

## DETAILS

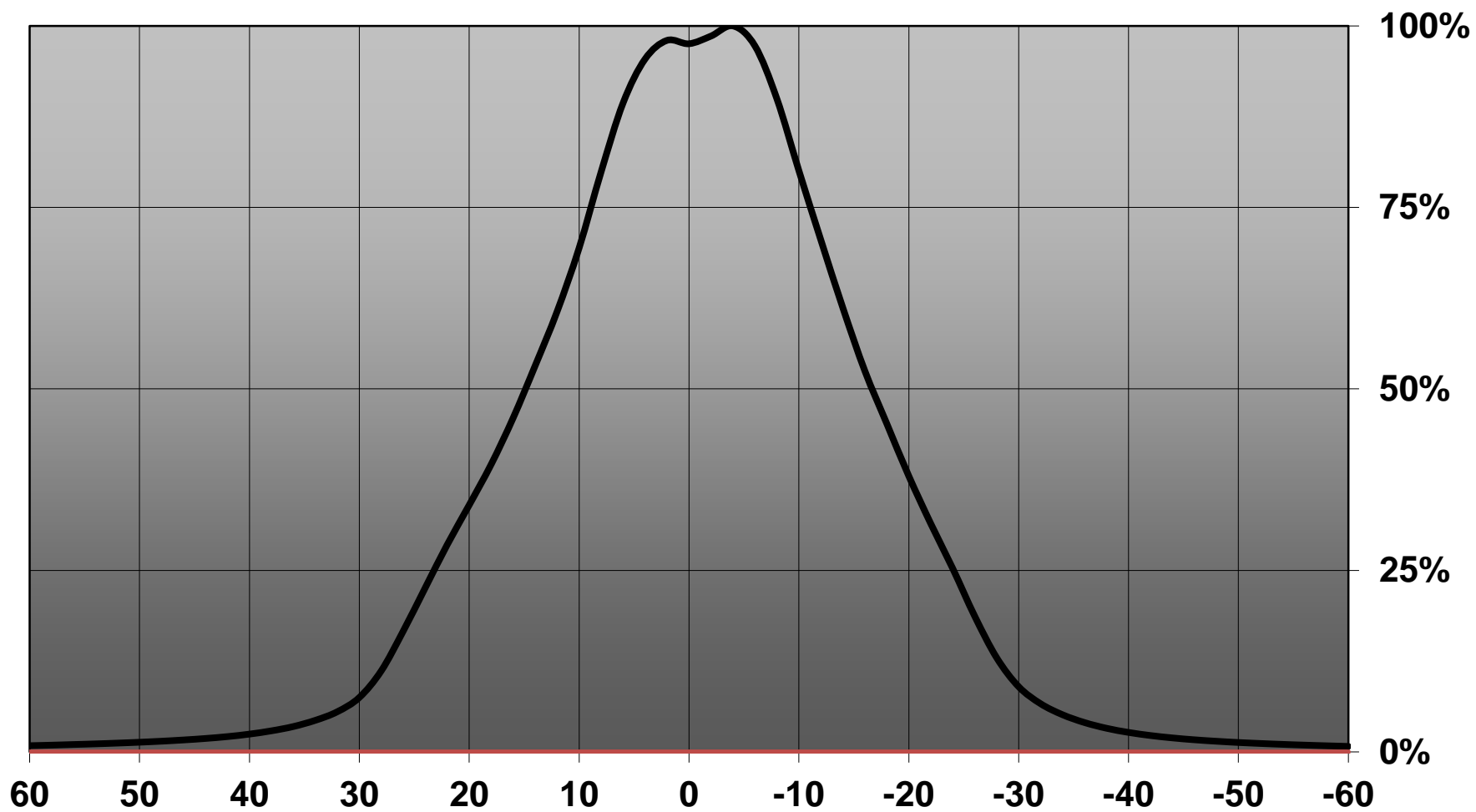
<b>Product Number</b>	CA12378_TINA2-W
<b>Family</b>	Tina
<b>Type</b>	Assembly
<b>Color</b>	black
<b>Diameter</b>	16 mm
<b>Height</b>	9,5 mm
<b>Style</b>	round
<b>Optic Material</b>	PMMA
<b>Holder Material</b>	
<b>Fastening</b>	tape, pin
<b>Status</b>	production ready
<b>ROHS Compliant</b>	Yes
<b>Date Updated</b>	25/09/2015



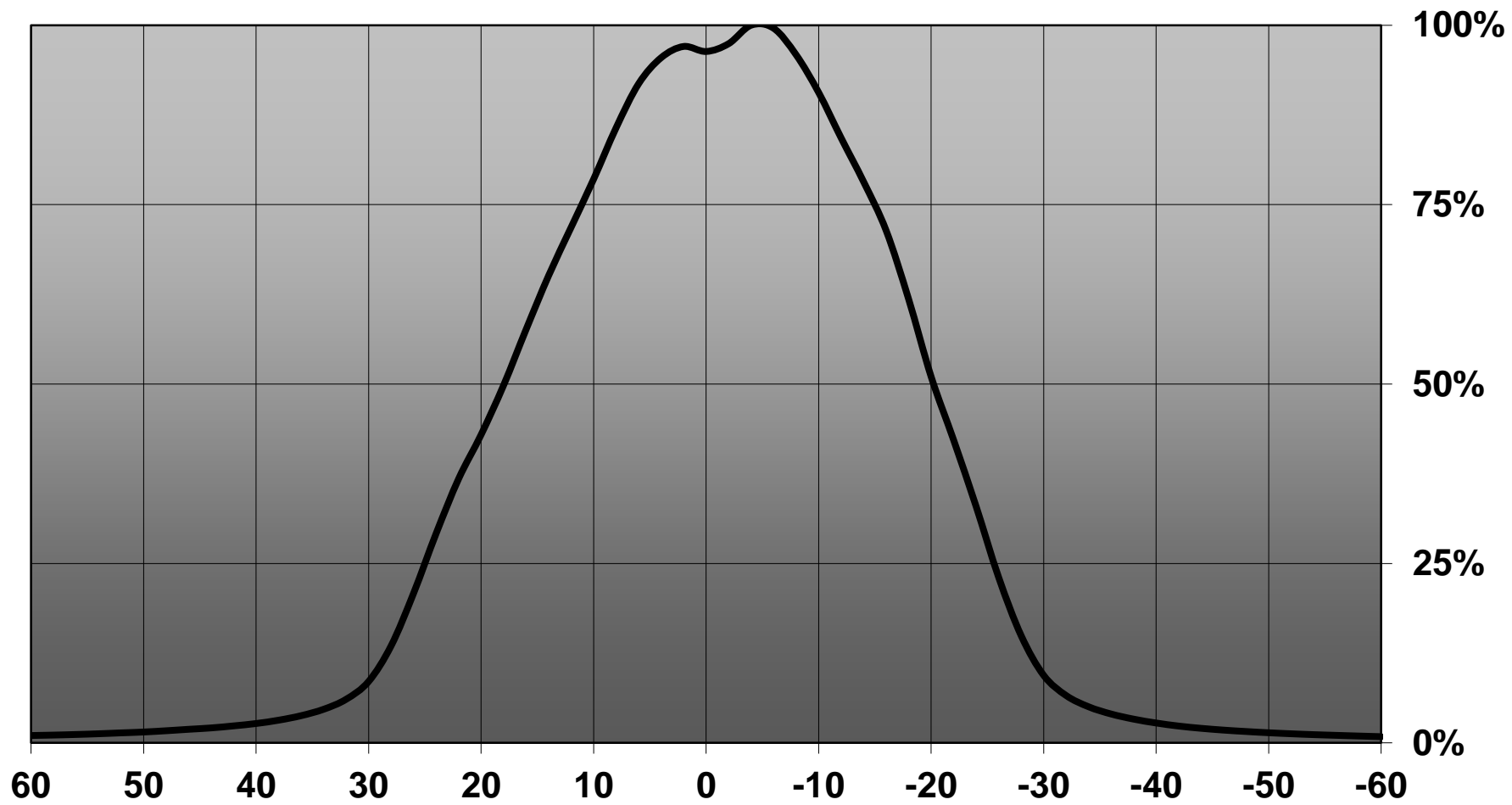
## OPTICAL PROPERTIES

LED	Viewing	Light	Effi-		Connector
	Angle	Beam	ciency	cd/lm	
LUXEON TX	49 deg	Wide	88 %	1.550	-
LUXEON C	sim: 44	Wide	sim: 91 %	sim: 1.800	-
NWSx229A	55 deg	Wide	84 %	1.000	-
NVSxx19B/NVSxx19C	52 deg	Wide	87 %	1.400	-
Oslon Square EC	50 deg	Wide	84 %	1.100	-
SFH 4715S	36 deg	Wide	sim: 89 %	-	-
Oslon SSL 80	49 deg	Wide	86 %	1.300	-
Oslon SSL 150	53 deg	Wide	85 %	1.200	-
SFH 4725S	38 deg	Wide	-	-	-
SFH 4770S	sim: 32	Wide	sim: 88 %	-	-
Synios P2720 1 mm	sim: 31	Wide	sim: 92 %	sim: 2.670	-
Synios P2720 1/4 mm	sim: 31	Wide	sim: 92 %	sim: 2.590	-
Synios P2720 1/2 mm	sim: 30	Wide	sim: 92 %	sim: 2.790	-

Relative intensity of CA12378\_TINA2-W-SFH4715S

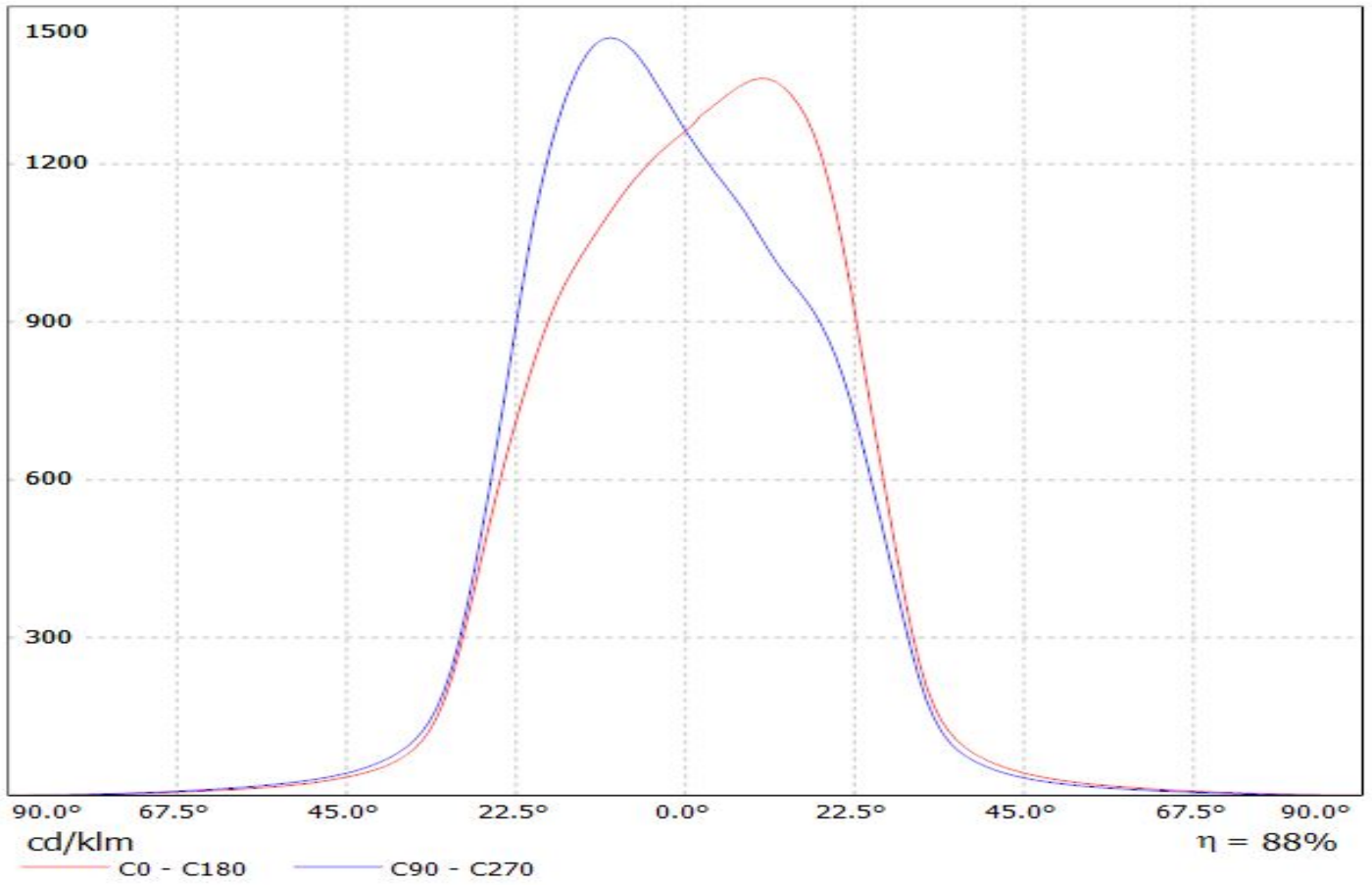


Relative intensity of CA12378\_TINA2-W\_(SFH4725S)



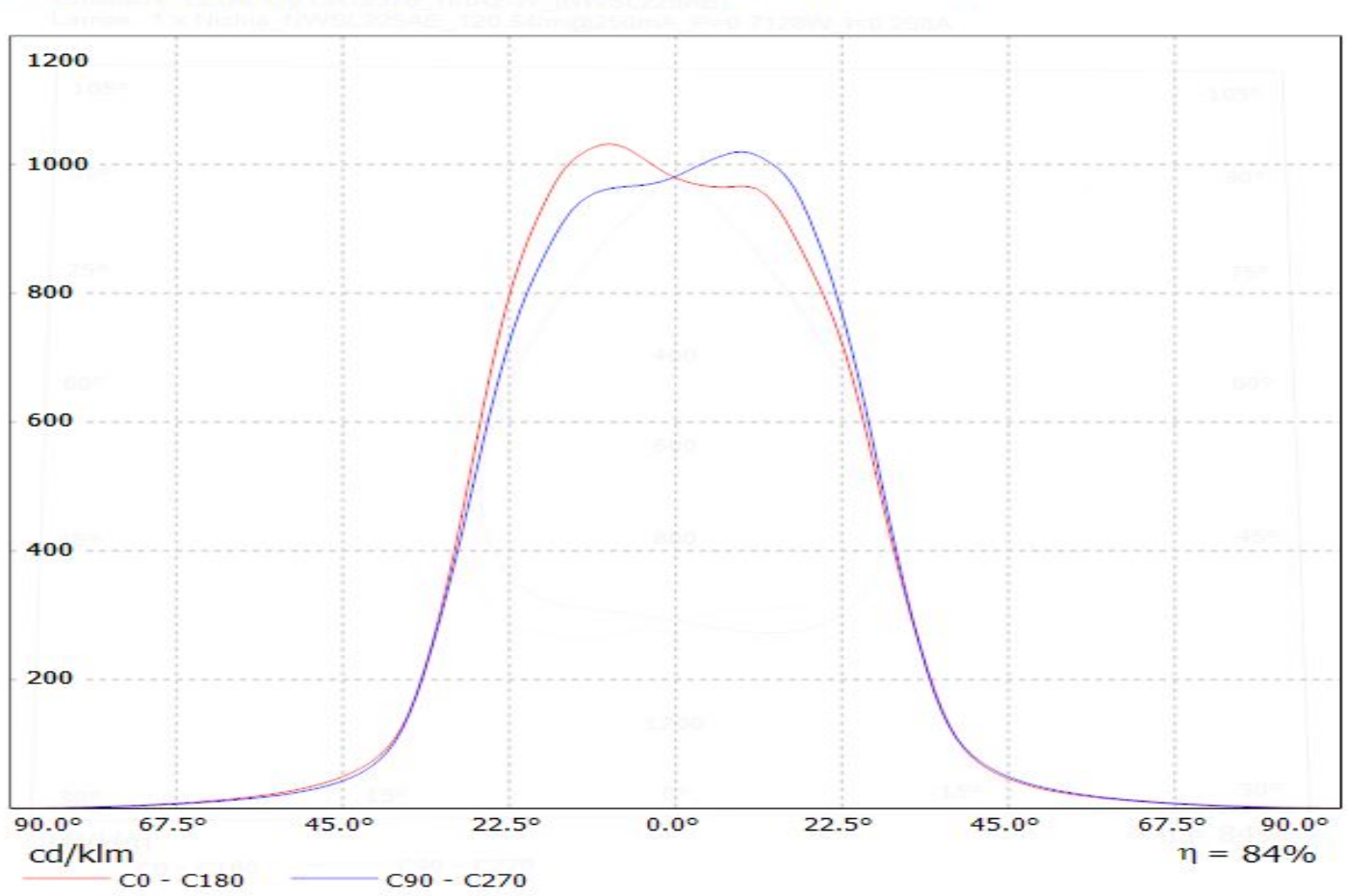
Luminaire: LEDiL Oy CA12378\_TINA2-W\_(TX)

Lamps: 1 x Luxeon\_TX\_(L1T2-5770)\_109.051lm@250mA\_P=0.732157W\_I=0.2499A

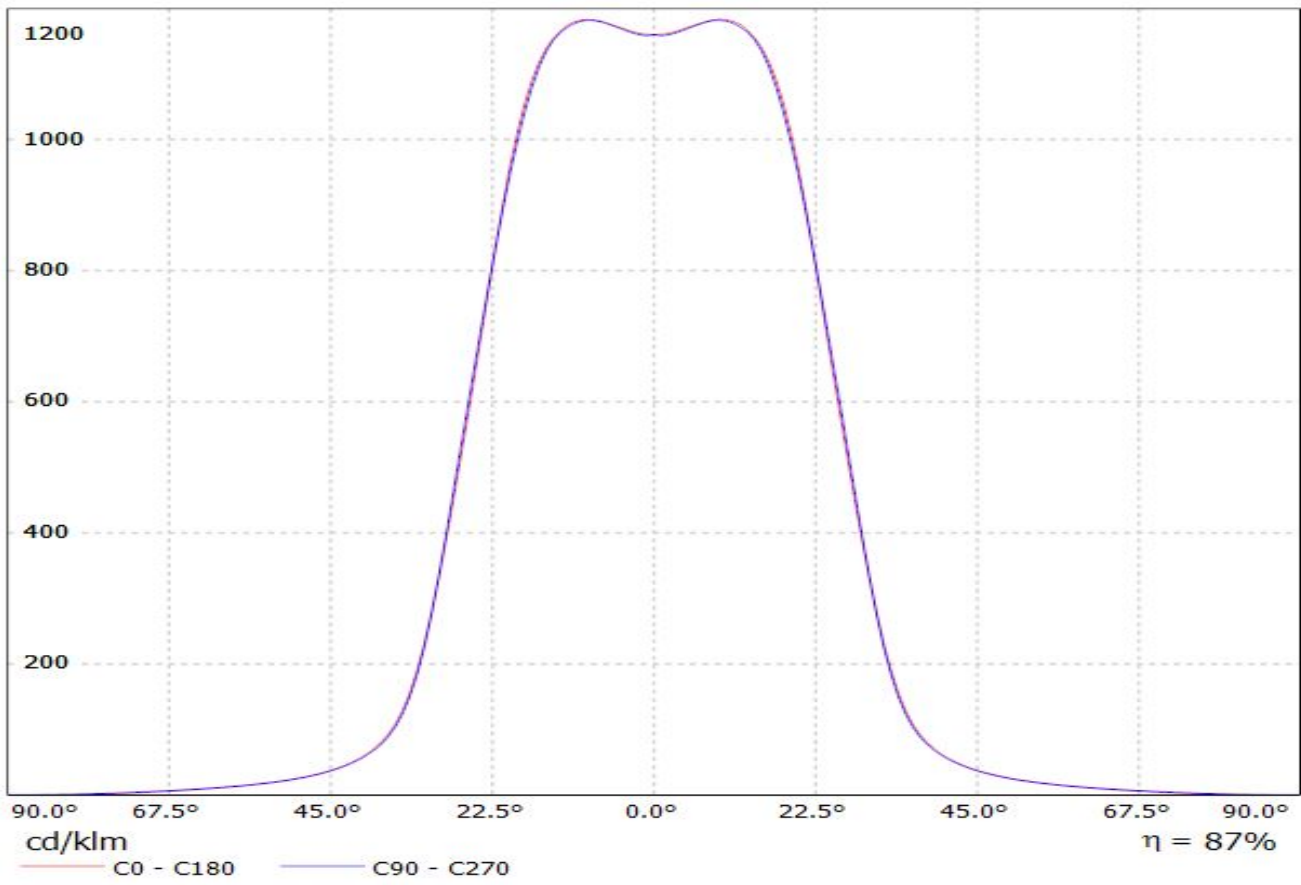


Luminaire: LEDiL Oy CA12378\_TINA2-W\_(NWSL229AE)

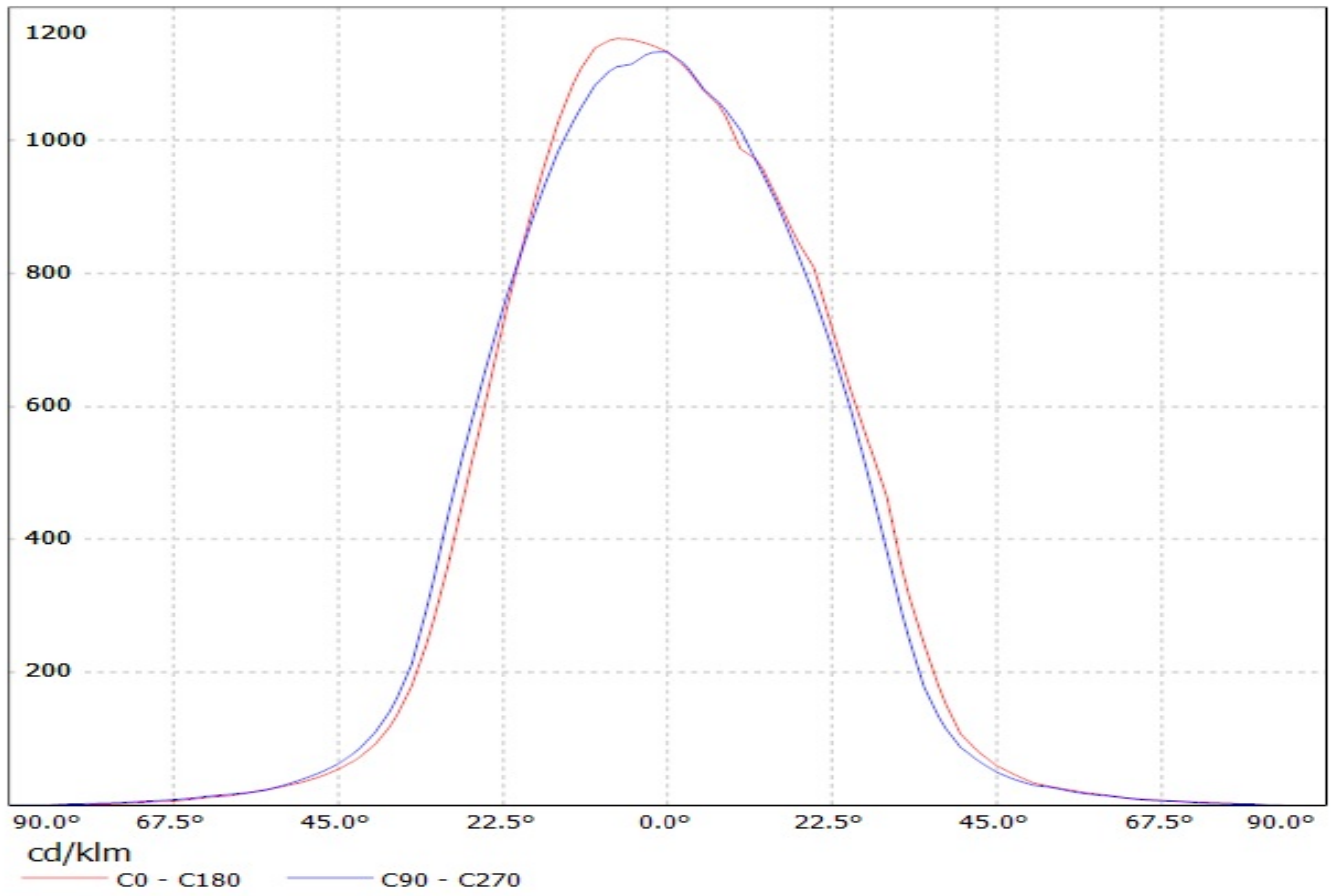
Lamps: 1 x Nichia\_NWSL229AE\_120.54lm@250mA\_P=0.7128W\_I=0.250A



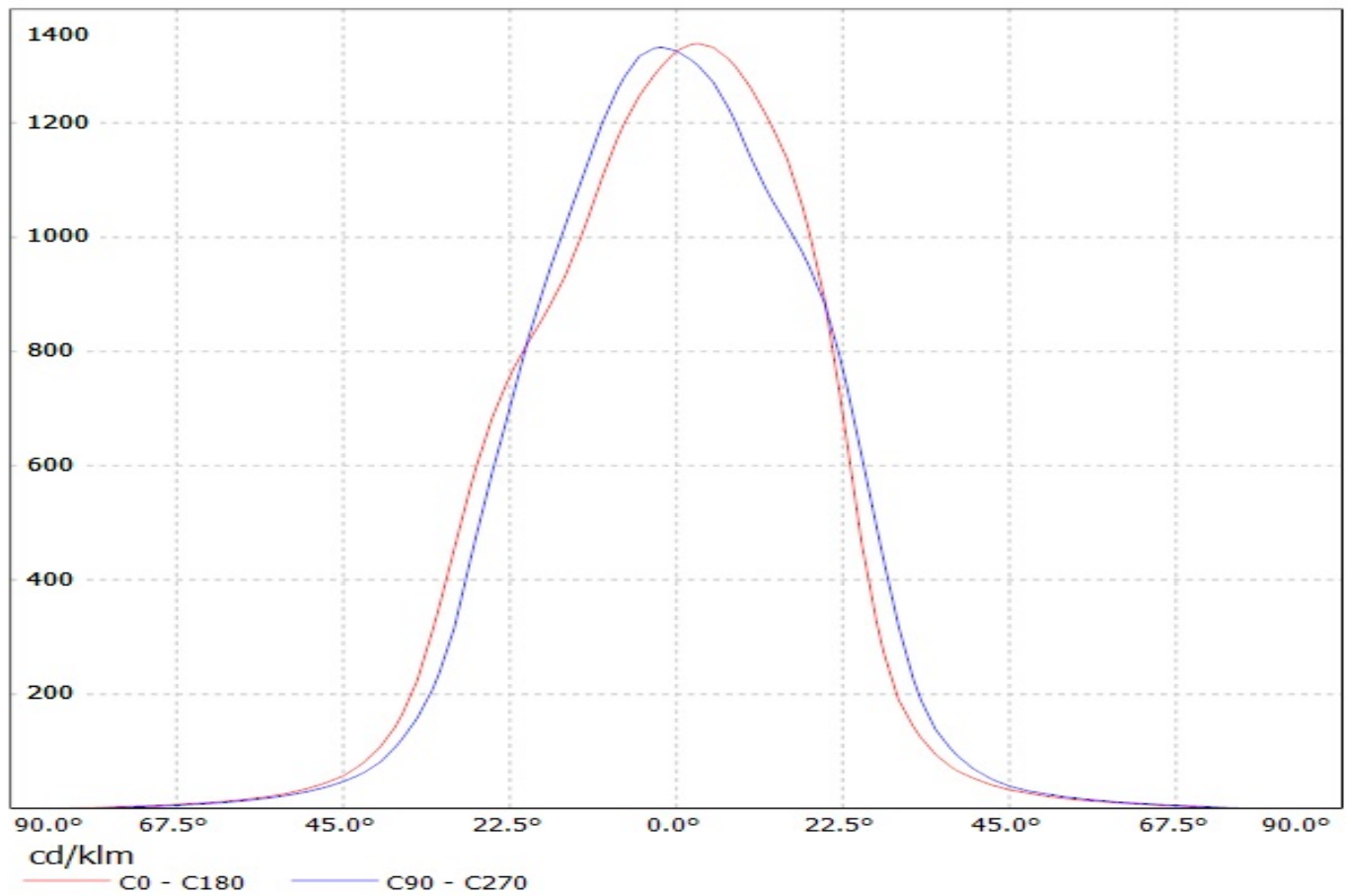
Luminaire: LEDiL Oy CA12378\_TINA2-W\_(NVSL219CE)  
Lamps: 2 x Nichia\_NVSL219CE\_101.227lm@250mA\_P=0.713404W\_I=0.25A



Luminaire: Ledil Oy CA12378\_TINA2-W (Osram Square EC 69lm @ 250mA) Efficiency=84%  
Lamps: 1 x Osram Square EC 69lm @ 250mA

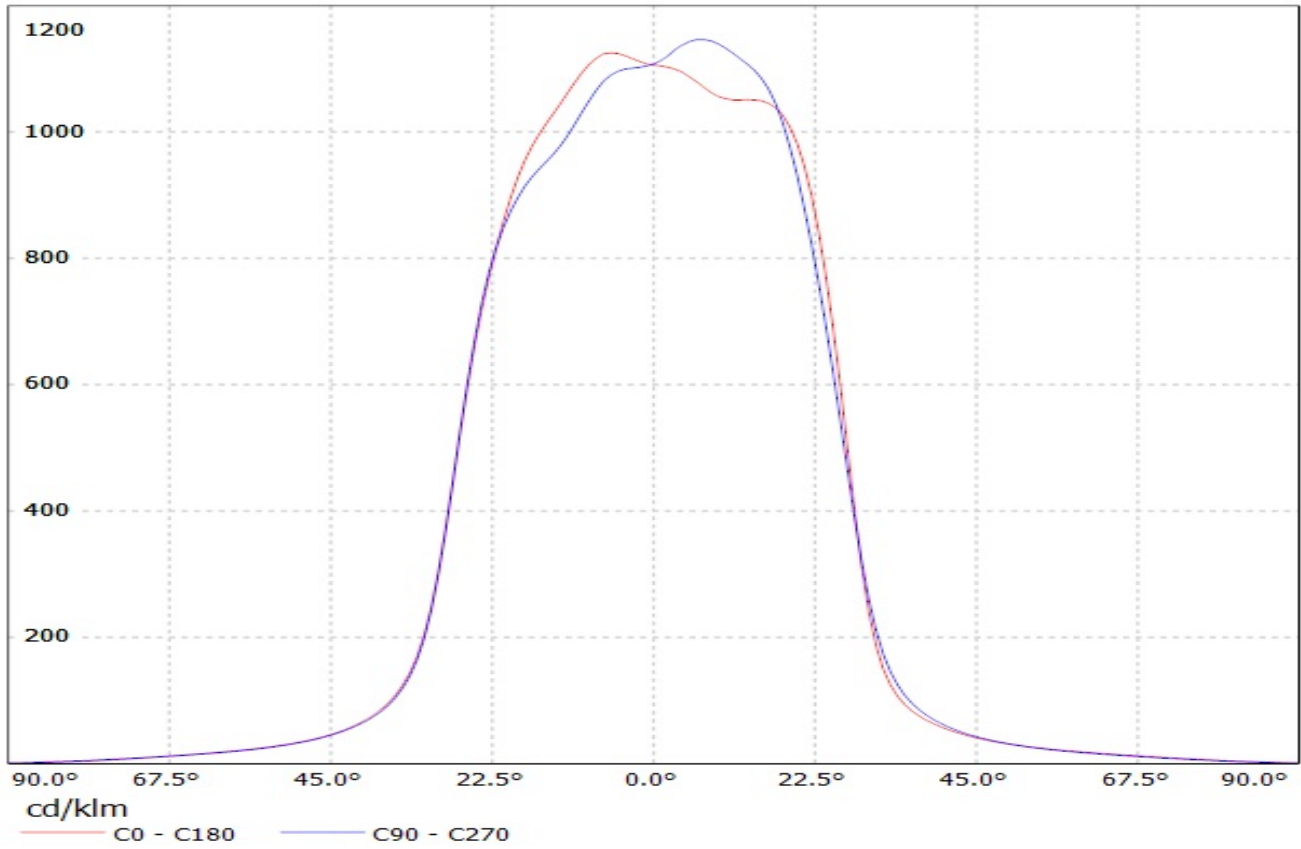


Luminaire: Ledil Oy CA12378\_TINA2-W (Osram OSlon 80deg 79lm @ 250mA) Efficiency=86%  
Lamps: 1 x Osram OSlon 80deg 79lm @ 250mA CCT=6453K P=0,76W I=250mA



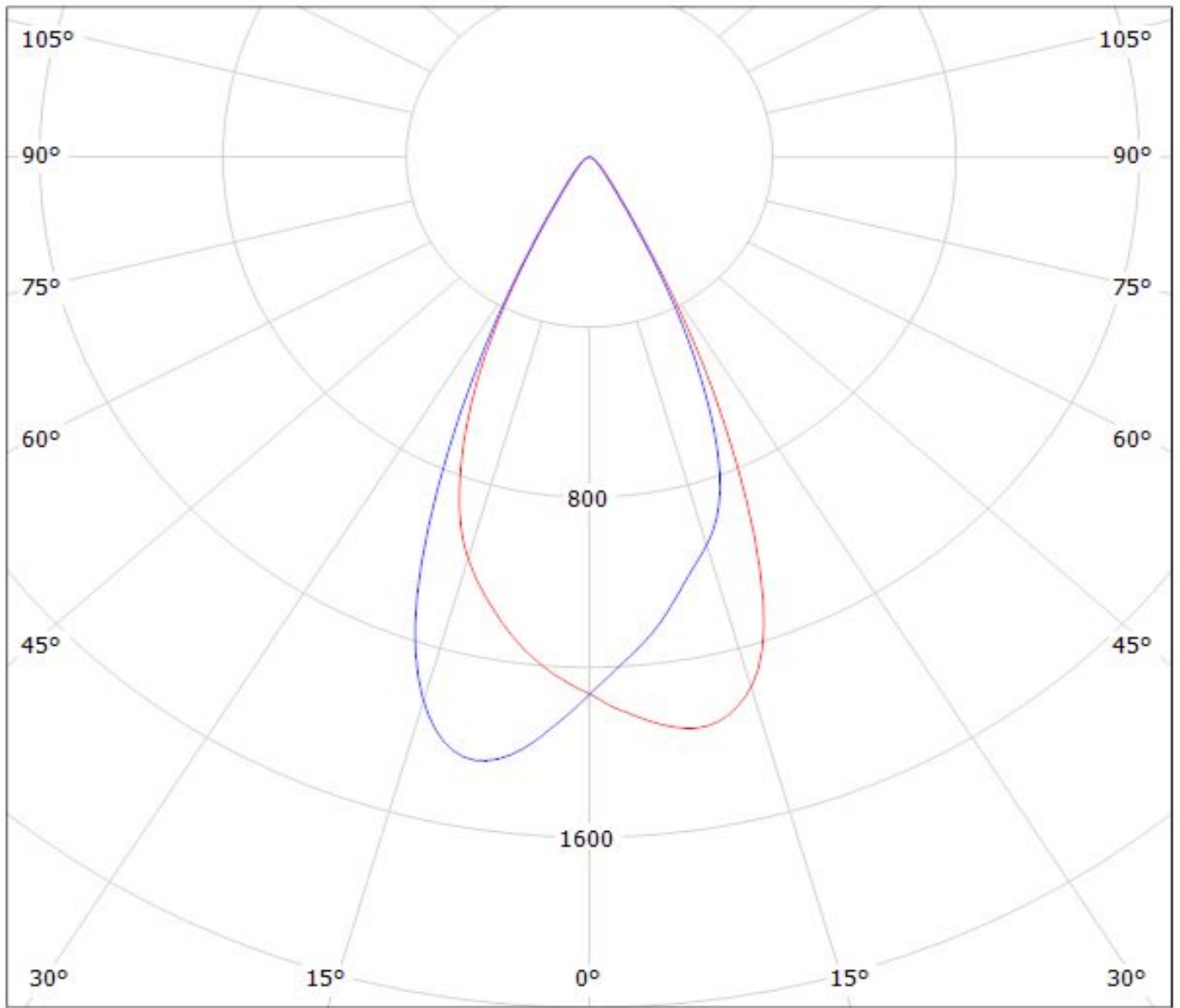


Luminaire: LEDIL OY CA12378-TINA2-W (SSL150) Efficiency=85%  
Lamps: 1 x Osram Oslon SSL150 (95lm@250mA)



Luminaire: LEDiL Oy CA12378\_TINA2-W\_(TX)

Lamps: 1 x Luxeon\_TX\_(L1T2-5770)\_109.051lm@250mA\_P=0.732157W\_I=0.2499A



cd/klm

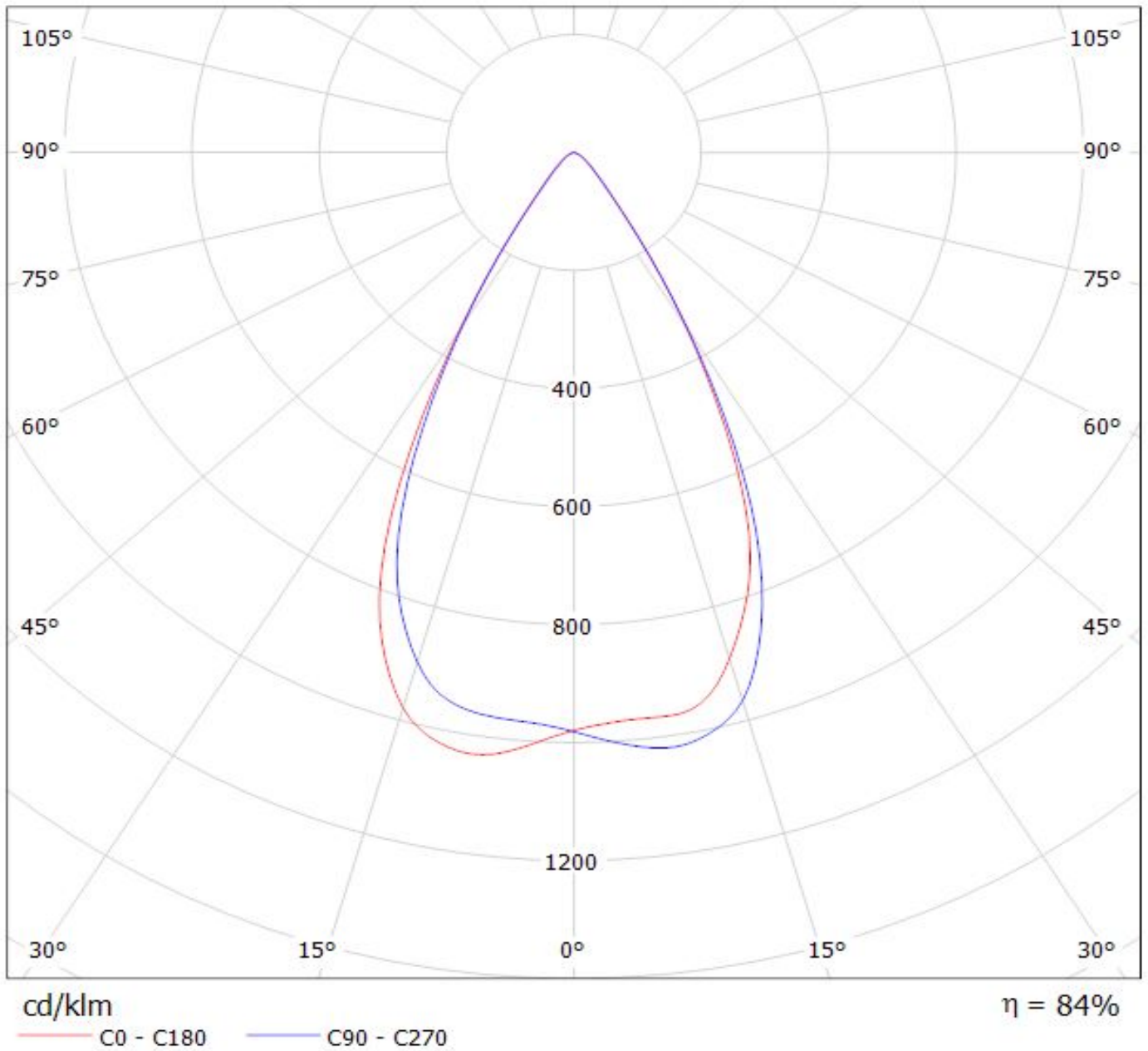
$\eta = 88\%$

— C0 - C180

— C90 - C270

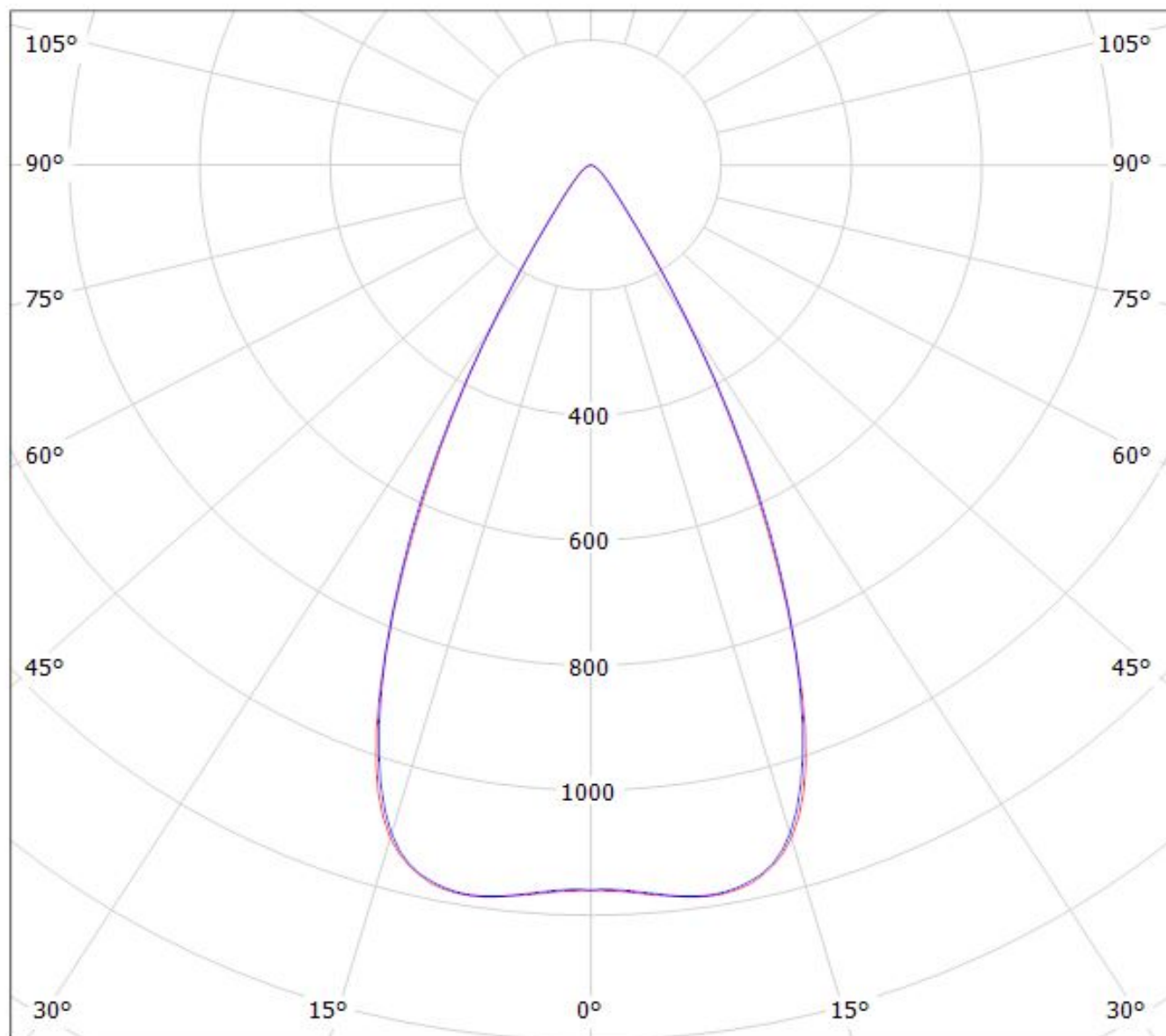
Luminaire: LEDiL Oy CA12378\_TINA2-W\_(NWSL229AE)

Lamps: 1 x Nichia\_NWSL229AE\_120.54lm@250mA\_P=0.7128W\_I=0.250A



Luminaire: LEDiL Oy CA12378\_TINA2-W\_(NVSL219CE)

Lamps: 2 x Nichia\_NVSL219CE\_101.227lm@250mA\_P=0.713404W\_I=0.25A



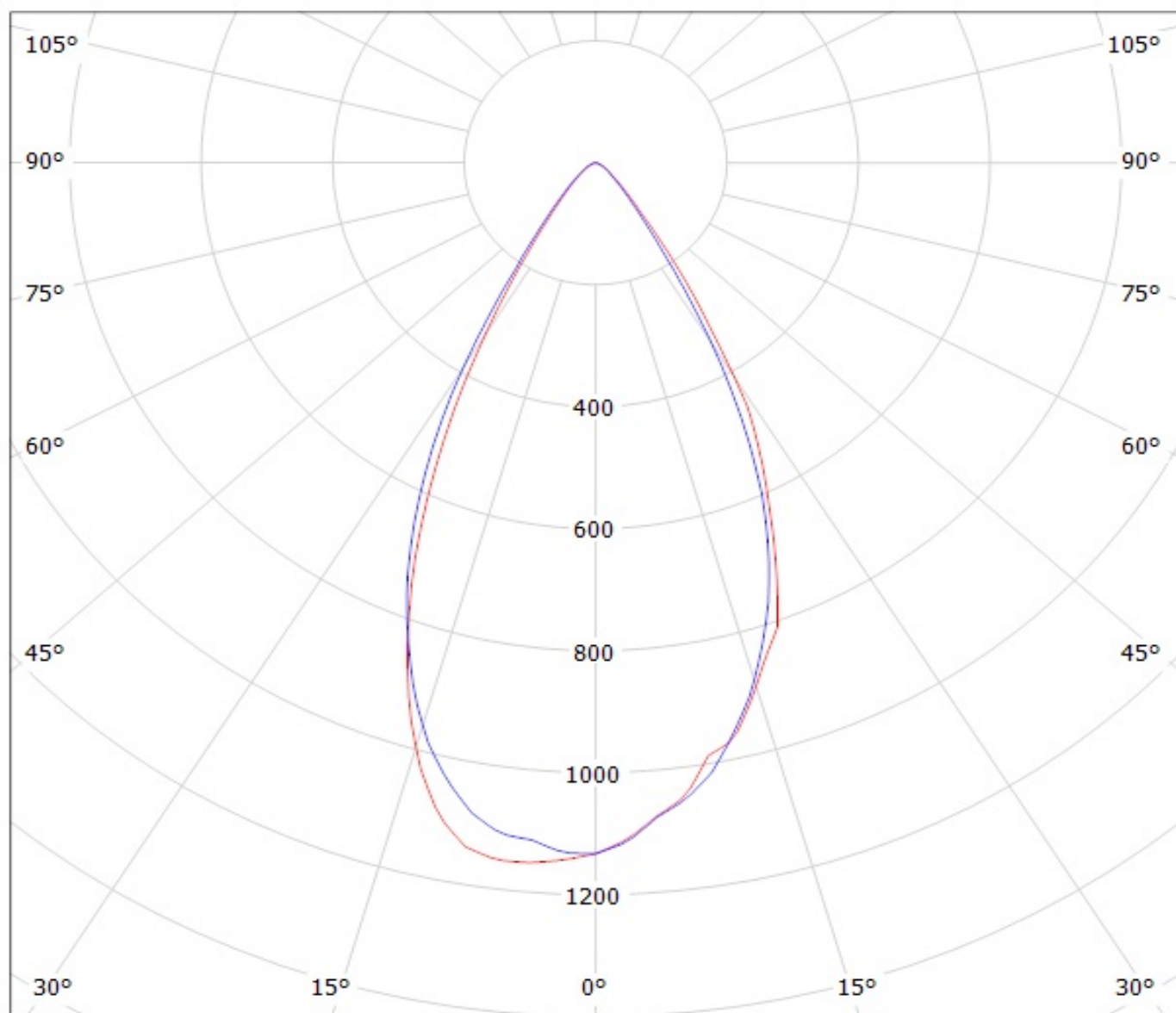
cd/klm

— C0 - C180

— C90 - C270

$\eta = 87\%$

Luminaire: Ledil Oy CA12378\_TINA2-W (Osram Square EC 69lm @ 250mA) Efficiency=84%  
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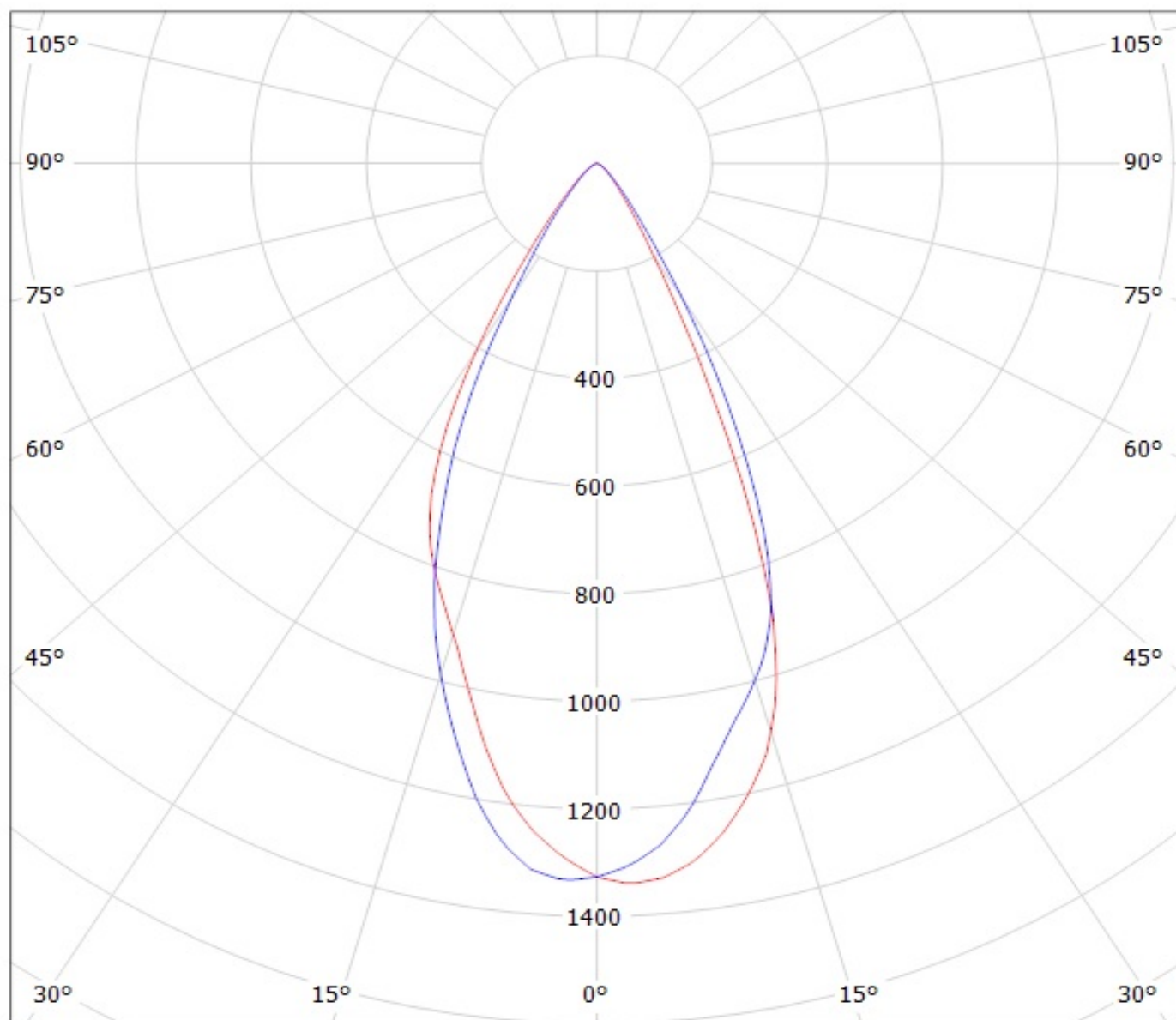


cd/klm

— C0 - C180

— C90 - C270

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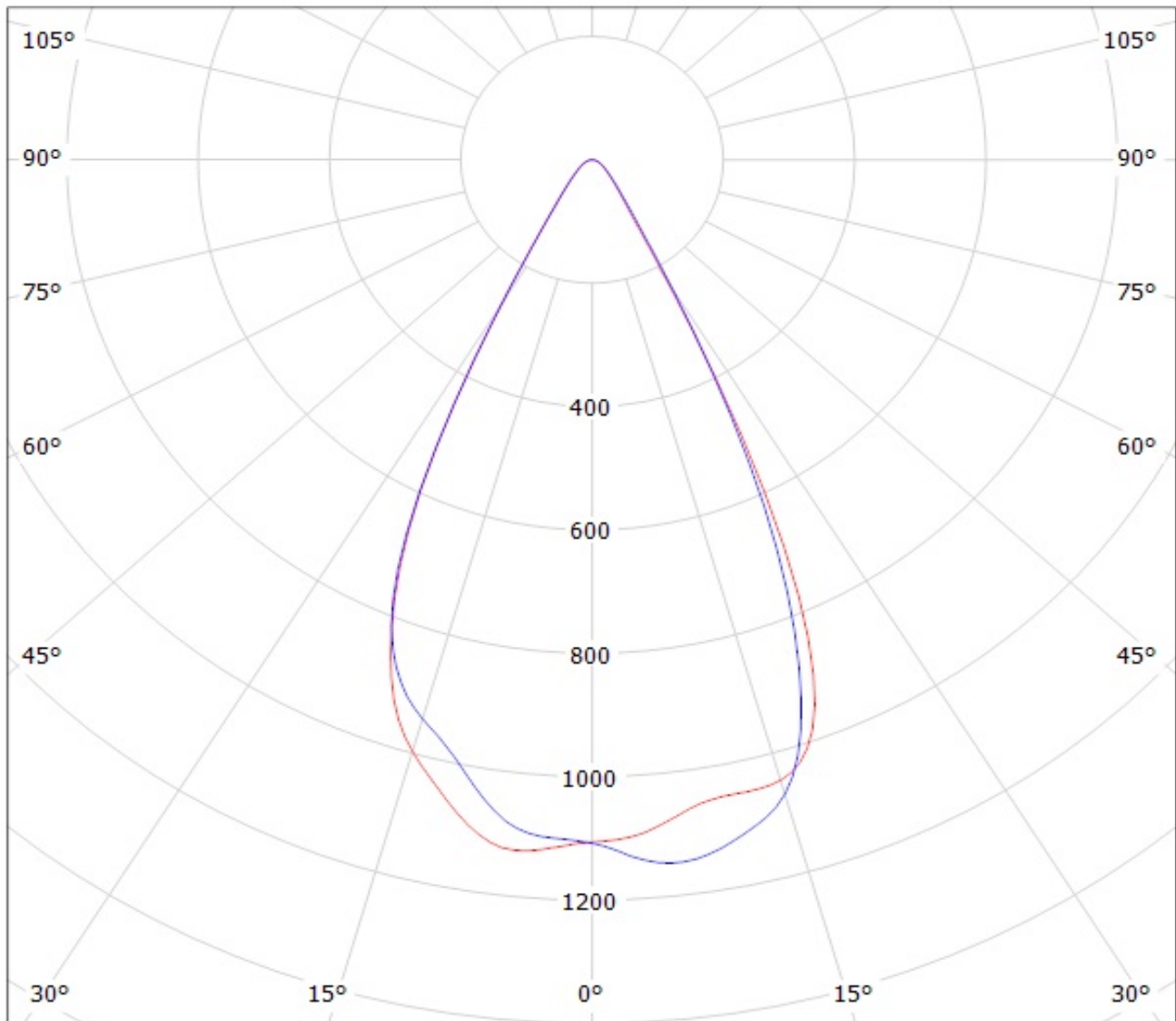


cd/klm

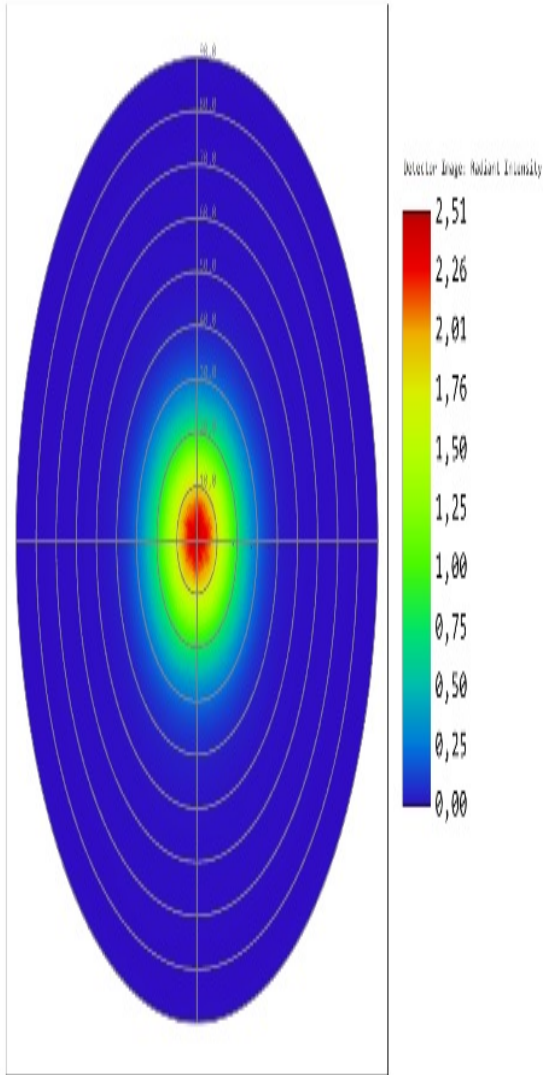
— C0 - C180

— C90 - C270

Luminaire: LEDIL OY CA12378-TINA2-W (SSL150) Efficiency=85%  
Lamps: 1 x Osram Oslon SSL150 (95lm@250mA)



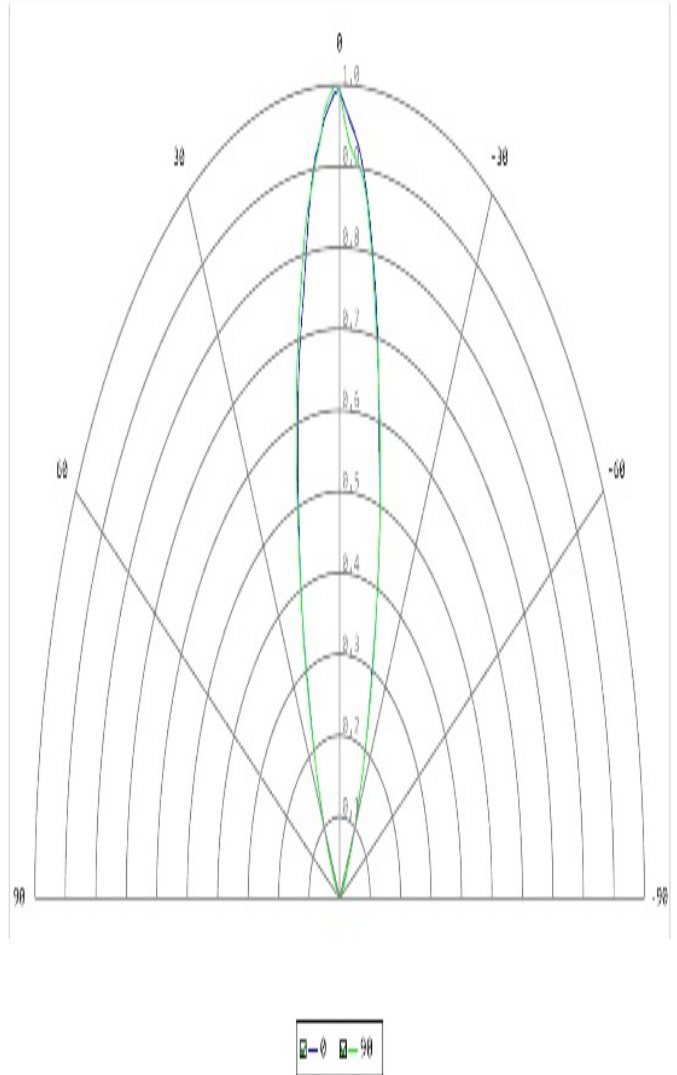
cd/klm  
— C0 - C180    — C90 - C270



Detector Image: Radiant Intensity

14.4.2016  
 Detector 6, NSCG Surface 1:  
 Max polar angle: 90,00 deg, Total Hits = 884667  
 Peak Intensity : 2,507E+000 Watts/Steradian  
 Total Power : 8,847E-001 Watts

Zemax  
 Zemax OpticStudio 15.5 SP2  
 C:\12378\_TJ1042-II (SPH 4770S) SIMULATED.zmx  
 Configuration 1 of 1



Detector Image: Radiant Intensity

14.4.2016  
 Detector 6, NSCG Surface 1:  
 Scan Angles: 0, 90  
 Peak Intensity : 2,472E+000 Watts/Steradian

Zemax  
 Zemax OpticStudio 15.5 SP2  
 C:\12378\_TJ1042-II (SPH 4770S) SIMULATED.zmx  
 Configuration 1 of 1



**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.**