

**Product number FP11055_LISA2-RS-PIN**

Family	Lisa2	FWHM	16 degrees
Type	Assembly	Efficiency	90 %
LED	XP-E	cd/lm	6.500
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue", "pin"]		
Status	Production ready		

**Product number FP11085_LISA2-RS-CLIP**

Family	Lisa2	FWHM	16 degrees
Type	Assembly	Efficiency	90 %
LED	XP-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["clips", "glue"]		
Status	Production ready		

**Product number FP11121_LISA2-O-CLIP**

Family	Lisa2	FWHM	18+48 degrees
Type	Assembly	Efficiency	83 %
LED	XP-E	cd/lm	2.300
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["clips", "glue"]		
Status	Production ready		

**Product number FP11125_LISA2-O-PIN**

Family	Lisa2	FWHM	18+48 degrees
Type	Assembly	Efficiency	83 %
LED	XP-E	cd/lm	2.300
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["pin", "glue"]		
Status	Production ready		

**Product number FP10995_LISA2-M-PIN**

Family	Lisa2	FWHM	24 degrees
Type	Assembly	Efficiency	92 %
LED	XP-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["pin", "glue"]		
Status	Production ready		

Product number FP11075_LISA2-M-CLIP

Family	Lisa2	FWHM	24 degrees
Type	Assembly	Efficiency	92 %
LED	XP-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue", "clips"]		
Status	Production ready		

Product number FP10996_LISA2-W-PIN

Family	Lisa2	FWHM	37 degrees
Type	Assembly	Efficiency	90 %
LED	XP-E	cd/lm	1.960
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["pin", "glue"]		
Status	Production ready		

Product number FP11076_LISA2-W-CLIP

Family	Lisa2	FWHM	37 degrees
Type	Assembly	Efficiency	90 %
LED	XP-E	cd/lm	1.960
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue", "clips"]		
Status	Production ready		

**Product number FP10997_LISA2-WW-PIN**

Family	Lisa2	FWHM	42 degrees
Type	Assembly	Efficiency	91 %
LED	XP-E	cd/lm	1.000
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue", "pin"]		
Status	Production ready		

**Product number FP11077_LISA2-WW-CLIP**

Family	Lisa2	FWHM	42 degrees
Type	Assembly	Efficiency	91 %
LED	XP-E	cd/lm	1.300
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue", "clips"]		
Status	Production ready		

**Product number FP11851_LISA2-O-90-PIN**

Family	Lisa2	FWHM	48+18 degrees
Type	Assembly	Efficiency	83 %
LED	XP-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["pin", "glue"]		
Status	Production ready		

**Product number FP11856_LISA2-O-90-CLIP**

Family	Lisa2	FWHM	48+18 degrees
Type	Assembly	Efficiency	83 %
LED	XP-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue", "clips"]		
Status	Production ready		

**Product number C12469_LISA2-R-PIN**

Family	Lisa2	FWHM	82 degrees
Type	Reflector	Efficiency	86 %
LED	XP-E	cd/lm	0.350
Color	White	Gerber File	Available
Diameter	9.9 mm		
Height	6.5 mm		
Style	Round		
Optic Material	HRPC		
Holder Material	-		
Fastening	["glue", "pin"]		
Status	Production ready		

**Product number FP11429_LISA2-WWW-PIN**

Family	Lisa2	FWHM	84 degrees
Type	Assembly	Efficiency	77 %
LED	XP-E	cd/lm	0.500
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["pin", "glue"]		
Status	Production ready		

**Product number FP11431_LISA2-WWW-CLIP**

Family	Lisa2	FWHM	84 degrees
Type	Assembly	Efficiency	77 %
LED	XP-E	cd/lm	0.500
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	-		
Fastening	["clips", "glue"]		
Status	Production ready		

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.



PRODUCT DATASHEET

Lisa2 series

last update 18/8/2014

GENERAL INFORMATION

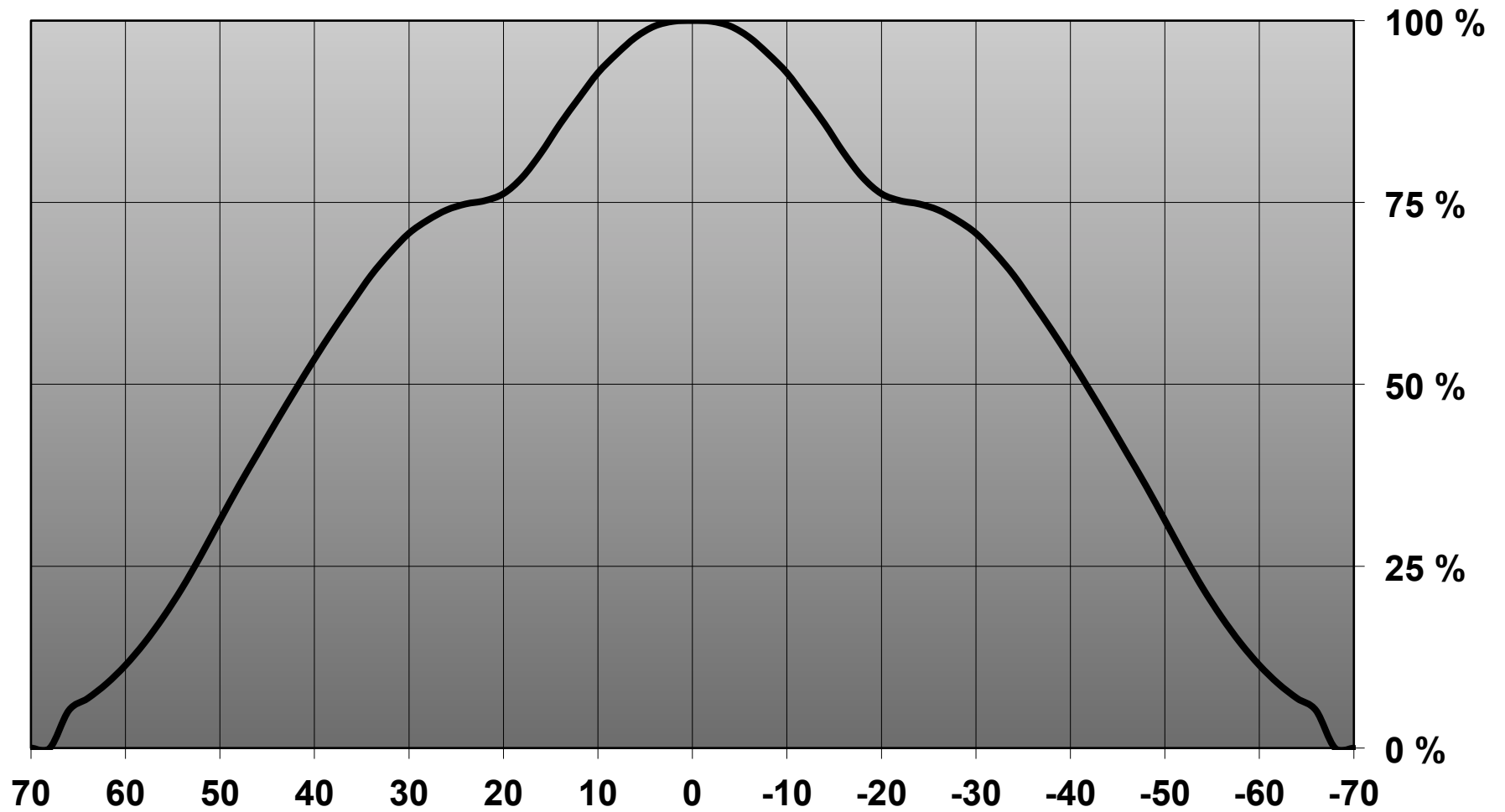
- Product series especially designed & optimized for XP-E series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PMMA with high UV and temperature resistance. Allows use of high current and temperature conditions.

Please find more information about used material from below:

http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20UL94_Yellow%20Card.pdf

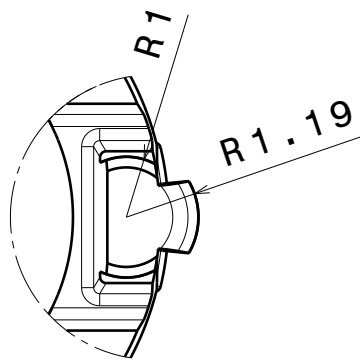
<http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20PLEXIGLAS-Datasheet.pdf>

**Relative intensity of FP11431_LISA2-WWW-CLIP &
FP11429_LISA2-WWW-PIN**

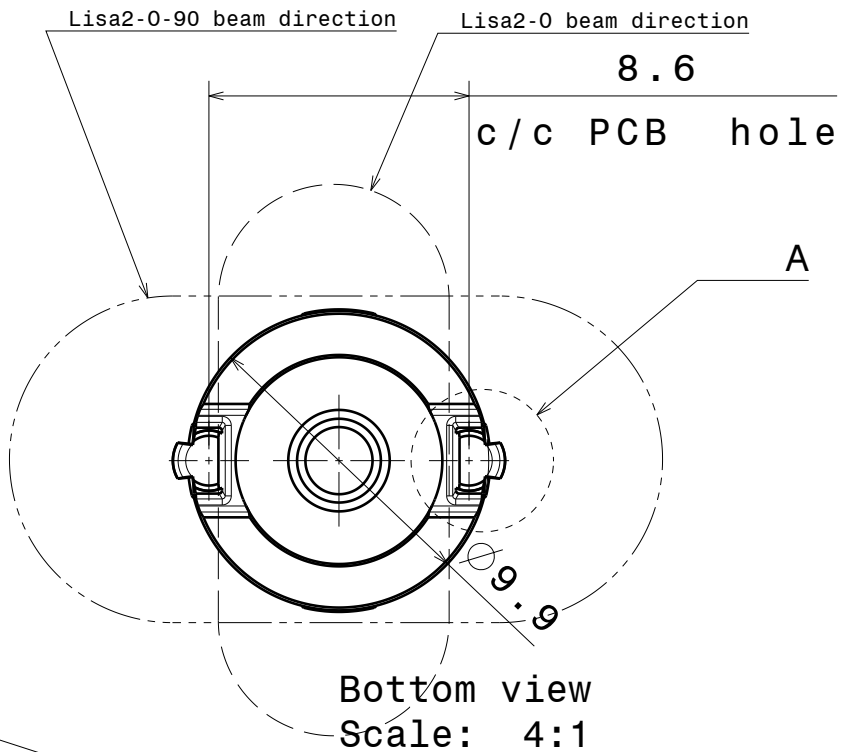


D C B A

4



Detail A
Scale: 8:1



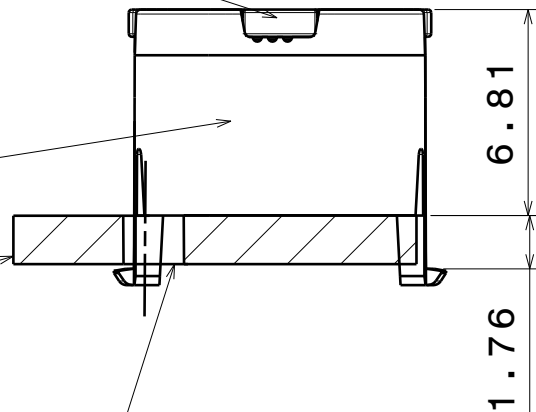
Bottom view
Scale: 4:1

Lens

3

Holder

Reference PCB



Front view
Scale: 4:1

2

Materials:
Lens PMMA
Holder PC

Note:
Take tolerances
into account
when specifying
positioning
holes for PCB

1

This drawing is our property.
It can't be reproduced
or communicated without
our written agreement.



Ledil Oy
Tehdaskatu 13
FIN-24100 SALO
Finland

DRAWING TITLE

Datasheet Lisa2-clip16-XP series Assy

DRAWN BY
ch

DATE
20.7.2011

CHECKED BY
sn

DATE
20.7.2011

SIZE
A4

DRAWING NUMBER

REV
2

DESIGNED BY
hh

DATE
19.10.2009

SCALE

4:1

WEIGHT (g)

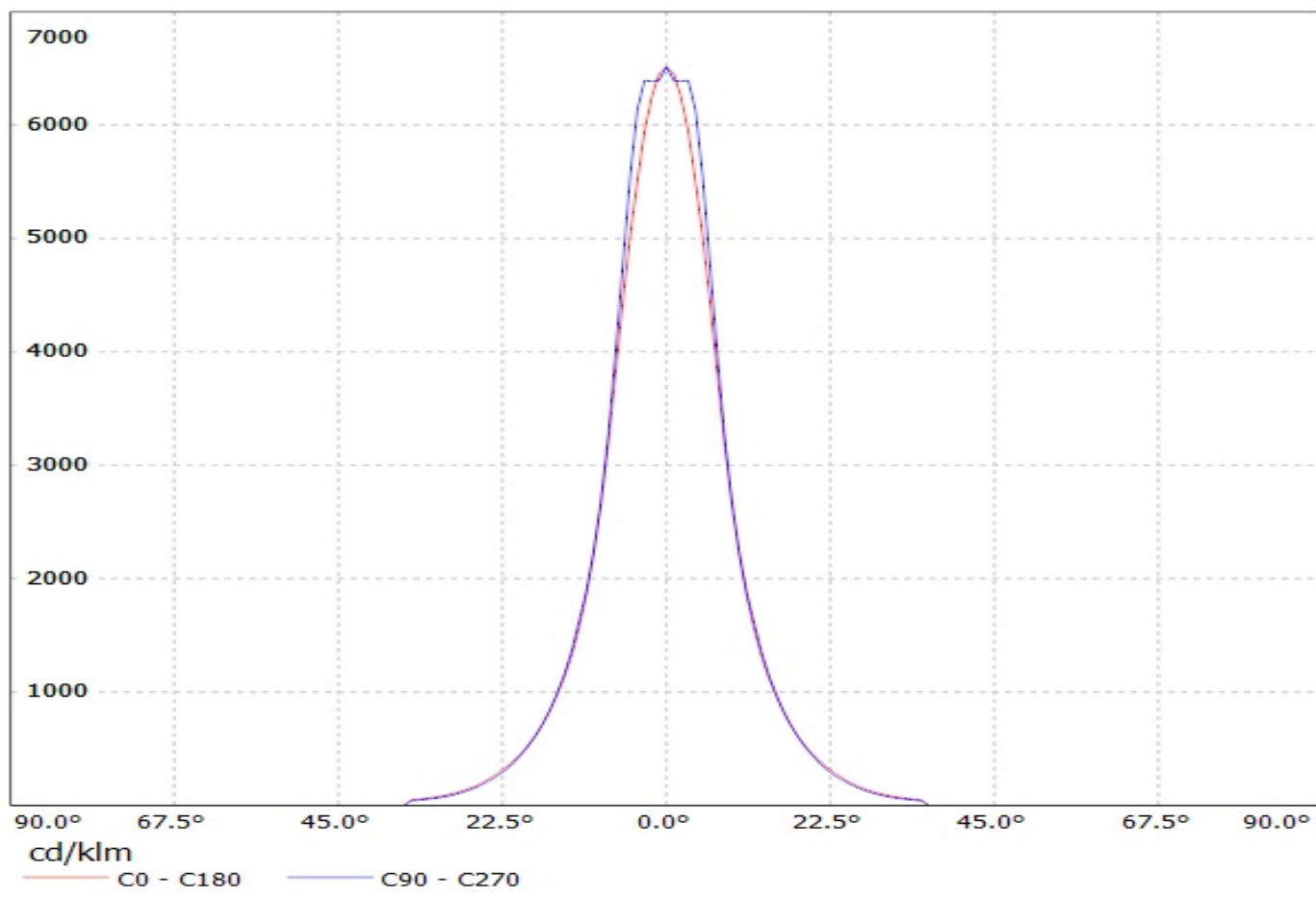
SHEET

1/1

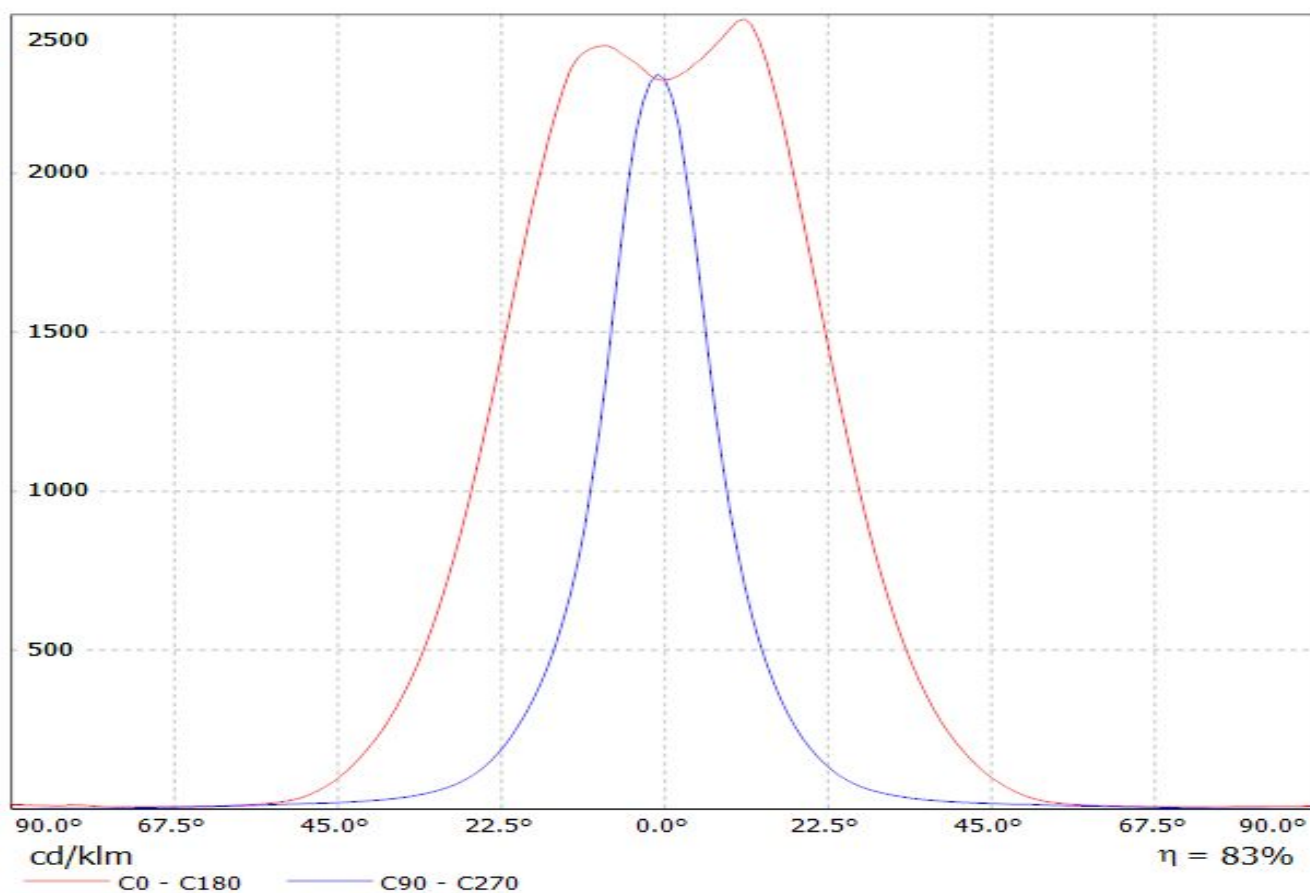
D

A

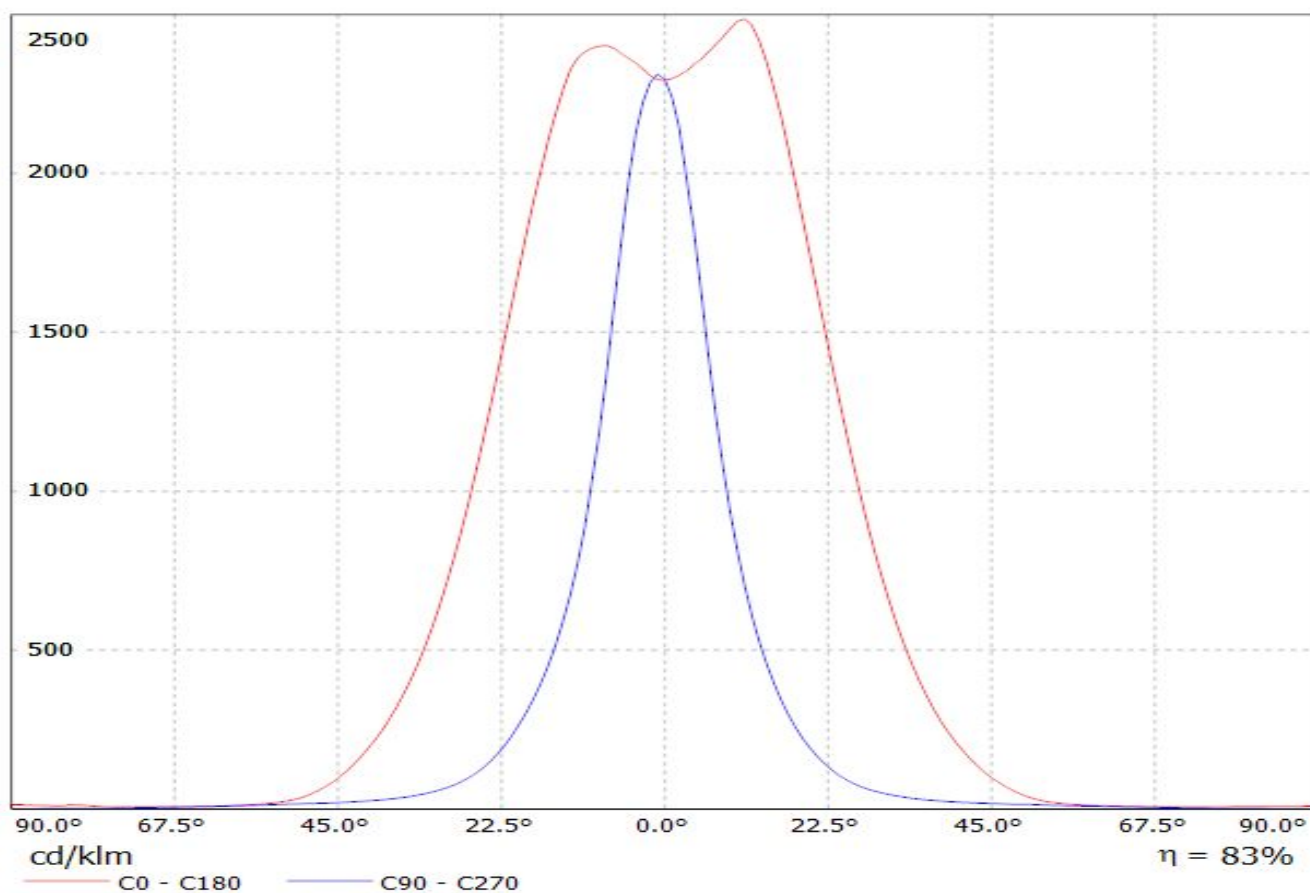
Luminaire: Ledil Oy FA11055_Lisa2-RS-Pin-XP FA11055_Lisa2-RS-Pin-XP
Lamps: 1 x Cree XP-E (White)



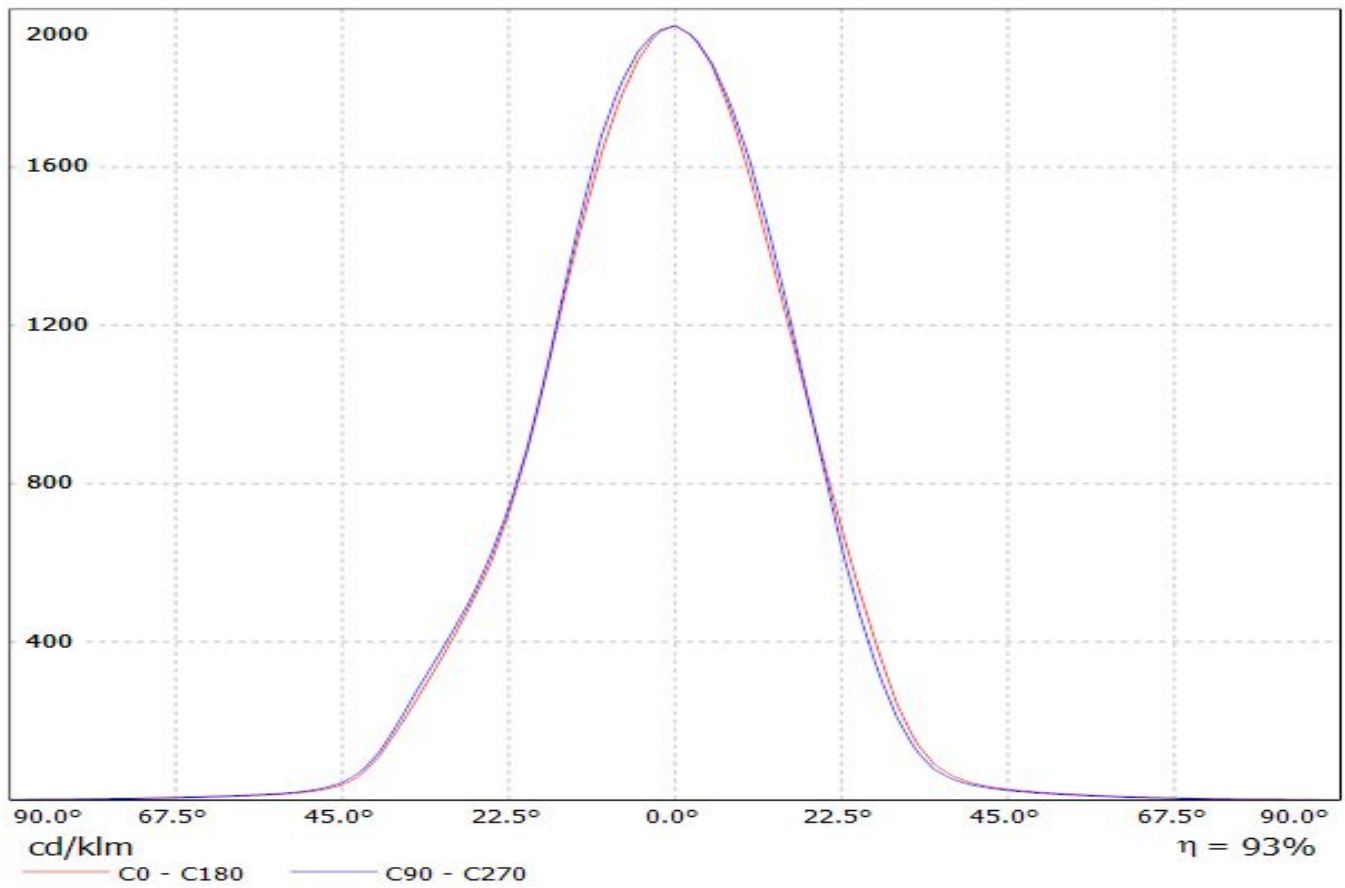
Luminaire: LEDiL Oy FP11125&_FP11121_LISA2-O_(XP-E) Eff.83.3%
Lamps: 1 x CREE XP-E (70.0622lm@250mA)



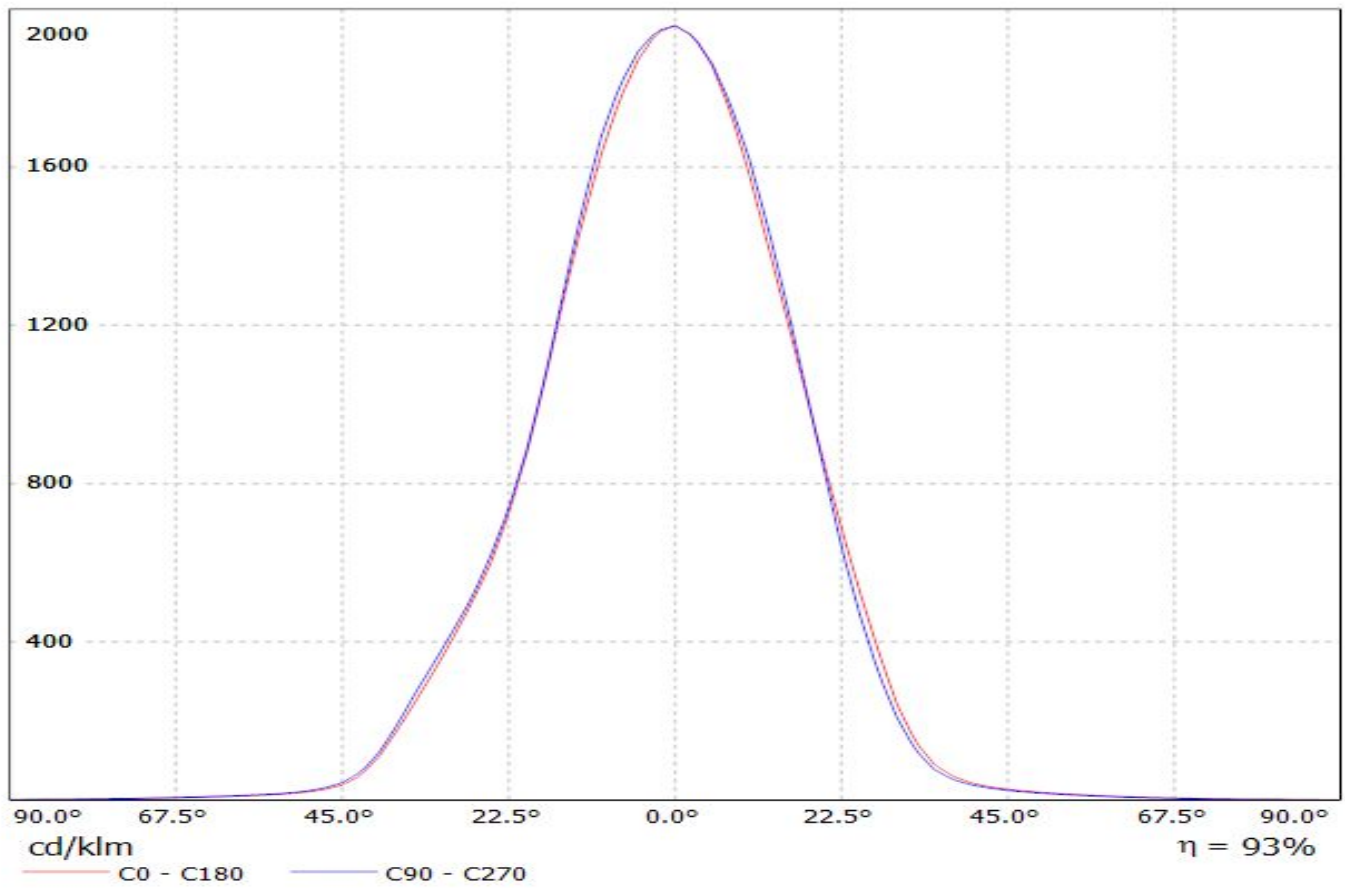
Luminaire: LEDiL Oy FP11125&_FP11121_LISA2-O_(XP-E) Eff.83.3%
Lamps: 1 x CREE XP-E (70.0622lm@250mA)



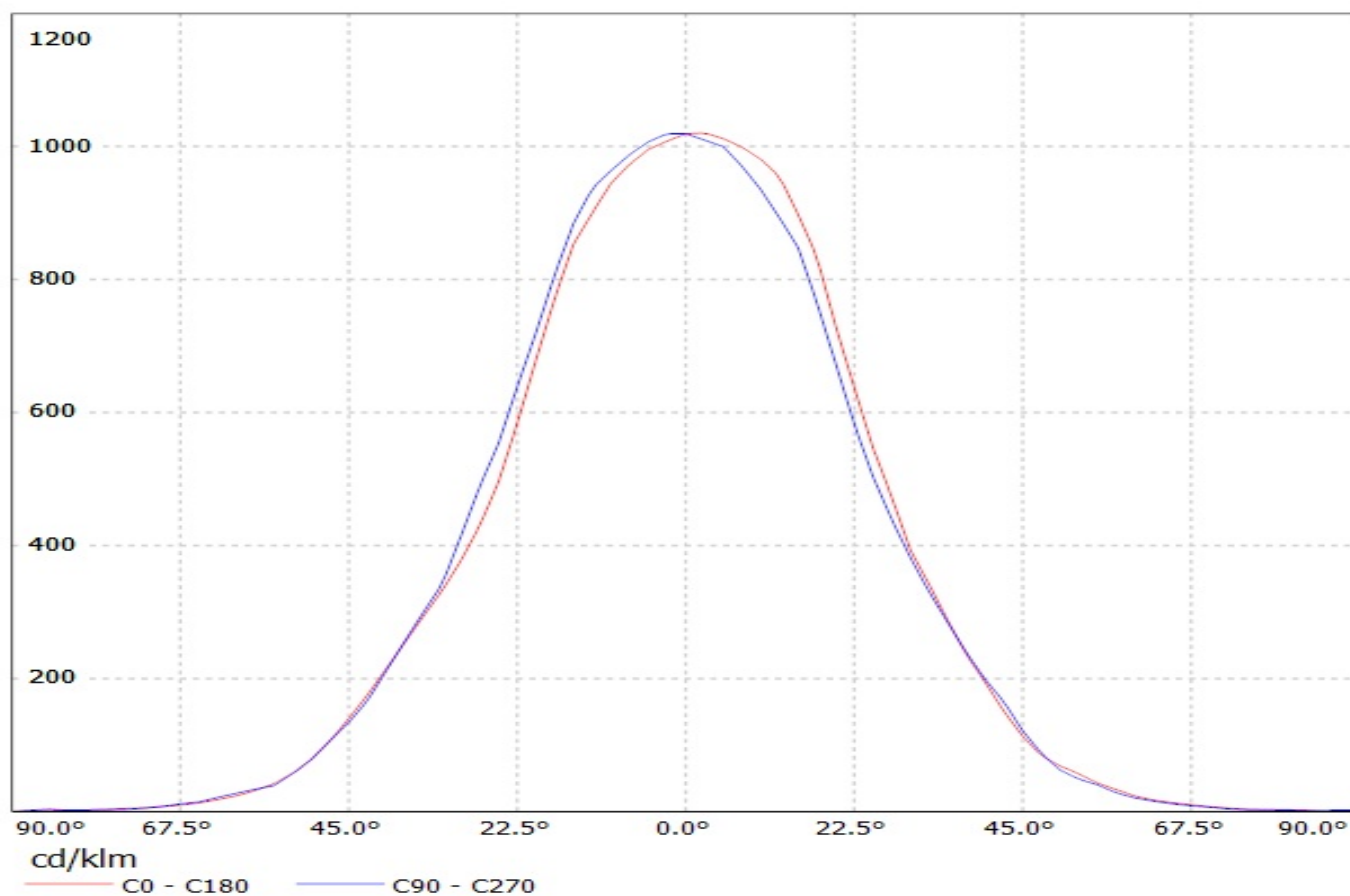
Luminaire: LEDiL Oy FP10996&FP11076_LISA2-W_(XP-E) Eff.93.1%
Lamps: 1 x Cree XP-E (69.4929lm@250mA)



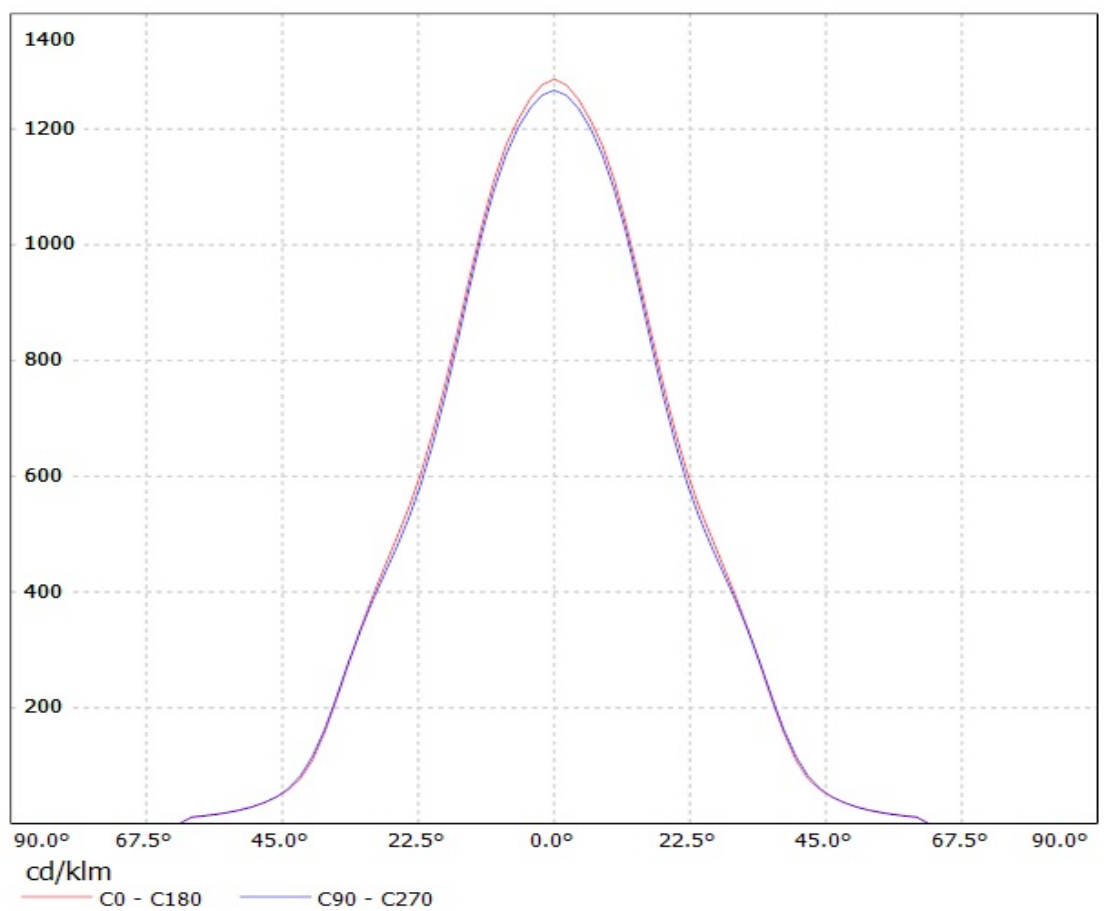
Luminaire: LEDiL Oy FP10996&FP11076_LISA2-W_(XP-E) Eff.93.1%
Lamps: 1 x Cree XP-E (69.4929lm@250mA)



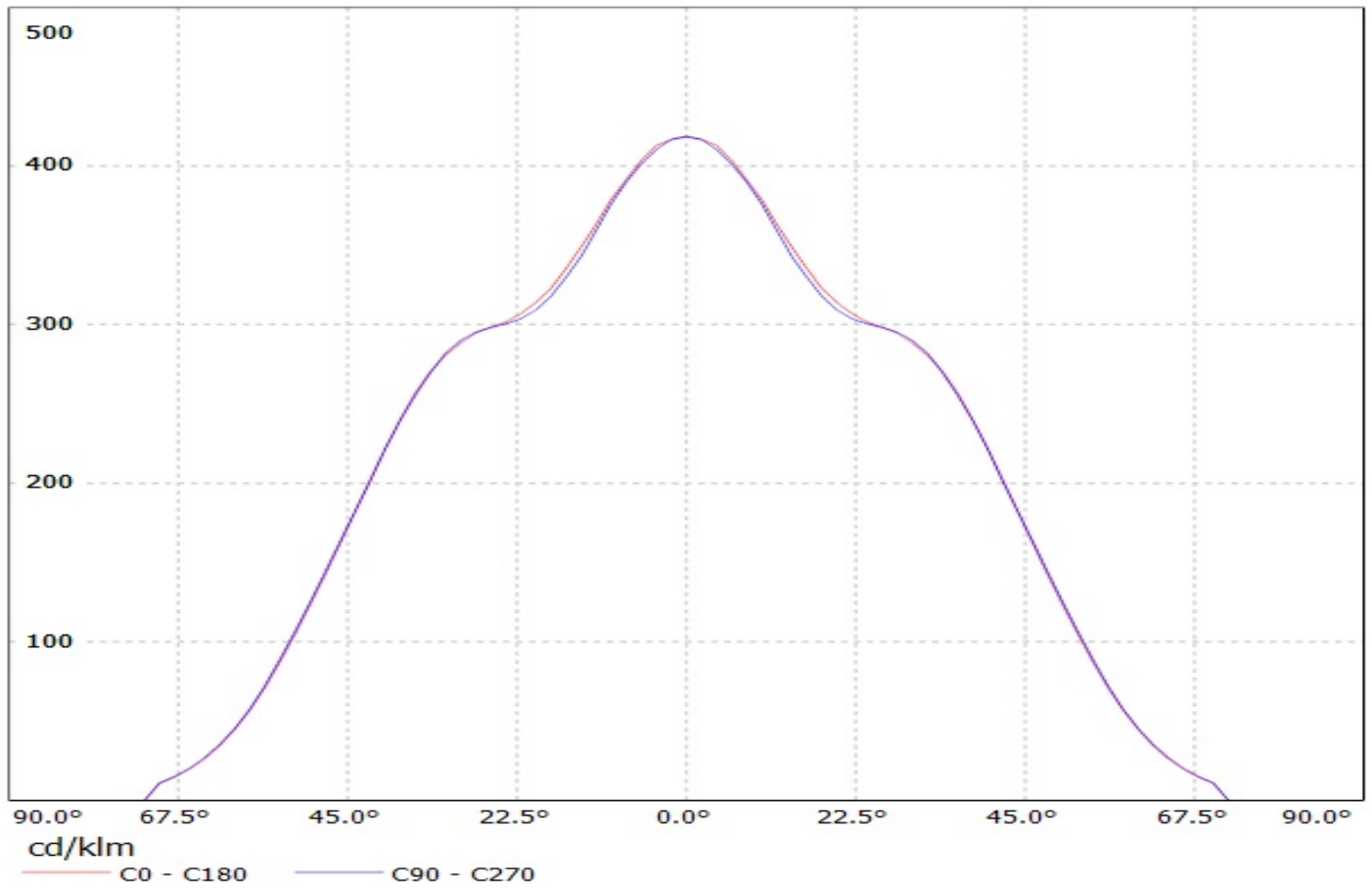
Luminaire: Ledil Oy FP10997_LISA2-WW-PIN (Cree XP-E 73lm @ 250mA) Efficiency=91%
Lamps: 1 x Cree XP-E 73lm @ 250mA



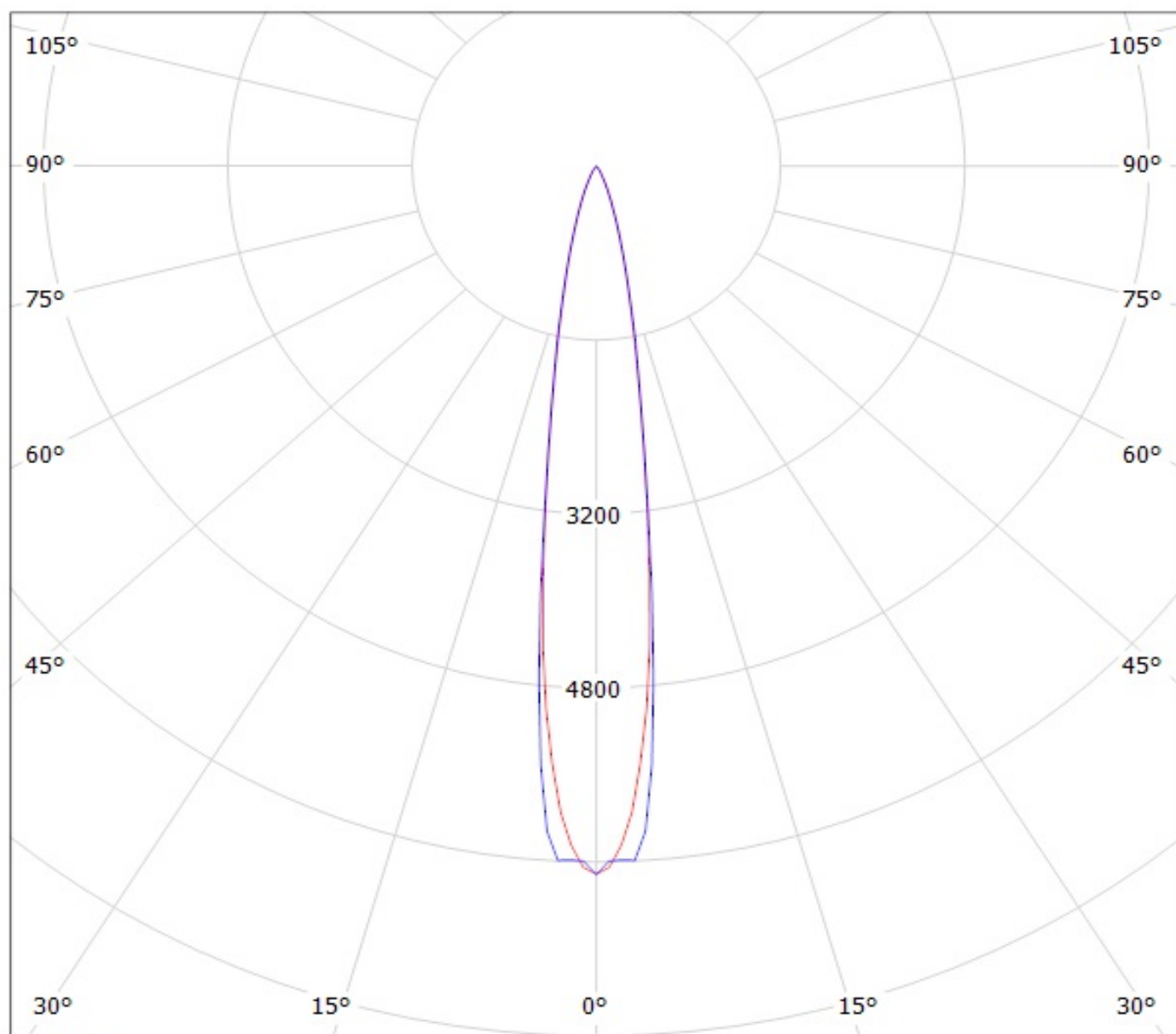
Luminaire: Ledil Oy FA10997_Lisa2-WW-Pin/FP11077_LISA2-WW-CLIP-XP FA10997_Lisa2-WW-Pin/FP11077_LISA2-WW-CLIP-XP
Lamps: 1 x cree xp-e white



Luminaire: Ledil Oy Lisa2-WWW-XP Lisa2-WWW-XP
Lamps: 1 x cree xp-e white



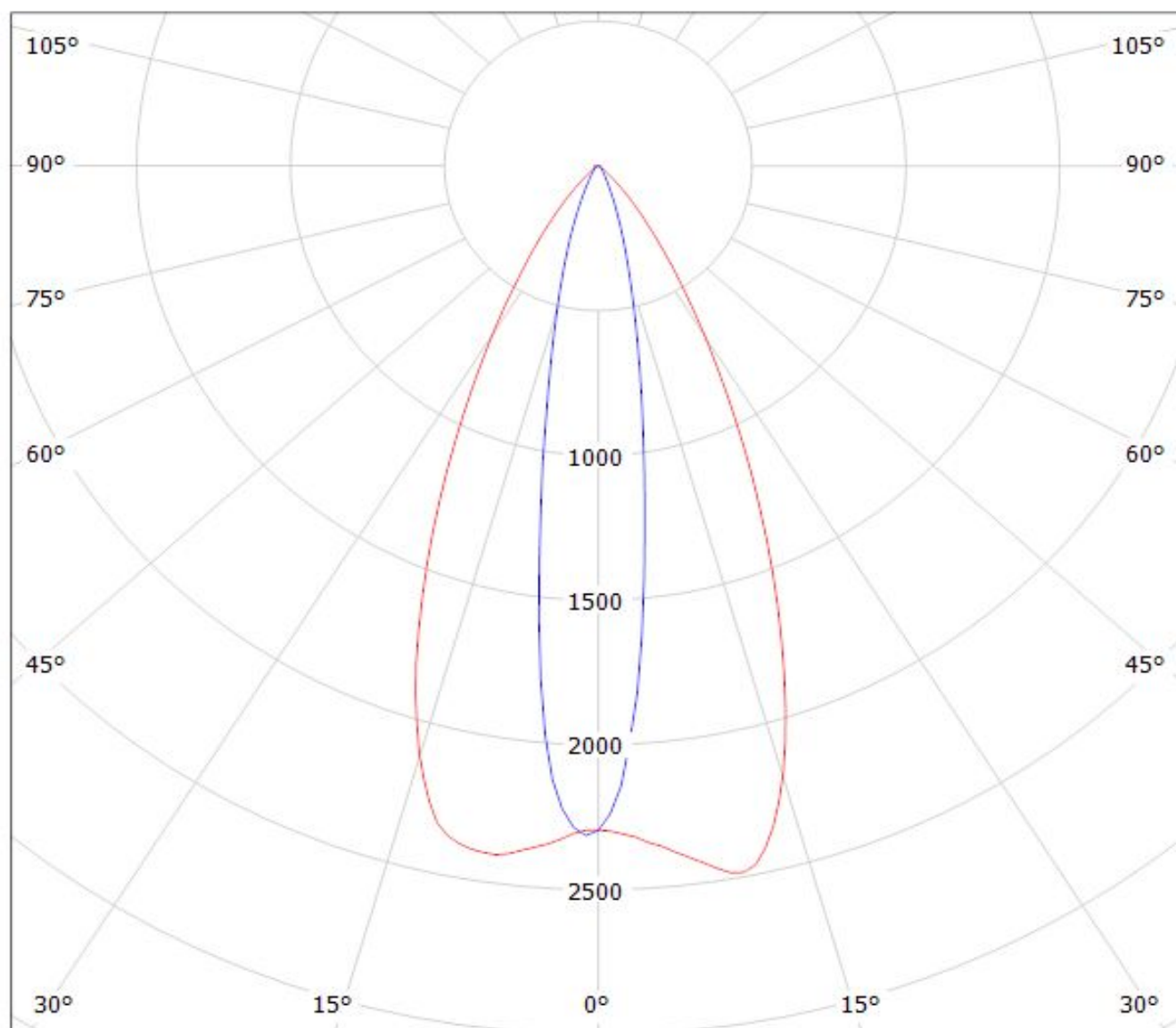
Luminaire: Ledil Oy FA11055_Lisa2-RS-Pin-XP FA11055_Lisa2-RS-Pin-XP
Lamps: 1 x Cree XP-E (White)



cd/klm

— C0 - C180 — C90 - C270

Luminaire: LEDiL Oy FP11125&_FP11121_LISA2-O_(XP-E) Eff.83.3%
Lamps: 1 x CREE XP-E (70.0622lm@250mA)

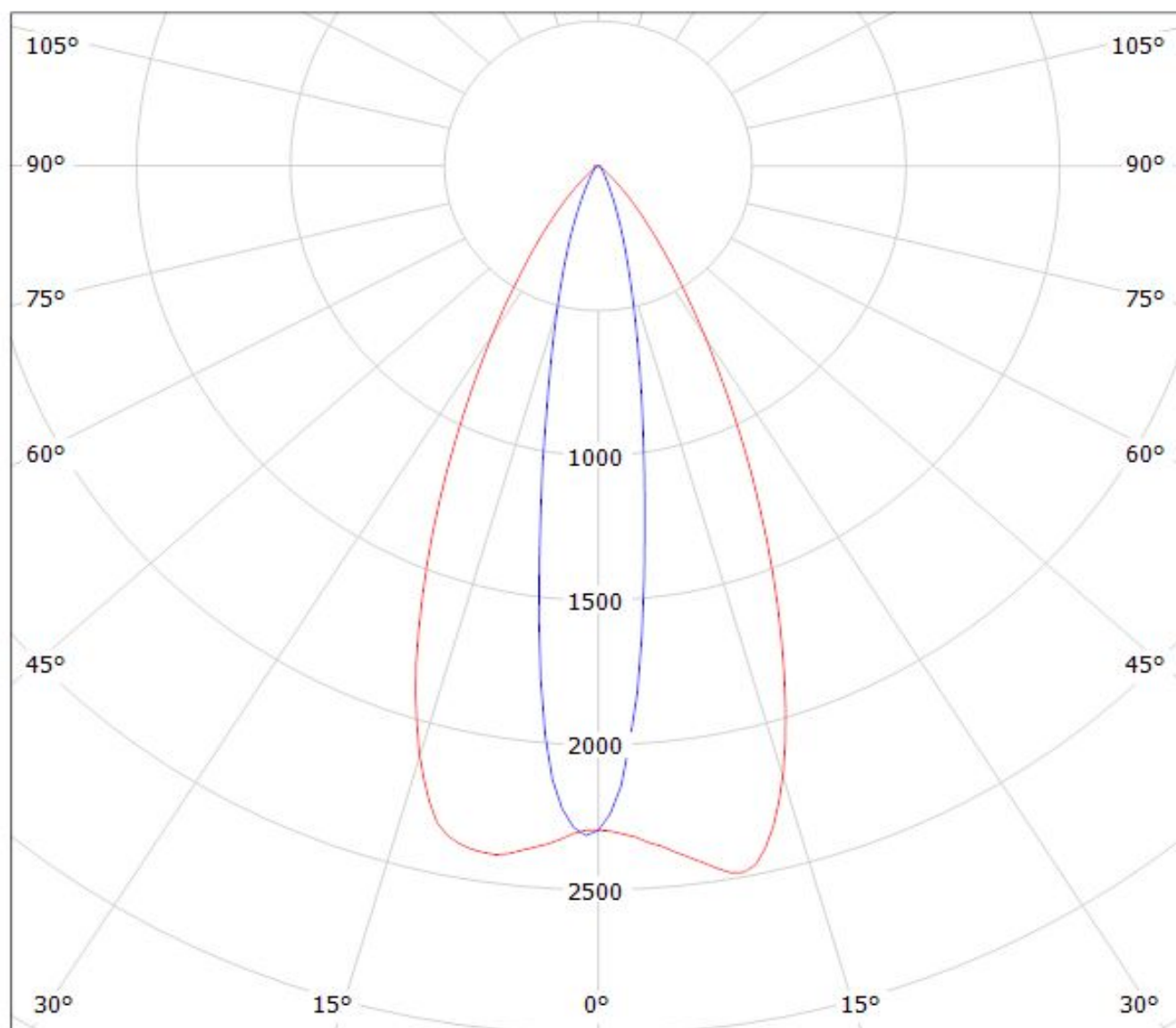


cd/klm

$\eta = 83\%$

— C0 - C180 — C90 - C270

Luminaire: LEDiL Oy FP11125&_FP11121_LISA2-O_(XP-E) Eff.83.3%
Lamps: 1 x CREE XP-E (70.0622lm@250mA)

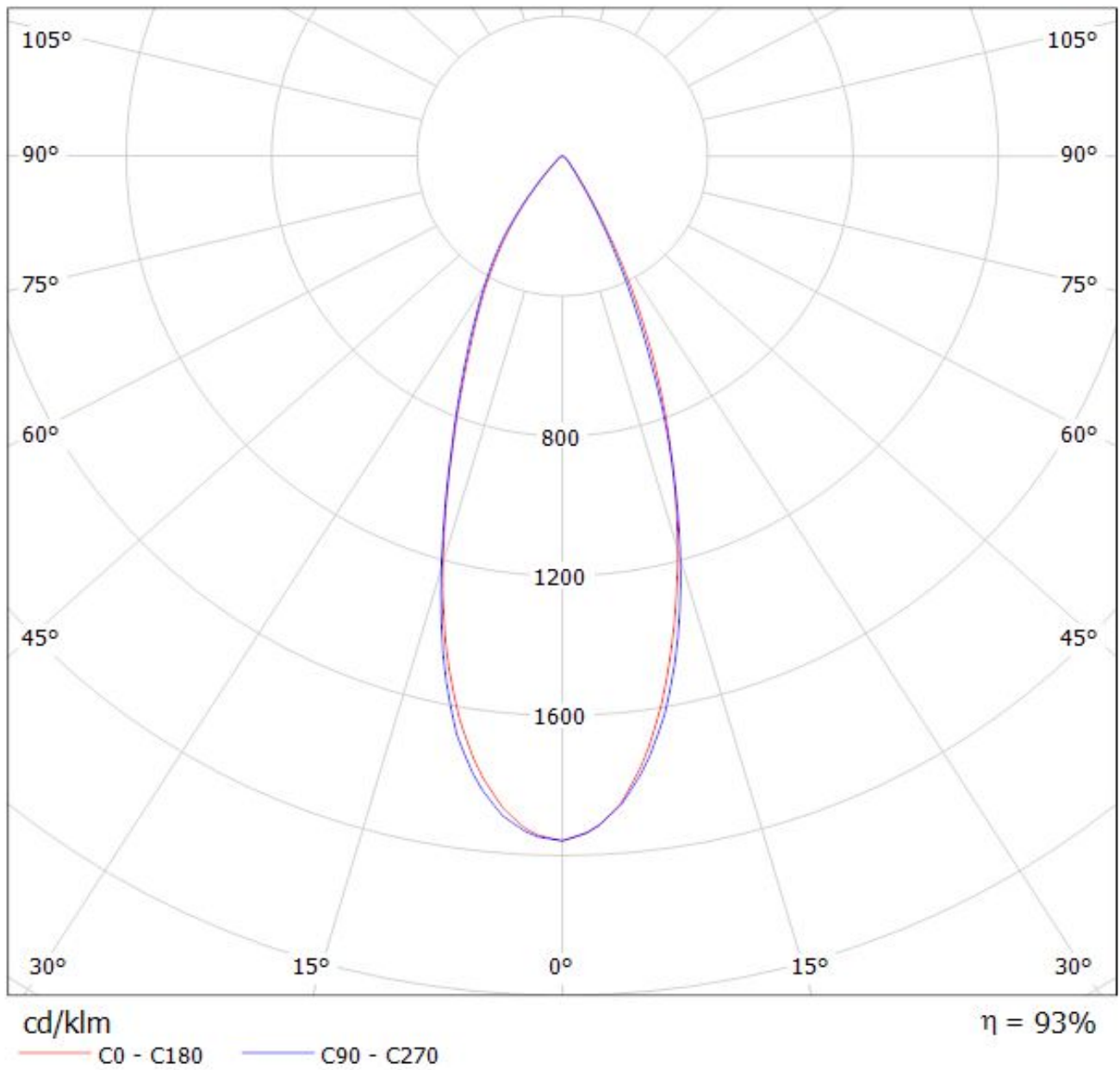


cd/klm

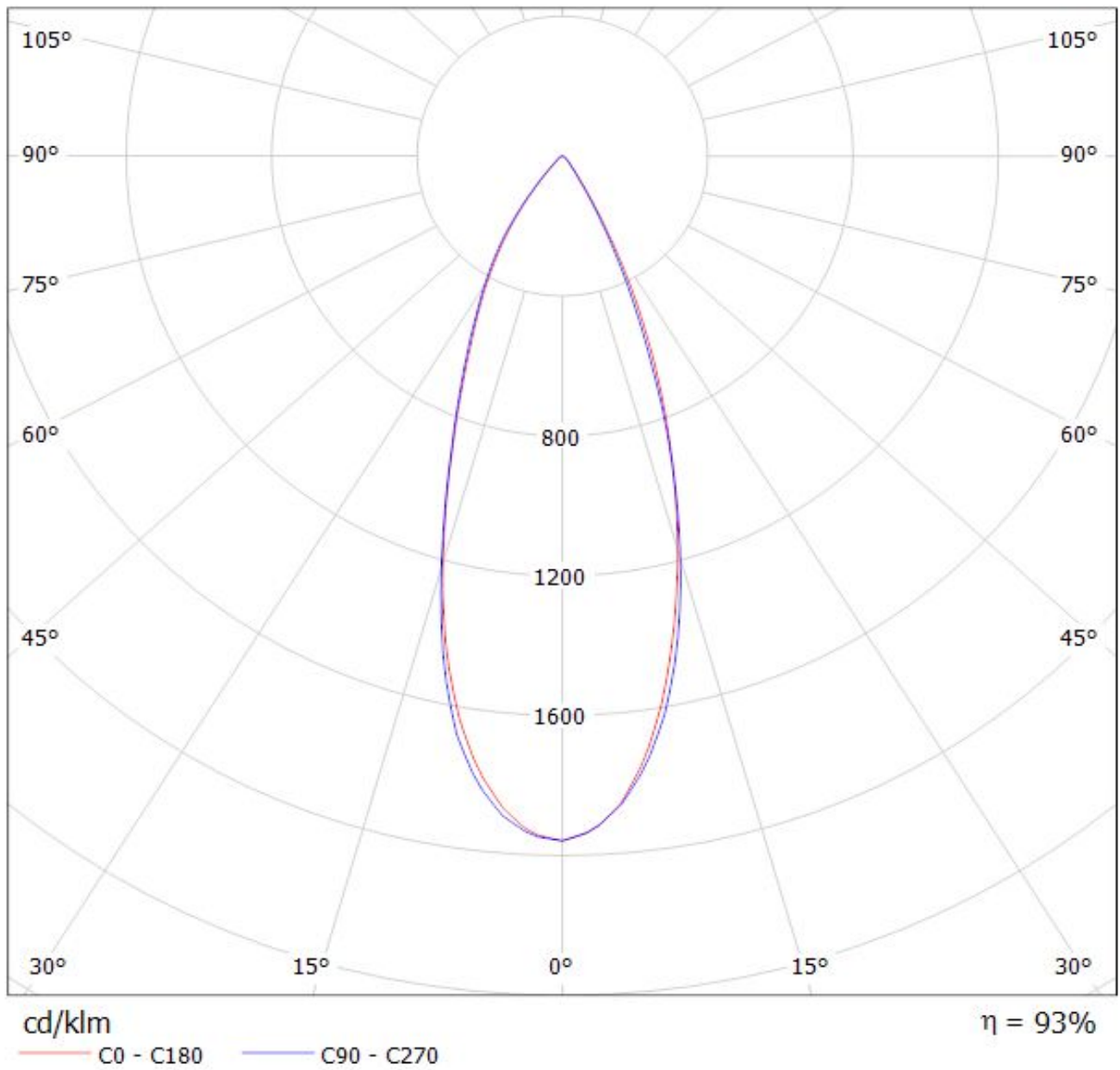
$\eta = 83\%$

— C0 - C180 — C90 - C270

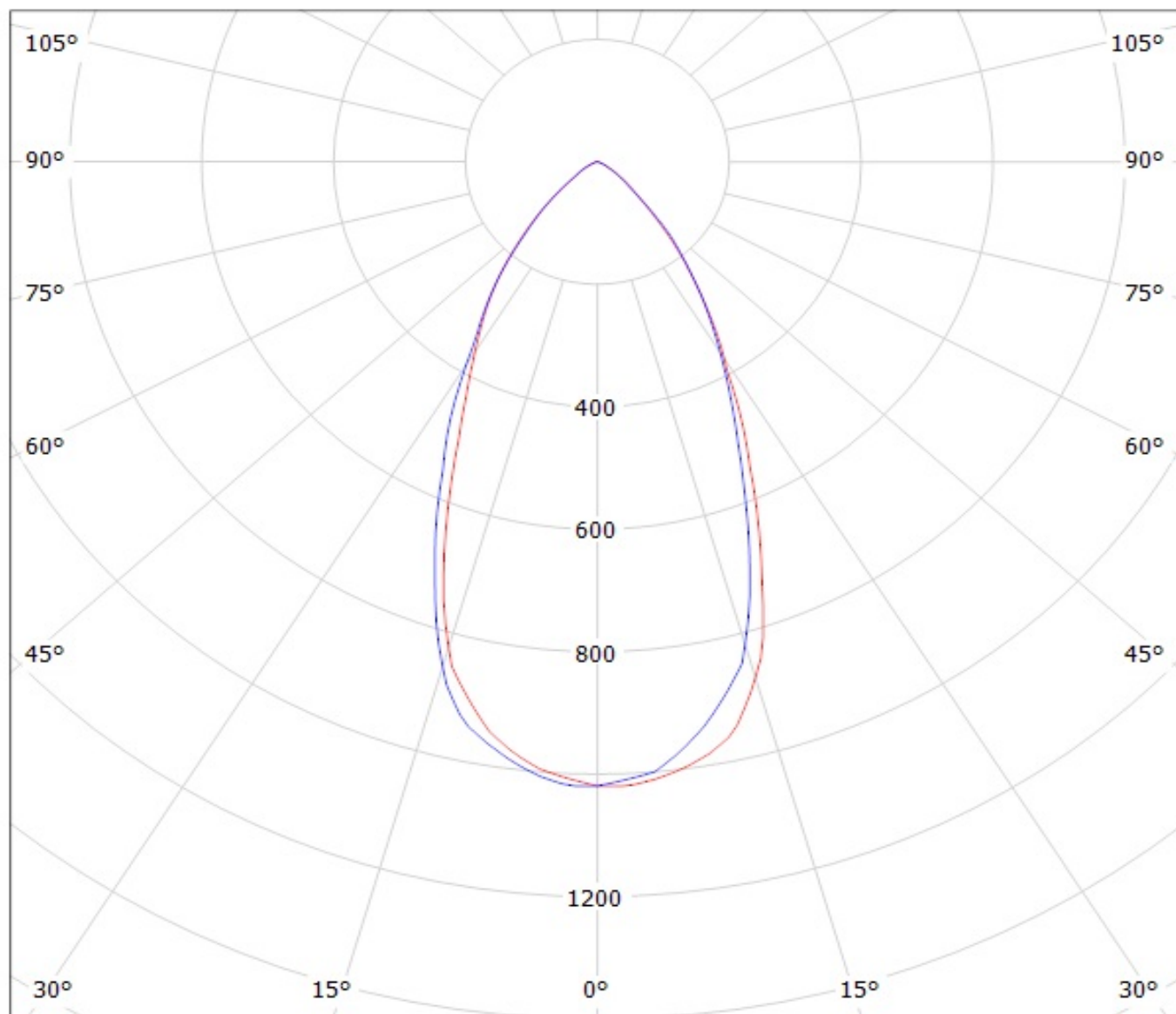
Luminaire: LEDiL Oy FP10996&FP11076_LISA2-W_(XP-E) Eff.93.1%
Lamps: 1 x Cree XP-E (69.4929lm@250mA)



Luminaire: LEDiL Oy FP10996&FP11076_LISA2-W_(XP-E) Eff.93.1%
Lamps: 1 x Cree XP-E (69.4929lm@250mA)



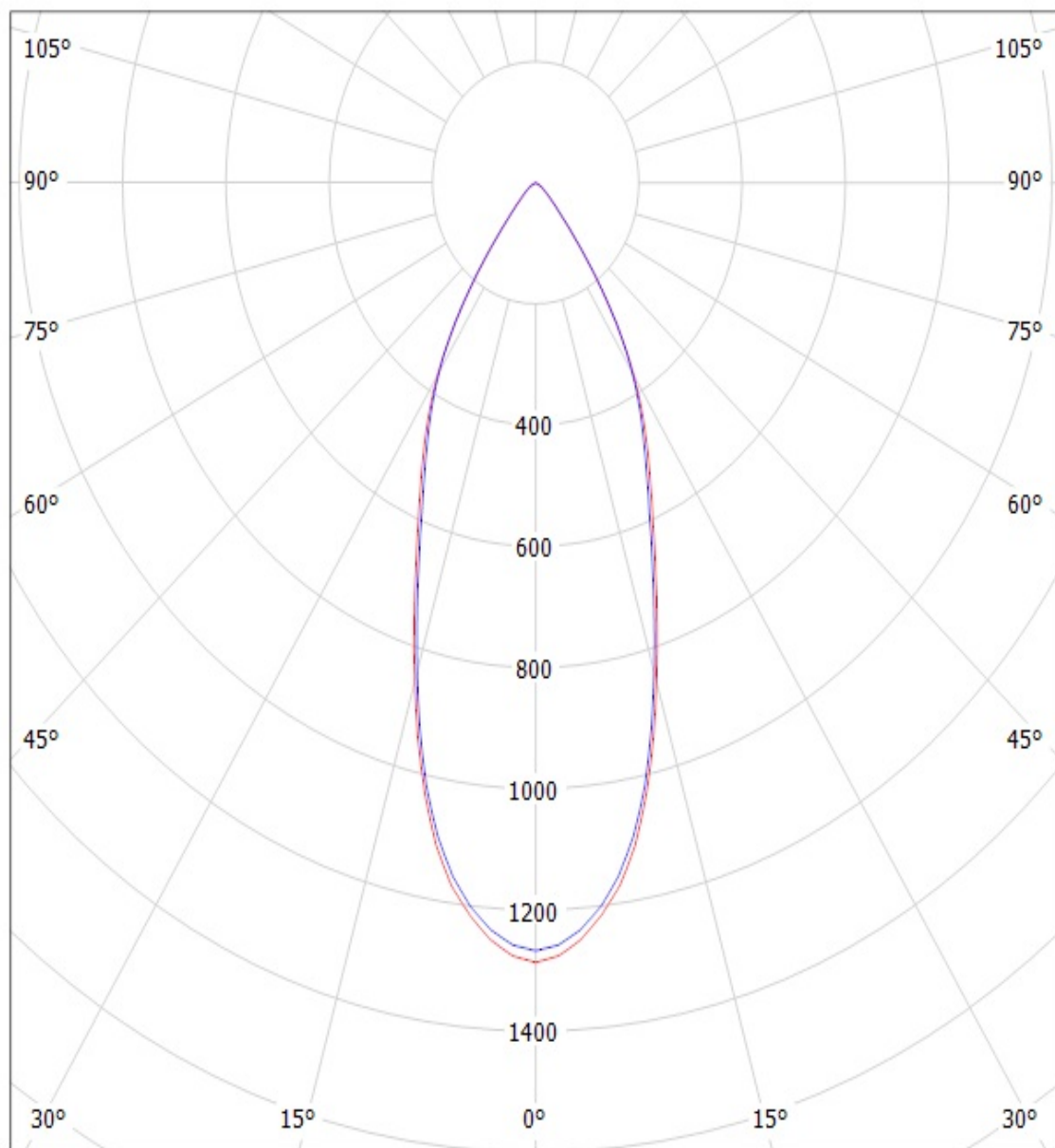
Luminaire: Ledil Oy FP10997_LISA2-WW-PIN (Cree XP-E 73lm @ 250mA) Efficiency=91%
Lamps: 1 x Cree XP-E 73lm @ 250mA



cd/klm

— C0 - C180 — C90 - C270

Luminaire: Ledil Oy FA10997_Lisa2-WW-Pin/FP11077_LISA2-WW-CLIP-XP FA10997_Lisa2-WW-Pin/FP11077_LISA2-WW-CLIP-XP
Lamps: 1 x cree xp-e white



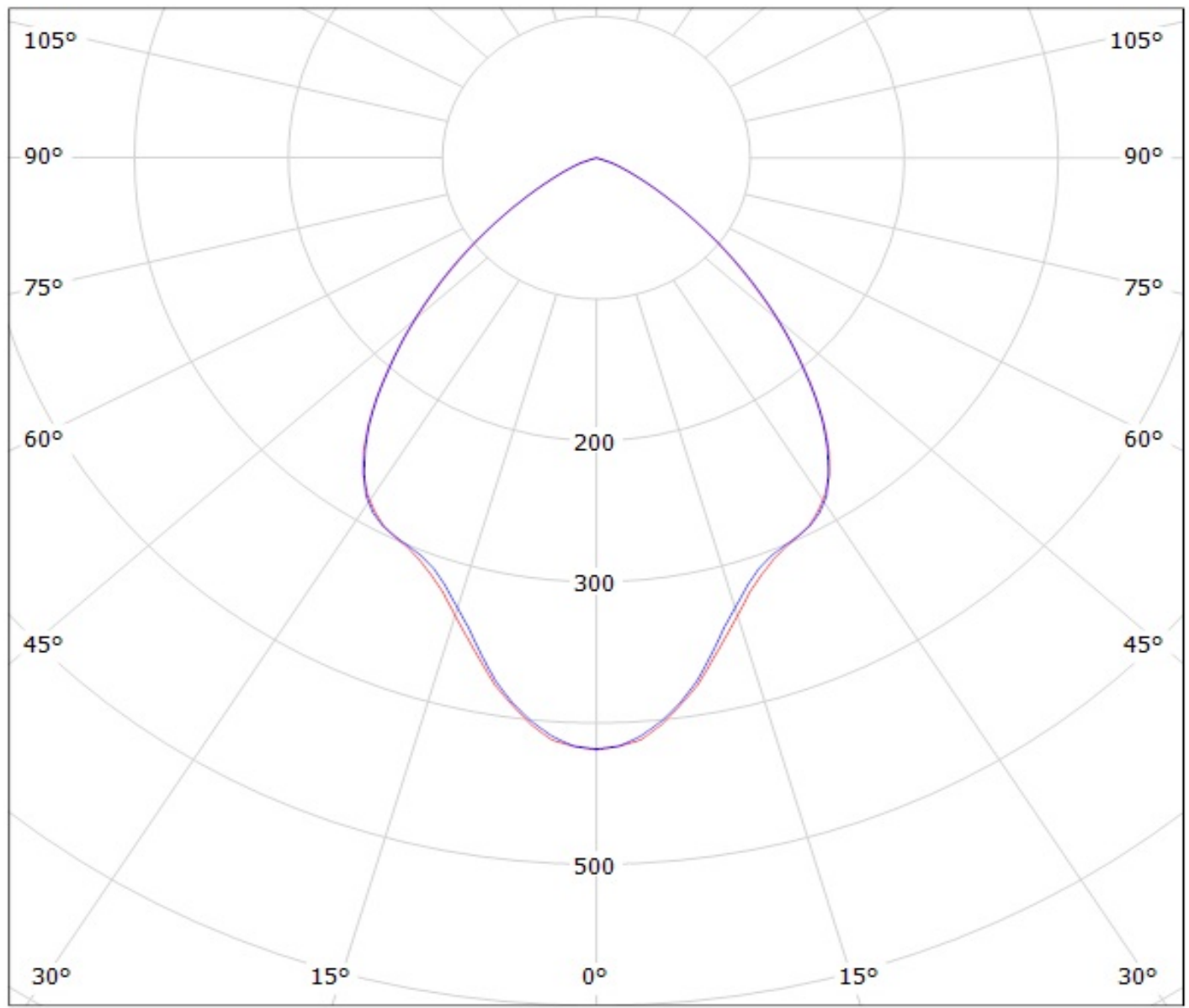
cd/klm

— C0 - C180

— C90 - C270

Luminaire: Ledil Oy Lisa2-WWW-XP Lisa2-WWW-XP

Lamps: 1 x cree xp-e white



cd/klm

— C0 - C180

— C90 - C270