

## DETAILS

<b>Product Number</b>	C13253_TINA2-R-CLIP16
<b>Family</b>	Tina
<b>Type</b>	Reflector
<b>Color</b>	clear
<b>Diameter</b>	16,1 mm
<b>Height</b>	10,1 mm
<b>Style</b>	round
<b>Optic Material</b>	HRPC
<b>Holder Material</b>	
<b>Fastening</b>	clips
<b>Status</b>	production ready
<b>ROHS Compliant</b>	Yes
<b>Date Updated</b>	24/10/2014



## OPTICAL PROPERTIES

LED	Viewing	Light	Effi-	cd/lm	Connector
	Angle	Beam	ciency		
XP-G	77 deg	Very Wide	90 %	0.506	-
XT-E	71 deg	Very Wide	87 %	0.585	-
XP-E	74 deg	Very Wide	90 %	0.544	-
XB-D	73 deg	Very Wide	90 %	0.575	-
XM-L	78 deg	Very Wide	88 %	0.480	-
XP-G2	75 deg	Very Wide	89 %	0.530	-
XP-E2	74 deg	Very Wide	90 %	0.560	-
XM-L2	78 deg	Very Wide	90 %	0.480	-
XB-H	81 deg	Very Wide	92 %	0.460	-
LUXEON Rebel ES	74 deg	Very Wide	89 %	0.550	-
LUXEON A	75 deg	Very Wide	91 %	0.540	-
LUXEON R	75 deg	Very Wide	89 %	0.550	-
LUXEON Rebel	72 deg	Very Wide	90 %	0.607	-
LUXEON T	75 deg	Very Wide	89 %	0.535	-
LUXEON TX	81 deg	Very Wide	90 %	0.500	-
NVSxx19A	74 deg	Very Wide	90 %	0.556	-
NCSxx19A	72 deg	Very Wide	90 %	0.600	-
NF2x757A	72 deg	Very Wide	92 %	0.595	-
NVSxx19B/NVSxx19C	74 deg	Very Wide	89 %	0.534	-
Oslon SSL 80	71 deg	Very Wide	91 %	0.725	-
Oslon SSL 150	75 deg	Very Wide	88 %	0.520	-
Oslon Square EC	75 deg	Very Wide	91 %	0.545	-
Duris S5 (2 chip)	76 deg	Very Wide	91 %	0.500	-
Oslon Black	sim: 71	Very Wide	sim: 80 %	sim: 0.600	Undefined Manufacturer: Protective Plate, Glass
Z8Y15	72 deg	Very Wide	90 %	0.557	-



## PRODUCT DATASHEET

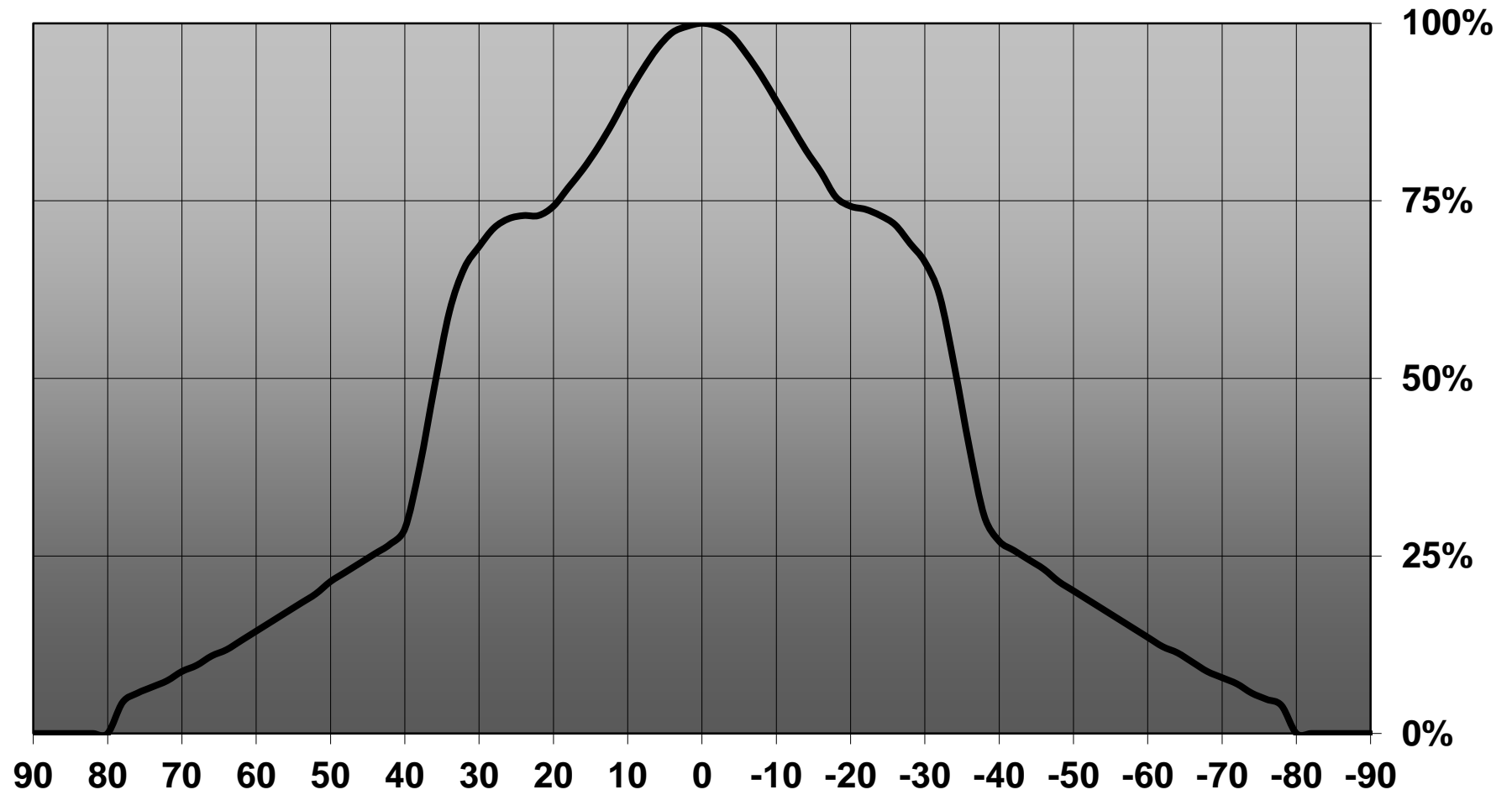
### Tina series

last update 24/10/2014

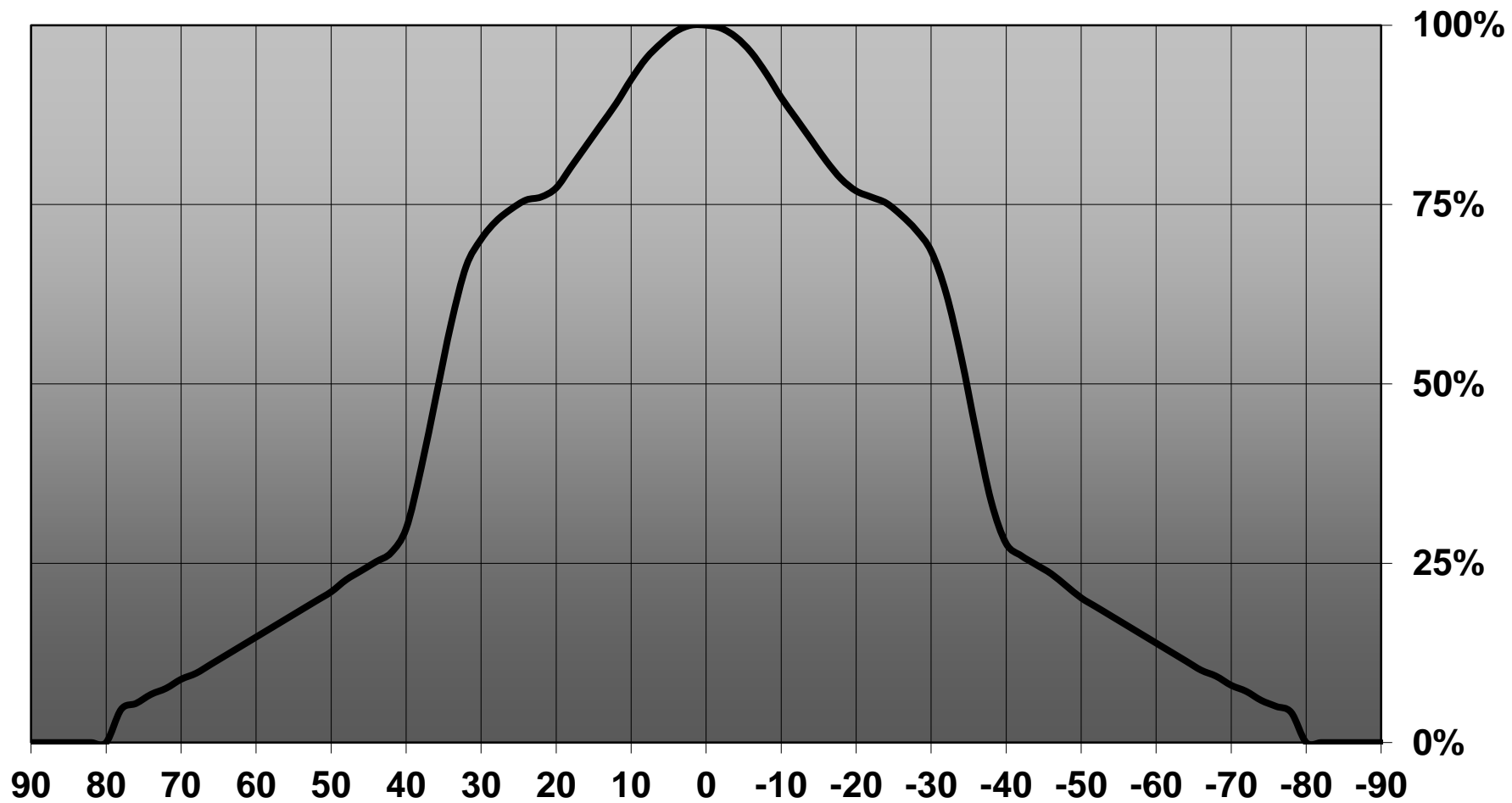
## OPTICAL PROPERTIES

LED	Viewing Angle	Light Beam	Effi- ciency	cd/lm	Connector
Z8Y19	71 deg	Very Wide	89 %	0.561	-

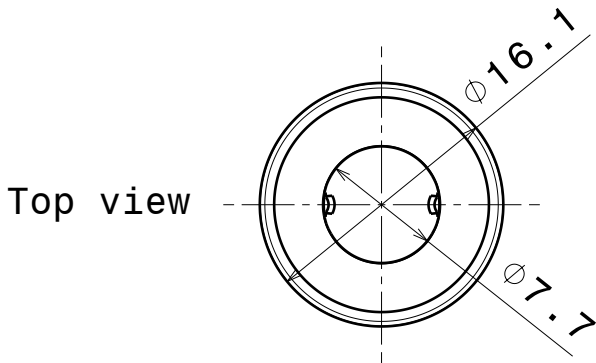
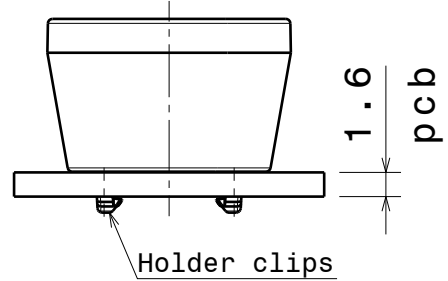
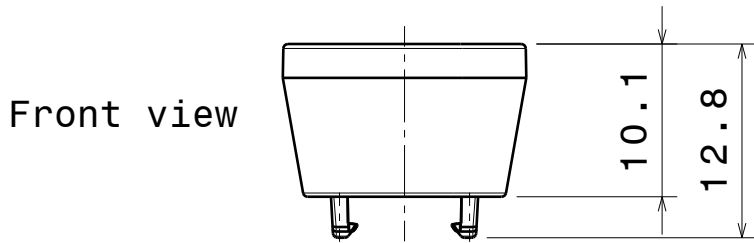
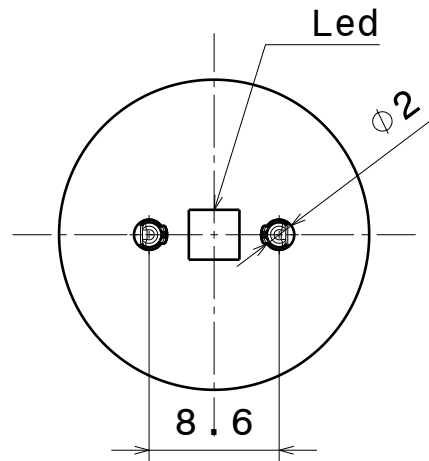
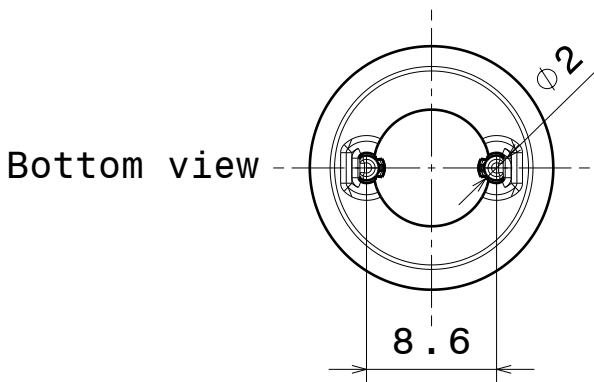
Relative intensity of C13253\_TINA2-R-CLIP16\_(SZ8\_Y15)



Relative intensity of C13253\_TINA2-R-CLIP16\_(SZ8\_Y19)



INDEX	PART NO	DESCRIPTION	MATERIAL
1	C13253	TINA2-R-CLIP16	PC



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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our written agreement.

**LEDiL** Ledit Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

DRAWING TITLE Part Drawing  
**Datasheet C13253 TINA2-R-CLIP16**

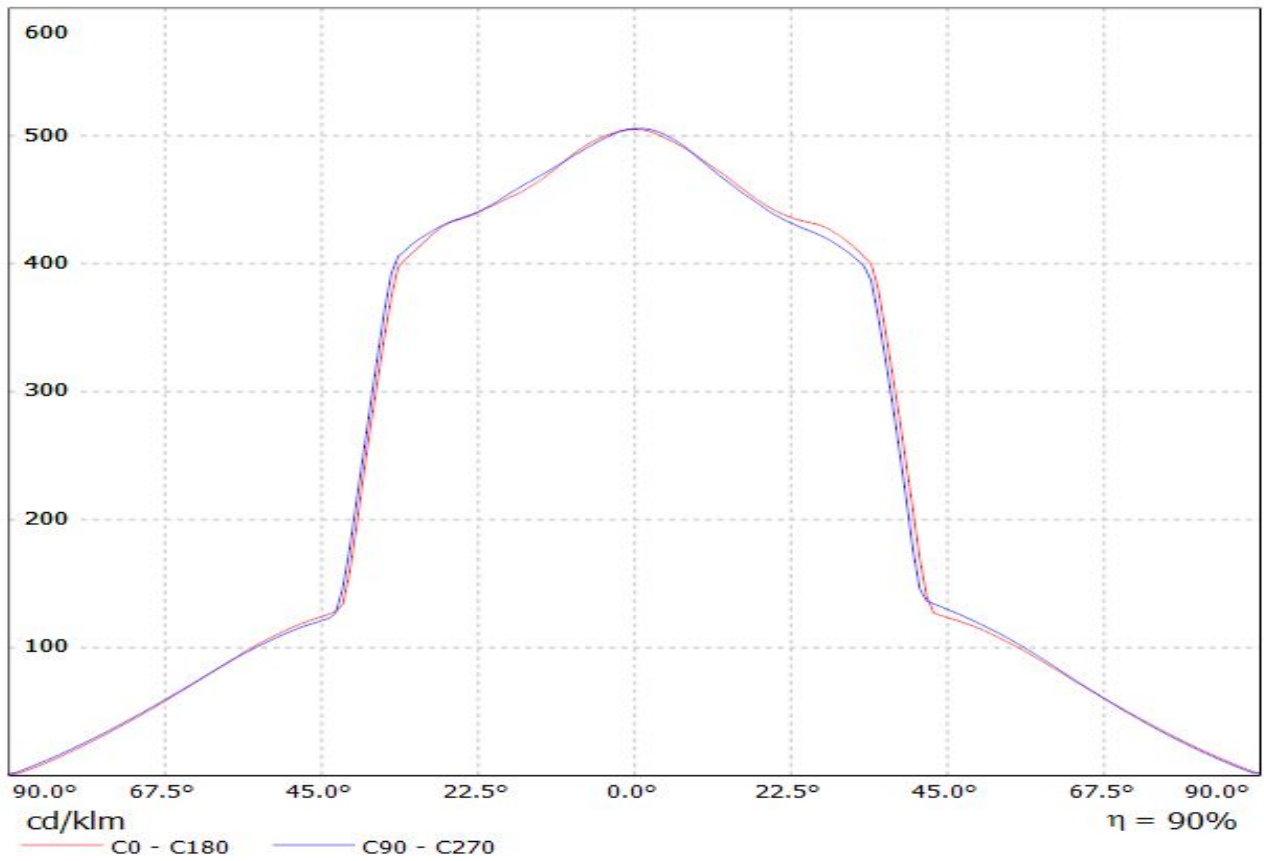
DRAWN BY <b>mav</b>	DATE 24.10.2012
CHECKED BY <b>VS</b>	DATE 24.10.2012
DESIGNED BY <b>mav</b>	DATE 23.10.2012

SIZE <b>A4</b>	PART NUMBER <b>C13253</b>	REV <b>001</b>
SCALE <b>2:1</b>	WEIGHT <b>0,789g</b>	SHEET <b>1/1</b>

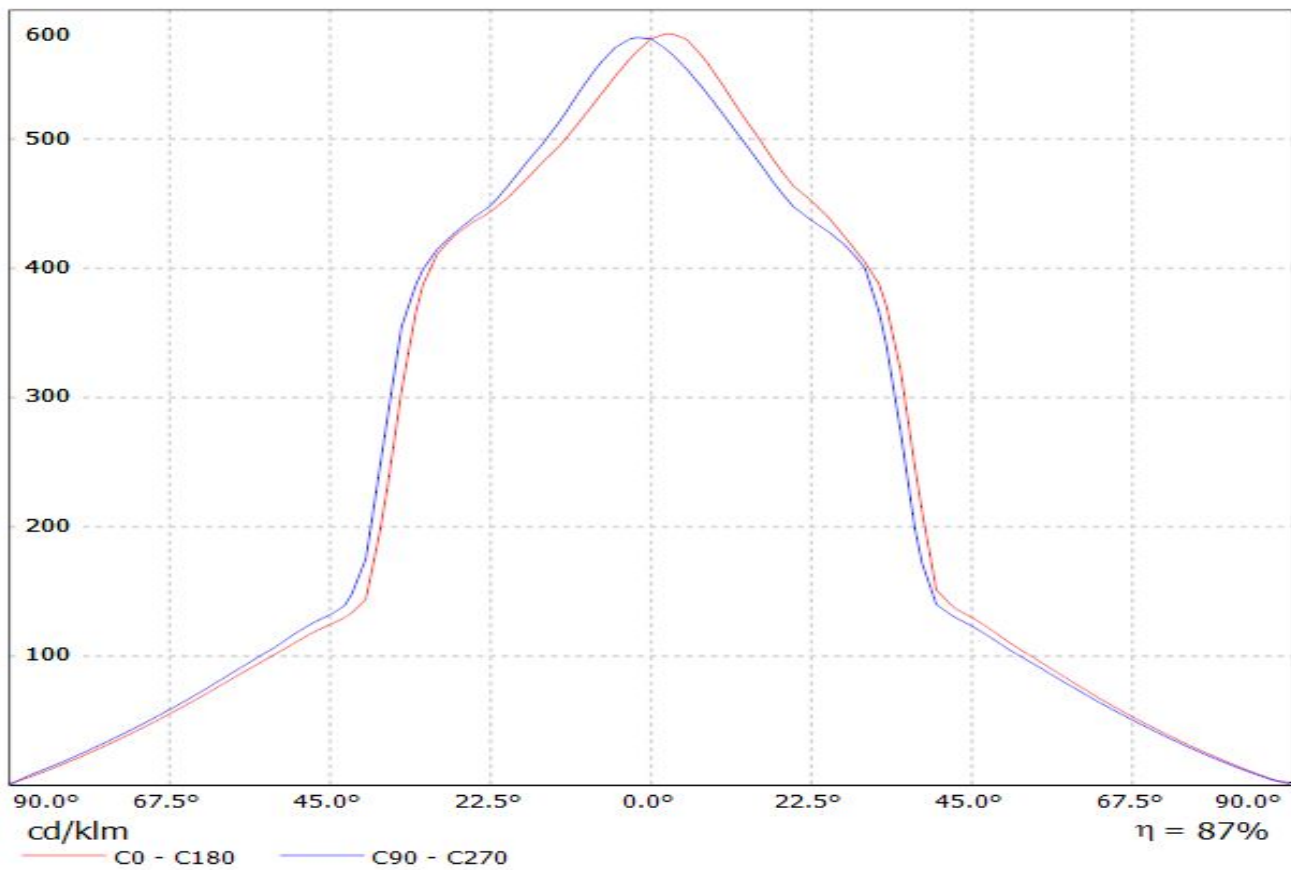
D

A

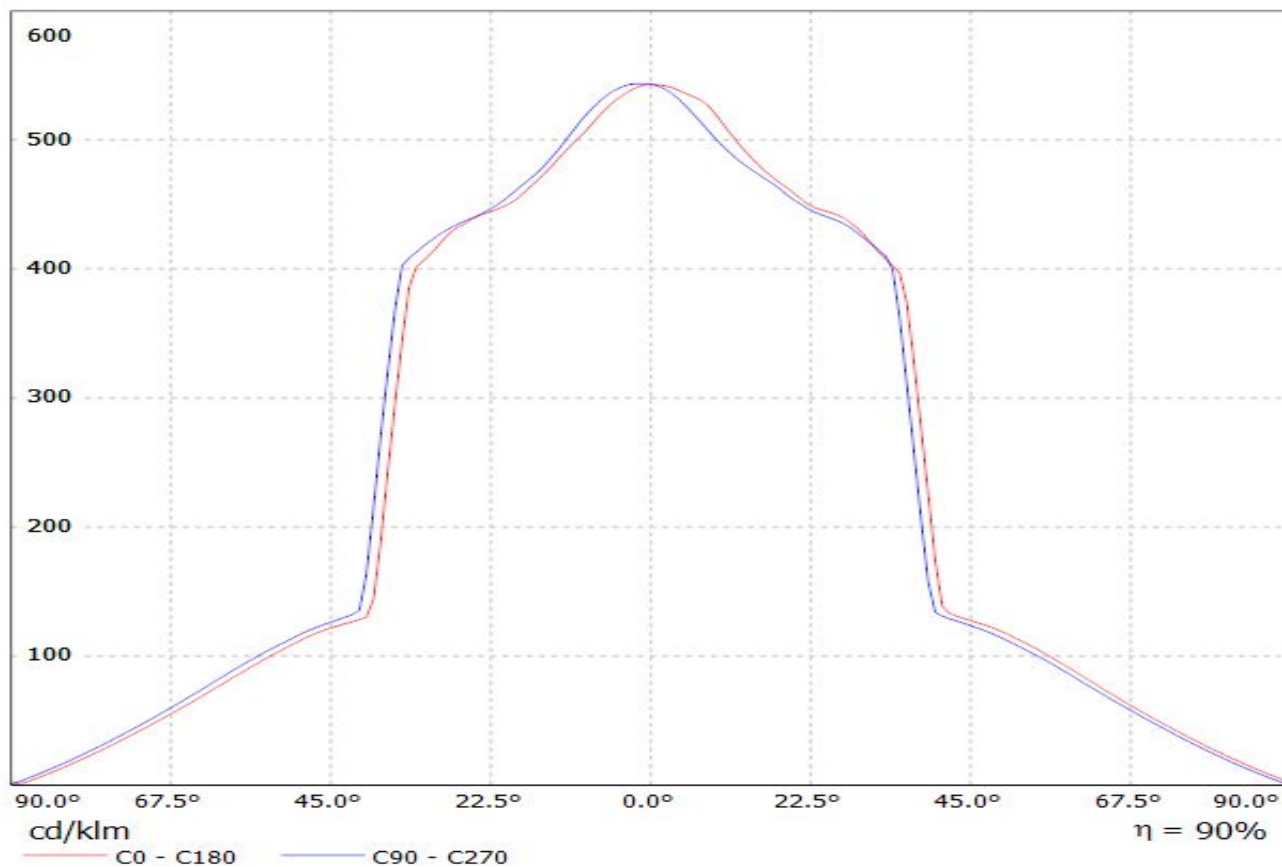
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XP-G) Eff. 90,1%  
Lamps: 1 x Cree XP-G (66lm@250mA)



Luminaire: LEDiL Oy Luminaire Catalog Number C13253\_TINA2-R-CLIP16\_(XT-E) Eff, 86,5%  
Lamps: 1 x Cree XT-E (102 lm@250mA)

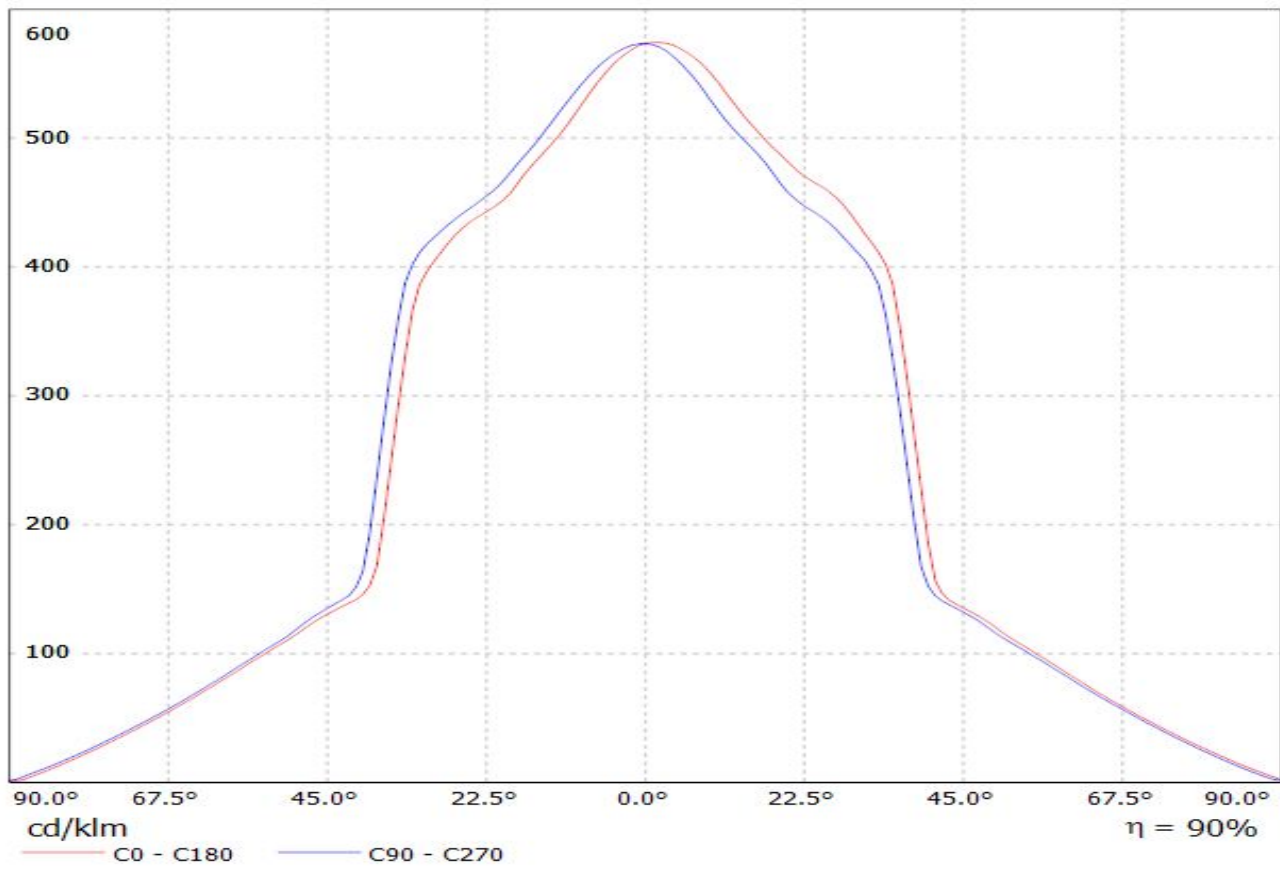


Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XP-E) Eff. 89,9%  
Lamps: 1 x Cree XP-E Ceramic (70lm@250mA)

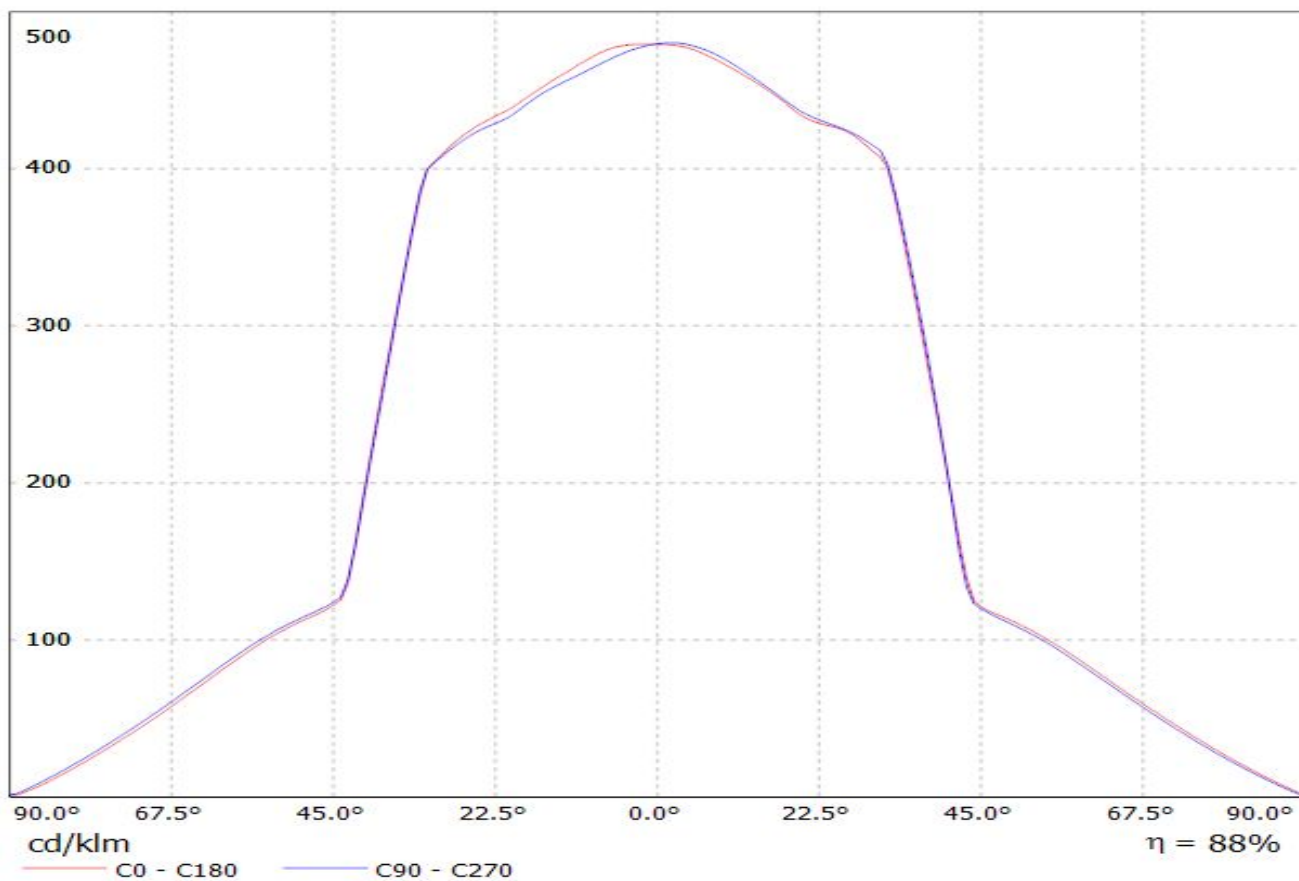




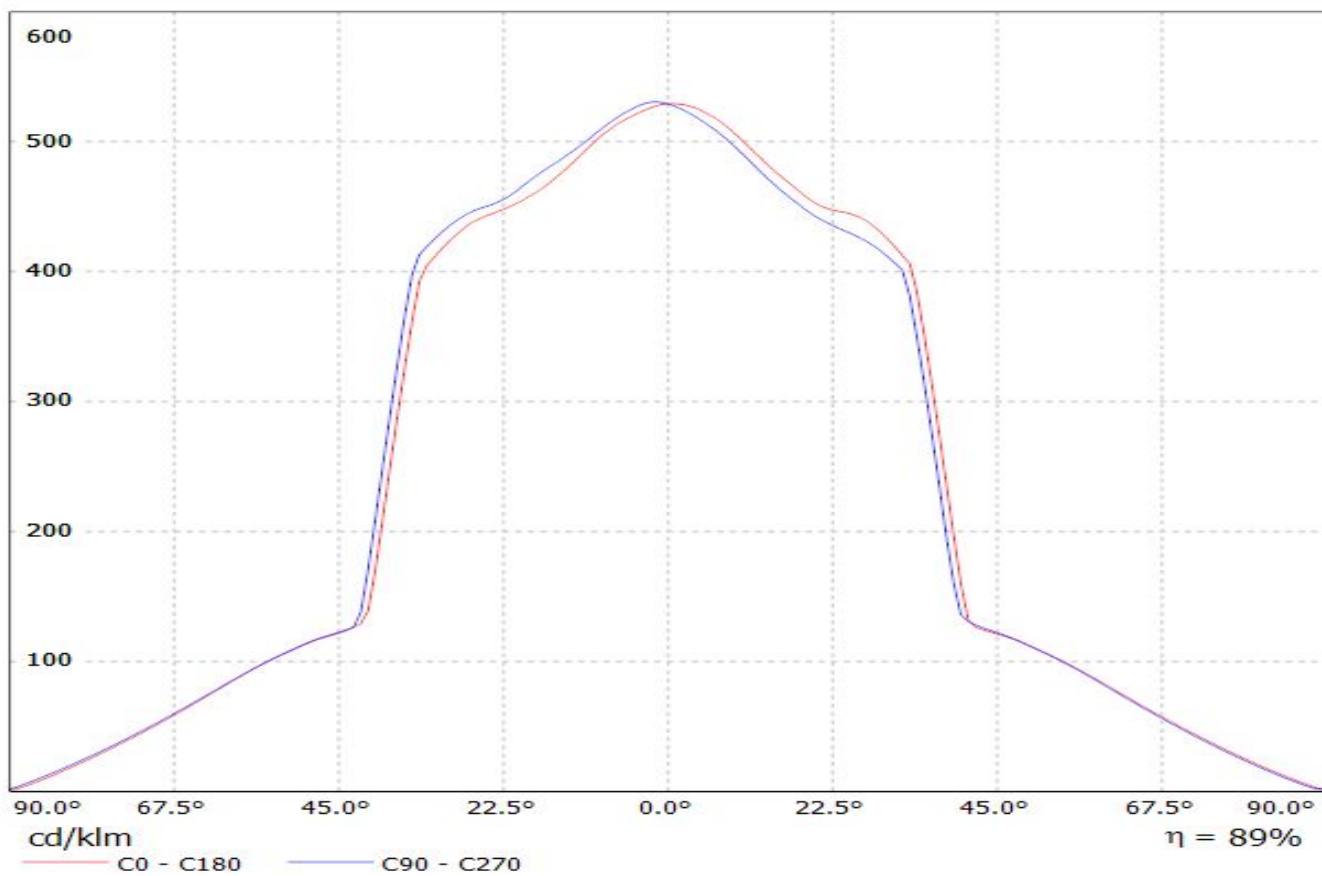
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XB-D) Eff. 89,9%  
Lamps: 1 x Cree XB-D (92lm@250mA)



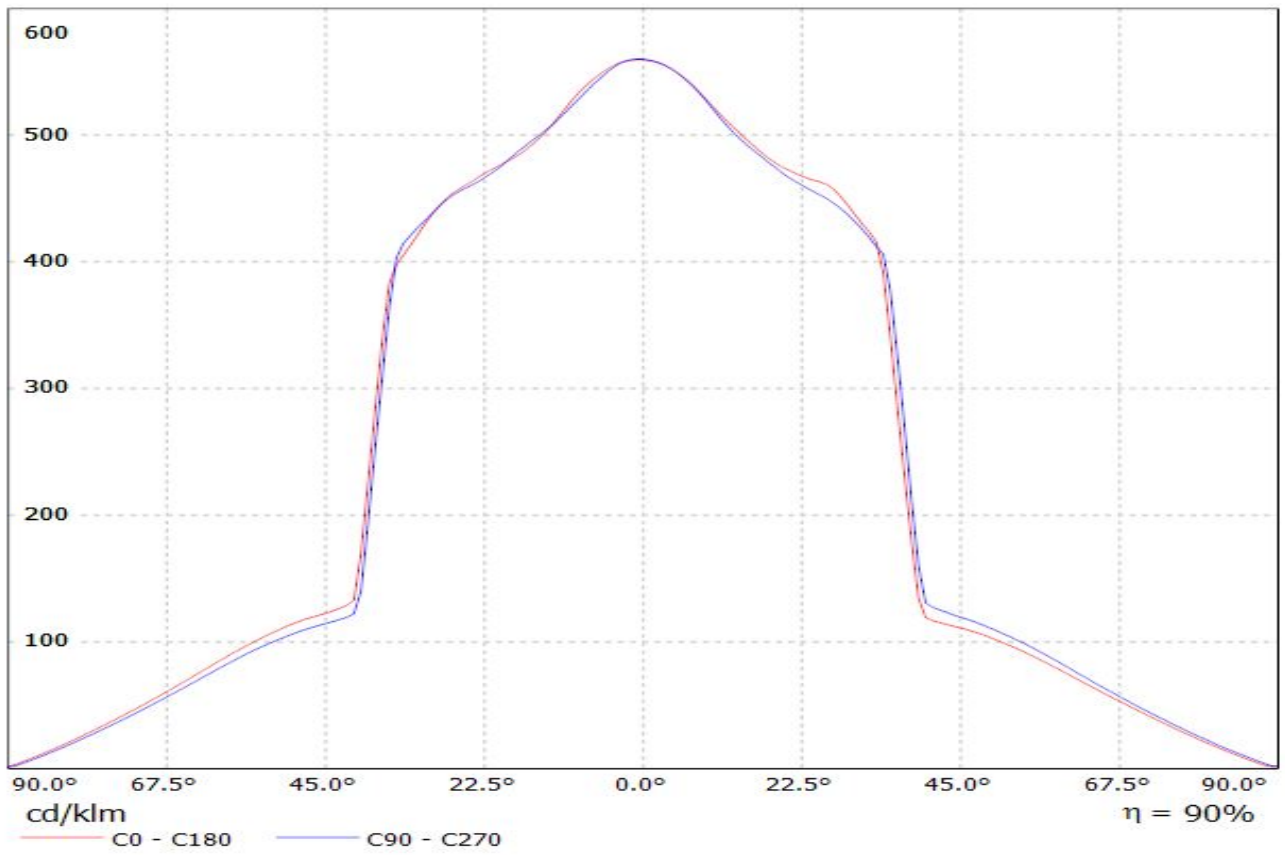
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XM-L) Eff. 88,3%  
Lamps: 1 x Cree XM-L (91lm@250mA)



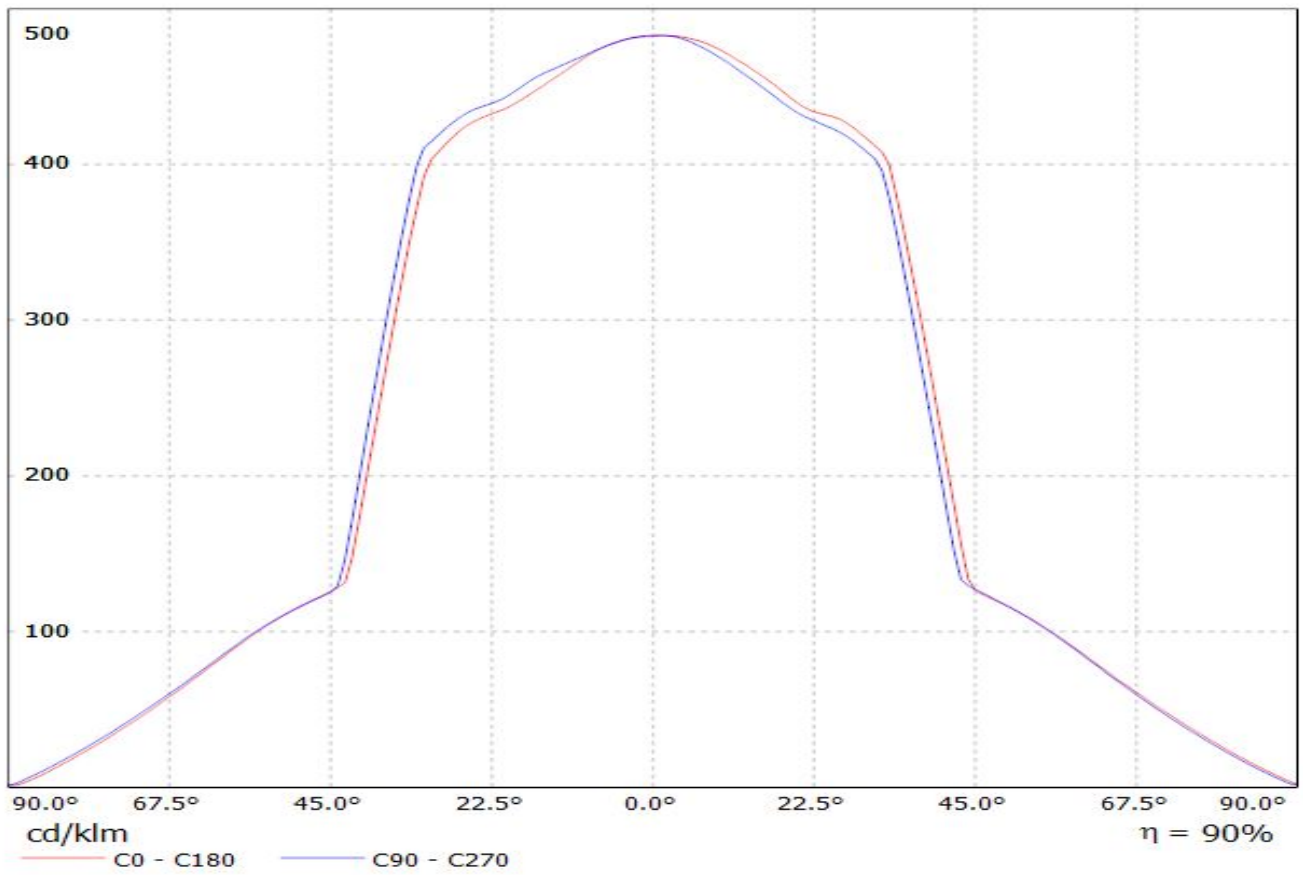
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(Cree\_XP-G2) Eff. 89,1%  
Lamps: 1 x Cree XP-G2 (106 lm@250mA)



Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XP-E2) Eff. 90,1%  
Lamps: 1 x Cree XP-E2 (93 lm@250mA)

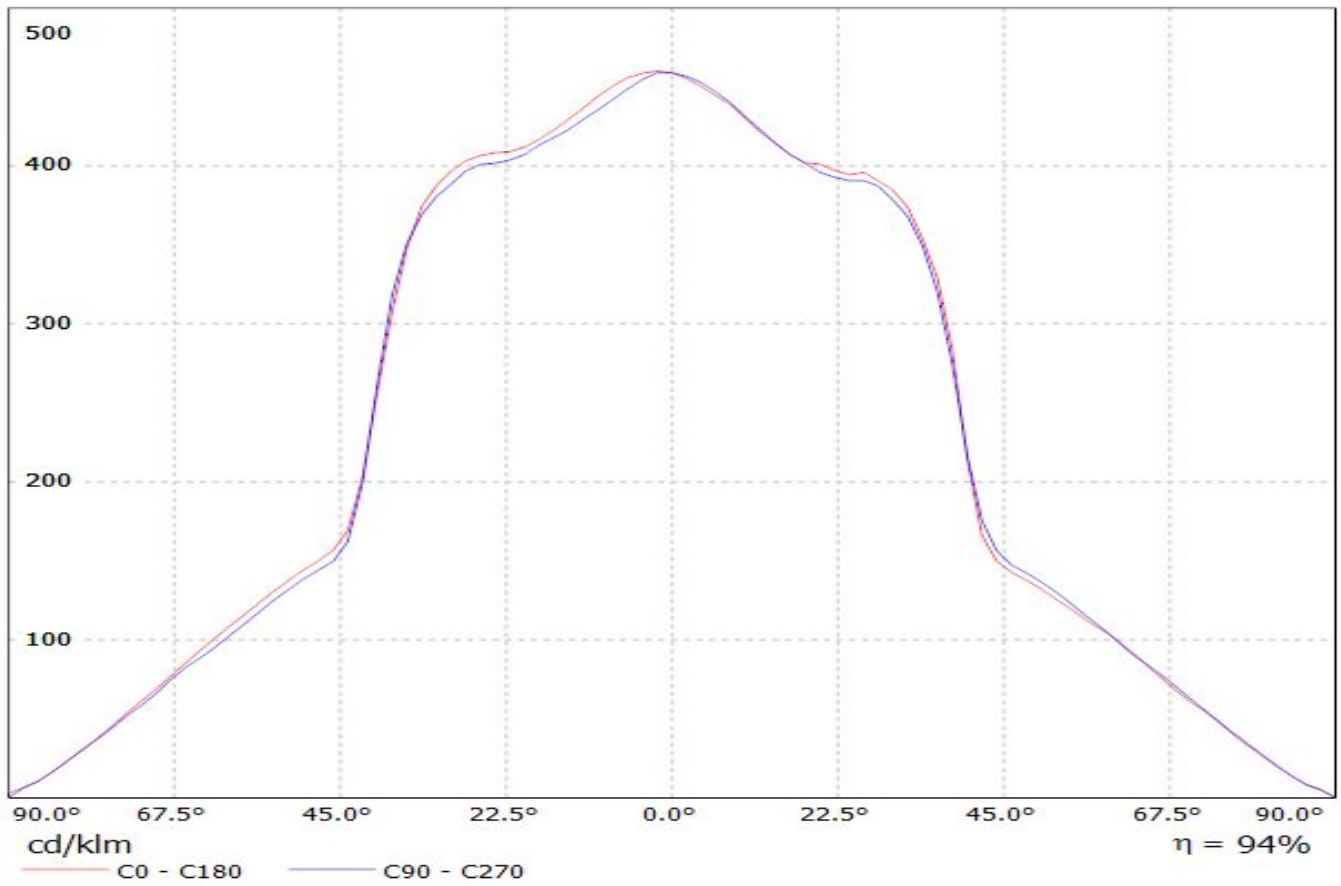


Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XM-L2) Eff.89,6%  
Lamps: 1 x Cree XM-L2 (99lm@250mA)

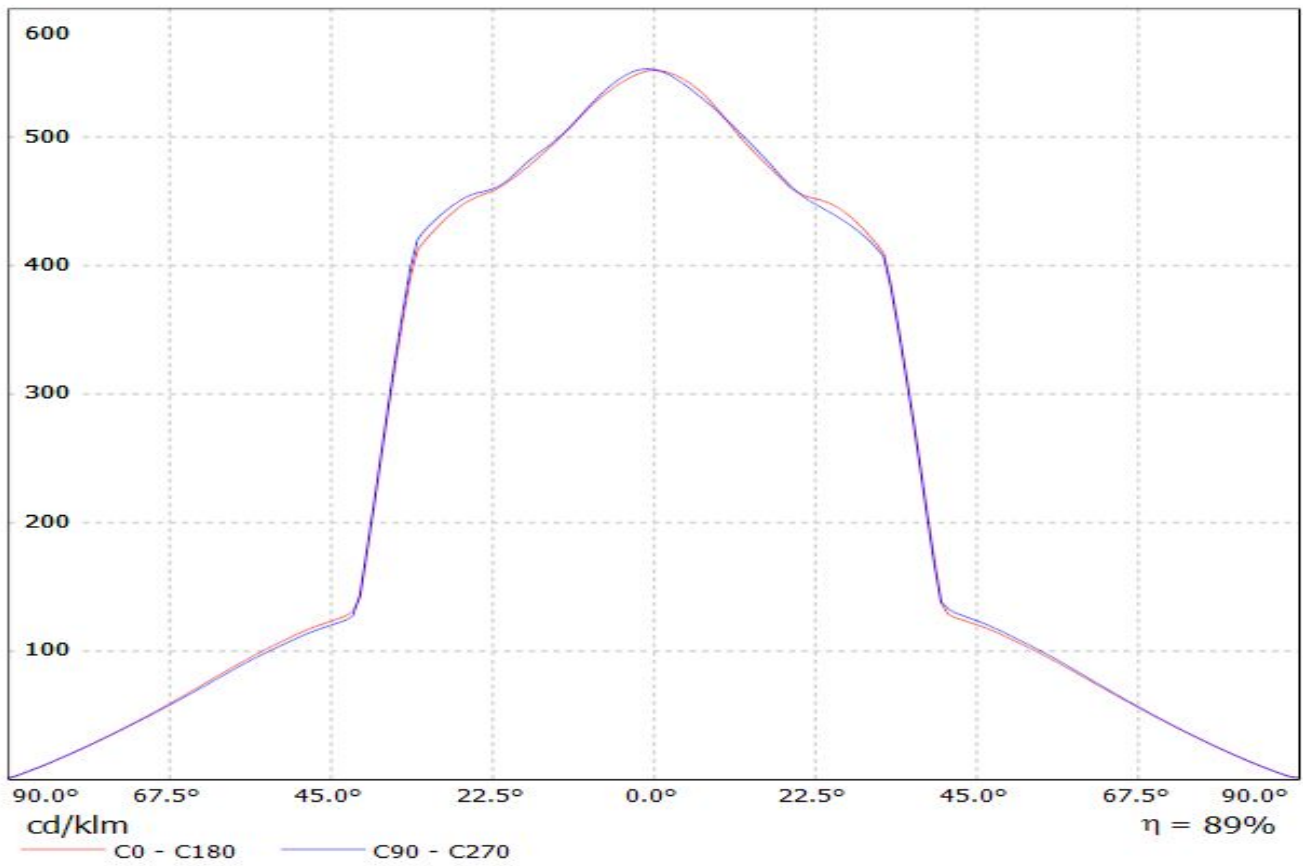


Luminaire: Ledil Oy C13253\_TINA2-R-CLIP16\_(XB-H)

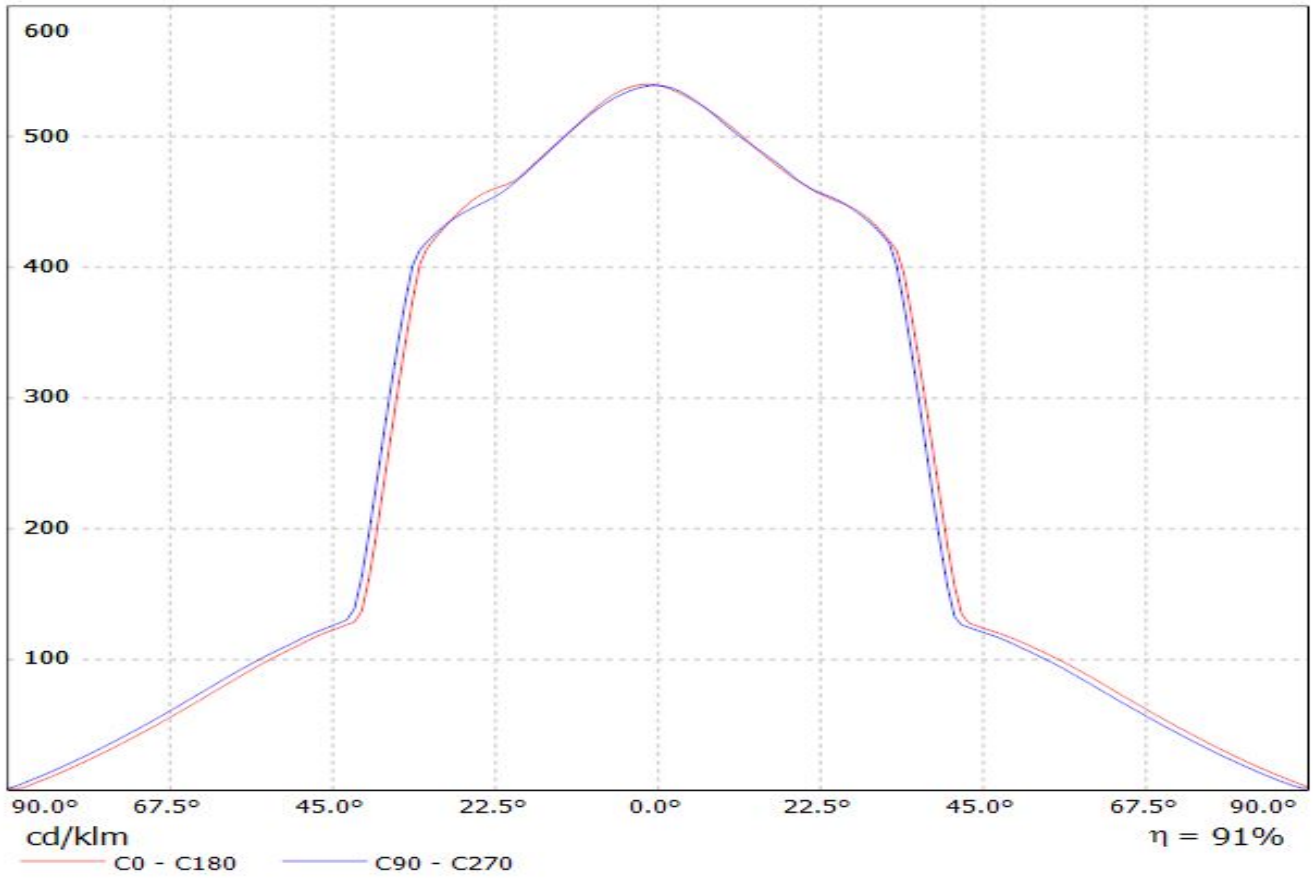
Lamps: 1 x Cree XB-H (XBHAWT-0-3C0-T50-0B-0001) 106lm @ 250mA CCT= P=0.73W I=250mA



Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(Luxeon\_Rebel-ES) Eff. 89,3%  
Lamps: 1 x Luxeon Rebel-ES (89lm@250mA)

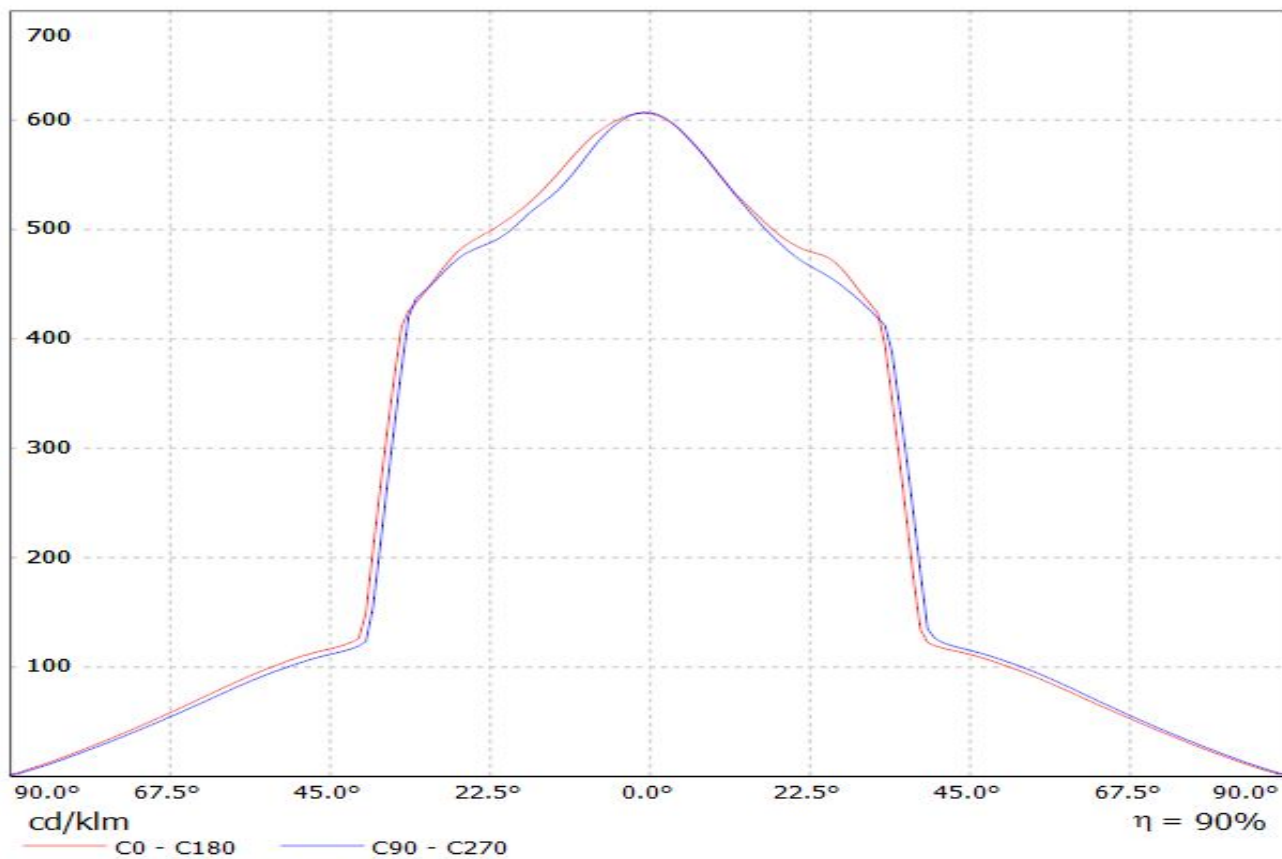


Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(Luxeon\_A) Eff. 90,6%  
Lamps: 1 x Luxeon A (66lm@250mA)

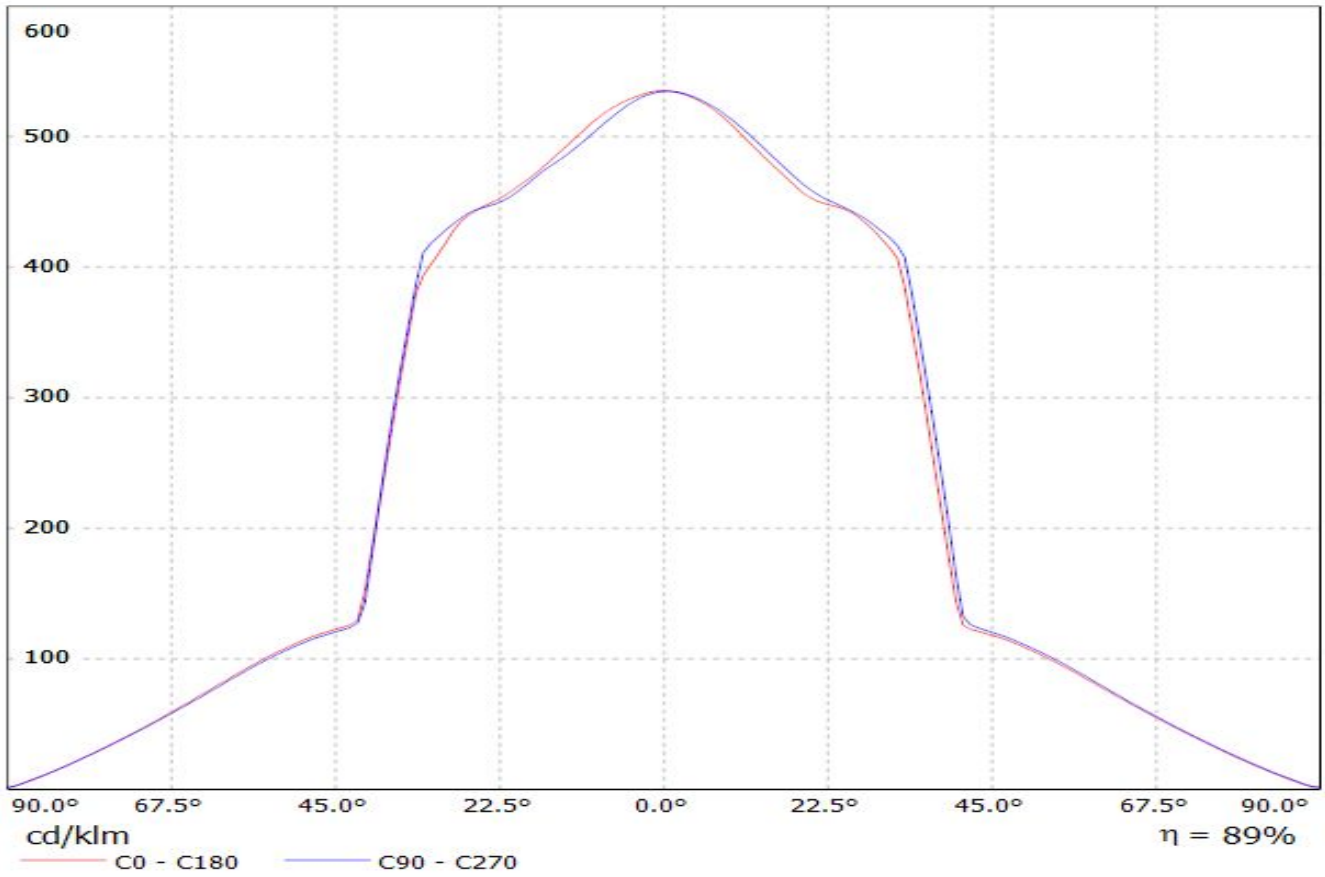




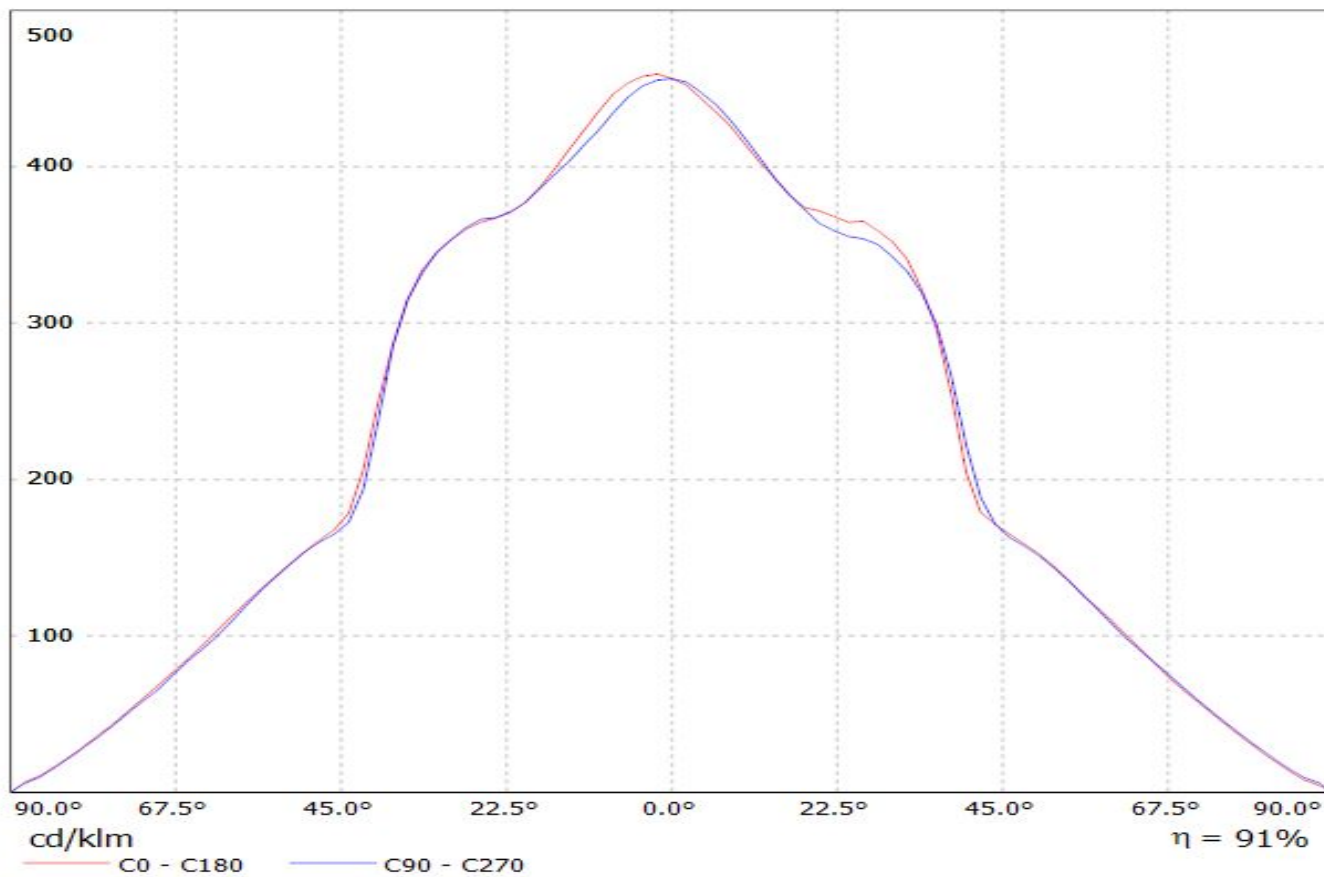
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(Luxeon\_Rebel) Eff. 89,9%  
Lamps: 1 x Luxeon Rebel (81lm@250mA)



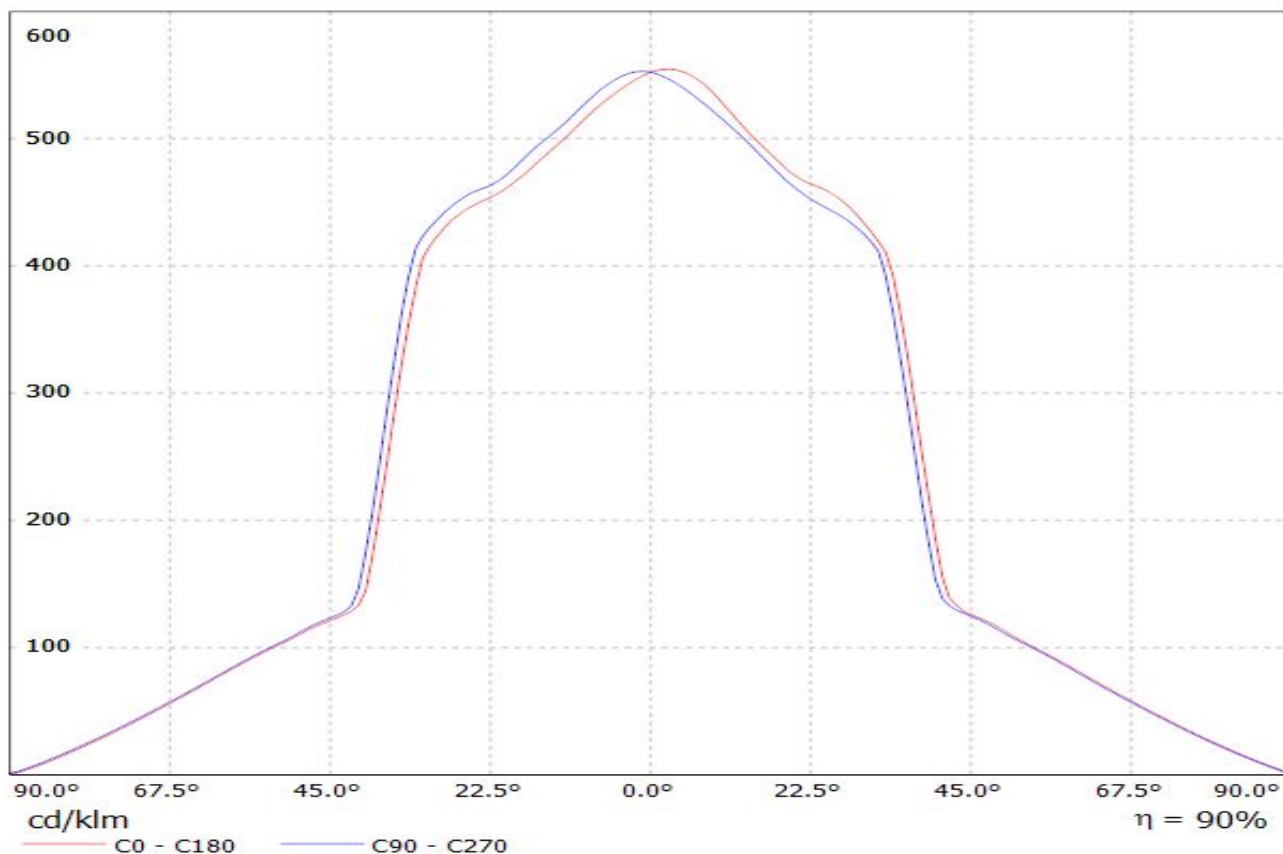
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(Luxeon\_T) Eff. 88,8%  
Lamps: 1 x Luxeon T (73 lm@250mA)



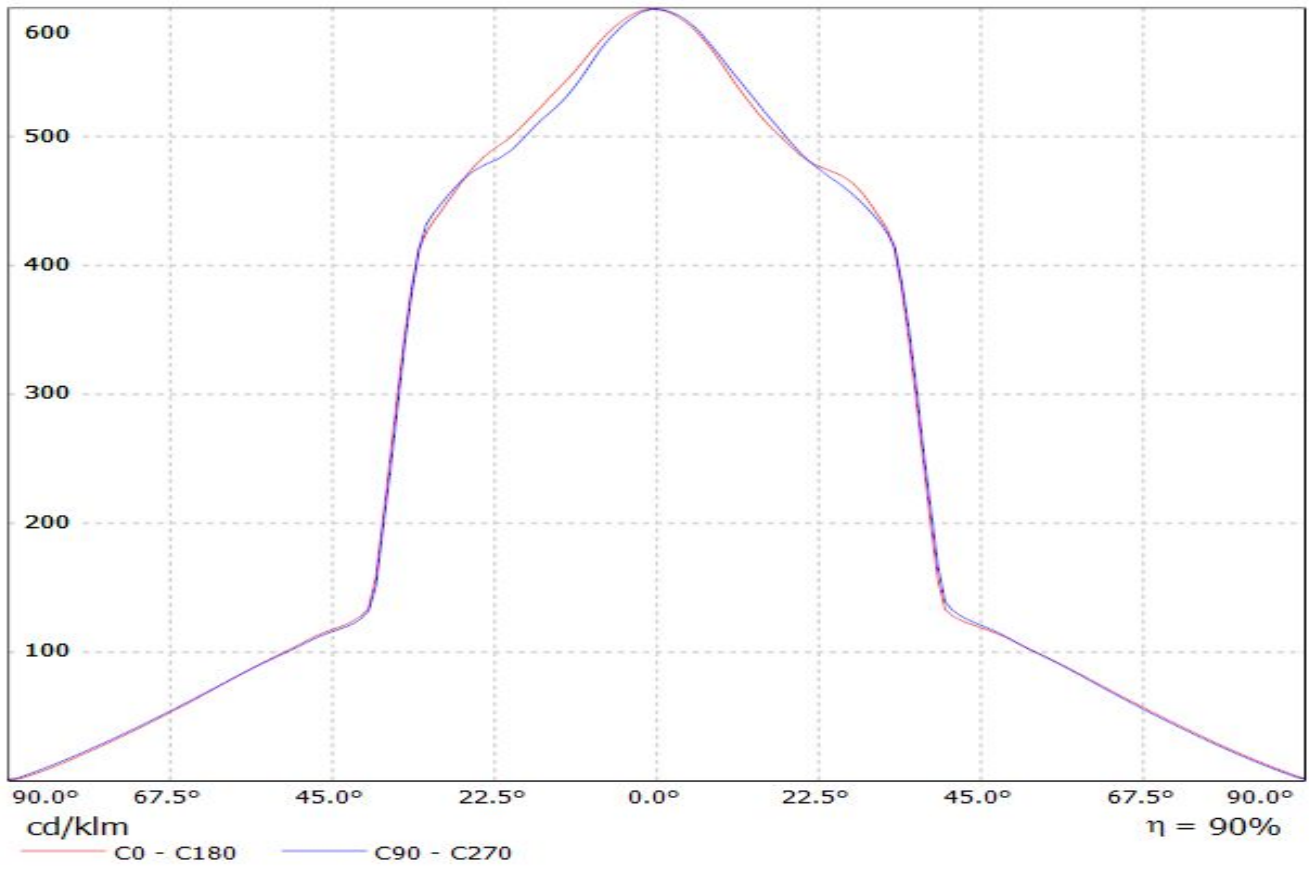
Luminaire: Ledil Oy C13253\_TINA2-R-CLIP16\_(Luxeon\_TX) Efficiency=90%  
Lamps: 1 x Luxeon TX 108lm @ 250mA CCT= P=0.73 I=250mA



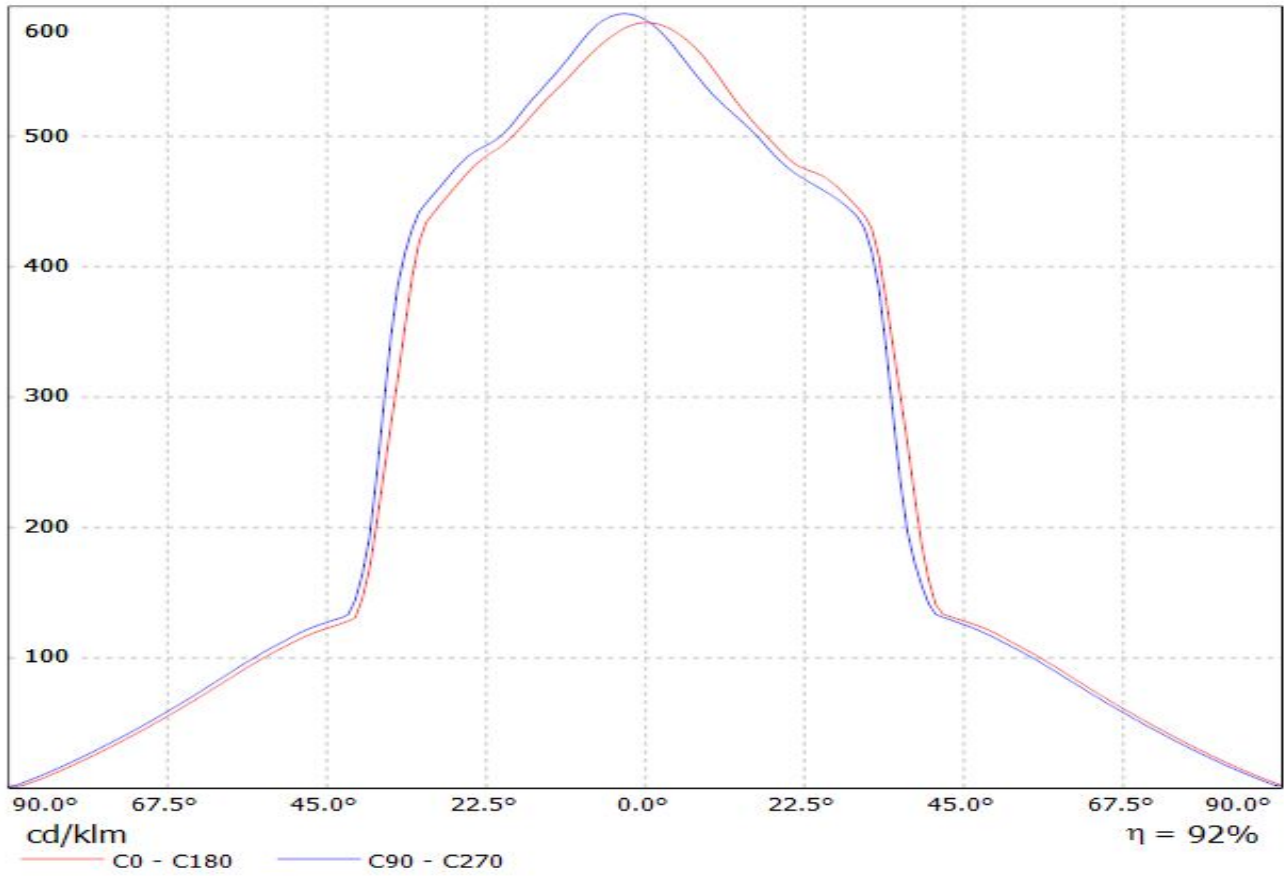
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(NVS19) Eff. 89,8%  
Lamps: 1 x Nichia NVS19 (97,5lm@250mA)



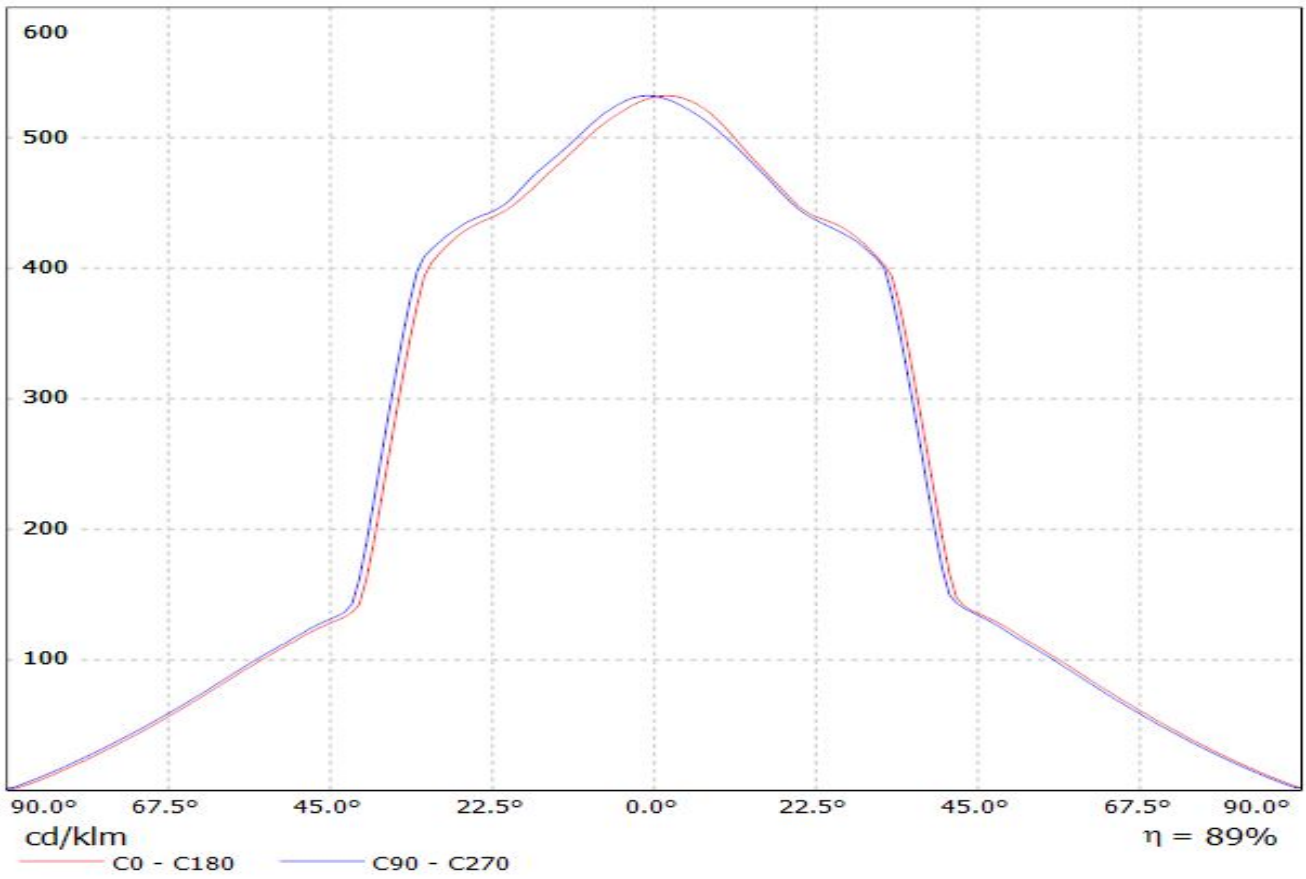
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(NCS19) Eff. 89,7%  
Lamps: 1 x Nichia NCS19 (88lm@250mA)



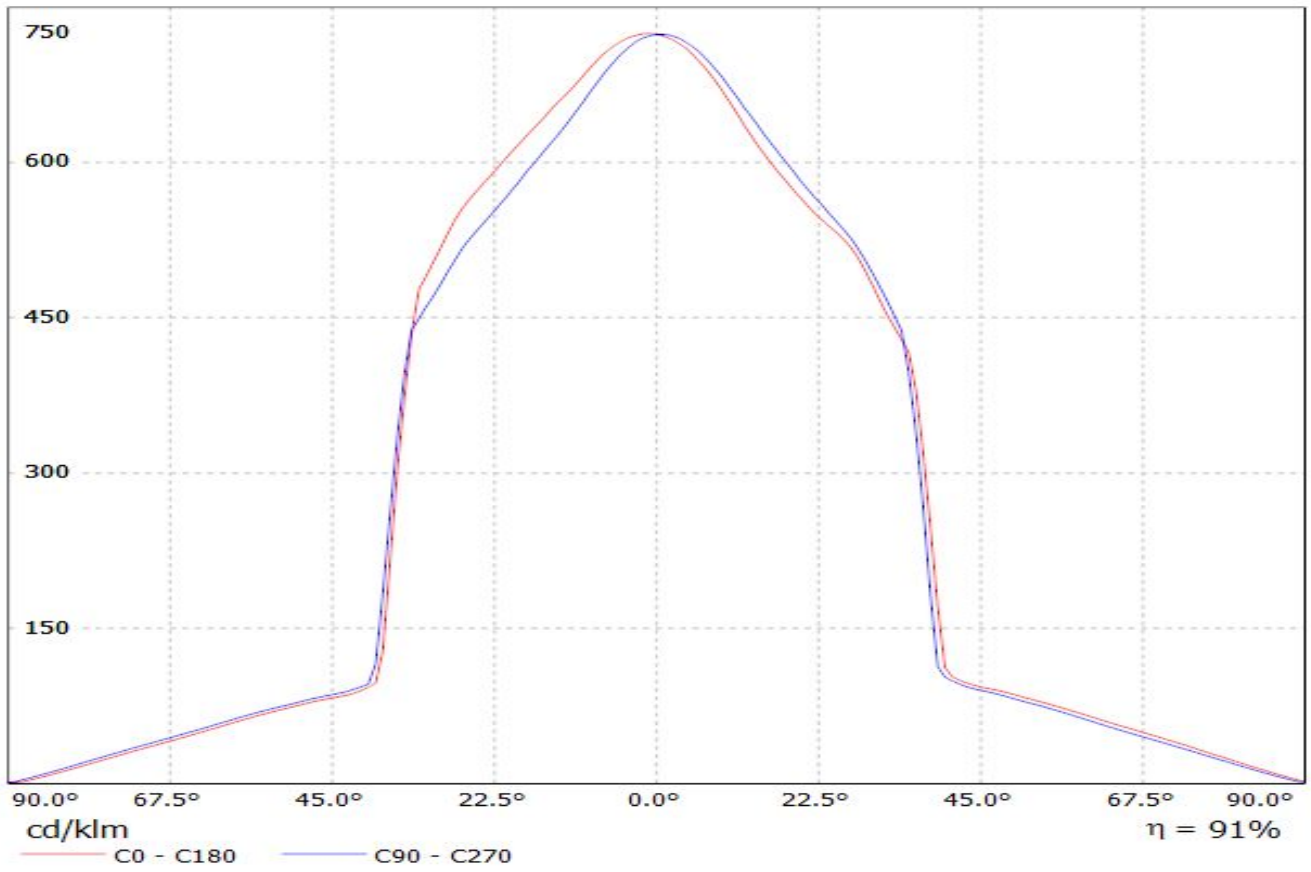
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(NF2x757) Eff. 91,7%  
Lamps: 1 x Nichia NF2x757 (69lm@100mA)



Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(NVS19B) Eff. 89,4%  
Lamps: 1 x Nichia NVS19B (108lm@250mA)

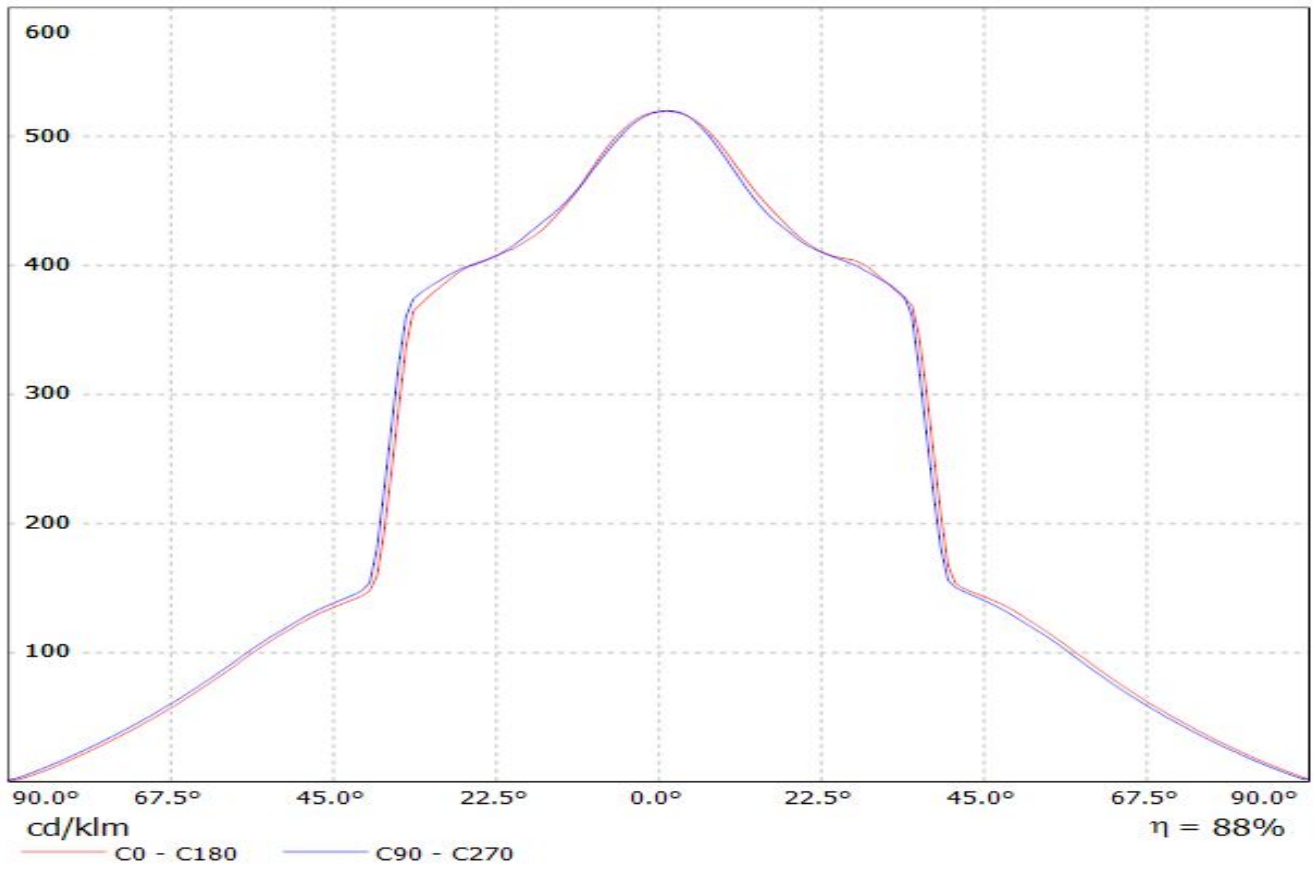


Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(SSL80) Eff. 91,1%  
Lamps: 1 x Osram SSL80 (81lm@250mA)

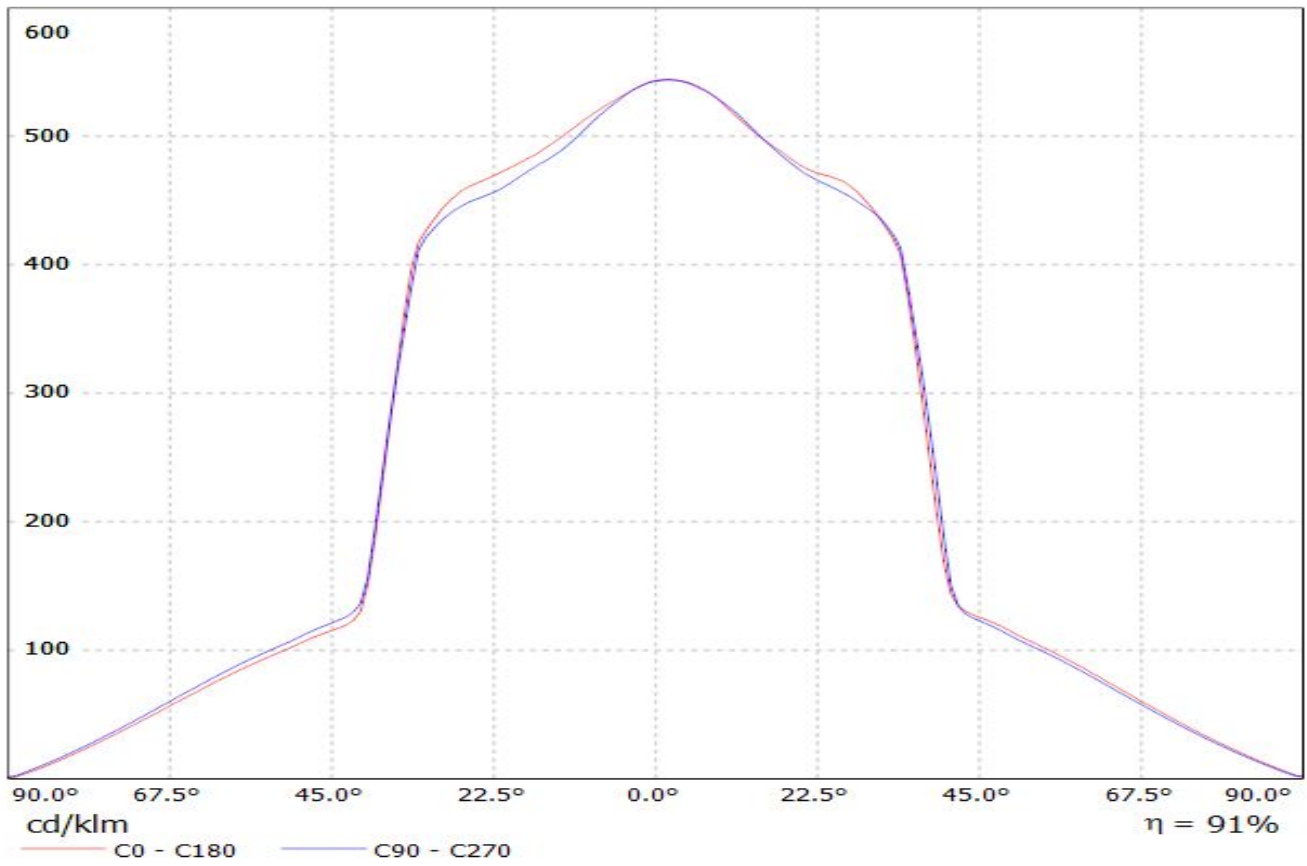




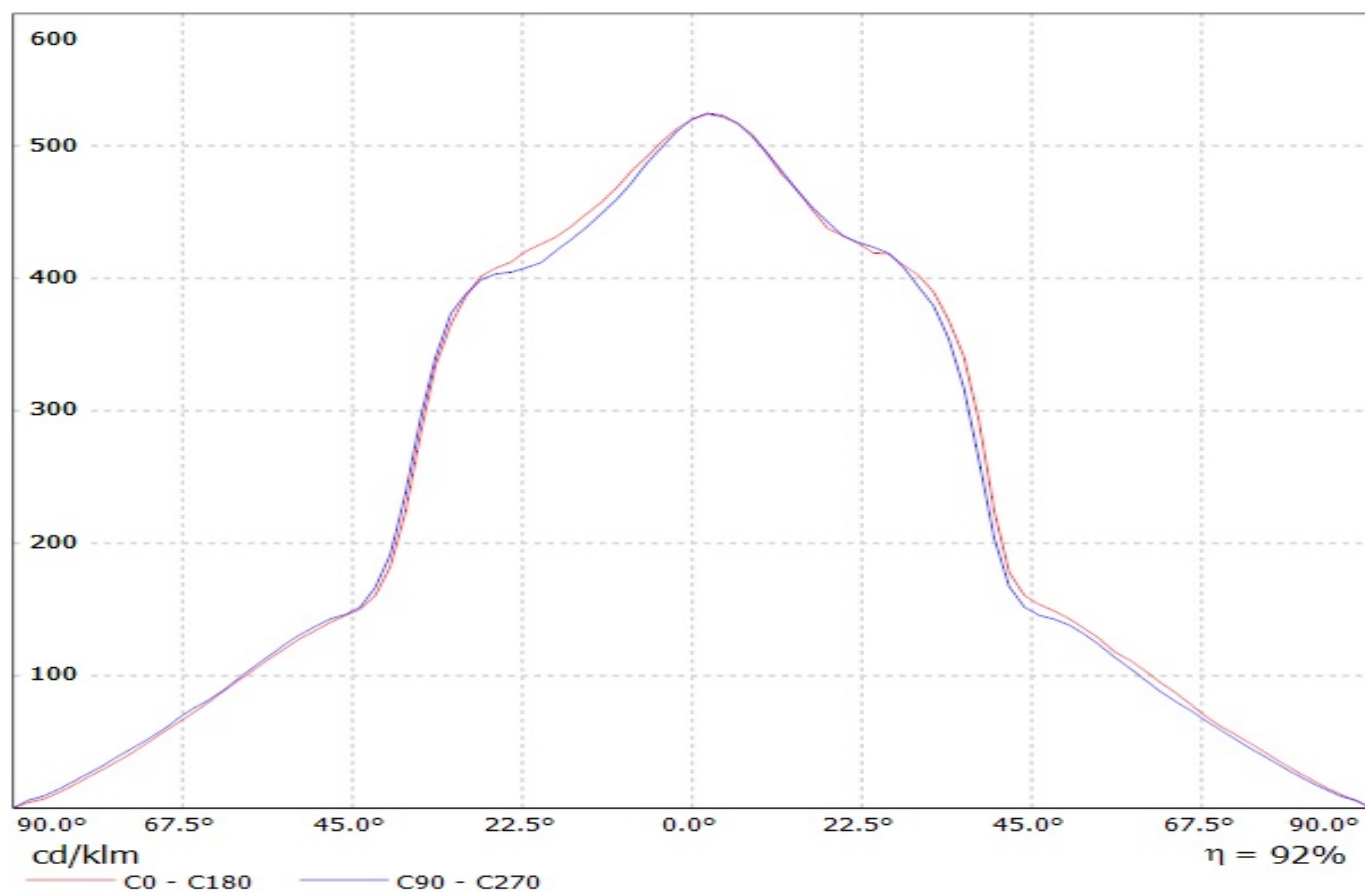
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(SSL150) Eff. 87,6%  
Lamps: 1 x Osram SSL150 (87lm@250mA)



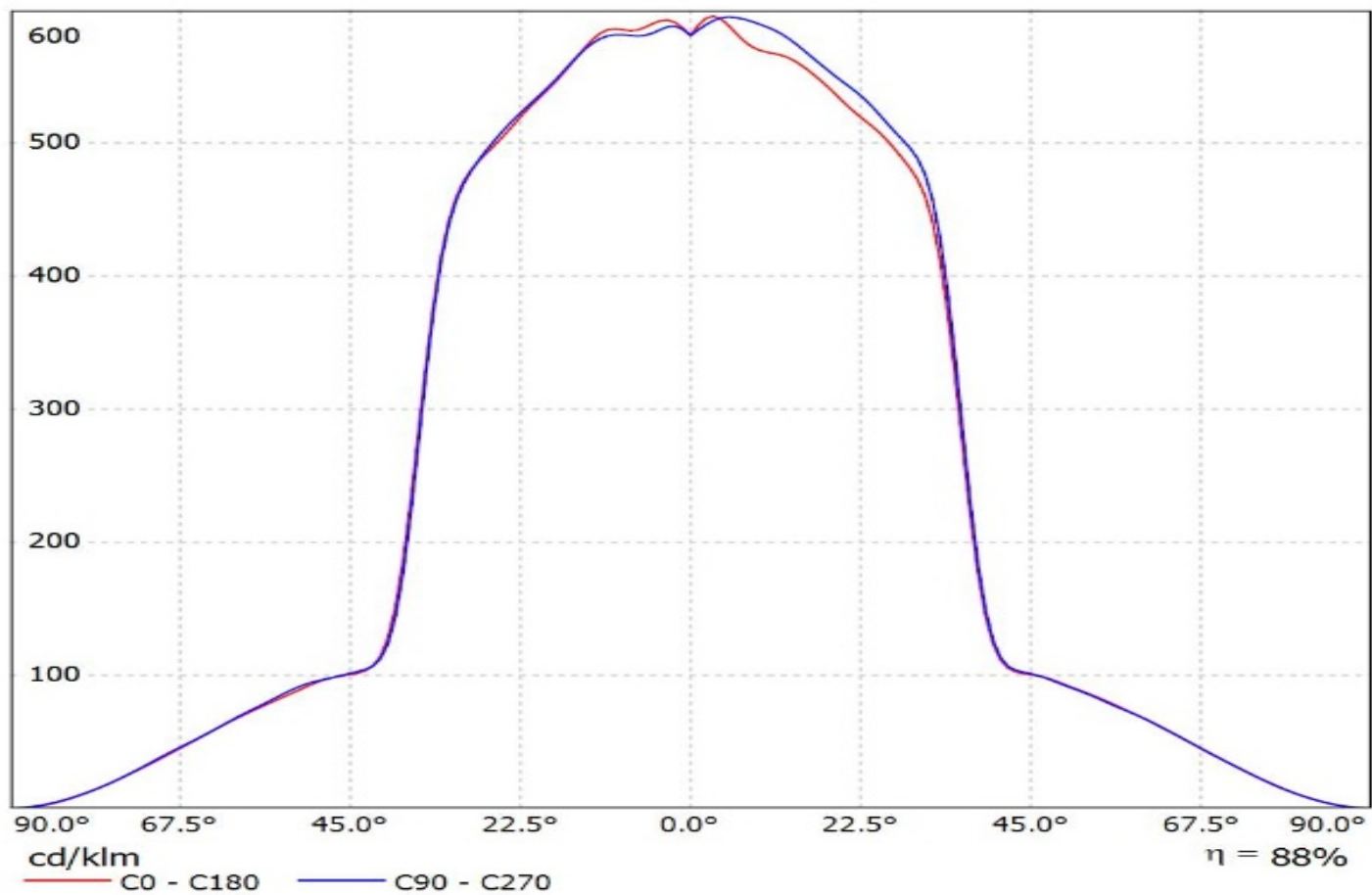
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(SQ\_EC) Eff. 90,7%  
Lamps: 1 x Osram Square (63,4lm@250mA)



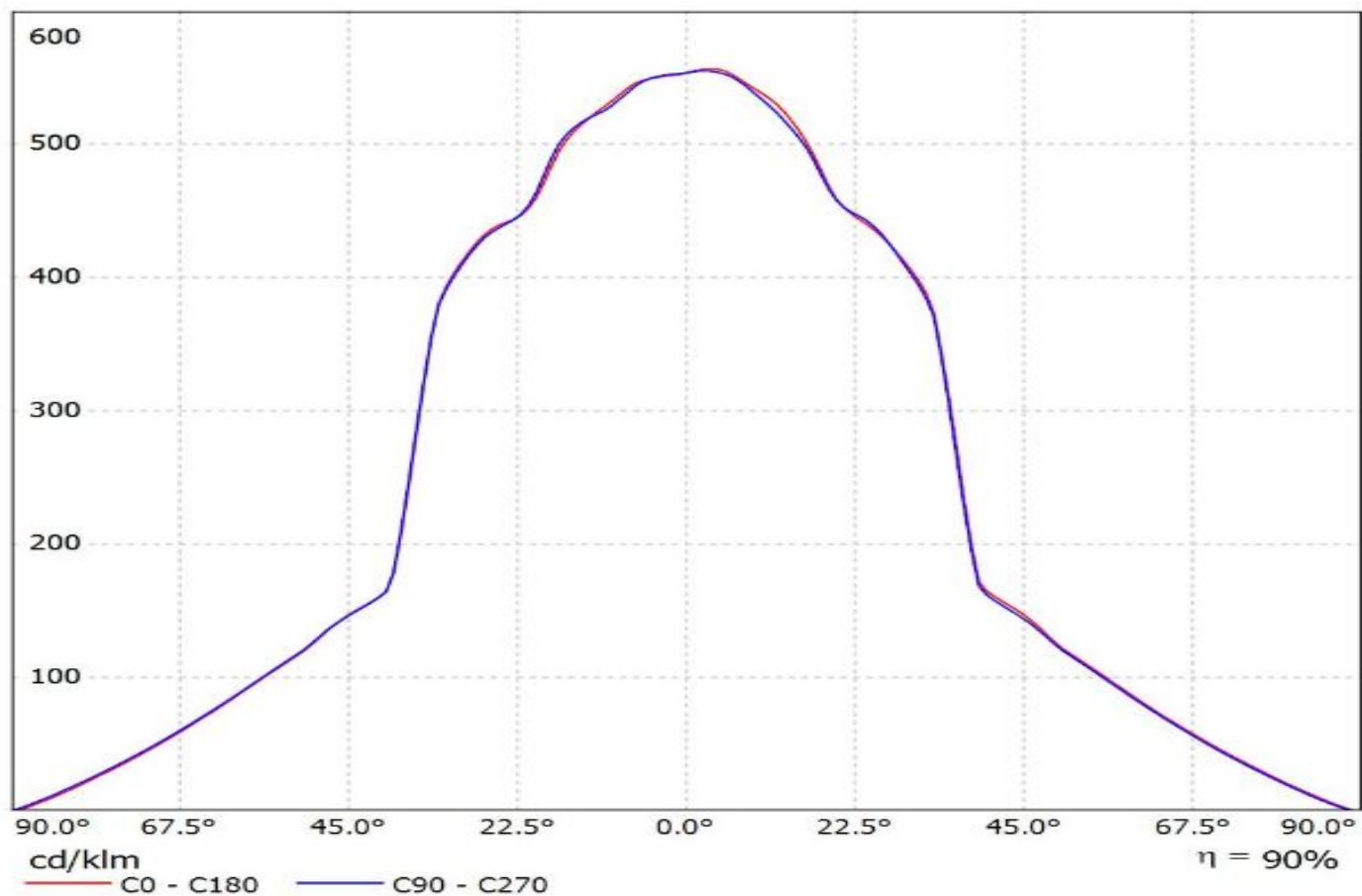
Luminaire: LEDil Oy C13253\_TINA2-R-CLIP16\_(DURIS\_S5) Efficiency=91%  
Lamps: 1 x Osram Duris S5 (GW PSLPS1.EC) 102lm @ 150mA CCT=6300K P=1.0W I=150mA



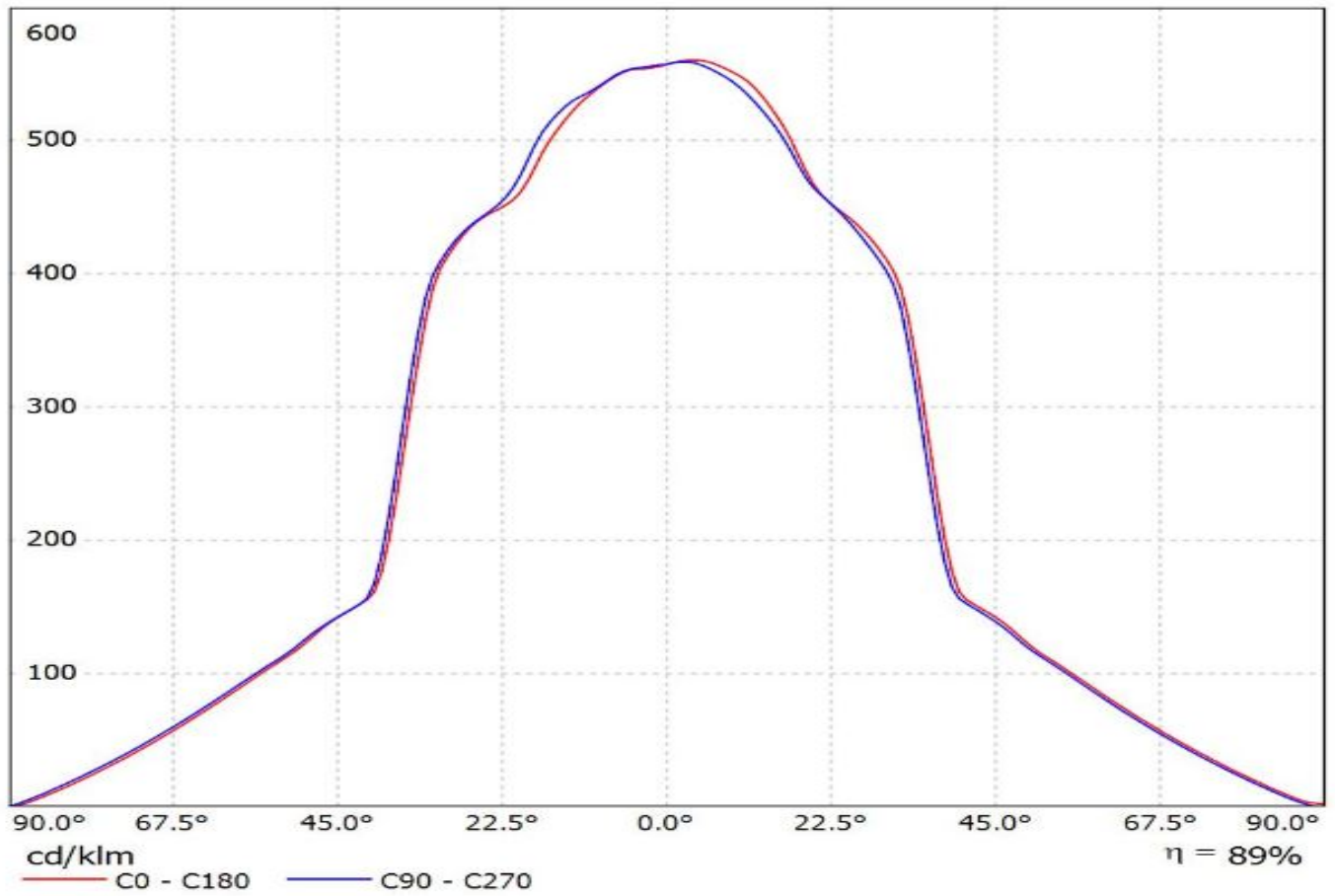
Luminaire: Ledil Oy C13253\_TINA2-R-CLIP16\_(Oslon\_Black)\_(glass)\_SIMULATED  
Lamps: 1 x Osram Olson Black - LUW H9GP



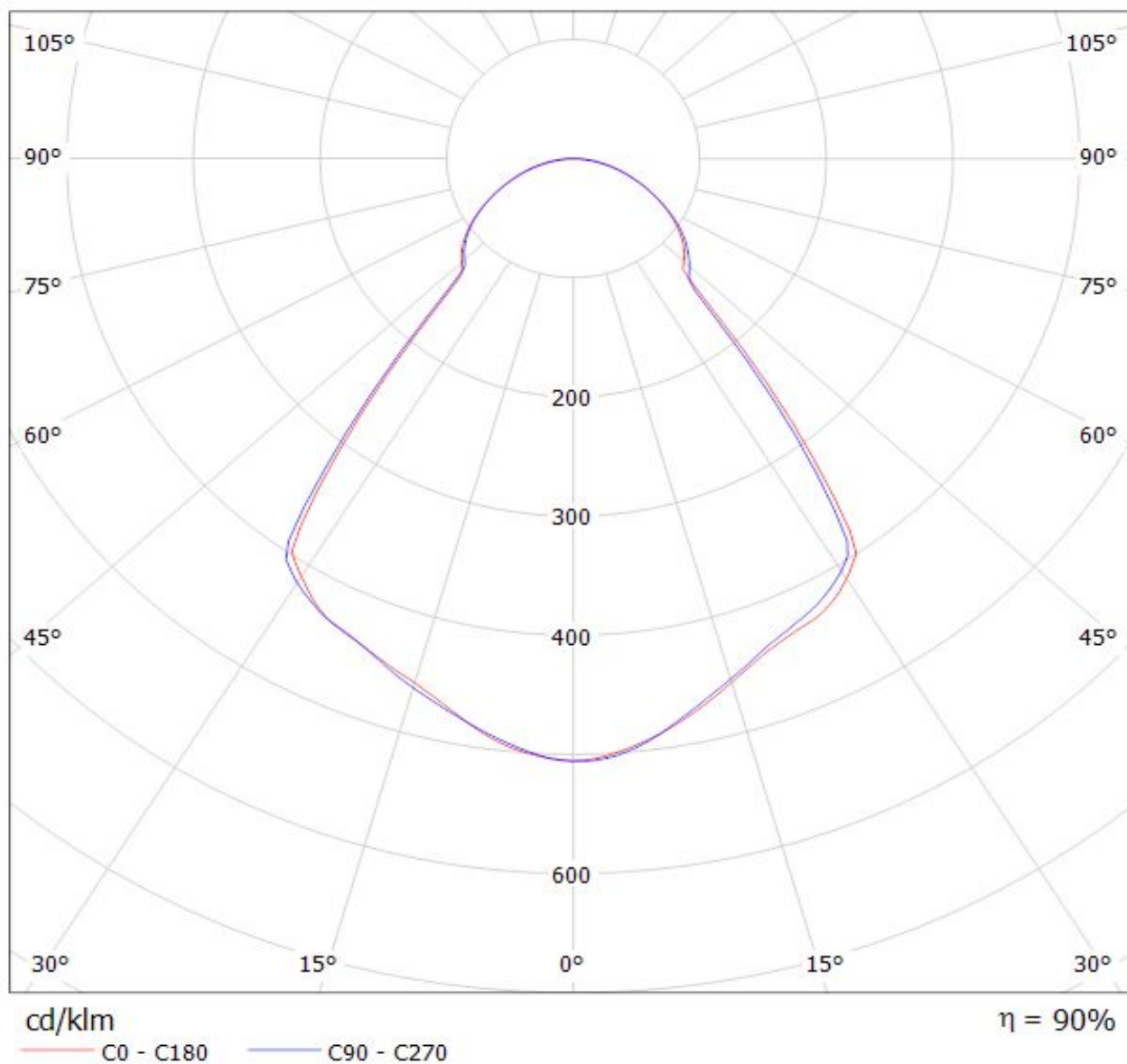
Luminaire: Ledil C13253\_TINA2-R-CLIP16\_(Z8Y15)  
Lamps: 1 x Seoul\_Z8Y15\_99.8967lm@250mA\_P=0.7569W\_I=0.25A



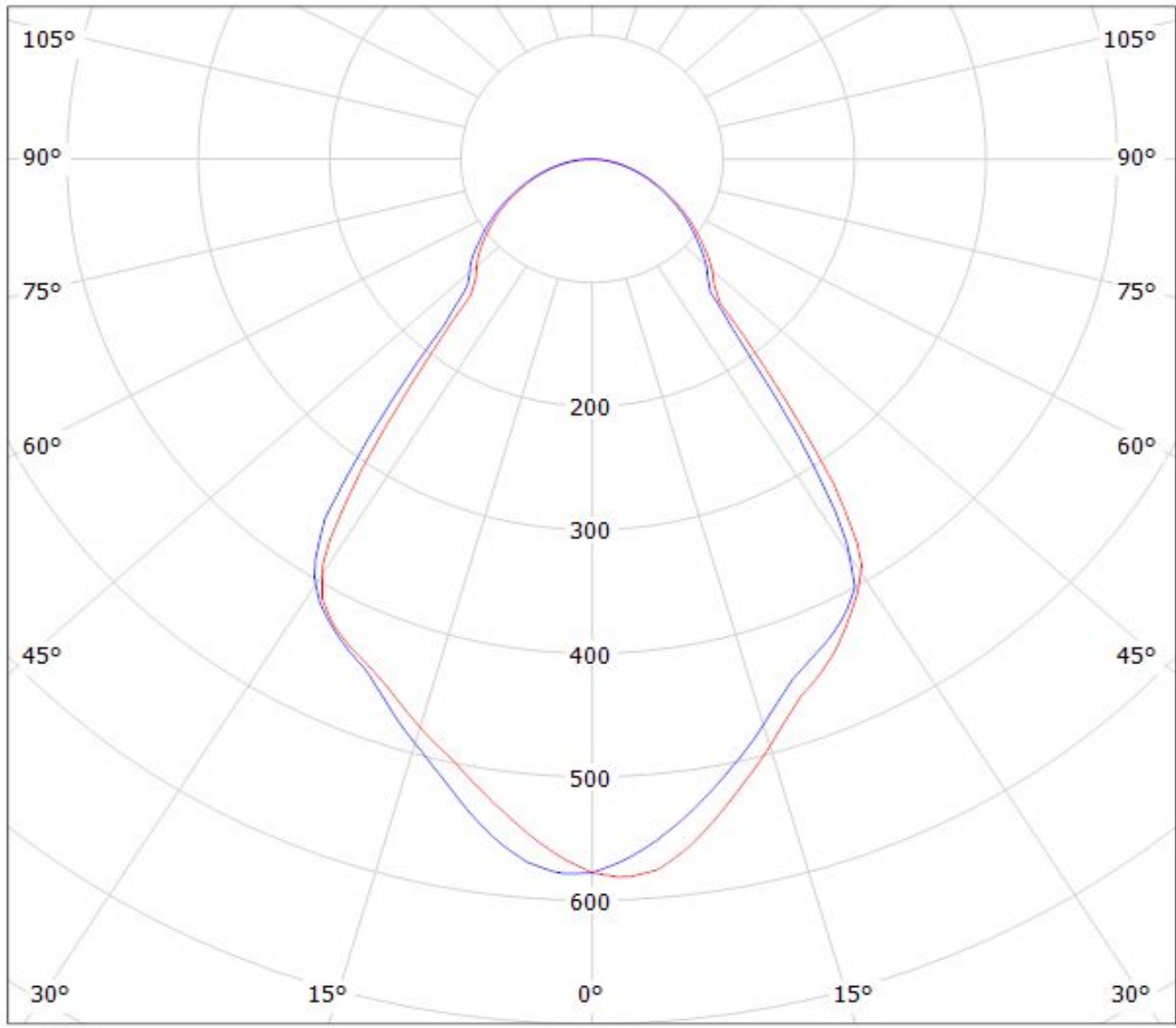
Luminaire: Ledil C13253\_TINA2-R-CLIP16\_(Z8Y19)  
Lamps: 1 x Seoul\_Z8Y19\_111.337lm@250mA\_P=0.7402W\_I=0.25



Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XP-G) Eff. 90,1%  
Lamps: 1 x Cree XP-G (66lm@250mA)



Luminaire: LEDiL Oy Luminaire Catalog Number C13253\_TINA2-R-CLIP16\_(XT-E) Eff, 86,5%  
Lamps: 1 x Cree XT-E (102 lm@250mA)

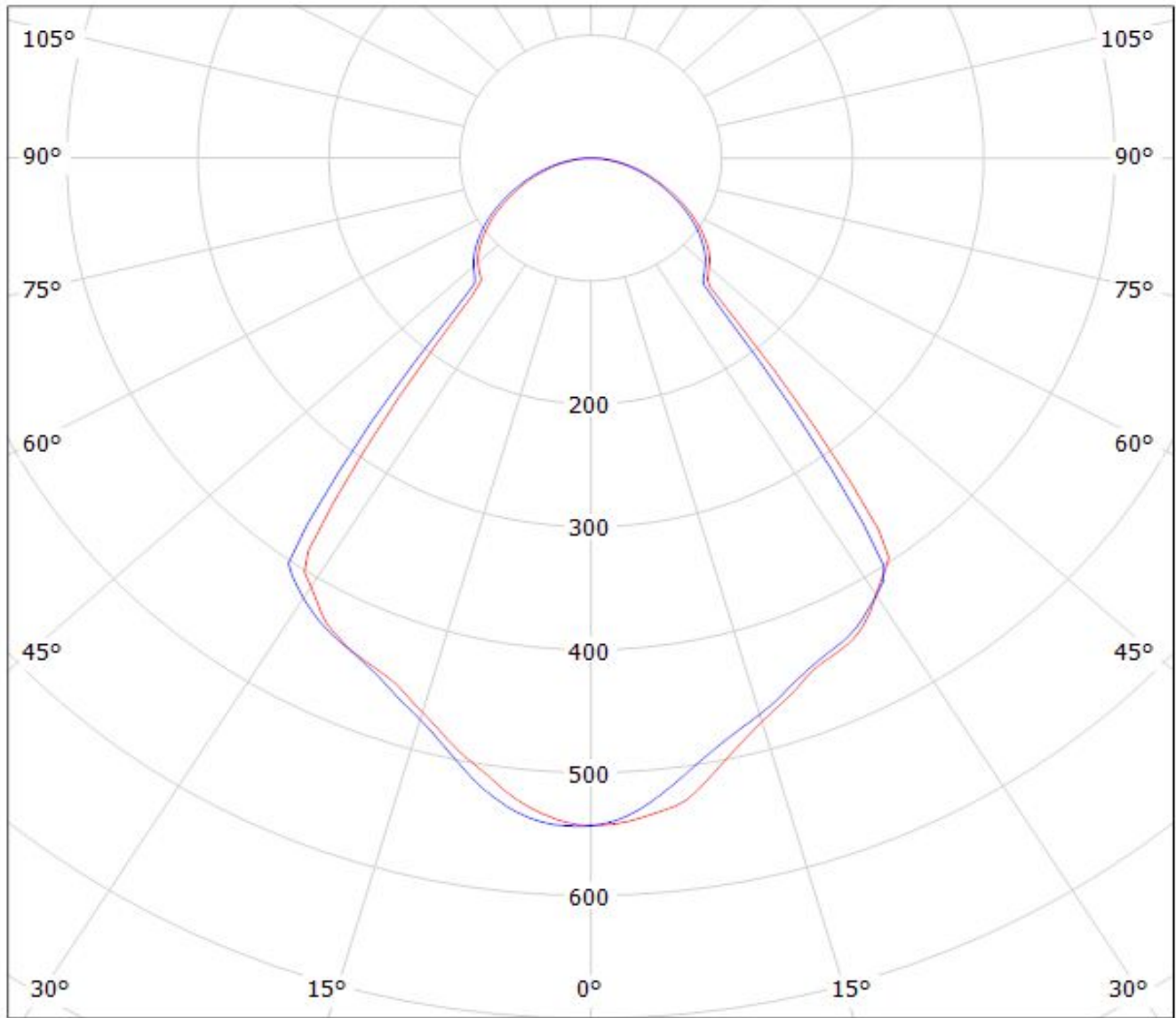


cd/klm  
— C0 - C180 — C90 - C270

$\eta = 87\%$



Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XP-E) Eff. 89,9%  
Lamps: 1 x Cree XP-E Ceramic (70lm@250mA)

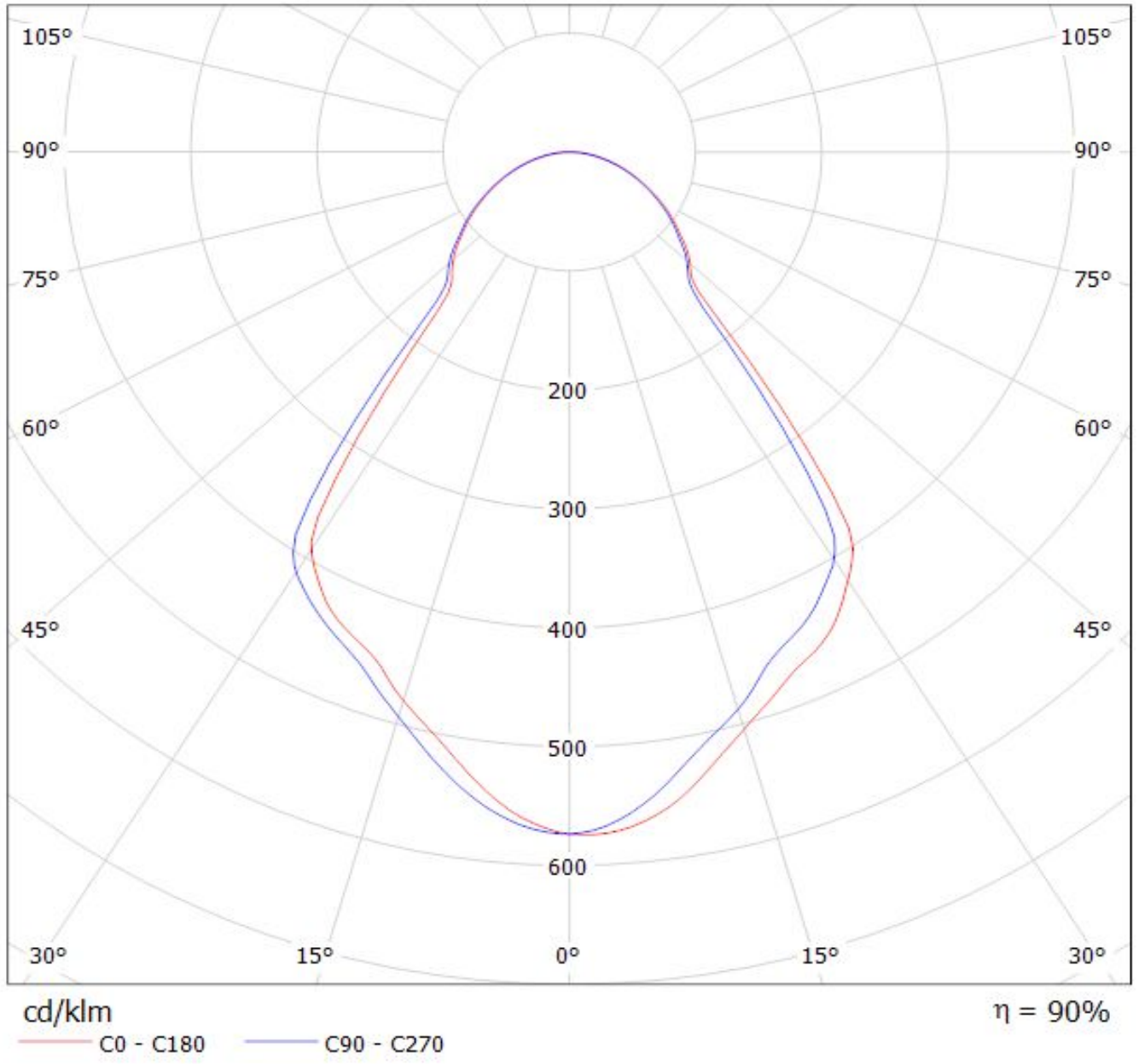


cd/klm

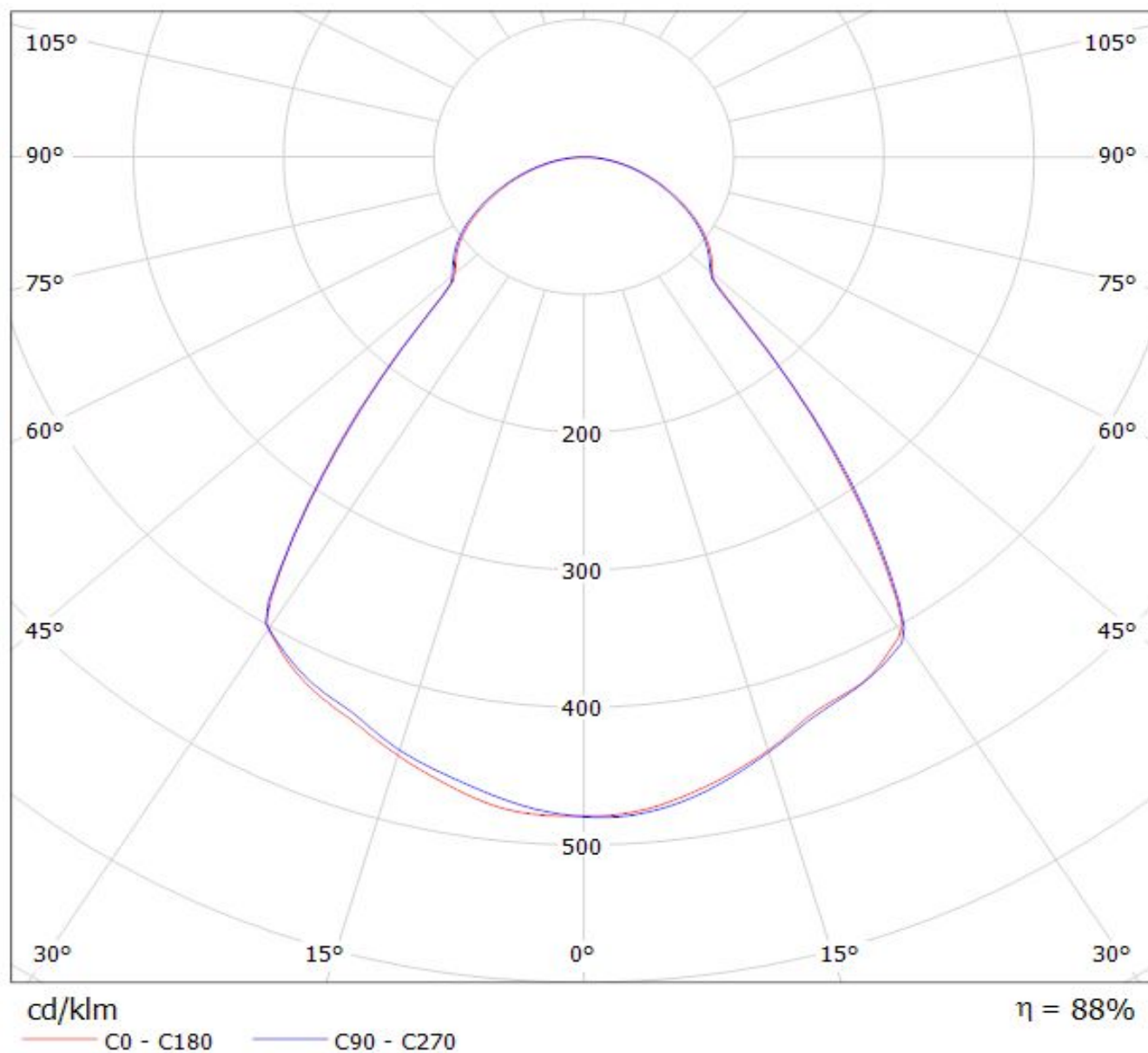
— C0 - C180 — C90 - C270

$\eta = 90\%$

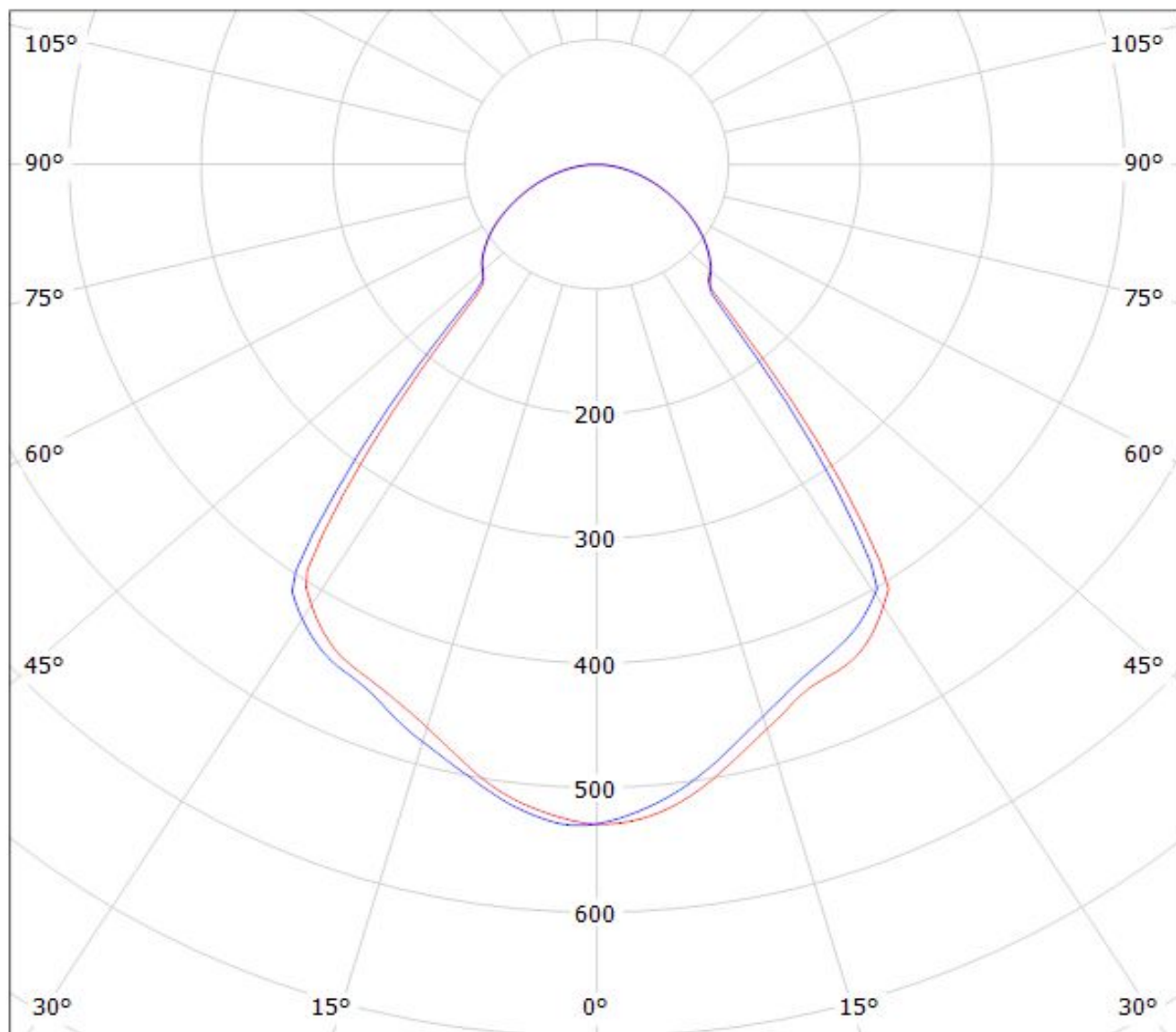
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XB-D) Eff. 89,9%  
Lamps: 1 x Cree XB-D (92lm@250mA)



Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XM-L) Eff. 88,3%  
Lamps: 1 x Cree XM-L (91lm@250mA)



Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(Cree\_XP-G2) Eff. 89,1%  
Lamps: 1 x Cree XP-G2 (106 lm@250mA)

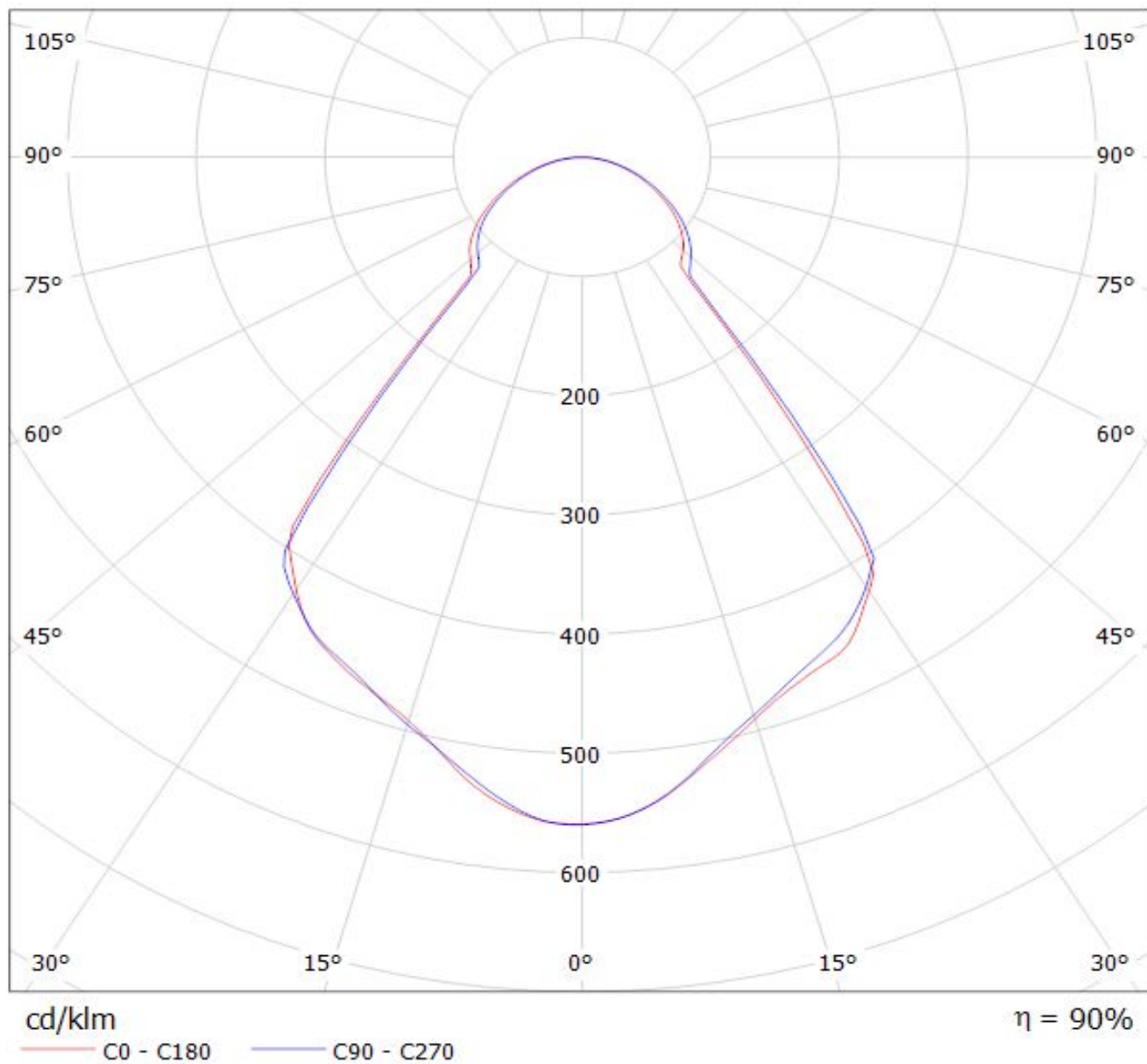


cd/klm

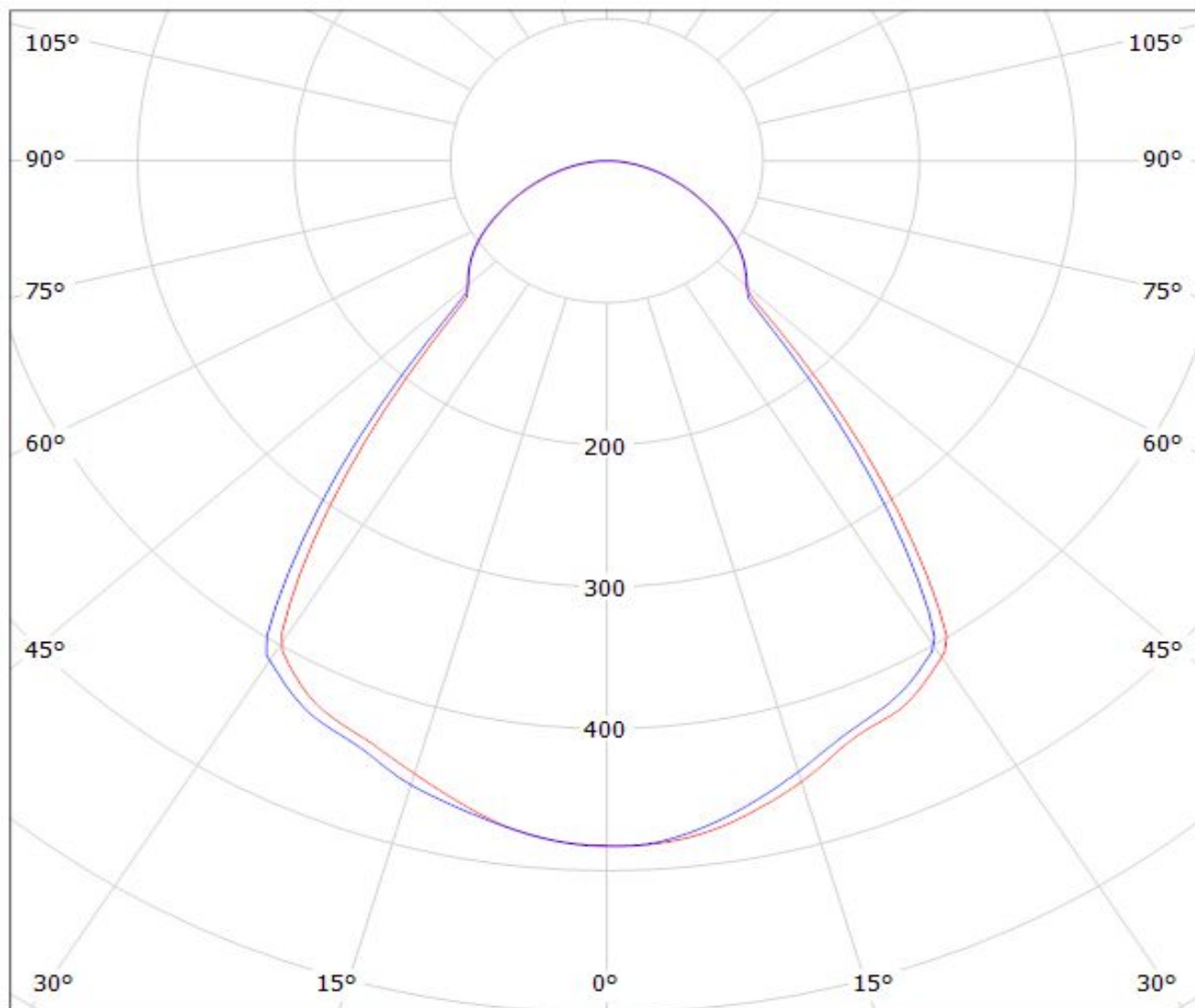
— C0 - C180    — C90 - C270

$\eta = 89\%$

Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XP-E2) Eff. 90,1%  
Lamps: 1 x Cree XP-E2 (93 lm@250mA)



Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(XM-L2) Eff.89,6%  
Lamps: 1 x Cree XM-L2 (99lm@250mA)



cd/klm

— C0 - C180

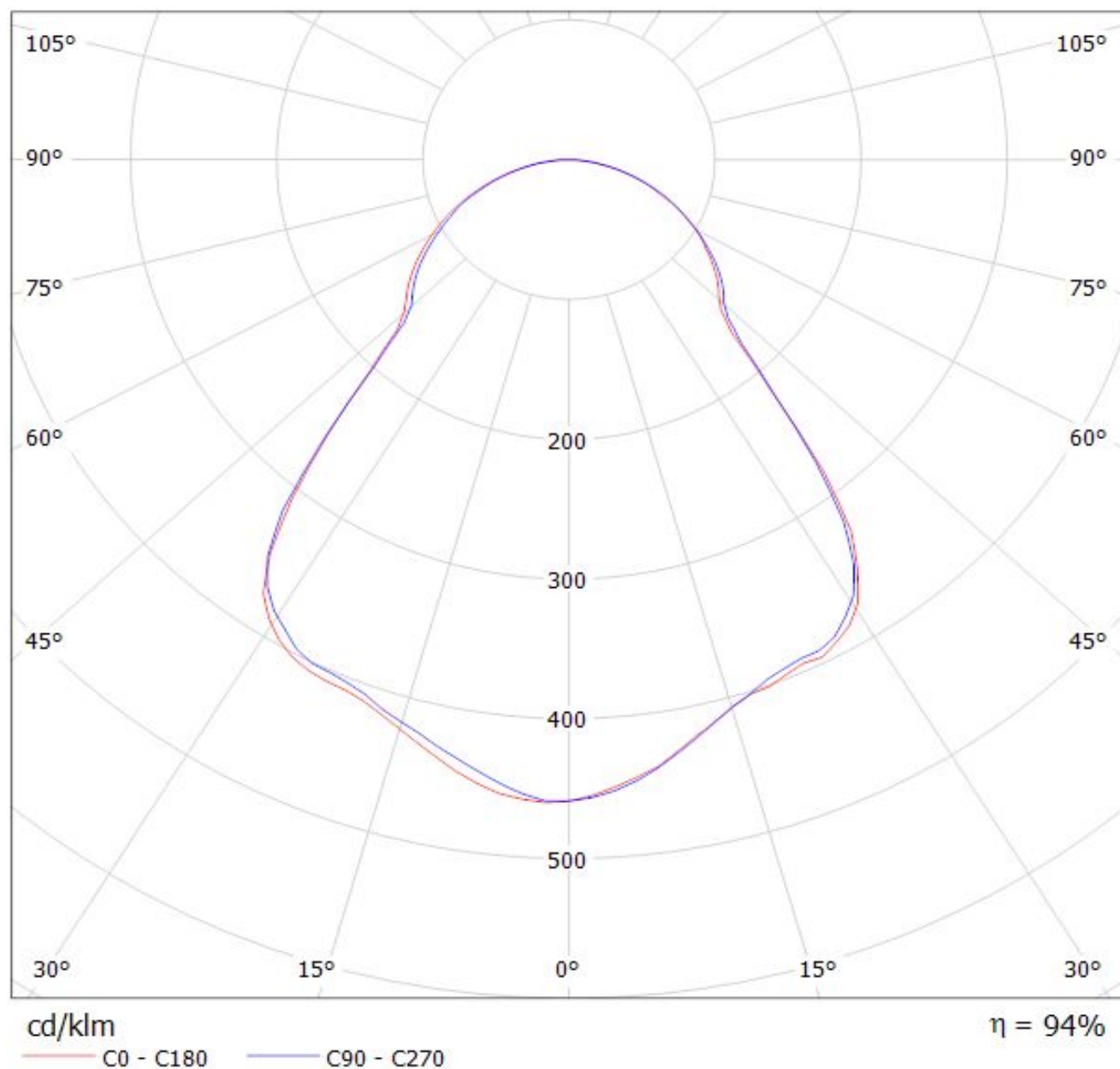
— C90 - C270

$\eta = 90\%$

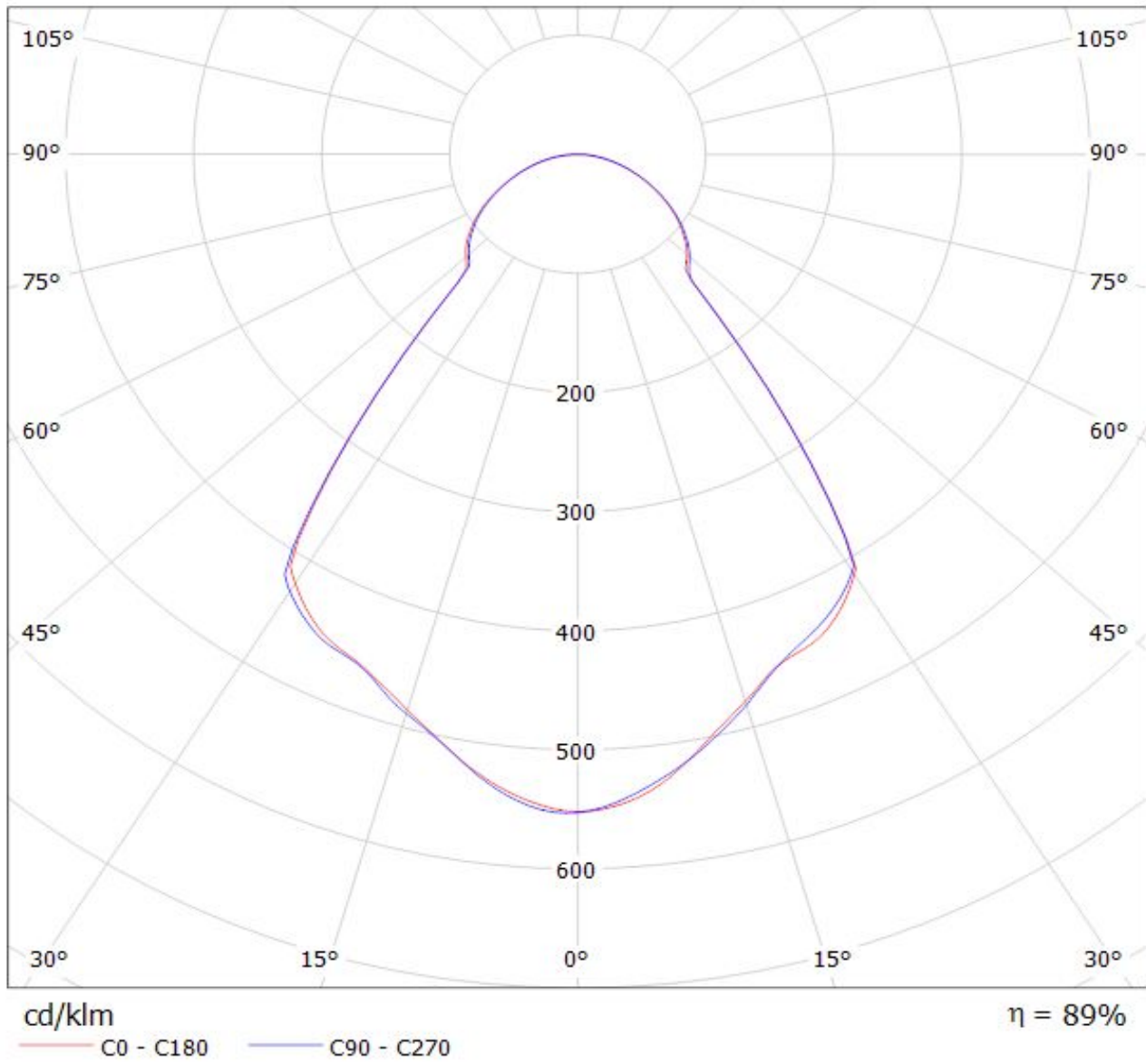


Luminaire: Ledil Oy C13253\_TINA2-R-CLIP16\_(XB-H)

Lamps: 1 x Cree XB-H (XBHAWT-0-3C0-T50-0B-0001) 106lm @ 250mA CCT= P=0.73W I=250mA

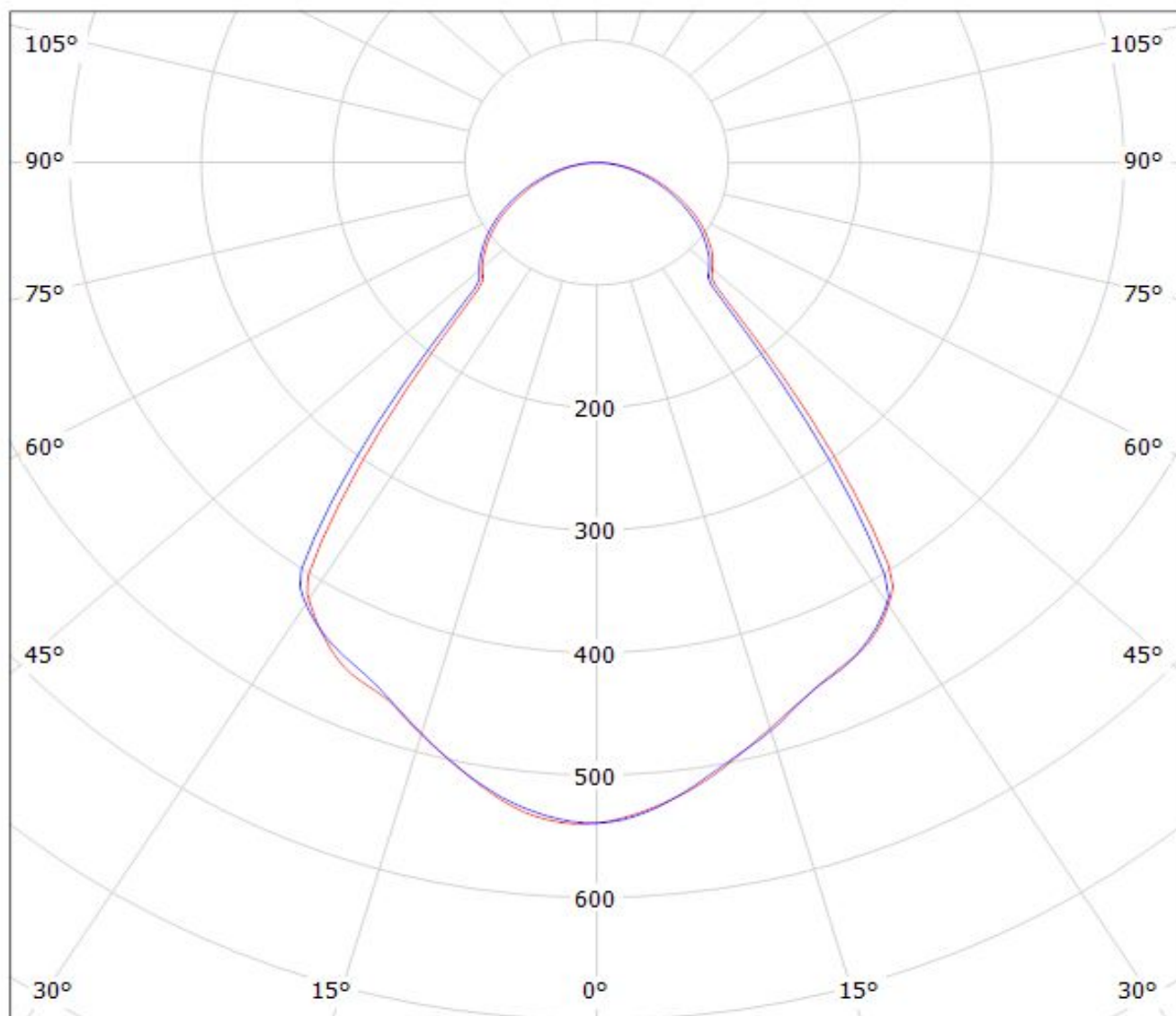


Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(Luxeon\_Rebel-ES) Eff. 89,3%  
Lamps: 1 x Luxeon Rebel-ES (89lm@250mA)





Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(Luxeon\_A) Eff. 90,6%  
Lamps: 1 x Luxeon A (66lm@250mA)



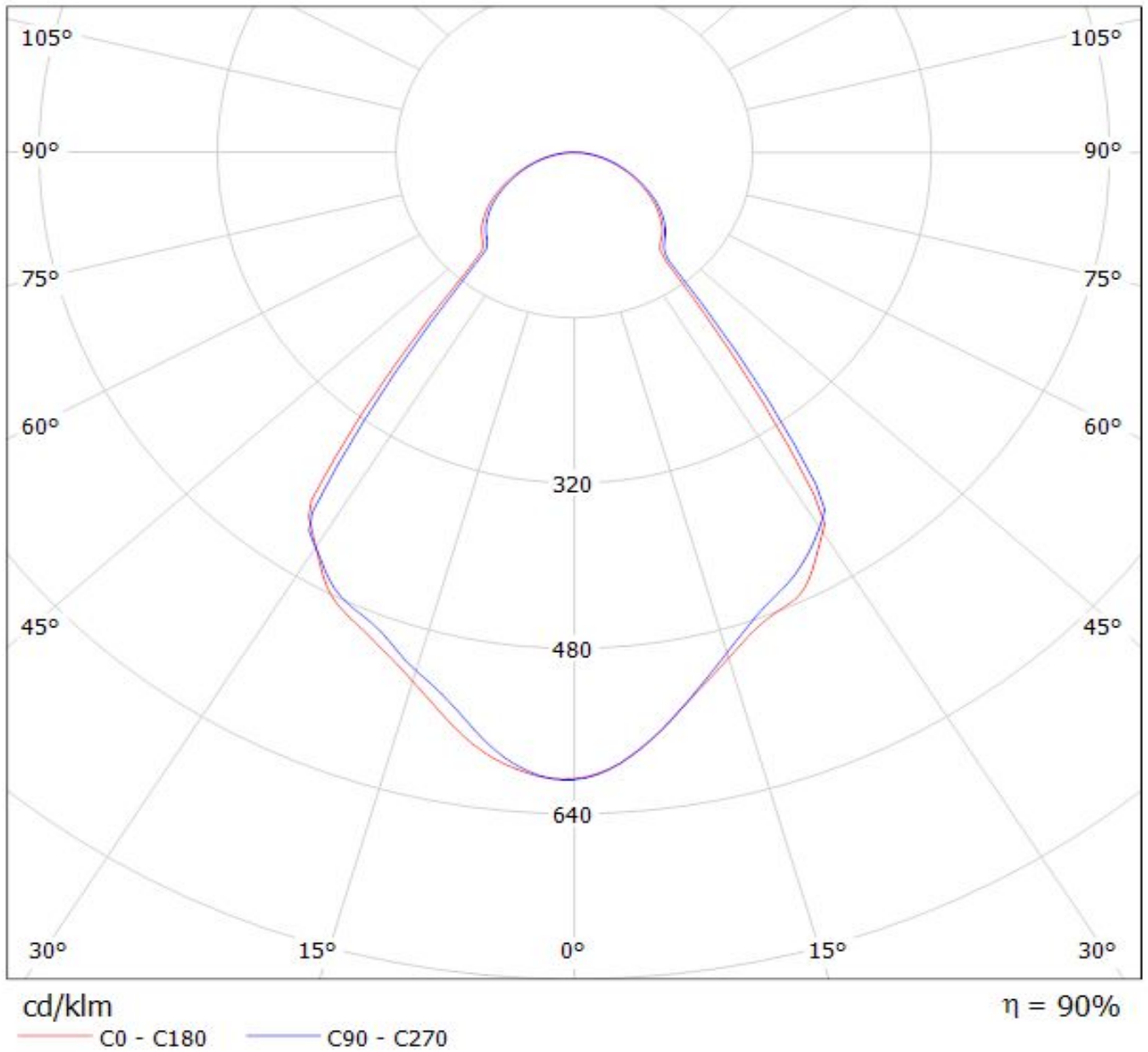
cd/klm

$\eta = 91\%$

— C0 - C180

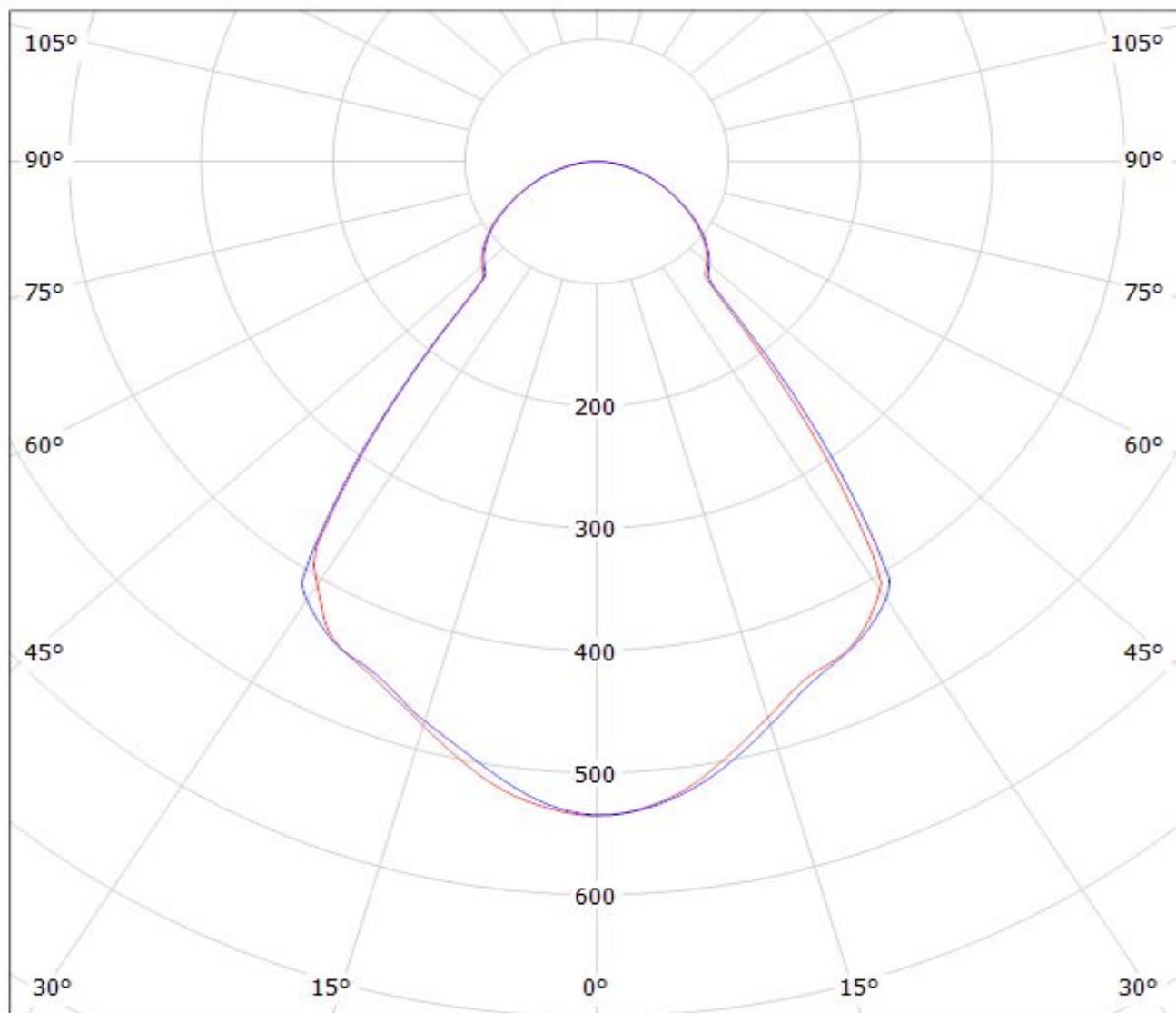
— C90 - C270

Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(Luxeon\_Rebel) Eff. 89,9%  
Lamps: 1 x Luxeon Rebel (81lm@250mA)



Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(Luxeon\_T) Eff. 88,8%

Lamps: 1 x Luxeon T (73 lm@250mA)

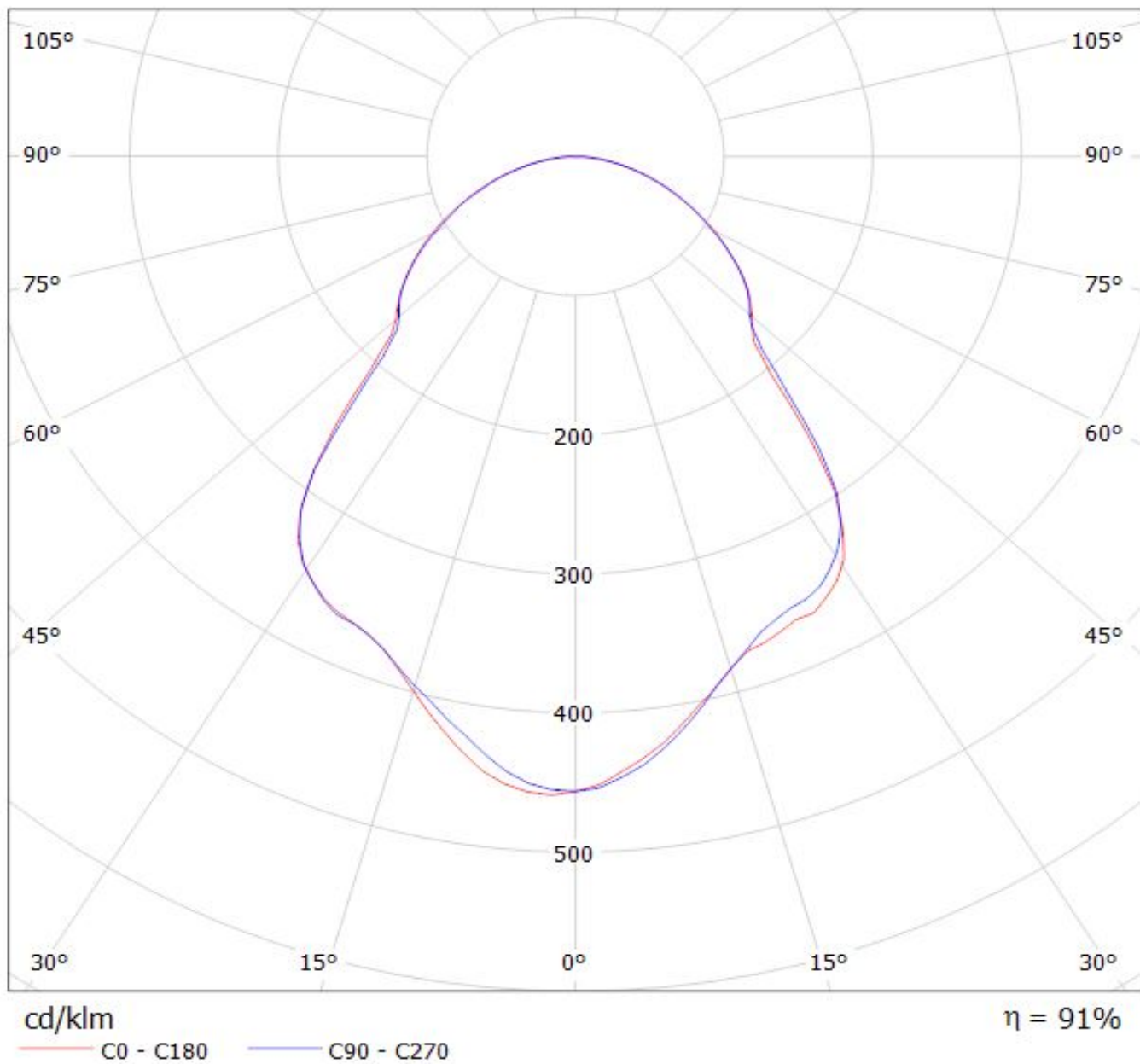


cd/klm

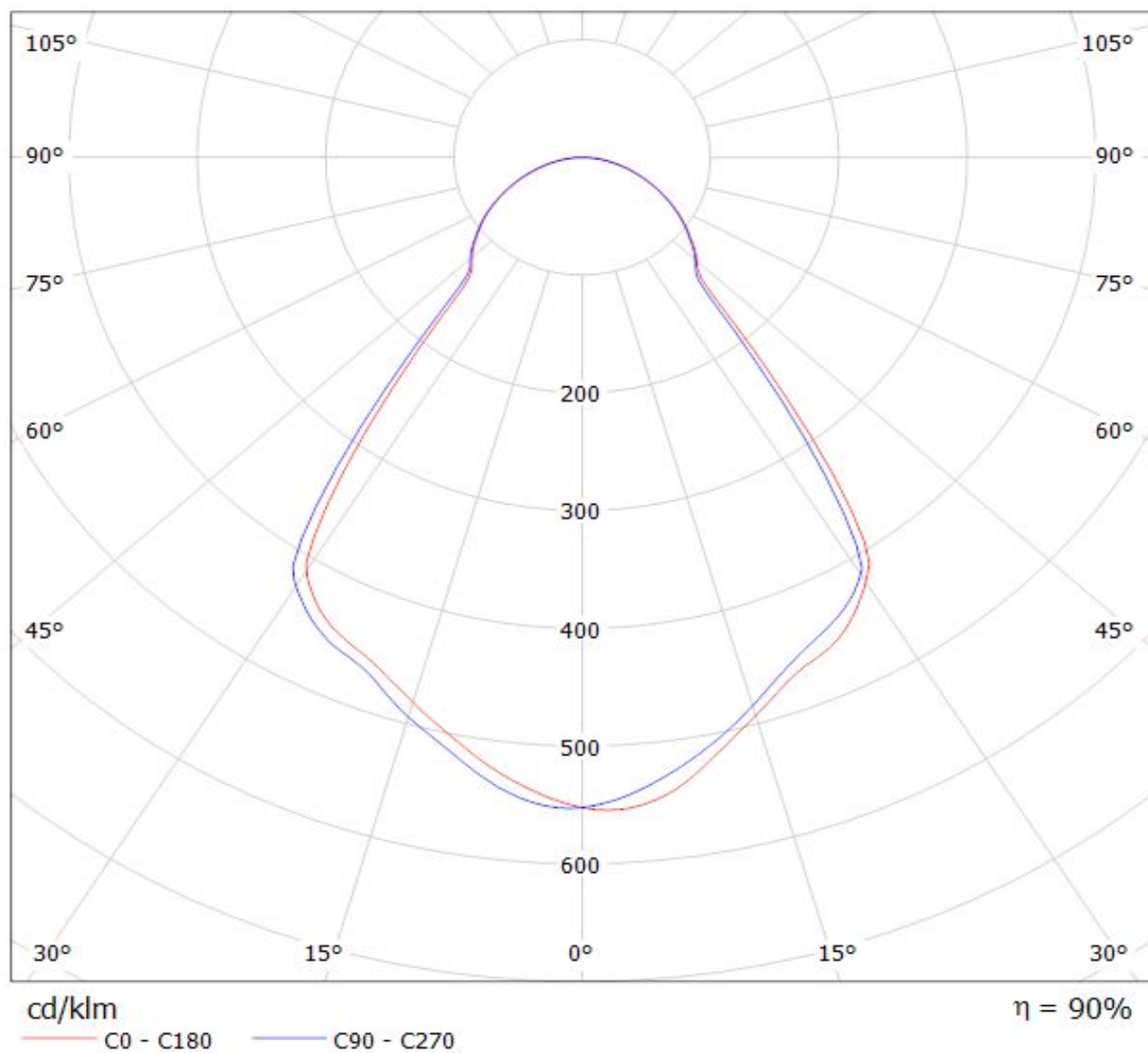
— C0 - C180    — C90 - C270

$\eta = 89\%$

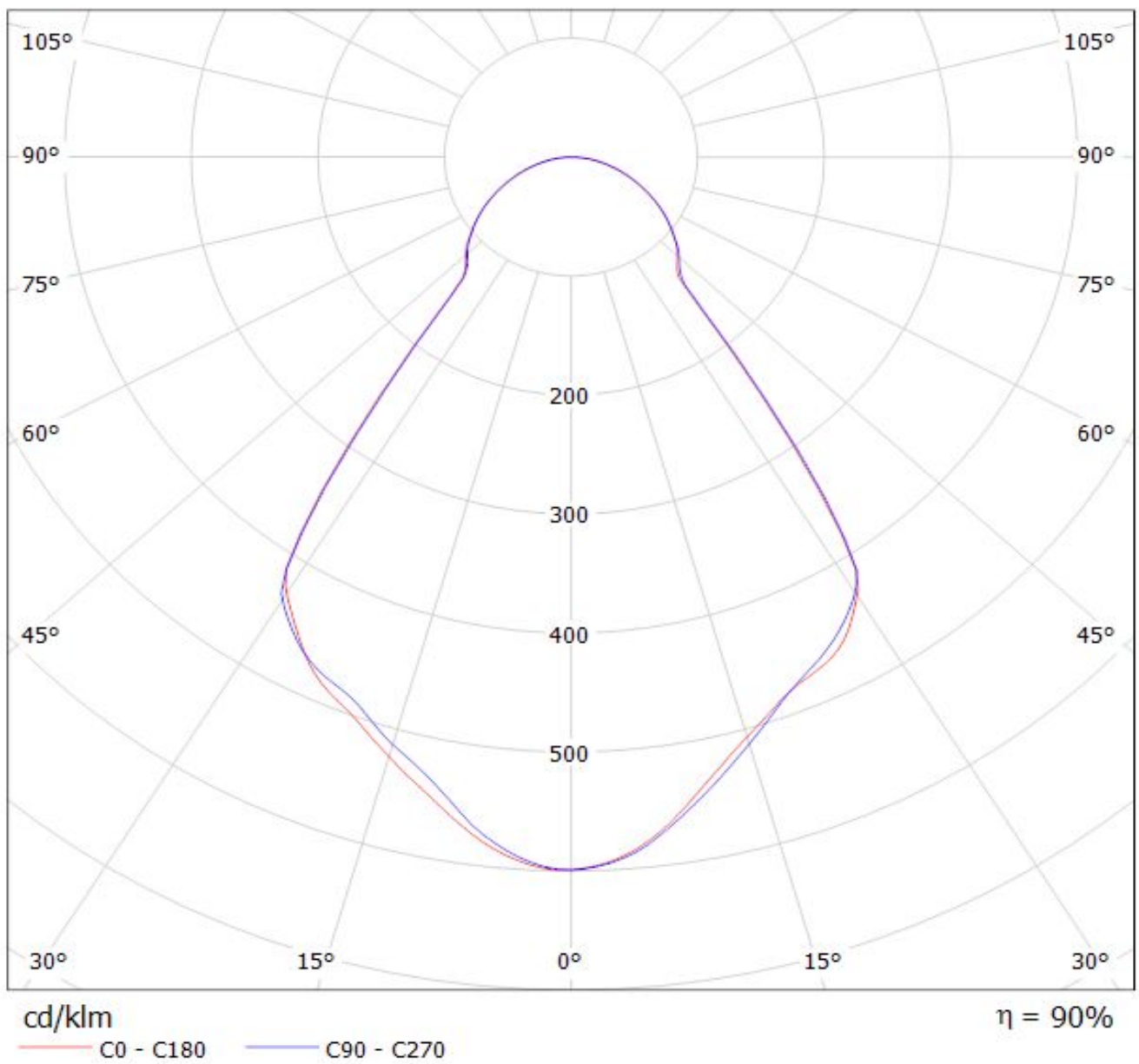
Luminaire: Ledil Oy C13253\_TINA2-R-CLIP16\_(Luxeon\_TX) Efficiency=90%  
Lamps: 1 x Luxeon TX 108lm @ 250mA CCT= P=0.73 I=250mA



Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(NVS19) Eff. 89,8%  
Lamps: 1 x Nichia NVS19 (97,5lm@250mA)

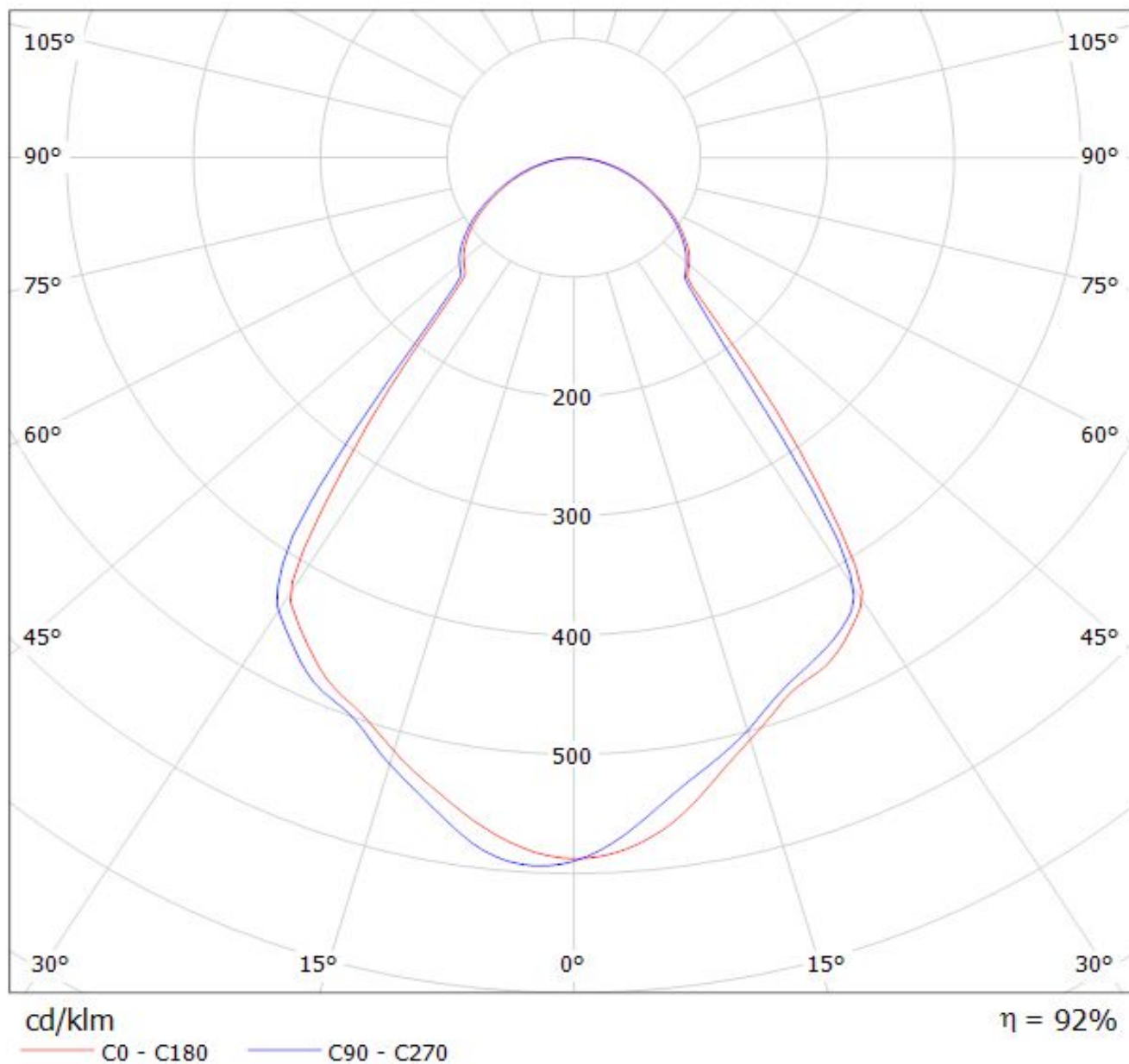


Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(NCS19) Eff. 89,7%  
Lamps: 1 x Nichia NCS19 (88lm@250mA)

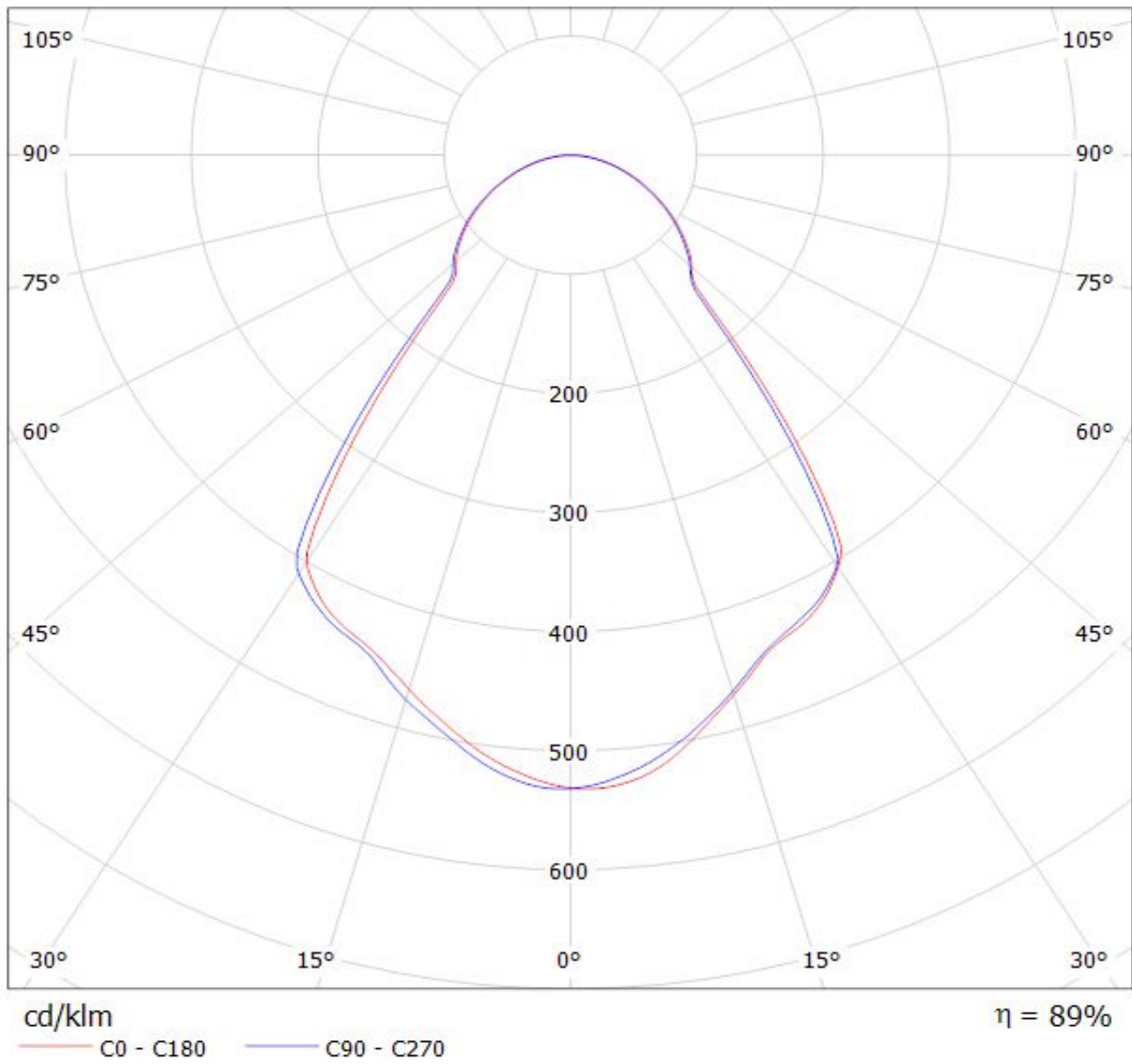




Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(NF2x757) Eff. 91,7%  
Lamps: 1 x Nichia NF2x757 (69lm@100mA)

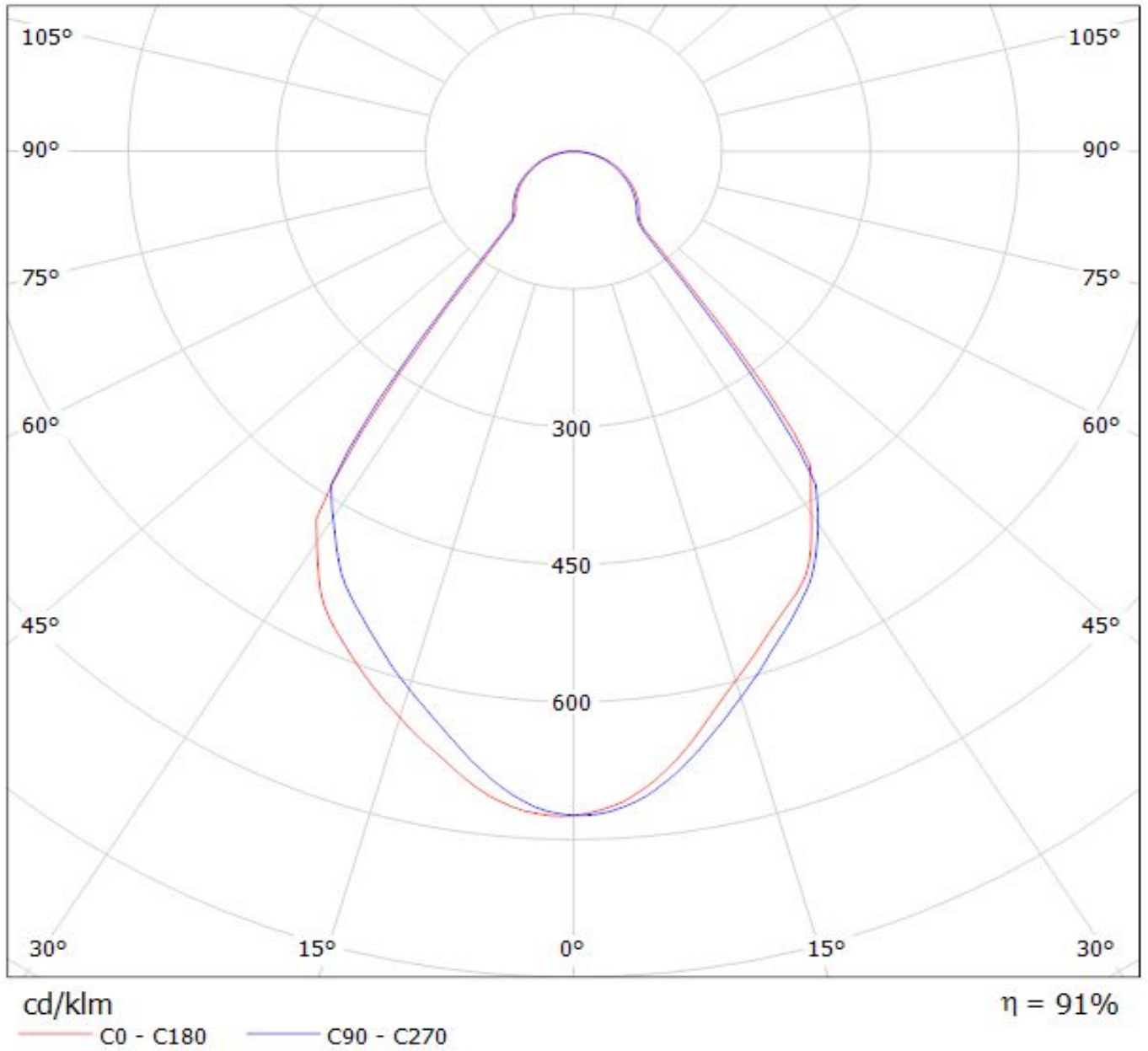


Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(NVS19B) Eff. 89,4%  
Lamps: 1 x Nichia NVS19B (108lm@250mA)

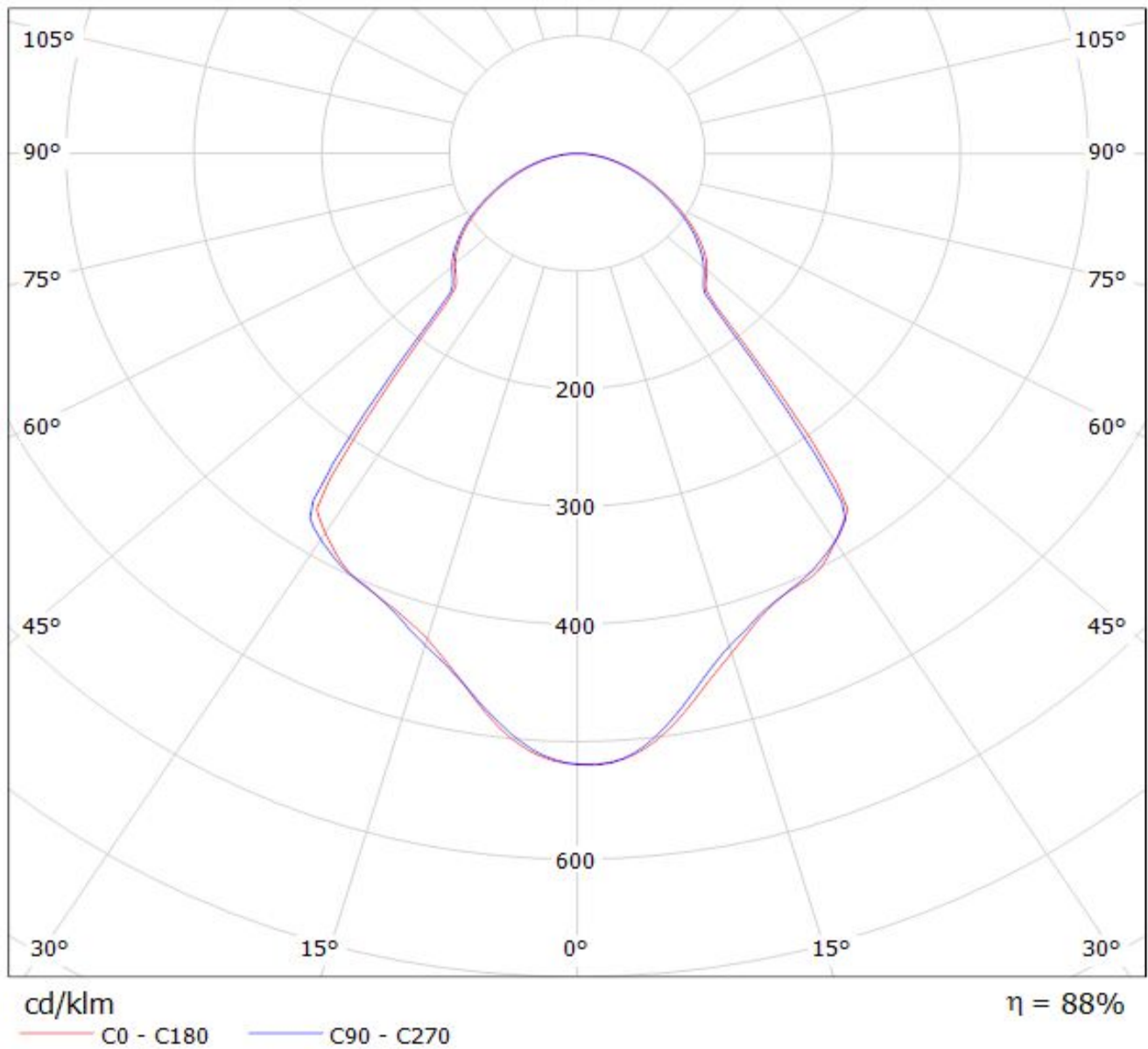




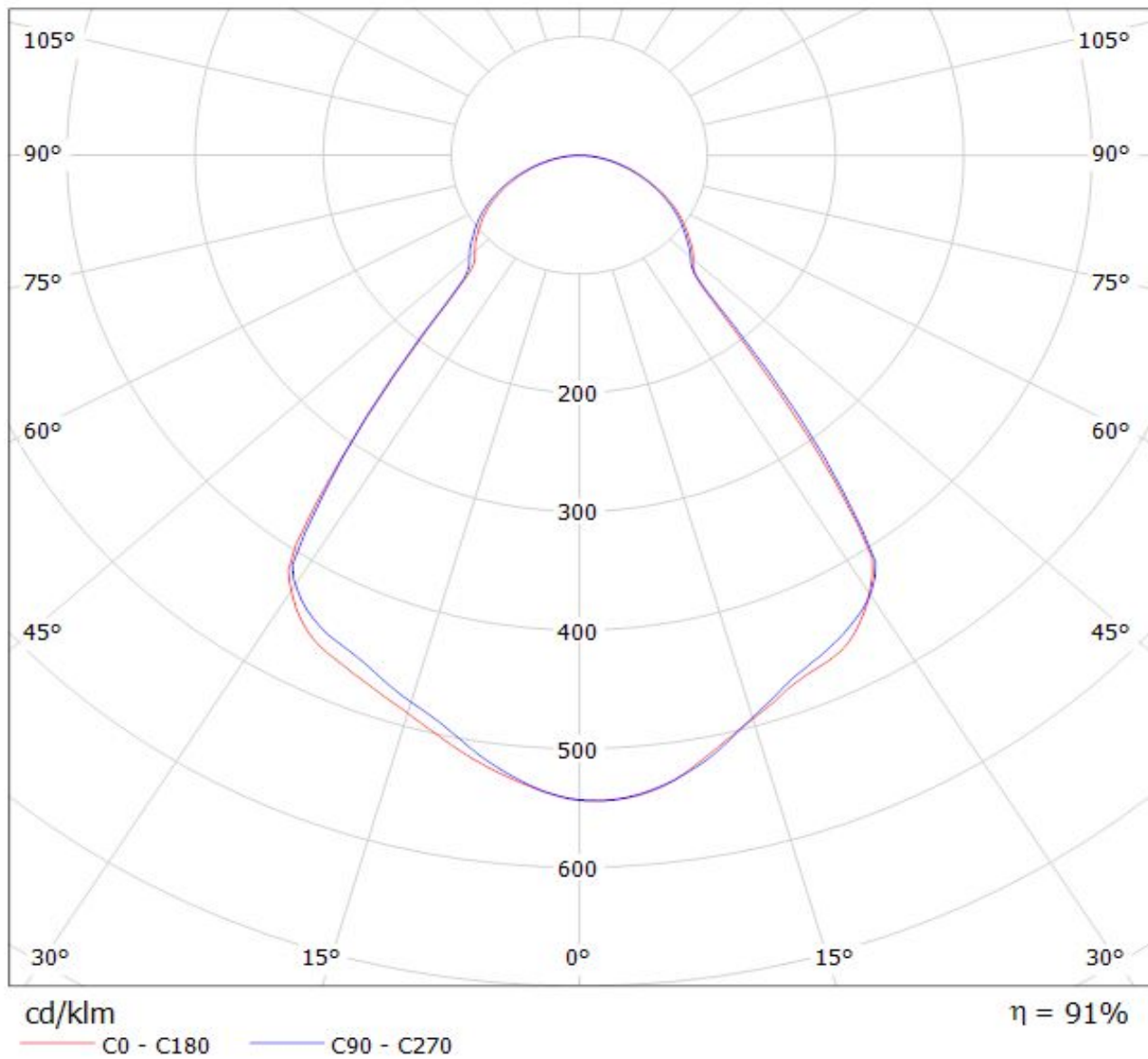
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(SSL80) Eff. 91,1%  
Lamps: 1 x Osram SSL80 (81lm@250mA)



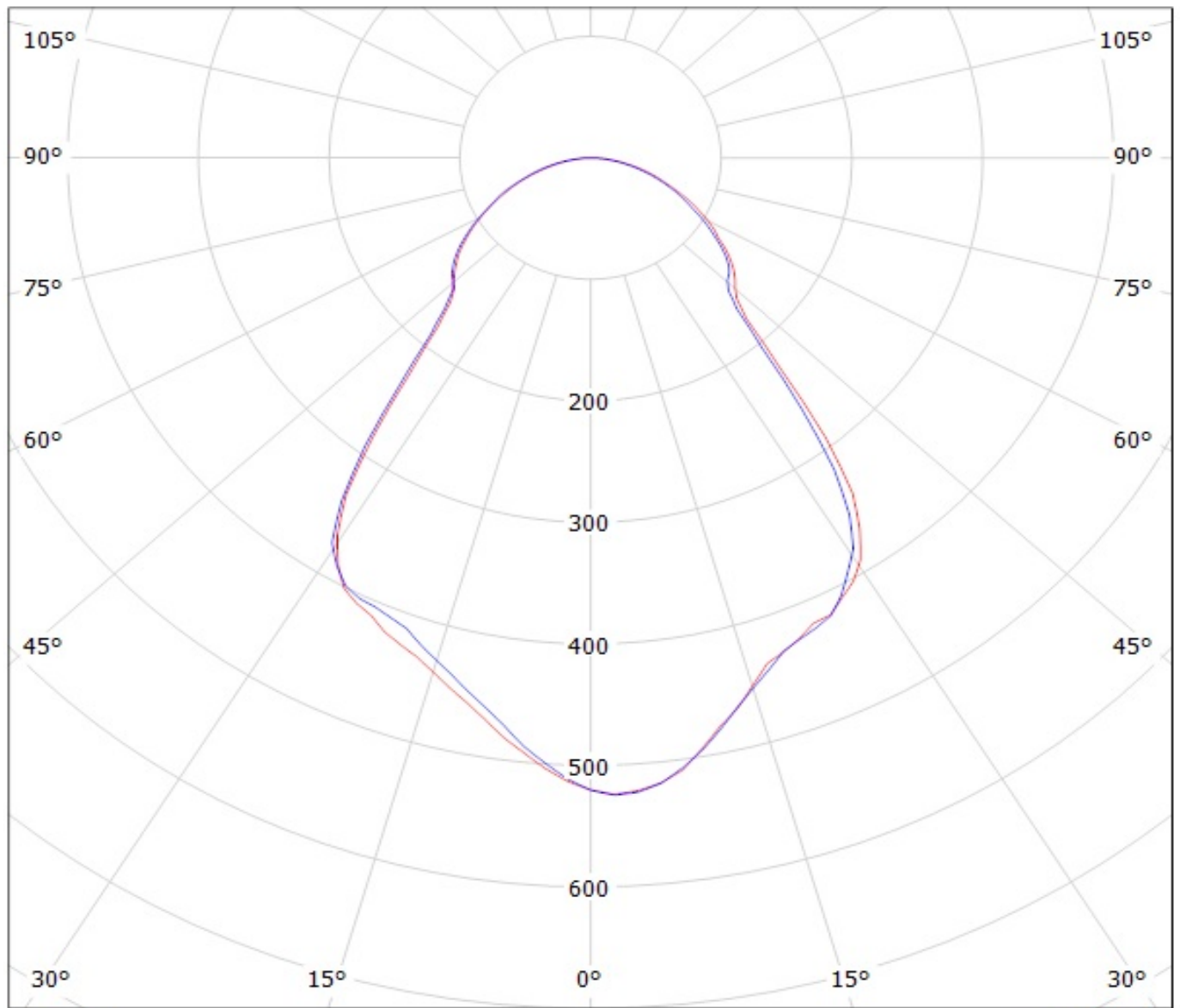
Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(SSL150) Eff. 87,6%  
Lamps: 1 x Osram SSL150 (87lm@250mA)



Luminaire: LEDiL Oy C13253\_TINA2-R-CLIP16\_(SQ\_EC) Eff. 90,7%  
Lamps: 1 x Osram Square (63,4lm@250mA)



Luminaire: LEDil Oy C13253\_TINA2-R-CLIP16\_(DURIS\_S5) Efficiency=91%  
Lamps: 1 x Osram Duris S5 (GW PSLPS1.EC) 102lm @ 150mA CCT=6300K P=1.0W I=150mA



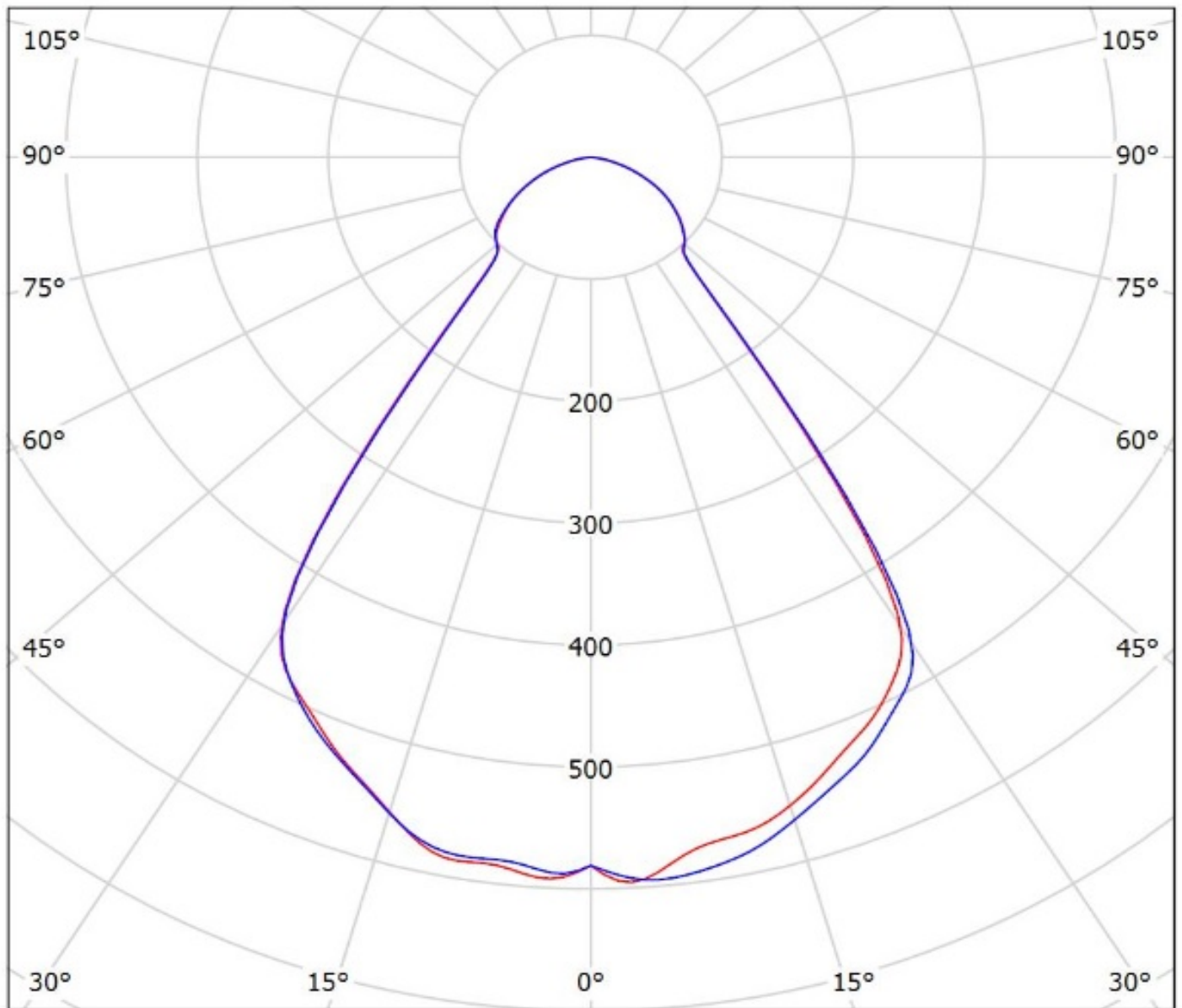
cd/klm

— C0 - C180

— C90 - C270

$\eta = 92\%$

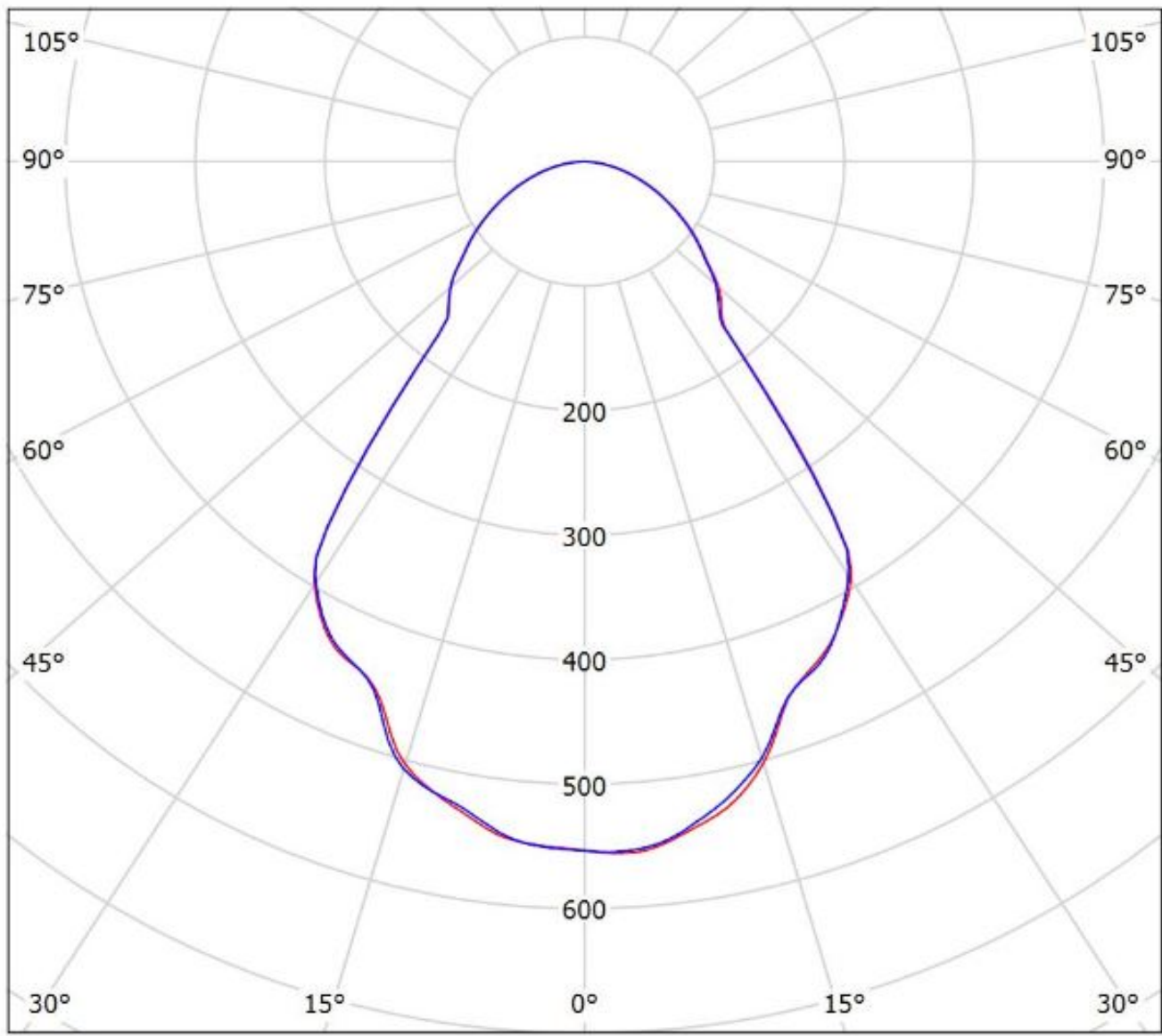
Luminaire: Ledil Oy C13253\_TINA2-R-CLIP16\_(Oslon\_Black)\_glass)\_SIMULATED  
Lamps: 1 x Osram Olson Black - LUW H9GP



cd/klm  
— C0 - C180 — C90 - C270

$\eta = 88\%$

Luminaire: Ledil C13253\_TINA2-R-CLIP16\_(Z8Y15)  
Lamps: 1 x Seoul\_Z8Y15\_99.8967lm@250mA\_P=0.7569W\_I=0.25A



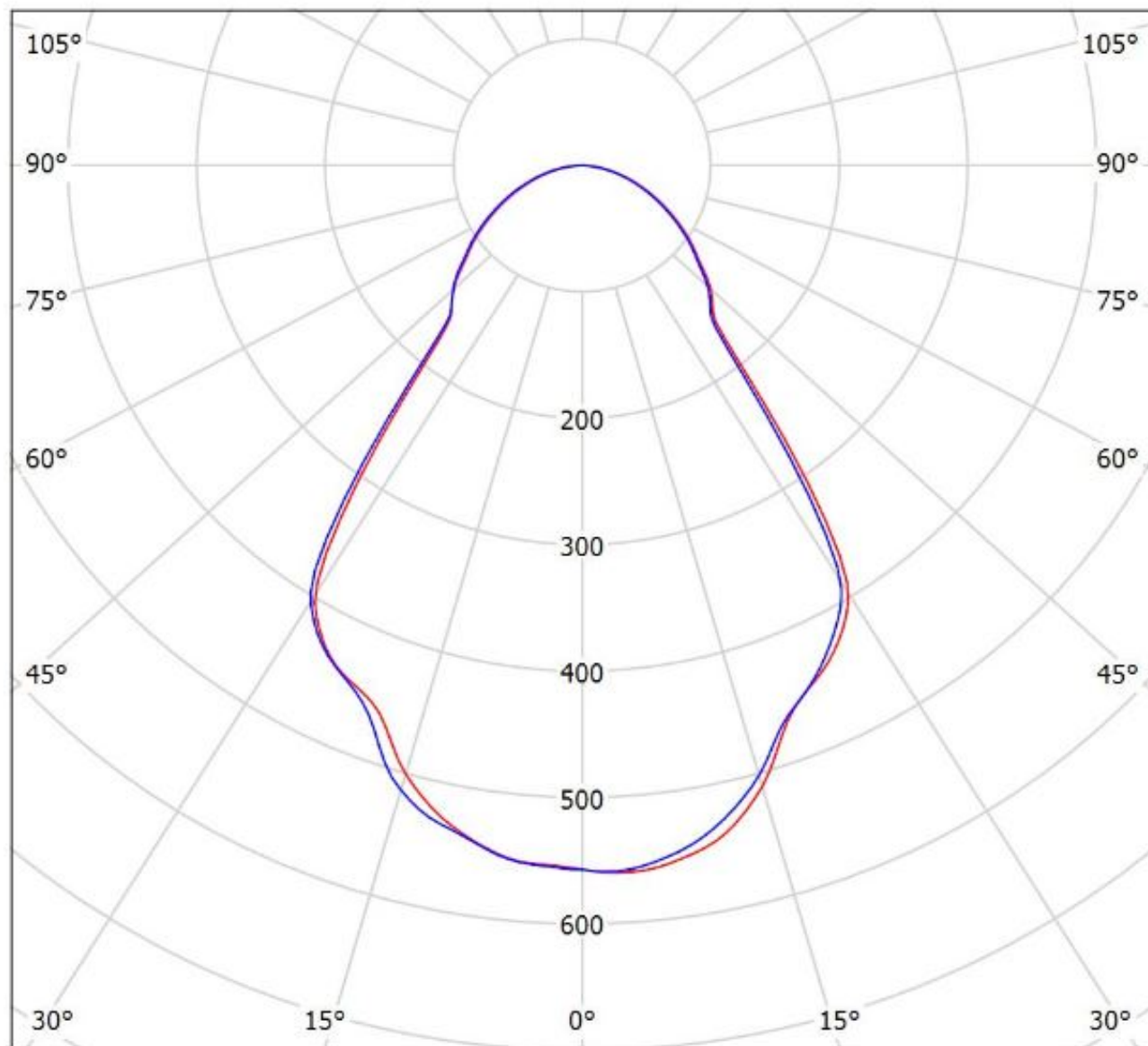
cd/klm  
— C0 - C180 — C90 - C270

$\eta = 90\%$



Luminaire: Ledil C13253\_TINA2-R-CLIP16\_(Z8Y19)

Lamps: 1 x Seoul\_Z8Y19\_111.337lm@250mA\_P=0.7402W\_I=0.25



cd/klm

— C0 - C180

— C90 - C270

$\eta = 89\%$

**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.**