PRODUCT DATASHEET
Mirella series
last update 3/10/2012

Ordering number C12476_MIRELLA-50-S

Family	Mirella	FWHM	14 degrees
Type	Reflector	Efficiency	(simulated) 0 %
LED	CLL010	cd/lm	-
Color	Metal	Gerber File	Available
Diameter	49.9 mm		
Height	24 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	Ready		

Ordering number CN12483_MIRELLA-50-S-DL

Family	Mirella	FWHM	20 degrees
Type	Pack	Efficiency	(simulated) 0 %
LED	CLL010	cd/lm	-
Color	Metal	Gerber File	Available
Diameter	49.9 mm		
Height	23.9 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	Ready		

Ordering number C12477_MIRELLA-50-M

Family	Mirella	FWHM	29 degrees
Type	Reflector	Efficiency	(simulated) 0 %
LED	CLL010	cd/lm	3.200
Color	Metal	Gerber File	Available
Diameter	49.9 mm		
Height	23.9 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	Ready		

Ordering number CN12484_MIRELLA-50-M-DL

Family	Mirella	FWHM	39 degrees
Type	Pack	Efficiency	(simulated) 0 %
LED	CLL010	cd/lm	-
Color	Metal	Gerber File	Available
Diameter	49.9 mm		
Height	23.9 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	Ready		

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PRODUCT DATASHEET
Mirella series
last update 3/10/2012

Ordering number **C12478_MIRELLA-50-W**

Family	Mirella	FWHM	44 degrees
Type	Reflector	Efficiency	(simulated) 0 %
LED	CLL010	cd/lm	-
Color	Metal	Gerber File	Available
Diameter	49.9 mm		
Height	23.9 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	Ready		

Ordering number **CN12485_MIRELLA-50-W-DL**

Family	Mirella	FWHM	50 degrees
Type	Pack	Efficiency	(simulated) 0 %
LED	CLL010	cd/lm	-
Color	Metal	Gerber File	Available
Diameter	49.9 mm		
Height	23.9 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	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.

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GENERAL INFORMATION

- Product series especially designed & optimized for CLL010 series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PC with high UV and temperature resistance (120 degrees of Celcius / 248 degrees of Fahrenheit). Allows use of high current and temperature conditions.

Please find more information about used materials from below:
http://ledil.fi/sites/default/files/Documents/Technical/Material/PC%20Makrolon%202400_2407_2456_2458-UL.pdf
- Reflector is made of aluminium coated PC (120 degrees of Celcius / 248 degrees of Fahrenheit) with protective lacquer (110 degrees of Celcius / 230 degrees of Fahrenheit).

- Fastening to PCB with appropriate adhesive. By clicking link below you can find Ledil recommended glue options.
http://www.ledil.com/datasheets/DataSheet_GLUES.pdf

NOTE 1: We advise customer to ensure the suitability and sufficiency of the bond in the end product. For example, mechanical stress, vibration and holes on the surface of the circuit boar weaken the strength of the glue.

NOTE 2: All surfaces where glue is applied must be clean, dry and free from grease and dirt. If cleaning of PCB surfaces is needed, please follow strictly the cleaning instructions of your LED manufacturer -this is important as cleaning shall under no circumstances damage LEDs or other electronics components on the PCB.

Further note that optical components shall not be cleaned with any chemicals - only micro fiber cloth may be used to remove fingerprints or other traces from handling.

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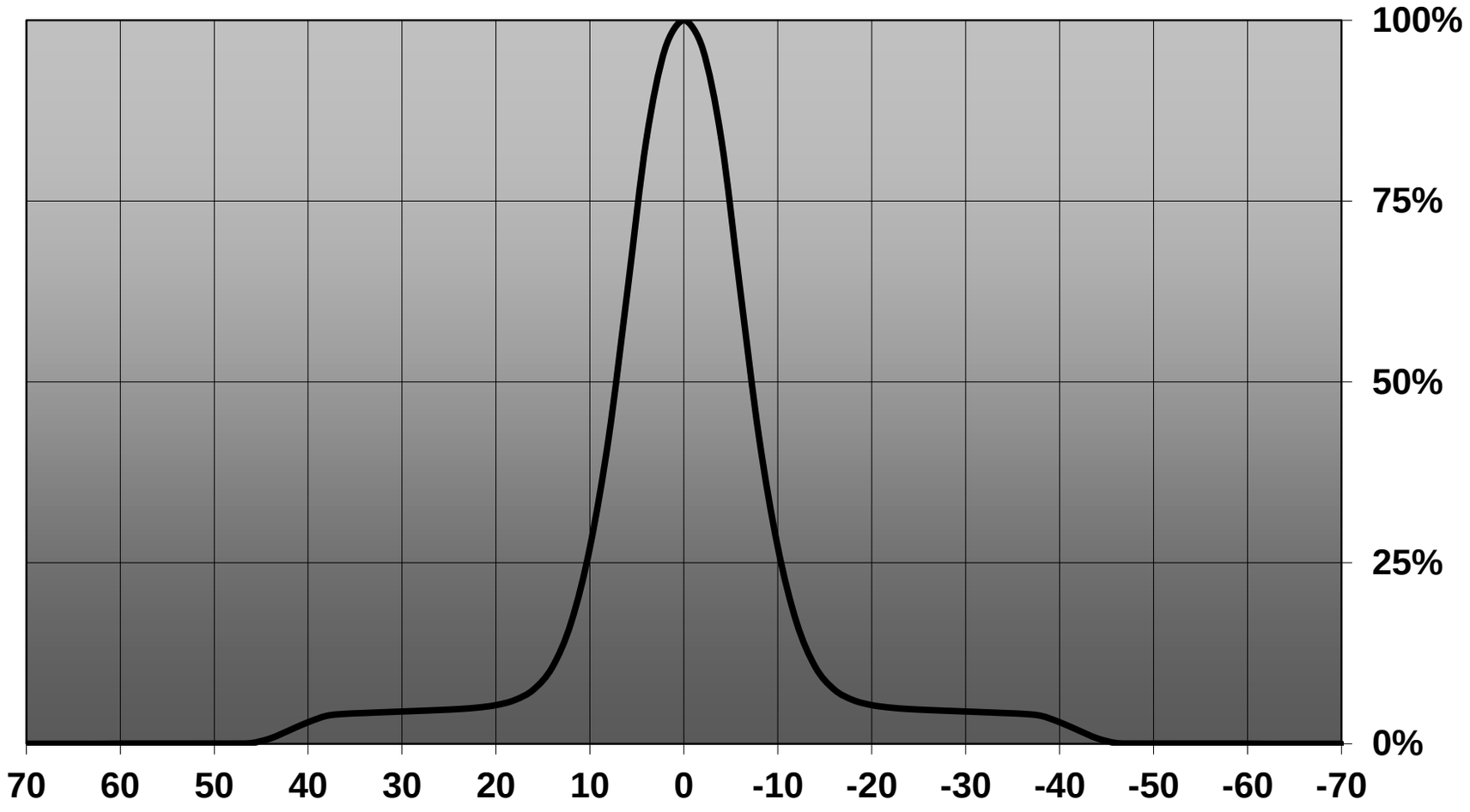
Relative intensity of C12476_Mirella_50-S_(CLL010)
100%
75%
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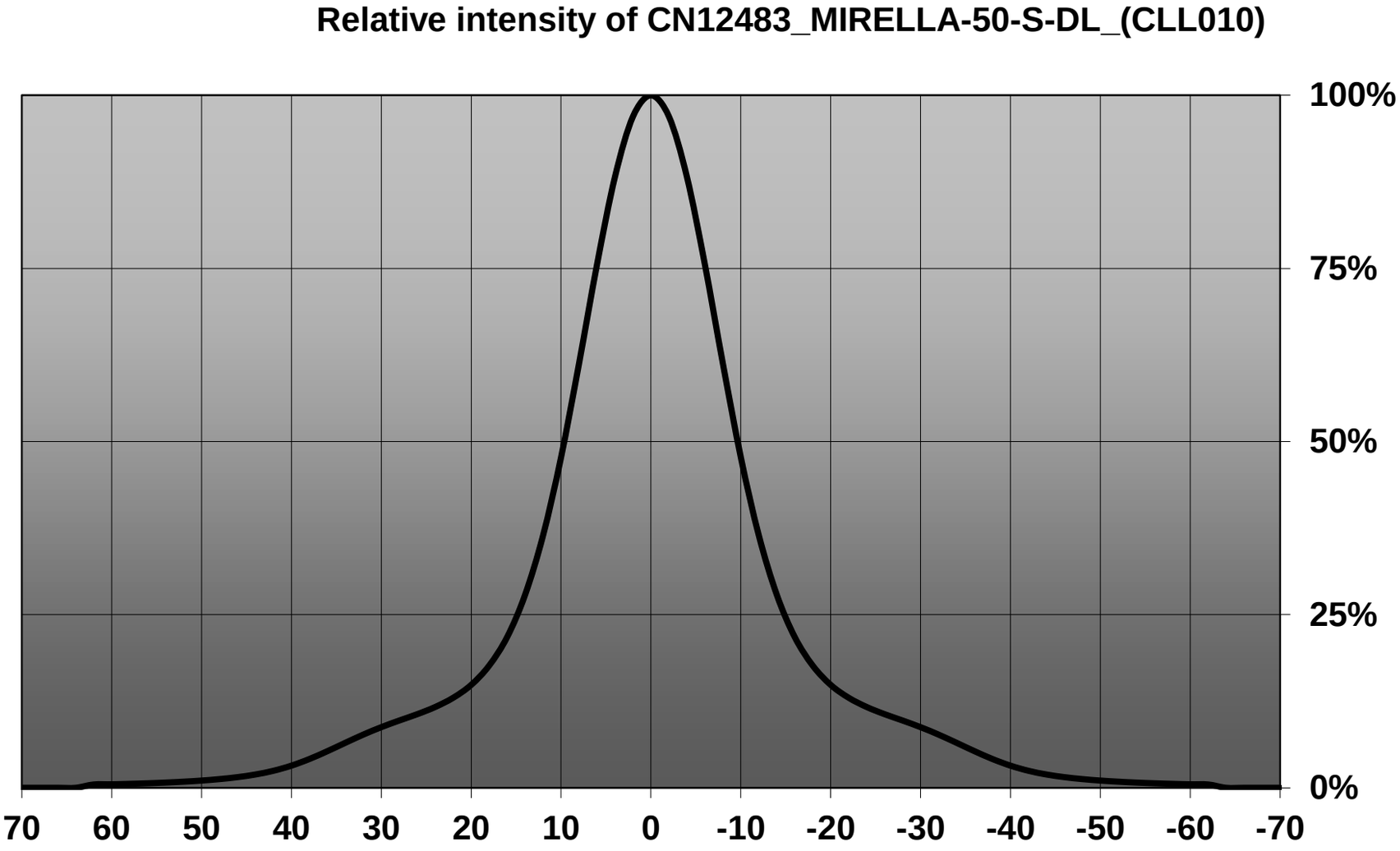
Relative intensity of CN12483_MIRELLA-50-S-DL_(CLL010)
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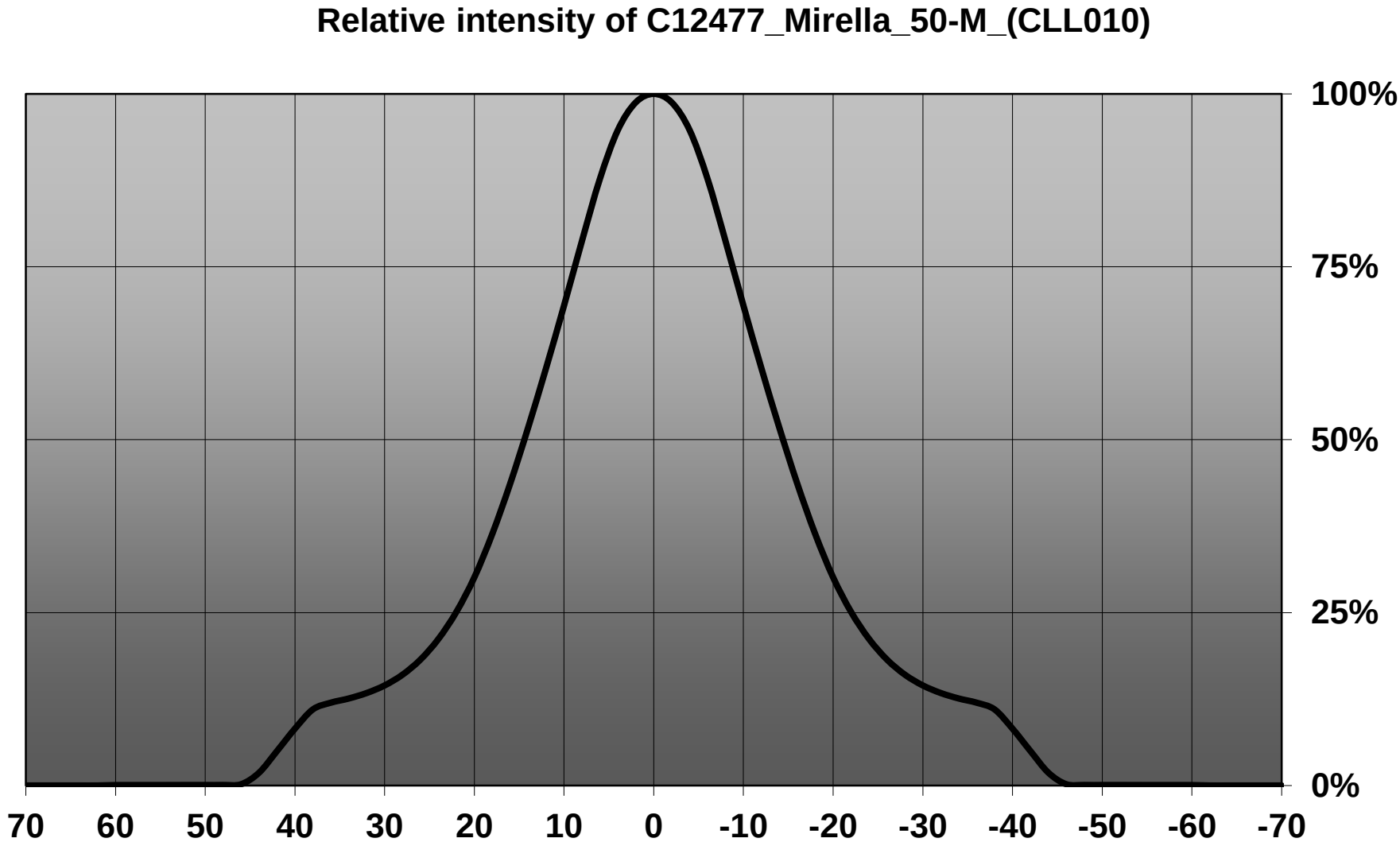
Relative intensity of C12477_Mirella_50-M_(CLL010)
100%
75%
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25%
0%
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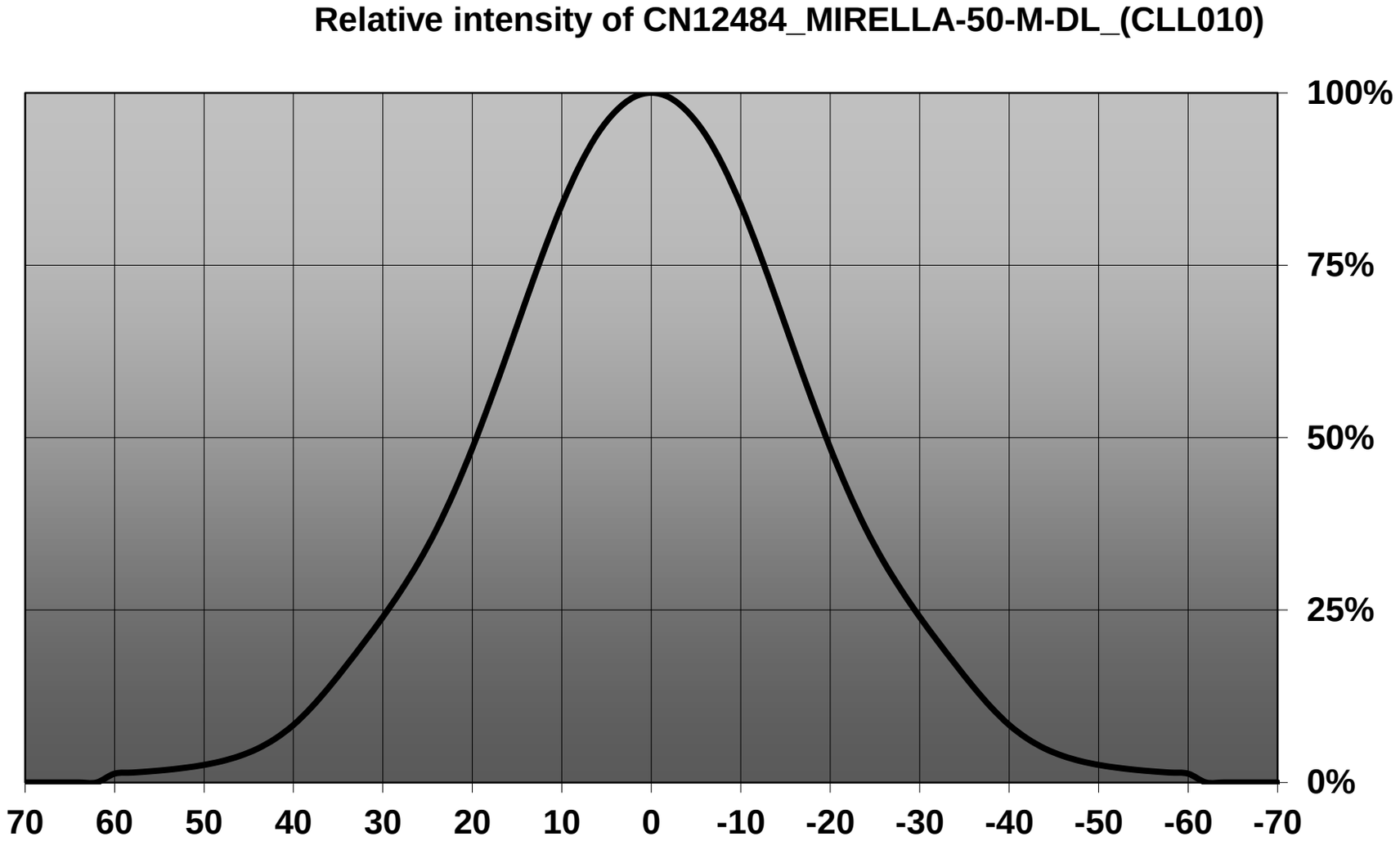
Relative intensity of CN12484_MIRELLA-50-M-DL_(CLL010)
100%
75%
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Lens type	C12478_Mirella_50-W			Voltage	
Led type	CLL010		250mA	Current	
Received					
Material					

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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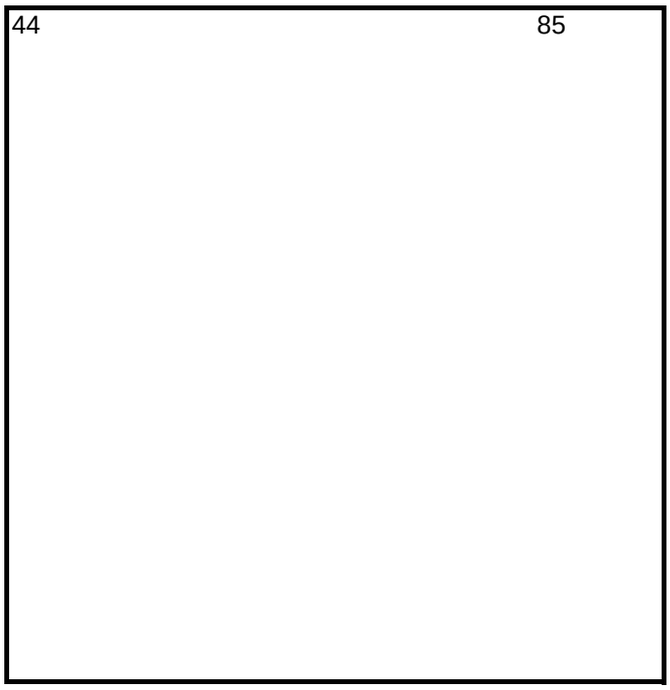
86				
88				

-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
50	0.004341
52	0
54	0
56	0
58	0
60	0
62	0
64	0
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68	0
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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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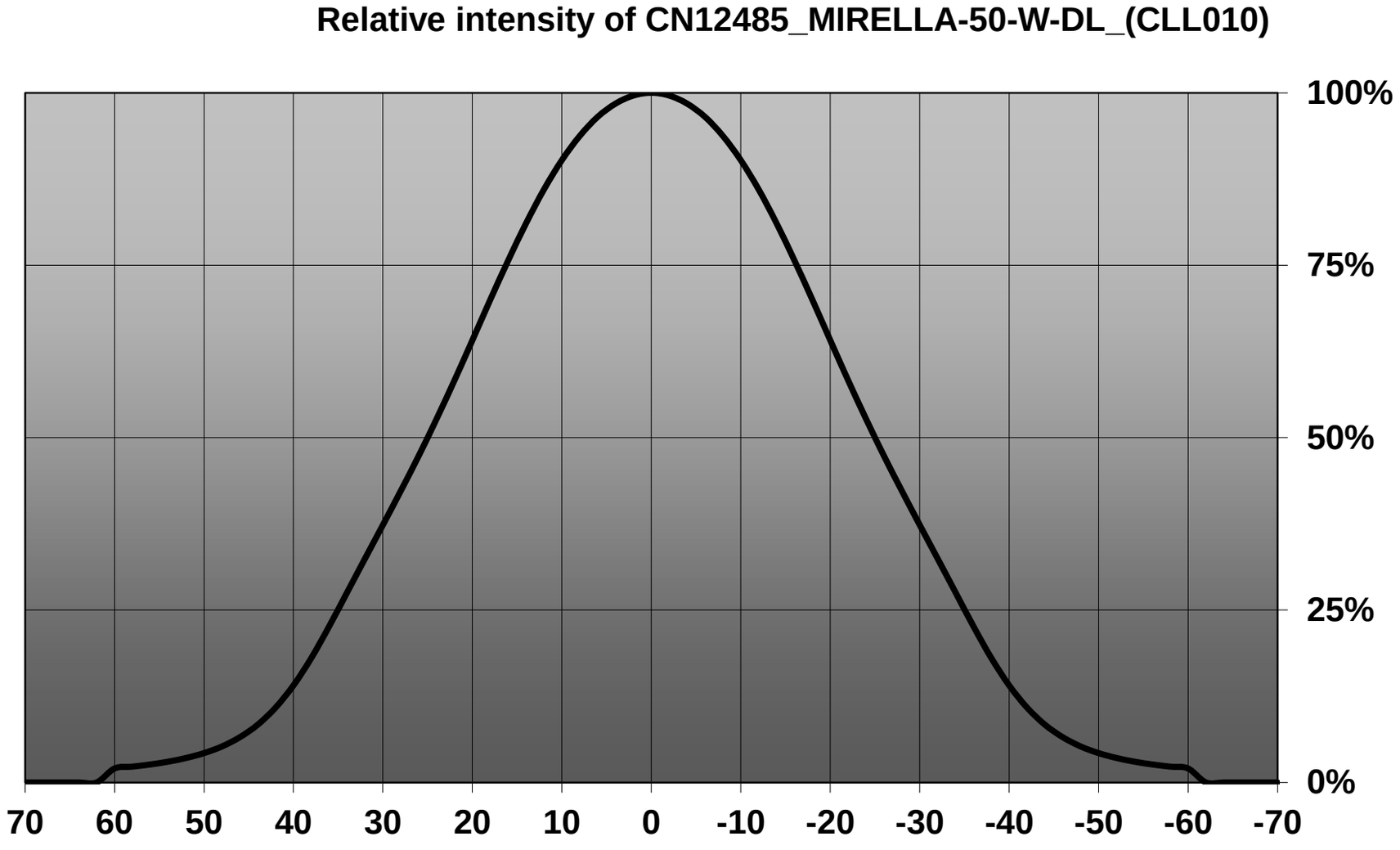
Relative intensity of CN12485_MIRELLA-50-W-DL_(CLL010)
100%
75%
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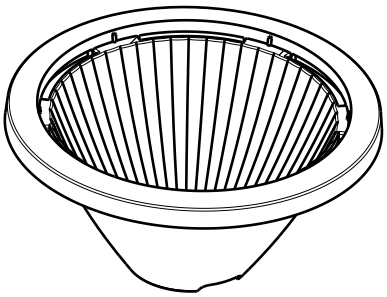

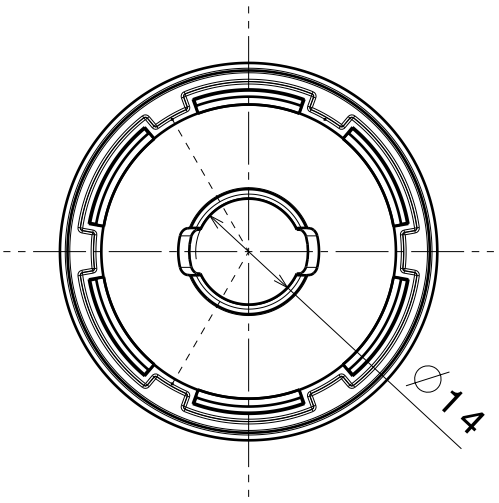

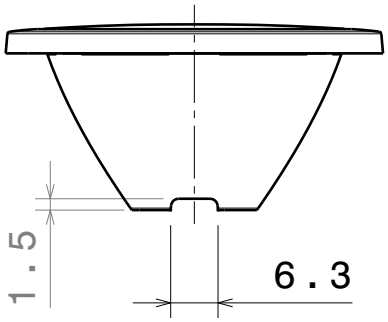

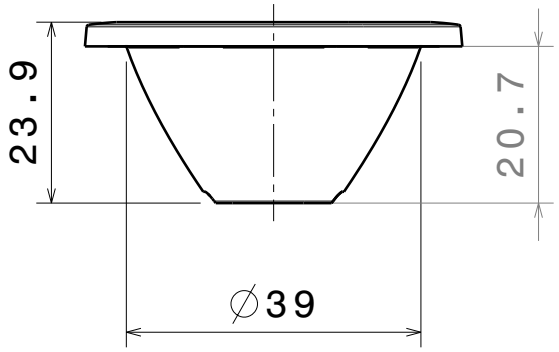

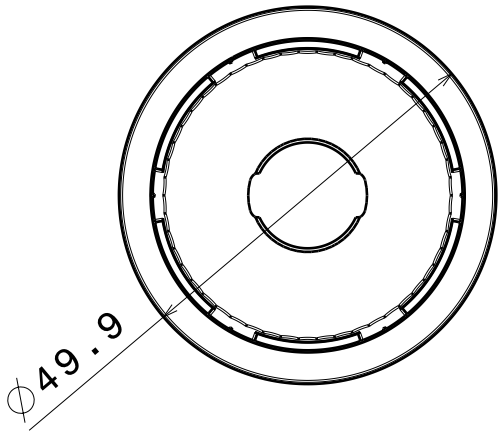

Material: PC, metal plated

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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