

## DETAILS

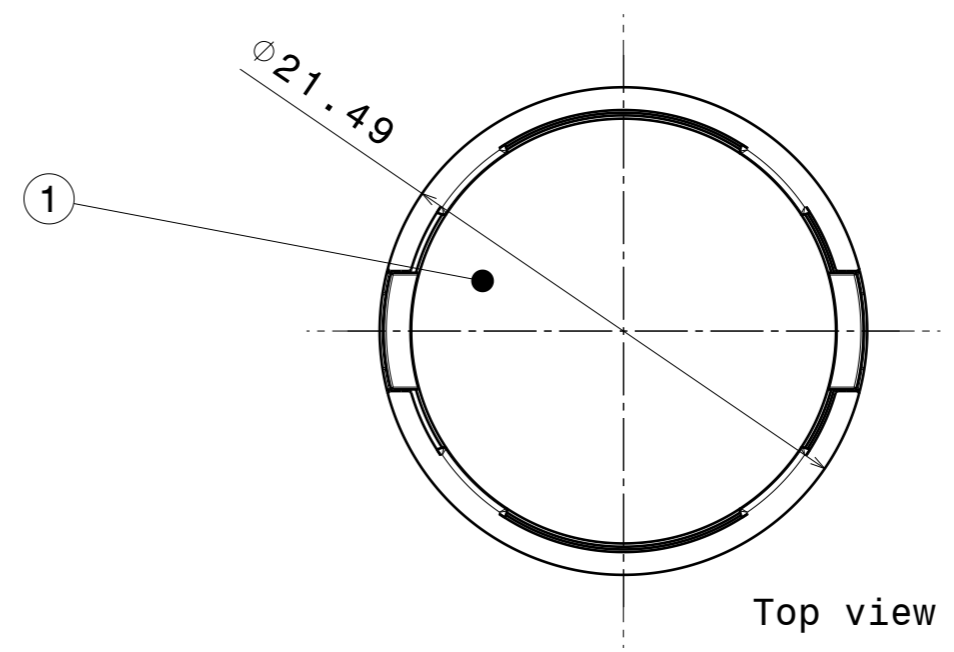
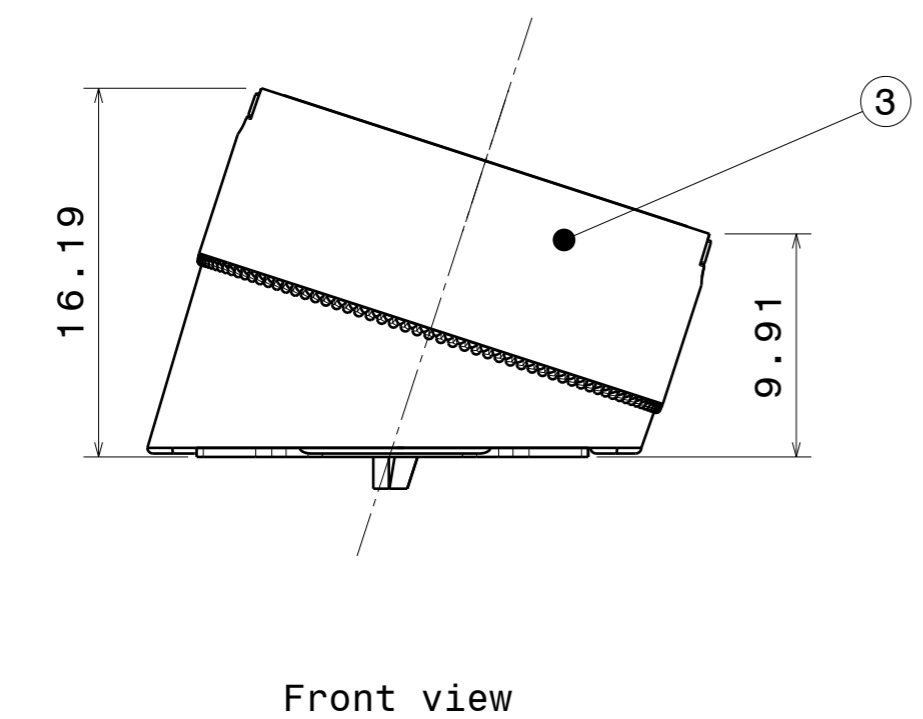
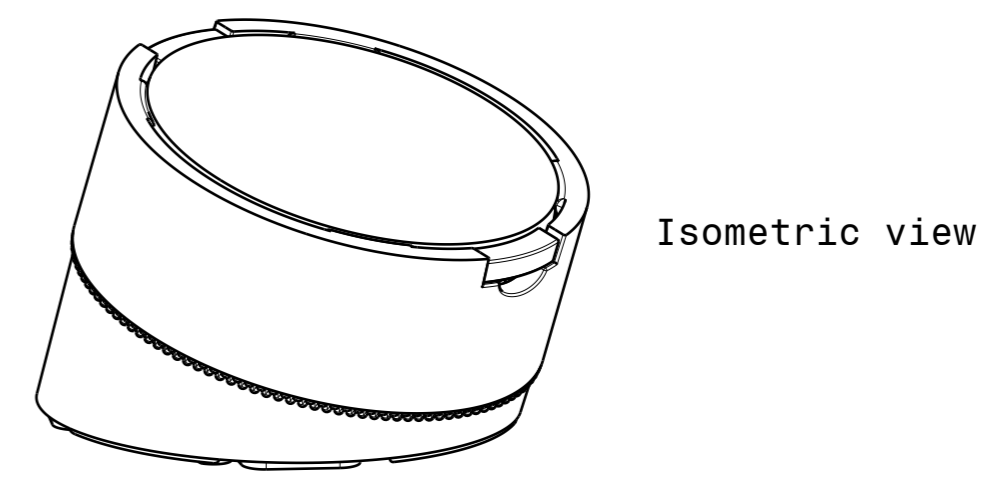
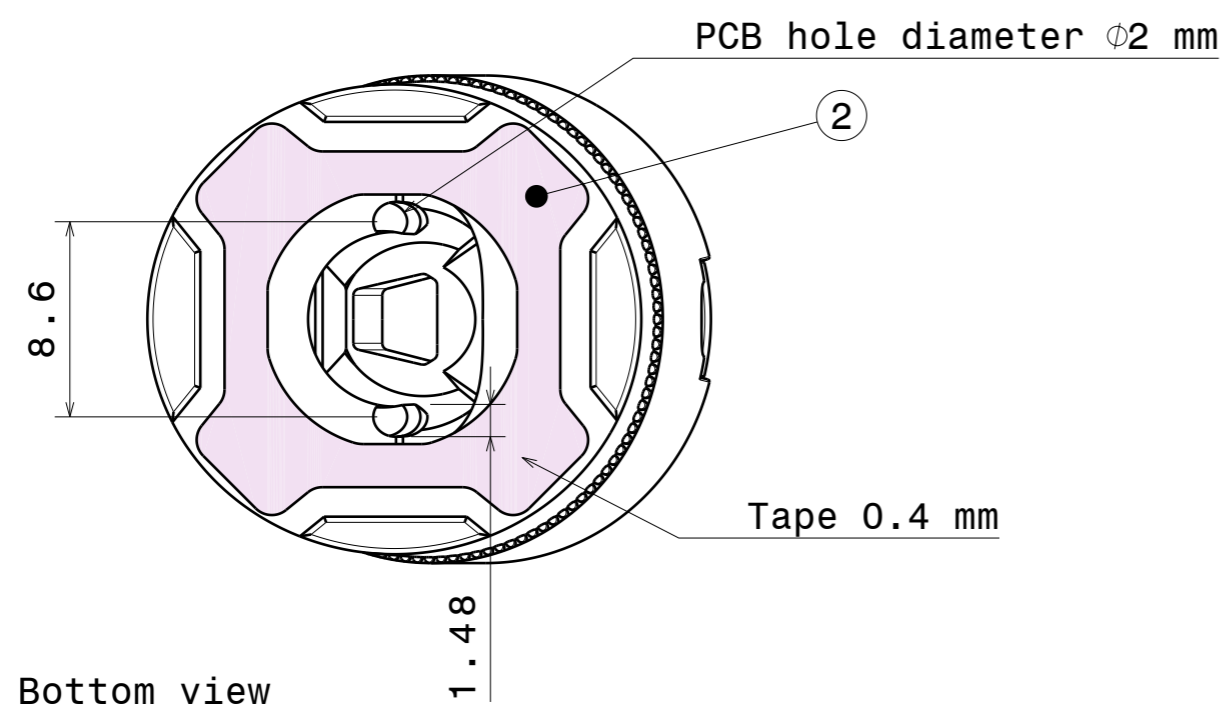
<b>Product Number</b>	FCA13329_BILLIE-A
<b>Family</b>	Billie
<b>Type</b>	Assembly
<b>Color</b>	white
<b>Diameter</b>	21,5 mm
<b>Height</b>	16,1 mm
<b>Style</b>	round
<b>Optic Material</b>	PMMA
<b>Holder Material</b>	
<b>Fastening</b>	tape, pin
<b>Status</b>	production ready
<b>ROHS Compliant</b>	Yes
<b>Date Updated</b>	2/07/2014




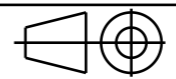
## OPTICAL PROPERTIES

LED	Viewing	Light	Efficiency	cd/lm	Connector
	Angle	Beam			
XB-D	Asymmetric deg	Asymmetric	85 %	2.100	-
XT-E	Asymmetric deg	Asymmetric	87 %	2.100	-
XP-G	Asymmetric deg	Asymmetric	88 %	2.200	-
XP-E	Asymmetric deg	Asymmetric	89 %	2.400	-
XP-E2	asymmetric deg	Asymmetric	92 %	2.300	-
LUXEON Rebel	Asymmetric deg	Asymmetric	87 %	2.200	-
LUXEON Rebel ES	Asymmetric deg	Asymmetric	88 %	2.000	-
LUXEON A	Asymmetric deg	Asymmetric	88 %	2.100	-
LUXEON R	Asymmetric deg	Asymmetric	88 %	2.000	-
NCSxx19A	Asymmetric deg	Asymmetric	86 %	2.000	-
NVSxx19A	Asymmetric deg	Asymmetric	85 %	1.900	-
NF2x757A	Asymmetric deg	Asymmetric	88 %	1.900	-
NF2x757G	sim: Asymmetric	Asymmetric	sim: 93 %	sim: 2.000	-
Oslon SSL 80	Asymmetric deg	Asymmetric	88 %	2.100	-
Oslon SSL 150	Asymmetric deg	Asymmetric	88 %	2.700	-
Duris S5 (2 chip)	asymmetric deg	Asymmetric	90 %	2.000	-
Oslon Square EC	sim: Asymmetric	Asymmetric	sim: 86 %	sim: 2.290	-

H G F E D C B A

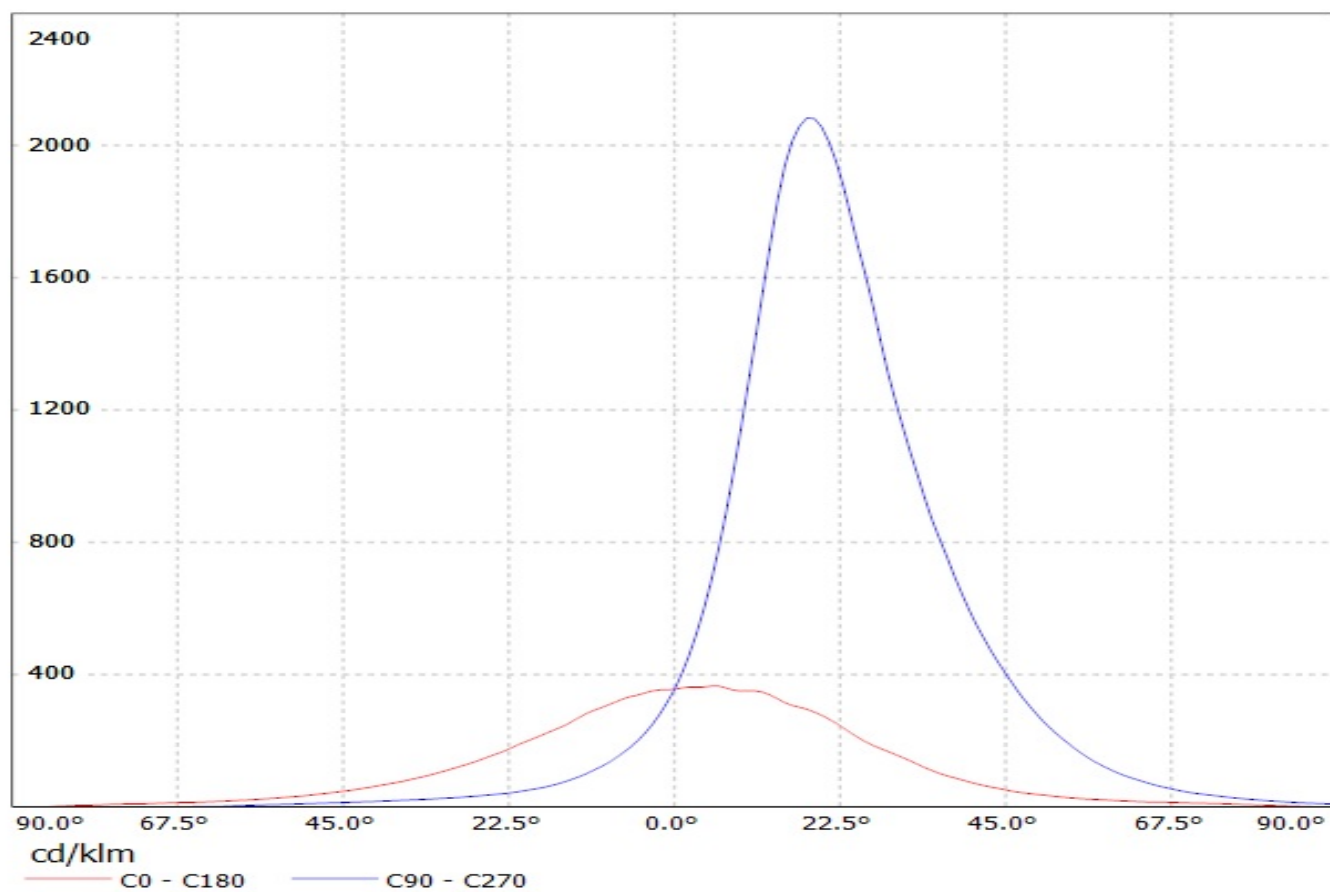


INDEX	PART NO	DESCRIPTION	MATERIAL
1	C13327	BILLIE-A	PMMA
2	C11269	HEIDI-TAPE	2-sided tape
3	F13328	BILLIE-HLD-PIN-TAPE	PC

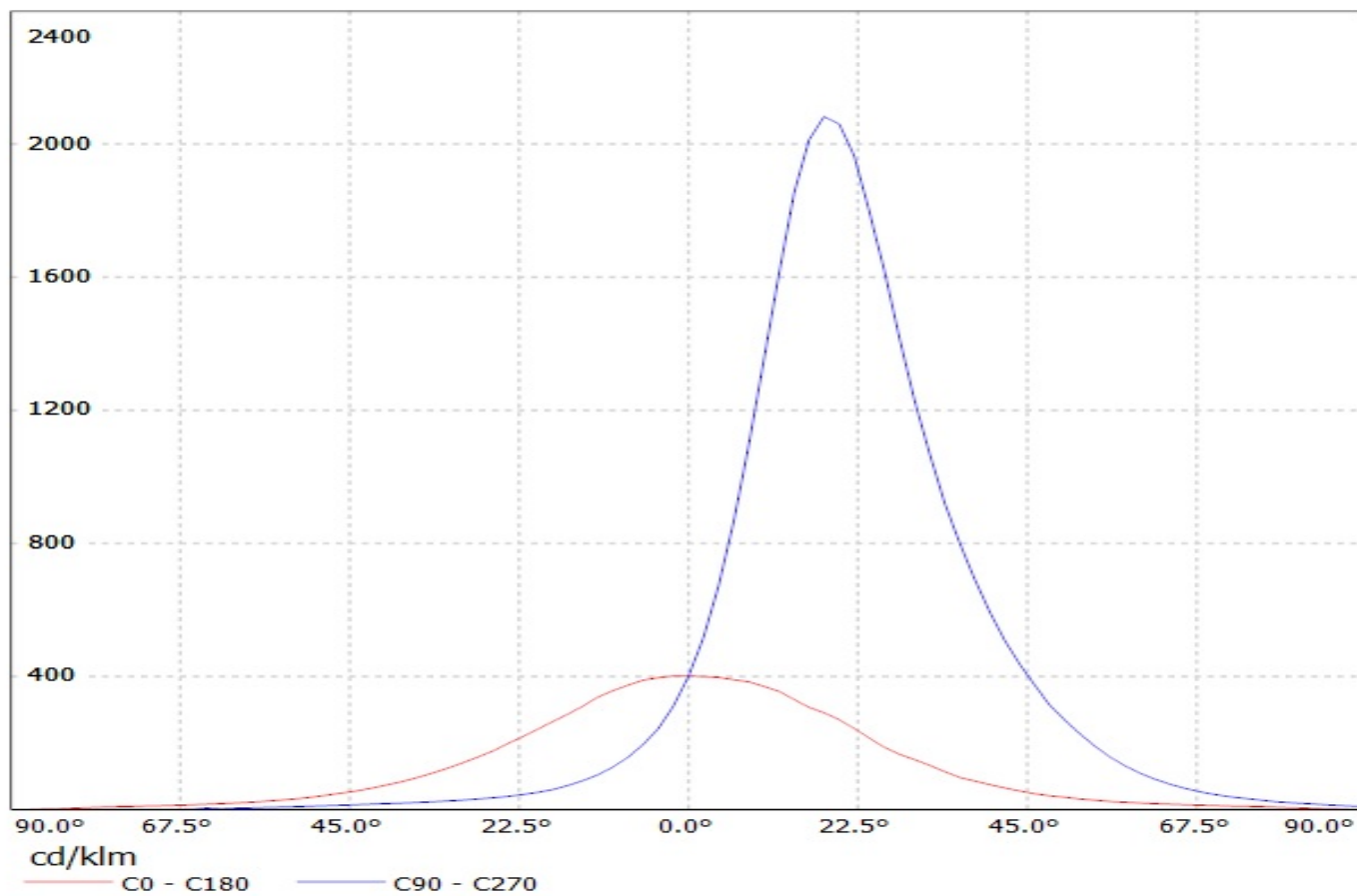
Tolerances if not otherwise shown According to DIN ISO 2768-1 Linear measures: Up to 30mm class M, otherwise class C. According to DIN ISO 2768-2 Form and position: class L		 Ledil Oy Salorankatu 10 FIN 24240 SALO Finland	
THIRD ANGLE PROJECTION: 		DRAWING TITLE <b>BILLIE-A datasheet</b>	
This drawing is the property of LEDiL Oy. It may not be reproduced, copied or communicated without a written agreement with LEDiL Oy."		SIZE <b>A3</b>	PART NUMBER <b>FCA13329</b>
SCALE 3:1		WEIGHT g	SHEET 1/1

H G B A

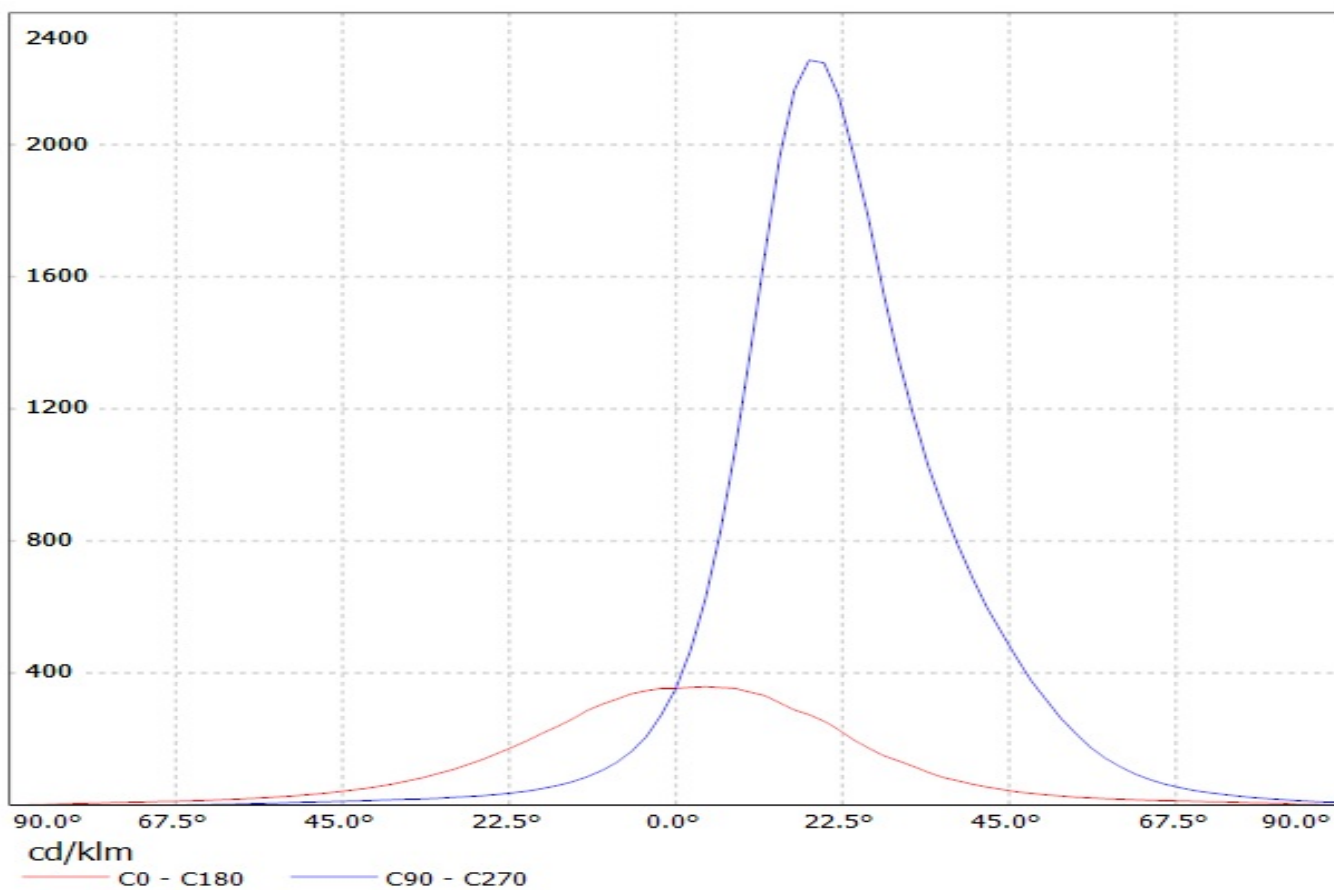
Luminaire: Ledil Oy FCA13329\_BILLIE-A (Cree XB-D 90lm @ 250mA) Efficiency=85%  
Lamps: 1 x Cree XB-D 90lm @ 250mA CCT=6580K P=0,75W I=250mA



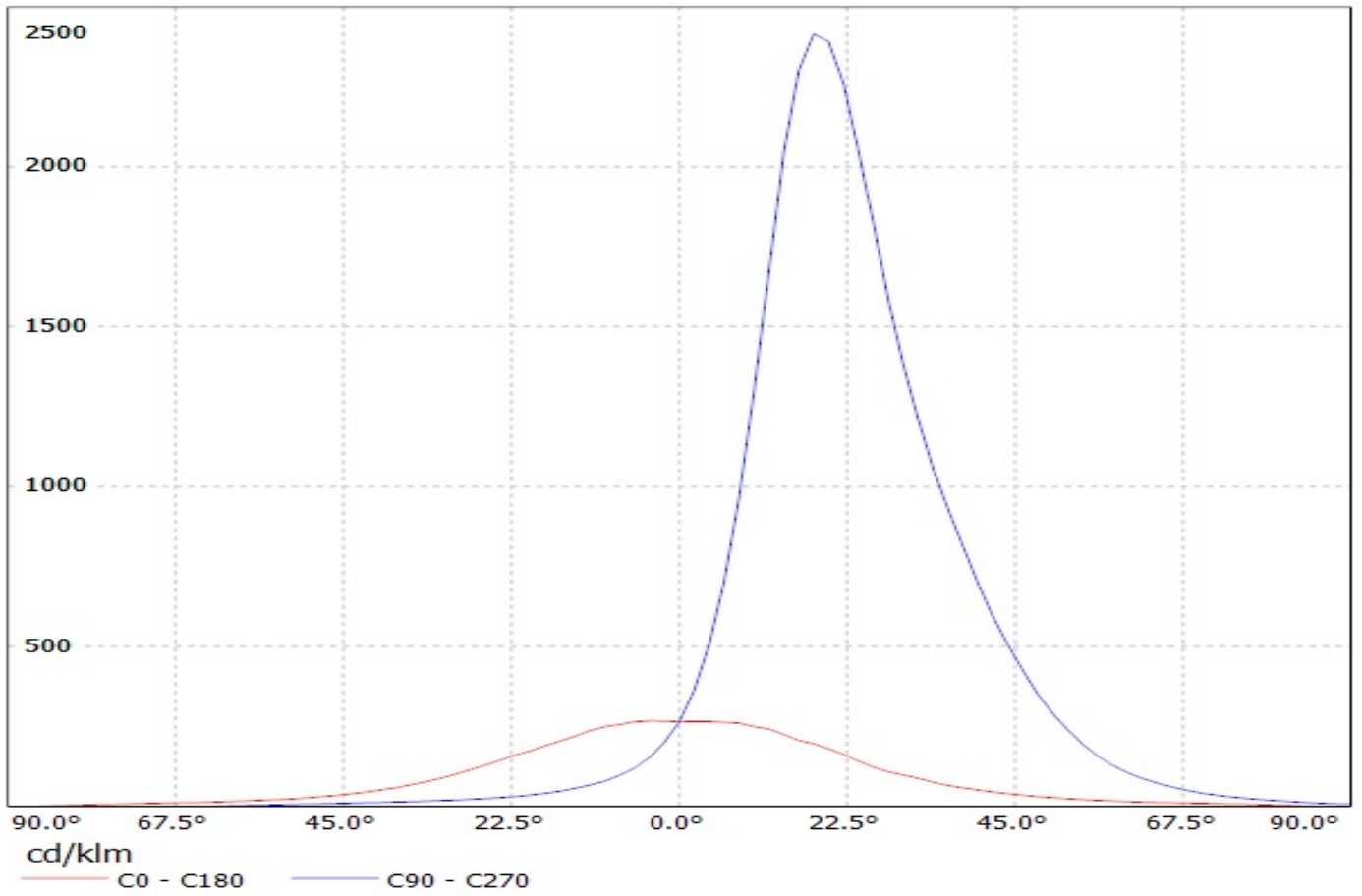
Luminaire: Ledil Oy FCA13329 BILLIE-A (Cree XT-E 103lm @ 250mA) Efficiency=87%  
Lamps: 1 x Cree XT-E 103lm @ 250mA CCT=4425K P=0,75W I=250mA



Luminaire: Ledil Oy FCA13329\_BILLIE-A (Cree XP-G 62lm @ 250mA) Efficiency=88%  
Lamps: 1 x Cree XP-G 62lm @ 250mA CCT=3218K P=0,75W I=250mA

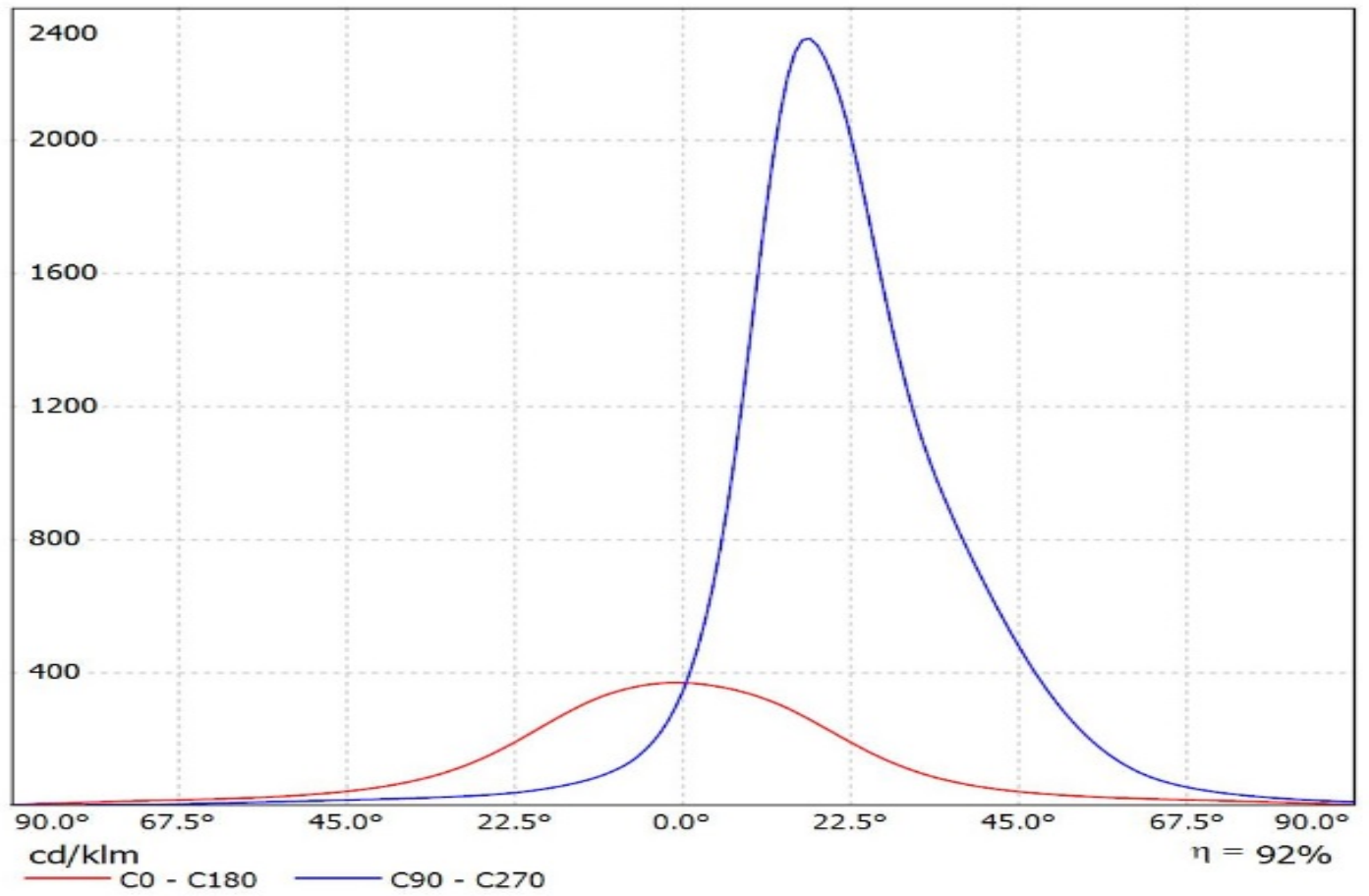


Luminaire: Ledil Oy FCA13329\_BILLIE-A (Cree XP-E 51lm @ 250mA) Efficiency=89%  
Lamps: 1 x Cree XP-E 51lm @ 250mA CCT=2864K P=0,75W I=250mA

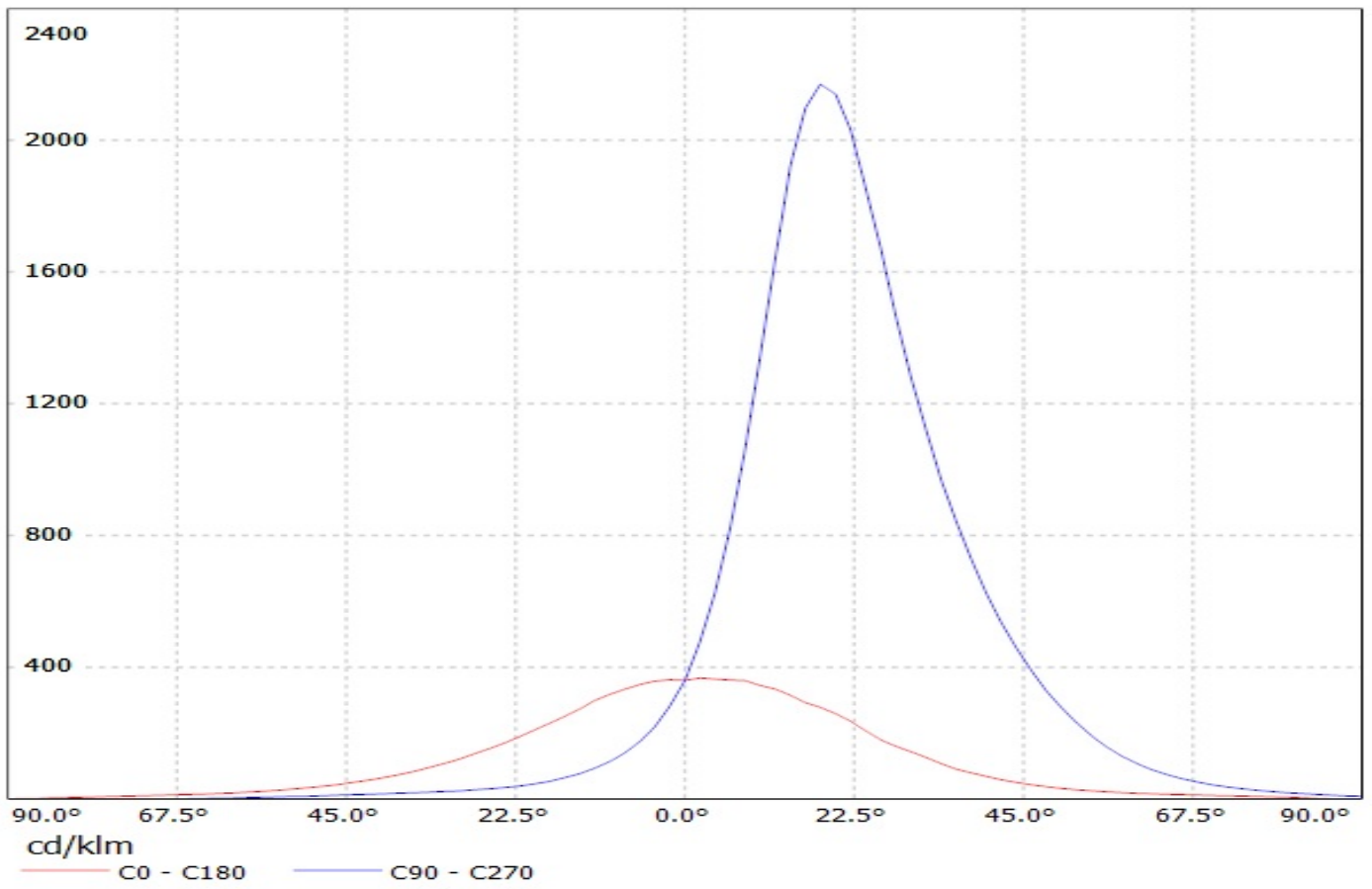


Luminaire: Ledil FCA13329\_BILLIE-A\_(XP-E2)

Lamps: 1 x CREE\_XP-E2\_(XPEBWT-L1-7B4-Q4-0-01)\_Im@250mA\_CCT=3194K\_P=0.765725W\_I=0.25A

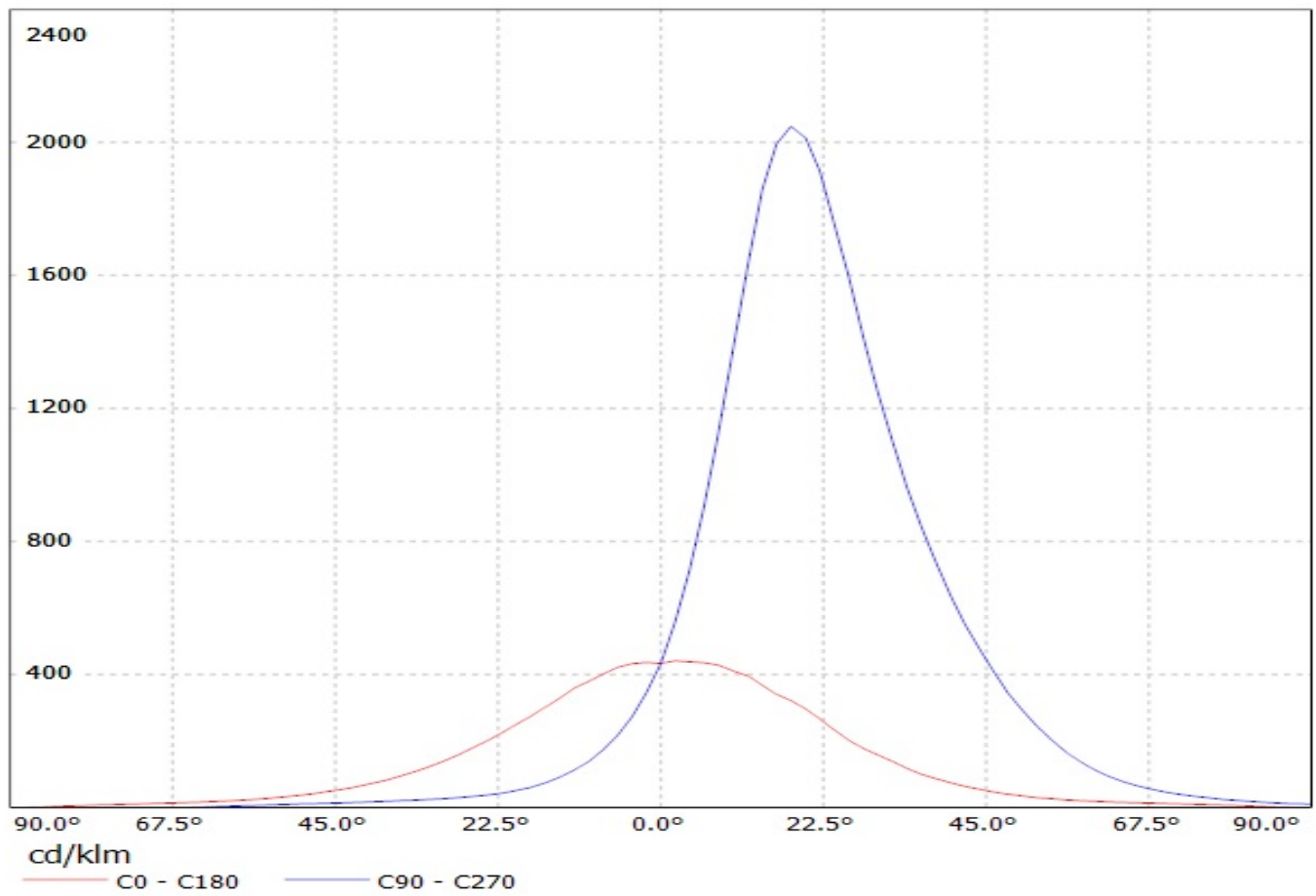


Luminaire: Ledil Oy FCA13329\_BILLIE-A (Luxeon Rebel 61lm @ 250mA) Efficiency=87%  
Lamps: 1 x Luxeon Rebel 61lm @ 250mA CCT=2872K P=0,75W I=250mA

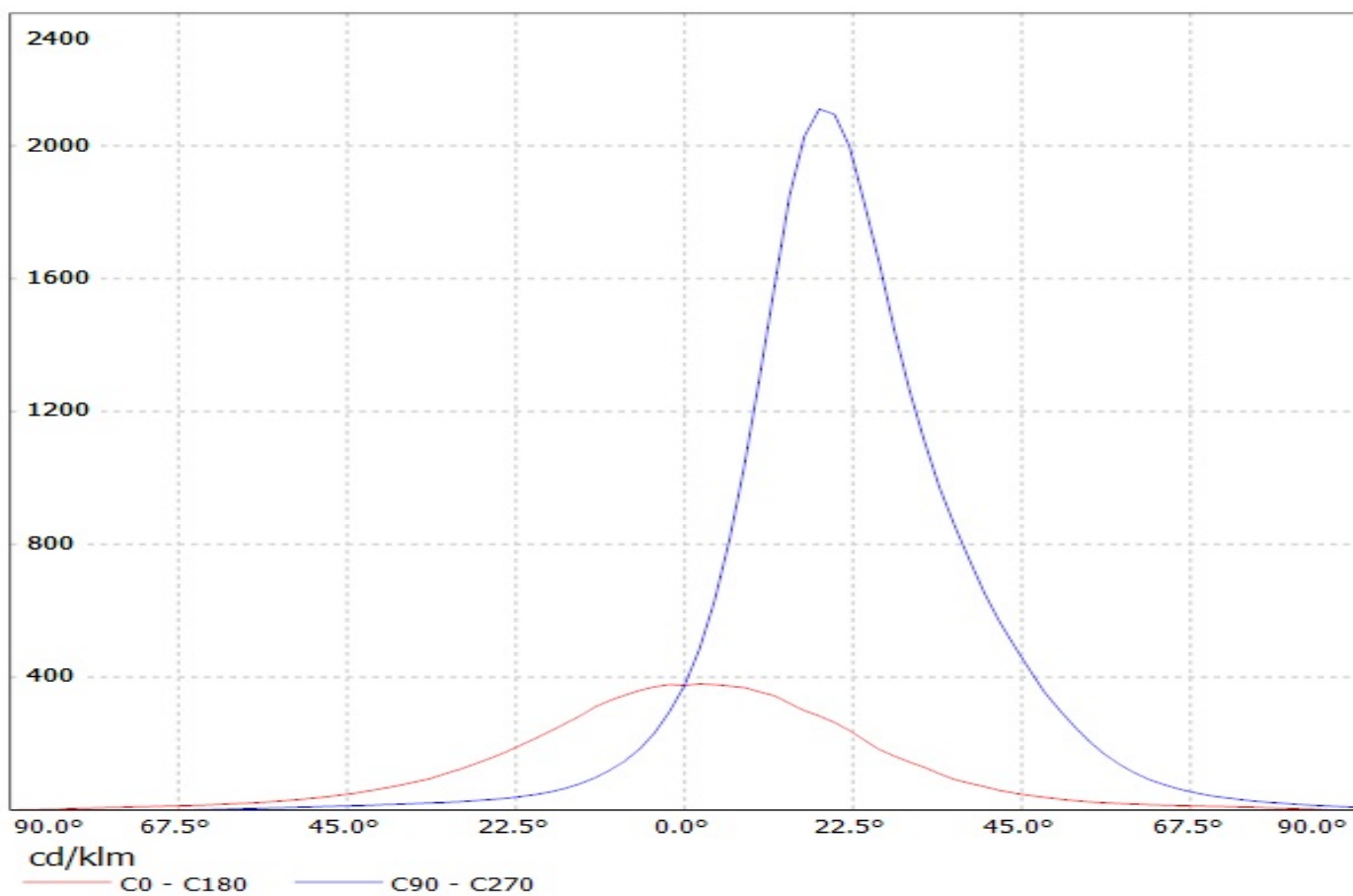




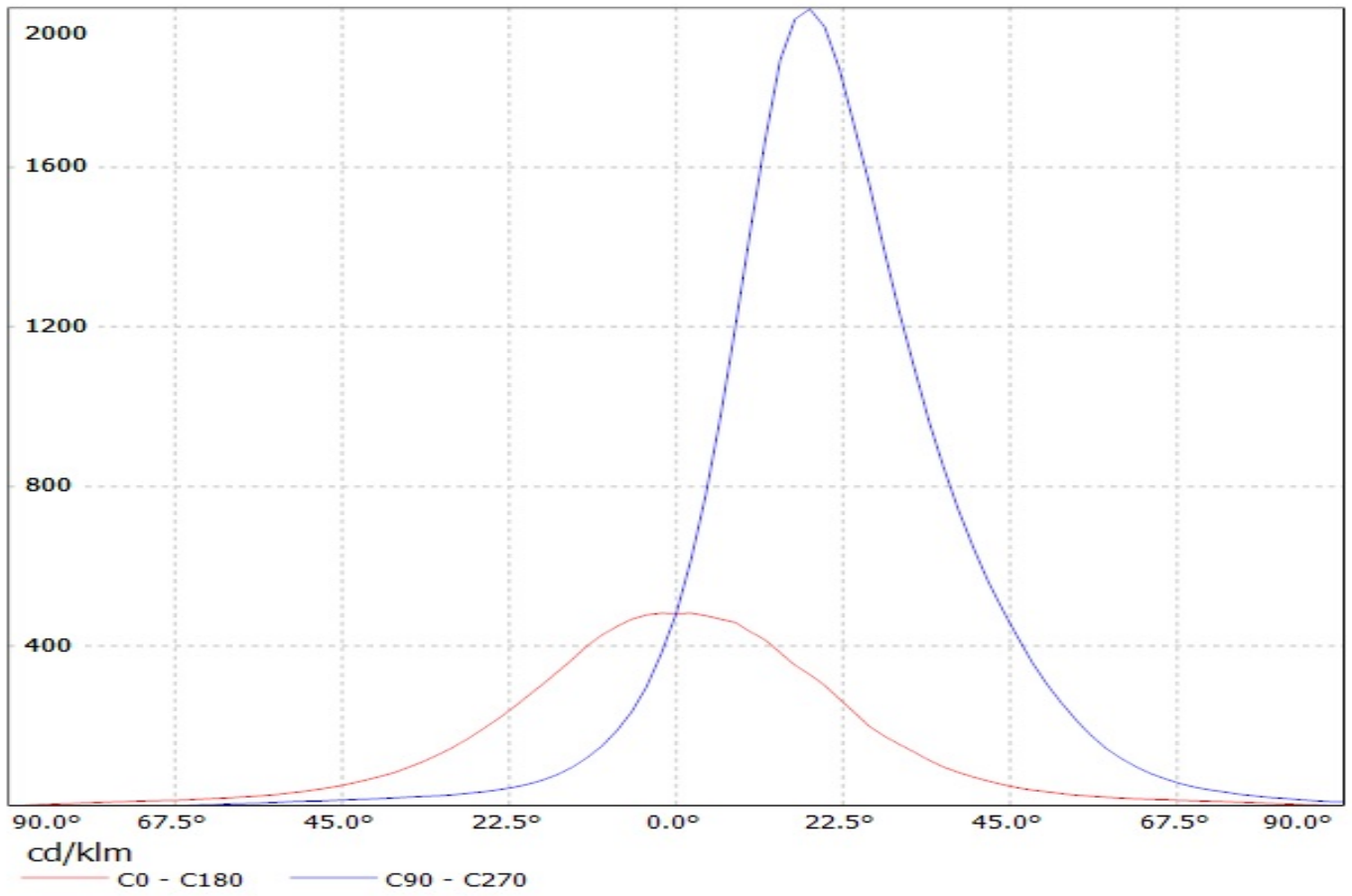
Luminaire: Ledil Oy FCA13329\_BILLIE-A (Luxeon Rebel-ES 87lm @ 250mA) Efficiency=88%  
Lamps: 1 x Luxeon Rebel-ES 87lm @ 250mA CCT=6045K P=0,75W I=250mA



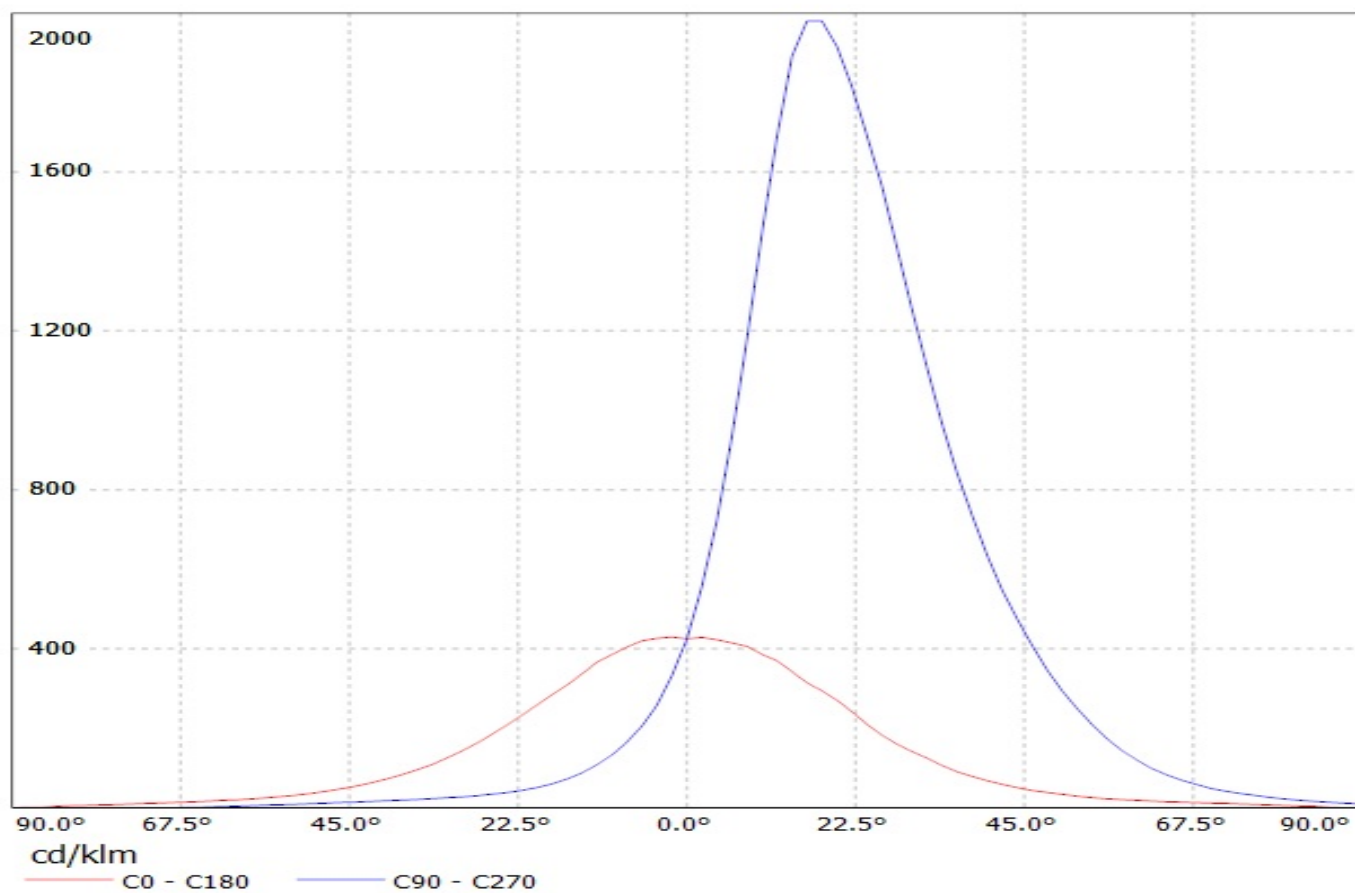
Luminaire: Ledil Oy FCA13329\_BILLIE-A (Luxeon A 66lm @ 250mA) Efficiency=88%  
Lamps: 1 x Luxeon A 66lm @ 250mA CCT=2933K P=0,75W I=250mA



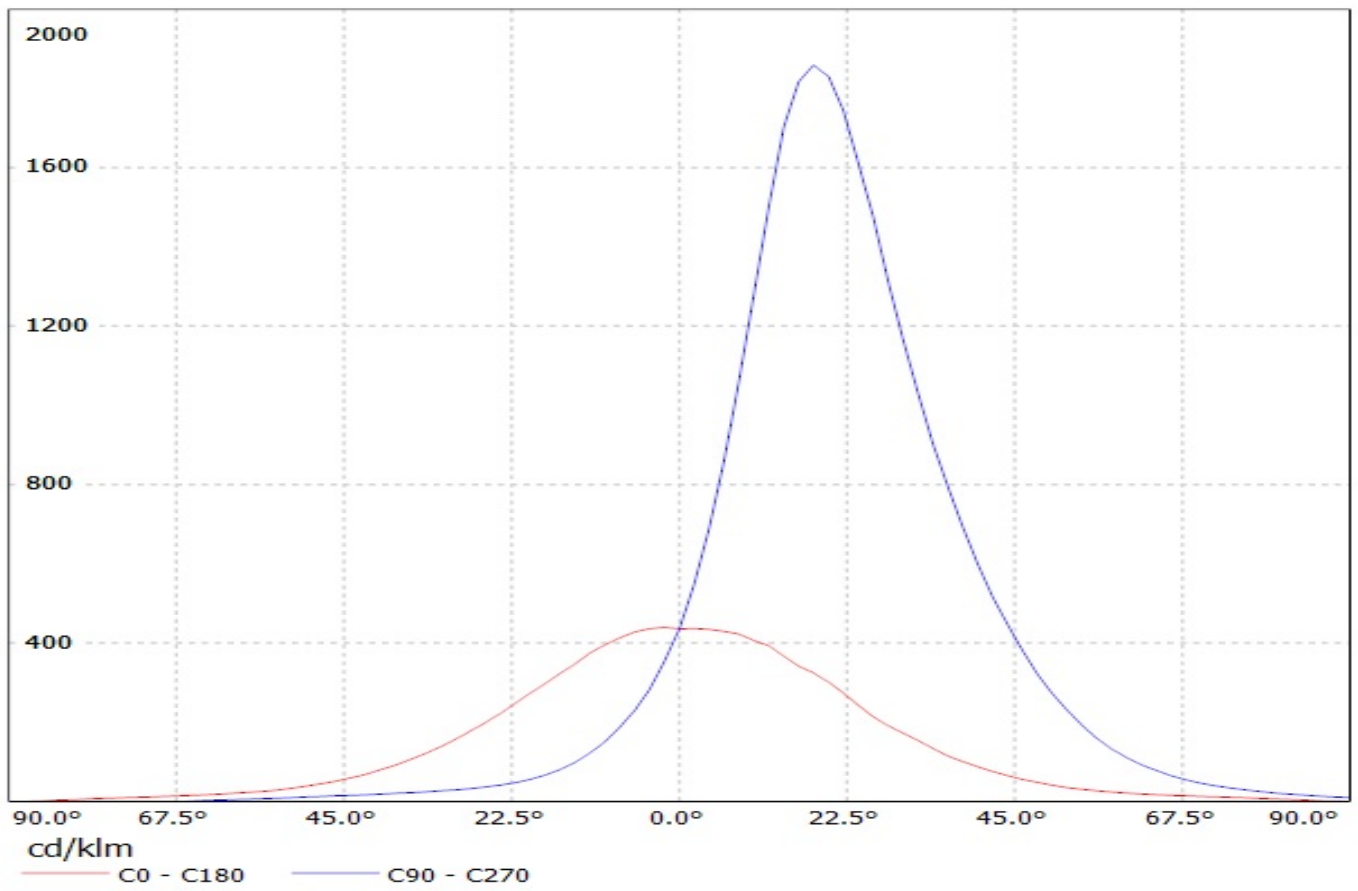
Luminaire: Ledil Oy FCA13329\_BILLIE-A (Luxeon R 84lm @ 250mA) Efficiency=88%  
Lamps: 1 x Luxeon R 84lm @ 250mA CCT=4328K P=0,75W I=250mA



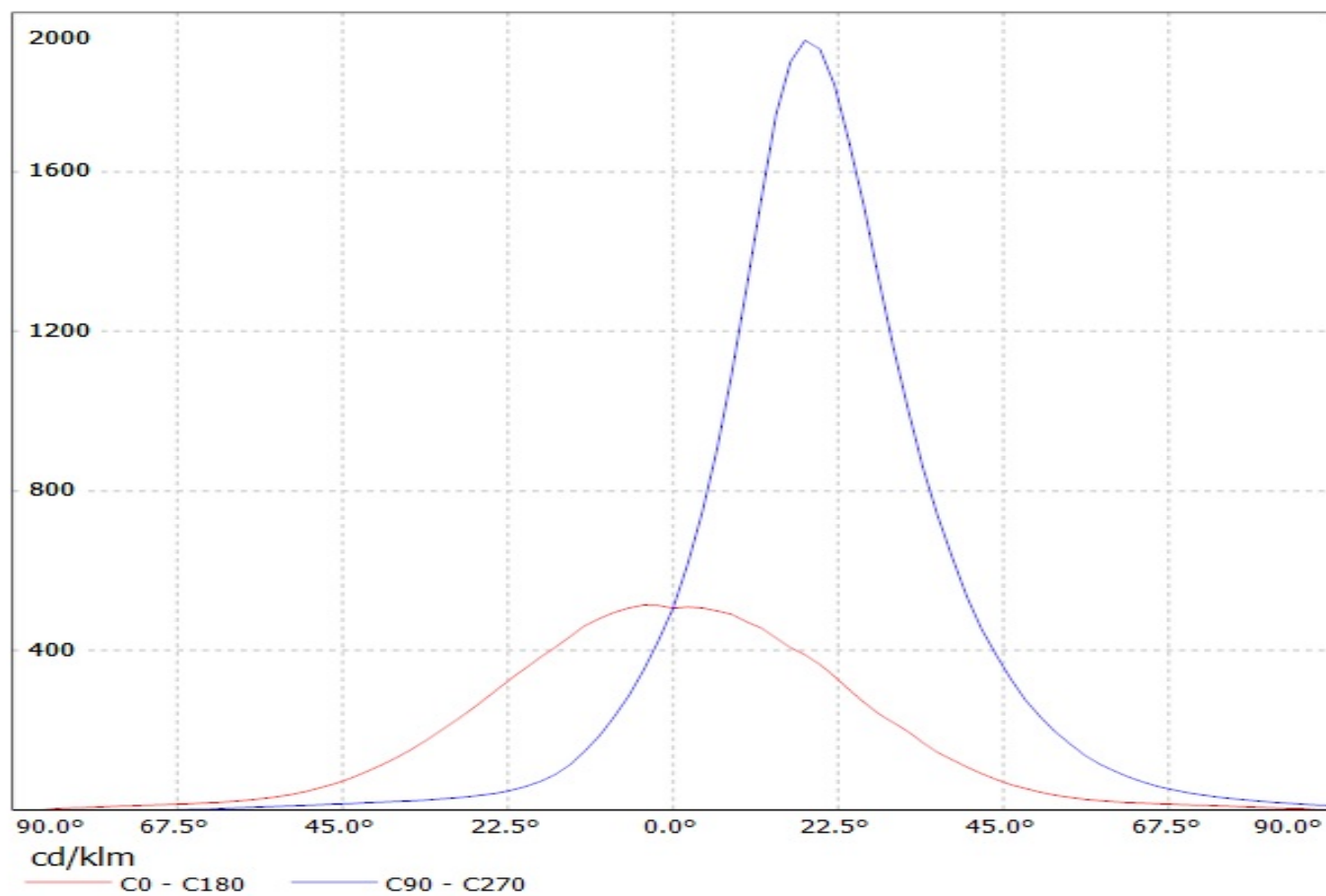
Luminaire: Ledil Oy FCA13329\_BILLIE-A (Nichia NCS19 68lm @ 250mA) Efficiency=86%  
Lamps: 1 x Nichia NCS19 68lm @ 250mA CCT=3640K P=0,75W I=250mA



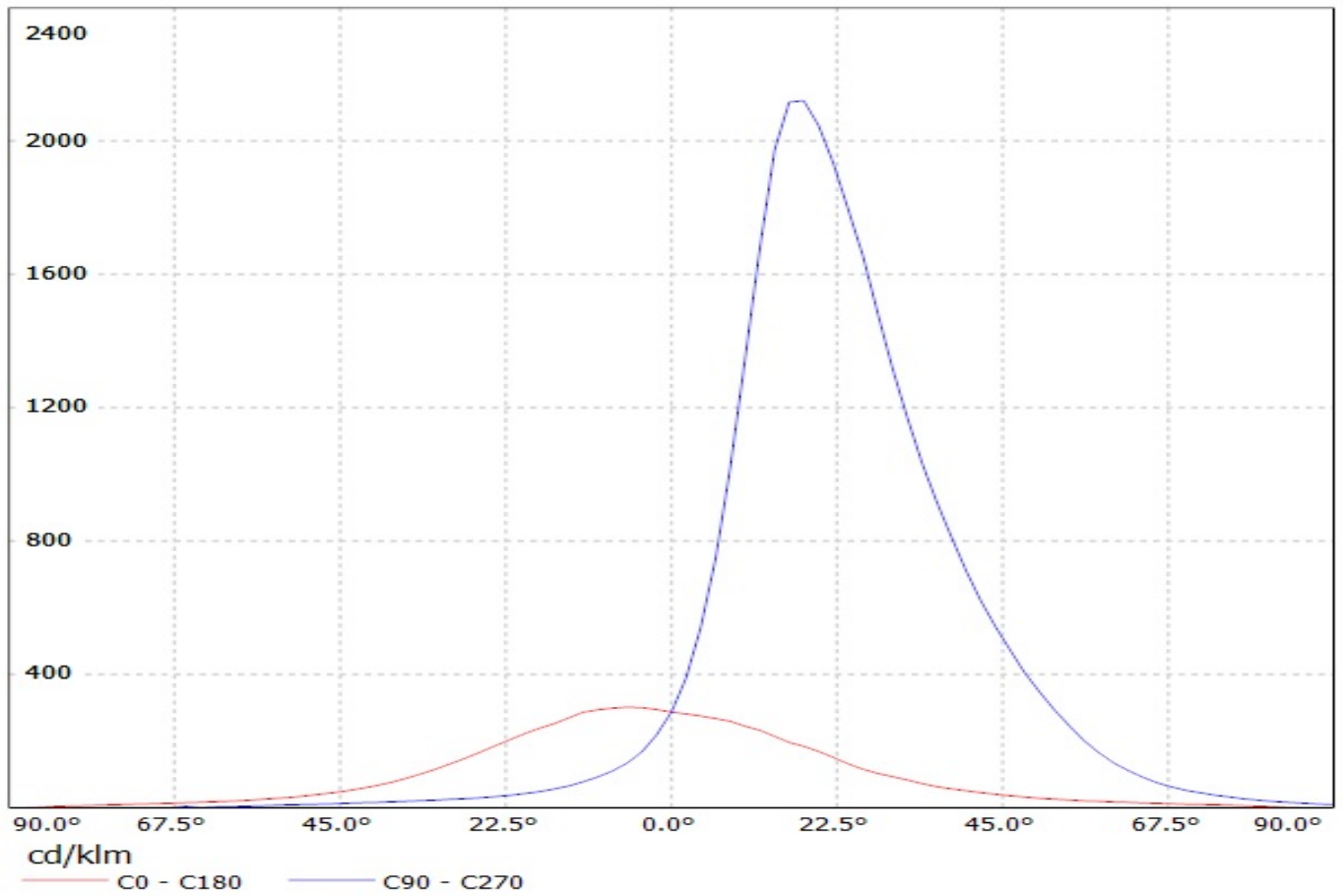
Luminaire: Ledil Oy FCA13329\_BILLIE-A (Nichia NVS19 97lm @ 250mA) Efficiency=85%  
Lamps: 1 x Nichia NVS19 97lm @ 250mA CCT=5320K P=0,75W I=250mA



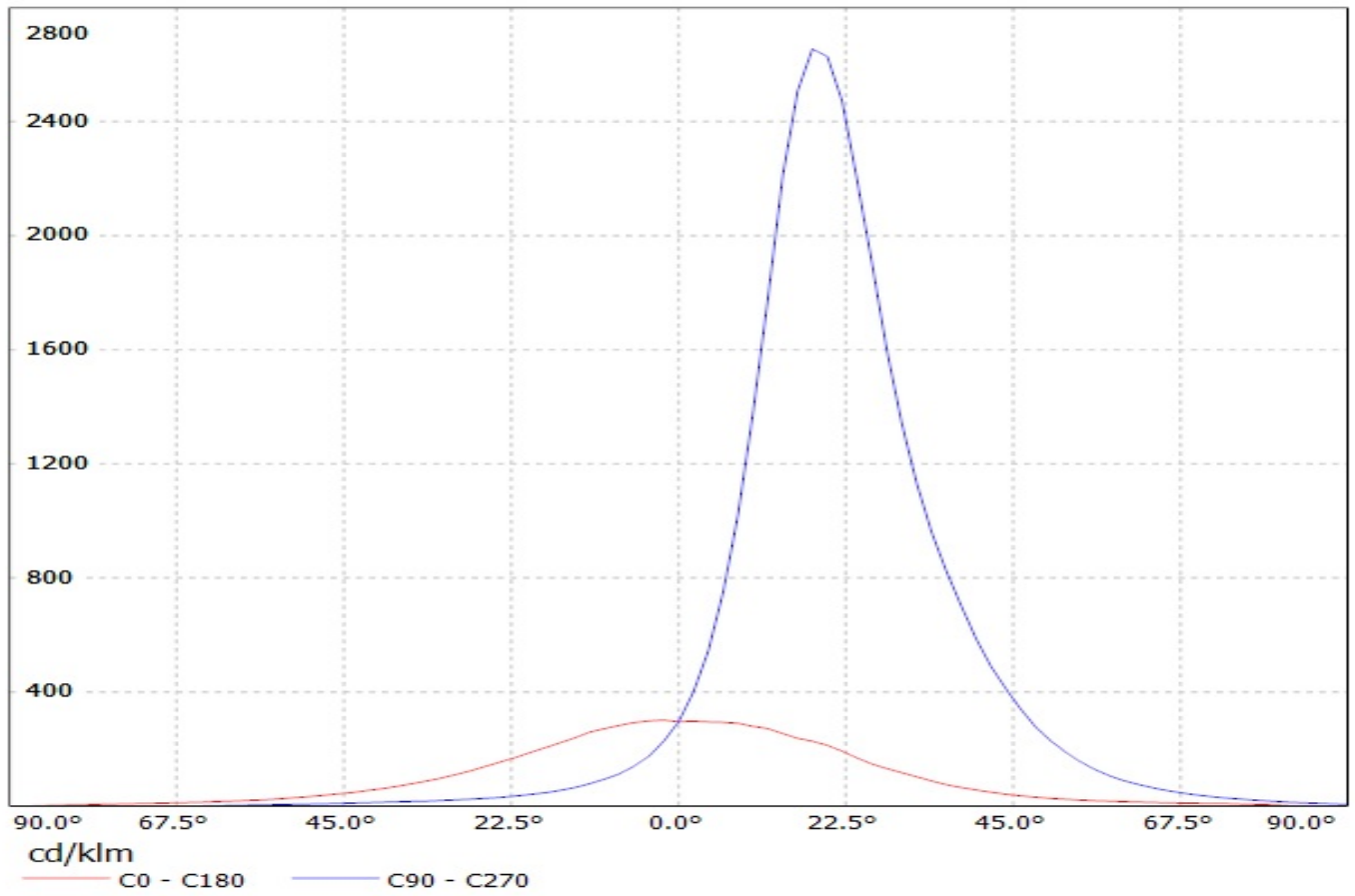
Luminaire: Ledil Oy FCA13329\_BILLIE-A (Nichia 757 67lm @ 100mA) Efficiency=88%  
Lamps: 1 x Nichia 757 67lm @ 100mA CCT=4715K P=0,6W I=100mA



Luminaire: Ledil Oy FCA13329\_BILLIE-A (Osram Oslon 80deg 74lm @ 250mA) Efficiency=88%  
Lamps: 1 x Osram Oslon 80deg 74lm @ 250mA CCT=6453K P=0,75W I=250mA

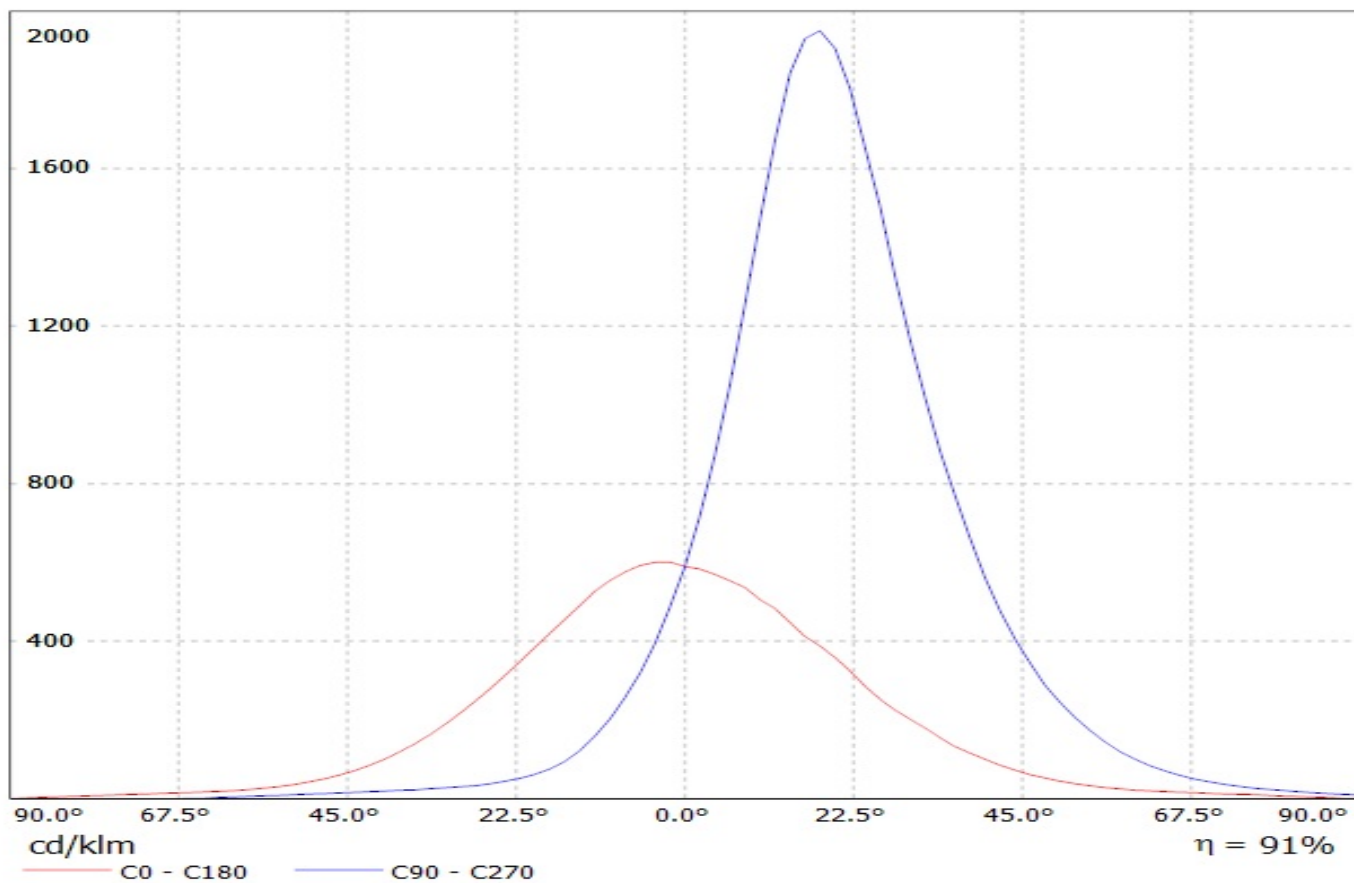


Luminaire: Ledil Oy FCA13329\_BILLIE-As (Osram Oslon 150deg 69lm @ 250mA) Efficiency=88%  
Lamps: 1 x Osram Oslon 150deg 69lm @ 250mA CCT=3601K P=0,75W I=250mA

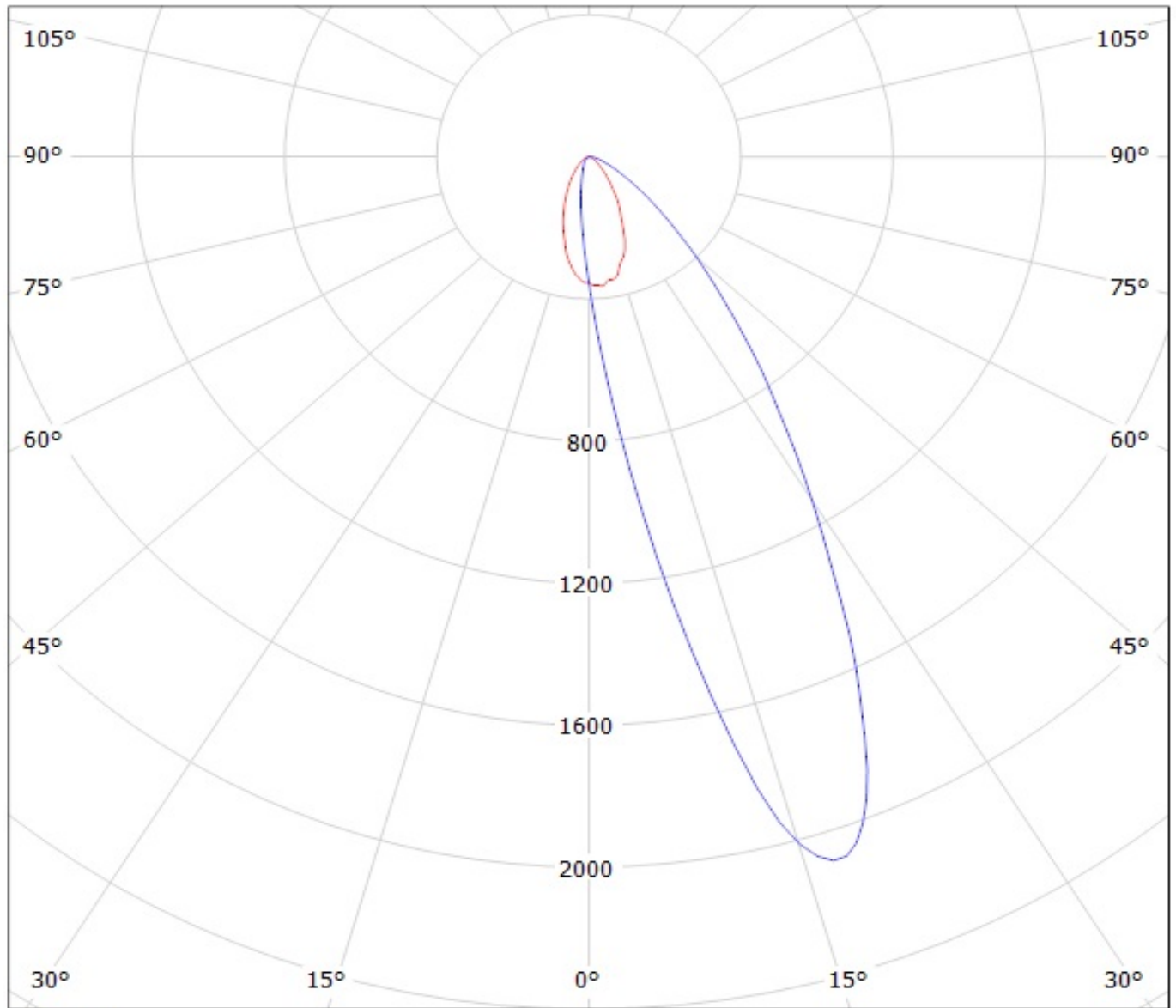




Luminaire: LEDil Oy FCA13329\_BILLIE-A\_(DURIS\_S5) Efficiency=90%  
Lamps: 1 x Osram Duris S5 (GW PSLPS1.EC) 102lm @ 150mA CCT=6300K P=1.0W I=150mA



Luminaire: Ledil Oy FCA13329\_BILLIE-A (Cree XB-D 90lm @ 250mA) Efficiency=85%  
Lamps: 1 x Cree XB-D 90lm @ 250mA CCT=6580K P=0,75W I=250mA

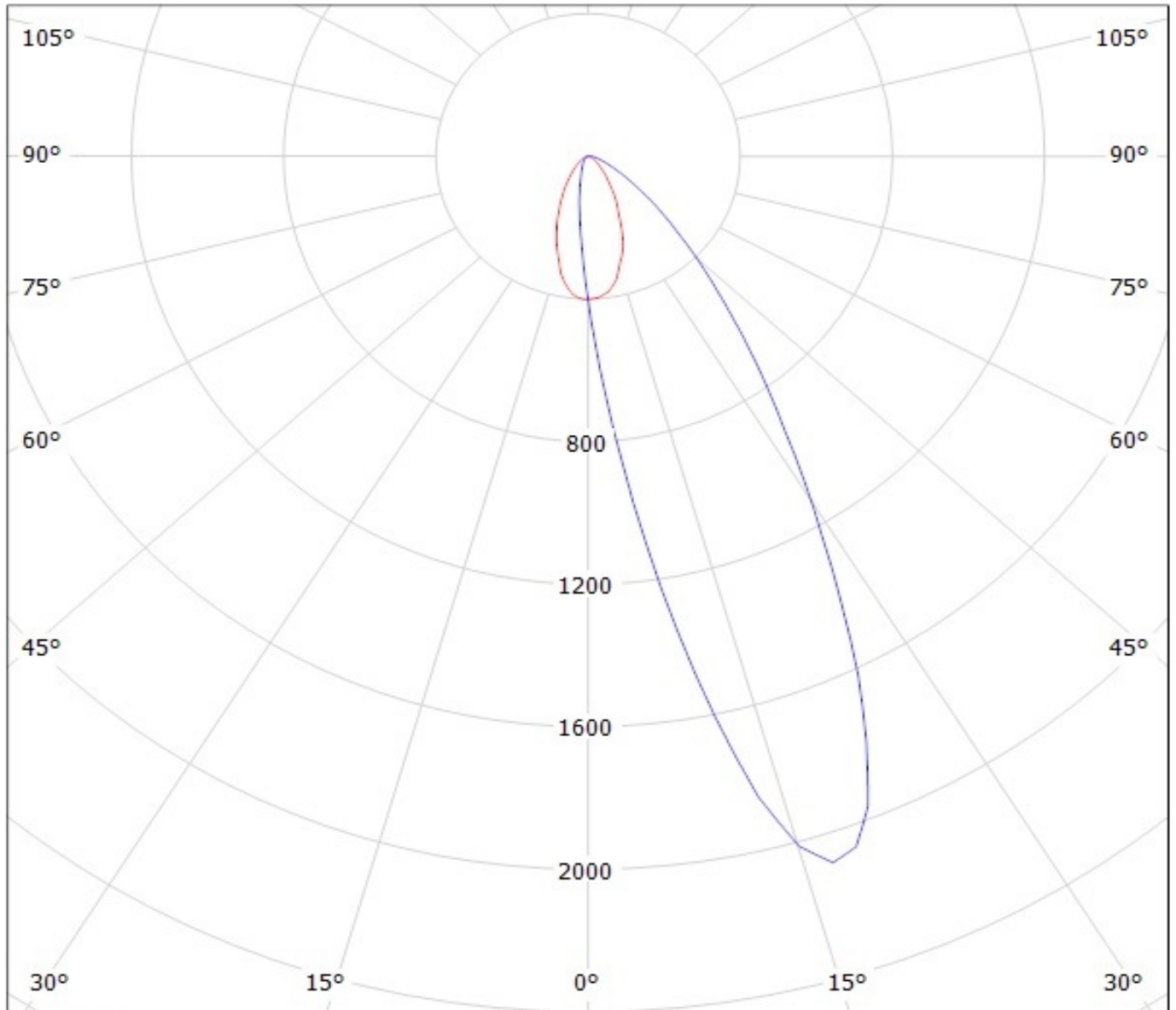


cd/klm

— C0 - C180

— C90 - C270

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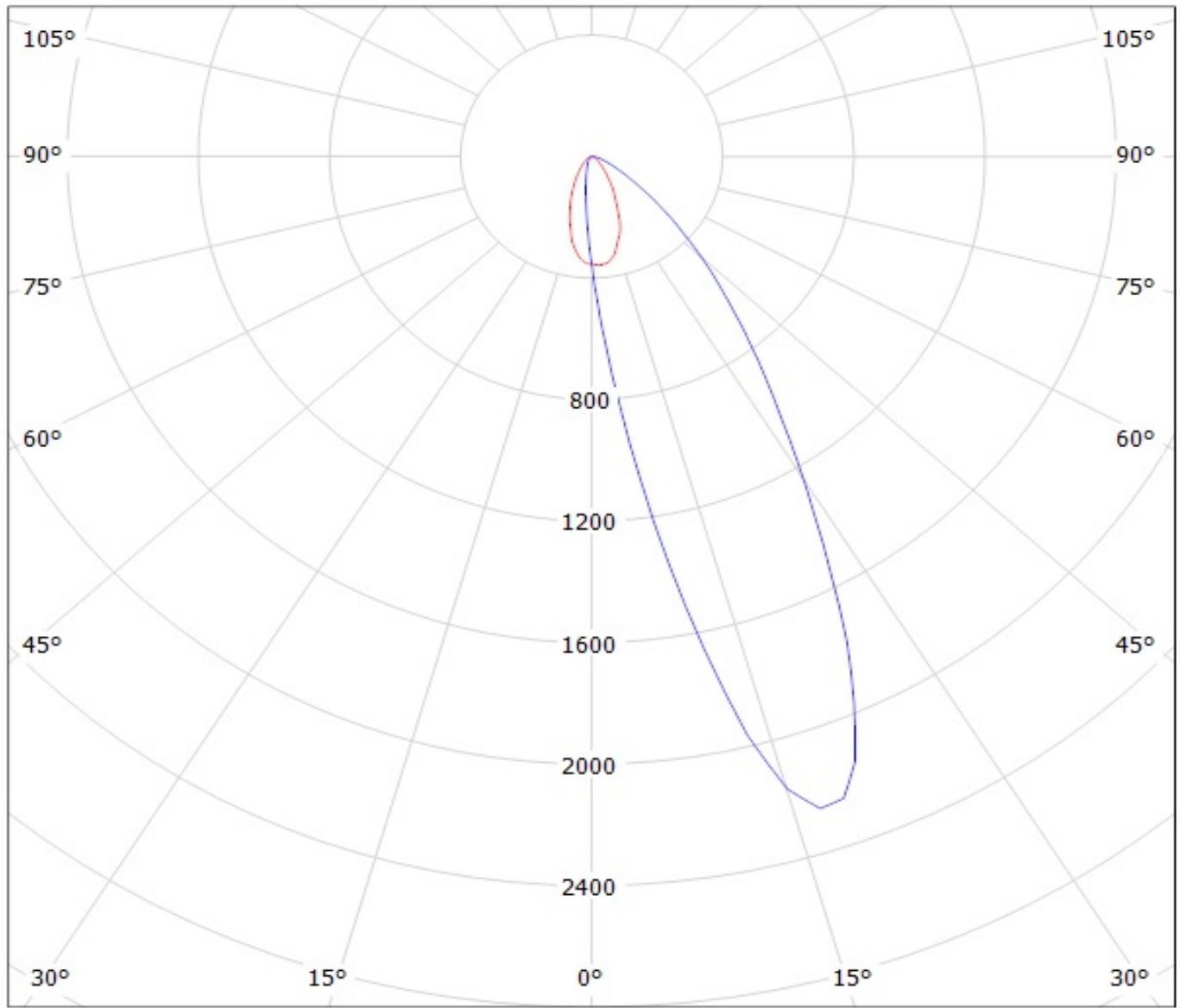


cd/klm

— C0 - C180

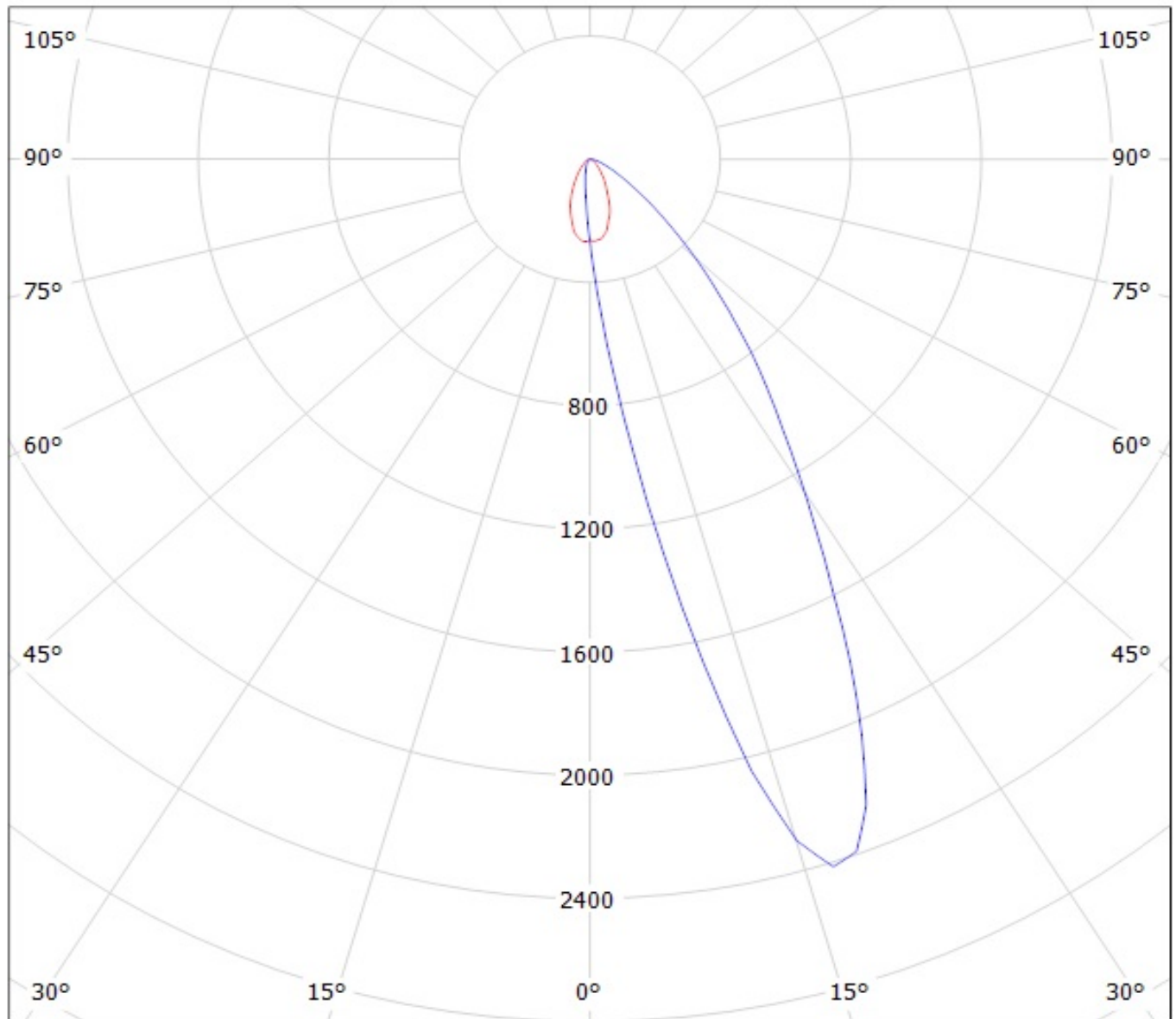
— C90 - C270

Luminaire: Ledil Oy FCA13329\_BILLIE-A (Cree XP-G 62lm @ 250mA) Efficiency=88%  
Lamps: 1 x Cree XP-G 62lm @ 250mA CCT=3218K P=0,75W I=250mA



cd/klm  
— C0 - C180    — C90 - C270

Luminaire: Ledil Oy FCA13329\_BILLIE-A (Cree XP-E 51lm @ 250mA) Efficiency=89%  
Lamps: 1 x Cree XP-E 51lm @ 250mA CCT=2864K P=0,75W I=250mA

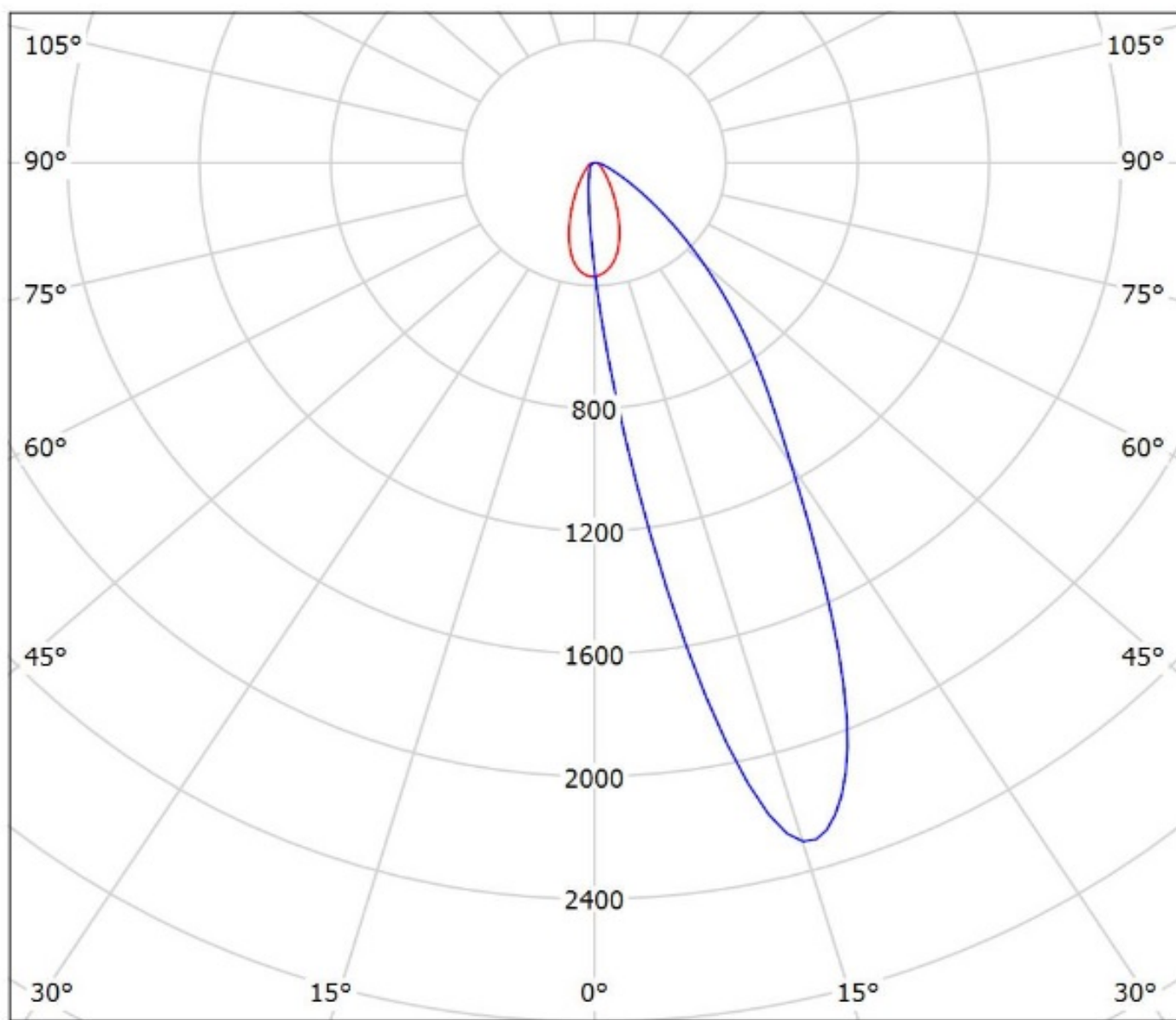


cd/klm

— C0 - C180    — C90 - C270

Luminaire: Ledil FCA13329\_BILLIE-A\_(XP-E2)

Lamps: 1 x CREE\_XP-E2\_(XPEBWT-L1-7B4-Q4-0-01)\_Im@250mA\_CCT=3194K\_P=0.765725W\_I=0.25A

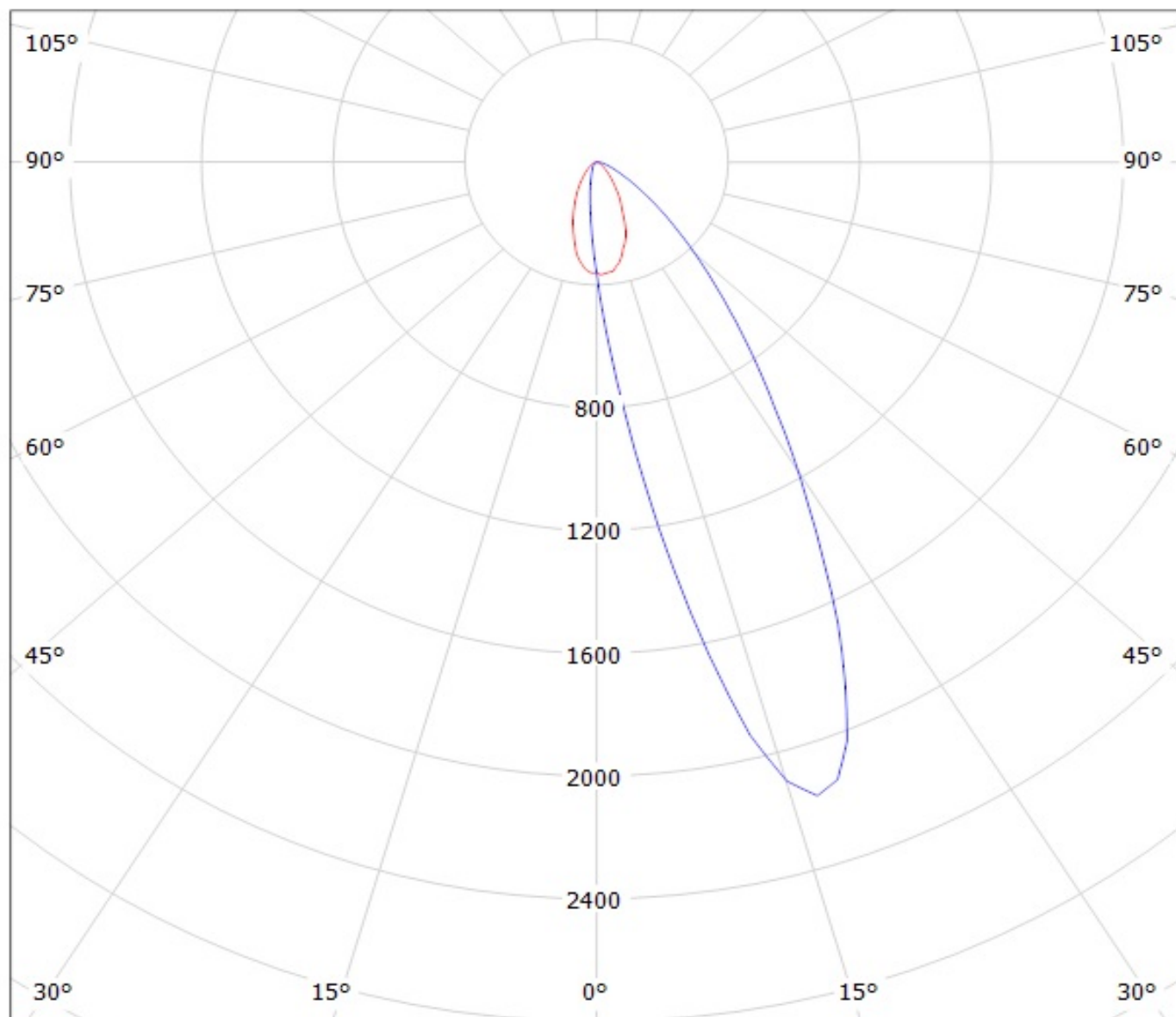


cd/klm

— C0 - C180 — C90 - C270

$\eta = 92\%$

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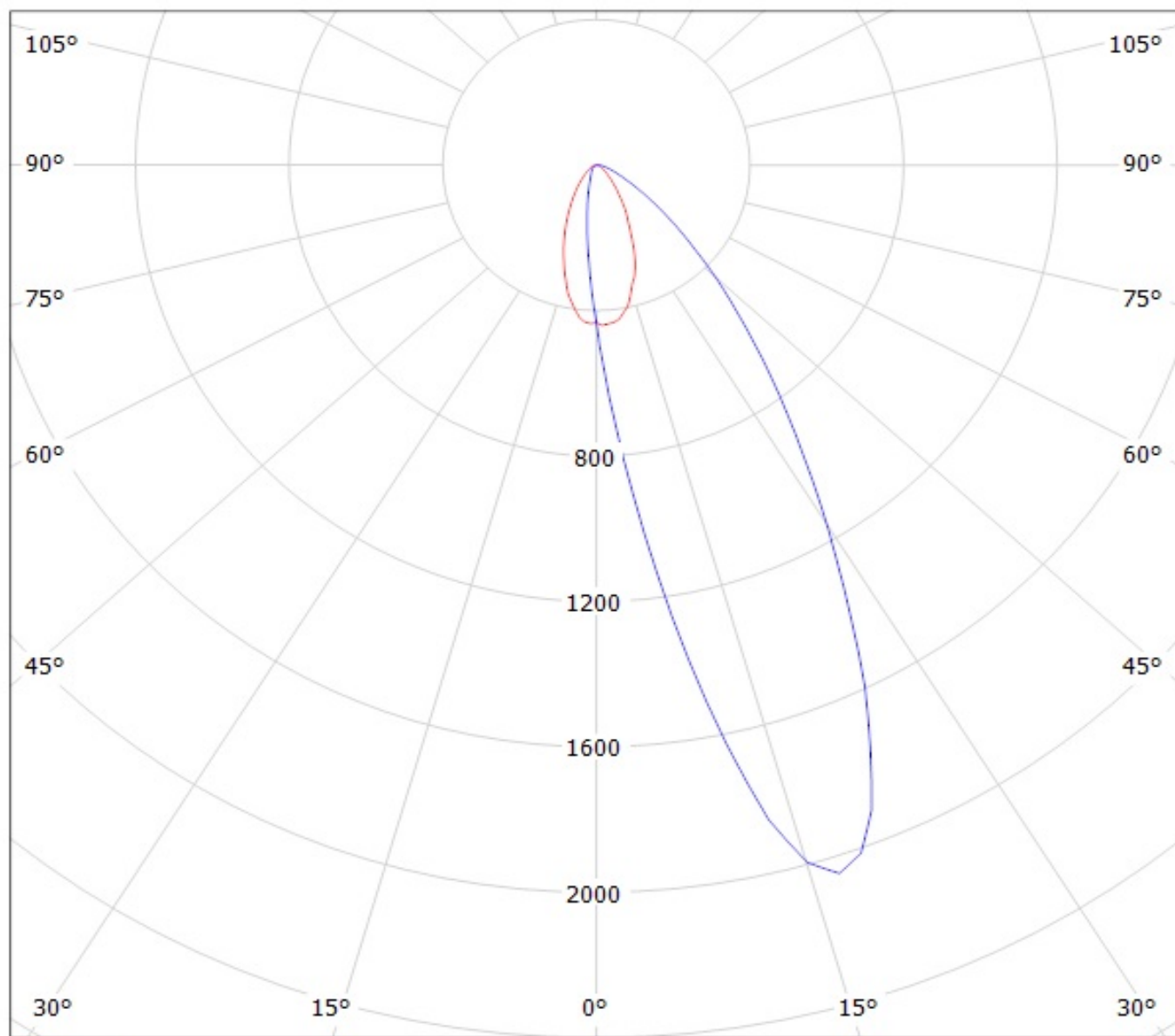
cd/klm

— C0 - C180

— C90 - C270



Luminaire: Ledil Oy FCA13329\_BILLIE-A (Luxeon Rebel-ES 87lm @ 250mA) Efficiency=88%  
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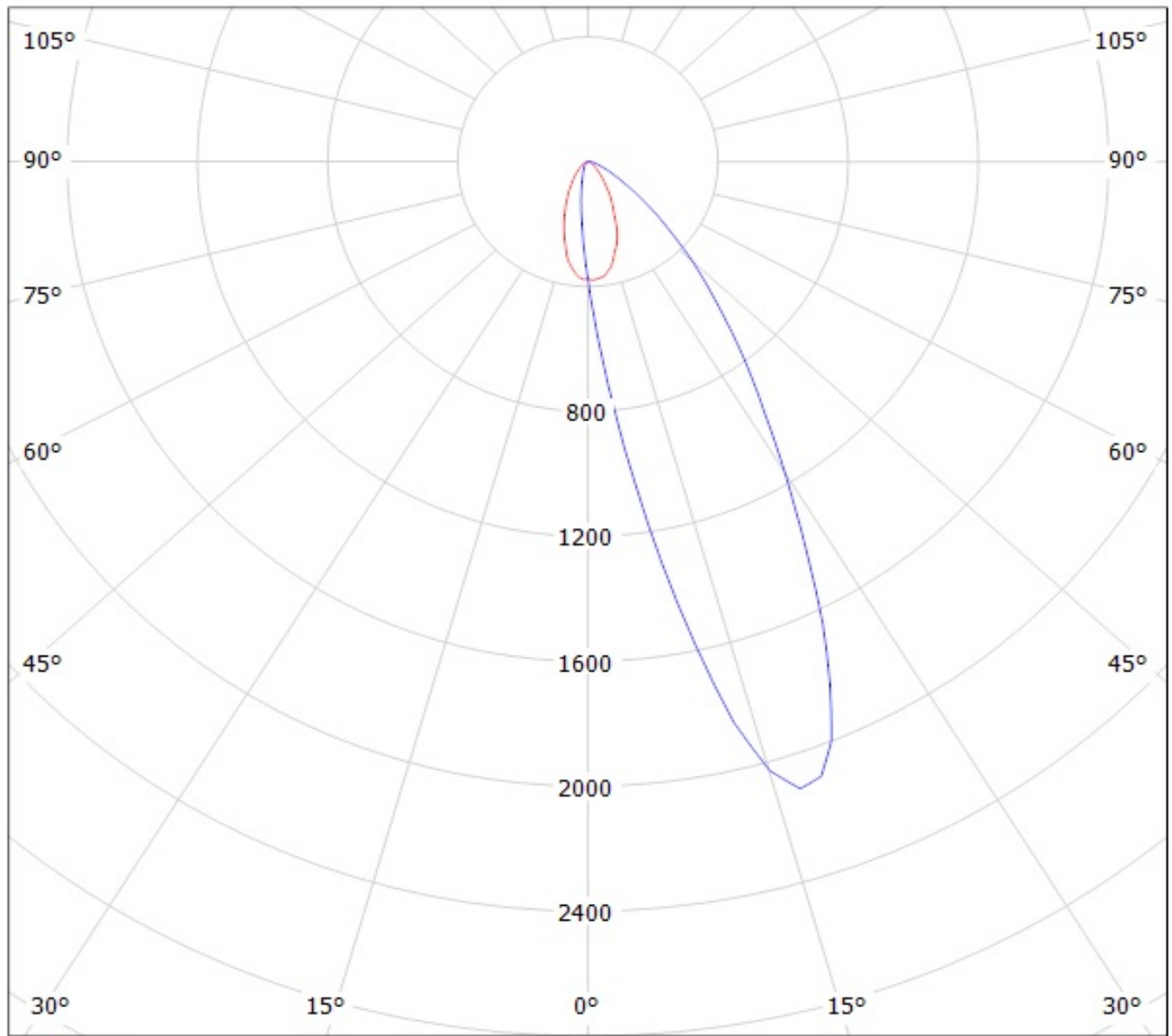
cd/klm

— C0 - C180

— C90 - C270



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Lamps: 1 x Luxeon A 66lm @ 250mA CCT=2933K P=0,75W I=250mA

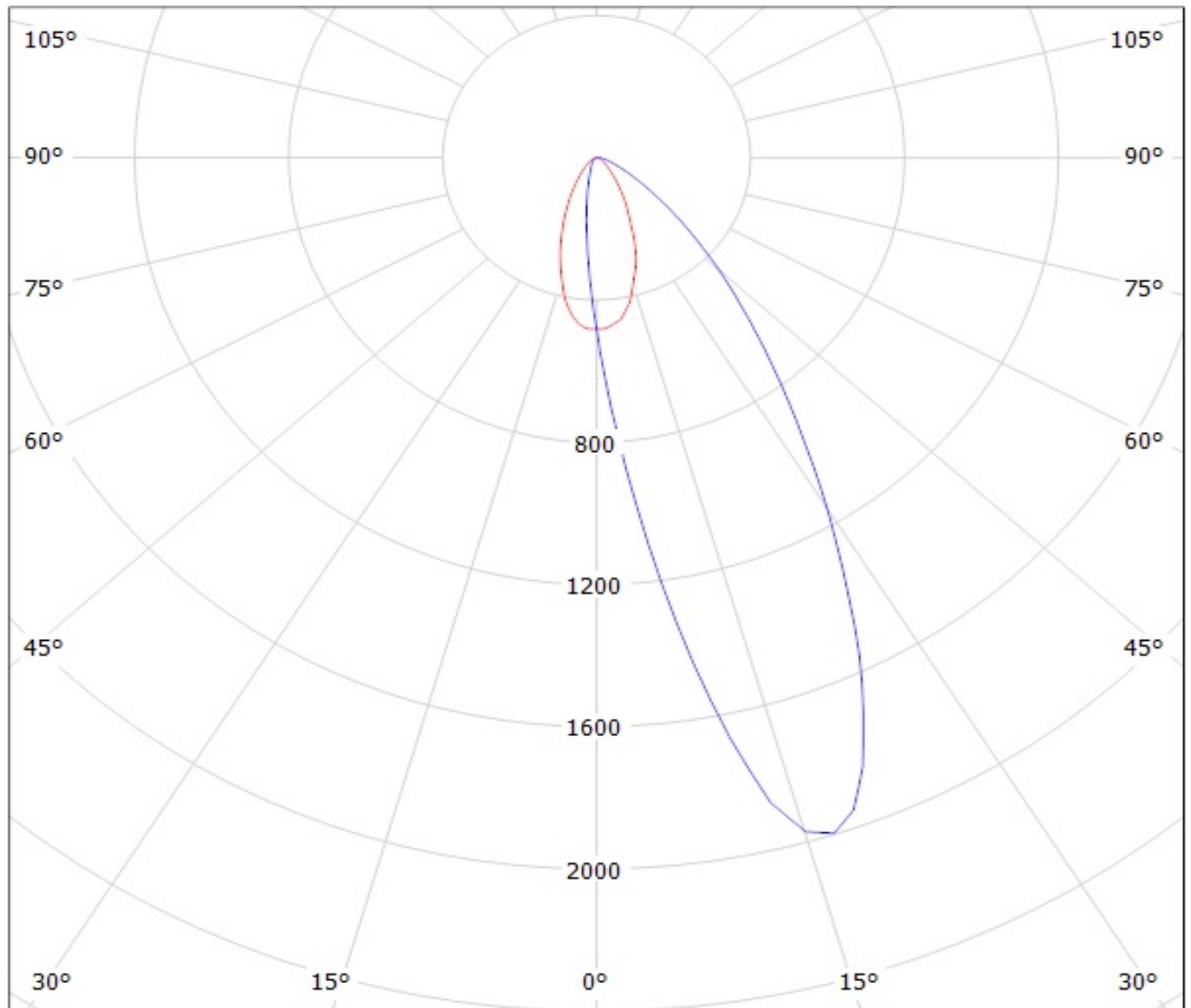


cd/klm

— C0 - C180

— C90 - C270

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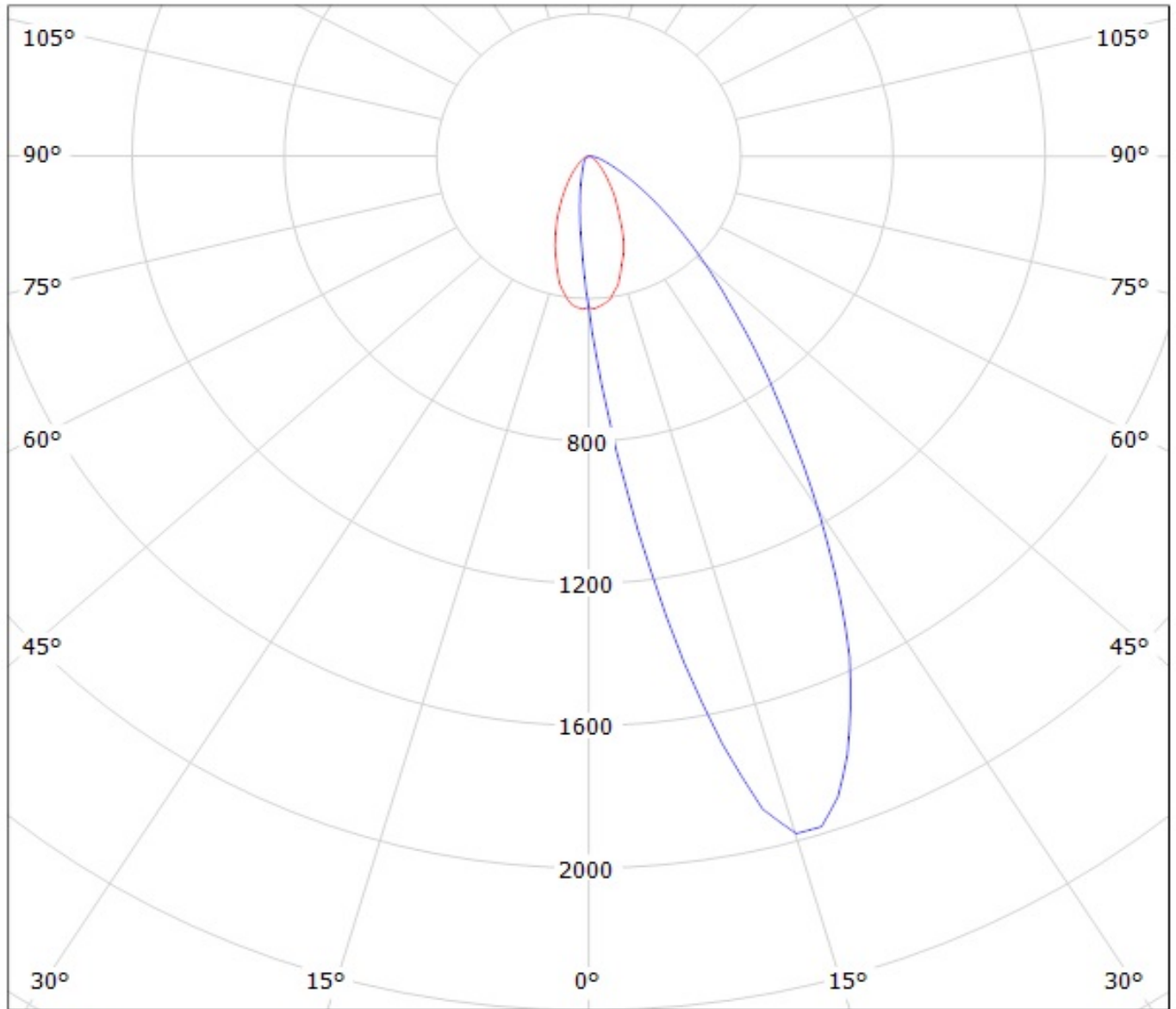


cd/klm

— C0 - C180

— C90 - C270

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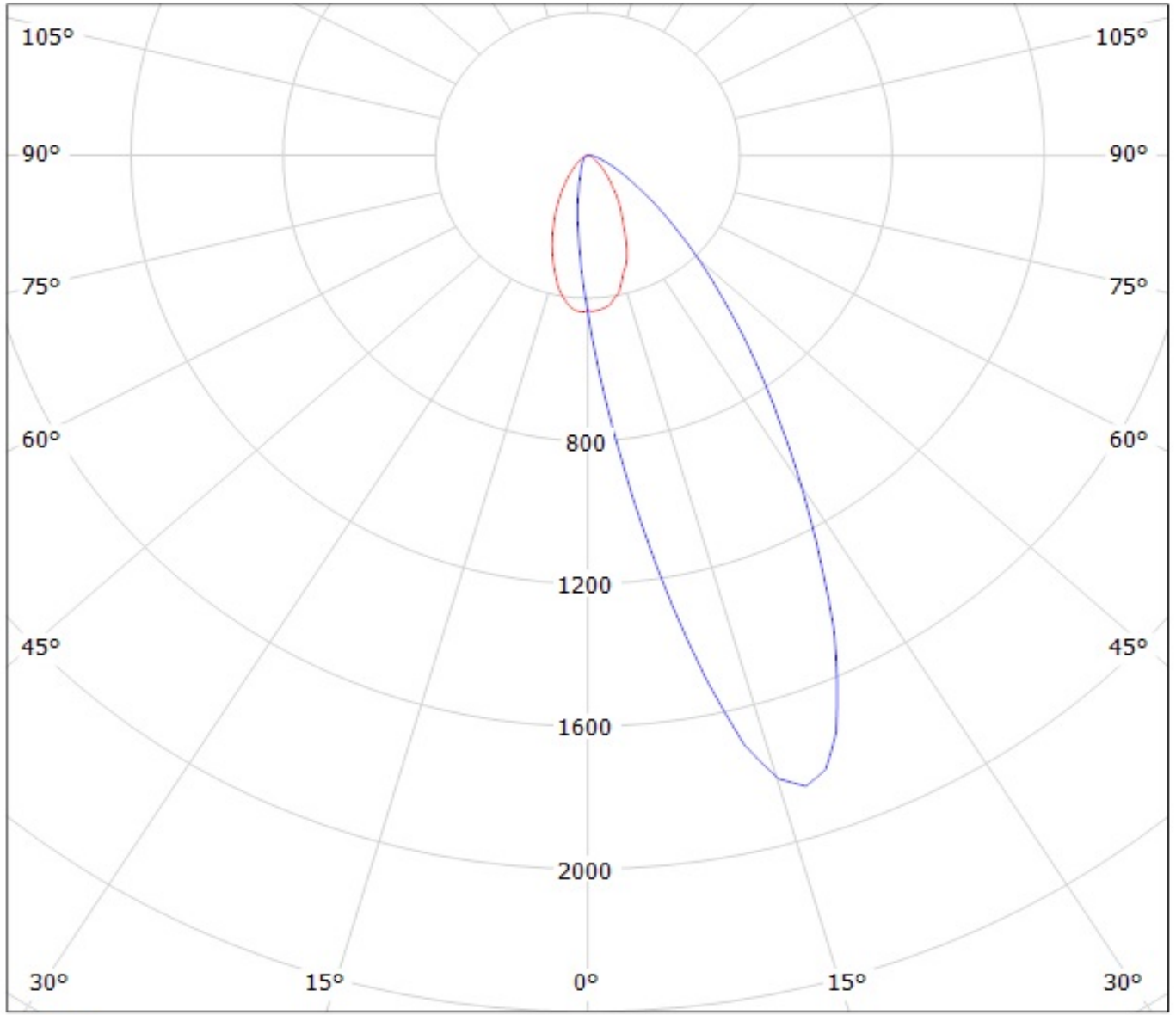


cd/klm

— C0 - C180

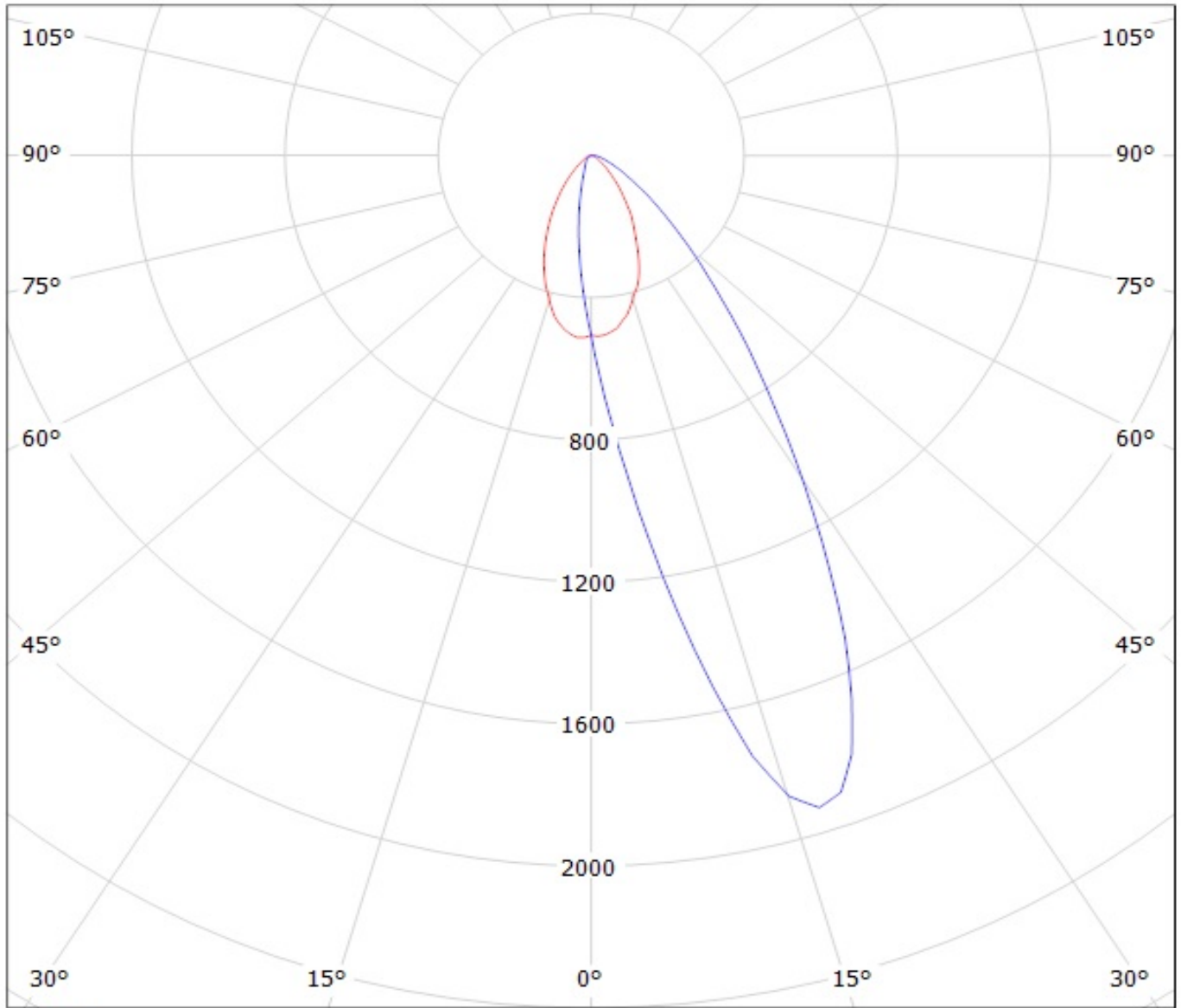
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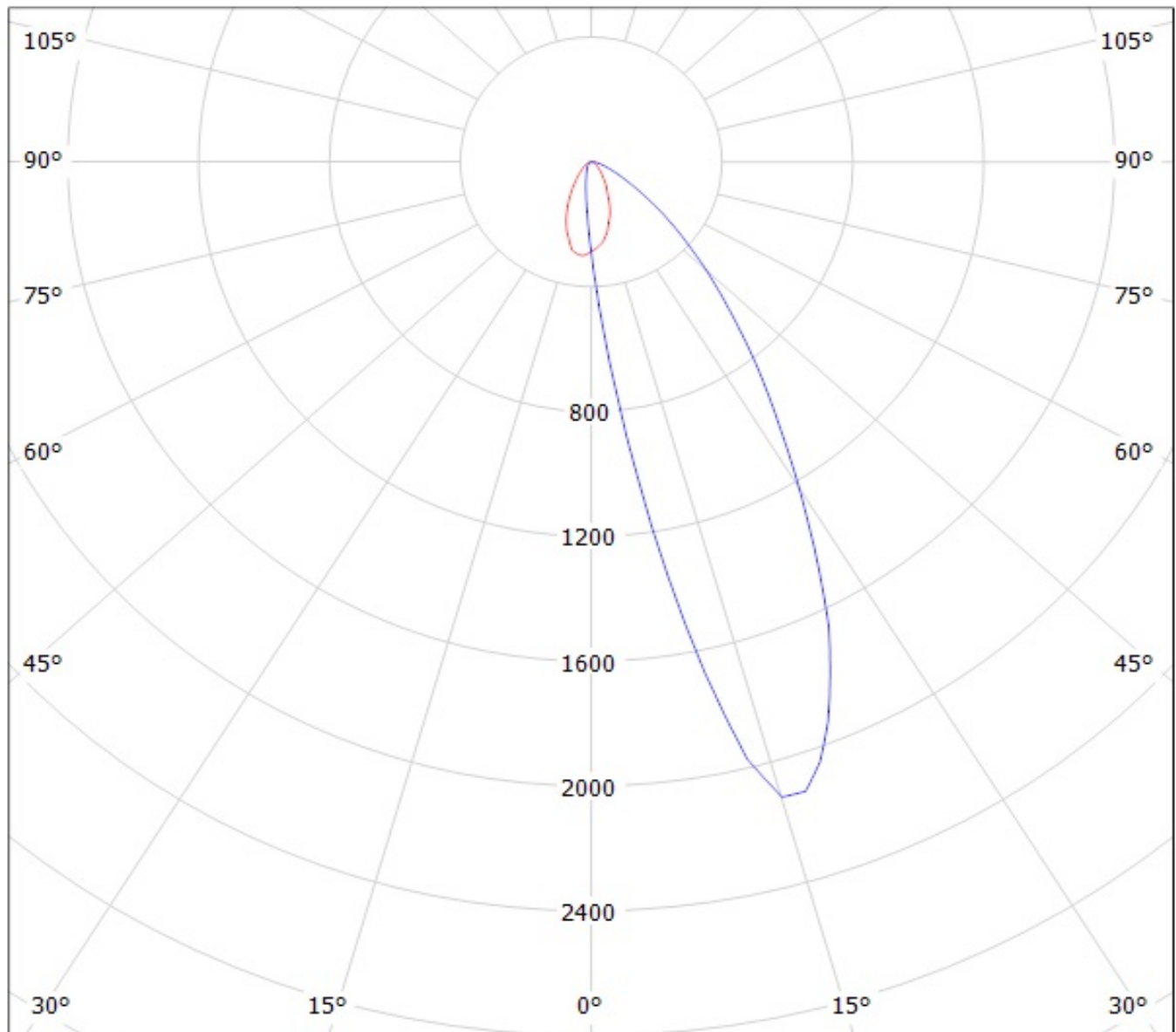
cd/klm  
— C0 - C180    — C90 - C270

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cd/klm  
— C0 - C180 — C90 - C270

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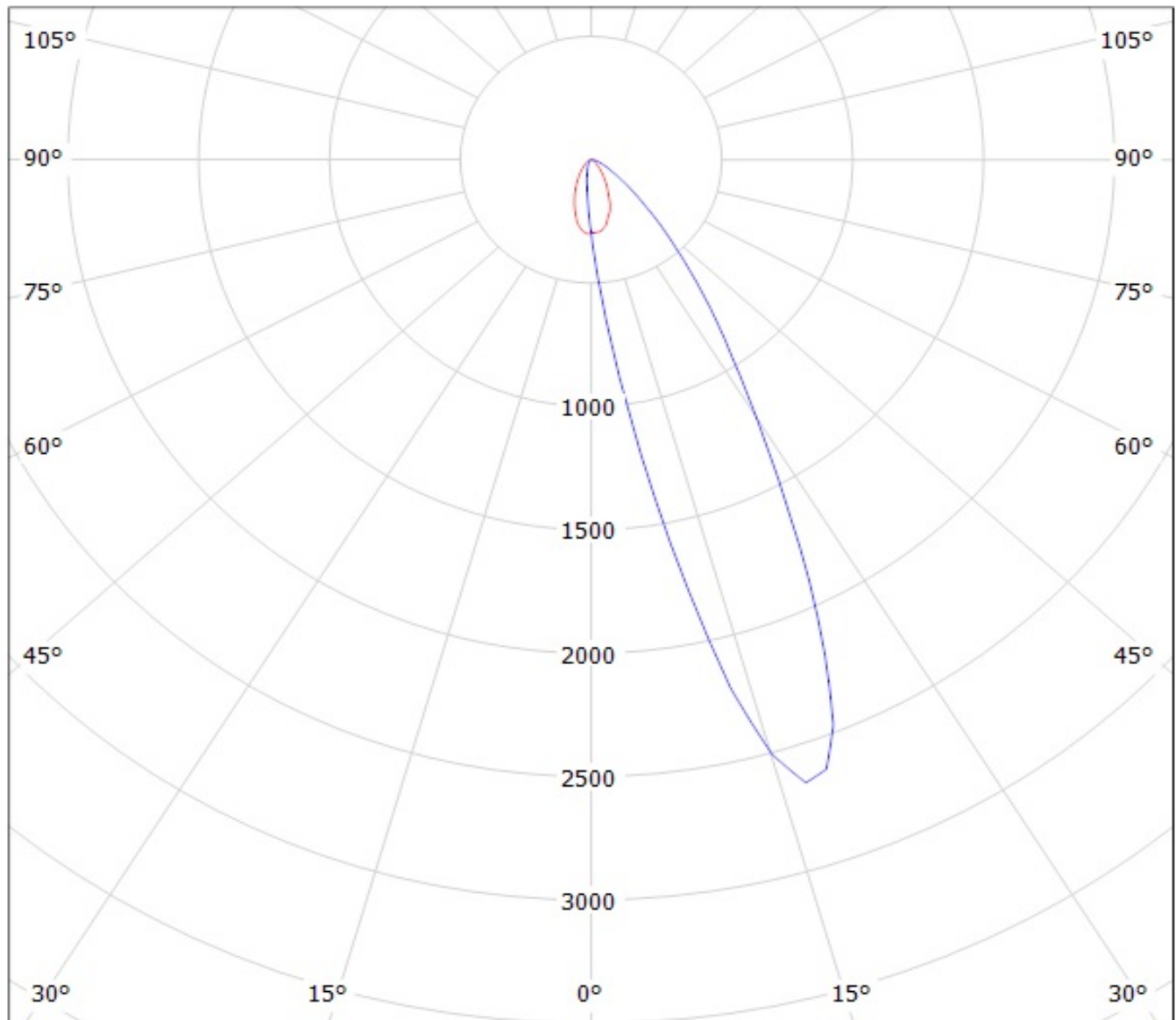


cd/klm

— C0 - C180

— C90 - C270

Luminaire: Ledil Oy FCA13329\_BILLIE-As (Osram Oslon 150deg 69lm @ 250mA) Efficiency=88%  
Lamps: 1 x Osram Oslon 150deg 69lm @ 250mA CCT=3601K P=0,75W I=250mA



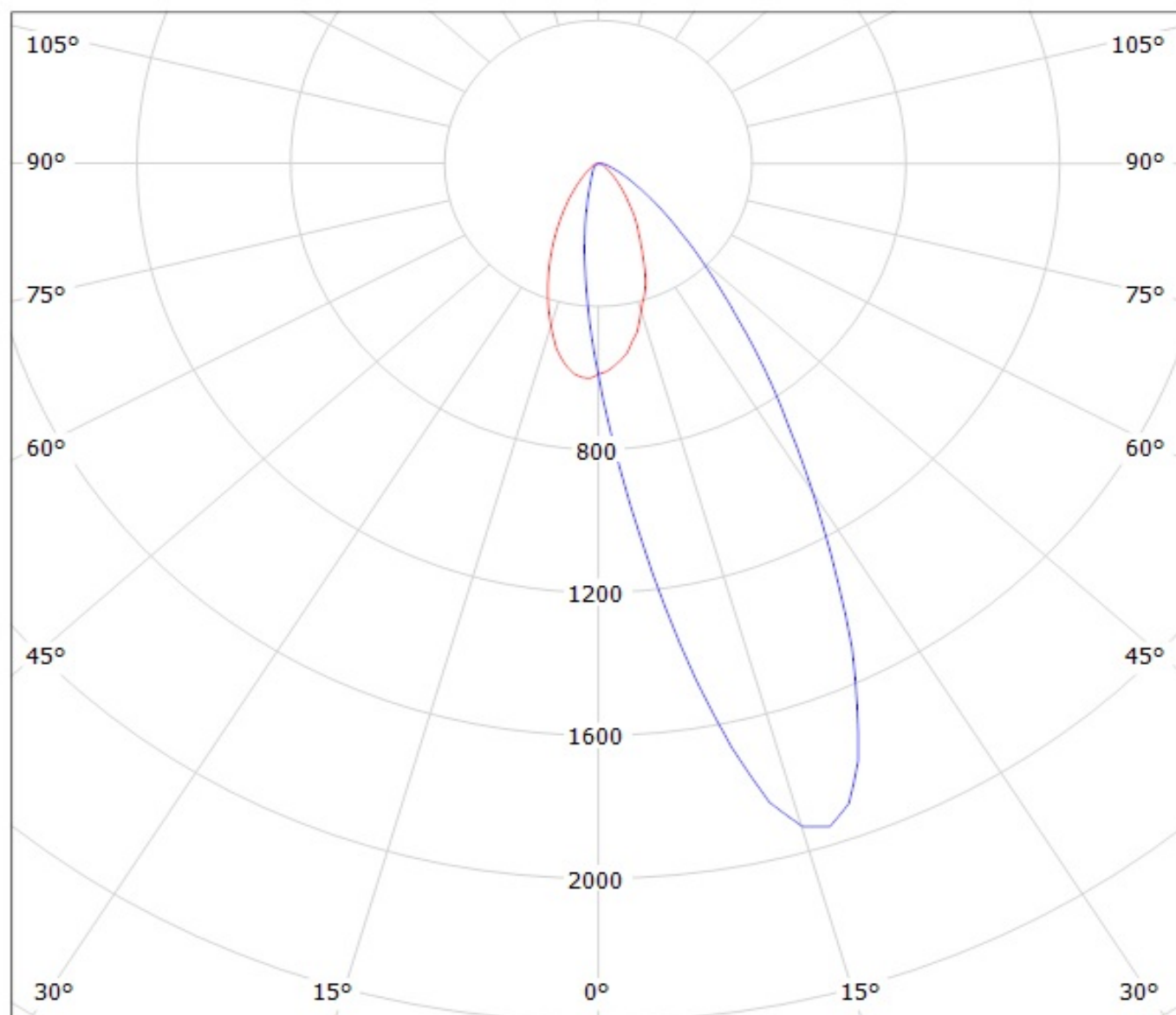
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Lamps: 1 x Osram Duris S5 (GW PSLPS1.EC) 102lm @ 150mA CCT=6300K P=1.0W I=150mA



cd/klm

— C0 - C180 — C90 - C270



**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.**