

## DETAILS

<b>Product Number</b>	FCA14295_BILLIE-B
<b>Family</b>	Billie
<b>Type</b>	Lens
<b>Color</b>	white
<b>Diameter</b>	21,5 mm
<b>Height</b>	16,1 mm
<b>Style</b>	round
<b>Optic Material</b>	PMMA
<b>Holder Material</b>	PC
<b>Fastening</b>	pin, tape
<b>Status</b>	production ready
<b>ROHS Compliant</b>	Yes
<b>Date Updated</b>	25/09/2015



## OPTICAL PROPERTIES

LED	Viewing Angle	Light Beam	Efficiency	cd/lm	Connector
XP-G	asymmetric deg	Asymmetric	93 %	2.300	-
XP-E	asymmetric deg	Asymmetric	94 %	2.500	-
LUXEON Rebel	asymmetric deg	Asymmetric	93 %	2.100	-
LUXEON Rebel ES	asymmetric deg	Asymmetric	92 %	2.000	-
NCSxx19B	asymmetric deg	Asymmetric	92 %	2.100	-
NVSxx19B/NVSxx19C	asymmetric deg	Asymmetric	91 %	1.800	-
NF2x757D	asymmetric deg	Asymmetric	93 %	1.900	-
NF2x757G	sim: Asymmetric	Asymmetric	sim: 93 %	sim: 2.000	-
Oslon Square EC	asymmetric deg	Asymmetric	93 %	2.000	-
Duris S5 (2 chip)	asymmetric deg	Asymmetric	93 %	1.900	-
LH351Z	asymmetric deg	Asymmetric	94 %	2.300	-
LH351B	asymmetric deg	Asymmetric	93 %	2.100	-
Z5M1/Z5M2	asymmetric deg	Asymmetric	94 %	2.200	-

D

C

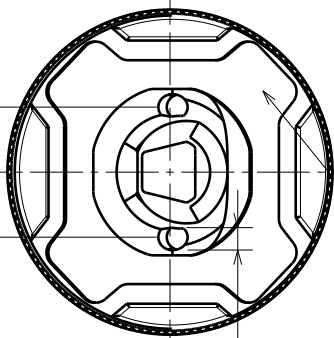
B

A

4

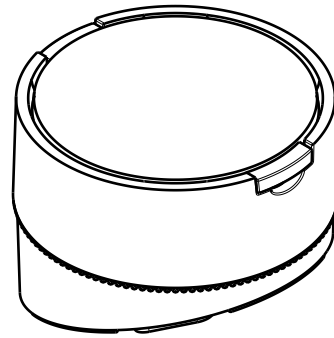
4

8.6



1.48

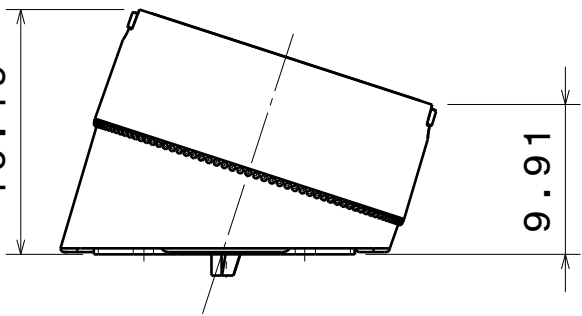
Tape 0,4 mm



3

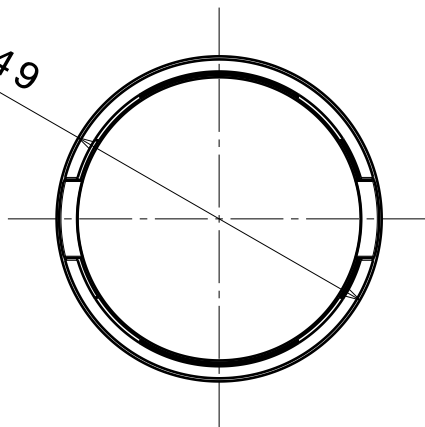
3

16.19



9.91

∅21.49



2

2

1

1

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** Ledil Oy  
 Salorankatu 10  
 FIN 24240 SALO  
 Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE  
**BILLIE datasheet**

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SIZE	PART NUMBER		
A4			

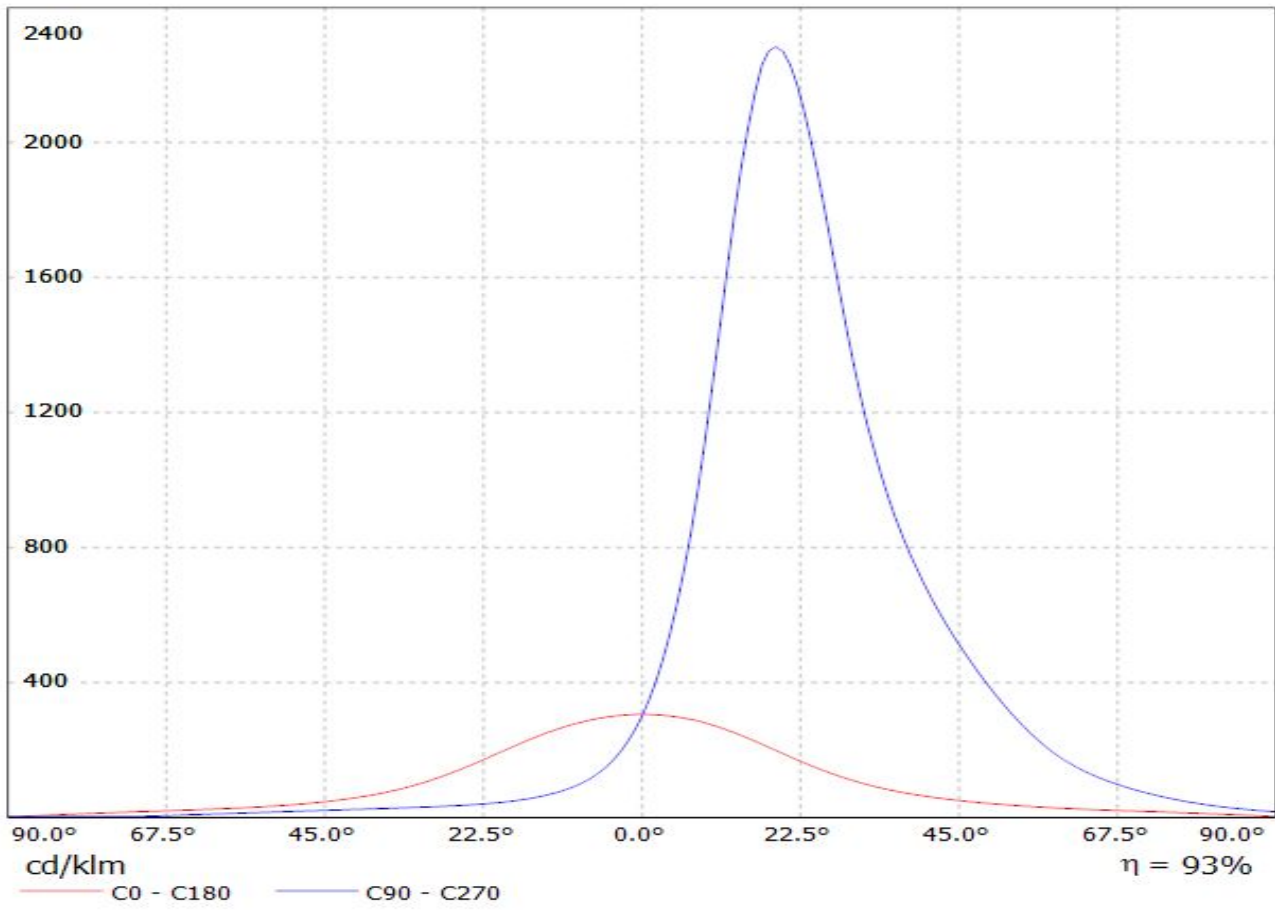
SCALE	2:1	WEIGHT	-	SHEET	1/1
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D

A

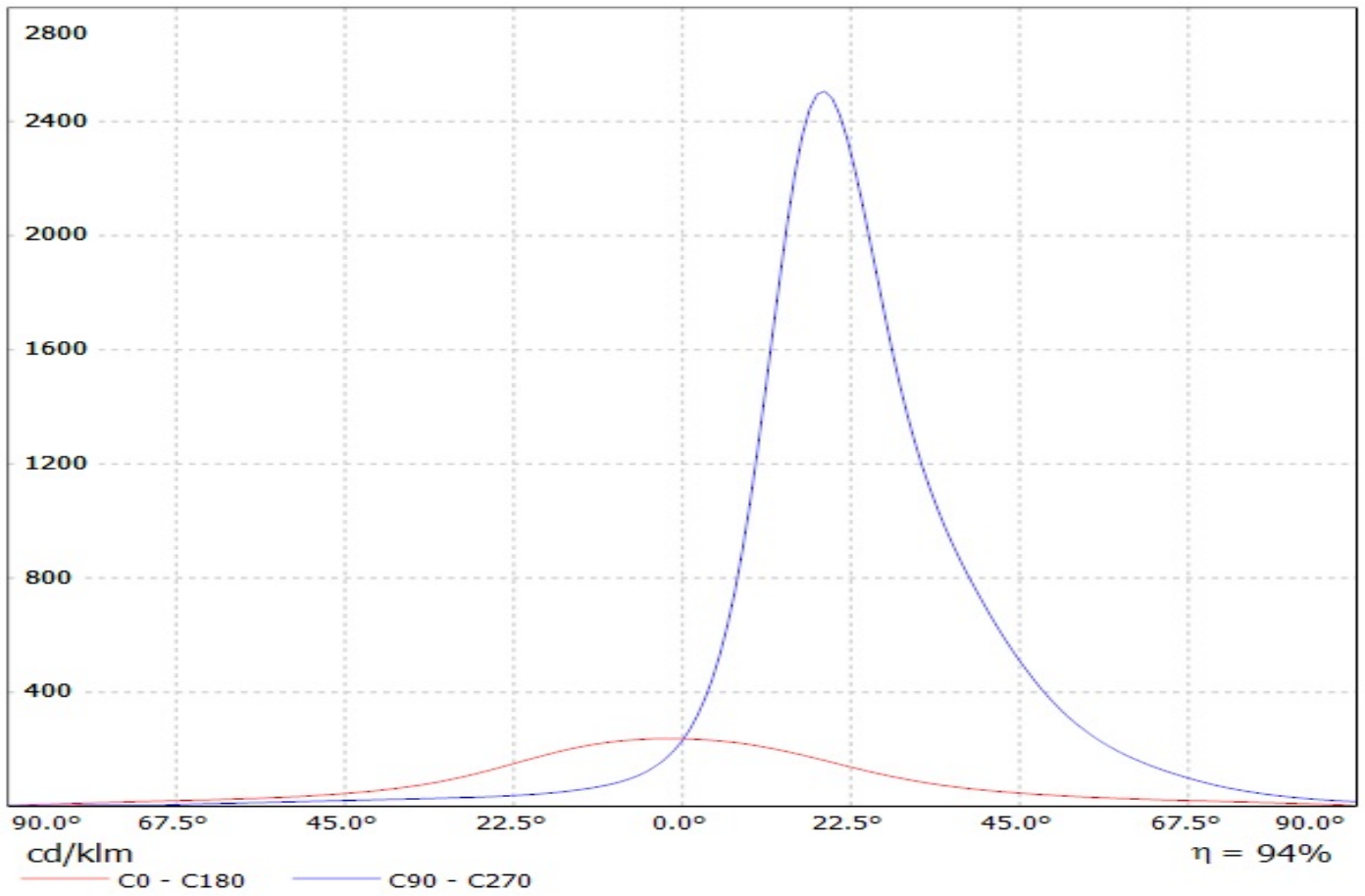
Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(XP-G)

Lamps: 1 x Cree\_XP-G\_(XPGWHT-L1-CWPI-00BE7)\_67.1176lm@250mA\_CCT=3061K\_P=0.769392W\_I=0.2499A

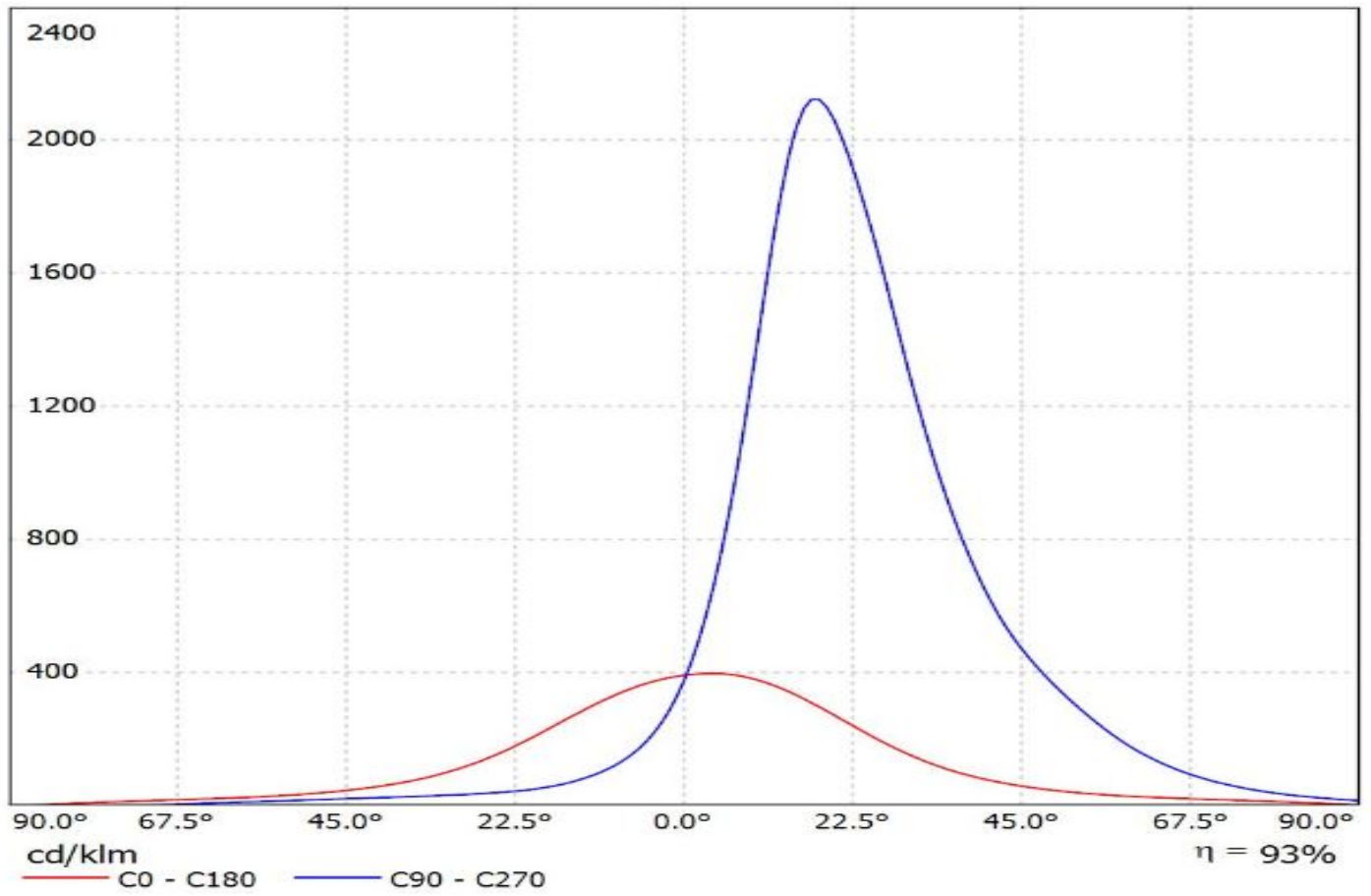


Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(XP-E)

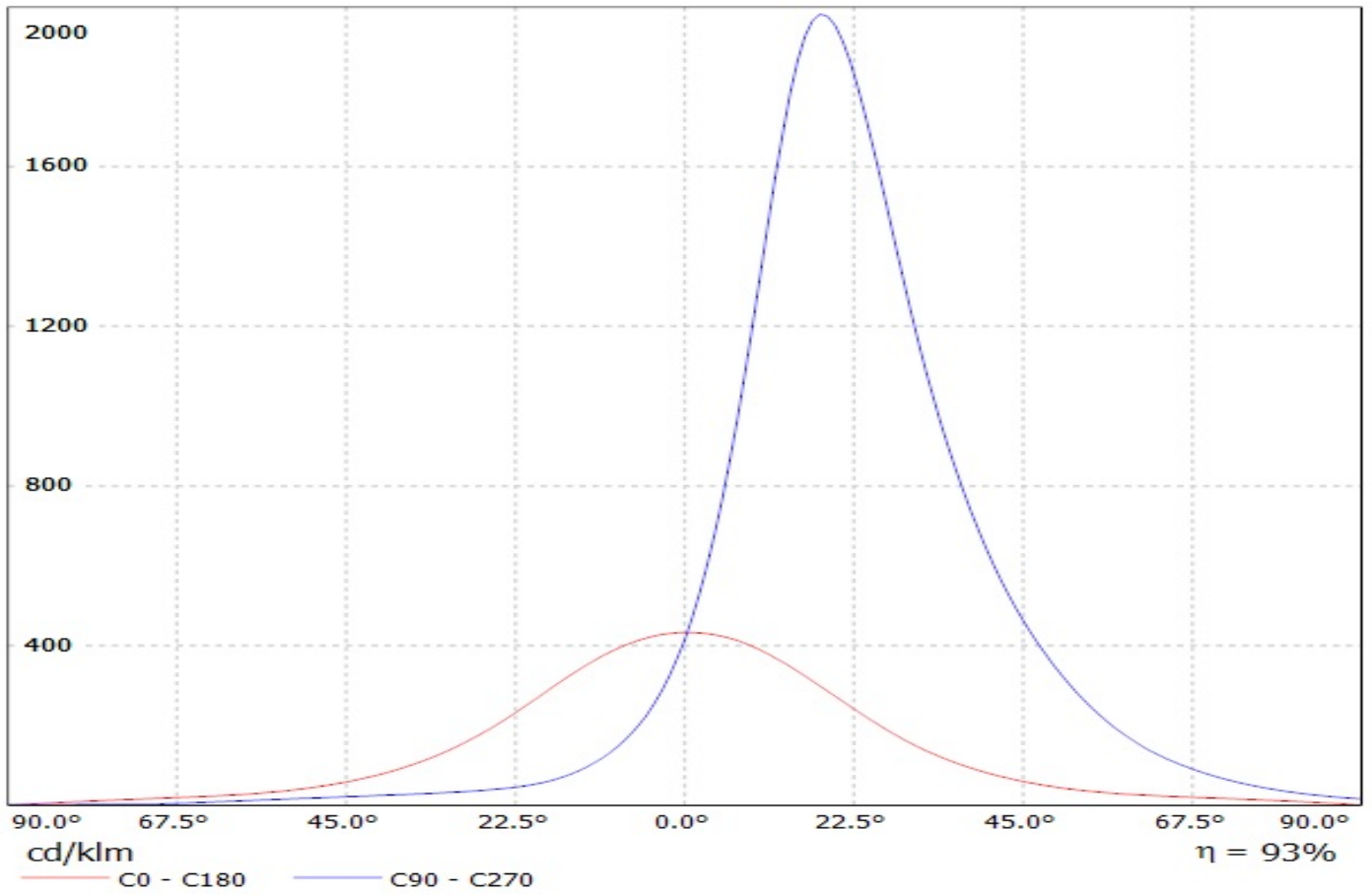
Lamps: 1 x Cree\_XP-E\_(XPEWHT-L1-3C0-Q5-0-06)\_77.7798lm@250mA\_P=0.801004W\_I=0.2499A



Luminaire: Ledil FCA14295\_BILLIE-B\_(Luxeon\_Rebel)  
Lamps: 1 x Luxeon\_Rebel\_62.1381lm@250mA\_P=0.7275W\_I=0.25A

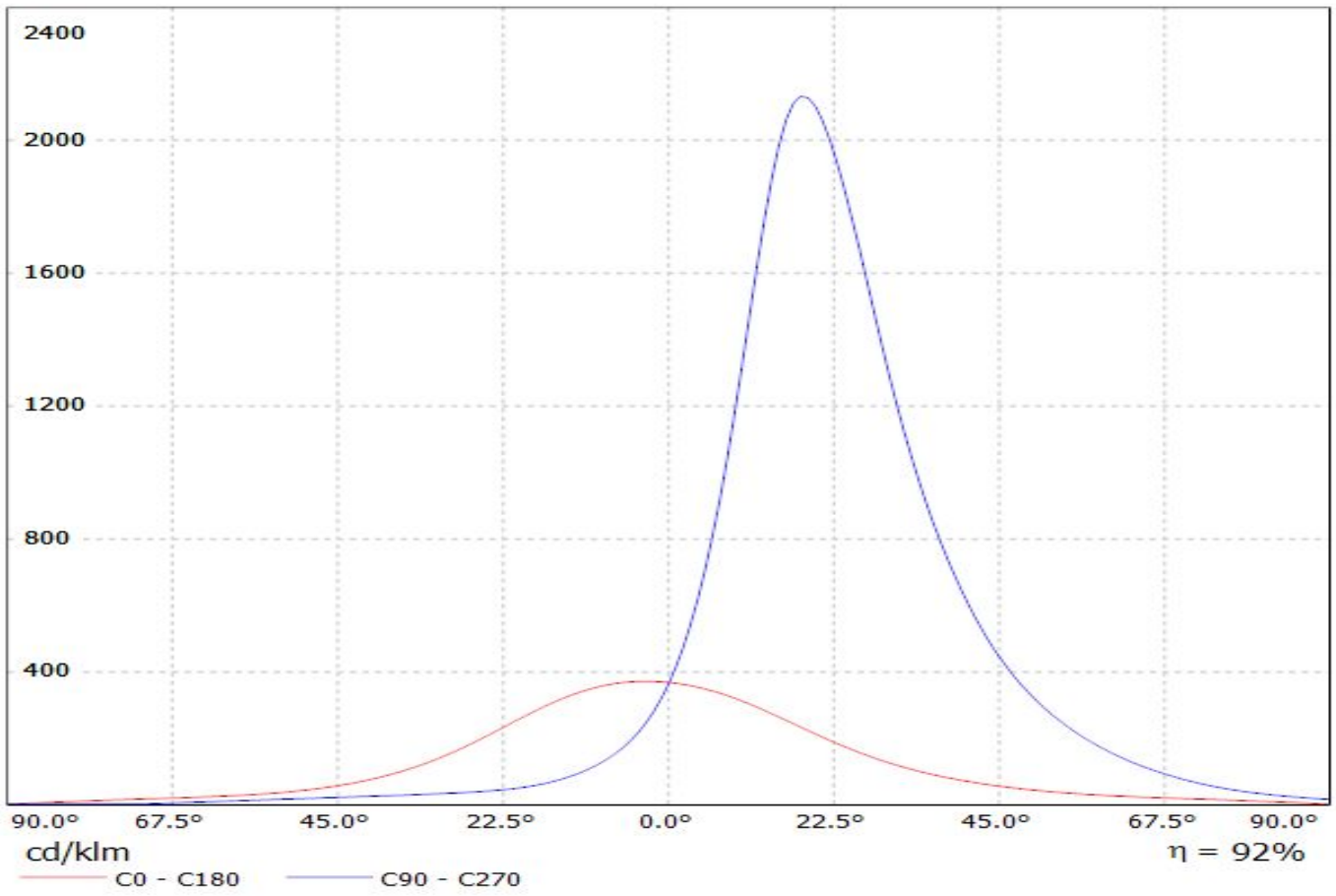


Luminaire: Ledil FCA14295\_BILLIE-B\_(Luxeon\_Rebel\_ES)  
Lamps: 1 x Luxeon\_Rebel\_ES\_91.0375lm@250mA\_P=0.73W\_I=0.25A



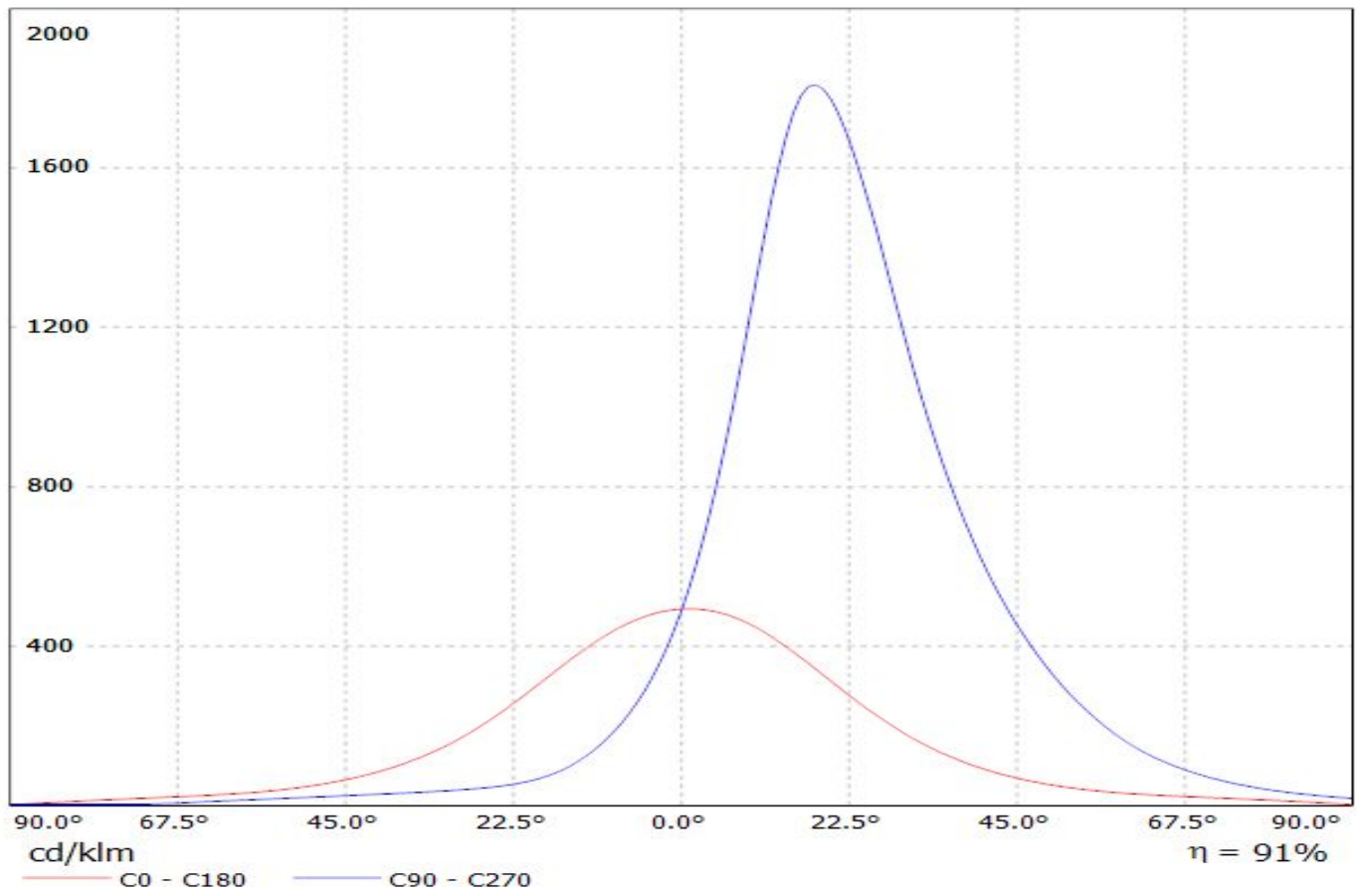
Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(NCSxx19B)

Lamps: 1 x Nichia\_NCSxx19B\_(NCSL119BE)\_91.169lm@250mA\_P=0.795532W\_I=0.2499A



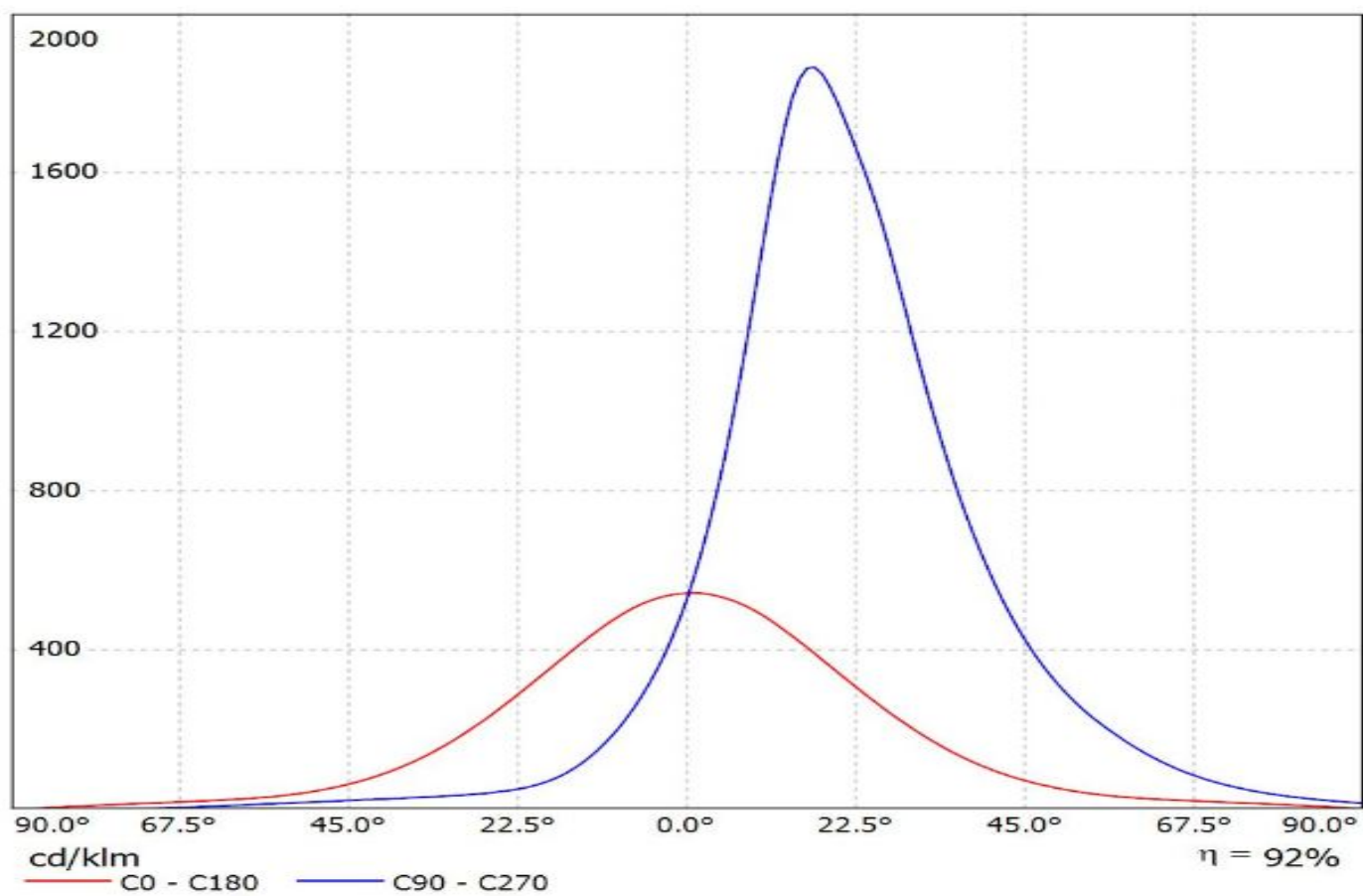
Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(NVSxx19B)

Lamps: 1 x Nichia\_NVsxx19B\_108.673lm@250mA\_P=0.776189W\_I=0.2499A

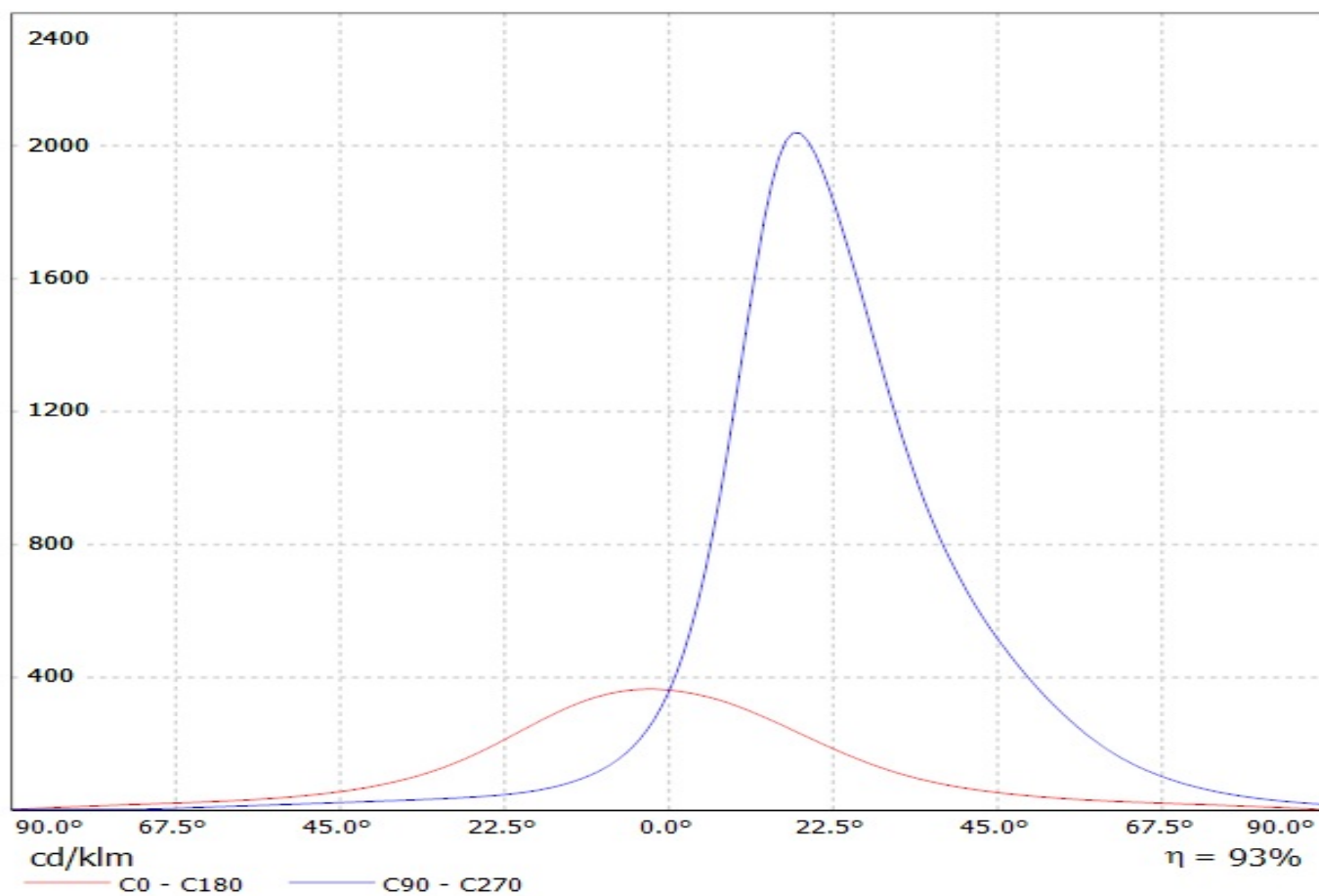




Luminaire: Ledil FCA14295\_BILLIE-B\_(NF2x757D)  
Lamps: 1 x Nichia\_NF2x757D\_53.1588lm@65mA\_P=0.3744W\_I=0.065A

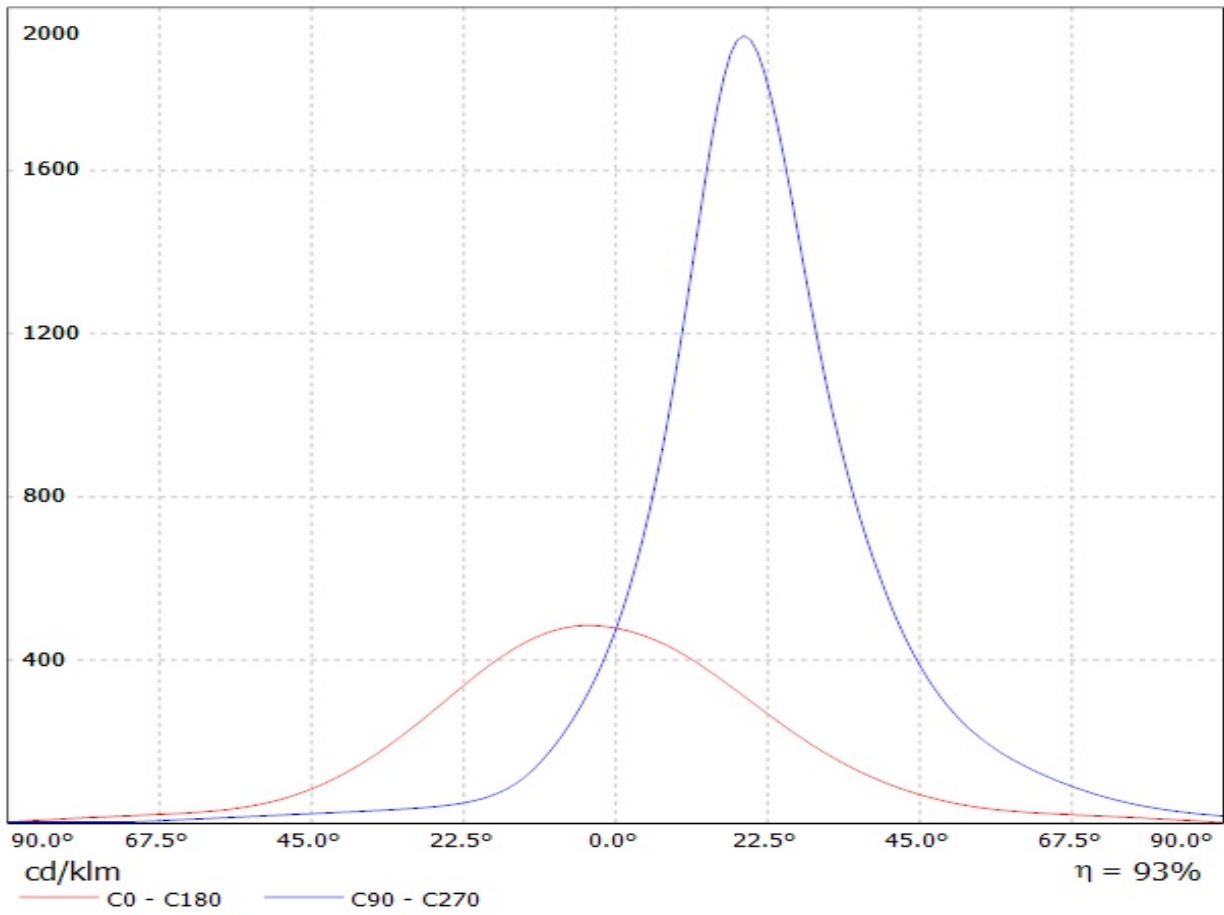


Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(Oslon\_Square\_EC)  
Lamps: 1 x Osram\_Oslon\_Square\_EC\_(GW\_CSSRM1.EC)\_85.7621lm@250mA\_P=0.738355W\_I=0.2499A

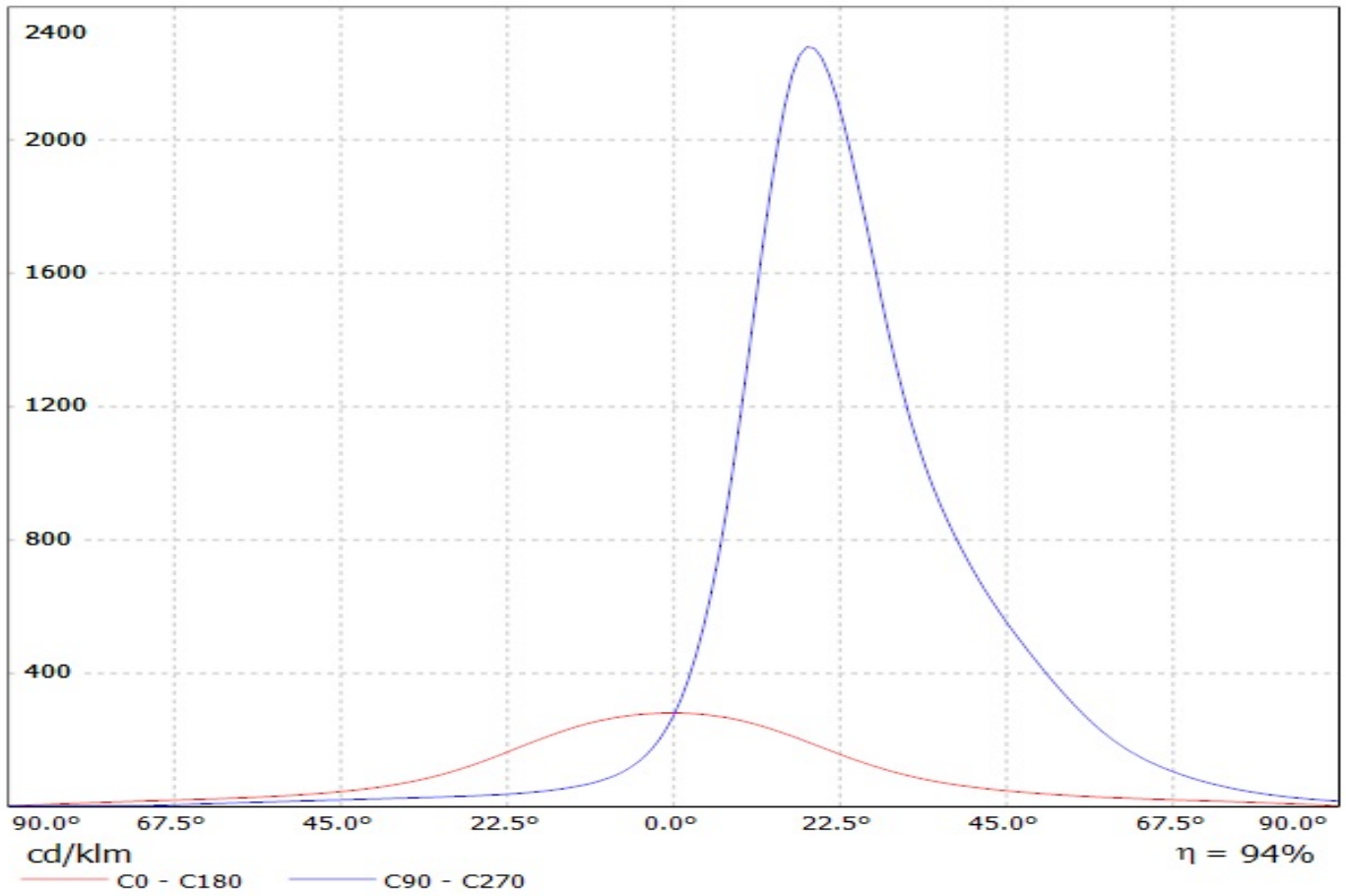


Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(Duris\_S5\_(2\_chip))

Lamps: 1 x Osram\_Duris\_S5\_(2\_chip)\_(GW\_PSLRS1.EC-LQLS-5H7I-1)\_123.51lm@150mA\_P=0.932856W\_I=0.1501A

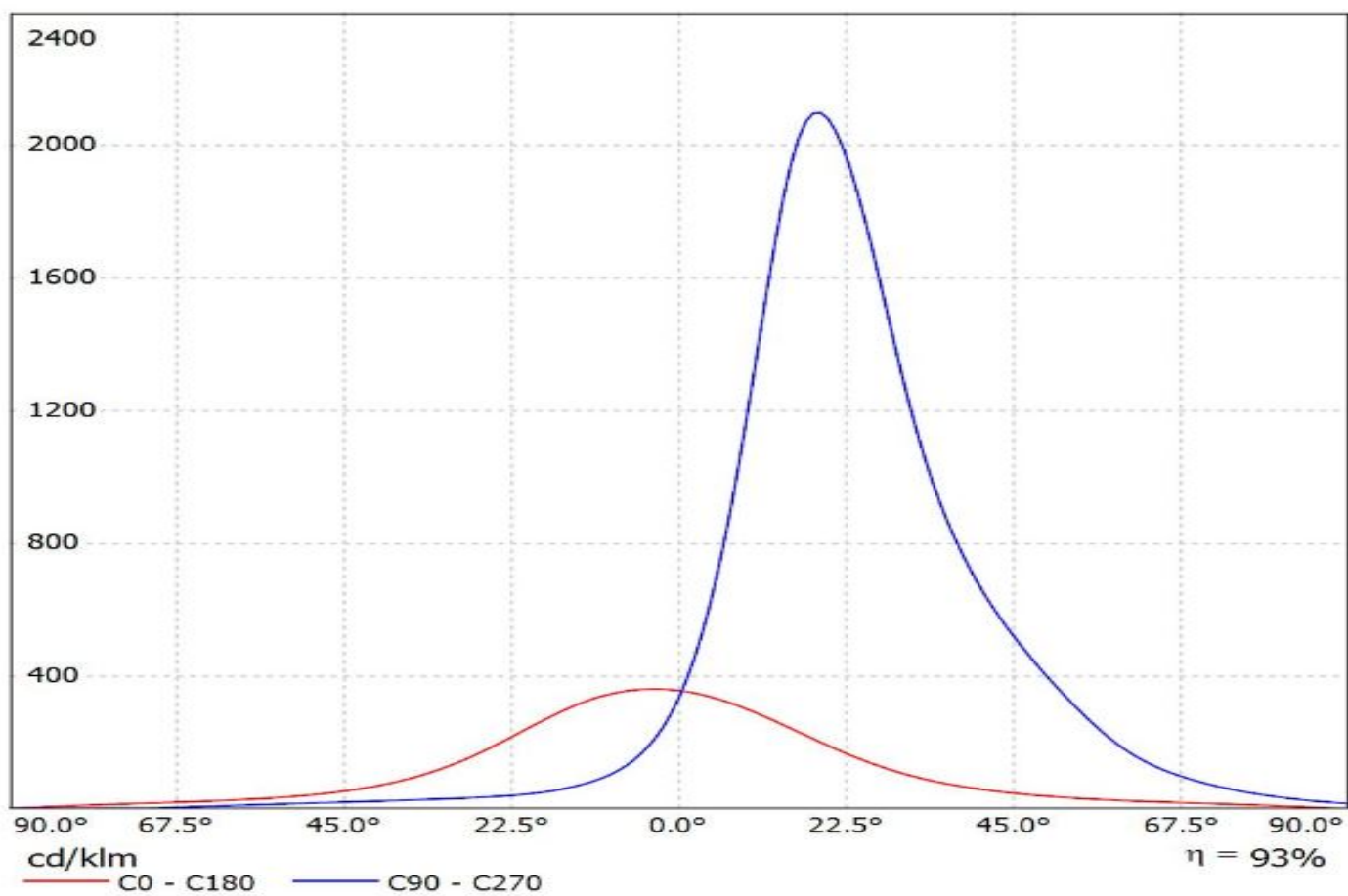


Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(LH351Z)  
Lamps: 1 x Samsung\_LH351Z\_91.6272lm@250mA\_CCT=6506K\_P=0.746301W\_I=0.2499A



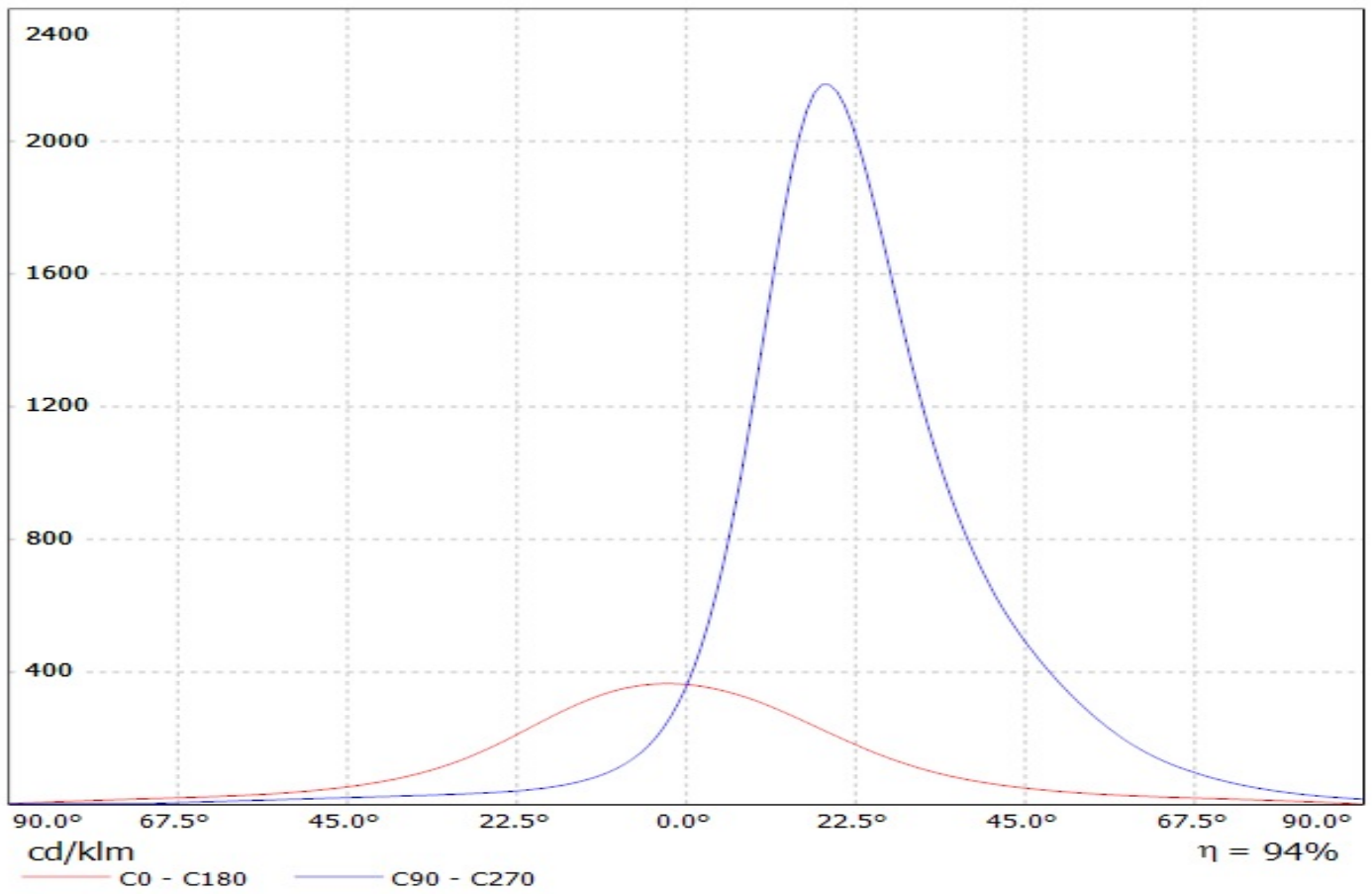
Luminaire: Ledil FCA14295\_BILLIE-B\_(LH315B)

Lamps: 1 x Samsung\_LH315B\_110.075lm@250mA\_P=0.7275W\_I=0.25A



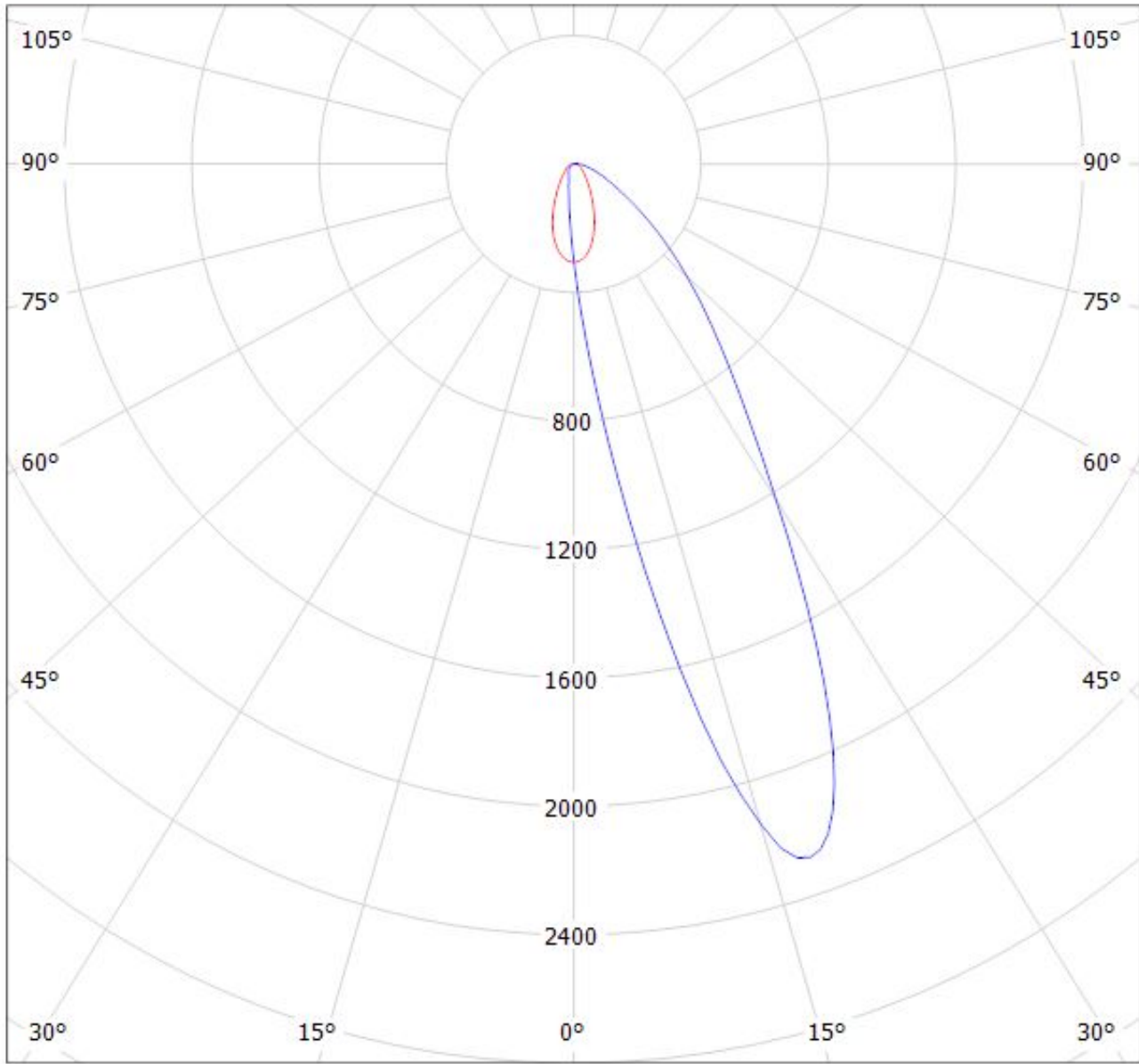
Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(Z5M1)

Lamps: 1 x Seoul\_Z5M1\_(SZ5-M1-W0-C8)\_111.713lm@250mA\_P=0.745402W\_I=0.2499A



Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(XP-G)

Lamps: 1 x Cree\_XP-G\_(XPGWHT-L1-CWPI-00BE7)\_67.1176lm@250mA\_CCT=3061K\_P=0.769392W\_I=0.2499A



cd/klm

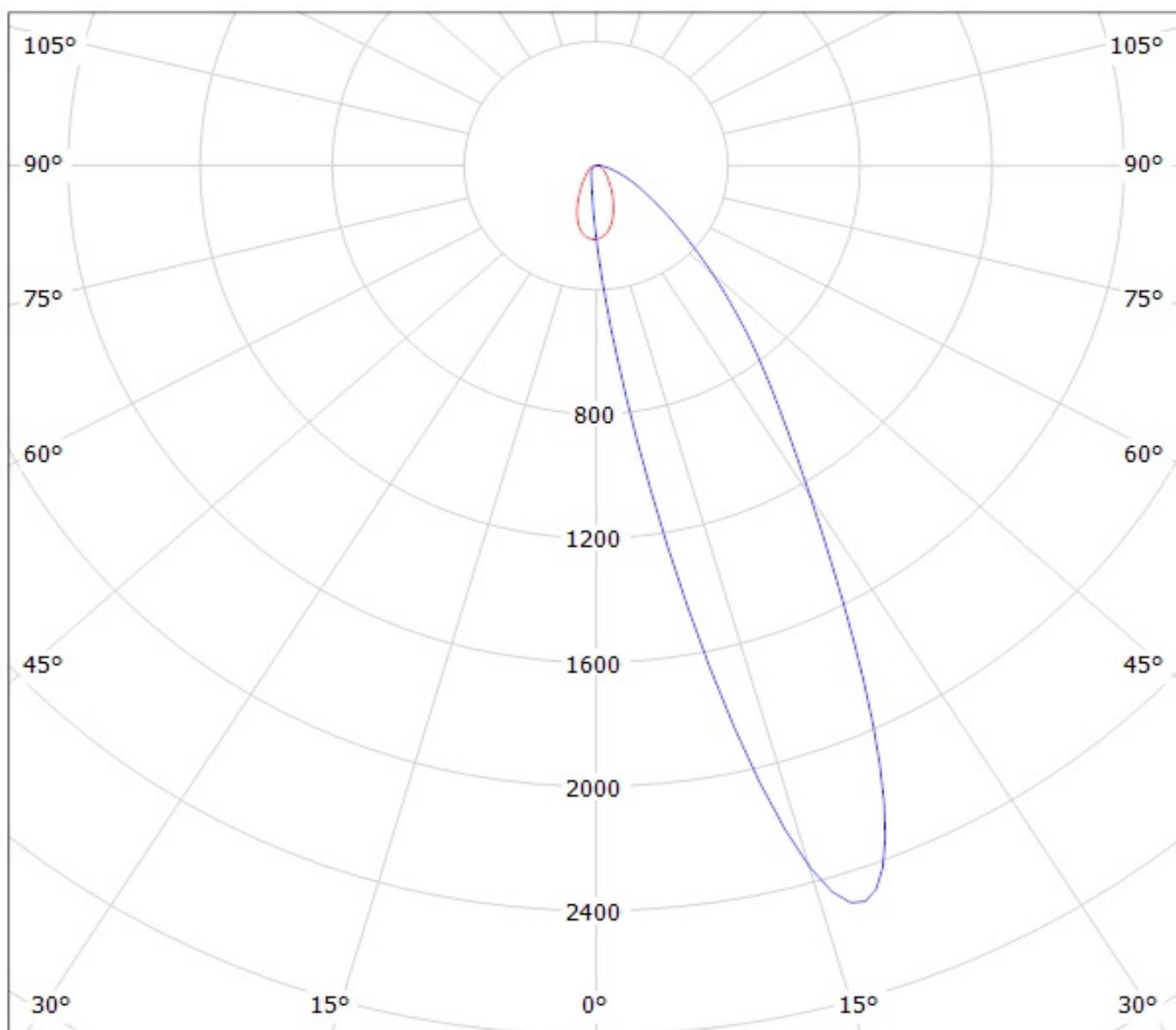
— C0 - C180

— C90 - C270

$\eta = 93\%$

Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(XP-E)

Lamps: 1 x Cree\_XP-E\_(XPEWHT-L1-3C0-Q5-0-06)\_77.7798lm@250mA\_P=0.801004W\_I=0.2499A



cd/klm

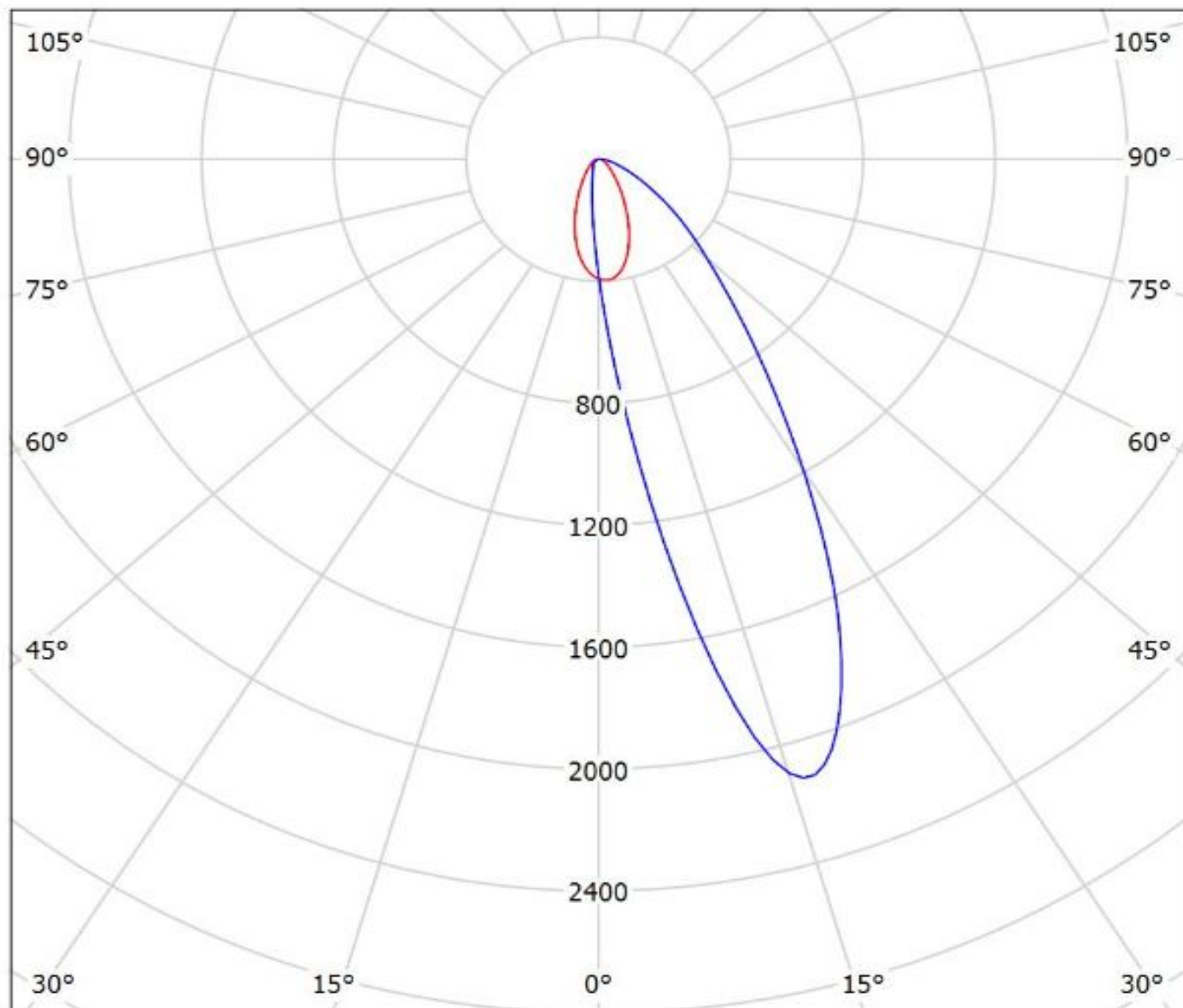
— C0 - C180

— C90 - C270

$\eta = 94\%$



Luminaire: Ledil FCA14295\_BILLIE-B\_(Luxeon\_Rebel)  
Lamps: 1 x Luxeon\_Rebel\_62.1381lm@250mA\_P=0.7275W\_I=0.25A

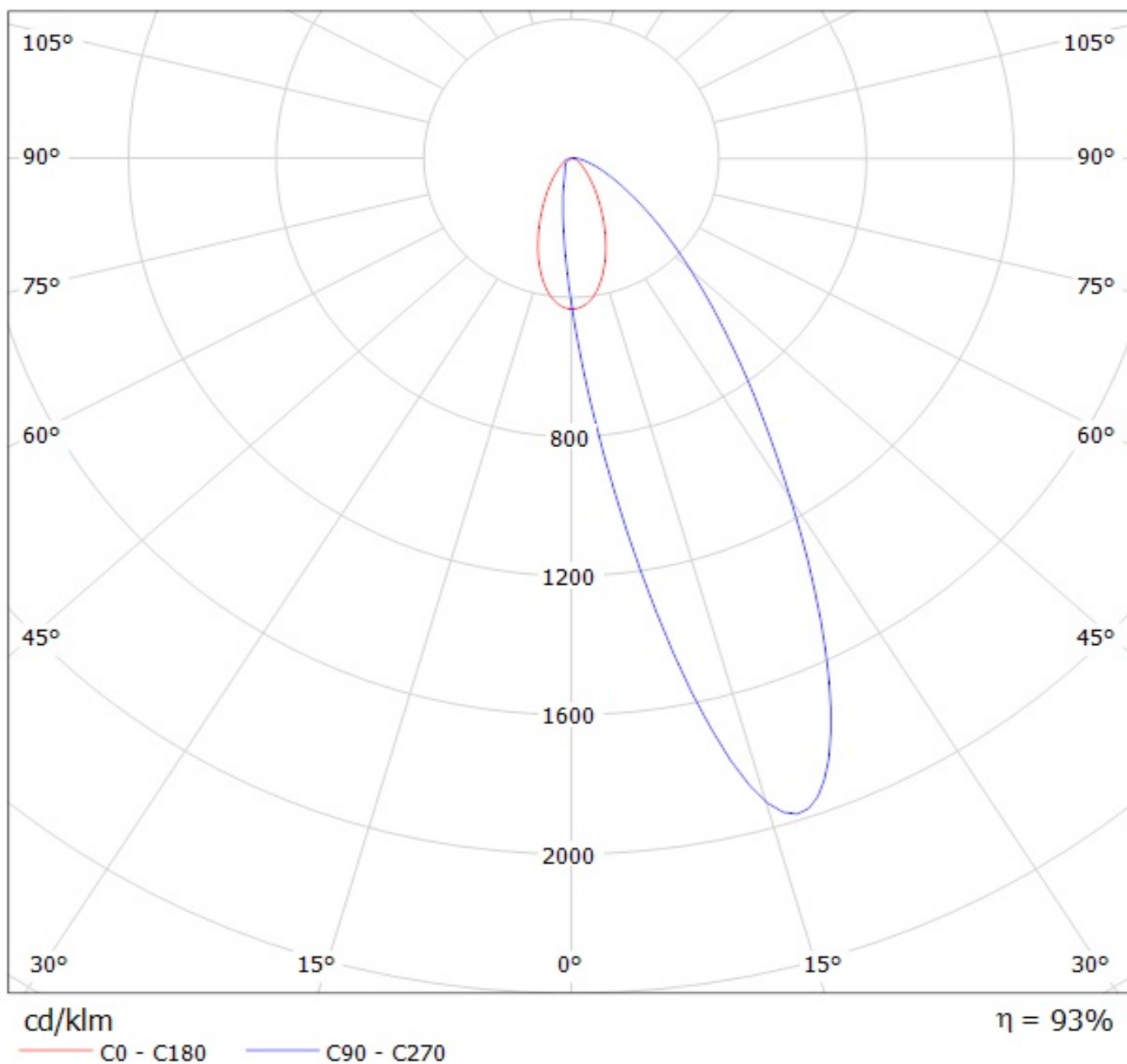


cd/klm

— C0 - C180 — C90 - C270

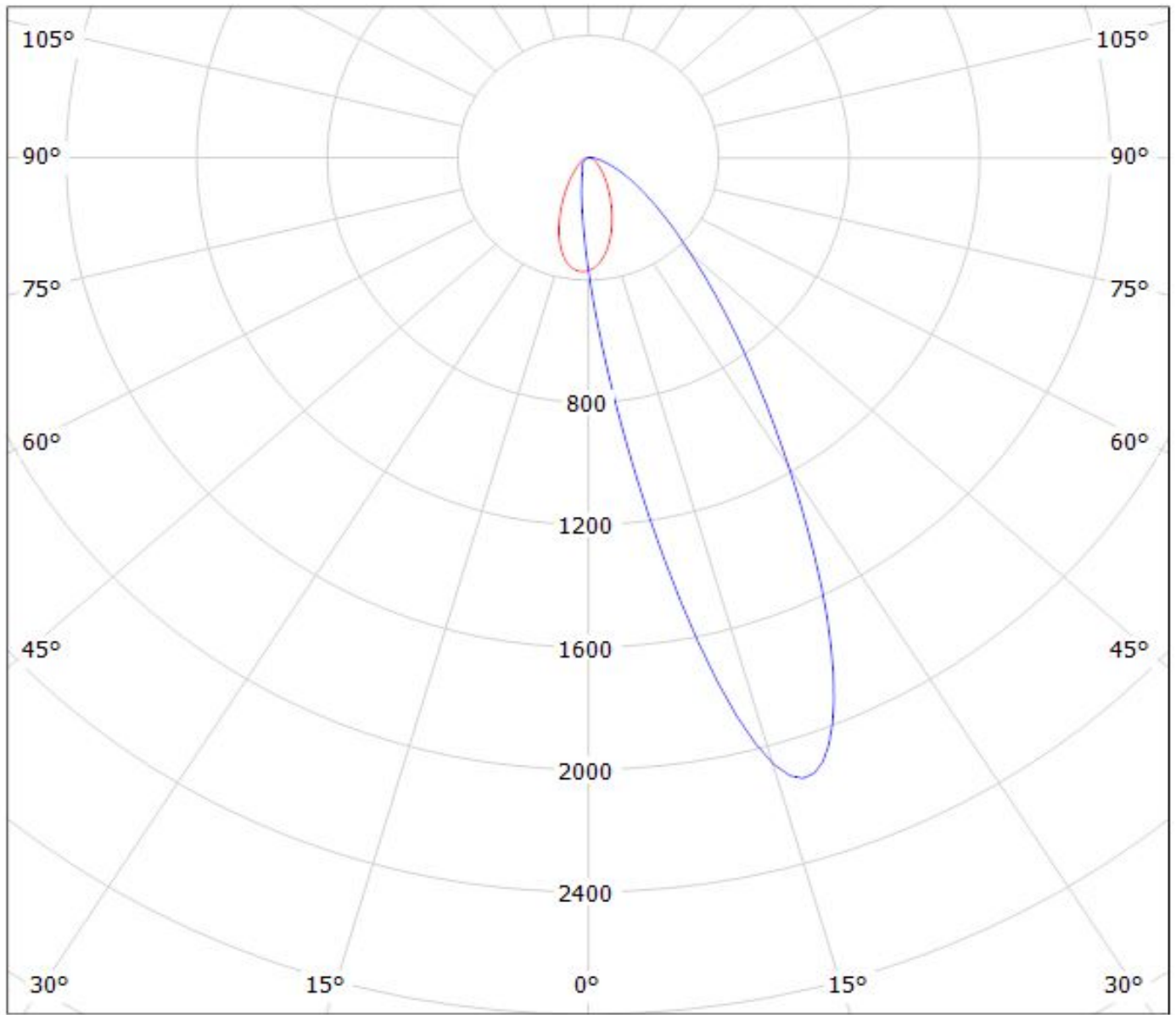
$\eta = 93\%$

Luminaire: Ledil FCA14295\_BILLIE-B\_(Luxeon\_Rebel\_ES)  
Lamps: 1 x Luxeon\_Rebel\_ES\_91.0375lm@250mA\_P=0.73W\_I=0.25A



Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(NCSxx19B)

Lamps: 1 x Nichia\_NCSxx19B\_(NCSL119BE)\_91.169lm@250mA\_P=0.795532W\_I=0.2499A



cd/klm

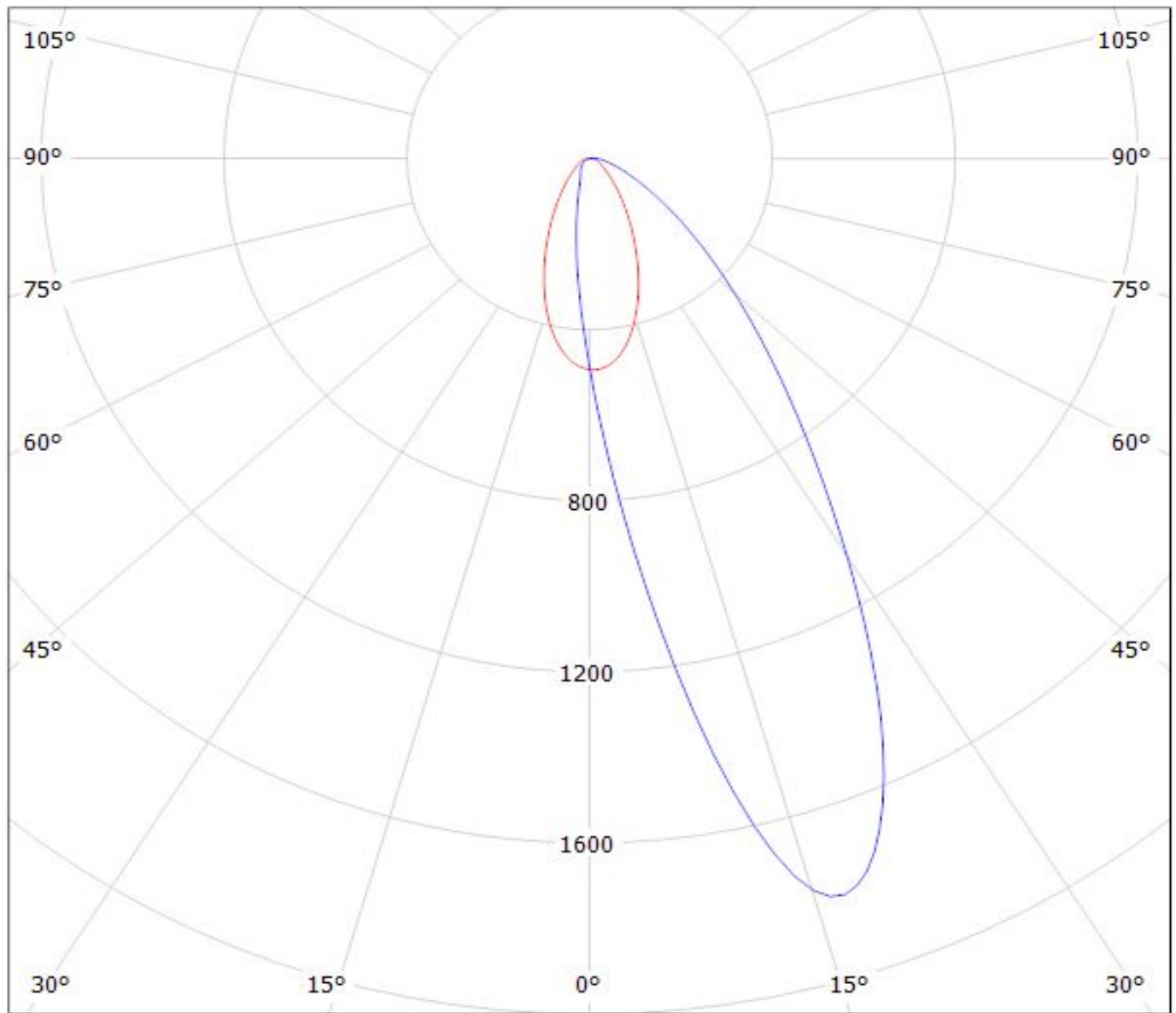
— C0 - C180

— C90 - C270

$\eta = 92\%$

Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(NVSxx19B)

Lamps: 1 x Nichia\_NVsxx19B\_108.673lm@250mA\_P=0.776189W\_I=0.2499A



cd/klm

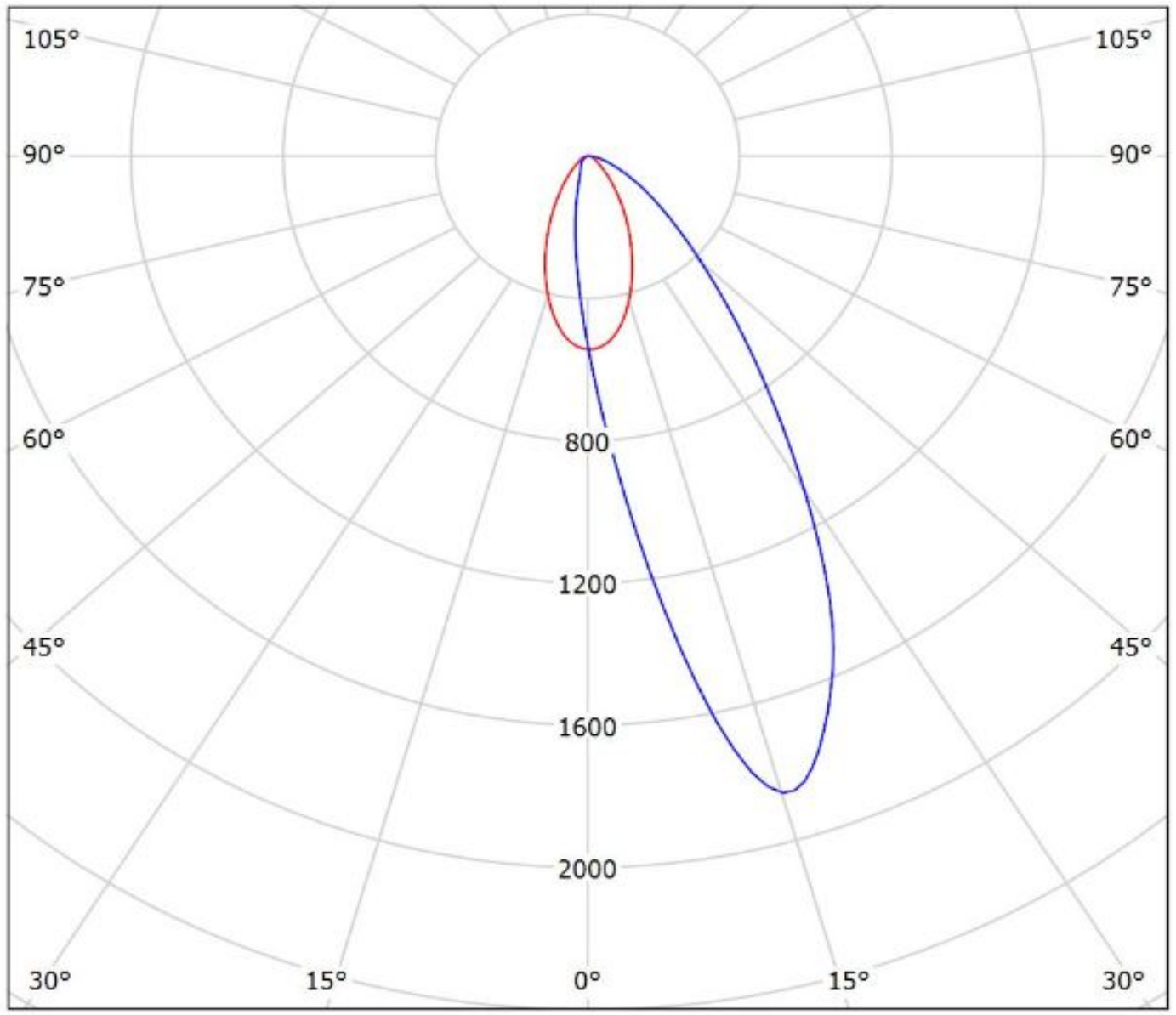
— C0 - C180

— C90 - C270

$\eta = 91\%$

Luminaire: Ledil FCA14295\_BILLIE-B\_(NF2x757D)

Lamps: 1 x Nichia\_NF2x757D\_53.1588lm@65mA\_P=0.3744W\_I=0.065A

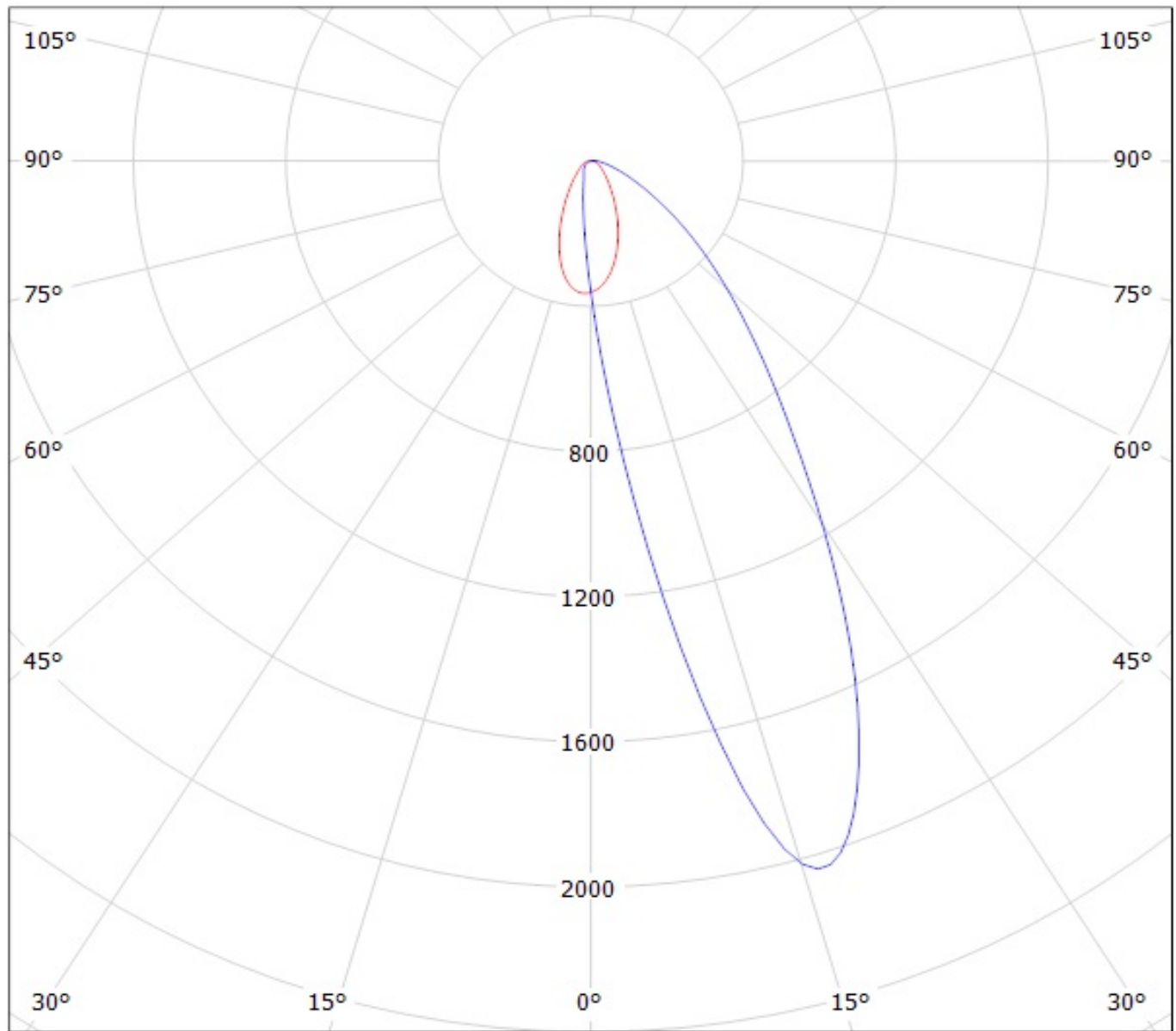


cd/klm  
— C0 - C180 — C90 - C270

$\eta = 92\%$

Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(Oslon\_Square\_EC)

Lamps: 1 x Osram\_Oslon\_Square\_EC\_(GW\_CSSRM1.EC)\_85.7621lm@250mA\_P=0.738355W\_I=0.2499A



cd/klm

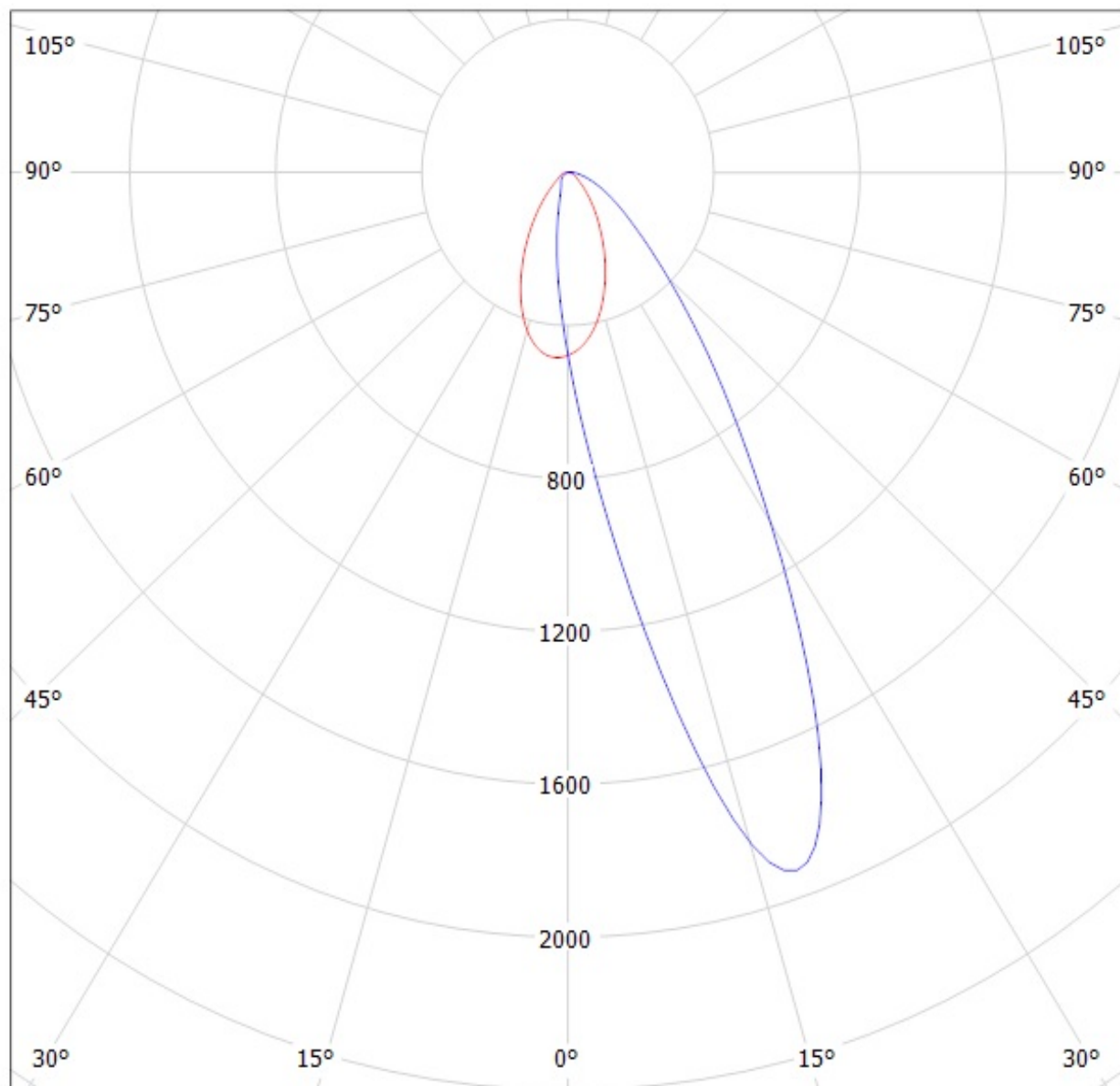
— C0 - C180 — C90 - C270

$\eta = 93\%$



Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(Duris\_S5\_(2\_chip))

Lamps: 1 x Osram\_Duris\_S5\_(2\_chip)\_(GW\_PSLRS1.EC-LQLS-5H7I-1)\_123.5lm@150mA\_P=0.932856W\_I=0.1501A



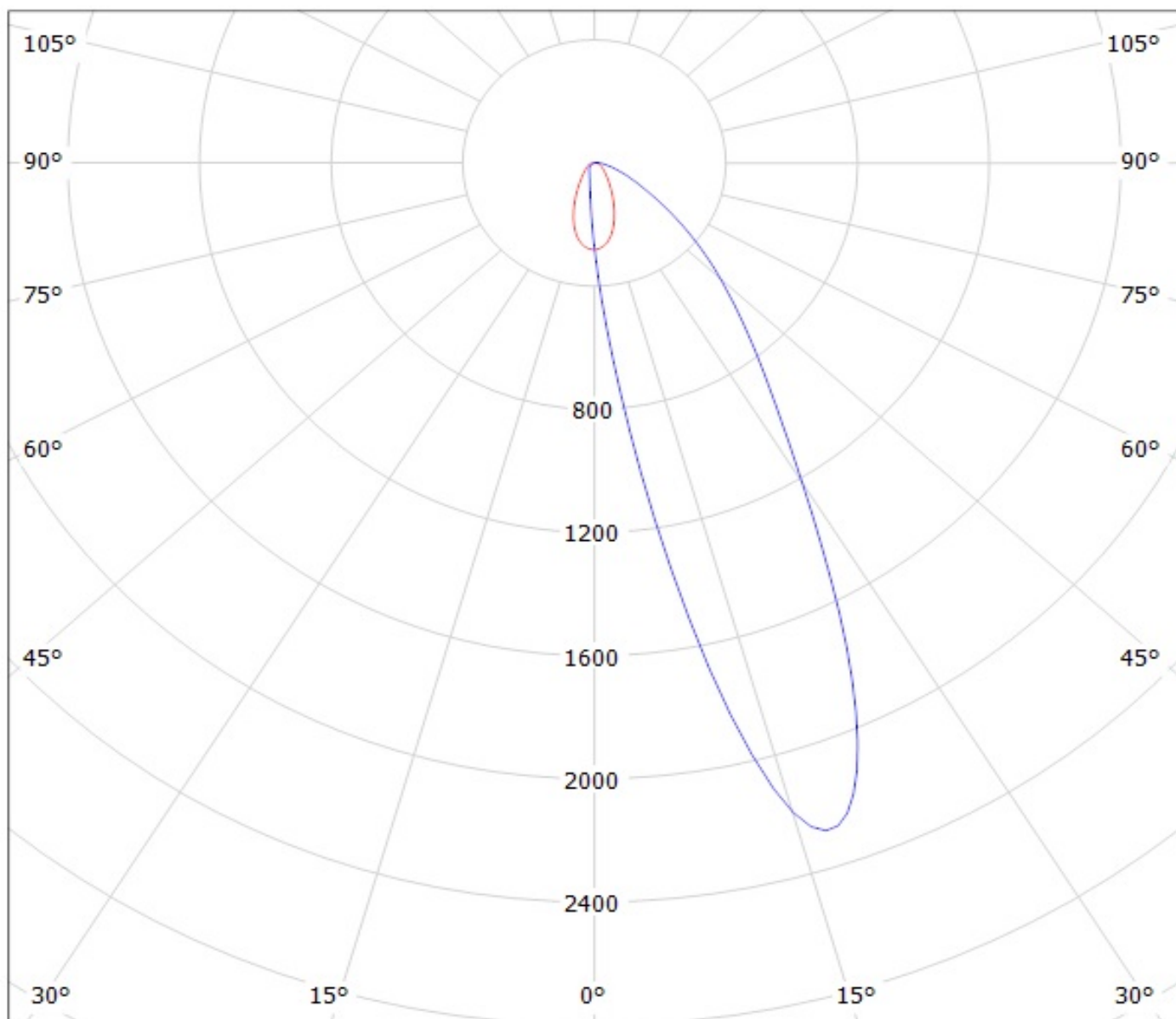
cd/klm

— C0 - C180 — C90 - C270

$\eta = 93\%$

Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(LH351Z)

Lamps: 1 x Samsung\_LH351Z\_91.6272lm@250mA\_CCT=6506K\_P=0.746301W\_I=0.2499A



cd/klm

$\eta = 94\%$

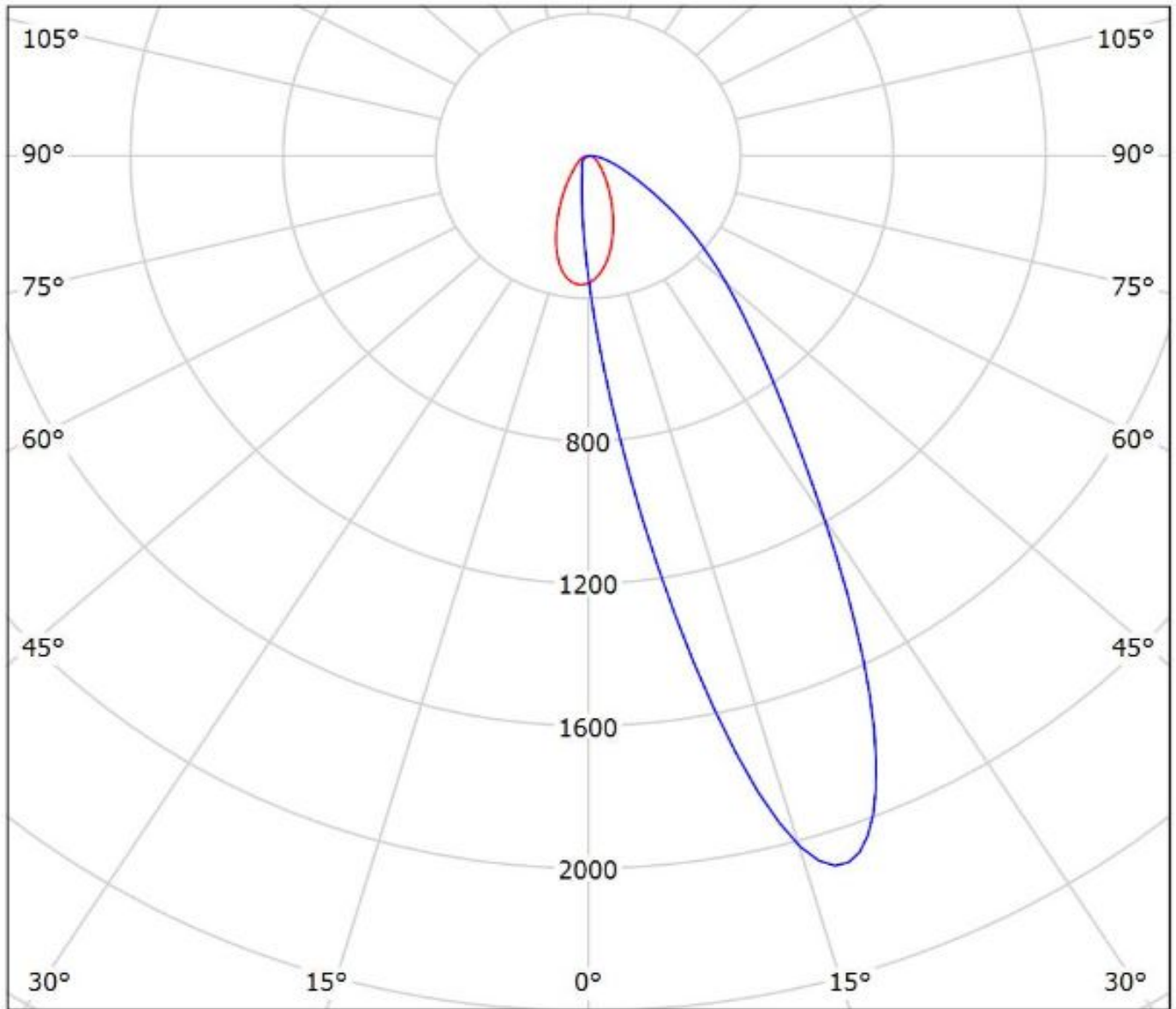
— C0 - C180

— C90 - C270



Luminaire: Ledil FCA14295\_BILLIE-B\_(LH315B)

Lamps: 1 x Samsung\_LH315B\_110.075lm@250mA\_P=0.7275W\_I=0.25A



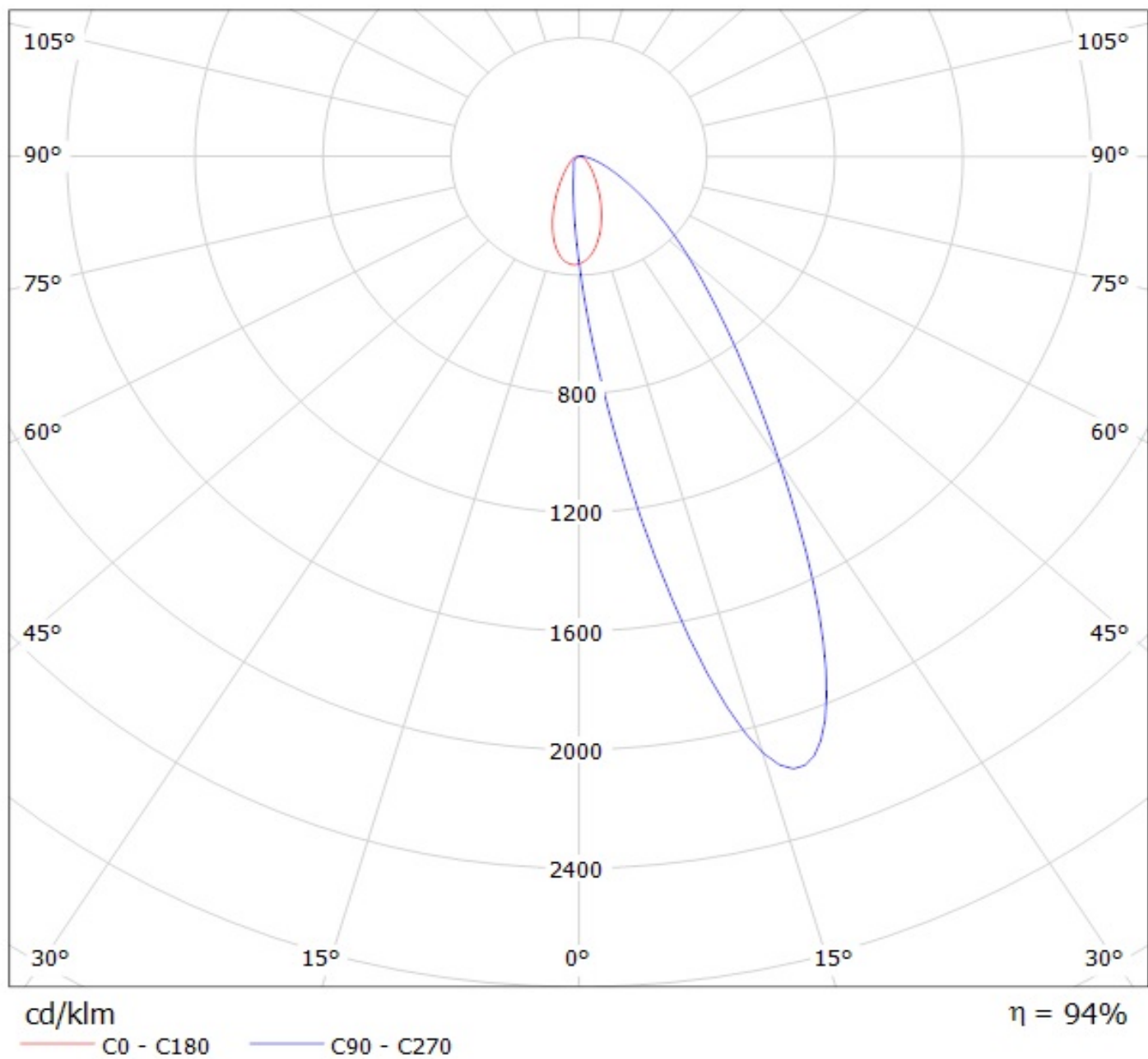
cd/klm

— C0 - C180 — C90 - C270

$\eta = 93\%$

Luminaire: LEDiL Oy FCA14295\_BILLIE-B\_(Z5M1)

Lamps: 1 x Seoul\_Z5M1\_(SZ5-M1-W0-C8)\_111.713lm@250mA\_P=0.745402W\_I=0.2499A



**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.**