PRODUCT DATASHEET
Mirella series
last update 27/12/2016

DETAILS



Product Number	C12478_MIRELLA-50-W
Family	Mirella
Type	Reflector
Color	metal
Diameter	49,9 mm
Height	23,9 mm
Style	round
Optic Material	PC
Holder Material	
Fastening	glue
Status	production ready
ROHS Comliant	Yes
Date Updated	27/12/2016

OPTICAL PROPERTIES

LED	Viewing Angle	Light Beam	Effi-ciency	cd/lm	Connector
BXRA LS	35 deg	Wide	88 %	1.900	-
CLL01x	44 deg	Wide	-	-	-
CLL02x/CLU02x (LES10)	42 deg	Wide	90 %	-	-
CLU700/701	40 deg	Wide	88 %	1.400	-
CLU710/711	46 deg	Wide	88 %	1.200	-
CLU720/721	51 deg	Wide	88 %	1.100	-
MT-G	46 deg	Wide	90 %	1.253	-
MT-G2	46 deg	Wide	91 %	1.400	-
CXA/B 15xx	42 deg	Wide	91 %	1.400	-
CXA/B 13xx	37 deg	Wide	86 %	1.800	-
CXA/B 1816 & CXA/B 1820 & CXA 1850	52 deg	Wide	87 %	1.200	-
XHP50	45 deg	Wide	89 %	1.200	-
XHP70	45 deg	Wide	89 %	1.200	-
MHD-E/G	46 deg	Wide	92 %	1.200	-
COB 4W	38 deg	Wide	89 %	1.700	-
LUXEON S1000	34 deg	Wide	-	-	-
LUXEON CoB 1202/1203	44 deg	Wide	87 %	1.300	-
CXM-9	43 deg	Wide	89 %	1.300	-
COB L-Type (LES 9)	42 deg	Wide	89 %	1.400	-
NSCxL036A	40 deg	Wide	87 %	1.500	-
NFMW48xA	38 deg	Wide	88 %	1.500	-
Soleriq S13	55 deg	Wide	85 %	-	-
Duris S10	40 deg	Wide	87 %	1.500	-
Duris P10	sim: 45	Wide	sim: 91 %	sim: 1.400	-
Soleriq S9	sim: 47	Wide	sim: 91 %	sim: 1.300	-

Ledil Oy
Salorankatu 10
24240 SALO, Finland

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

PRODUCT DATASHEET
Mirella series
last update 27/12/2016

OPTICAL PROPERTIES

LED	Viewing Angle	Light Beam	Effi-ciency	cd/lm	Connector
ZC4/6	42 deg	Wide	86 %	1.400	-
Mini Zenigata (GW5BM)	39 deg	Wide	89 %	1.500	-
Mini Zenigata (GW6BM)	38 deg	Wide	88 %	1.500	-
STARK SLE PURE G3 LES10	39 deg	Wide	86 %	1.600	-
SLE G5 LES6	39 deg	Wide	88 %	1.450	-
SLE G5 LES11	49 deg	Wide	86 %	1.150	-

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Lens type	C12478_Mirella_50-W			Voltage	
Led type	CLL010		250mA	Current	
Received					
Material					

Position	**Horizontal**			
Angle	Negative	Positive	Average	Maximum
0	28.78	28.81	28.80	1.00
2	28.54	28.70	28.62	0.99
4	27.94	28.29	28.12	0.98
6	27.12	27.57	27.35	0.95
8	26.14	26.52	26.33	0.91
10	25.03	25.12	25.08	0.87
12	23.78	23.51	23.65	0.82
14	22.39	21.61	22.00	0.76
16	20.81	19.51	20.16	0.70
18	19.13	17.39	18.26	0.63
20	17.38	15.29	16.34	0.57
22	15.63	13.34	14.49	0.50
24	13.90	11.68	12.79	0.44
26	12.26	10.26	11.26	0.39
28	10.82	9.16	9.99	0.35
30	9.62	8.29	8.96	0.31
32	8.70	7.59	8.15	0.28
34	7.96	7.01	7.48	0.26
36	7.32	6.51	6.92	0.24
38	6.80	5.60	6.20	0.22
40	6.04	3.91	4.97	0.17
42	4.40	2.17	3.28	0.11
44	2.64	0.62	1.63	0.06
46	1.01	0.15	0.58	0.02
48	0.24	0.10	0.17	0.01
50	0.17	0.08	0.13	0.00
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54				
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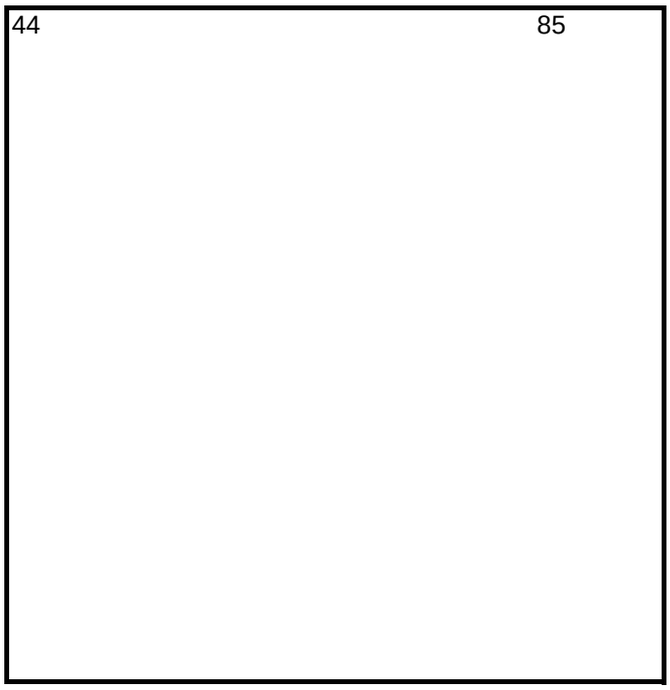
86				
88				

-90	0
-88	0
-86	0
-84	0
-82	0
-80	0
-78	0
-76	0
-74	0
-72	0
-70	0
-68	0
-66	0
-64	0
-62	0
-60	0
-58	0
-56	0
-54	0
-52	0
-50	0.004341
-48	0.00605
-46	0.020116
-44	0.056638
-42	0.114013
-40	0.172756
-38	0.215367
-36	0.24025
-34	0.259854
-32	0.282896
-30	0.311061
-28	0.346848
-26	0.39104
-24	0.444174
-22	0.503039
-20	0.567286
-18	0.634138
-16	0.700122
-14	0.764022
-12	0.82115
-10	0.870811
-8	0.914395
-6	0.949644
-4	0.976385
-2	0.993923
0	1
2	0.993923
4	0.976385
6	0.949644
8	0.914395
10	0.870811

90



12	0.82115
14	0.764022
16	0.700122
18	0.634138
20	0.567286
22	0.503039
24	0.444174
26	0.39104
28	0.346848
30	0.311061
32	0.282896
34	0.259854
36	0.24025
38	0.215367
40	0.172756
42	0.114013
44	0.056638
46	0.020116
48	0.00605
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72	0
74	0
76	0
78	0
80	0
82	0
84	0
86	0
88	0
90	0

0	0.44	0.41	28.78	3012.00
1	0.44	0.41	28.54	3011.00
2	0.44	0.41	27.94	3008.00
3	0.44	0.41	27.12	3008.00
4	0.44	0.41	26.14	3006.00
5	0.44	0.41	25.03	3003.00
6	0.44	0.41	23.78	3002.00
7	0.44	0.41	22.39	2998.00
8	0.44	0.41	20.81	2996.00
9	0.44	0.41	19.13	2995.00
10	0.44	0.41	17.38	2993.00
11	0.44	0.41	15.63	2991.00
12	0.44	0.41	13.90	2990.00
13	0.44	0.41	12.26	2991.00
14	0.44	0.41	10.82	2994.00
15	0.44	0.41	9.62	2996.00
16	0.44	0.41	8.70	2997.00
17	0.44	0.41	7.96	2998.00
18	0.44	0.41	7.32	2996.00
19	0.44	0.41	6.80	2987.00
20	0.44	0.41	6.04	3004.00
21	0.44	0.42	4.40	2975.00
22	0.45	0.42	2.64	2973.00
23	0.46	0.44	1.01	2886.00
24	0.46	0.46	0.24	3018.00
25	0.47	0.47	0.17	3051.00
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0	0.44	0.41	28.81	3011.00
1	0.44	0.41	28.70	3011.00
2	0.44	0.41	28.29	3008.00
3	0.44	0.41	27.57	3005.00
4	0.44	0.41	26.52	3001.00
5	0.44	0.41	25.12	2997.00
6	0.44	0.41	23.51	2995.00
7	0.44	0.41	21.61	2990.00
8	0.44	0.41	19.51	2988.00
9	0.44	0.41	17.39	2986.00
10	0.44	0.41	15.29	2983.00
11	0.44	0.41	13.34	2985.00
12	0.44	0.41	11.68	2986.00
13	0.44	0.41	10.26	2988.00
14	0.44	0.41	9.16	2991.00
15	0.44	0.41	8.29	2992.00
16	0.44	0.41	7.59	2995.00
17	0.44	0.41	7.01	2985.00
18	0.44	0.41	6.51	2983.00
19	0.44	0.41	5.60	2987.00
20	0.45	0.42	3.91	2951.00
21	0.45	0.42	2.17	2938.00
22	0.48	0.45	0.62	2710.00
23	0.48	0.49	0.15	3039.00
24	0.49	0.52	0.10	3067.00
25	0.50	0.57	0.08	3152.00
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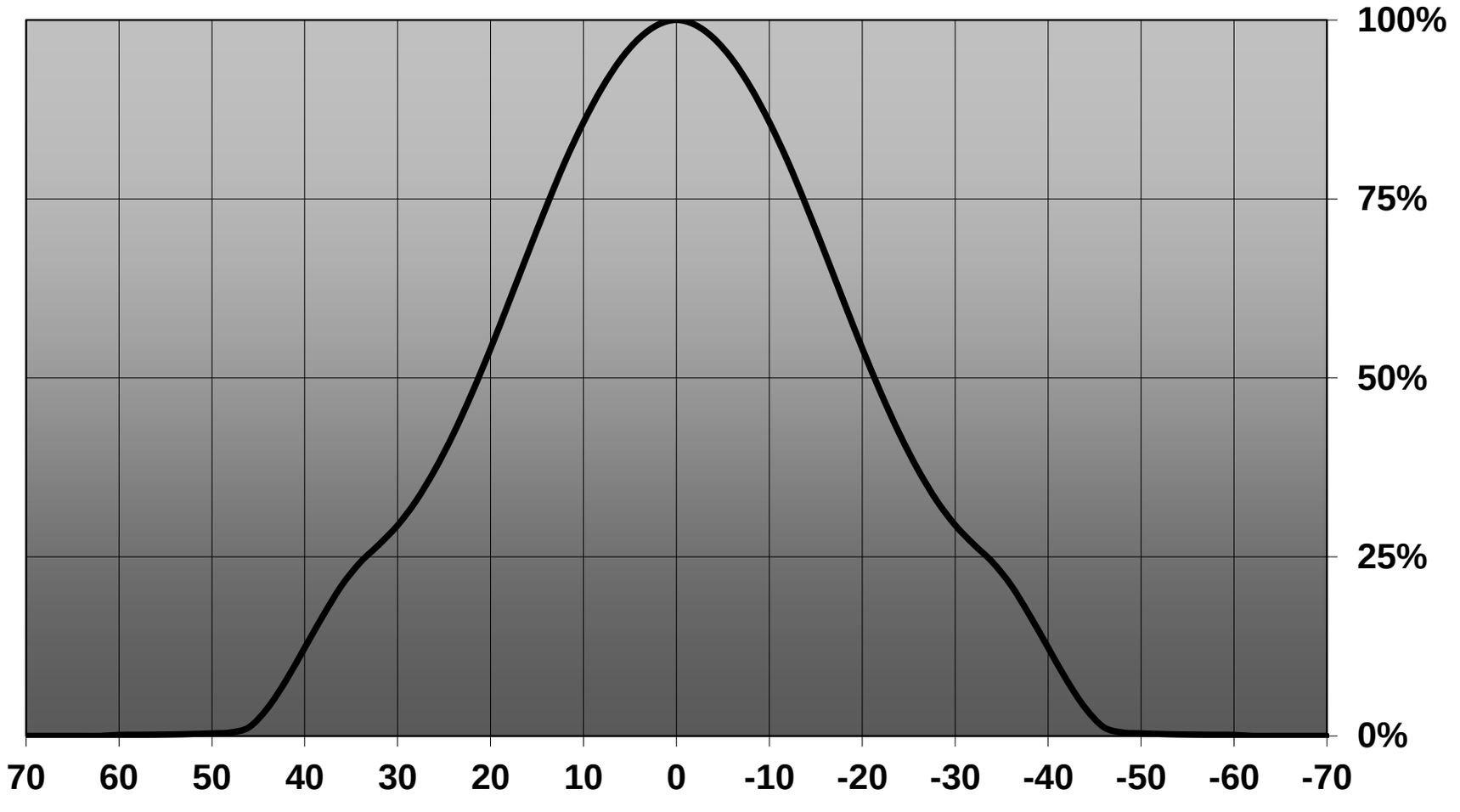
Relative intensity of C12478_Mirella_50-W_(CLL020)
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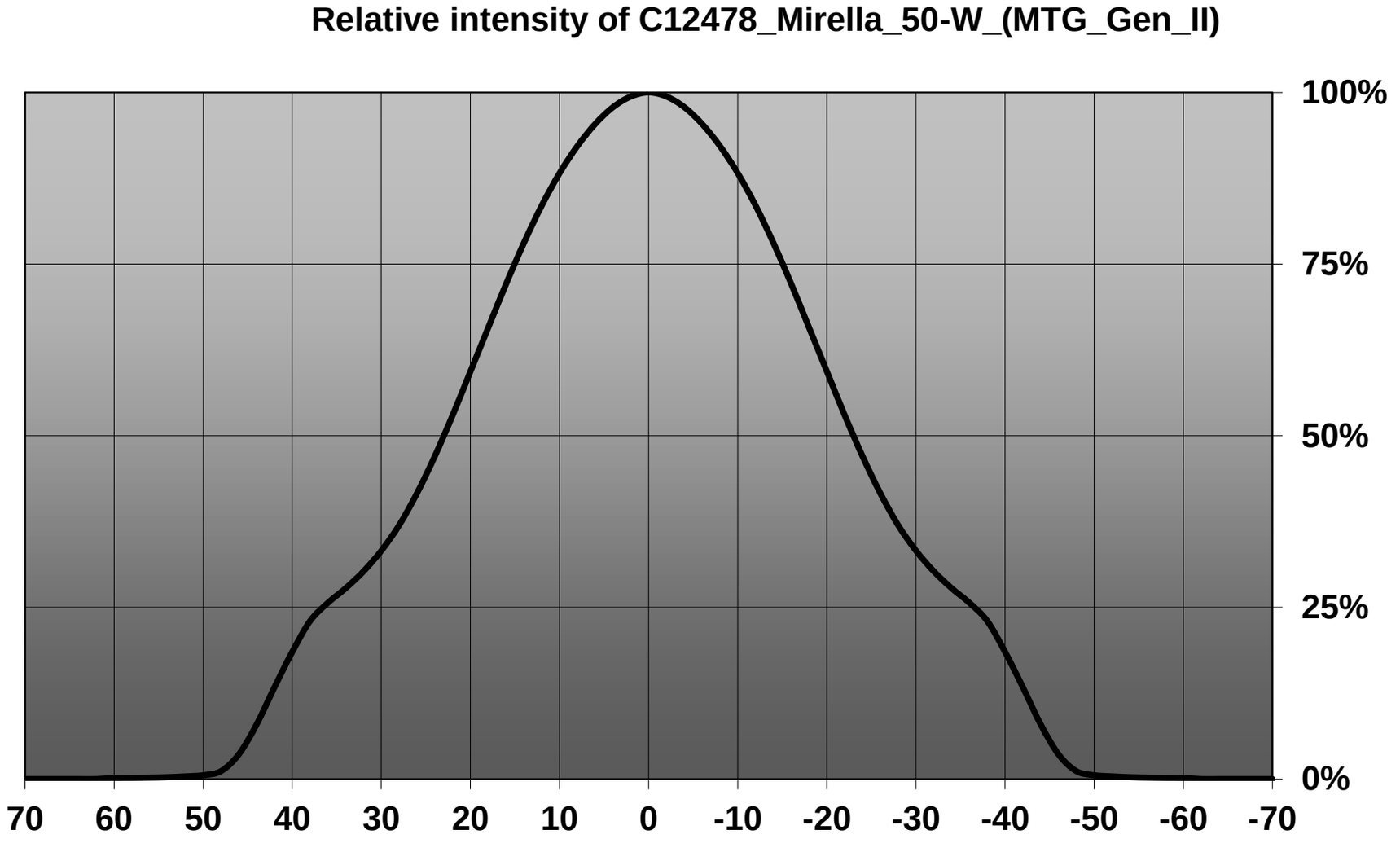
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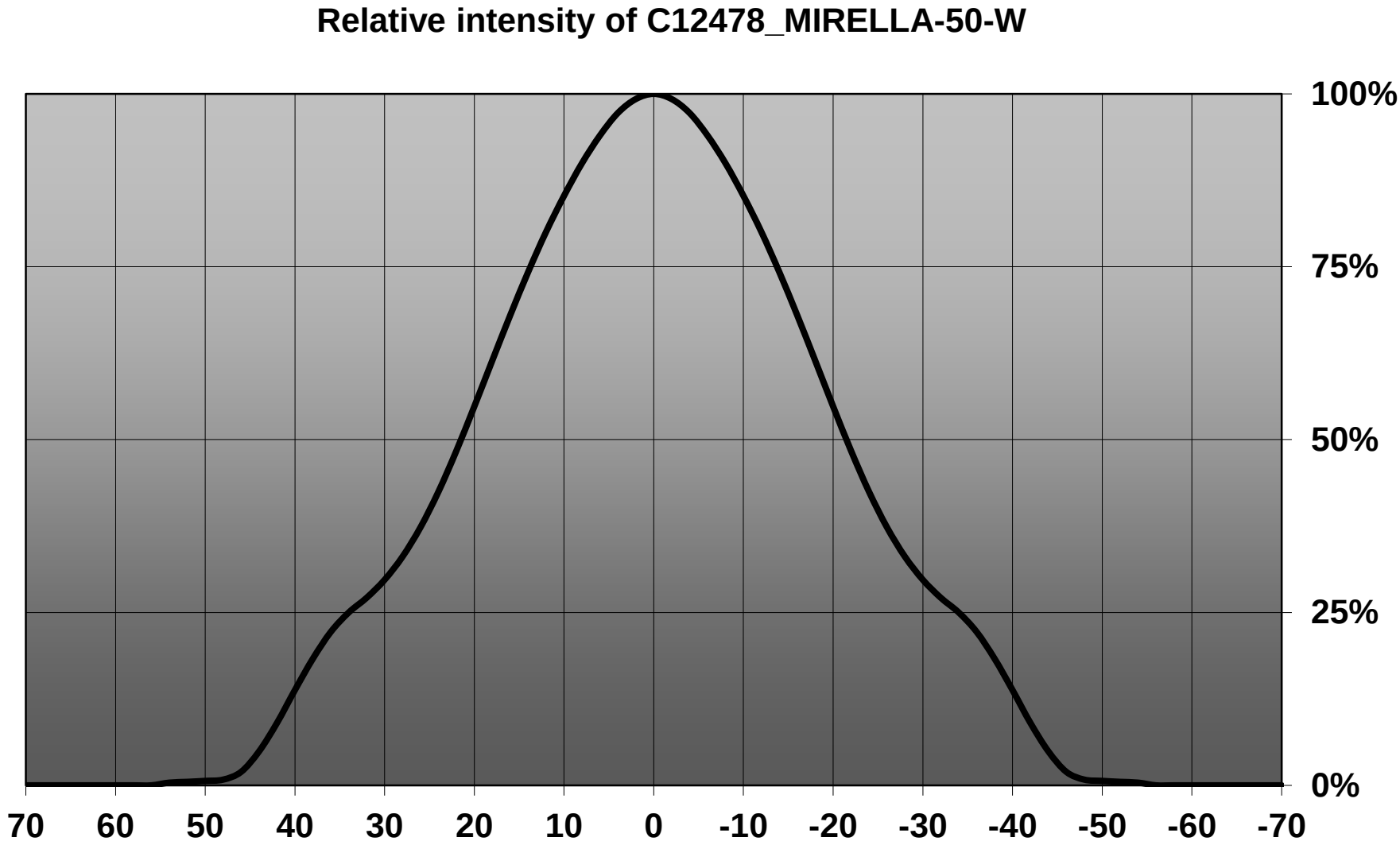
Relative intensity of C12478_MIRELLA-50-W
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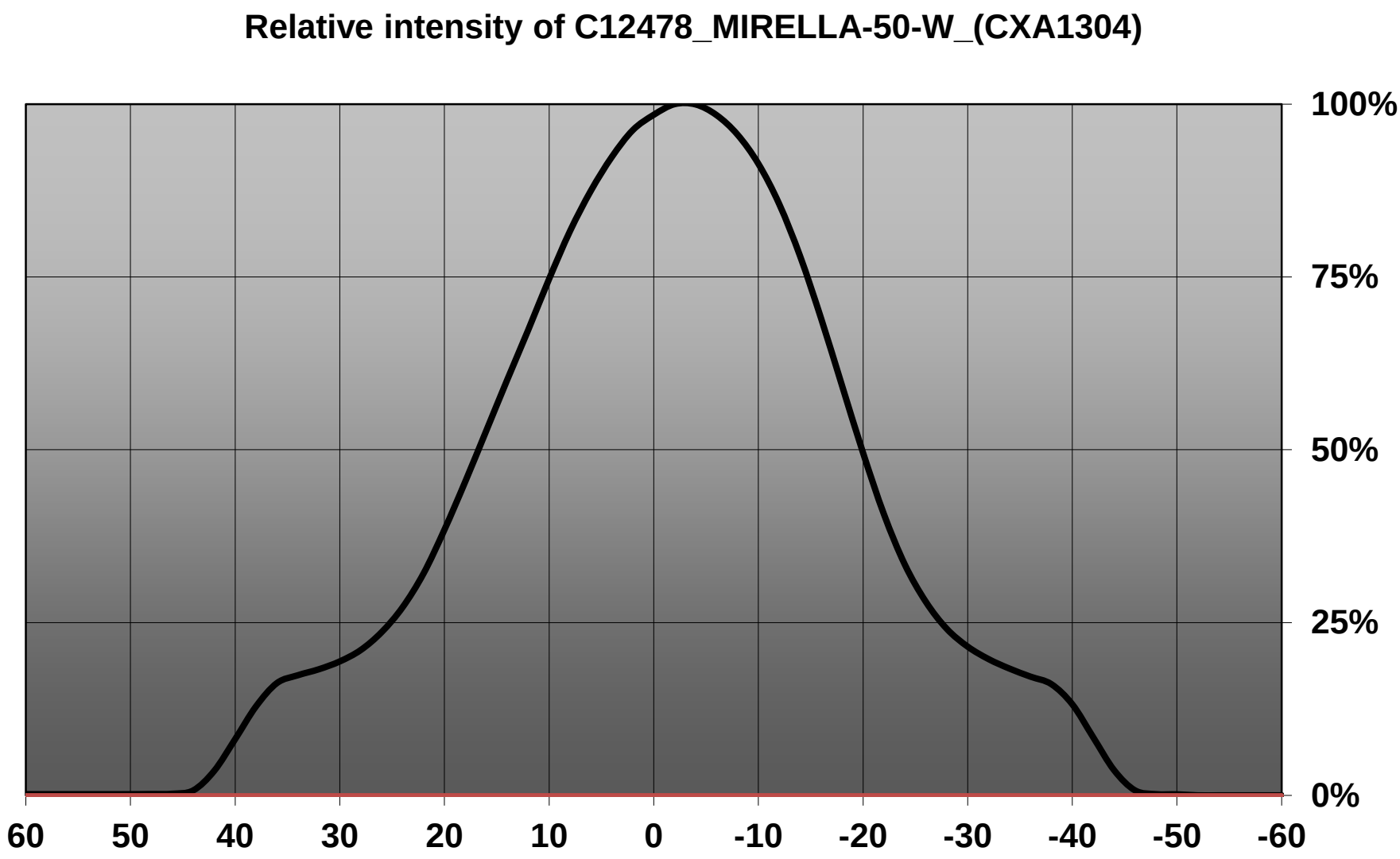
Relative intensity of C12478_MIRELLA-50-W_(CXA1304)
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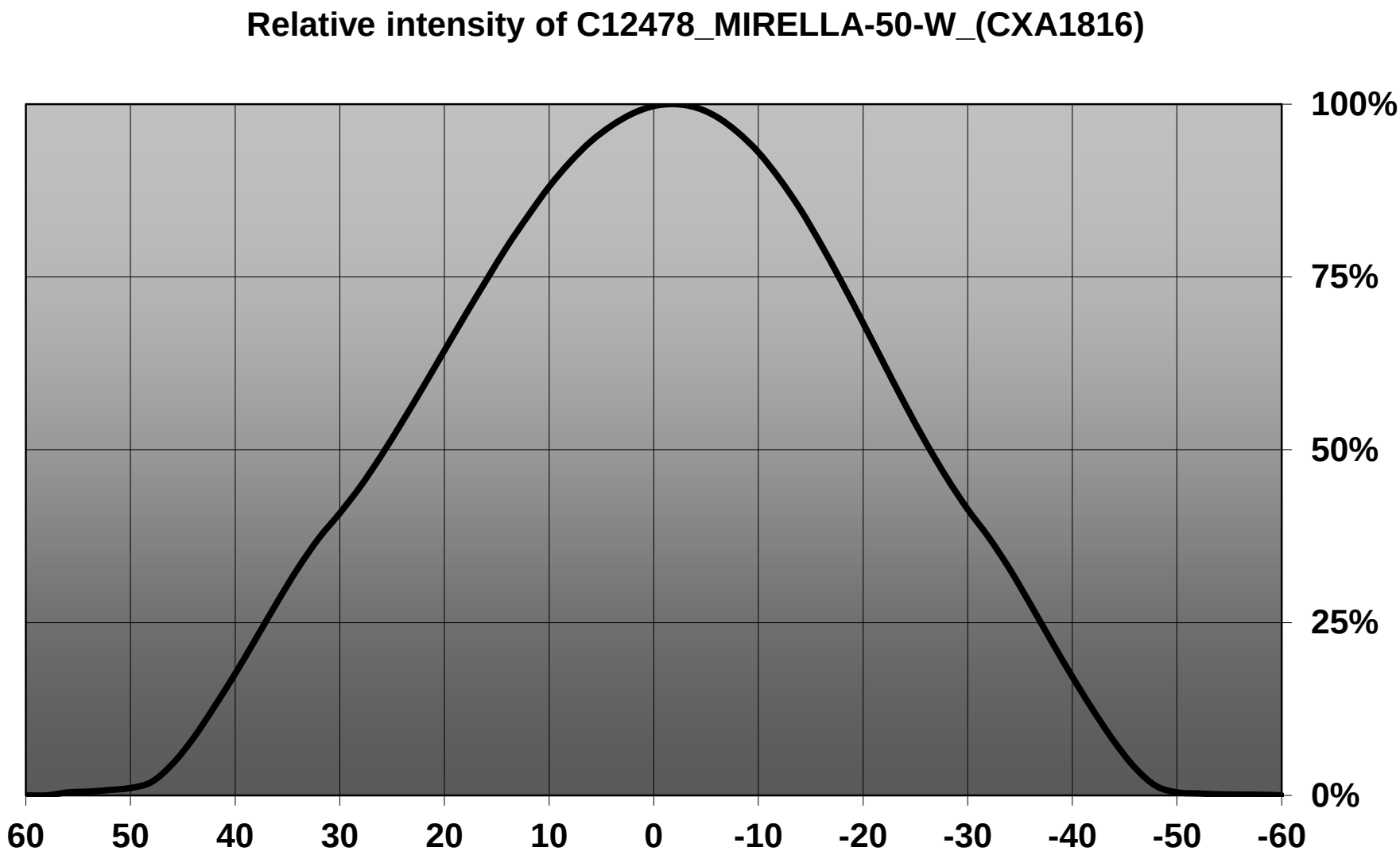
Relative intensity of C12478_MIRELLA-50-W_(CXA1816)
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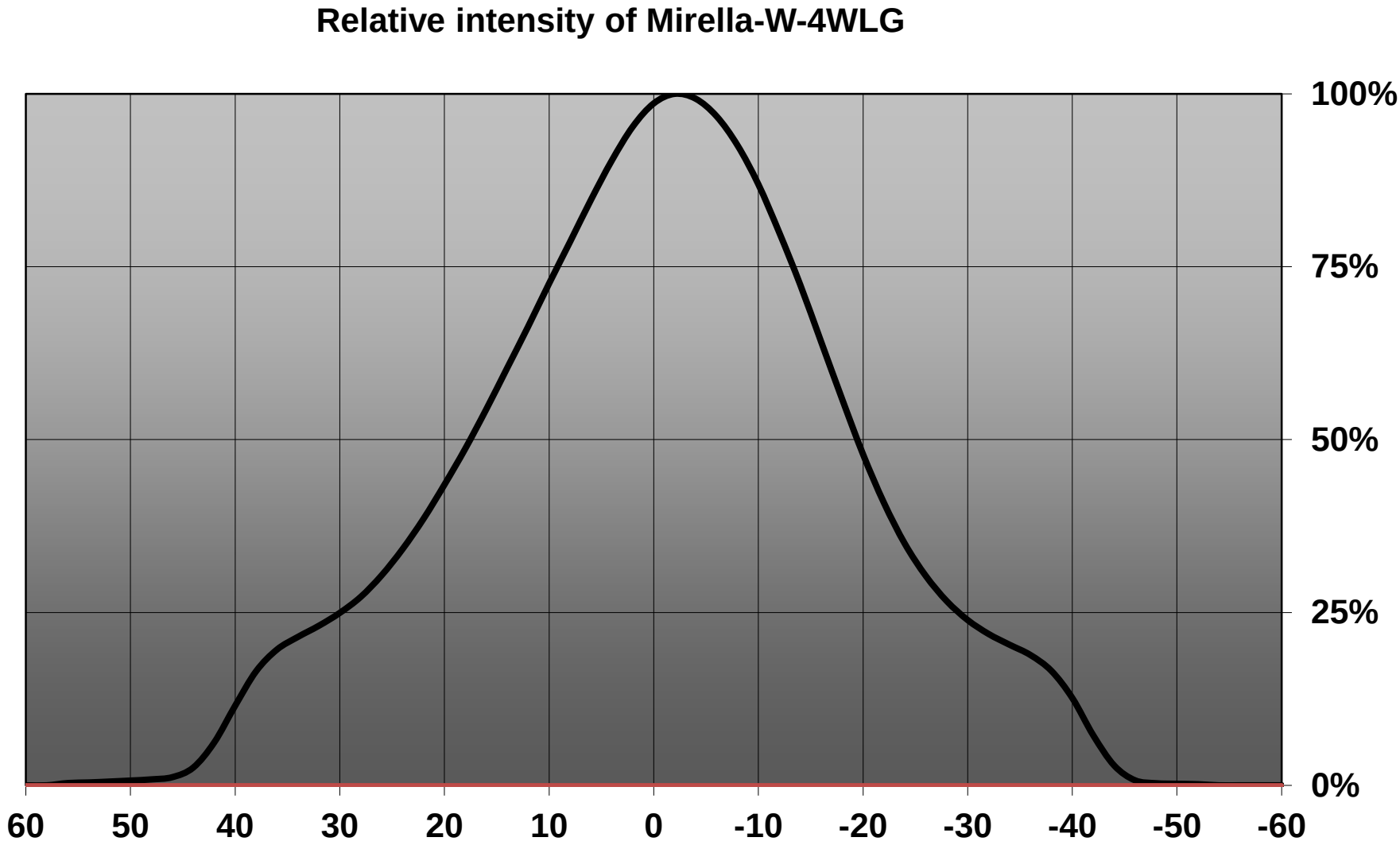
Relative intensity of Mirella-W-4WLG
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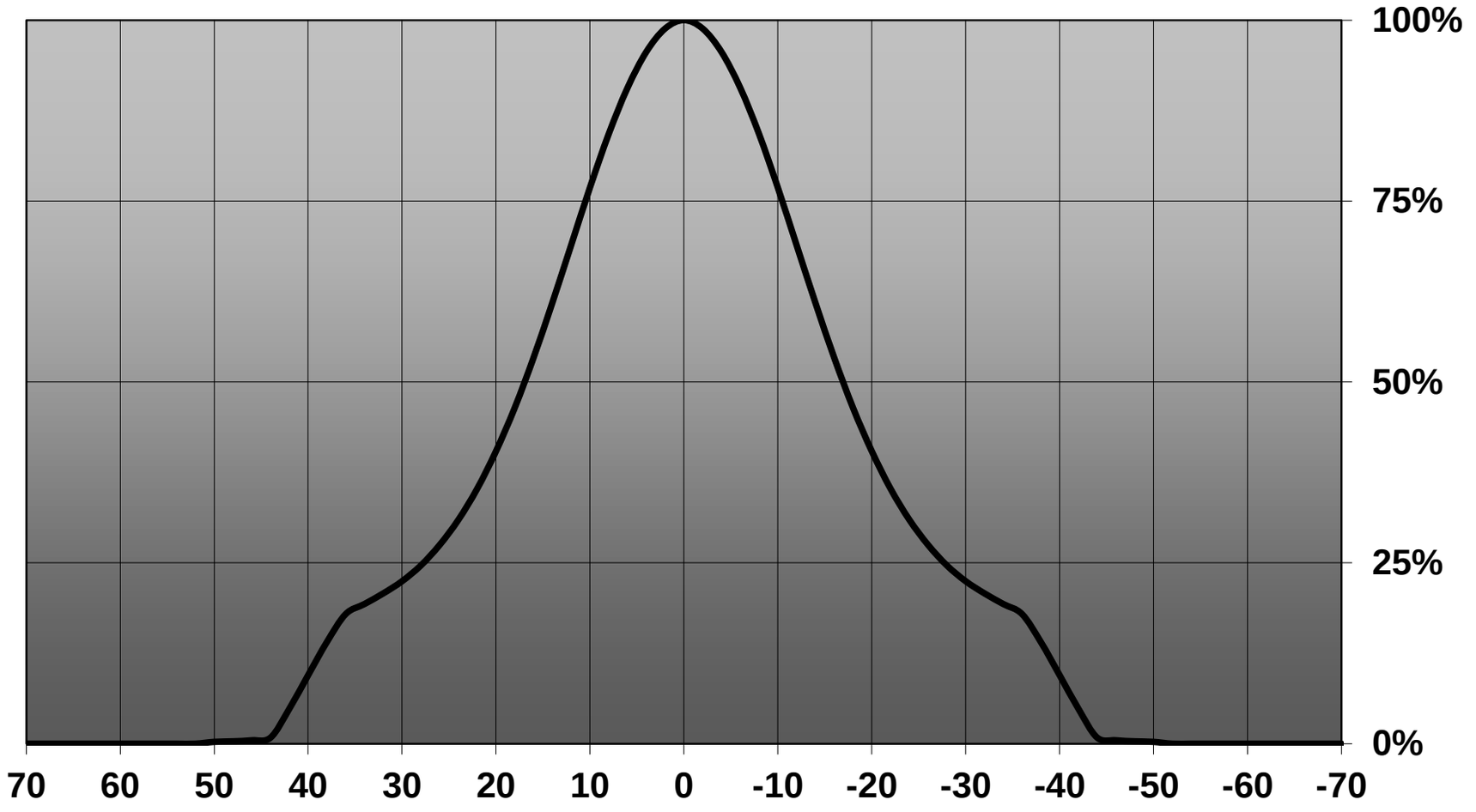
Relative intensity of C12478_Mirella_50-W_(Luxeon_S)
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50%
25%
0%
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50
40
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20
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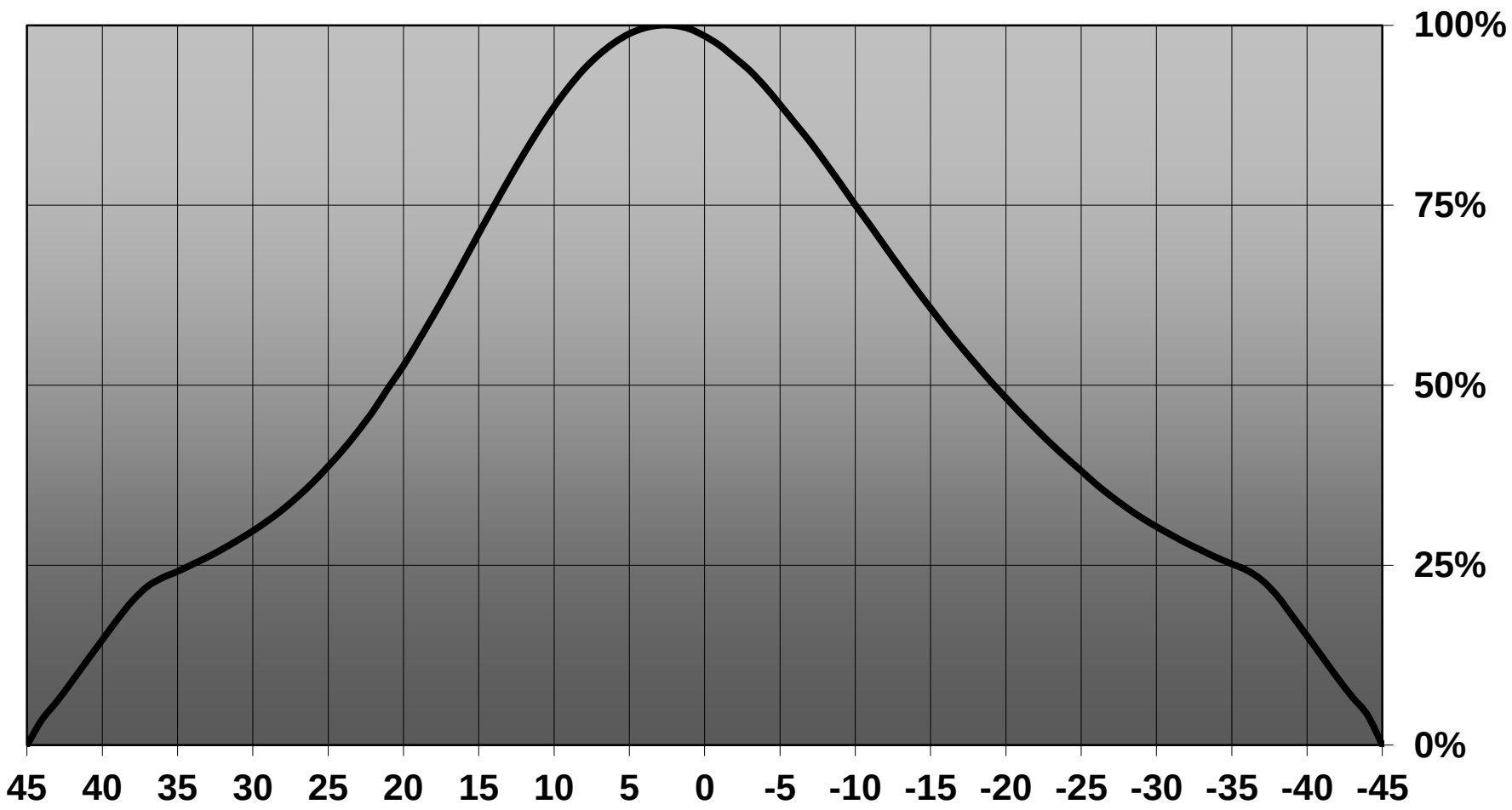
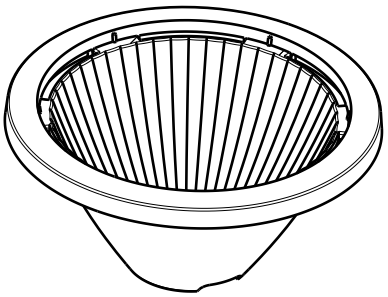
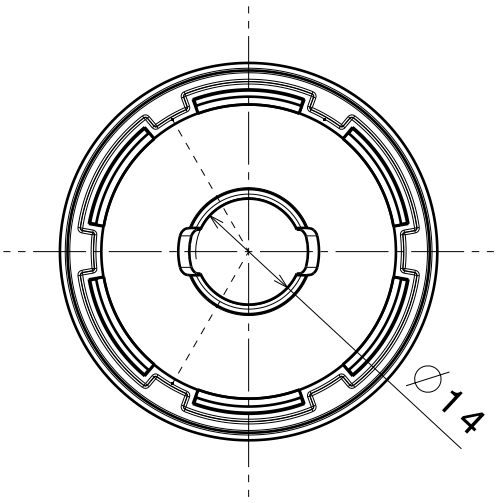
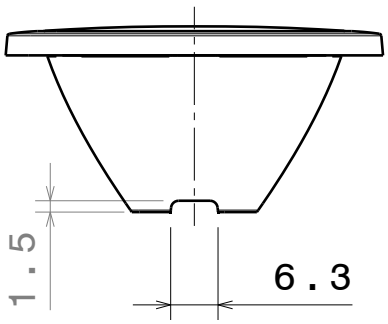
-10
-20
-30
-40
-50
-60
-70

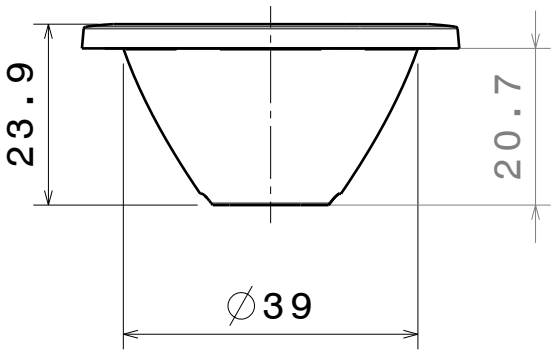
Relative intensity of C12478_MIRELLA-50-W_(Duris_S10)

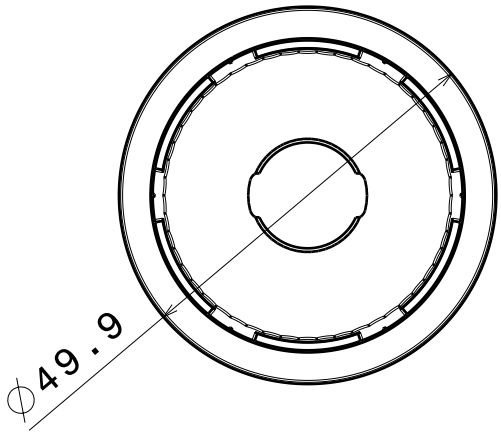












Material: PC, metal plated

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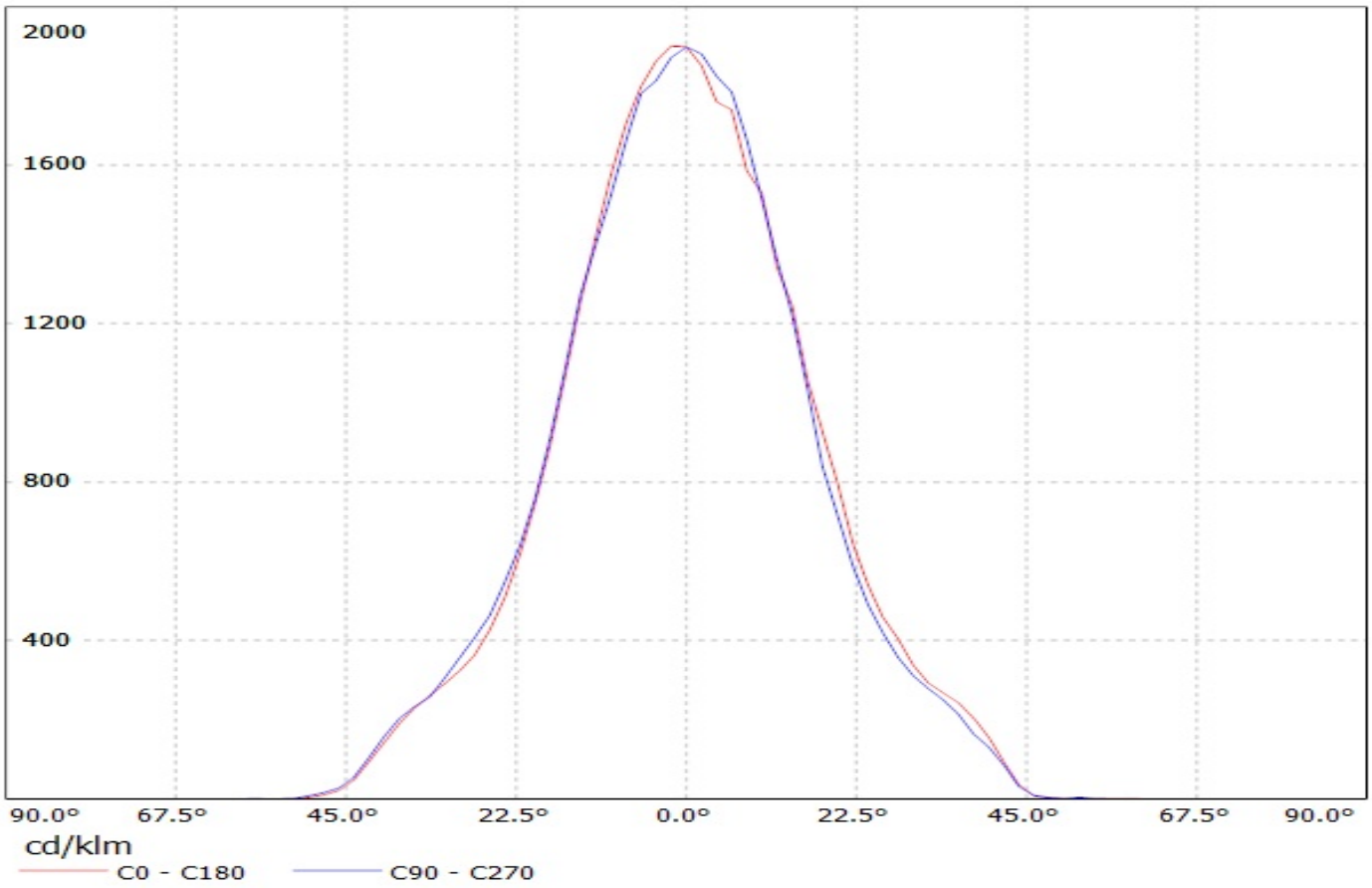
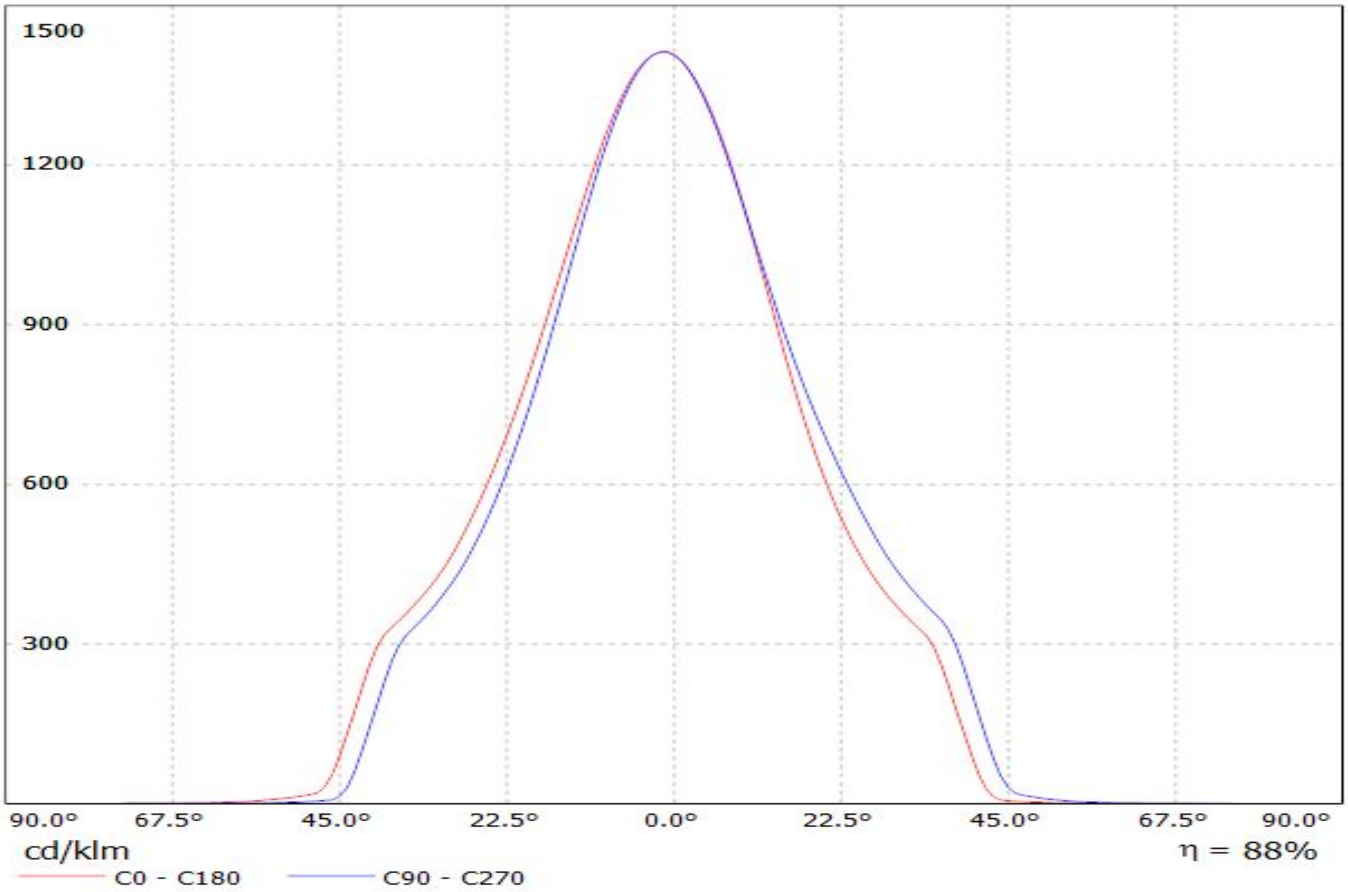
Ledil Oy
Salorankatu 10
FIN-24240 SALO
Finland

DRAWN BY: pl	DATE: 25.11.2011	DRAWING TITLE: Datasheet Mirella reflector		
CHECKED BY	DATE	SIZE: A4	DRAWING NUMBER	REV: 1
DESIGNED BY: pl	DATE: 25.11.2011	SCALE: 1:1	WEIGHT(g)	SHEET: 1/1

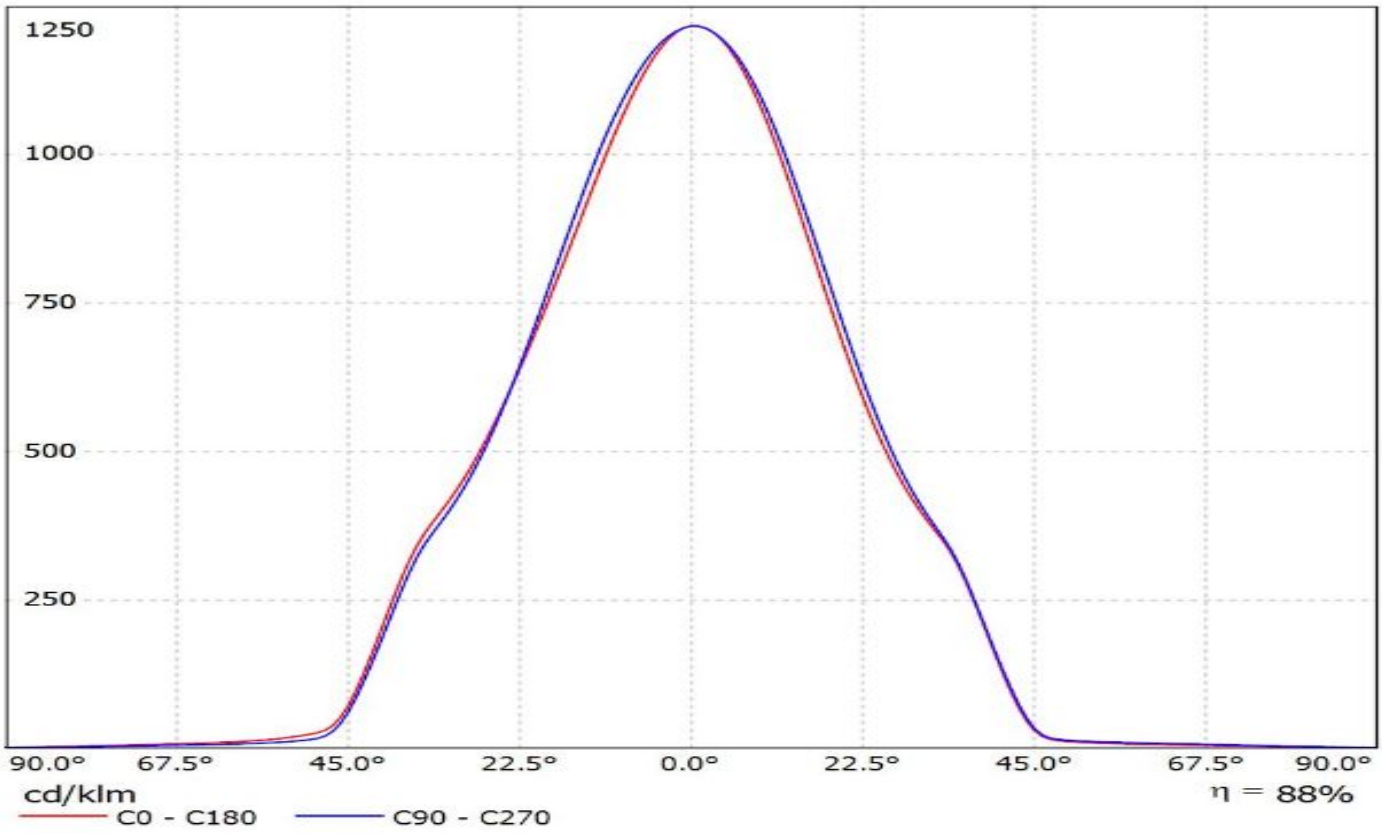
Luminaire: Ledil Oy C12478_MIRELLA-50-W (Bridgelux LS 170lm @ 250mA) Efficiency=88%
Lamps: 1 x Bridgelux LS 170lm @ 250mA



Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(CLU700)
Lamps: 1 x CITIZEN_CLU700_(CLU700-100-2B8-273M2G1)_380.605lm@250mA_P=2.8002W_I=0.1001A



Luminaire: Ledil C12478_MIRELLA-50-W_(CLU710)
Lamps: 1 x CITIZEN_CLU710_(CLU710-1204B8-273M2G1)_1212.66lm@250mA_P=8.5W_I=0.25A



Luminaire: Ledil C12478_MIRELLA-50-W_(CLU720)
Lamps: 1 x CITIZEN_CLU720_(CLU720-1206B8-273M2)
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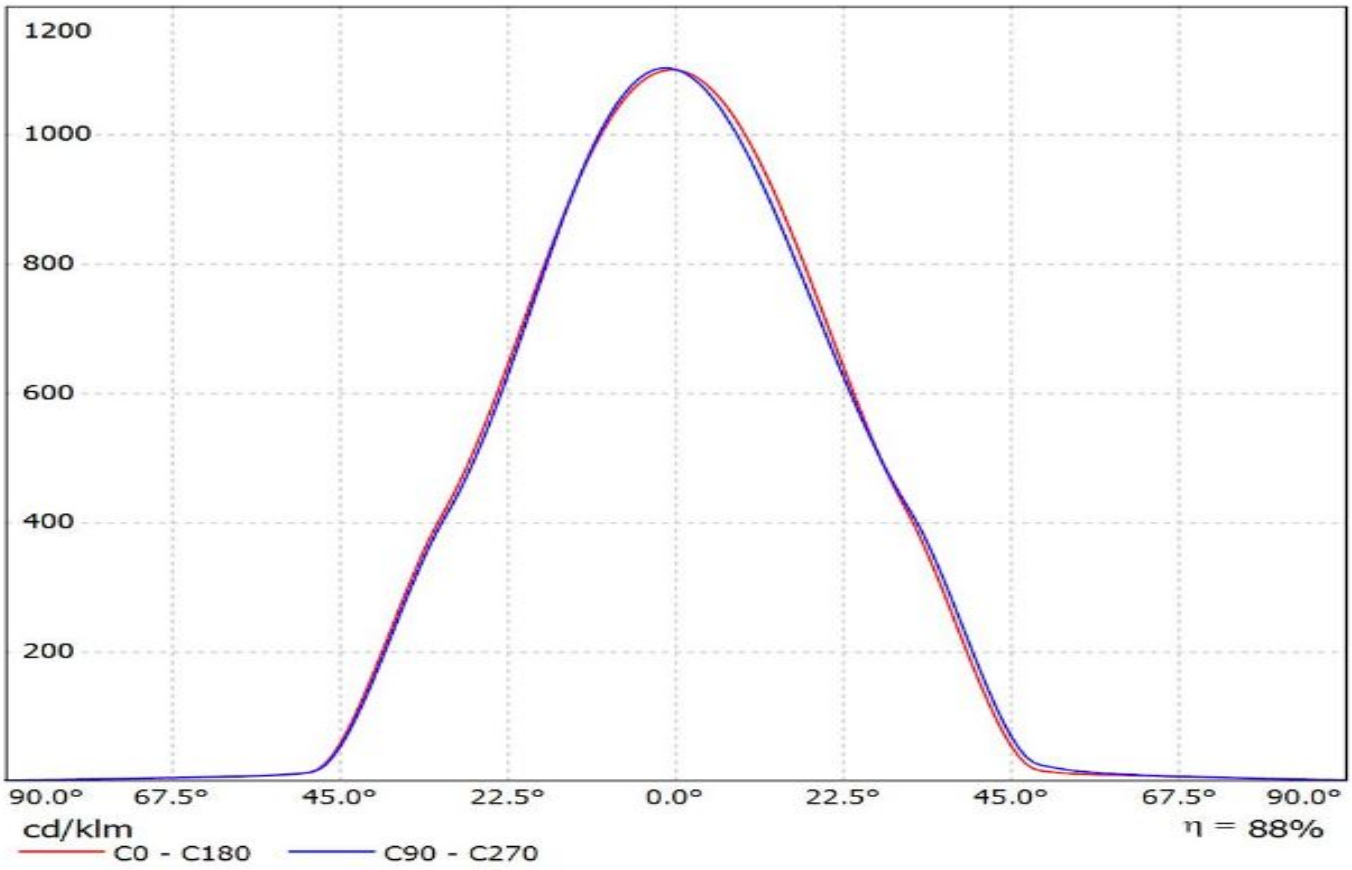
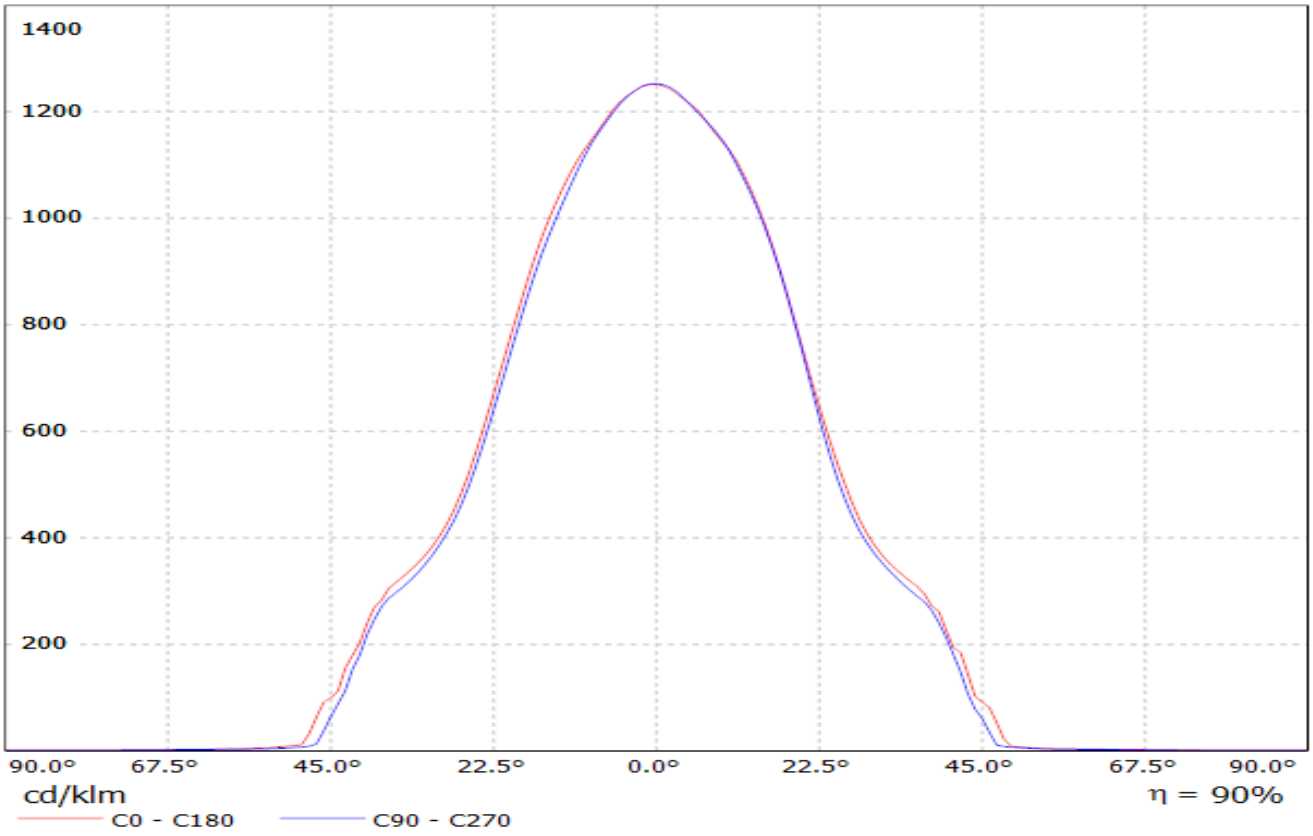
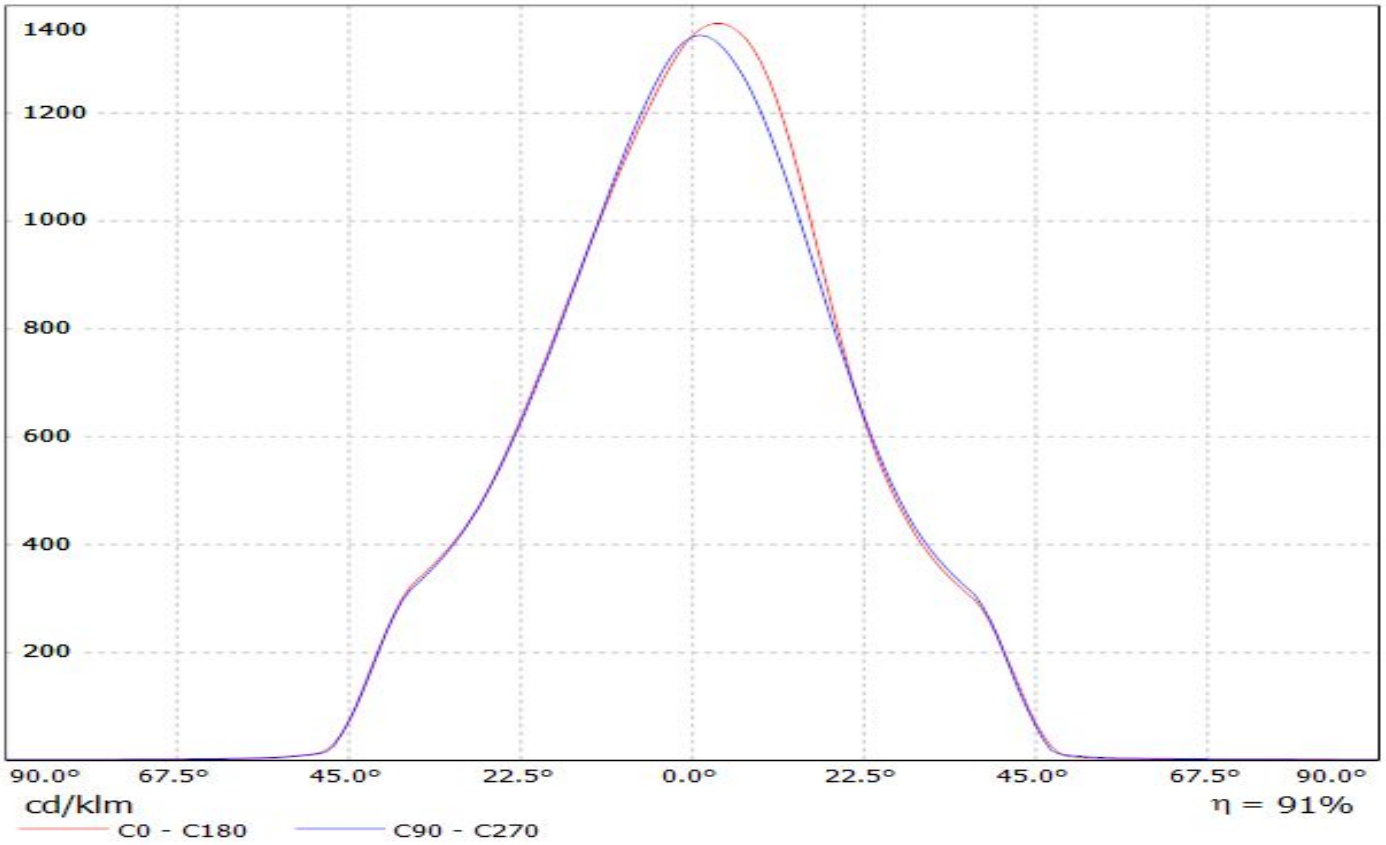


Luminaire: LEDIL OY C12478_MIRELLA-50-W_(MT-G)
Lamps: 1 x MT-G (777.7lm)



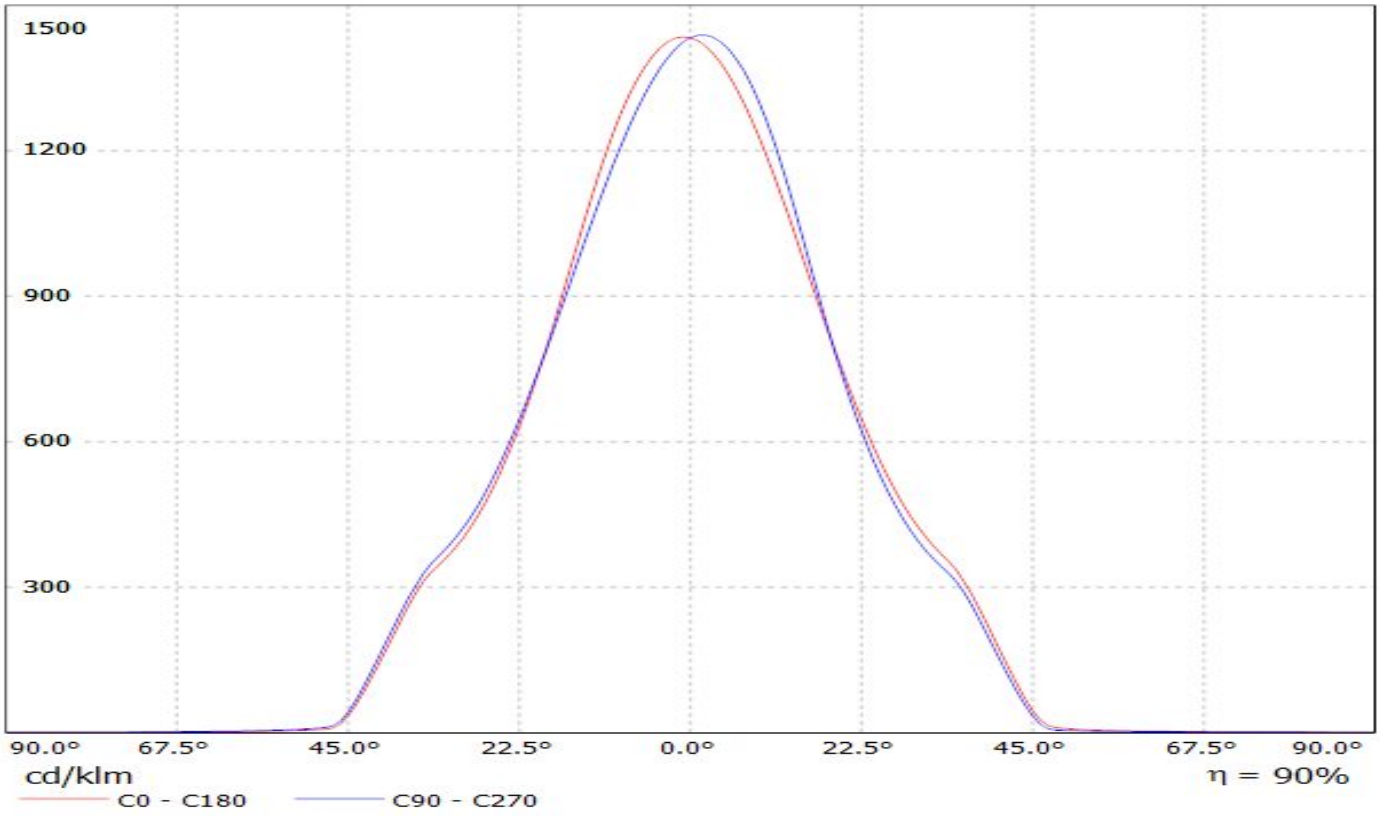
LEDiL Oy C12478_MIRELLA-50-W_(MT-G2) Eff.91.3% / LDC (Linear)

Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(MT-G2) Eff.91.3%
Lamps: 1 x MT-G2 (165.381lm@250mA)

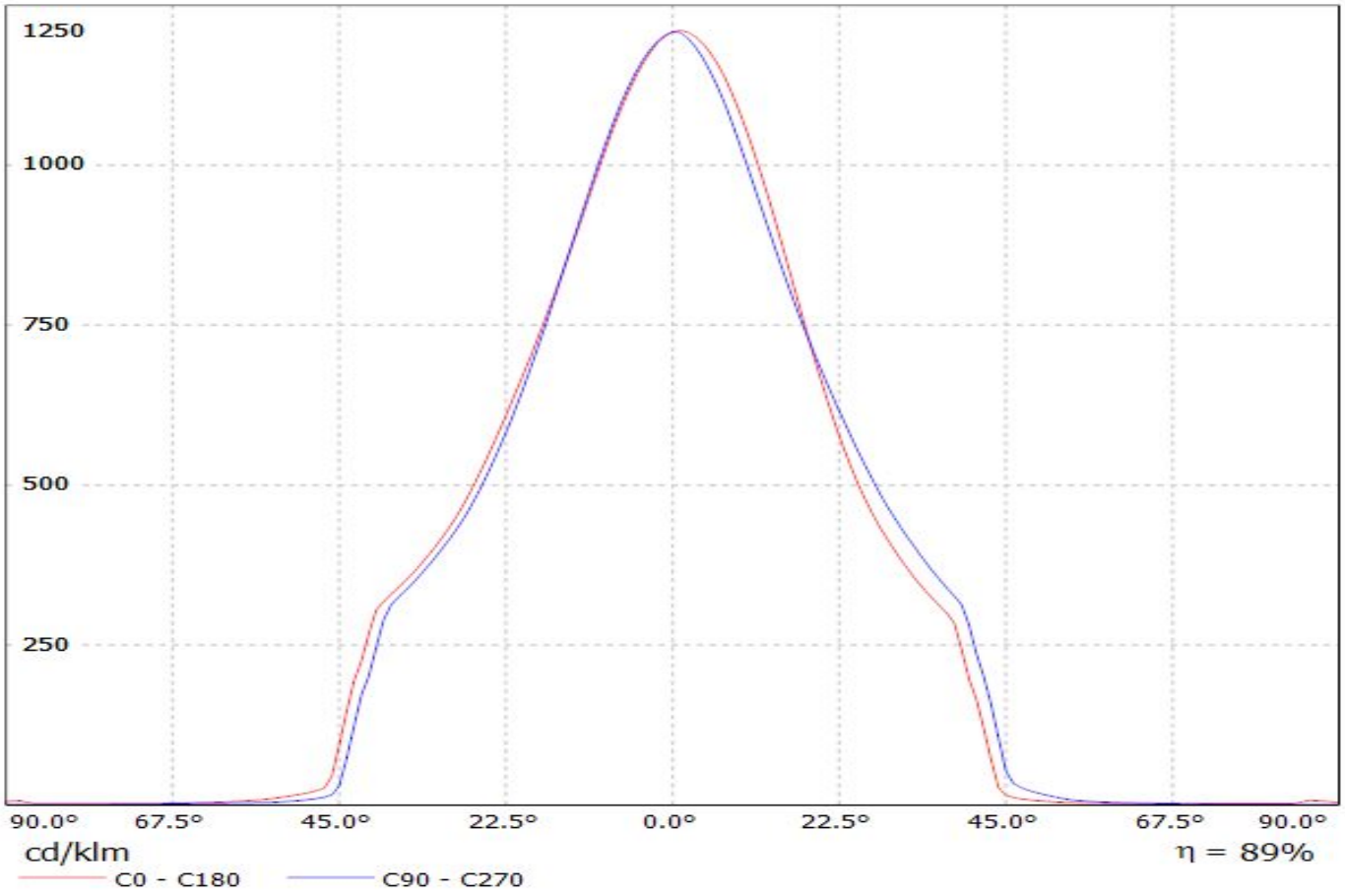


LEDiL Oy C12478_MIRELLA-50-W_(CXA1507) Eff.89.6% / LDC (Linear)

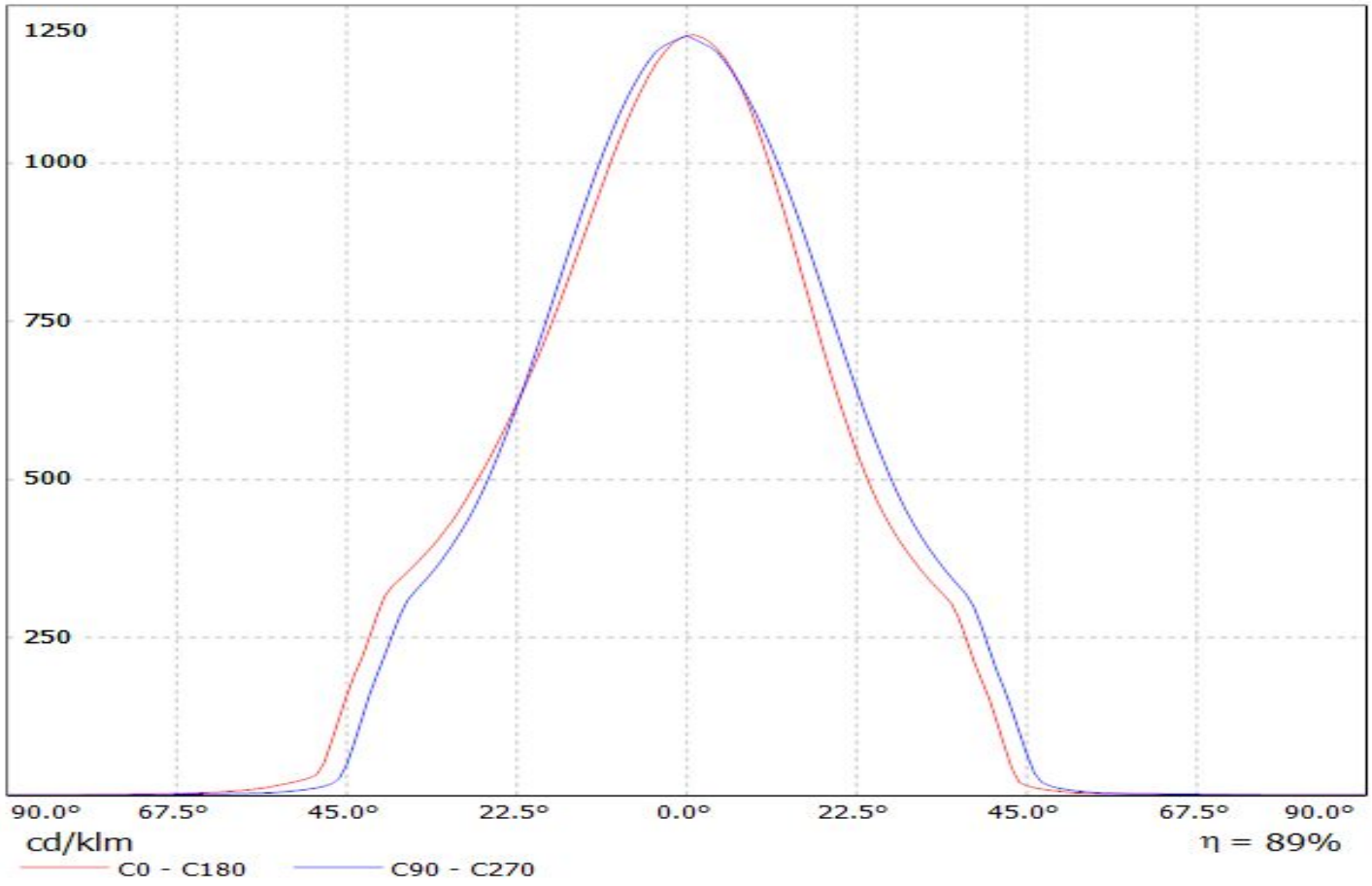
Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(CXA1507) Eff.89.6%
Lamps: 1 x CREE_CXA1507 (CXA1507-30F-F2-N0A-00000) 238.378lm@50mA CCT=3000K P=1.8506W I=54.5mA



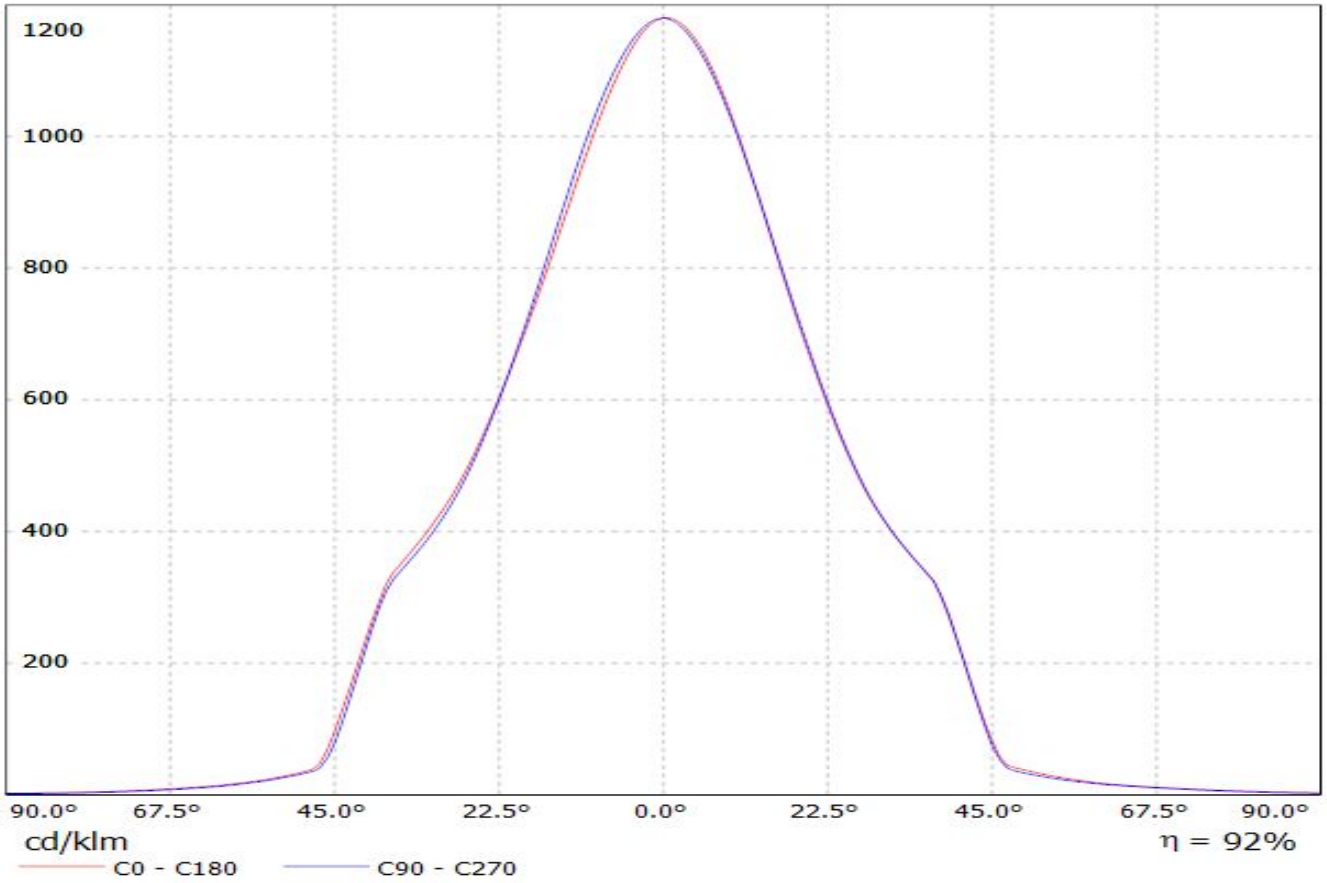
Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(Cree_XHP50_WW)
Lamps: 1 x Cree_XHP50_WW_196.271lm@250mA_P=1.39897W_I=0.2499A



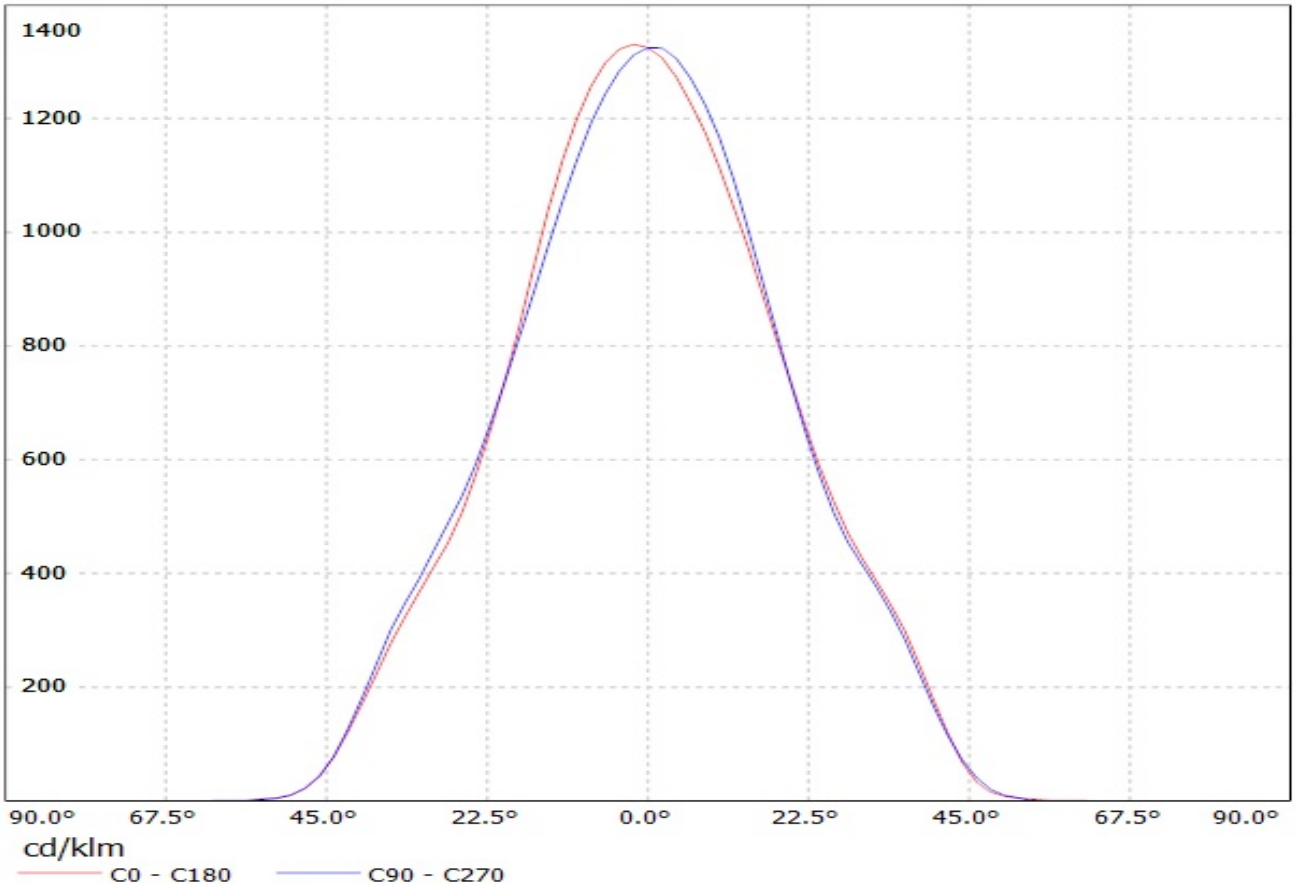
Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(Cree_XHP70)
Lamps: 1 x Cree_XHP70_258.083lm@250mA_P=1.38117W_I=0.2499A



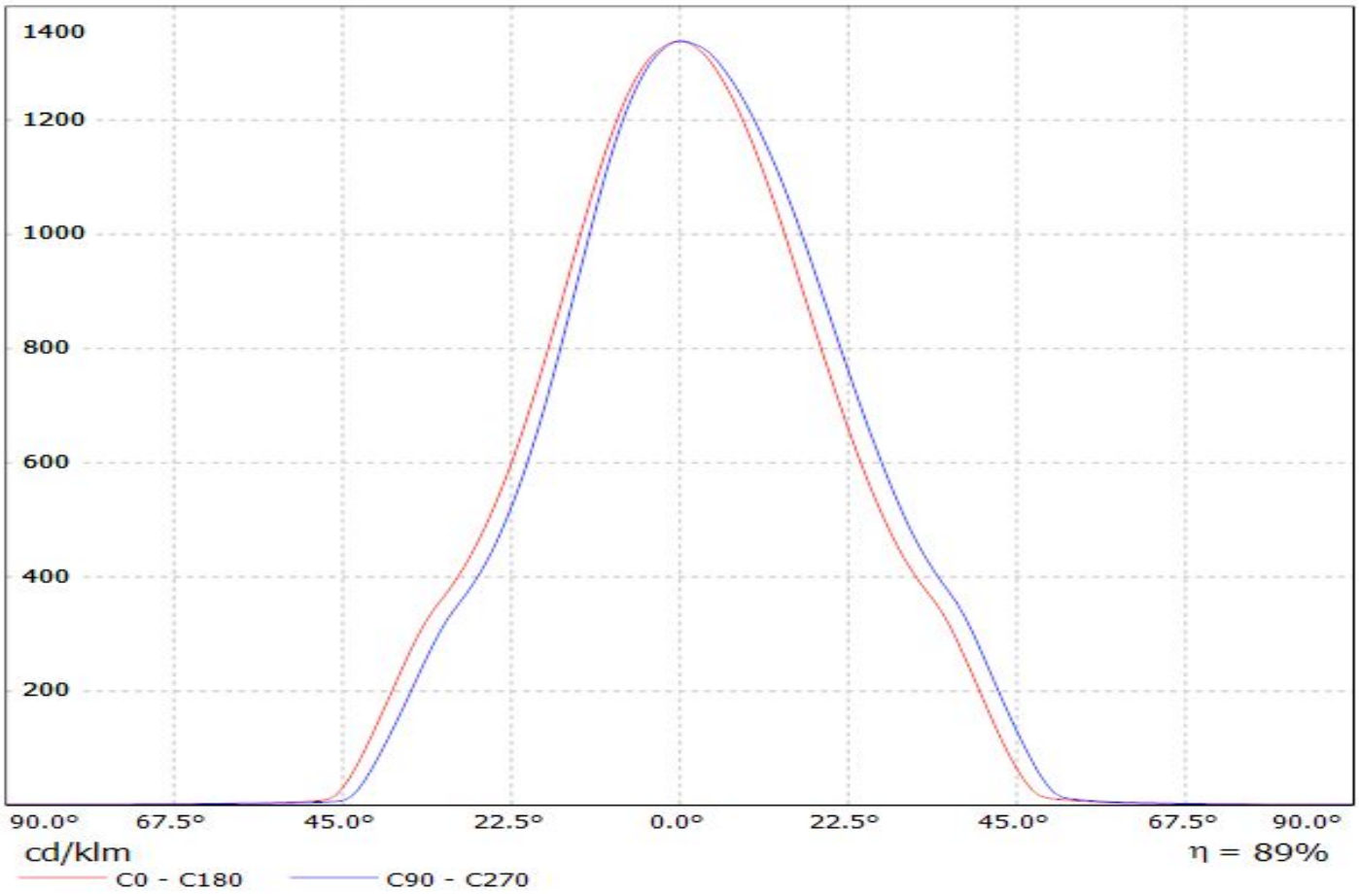
Luminaire: Ledil C12478_MIRELLA-50-W_(MHD-G)
Lamps: 1 x Cree MHD-G_528.649lm@100mA_P=3.0W_I=0.100A



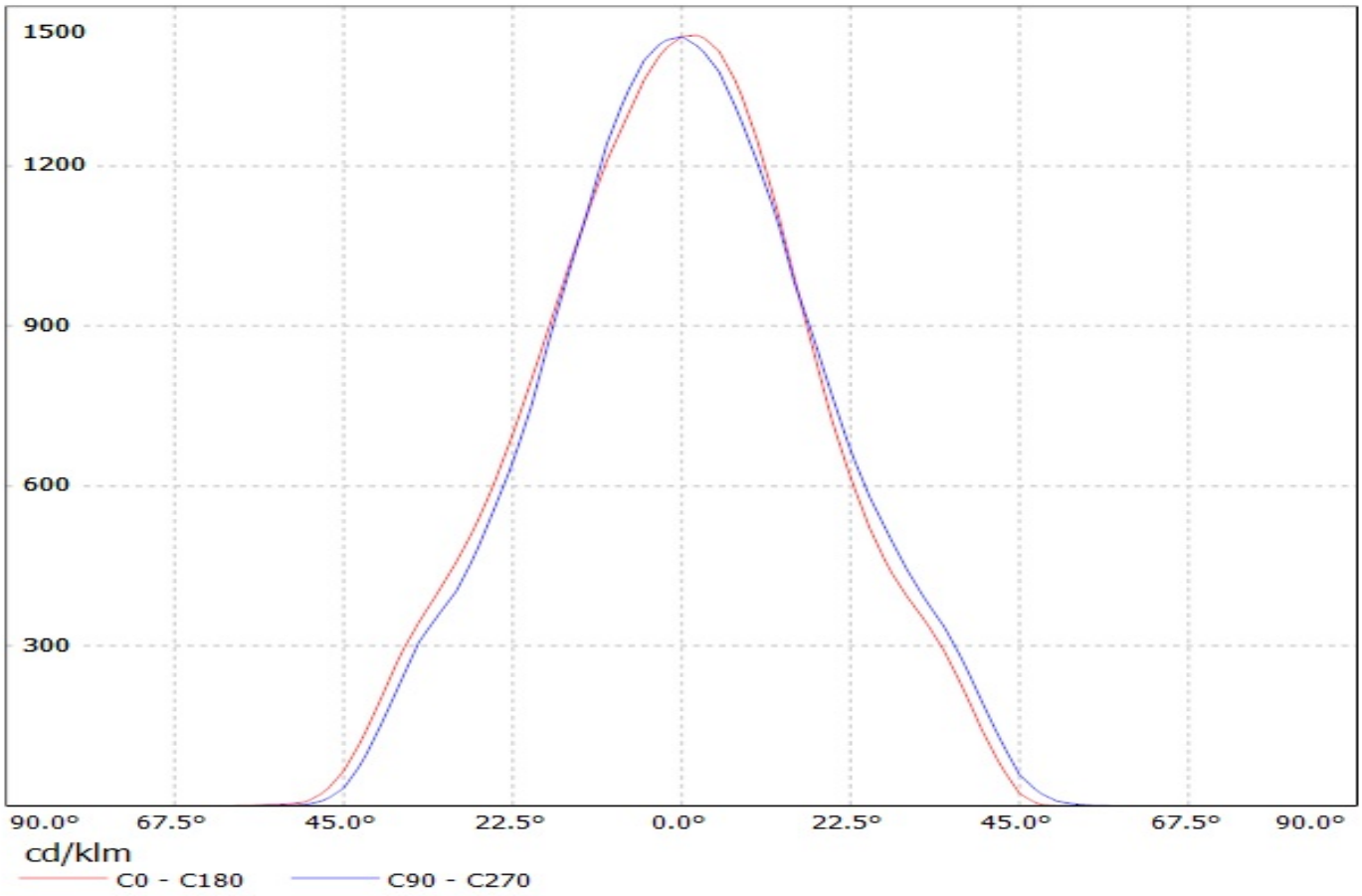
Luminaire: Ledil Oy C12478_MIRELLA-50-W_(Luxeon Cob 1203) Efficiency=87%
Lamps: 1 x Luxeon Cob 1203 (LHC1-3080-1203) 824lm @ 250mA CCT=3000K P=8.7W I=250mA



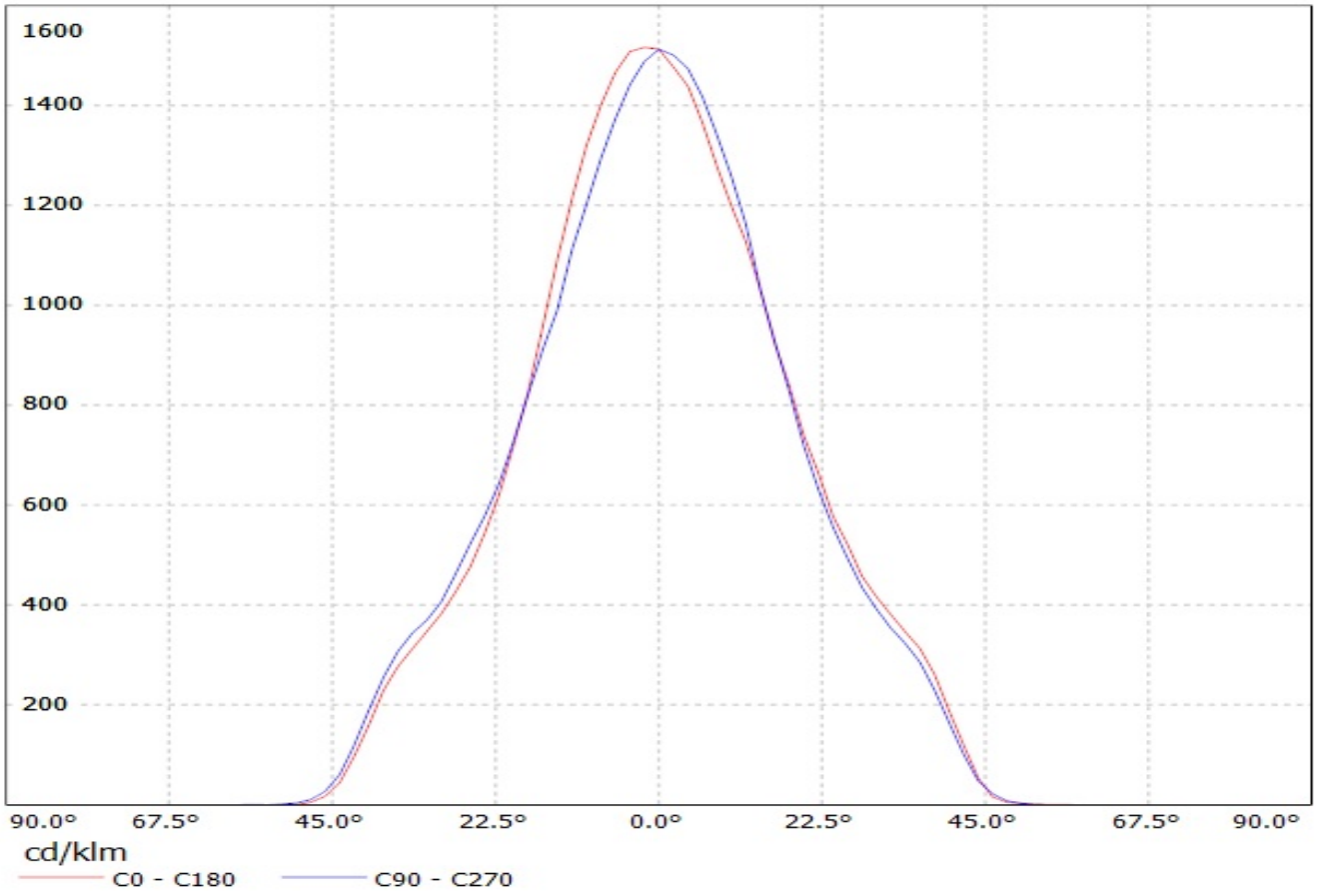
Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(CXM-9)
Lamps: 1 x Luminus_XNOVA_CXM-9_(AA00)_977.302lm@240mA_P=8.28264W_I=240mA



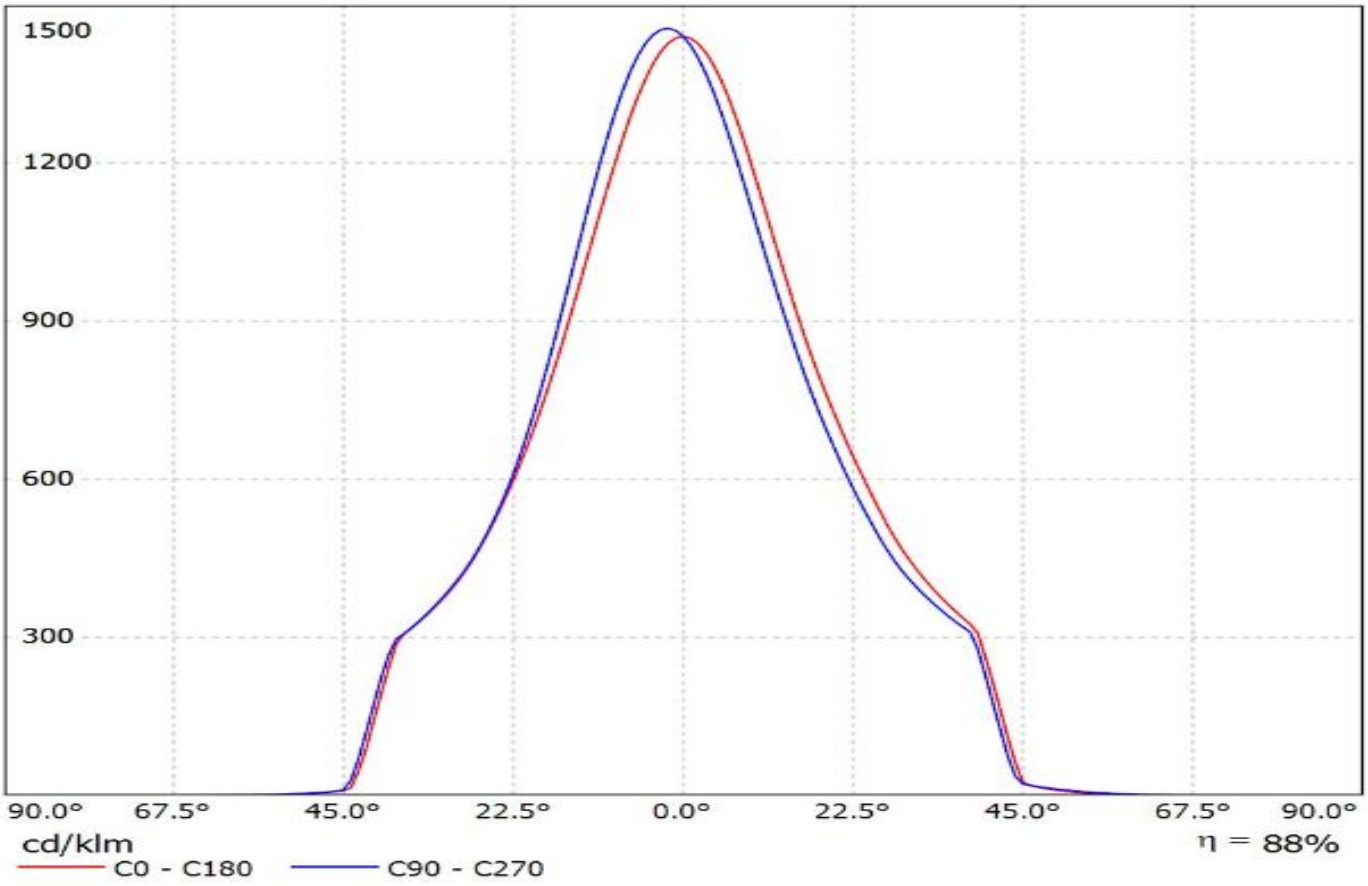
Luminaire: Ledil Oy C12478_MIRELLA-50-W (NSBxL066A 930lm @ 250mA) Efficiency=89%
Lamps: 1 x NSBxL066A 930lm @ 250mA (NSBLL066AE) CCT=3536K P=7,75W I=250mA



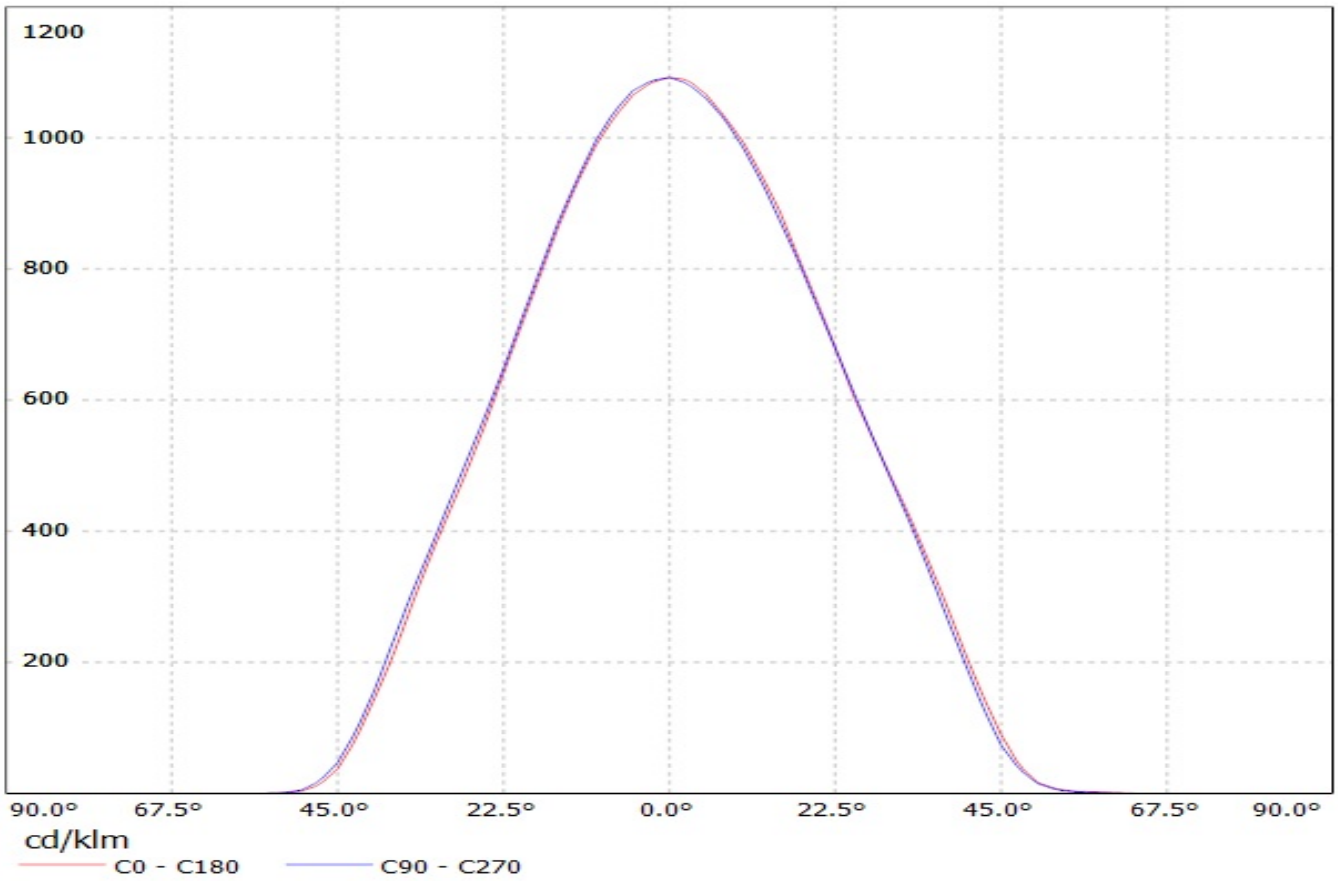
Luminaire: Ledil Oy C12478_MIRELLA-50-W (Nichia NSCxL036A 434lm @ 100mA) Efficiency=87%
Lamps: 1 x Nichia NSCxL036A 434lm @ 100mA (NSCLL036A) CCT=3000K P=3,4W I=100mA



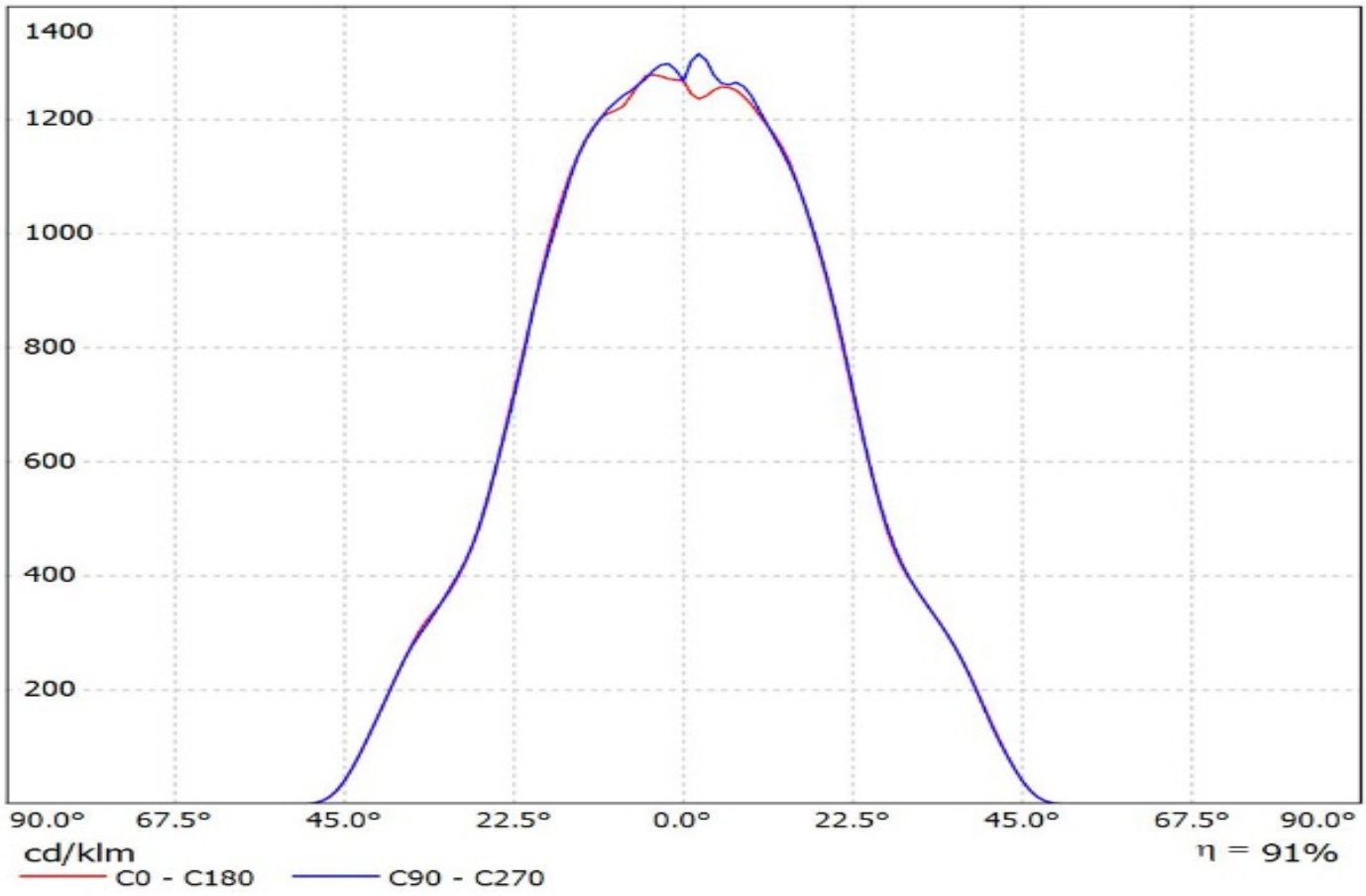
Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(NFMX48xAR_14chip)
Lamps: 1 x Nichia_NFMX48xAR_14chip_(NFMW488AR)_557.972lm@100mA_P=4.0701W_I=0.100A



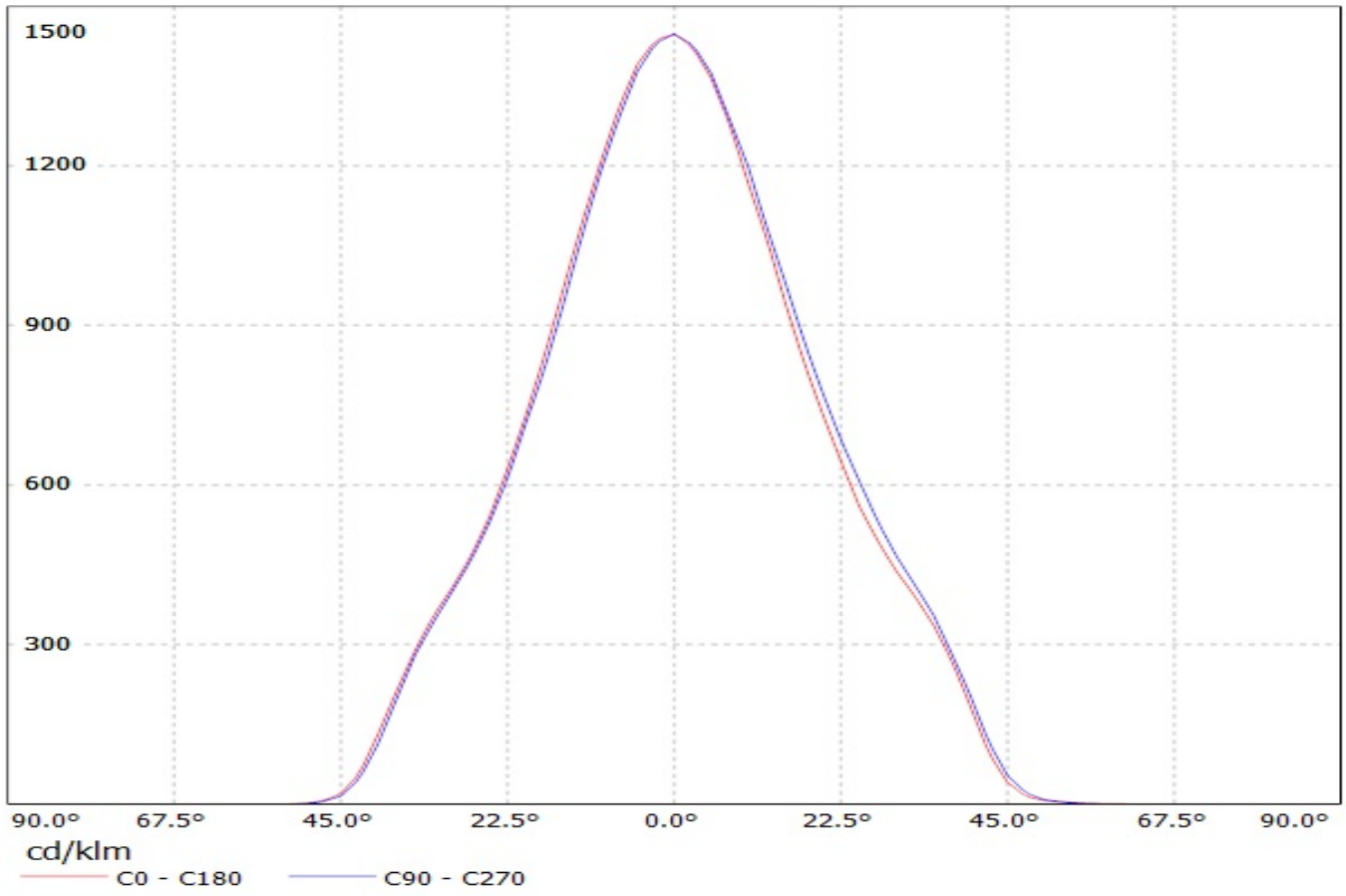
Luminaire: LEDil Oy C12478_MIRELLA-50-W_(Soleriq_S13) Efficiency=85%
Lamps: 1 x Osram Soleriq S13 (GW KAGHB1.EM) 832lm @ 250mA CCT=3100K P=7.4W I=250mA



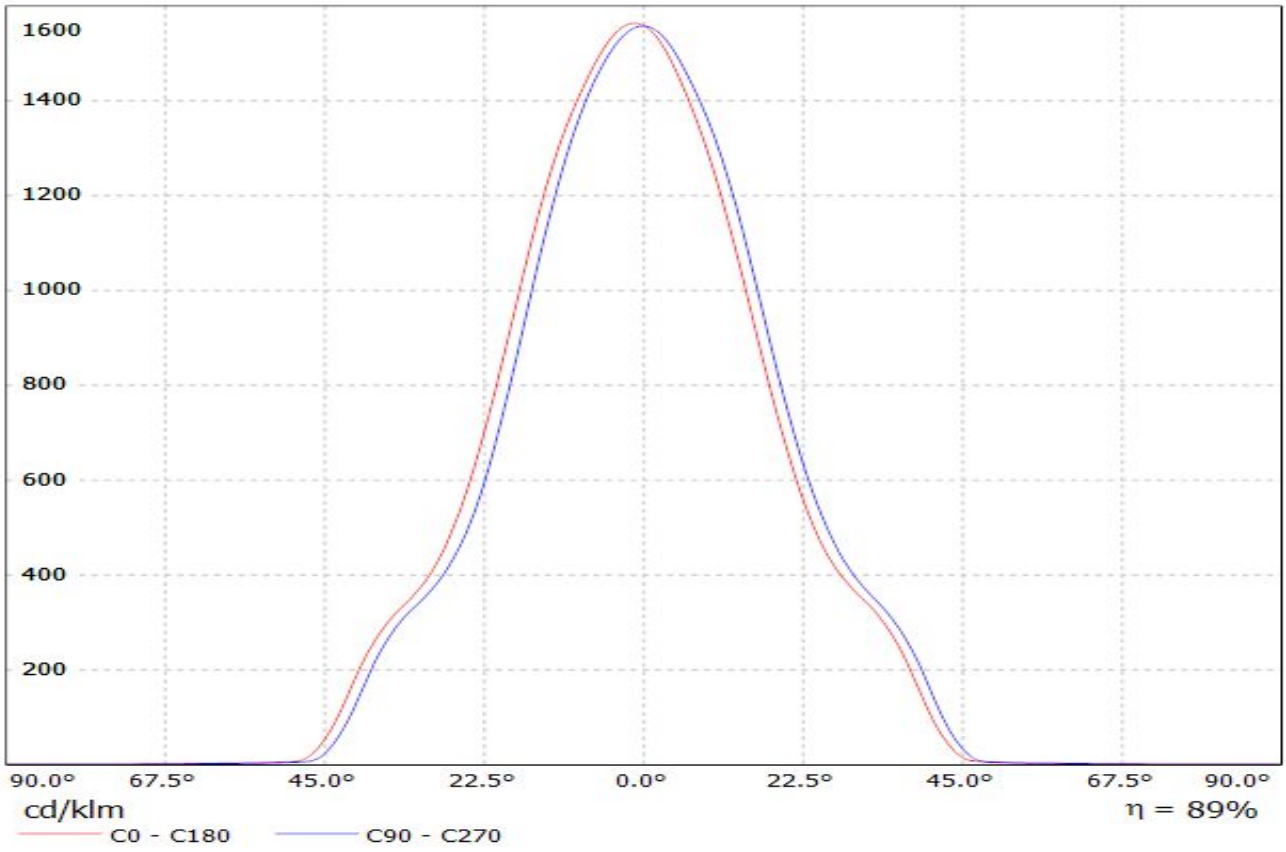
Luminaire: Ledil Oy C12478_MIRELLA-50-W_(Soleriq_S9)_SIMULATED
Lamps: 1 x Osram Soleriq S9 (GW KAJFB3.EM)



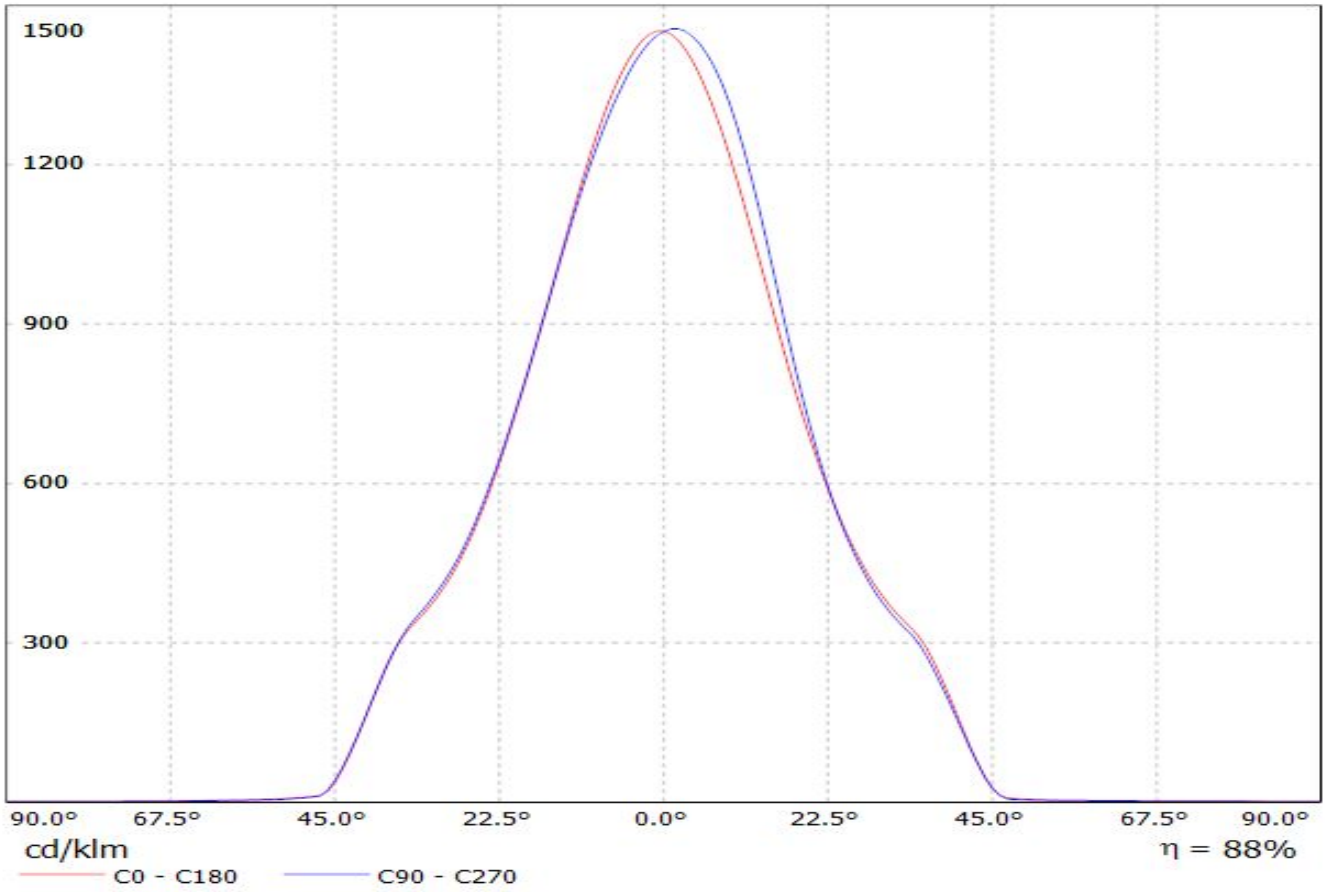
Luminaire: LEDil Oy C12478_MIRELLA-50-W_(ZC6) Efficiency=86%
Lamps: 1 x Seoul ZC6 (SDW81F1C) 422lm @ 100mA CCT=3100K P=3.4W I=100mA



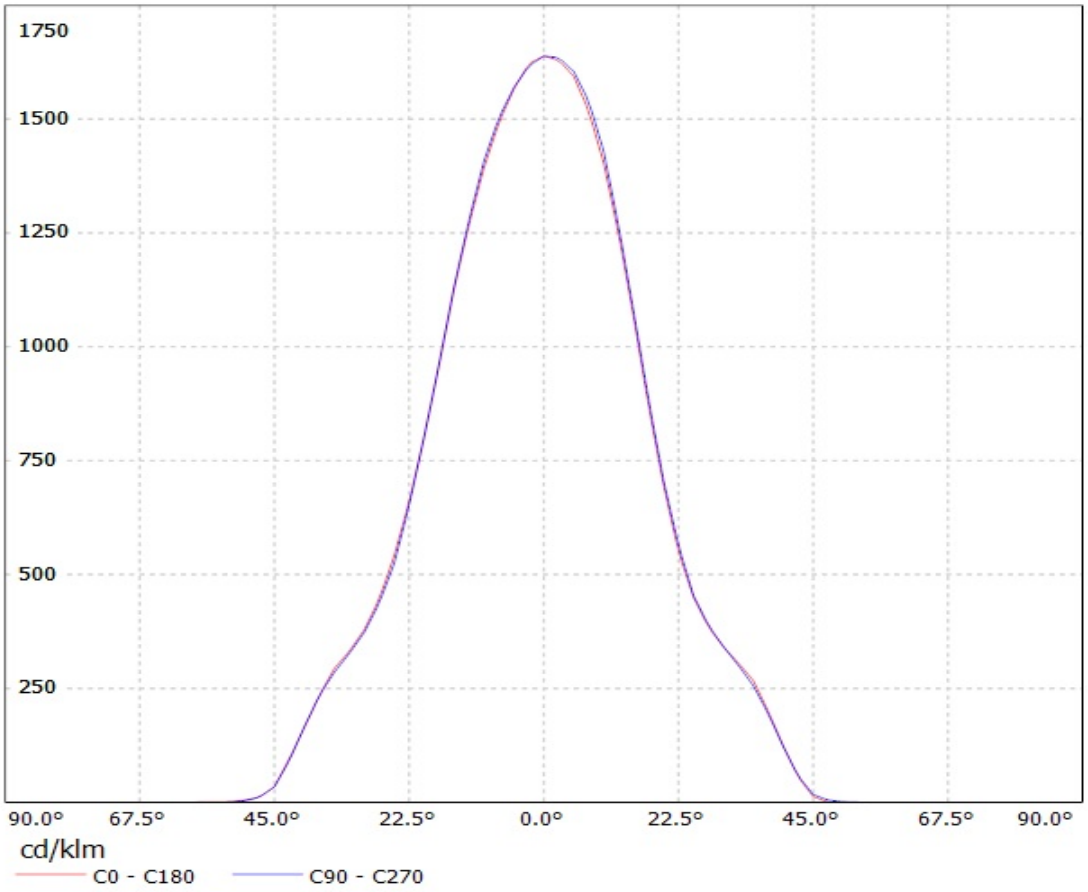
Luminaire: LEDIL OY C12478_MIRELLA-50-W_(MiniZenigata) Eff.88.9%
Lamps: 1 x Mini Zenigata (387.5lm@250mA)



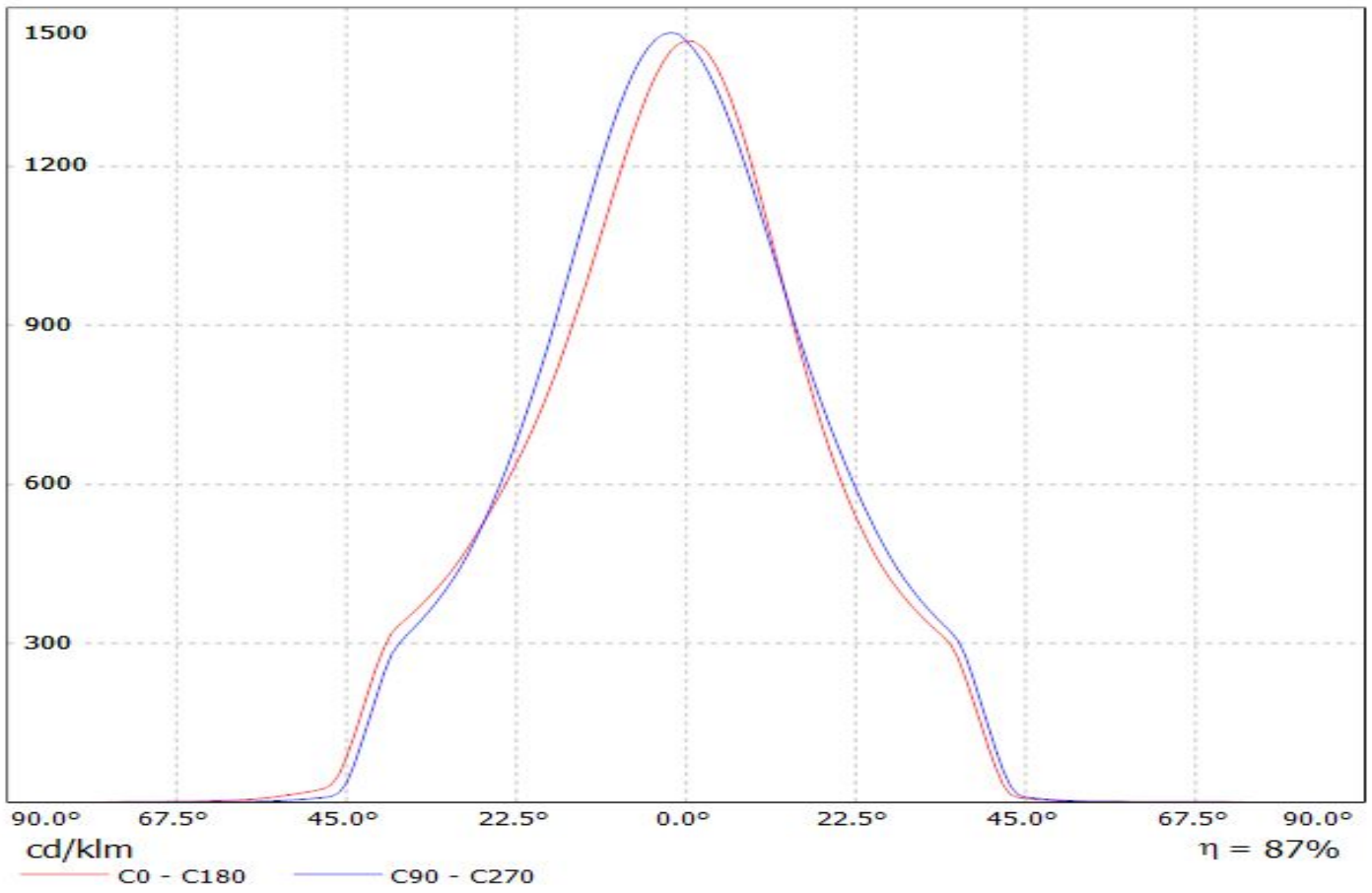
Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(Mini_Zenigata) Eff.87.7%
Lamps: 1 x Mini_Zenigata GW6BM (803.772lm@250mA)



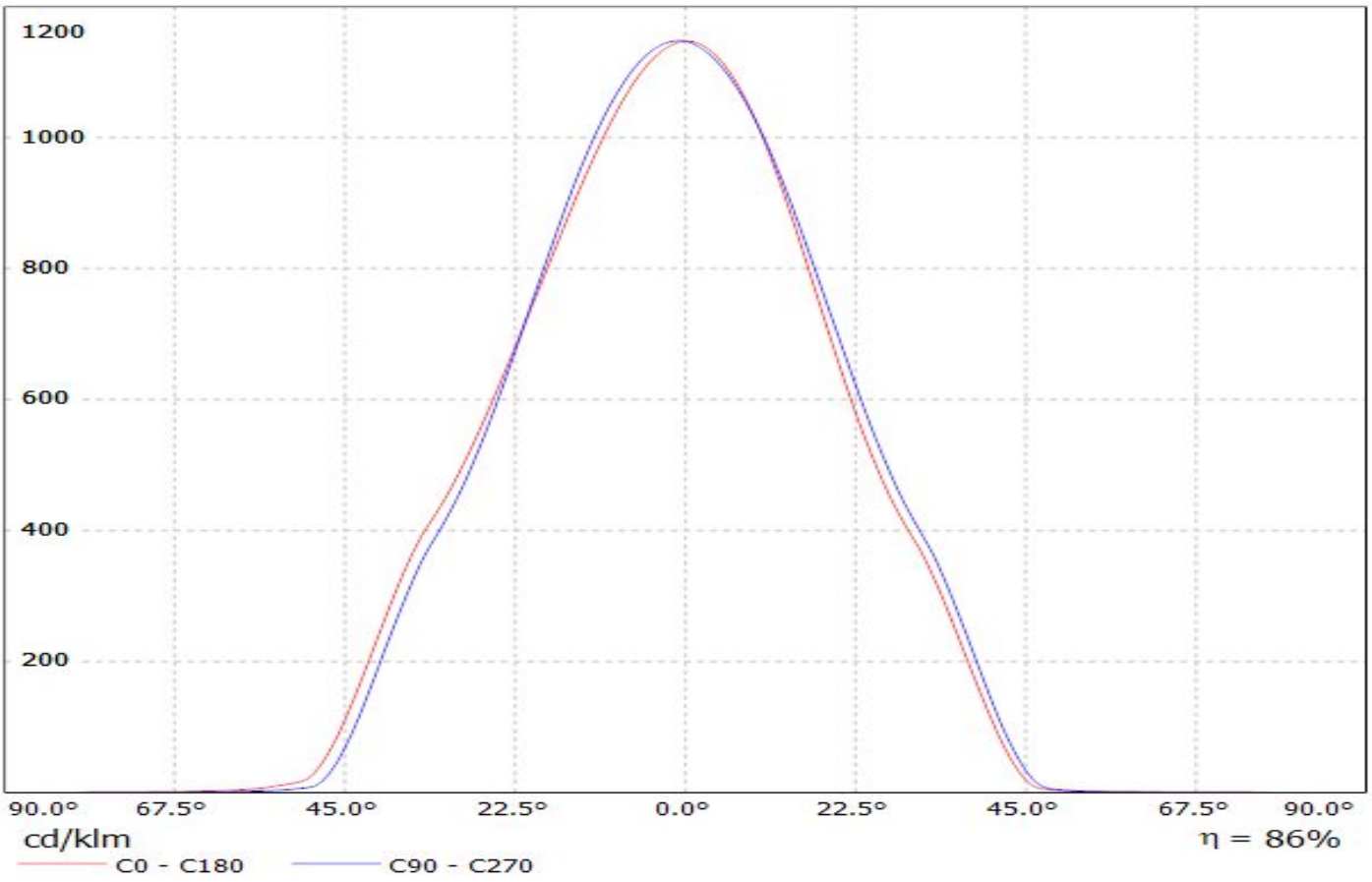
Luminaire: LEDil Oy C12478_MIRELLA-50-W_(Stark_SLE_G3_LES10) Efficiency=86%
Lamps: 1 x Tridonic Stark SLE G3 LES10 (STARK-SLE-PURE-G3-10-1000-830-CLA) 453lm @ 250mA CCT=3000K P=4.3W I=250mA



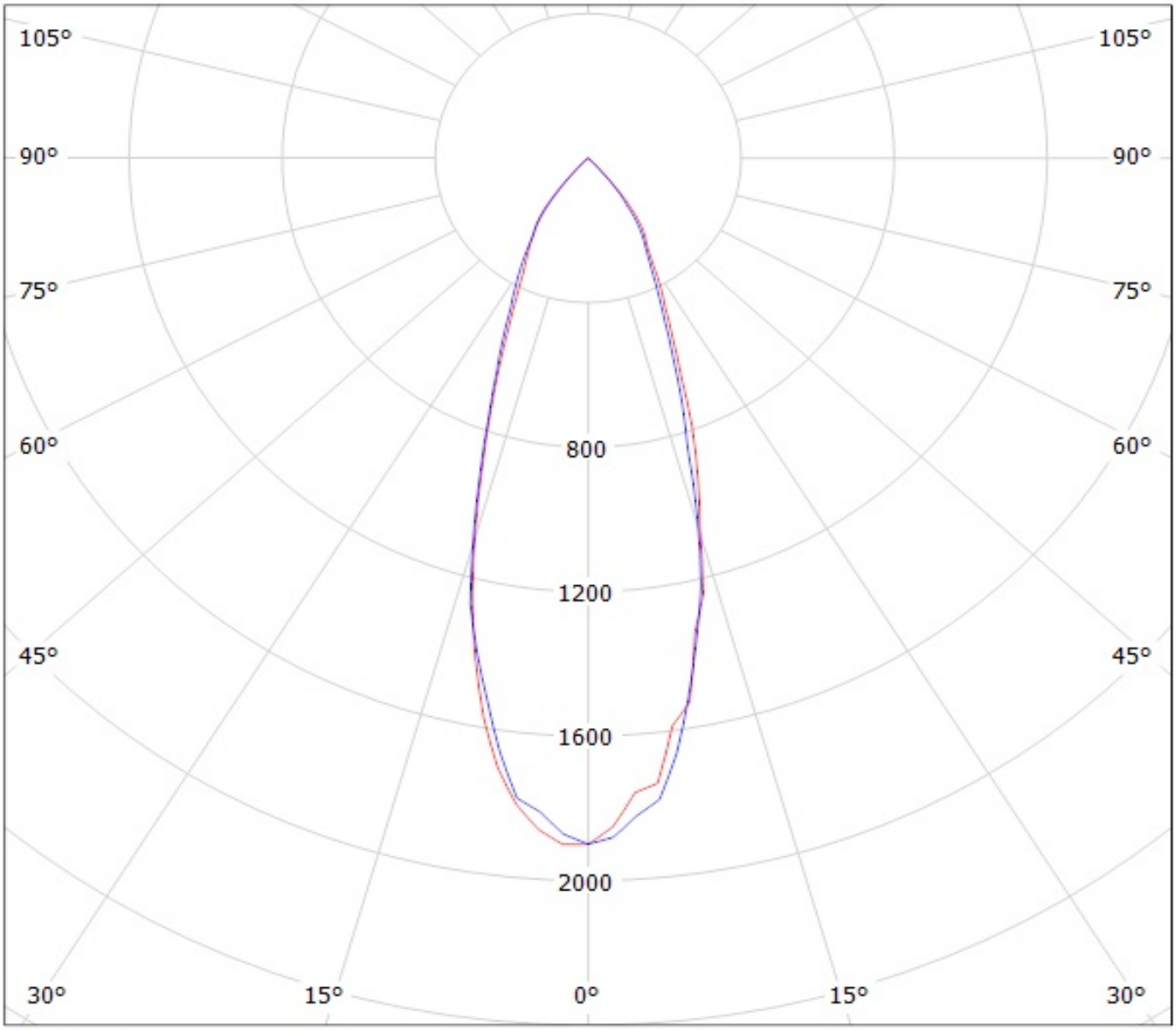
Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(SLE-G5_LES-6)
Lamps: 1 x Tridonic_SLE-G5_LES-6_470.59lm@100mA_P=3.3748W_I=0.100A



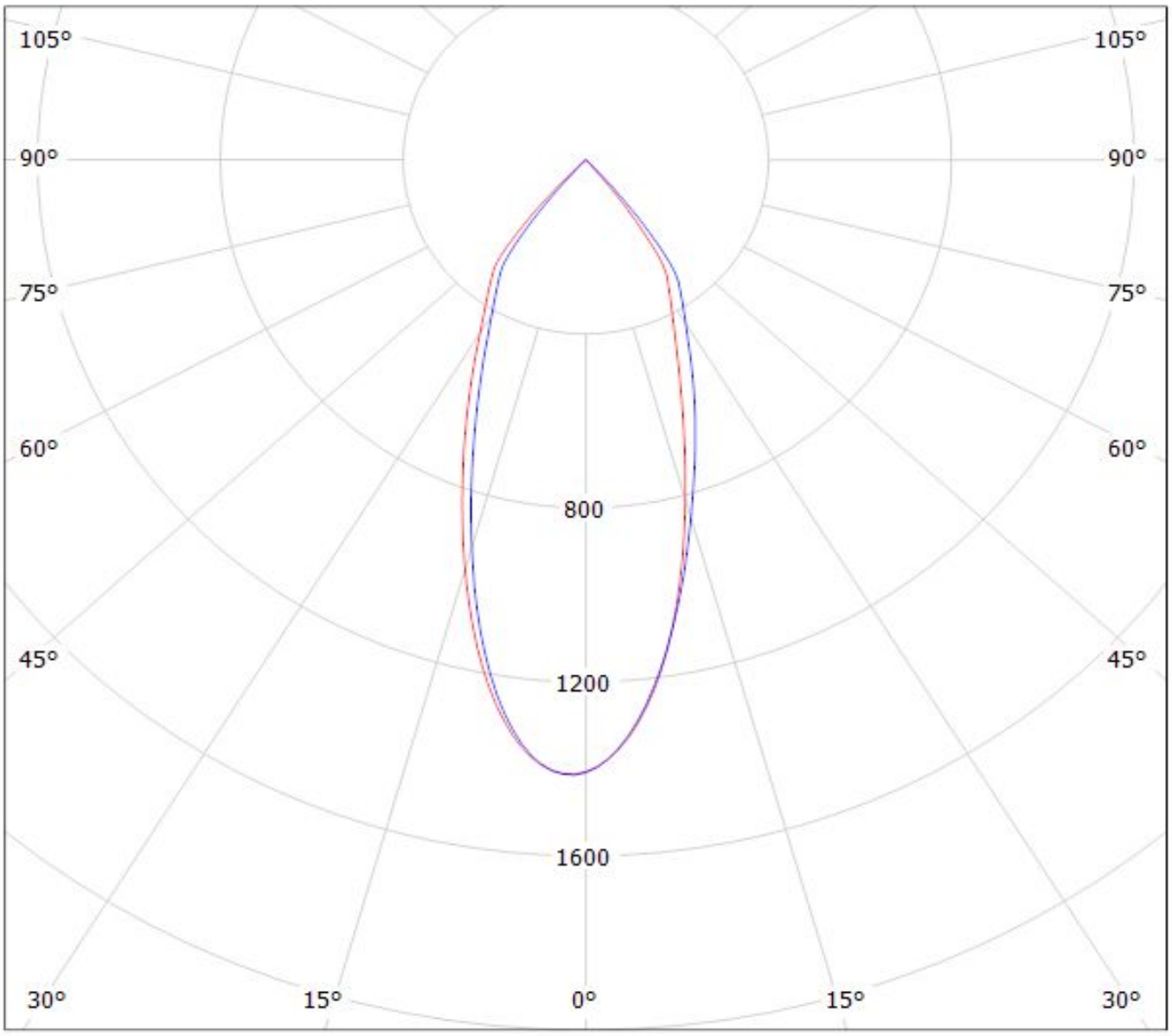
Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(SLE-G5_LES-11)
Lamps: 1 x Tridonic_SLE-G5_LES-11_1168.86lm@250mA_P=8.3243W_I=0.250A



Luminaire: Ledil Oy C12478_MIRELLA-50-W (Bridgelux LS 170lm @ 250mA) Efficiency=88%
Lamps: 1 x Bridgelux LS 170lm @ 250mA



Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(CLU700)
Lamps: 1 x CITIZEN_CLU700_(CLU700-100-2B8-273M2G1)_380.605lm@250mA_P=2.8002W_I=0.1001A



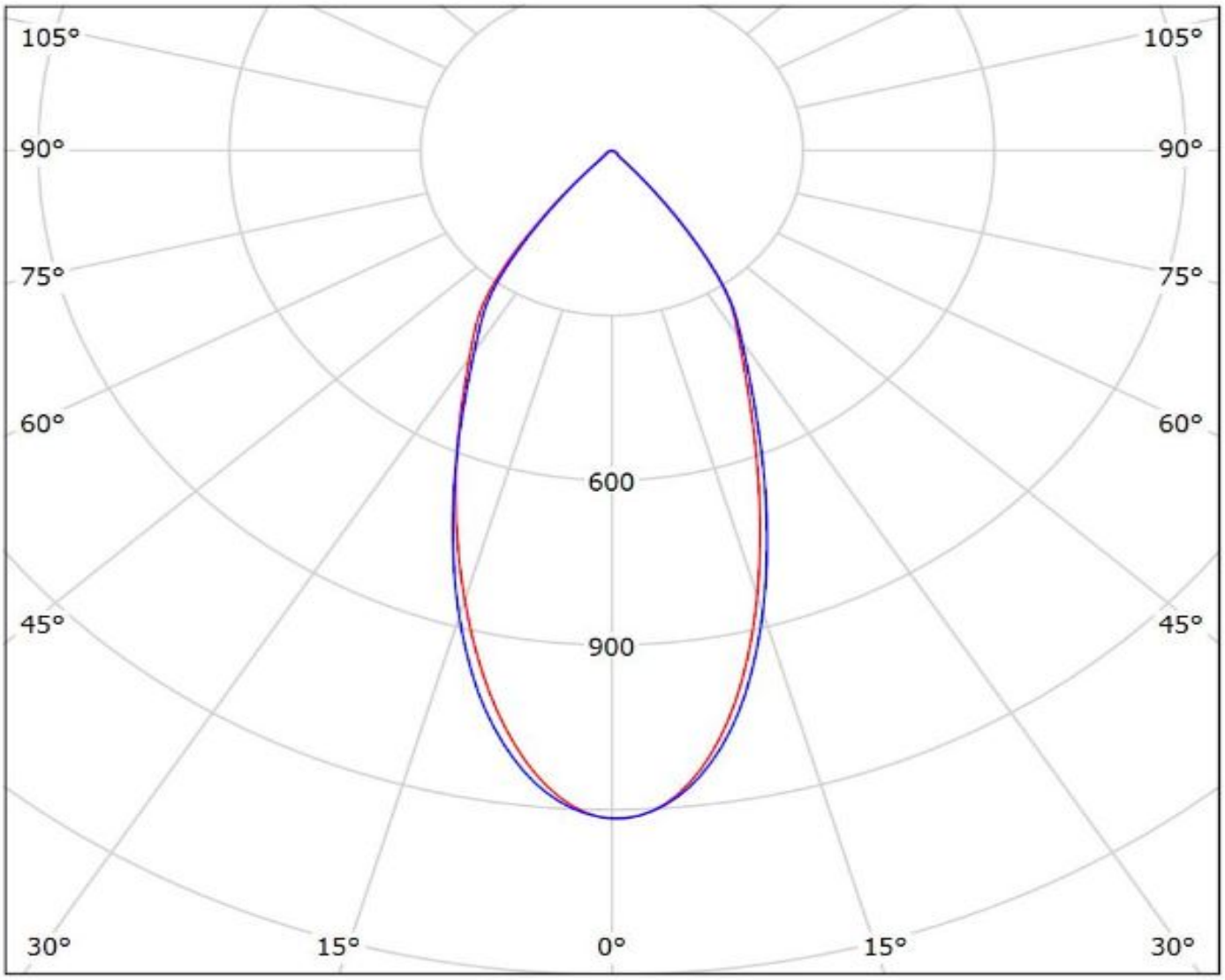
cd/klm

η = 88%

C0 - C180 C90 - C270

Ledil C12478_MIRELLA-50-W_(CLU710) / LDC (Polar)

Luminaire: Ledil C12478_MIRELLA-50-W_(CLU710)
Lamps: 1 x CITIZEN_CLU710_(CLU710-1204B8-273M2G1)_1212.66lm@250mA_P=8.5W_I=0.25A

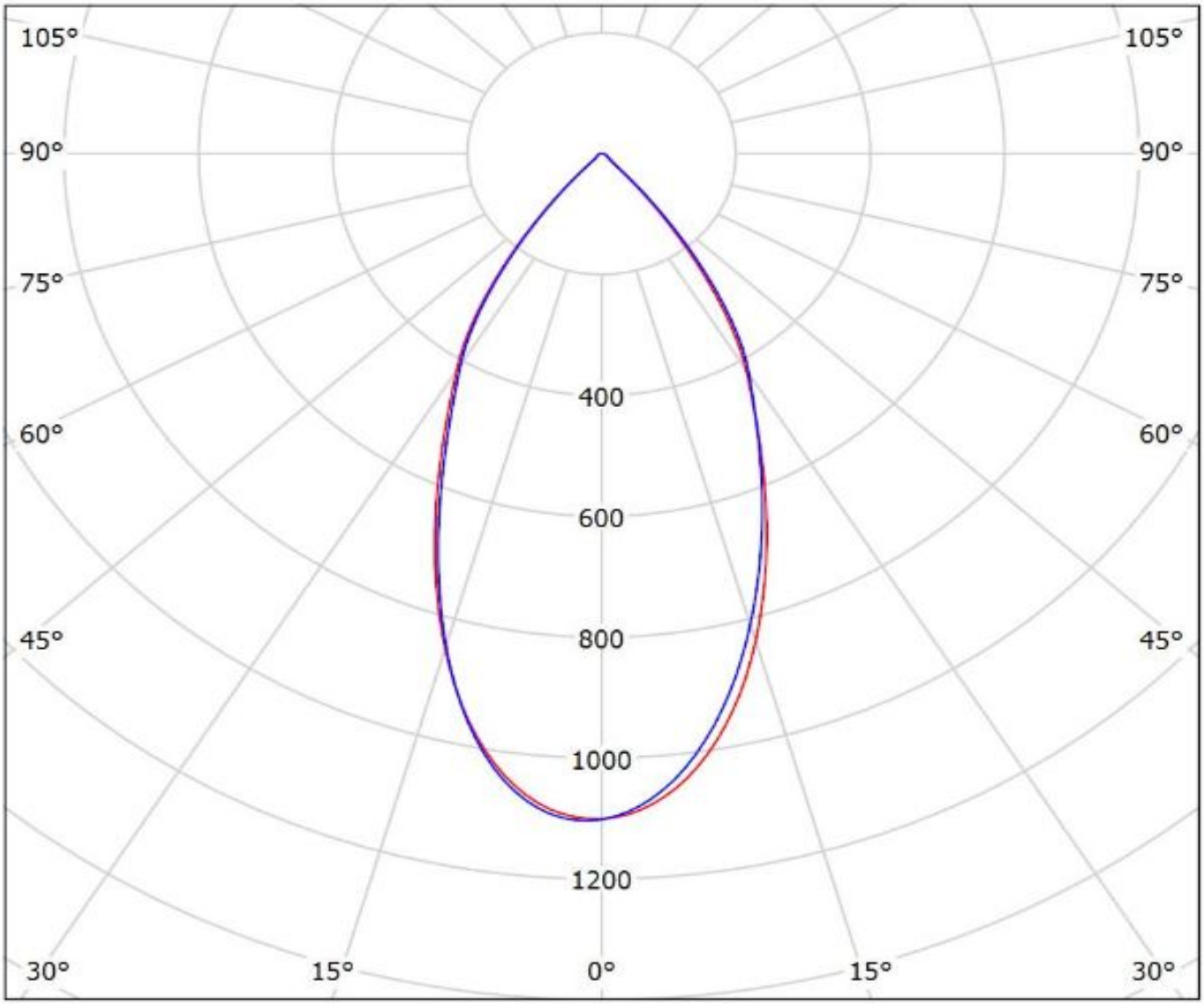


cd/klm

η = 88%

C0 - C180 C90 - C270

Luminaire: Ledil C12478_MIRELLA-50-W_(CLU720)
Lamps: 1 x CITIZEN_CLU720_(CLU720-1206B8-273M2)
_1298.17lm@250mA_CCT=2700K_P=8.3W_I=0.25A



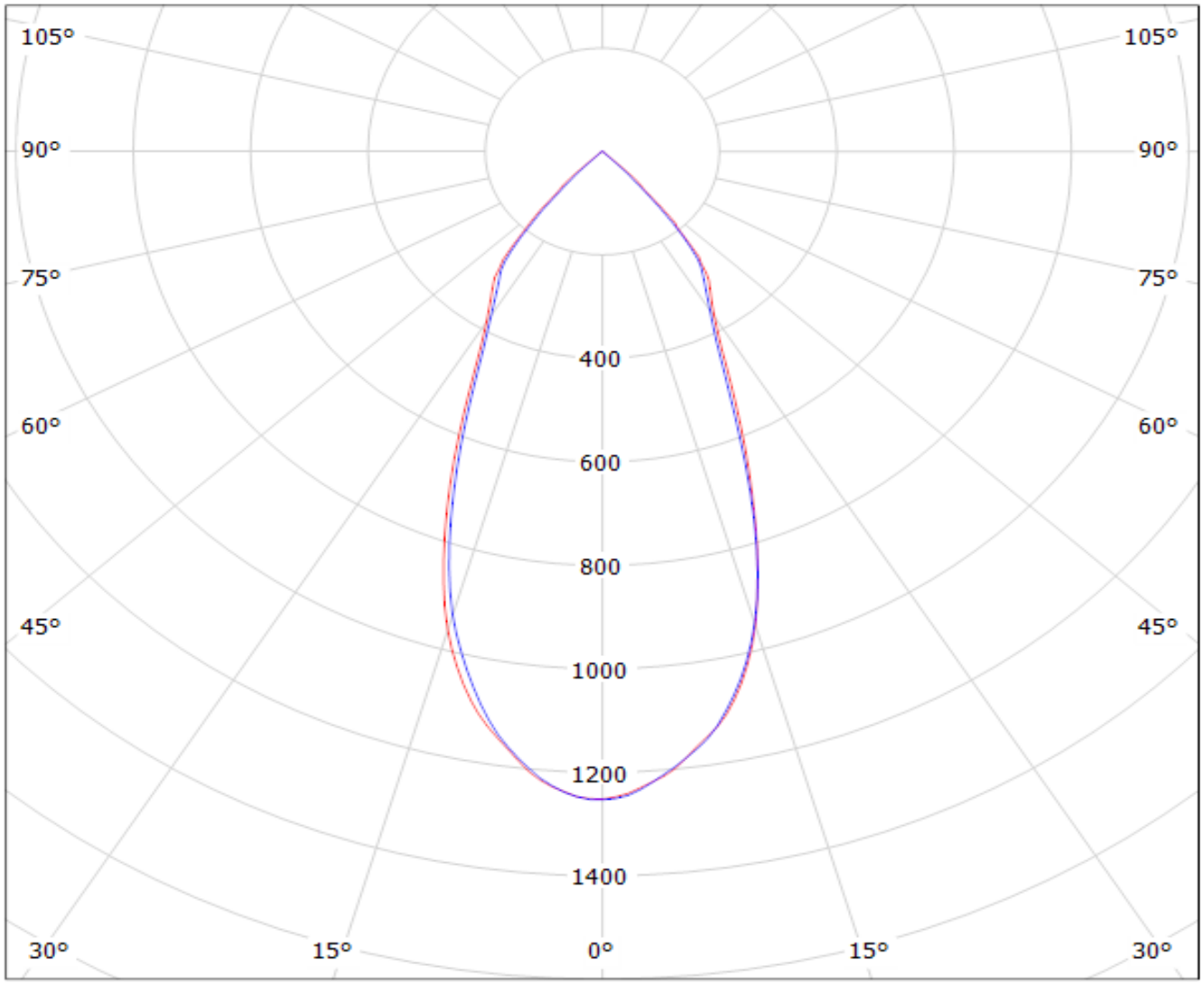
cd/klm

η = 88%

C0 - C180 C90 - C270

LEDIL OY C12478_MIRELLA-50-W_(MT-G) / LDC (Polar)

Luminaire: LEDIL OY C12478_MIRELLA-50-W_(MT-G)
Lamps: 1 x MT-G (777.7lm)



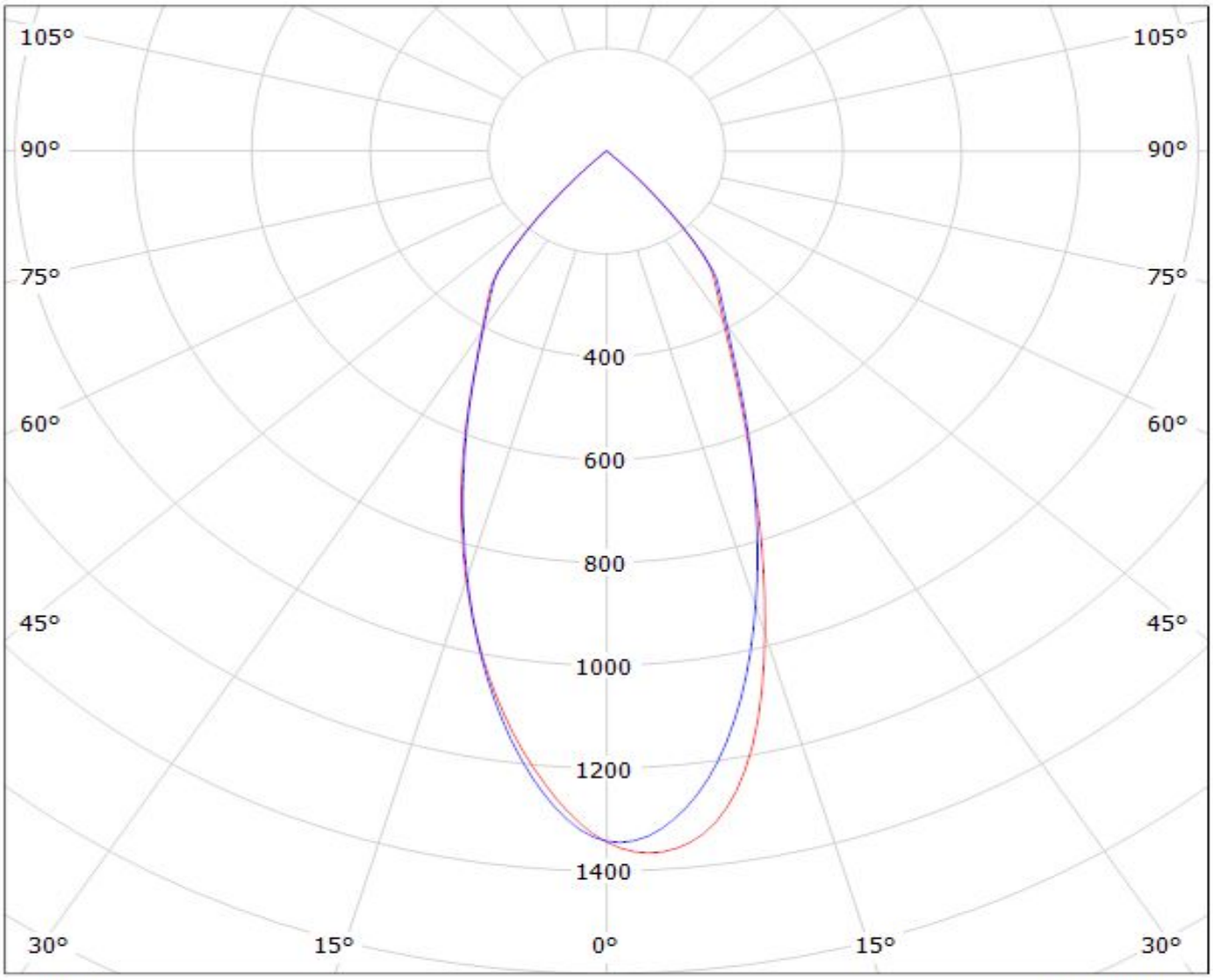
cd/klm

η = 90%

C0 - C180 C90 - C270

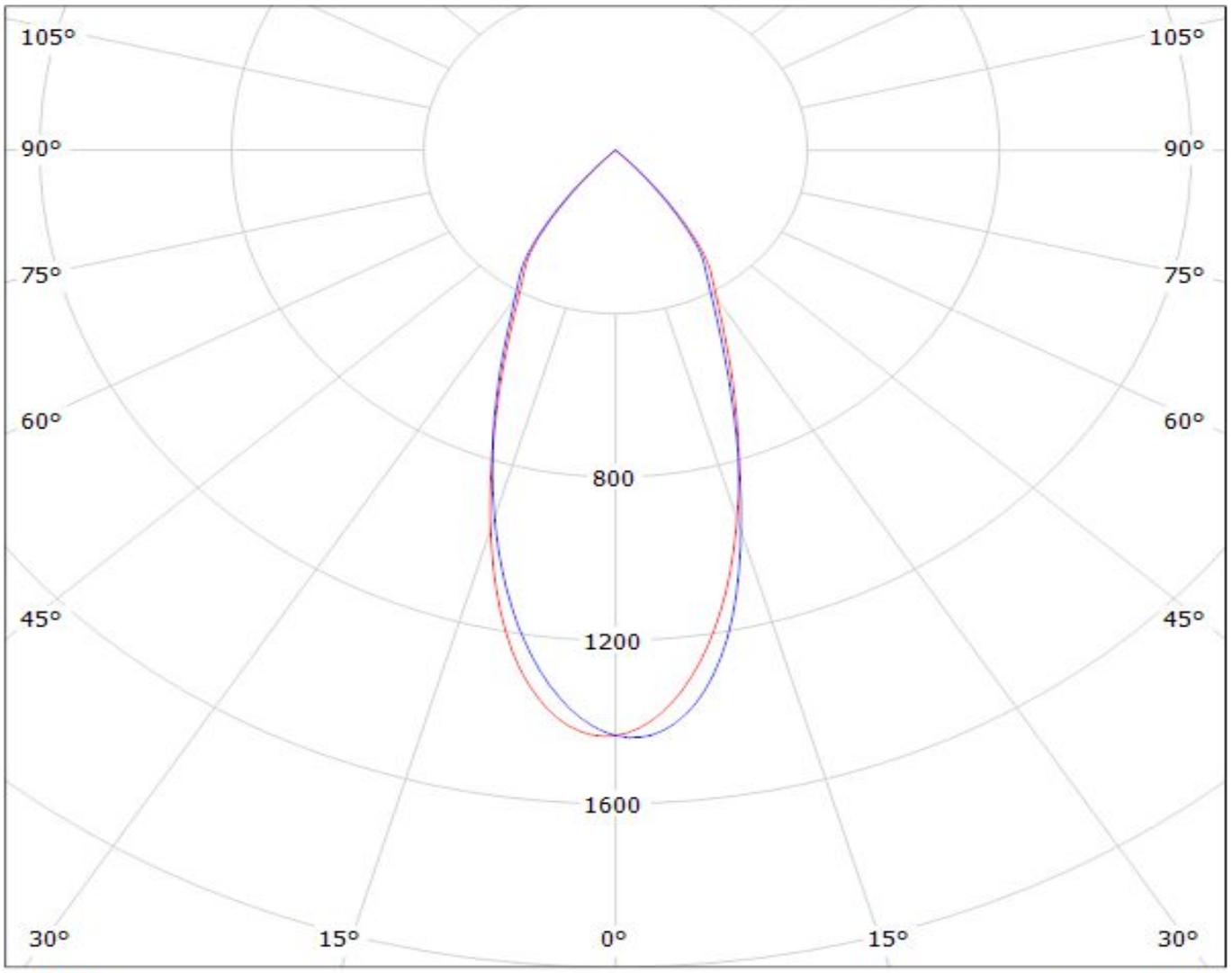
LEDiL Oy C12478_MIRELLA-50-W_(MT-G2) Eff.91.3% / LDC (Polar)

Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(MT-G2) Eff.91.3%
Lamps: 1 x MT-G2 (165.381lm@250mA)



LEDiL Oy C12478_MIRELLA-50-W_(CXA1507) Eff.89.6% / LDC (Polar)

Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(CXA1507) Eff.89.6%
Lamps: 1 x CREE_CXA1507 (CXA1507-30F-F2-N0A-00000) 238.378lm@50mA CCT=3000K P=1.8506W I=54.5mA

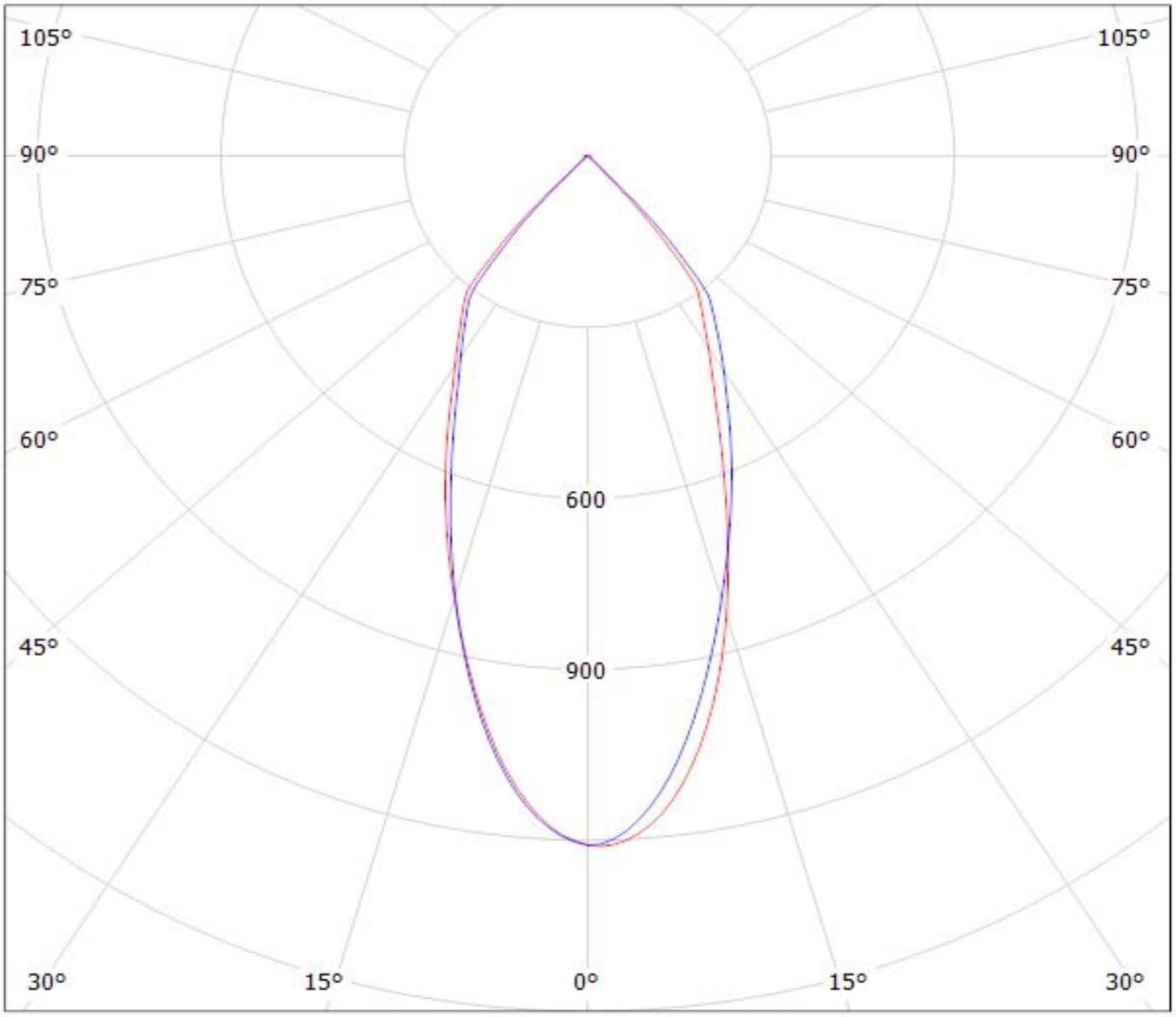


cd/klm

η = 90%

C0 - C180 C90 - C270

Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(Cree_XHP50_WW)
Lamps: 1 x Cree_XHP50_WW_196.271lm@250mA_P=1.39897W_I=0.2499A

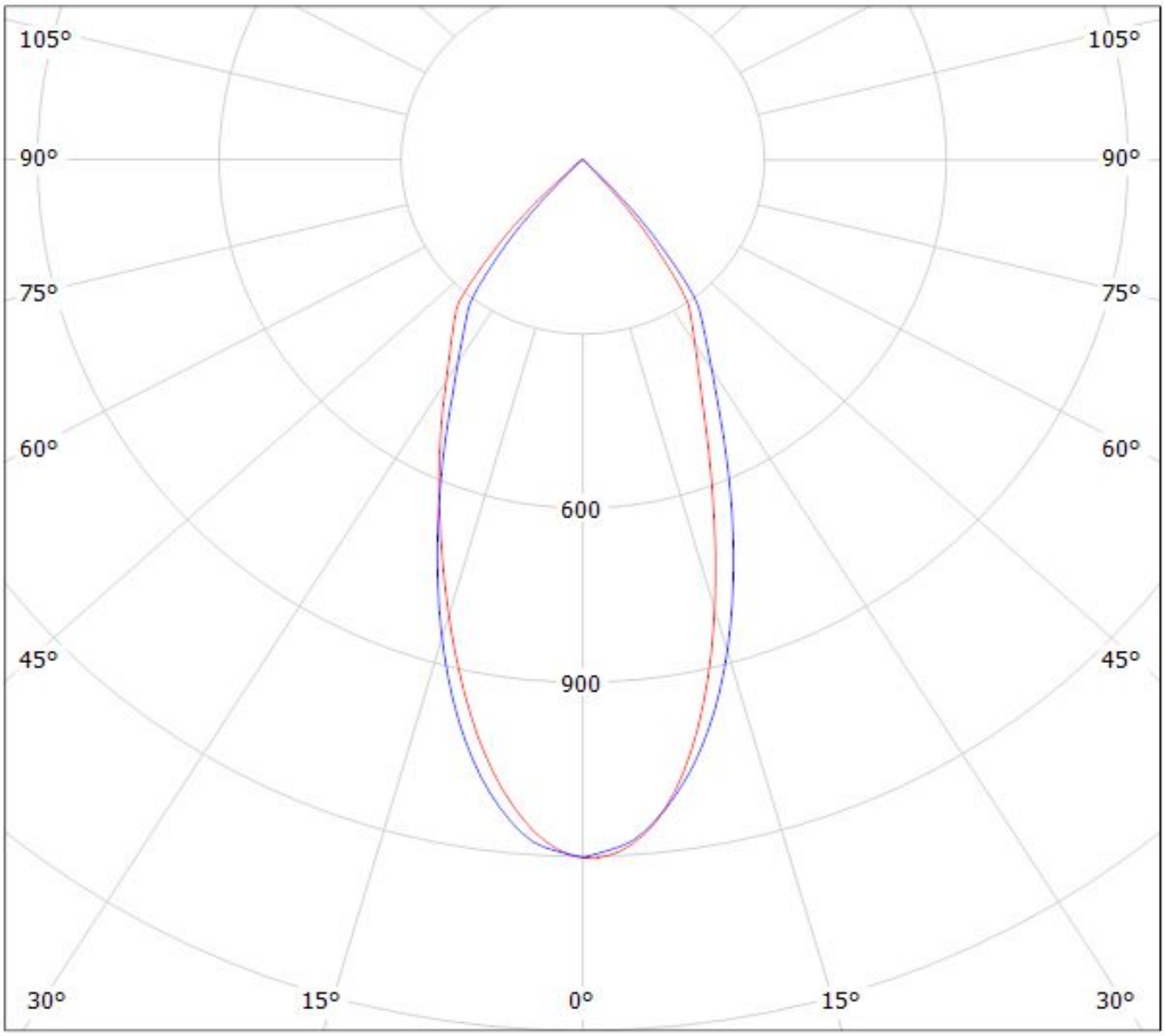


cd/klm

η = 89%

C0 - C180 C90 - C270

Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(Cree_XHP70)
Lamps: 1 x Cree_XHP70_258.083lm@250mA_P=1.38117W_I=0.2499A

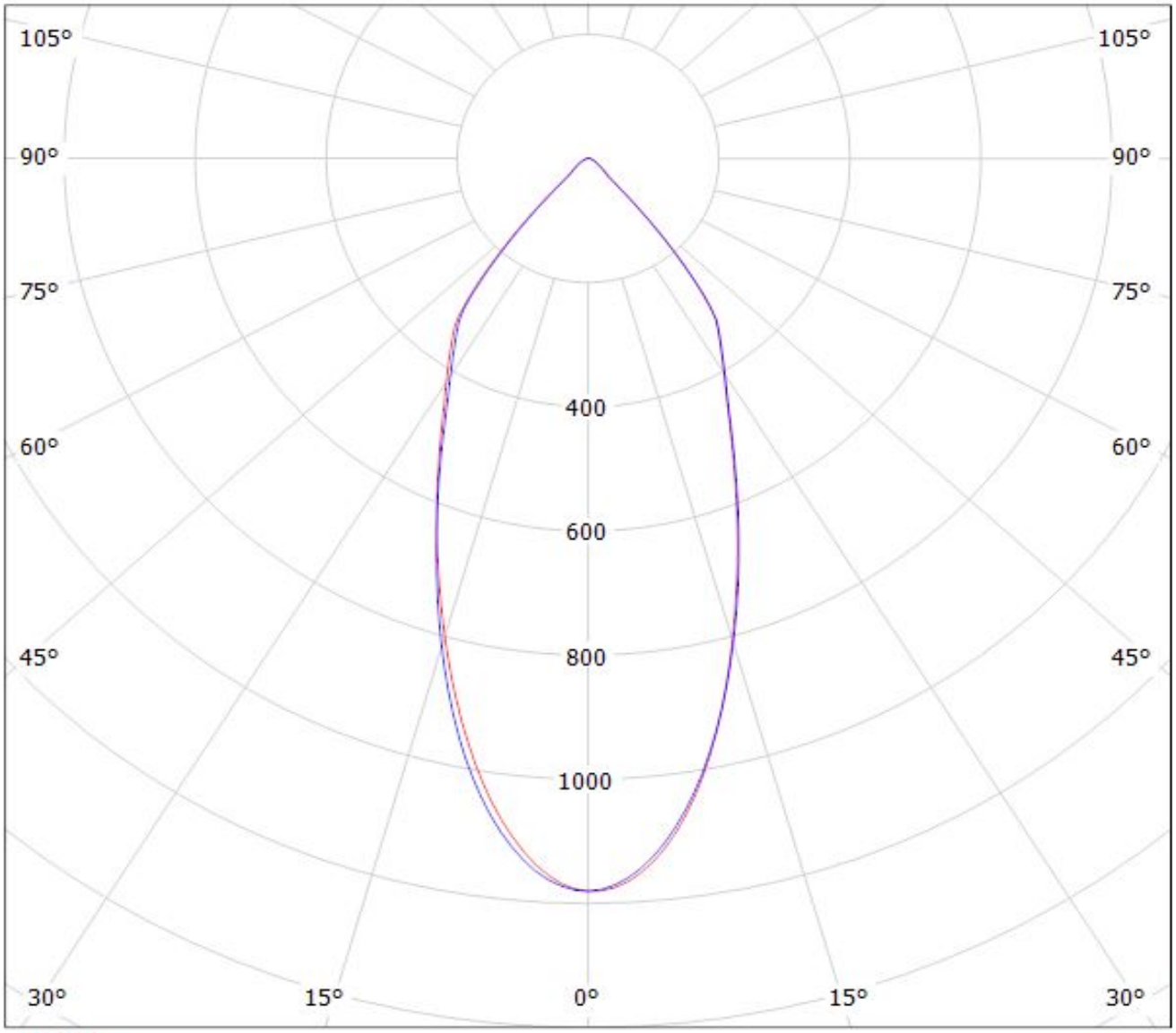


cd/klm

η = 89%

C0 - C180 C90 - C270

Luminaire: Ledil C12478_MIRELLA-50-W_(MHD-G)
Lamps: 1 x Cree MHD-G_528.649lm@100mA_P=3.0W_I=0.100A

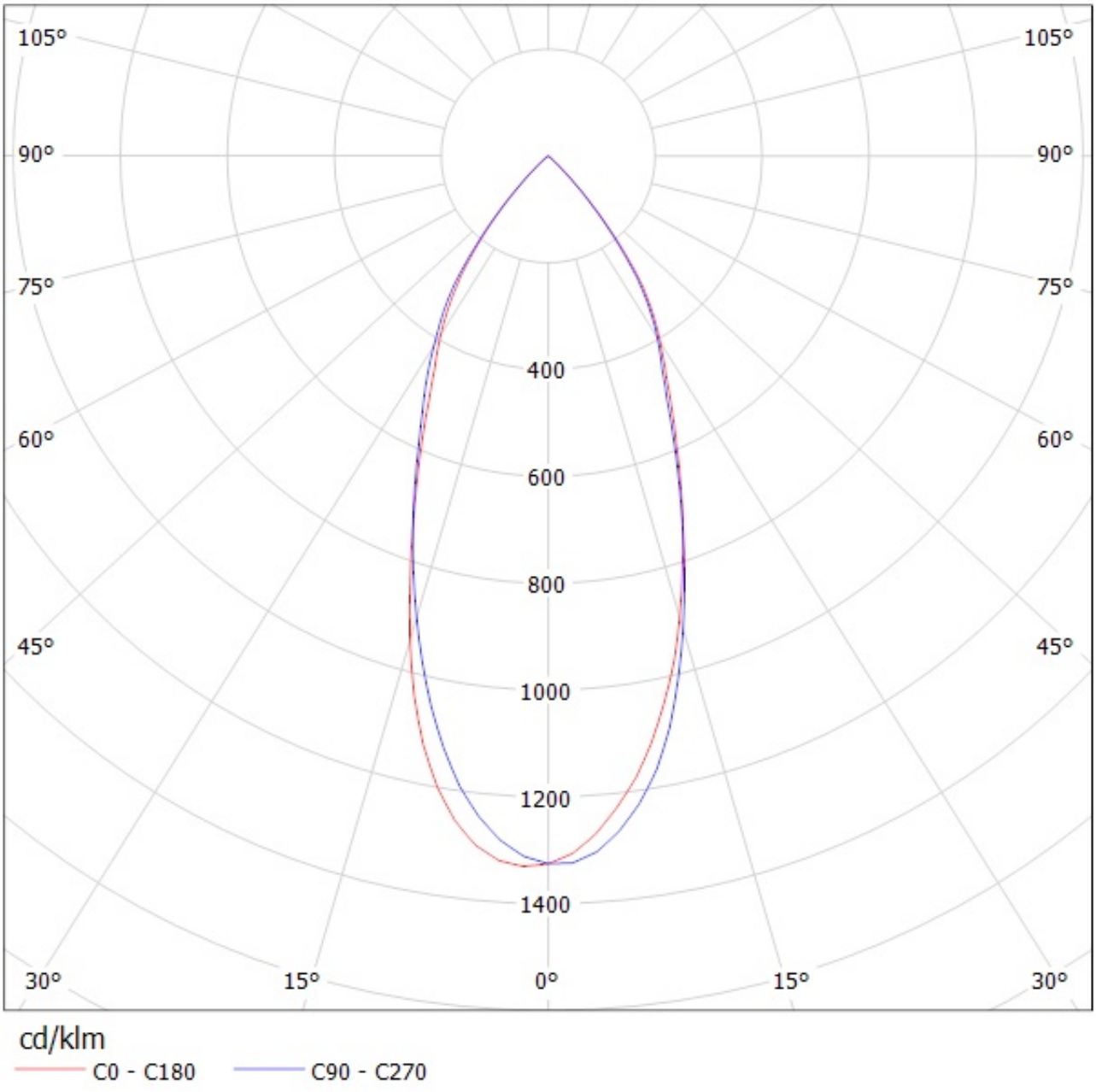


cd/klm

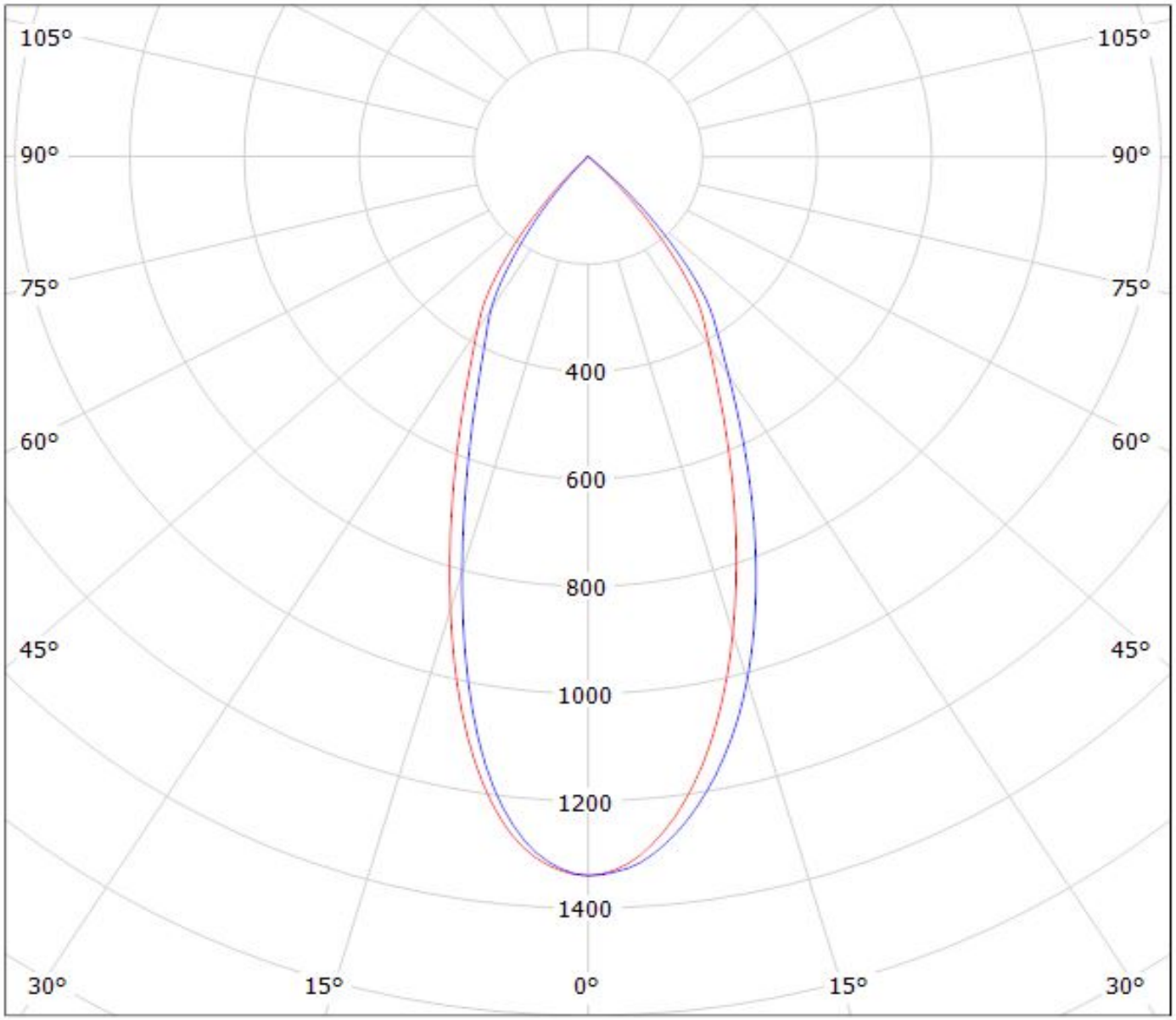
η = 92%

C0 - C180 C90 - C270

Luminaire: Ledil Oy C12478_MIRELLA-50-W_(Luxeon Cob 1203) Efficiency=87%
Lamps: 1 x Luxeon Cob 1203 (LHC1-3080-1203) 824lm @ 250mA CCT=3000K P=8.7W I=250mA



Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(CXM-9)
Lamps: 1 x Luminus_XNOVA_CXM-9_(AA00)_977.302lm@240mA_P=8.28264W_I=240mA

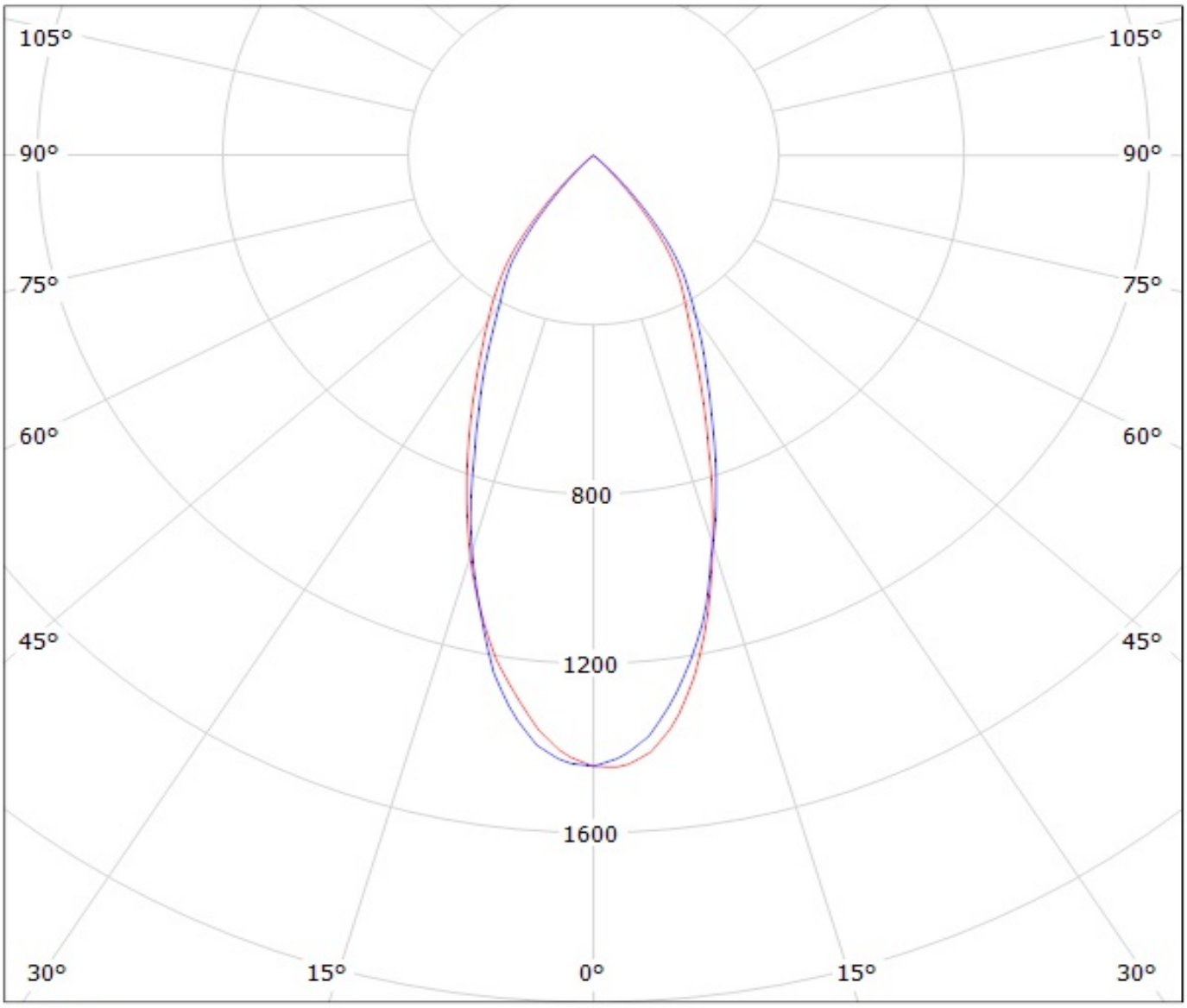


cd/klm

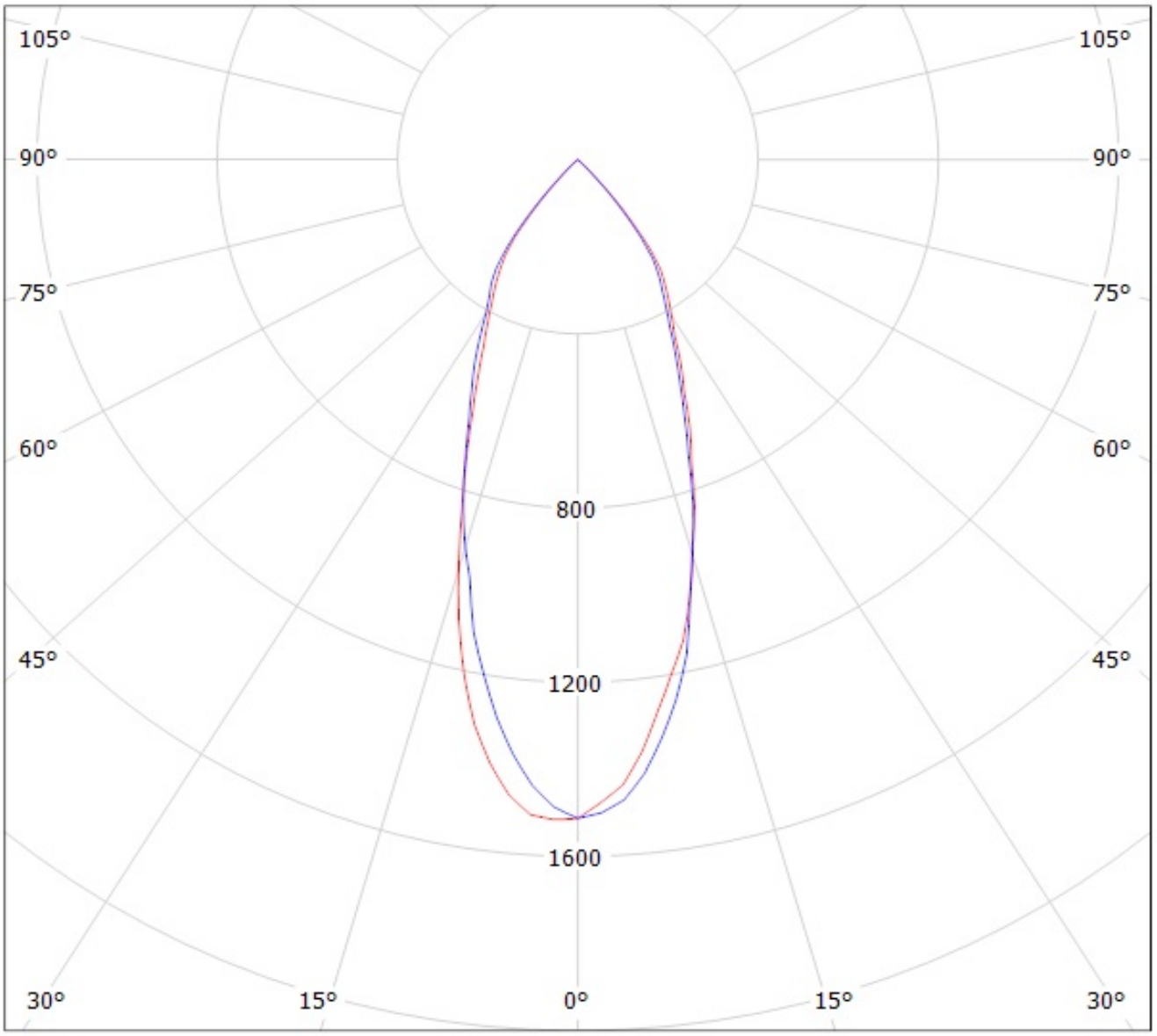
η = 89%

C0 - C180 C90 - C270

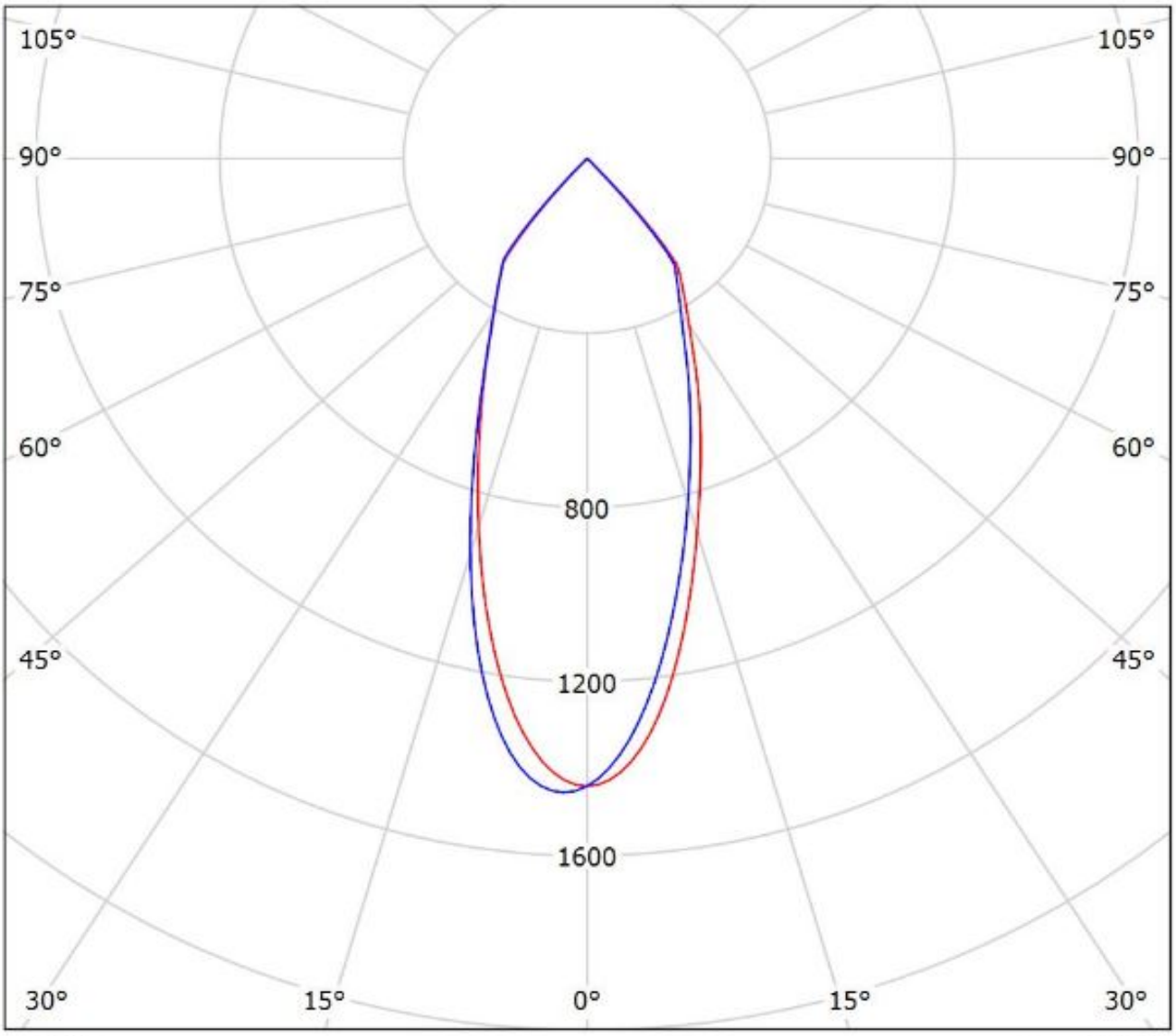
Luminaire: Ledil Oy C12478_MIRELLA-50-W (NSBxL066A 930lm @ 250mA) Efficiency=89%
Lamps: 1 x NSBxL066A 930lm @ 250mA (NSBLL066AE) CCT=3536K P=7,75W I=250mA



Luminaire: Ledil Oy C12478_MIRELLA-50-W (Nichia NSCxL036A 434lm @ 100mA) Efficiency=87%
Lamps: 1 x Nichia NSCxL036A 434lm @ 100mA (NSCLL036A) CCT=3000K P=3,4W I=100mA



Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(NFMX48xAR_14chip)
Lamps: 1 x Nichia_NFMX48xAR_14chip_(NFMW488AR)_557.972lm@100mA_P=4.0701W_I=0.100A

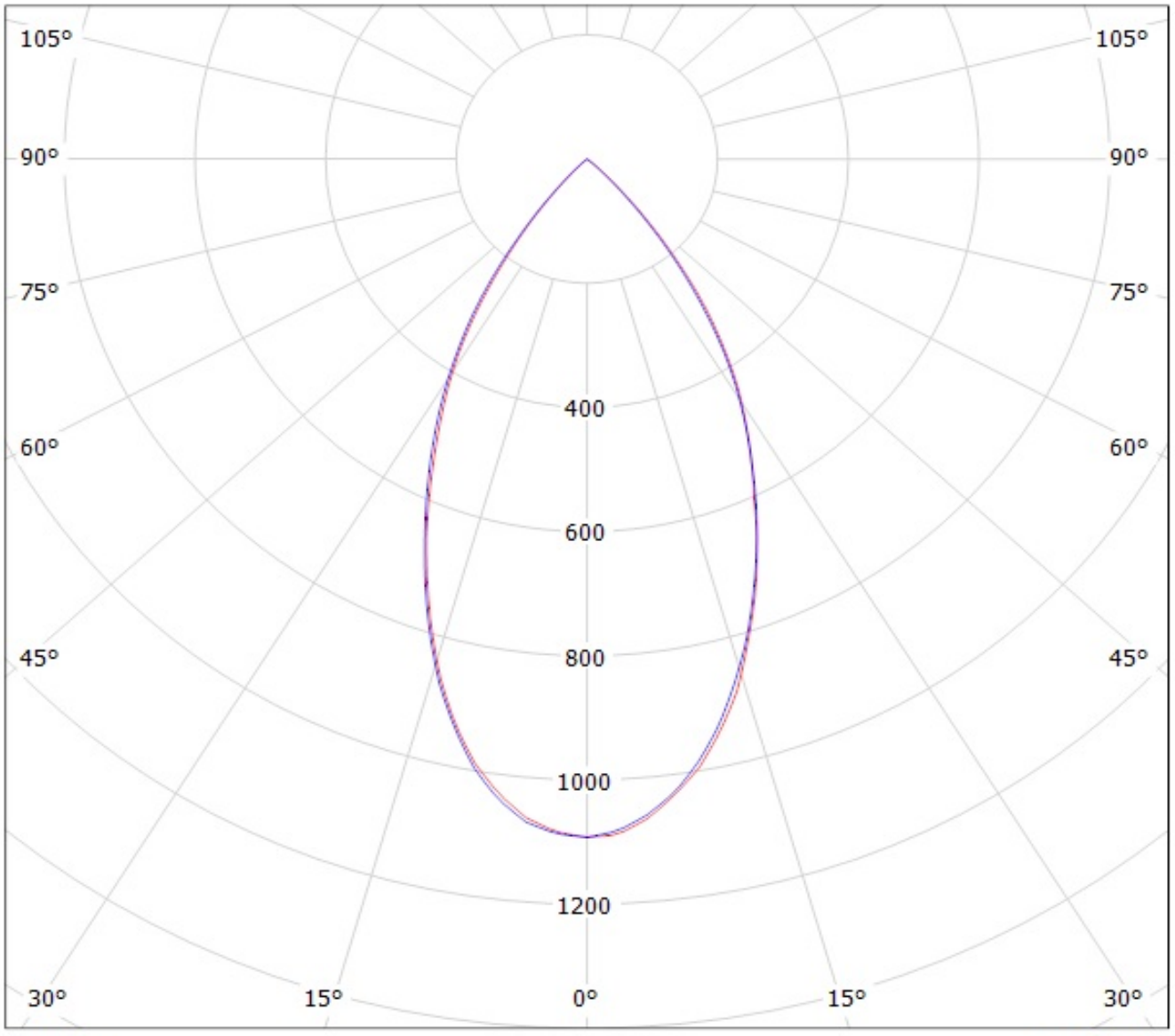


cd/klm

η = 88%

C0 - C180 C90 - C270

Luminaire: LEDil Oy C12478_MIRELLA-50-W_(Soleriq_S13) Efficiency=85%
Lamps: 1 x Osram Soleriq S13 (GW KAGHB1.EM) 832lm @ 250mA CCT=3100K P=7.4W I=250mA

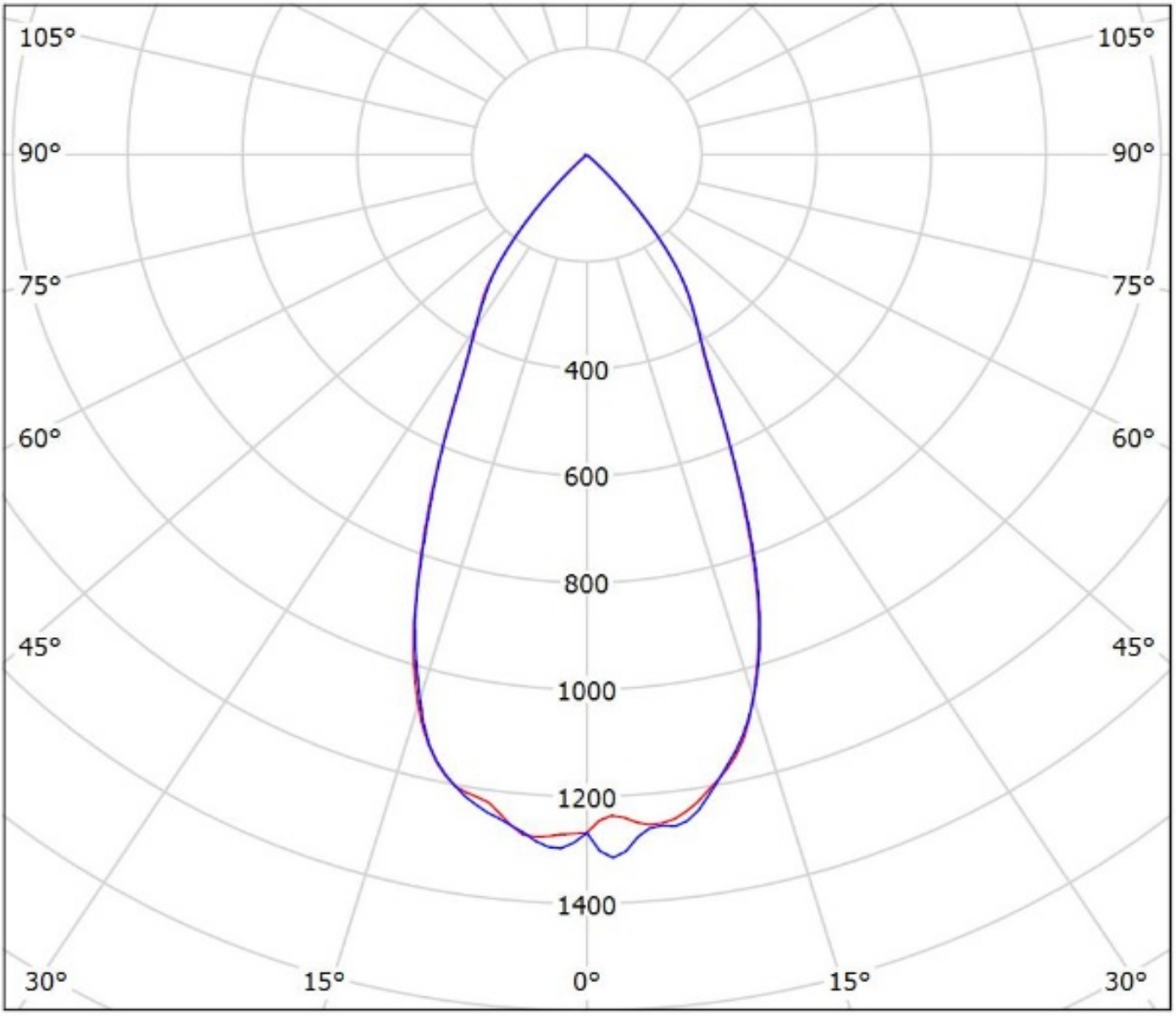


cd/klm

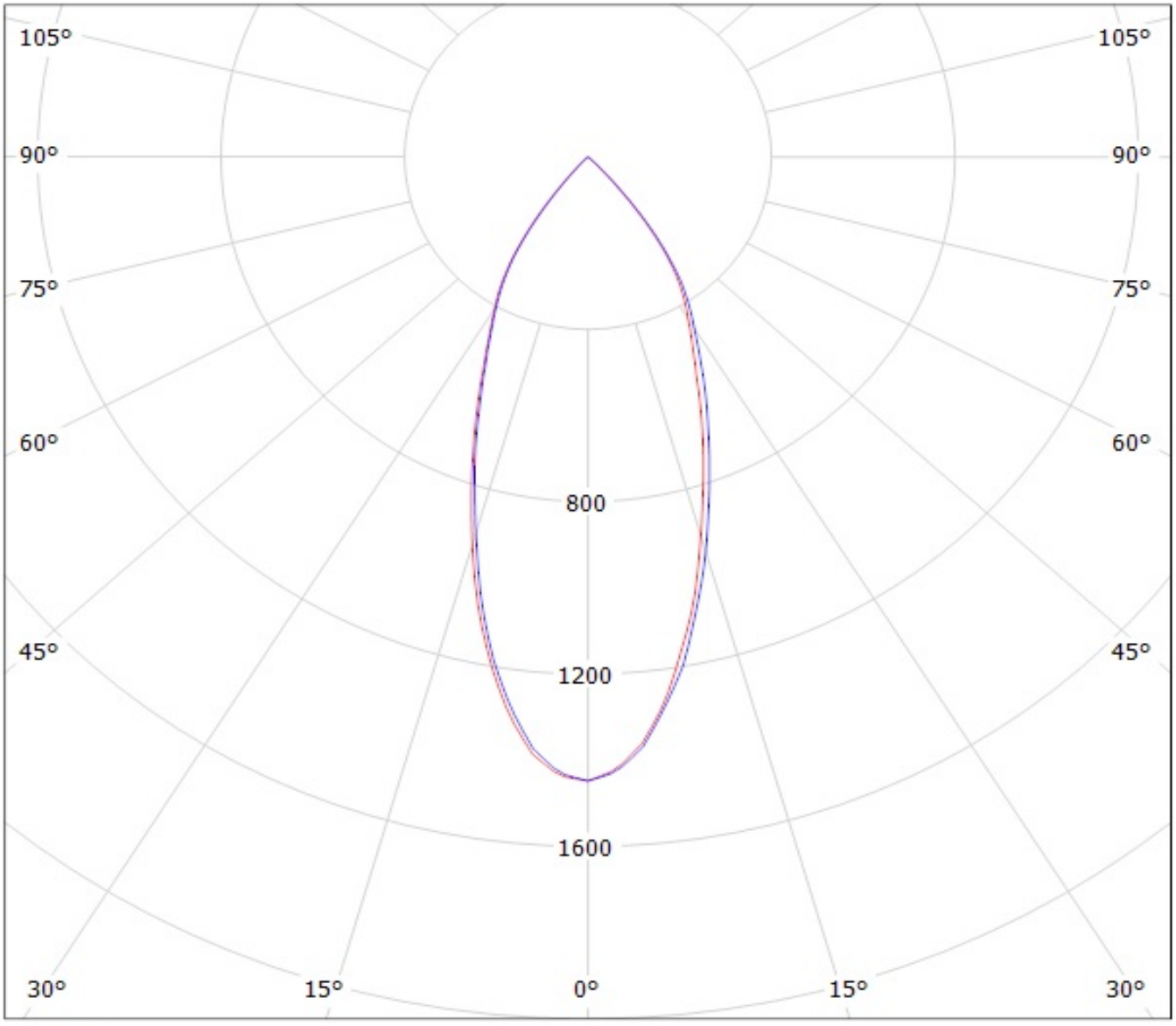
η = 87%

C0 - C180 C90 - C270

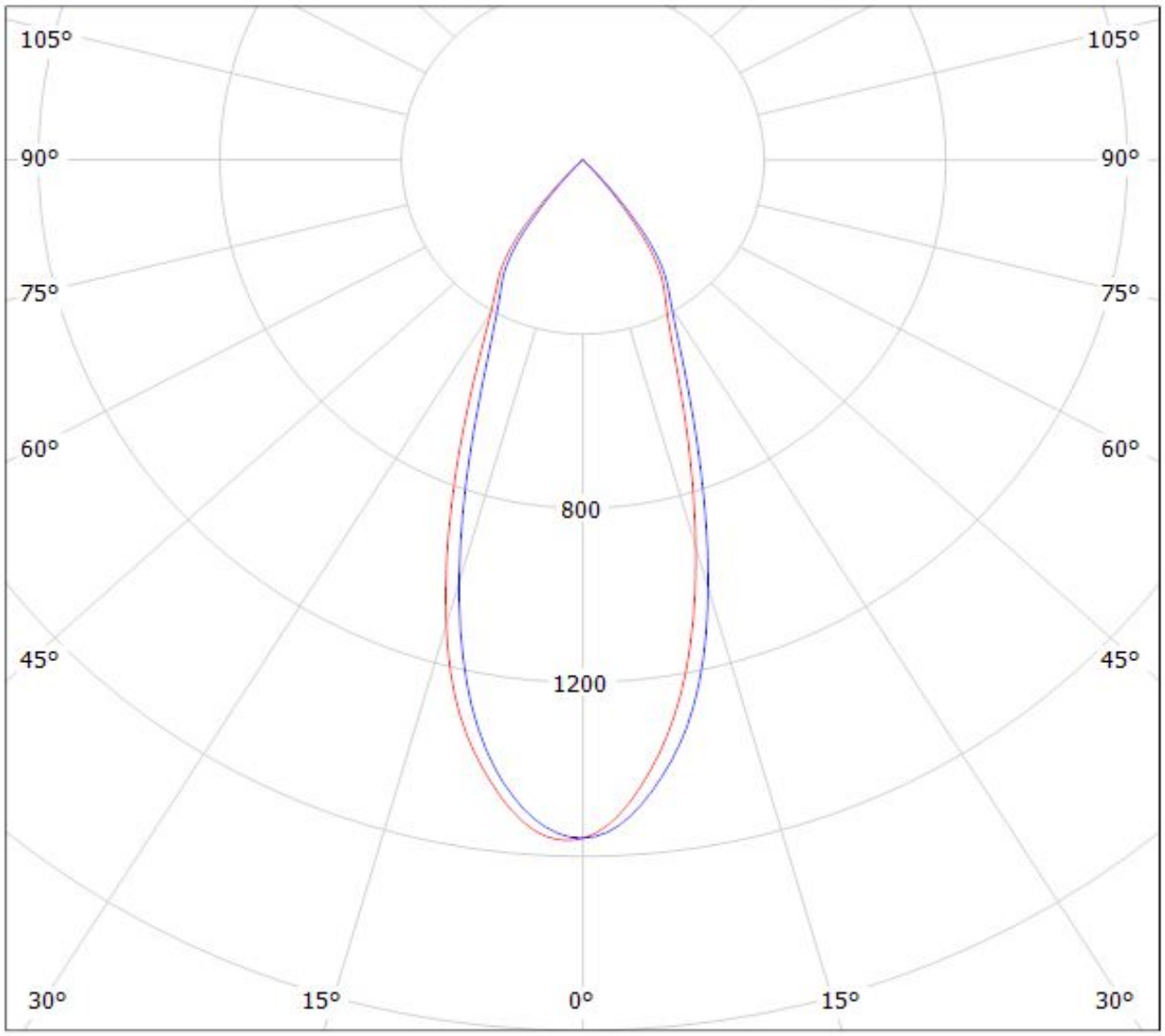
Luminaire: Ledil Oy C12478_MIRELLA-50-W_(Soleriq_S9)_SIMULATED
Lamps: 1 x Osram Soleriq S9 (GW KAJFB3.EM)



Luminaire: LEDil Oy C12478_MIRELLA-50-W_(ZC6) Efficiency=86%
Lamps: 1 x Seoul ZC6 (SDW81F1C) 422lm @ 100mA CCT=3100K P=3.4W I=100mA



Luminaire: LEDIL OY C12478_MIRELLA-50-W_(MiniZenigata) Eff.88.9%
Lamps: 1 x Mini Zenigata (387.5lm@250mA)

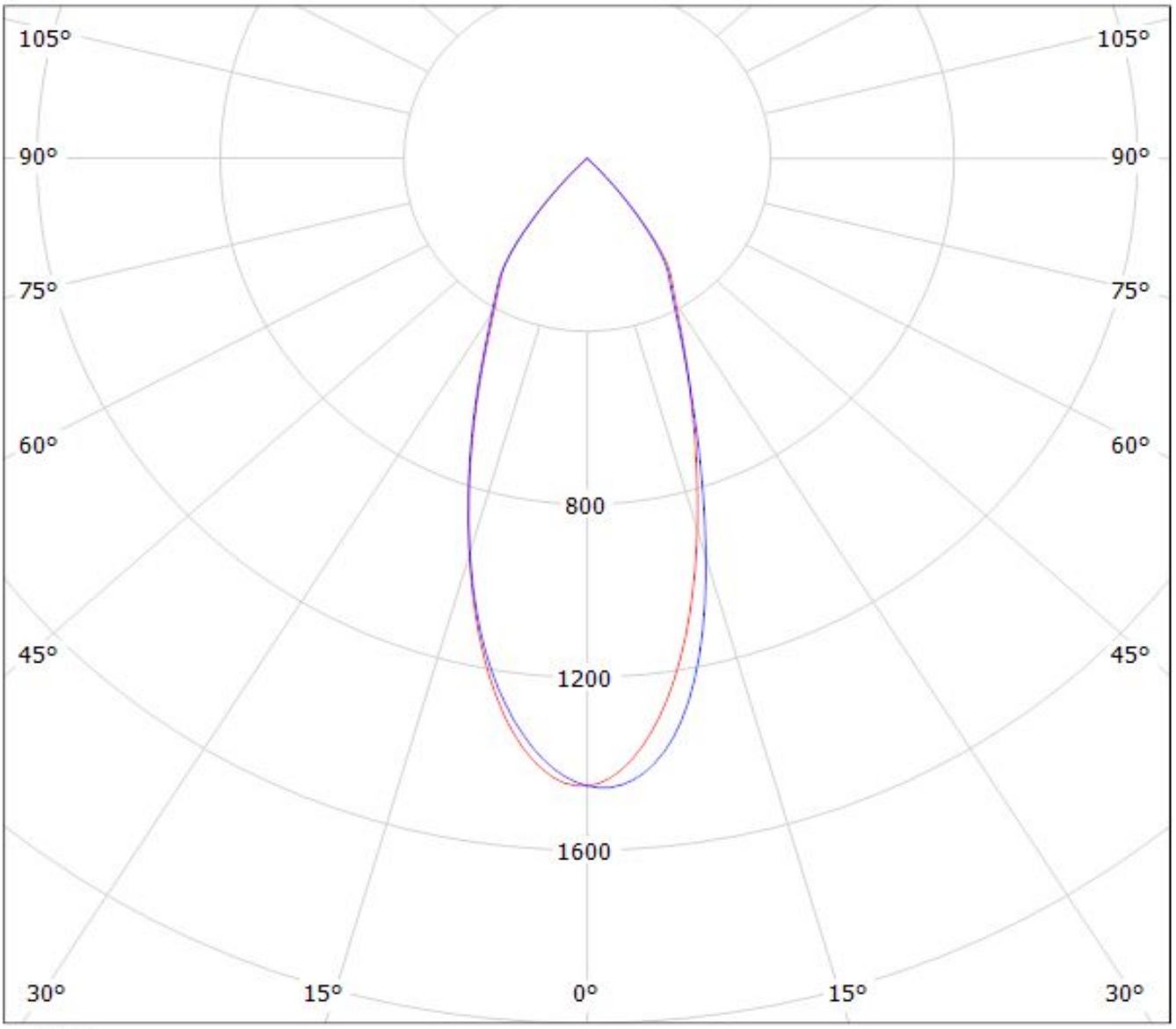


cd/klm

η = 89%

C0 - C180 C90 - C270

Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(Mini_Zenigata) Eff.87.7%
Lamps: 1 x Mini_Zenigata GW6BM (803.772lm@250mA)

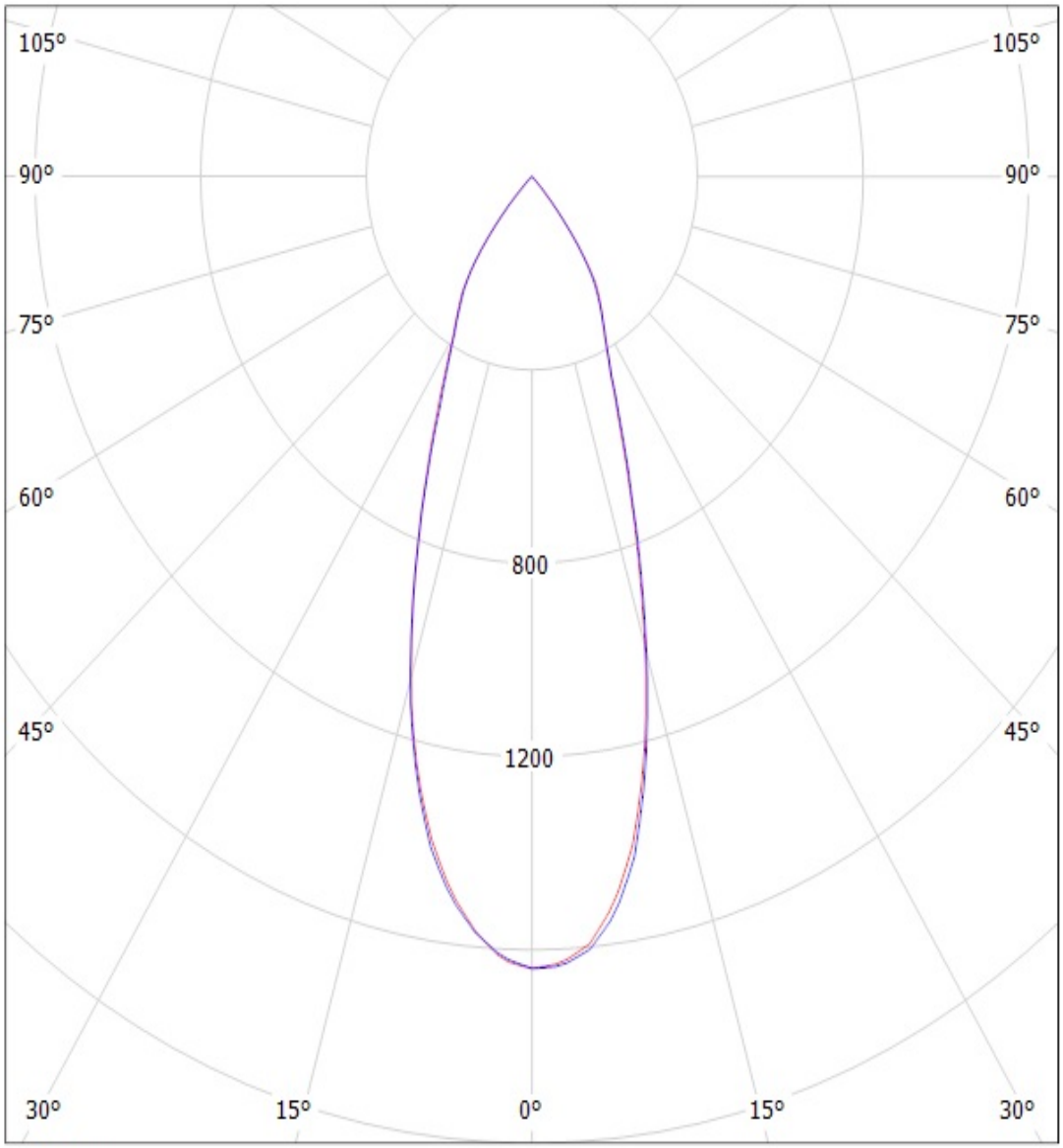


cd/klm

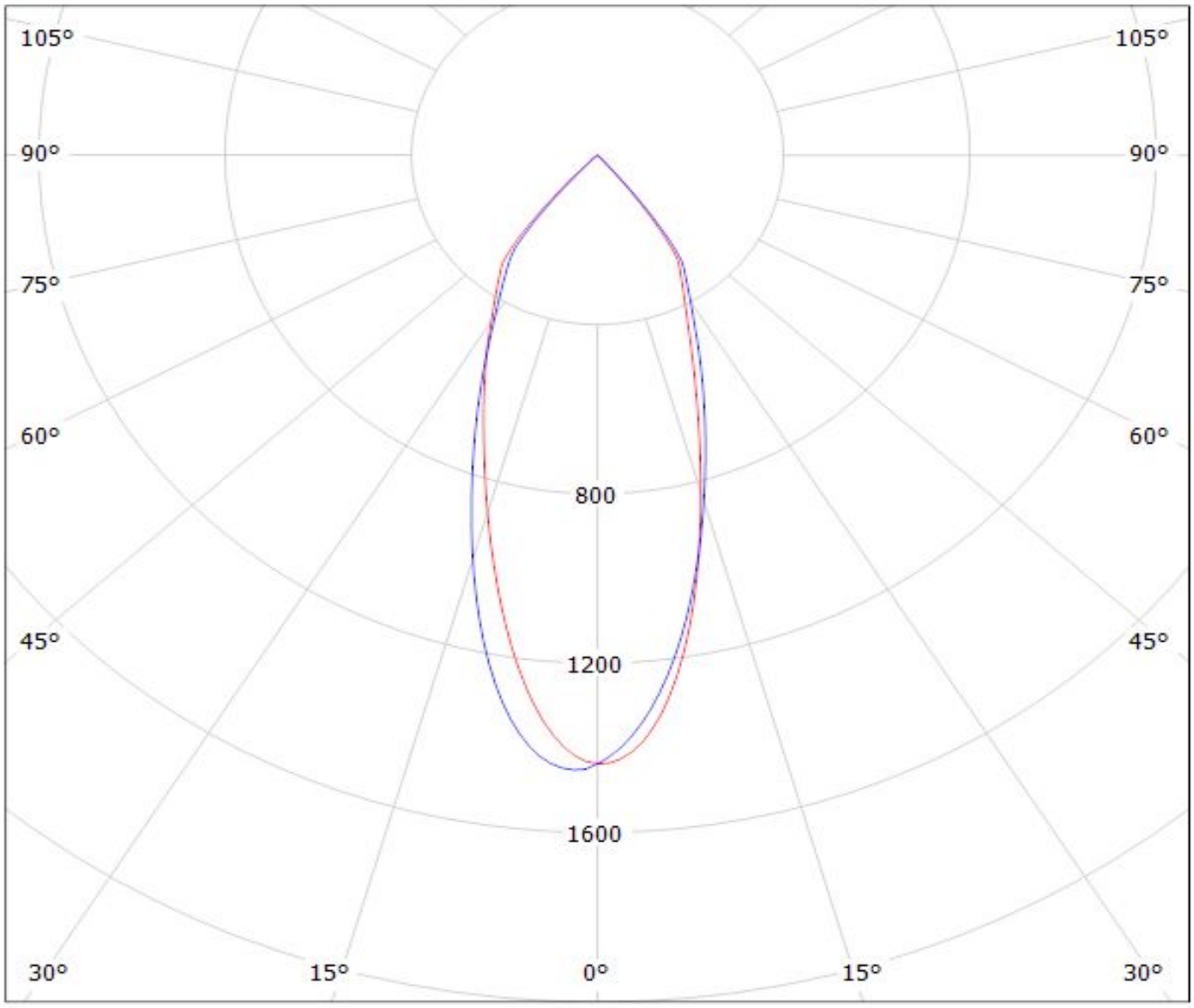
η = 88%

C0 - C180 C90 - C270

Luminaire: LEDil Oy C12478_MIRELLA-50-W_(Stark_SLE_G3_LES10) Efficiency=86%
Lamps: 1 x Tridonic Stark SLE G3 LES10 (STARK-SLE-PURE-G3-10-1000-830-CLA) 453lm @ 250mA CCT=3000K P=4.3W I=250mA



Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(SLE-G5_LES-6)
Lamps: 1 x Tridonic_SLE-G5_LES-6_470.59lm@100mA_P=3.3748W_I=0.100A

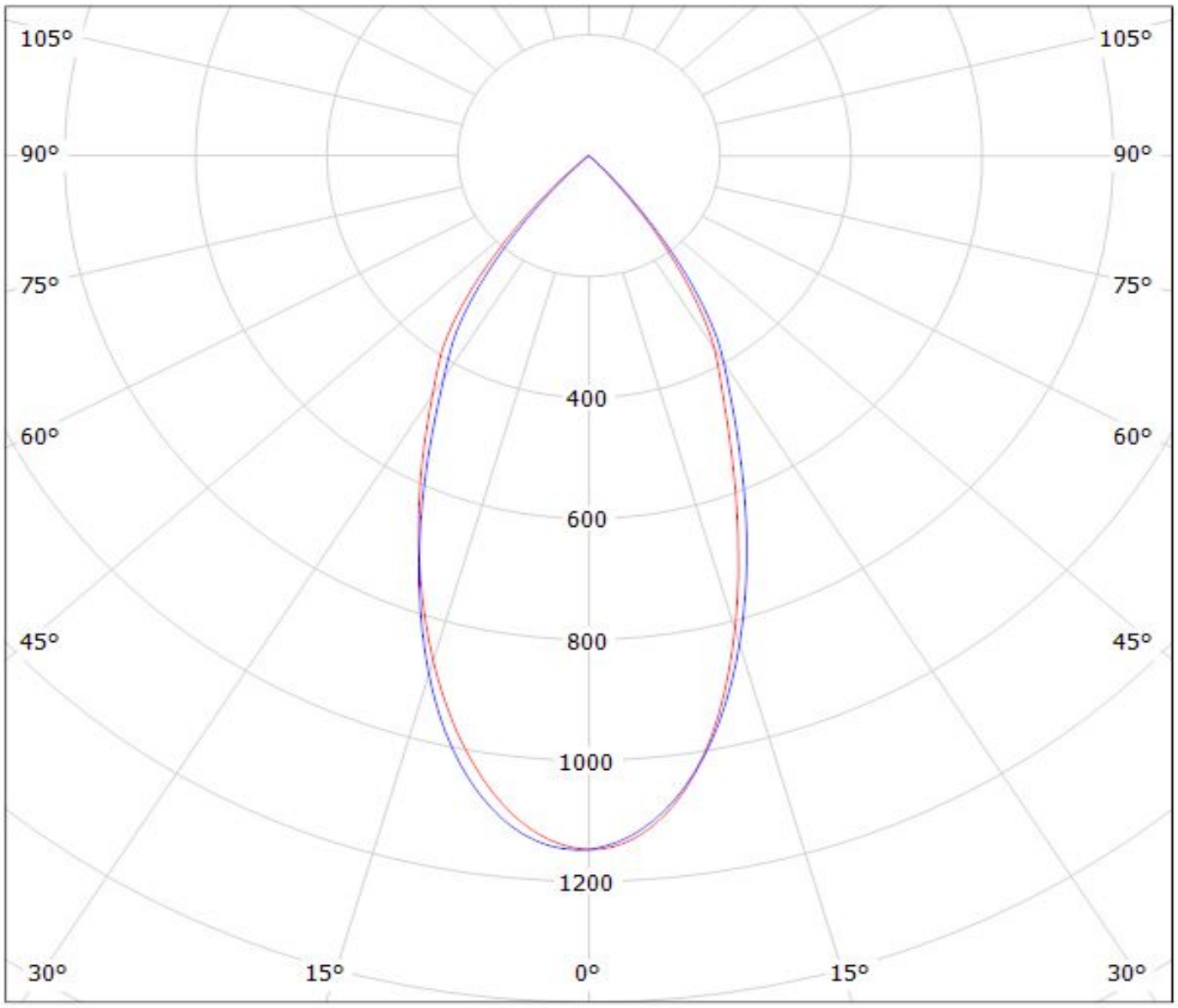


cd/klm

η = 87%

C0 - C180 C90 - C270

Luminaire: LEDiL Oy C12478_MIRELLA-50-W_(SLE-G5_LES-11)
Lamps: 1 x Tridonic_SLE-G5_LES-11_1168.86lm@250mA_P=8.3243W_I=0.250A



cd/klm

η = 86%

C0 - C180 C90 - C270

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.

GENERAL INFORMATION

- Product series especially designed & optimized for series of LEDs.
- Special care taken to make light distribution as uniform as possible.

Note! Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.