

## DETAILS

<b>Product Number</b>	F13663_ANGELA-M-B
<b>Family</b>	ANGELA
<b>Type</b>	Reflector
<b>Color</b>	metal
<b>Diameter</b>	119.5 mm
<b>Height</b>	74.5 mm
<b>Style</b>	round
<b>Optic Material</b>	PC
<b>Holder Material</b>	
<b>Fastening</b>	
<b>Status</b>	ready
<b>ROHS Compliant</b>	Yes
<b>Date Updated</b>	16/05/2014



## OPTICAL PROPERTIES

LED	Viewing Angle	Light Beam	Efficiency	cd/lm	connector
Soleriq S13	15 degrees		83 %	4.000	8502/G2 A.A.G. STUCCHI
CXM-14	16 degrees		82 %	3.900	Solderless Connector 47.319.2020 BJB
COB 10W/13W/17W/24W	16 degrees		83 %	3.900	Solderless Connector 47.319.2080 BJB
BXRA ES Rectangle	16 degrees		82 %	3.690	Solderless Connector 47.319.2040 BJB
CLL03x/CLU034	16 degrees		83 %	3.800	Solderless Connector 47.319.2020 BJB
Soleriq S19	17 degrees		83 %	3.400	8503/G2 A.A.G. STUCCHI
Mega Zenigata (GW6DME)	17 degrees		84 %	3.700	Solderless Connector 47.319.2010 BJB
LUXEON K16	17 degrees		87 %	3.700	Solderless Connector 47.319.2070 BJB
LUXEON K12	17 degrees		87 %	3.700	Solderless Connector 47.319.2070 BJB
Soleriq S19	18 degrees		83 %	3.380	Solderless Connector 47.319.2170 BJB
Soleriq E30	20 degrees		81 %	2.900	Solderless Connector 47.319.2090 BJB
CLL04x/CLU044	21 degrees		81 %	2.730	Solderless Connector 47.319.2030 BJB
CXM-22	22 degrees		81 %	2.500	Solderless Connector 47.319.2030 BJB
ZC25/40	23 degrees		81 %	2.700	Solderless Connector 47.319.2030 BJB

D

C

B

A

4

4

LED position

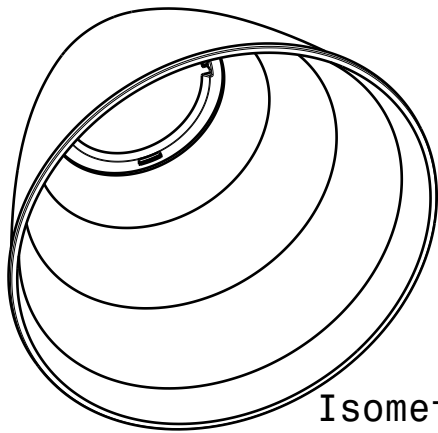
Ø 119.5

Ø 39

Bottom view  
Scale: 1:2

3

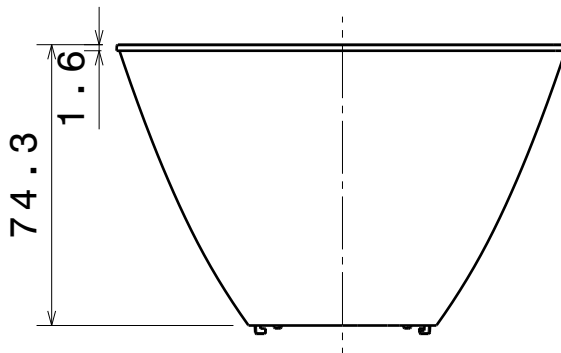
3



Isometric view  
Scale: 1:2

2

2



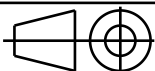
Front view  
Scale: 1:2

Tolerances if not otherwise shown  
According to DIN ISO 2768-1  
Linear measures:  
Up to 30mm class F, otherwise class M.  
According to DIN ISO 2768-2  
Form and position: class K

**LEDiL**

Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:



DRAWING TITLE

Angela-B

This drawing is the property  
of LEDiL Oy. It may not be  
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communicated without a written  
agreement with LEDiL Oy."

SIZE PART NUMBER

A4

-

SCALE 1:2 WEIGHT

-

SHEET 1/1

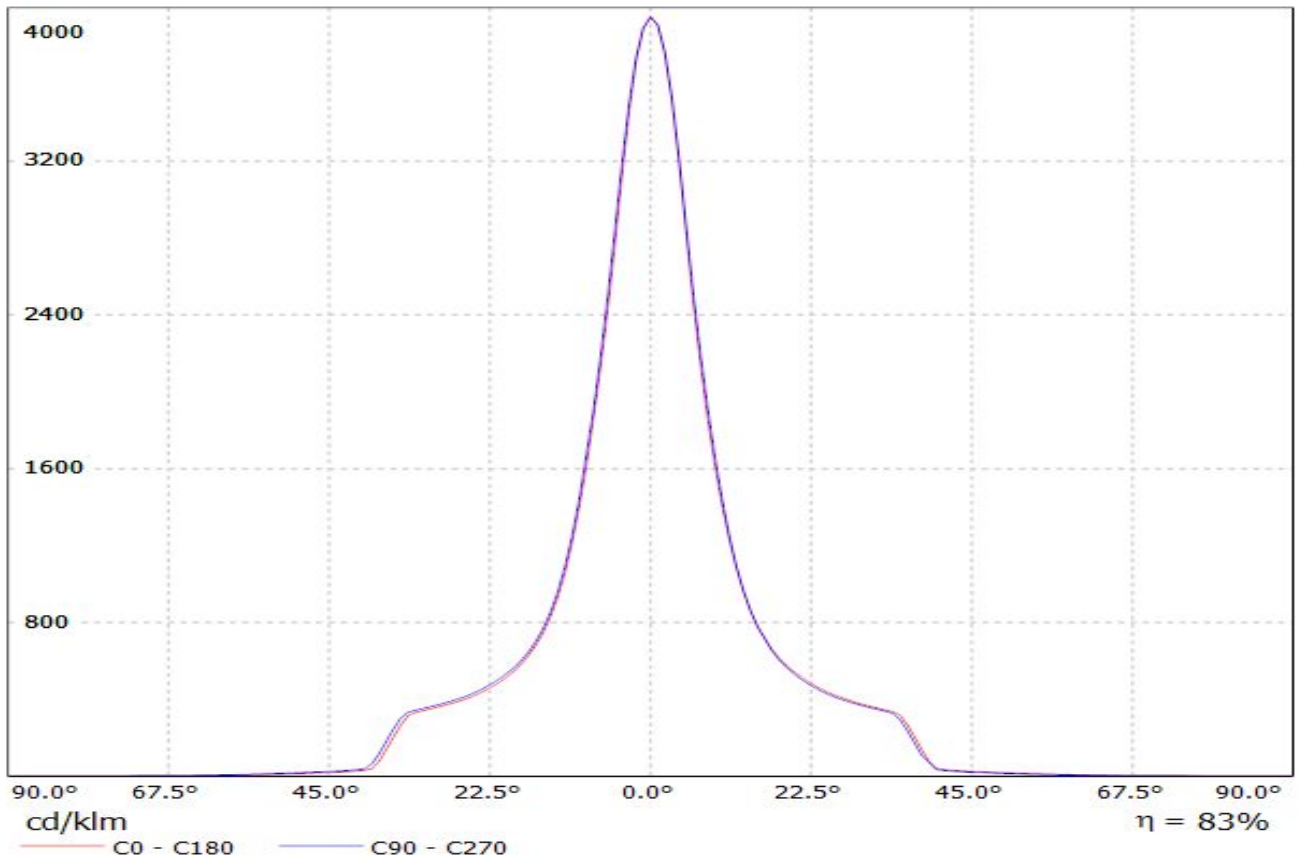
D

A

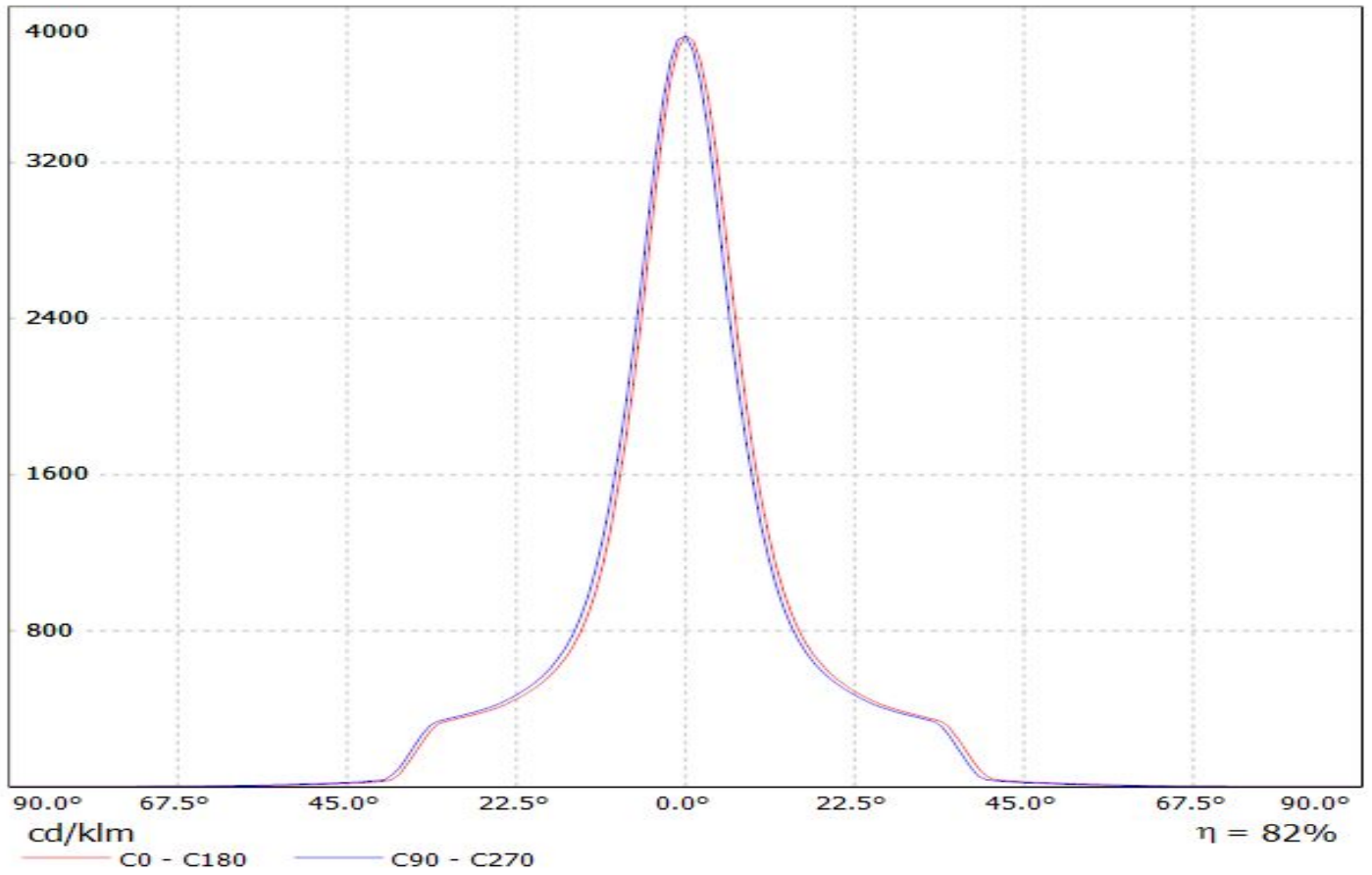
1

1

Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(S13) Eff.83.2%  
Lamps: 1 x Osram\_Soleriq\_S13\_901.003lm@250mA\_P=7.48151W\_I=249.9mA

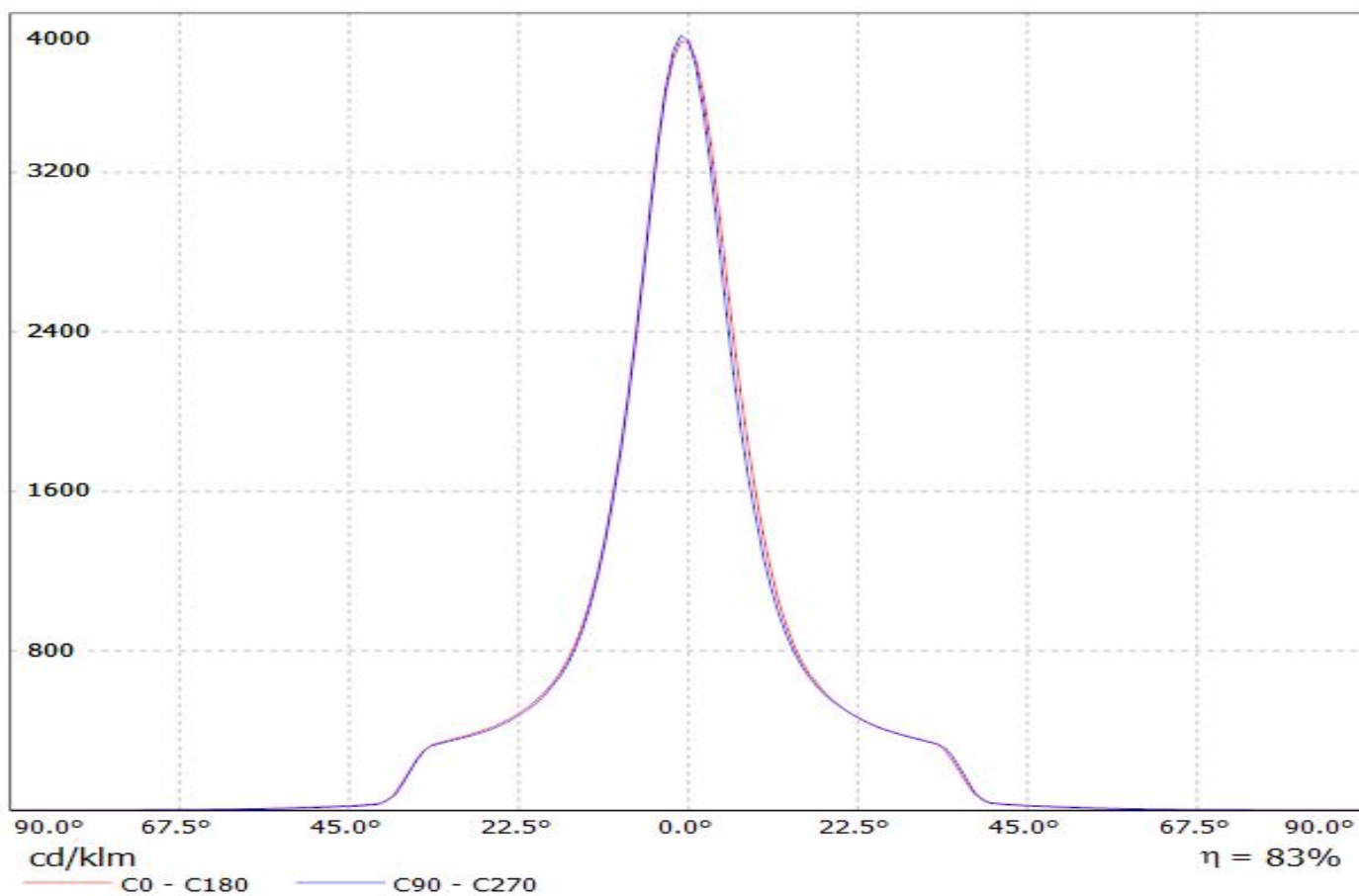


Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(CXM-14)  
Lamps: 1 x LUMINUS\_XNOVA\_CXM-14\_(AC00)  
\_1049.18lm@250mA\_CCT=3126K\_P=8.31834W\_I=249.8mA

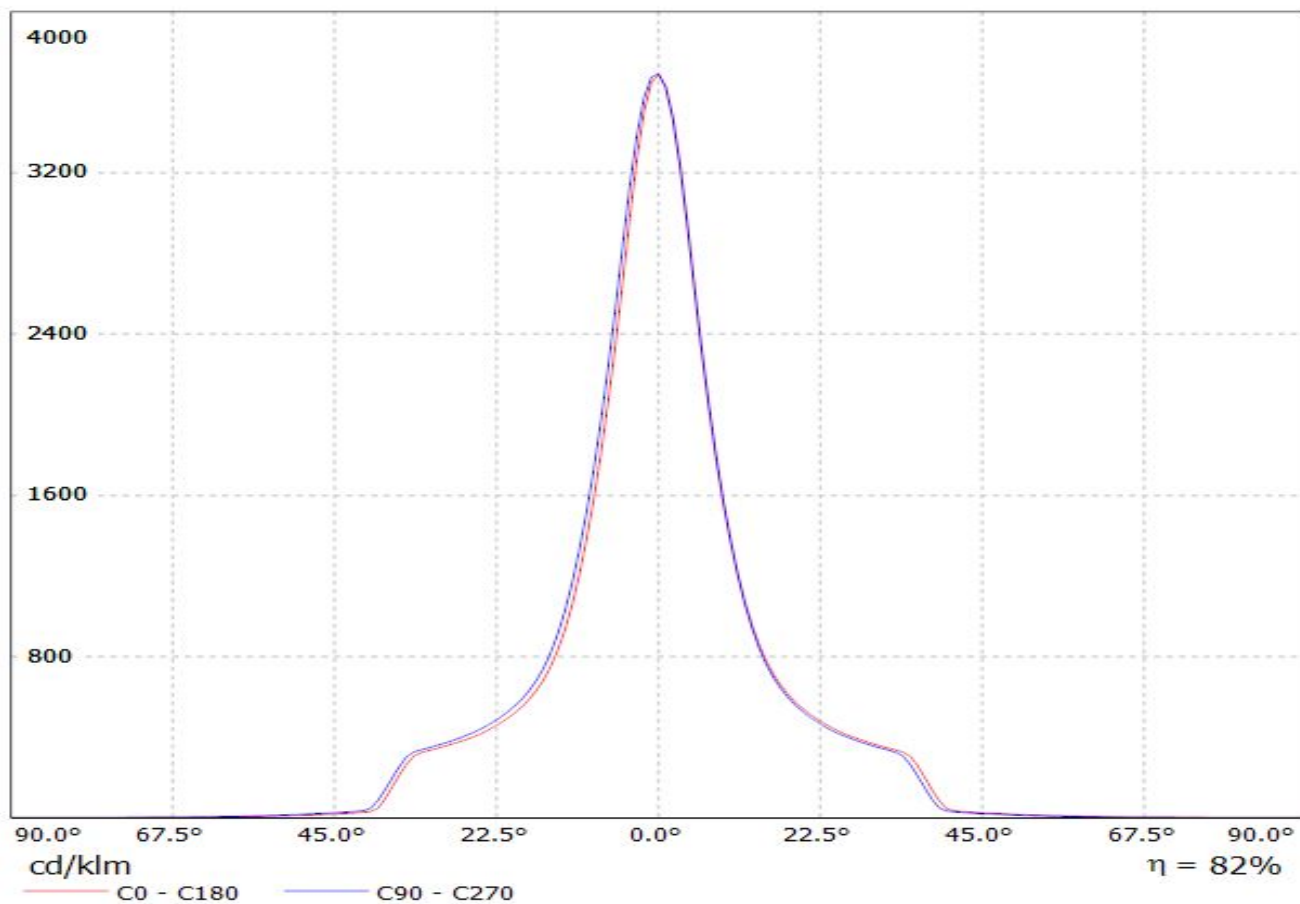


Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(COB-10W) Eff.83.2%

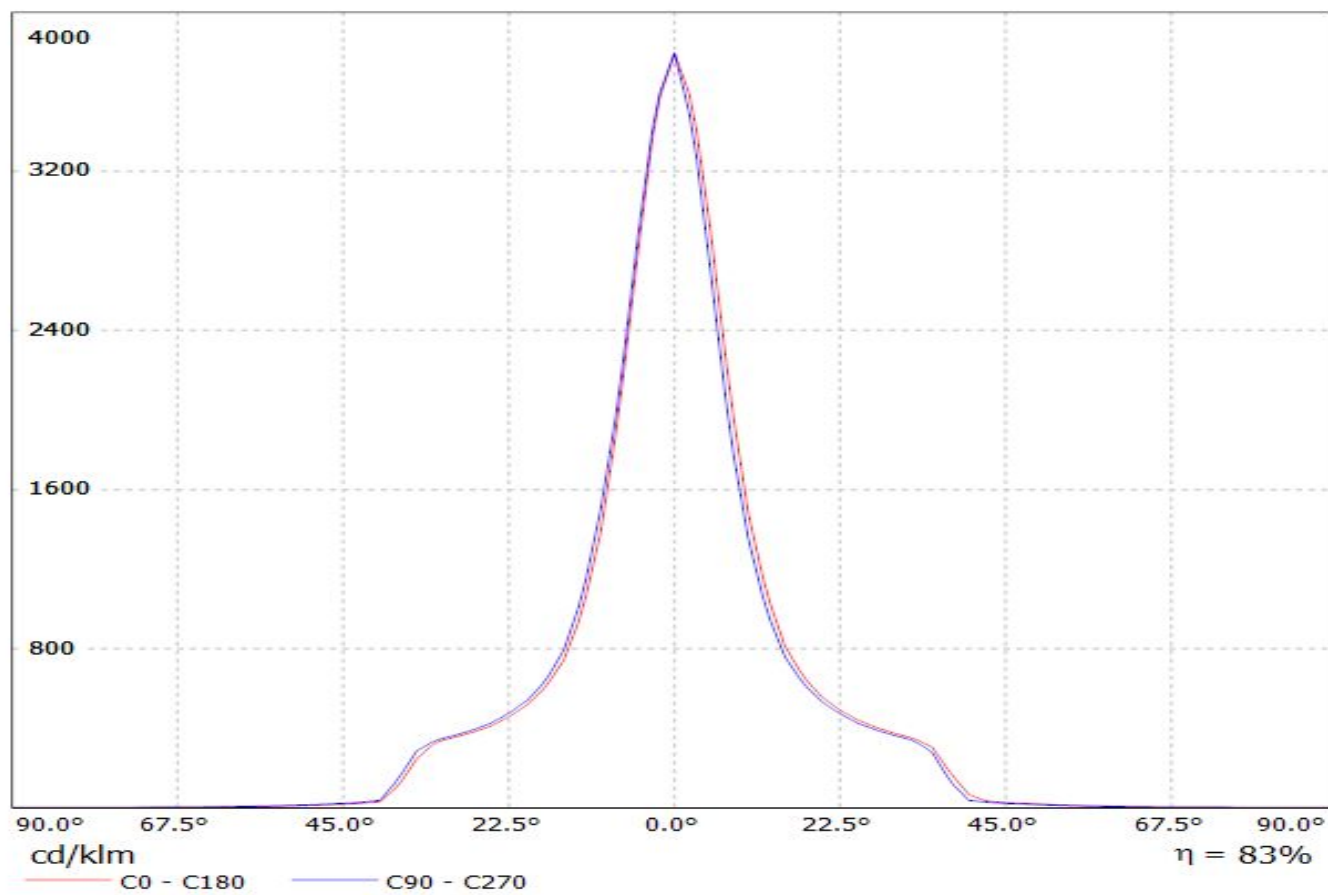
Lamps: 1 x LG\_COB-10W\_1065.85lm@250mA\_CCT=5090K\_P=9.10871W\_I=249.8mA



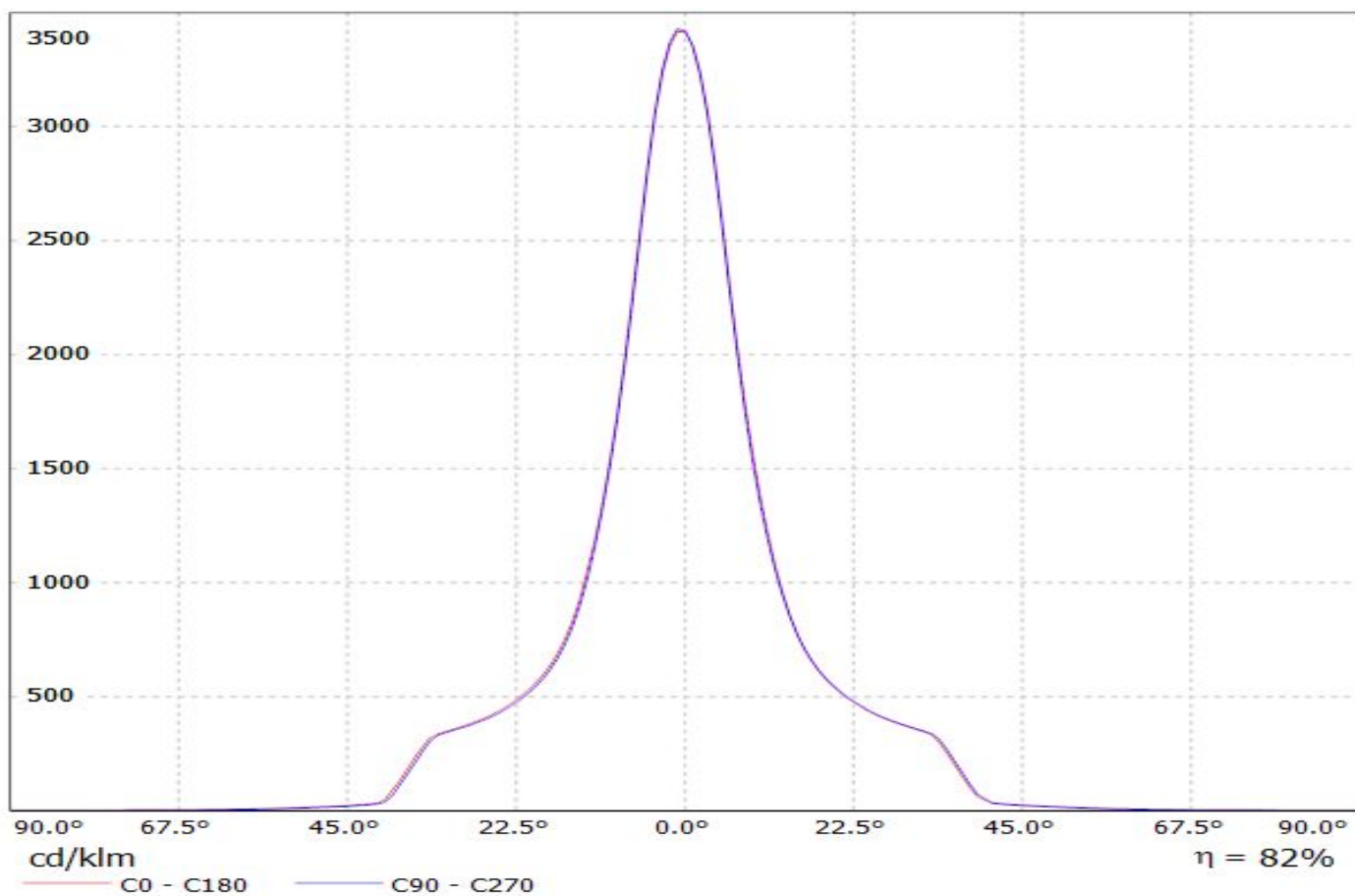
Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(BXRA\_ES) Eff.82.2%  
Lamps: 1 x Bridgelux\_BXRA\_ES\_287.055lm@250mA\_P=4.09486W\_I=249.9mA



Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(CLL030) Eff.82.7%  
Lamps: 1 x Citizen\_CLL030\_1040.57lm@250mA\_P=8.45923W\_I=249.8mA

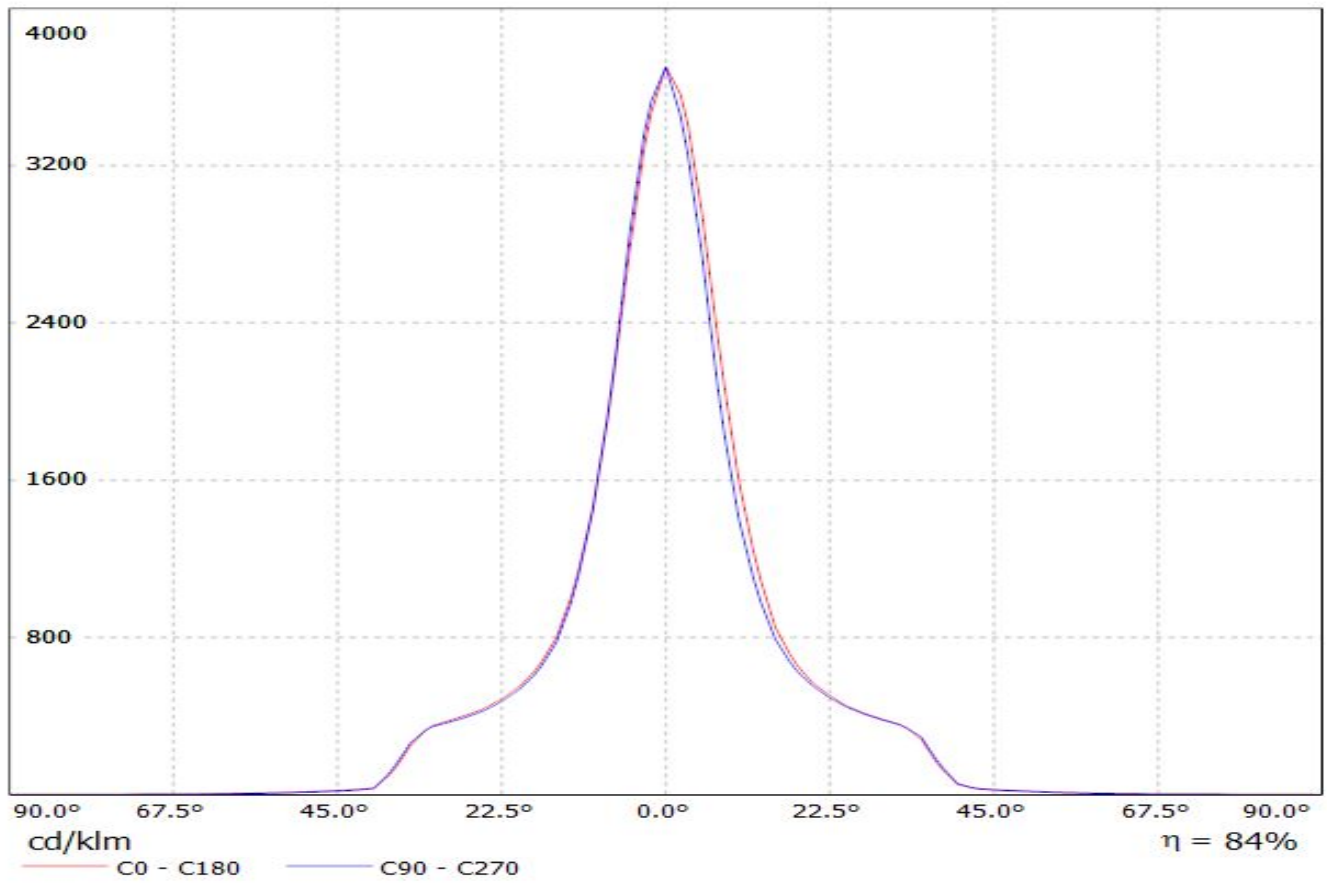


Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(S19) Eff.82.6%  
Lamps: 1 x Osram\_SOLERIQ\_S19\_1434.85lm@250mA\_P=10.5595W\_I=249.8mA

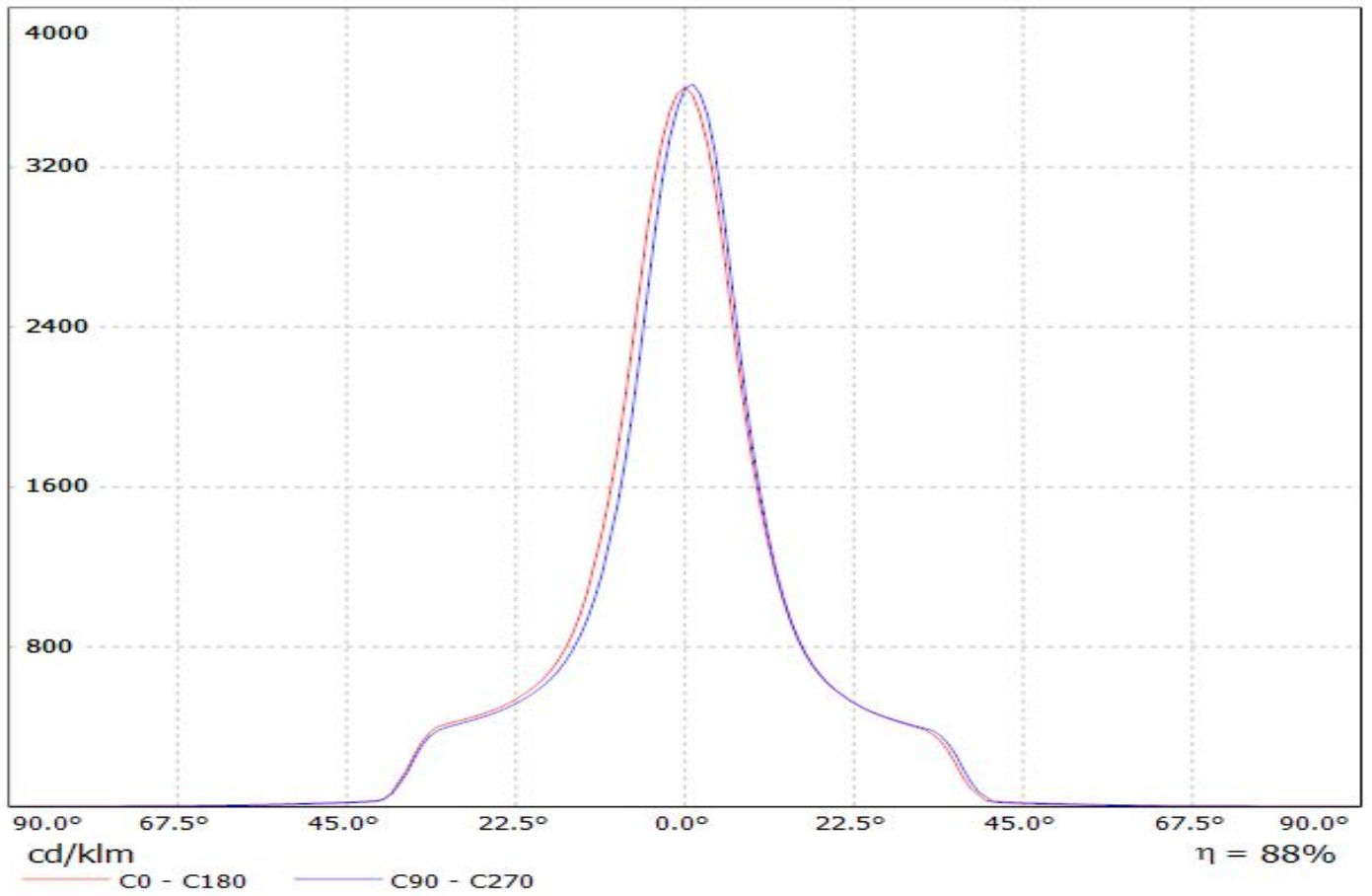




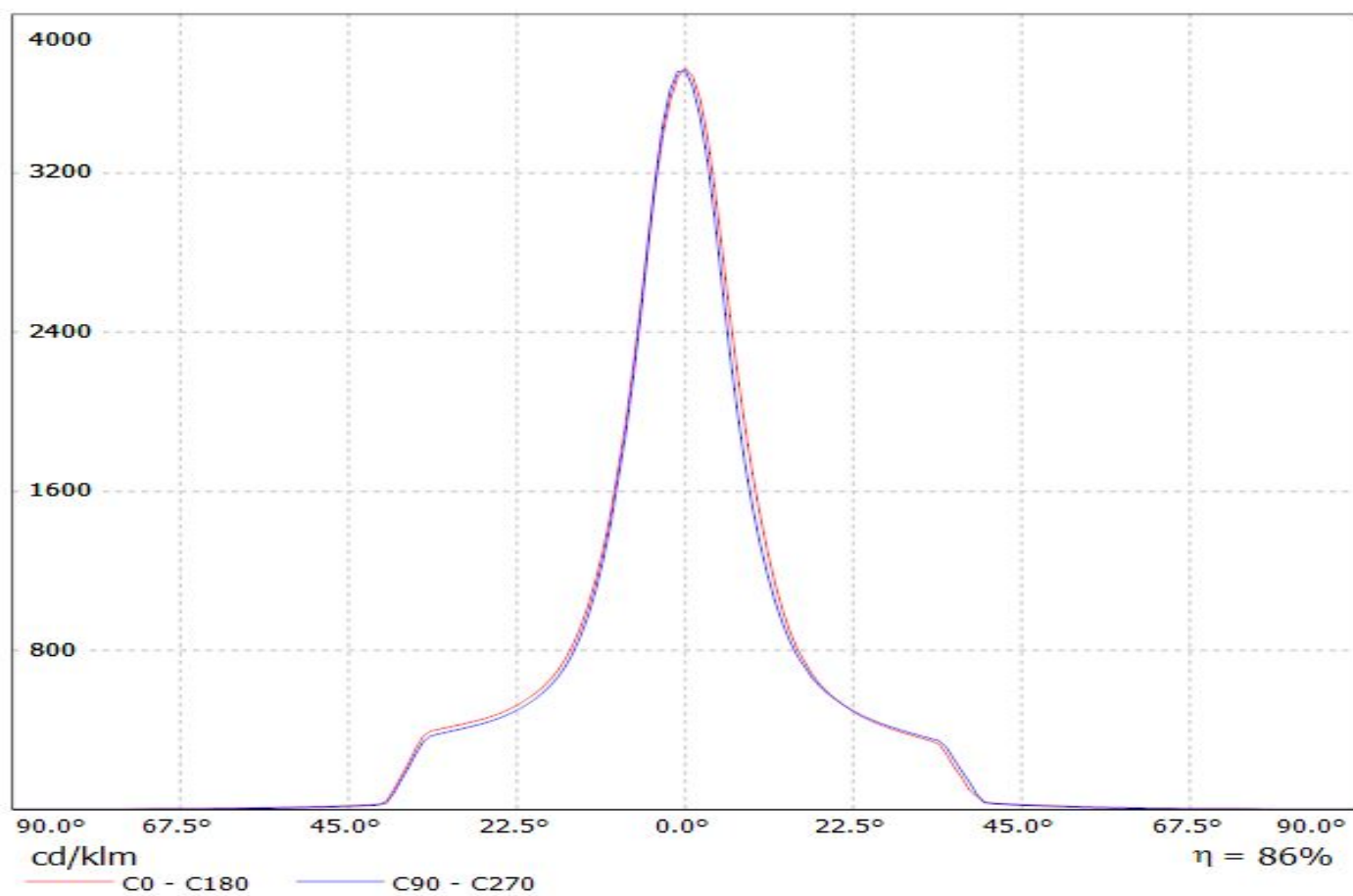
Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(MZ) Eff 84.3%  
Lamps: 1 x Sharp\_Mega\_Zenigata\_1226.07lm@250mA\_P=11.1573W\_I=249.8mA



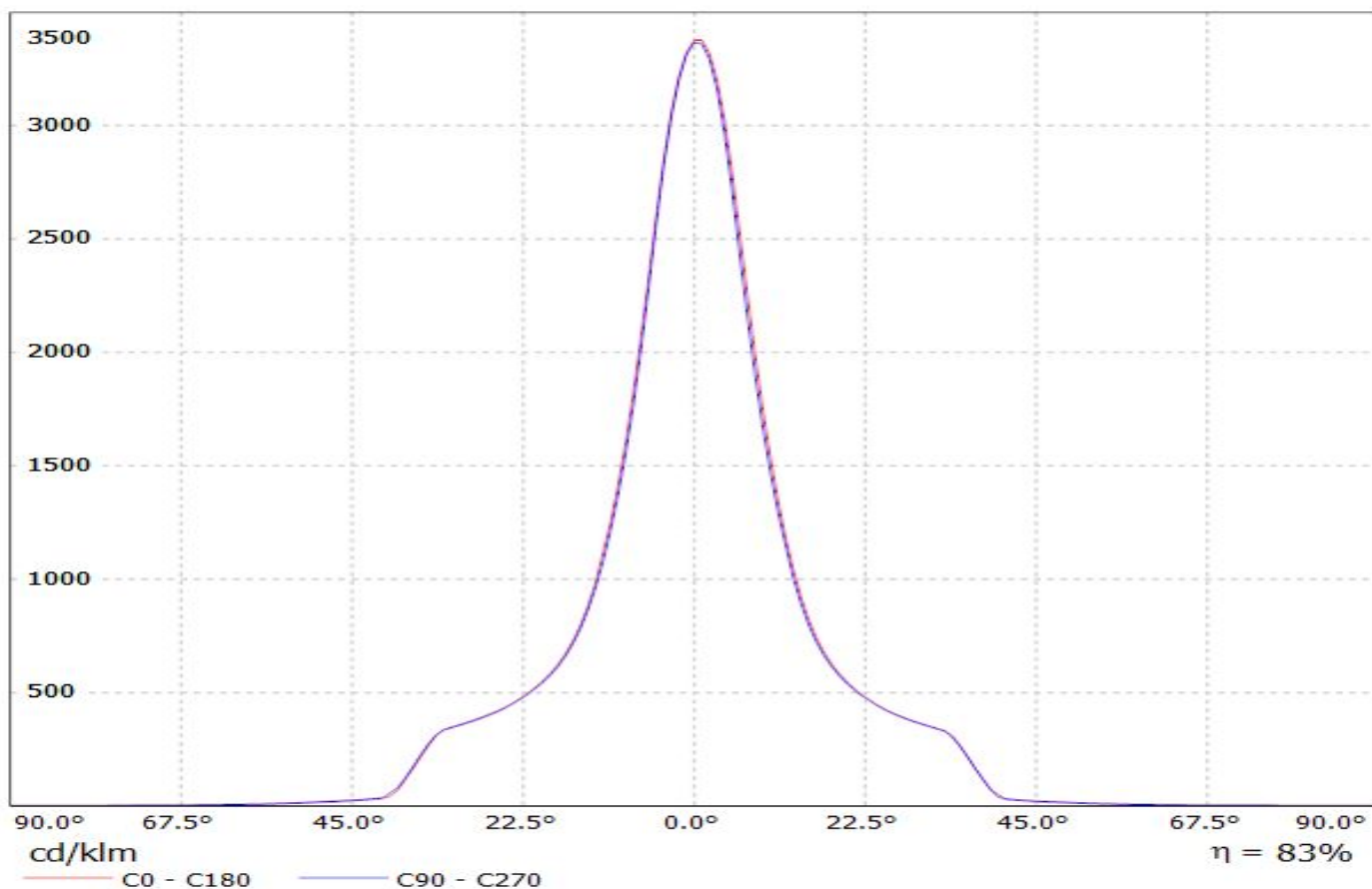
Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(K16) Eff.87.9%  
Lamps: 1 x Luxeon\_K16\_1224.2lm@250mA\_P=10.8991W\_U=249.9mA



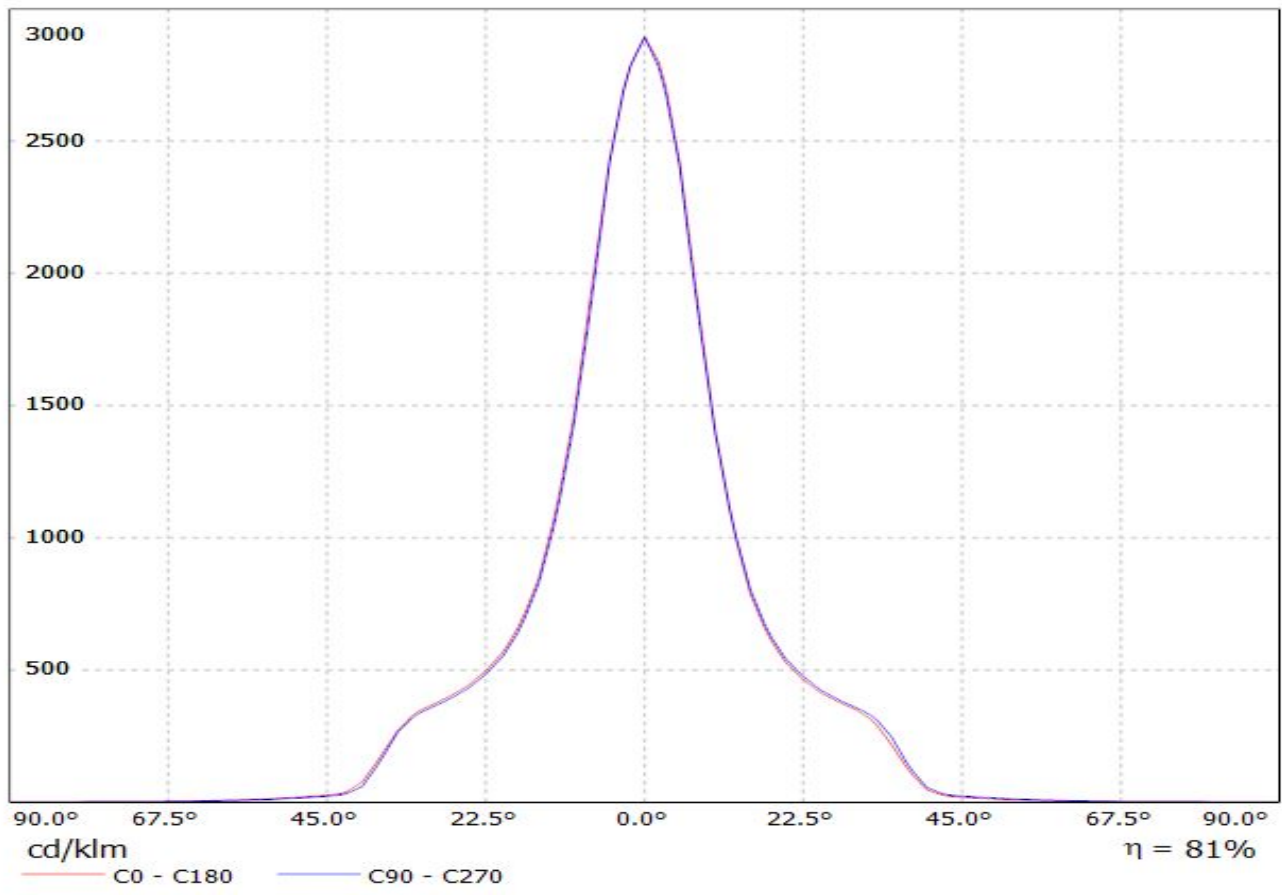
Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(K12) Eff.86.5%  
Lamps: 1 x Luxeon\_K12\_933.514lm@250mA\_P=8.21721W\_I=249.9mA



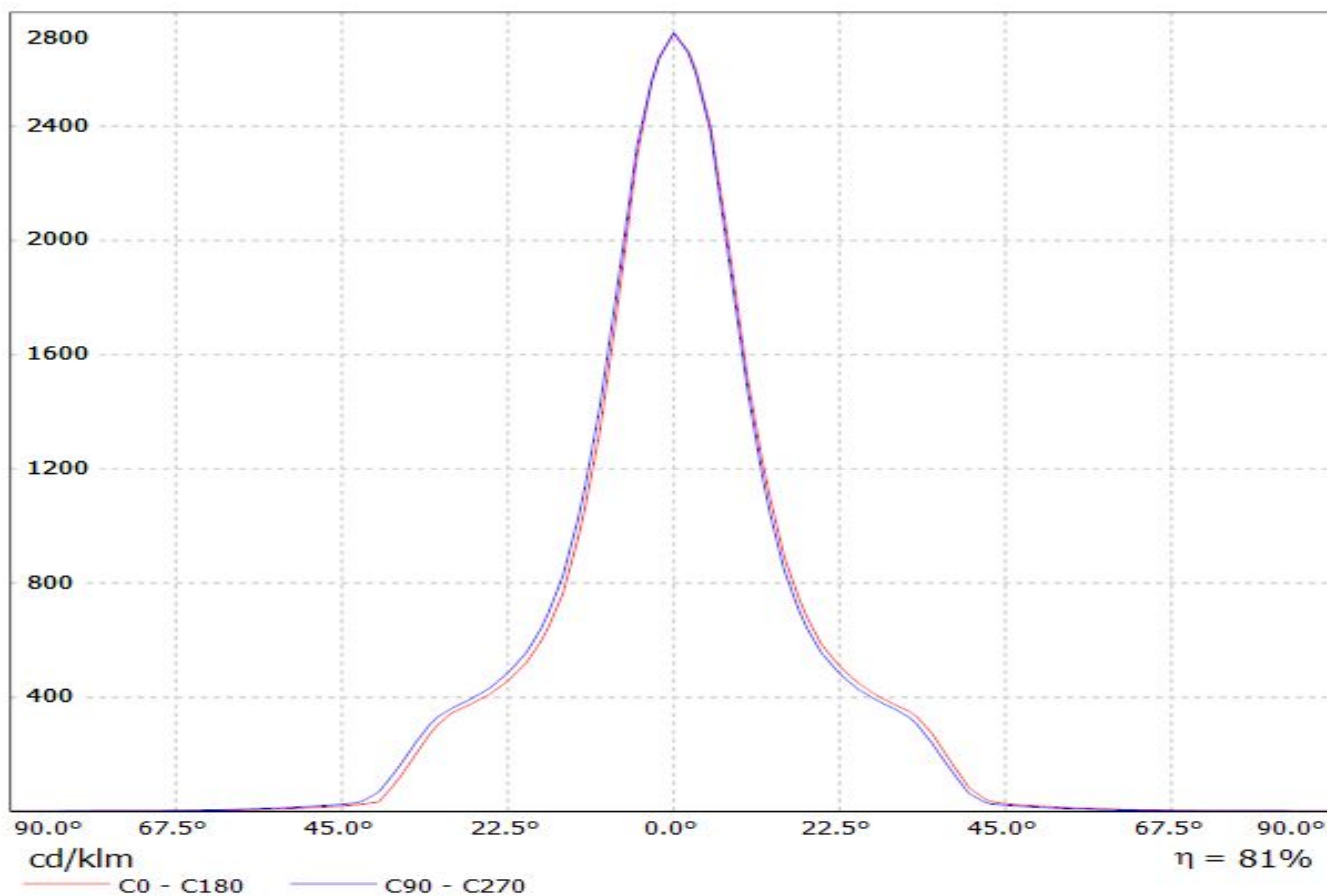
Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(Soleriq S19) Eff.82.6%  
Lamps: 1 x OSRAM\_SOLERIQ\_S19\_(GW\_KAHJB1.EM)  
\_1445.44lm@250mA\_CCT=3000K\_P=10.558W\_I=249.8mA



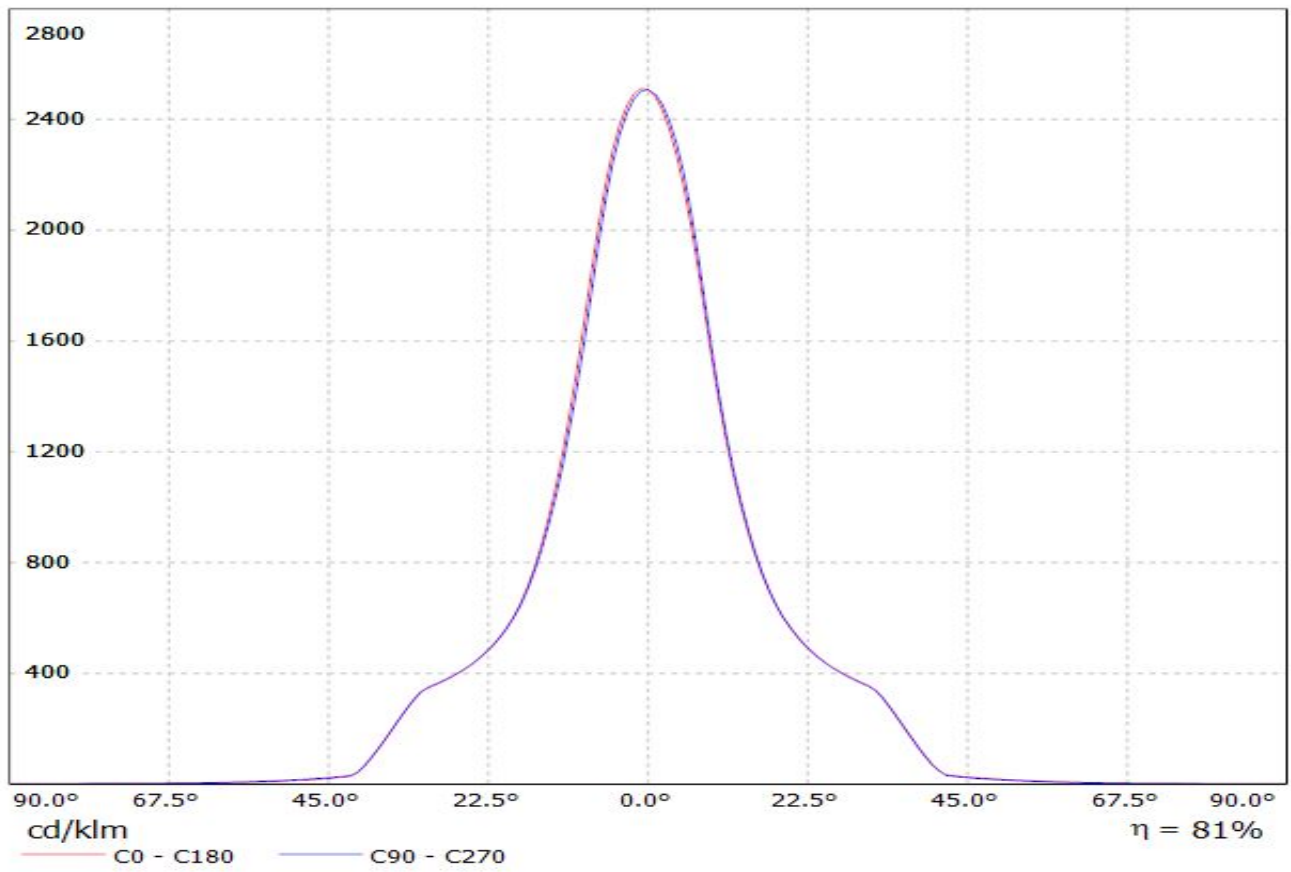
Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(E30) Eff.80.7%  
Lamps: 1 x Osram\_Solericq\_E30\_1364.86lm@250mA\_P=10.2445W\_I=249.8mA



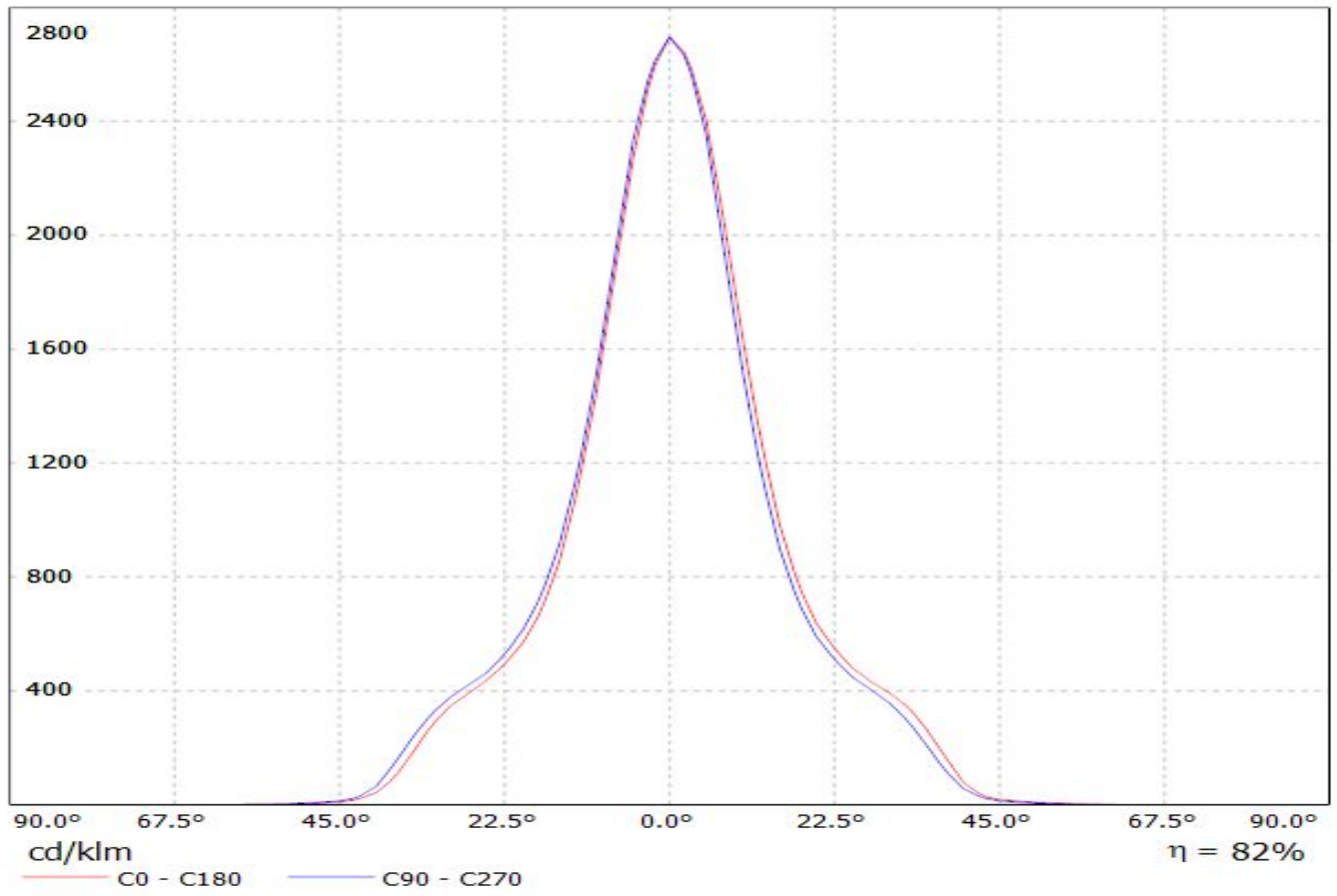
Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(CLL040) Eff.81.0%  
Lamps: 1 x Citizen\_CLL040\_1011.32lm@250mA\_P=8.24545W\_I=249.9mA



Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(CXM-22) Eff.80.7%  
Lamps: 1 x LUMINUS\_CXM-22\_1221.8lm@250mA\_P=8.00809W\_CCT=3000K\_I=249.8mA



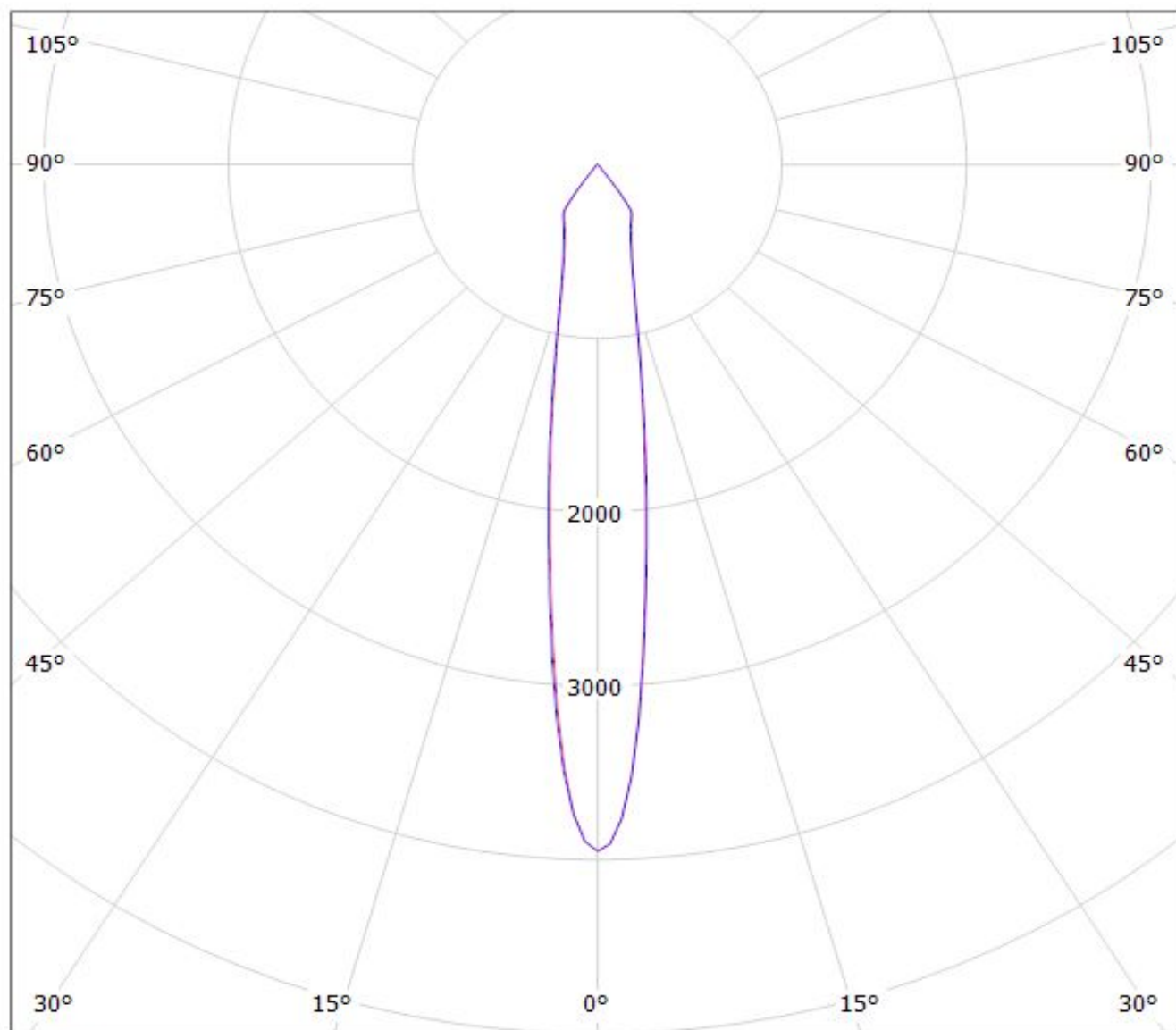
Luminaire: Ledil Oy F13663\_ANGELA-M-B\_(ZC-40) Efficiency=81%  
Lamps: 1 x Seoul ZC-40 (SBWW5F1B) 1153lm @ 250mA CCT= P=8.25W I=250mA





Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(S13) Eff.83.2%

Lamps: 1 x Osram\_Solericq\_S13\_901.003lm@250mA\_P=7.48151W\_I=249.9mA



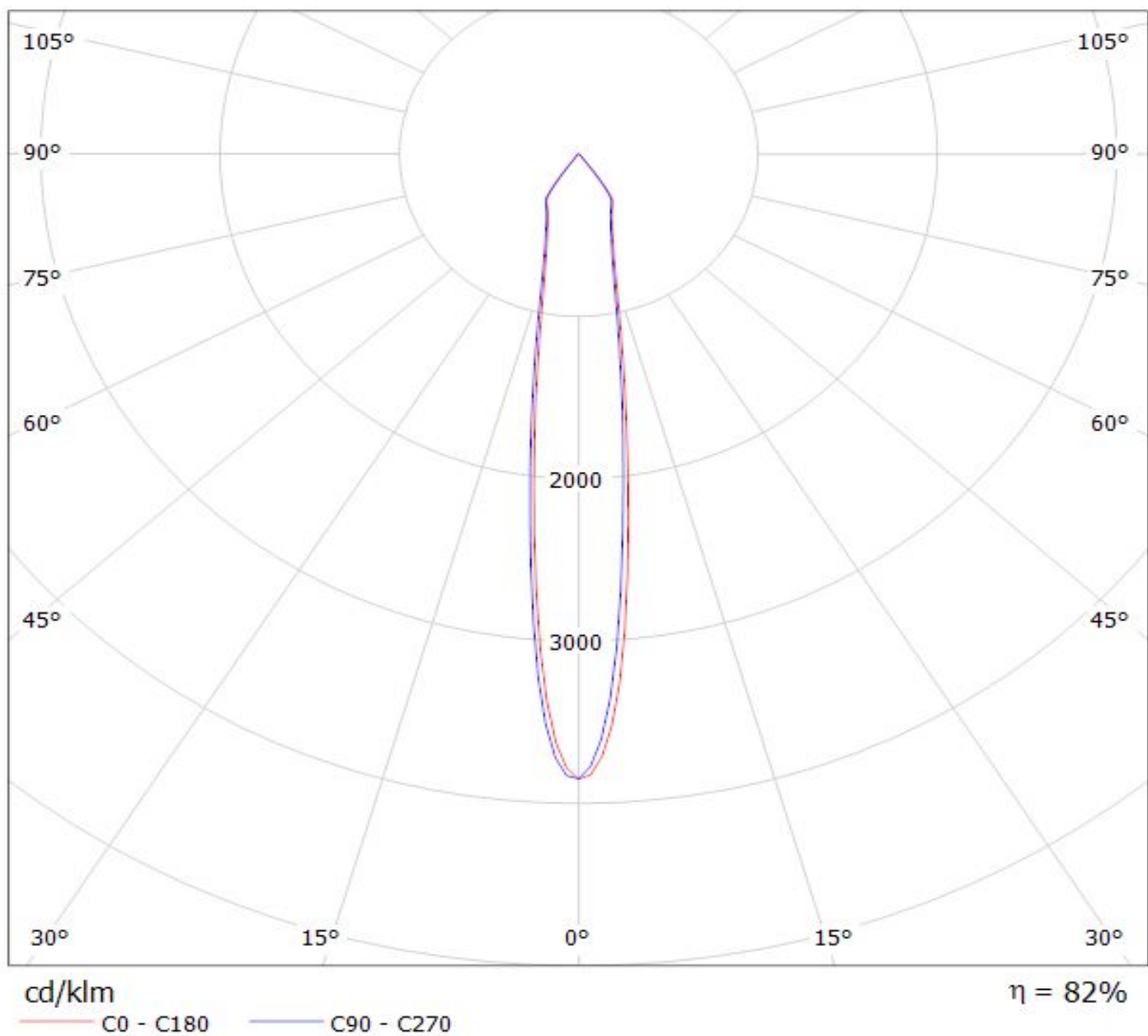
cd/klm

— C0 - C180

— C90 - C270

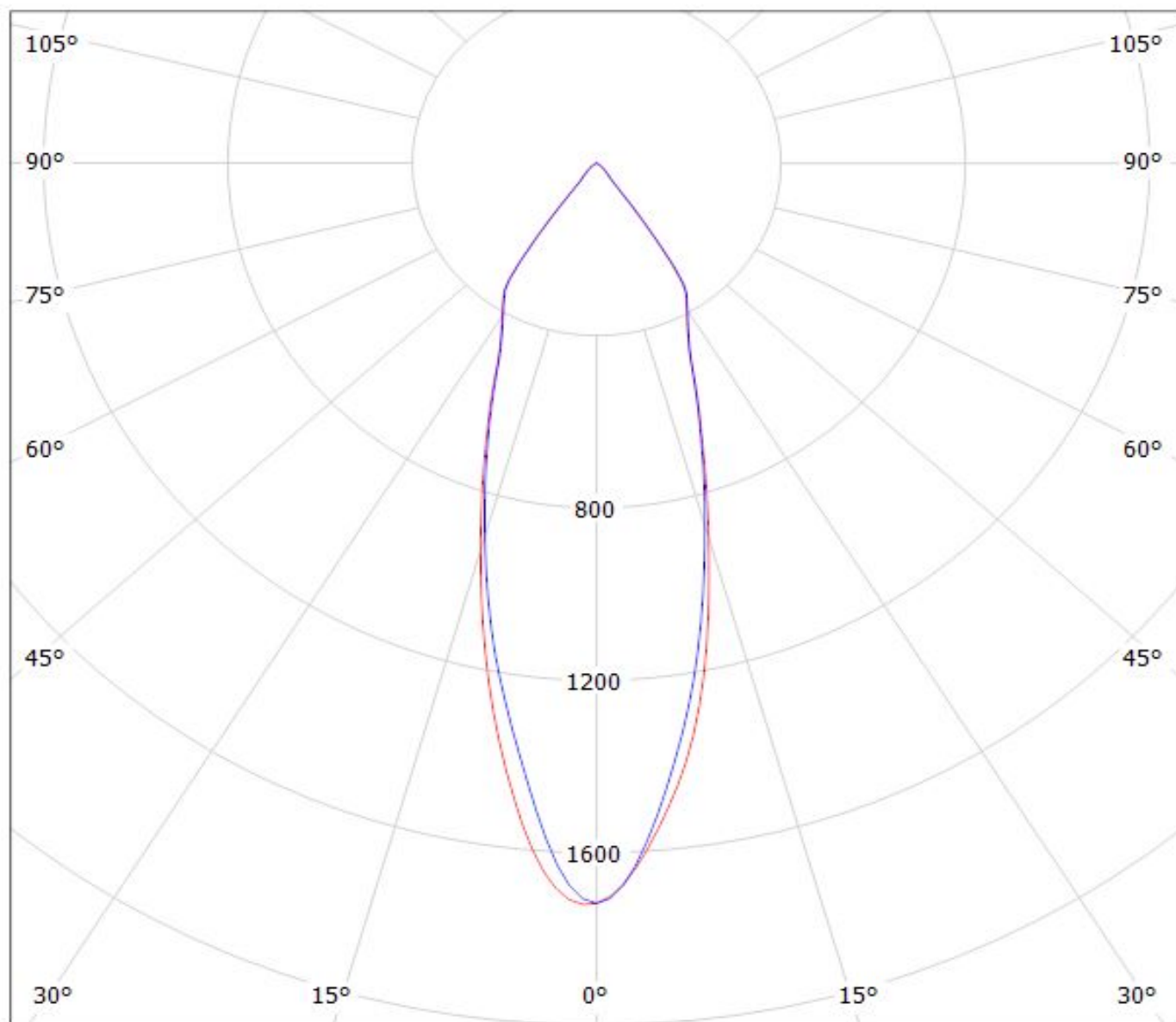
η = 83%

Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(CXM-14)  
Lamps: 1 x LUMINUS\_XNOVA\_CXM-14\_(AC00)  
\_1049.18lm@250mA\_CCT=3126K\_P=8.31834W\_I=249.8mA



Luminaire: LEDiL Oy F13664\_ANGELA-W-B\_(COB-10W) Eff.84.0%

Lamps: 1 x LG\_COB-10W\_1065.85lm@250mA\_CCT=5090K\_P=9.10871W\_I=249.8mA



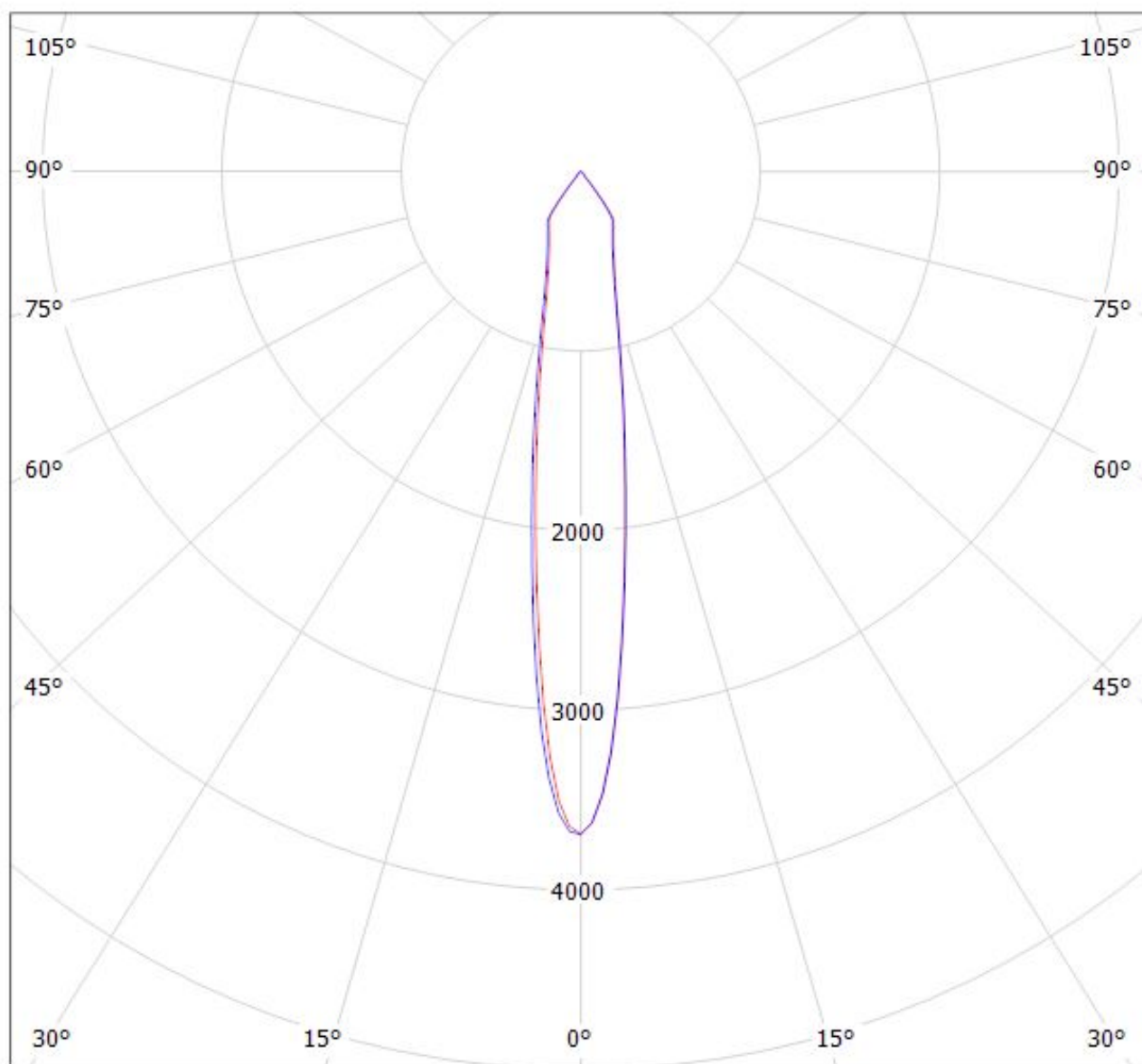
cd/klm

— C0 - C180

— C90 - C270

$\eta = 84\%$

Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(BXRA\_ES) Eff.82.2%  
Lamps: 1 x Bridgelux\_BXRA\_ES\_287.055lm@250mA\_P=4.09486W\_I=249.9mA

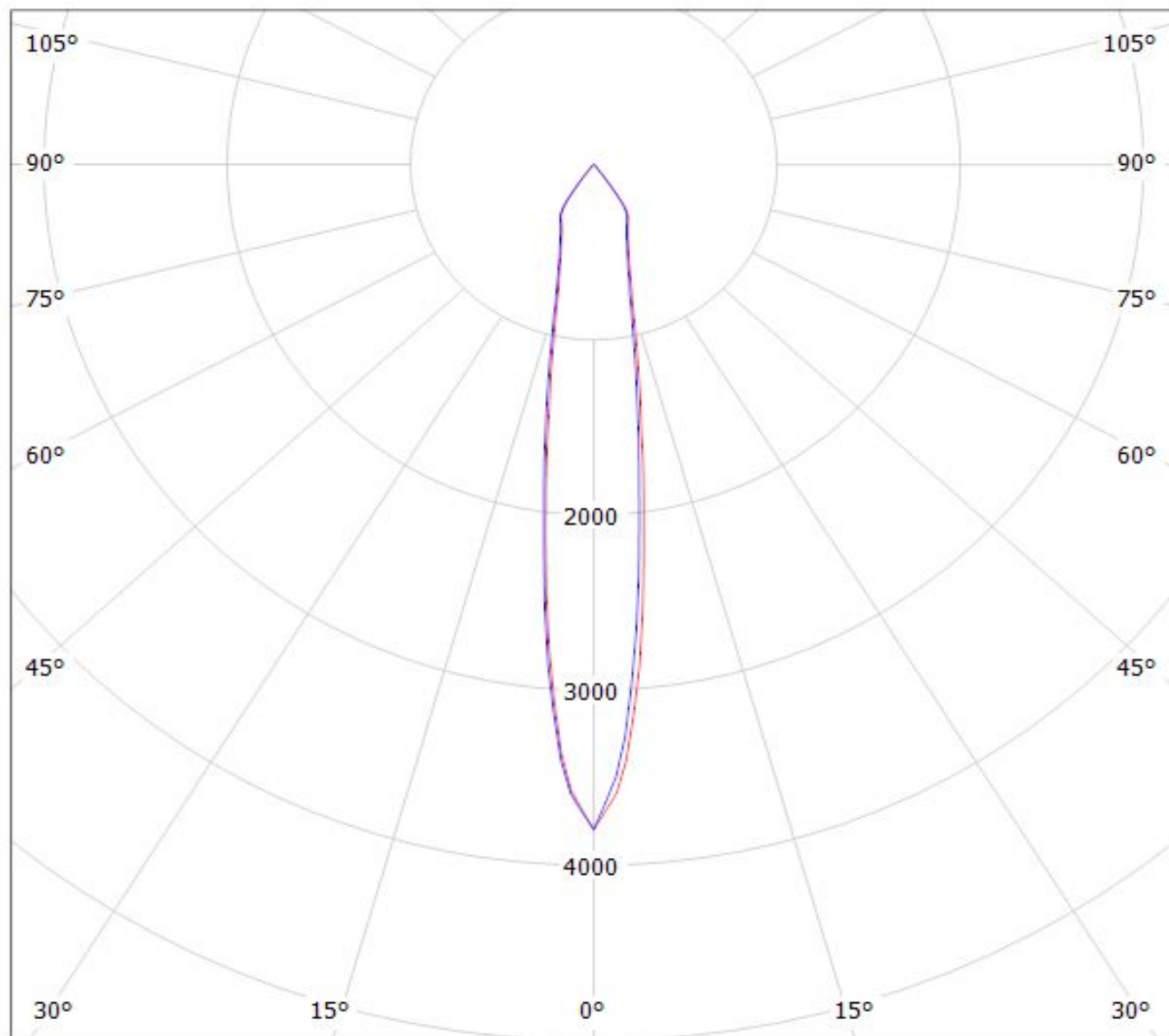


cd/klm

$\eta = 82\%$

— C0 - C180 — C90 - C270

Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(CLL030) Eff.82.7%  
Lamps: 1 x Citizen\_CLL030\_1040.57lm@250mA\_P=8.45923W\_I=249.8mA



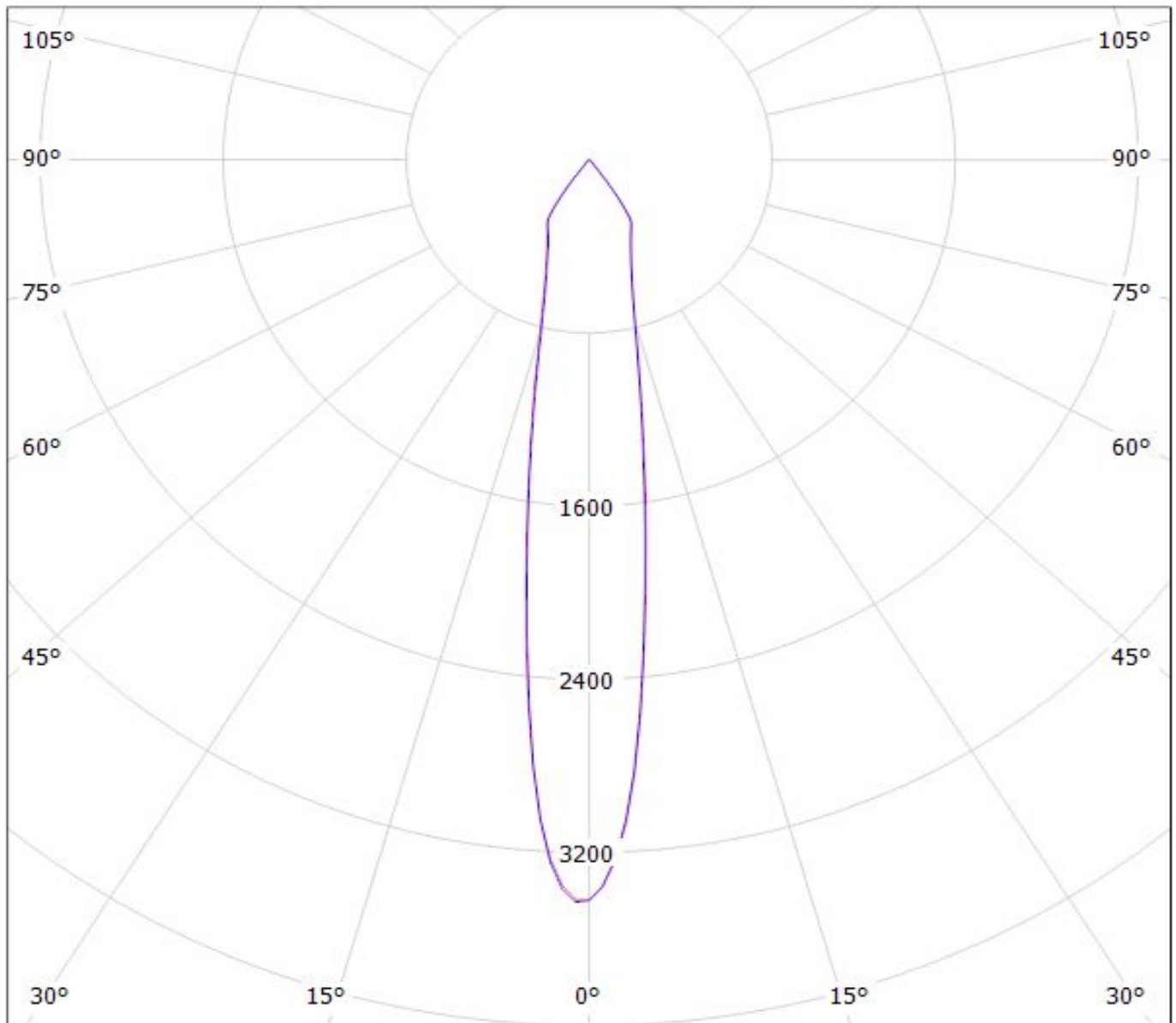
cd/klm

$\eta = 83\%$

— C0 - C180    — C90 - C270

Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(S19) Eff.82.6%

Lamps: 1 x Osram\_SOLERIQ\_S19\_1434.85lm@250mA\_P=10.5595W\_I=249.8mA



cd/klm

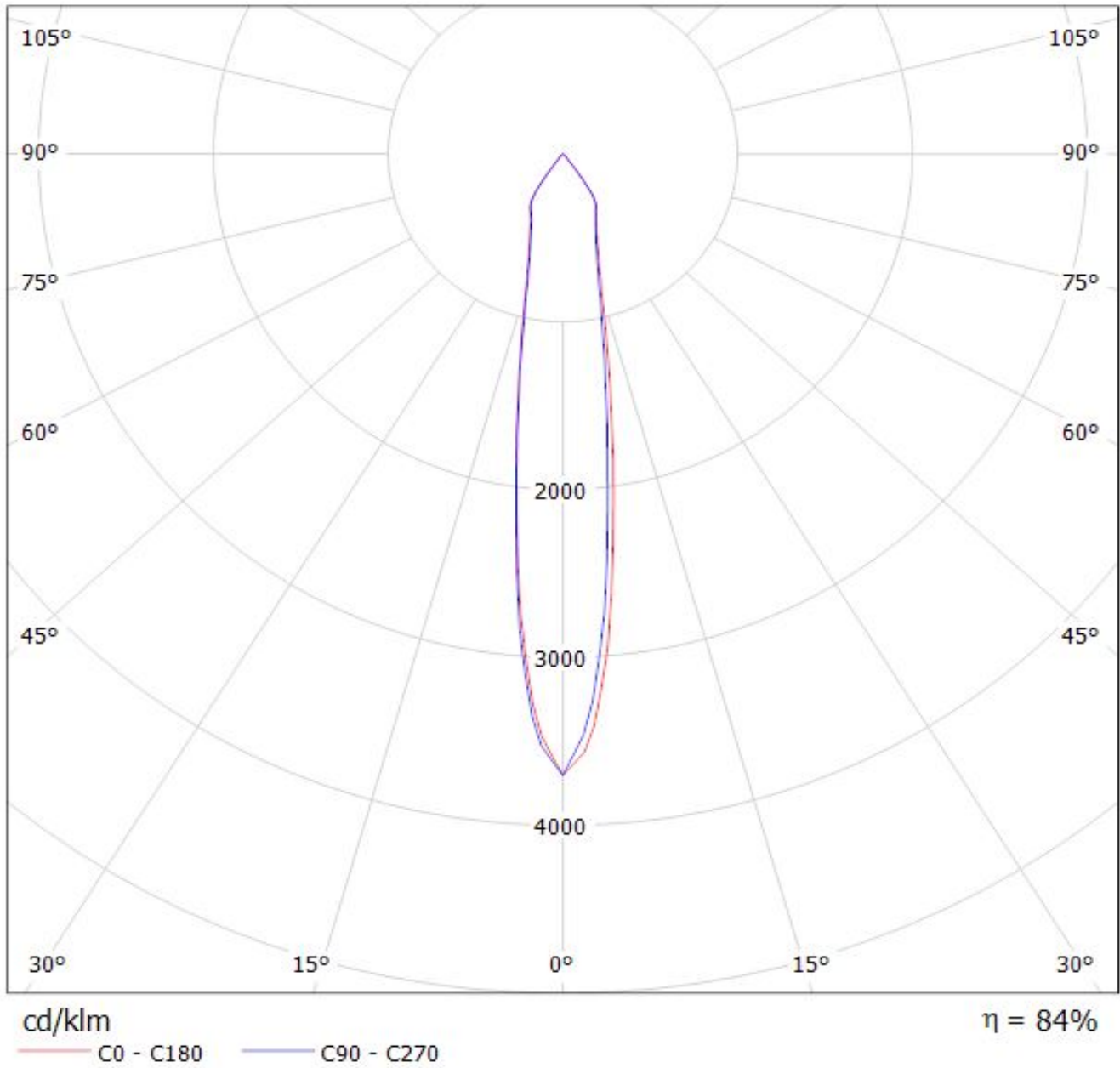
— C0 - C180

— C90 - C270

$\eta = 82\%$

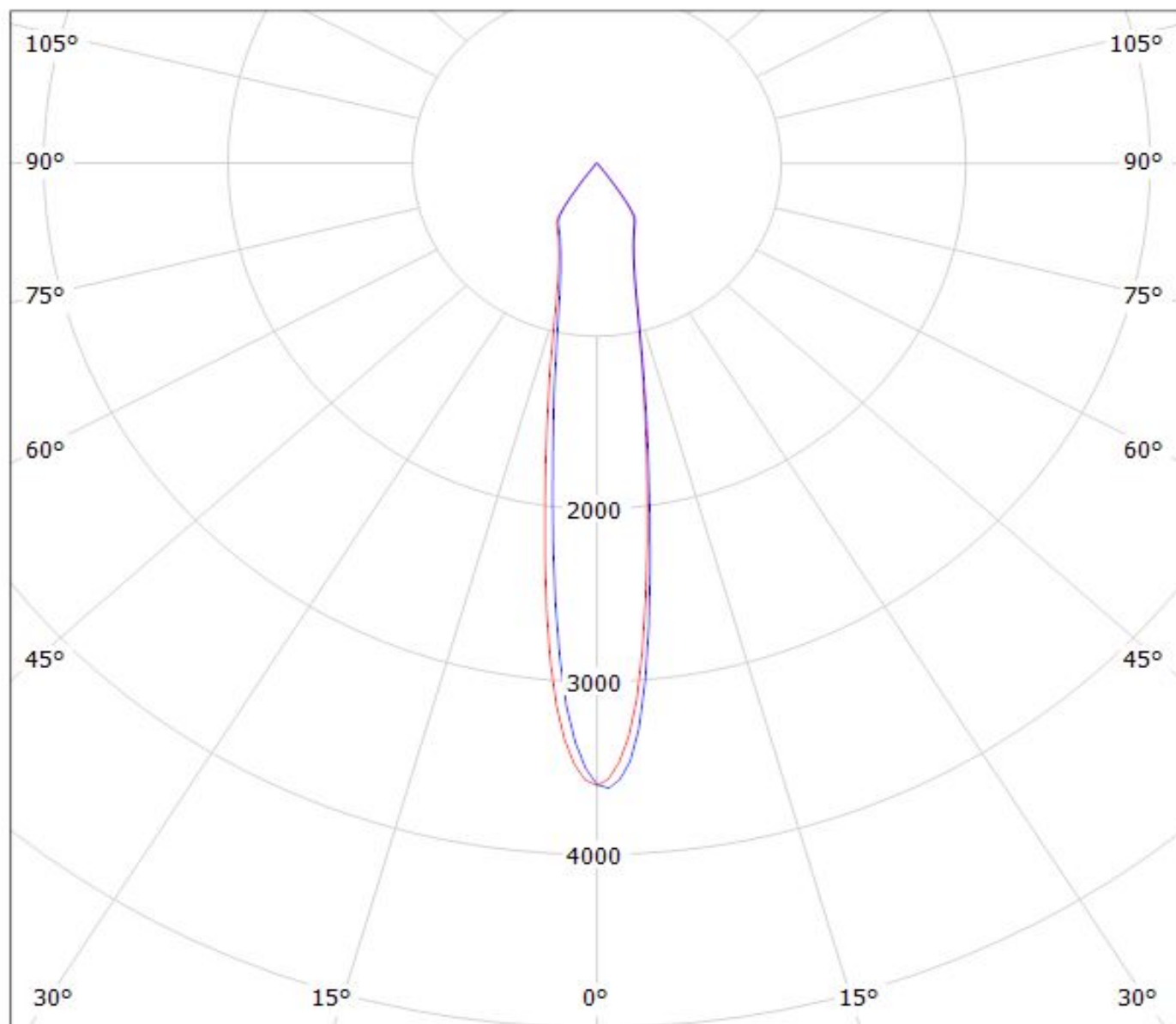
Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(MZ) Eff.84.3%

Lamps: 1 x Sharp\_Mega\_Zenigata\_1226.07lm@250mA\_P=11.1573W\_I=249.8mA





Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(K16) Eff.87.9%  
Lamps: 1 x Luxeon\_K16\_1224.2lm@250mA\_P=10.8991W\_U=249.9mA



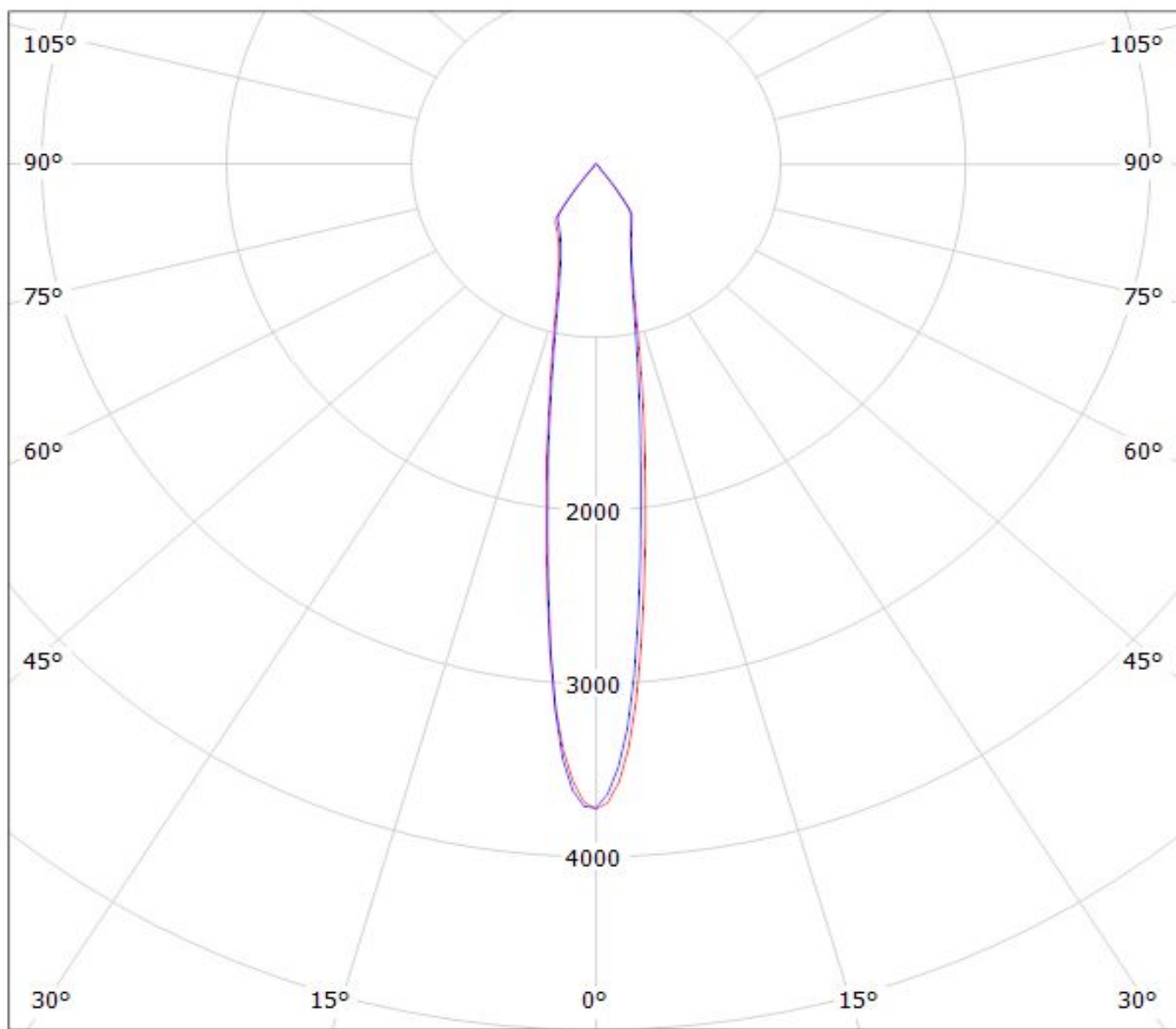
cd/klm

— C0 - C180 — C90 - C270

$\eta = 88\%$



Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(K12) Eff.86.5%  
Lamps: 1 x Luxeon\_K12\_933.514lm@250mA\_P=8.21721W\_I=249.9mA

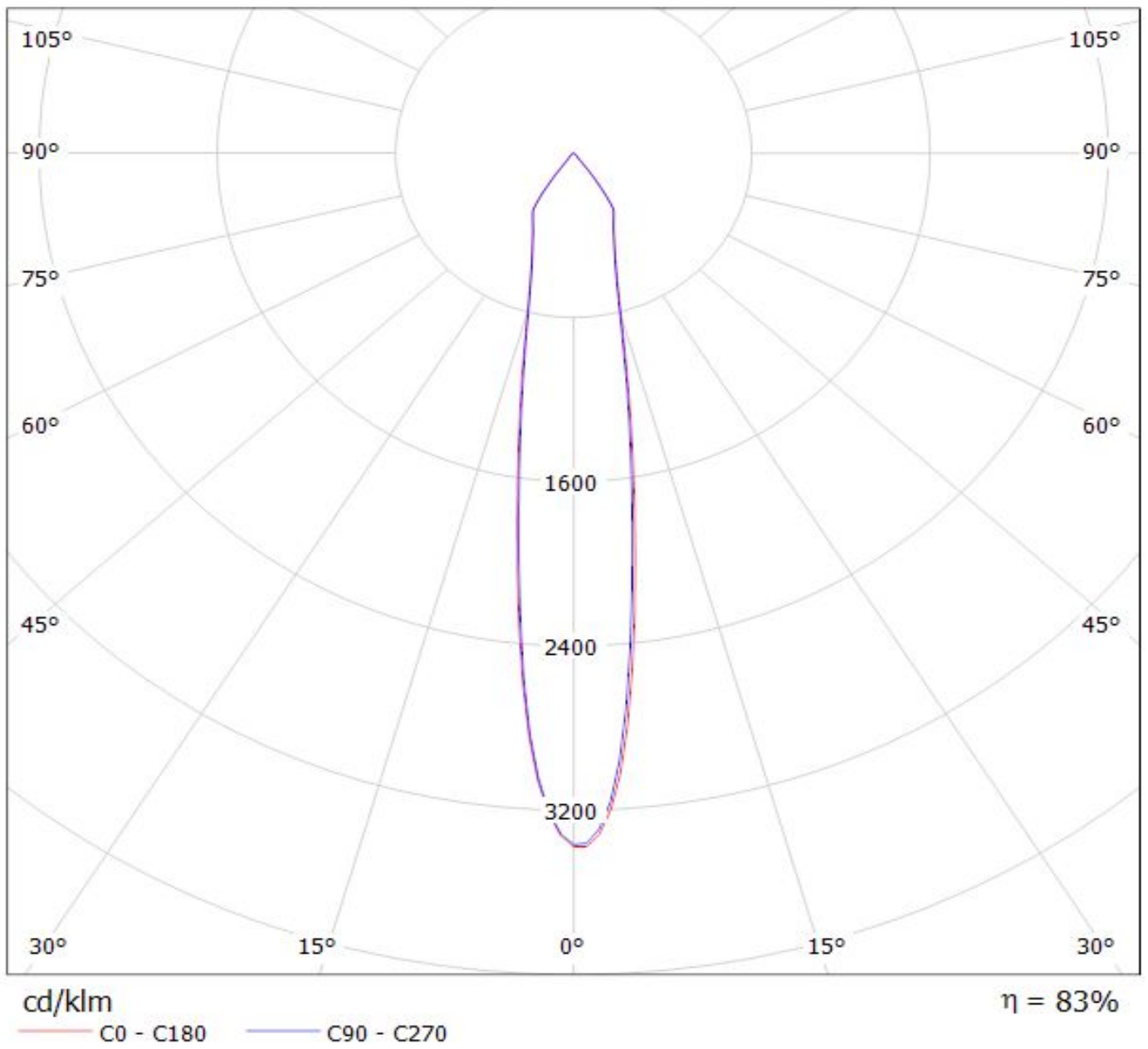


cd/klm

$\eta = 86\%$

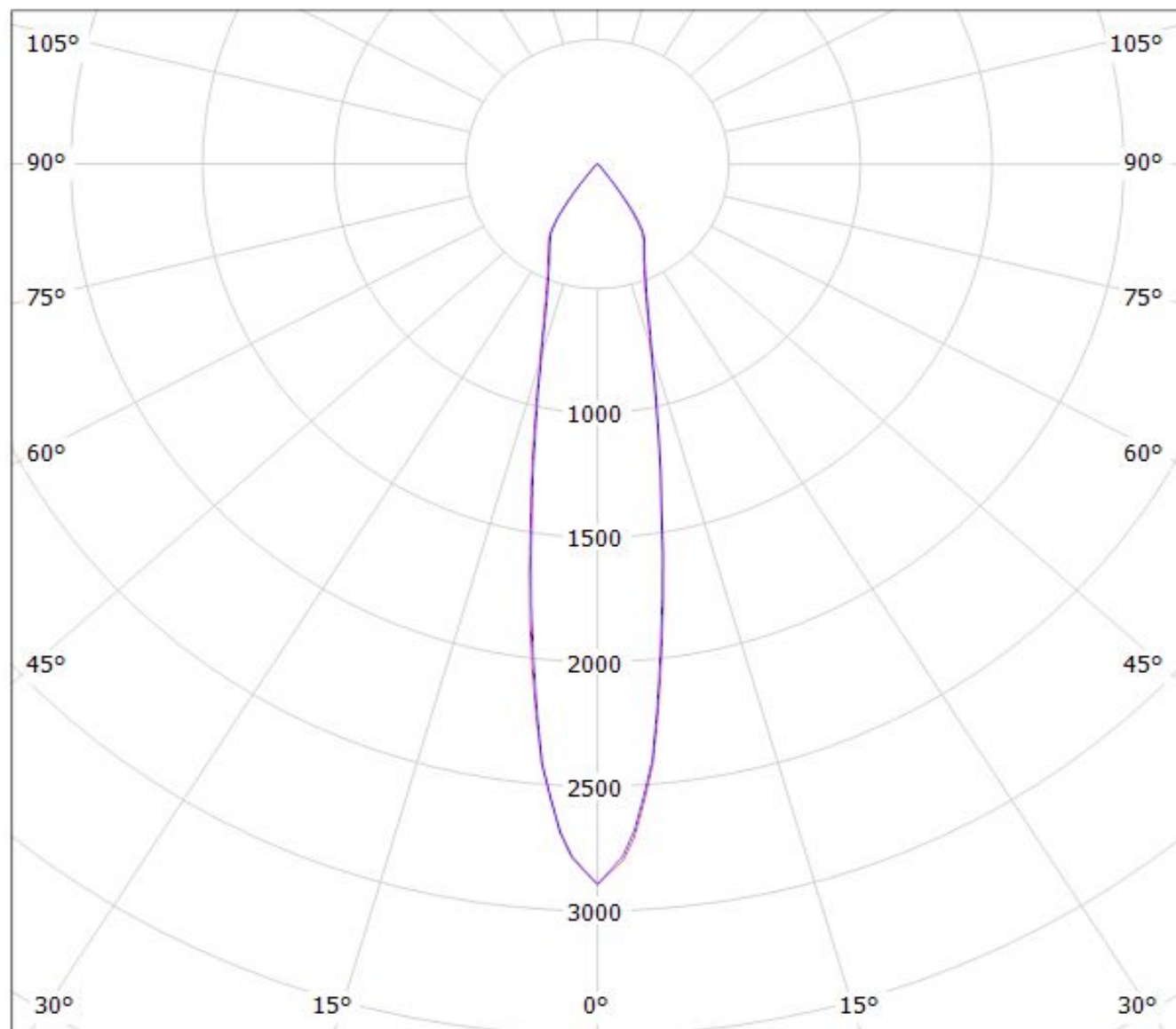
— C0 - C180 — C90 - C270

Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(Soleriq S19) Eff.82.6%  
Lamps: 1 x OSRAM\_SOLERIQ\_S19\_(GW\_KAHJB1.EM)  
\_1445.44lm@250mA\_CCT=3000K\_P=10.558W\_I=249.8mA



Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(E30) Eff.80.7%

Lamps: 1 x Osram\_Soleriq\_E30\_1364.86lm@250mA\_P=10.2445W\_I=249.8mA



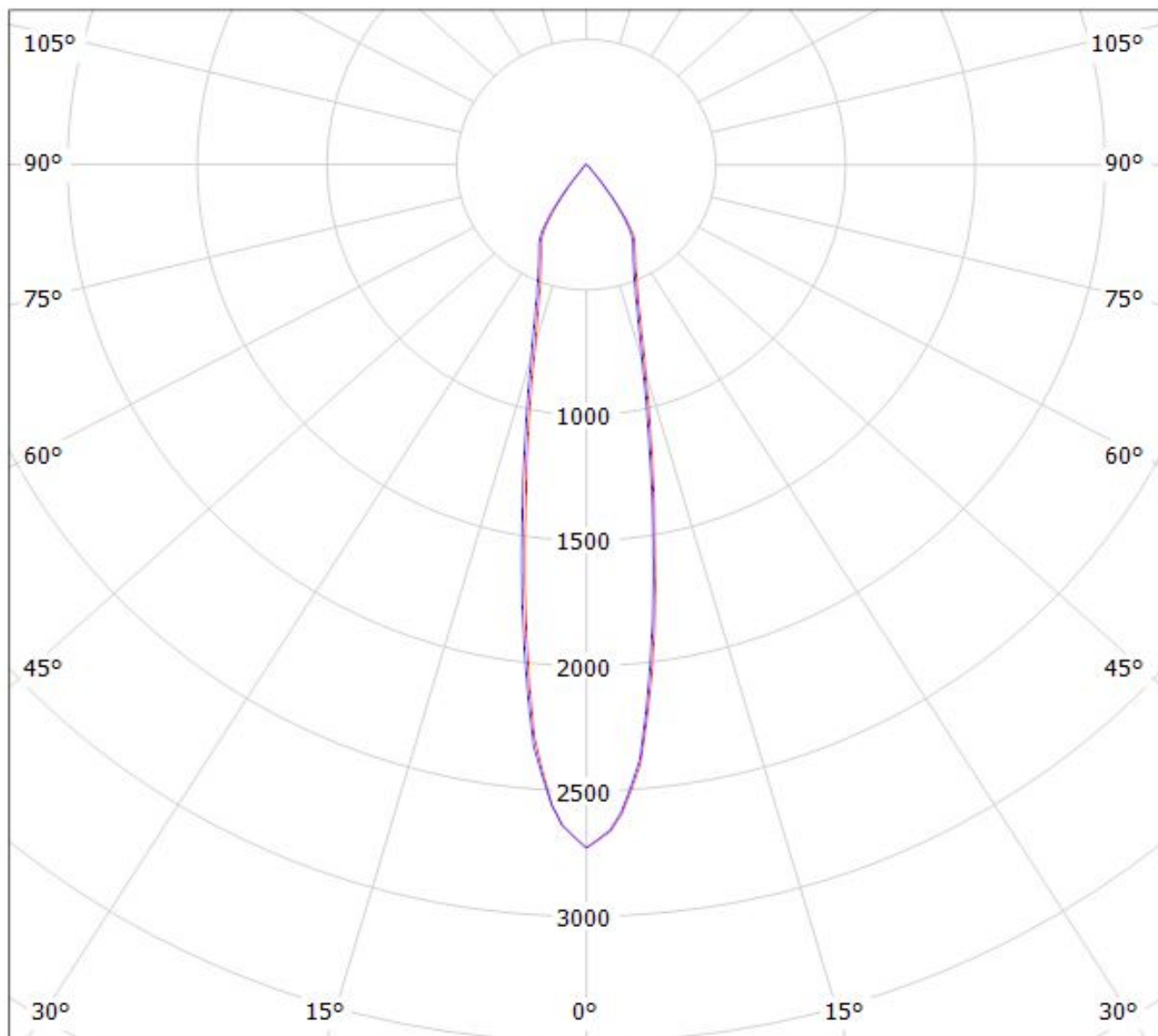
cd/klm

— C0 - C180

— C90 - C270

$\eta = 81\%$

Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(CLL040) Eff.81.0%  
Lamps: 1 x Citizen\_CLL040\_1011.32lm@250mA\_P=8.24545W\_I=249.9mA



cd/klm

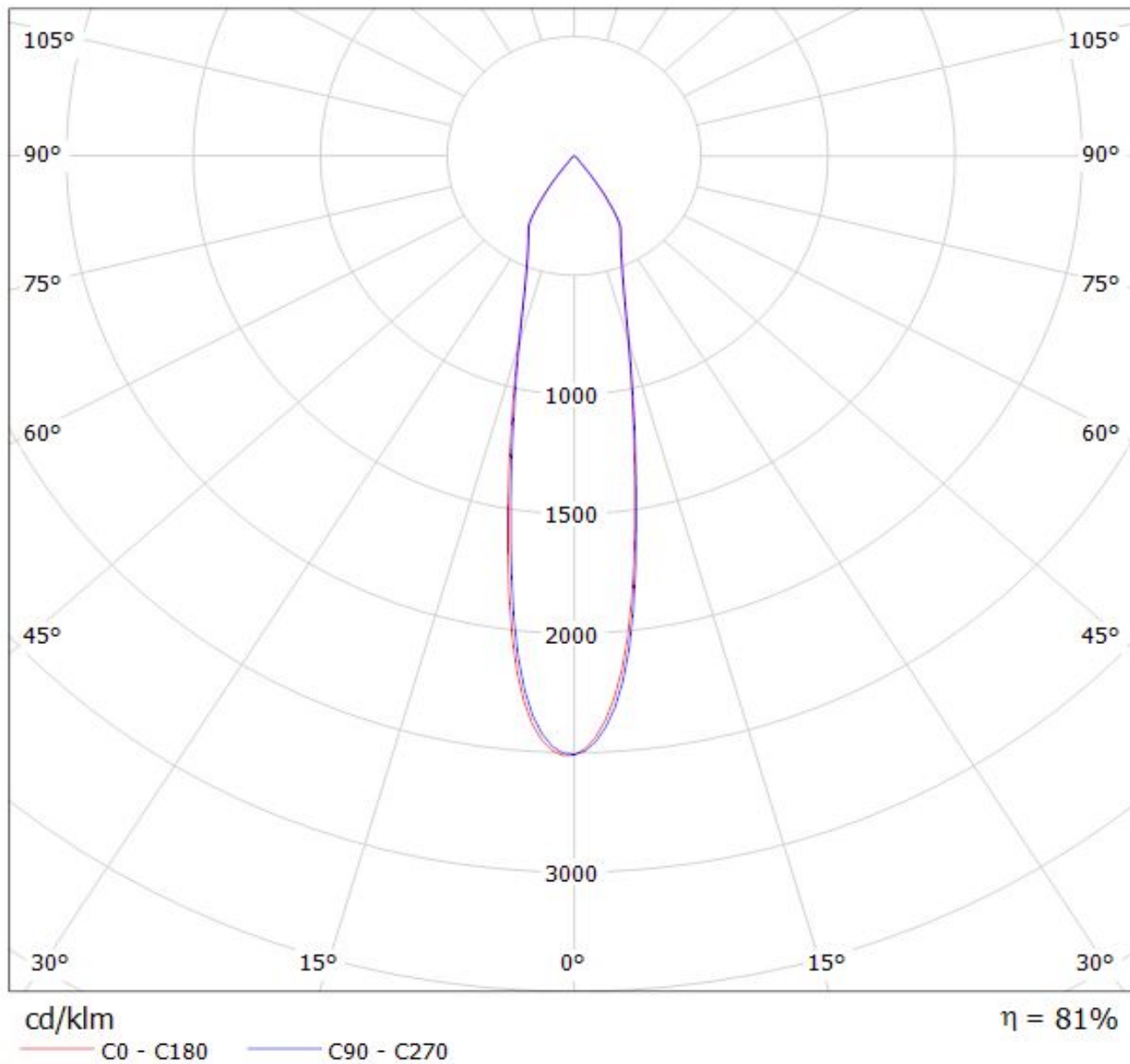
$\eta = 81\%$

— C0 - C180

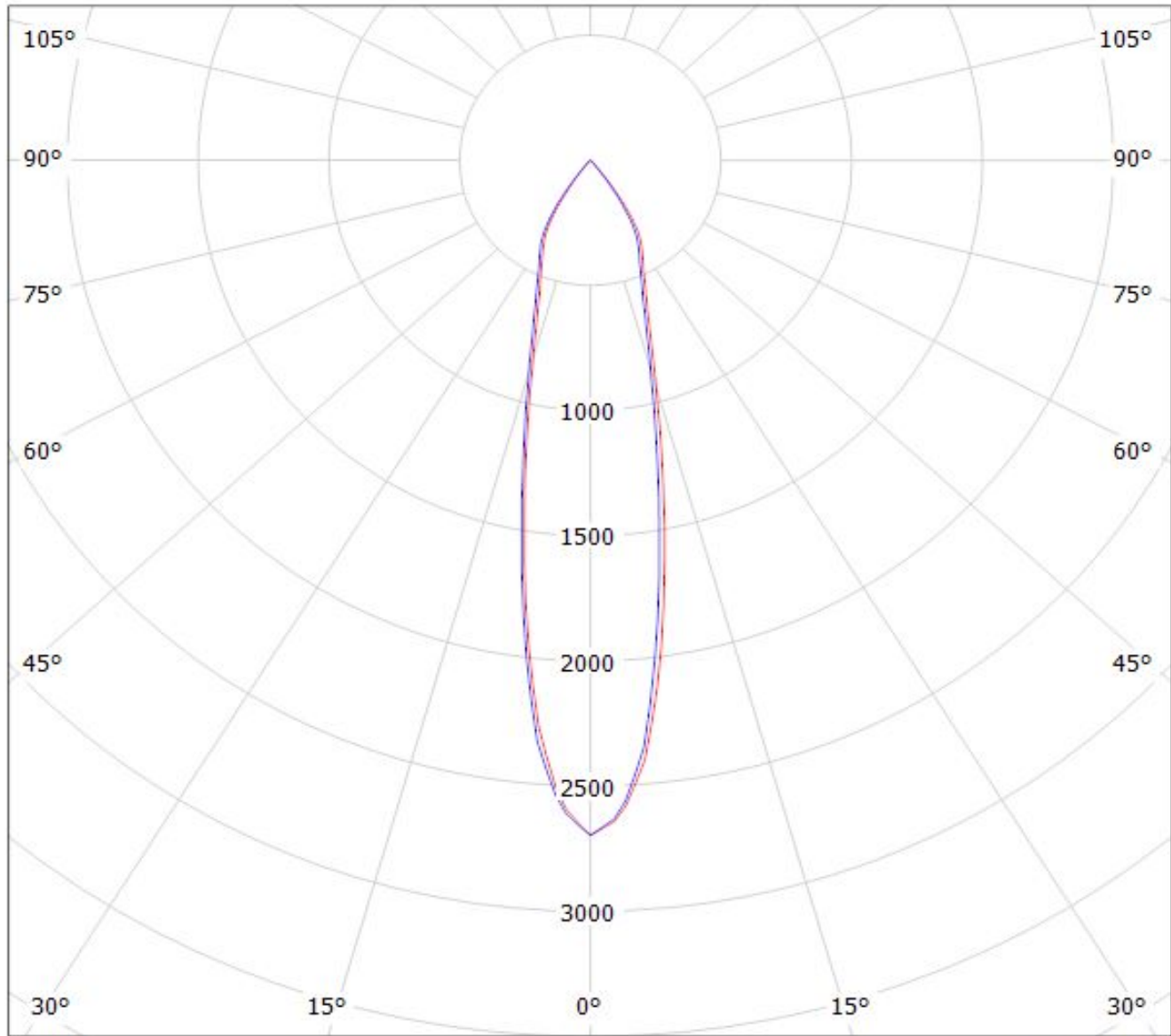
— C90 - C270

Luminaire: LEDiL Oy F13663\_ANGELA-M-B\_(CXM-22) Eff.80.7%

Lamps: 1 x LUMINUS\_CXM-22\_1221.8lm@250mA\_P=8.00809W\_CCT=3000K\_I=249.8mA



Luminaire: Ledil Oy F13663\_ANGELA-M-B\_(ZC-40) Efficiency=81%  
Lamps: 1 x Seoul ZC-40 (SBWW5F1B) 1153lm @ 250mA CCT= P=8.25W I=250mA



cd/klm

— C0 - C180

— C90 - C270

$\eta = 82\%$

**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.
- 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).

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.