PRODUCT DATASHEET
High Bay series
last update 21/4/2016

Product number **C13489_HB-5X1-WW**

Family	High Bay	FWHM	(simulated) 80
Type	Lens array	Efficiency	-
LED	XM-L	cd/lm	-
Color	Clear	Gerber File	Available
Diameter	123 + 25 mm		
Height	9.3 mm		
Style	Rectang		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue", "screw", "pin"]		
Status	Production ready		

Product number **CS14130_HB-IP-2X6-W**

Family	High Bay	FWHM	(simulated) 57
Type	Assembly	Efficiency	(simulated) 93 %
LED	XM-L	cd/lm	-
Color	White	Gerber File	Available
Diameter	173 + 71.4 mm		
Height	11.4 mm		
Style	Rectang		
Optic Material	PMMA		
Holder Material	-		
Fastening	["screw", "pin"]		
Status	Production ready		

Wide square shaped light distribution. Developed especially for high bay applications.

Product number **C14541_HB-2X2-RS**

Family	High Bay	FWHM	(simulated) 19
Type	Lens array	Efficiency	(simulated) 92 %
LED	XM-L	cd/lm	(simulated) 5.620
Color	Clear	Gerber File	Available
Diameter	50 x 50 mm		
Height	10 mm		
Style	Rectang		
Optic Material	PMMA		
Holder Material	-		
Fastening	["screw"]		
Status	Production ready		

Product number **C14605_HB-2X2-RW**

Family	High Bay	FWHM	(simulated) 54
Type	Lens array	Efficiency	(simulated) 92 %
LED	XM-L	cd/lm	(simulated) 1.180
Color	Clear	Gerber File	Available
Diameter	50x50 mm		
Height	8.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	-		
Fastening	["pin", "screw"]		
Status	Production ready		

Wide light pattern between C13233_HB-2X2-M and C13232_HB-2X2-WW beam angles.

Ledil Oy
Salorankatu 10
24240 SALO
Finland

http://www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

PRODUCT DATASHEET
High Bay series
last update 21/4/2016

Product number **CS14895_HB-IP-2X6-RS**

Family	High Bay	FWHM	21 degrees
Type	Assembly	Efficiency	94 %
LED	XM-L	cd/lm	5.100
Color	Clear	Gerber File	Available
Diameter	173 + 71.4 mm		
Height	11.39 mm		
Style	Rectang		
Optic Material	PMMA		
Holder Material	-		
Fastening	["pin", "screw"]		
Status	Production ready		

Product number **CS14891_HB-IP-2X6-M**

Family	High Bay	FWHM	27 degrees
Type	Assembly	Efficiency	94 %
LED	XM-L	cd/lm	3.100
Color	Clear	Gerber File	Available
Diameter	173 + 71.4 mm		
Height	11.39 mm		
Style	Rectang		
Optic Material	PMMA		
Holder Material	-		
Fastening	["screw", "pin"]		
Status	Production ready		

Product number **C13749_HB-2X2-O**

Family	High Bay	FWHM	29+109 degrees
Type	Lens	Efficiency	94 %
LED	XM-L	cd/lm	0.980
Color	Clear	Gerber File	Available
Diameter	50 + 50 mm		
Height	10.6 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue", "screw", "pin"]		
Status	Production ready		

Developed especially for warehouse aisle lighting application, aisle width 3-4 meters.

Product number **C14607_HB-2X2-M**

Family	High Bay	FWHM	32 degrees
Type	Lens array	Efficiency	93 %
LED	XM-L	cd/lm	2.040
Color	Clear	Gerber File	Available
Diameter	50x50 mm		
Height	8.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	-		
Fastening	["pin", "screw"]		
Status	Production ready		

Ledil Oy
Salorankatu 10
24240 SALO
Finland

http://www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

PRODUCT DATASHEET
High Bay series
last update 21/4/2016

Product number **CS14597_HB-IP-2X6-O**

Family	High Bay	FWHM	36+110 degrees
Type	Assembly	Efficiency	91 %
LED	XM-L	cd/lm	0.610
Color	Clear	Gerber File	Available
Diameter	173x71.4 mm		
Height	12.2 mm		
Style	Rectang		
Optic Material	PMMA		
Holder Material	-		
Fastening	-		
Status	Production ready		

Product number **C13490_HB-5X1-FLAT-W**

Family	High Bay	FWHM	54 degrees
Type	Lens array	Efficiency	91 %
LED	XM-L	cd/lm	-
Color	Clear	Gerber File	Available
Diameter	123 + 25 mm		
Height	8.5 mm		
Style	Rectang		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue", "screw", "pin"]		
Status	Production ready		

Otherwise same as C12345_HB-5X1-W but bottom structure is flat allowing more freedom in PCB design.

Product number **C12345_HB-5X1-W**

Family	High Bay	FWHM	56 degrees
Type	Lens array	Efficiency	89 %
LED	XM-L	cd/lm	0.900
Color	Clear	Gerber File	Available
Diameter	123 + 25 mm		
Height	9 mm		
Style	Rectang		
Optic Material	PMMA		
Holder Material	-		
Fastening	["pin", "glue", "screw"]		
Status	Production ready		

Product number **C12361_HB-2X2-W**

Family	High Bay	FWHM	57 degrees
Type	Lens array	Efficiency	89 %
LED	XM-L	cd/lm	0.860
Color	Clear	Gerber File	Available
Diameter	50x50 mm		
Height	8.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	-		
Fastening	["glue", "pin", "screw"]		
Status	Production ready		

Ledil Oy
Salorankatu 10
24240 SALO
Finland

http://www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

PRODUCT DATASHEET
High Bay series
last update 21/4/2016

Product number	**C14606_HB-2X2-WW**

Family	High Bay	FWHM	66 degrees
Type	Lens array	Efficiency	93 %
LED	XM-L	cd/lm	0.760
Color	Clear	Gerber File	Available
Diameter	50x50 mm		
Height	8.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	-		
Fastening	["pin", "screw"]		
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.

Ledil Oy
Salorankatu 10
24240 SALO
Finland

http://www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

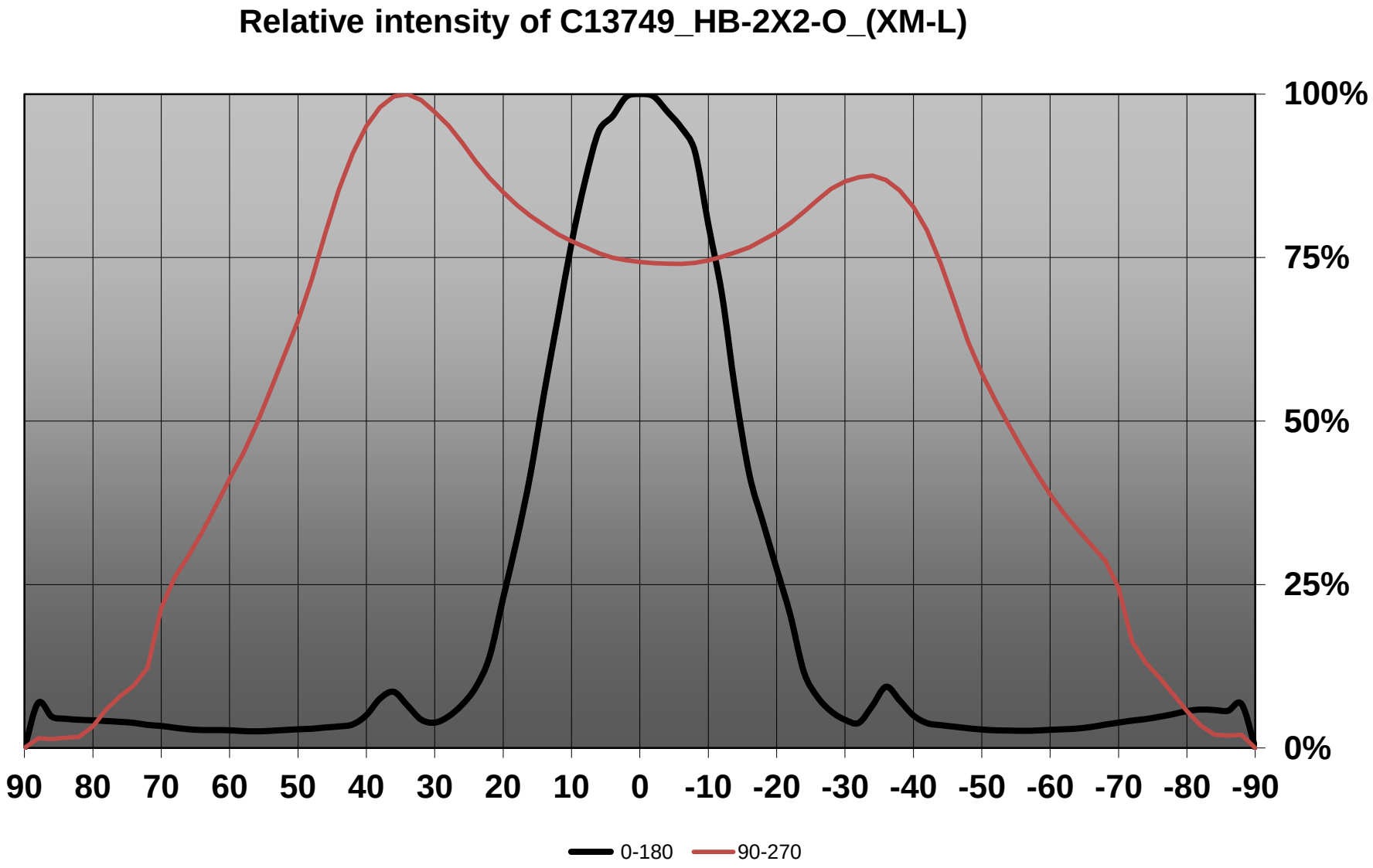
GENERAL INFORMATION

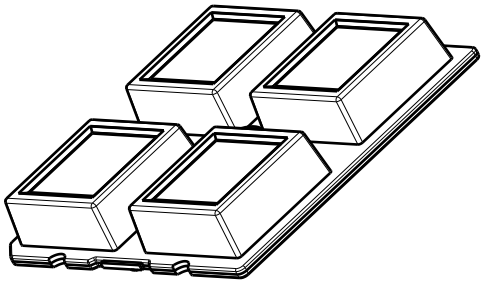
- Product series especially designed & optimized for XM-L series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PMMA with high UV and temperature resistance. Allows use of high current and temperature conditions.

Please find more information about used material from below:
http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%208N%20UL94_Yellow%20Card.pdf
http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%208N%20PLEXIGLAS-Datasheet.pdf

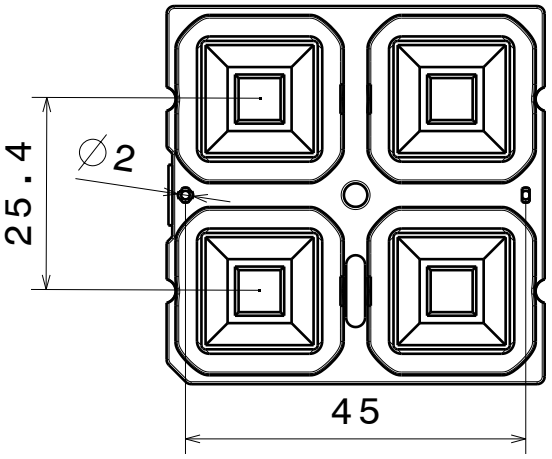
Ledil Oy
Salorankatu 10
24240 SALO
Finland

http://www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

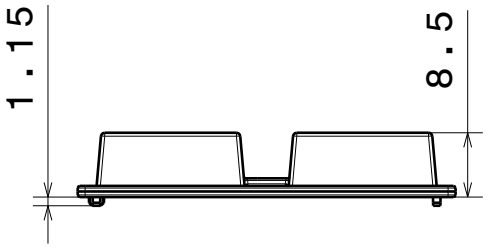

Relative intensity of C13749_HB-2X2-O_(XM-L)
100%
75%
50%
25%
0%
90 80 70 60 50 40 30 20 10 0 -10 -20 -30 -40 -50 -60 -70 -80 -90
0-180
90-270



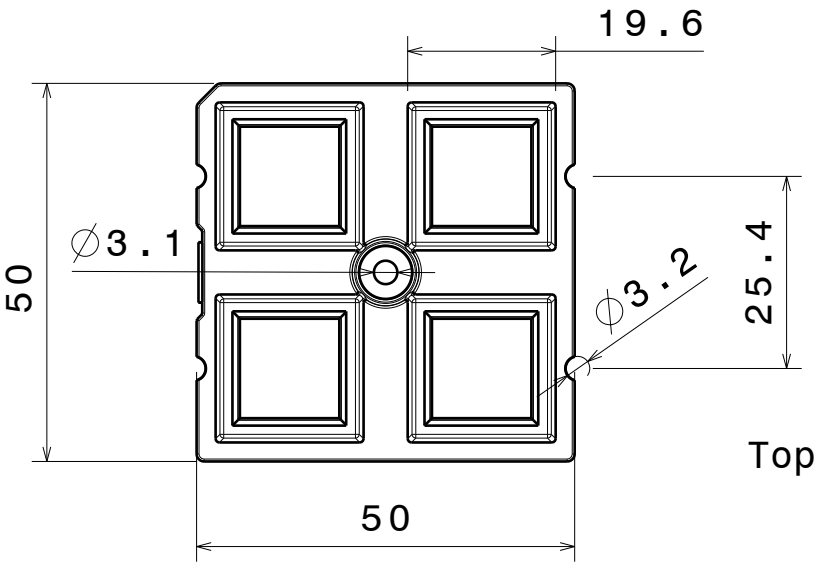
Isometric view



Bottom view



Front view



Top view

MATERIALS
Lens: PMMA

M3 screw
recommended for
fastening

Fastening also
with glue

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

THIRD ANGLE PROJECTION:

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

Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

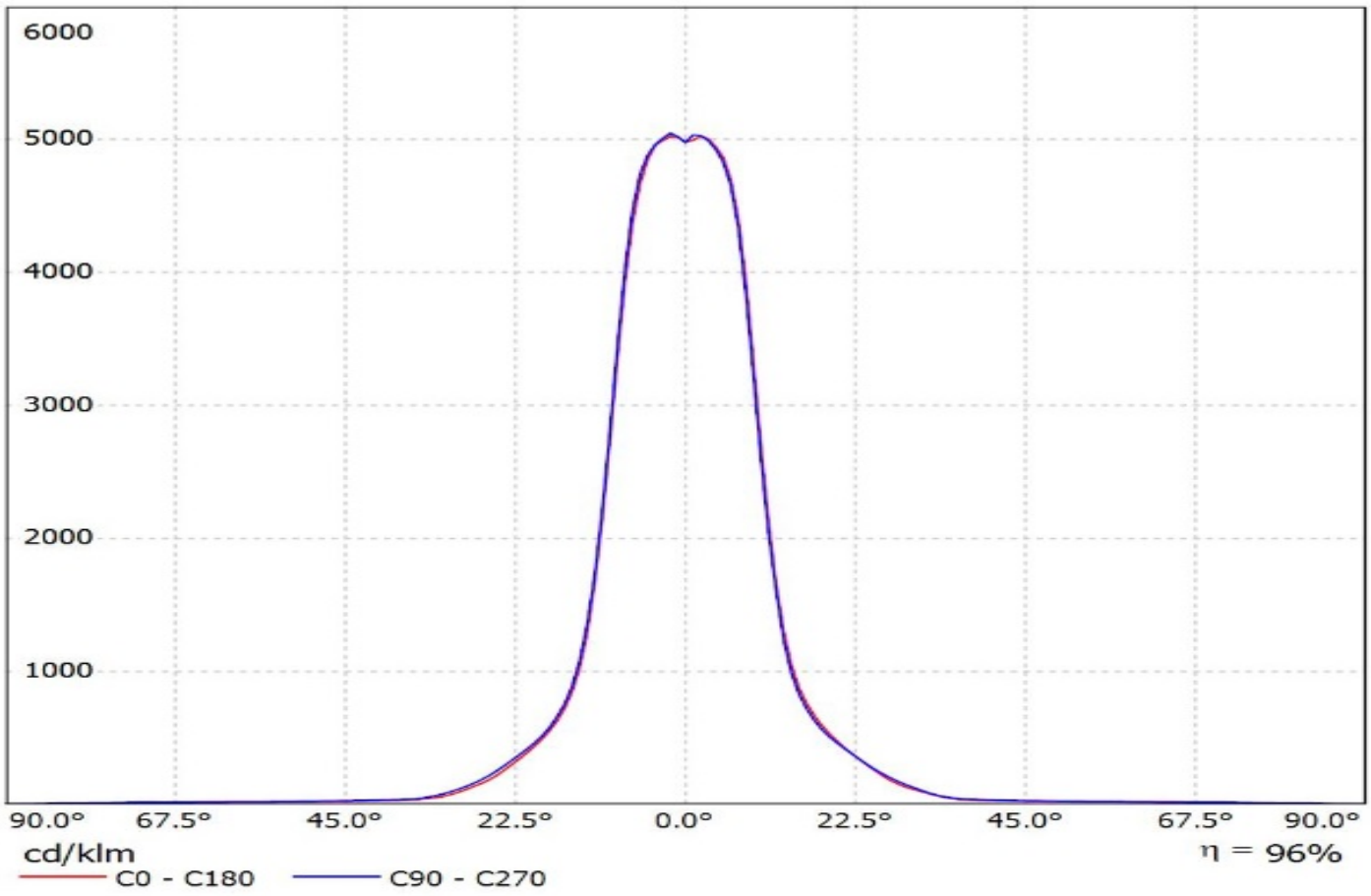
DRAWING TITLE

Datasheet HB-2x2 Lens module

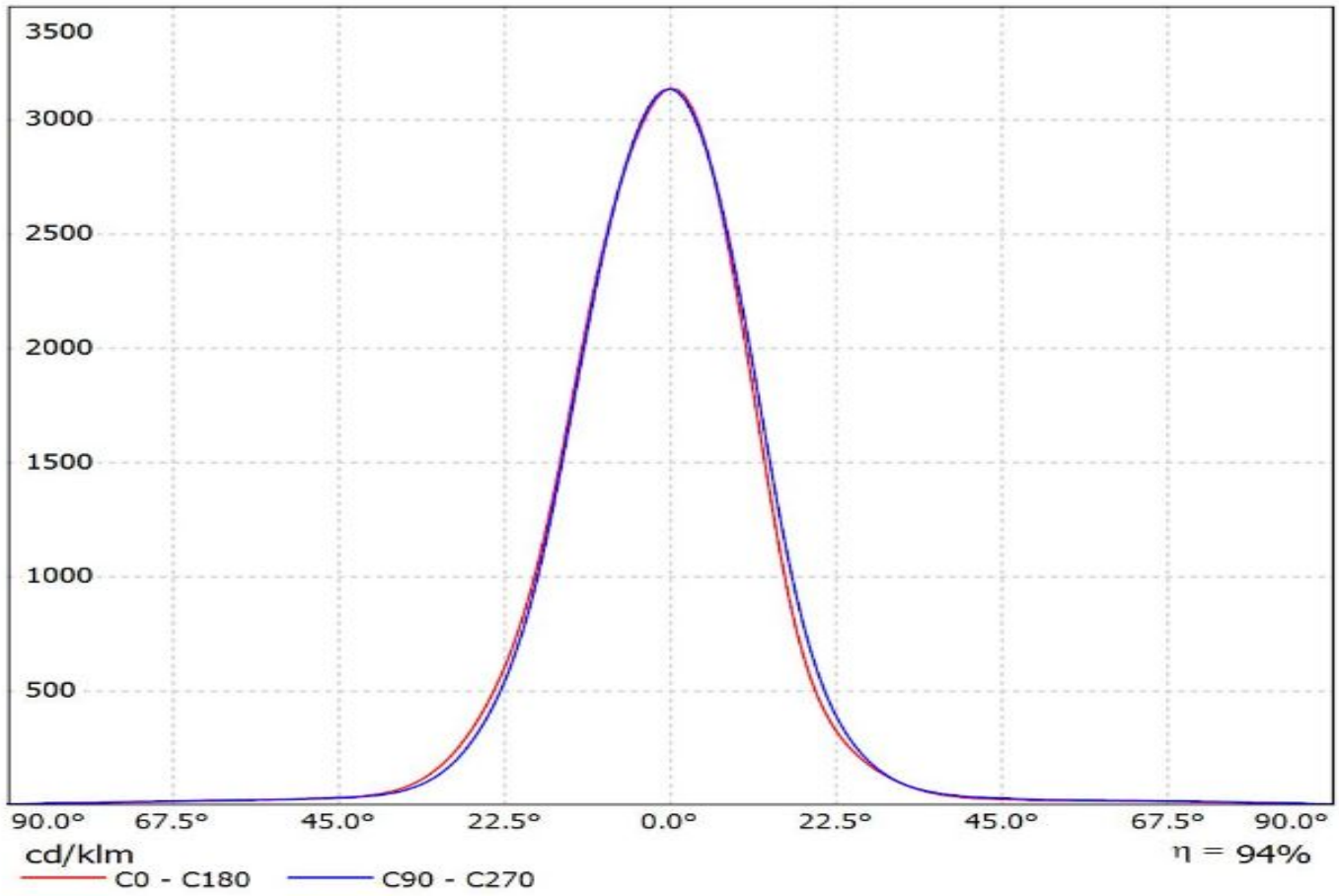
SIZE	PART NUMBER
A4	C12361

SCALE	WEIGHT		SHEET
1:1	-		1/1

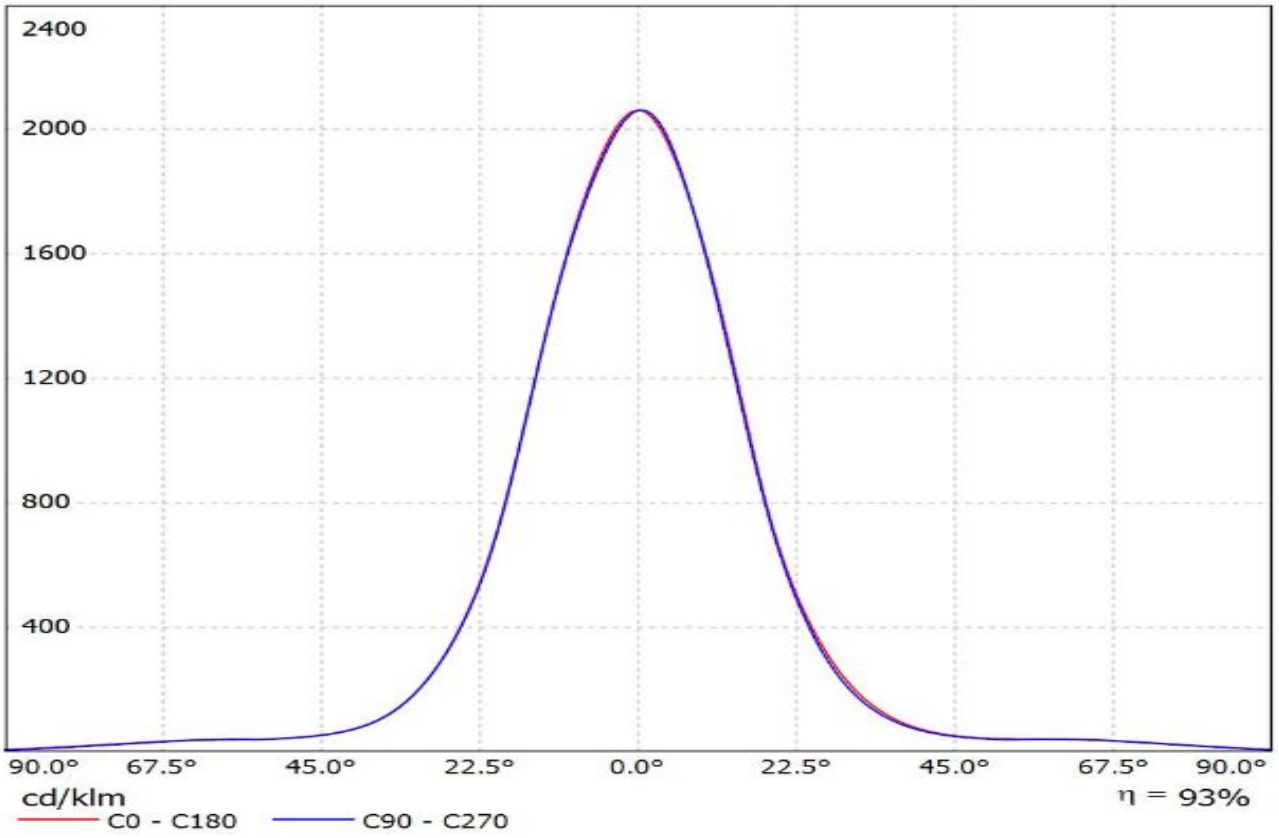
Luminaire: LEDiL Oy CS14895_HB-IP-2X6-RS_(XM-L)
Lamps: 1 x Cree_XM-L_(XMLAWT-00-0000-000LT20E7)_980.828lm@250mA_P=8.1232W_I=0.250A



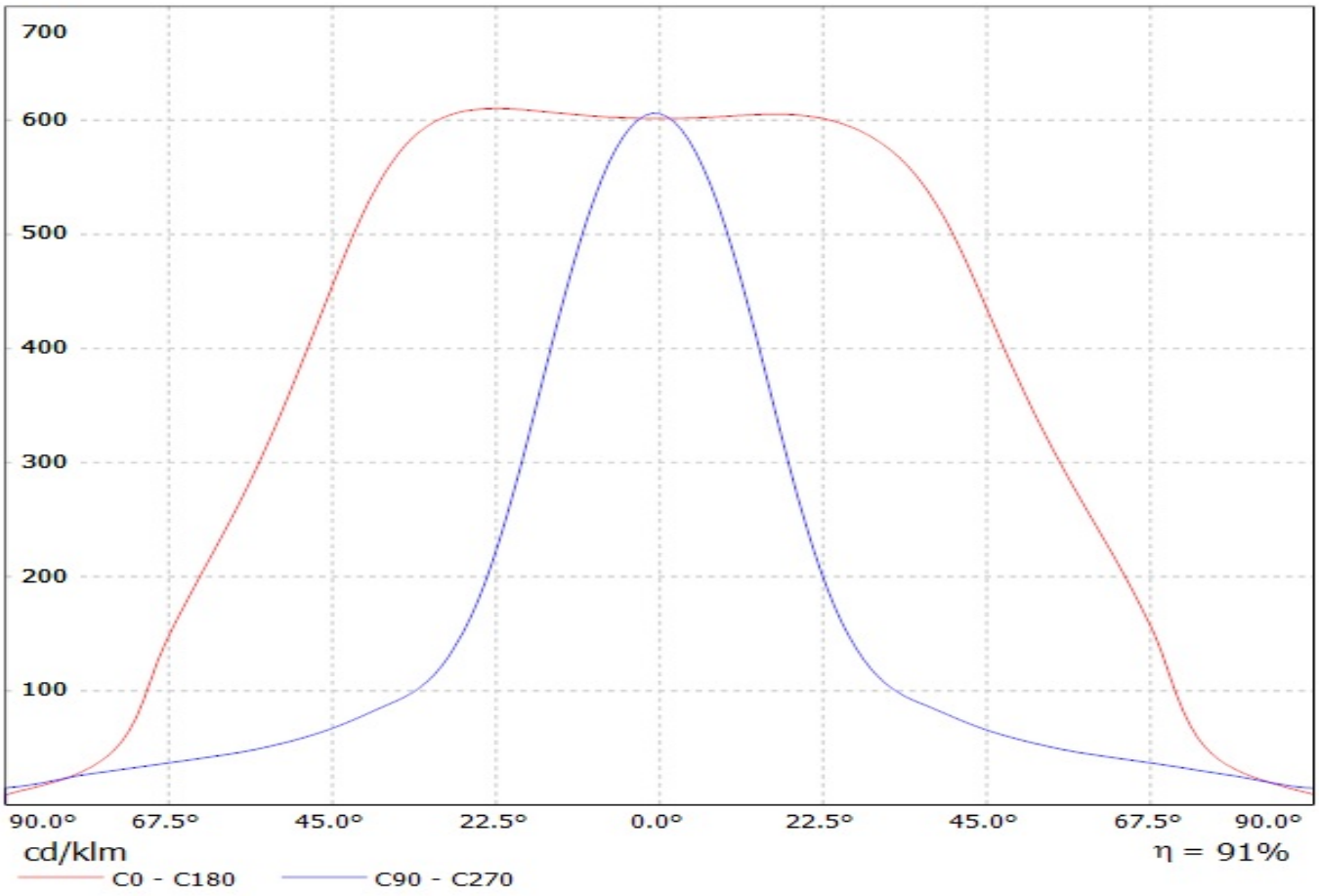
Luminaire: LEDiL Oy CS14891_HB-IP-2X6-M_(XM-L)_Cav1
Lamps: 1 x Cree_XM-L_(XMLAWT-00-0000-000LT2OE7)_985.421lm@250mA_P=8.11375W_I=0.2499A



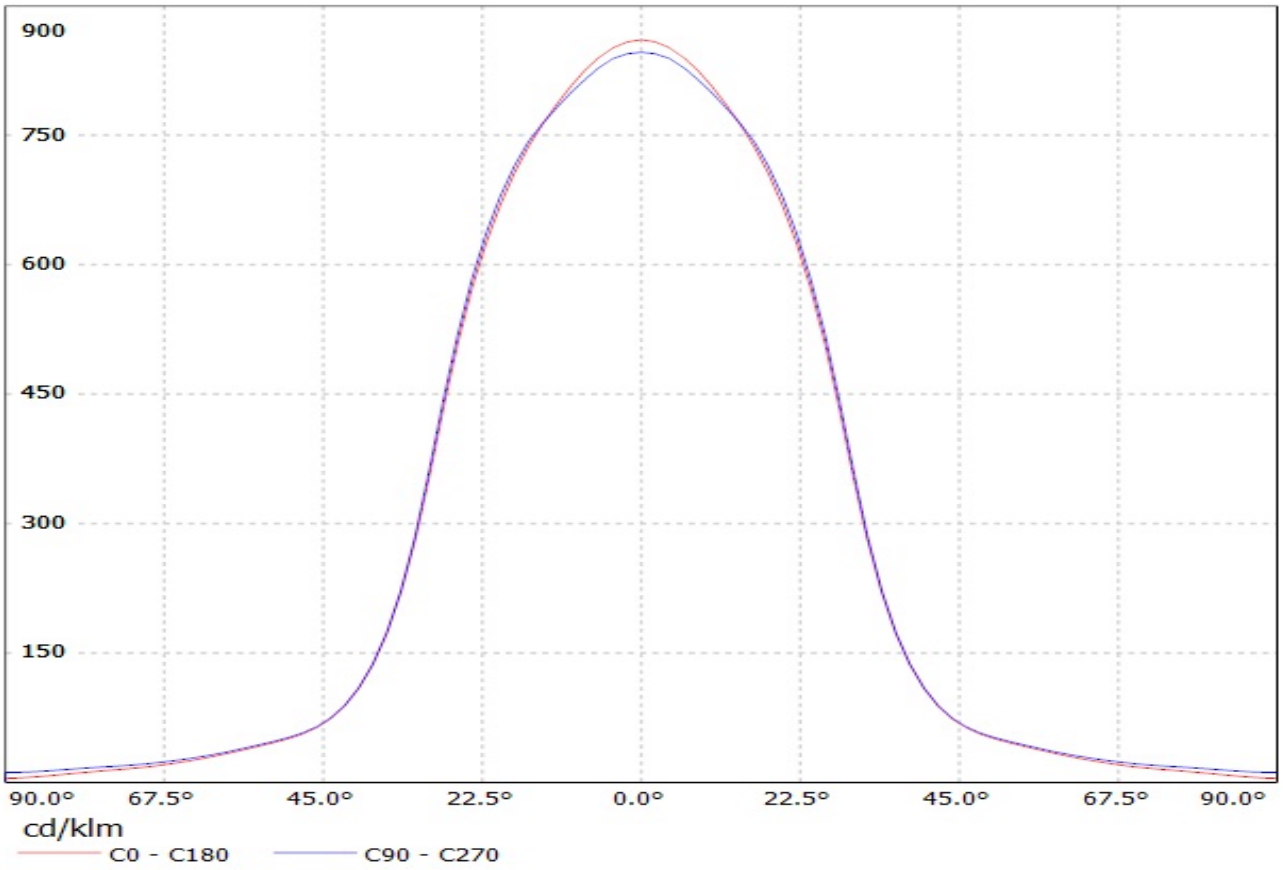
Luminaire: LEDiL Oy C14607_HB-2X2-M_(XM-L)
Lamps: 1 x Cree_XM-L_2x2_(XMLAWT-00-0000-000LT20E7)_334.631lm@250mA_P=2.75215W_I=0.2499A



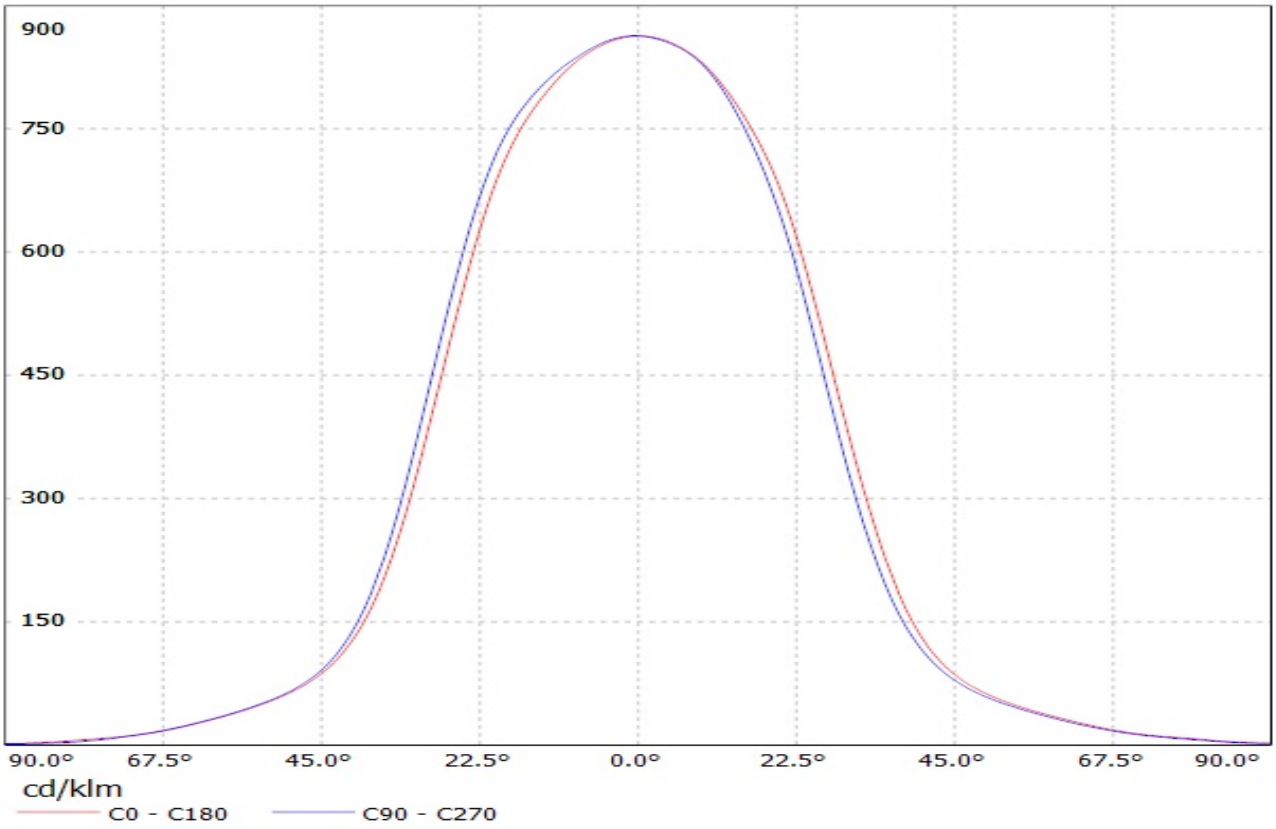
Luminaire: LEDiL Oy CS14597_HB-IP-2X6-O_(XM-L)
Lamps: 1 x Cree_XM_L_2x6_(XMLAWT-00-0000-000LT2OE7)_995.915lm@250mA_P=8.16796W_I=0.2498A



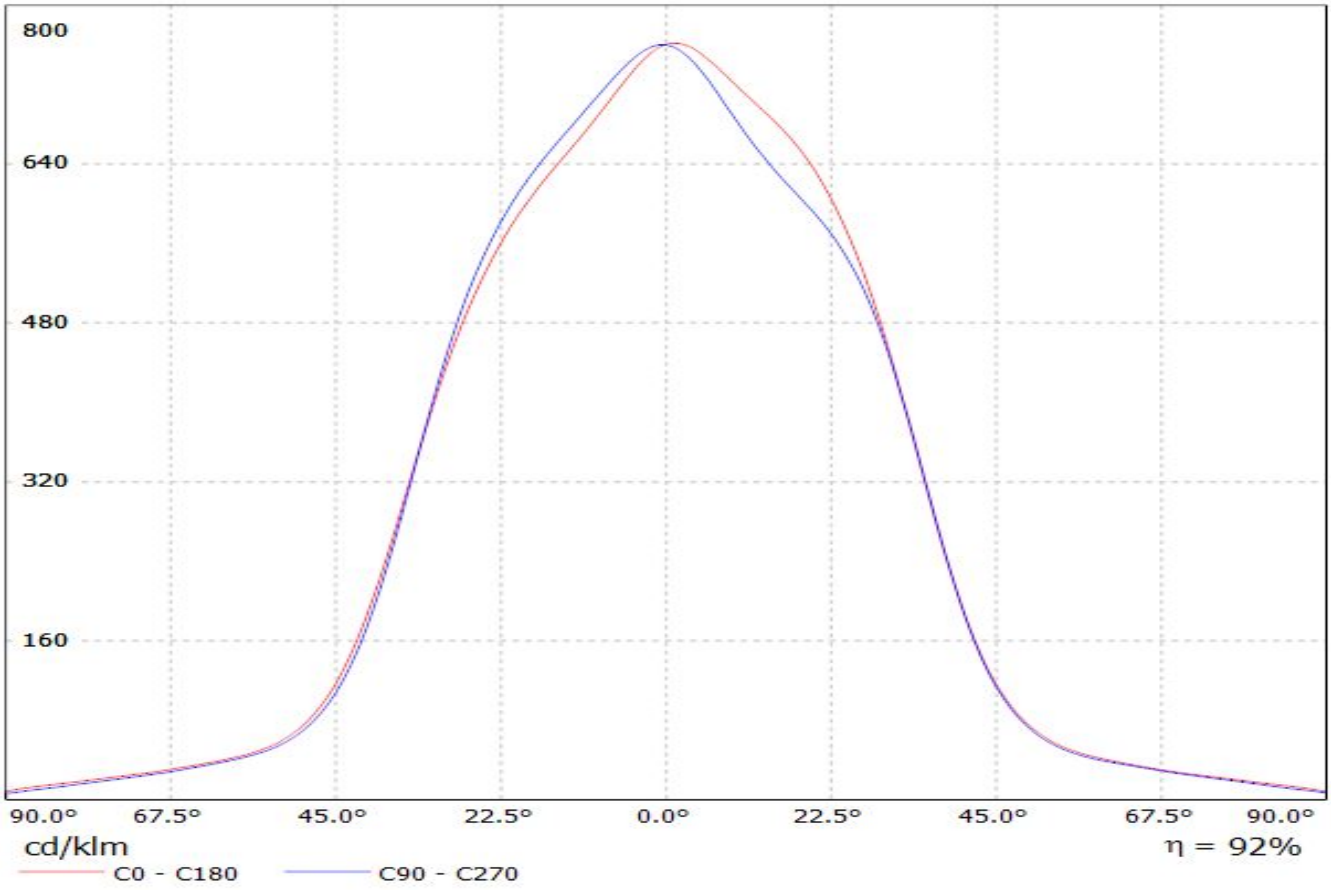
Luminaire: Ledil Oy C12345-HB-5x1 C12345-HB-5x1 LOR=89%
Lamps: 1 x Cree XM-L 5x1 module 473lm @ 250mA



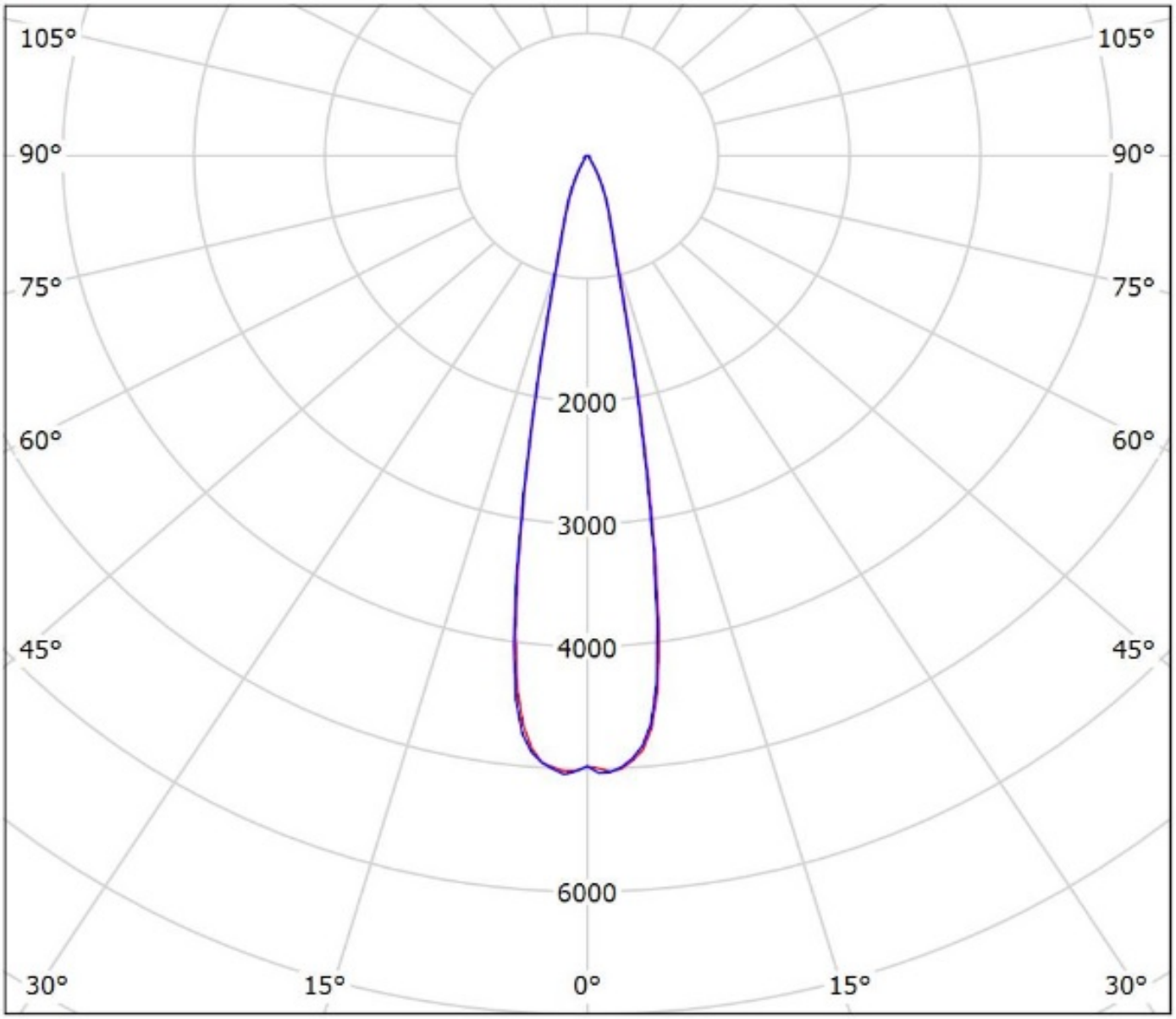
Luminaire: LEDIL OY C12361_HB-2X2 (XM-L) Efficiency=89%
Lamps: 1 x Cree XM-L (395lm @ 250mA)



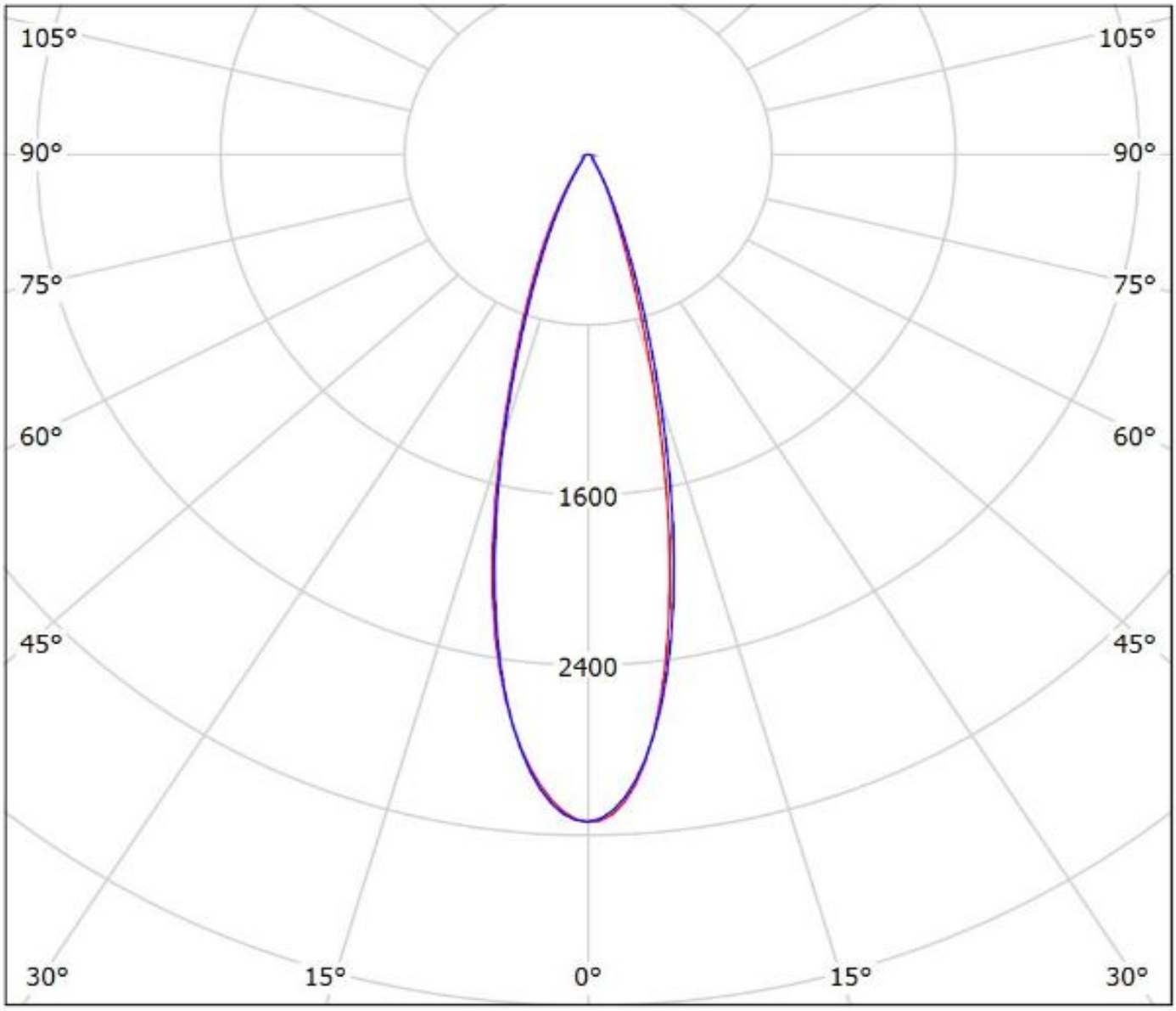
Luminaire: LEDiL Oy C14606_HB-2X2-WW_(XM-L)
Lamps: 1 x Cree_XM-L_2x2_(XMLAWT-00-0000-000LT20E7)_338.257lm@250mA_P=2.75205W_I=0.2498A



Luminaire: LEDiL Oy CS14895_HB-IP-2X6-RS_(XM-L)
Lamps: 1 x Cree_XM-L_(XMLAWT-00-0000-000LT20E7)_980.828lm@250mA_P=8.1232W_I=0.250A



Luminaire: LEDiL Oy CS14891_HB-IP-2X6-M_(XM-L)_Cav1
Lamps: 1 x Cree_XM-L_(XMLAWT-00-0000-000LT2OE7)_985.421lm@250mA_P=8.11375W_I=0.2499A

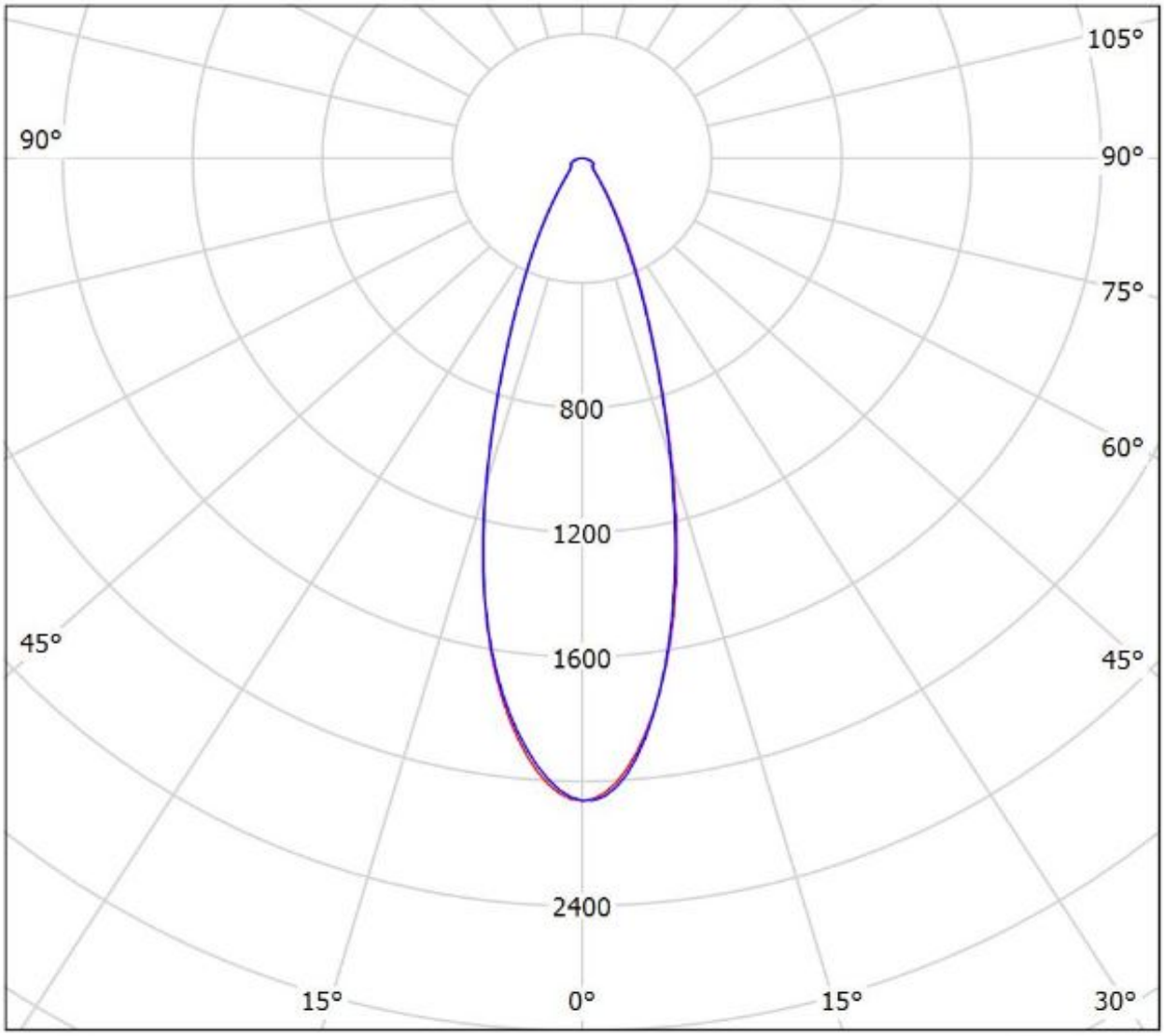


cd/klm

η = 94%

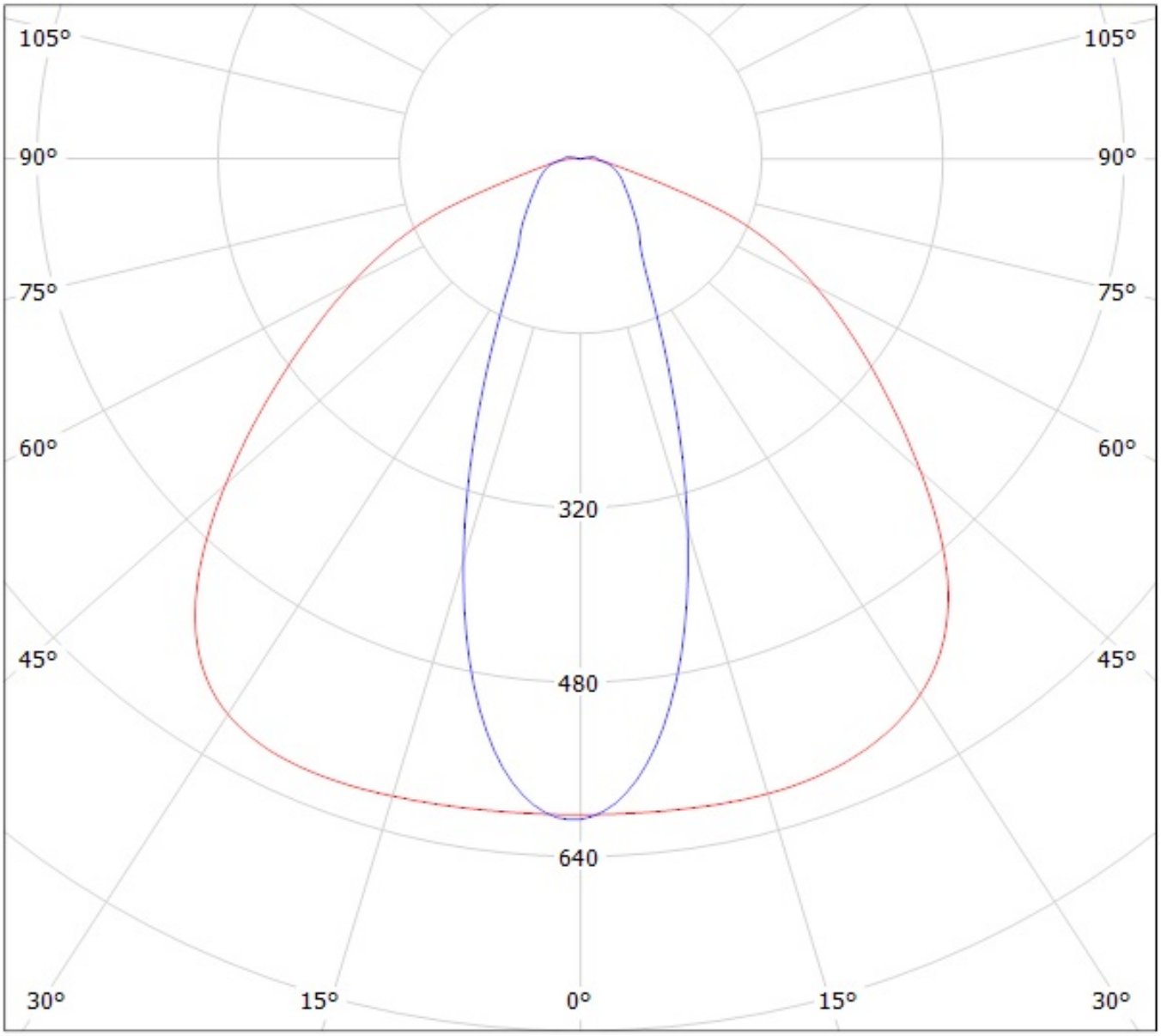
C0 - C180 C90 - C270

Luminaire: LEDiL Oy C14607_HB-2X2-M_(XM-L)
Lamps: 1 x Cree_XM-L_2x2_(XMLAWT-00-0000-000LT20E7)_334.631lm@250mA_P=2.75215W_I=0.2499A

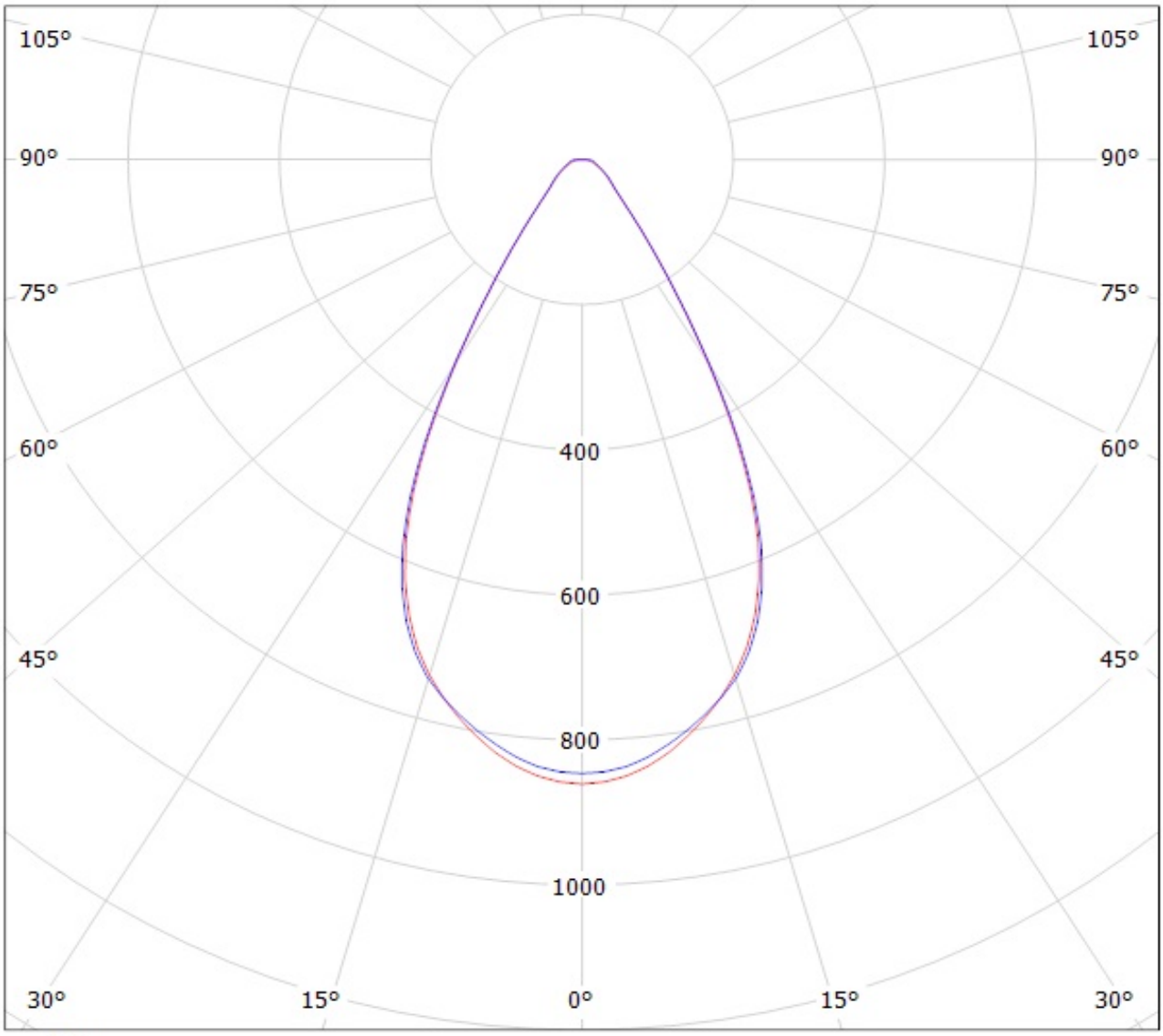


cd/klm
η = 93%
C0 - C180
C90 - C270

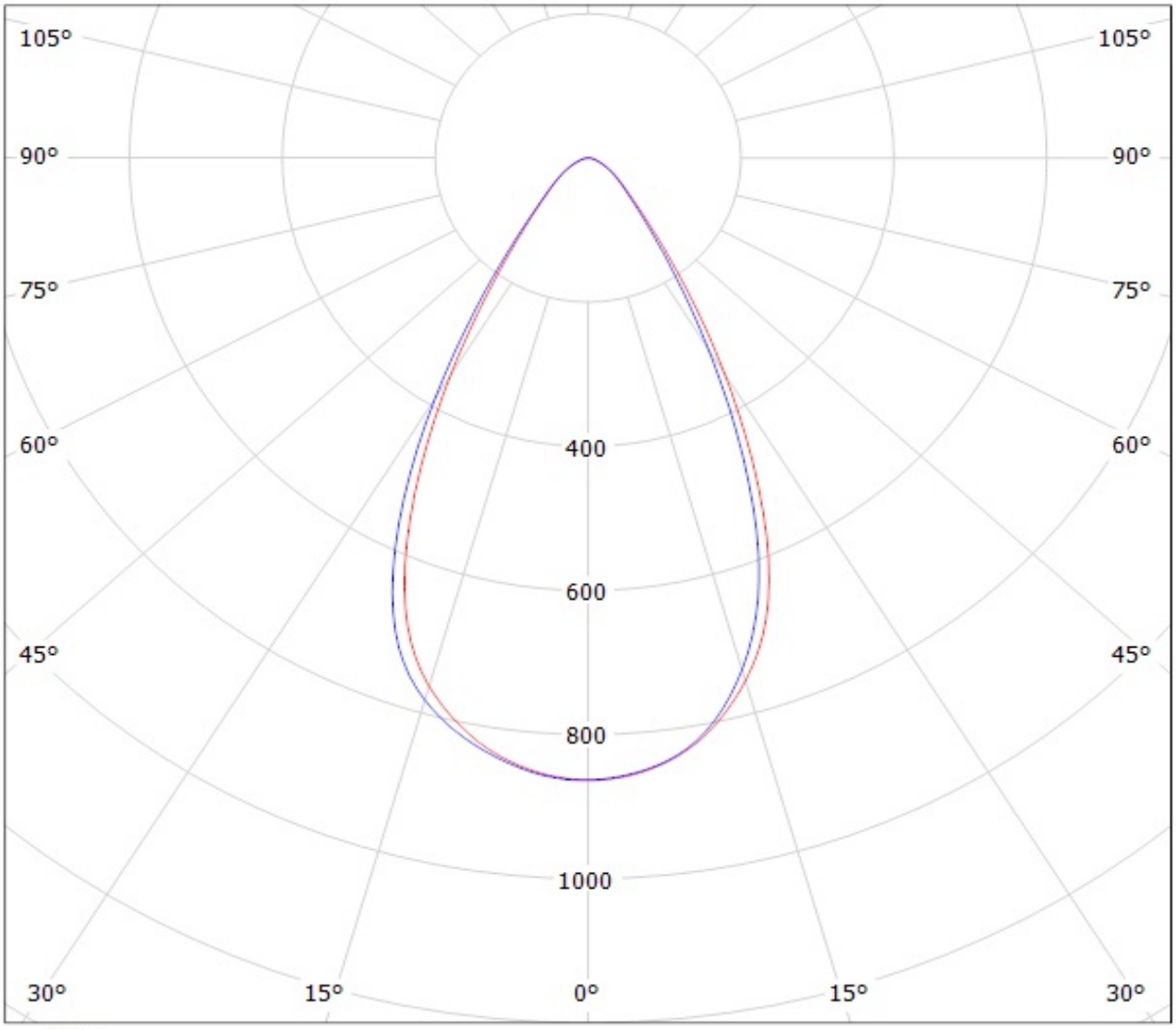
Luminaire: LEDiL Oy CS14597_HB-IP-2X6-O_(XM-L)
Lamps: 1 x Cree_XM_L_2x6_(XMLAWT-00-0000-000LT2OE7)_995.915lm@250mA_P=8.16796W_I=0.2498A



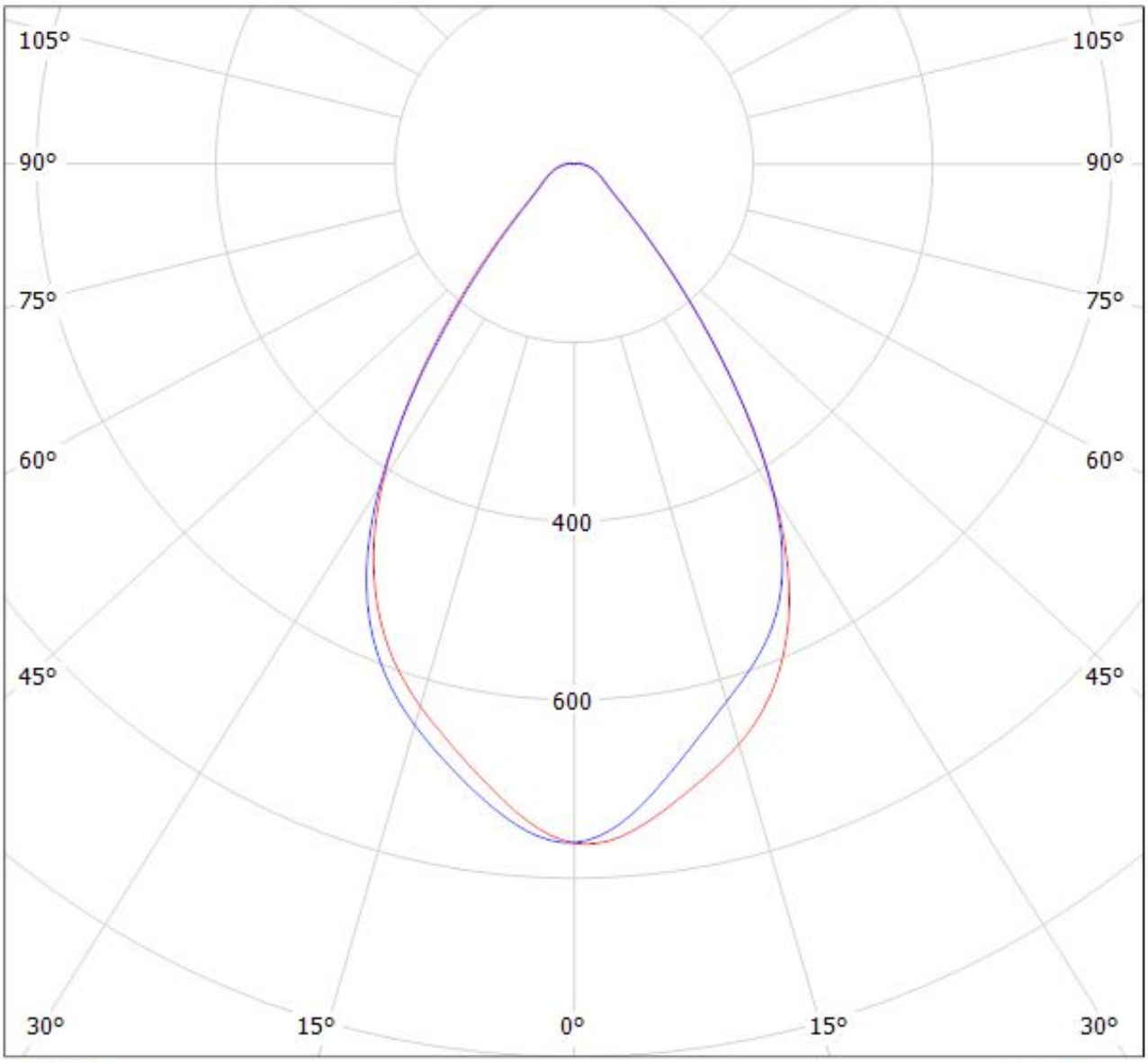
Luminaire: Ledil Oy C12345-HB-5x1 C12345-HB-5x1 LOR=89%
Lamps: 1 x Cree XM-L 5x1 module 473lm @ 250mA



Luminaire: LEDIL OY C12361_HB-2X2 (XM-L) Efficiency=89%
Lamps: 1 x Cree XM-L (395lm @ 250mA)



Luminaire: LEDiL Oy C14606_HB-2X2-WW_(XM-L)
Lamps: 1 x Cree_XM-L_2x2_(XMLAWT-00-0000-000LT20E7)_338.257lm@250mA_P=2.75205W_I=0.2498A



cd/klm

η = 92%

C0 - C180 C90 - C270