

## DETAILS

<b>Product Number</b>	C13749_HB-2X2-O
<b>Family</b>	High Bay
<b>Type</b>	Lens
<b>Color</b>	clear
<b>Diameter</b>	50 + 50 mm
<b>Height</b>	10,6 mm
<b>Style</b>	square
<b>Optic Material</b>	PMMA
<b>Holder Material</b>	
<b>Fastening</b>	screw, pin, glue
<b>Status</b>	production ready
<b>ROHS Compliant</b>	Yes
<b>Date Updated</b>	21/04/2016



## OPTICAL PROPERTIES

LED	Viewing	Light	Efficiency	cd/lm	Connector
	Angle	Beam			
XP-G2	27+112 deg	Oval	94 %	1.200	-
XM-L	29+109 deg	Oval	94 %	0.980	-
XM-L2	30+106 deg	Oval	94 %	1.000	-
XP-G	26+115 deg	Oval	94 %	1.130	-
XP-L	29+117 deg	Oval	94 %	0.890	-
XQ-E HI	sim: 96+14	Oval	93 %	1.700	-
XHP35 HD	sim: 102+35	Oval	sim: 91 %	sim: 0.910	-
XHP35 HI	sim: 101+27	Oval	sim: 94 %	sim: 1.200	-
XP-G3	sim: 103+29	Oval	sim: 94 %	sim: 1.100	-
LUXEON Rebel ES	25+106 deg	Oval	94 %	1.200	-
LUXEON T	26+110 deg	Oval	94 %	1.200	-
LUXEON R	25+105 deg	Oval	94 %	1.240	-
LUXEON MZ	28+103 deg	Oval	94 %	1.100	-
LUXEON TX	24+118 deg	Oval	94 %	1.080	-
NVSxx19A	24+105 deg	Oval	94 %	1.220	-
NVSxx19B/NVSxx19C	26+108 deg	Oval	94 %	1.200	-
NCSxx19B	23+113 deg	Oval	94 %	1.400	-
NWSx229A	27+118 deg	Oval	94 %	1.000	-
Oslon Square PC	25+124 deg	Oval	91 %	1.070	-
Duris S8	sim: 95+25	Oval	sim: 93 %	sim: 0.950	-
Duris P8	sim: 99+19	Oval	sim: 94 %	sim: 1.300	-
Fortimo FastFlex LED board 2x8/740 DA	23+108 deg	Oval	94 %	1.300	-
LH351Z	26+117 deg	Oval	94 %	1.100	-
LH351B	23+113 deg	Oval	94 %	1.210	-
Z5M1/Z5M2	sim: 22+97	Oval	sim: 94 %	sim: 1.200	-



# PRODUCT DATASHEET

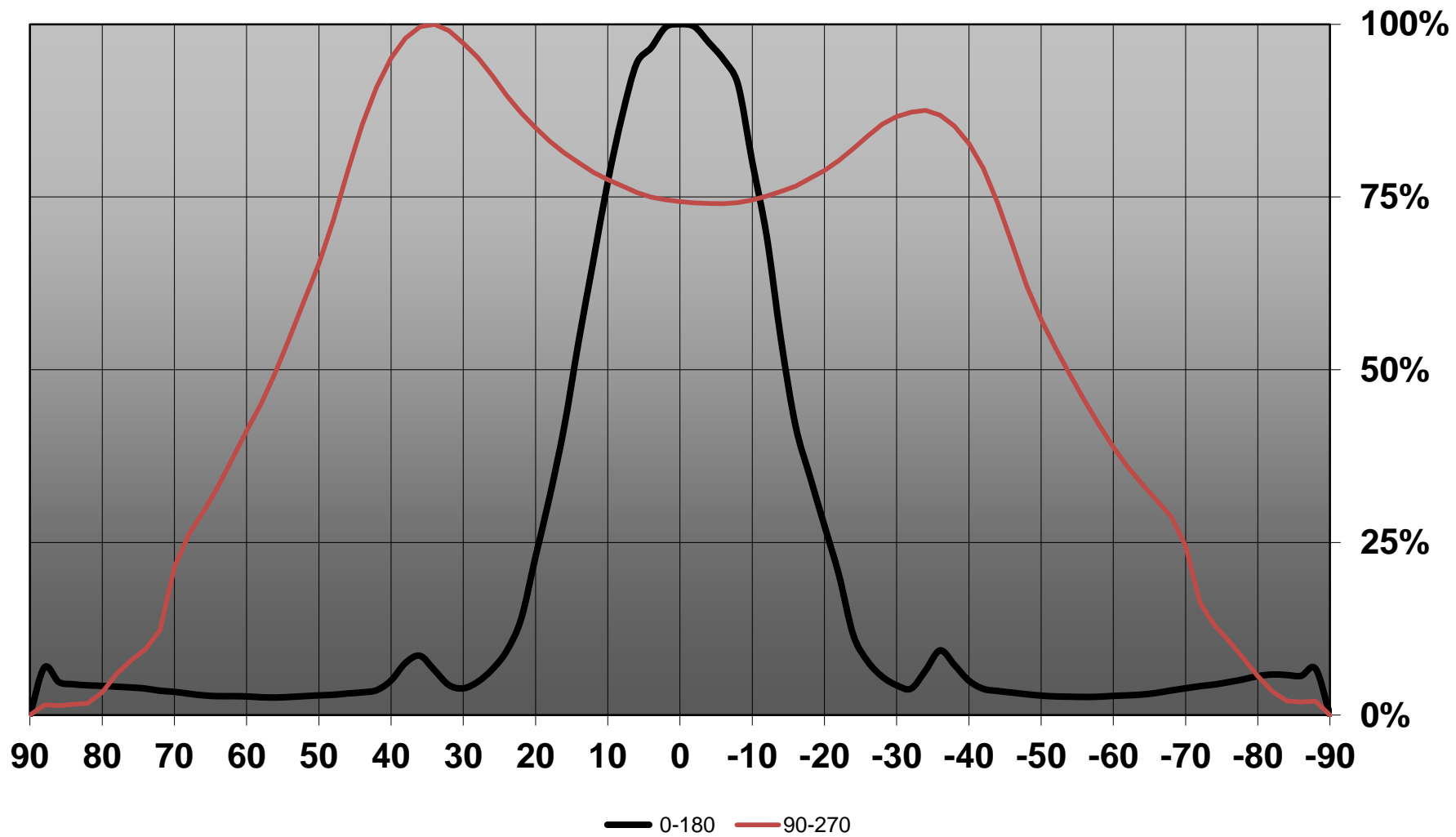
## High Bay series

last update 21/4/2016

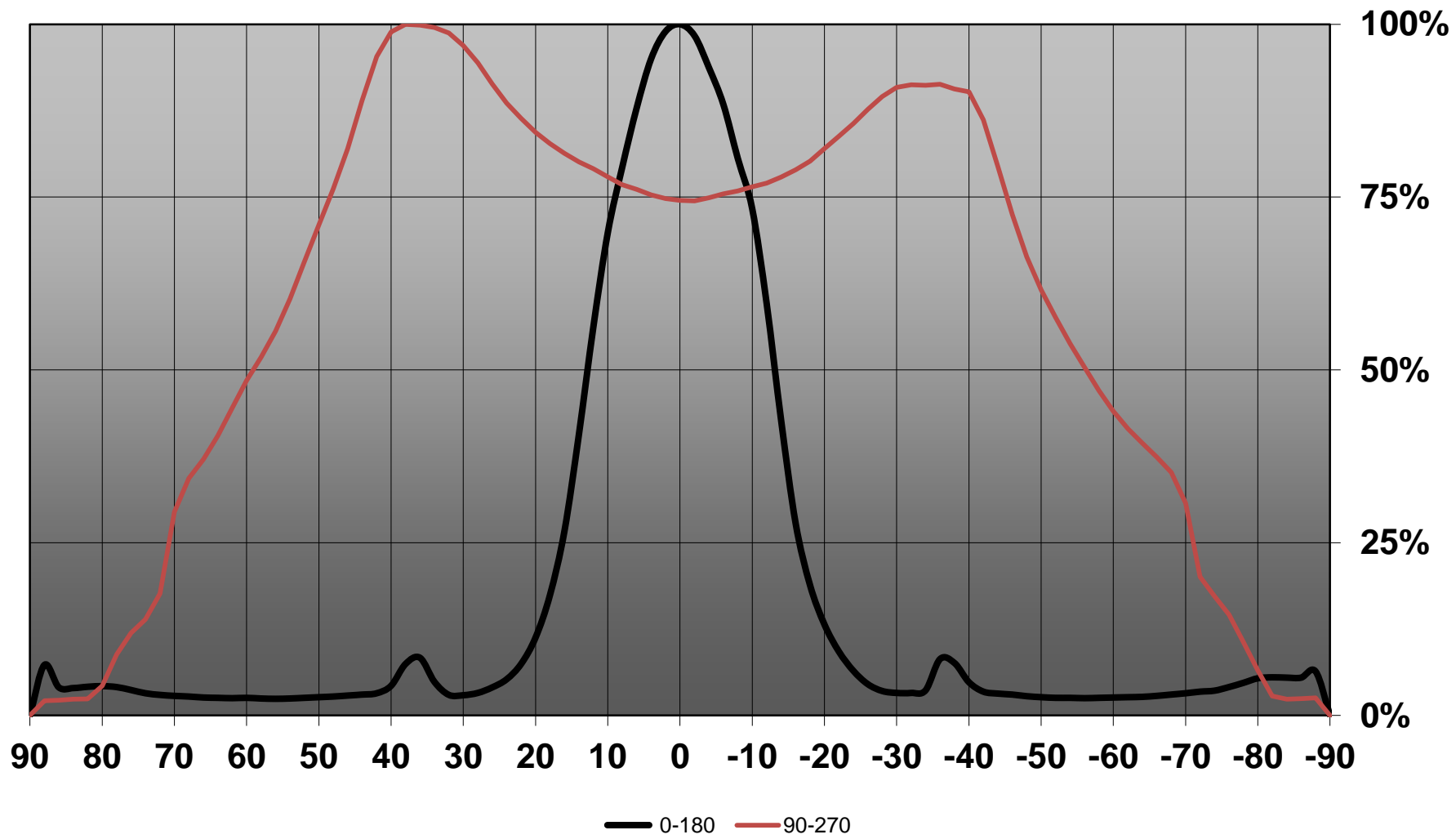
### OPTICAL PROPERTIES

LED	Viewing Angle	Light Beam	Efficiency	cd/lm	Connector
TL1L4	24+119 deg	Oval	89 %	1.100	-
RLE G1 49x223mm 4000lm xxx EXC OTØ3+104 deg		Oval	94 %	1.300	-
RLE G1 49x245mm 4000lm xxx EXC OTØ3+104 deg		Oval	94 %	1.300	-

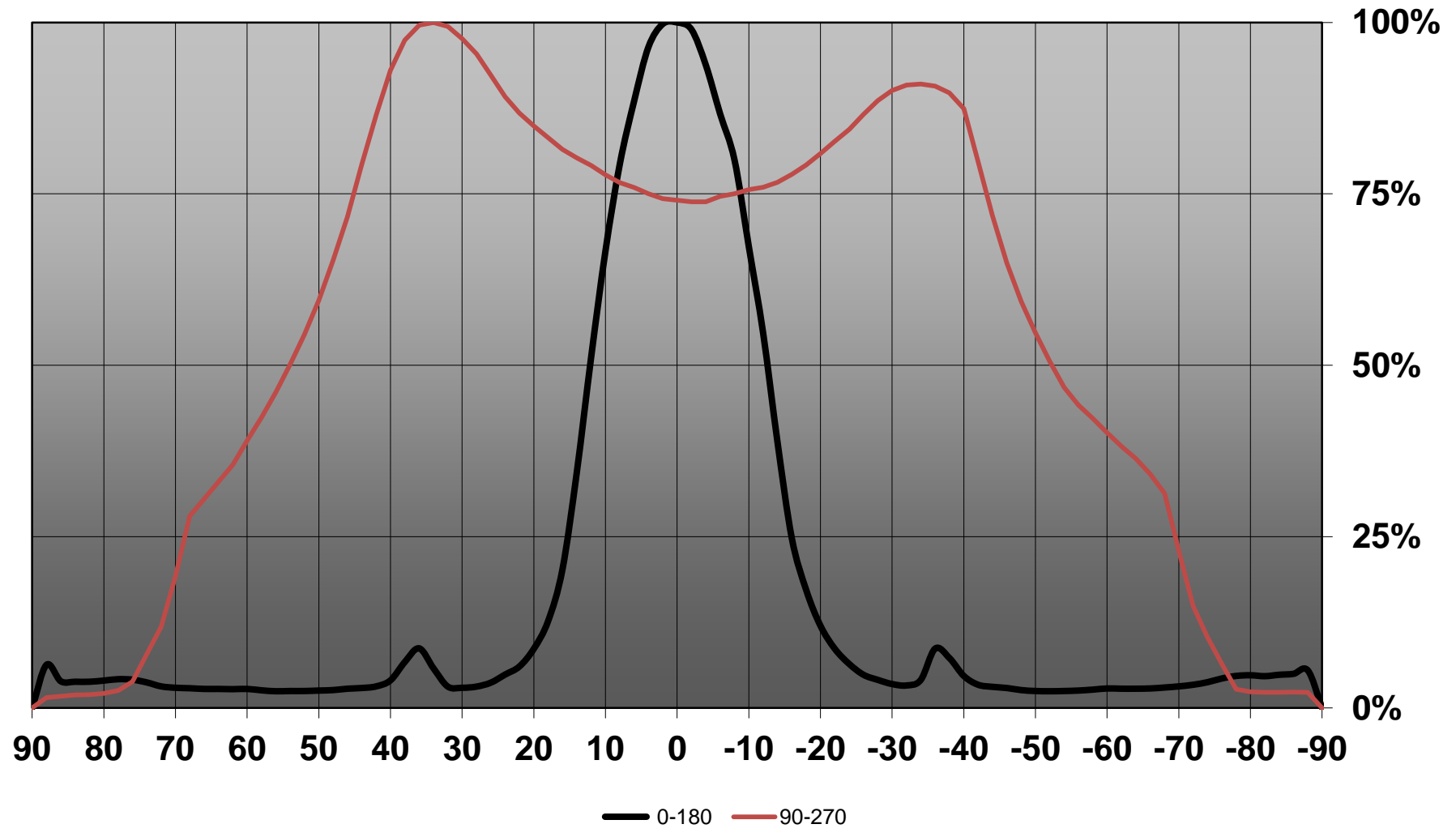
Relative intensity of C13749\_HB-2X2-O\_(XM-L)



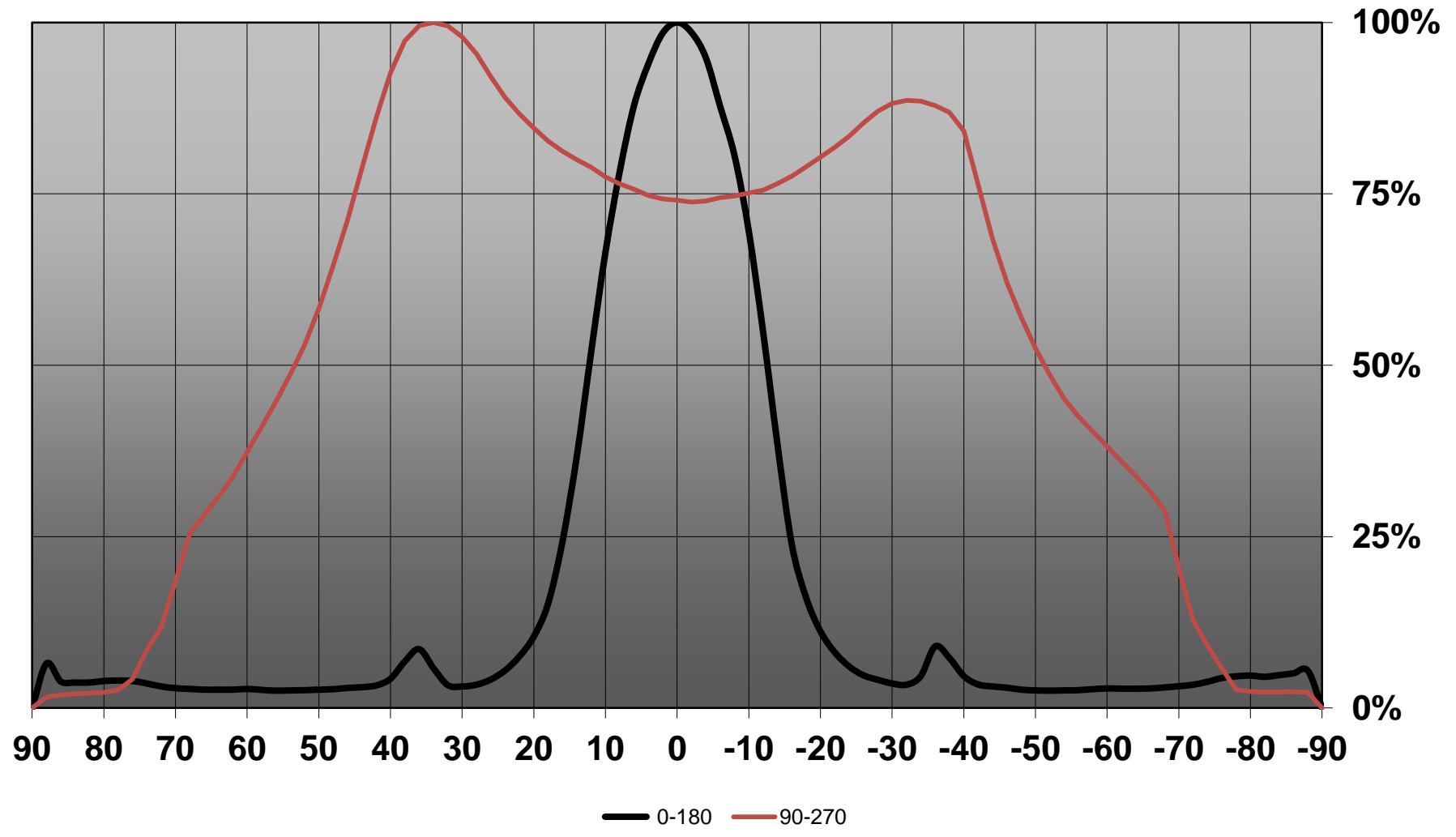
Relative intensity of C13749\_HB-2X2-O\_(XP-G)



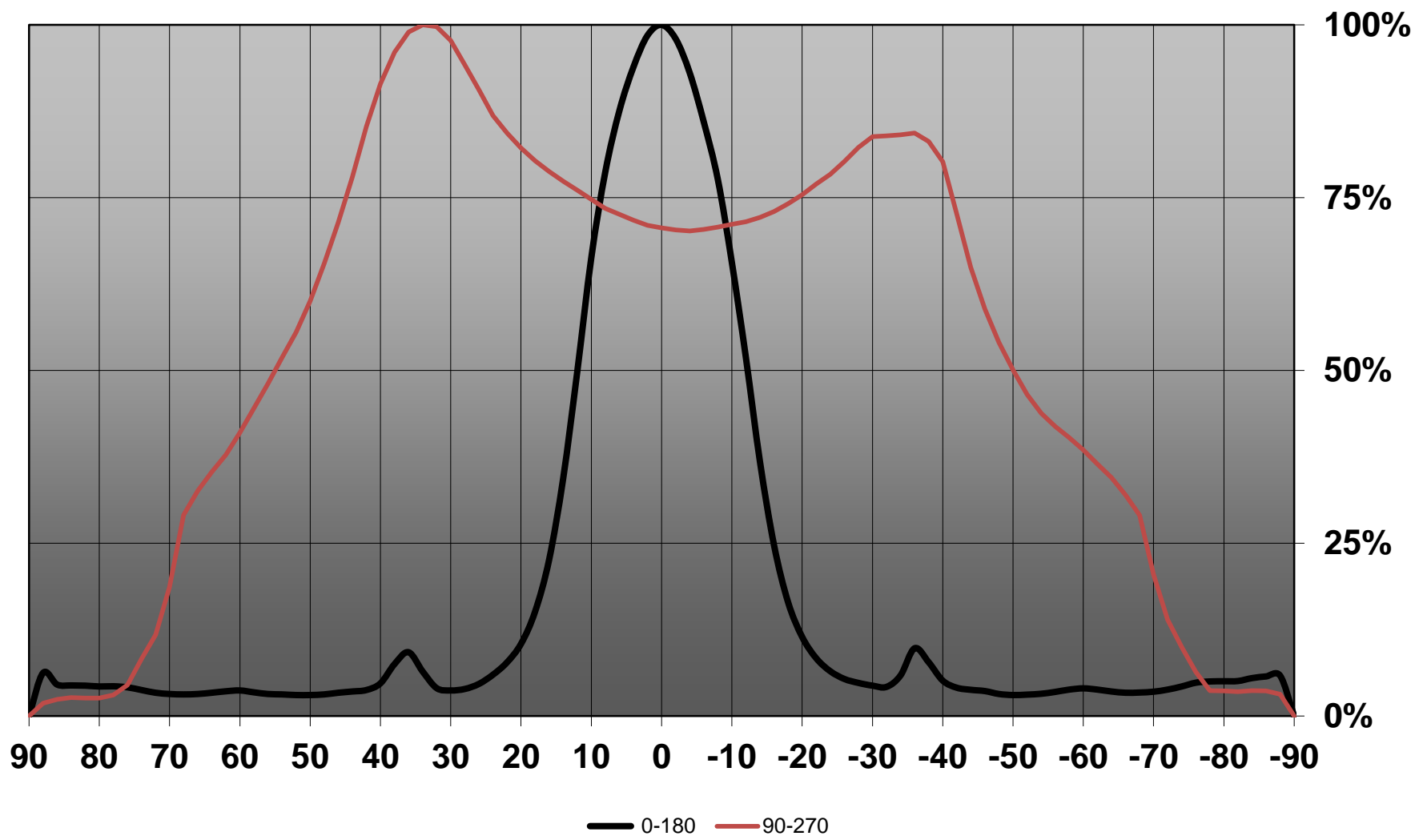
Relative intensity of C13749\_HB-2X2-O\_(Rebel ES)



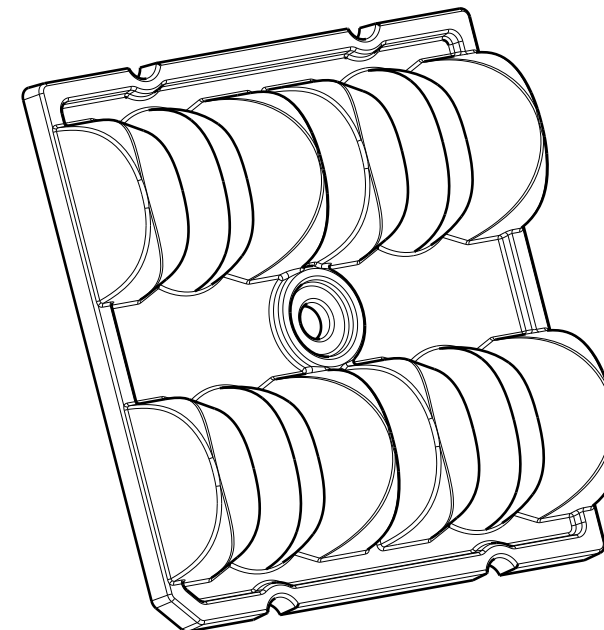
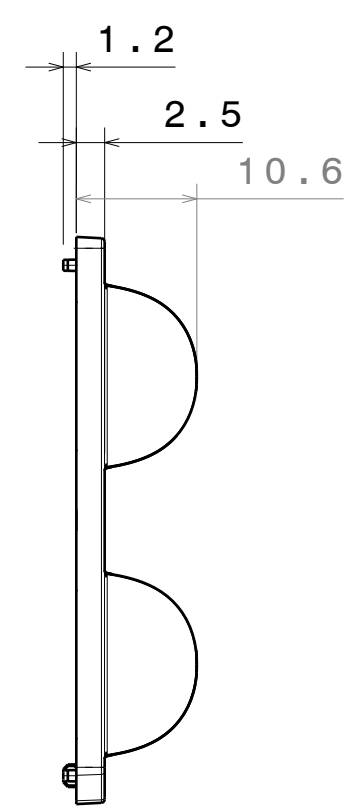
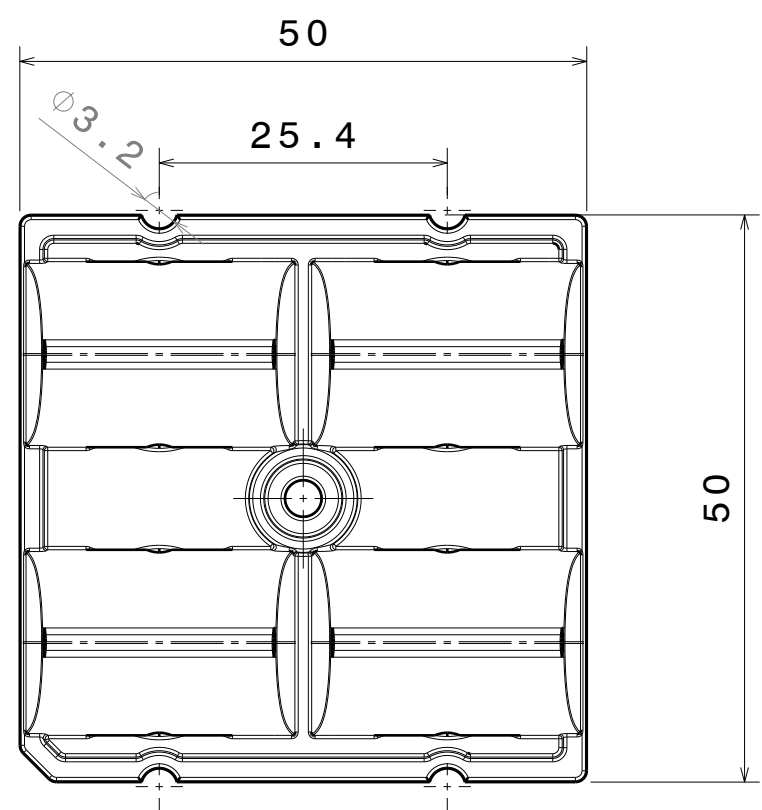
Relative intensity of C13749\_HB-2X2-O\_(Luxeon R)



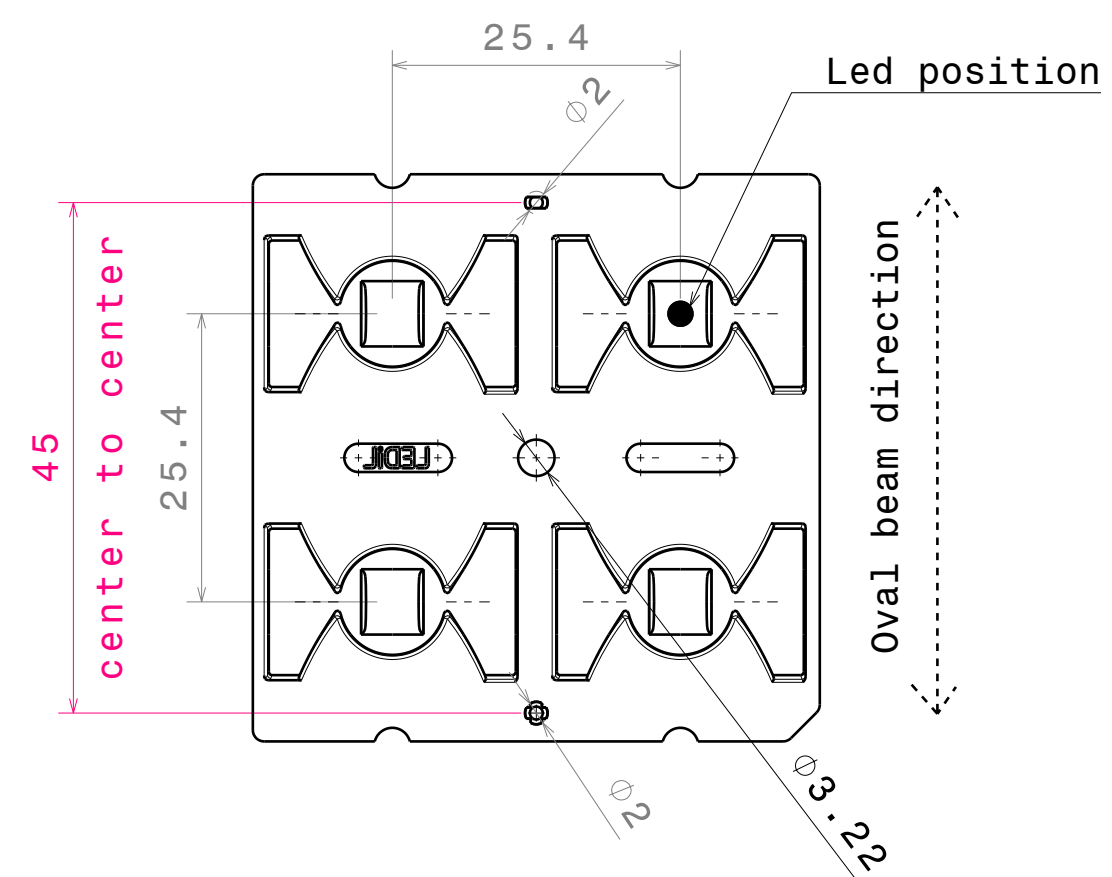
Relative intensity of C13749\_HB-2X2-O\_(NVSxx19A)



H G F E D C B A



Isometric view



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	HB-2X2-0			

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  
**HB-2X2-0**

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

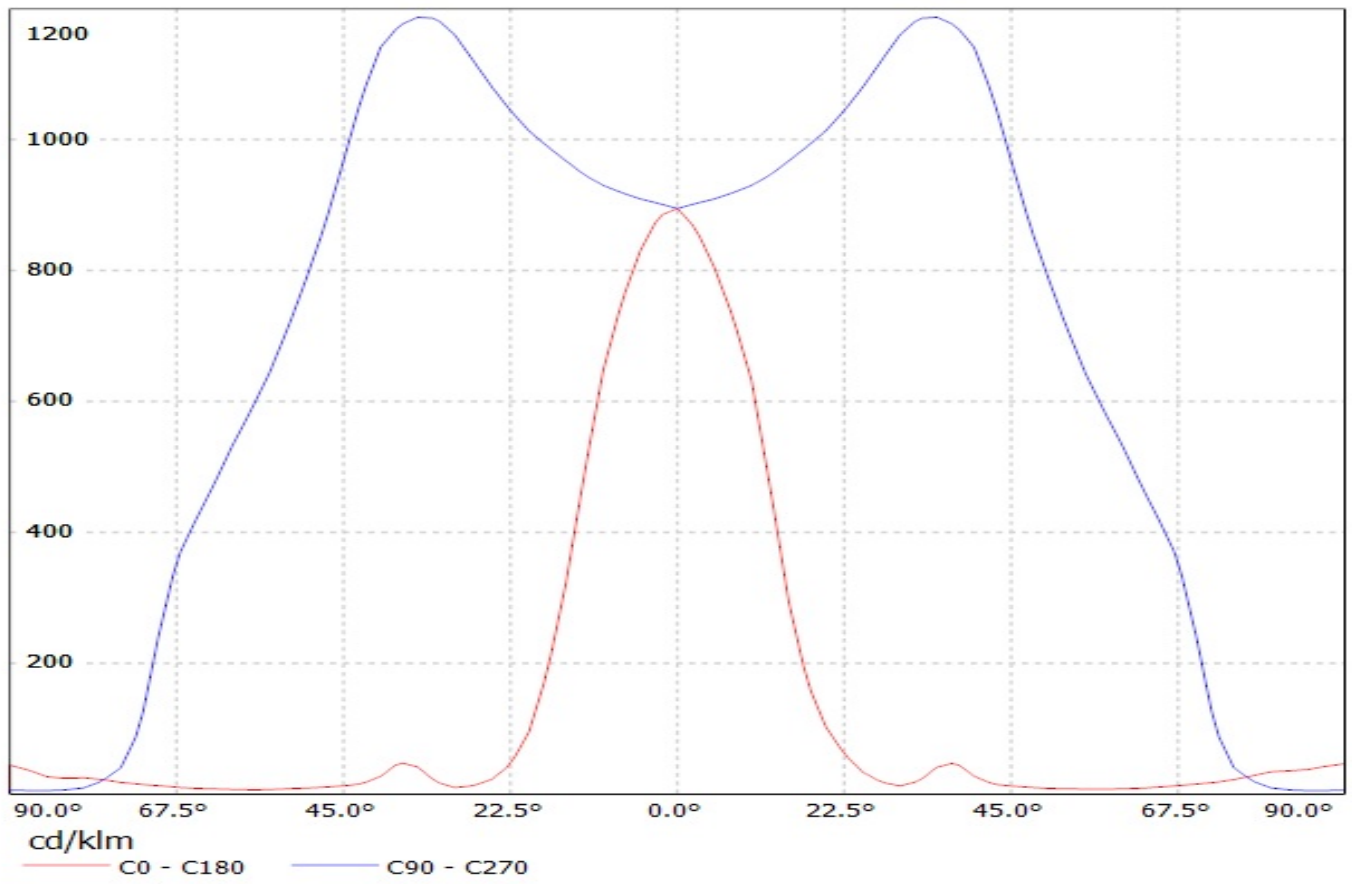
SIZE	PART NUMBER		
<b>A3</b>	-		

SCALE	3:2	WEIGHT	-	SHEET	1/1
-------	-----	--------	---	-------	-----

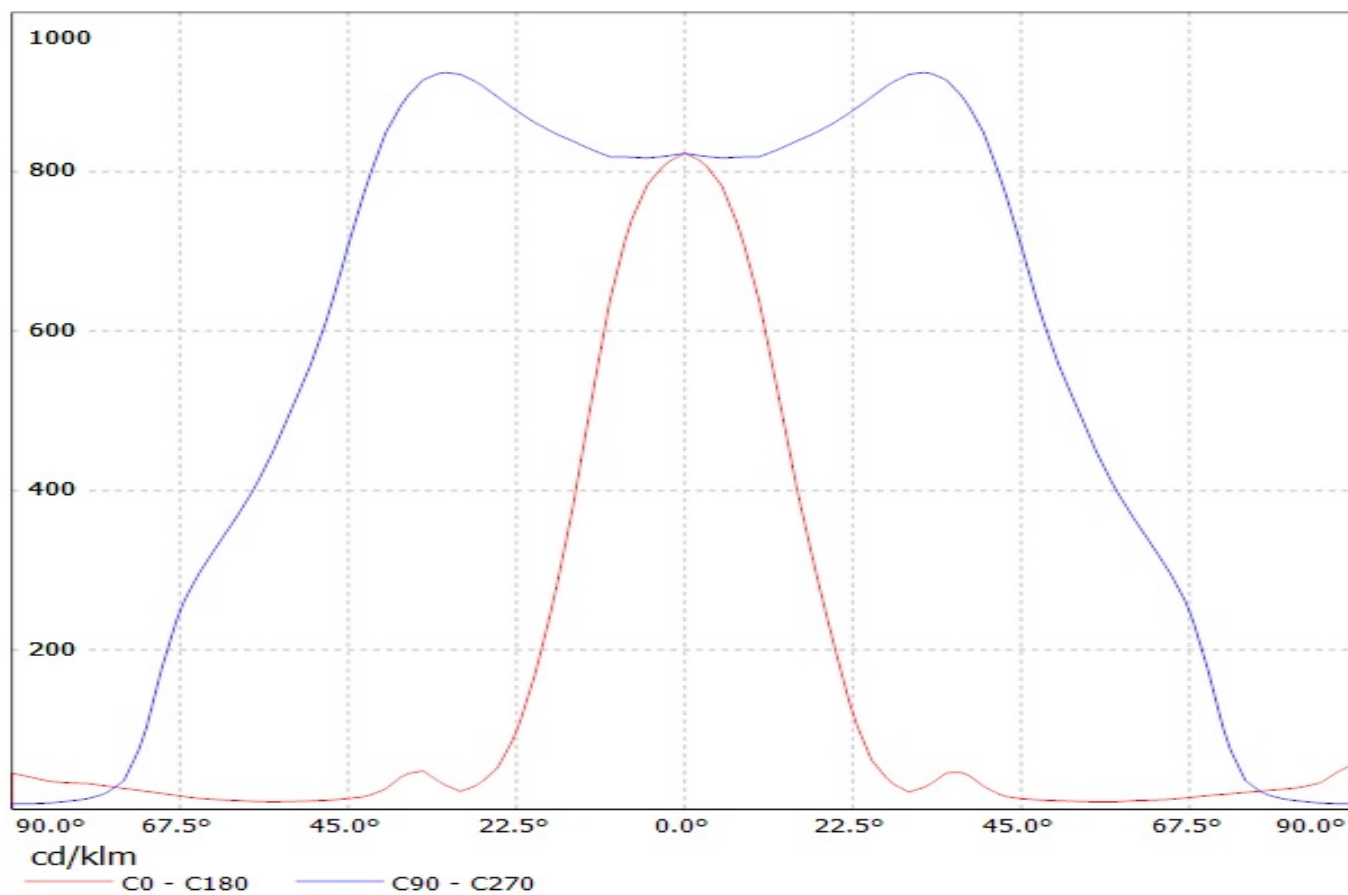
H G B A



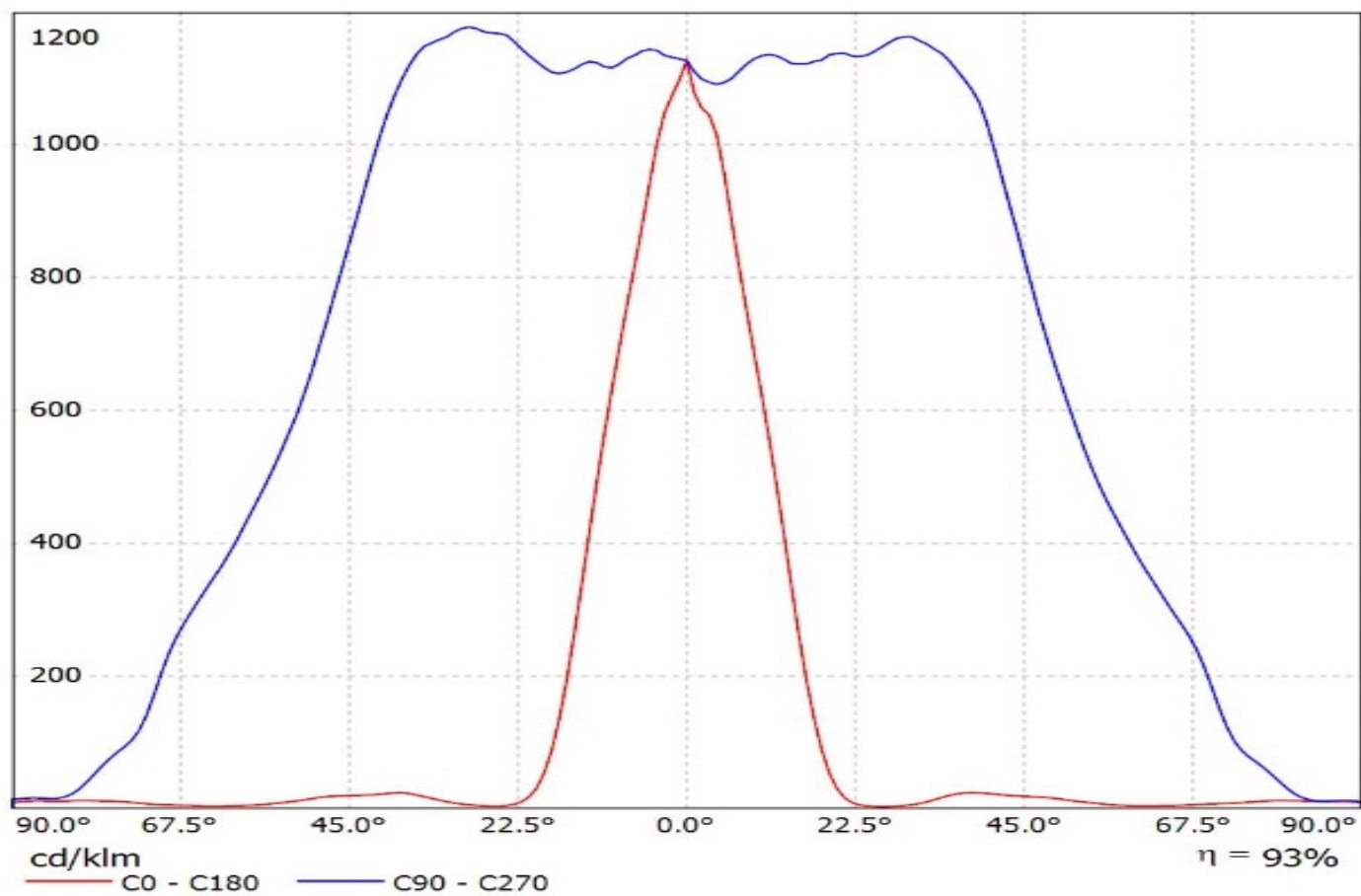
Luminaire: LEDil Oy C13749\_HB-2X2-O\_(XP-G2) Efficiency=94%  
Lamps: 1 x Cree XP-G2 (XPGBWT-L1-000-00G51) 411lm @ 250mA CCT=7200K P=2.9W I=250mA



Luminaire: LEDil Oy C13749\_HB-2X2-O\_(XM-L2) Efficiency=94%  
Lamps: 1 x Cree XM-L2 (XMLBWT-0-7B4-T30-0L-0001) 356lm @ 250mA CCT=3200K P=2.8W I=250mA

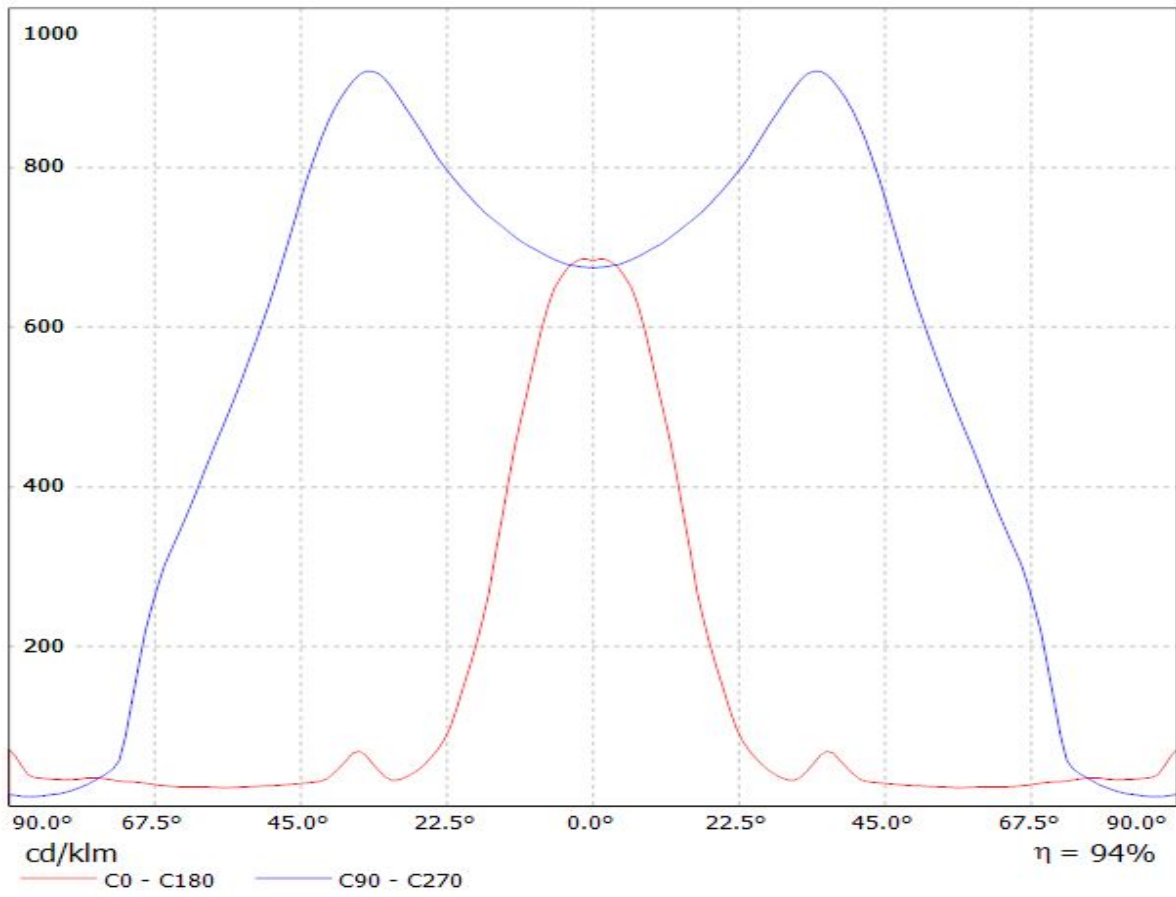


Luminaire: Ledil Oy C13749\_HB-2X2-O\_(XP-G)\_SIMULATED  
Lamps: 1 x Cree XP-G

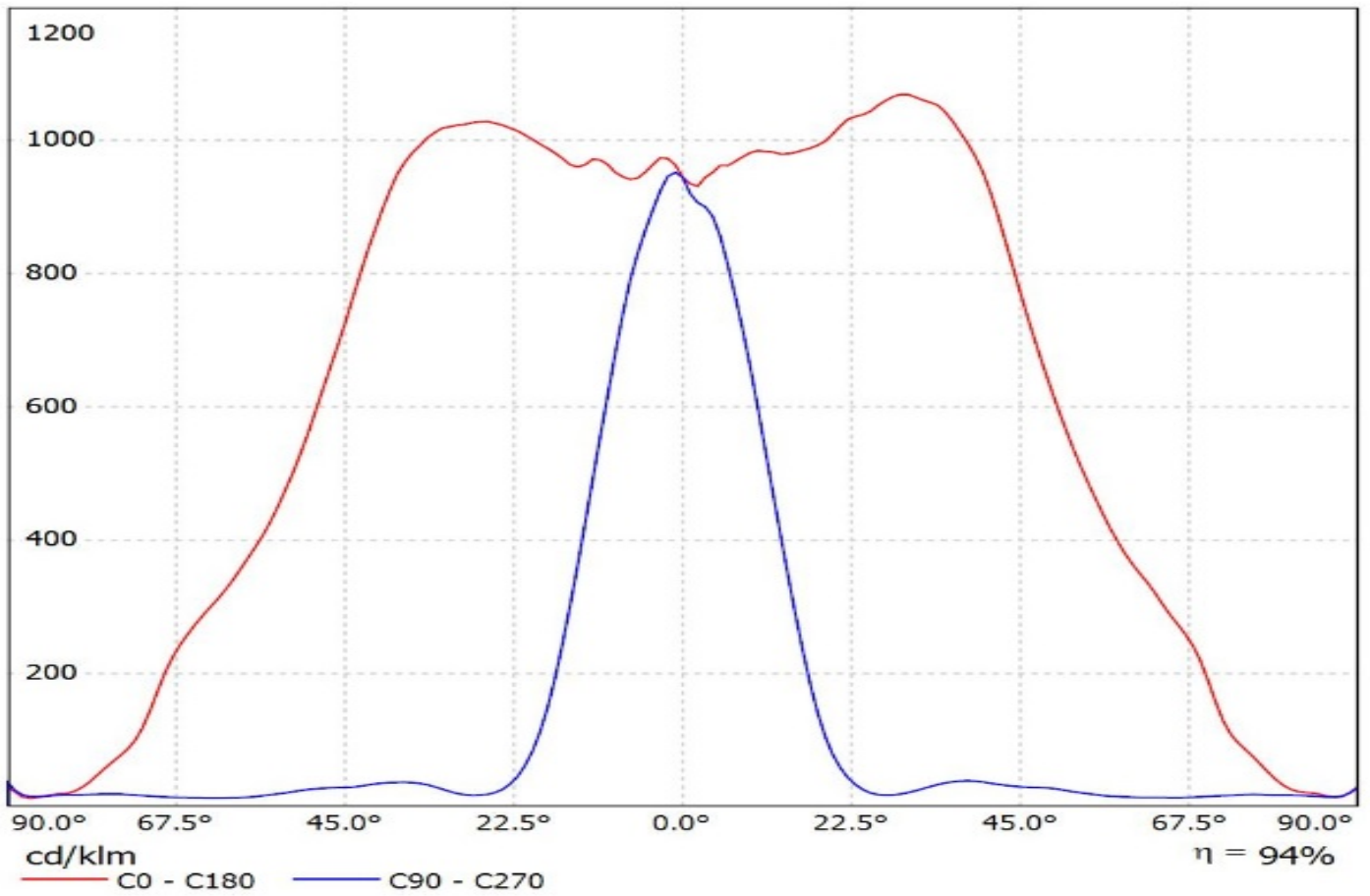


Luminaire: LEDiL Oy C13749\_HB-2X2-O\_(XP-L)

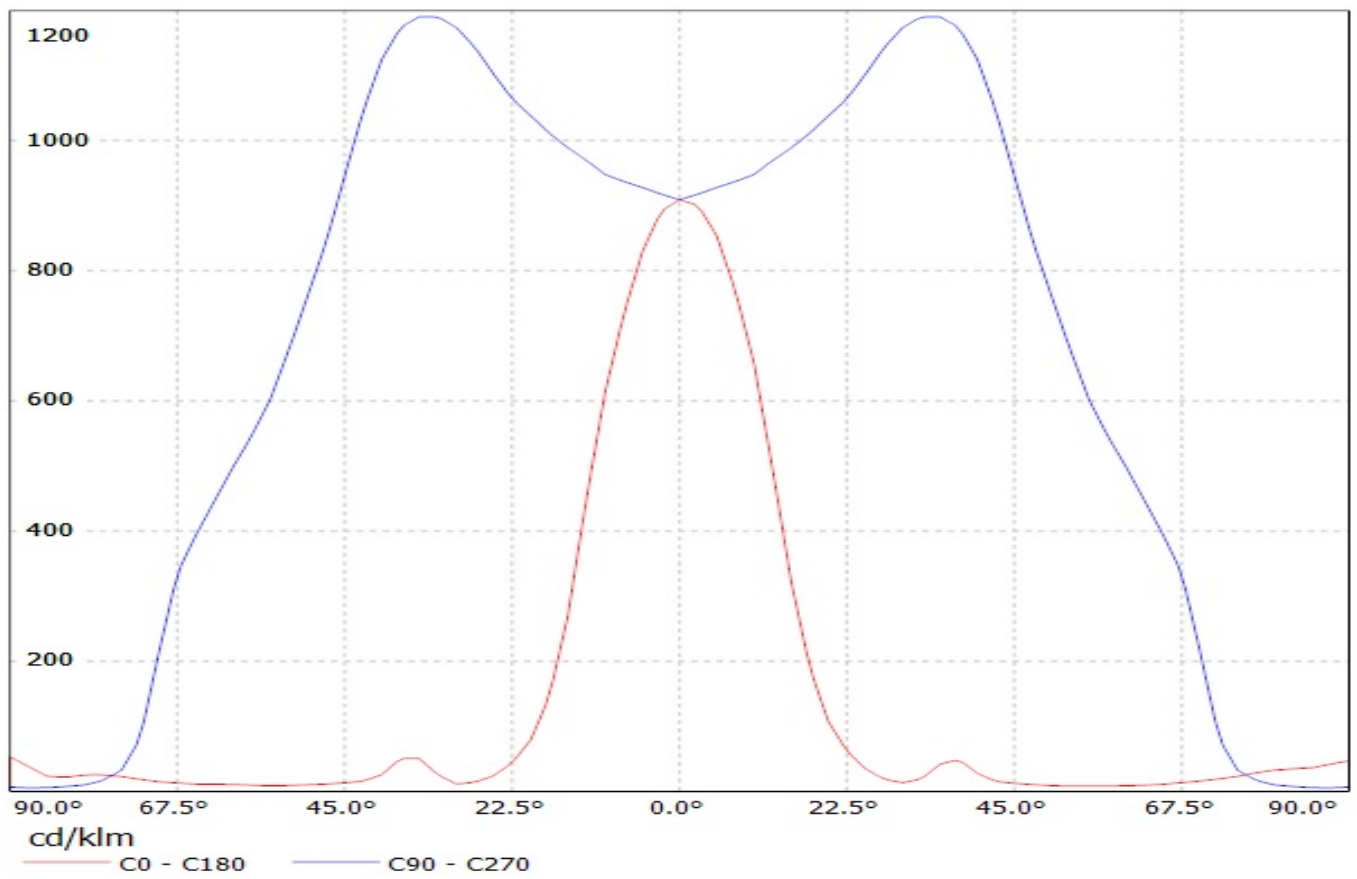
Lamps: 1 x CREE\_XP-L\_2x2\_(XPLAWT-0-1B0-V40-00-0001)\_490lm@250mA\_CCT=7600K\_P=2.79963W\_I=249.9mA



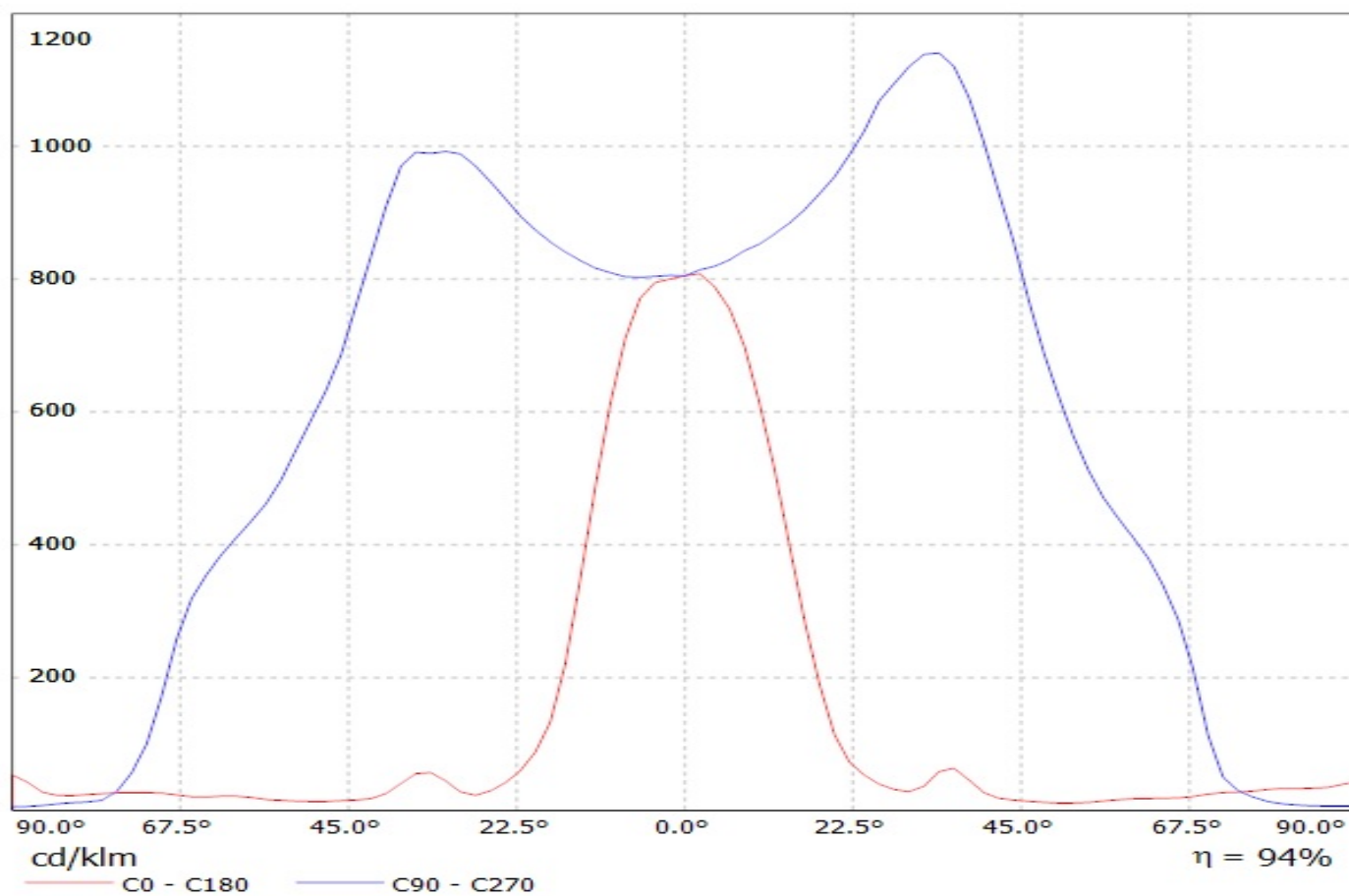
Luminaire: Ledil Oy C13749\_HB-2X2-O\_(XP-G3)\_SIMULATED C13749\_HB-2X2-O\_(XP-G3)\_SIMULATED  
Lamps: 1 x Cree XP-G3 - 1.00 W



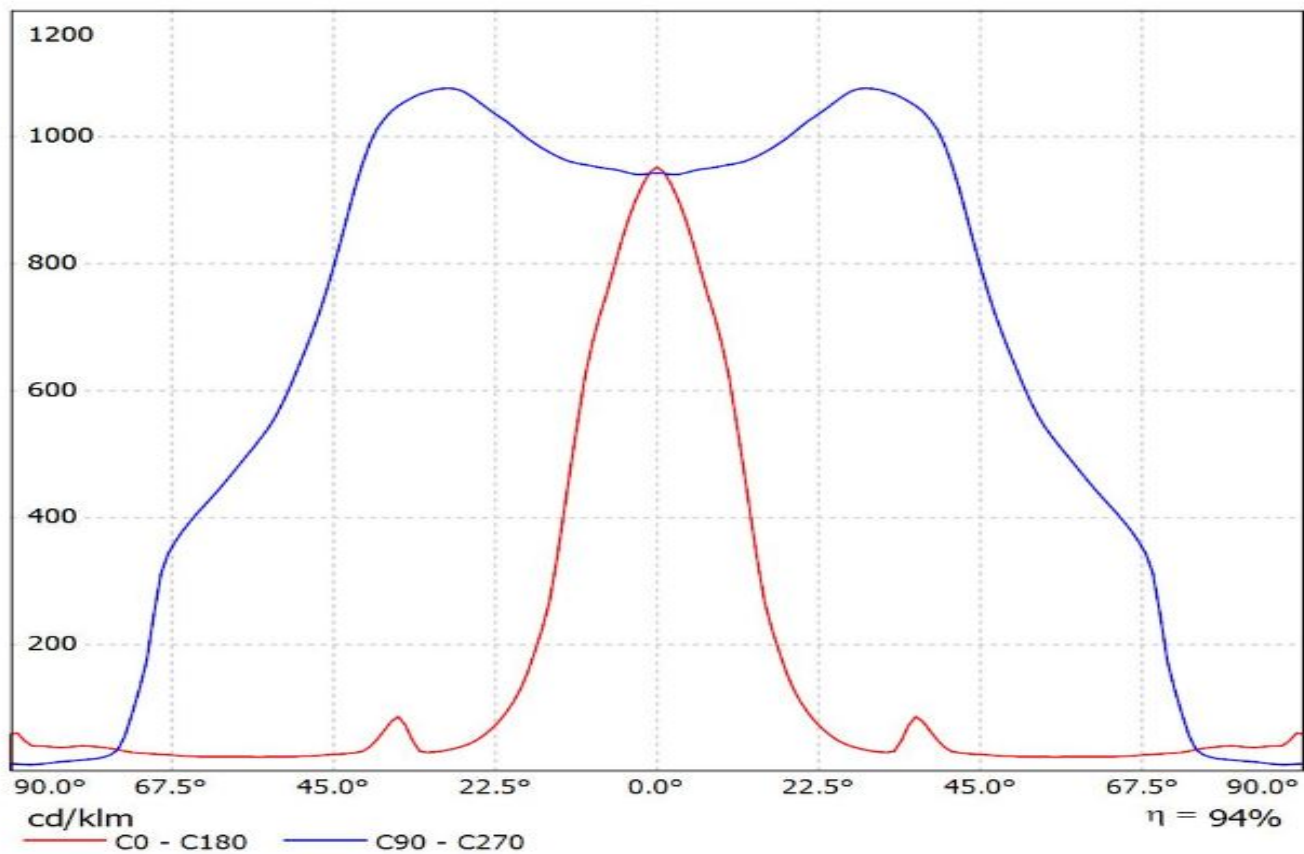
Luminaire: LEDil Oy C13749\_HB-2X2-O\_(Luxeon\_T) Efficiency=94%  
Lamps: 1 x Luxeon T (LXH8-FW30-3) 289lm @ 250mA CCT=3200K P=2.8W I=250mA



Luminaire: LEDil Oy C13749\_HB-2X2-O\_(Luxeon\_MZ)  
Lamps: 1 x Philips Lumileds Luxeon MZ (413.59lm @ 250mA) P=2.7W I=250mA

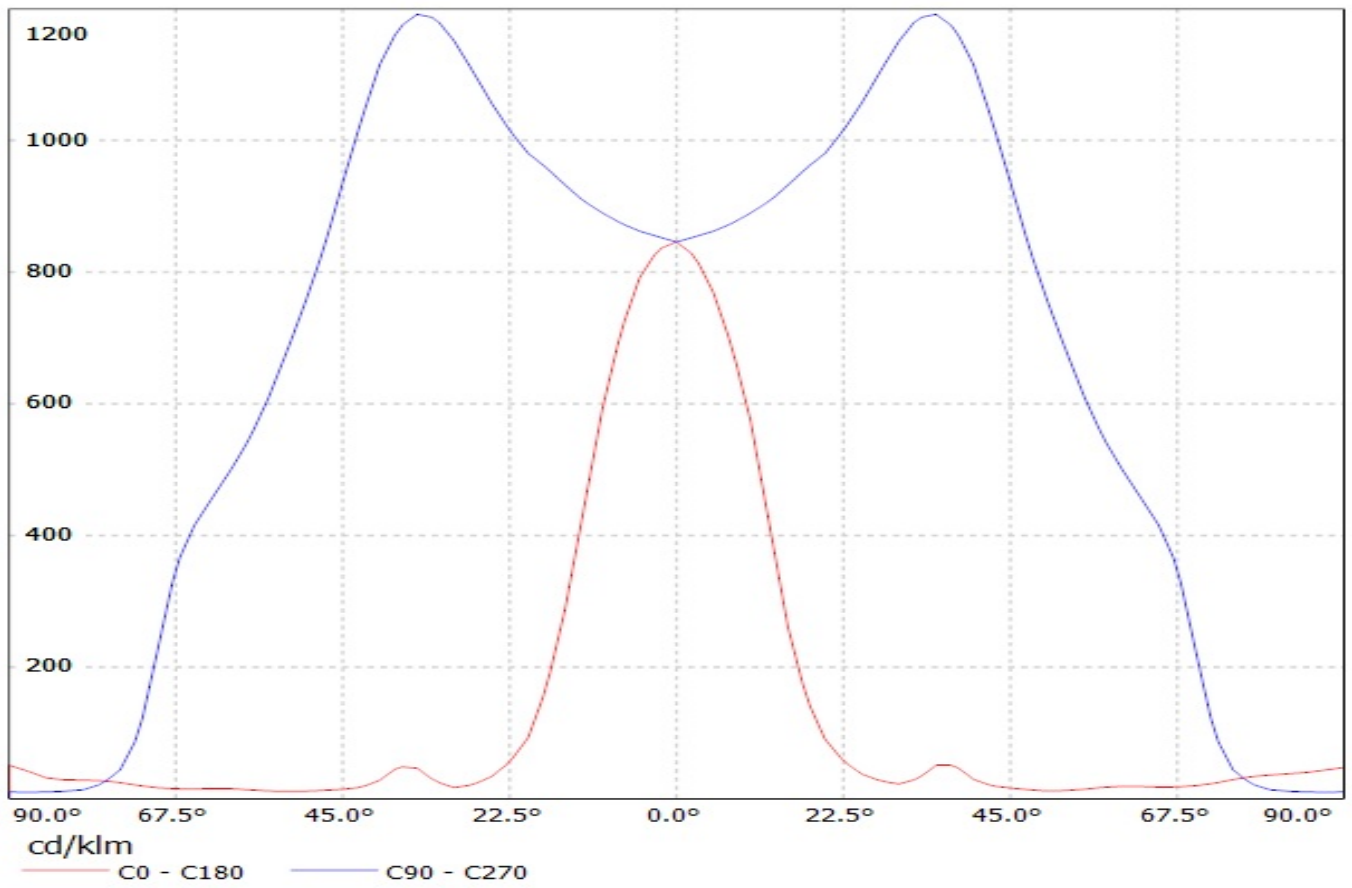


Luminaire: LEDiL Oy C13749\_HB-2X2-O\_(Luxeon\_TX)  
Lamps: 1 x Luxeon\_TX\_2x2\_305lm@250mA\_P=2.79451W\_I=249.8mA

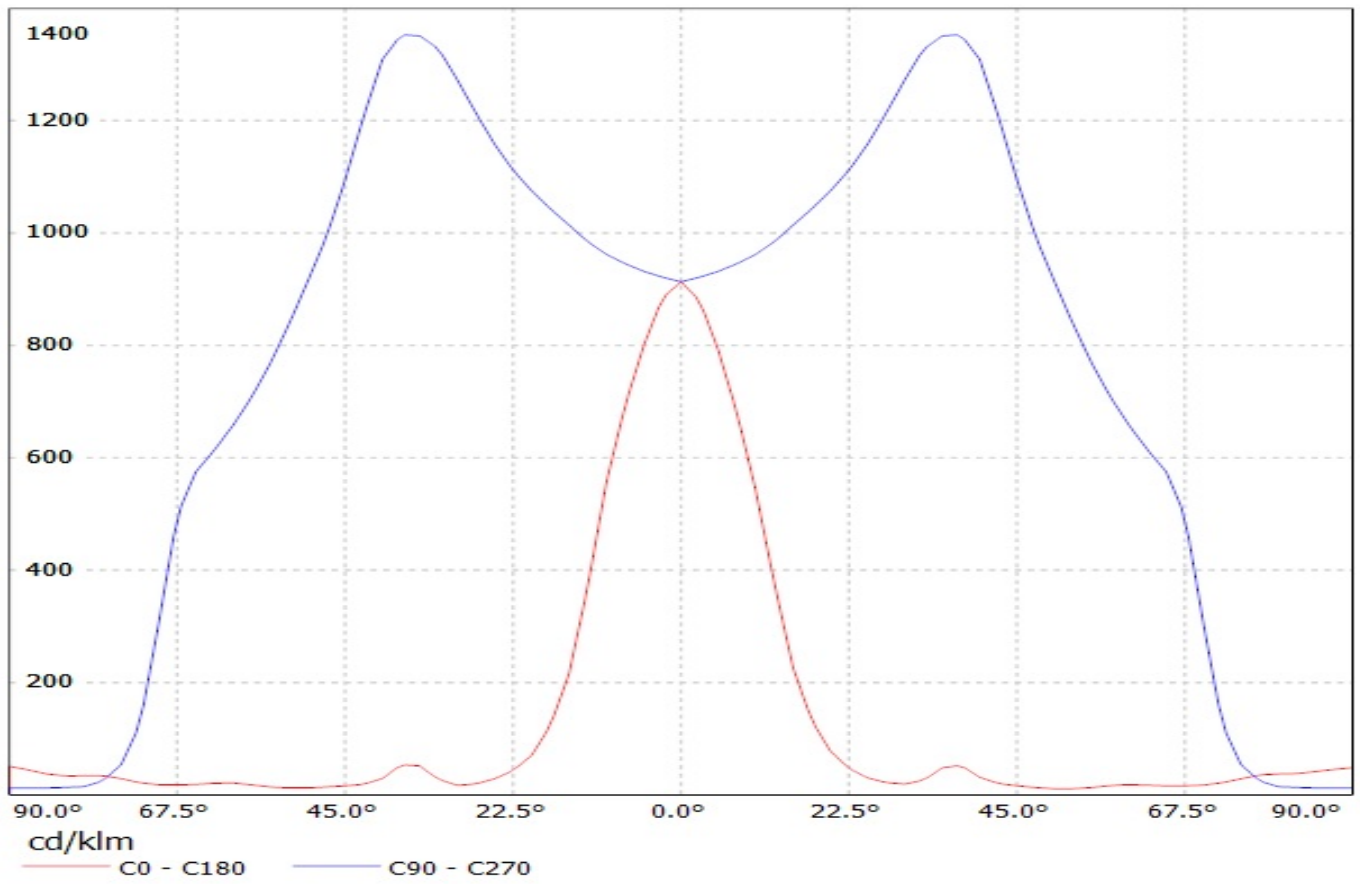




Luminaire: LEDil Oy C13749\_HB-2X2-O\_(NVSxx19B) Efficiency=94%  
Lamps: 1 x Nichia NCSxx19B (NVSL219BE) 315lm @ 250mA CCT=3100K P=2.9W I=250mA

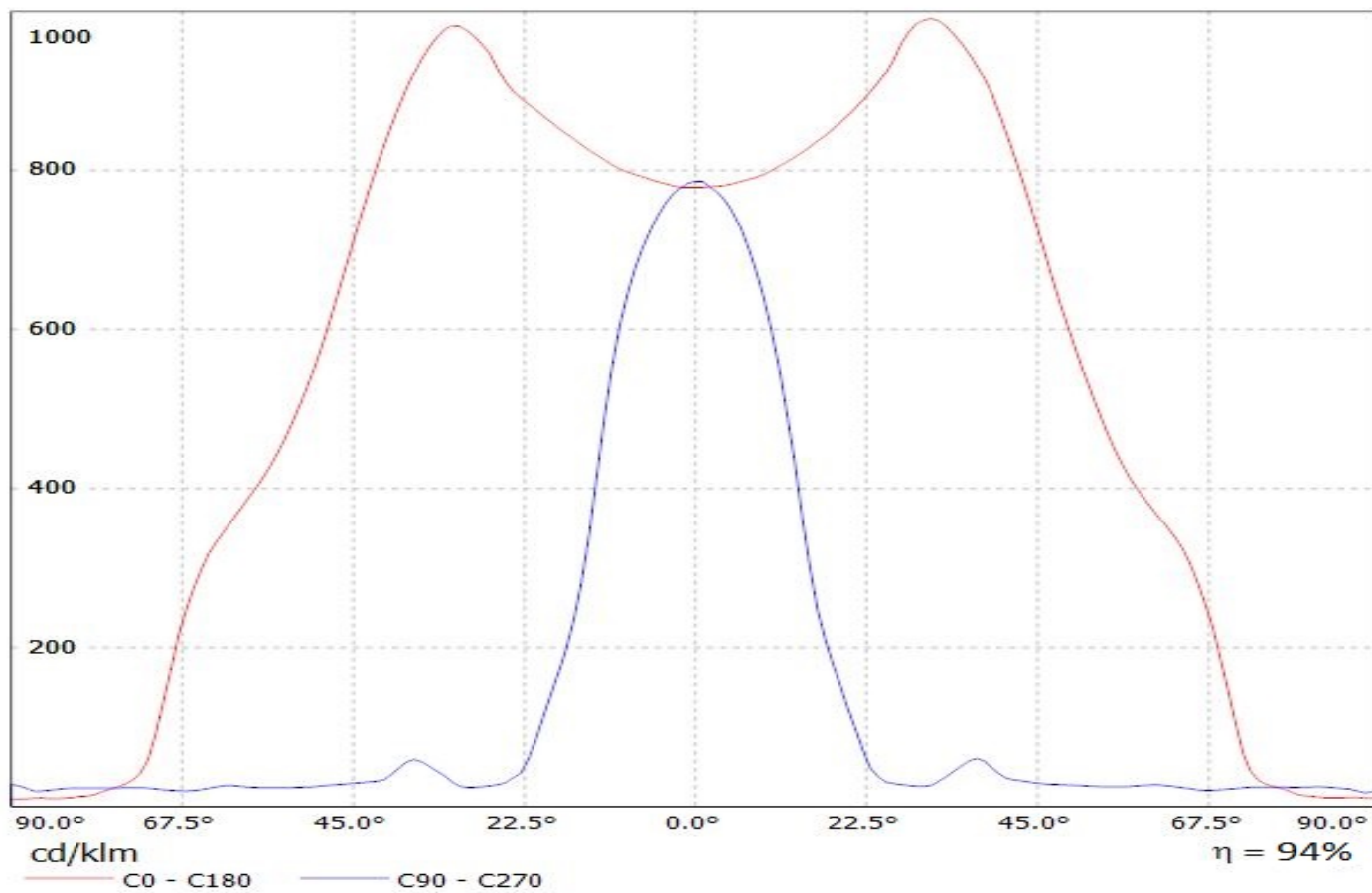


Luminaire: LEDil Oy C13749\_HB-2X2-O\_(NCSxx19B) Efficiency=94%  
Lamps: 1 x Nichia NCSxx19B (NCSW119BE) 425lm @ 250mA CCT=5400K P=3.1W I=250mA



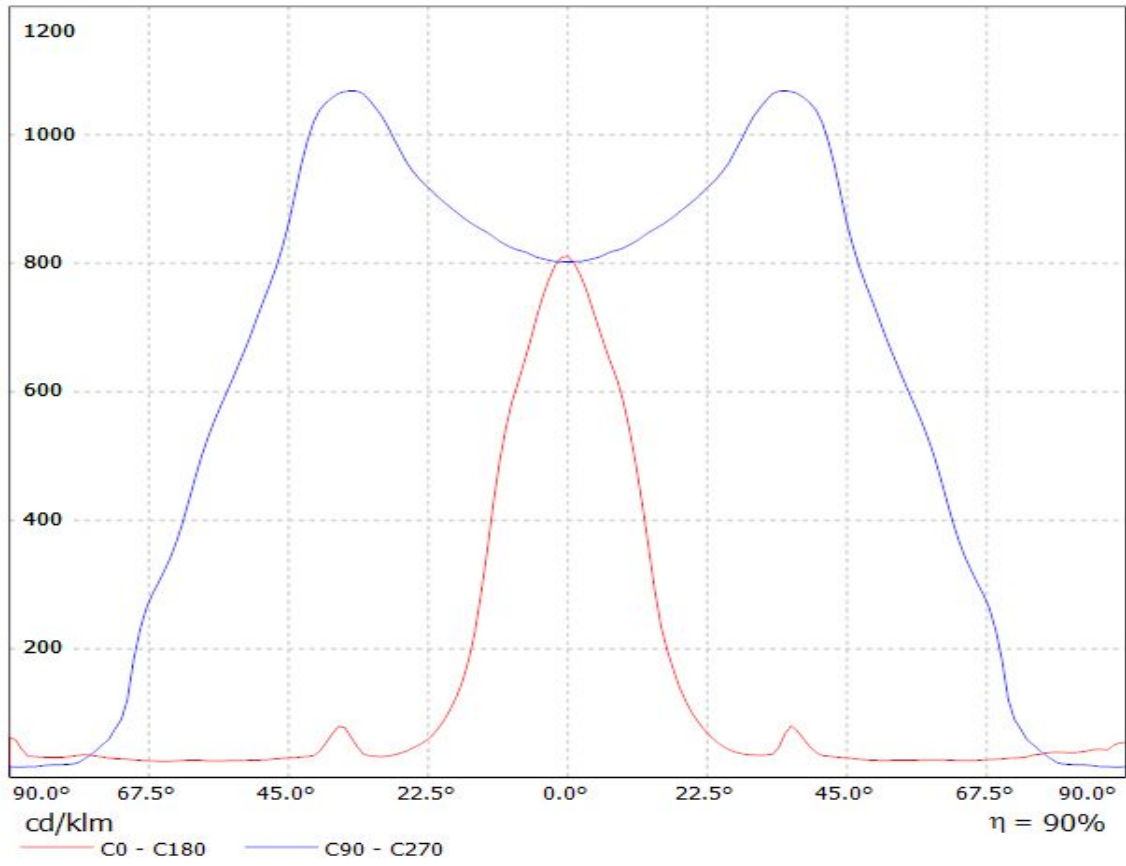
Luminaire: LEDiL Oy C13749\_HB-2X2-O\_(NWSL229AE)

Lamps: 1 x Nichia\_2X2\_NWSL229AE\_476.548lm@250mA\_P=2.7515W\_I=0.250A

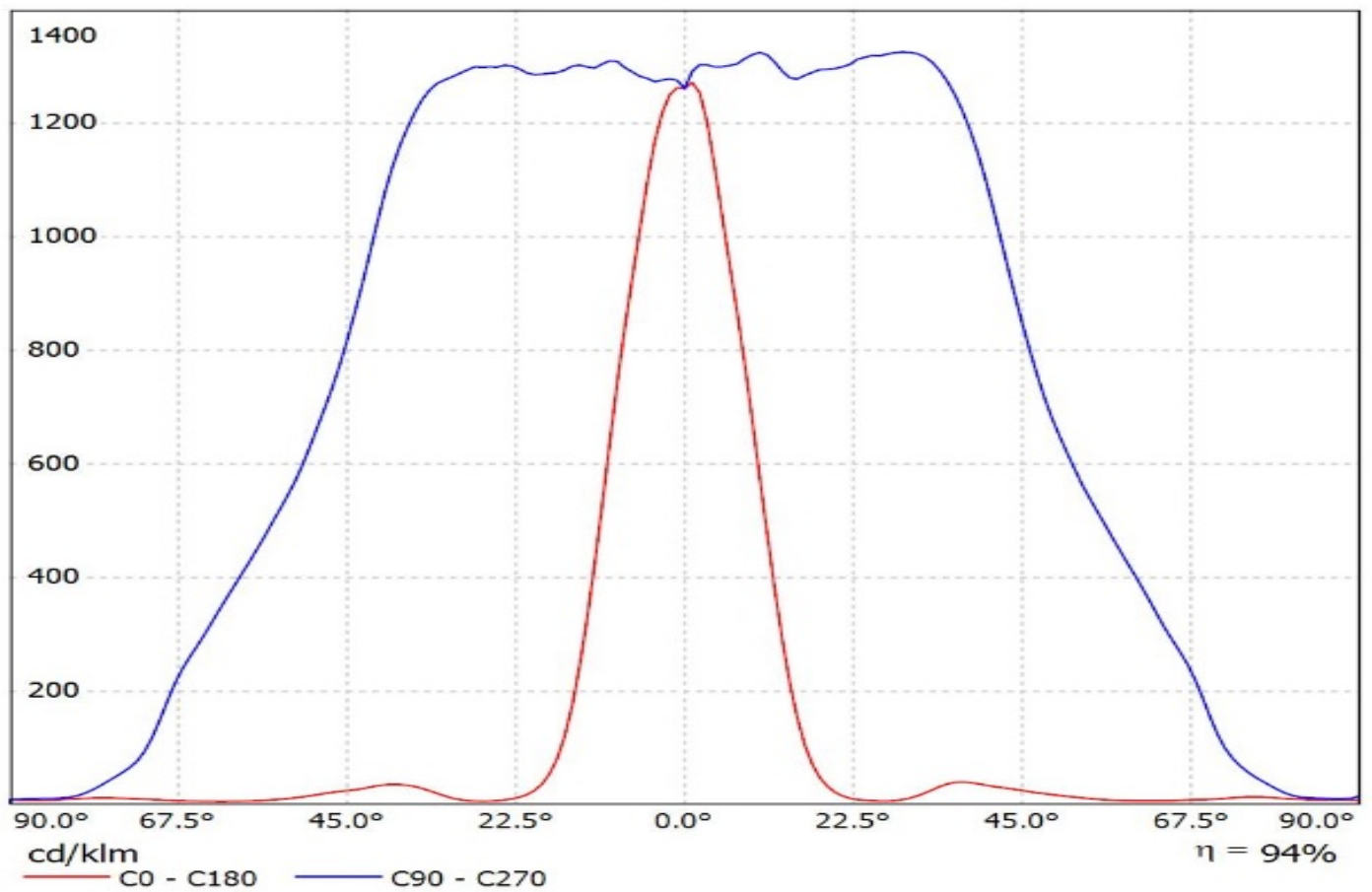


Luminaire: LEDiL Oy C13479\_HB-2x2-O\_(SQ-PC)

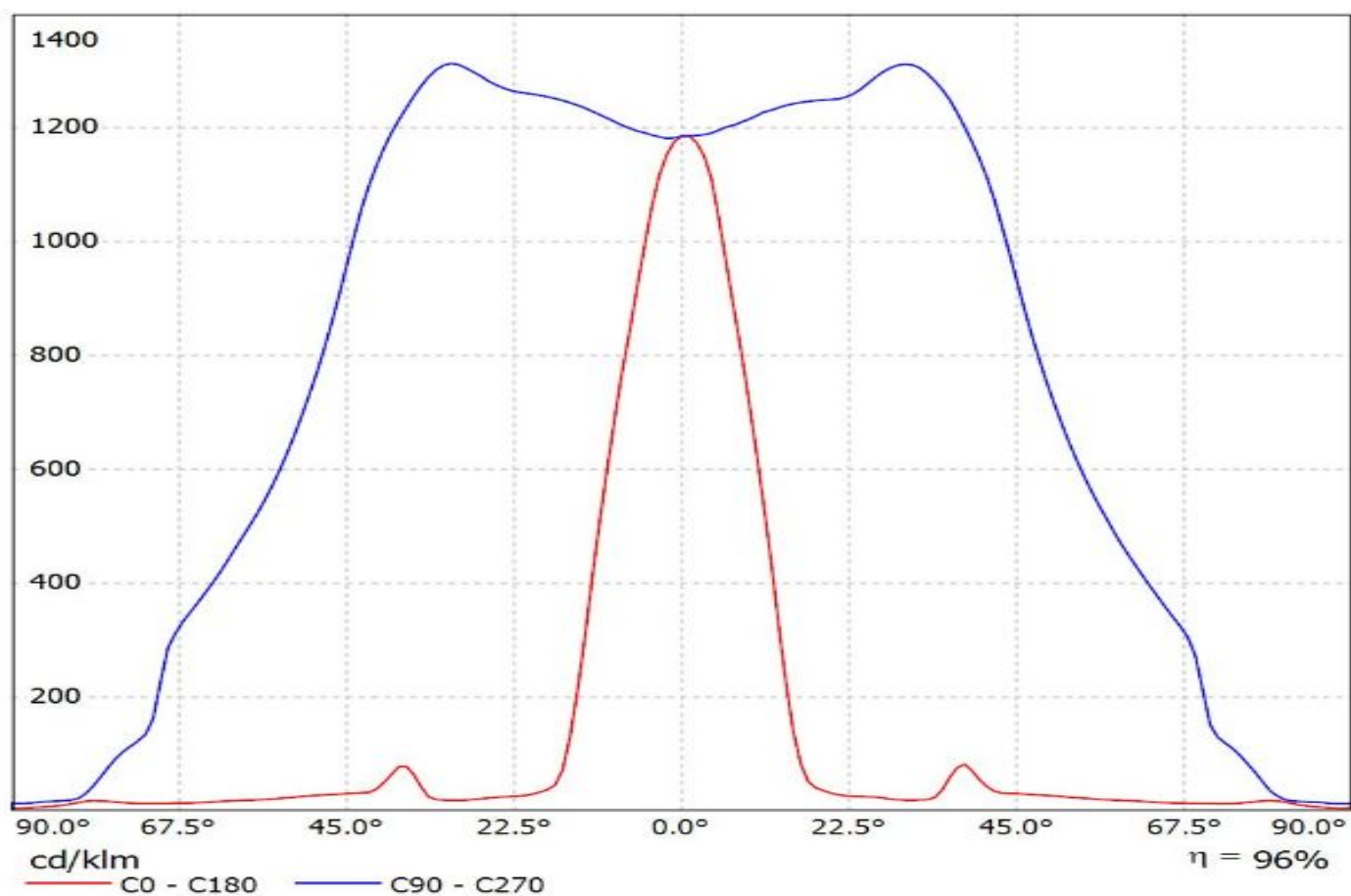
Lamps: 1 x OSRAM\_OSLON\_SQUARE\_PC\_2x2\_(GWCSSRM1.PC)\_414.854lm@250mA\_P=2.8626W\_CCT=5201K\_I=249.9mA



Luminaire: Ledil Oy C13749\_HB-2X2-O\_(Duris\_P8)\_SIMULATED  
Lamps: 1 x Osram Duris P8

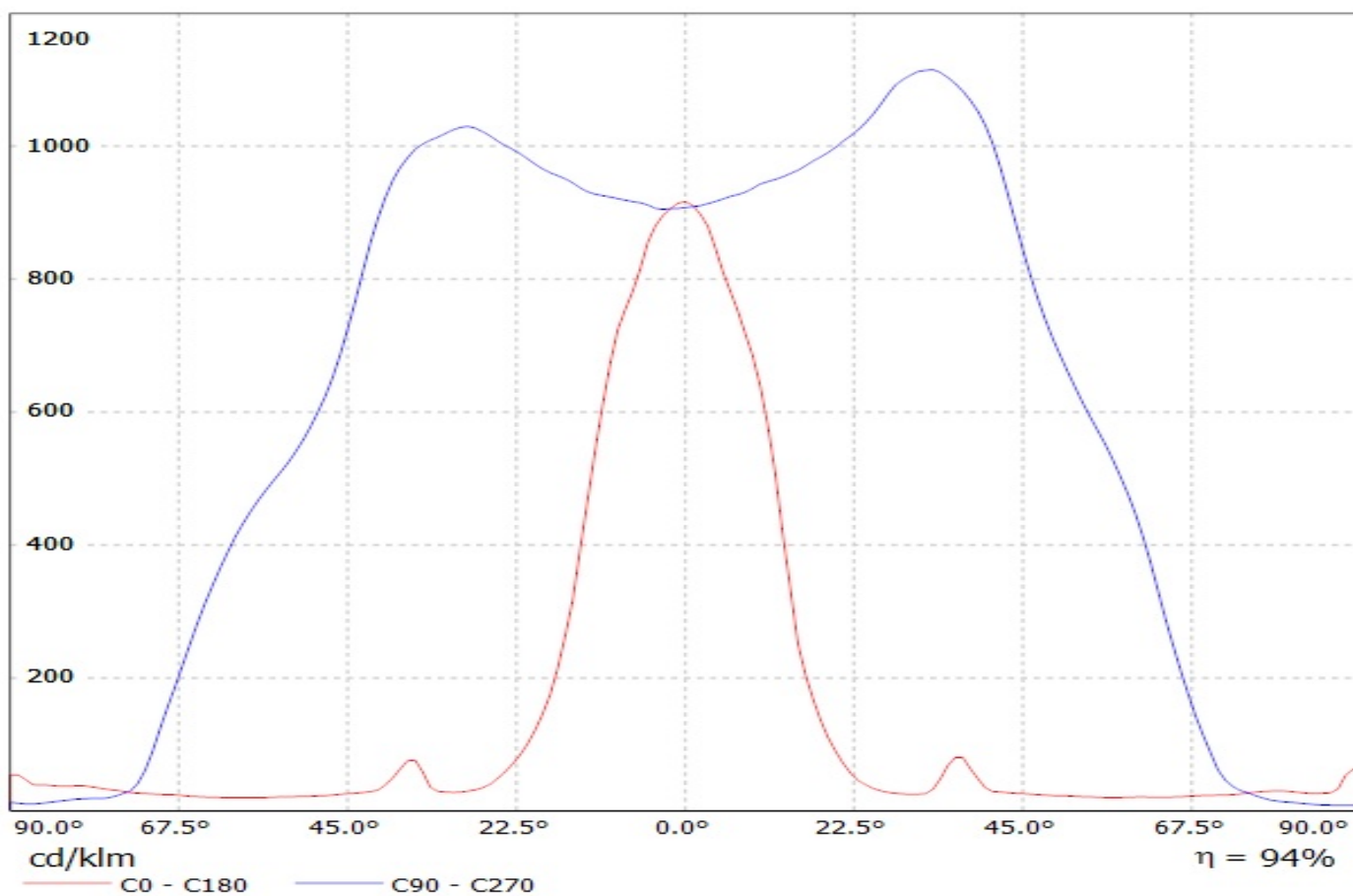


Luminaire: Ledil C13749\_HB-2X2-O\_(Fortimo\_FastFlex\_LED\_board\_2x8/740\_DA\_G3)  
Lamps: 1 x Fortimo\_FastFlex\_LED\_board\_2x8/740\_DA\_G3\_1828.23lm@250mA\_P=11.667W\_I=0.25A



Luminaire: LEDiL Oy C13749\_HB-2X2-O\_(LH351Z)

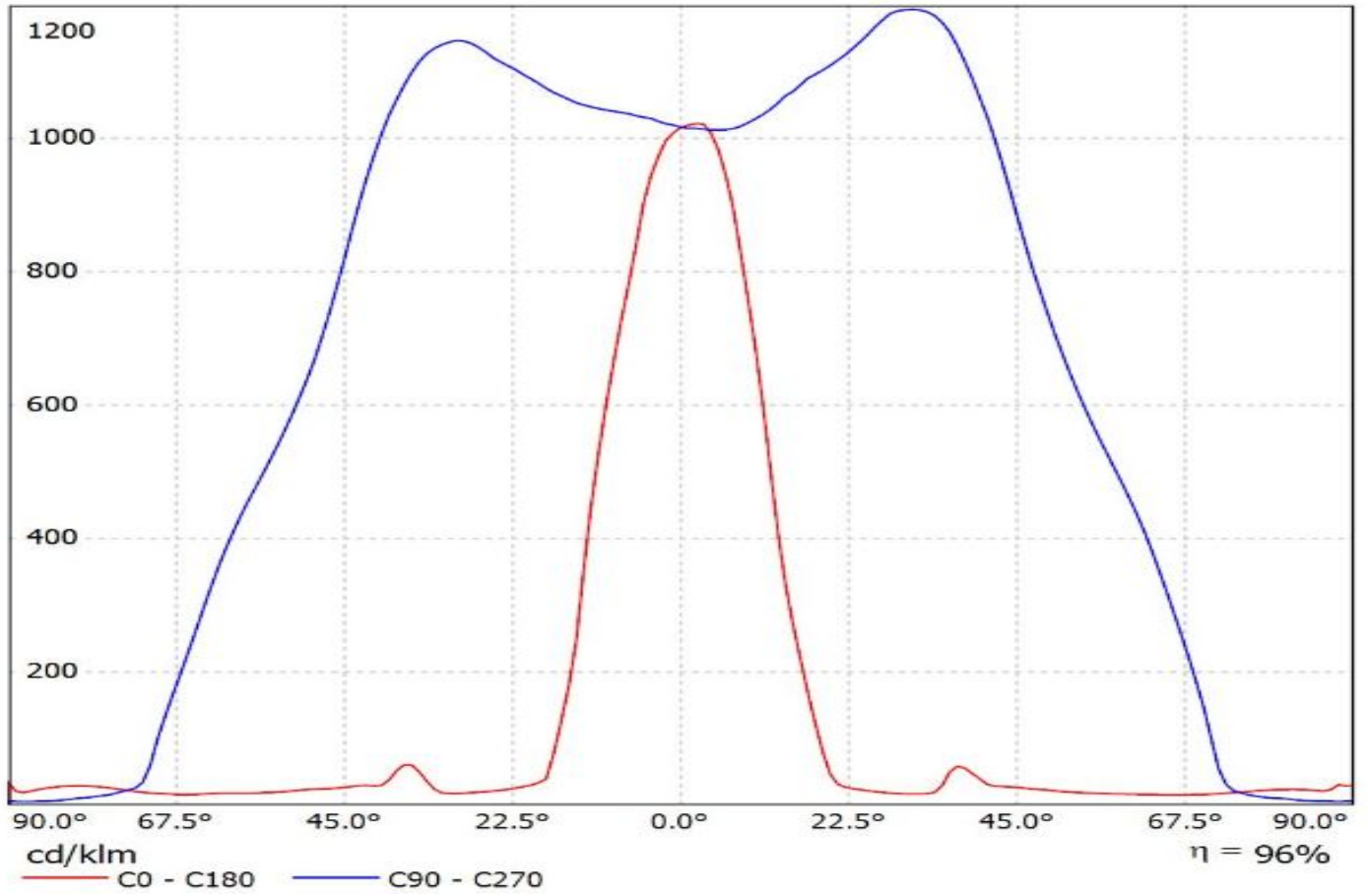
Lamps: 1 x SAMSUNG\_LH351Z\_2x2\_361.9lm@250mA\_P=2.86371W\_I=249.8mA





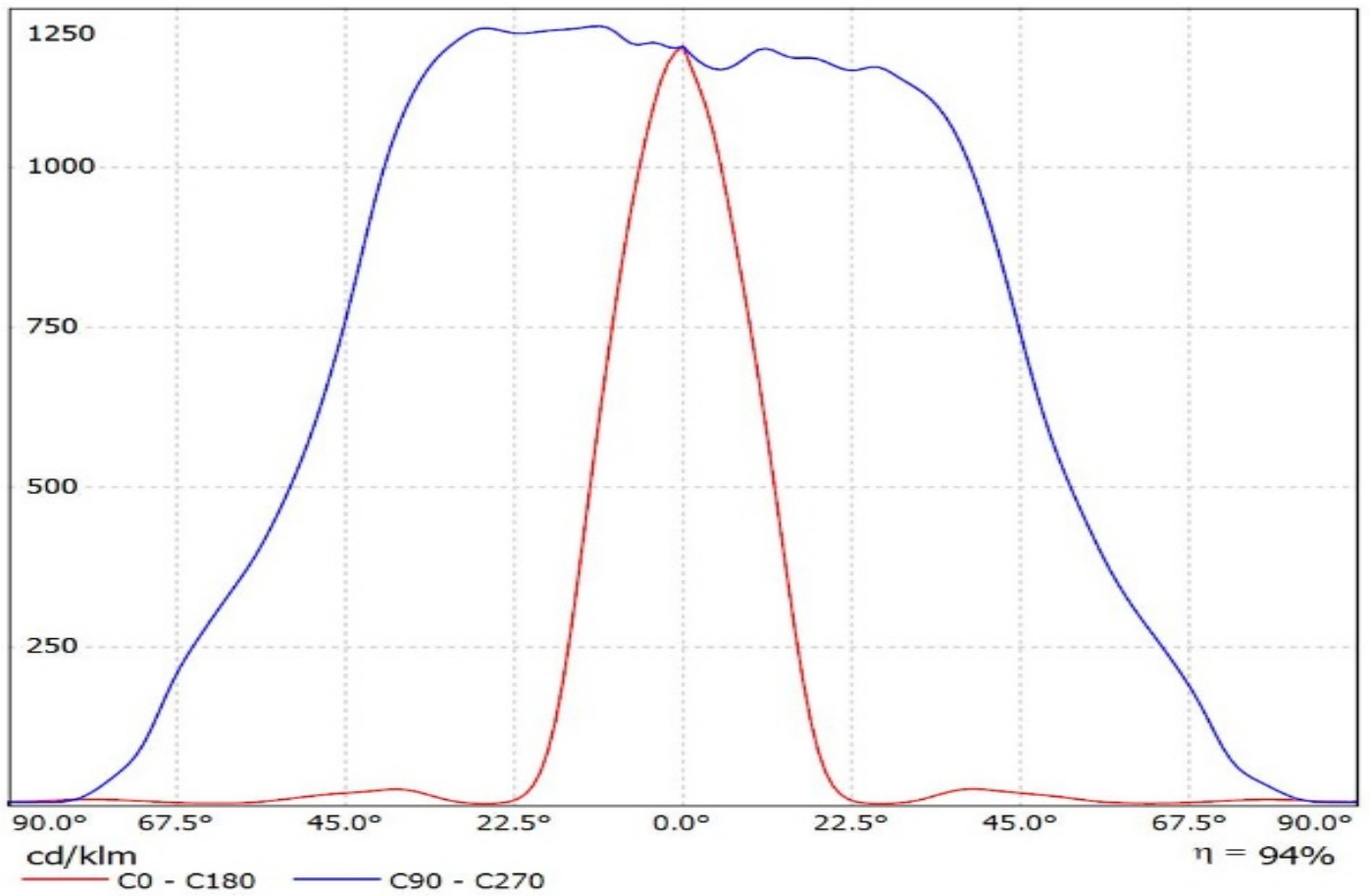
Luminaire: Ledil C13749\_HB-2X2-O\_(LH351B)

Lamps: 1 x Samsung\_LH351B\_2x2\_444.178lm@250mA\_P=2.8535W\_I=0.25A

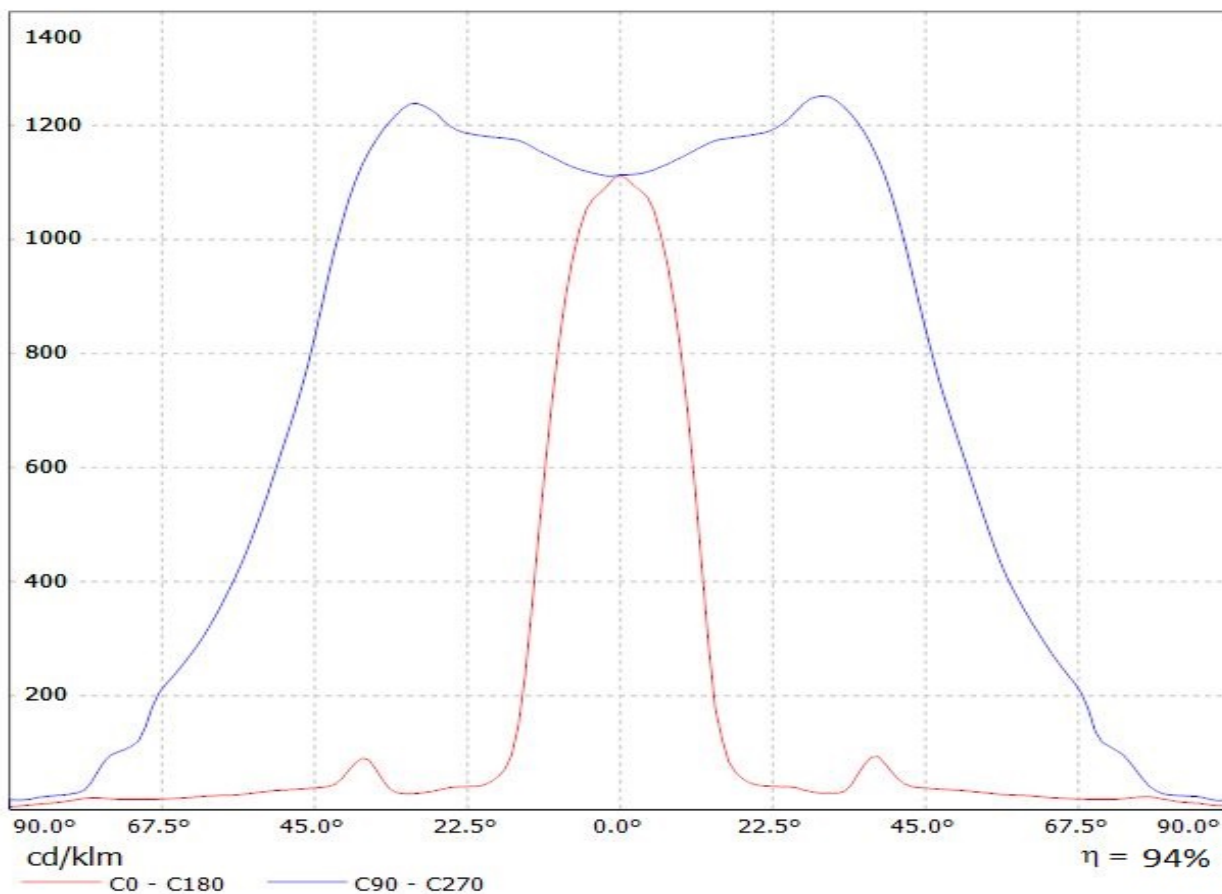




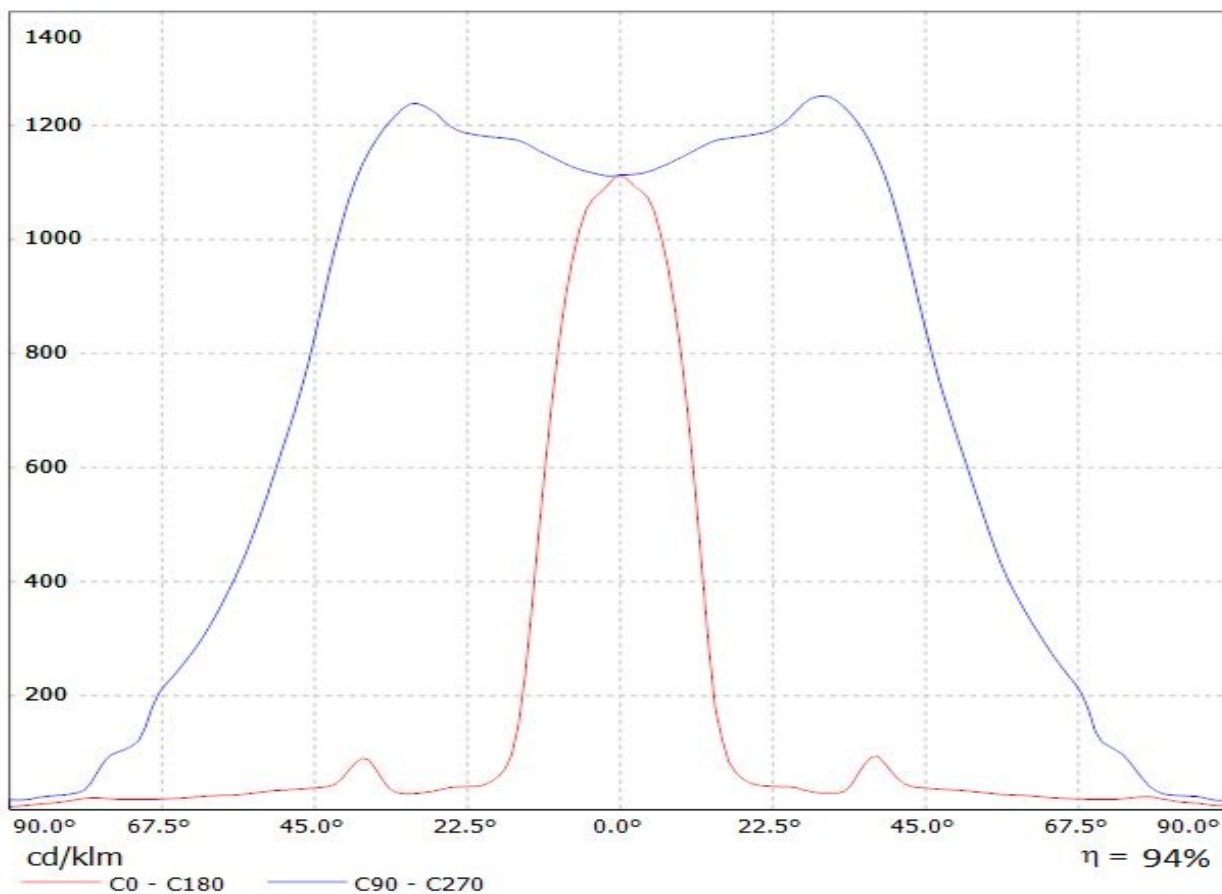
Luminaire: Ledil Oy C13749\_HB-2X2-O\_(Z5M2)\_SIMULATED  
Lamps: 1 x Seoul Z5M2 (SZ5-M2-W0-00)



Luminaire: LEDiL Oy C13749\_HB-2X2-O\_(Tridonic\_Module\_RLE\_G1)  
Lamps: 1 x Tridonic\_Module\_RLE\_G1\_4576.03lm@700mA\_P=32.0681W\_I=0.700A

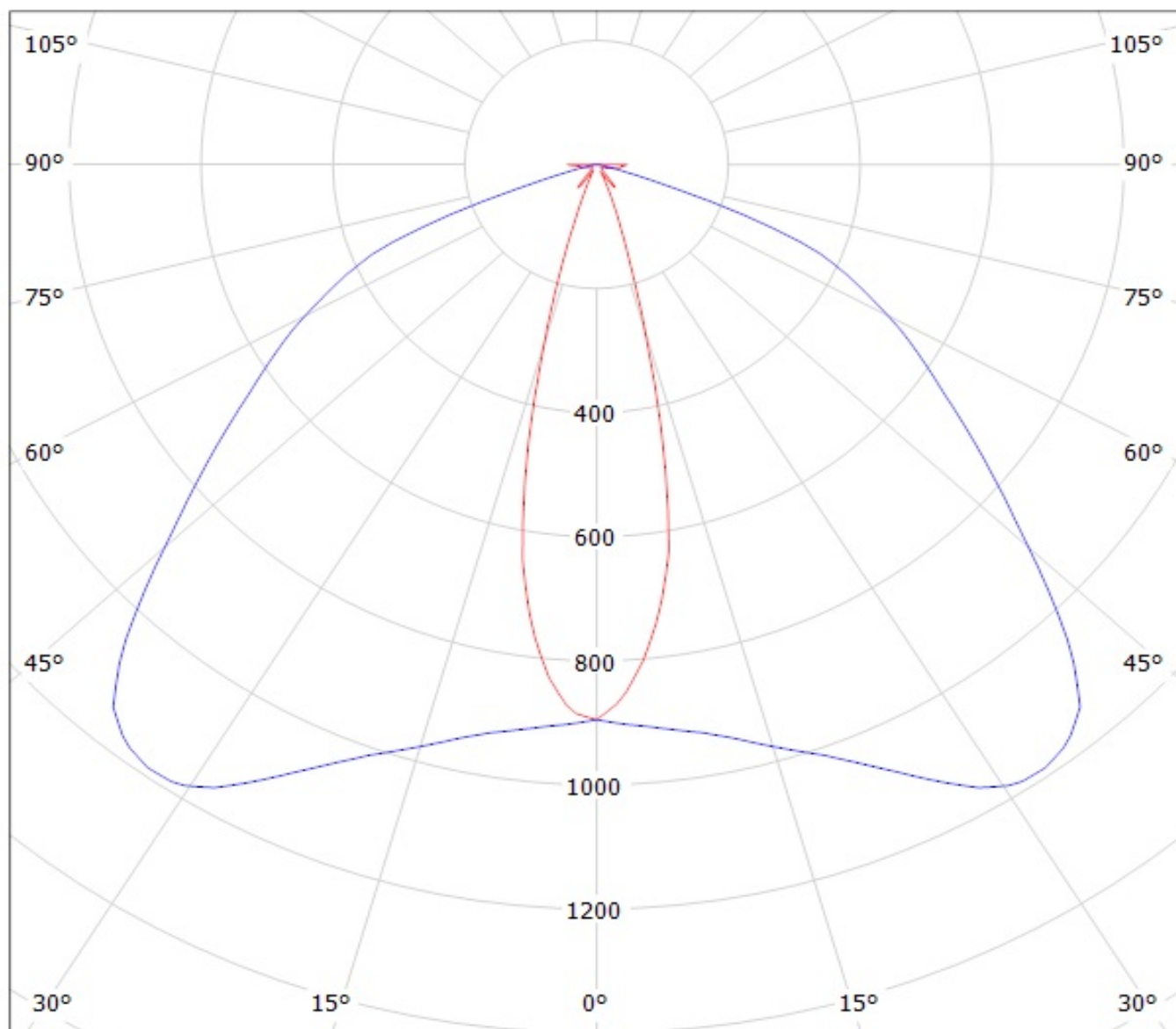


Luminaire: LEDiL Oy C13749\_HB-2X2-O\_(Tridonic\_Module\_RLE\_G1)  
Lamps: 1 x Tridonic\_Module\_RLE\_G1\_4576.03lm@700mA\_P=32.0681W\_I=0.700A



Luminaire: LEDil Oy C13749\_HB-2X2-O\_(XP-G2) Efficiency=94%

Lamps: 1 x Cree XP-G2 (XPGBWT-L1-000-00G51) 411lm @ 250mA CCT=7200K P=2.9W I=250mA

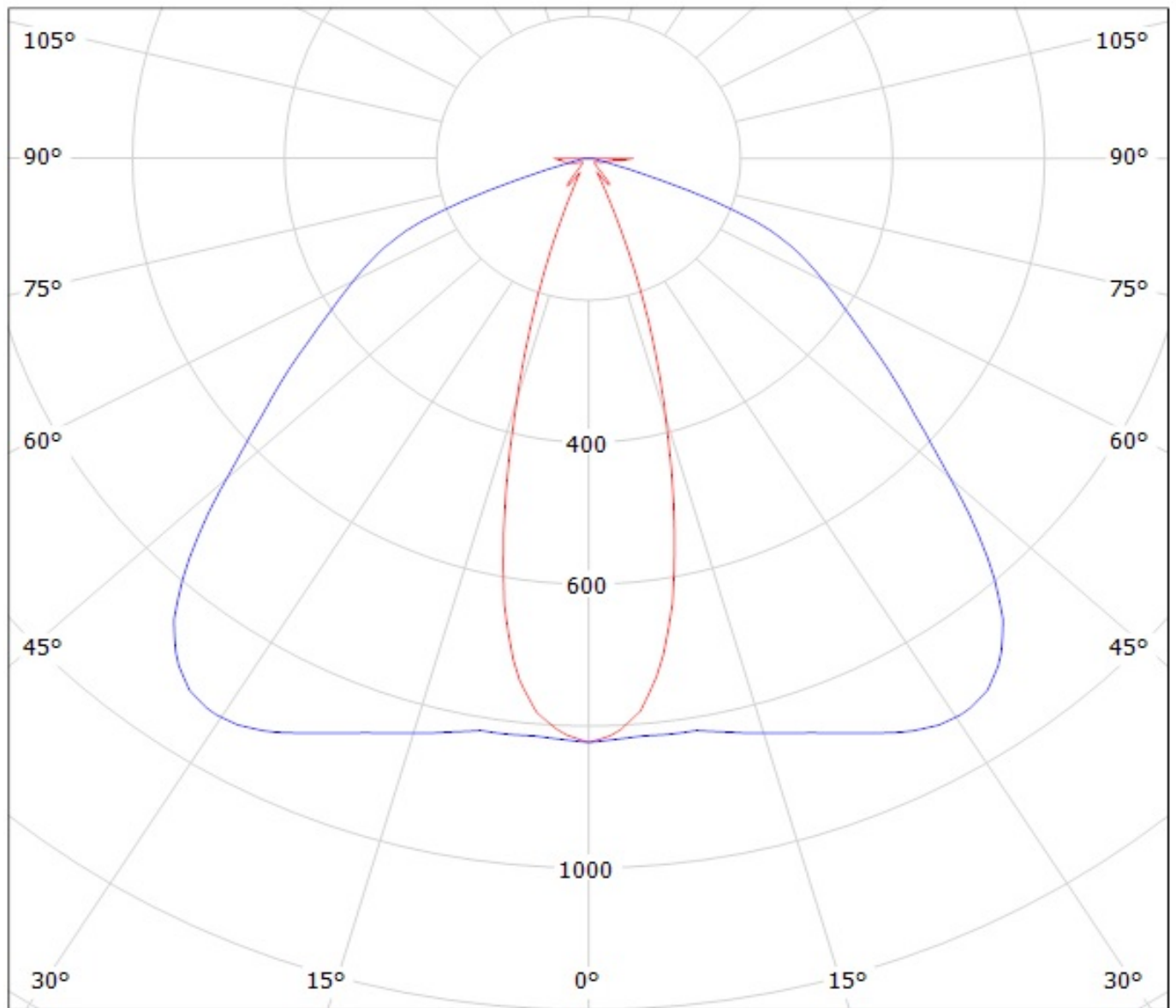


cd/klm

— C0 - C180

— C90 - C270

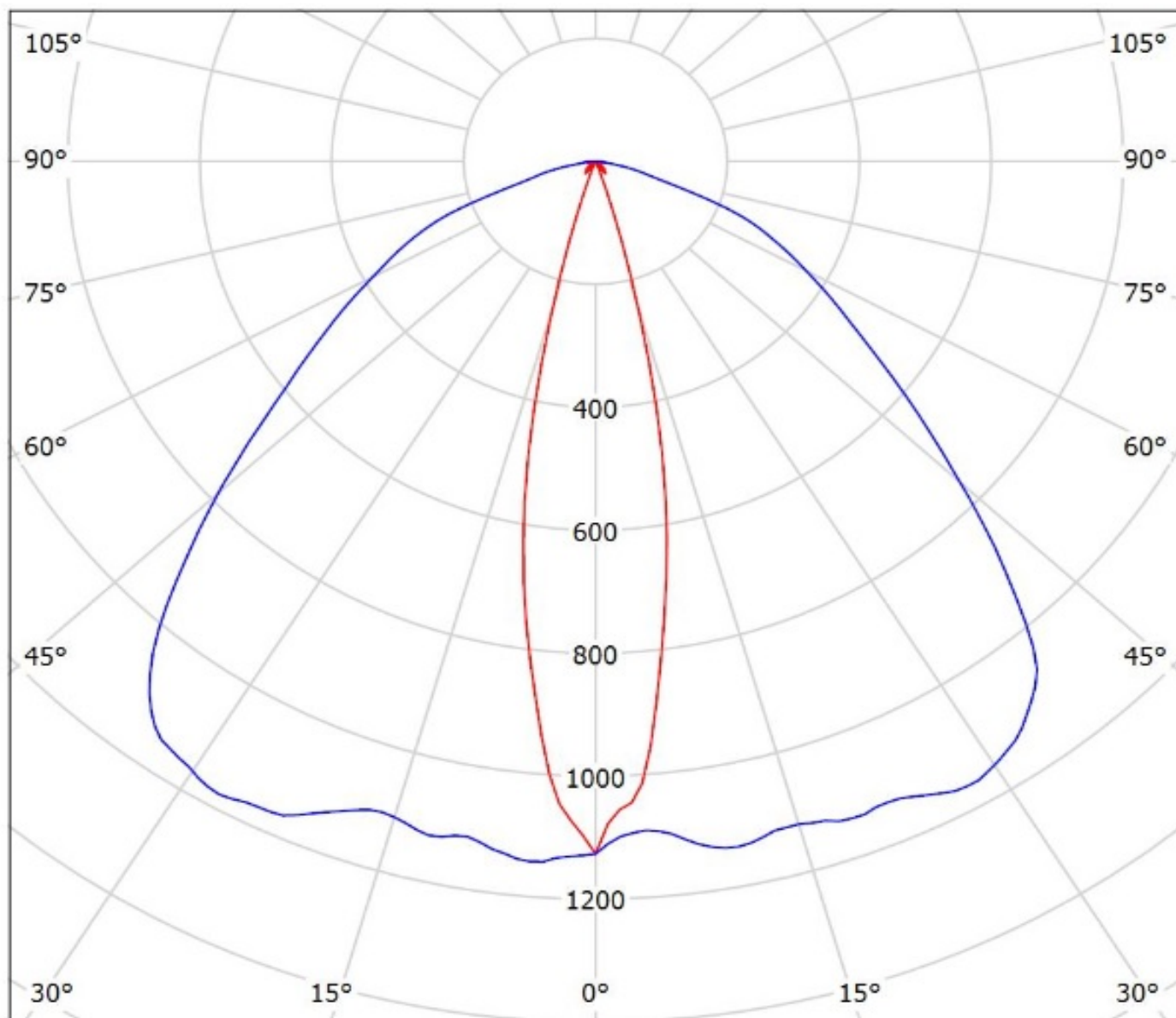
Luminaire: LEDil Oy C13749\_HB-2X2-O\_(XM-L2) Efficiency=94%  
Lamps: 1 x Cree XM-L2 (XMLBWT-0-7B4-T30-0L-0001) 356lm @ 250mA CCT=3200K P=2.8W I=250mA



cd/klm

— C0 - C180    — C90 - C270

Luminaire: Ledil Oy C13749\_HB-2X2-O\_(XP-G)\_SIMULATED  
Lamps: 1 x Cree XP-G



cd/klm

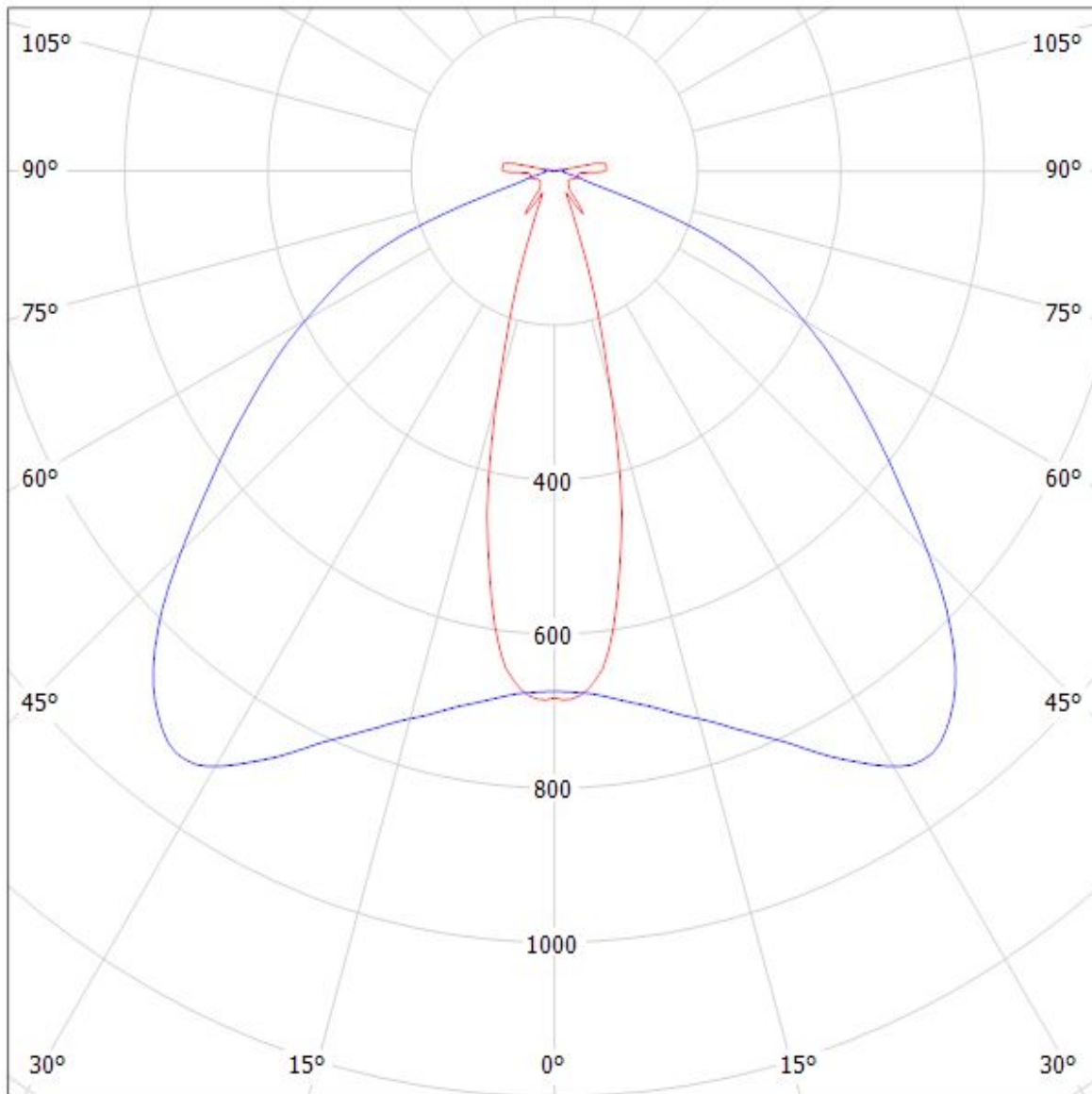
— C0 - C180 — C90 - C270

$\eta = 93\%$



Luminaire: LEDiL Oy C13749\_HB-2X2-O\_(XP-L)

Lamps: 1 x CREE\_XP-L\_2x2\_(XPLAWT-0-1B0-V40-00-0001)\_490lm@250mA\_CCT=7600K\_P=2.79963W\_I=249.9mA

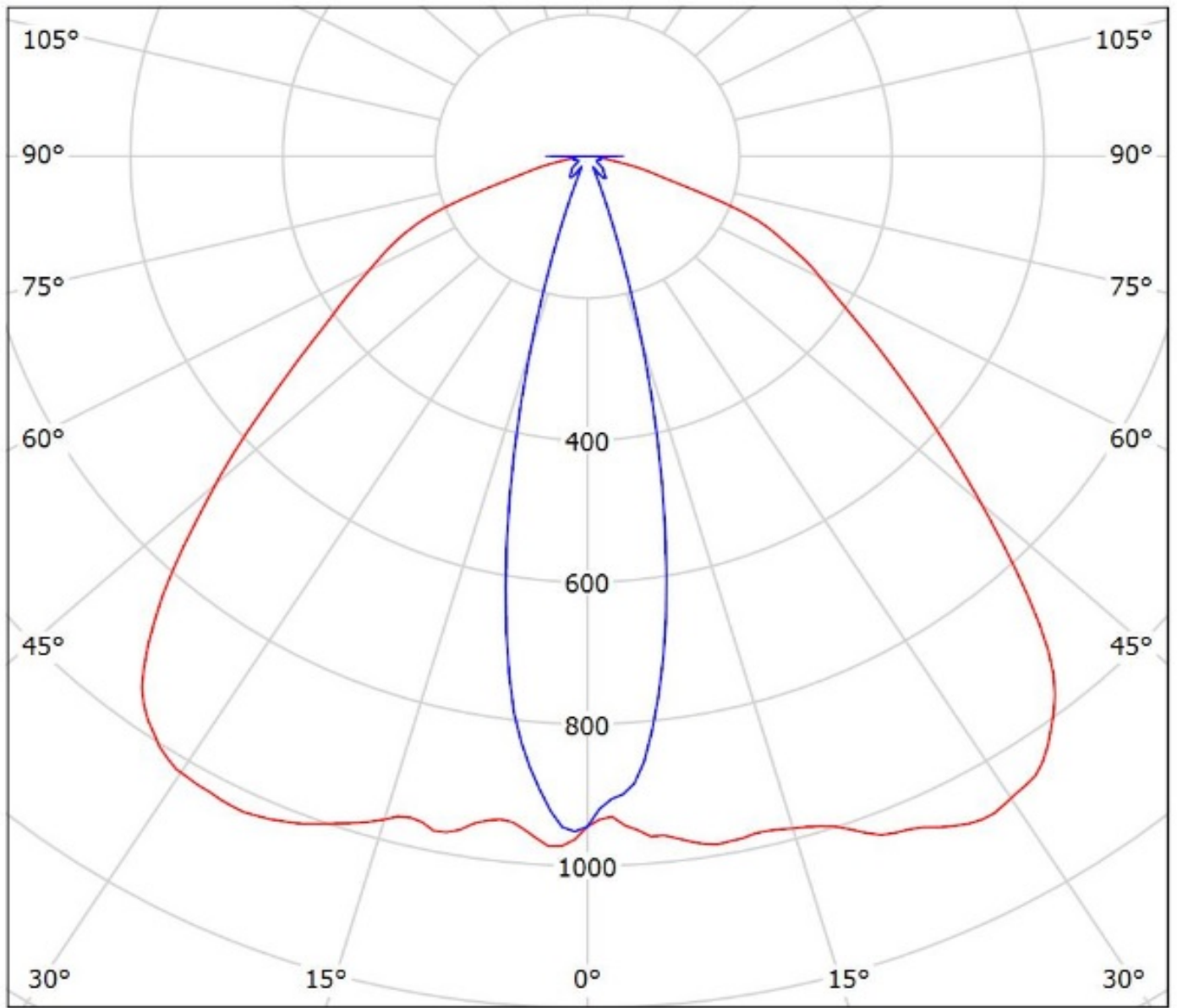


cd/klm

— C0 - C180    — C90 - C270

$\eta = 94\%$

Luminaire: Ledil Oy C13749\_HB-2X2-O\_(XP-G3)\_SIMULATED C13749\_HB-2X2-O\_(XP-G3)\_SIMULATED  
Lamps: 1 x Cree XP-G3 - 1.00 W

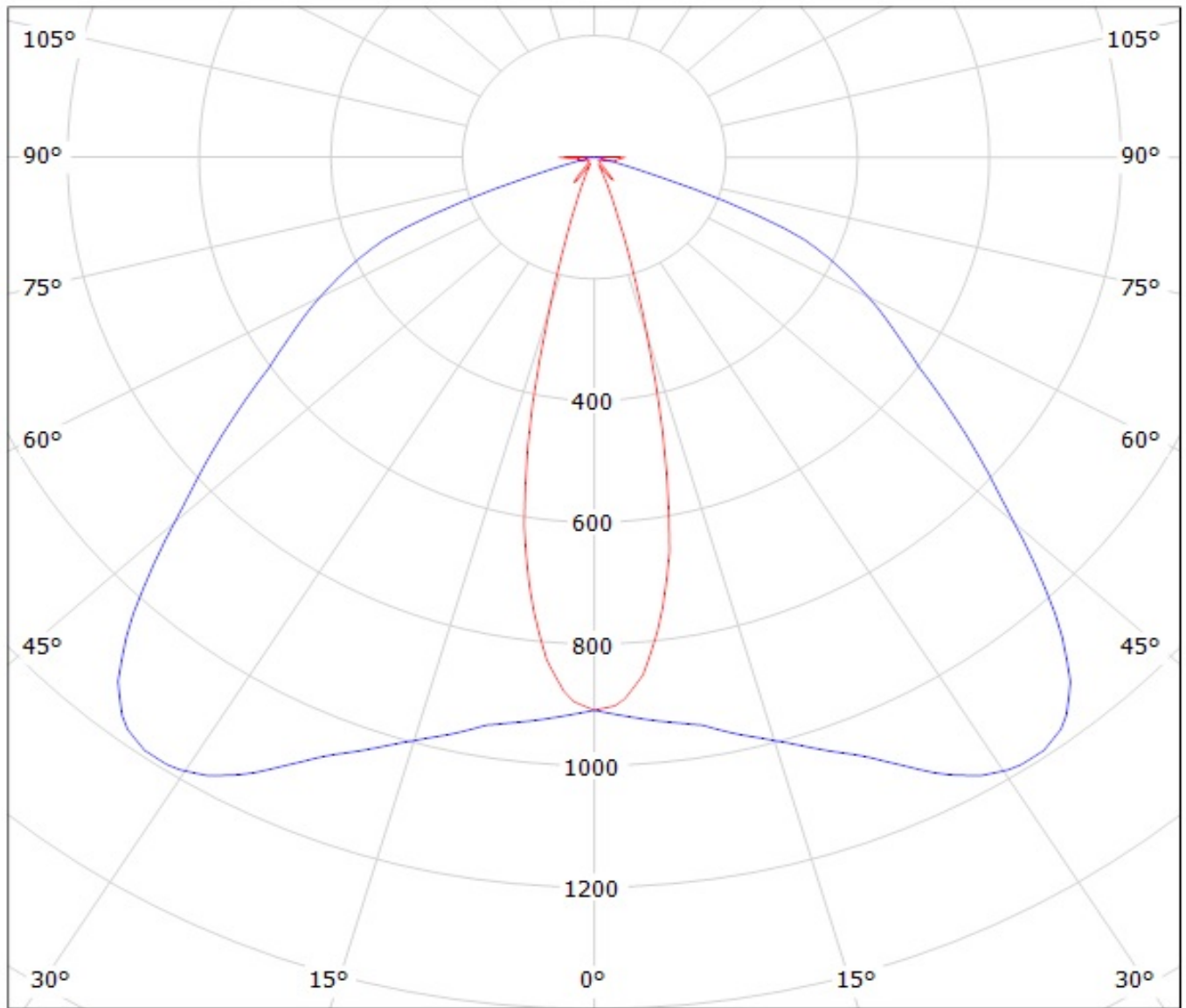


cd/klm  
— C0 - C180 — C90 - C270

$\eta = 94\%$



Luminaire: LEDil Oy C13749\_HB-2X2-O\_(Luxeon\_T) Efficiency=94%  
Lamps: 1 x Luxeon T (LXH8-FW30-3) 289lm @ 250mA CCT=3200K P=2.8W I=250mA

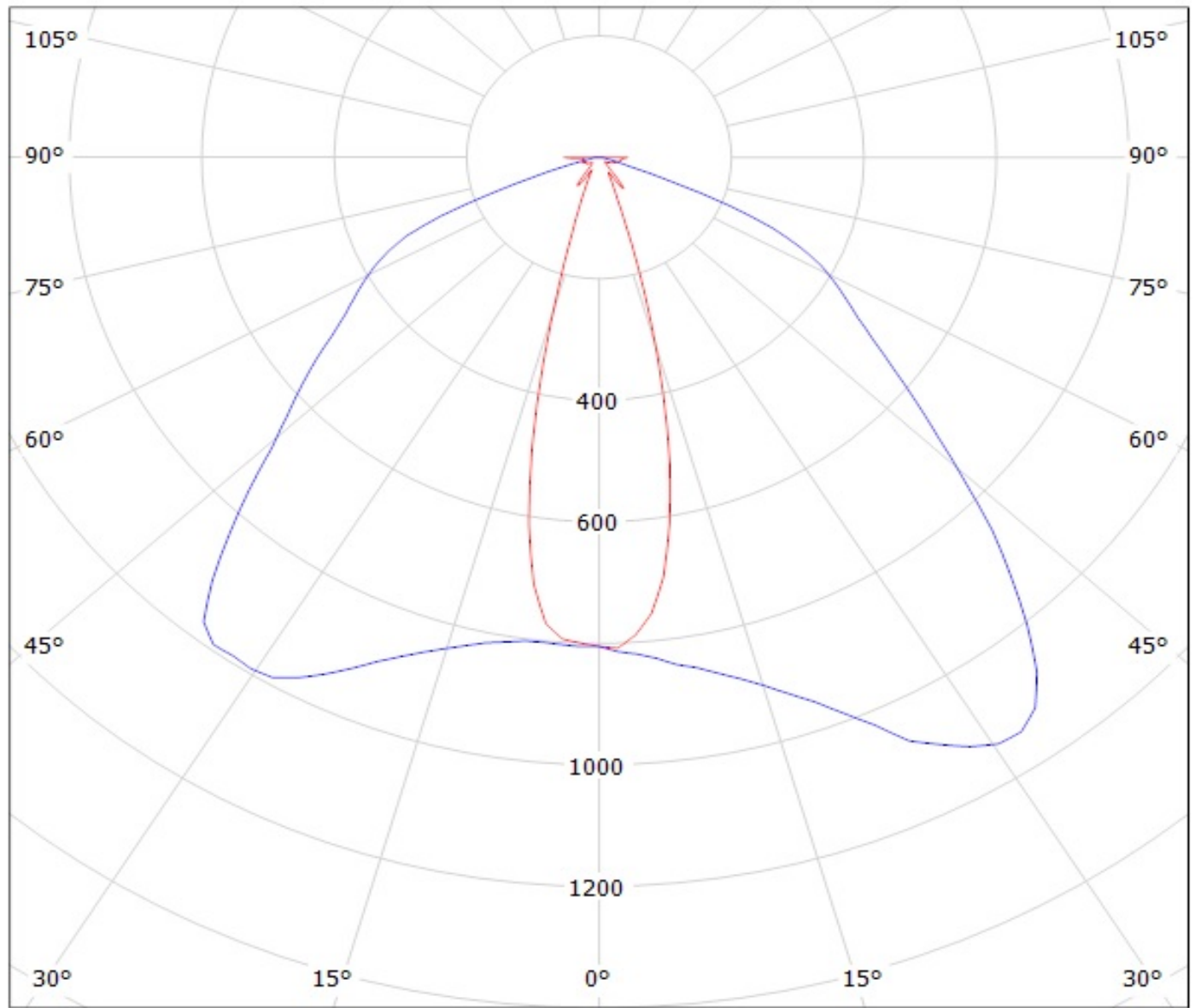


cd/klm

— C0 - C180    — C90 - C270

Luminaire: LEDil Oy C13749\_HB-2X2-O\_(Luxeon\_MZ)

Lamps: 1 x Philips Lumileds Luxeon MZ (413.59lm @ 250mA) P=2.7W I=250mA



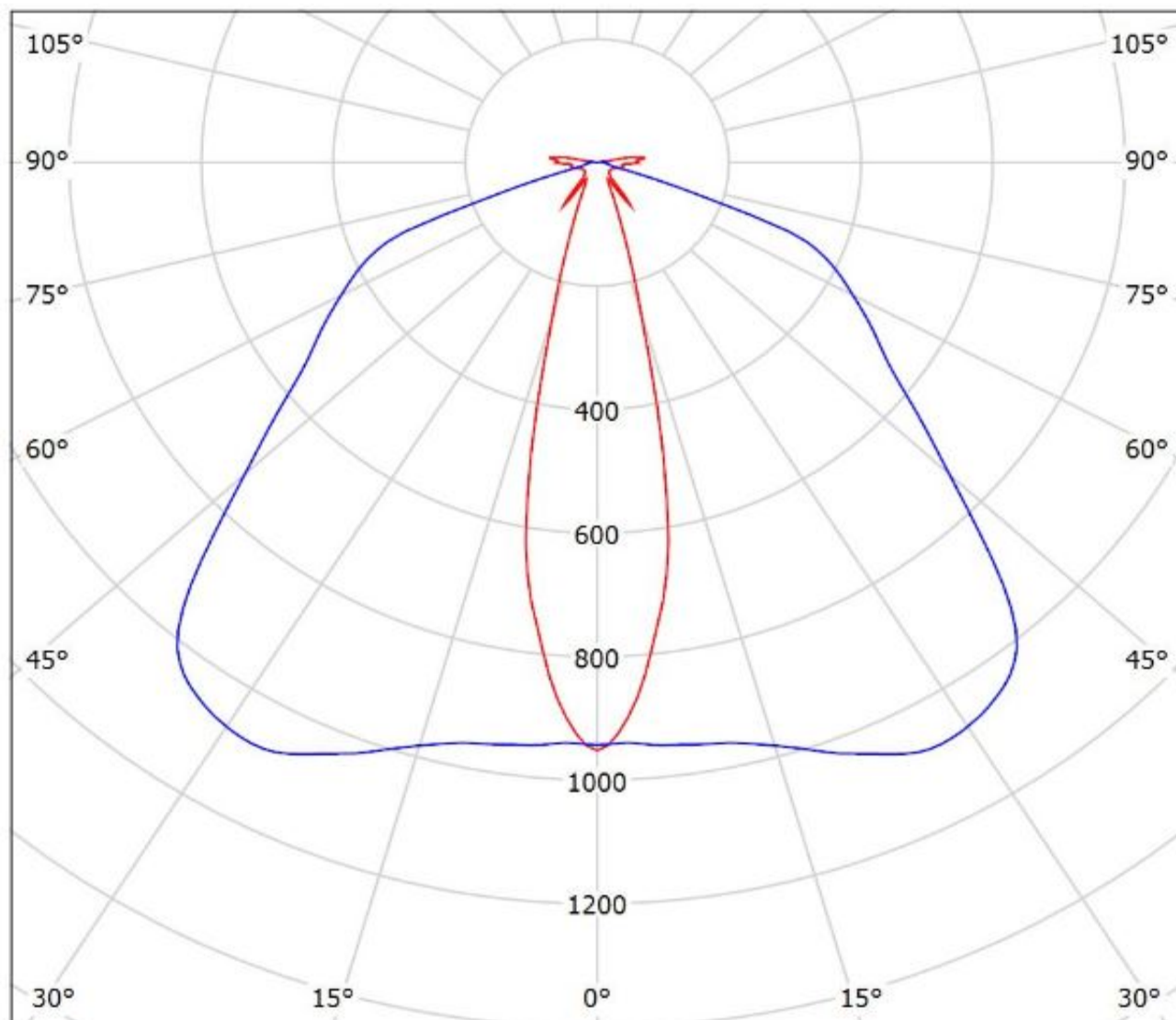
cd/klm

— C0 - C180

— C90 - C270

$\eta = 94\%$

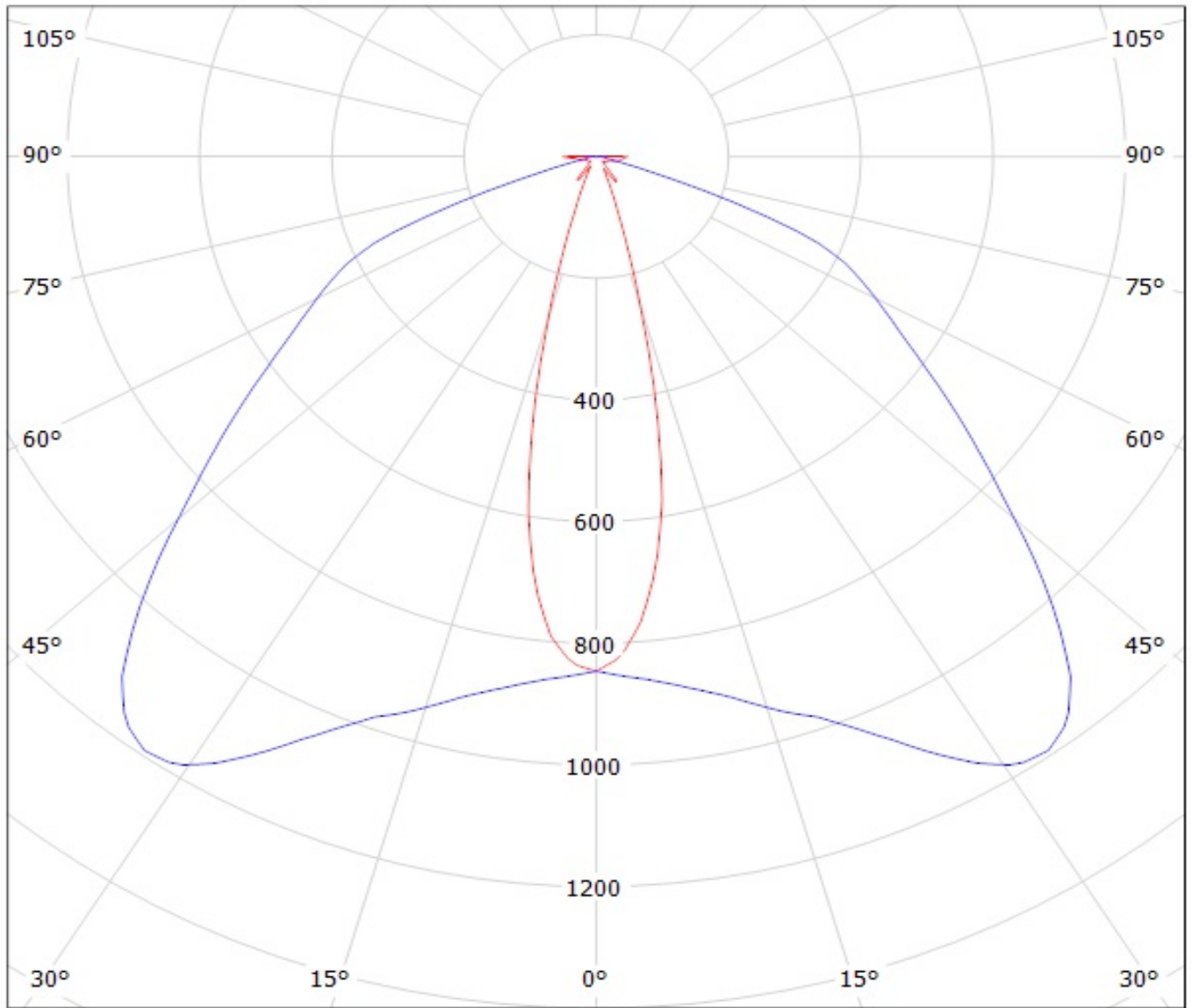
Luminaire: LEDiL Oy C13749\_HB-2X2-O\_(Luxeon\_TX)  
Lamps: 1 x Luxeon\_TX\_2x2\_305lm@250mA\_P=2.79451W\_I=249.8mA



cd/klm  
— C0 - C180 — C90 - C270

$\eta = 94\%$

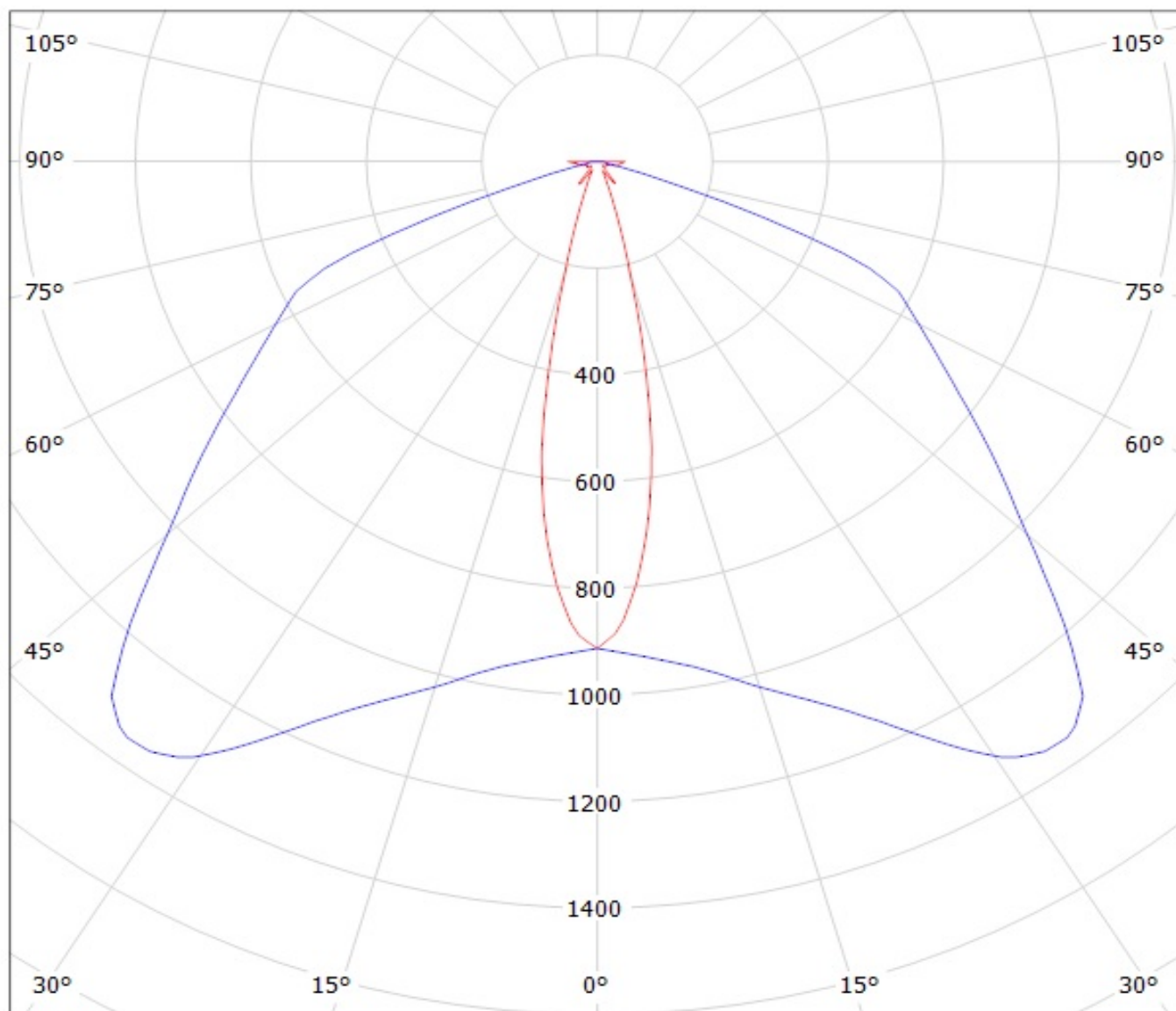
Luminaire: LEDil Oy C13749\_HB-2X2-O\_(NVSxx19B) Efficiency=94%  
Lamps: 1 x Nichia NCSxx19B (NVSL219BE) 315lm @ 250mA CCT=3100K P=2.9W I=250mA



cd/klm

— C0 - C180    — C90 - C270

Luminaire: LEDil Oy C13749\_HB-2X2-O\_(NCSxx19B) Efficiency=94%  
Lamps: 1 x Nichia NCSxx19B (NCSW119BE) 425lm @ 250mA CCT=5400K P=3.1W I=250mA

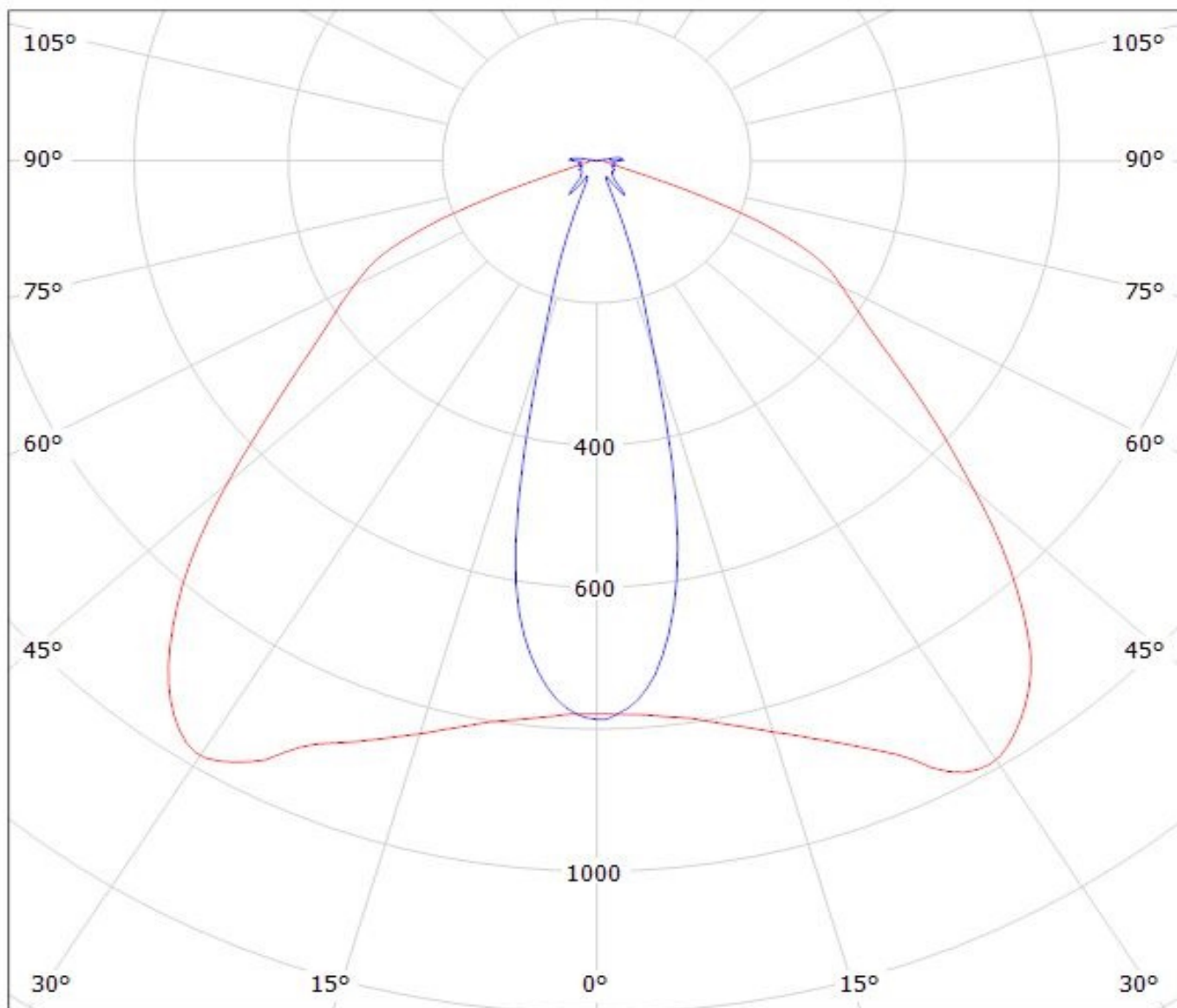


cd/klm

— C0 - C180    — C90 - C270

Luminaire: LEDiL Oy C13749\_HB-2X2-O\_(NWSL229AE)

Lamps: 1 x Nichia\_2X2\_NWSL229AE\_476.548lm@250mA\_P=2.7515W\_I=0.250A



cd/klm

— C0 - C180

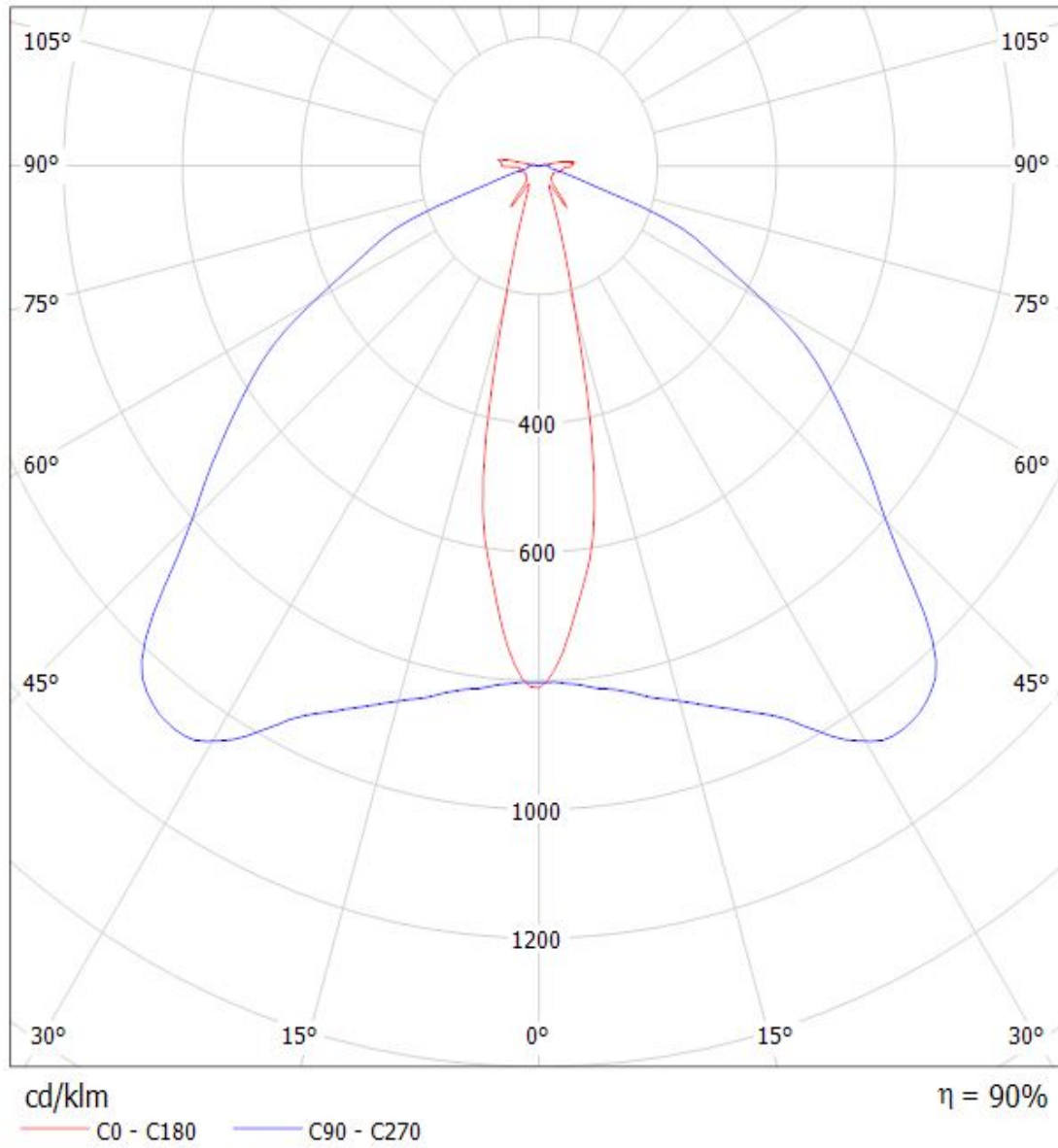
— C90 - C270

$\eta = 94\%$

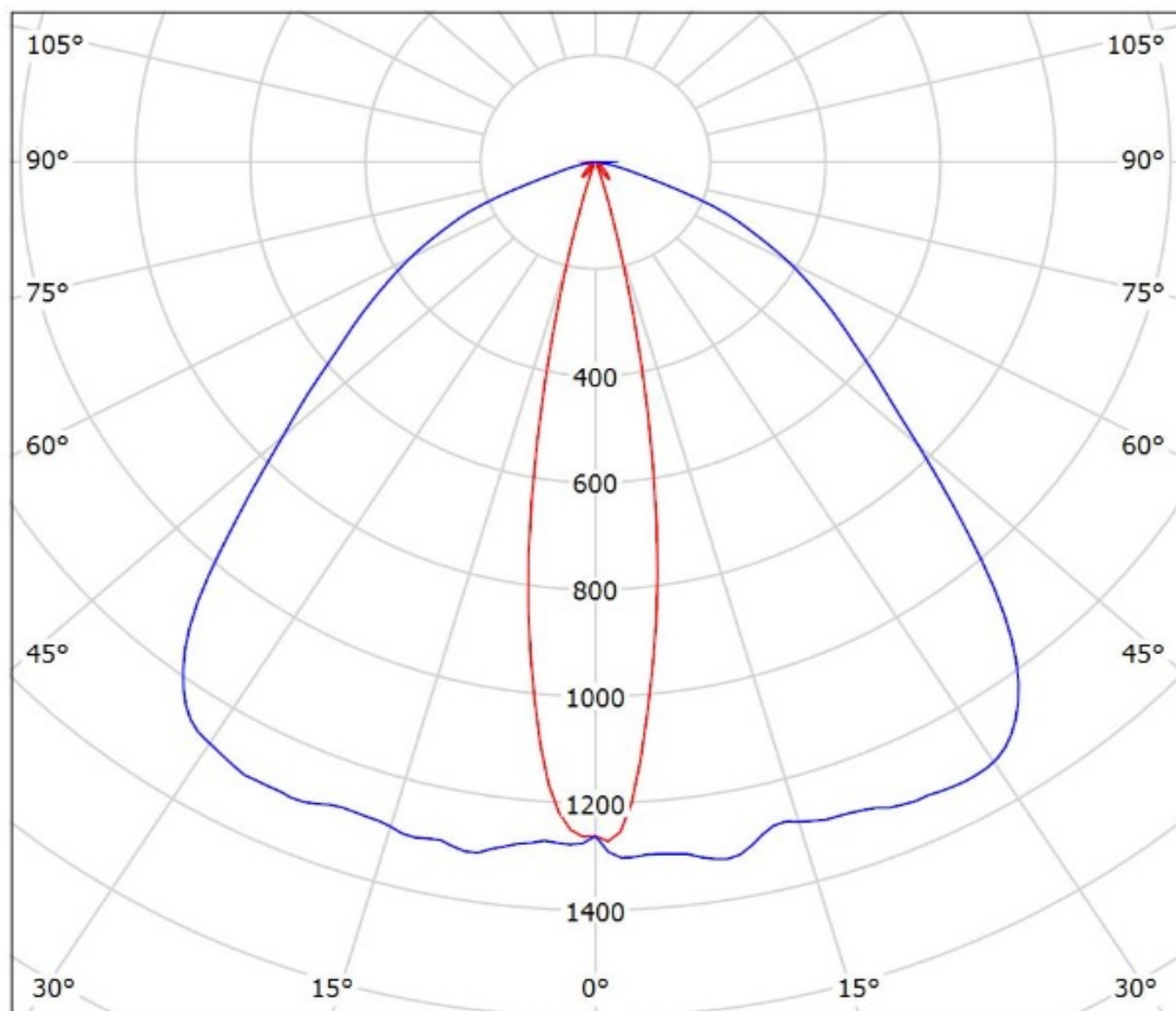


Luminaire: LEDiL Oy C13479\_HB-2x2-O\_(SQ-PC)

Lamps: 1 x OSRAM\_OSLON\_SQUARE\_PC\_2x2\_(GWCSSRM1.PC)\_414.854lm@250mA\_P=2.8626W\_CCT=5201K\_I=249.9mA



Luminaire: Ledil Oy C13749\_HB-2X2-O\_(Duris\_P8)\_SIMULATED  
Lamps: 1 x Osram Duris P8



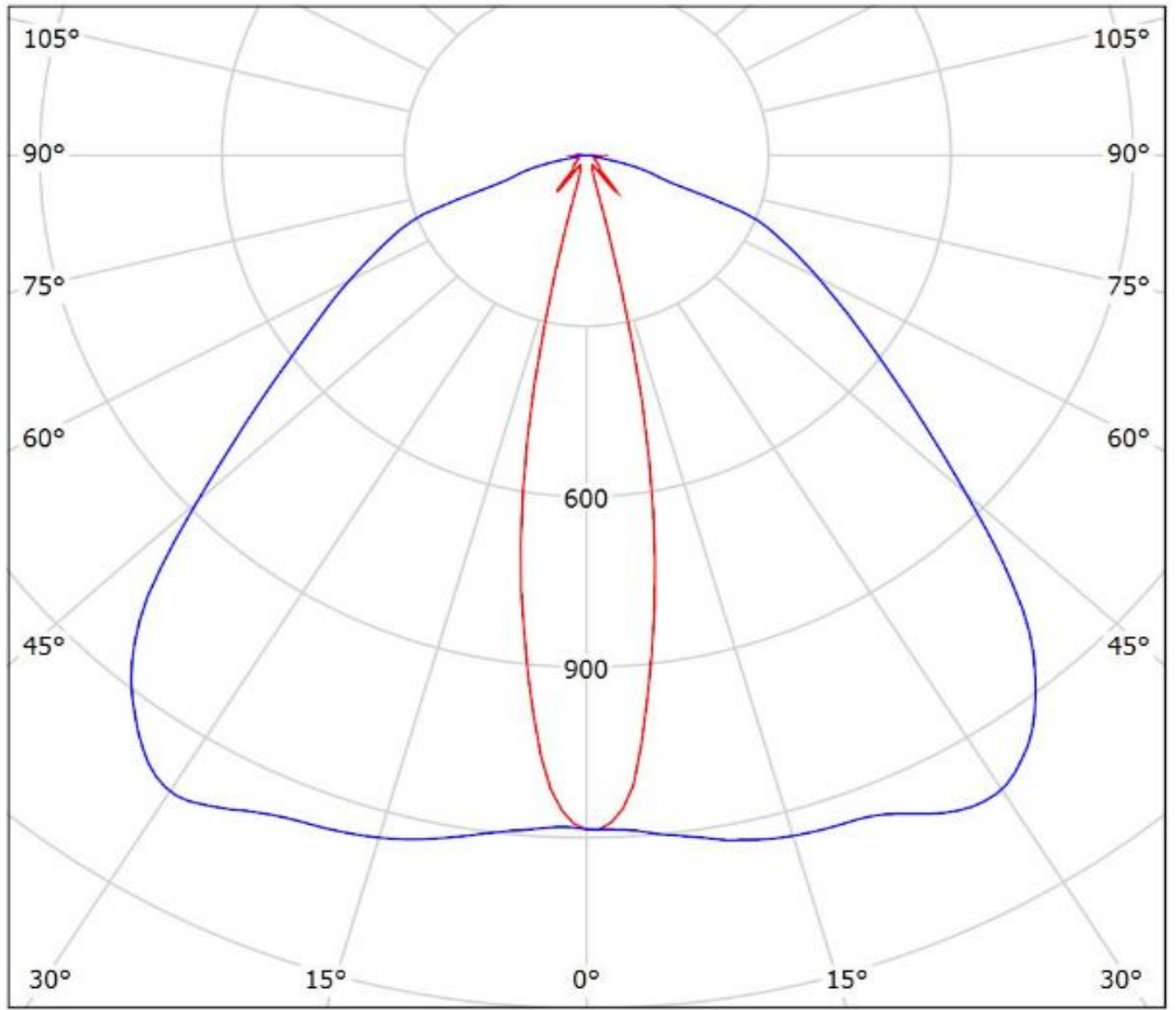
cd/klm  
— C0 - C180 — C90 - C270

$\eta = 94\%$



Luminaire: Ledil C13749\_HB-2X2-O\_(Fortimo\_FastFlex\_LED\_board\_2x8/740\_DA\_G3)

Lamps: 1 x Fortimo\_FastFlex\_LED\_board\_2x8/740\_DA\_G3\_1828.23lm@250mA\_P=11.667W\_I=0.25A

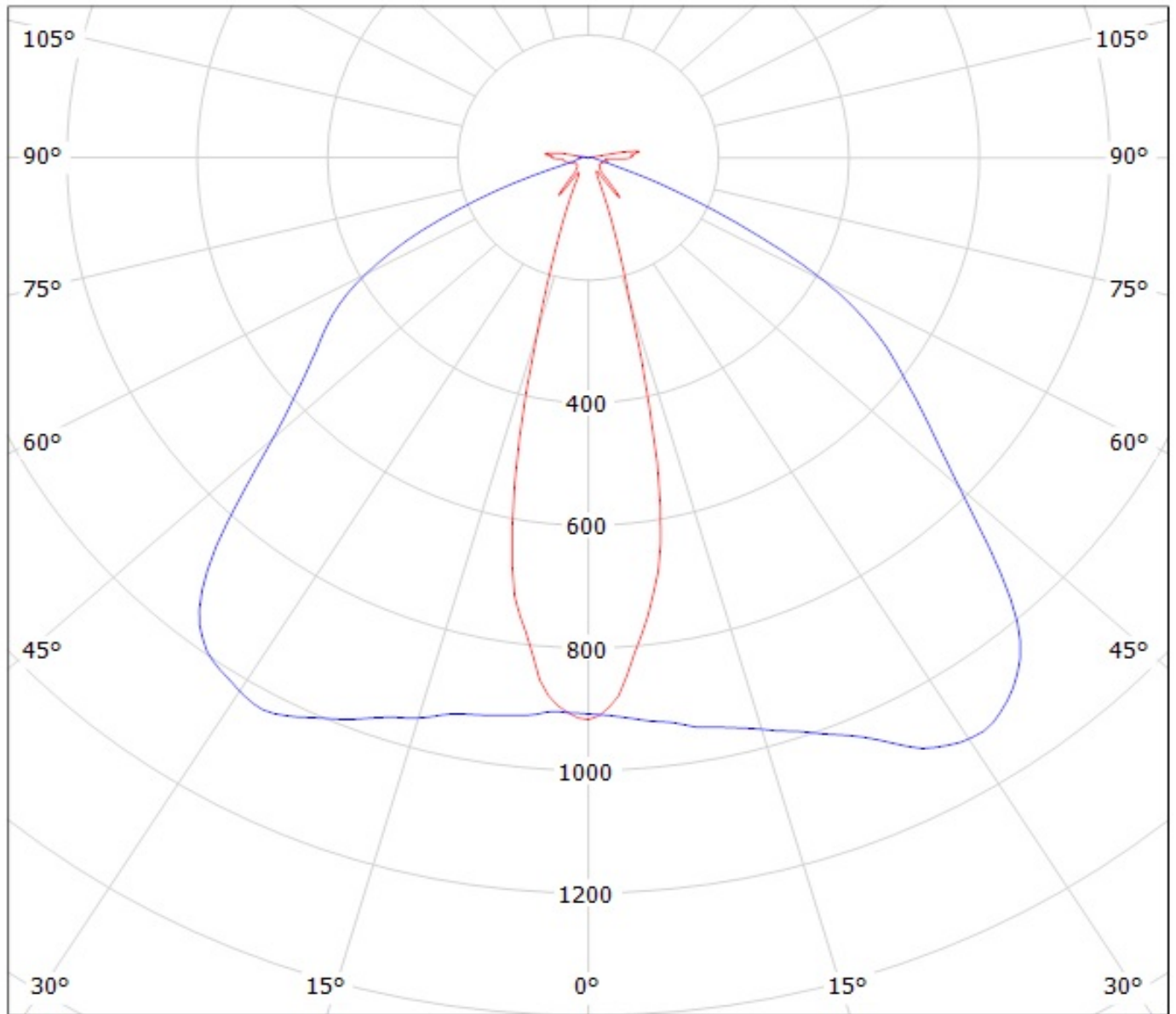


cd/klm  
— C0 - C180 — C90 - C270

$\eta = 96\%$

Luminaire: LEDiL Oy C13749\_HB-2X2-O\_(LH351Z)

Lamps: 1 x SAMSUNG\_LH351Z\_2x2\_361.9lm@250mA\_P=2.86371W\_I=249.8mA



cd/klm

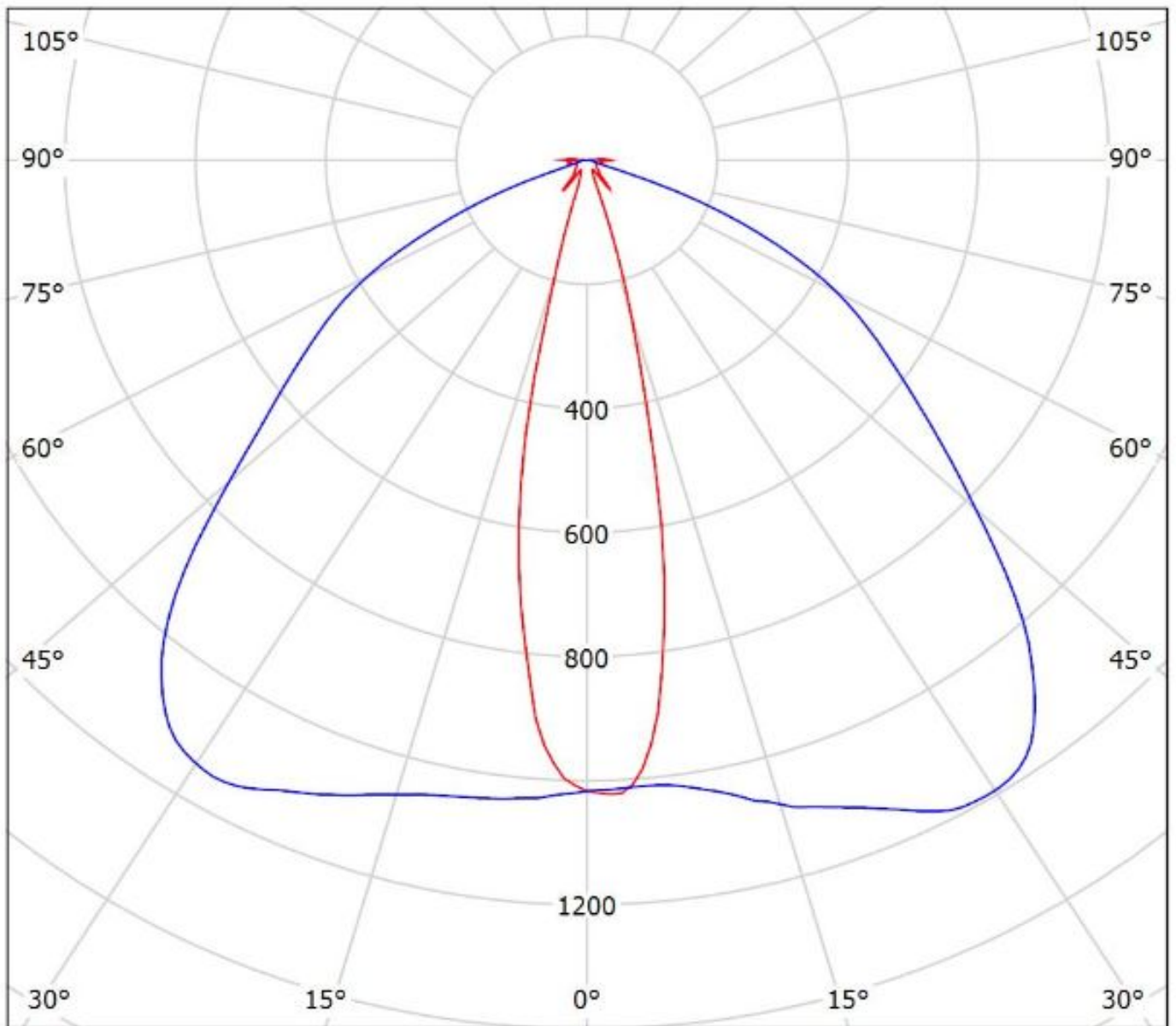
— C0 - C180

— C90 - C270

$\eta = 94\%$

Luminaire: Ledil C13749\_HB-2X2-O\_(LH351B)

Lamps: 1 x Samsung\_LH351B\_2x2\_444.178lm@250mA\_P=2.8535W\_I=0.25A

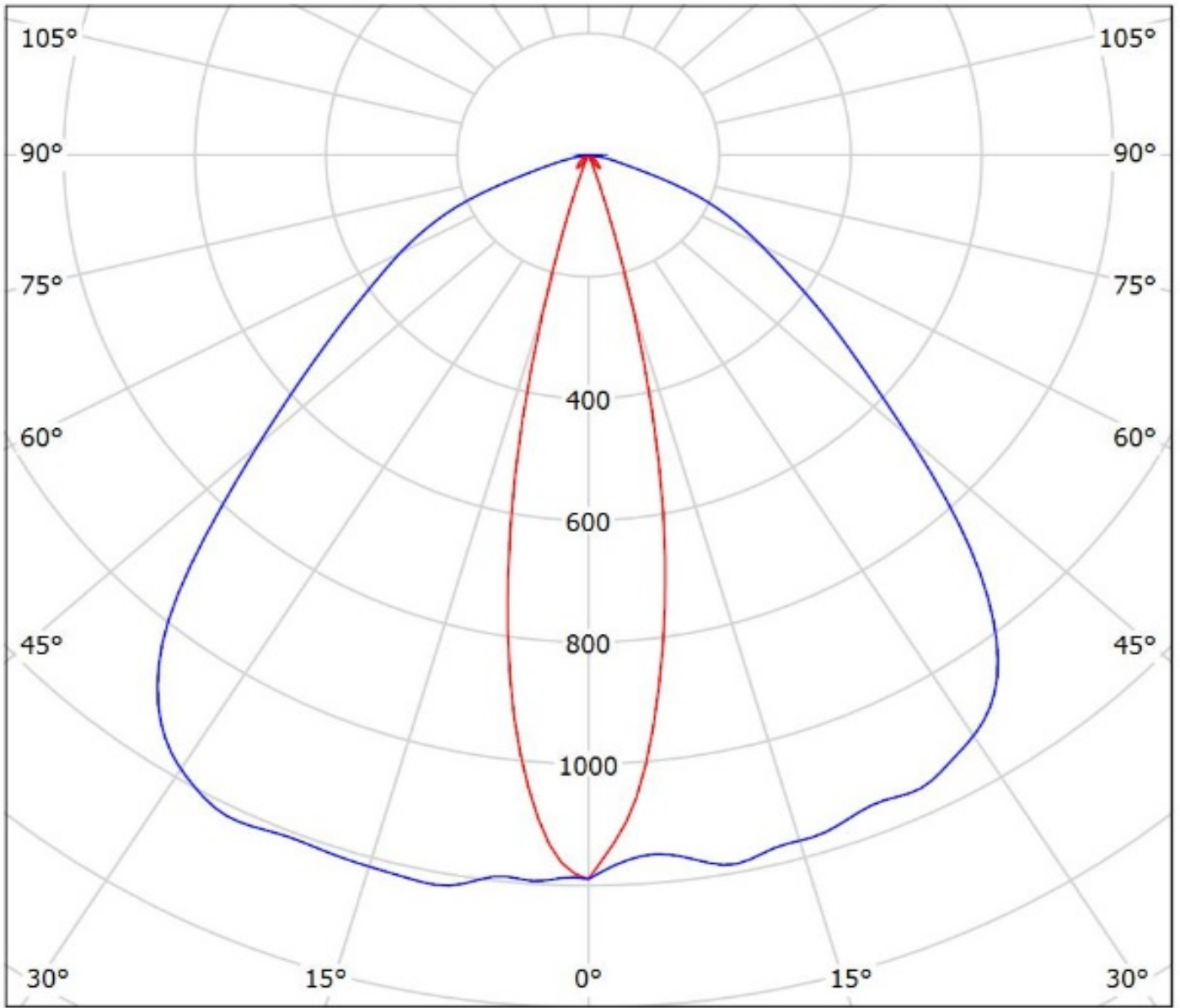


cd/klm

— C0 - C180    — C90 - C270

$\eta = 96\%$

Luminaire: Ledil Oy C13749\_HB-2X2-O\_(Z5M2)\_SIMULATED  
Lamps: 1 x Seoul Z5M2 (SZ5-M2-W0-00)

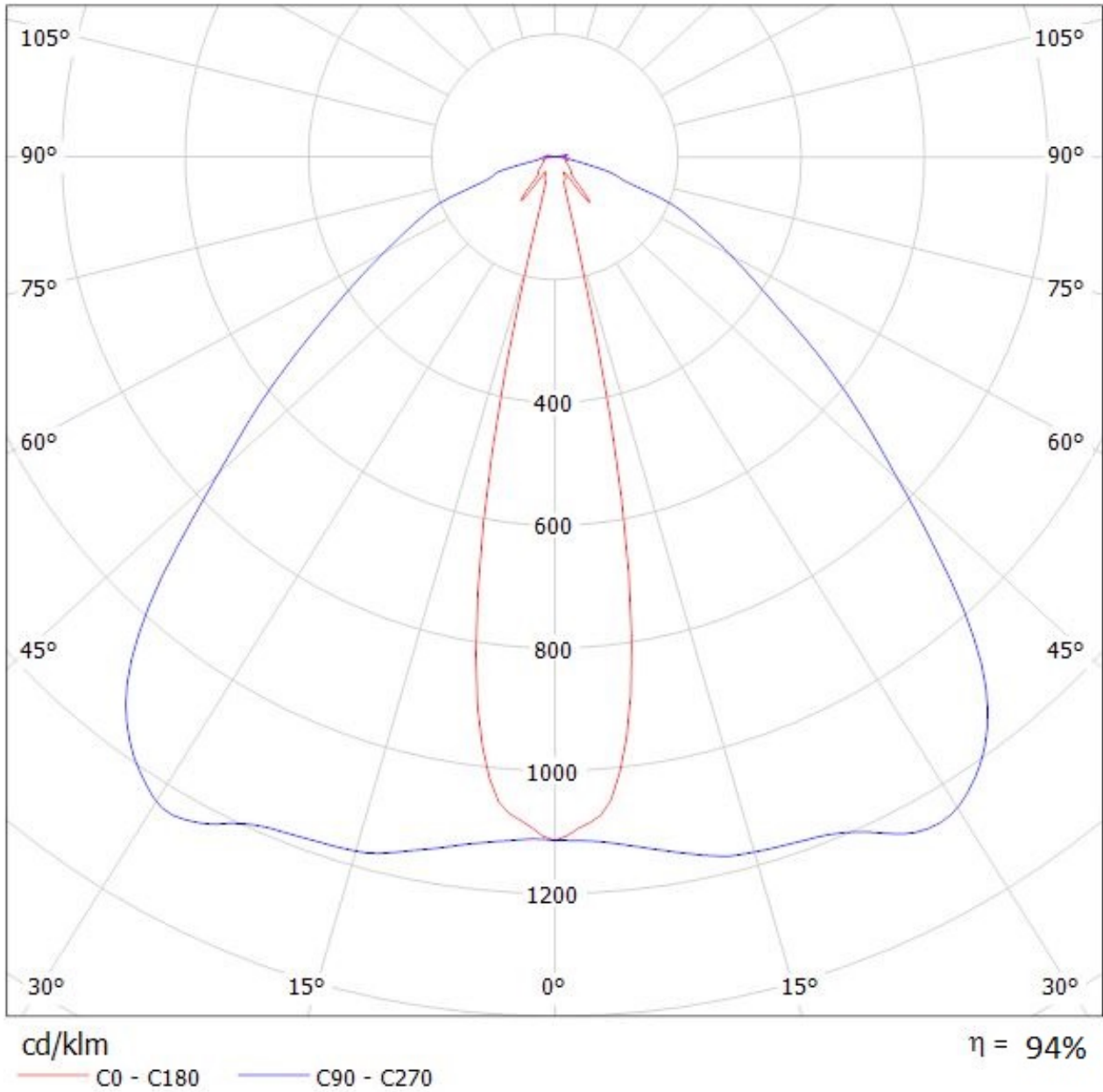


cd/klm

— C0 - C180 — C90 - C270

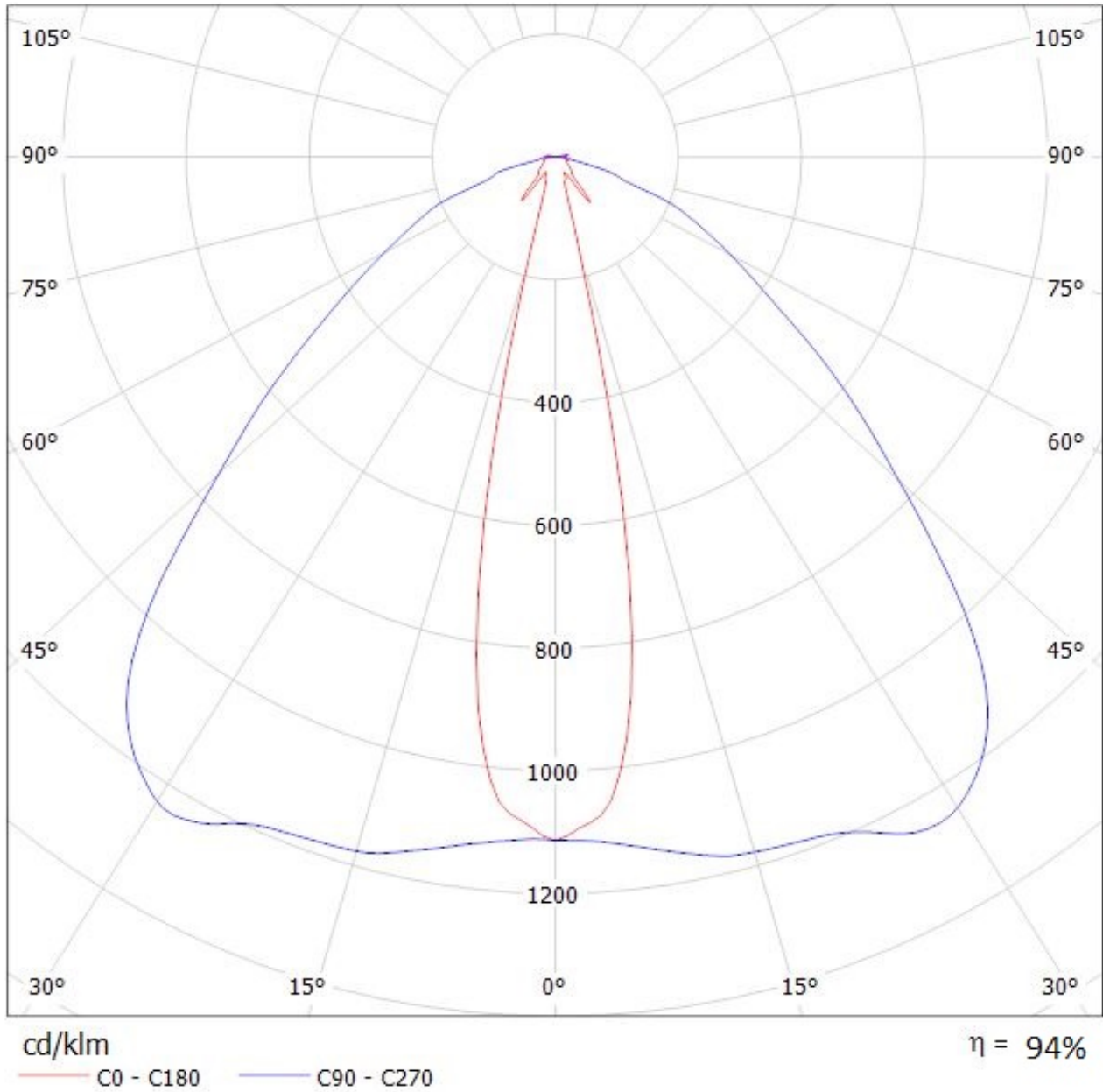
$\eta = 94\%$

Luminaire: LEDiL Oy C13749\_HB-2X2-O\_(Tridonic\_Module\_RLE\_G1)  
Lamps: 1 x Tridonic\_Module\_RLE\_G1\_4576.03lm@700mA\_P=32.0681W\_I=0.700A





Luminaire: LEDiL Oy C13749\_HB-2X2-O\_(Tridonic\_Module\_RLE\_G1)  
Lamps: 1 x Tridonic\_Module\_RLE\_G1\_4576.03lm@700mA\_P=32.0681W\_I=0.700A



**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.**