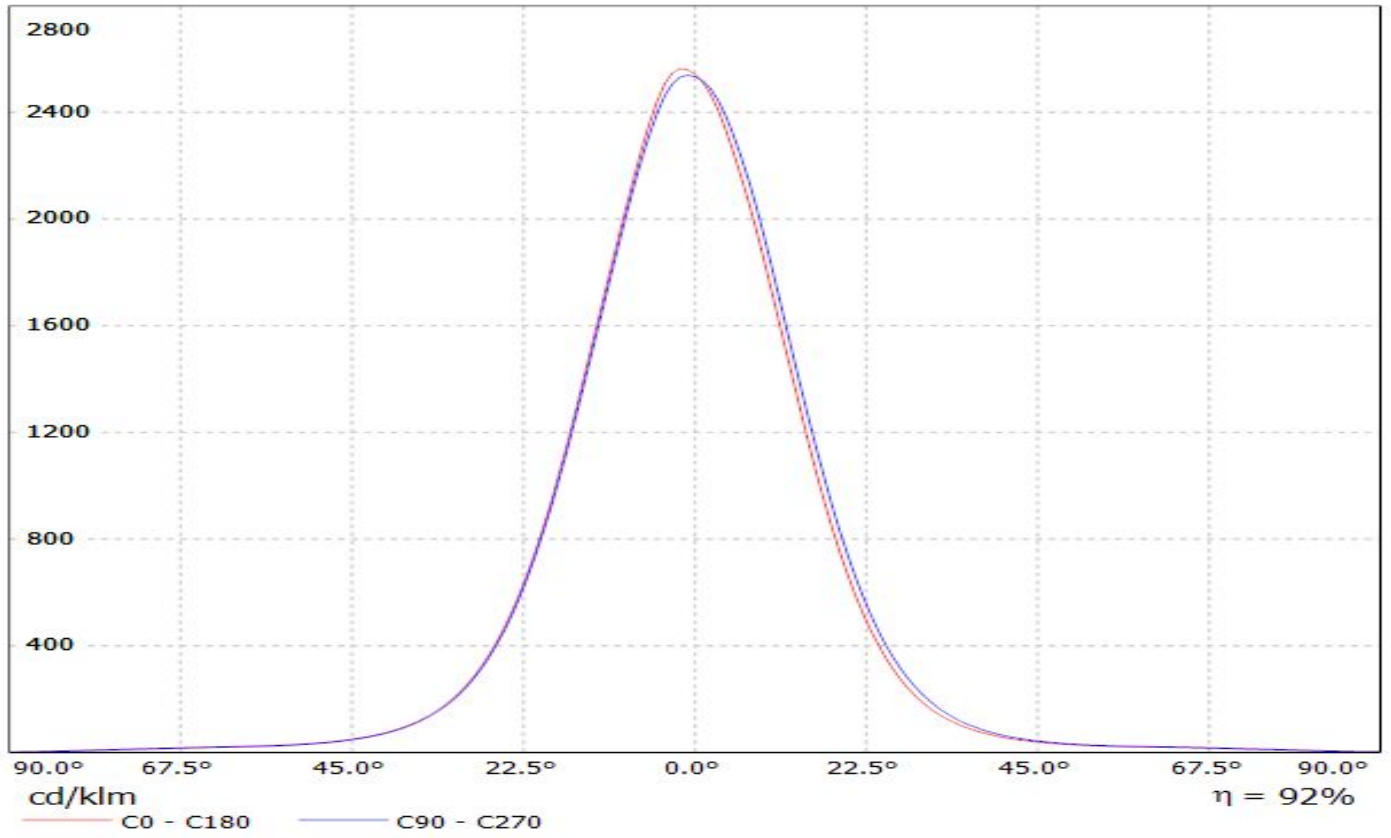
DRAWN BY pl	DATE 20.02.2012	DRAWING TITLE Datasheet Virpi series		
CHECKED BY	DATE	SIZE A4	DRAWING NUMBER -	REV 1
DESIGNED BY PL	DATE 03.02.2012	SCALE 1:1	WEIGHT (g)	SHEET 1/1

1

D A

**LEDiL Oy C12608\_VIRPI-M\_(XP-G) Eff.91.9% / LDC (Linear)**

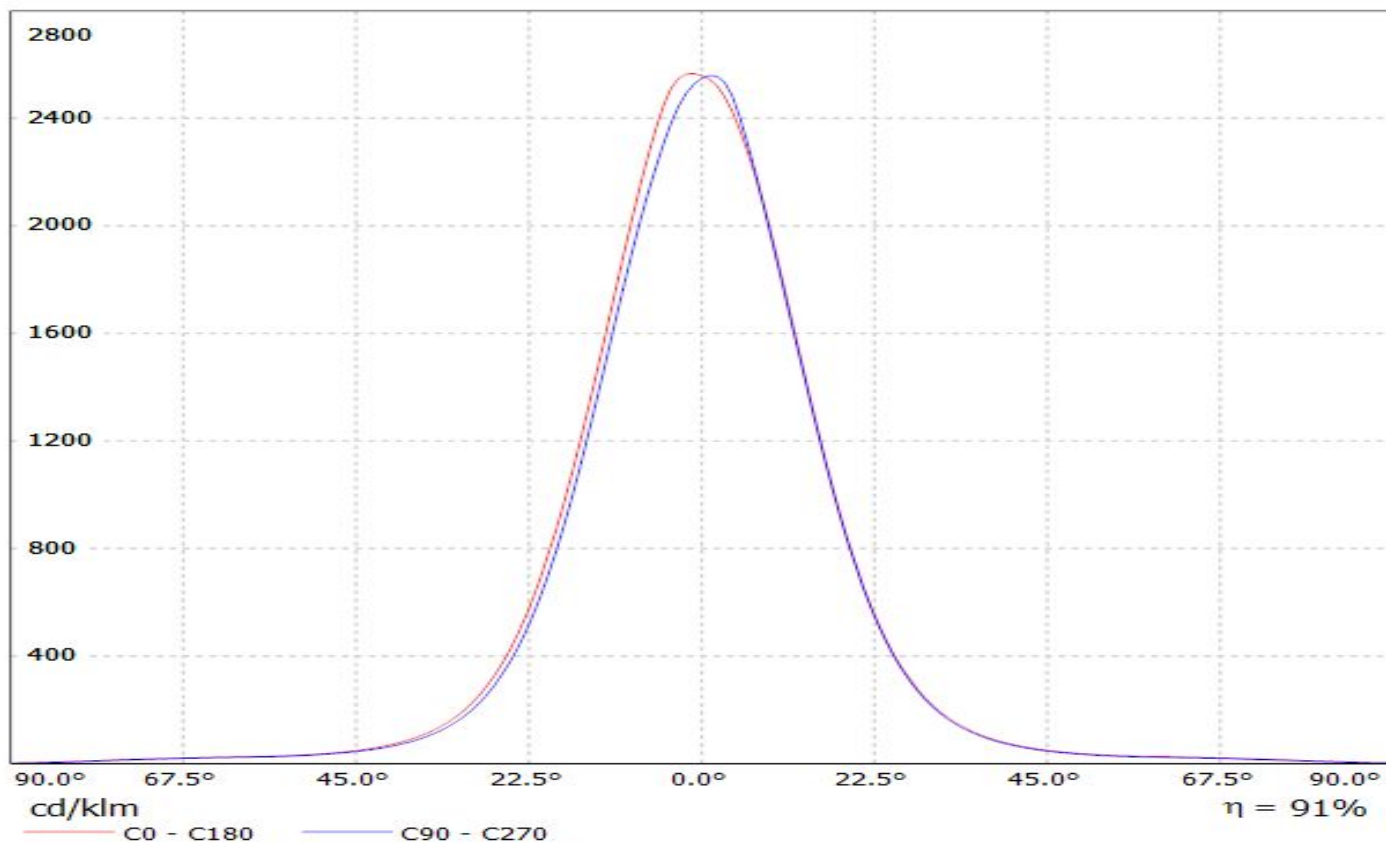
Luminaire: LEDiL Oy C12608\_VIRPI-M\_(XP-G) Eff.91.9%  
Lamps: 1 x XP-G\_5x5 (1544.25lm@250mA)



# LEDiL Oy C12608\_VIRPI-M\_(XT-E) Eff.91.0% / LDC (Linear)

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(XT-E) Eff.91.0%

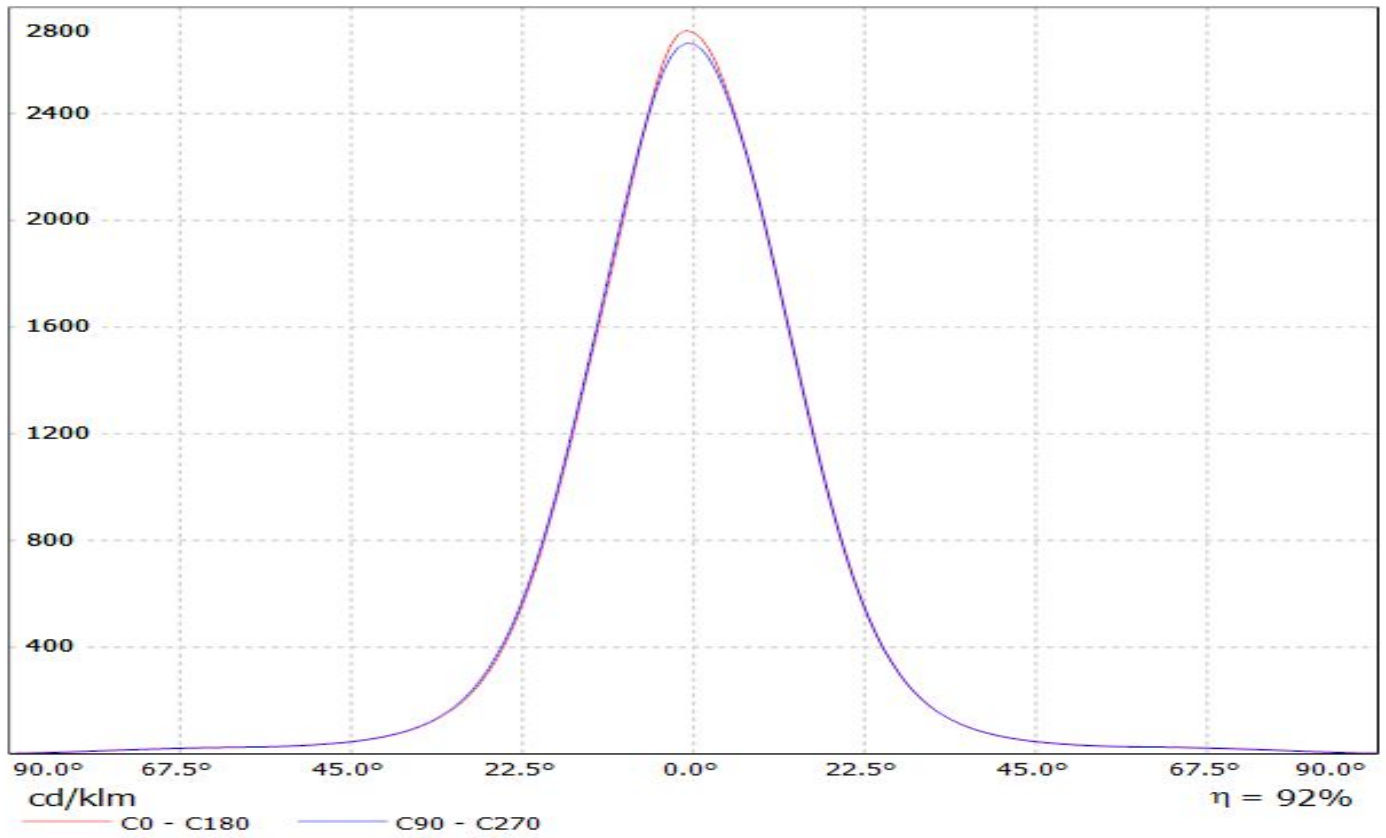
Lamps: 1 x XT-E\_5x5 (2049.85lm@250mA)



**LEDiL Oy C12608\_VIRPI-M\_(XB-D) Eff.92.1% / LDC (Linear)**

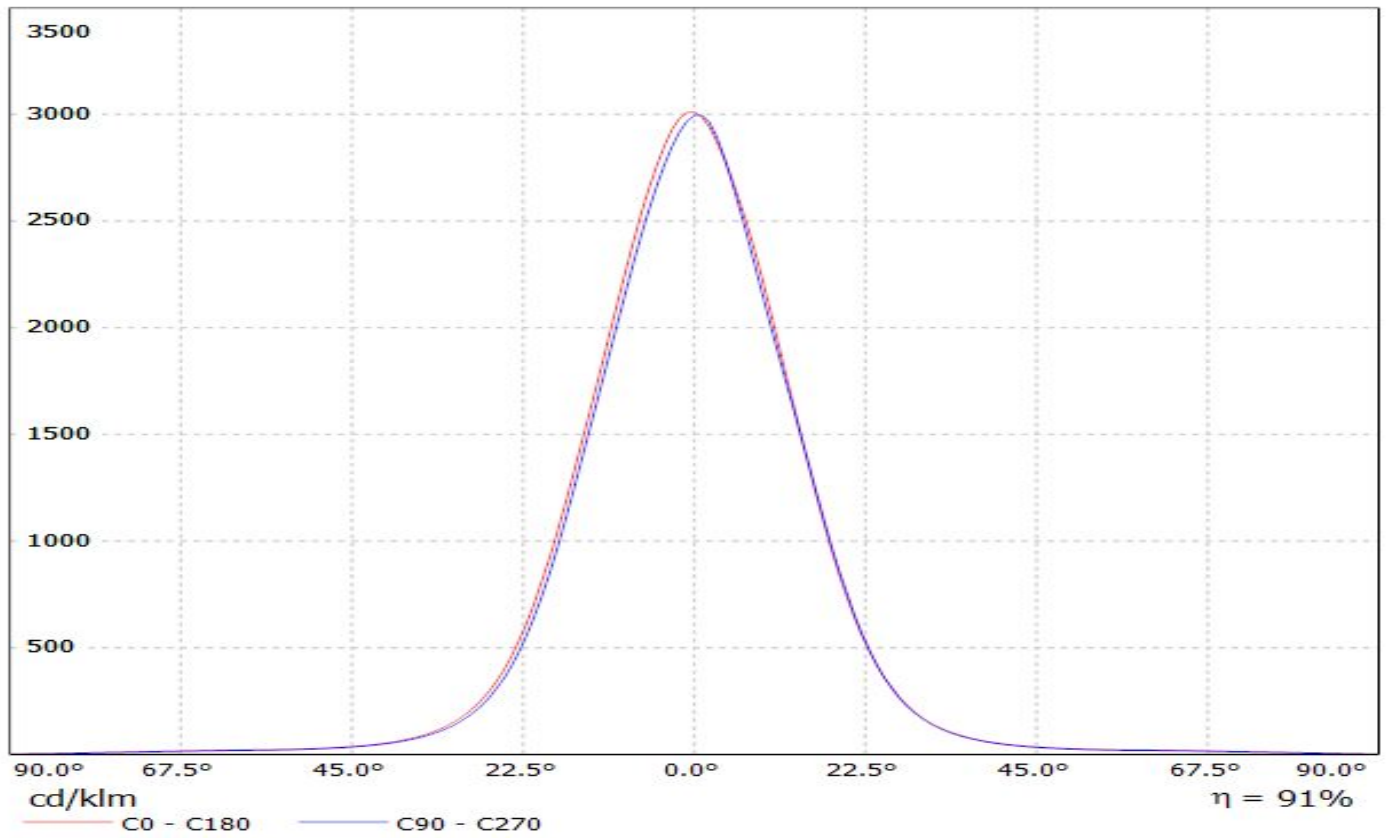
Luminaire: LEDiL Oy C12608\_VIRPI-M\_(XB-D) Eff.92.1%

Lamps: 1 x XB-D\_5x5 (1878.23lm@250mA)



# LEDiL Oy C12608\_VIRPI-M\_(XP-E2) Eff.91.2% / LDC (Linear)

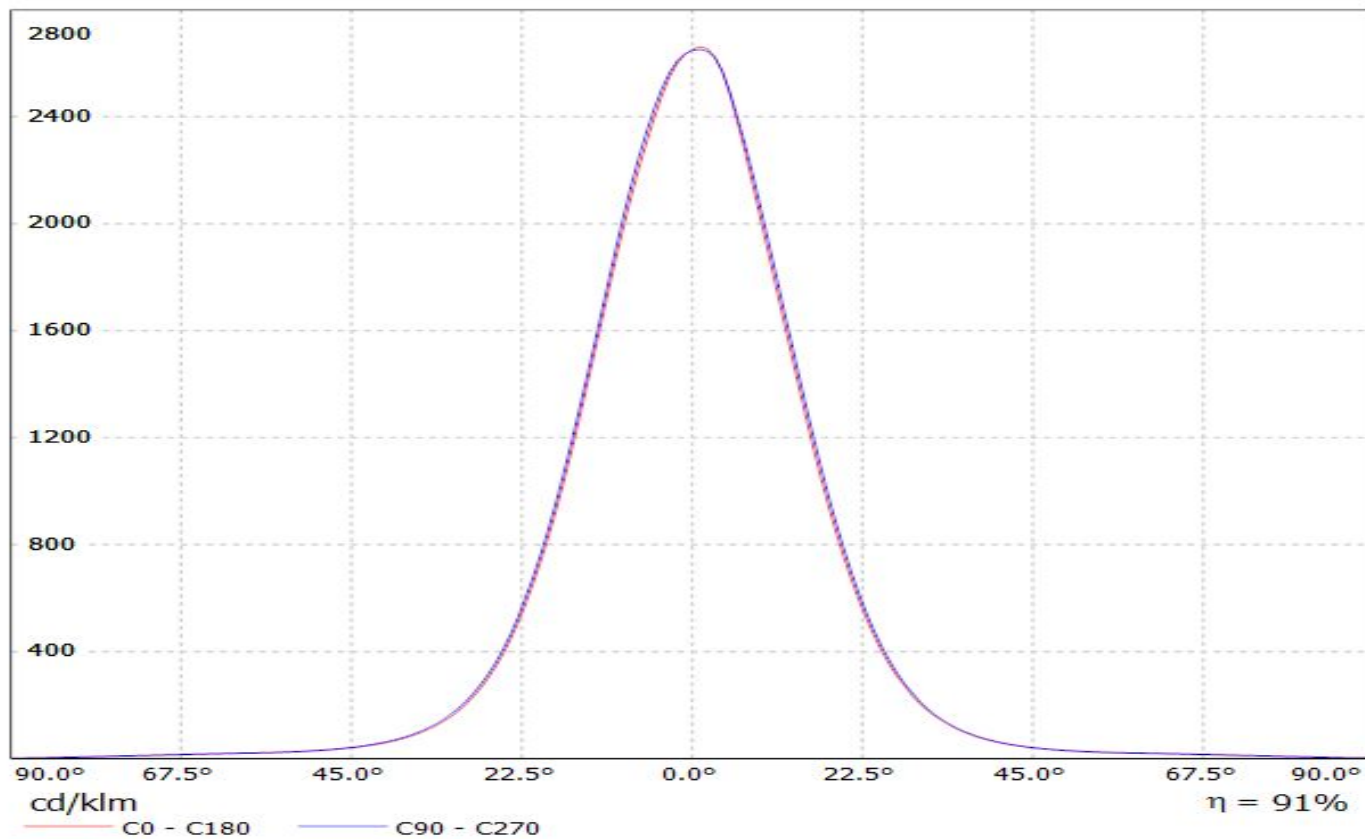
Luminaire: LEDiL Oy C12608\_VIRPI-M\_(XP-E2) Eff.91.2%  
Lamps: 1 x XP-E2\_x25 (2039.65lm@250mA)



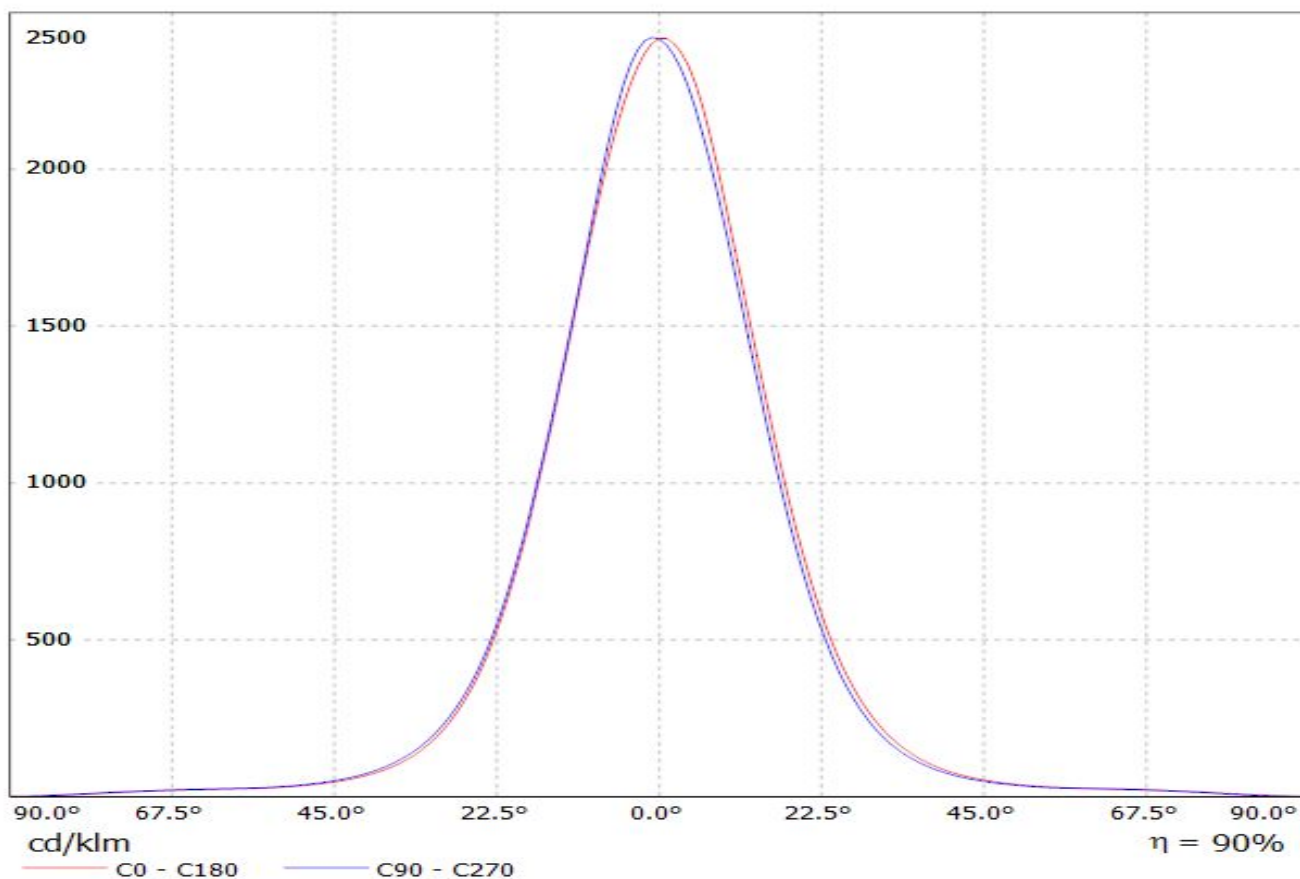
# LEDiL Oy C12608\_VIRPI-M\_(XP-G2) Eff.91.1% / LDC (Linear)

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(XP-G2) Eff.91.1%

Lamps: 1 x XP-G2\_x25 (2535.22lm@250mA)



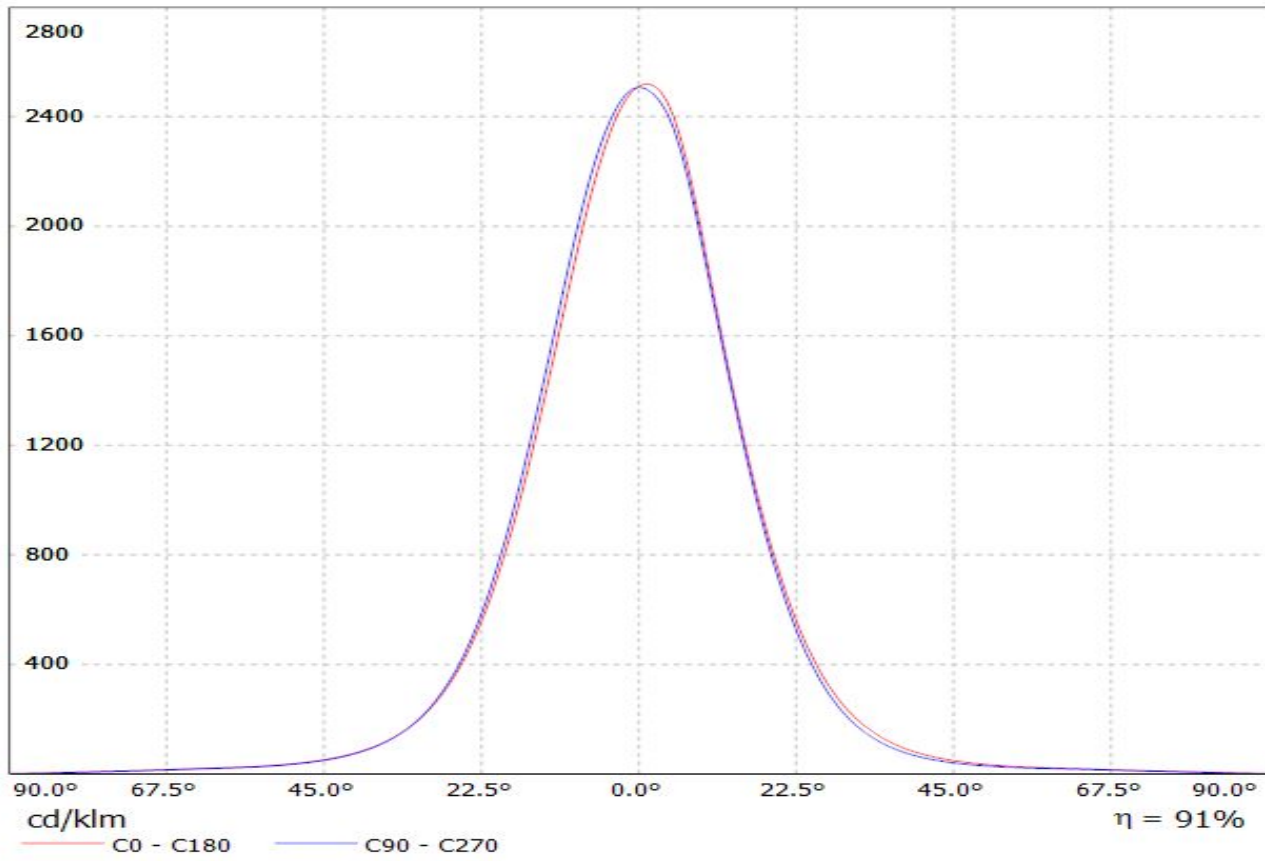
Luminaire: LEDiL Oy C12608\_VIRPI-M\_(XH-B)  
Lamps: 1 x CREE\_XH-B\_136.467lm@65mA\_P=0.911626\_I=65.2mA



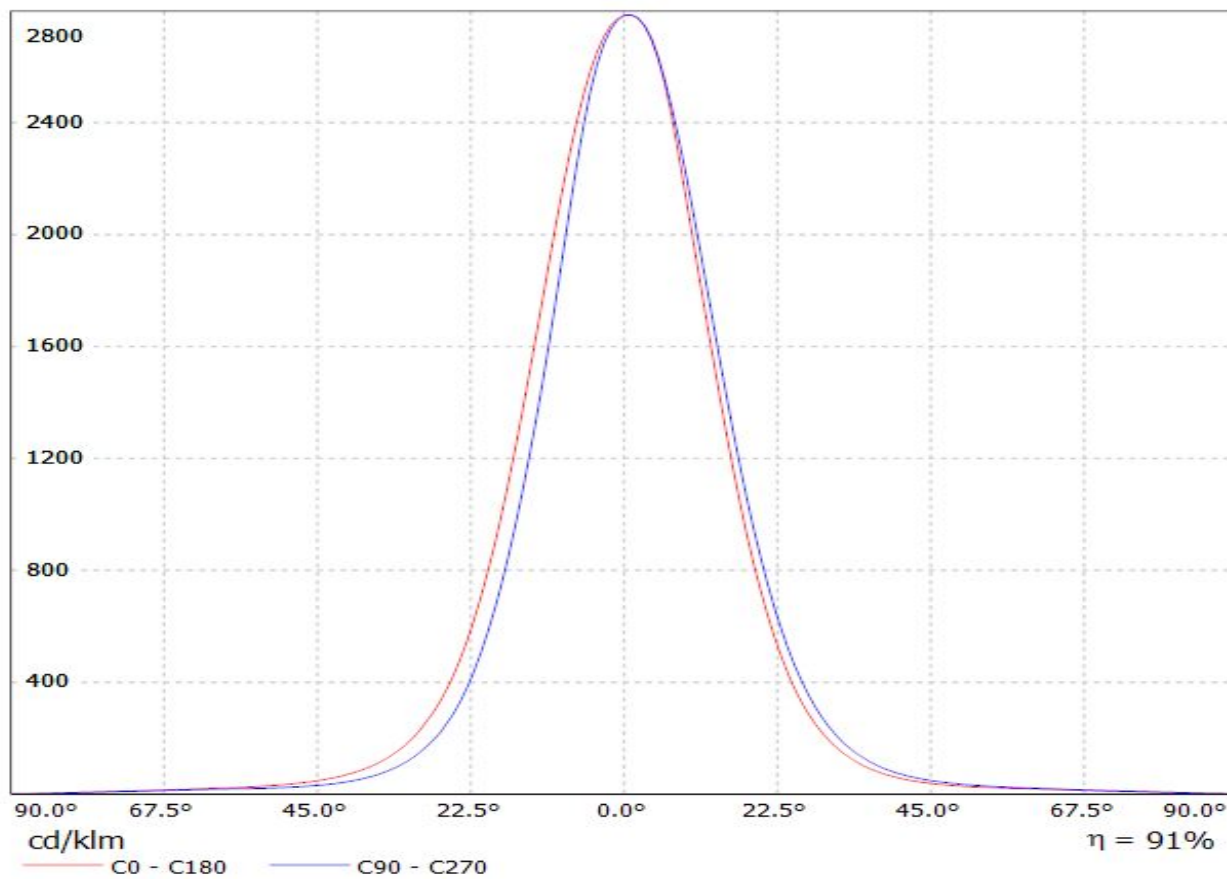


Luminaire: LEDiL Oy C12608\_VIRPI-M\_(ML-E)

Lamps: 1 x CREE\_ML-E\_5x5\_(MLEAWT-U1-7A3-K3-0-00003)\_178.608lm@150mA\_P=2.1053W\_I=150.1mA

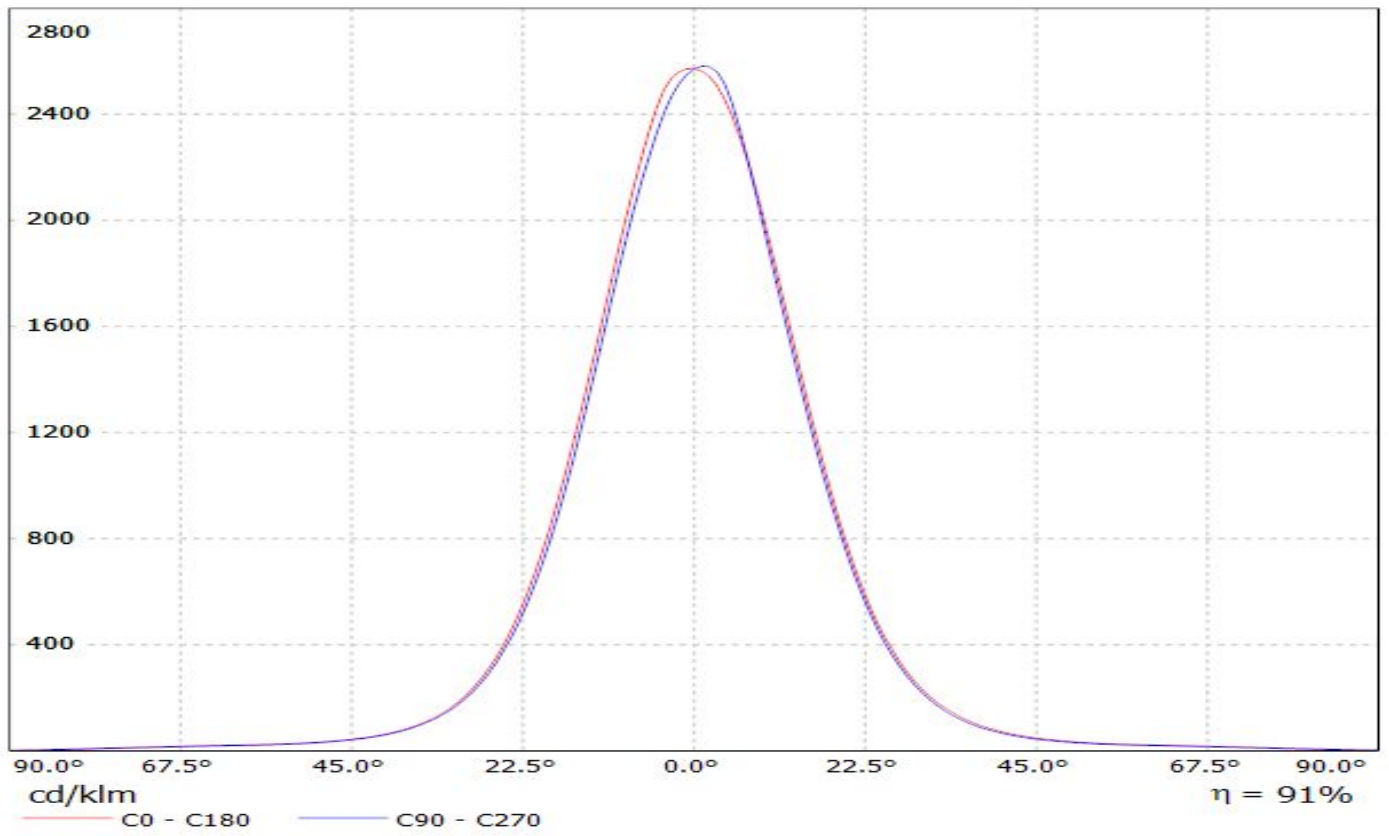


Luminaire: LEDiL Oy C12608\_VIRPI-M\_(LG\_3030)  
Lamps: 1 x LG\_3030\_3000k\_522.247lm@150mA\_P=4.12515W\_I=150mA



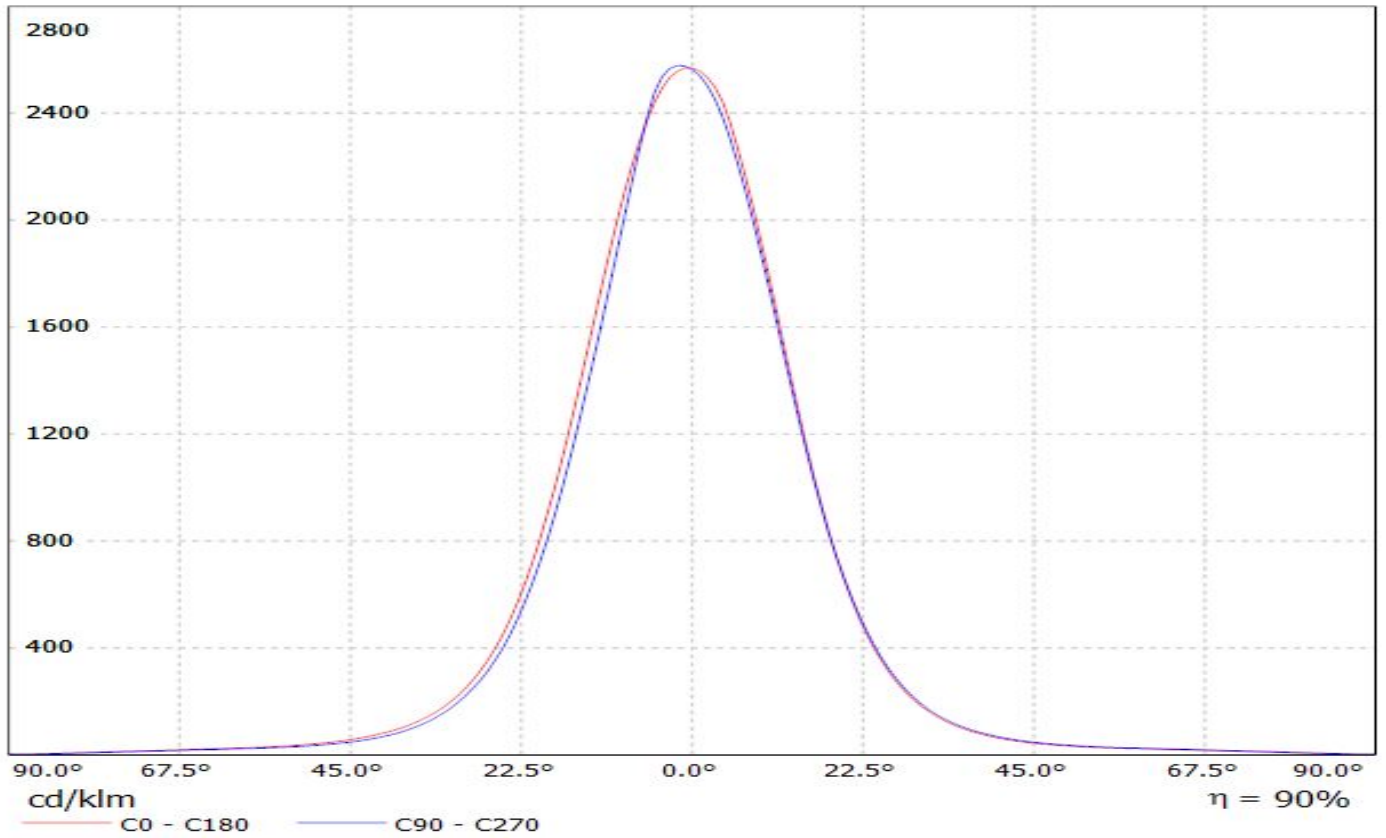
**LEDiL Oy C12608\_VIRPI-M\_(REBEL\_ES) Eff.90.6% / LDC (Linear)**

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(REBEL\_ES) Eff.90.6%  
Lamps: 1 x REBEL\_ES\_5x5 (1766.64lm@250mA)



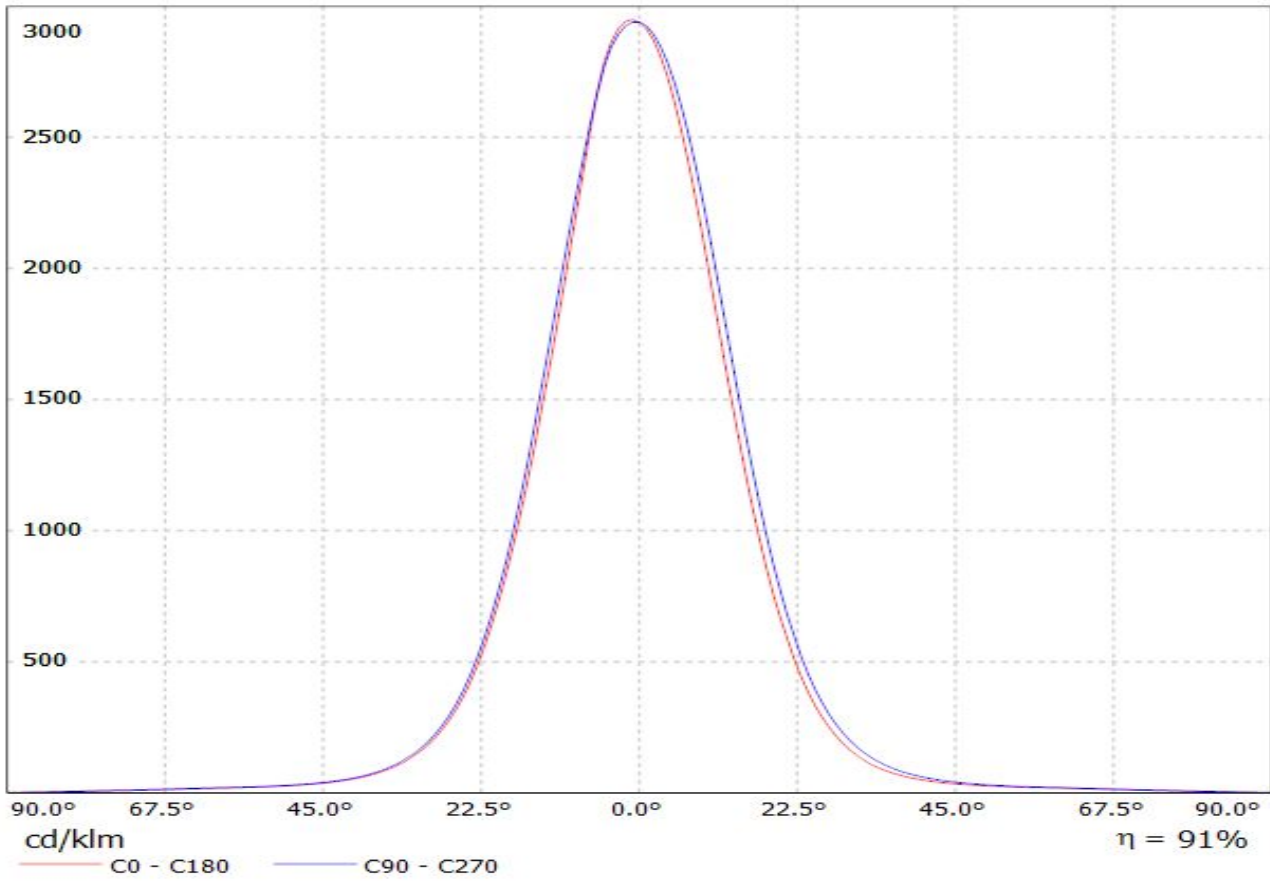
# LEDiL Oy C12608\_VIRPI-M\_(NVS19) Eff.90.1% / LDC (Linear)

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(NVS19) Eff.90.1%  
Lamps: 1 x NVS19\_5x5 (1782.78lm@250mA)

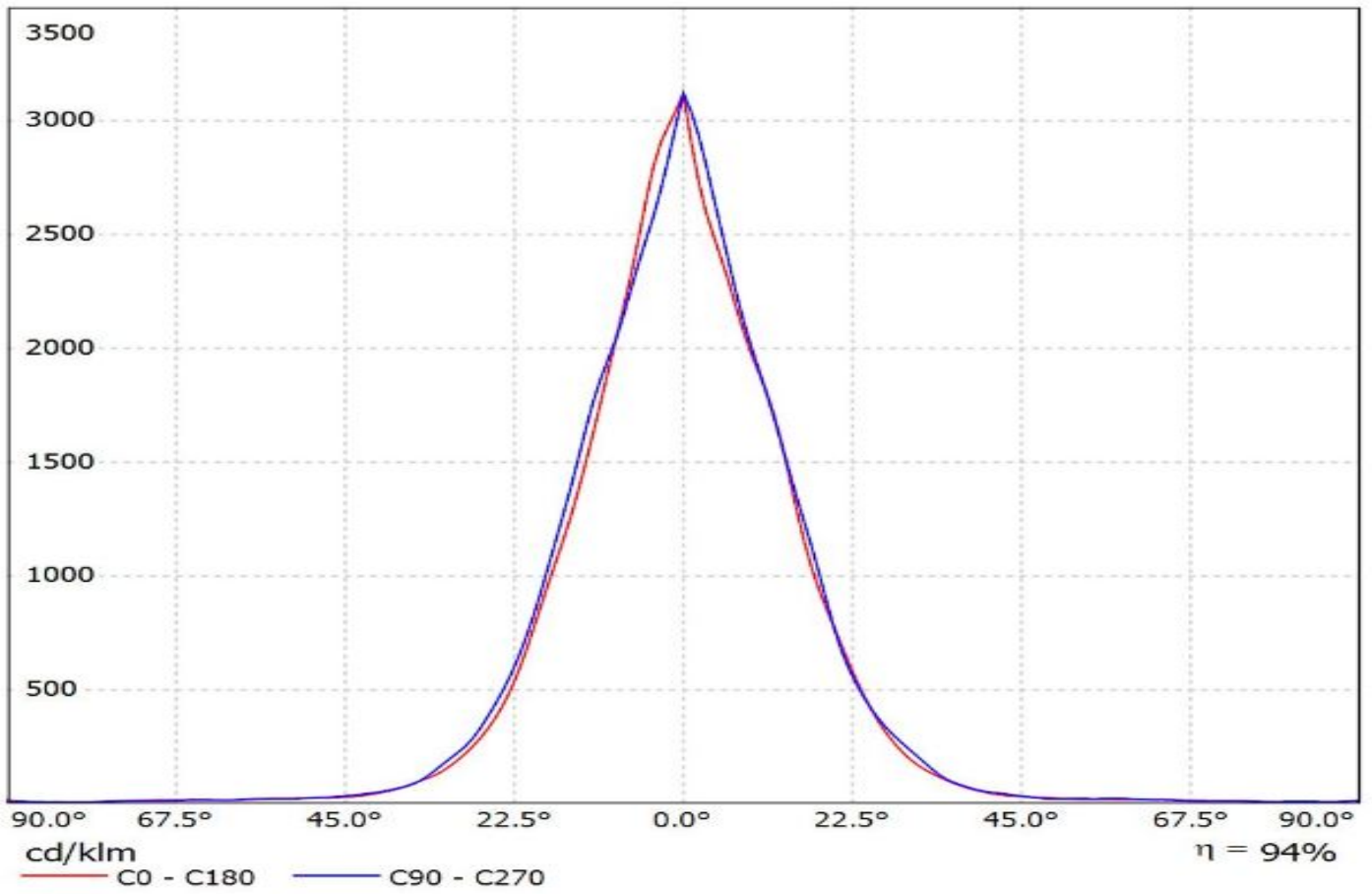


Luminaire: LEDiL Oy C12608\_VIRPI-M\_(NF2x757A)

Lamps: 1 x Nichia\_NF2x757A\_(NF2W757ARTV1)\_1037.67lm@250mA P=6.97966W I=249.8mA

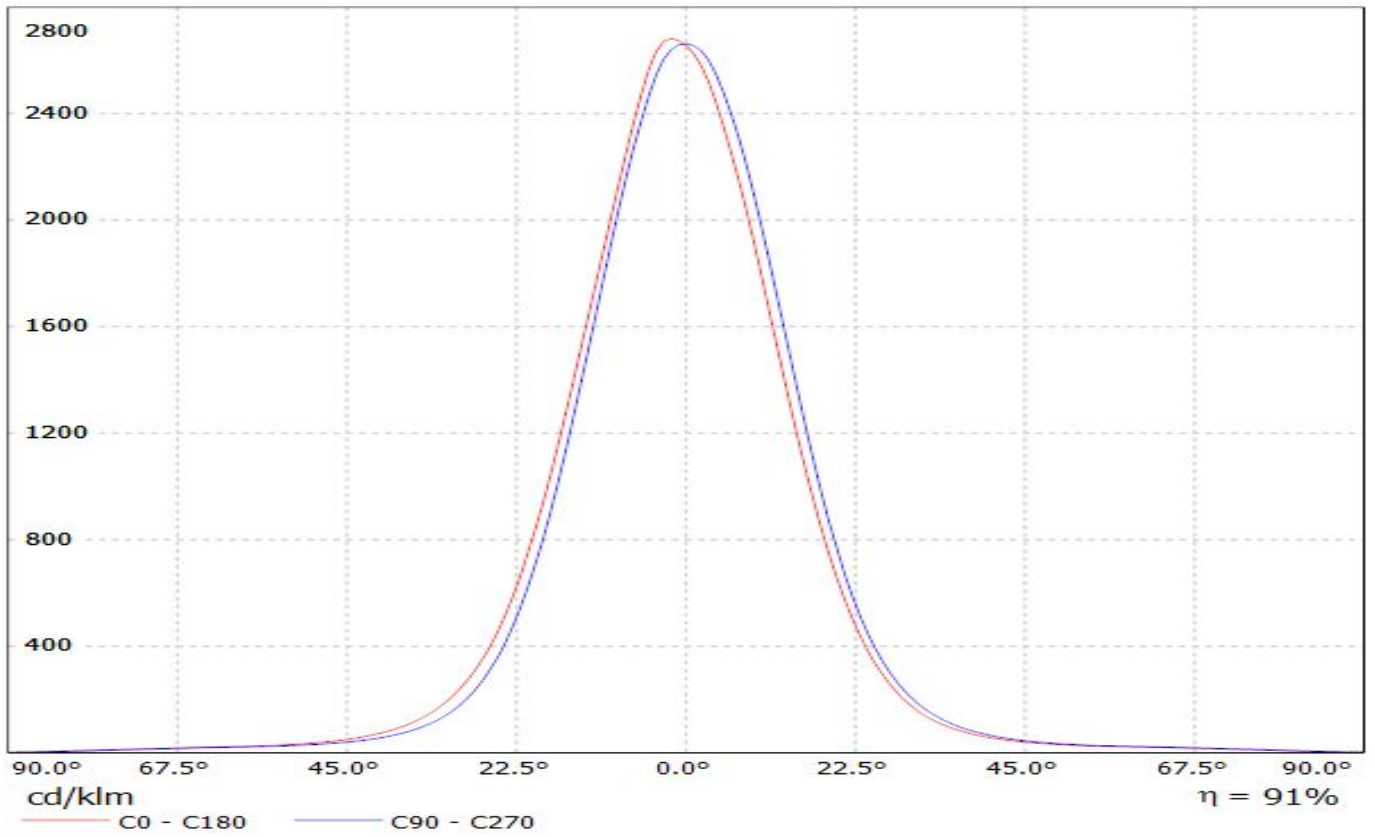


Luminaire: Ledil Oy C12608\_VIRPI-M\_NICHIA\_NVSW219C\_SIMULATED  
Lamps: 1 x NICHIA NVSW219C



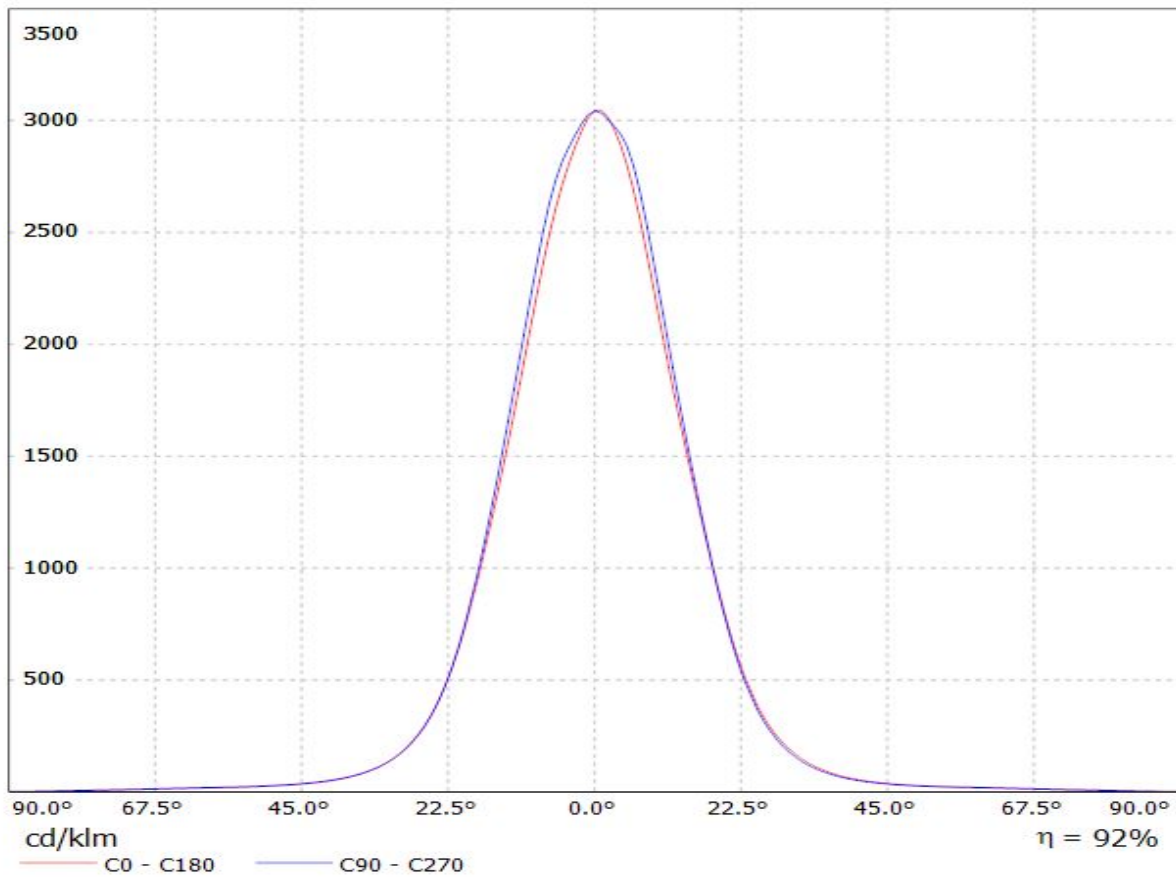
# LEDiL Oy C12608\_VIRPI-M\_(SQ-EC) Eff.91.0% / LDC (Linear)

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(SQ-EC) Eff.91.0%  
Lamps: 1 x SQ-EC\_5x5 (2043.47lm@250mA)



Luminaire: LEDiL Oy C12608\_VIRPI-M\_(DURIS-S5)

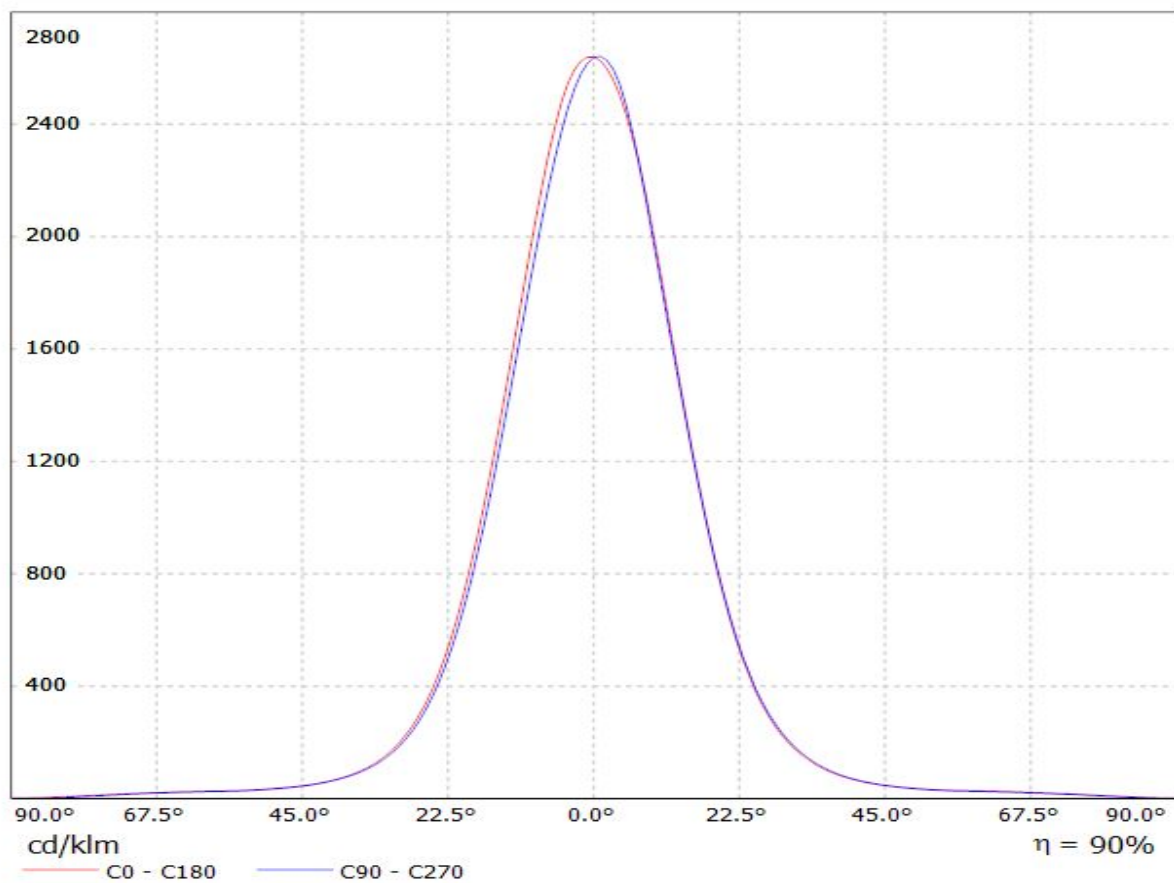
Lamps: 1 x OSRAM\_DURIS-S5\_5x5\_(GW\_PSLLS1.EC-HPHR-5L7N-1)\_160.476lm@80mA\_P=1.10163W\_I=80.2mA



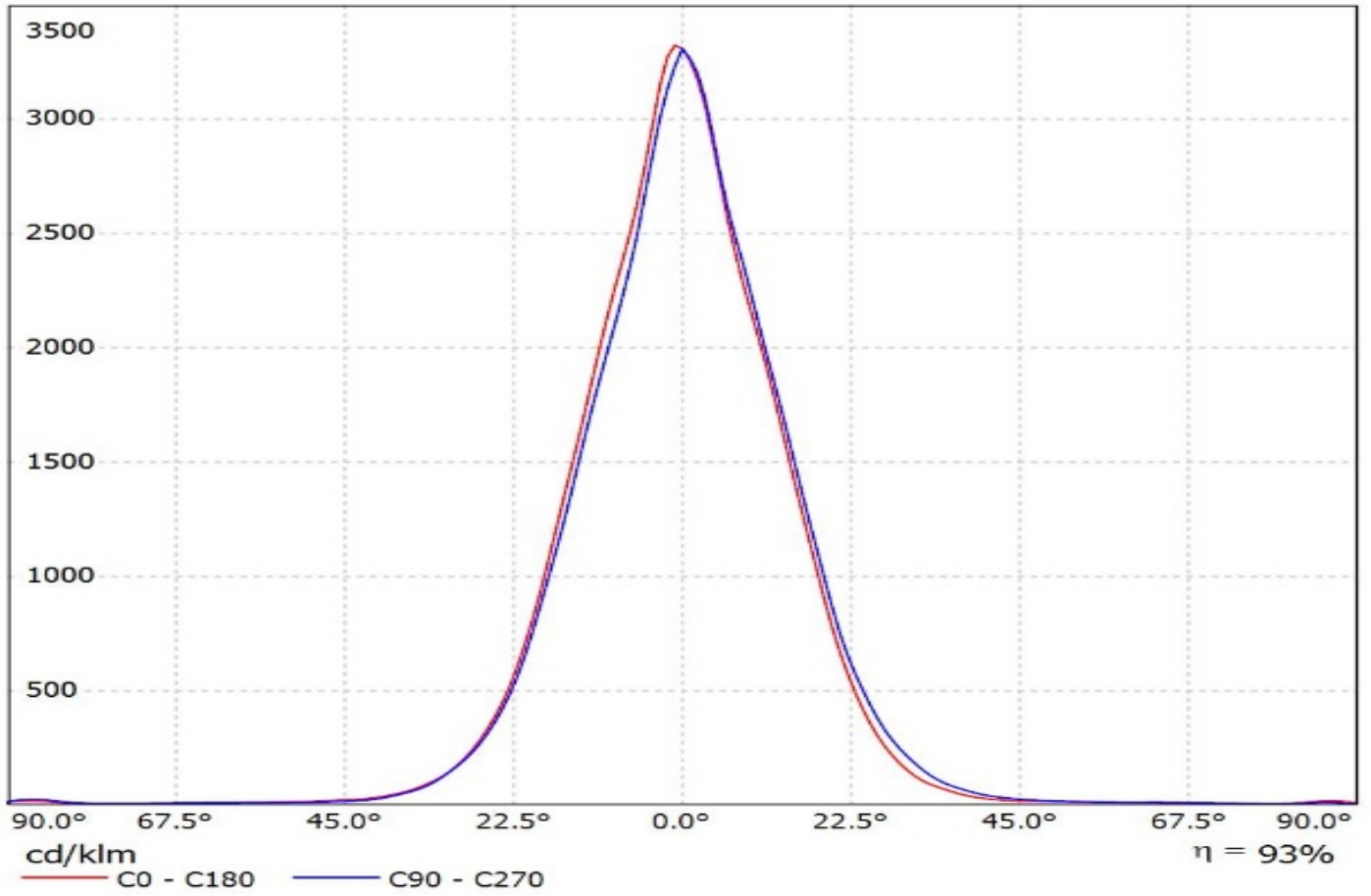


Luminaire: LEDiL Oy C12608\_VIRPI-M\_(DURIS\_P5)

Lamps: 1 x OSRAM\_DURIS\_P5\_5x5\_(GW\_DASPA1.EC-HPHR-5R8T-1)\_163.795lm@100mA\_P=1.37895W\_I=100.2mA

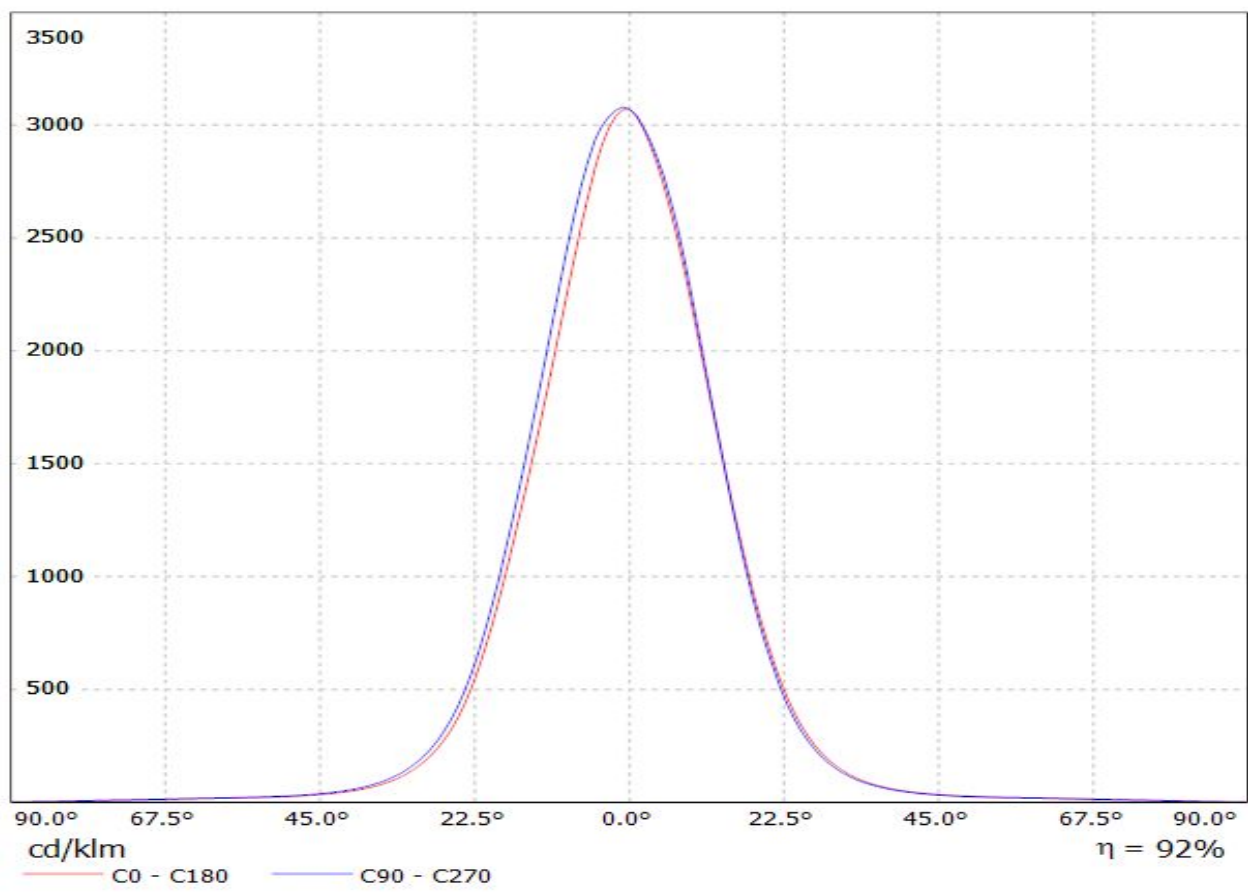


Luminaire: Ledil Oy C12608\_VIRPI-M\_(Osram\_Oslon\_Square\_Gen3)\_SIMULATED  
Lamps: 1 x Osram Oslon Square Gen 3 (GW CSSRM2.PM)



Luminaire: LEDiL Oy C12608\_VIRPI-M\_(LM231B)

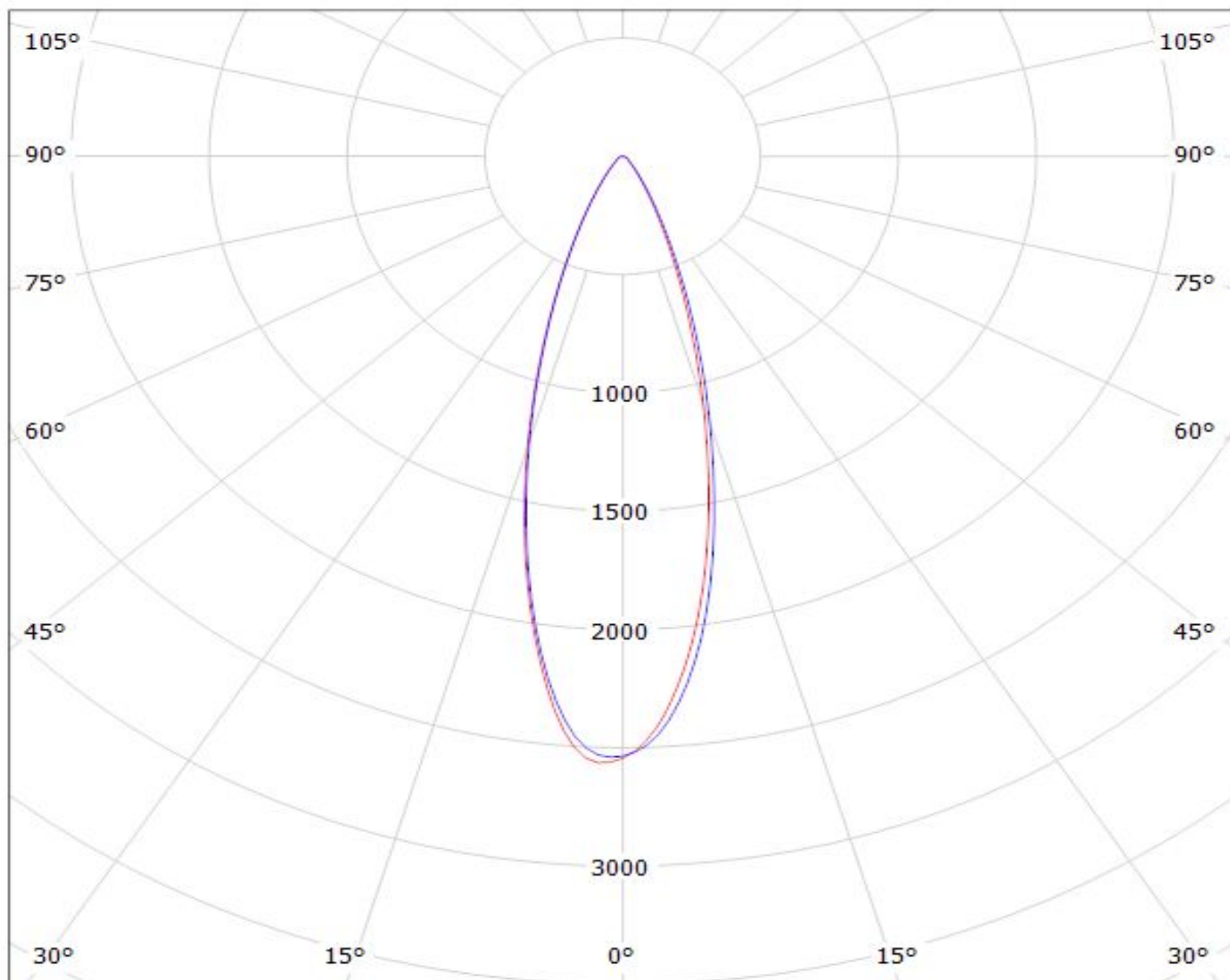
Lamps: 1 x SAMSUNG\_LM231B\_5X5\_121.687lm@65mA\_P=0.886133W\_I=65,2mA



# LEDiL Oy C12608\_VIRPI-M\_(XP-G) Eff.91.9% / LDC (Polar)

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(XP-G) Eff.91.9%

Lamps: 1 x XP-G\_5x5 (1544.25lm@250mA)



cd/klm

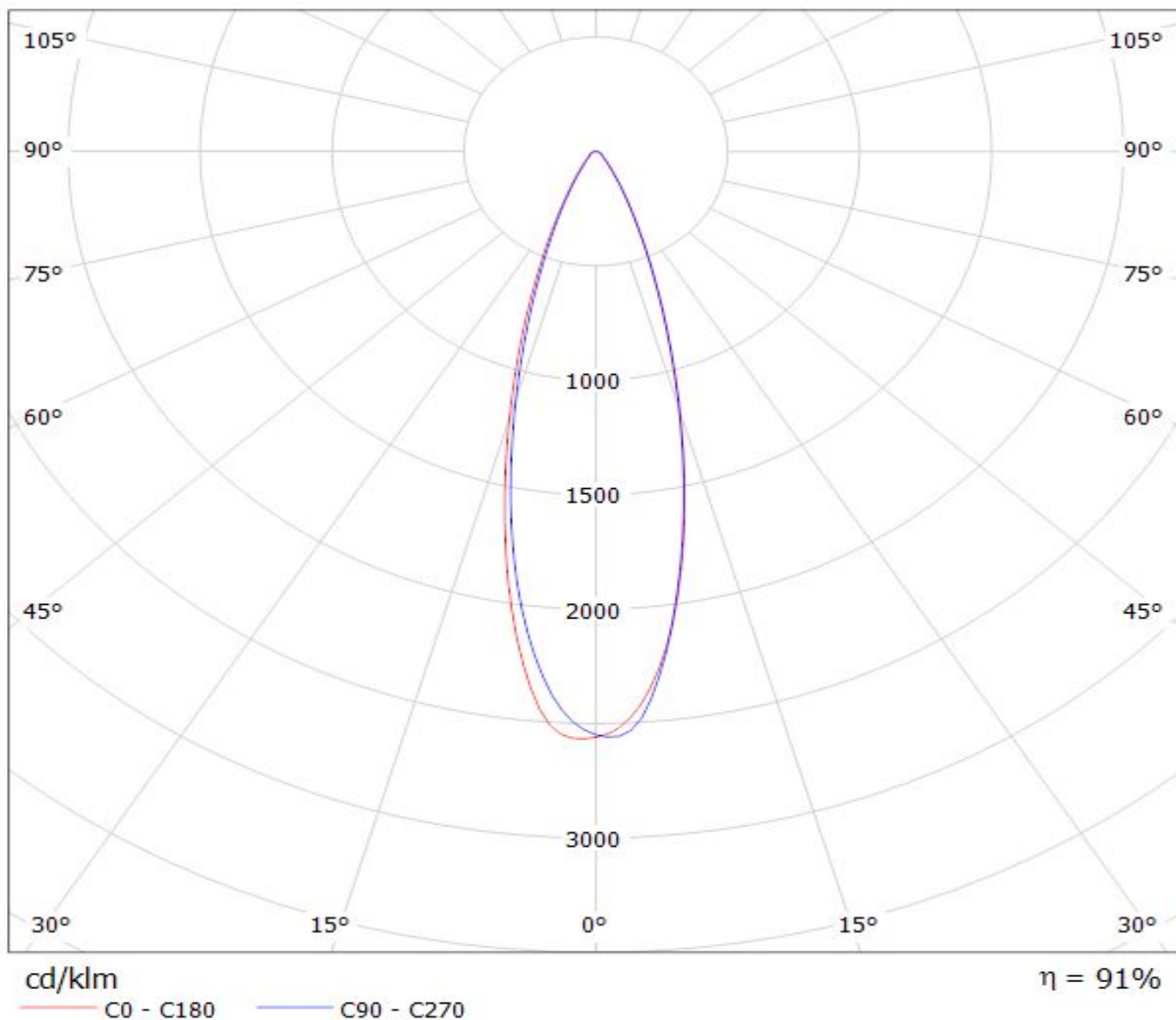
— C0 - C180

— C90 - C270

$\eta = 92\%$

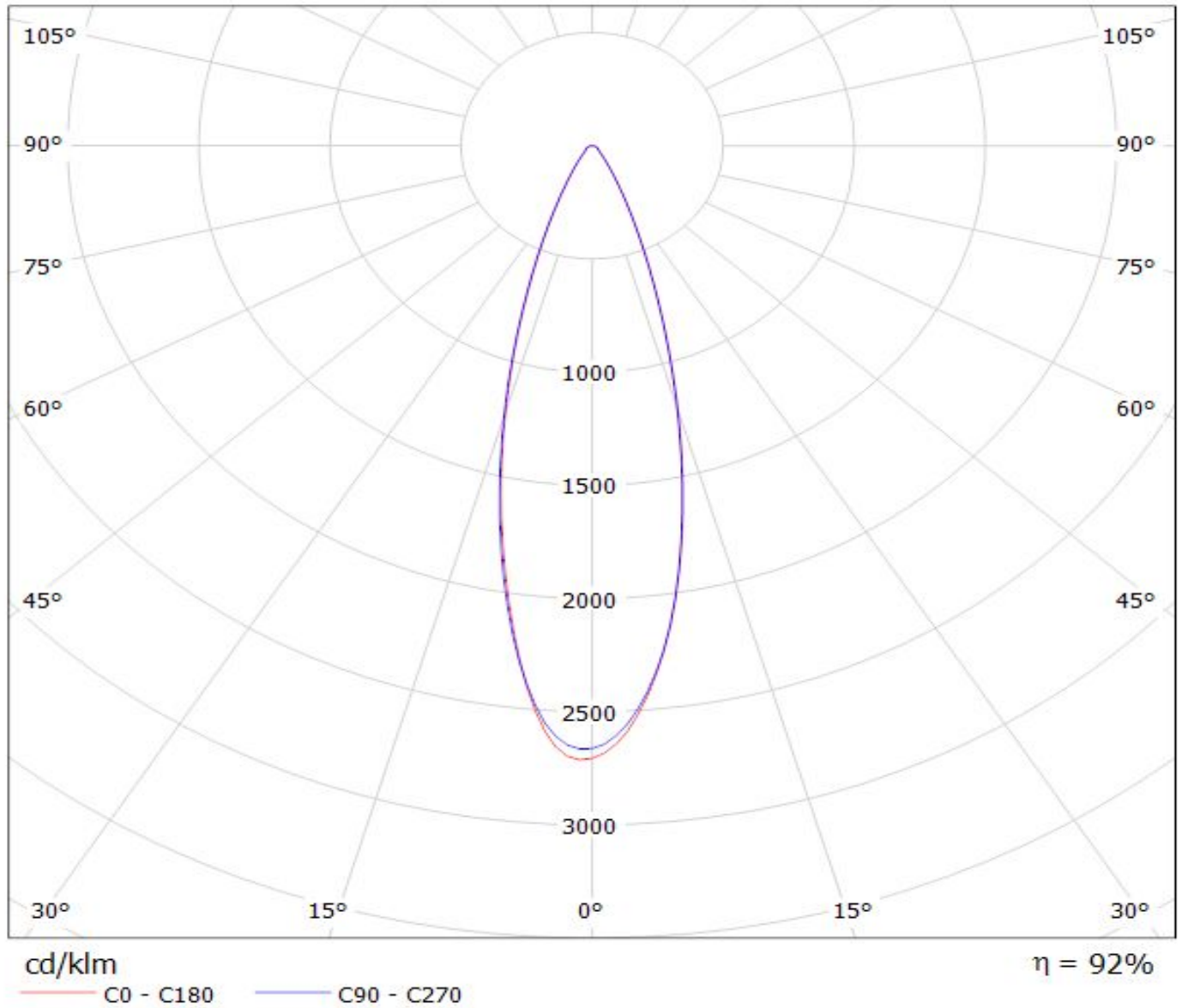
# LEDiL Oy C12608\_VIRPI-M\_(XT-E) Eff.91.0% / LDC (Polar)

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(XT-E) Eff.91.0%  
Lamps: 1 x XT-E\_5x5 (2049.85lm@250mA)



# LEDiL Oy C12608\_VIRPI-M\_(XB-D) Eff.92.1% / LDC (Polar)

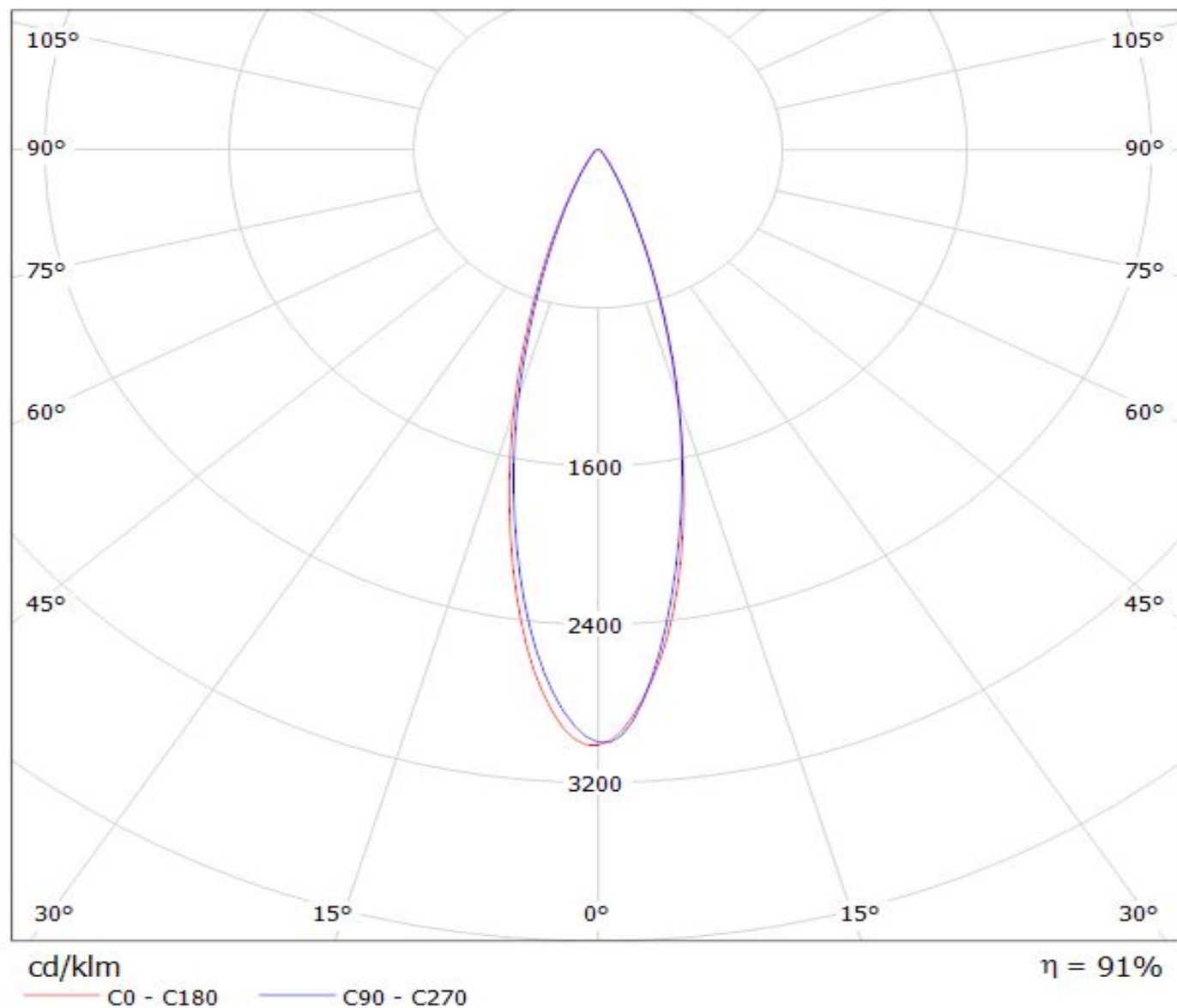
Luminaire: LEDiL Oy C12608\_VIRPI-M\_(XB-D) Eff.92.1%  
Lamps: 1 x XB-D\_5x5 (1878.23lm@250mA)



# LEDiL Oy C12608\_VIRPI-M\_(XP-E2) Eff.91.2% / LDC (Polar)

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(XP-E2) Eff.91.2%

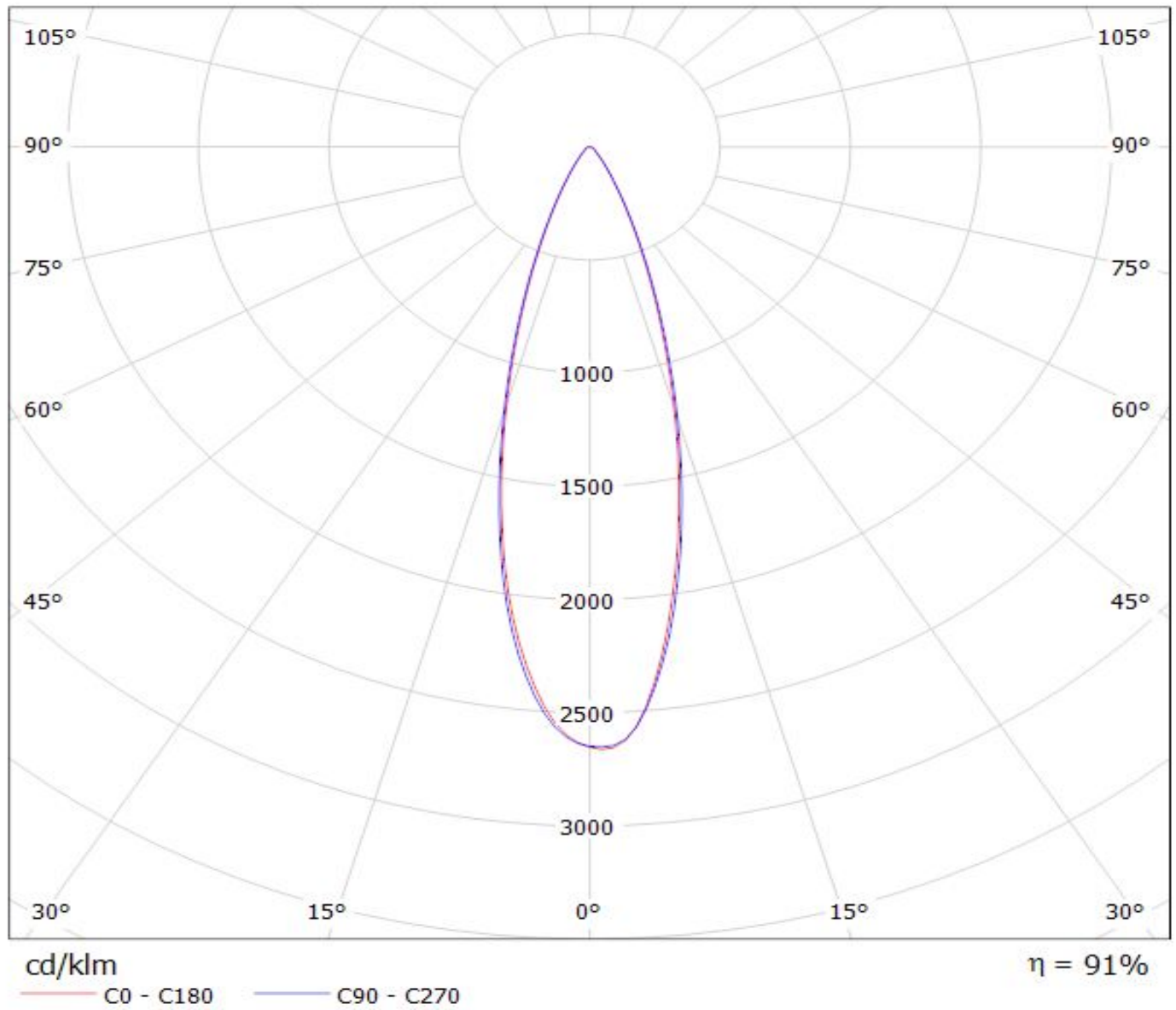
Lamps: 1 x XP-E2\_x25 (2039.65lm@250mA)



# LEDiL Oy C12608\_VIRPI-M\_(XP-G2) Eff.91.1% / LDC (Polar)

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(XP-G2) Eff.91.1%

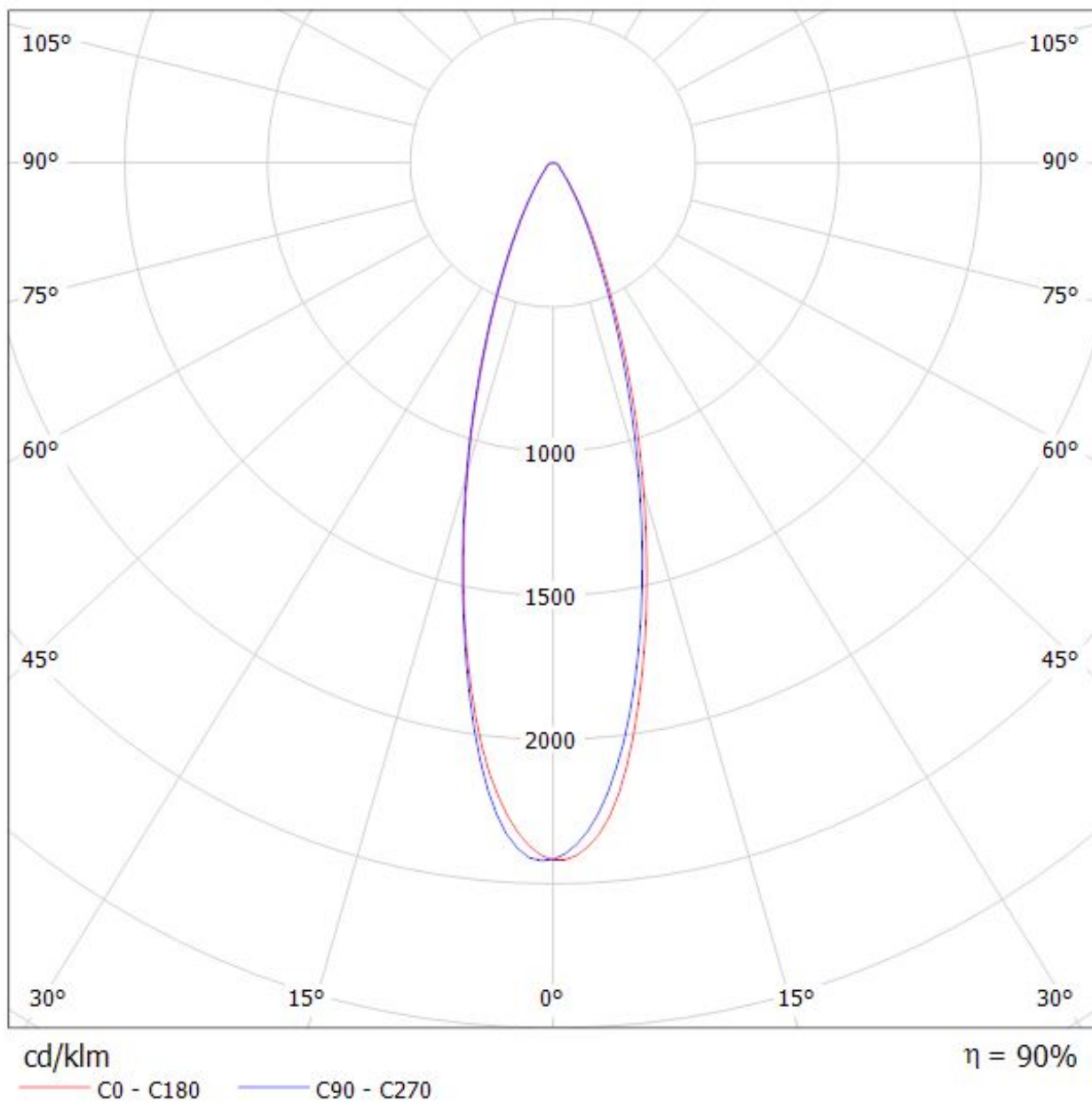
Lamps: 1 x XP-G2\_x25 (2535.22lm@250mA)





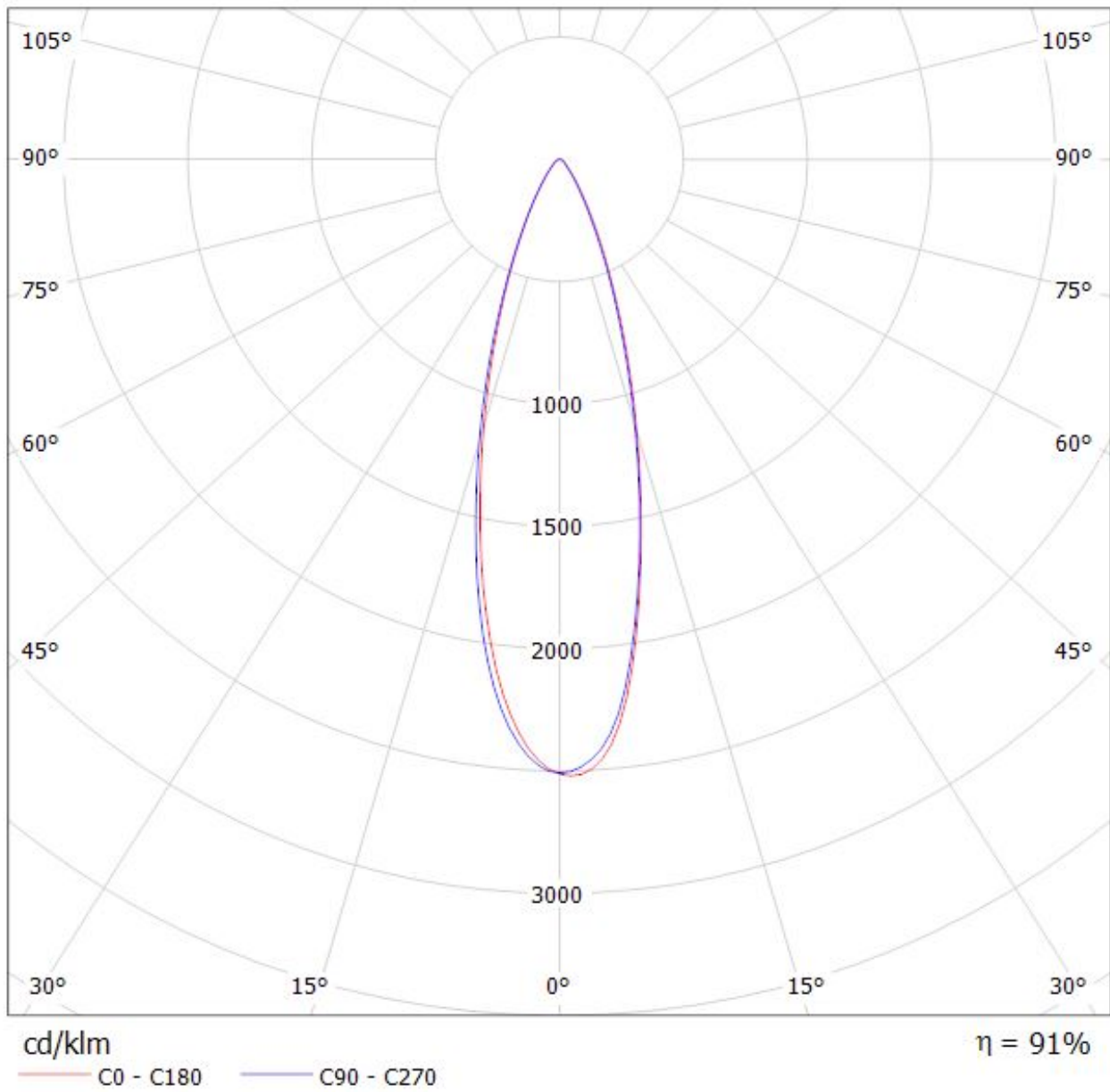
Luminaire: LEDiL Oy C12608\_VIRPI-M\_(XH-B)

Lamps: 1 x CREE\_XH-B\_136.467lm@65mA\_P=0.911626\_I=65.2mA

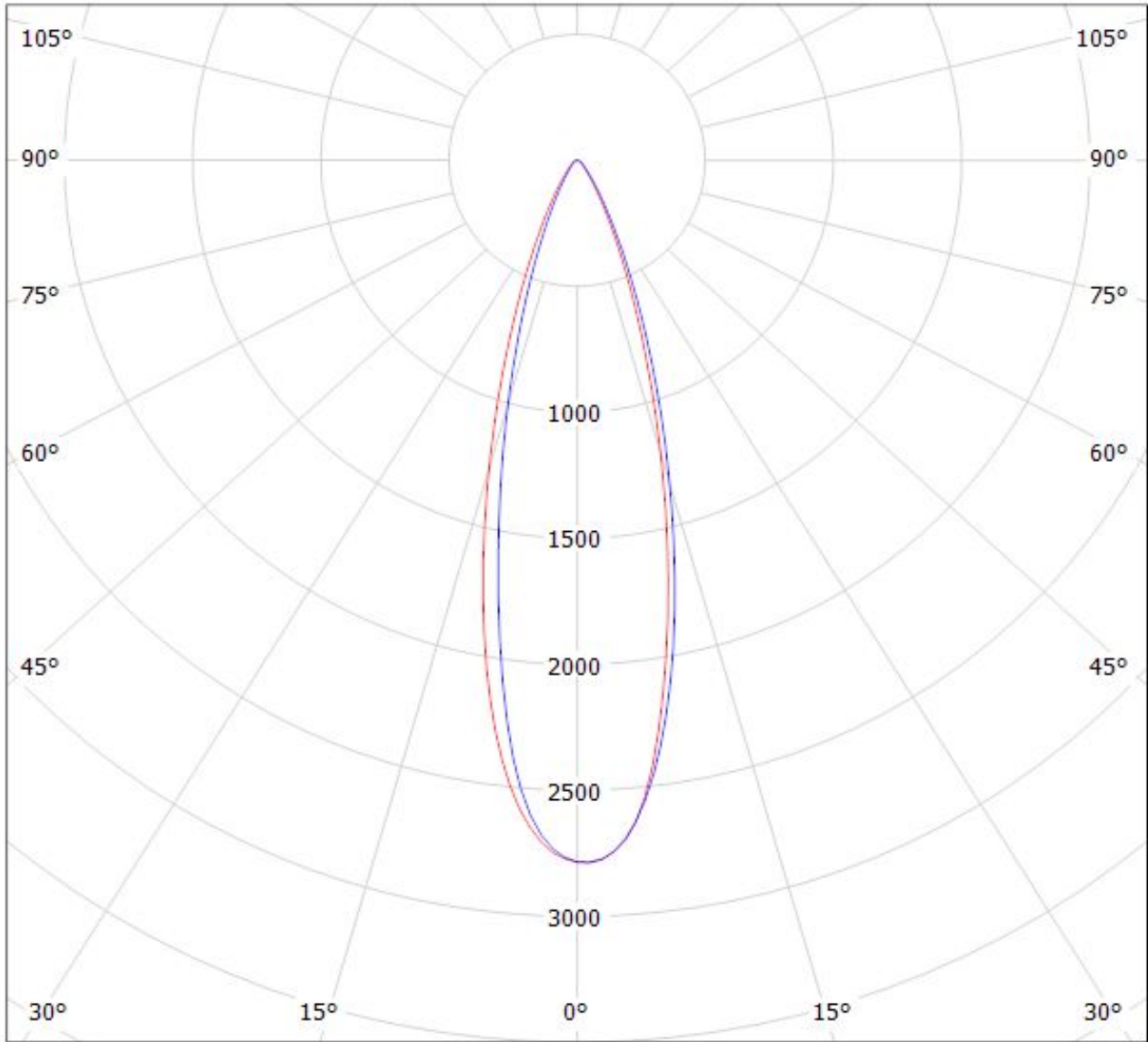


Luminaire: LEDiL Oy C12608\_VIRPI-M\_(ML-E)

Lamps: 1 x CREE\_ML-E\_5x5\_(MLEAWT-U1-7A3-K3-0-00003)\_178.608lm@150mA\_P=2.1053W\_I=150.1mA



Luminaire: LEDiL Oy C12608\_VIRPI-M\_(LG\_3030)  
Lamps: 1 x LG\_3030\_3000k\_522.247lm@150mA\_P=4.12515W\_I=150mA



cd/klm

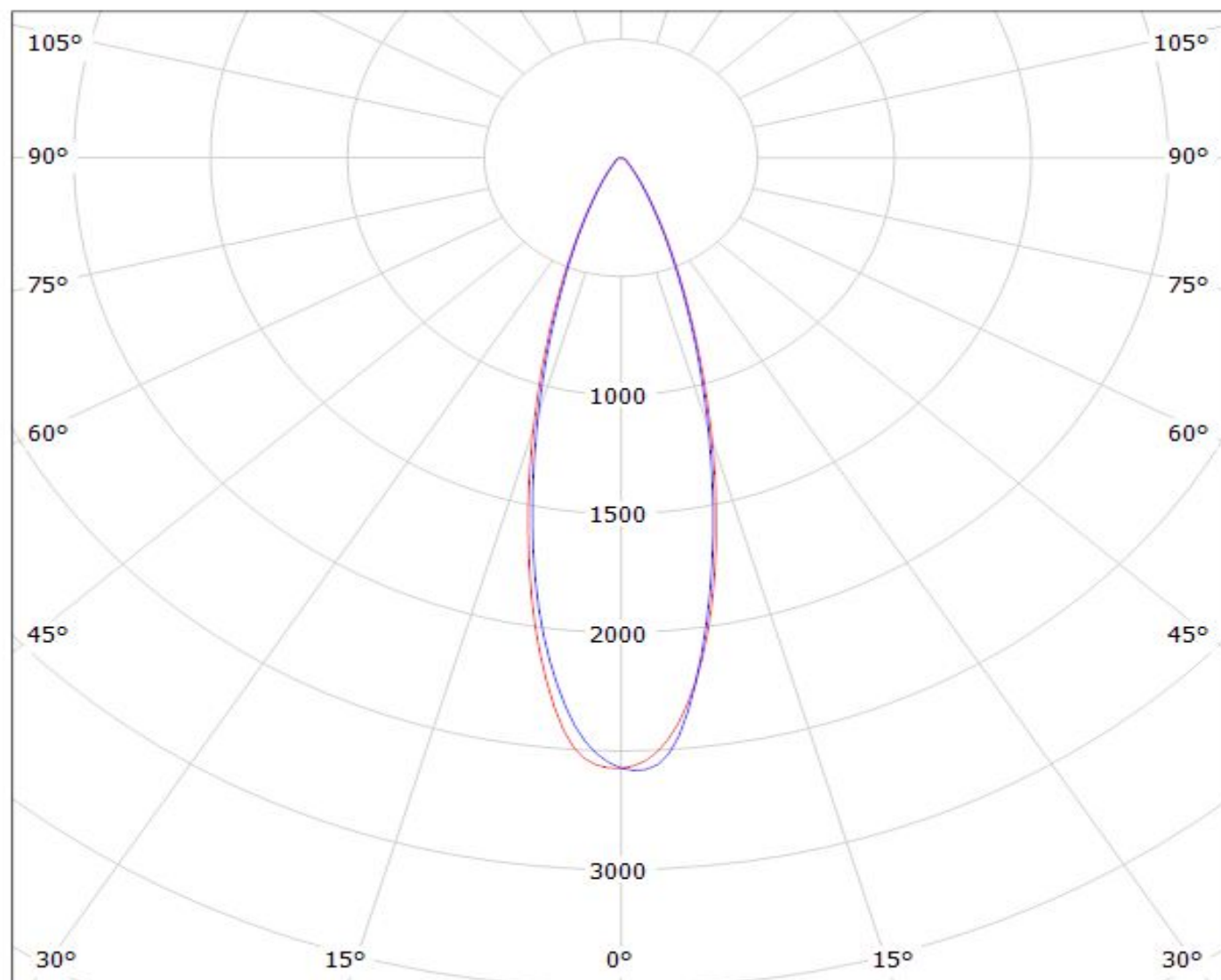
— C0 - C180    — C90 - C270

$\eta = 91\%$

# LEDiL Oy C12608\_VIRPI-M\_(REBEL\_ES) Eff.90.6% / LDC (Polar)

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(REBEL\_ES) Eff.90.6%

Lamps: 1 x REBEL\_ES\_5x5 (1766.64lm@250mA)



cd/klm

— C0 - C180

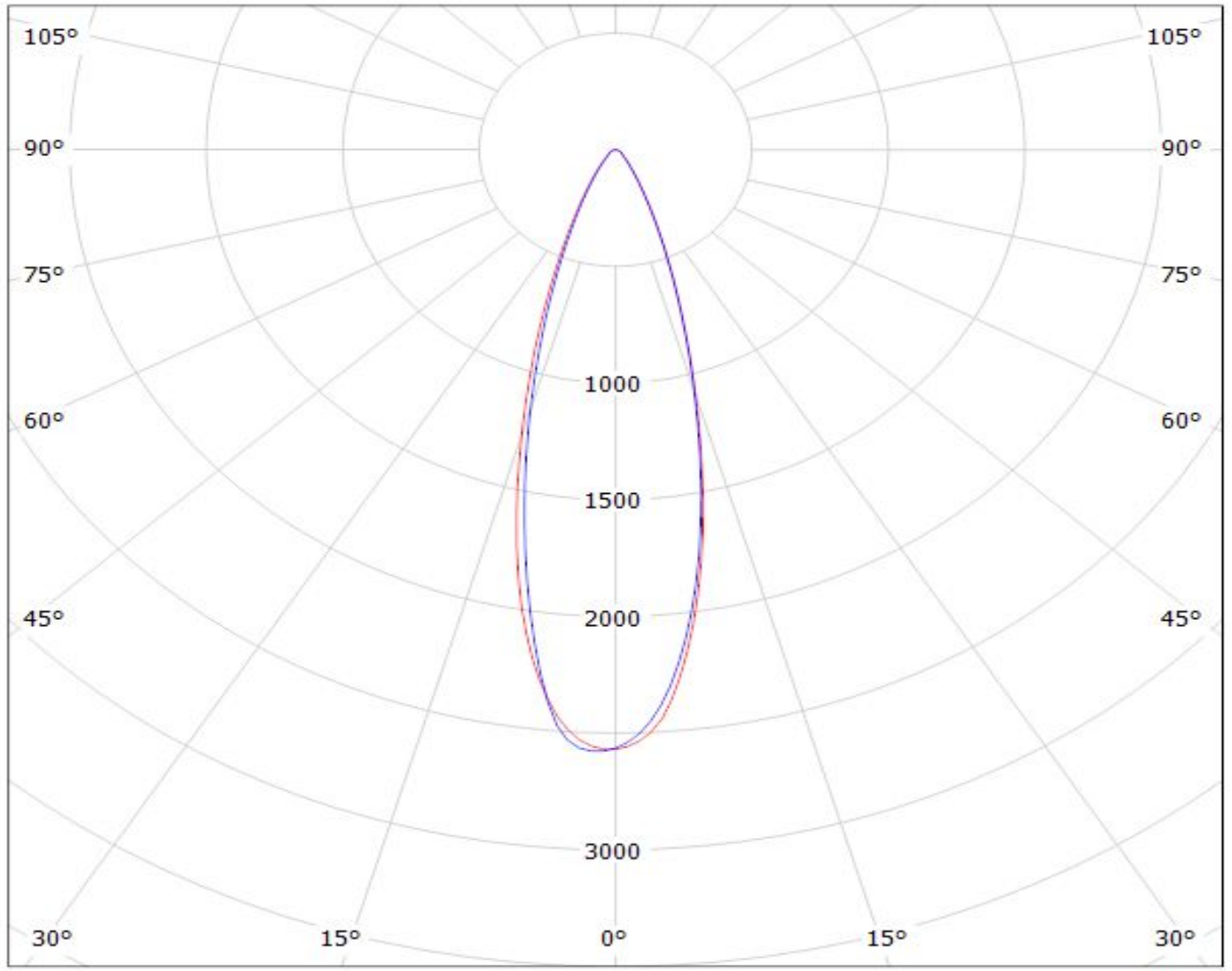
— C90 - C270

$\eta = 91\%$

# LEDiL Oy C12608\_VIRPI-M\_(NVS19) Eff.90.1% / LDC (Polar)

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(NVS19) Eff.90.1%

Lamps: 1 x NVS19\_5x5 (1782.78lm@250mA)



cd/klm

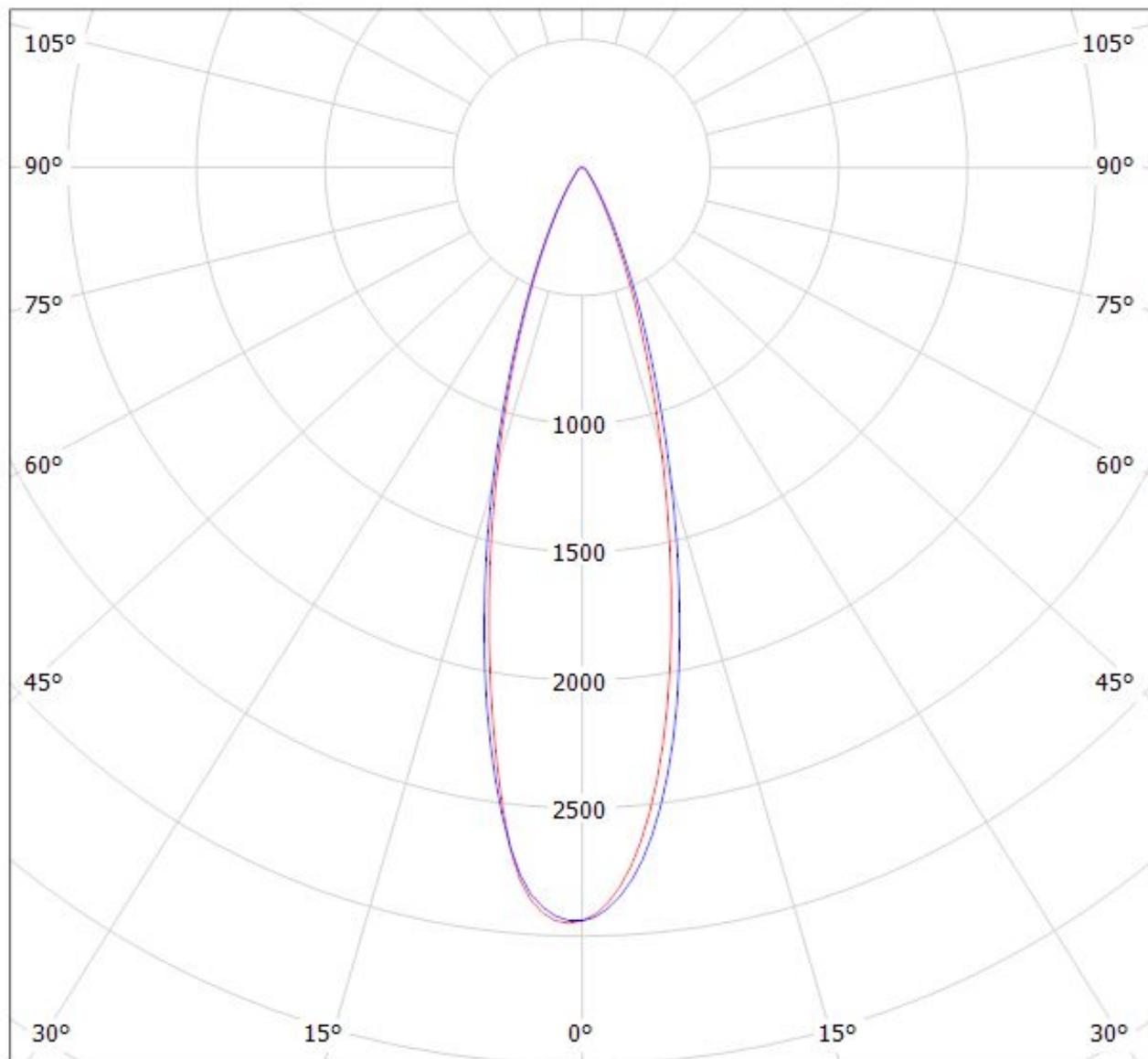
— C0 - C180

— C90 - C270

$\eta = 90\%$

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(NF2x757A)

Lamps: 1 x Nichia\_NF2x757A\_(NF2W757ARTV1)\_1037.67lm@250mA P=6.97966W I=249.8mA

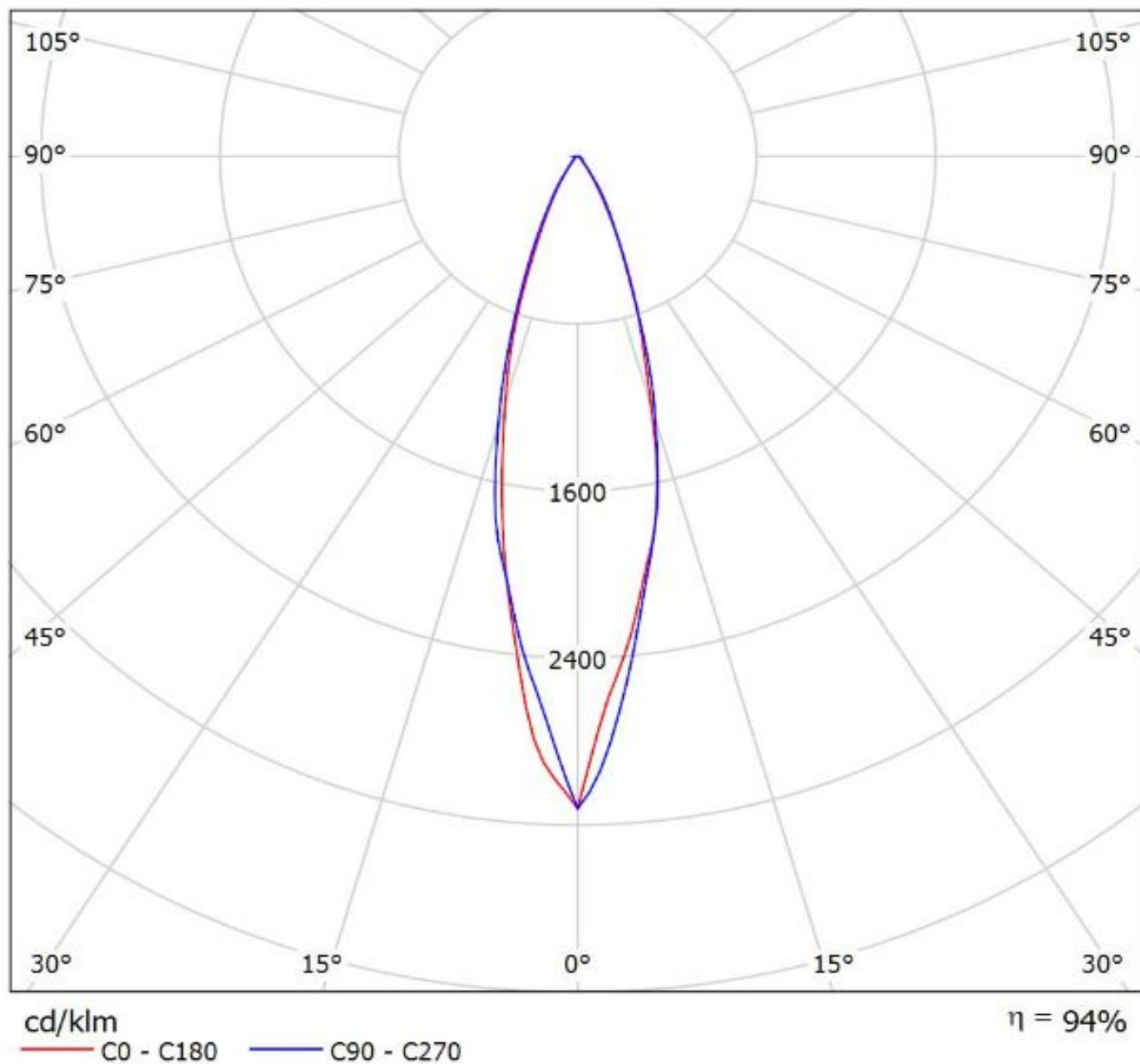


cd/klm

— C0 - C180    — C90 - C270

$\eta = 91\%$

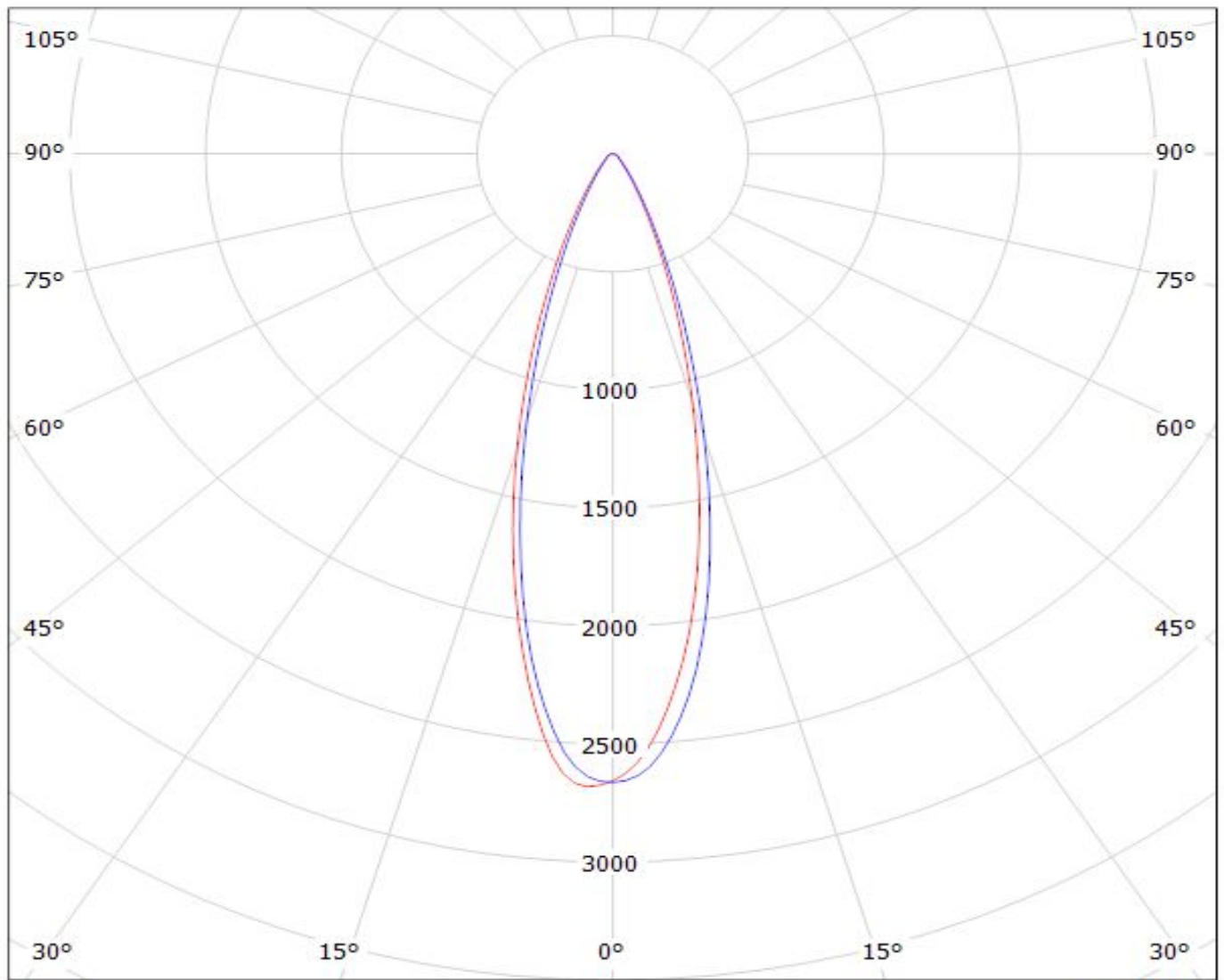
Luminaire: Ledil Oy C12608\_VIRPI-M\_NICHIA\_NVSW219C\_SIMULATED  
Lamps: 1 x NICHIA NVSW219C



# LEDiL Oy C12608\_VIRPI-M\_(SQ-EC) Eff.91.0% / LDC (Polar)

Luminaire: LEDiL Oy C12608\_VIRPI-M\_(SQ-EC) Eff.91.0%

Lamps: 1 x SQ-EC\_5x5 (2043.47lm@250mA)



cd/klm

— C0 - C180

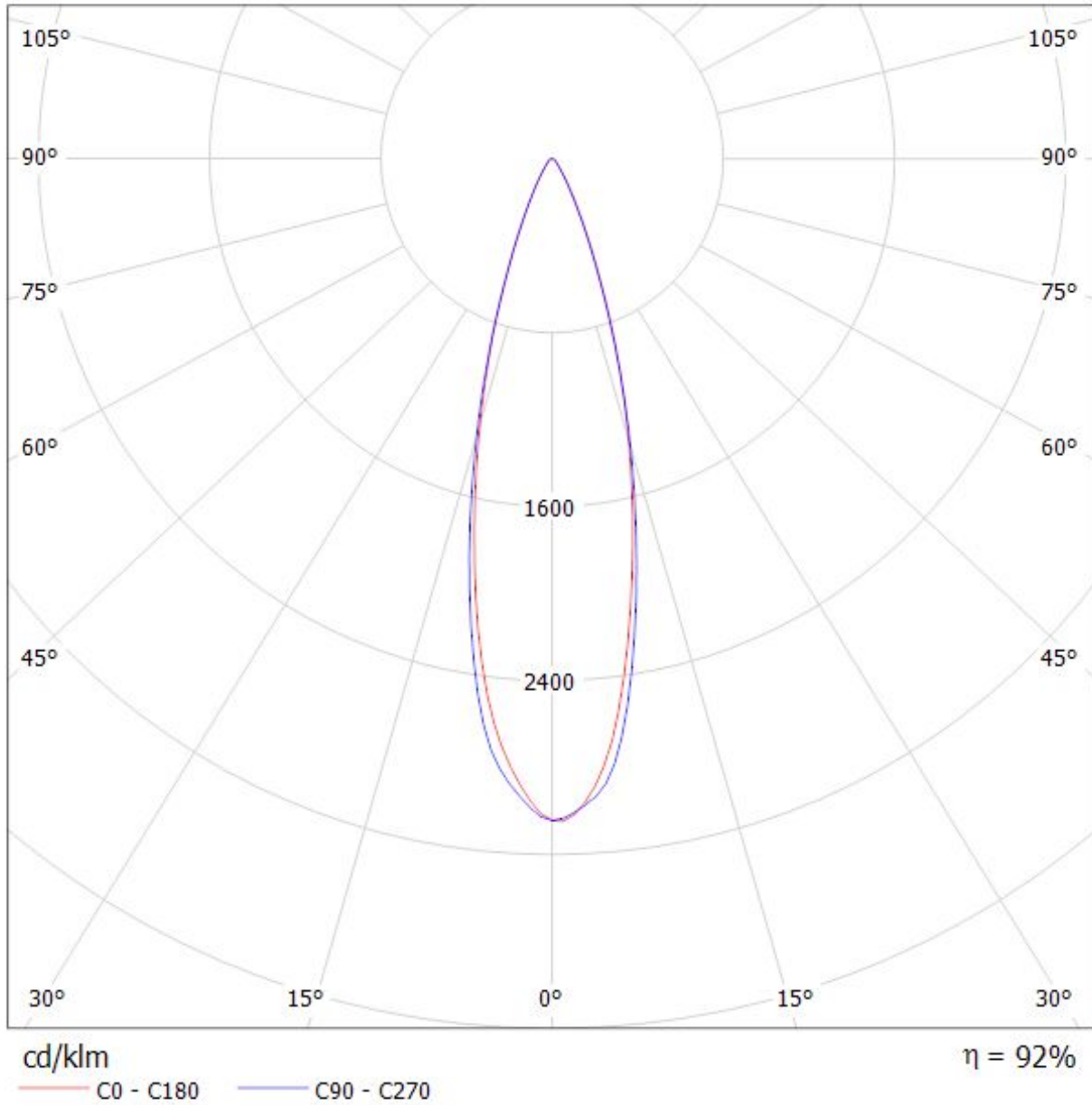
— C90 - C270

$\eta = 91\%$



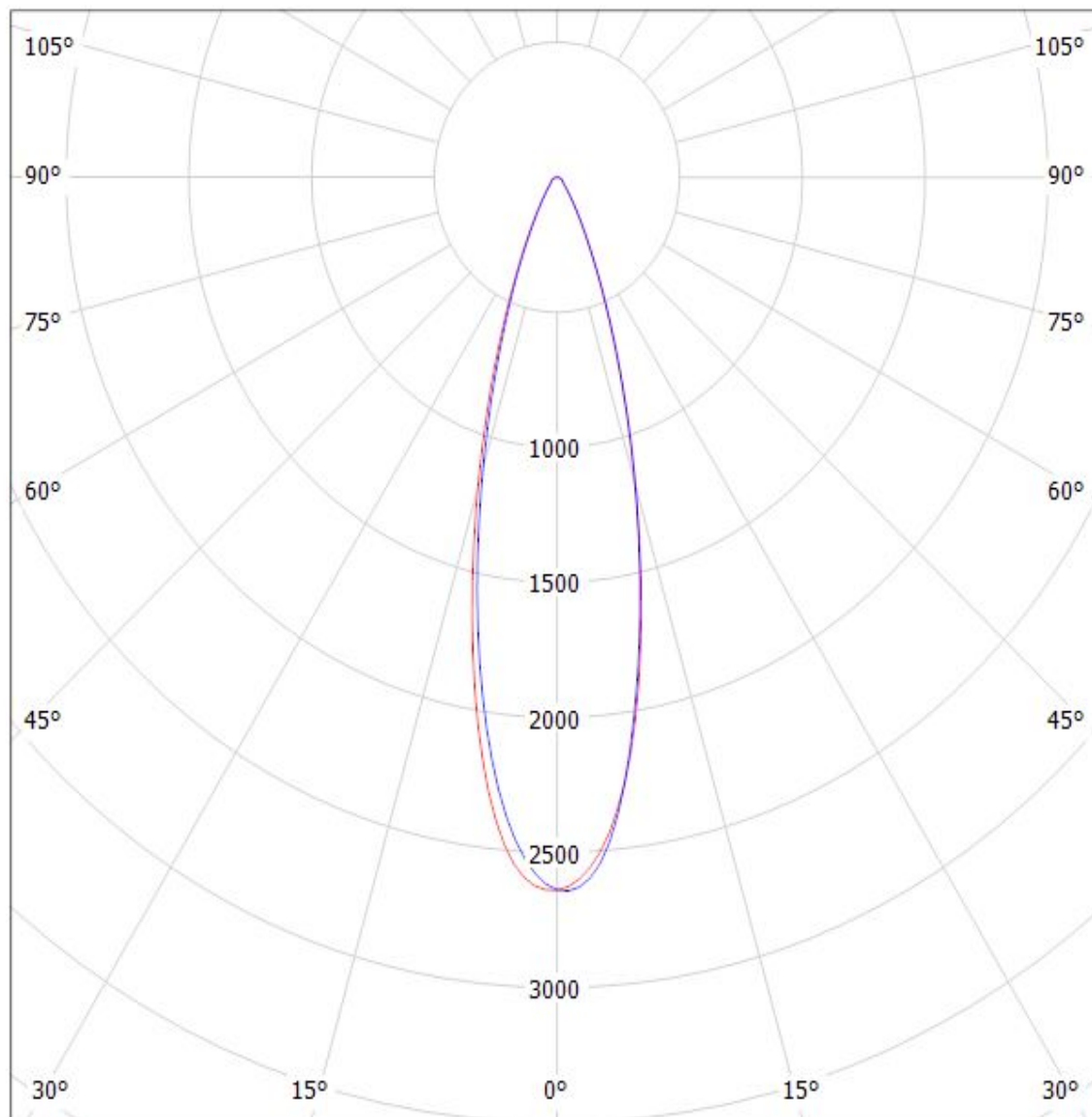
Luminaire: LEDiL Oy C12608\_VIRPI-M\_(DURIS-S5)

Lamps: 1 x OSRAM\_DURIS-S5\_5x5\_(GW\_PSLLS1.EC-HPHR-5L7N-1)\_160.476lm@80mA\_P=1.10163W\_I=80.2mA



Luminaire: LEDiL Oy C12608\_VIRPI-M\_(DURIS\_P5)

Lamps: 1 x OSRAM\_DURIS\_P5\_5x5\_(GW\_DASPA1.EC-HPHR-5R8T-1)\_163.795lm@100mA\_P=1.37895W\_I=100.2mA



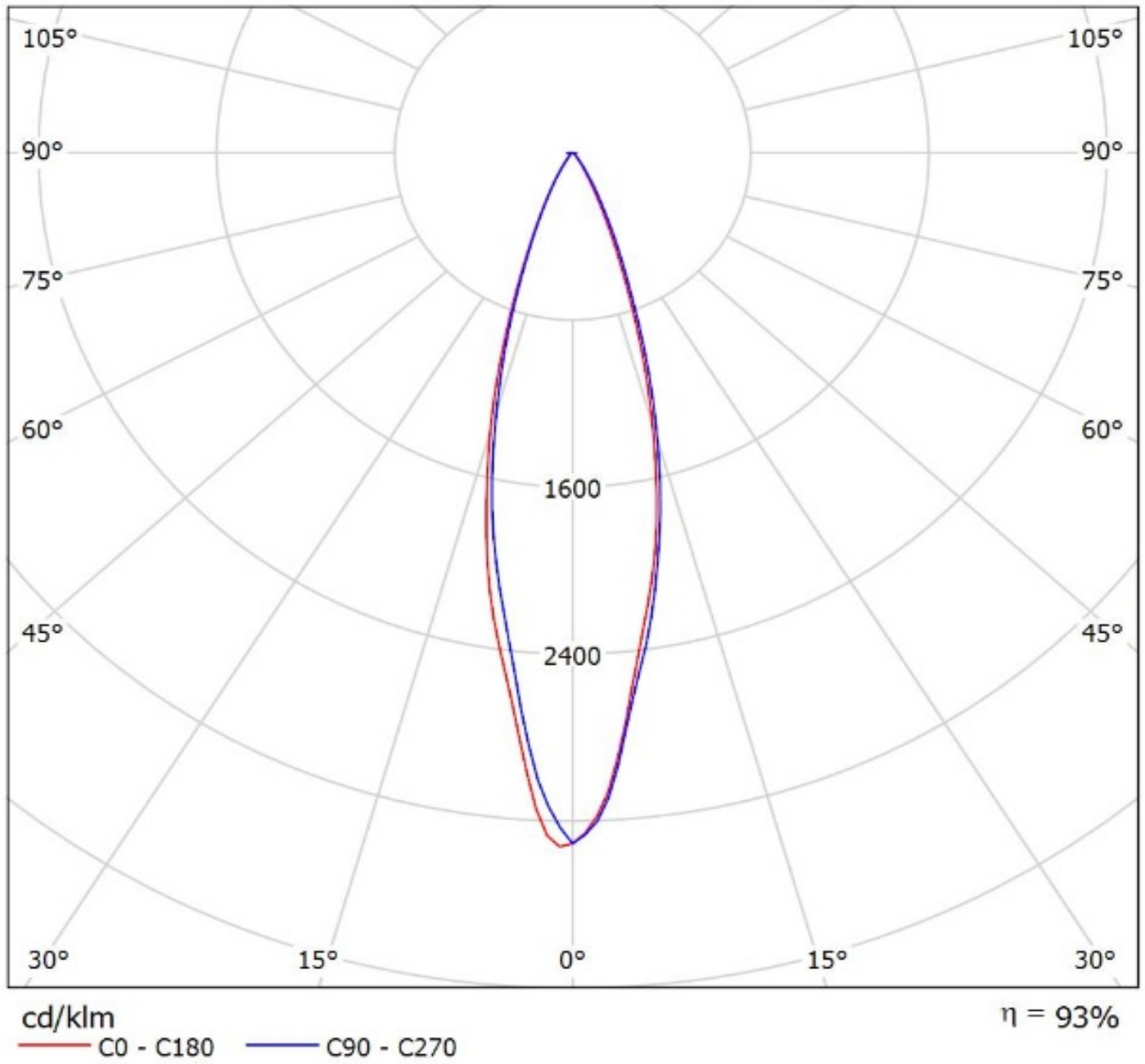
cd/klm

— C0 - C180

— C90 - C270

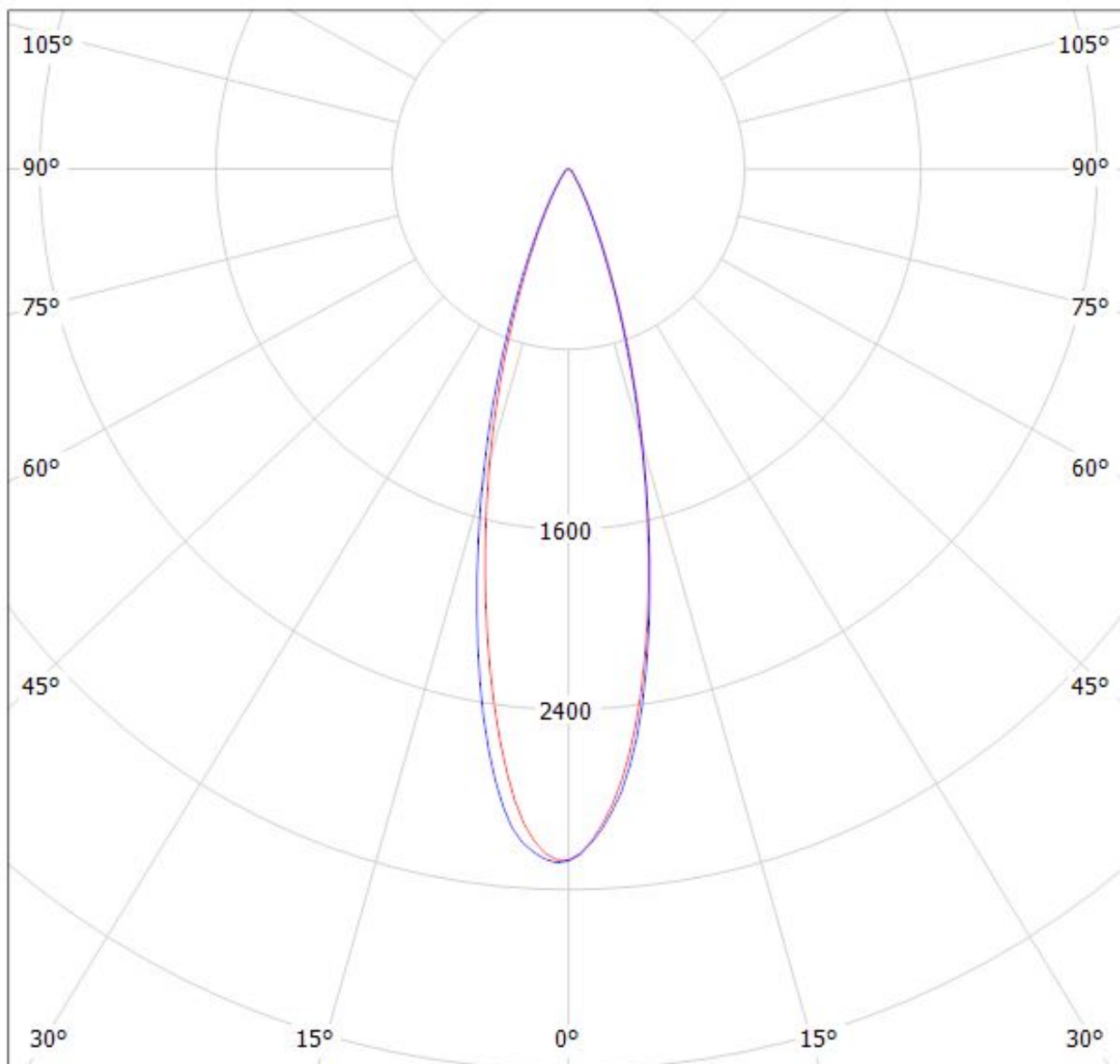
$\eta = 90\%$

Luminaire: Ledil Oy C12608\_VIRPI-M\_(Osram\_Oslon\_Square\_Gen3)\_SIMULATED  
Lamps: 1 x Osram Oslon Square Gen 3 (GW CSSRM2.PM)



Luminaire: LEDiL Oy C12608\_VIRPI-M\_(LM231B)

Lamps: 1 x SAMSUNG\_LM231B\_5X5\_121.687lm@65mA\_P=0.886133W\_I=65,2mA



cd/klm

— C0 - C180

— C90 - C270

$\eta = 92\%$

**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.**

### **GENERAL INFORMATION**

- Product series especially designed & optimized for series of LEDs.
- Special care taken to make light distribution as uniform as possible.

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.