

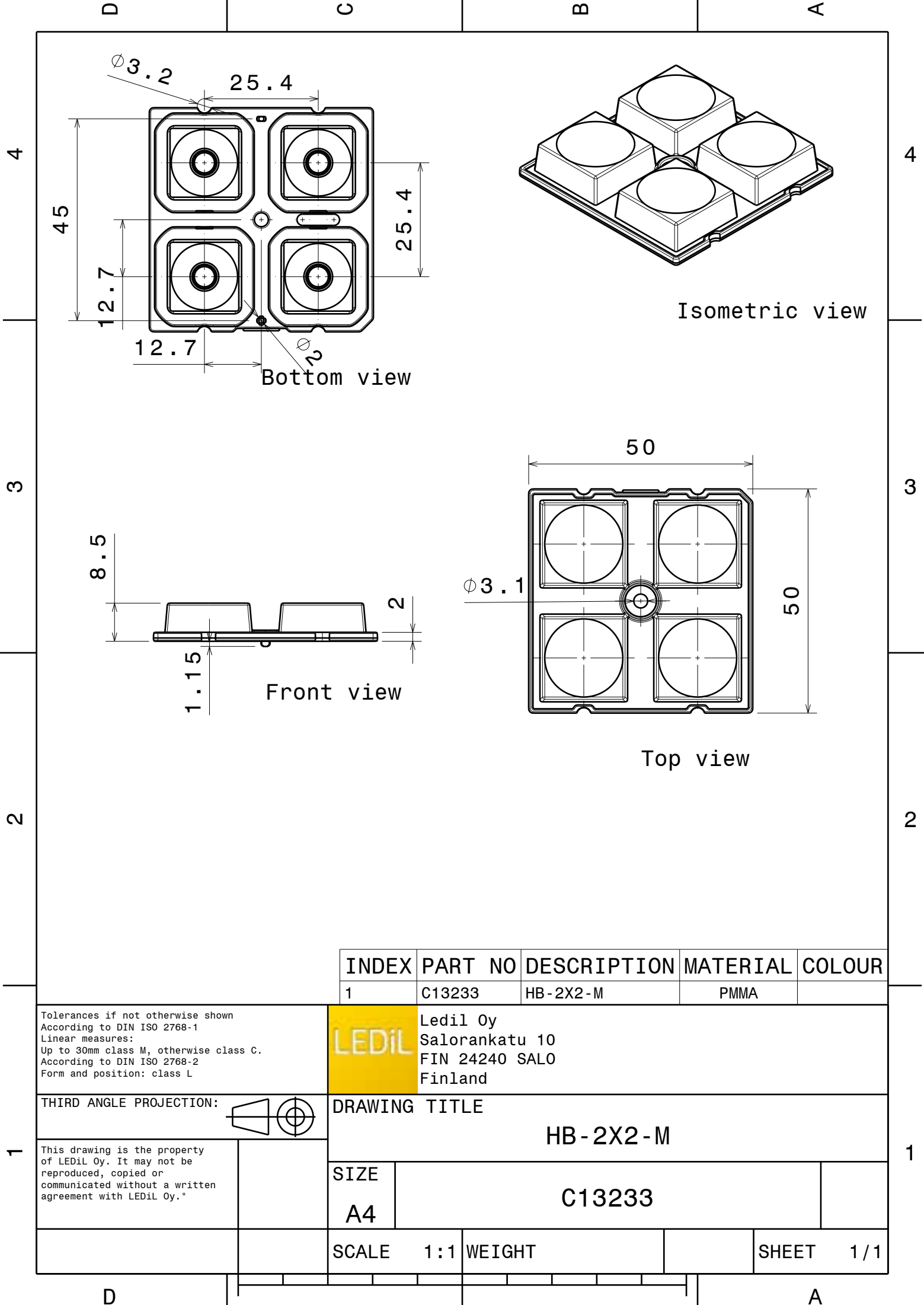
DETAILS

Product Number	C13233_HB-2X2-M
Family	High Bay
Type	Lens array
Color	clear
Diameter	50x50 mm
Height	8,5 mm
Style	square
Optic Material	PMMA
Holder Material	
Fastening	screw, pin, glue
Status	ready
ROHS Compliant	Yes
Date Updated	6/07/2015



OPTICAL PROPERTIES

LED	Viewing Angle	Light Beam	Effi- ciency	cd/lm	Connector
XQ-E HI	sim: 22	Medium	sim: 93 %	sim: 5.500	-
Oslon Square Gen3	sim: 32	Medium	sim: 93 %	sim: 3.900	-
Z8Y15	20 deg	Medium	89 %	4.600	-
LUXEON Z ES	21 deg	Medium	91 %	5.640	-
Z8Y19	22 deg	Medium	89 %	3.800	-
XT-E	25 deg	Medium	92 %	3.700	-
TL1L4	25 deg	Medium	85 %	3.500	-
XB-D	26 deg	Medium	95 %	3.900	-
LUXEON Q	26 deg	Medium	94 %	3.600	-
NVSxx19B/NVSxx19C	29 deg	Medium	91 %	3.100	-
H35C1 (LEMWA33)	29 deg	Medium	91 %	3.400	-
Oslon Square PC	30 deg	Medium	91 %	3.400	-
Z5M1/Z5M2	30 deg	Medium	90 %	3.400	-
XP-G	31 deg	Medium	91 %	3.100	-
LH351B	31 deg	Medium	94 %	2.800	-
LH351Z	32 deg	Medium	93 %	2.900	-
XP-G2	33 deg	Medium	93 %	3.400	-



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C13233	HB-2X2-M	PMMA	

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-M

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

SIZE
A4

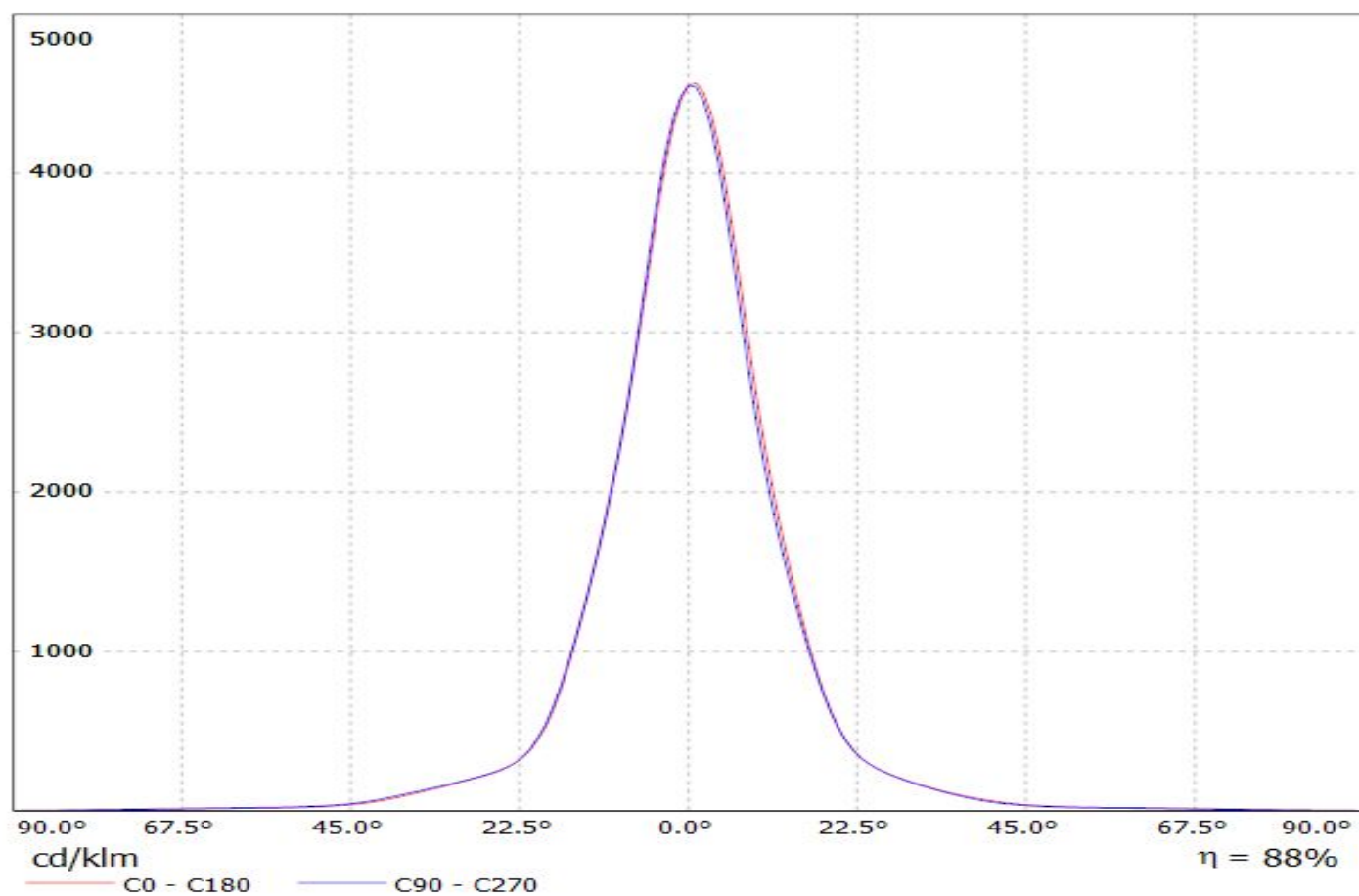
C13233

SCALE 1:1 WEIGHT

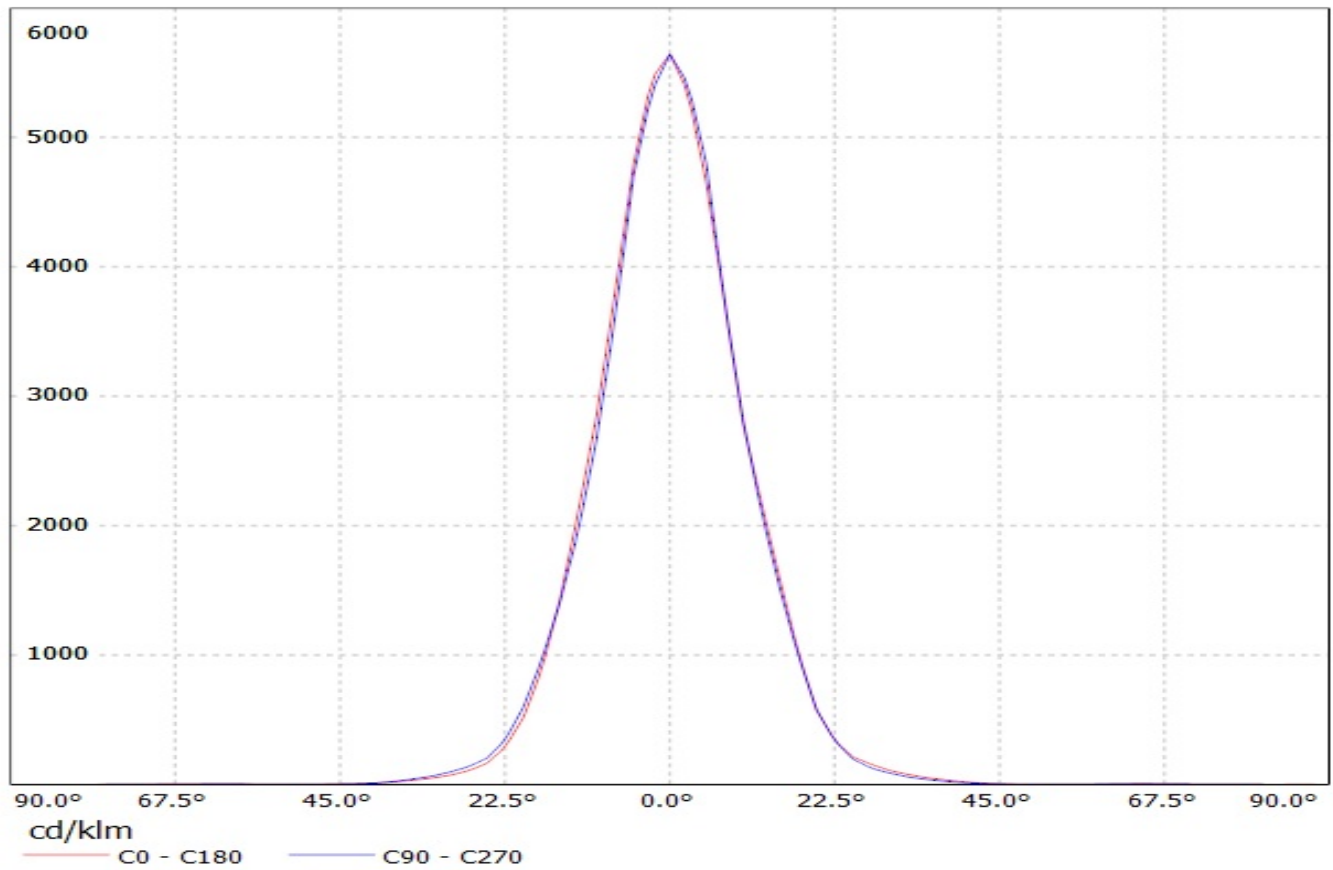
SHEET 1/1

Luminaire: LEDiL Oy C13233_HB-2X2-M_(WICOP2_Z8Y15)

Lamps: 1 x SEOUL_WICOP2_Z8Y15_336.842lm@250mA_P=2.9399W_I=0.250A

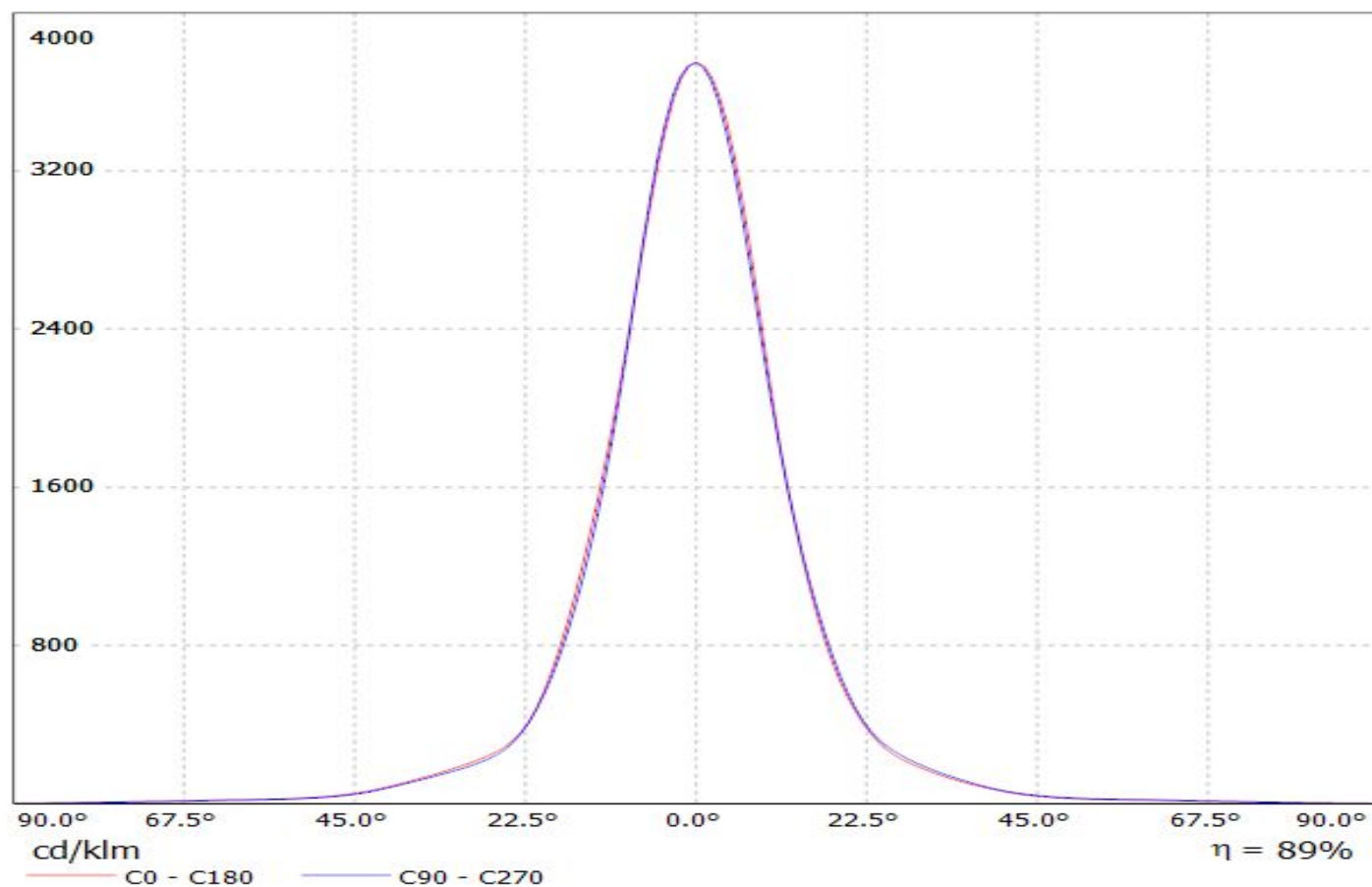


Luminaire: Ledil Oy C13233_HB-2X2-M_(Luxeon_Z_ES) Efficiency=91%
Lamps: 1 x Luxeon Z ES (LXZ2-3090) 209lm @ 250mA CCT=3000K P=2.8W I=250mA

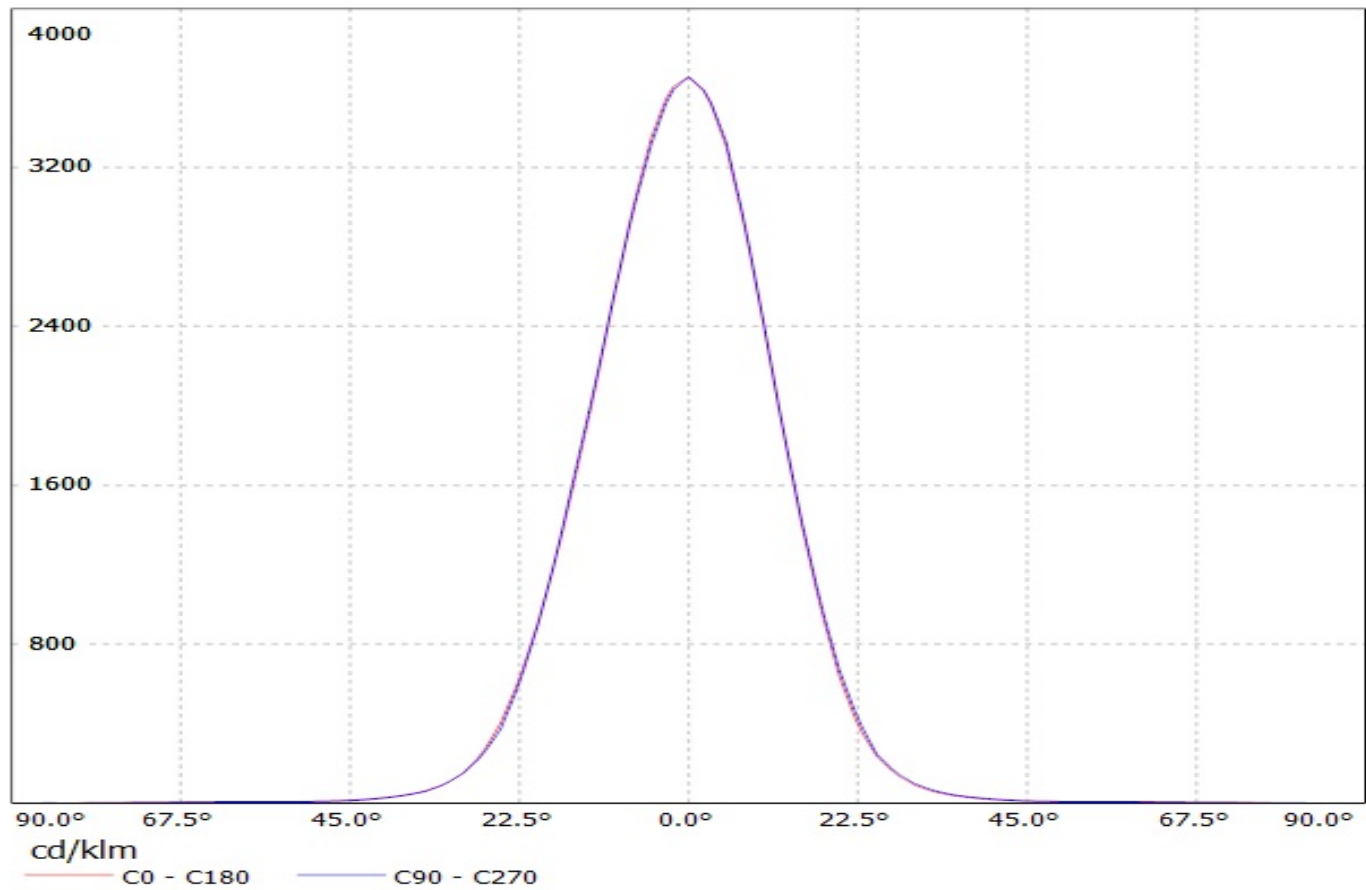


Luminaire: LEDiL Oy C13233_HB-2X2-M_(WICOP2_Z8Y19)

Lamps: 1 x SEOUL_WICOP2_Z8Y19_450.124lm@250mA_P=2.8579W_I=0.250A



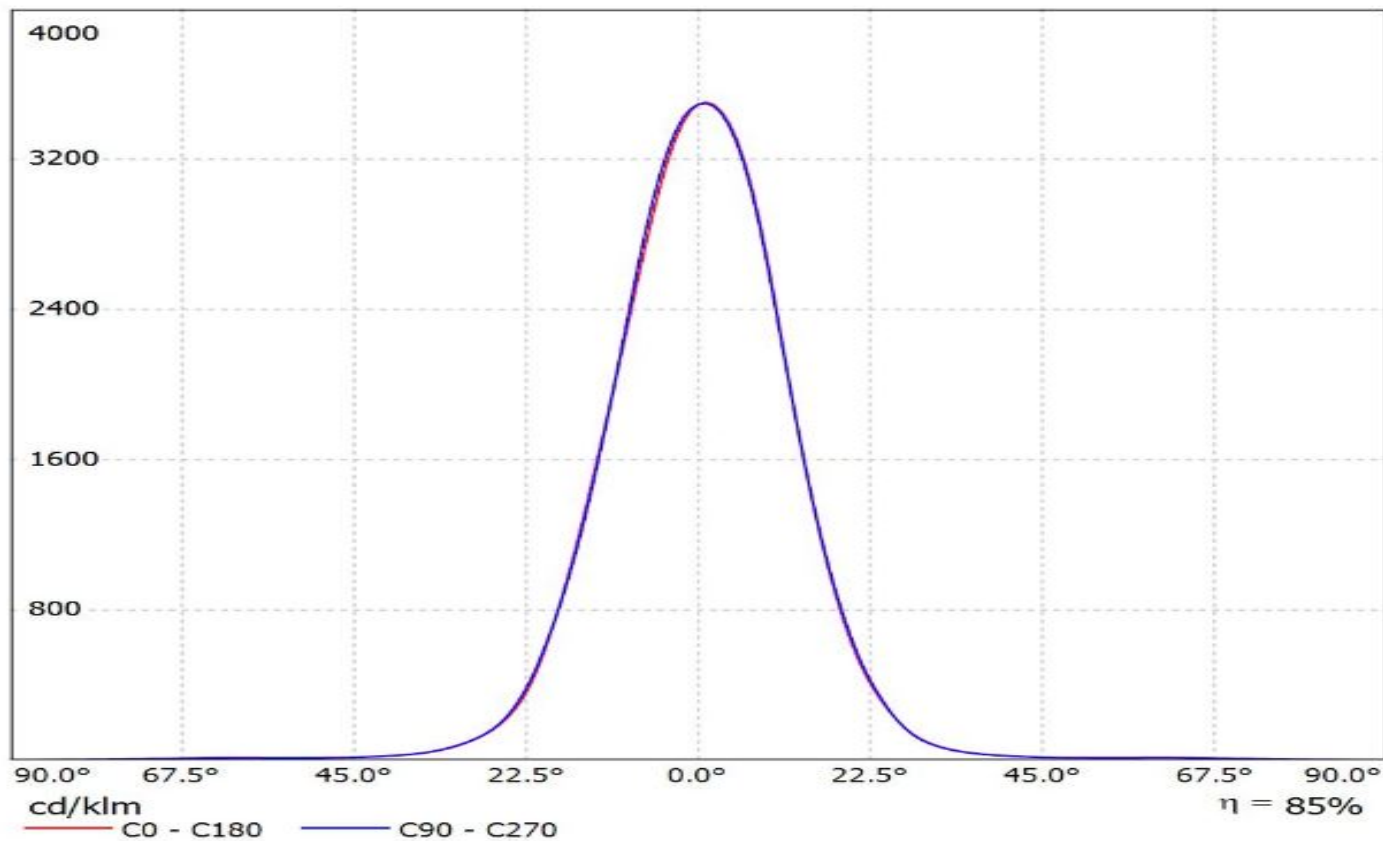
Luminaire: Ledil Oy C13233_HB-2x2-M (Cree XT-E 390lm @ 250mA) Efficiency=92%
Lamps: 1 x Cree XT-E 390lm @ 250mA



Ledil C13233_HB-2X2-M_(TL1L4) / LDC (Linear)

Luminaire: Ledil C13233_HB-2X2-M_(TL1L4)

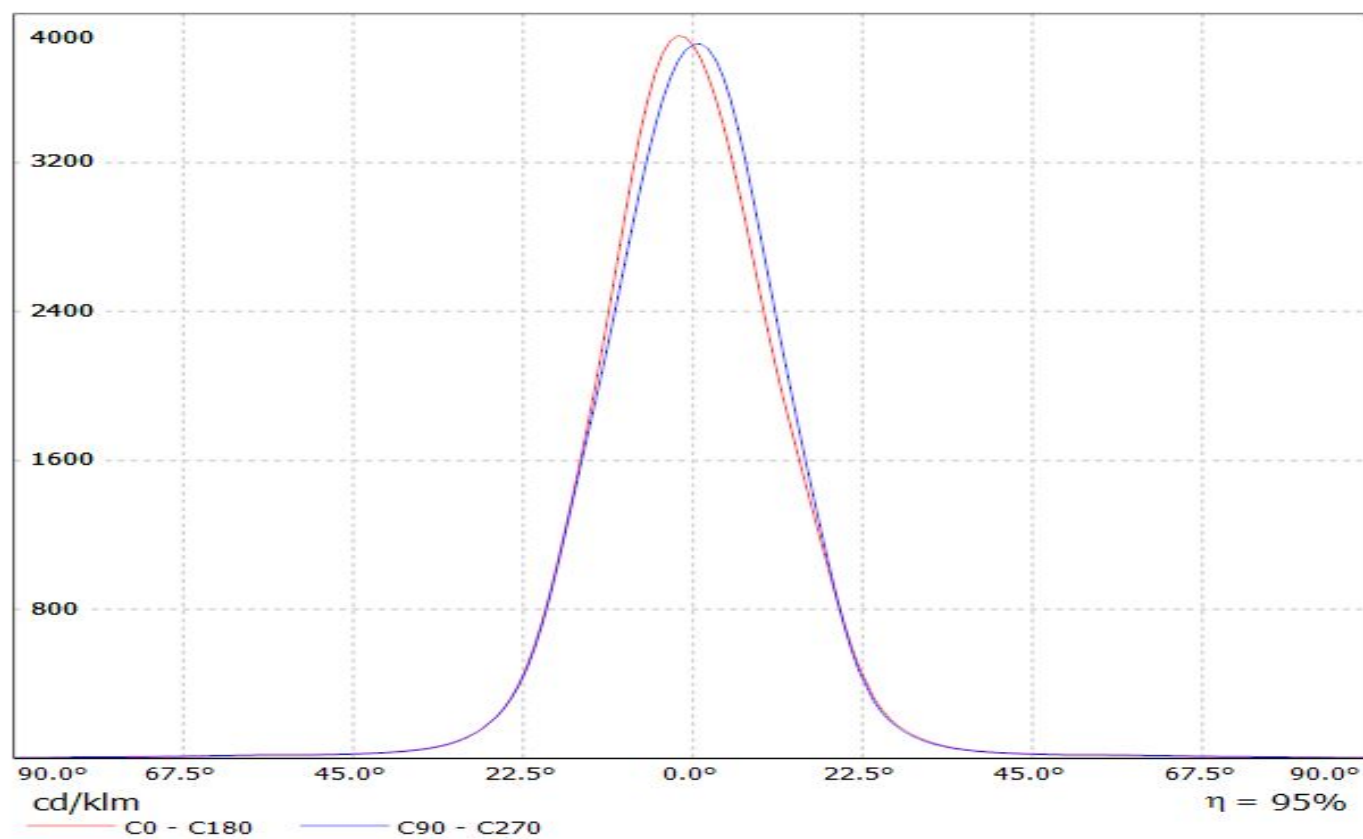
Lamps: 1 x Toshiba_TL1L4_2x2_(TL1L4-DW0)_472.639lm@250mA_CCT=6500K_P=2.9W_I=0.25A



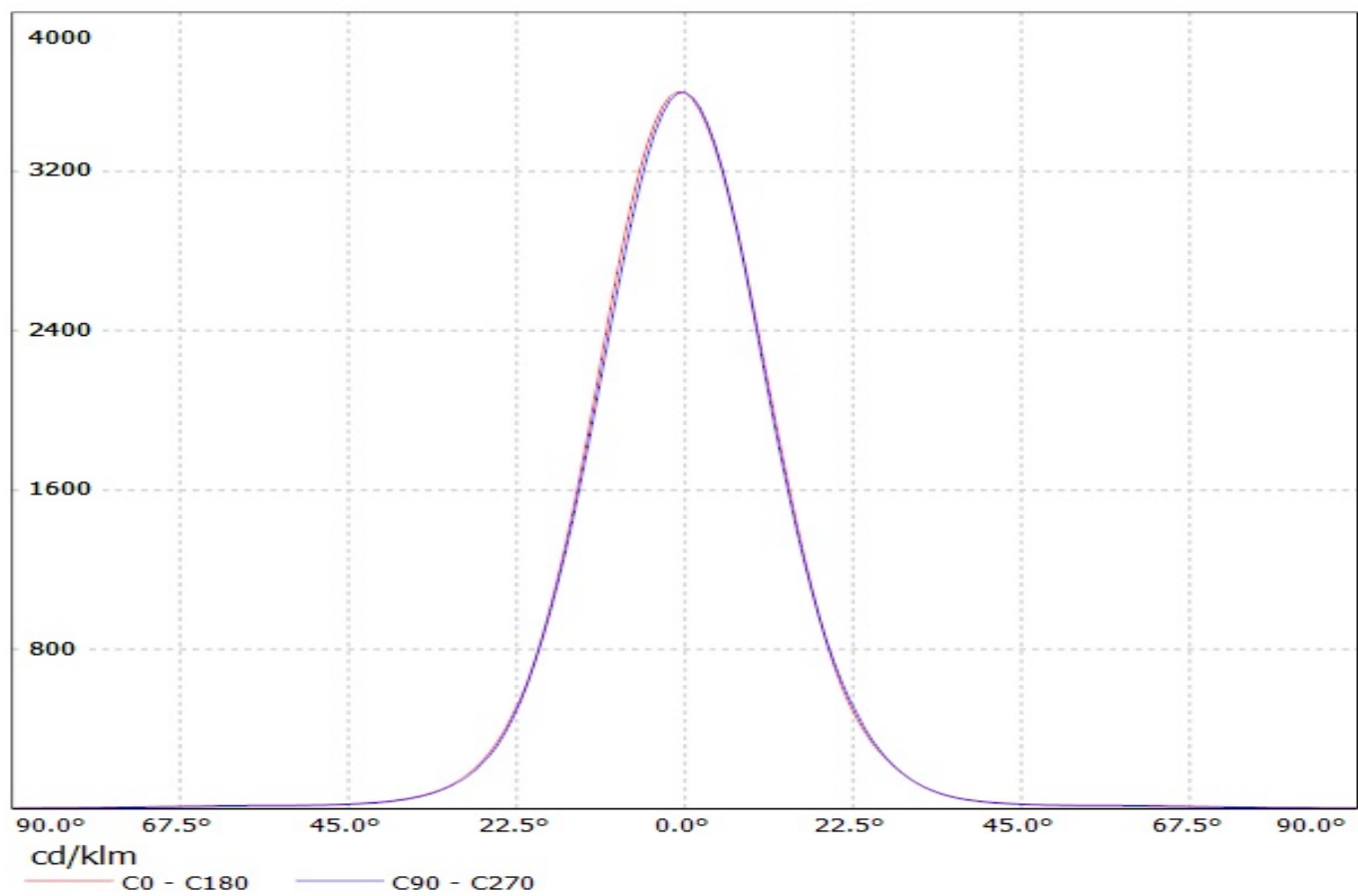
LEDiL Oy C13233_HB-2x2-M_(XB-D) Eff.95.2% / LDC (Linear)

Luminaire: LEDiL Oy C13233_HB-2x2-M_(XB-D) Eff.95.2%

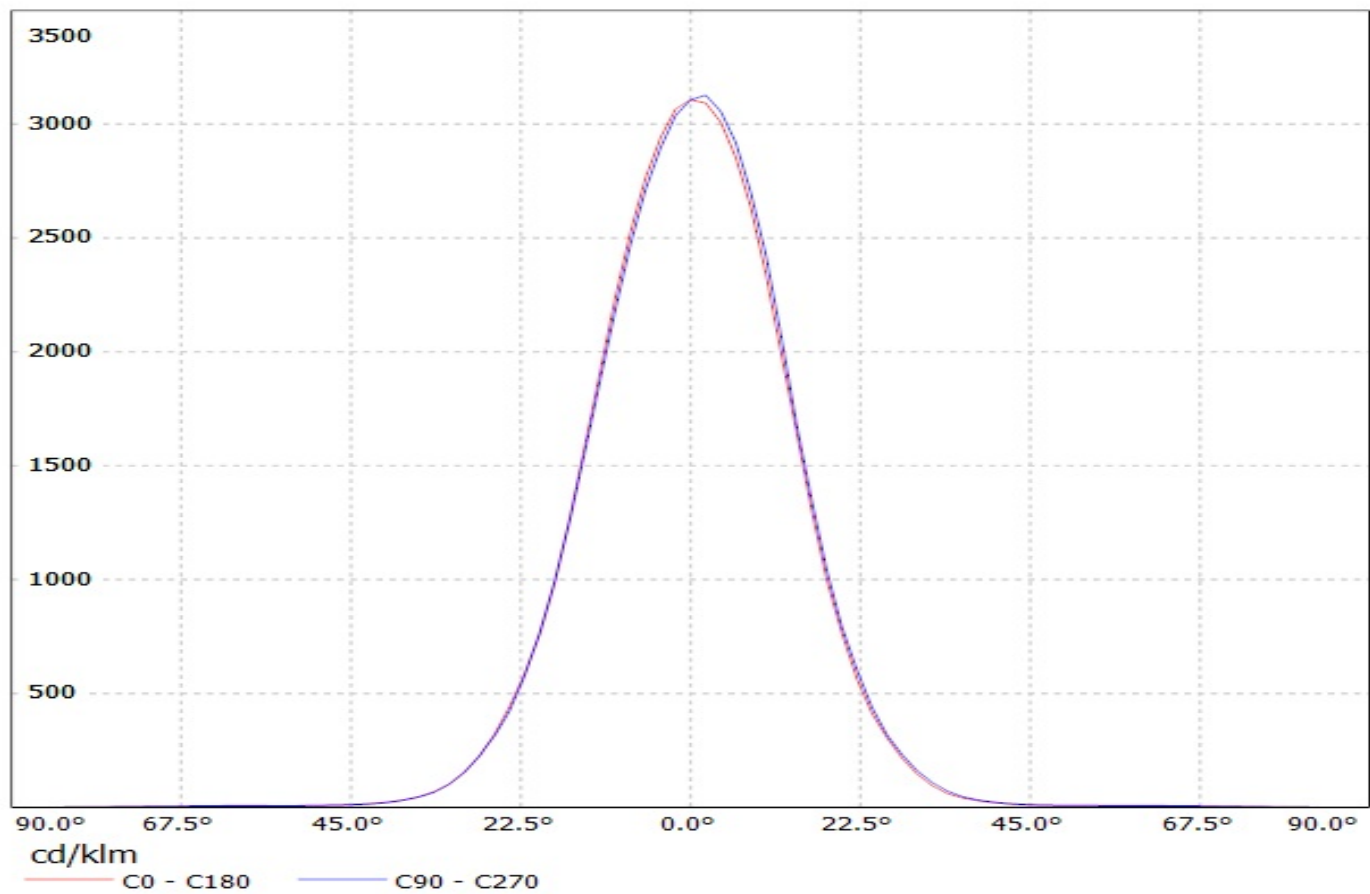
Lamps: 1 x CREE_XB-D_2x2 (362.885lm@250mA)



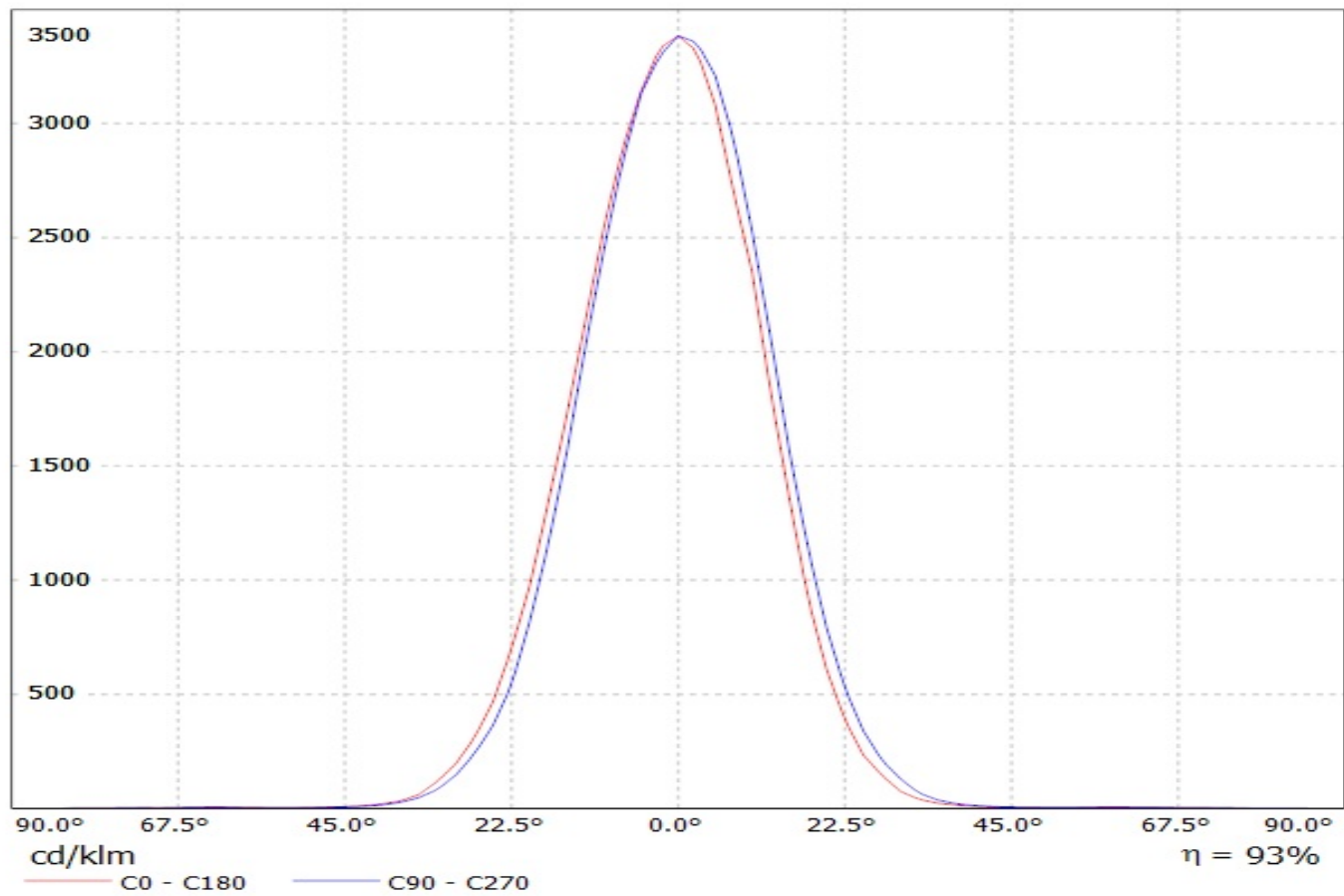
Luminaire: LEDiL Oy C13233_HB-2X2-M_(LUXEON_Q) Eff.94.5%
Lamps: 1 x LUXEON_Q_2x2_(LHQ-3080)_298.363lm@250mA_P=2.87385W_I=249.9mA



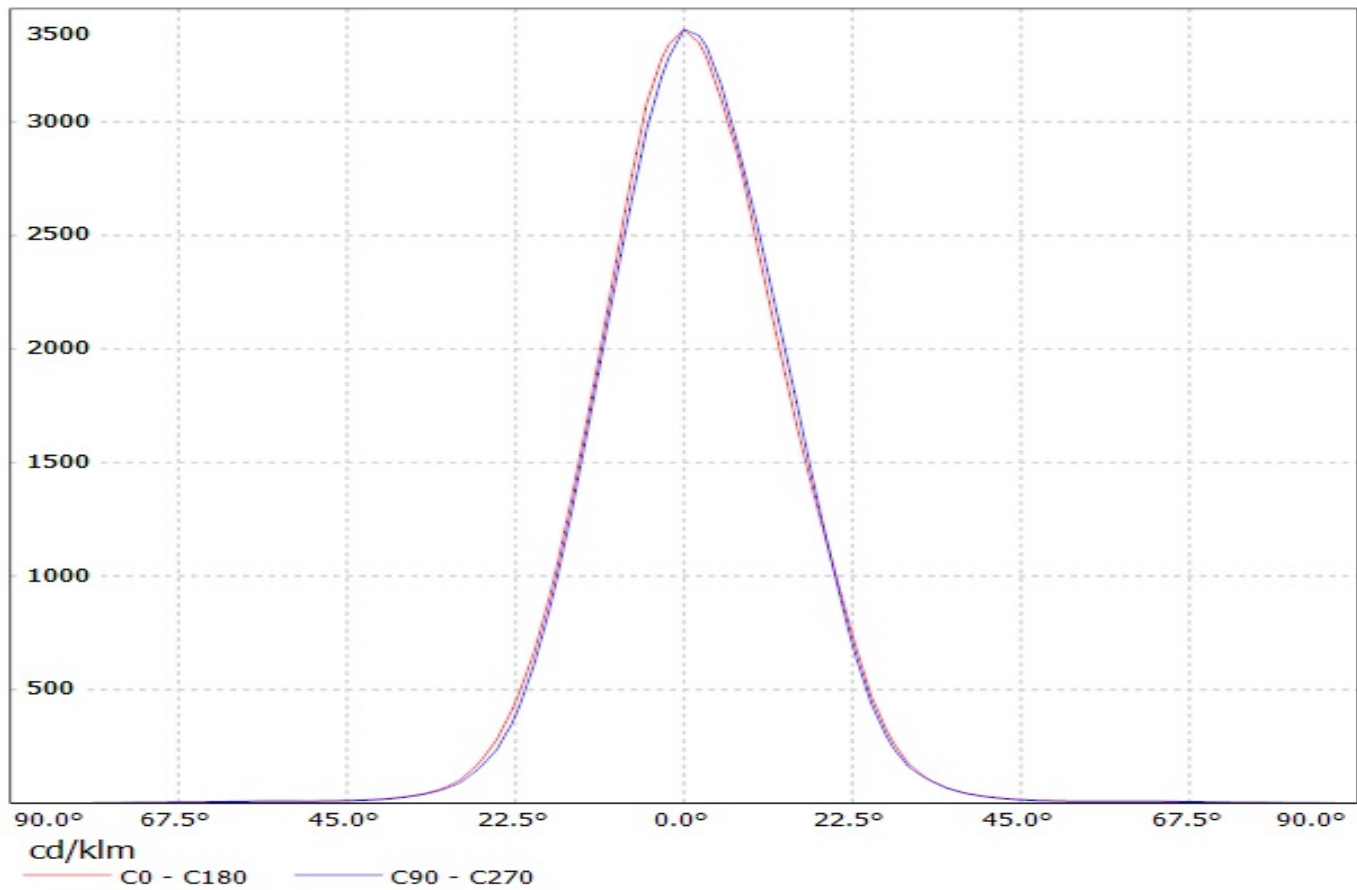
Luminaire: Ledil Oy C13233_HB-2x2-M (Nichia 219B 306lm @ 250mA) Efficiency=91%
Lamps: 1 x Nichia 219B 306lm @ 250mA



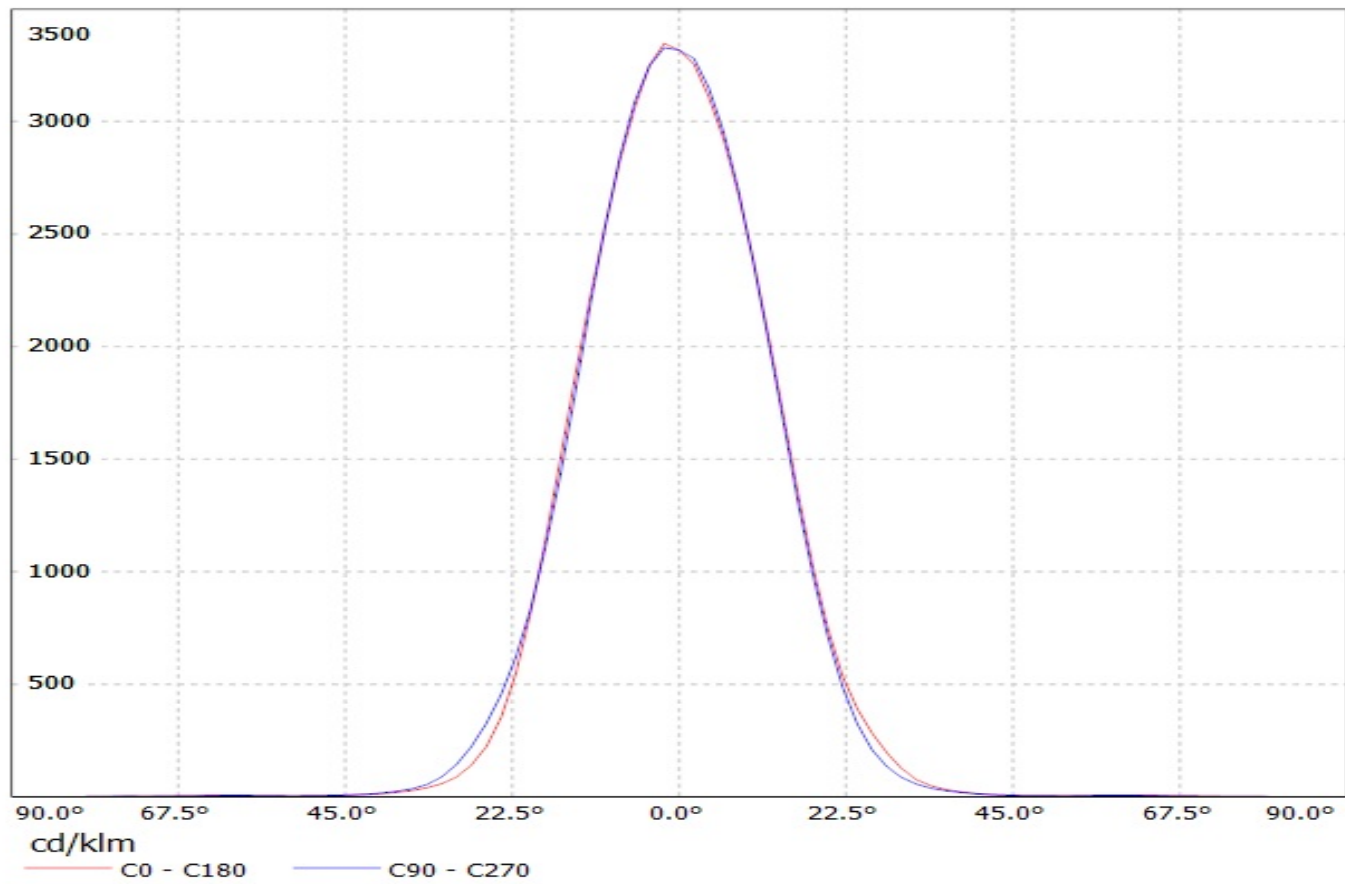
Luminaire: Ledil Oy C13233_HB-2x2-M_(3535_Ceramic_gen2) Efficiency=91%
Lamps: 1 x LG 3535 Ceramic gen2 (PKG5700K) 461lm @ 250mA CCT=6600K P=2.9W I=250mA



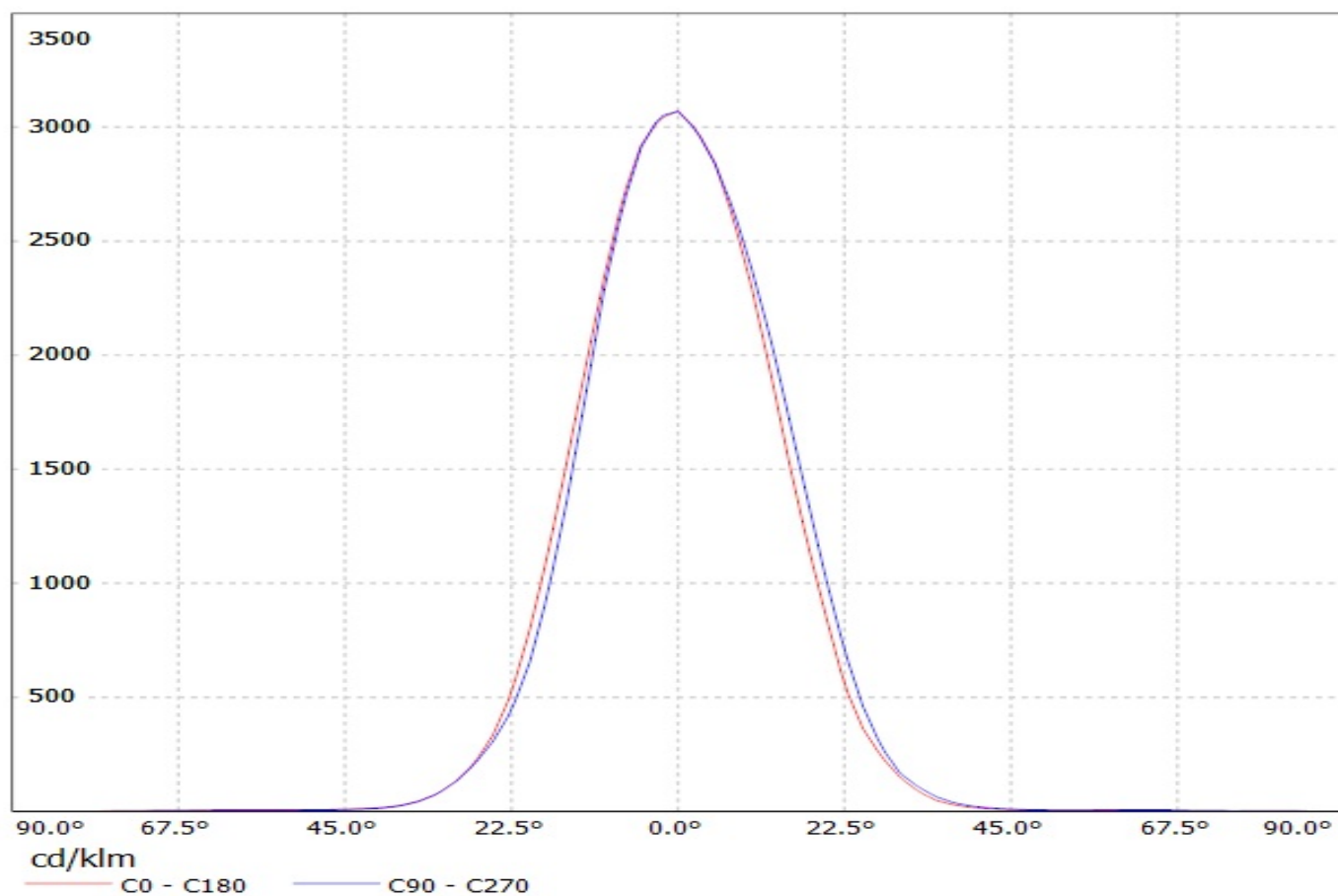
Luminaire: Ledil Oy (Osram Square PC 398lm @ 250mA) Efficiency=91%
Lamps: 1 x Osram Square PC 398lm @ 250mA



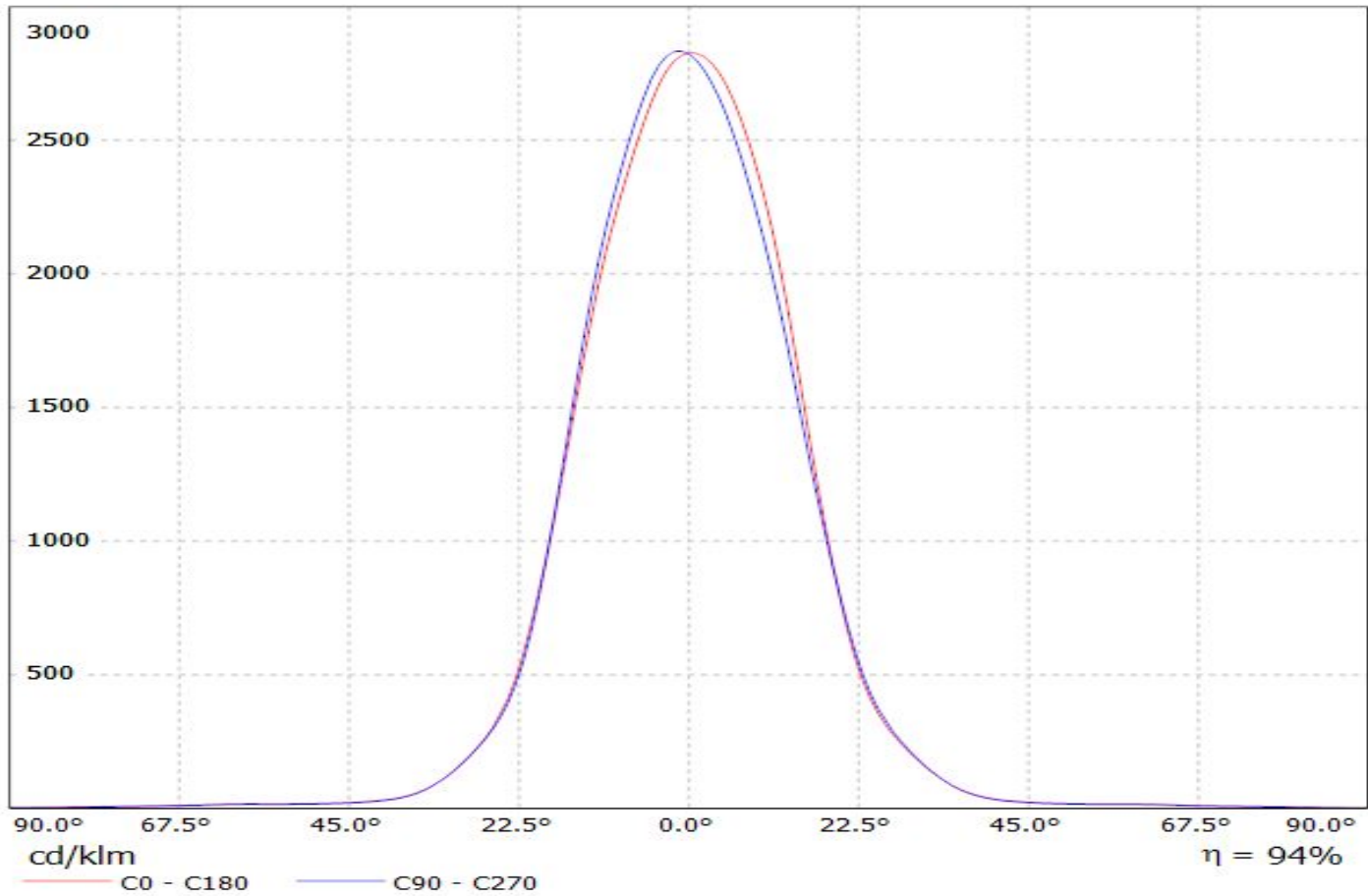
Luminaire: LEDil Oy C13233_HB-2X2-M_(Z5M1) Efficiency=90%
Lamps: 1 x Seoul Z5M1 (SZ5-M1-WN-C8) 379lm @ 250mA CCT=4600K P=2.9W I=250mA



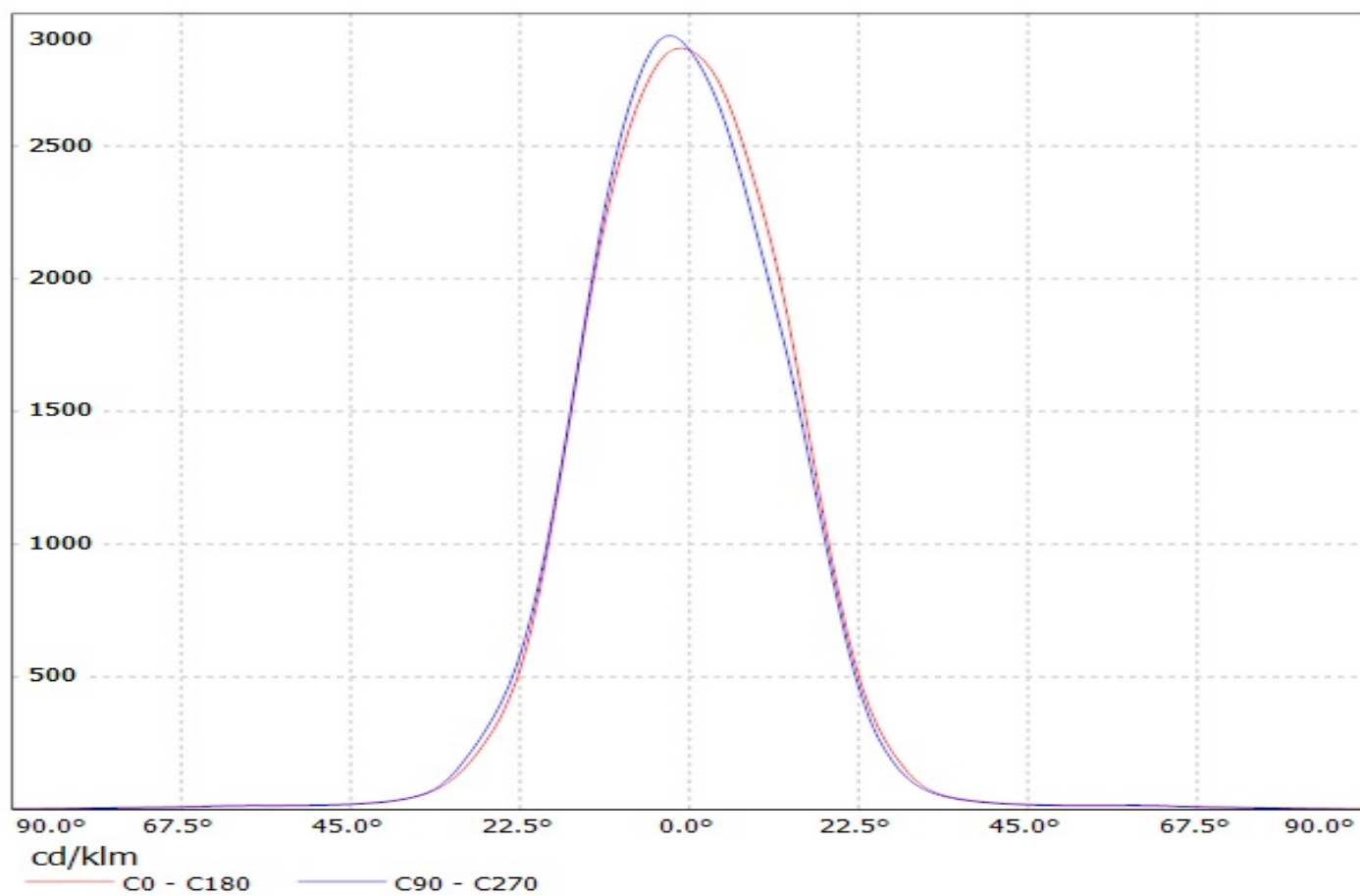
Luminaire: Ledil Oy C13233_HB-2x2-M (Cree XP-G 257lm @ 250mA) Efficiency=91%
Lamps: 1 x Cree XP-G 257lm @ 250mA



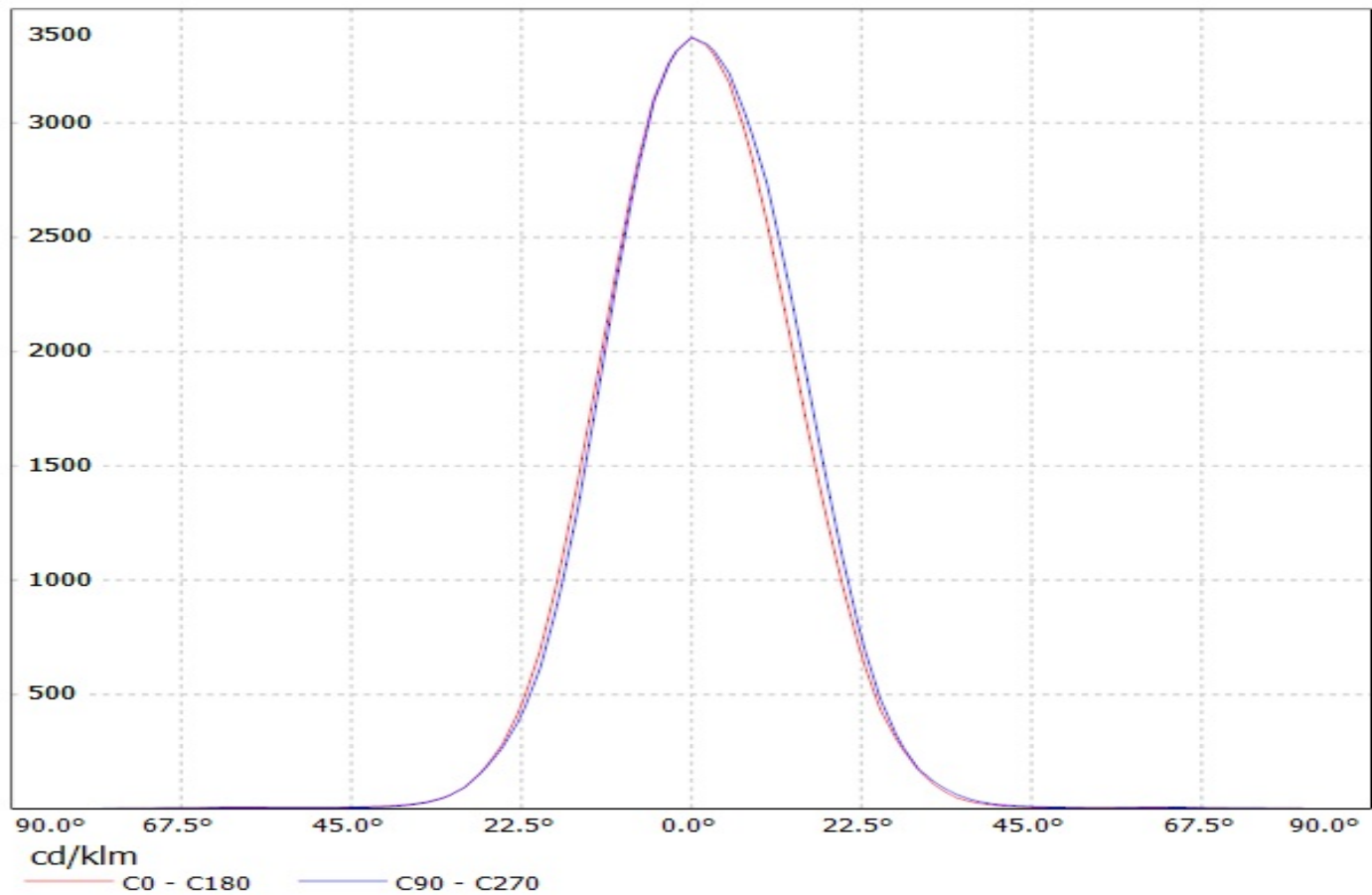
Luminaire: LEDiL Oy C13233_HB-2X2-M_(LH351B) Eff.93.6%
Lamps: 1 x SAMSUNG_LH351B_2x2_430.715lm@250mA_P=2.84311W_I=249.9mA



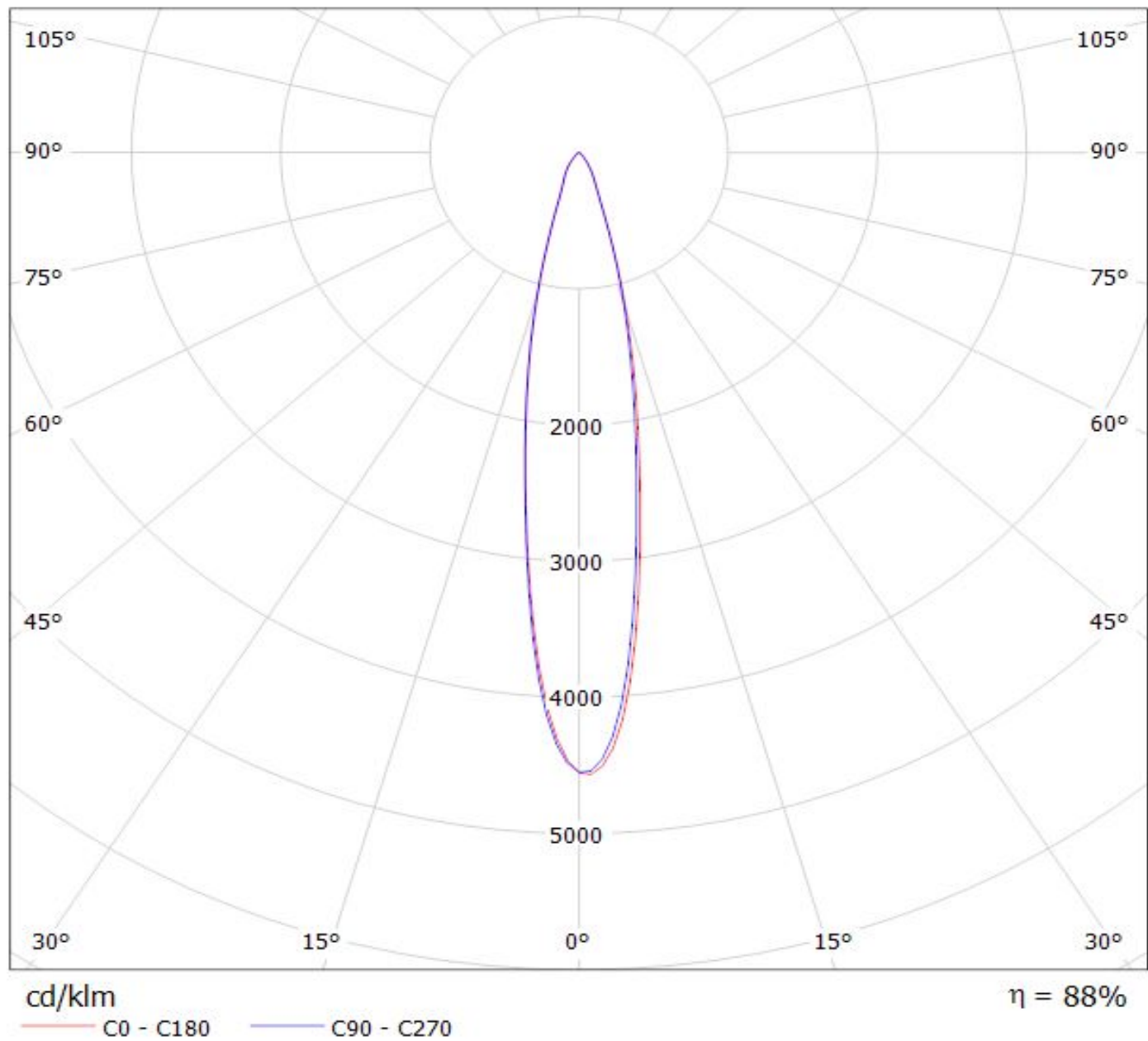
Luminaire: LEDiL Oy C13233_HB-2X2-M_(LH351Z) Eff.93.0%
Lamps: 1 x SAMSUNG_LH351Z_2x2_359.49lm@250mA_P=2.86371W_I=249.8mA



Luminaire: Ledil Oy C13233_HB-2x2-M (Cree XP-G2 420lm @ 250mA) Efficiency=93%
Lamps: 1 x Cree XP-G2 420lm @ 250mA

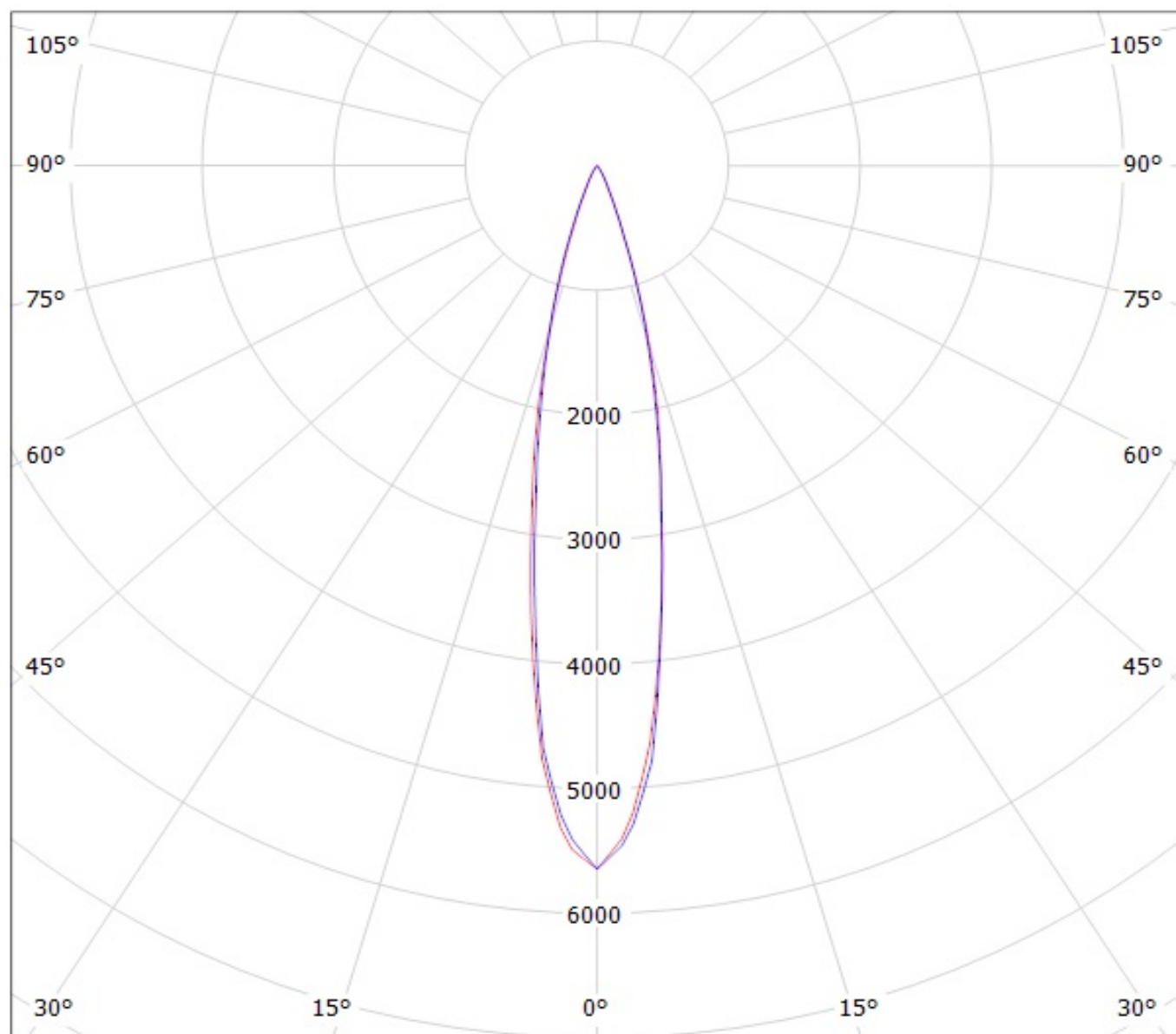


Luminaire: LEDiL Oy C13233_HB-2X2-M_(WICOP2_Z8Y15)
Lamps: 1 x SEOUL_WICOP2_Z8Y15_336.842lm@250mA_P=2.9399W_I=0.250A



Luminaire: Ledil Oy C13233_HB-2X2-M_(Luxeon_Z_ES) Efficiency=91%

Lamps: 1 x Luxeon Z ES (LXZ2-3090) 209lm @ 250mA CCT=3000K P=2.8W I=250mA

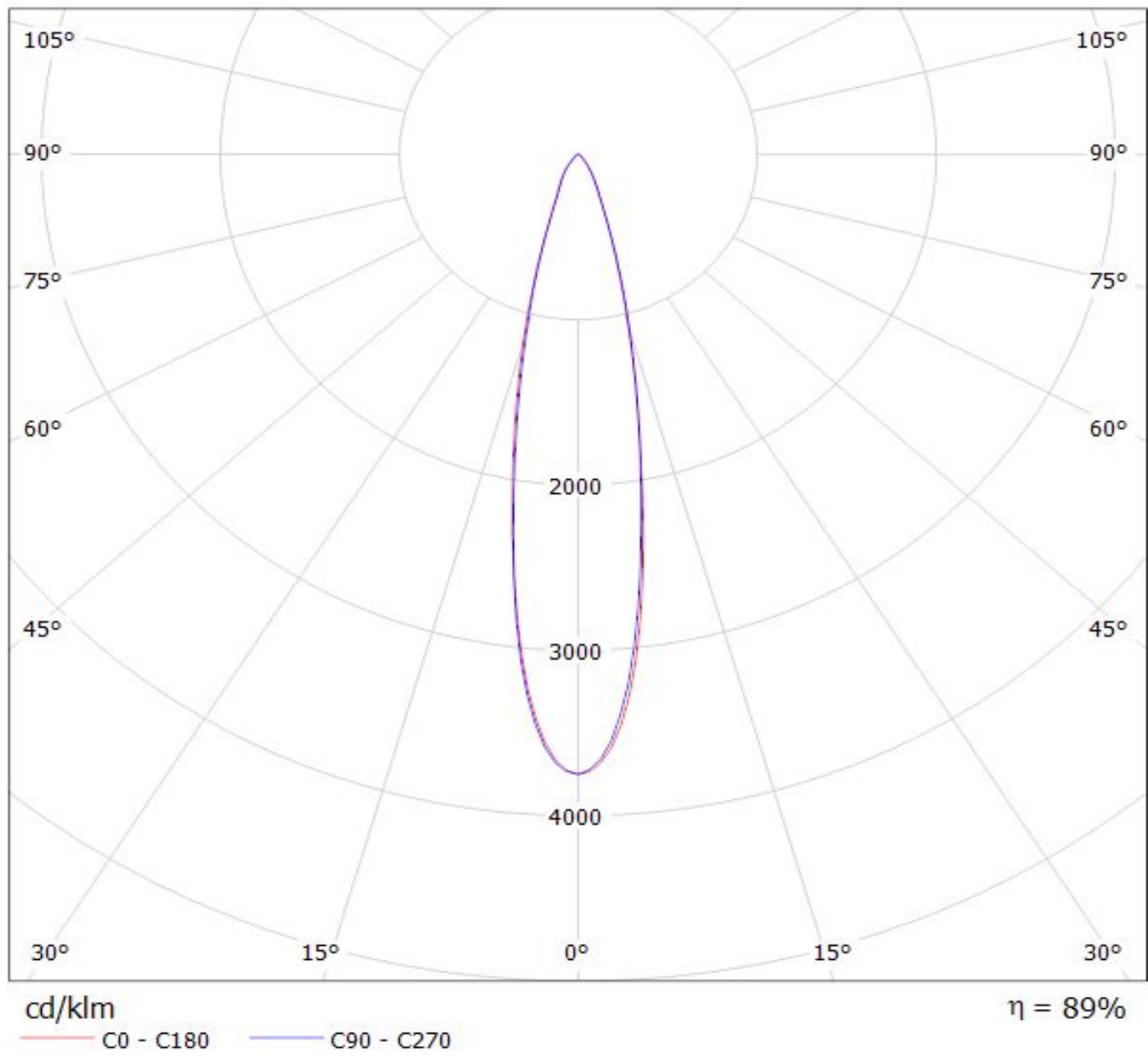


cd/klm

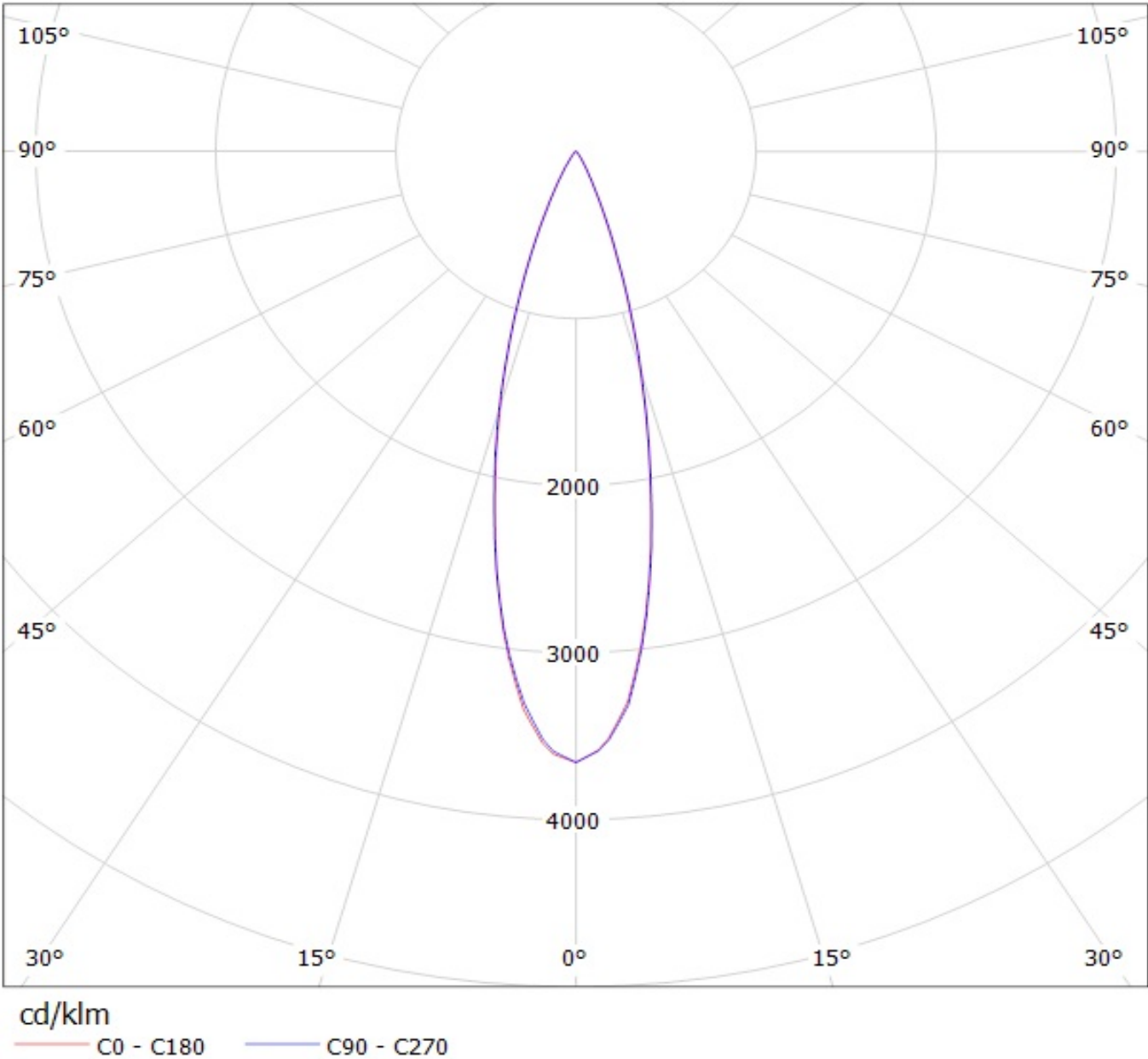
— C0 - C180

— C90 - C270

Luminaire: LEDiL Oy C13233_HB-2X2-M_(WICOP2_Z8Y19)
Lamps: 1 x SEOUL_WICOP2_Z8Y19_450.124lm@250mA_P=2.8579W_I=0.250A



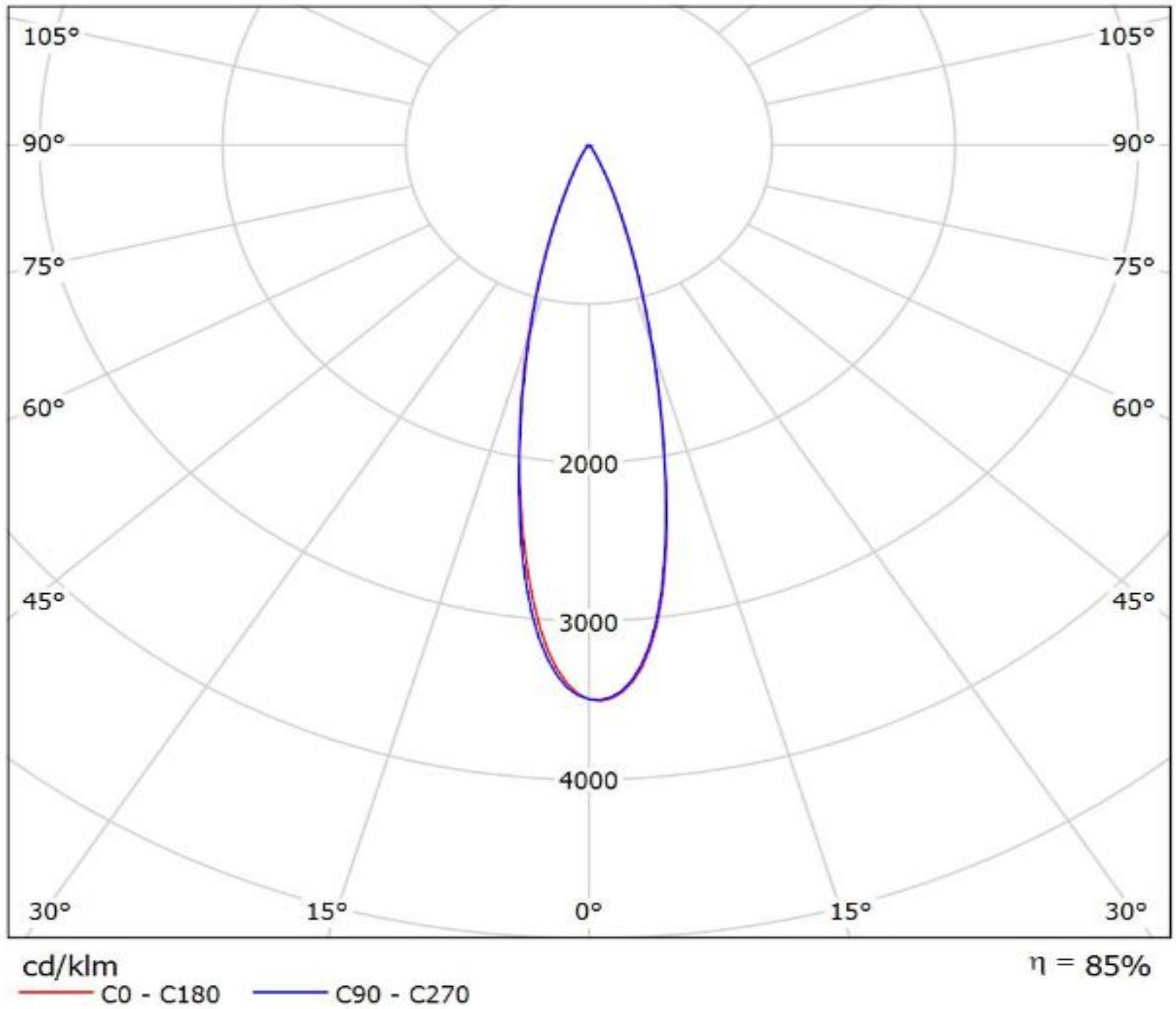
Luminaire: Ledil Oy C13233_HB-2x2-M (Cree XT-E 390lm @ 250mA) Efficiency=92%
Lamps: 1 x Cree XT-E 390lm @ 250mA



Ledil C13233_HB-2X2-M_(TL1L4) / LDC (Polar)

Luminaire: Ledil C13233_HB-2X2-M_(TL1L4)

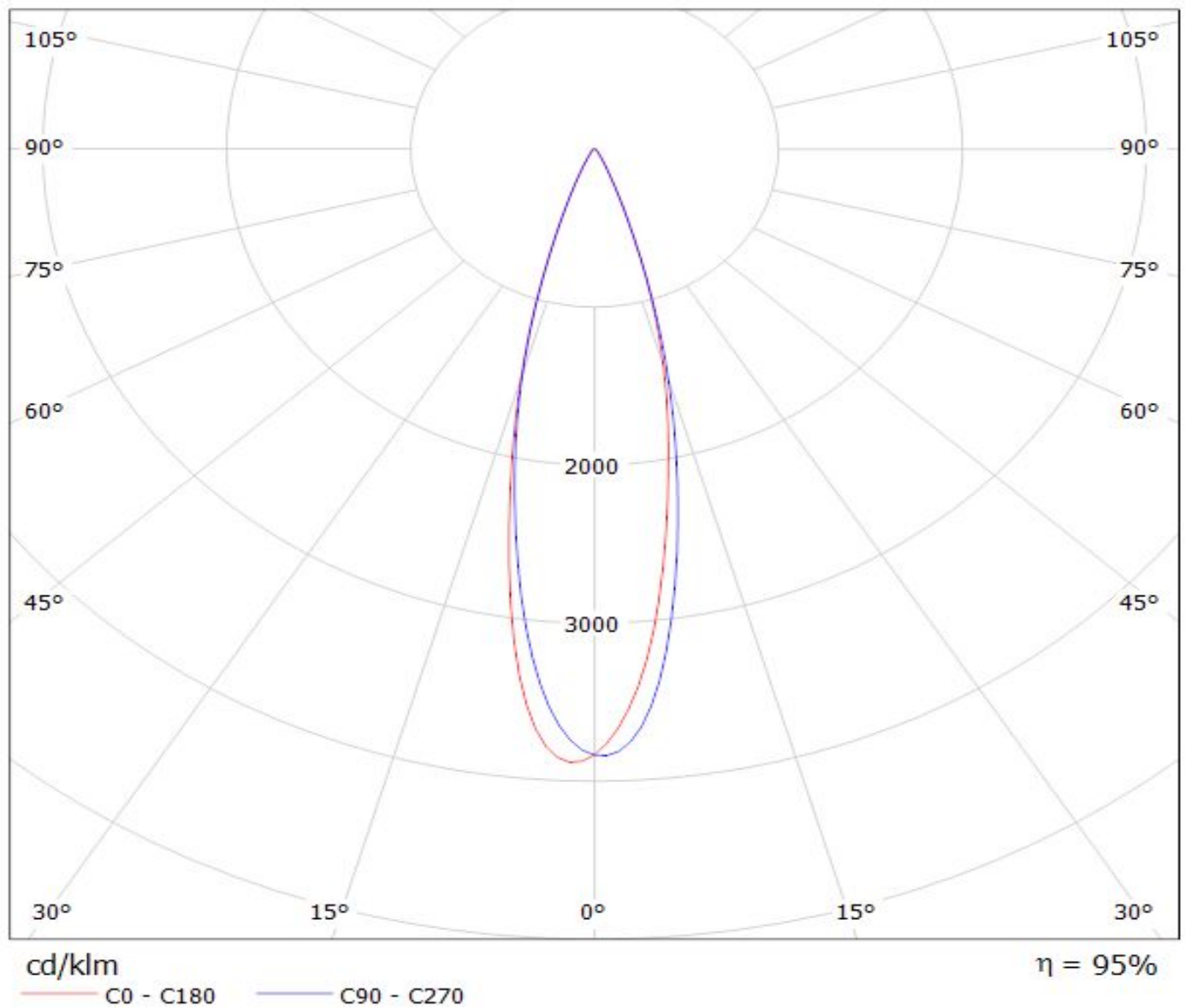
Lamps: 1 x Toshiba_TL1L4_2x2_(TL1L4-DW0)_472.639lm@250mA_CCT=6500K_P=2.9W_I=0.25A



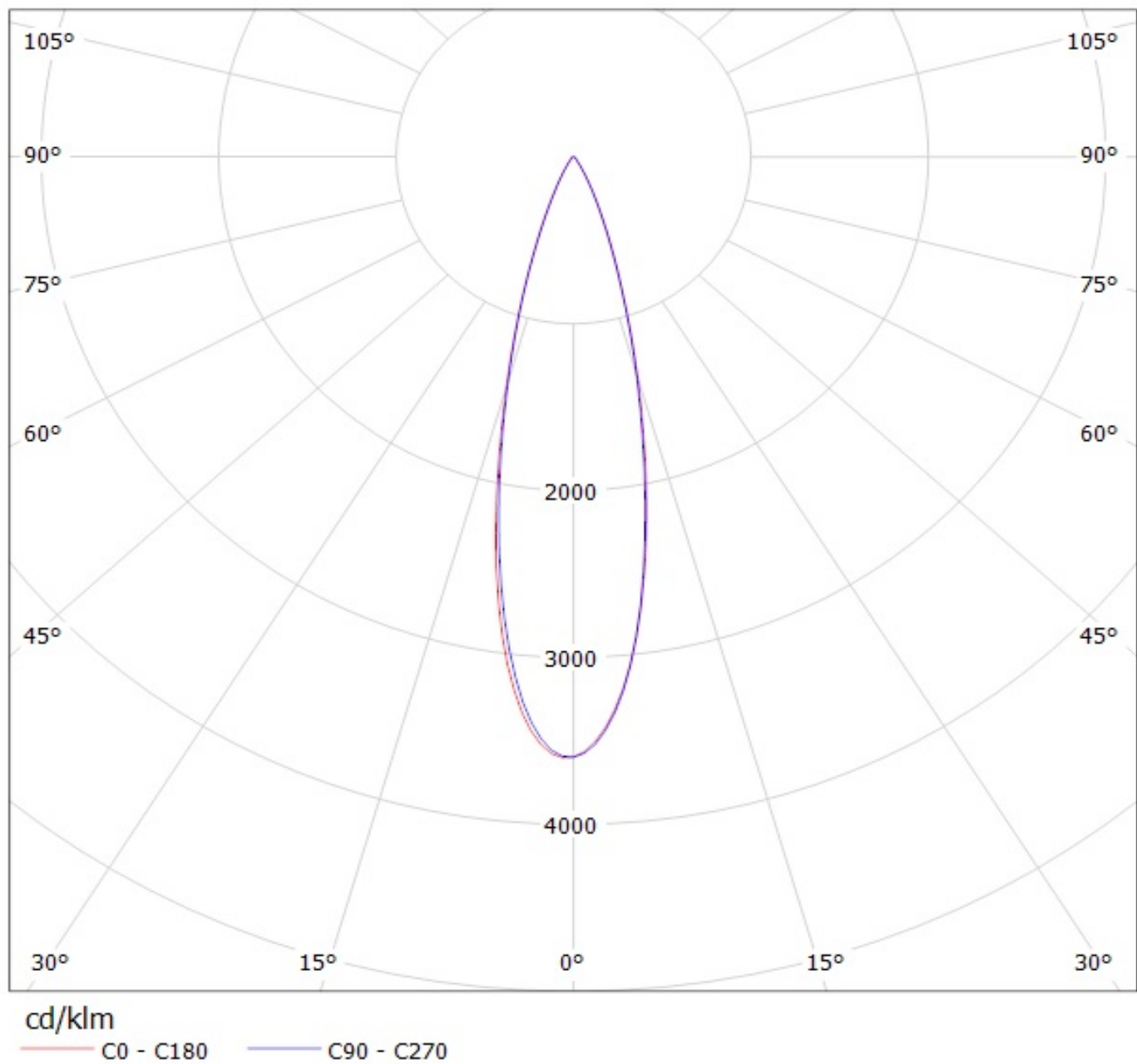
LEDiL Oy C13233_HB-2x2-M_(XB-D) Eff.95.2% / LDC (Polar)

Luminaire: LEDiL Oy C13233_HB-2x2-M_(XB-D) Eff.95.2%

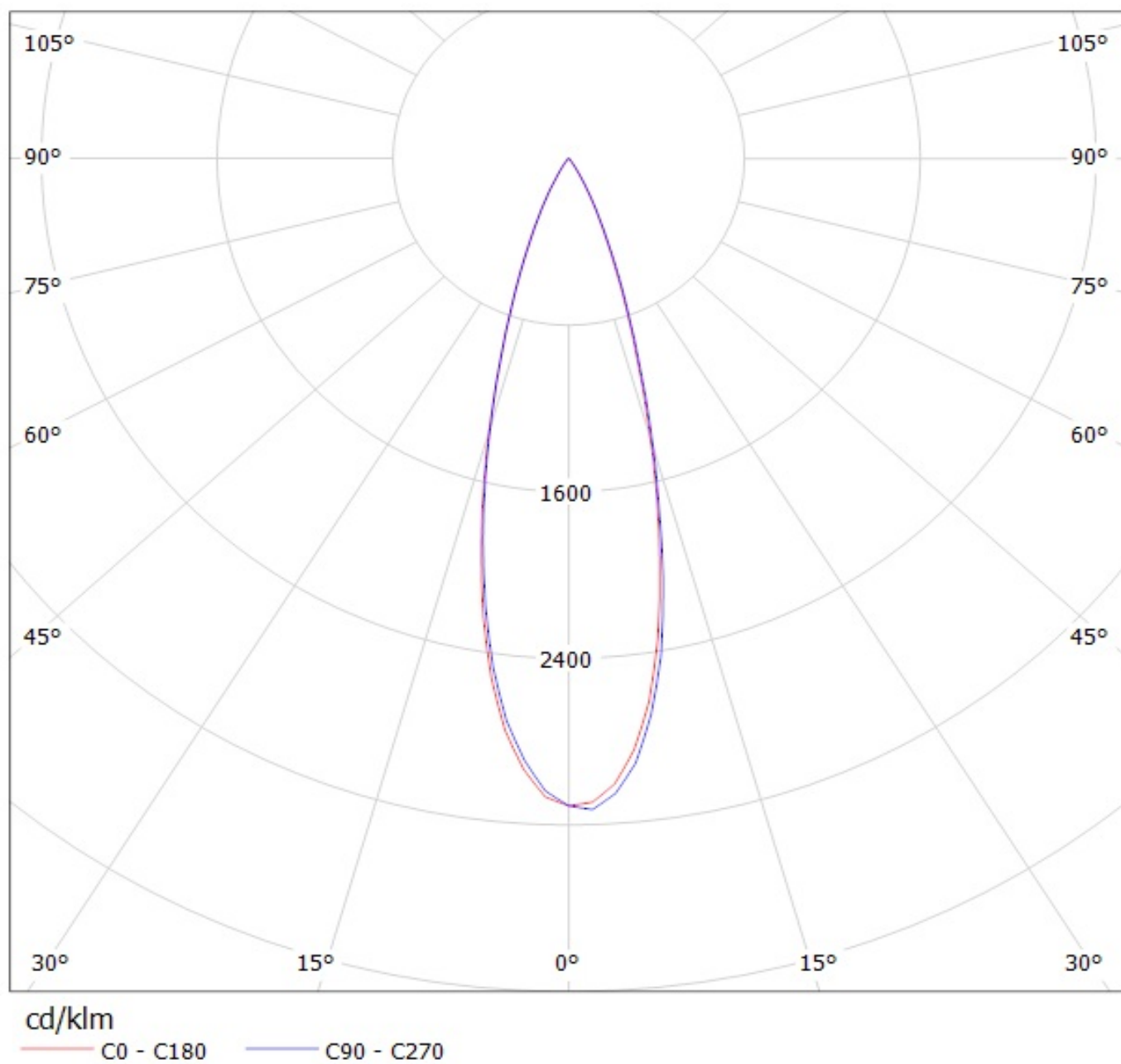
Lamps: 1 x CREE_XB-D_2x2 (362.885lm@250mA)



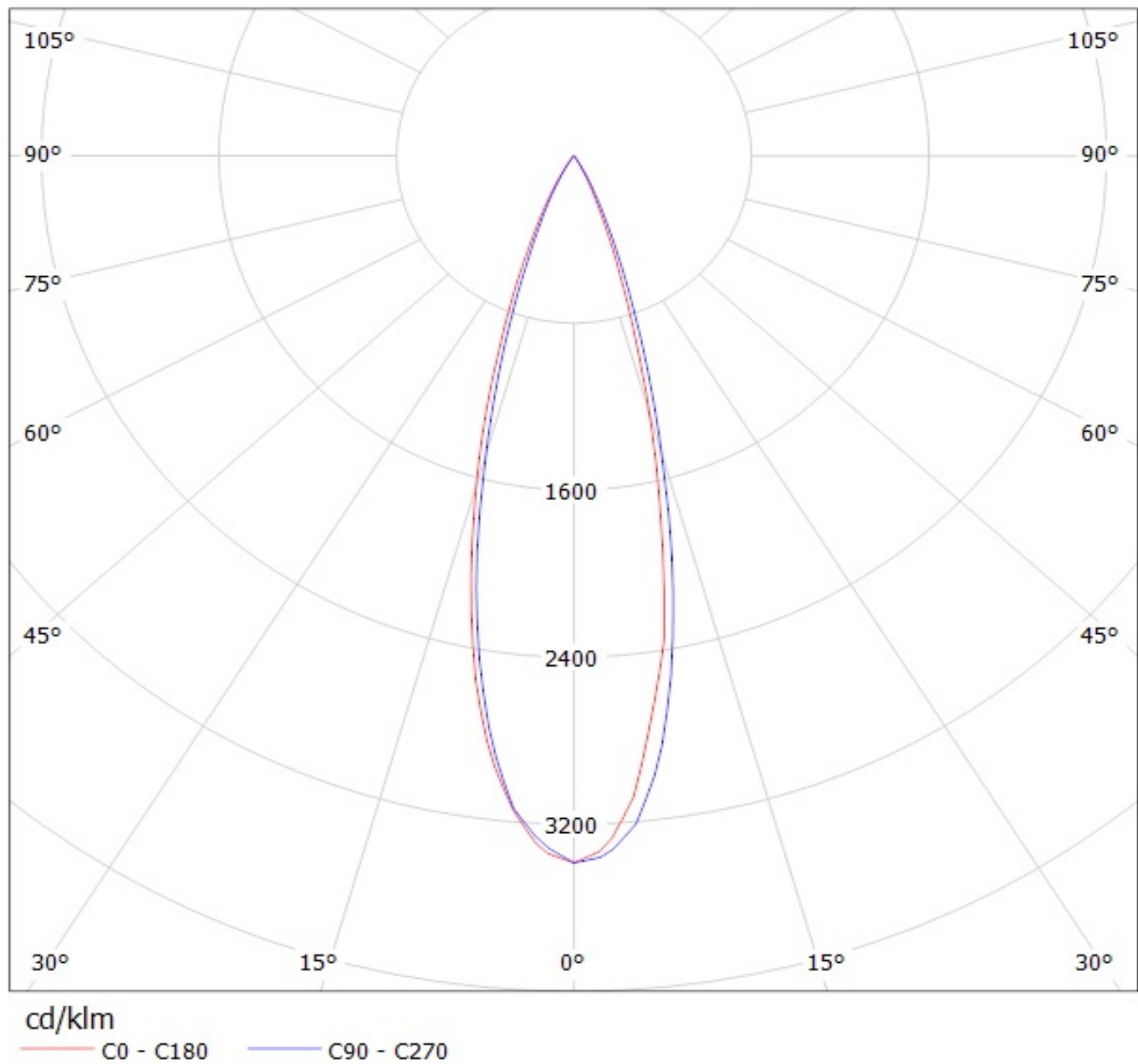
Luminaire: LEDiL Oy C13233_HB-2X2-M_(LUXEON_Q)
Lamps: 1 x LUXEON_Q_2x2_(LHQ-3080)_298.363lm@250mA_P=2.87385W_I=249.9mA



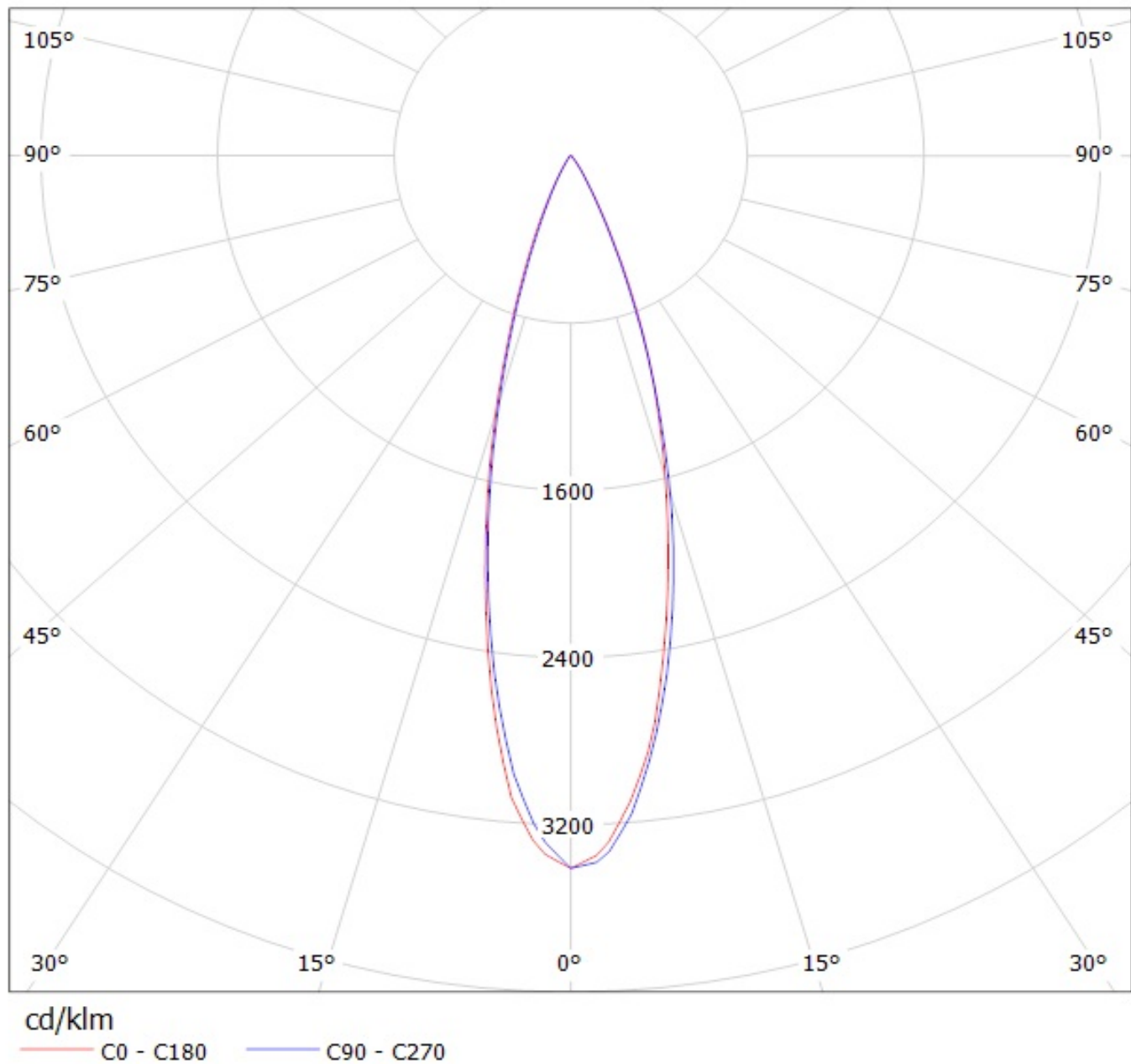
Luminaire: Ledil Oy C13233_HB-2x2-M (Nichia 219B 306lm @ 250mA) Efficiency=91%
Lamps: 1 x Nichia 219B 306lm @ 250mA



Luminaire: Ledil Oy C13233_HB-2x2-M_(3535_Ceramic_gen2) Efficiency=91%
Lamps: 1 x LG 3535 Ceramic gen2 (PKG5700K) 461lm @ 250mA CCT=6600K P=2.9W I=250mA

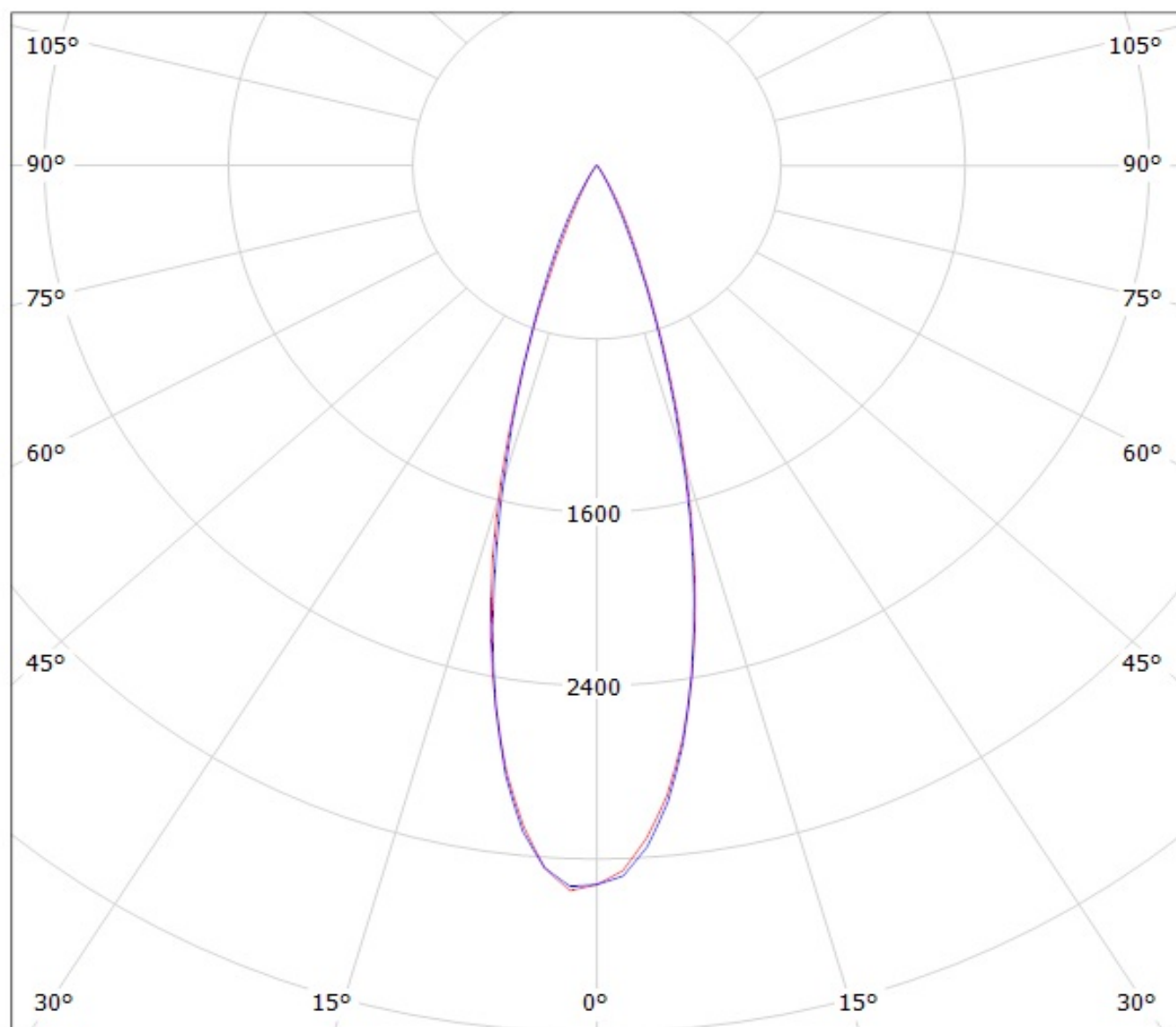


Luminaire: Ledil Oy (Osram Square PC 398lm @ 250mA) Efficiency=91%
Lamps: 1 x Osram Square PC 398lm @ 250mA



Luminaire: LEDil Oy C13233_HB-2X2-M_(Z5M1) Efficiency=90%

Lamps: 1 x Seoul Z5M1 (SZ5-M1-WN-C8) 379lm @ 250mA CCT=4600K P=2.9W I=250mA

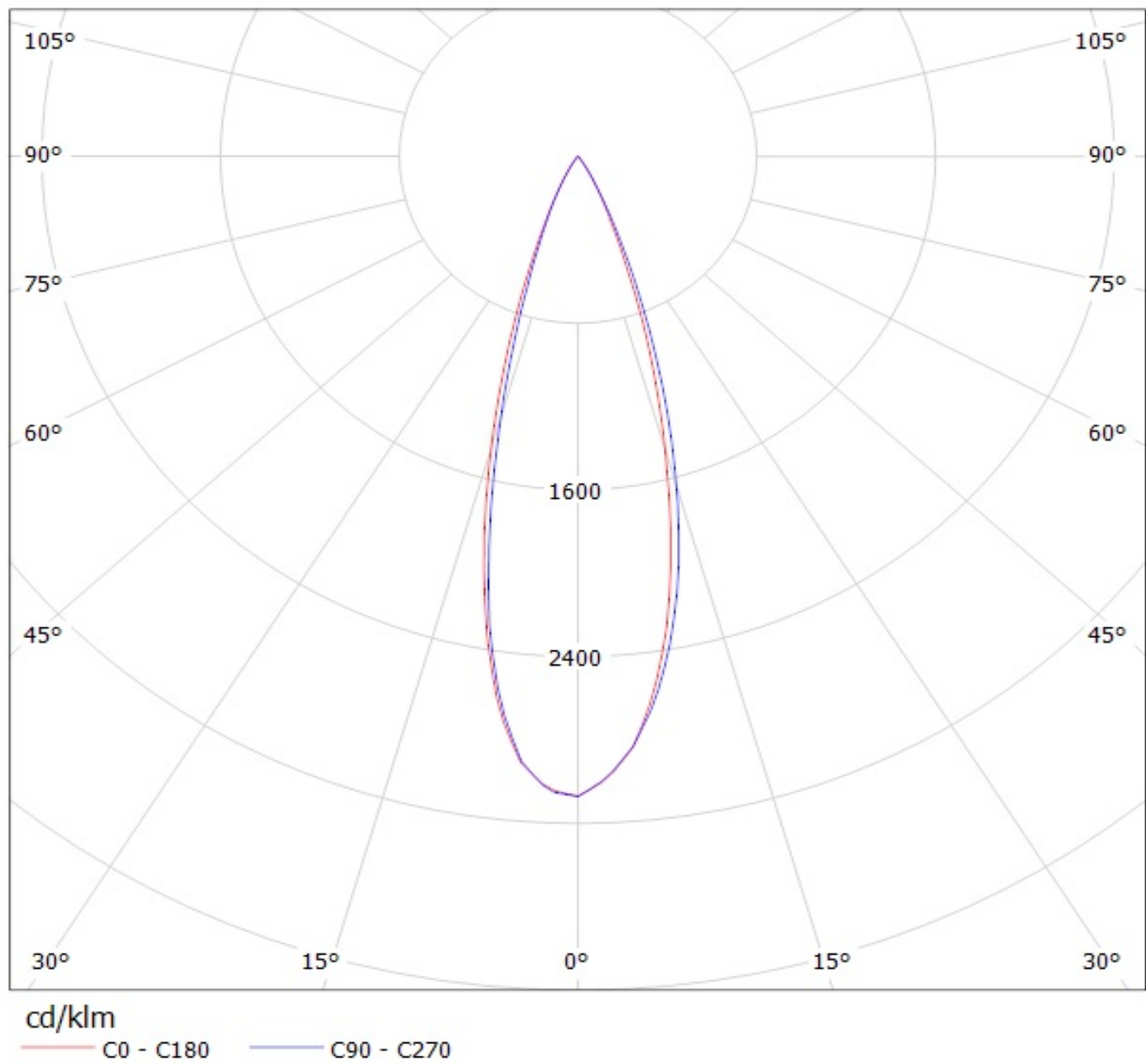


cd/klm

— C0 - C180

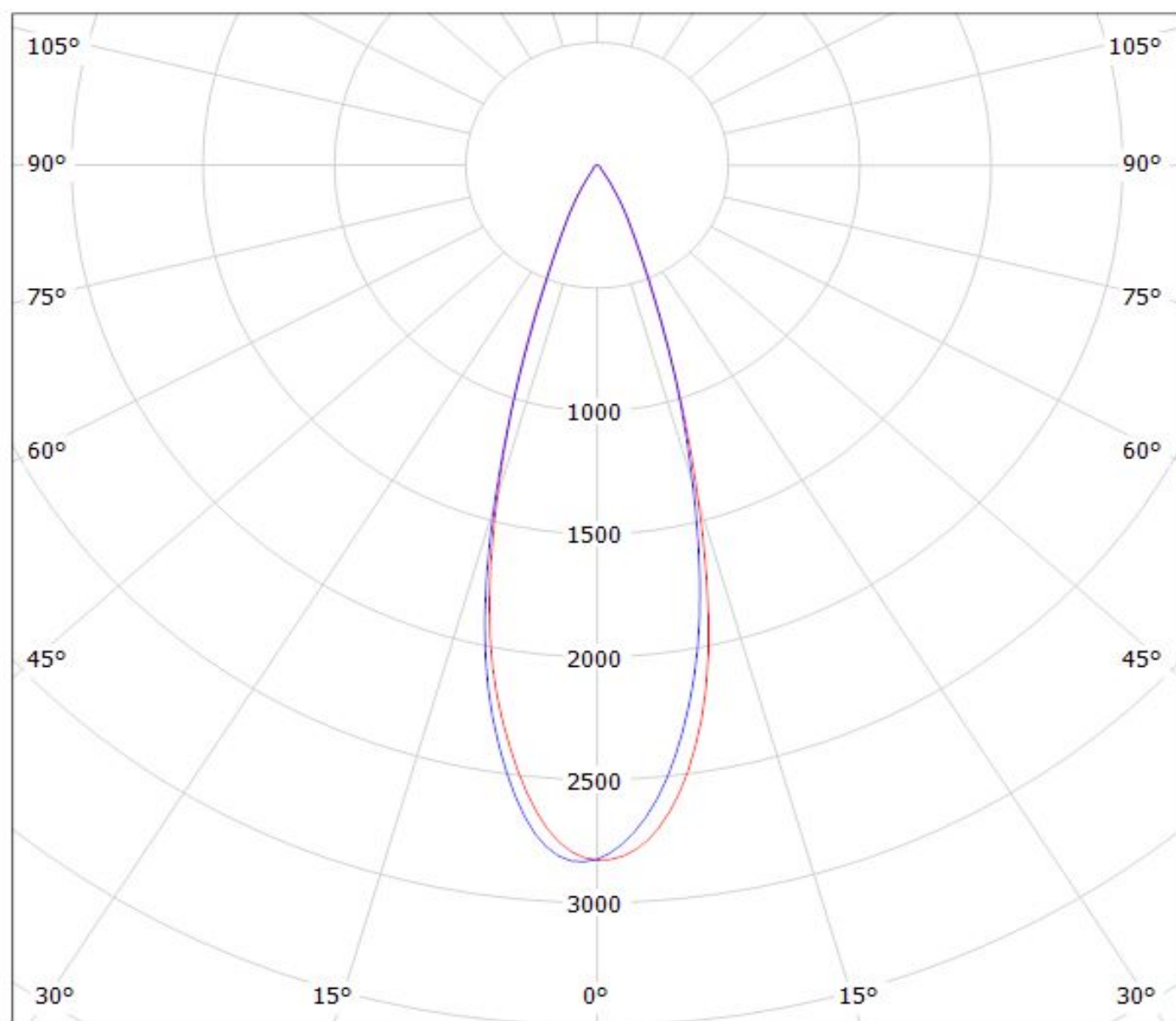
— C90 - C270

Luminaire: Ledil Oy C13233_HB-2x2-M (Cree XP-G 257lm @ 250mA) Efficiency=91%
Lamps: 1 x Cree XP-G 257lm @ 250mA



Luminaire: LEDiL Oy C13233_HB-2X2-M_(LH351B) Eff.93.6%

Lamps: 1 x SAMSUNG_LH351B_2x2_430.715lm@250mA_P=2.84311W_I=249.9mA



cd/klm

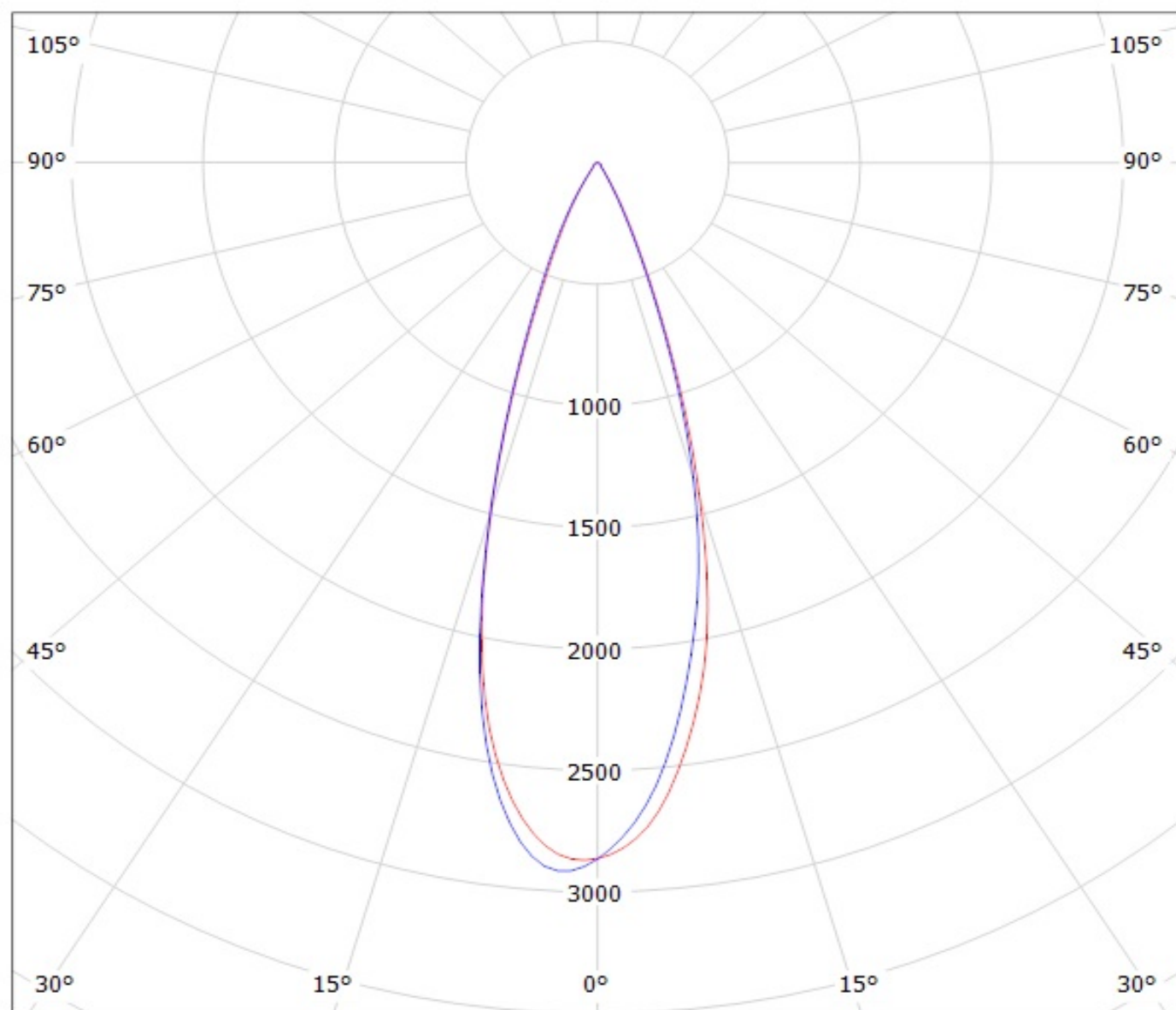
$\eta = 94\%$

C0 - C180

C90 - C270

Luminaire: LEDiL Oy C13233_HB-2X2-M_(LH351Z) Eff.93.0%

Lamps: 1 x SAMSUNG_LH351Z_2x2_359.49lm@250mA_P=2.86371W_I=249.8mA

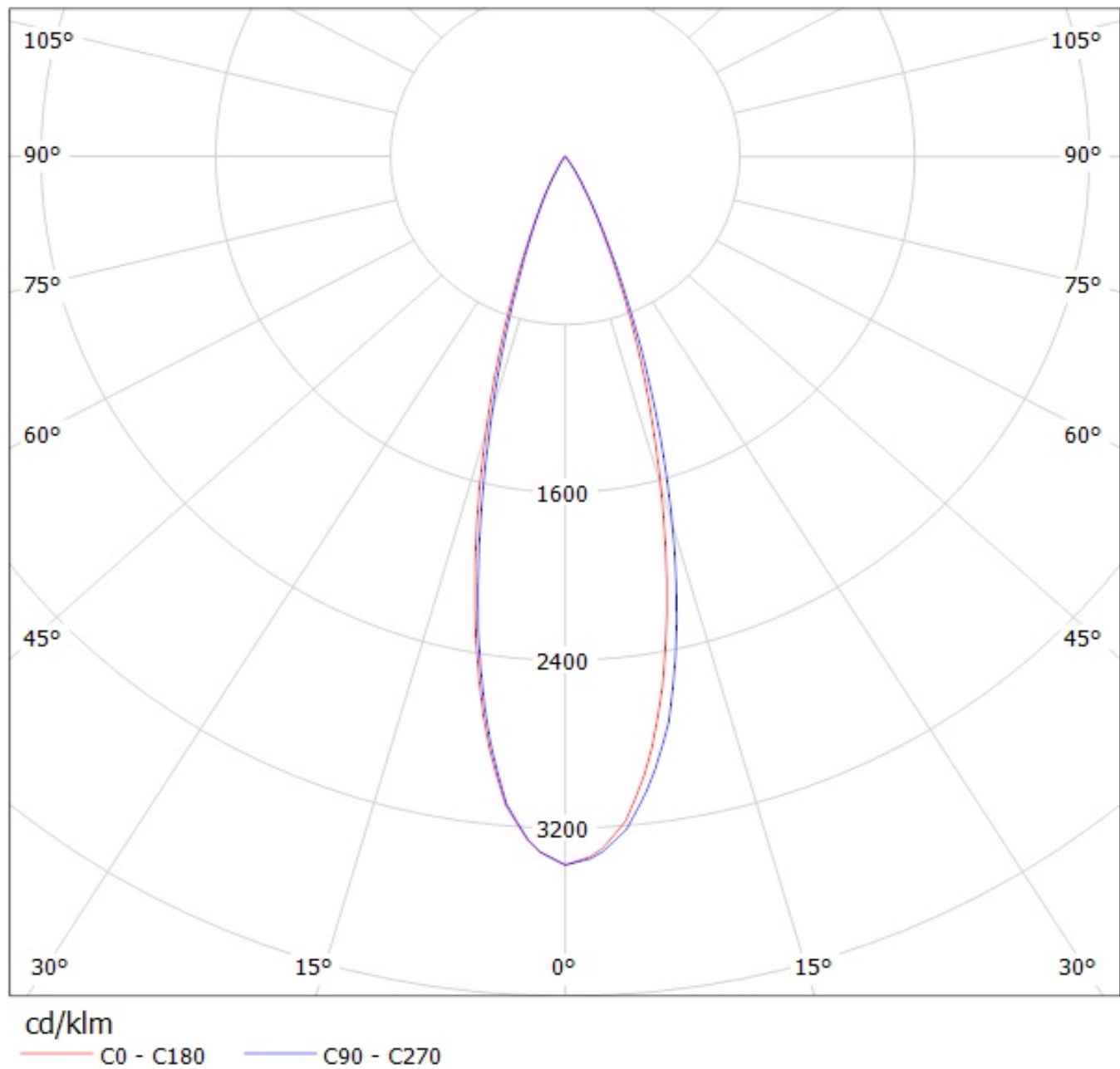


cd/klm

— C0 - C180

— C90 - C270

Luminaire: Ledil Oy C13233_HB-2x2-M (Cree XP-G2 420lm @ 250mA) Efficiency=93%
Lamps: 1 x Cree XP-G2 420lm @ 250mA



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.