

DETAILS

Product Number	CA13156_EMERALD-A
Family	EMERALD
Type	Assembly
Color	clear
Diameter	21.6 mm
Height	7,3 mm
Style	round
Optic Material	PMMA
Holder Material	
Fastening	pin, tape
Status	ready
ROHS Compliant	Yes
Date Updated	6/05/2014

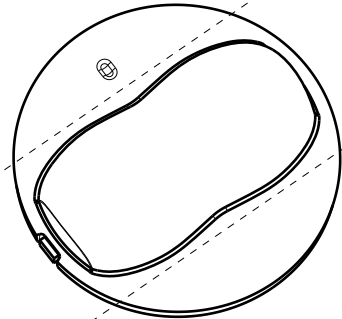


OPTICAL PROPERTIES

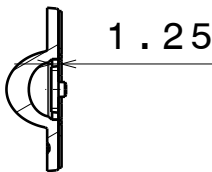
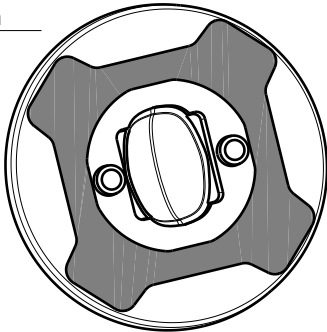
LED	Viewing Angle	Light Beam	Efficiency	cd/lm	connector
Z5	TBA degrees		89 %	(simulated) 0.000	-
NCSxx19A	145+64 degrees		88 %	2.200	-
LUXEON Rebel	146+64 degrees		88 %	2.900	-
LUXEON R	147+71 degrees		88 %	1.900	-
LUXEON Rebel ES	147+73 degrees		88 %	1.900	-
NVSxx19A	147+70 degrees		87 %	1.850	-
Oslon SSL 80	148+53 degrees		89 %	2.300	-
XB-D	150+63 degrees		88 %	2.300	-
XT-E	150+64 degrees		88 %	2.000	-
Oslon Square EC	150+76 degrees		89 %	1.850	-
Oslon Square PC	150+86 degrees		89 %	2.000	-
NS9x383	150+82 degrees		89 %	1.000	-
LUXEON A	151+73 degrees		89 %	1.750	-
LUXEON T	151+75 degrees		93 %	1.800	-
LUXEON TX	151+71 degrees		92 %	1.850	-
XM-L	152+81 degrees		91 %	1.200	-
Oslon SSL 150	152+99 degrees		92 %	2.900	-
XP-E	152+71 degrees		93 %	2.800	-
XP-G	153+92 degrees		88 %	1.900	-
H35C0 (LEMWA33)	153+68 degrees		90 %	1.600	-
XP-E2	153+70 degrees		93 %	2.900	-
H35B0 (LEMWA32)	153+64 degrees		93 %	2.000	-
XM-L2	167+71 degrees		92 %	1.200	-

INDEX	PART NO	DESCRIPTION	MATERIAL
1	CA13156	EMERALD-A	PMMA + PU FOAM adhesive tape

Isometric view
Scale: 2:1

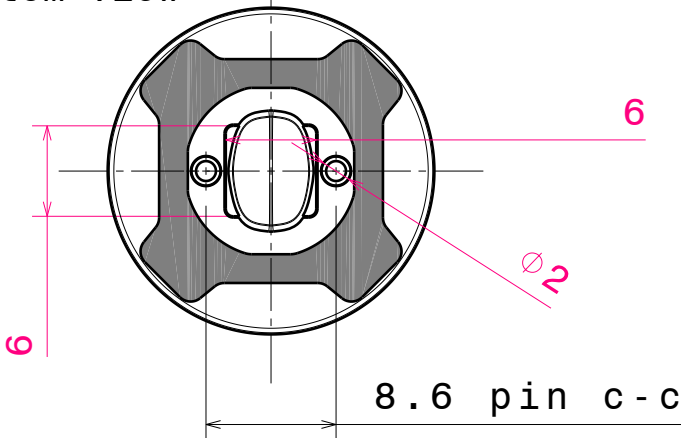


Beam pattern
direction

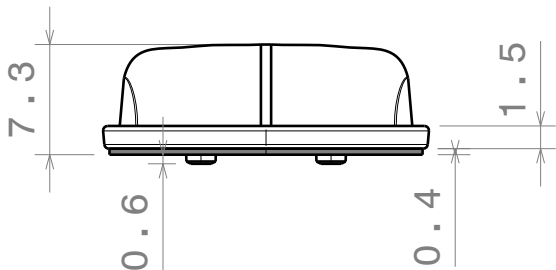


Section view A-A
Scale: 1:1

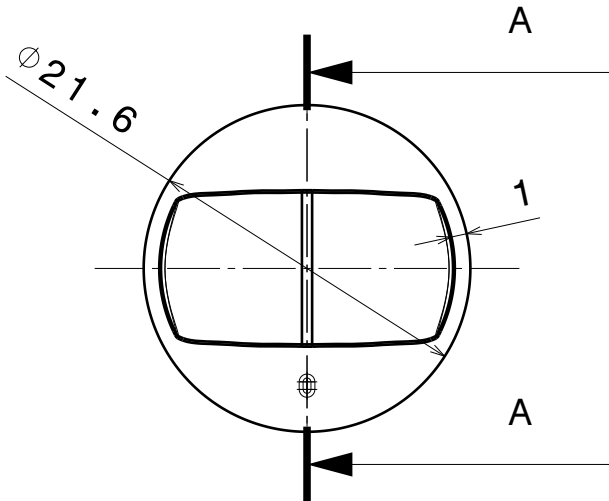
Bottom view



Front view



Top view

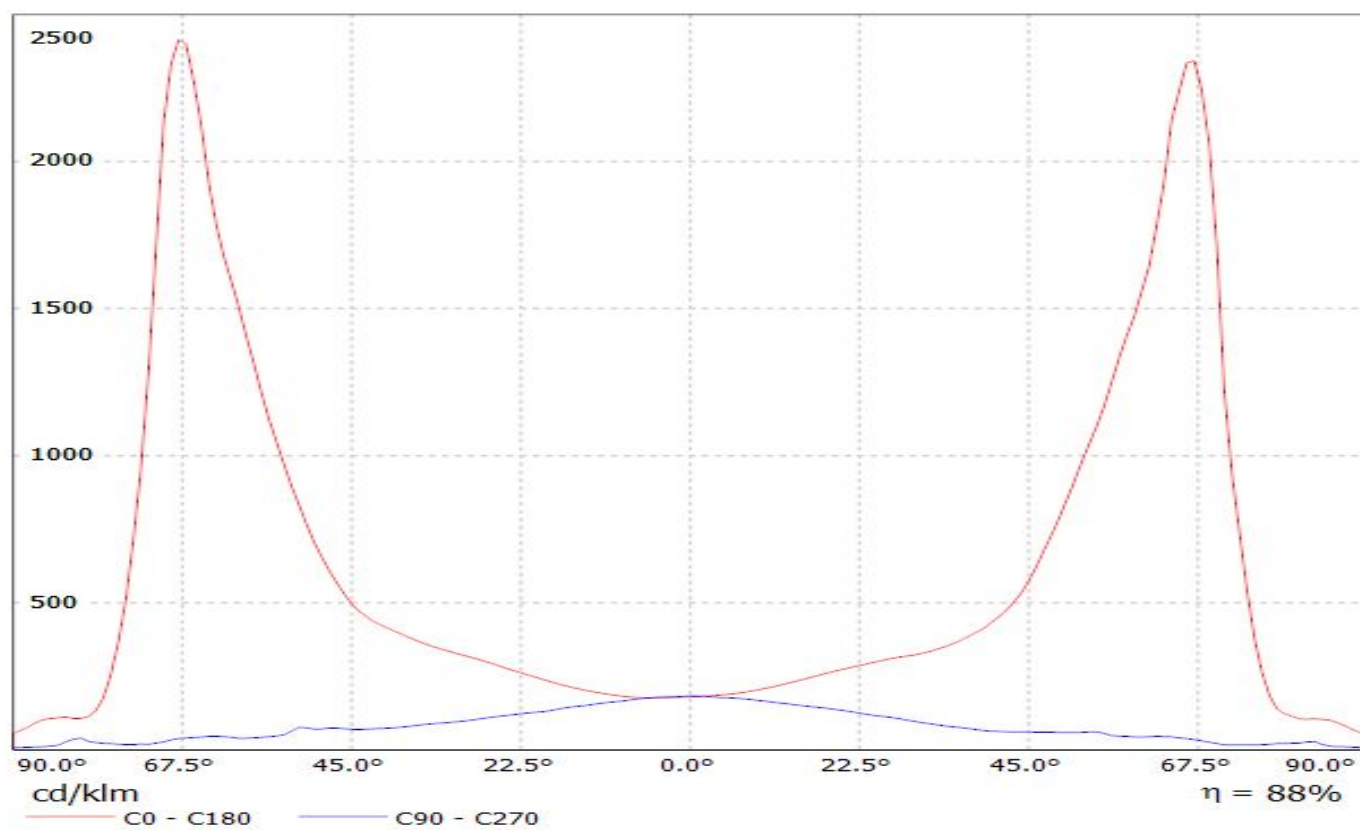


This drawing is our property. It can't be reproduced or communicated without our written agreement.			Ledil Oy Salorankatu 10 FIN 24240 SALO Finland				
			DATASHEET TITLE		Mechanical Drawing		
DRAWN BY ol	DATE 18.12.2012	CA13156 EMERALD-A					
CHECKED BY as	DATE 18.12.2012	SIZE A4	PART NUMBER CA13156			REV 001	
DESIGNED BY ol	DATE 3.10.2012	SCALE 2:1	WEIGHT			SHEET 1/1	

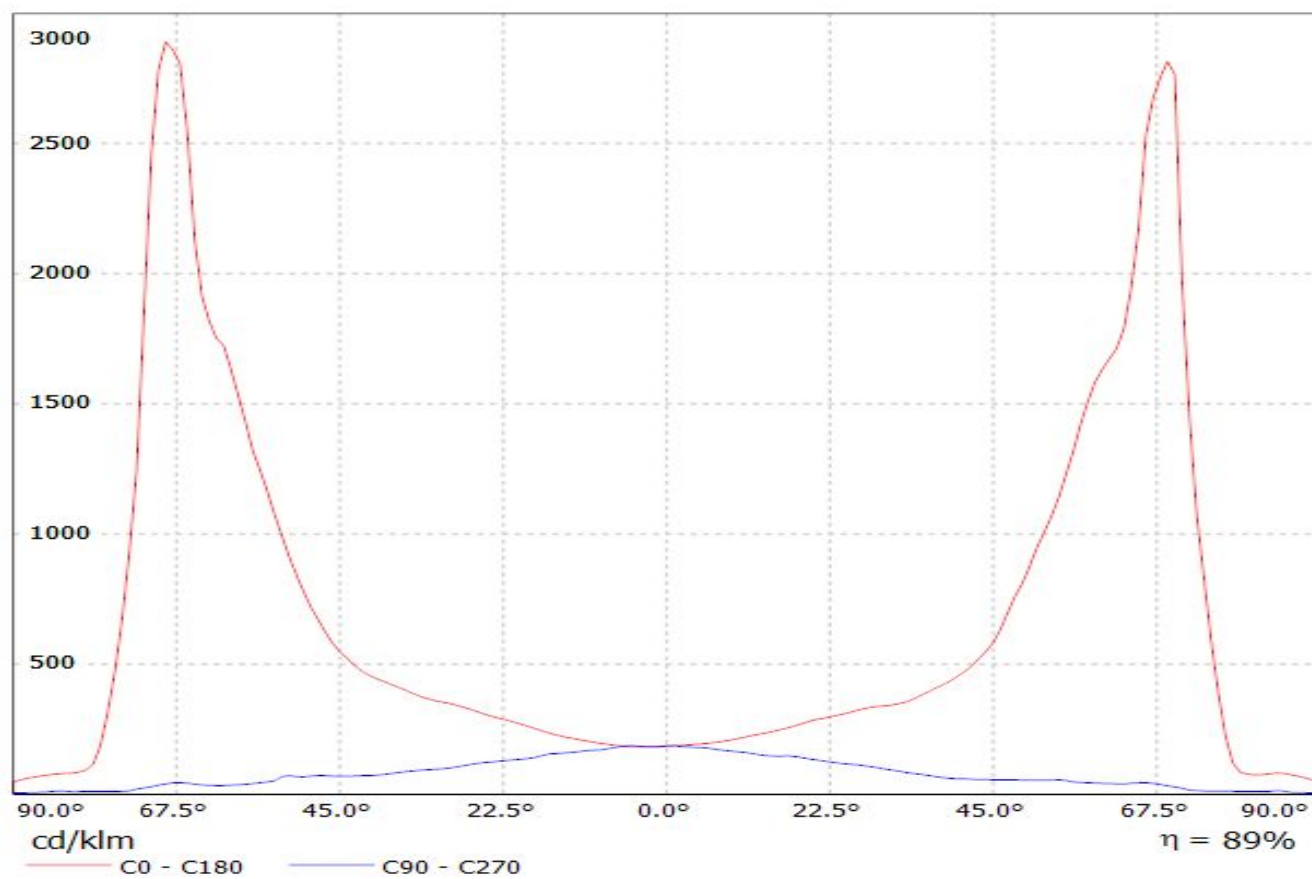
LEDiL Oy CA13156_EMERALD-A_(NCS19) Eff.88.1% / LDC (Linear)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(NCS19) Eff.88.1%

Lamps: 1 x NCS19 (89lm@250mA)



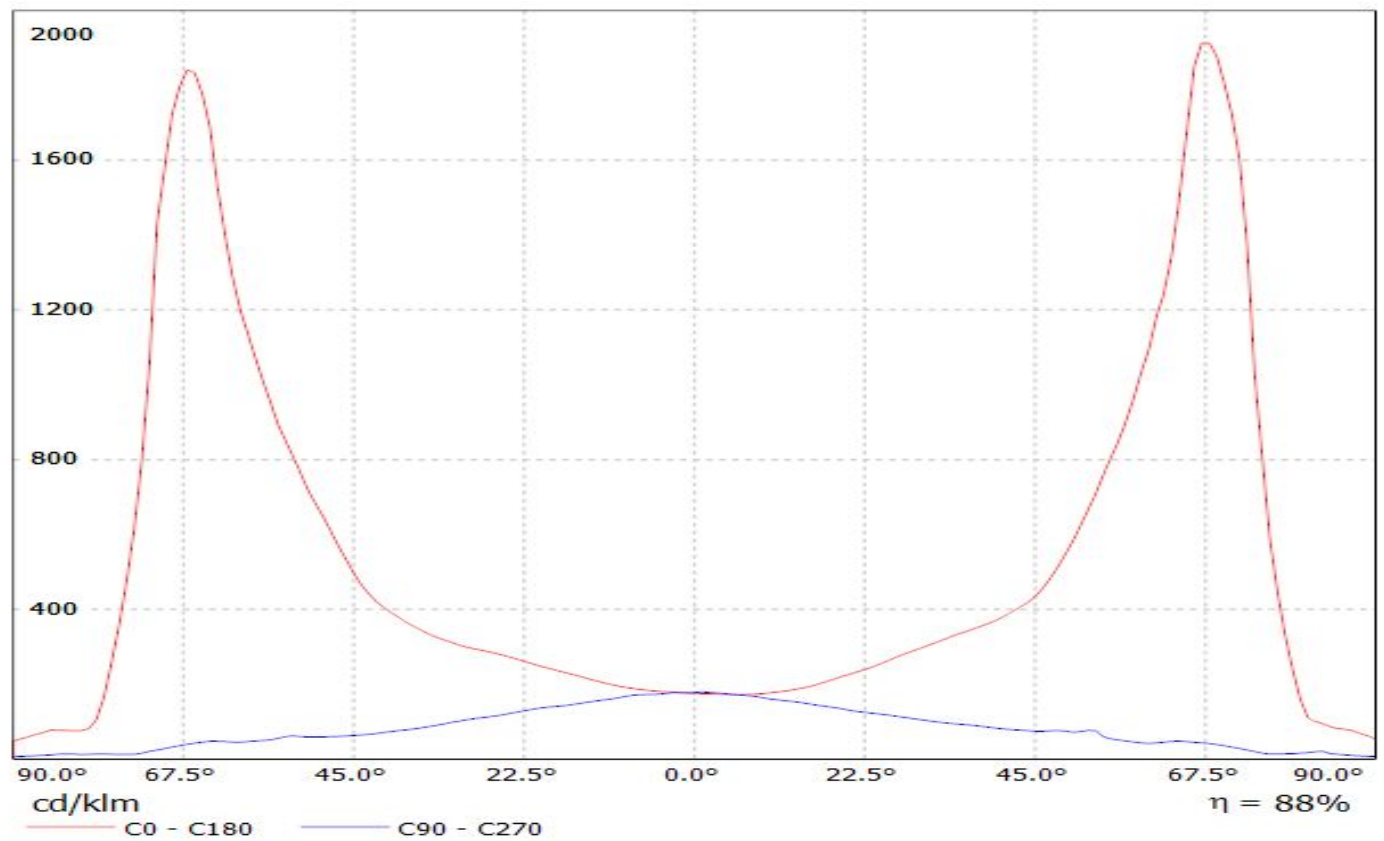
Luminaire: LEDiL Oy CA13156_EMERALD-A_(Rebel) Eff. 88,8%
Lamps: 1 x Luxeon Rebel (82lm@250mA)



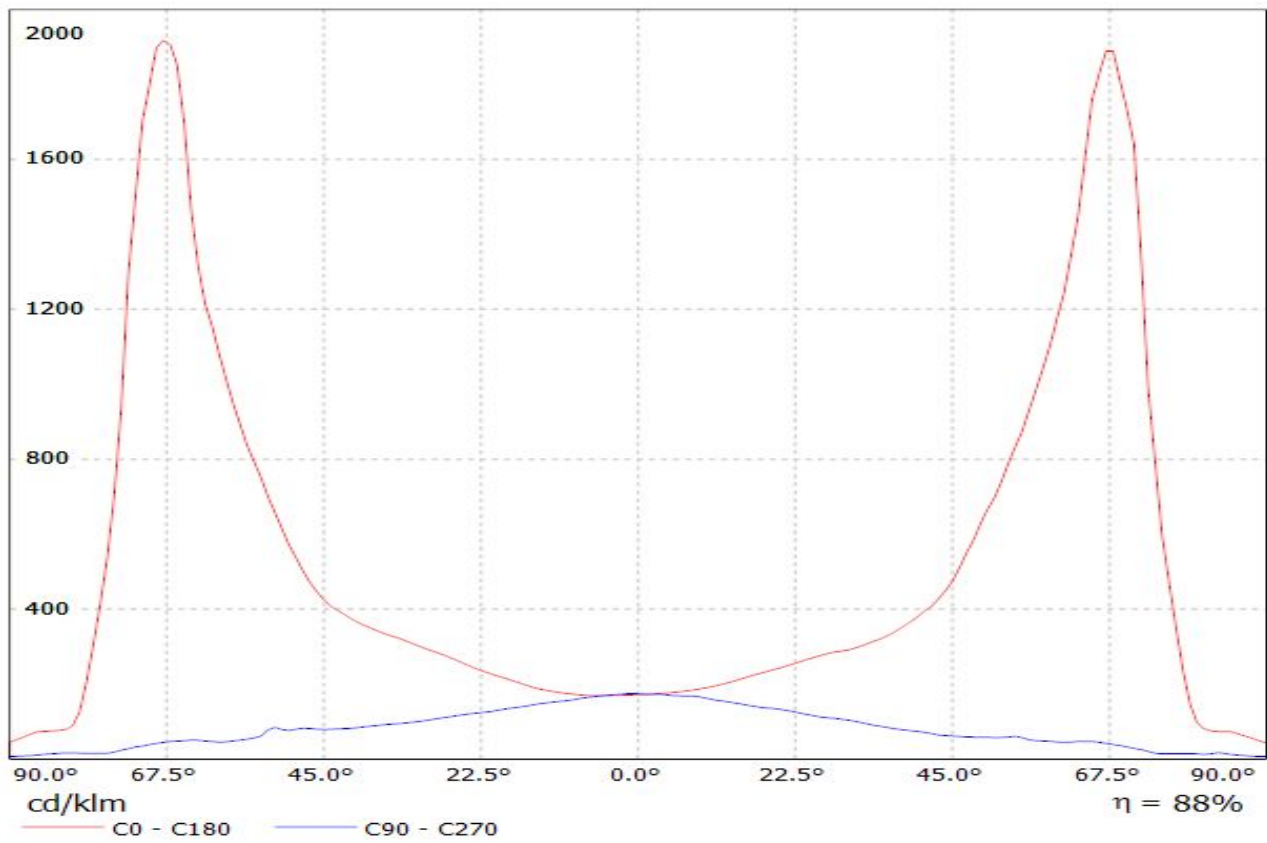
LEDiL Oy CA13156_EMERALD-A_(LUXEON_R) Eff.88.4% / LDC (Linear)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(LUXEON_R) Eff.88.4%

Lamps: 1 x LUXEON_R (85.6lm@250mA)



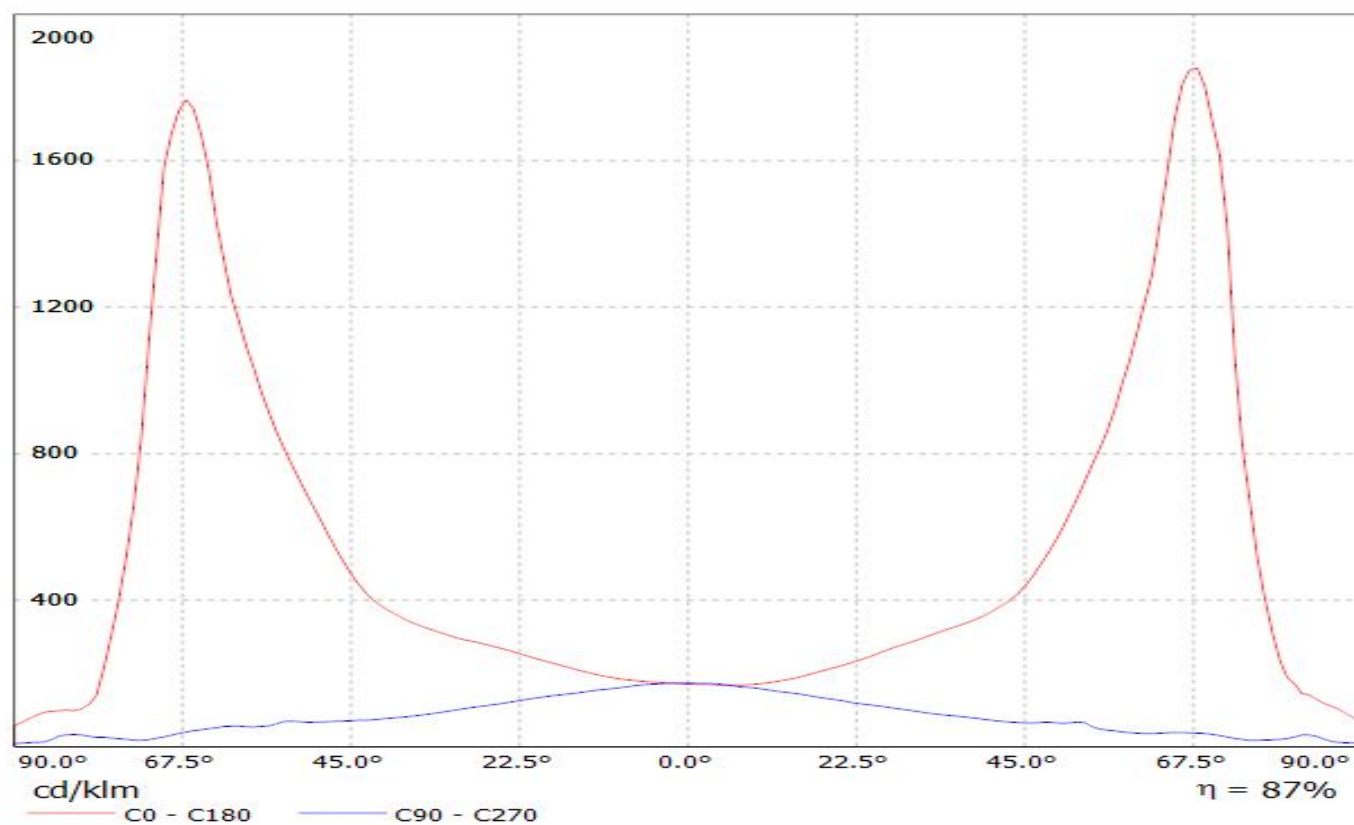
Luminaire: LEDiL Oy CA13156_EMERALD-A_(Rebel-ES) Eff. 88%
Lamps: 1 x Luxeon Rebel-ES (90lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(NVS19) Eff.87.5% / LDC (Linear)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(NVS19) Eff.87.5%

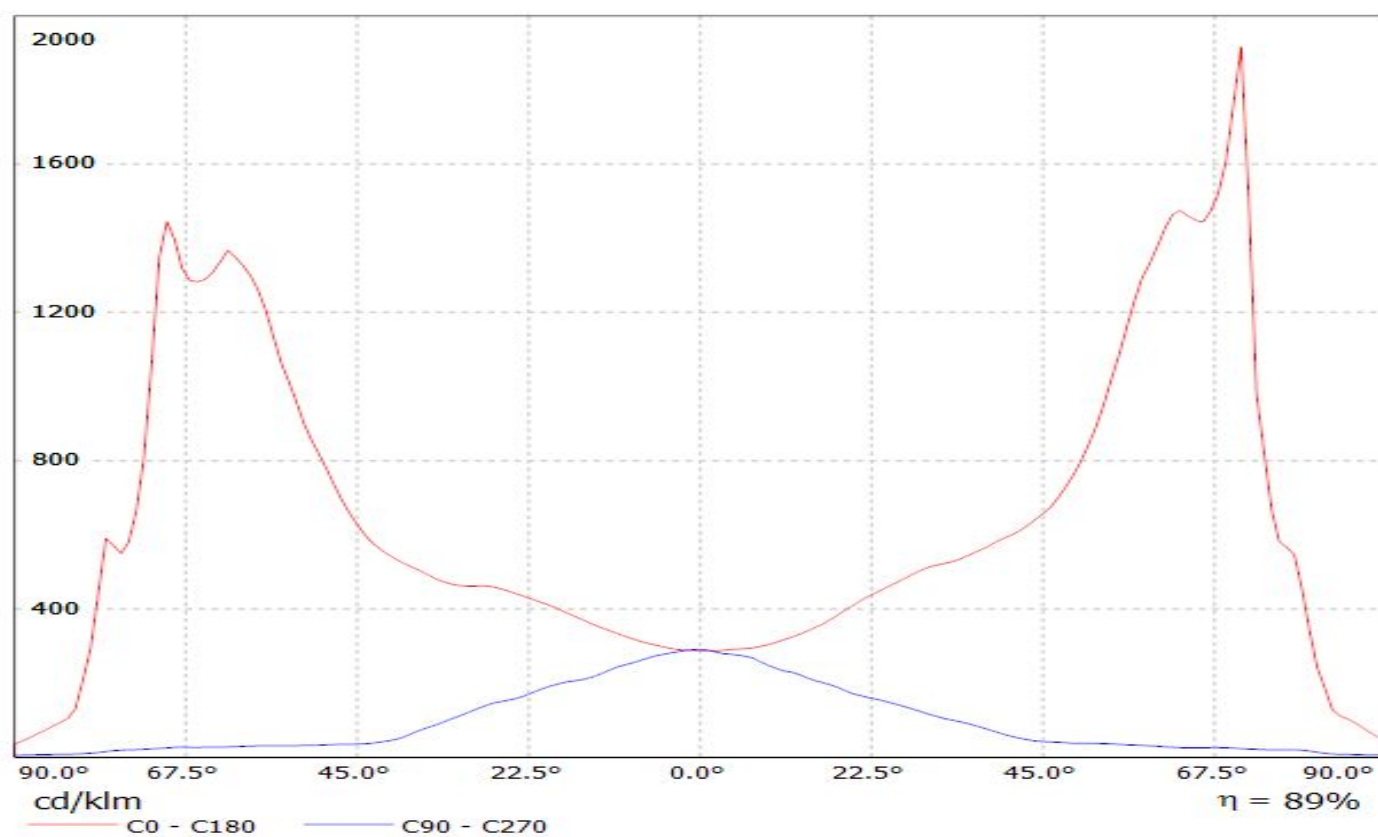
Lamps: 1 x NVS19 (98.3lm@250mA)



LEDiL Oy C13155_EMERALD-A_(SSL80) Eff.89.4% / LDC (Linear)

Luminaire: LEDiL Oy C13155_EMERALD-A_(SSL80) Eff.89.4%

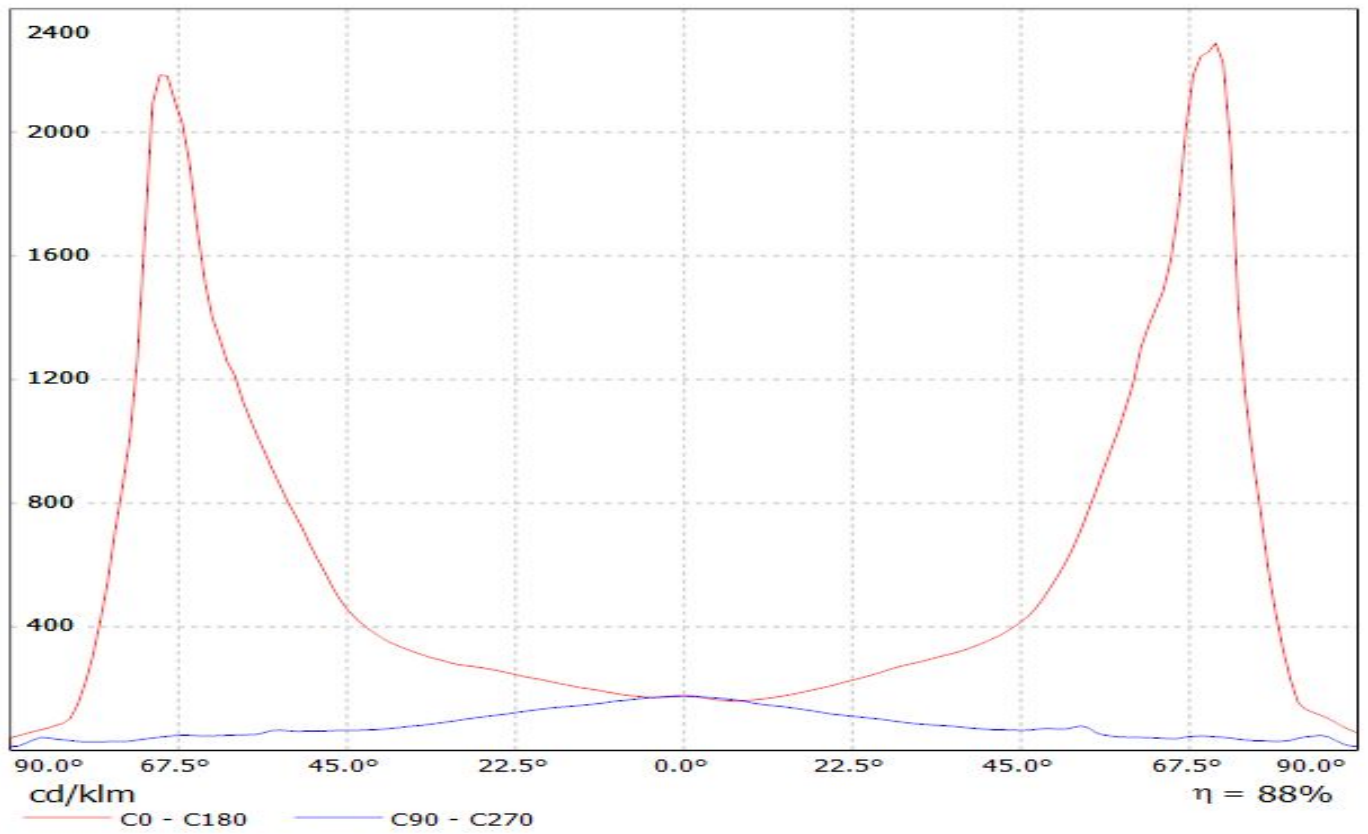
Lamps: 1 x Oslon SSL (81.3lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(XB-D) Eff.87.8% / LDC (Linear)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(XB-D) Eff.87.8%

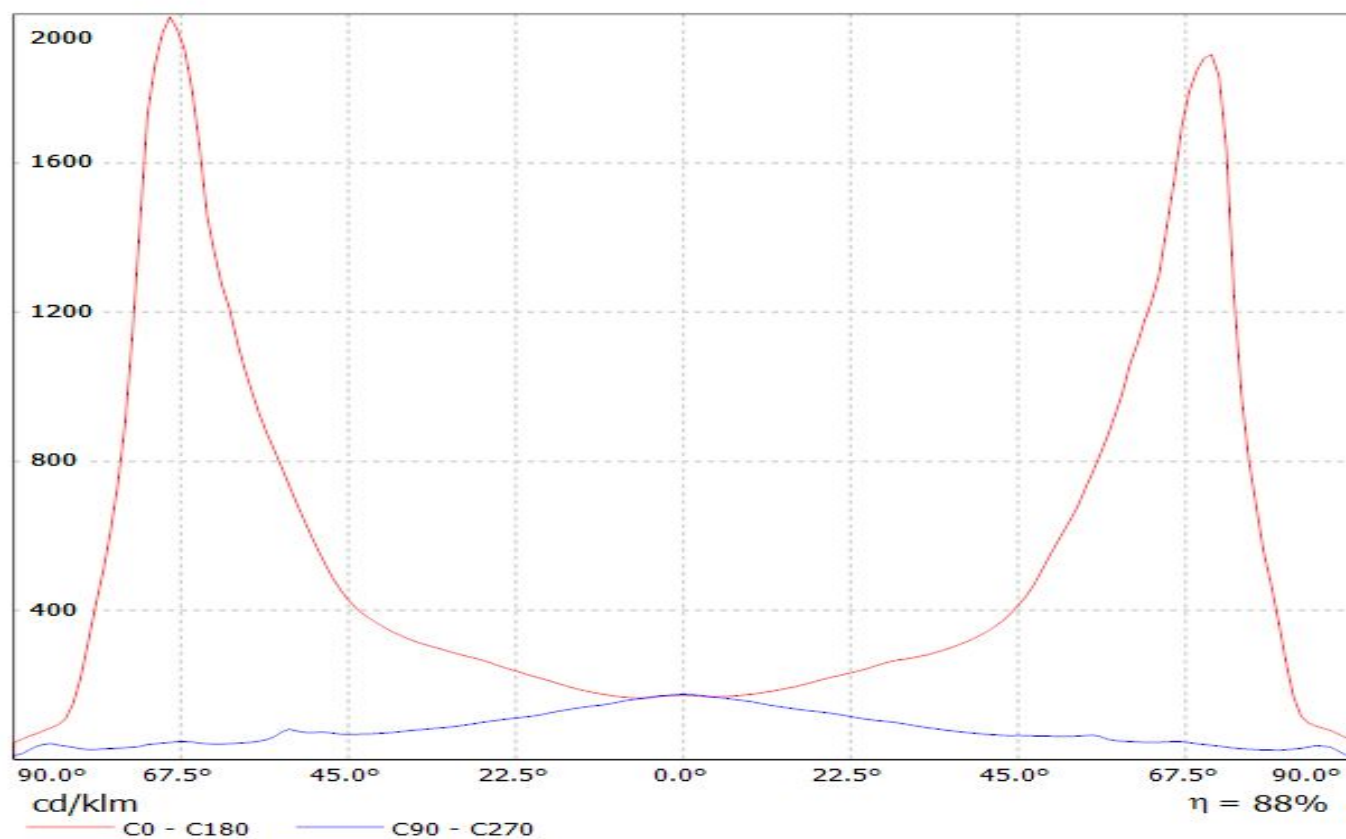
Lamps: 1 x Cree XB-D (95lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(XT-E) Eff.88.2% / LDC (Linear)

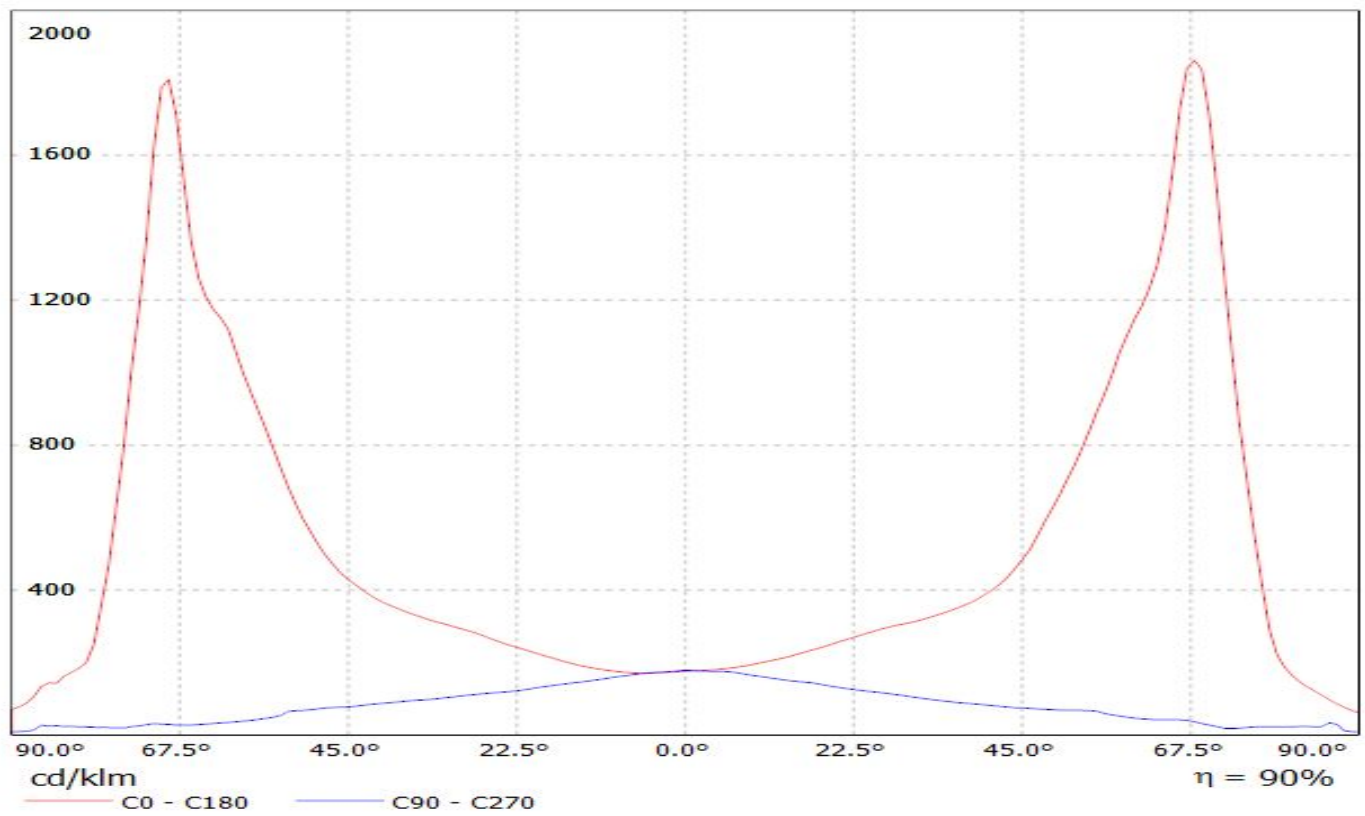
Luminaire: LEDiL Oy CA13156_EMERALD-A_(XT-E) Eff.88.2%

Lamps: 1 x Cree XT-E (102.3lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(SQ-EC) Eff.89.6% / LDC (Linear)

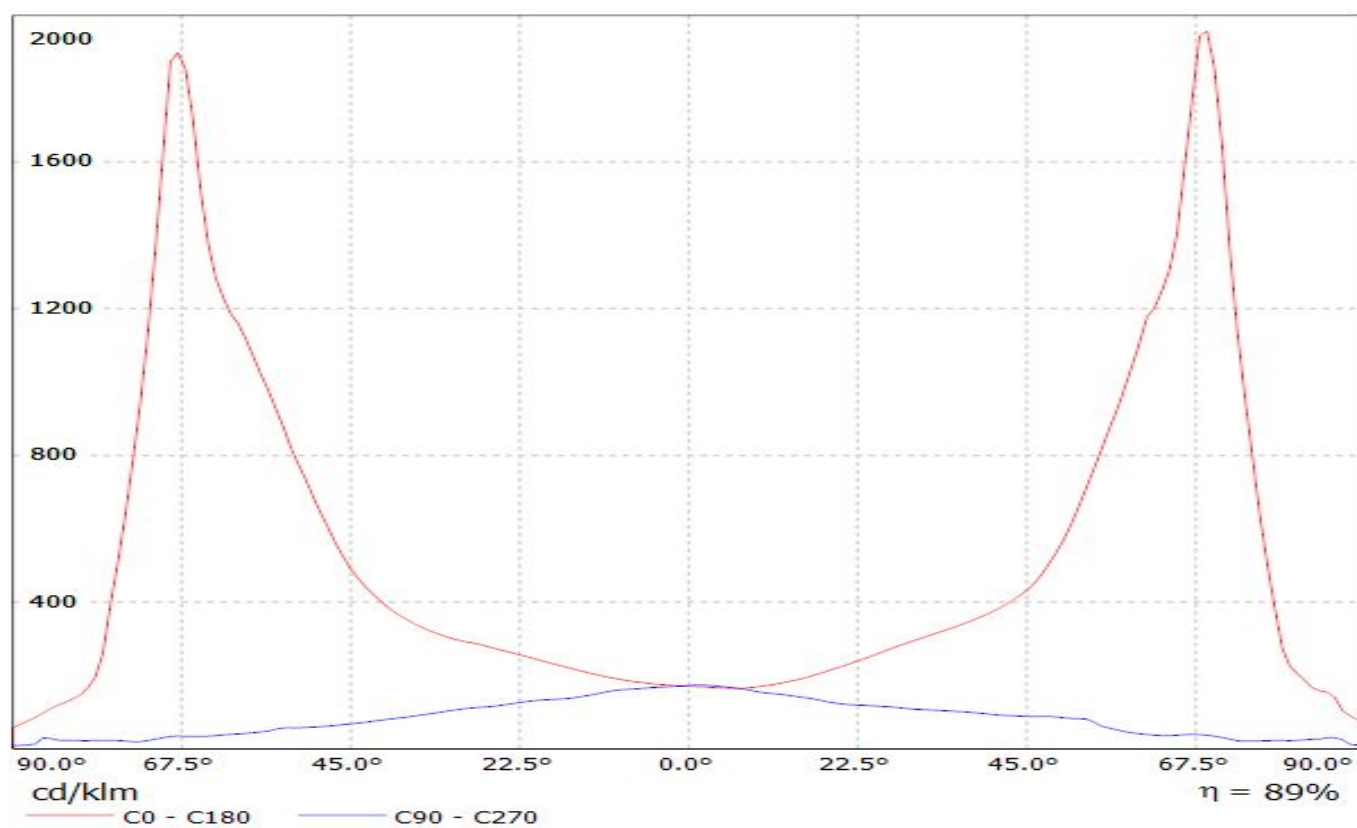
Luminaire: LEDiL Oy CA13156_EMERALD-A_(SQ-EC) Eff.89.6%
Lamps: 1 x SQ-EC (64.5908lm@250mA)



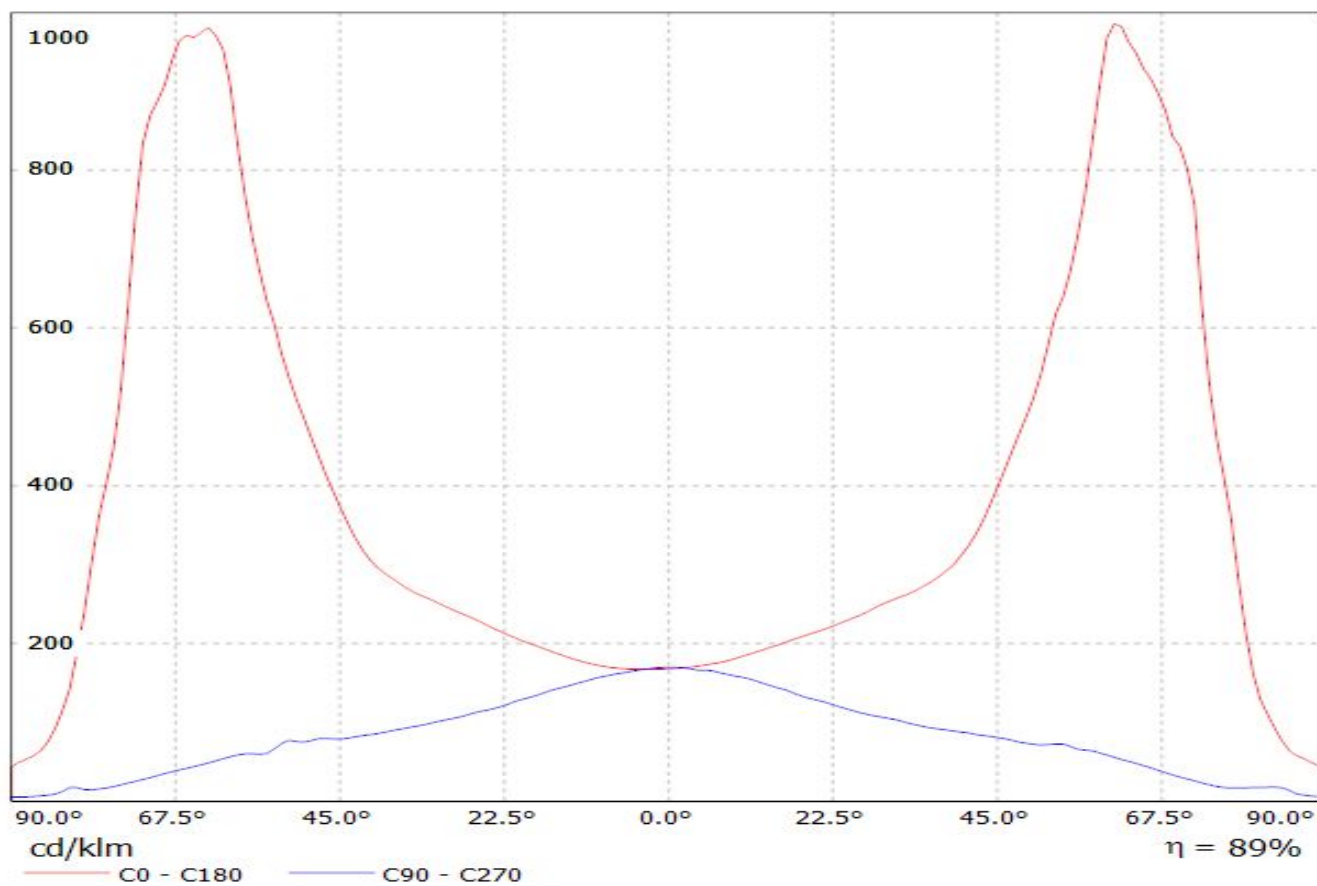
LEDiL Oy CA13156_EMERALD-A_(SQ-PC) Eff.89.1% / LDC (Linear)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(SQ-PC) Eff.89.1%

Lamps: 1 x SQ-PC (79.1971lm@250mA)



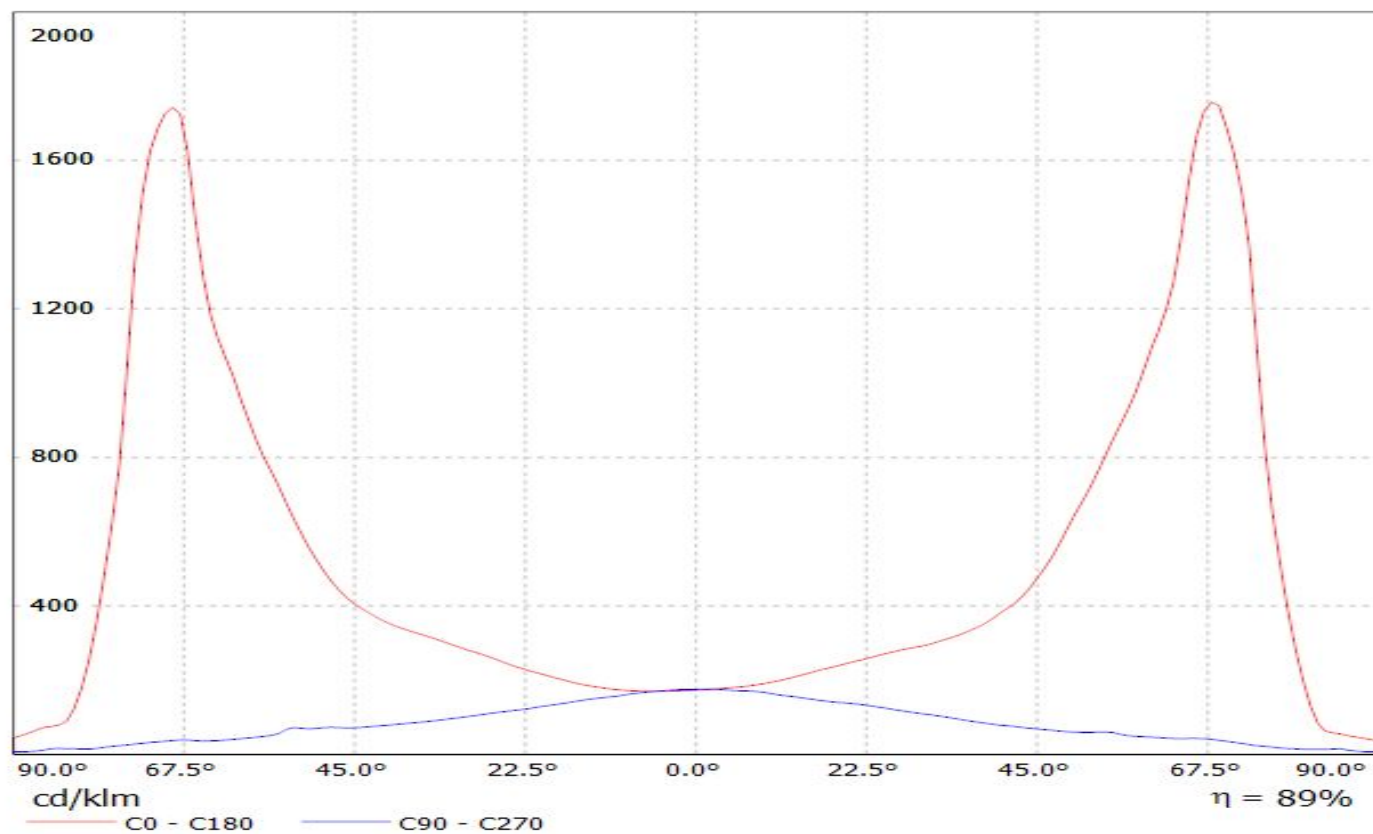
Luminaire: LEDiL Oy CA13156_EMERALD-A_(NS9x383) Eff. 89,2%
Lamps: 1 x Nichia NS9x383 (105lm@250mA)



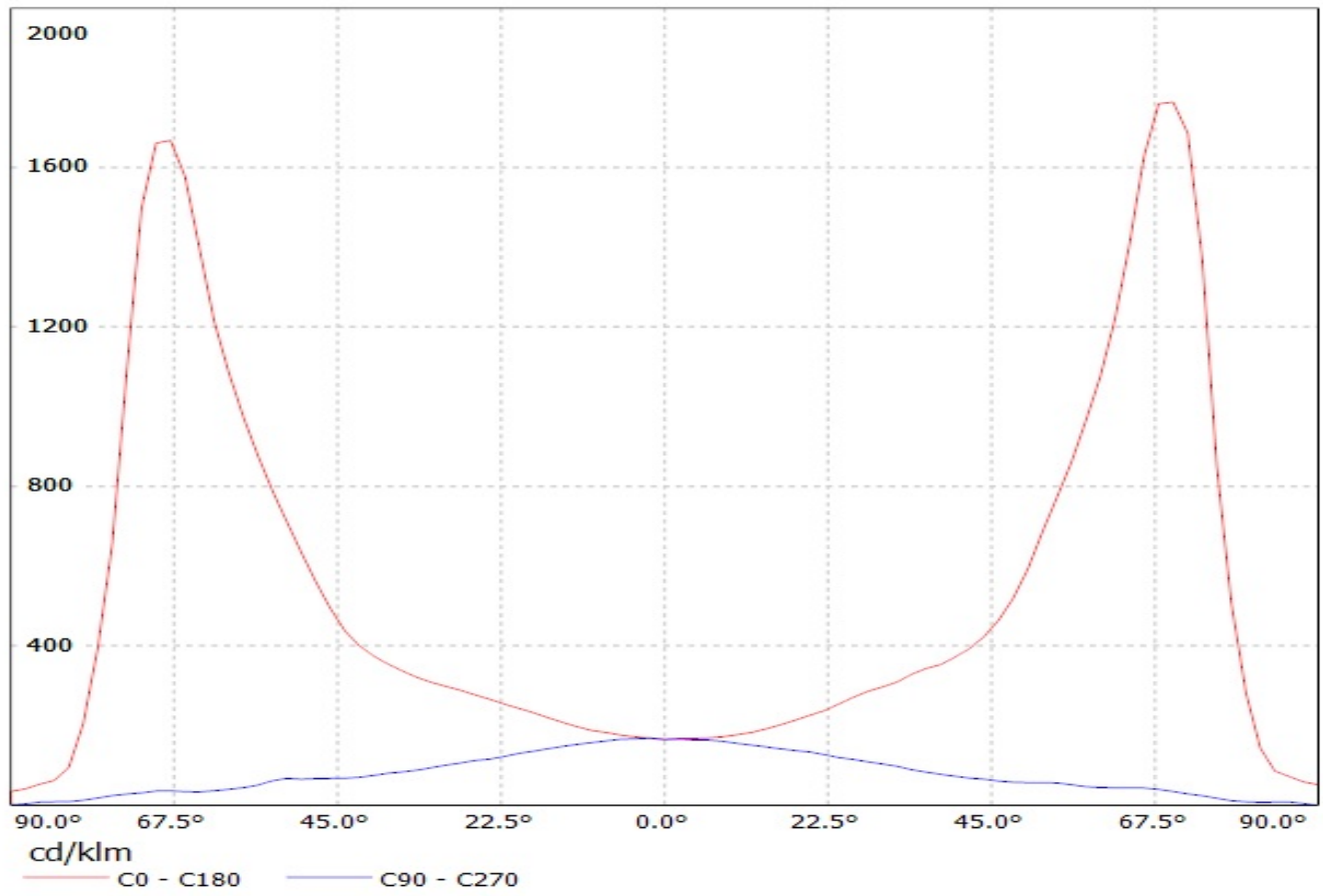
LEDiL Oy CA13156_EMERALD-A_(LUXEON_A) Eff.88.6% / LDC (Linear)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(LUXEON_A) Eff.88.6%

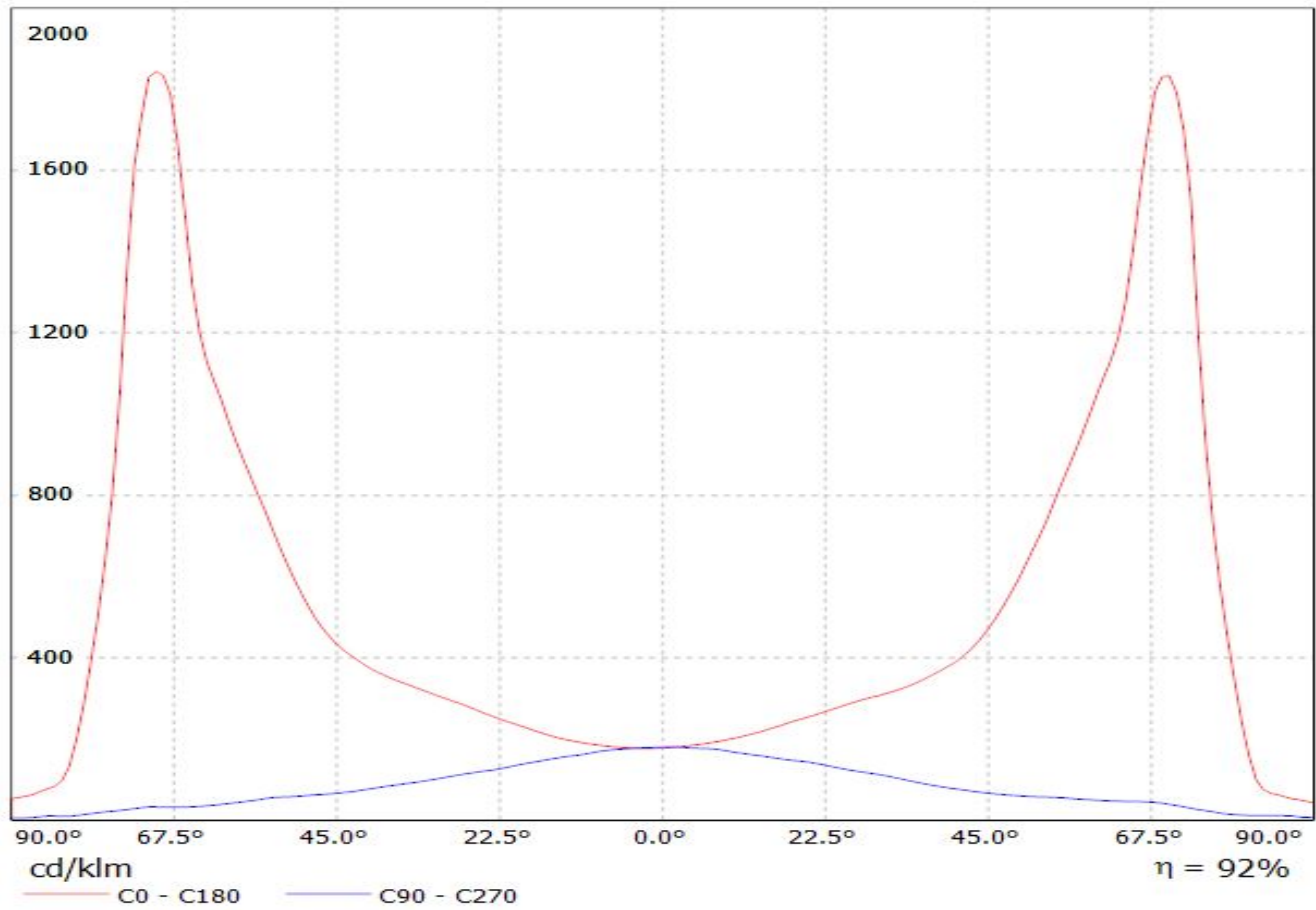
Lamps: 1 x LUXEON_R (67.5lm@250mA)



Luminaire: Ledil Oy CA13156_EMERALD-A (Luxeon T 71lm @ 250mA) Efficiency=93%
Lamps: 1 x Luxeon T 71lm @ 250mA



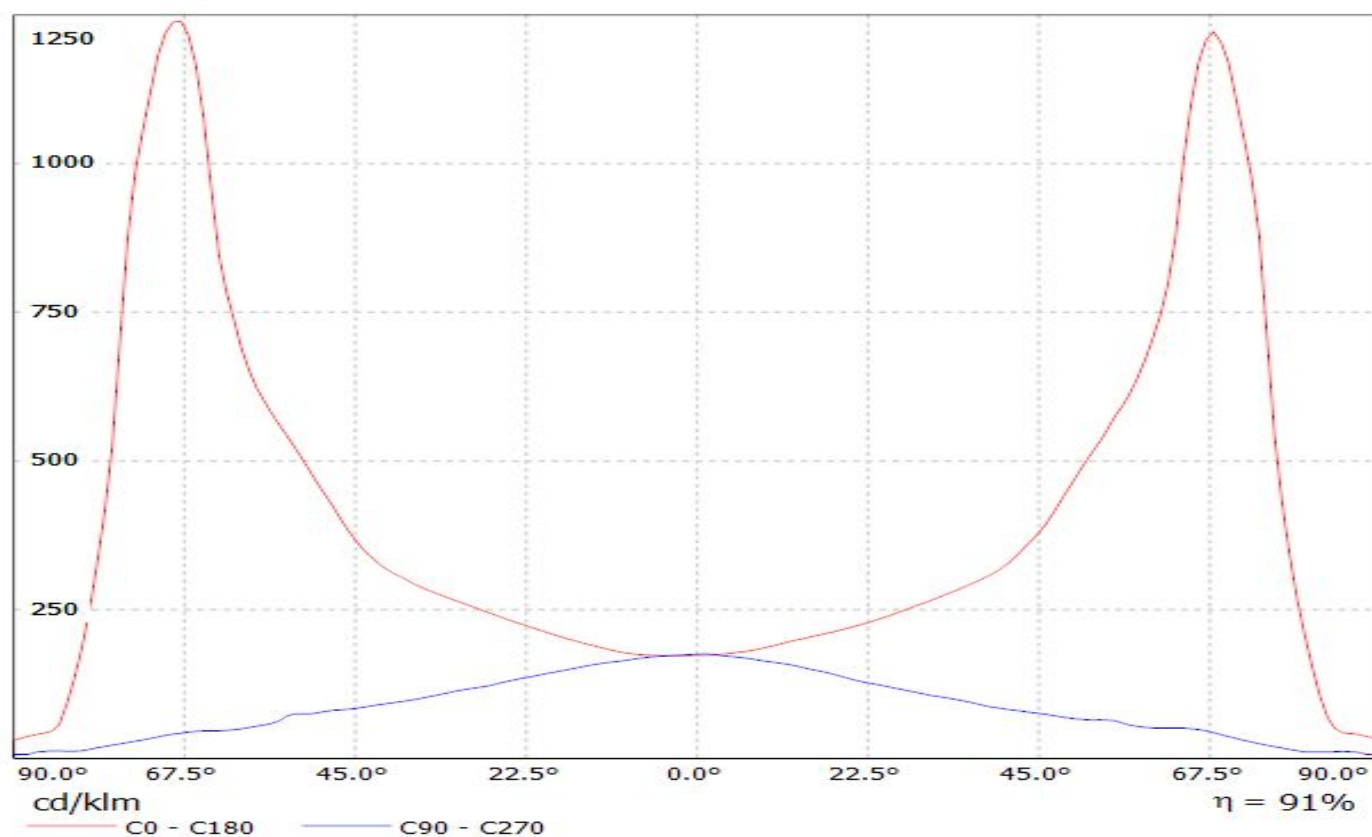
Luminaire: LEDiL Oy CA13156_EMERALD-A_(Luxeon_TX) Eff.91.7%
Lamps: 1 x Luxeon_TX_(L1T2-3585)_80.1801lm@250mA_CCT=3500K_P=0.731482W_I=249.9mA



LEDiL Oy CA13156_EMERALD-A_(XM-L) Eff.90.8% / LDC (Linear)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(XM-L) Eff.90.8%

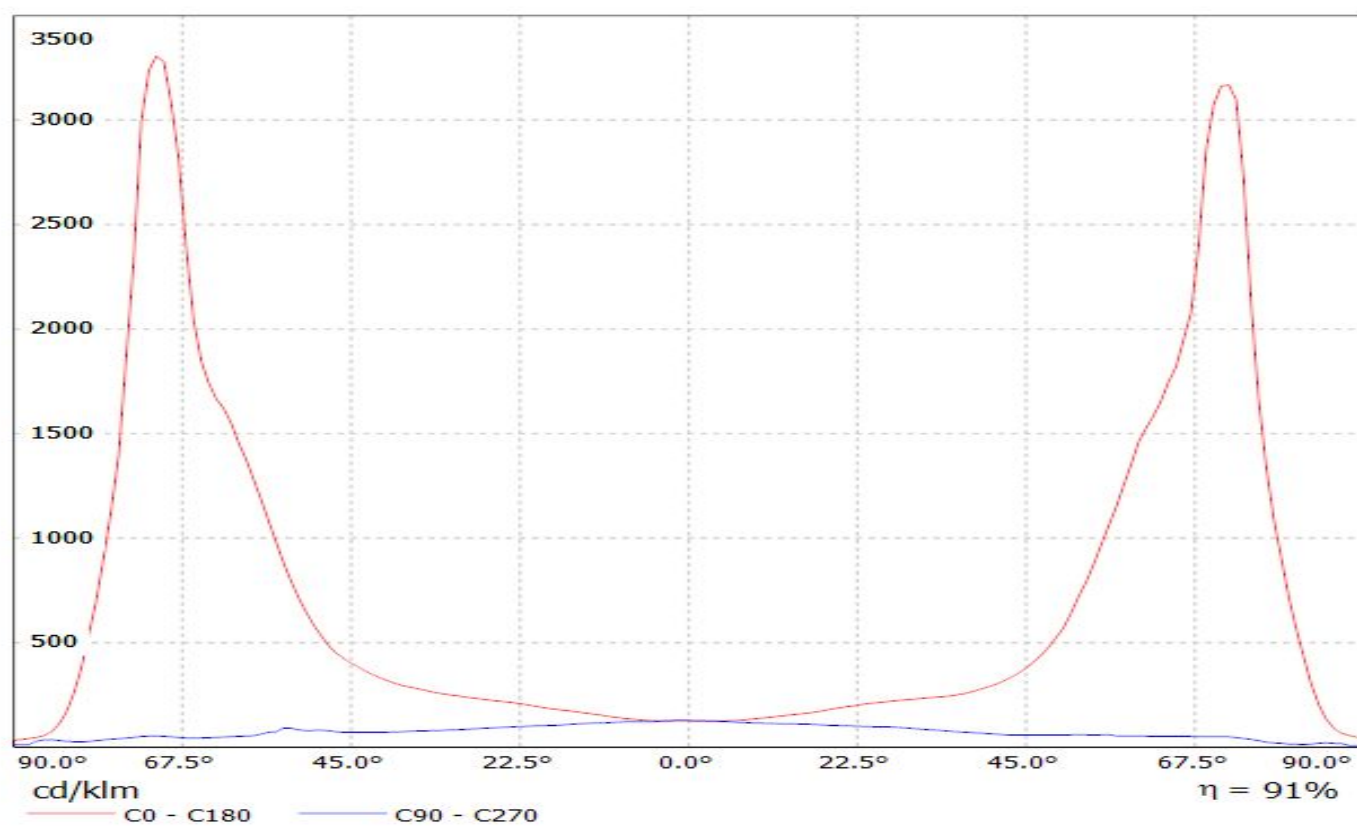
Lamps: 1 x Cree XM-L (91.7822lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(SSL150) Eff.91.4% / LDC (Linear)

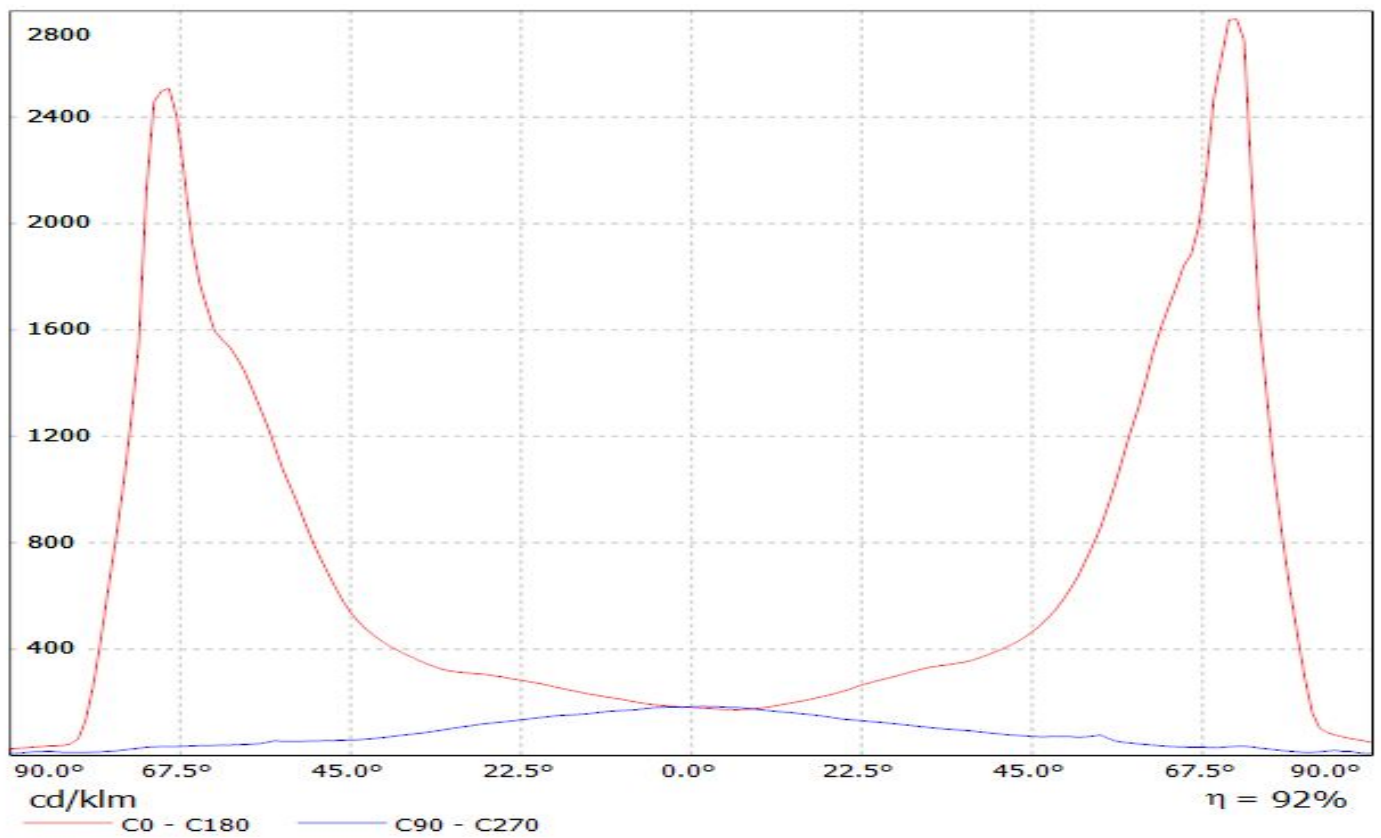
Luminaire: LEDiL Oy CA13156_EMERALD-A_(SSL150) Eff.91.4%

Lamps: 1 x Oscon SSL150 (71.5lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(XP-E) Eff.91.5% / LDC (Linear)

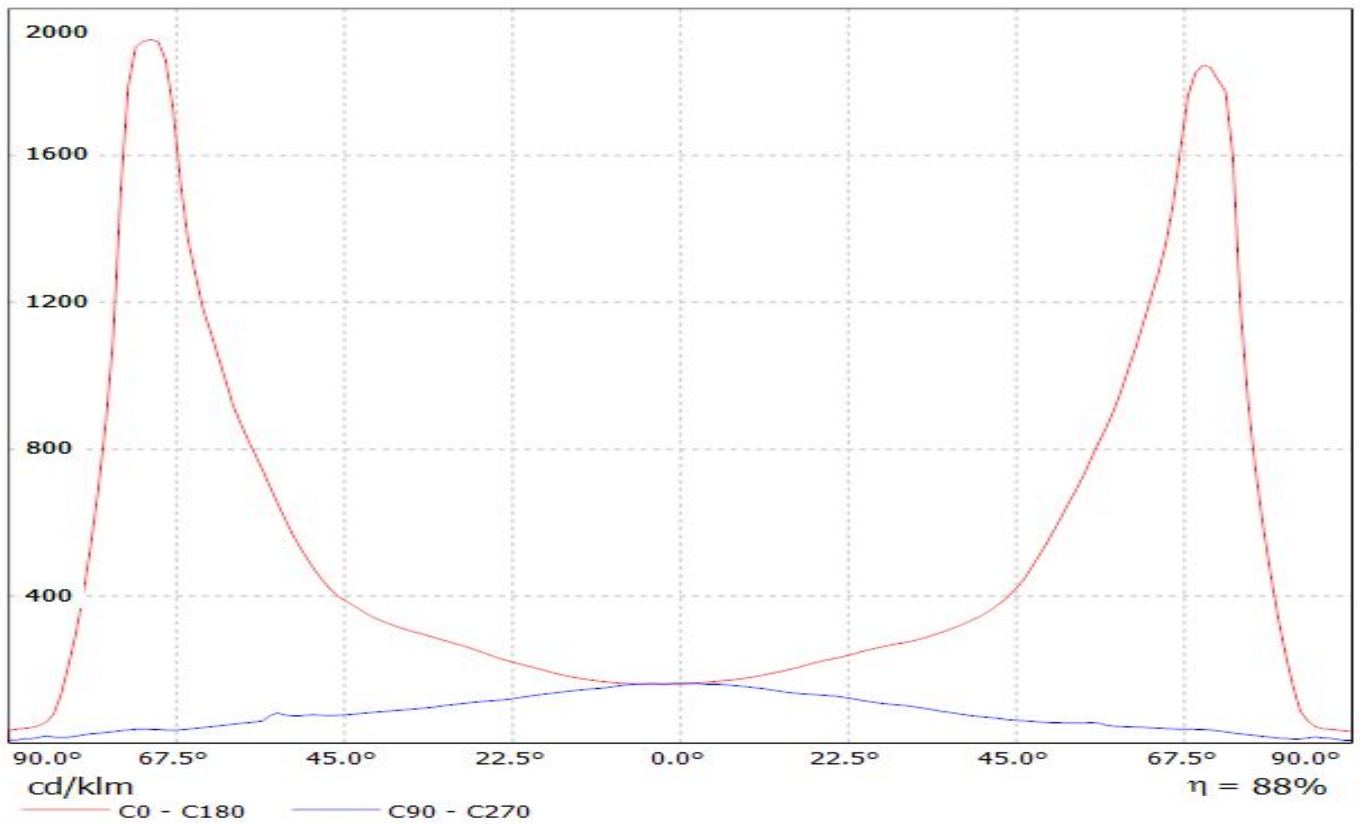
Luminaire: LEDiL Oy CA13156_EMERALD-A_(XP-E) Eff.91.5%
Lamps: 1 x CREE XP-E (51.4197lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(XP-G) Eff.88.1% / LDC (Linear)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(XP-G) Eff.88.1%

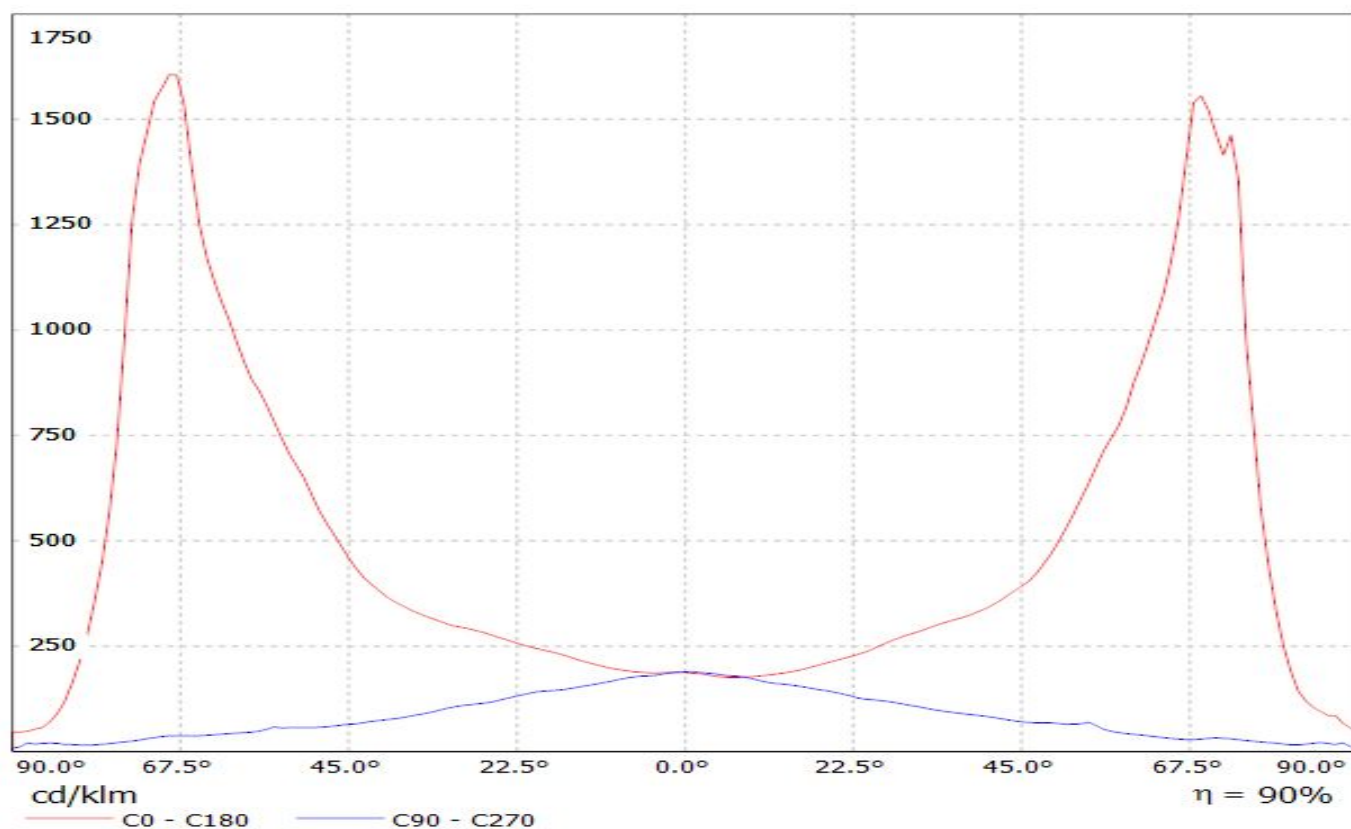
Lamps: 1 x XP-G (70.6lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(LG3535) Eff.89.7% / LDC (Linear)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(LG3535) Eff.89.7%

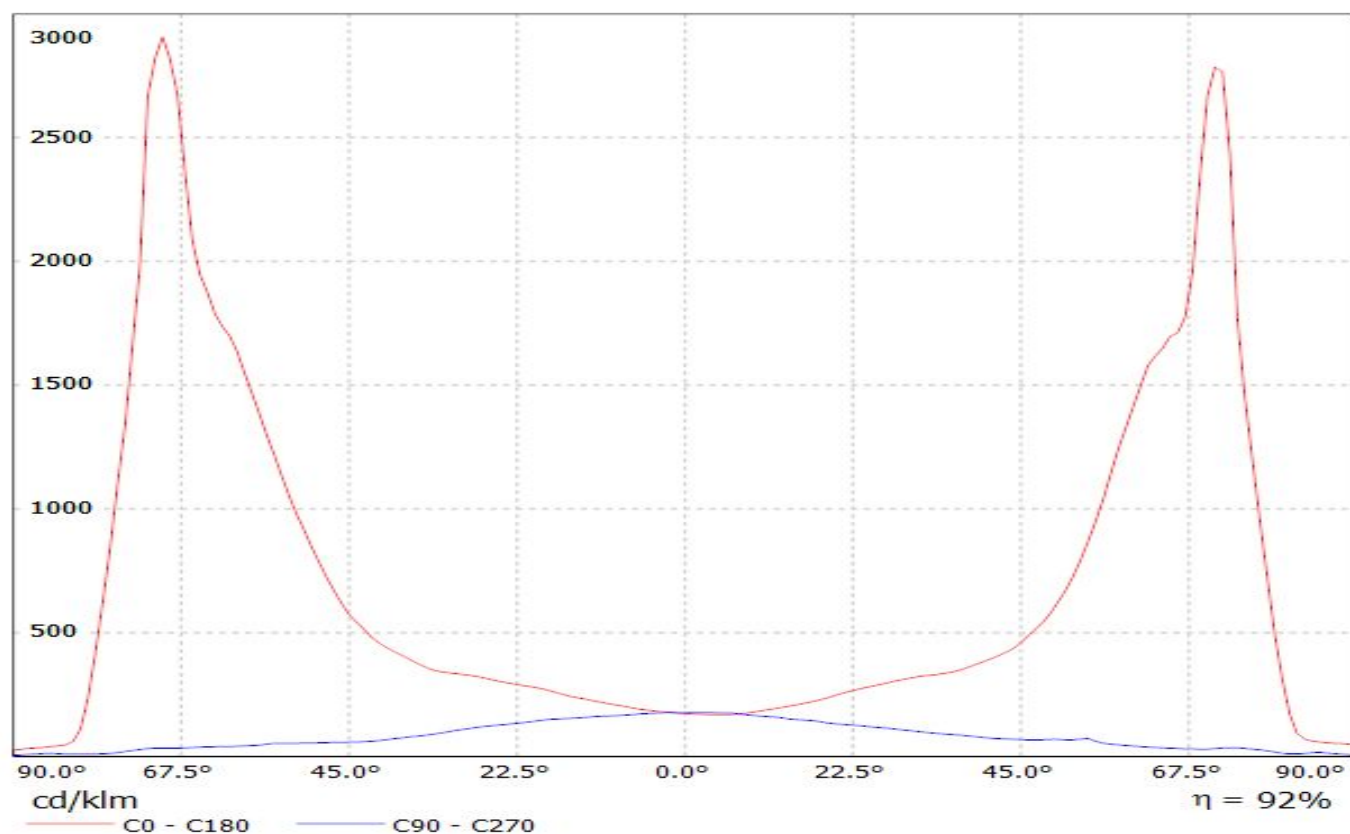
Lamps: 1 x LG 3535 Ceramic (94lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(XP-E2) Eff.91.7% / LDC (Linear)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(XP-E2) Eff.91.7%

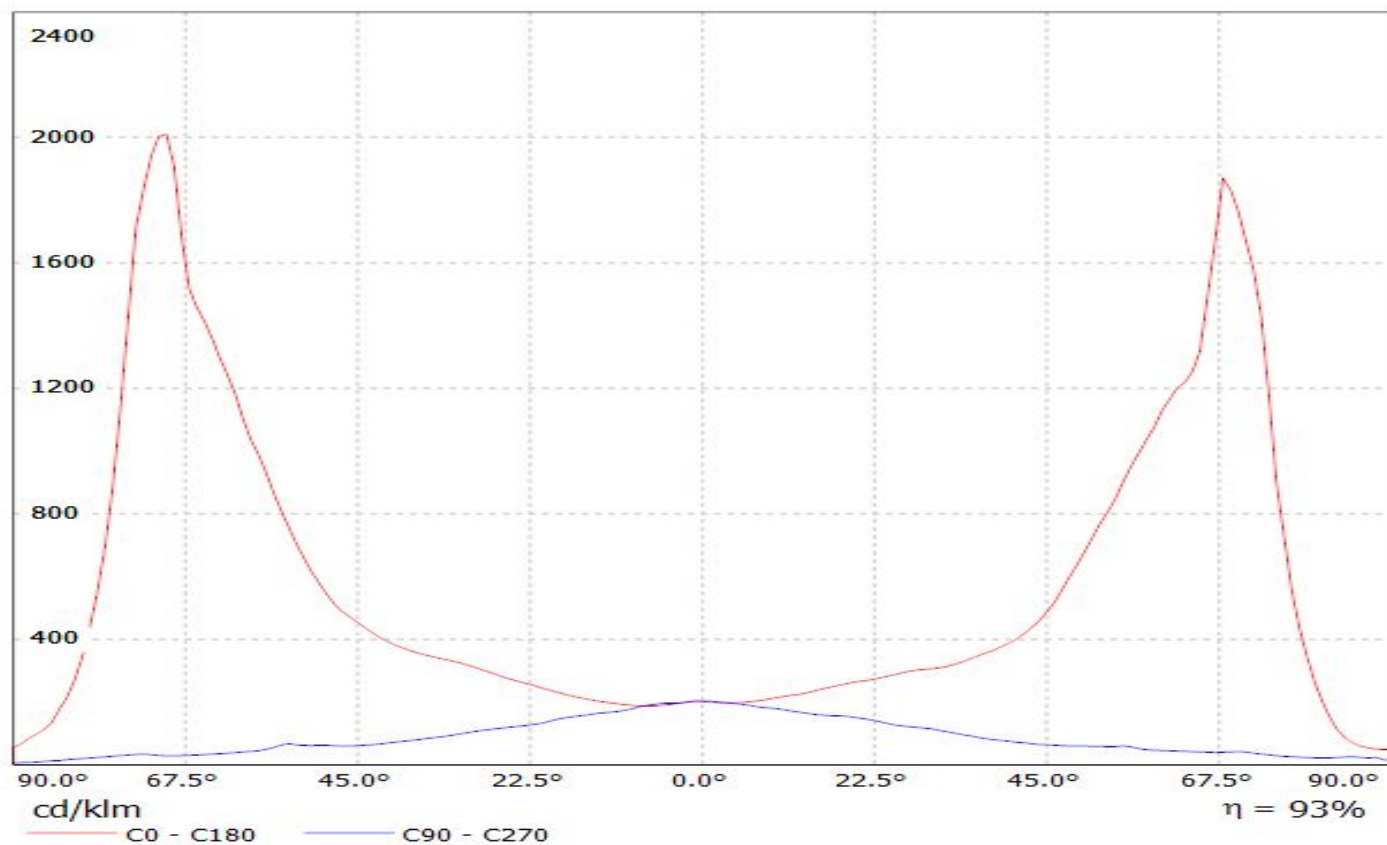
Lamps: 1 x CREE XP-E2 (93.5lm@250mA)



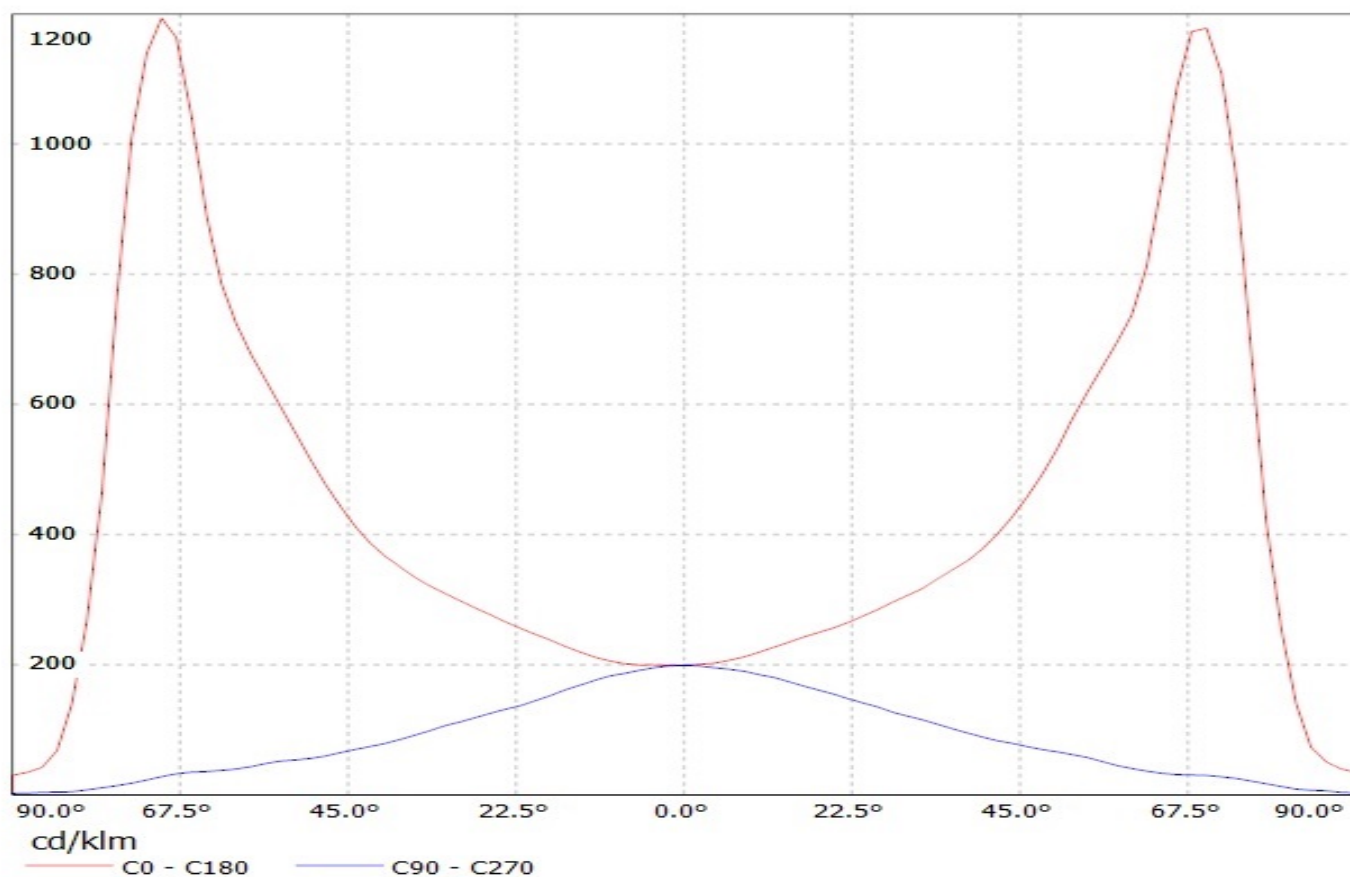
LEDiL Oy CA13156_EMERALD-A_(LG3535_2W) Eff.92.6% / LDC (Linear)

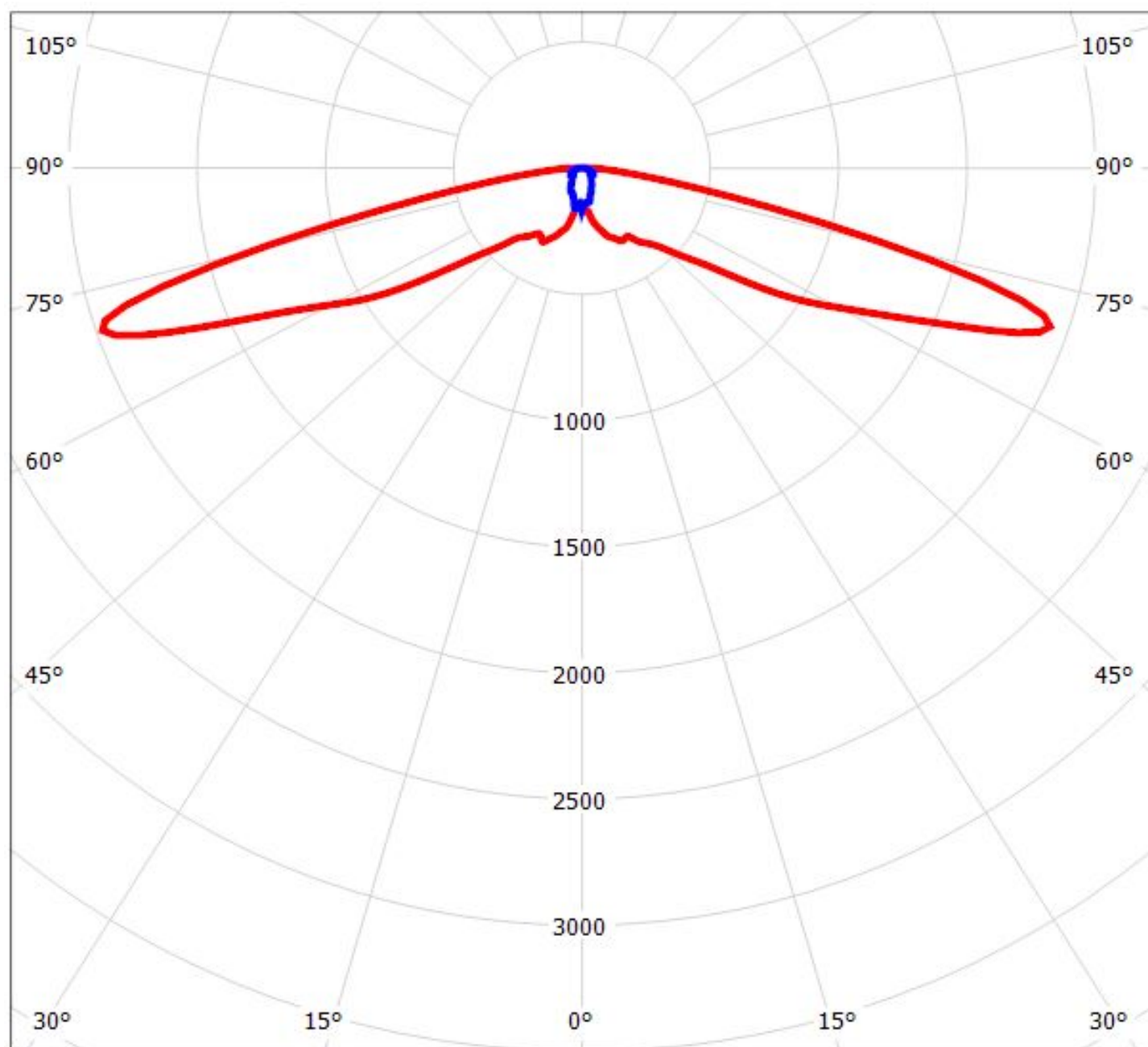
Luminaire: LEDiL Oy CA13156_EMERALD-A_(LG3535_2W) Eff.92.6%

Lamps: 1 x LG3535_2W (97.3629lm@250mA)



Luminaire: LEDil Oy CA13156_EMERALD-A_(XM-L2) Efficiency=92%
Lamps: 1 x Cree XM-L2 (XMLBWT-0-7B4-T30-0L-0001) 91lm @ 250mA CCT=3200K P=0.7W I=250mA





cd/klm

— C0 - C180

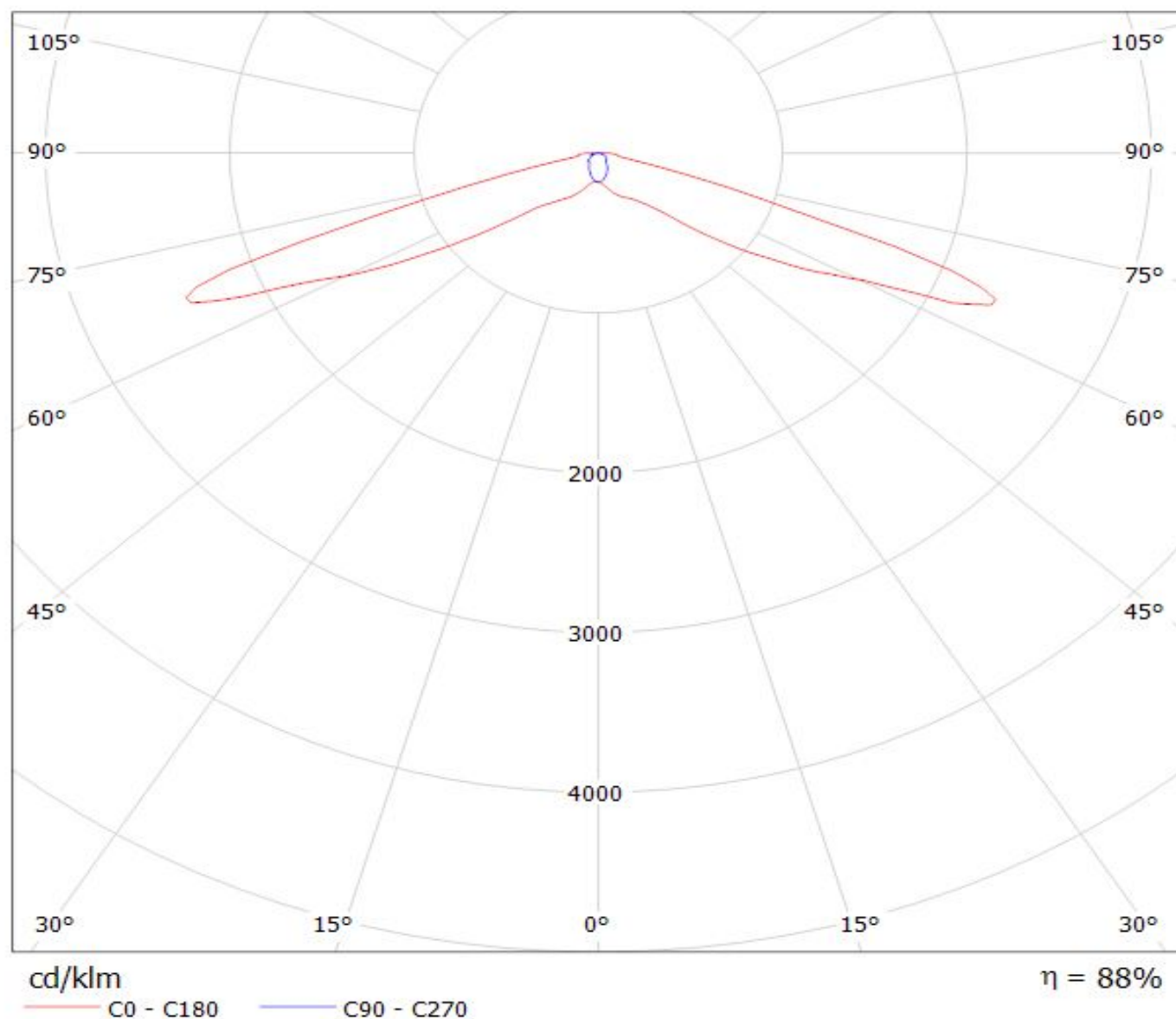
— C90 - C270

$\eta = 89\%$

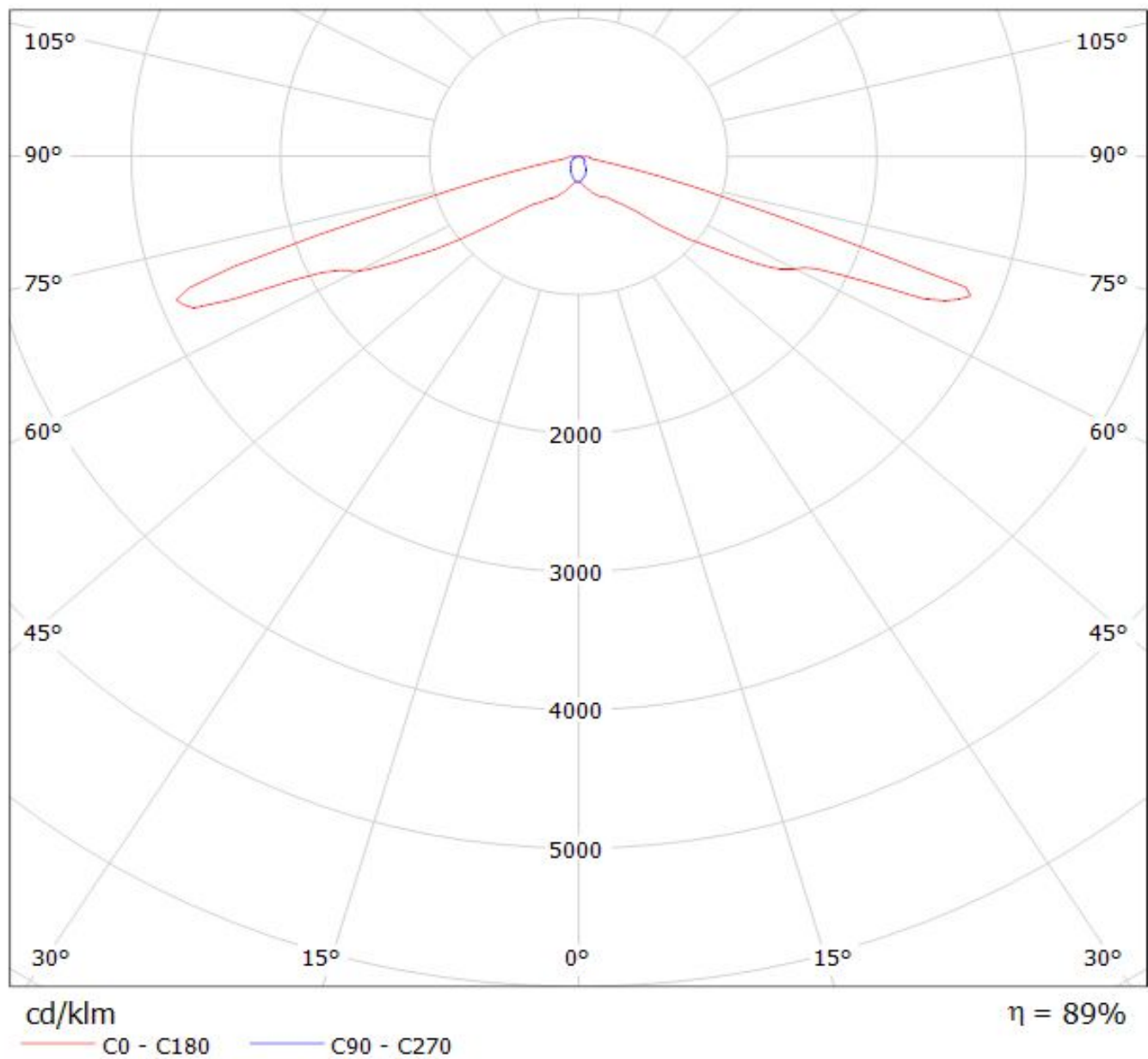
LEDiL Oy CA13156_EMERALD-A_(NCS19) Eff.88.1% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(NCS19) Eff.88.1%

Lamps: 1 x NCS19 (89lm@250mA)



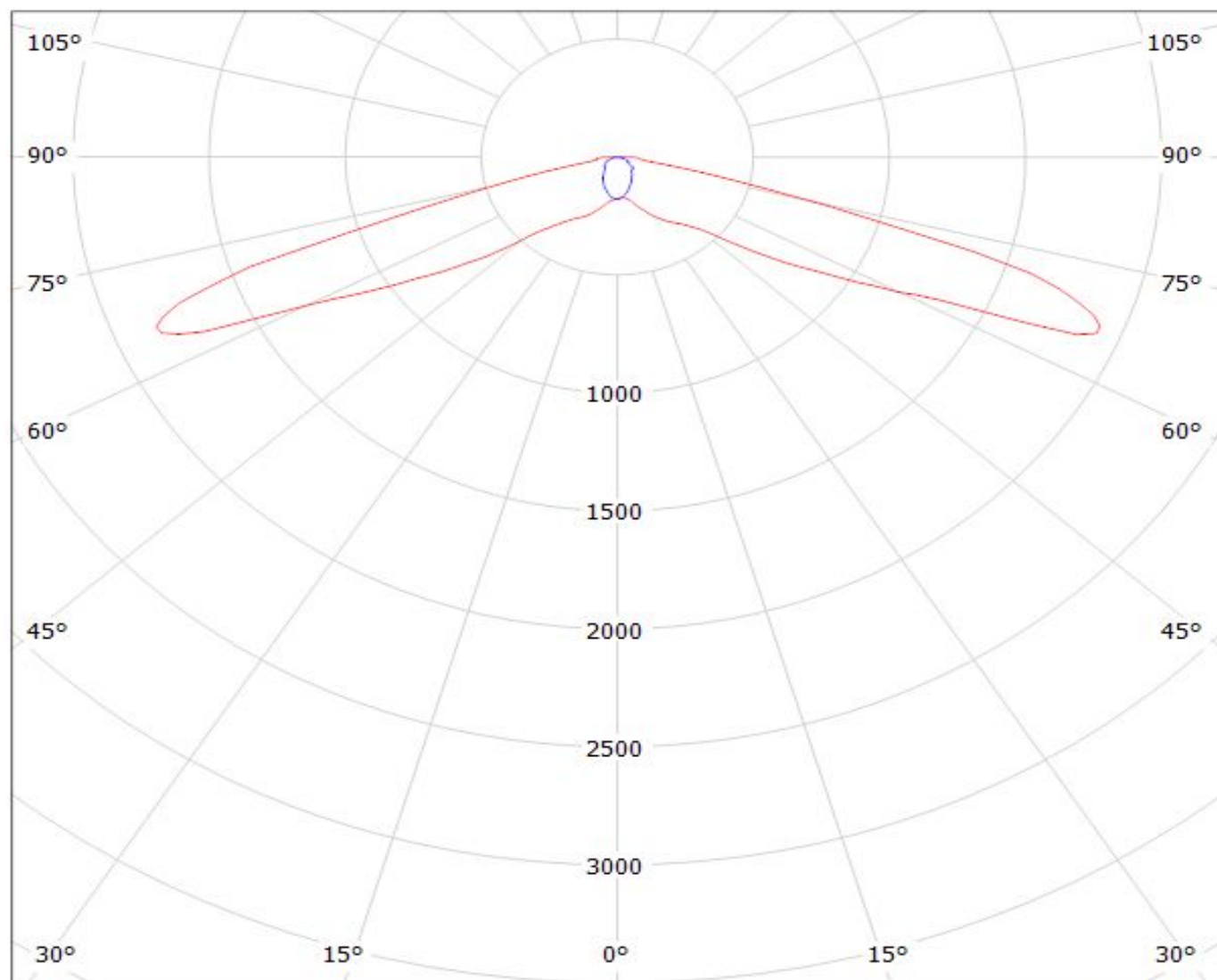
Luminaire: LEDiL Oy CA13156_EMERALD-A_(Rebel) Eff. 88,8%
Lamps: 1 x Luxeon Rebel (82lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(LUXEON_R) Eff.88.4% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(LUXEON_R) Eff.88.4%

Lamps: 1 x LUXEON_R (85.6lm@250mA)



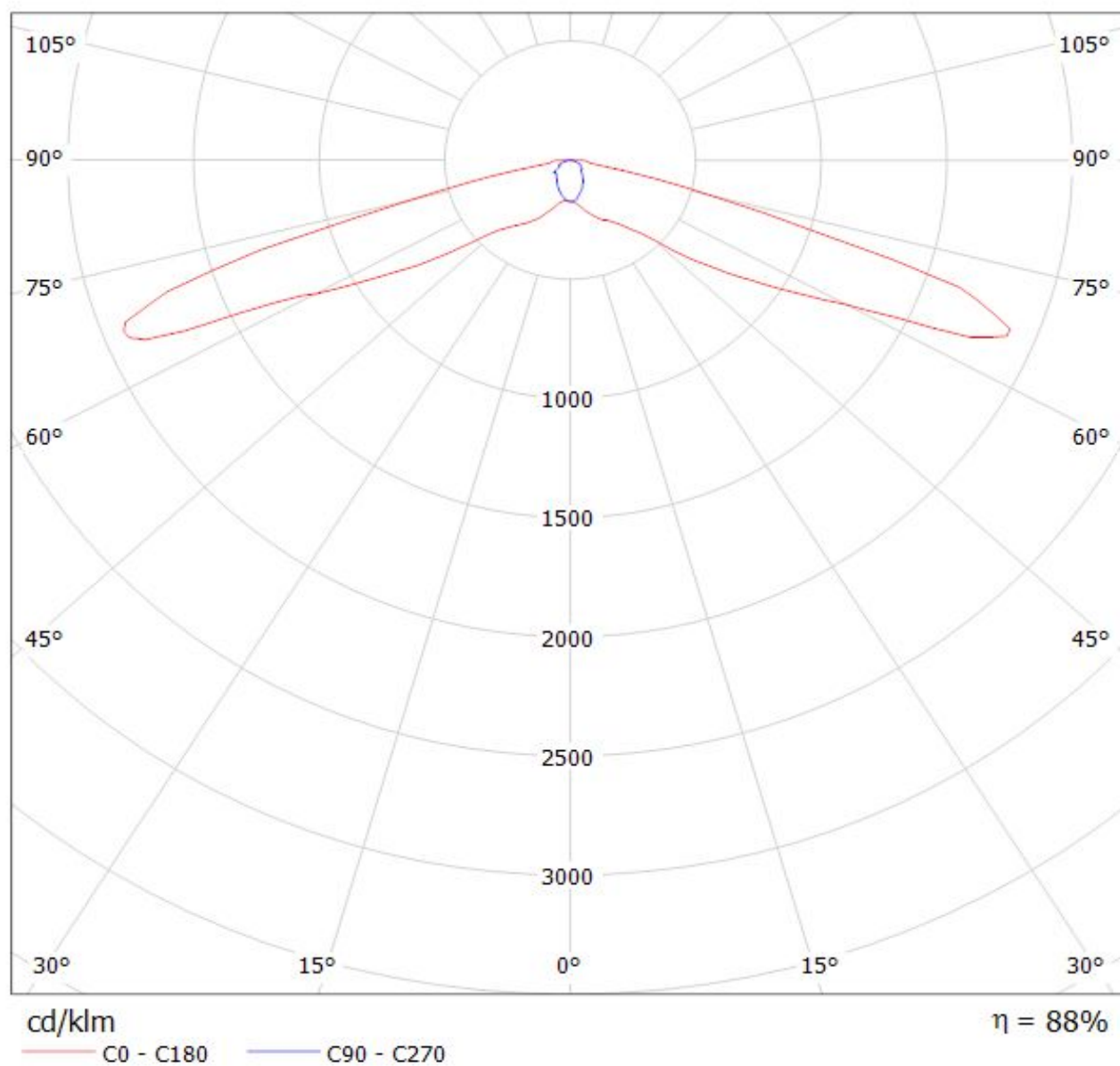
cd/klm

— C0 - C180

— C90 - C270

$\eta = 88\%$

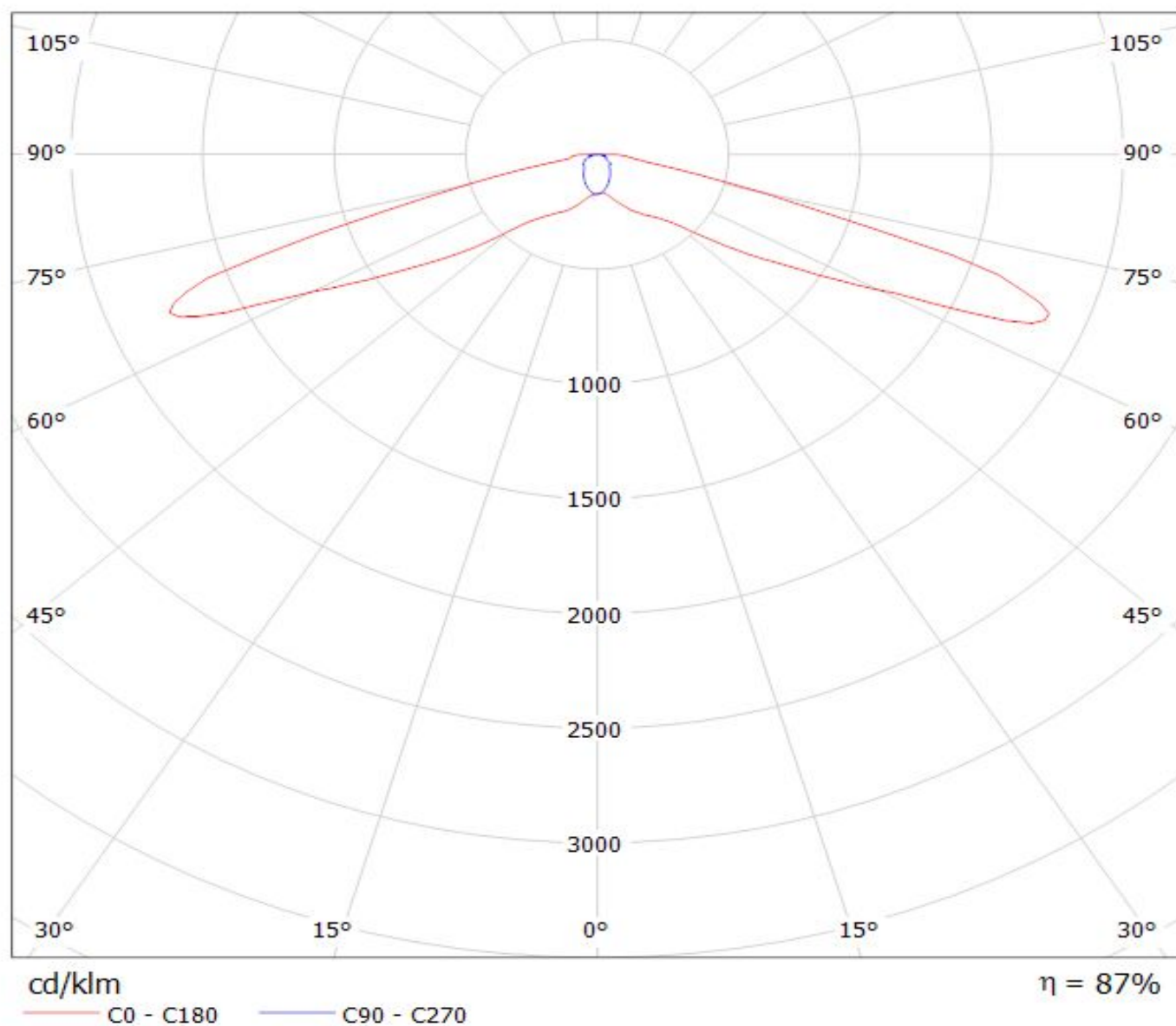
Luminaire: LEDiL Oy CA13156_EMERALD-A_(Rebel-ES) Eff. 88%
Lamps: 1 x Luxeon Rebel-ES (90lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(NVS19) Eff.87.5% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(NVS19) Eff.87.5%

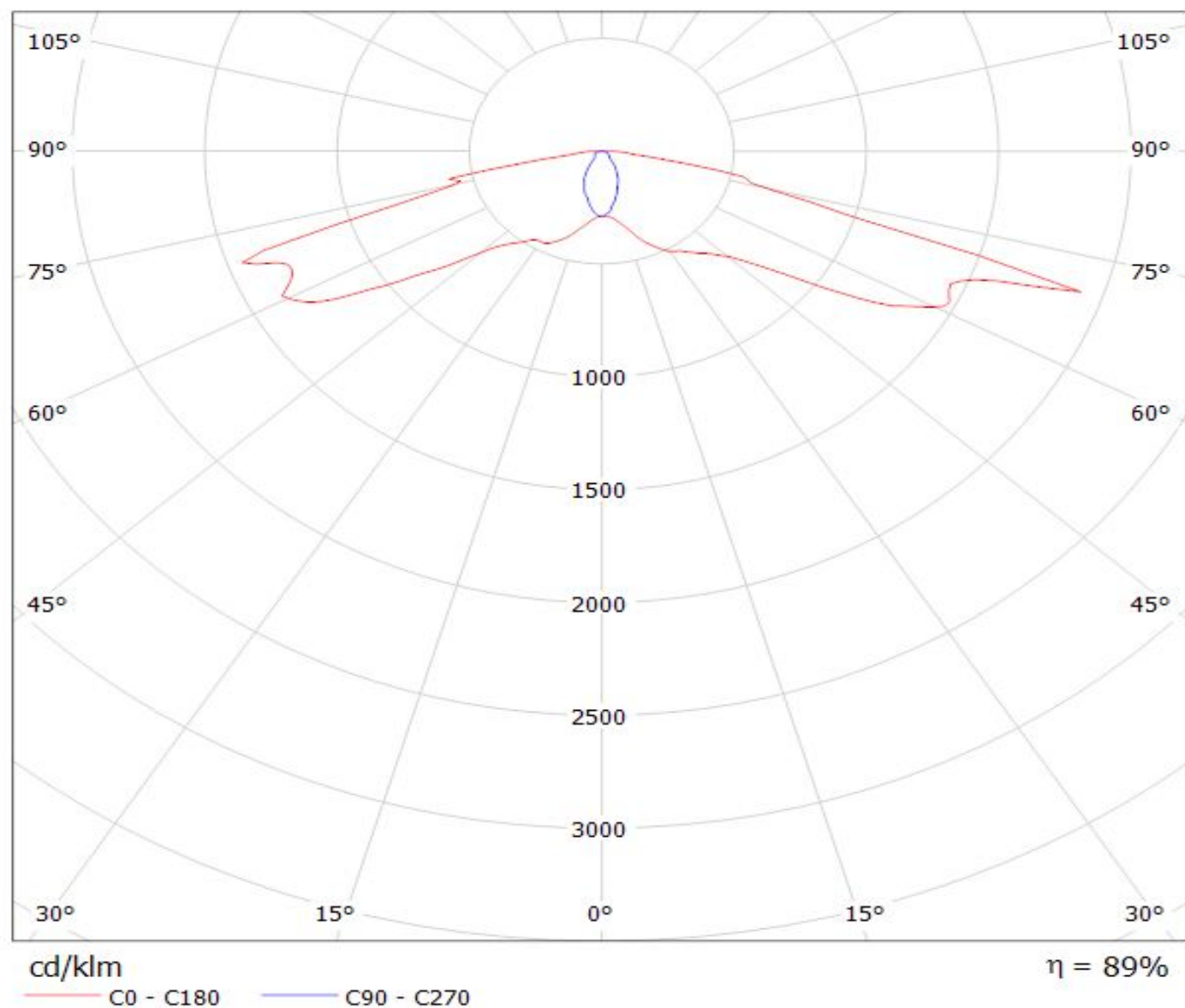
Lamps: 1 x NVS19 (98.3lm@250mA)



LEDiL Oy C13155_EMERALD-A_(SSL80) Eff.89.4% / LDC (Polar)

Luminaire: LEDiL Oy C13155_EMERALD-A_(SSL80) Eff.89.4%

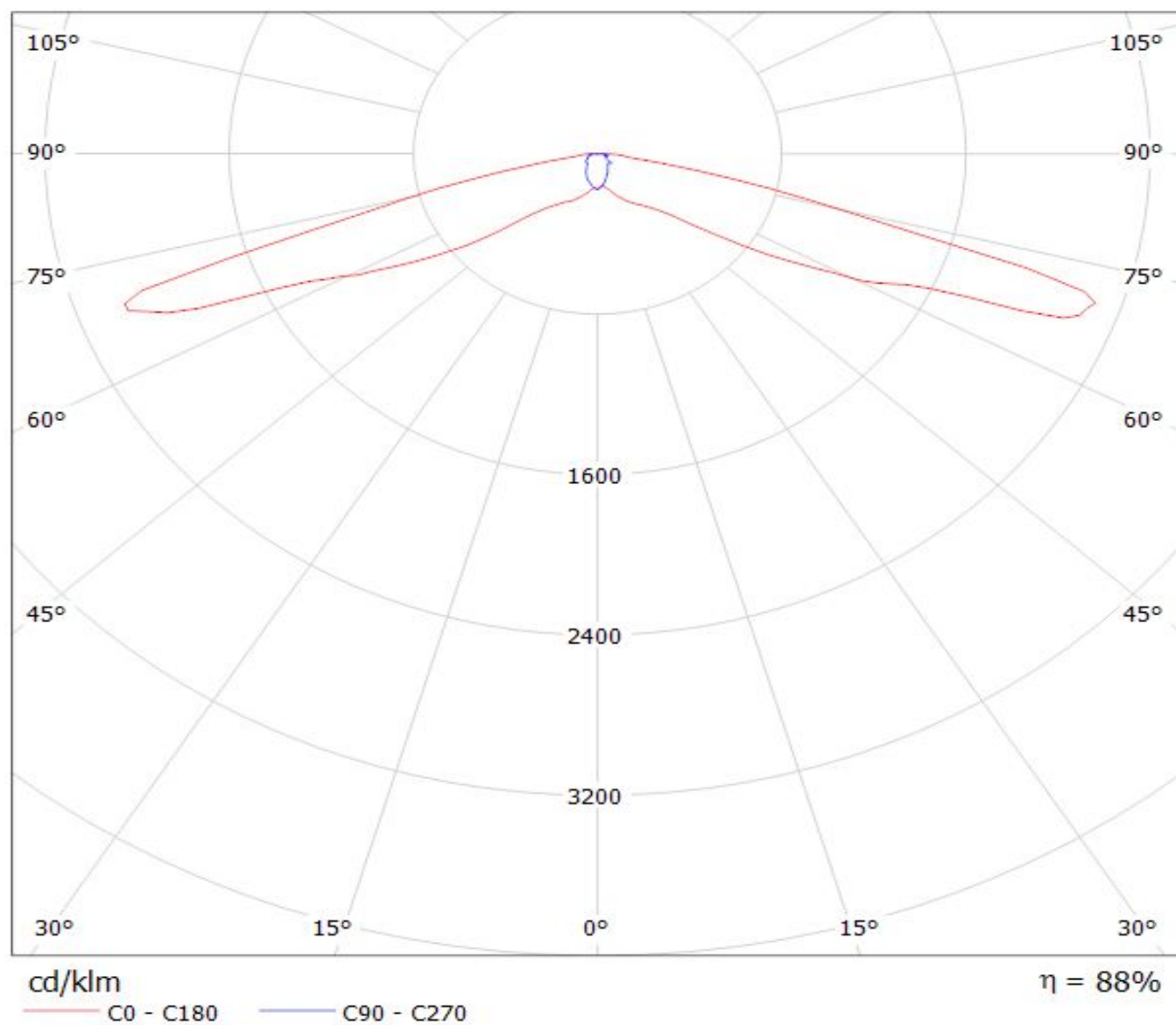
Lamps: 1 x Oslon SSL (81.3lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(XB-D) Eff.87.8% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(XB-D) Eff.87.8%

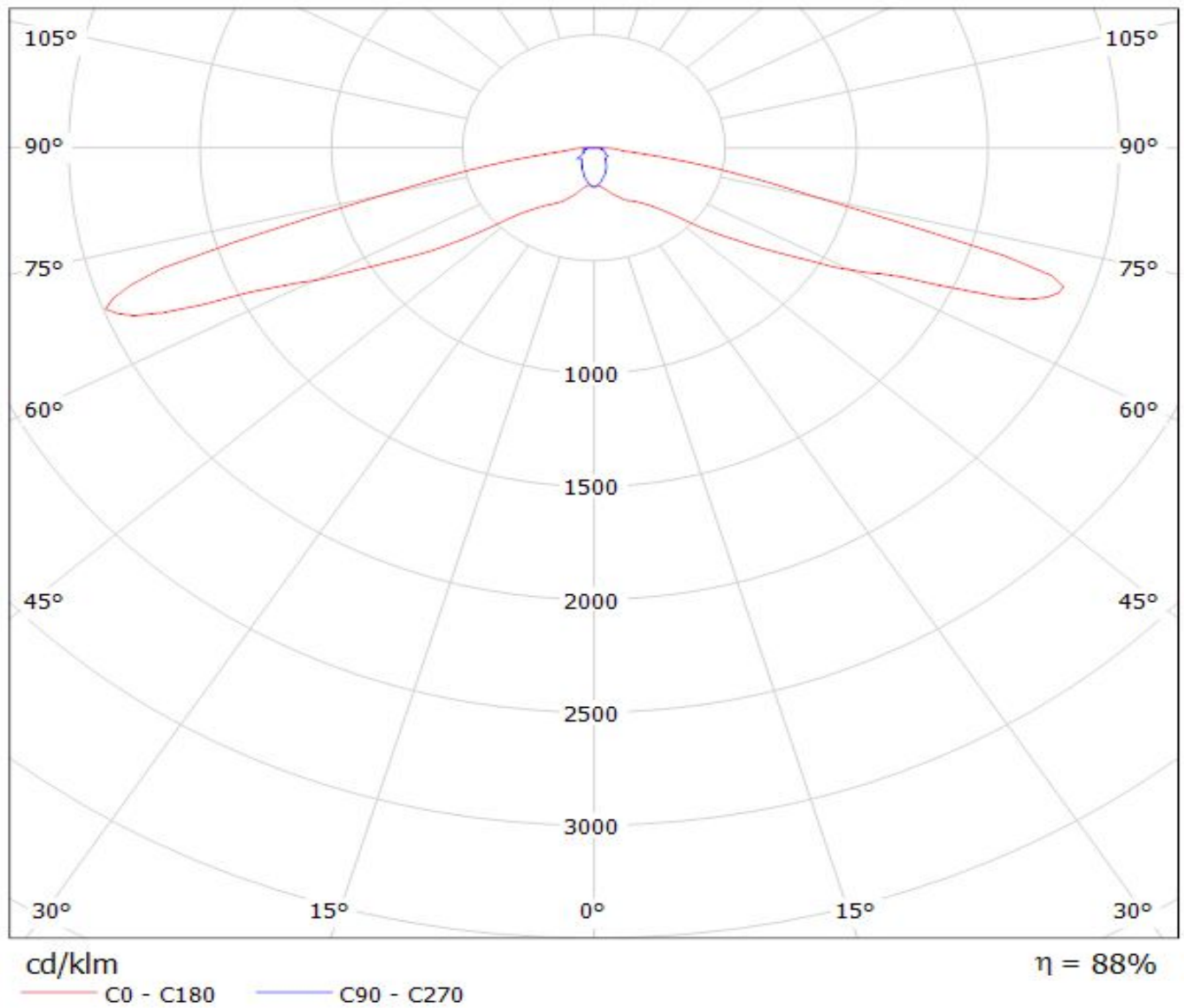
Lamps: 1 x Cree XB-D (95lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(XT-E) Eff.88.2% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(XT-E) Eff.88.2%

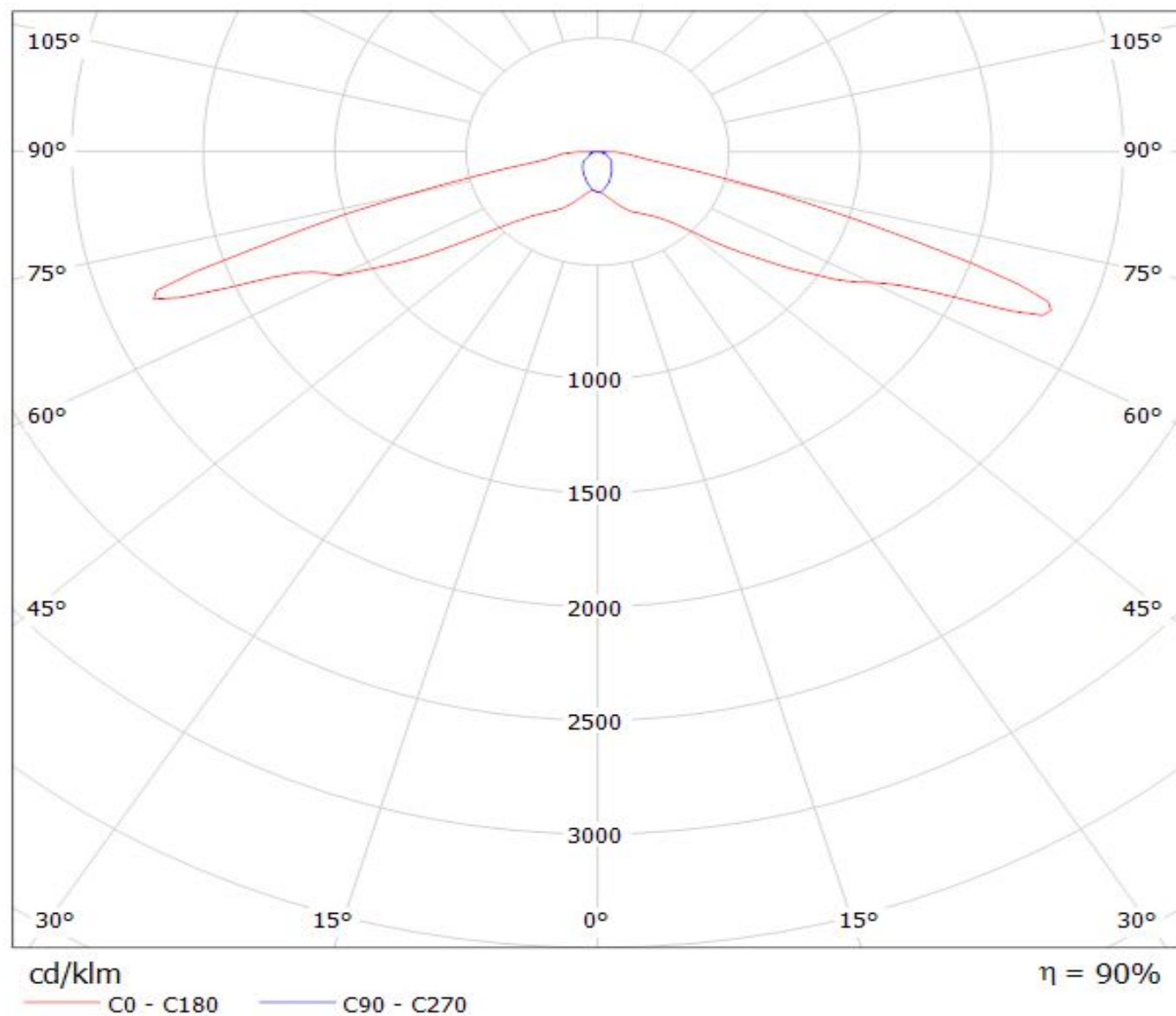
Lamps: 1 x Cree XT-E (102.3lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(SQ-EC) Eff.89.6% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(SQ-EC) Eff.89.6%

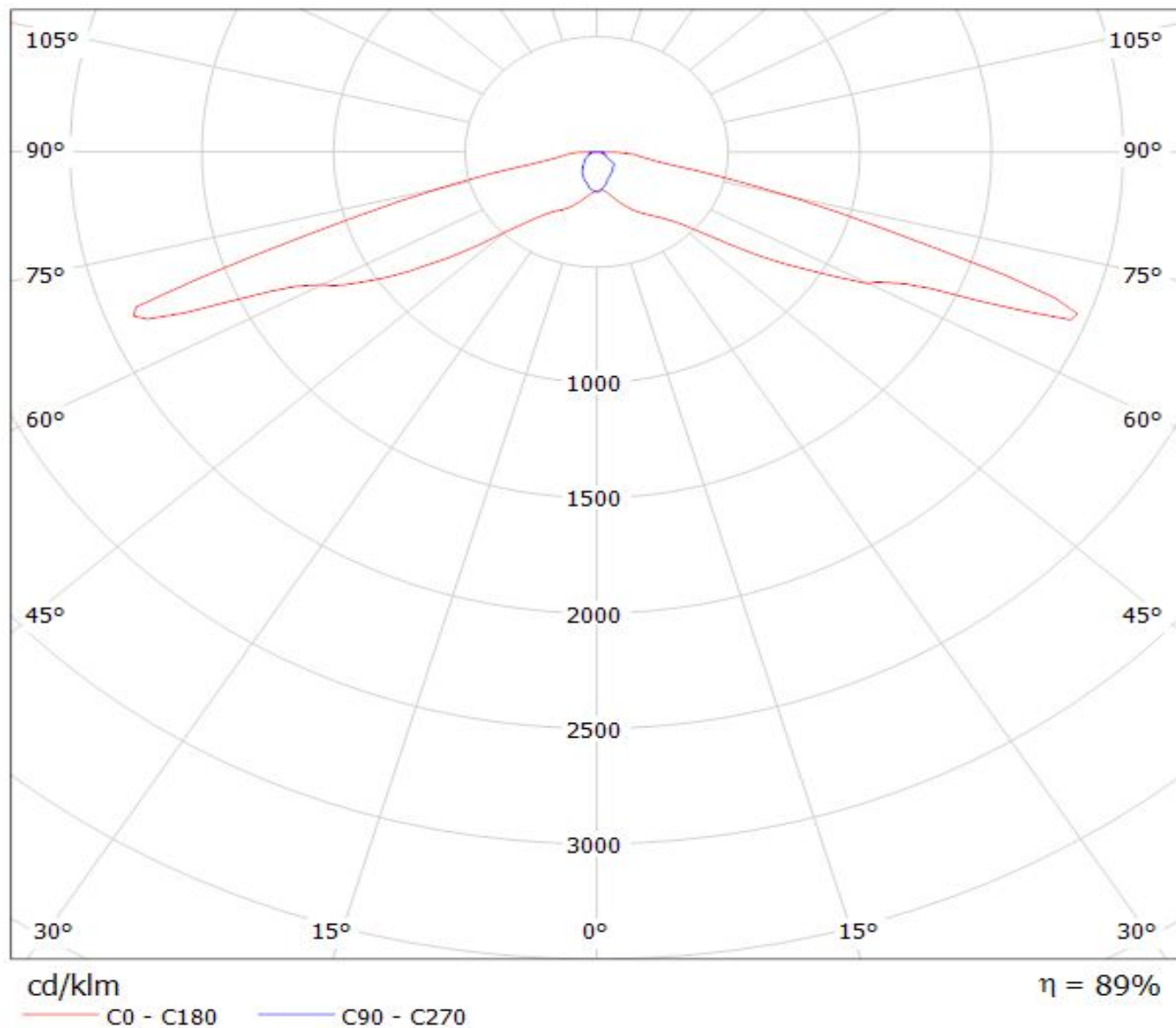
Lamps: 1 x SQ-EC (64.5908lm@250mA)



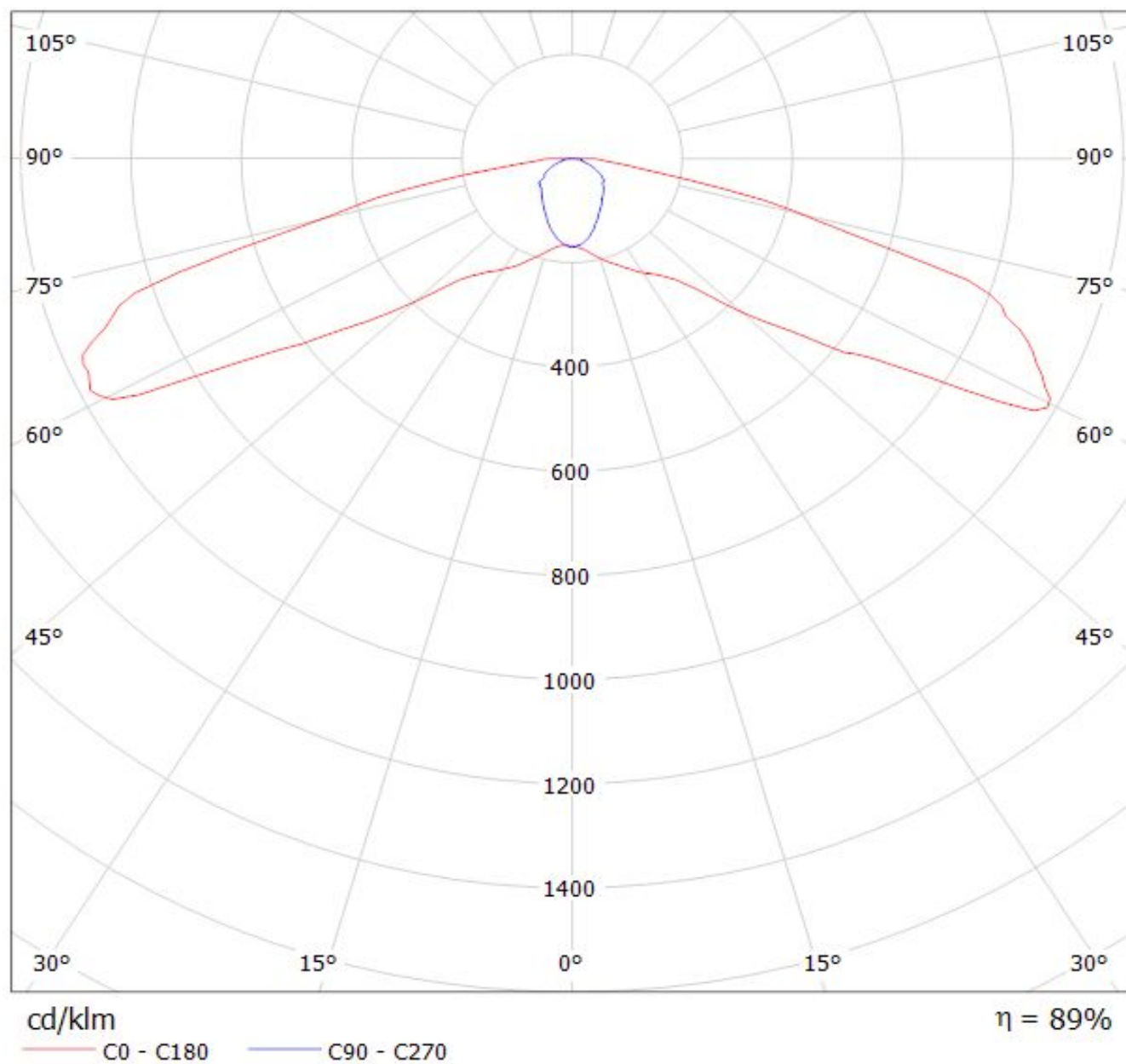
LEDiL Oy CA13156_EMERALD-A_(SQ-PC) Eff.89.1% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(SQ-PC) Eff.89.1%

Lamps: 1 x SQ-PC (79.1971lm@250mA)



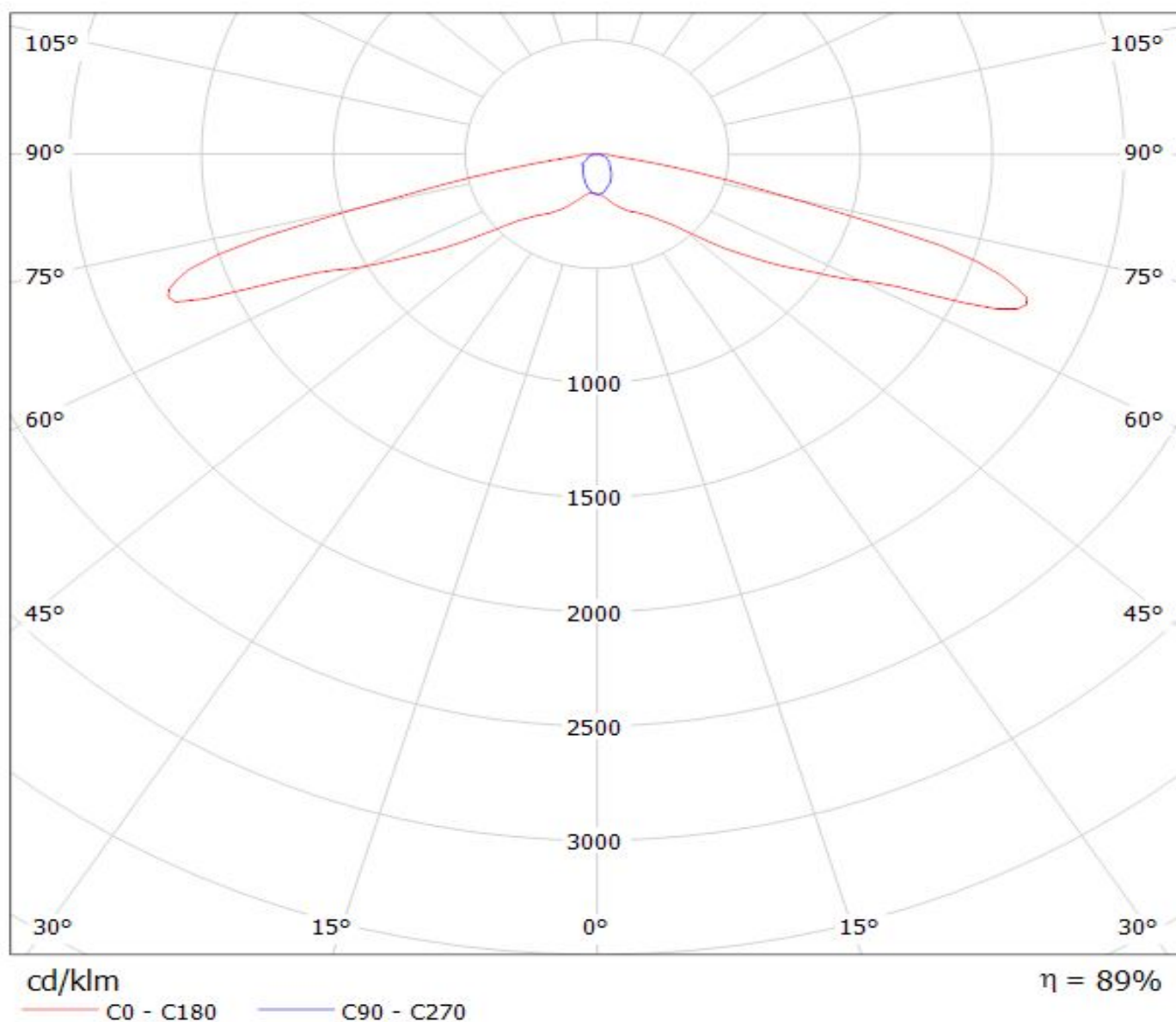
Luminaire: LEDiL Oy CA13156_EMERALD-A_(NS9x383) Eff. 89,2%
Lamps: 1 x Nichia NS9x383 (105lm@250mA)



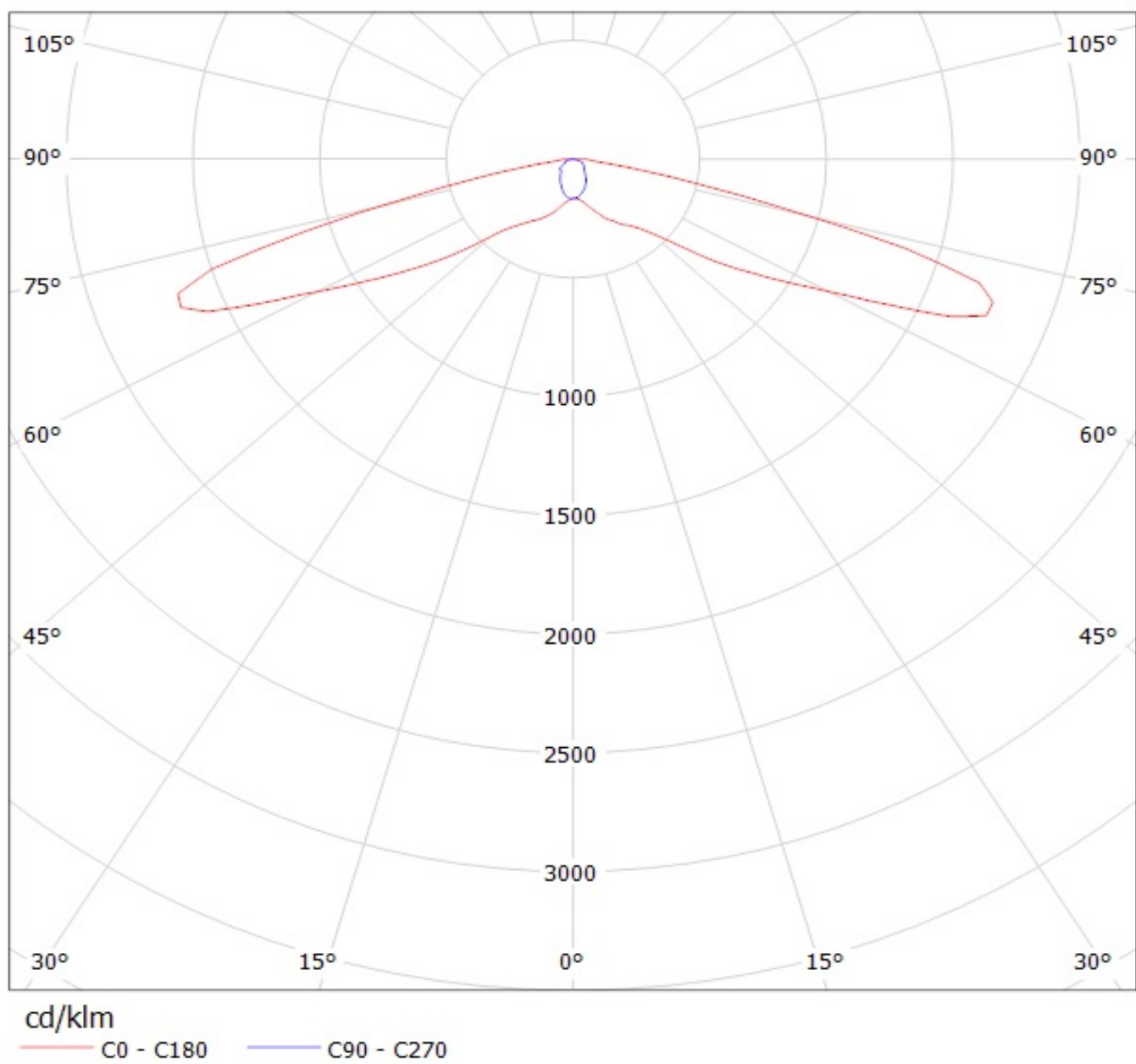
LEDiL Oy CA13156_EMERALD-A_(LUXEON_A) Eff.88.6% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(LUXEON_A) Eff.88.6%

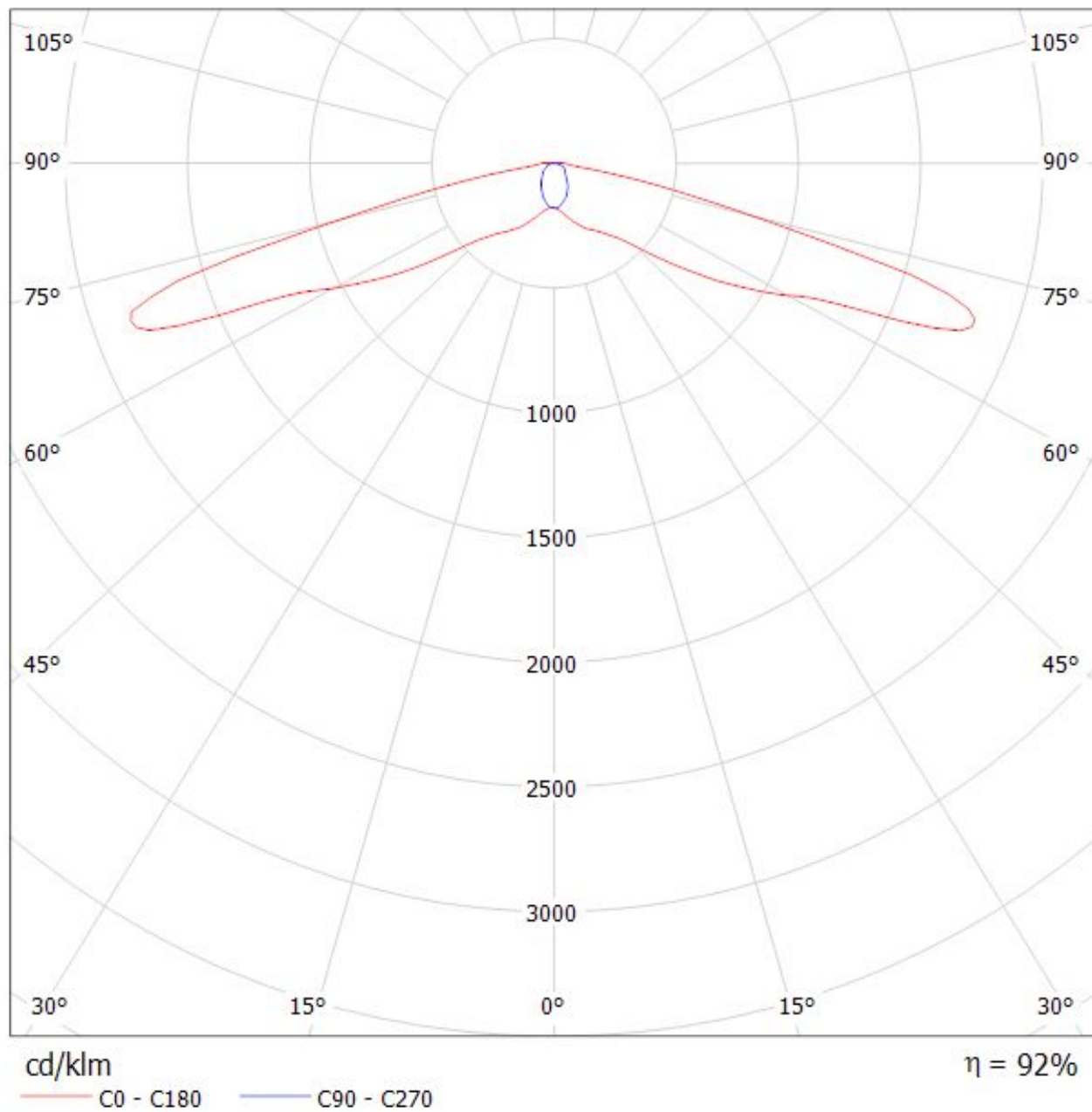
Lamps: 1 x LUXEON_R (67.5lm@250mA)



Luminaire: Ledil Oy CA13156_EMERALD-A (Luxeon T 71lm @ 250mA) Efficiency=93%
Lamps: 1 x Luxeon T 71lm @ 250mA



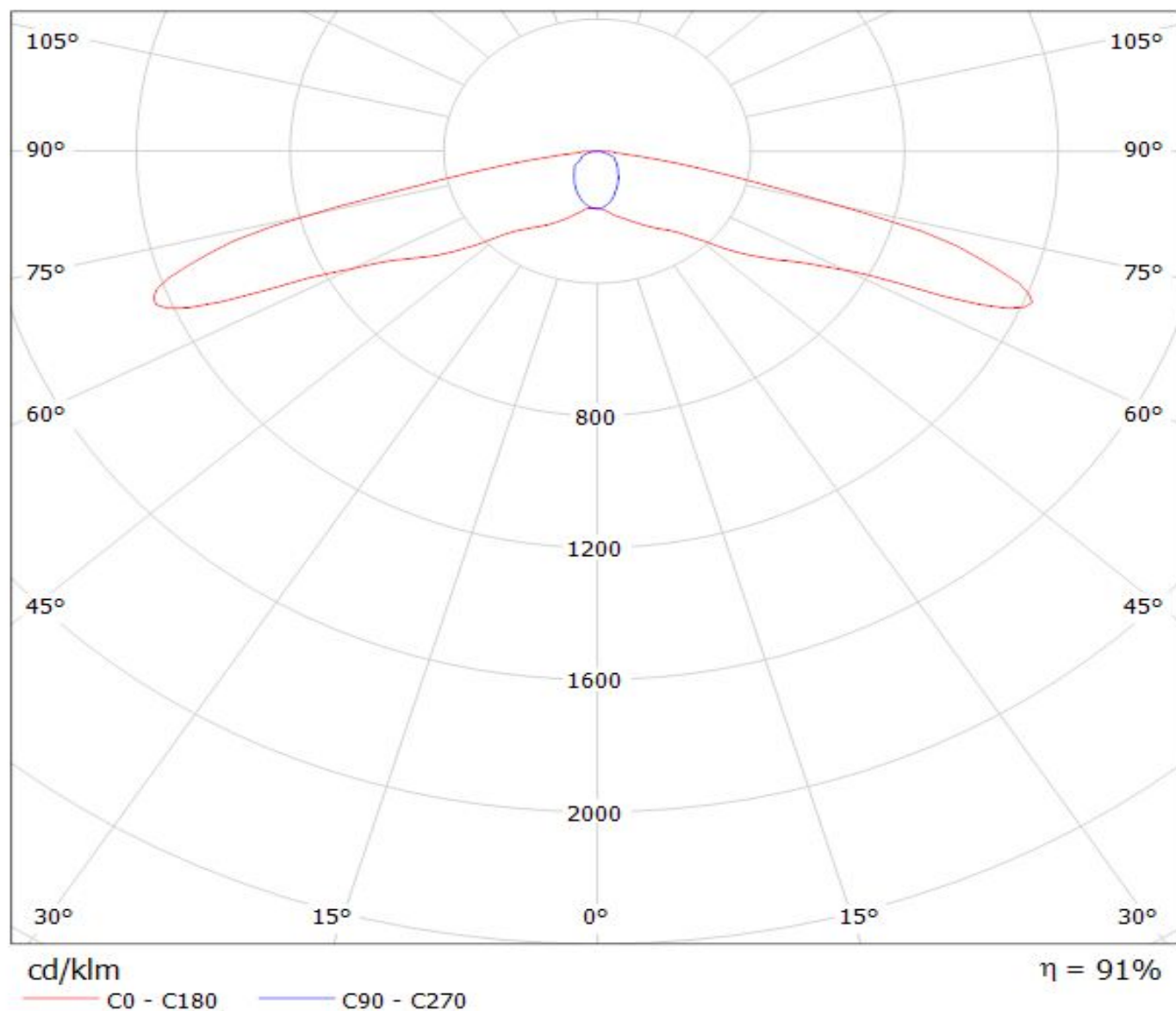
Luminaire: LEDiL Oy CA13156_EMERALD-A_(Luxeon_TX) Eff.91.7%
Lamps: 1 x Luxeon_TX_(L1T2-3585)_80.1801lm@250mA_CCT=3500K_P=0.731482W_I=249.9mA



LEDiL Oy CA13156_EMERALD-A_(XM-L) Eff.90.8% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(XM-L) Eff.90.8%

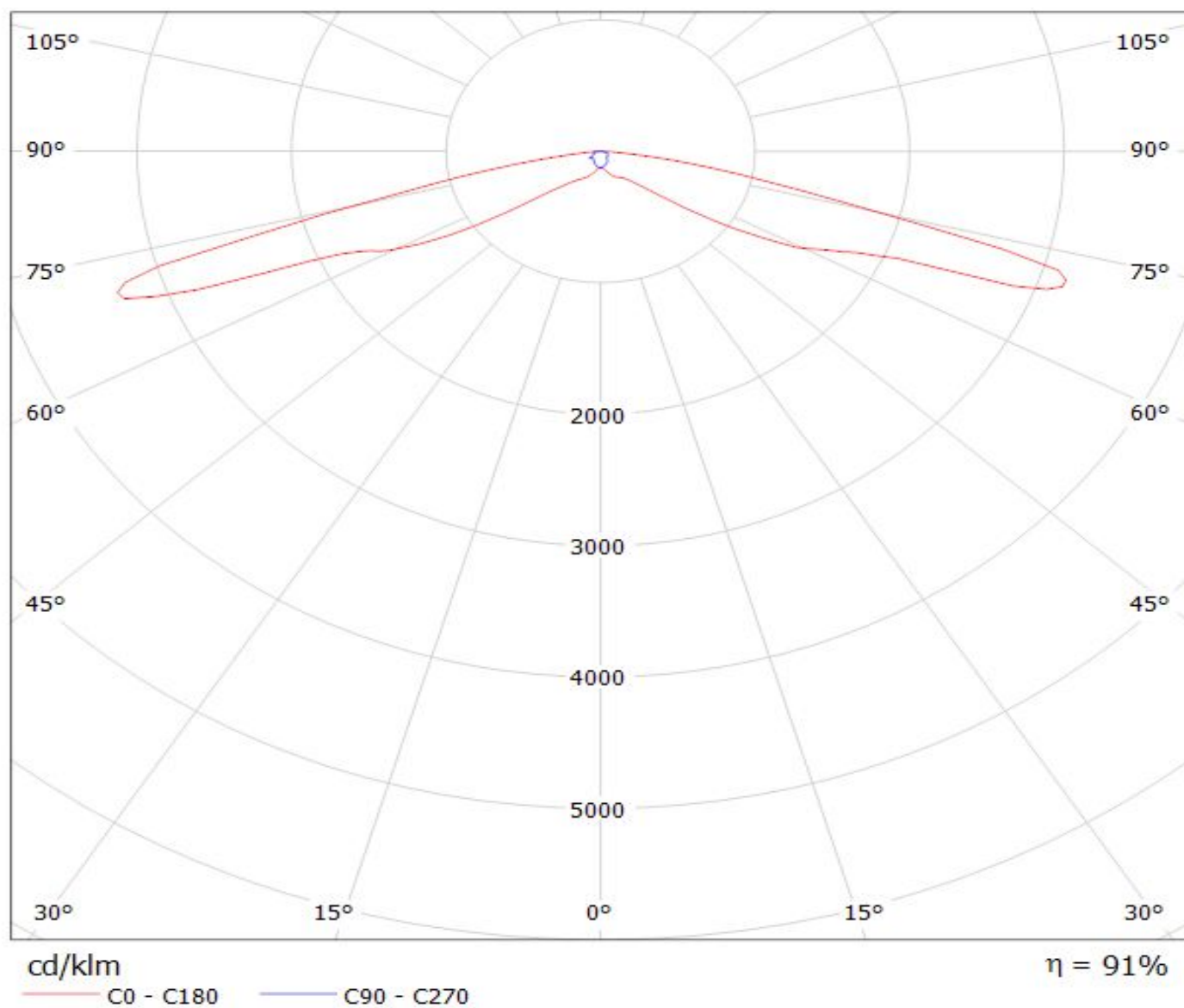
Lamps: 1 x Cree XM-L (91.7822lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(SSL150) Eff.91.4% / LDC (Polar)

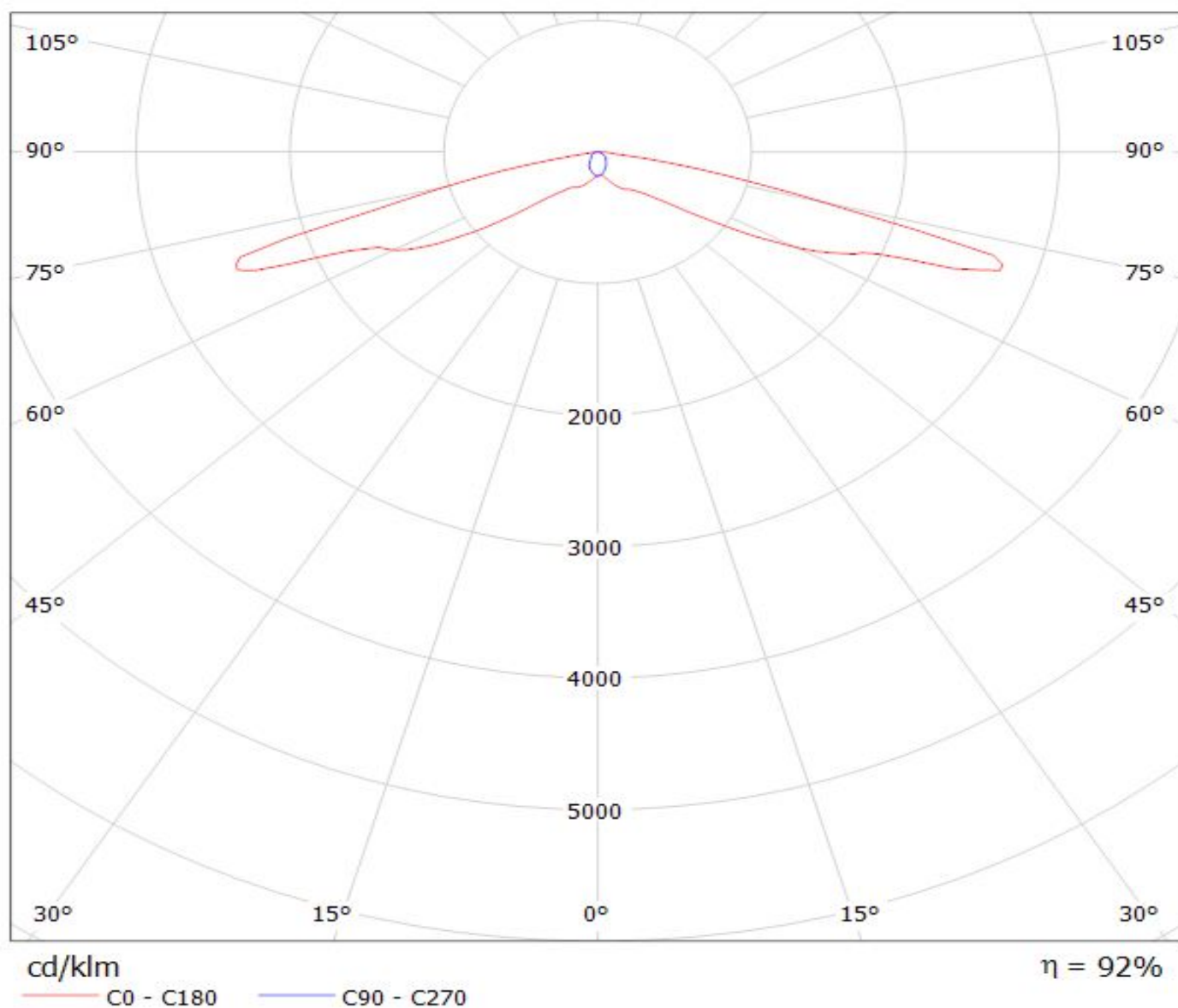
Luminaire: LEDiL Oy CA13156_EMERALD-A_(SSL150) Eff.91.4%

Lamps: 1 x Oslon SSL150 (71.5lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(XP-E) Eff.91.5% / LDC (Polar)

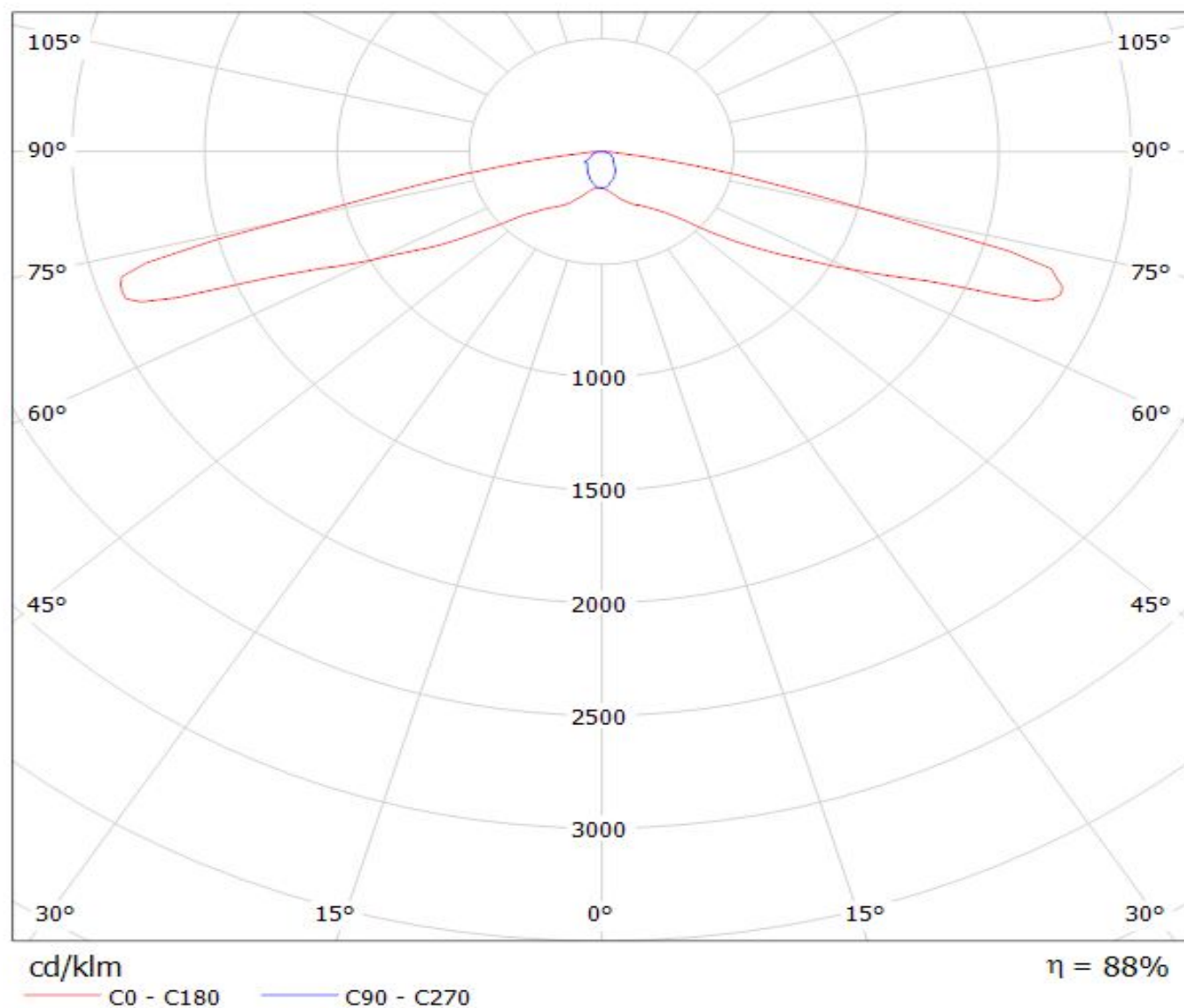
Luminaire: LEDiL Oy CA13156_EMERALD-A_(XP-E) Eff.91.5%
Lamps: 1 x CREE XP-E (51.4197lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(XP-G) Eff.88.1% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(XP-G) Eff.88.1%

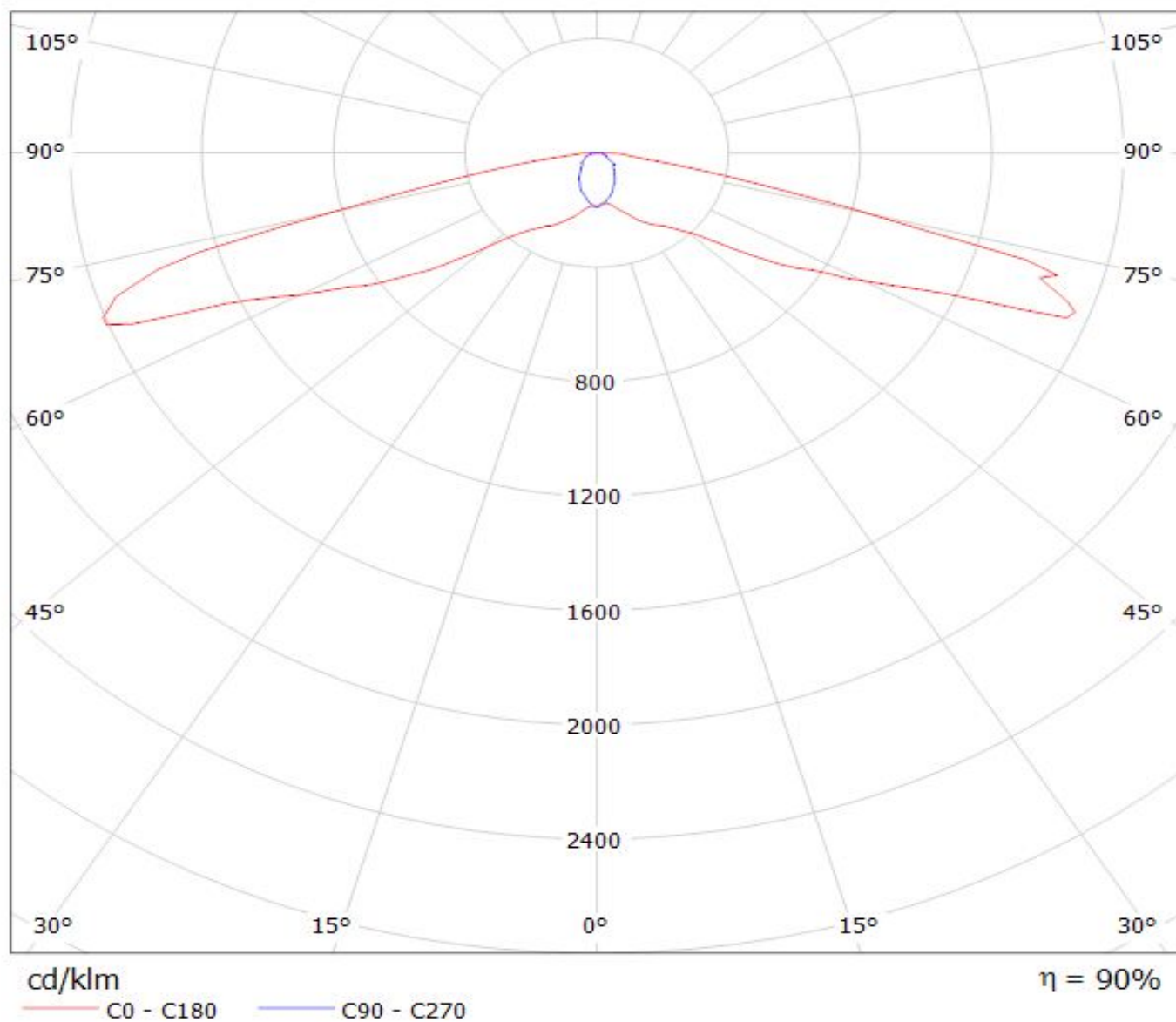
Lamps: 1 x XP-G (70.6lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(LG3535) Eff.89.7% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(LG3535) Eff.89.7%

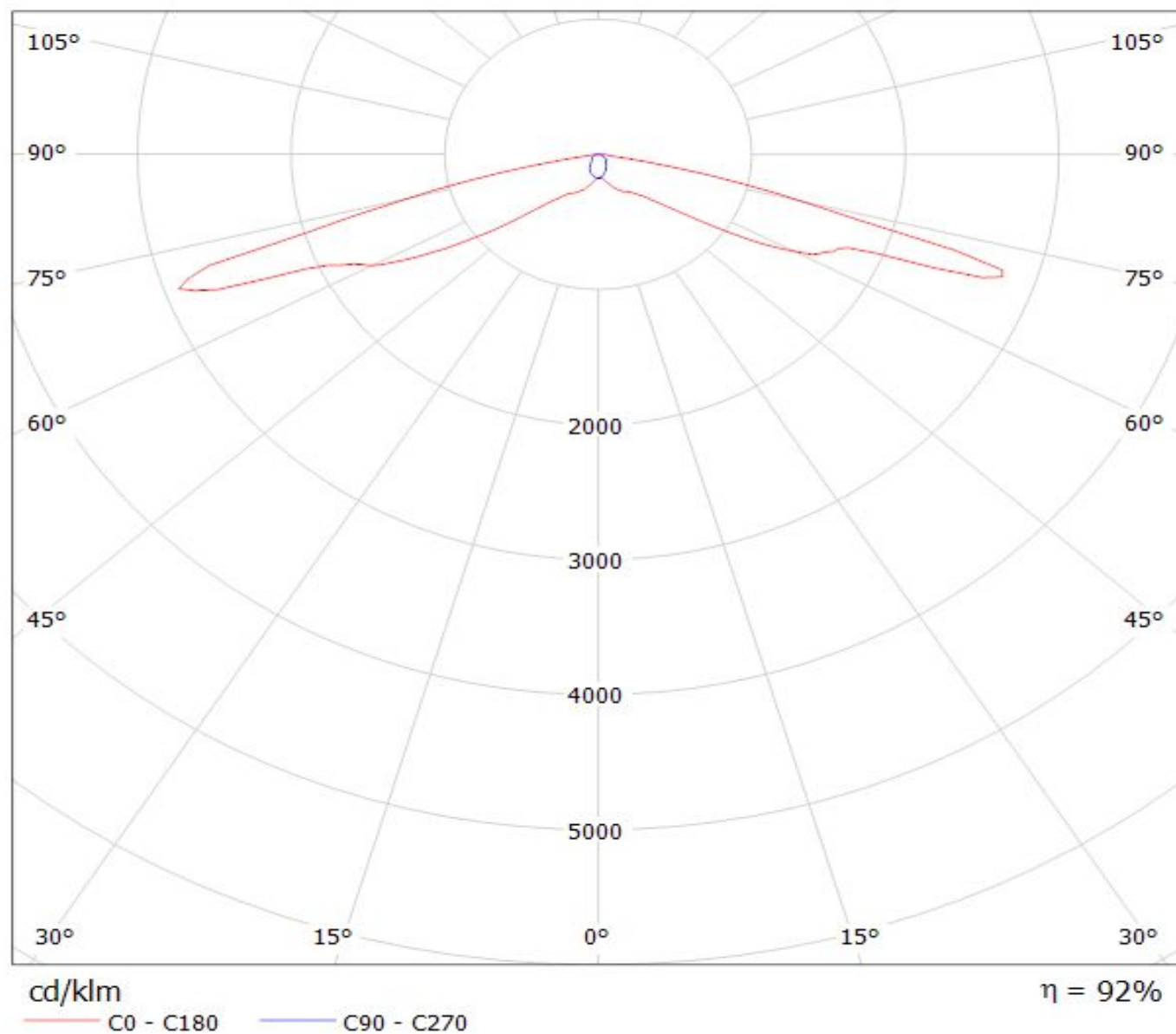
Lamps: 1 x LG 3535 Ceramic (94lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(XP-E2) Eff.91.7% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(XP-E2) Eff.91.7%

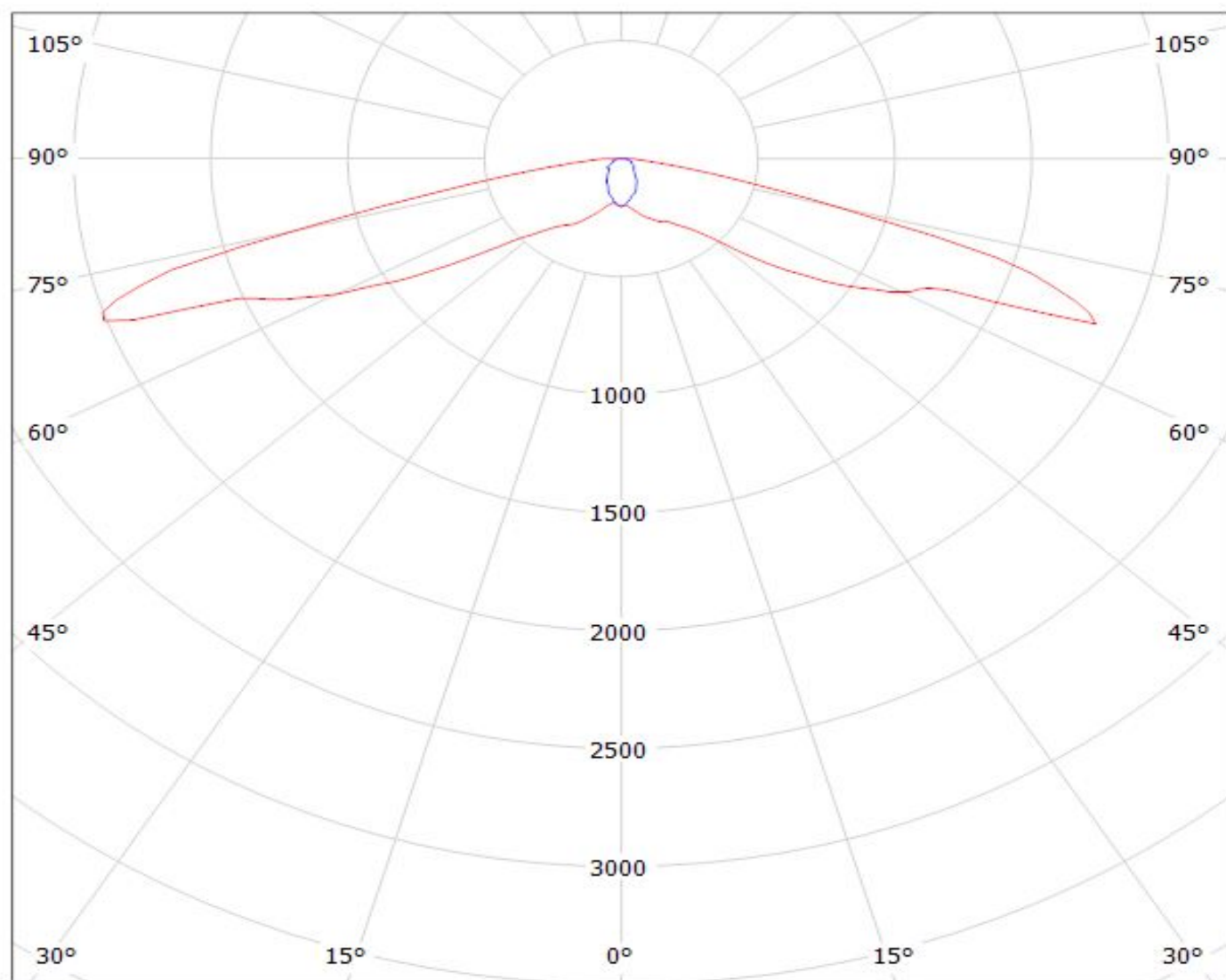
Lamps: 1 x CREE XP-E2 (93.5lm@250mA)



LEDiL Oy CA13156_EMERALD-A_(LG3535_2W) Eff.92.6% / LDC (Polar)

Luminaire: LEDiL Oy CA13156_EMERALD-A_(LG3535_2W) Eff.92.6%

Lamps: 1 x LG3535_2W (97.3629lm@250mA)



cd/klm

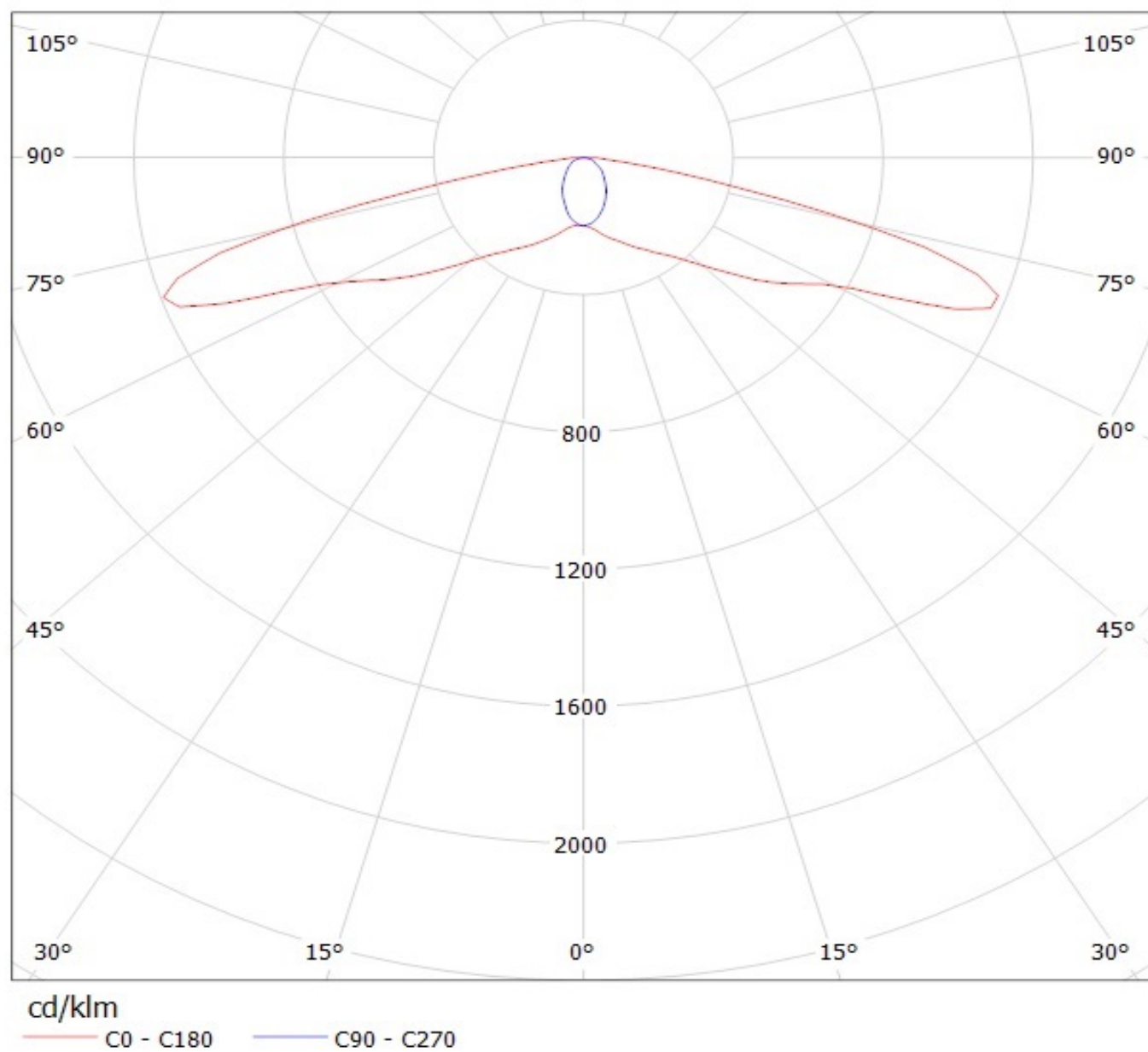
— C0 - C180

— C90 - C270

$\eta = 93\%$

Luminaire: LEDil Oy CA13156 EMERALD-A_(XM-L2) Efficiency=92%

Lamps: 1 x Cree XM-L2 (XMLBWT-0-7B4-T30-0L-0001) 91lm @ 250mA CCT=3200K P=0.7W I=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.