



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	23.9 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	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 C12477_MIRELLA-50-M

Family	Mirella	FWHM	29 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 CN12484_MIRELLA-50-M-DL

Family	Mirella	FWHM	39 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 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	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		

Not compatible if PCB board fixed down by using screws.

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.



PRODUCT DATASHEET

Mirella series

last update 3/8/2012

CITIZEN

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.

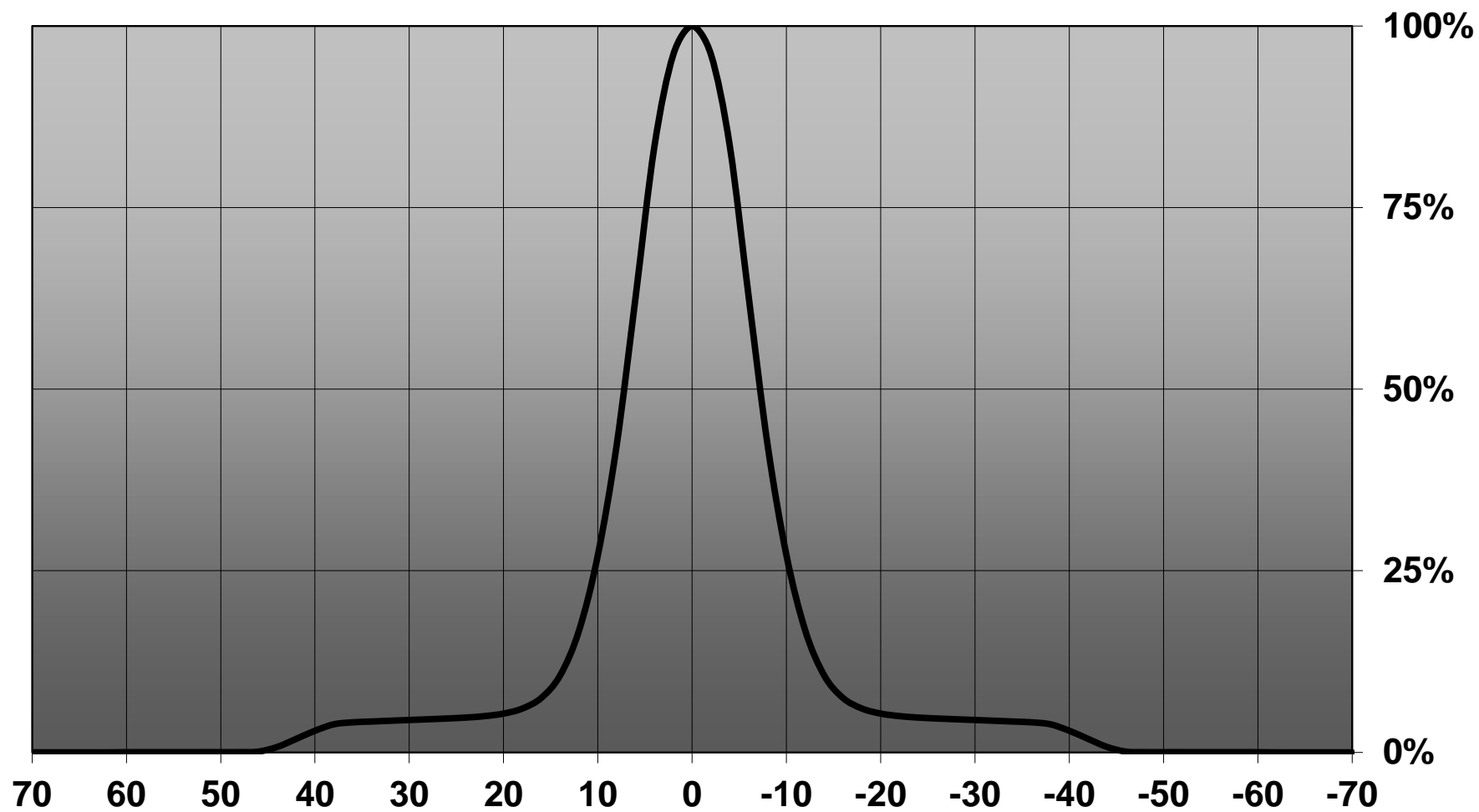
http://www.ledil.com/datasheets/DataSheet_GLUES.pdf

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 board weaken the strength of the glue.

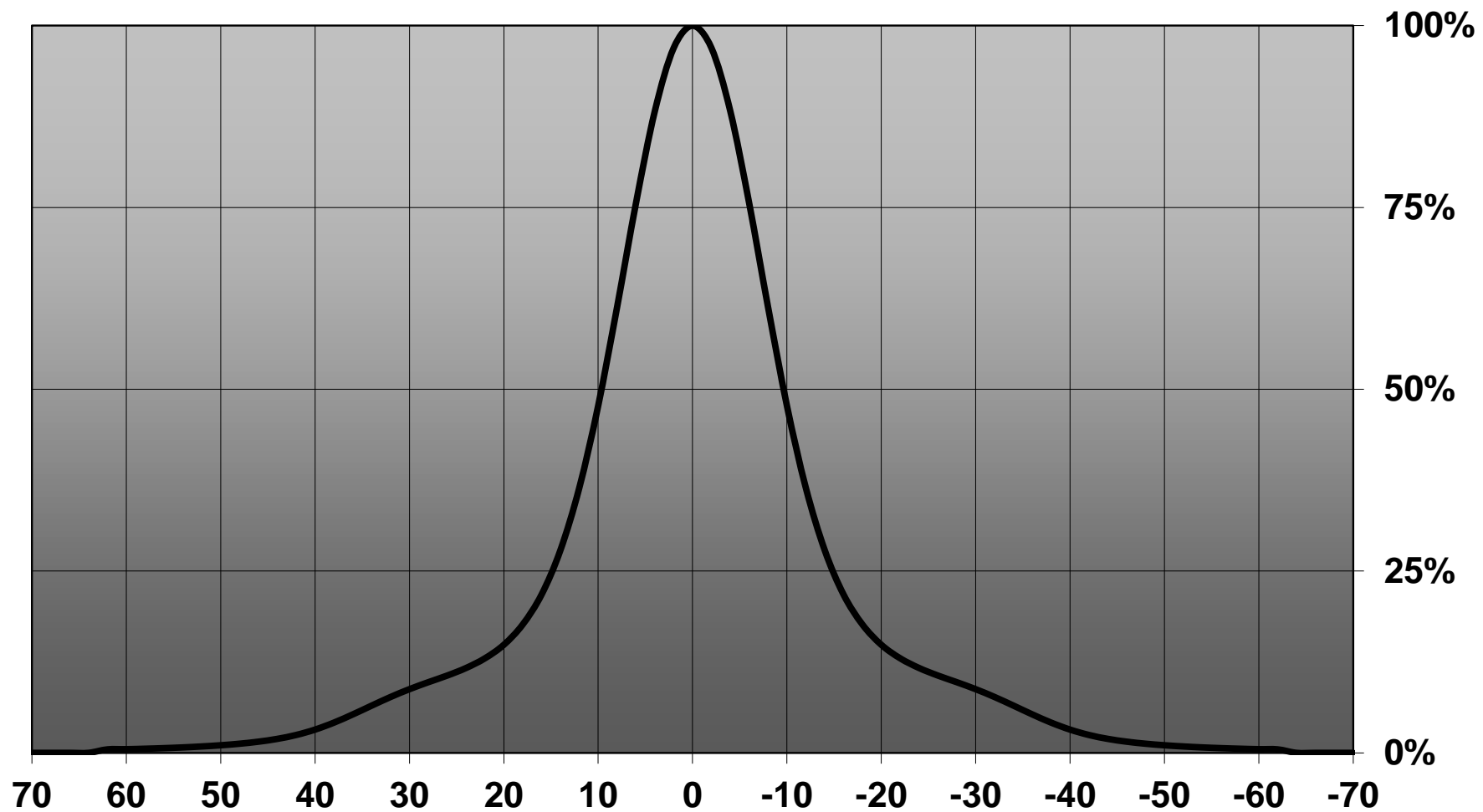
NOTE 2: All surfaces where glue is applied must be clean, dry and free from grease and dirt. If cleaning of PCB surfaces is needed, please follow strictly the cleaning instructions of your LED manufacturer -this is important as cleaning shall under no circumstances damage LEDs or other electronics components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

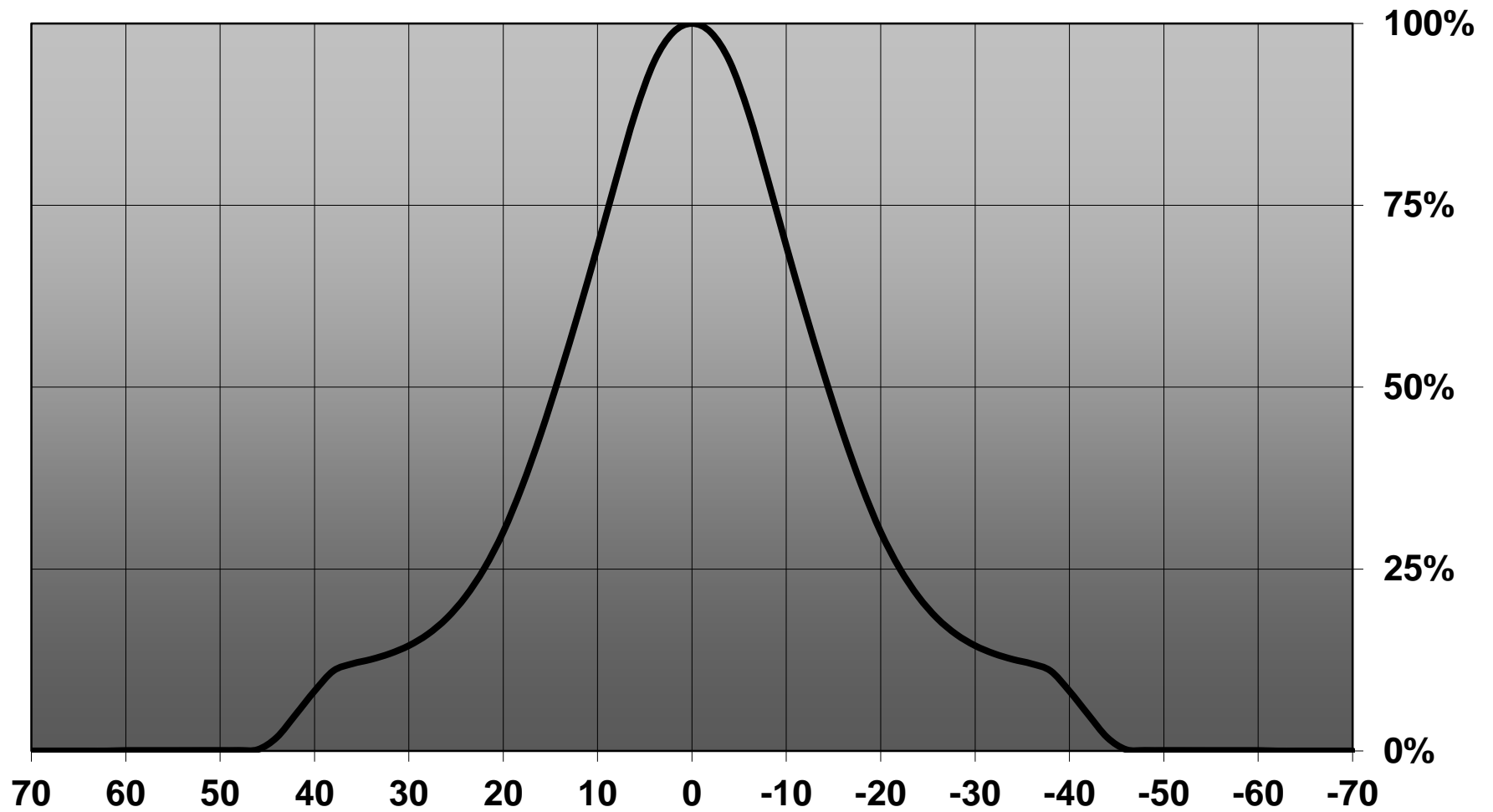
Relative intensity of C12476_Mirella_50-S_(CLL010)



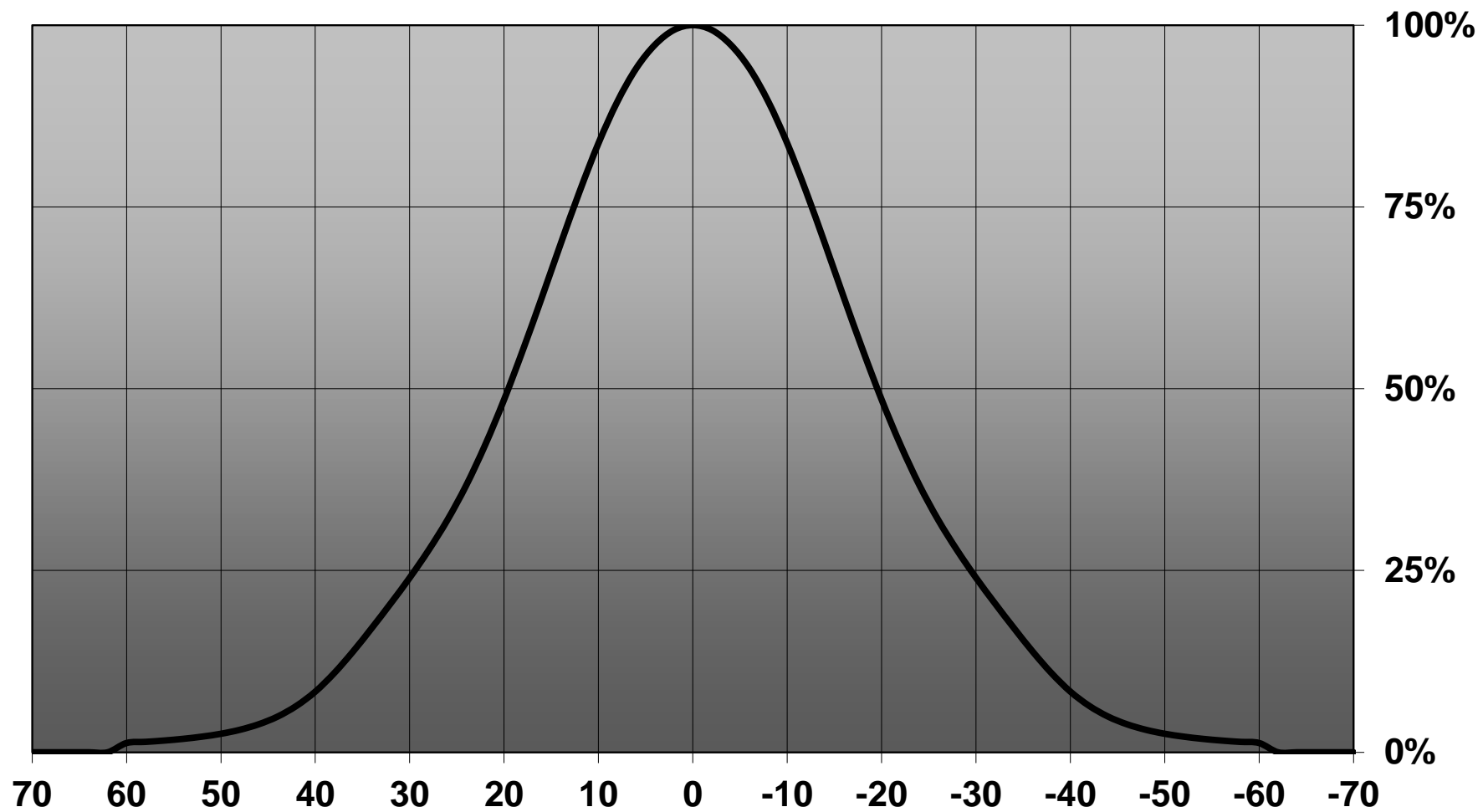
Relative intensity of CN12483_MIRELLA-50-S-DL_(CLL010)



Relative intensity of C12477_Mirella_50-M_(CLL010)

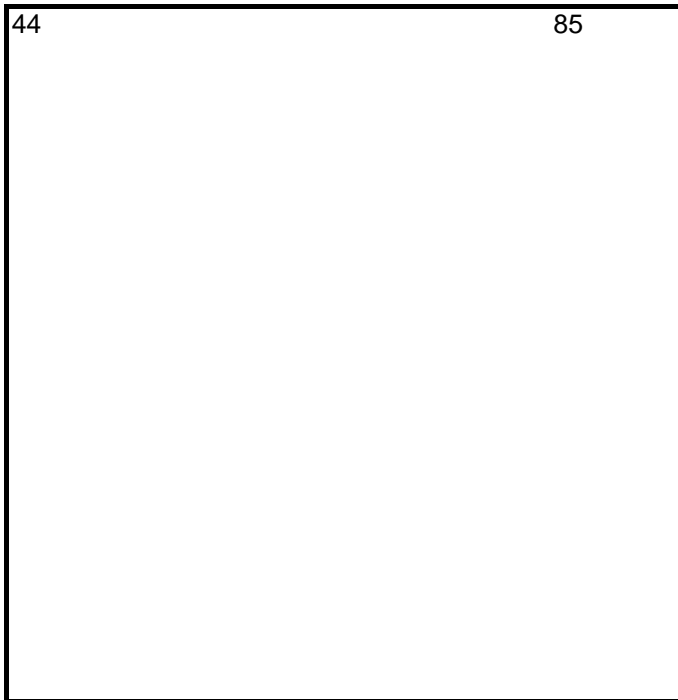


Relative intensity of CN12484_MIRELLA-50-M-DL_(CLL010)



Lens type		C12478_Mirella_50-W			Voltage	
Led type		CLL010			Current	
Received					250mA	
Material						
Position Angle	Horizontal					
	Negative	Positive	Average	Maximum		
0	28.78	28.81	28.80	1.00	-90	0
2	28.54	28.70	28.62	0.99	-88	0
4	27.94	28.29	28.12	0.98	-86	0
6	27.12	27.57	27.35	0.95	-84	0
8	26.14	26.52	26.33	0.91	-82	0
10	25.03	25.12	25.08	0.87	-80	0
12	23.78	23.51	23.65	0.82	-78	0
14	22.39	21.61	22.00	0.76	-76	0
16	20.81	19.51	20.16	0.70	-74	0
18	19.13	17.39	18.26	0.63	-72	0
20	17.38	15.29	16.34	0.57	-70	0
22	15.63	13.34	14.49	0.50	-68	0
24	13.90	11.68	12.79	0.44	-66	0
26	12.26	10.26	11.26	0.39	-64	0
28	10.82	9.16	9.99	0.35	-62	0
30	9.62	8.29	8.96	0.31	-60	0
32	8.70	7.59	8.15	0.28	-58	0
34	7.96	7.01	7.48	0.26	-56	0
36	7.32	6.51	6.92	0.24	-54	0
38	6.80	5.60	6.20	0.22	-52	0
40	6.04	3.91	4.97	0.17	-50	0.004341
42	4.40	2.17	3.28	0.11	-48	0.00605
44	2.64	0.62	1.63	0.06	-46	0.020116
46	1.01	0.15	0.58	0.02	-44	0.056638
48	0.24	0.10	0.17	0.01	-42	0.114013
50	0.17	0.08	0.13	0.00	-40	0.172756
52					-38	0.215367
54					-36	0.24025
56					-34	0.259854
58					-32	0.282896
60					-30	0.311061
62					-28	0.346848
64					-26	0.39104
66					-24	0.444174
68					-22	0.503039
70					-20	0.567286
72					-18	0.634138
74					-16	0.700122
76					-14	0.764022
78					-12	0.82115
80					-10	0.870811
82					-8	0.914395
84					-6	0.949644
86					-4	0.976385
88					-2	0.993923
					0	1
					2	0.993923
					4	0.976385
					6	0.949644
					8	0.914395
					10	0.870811

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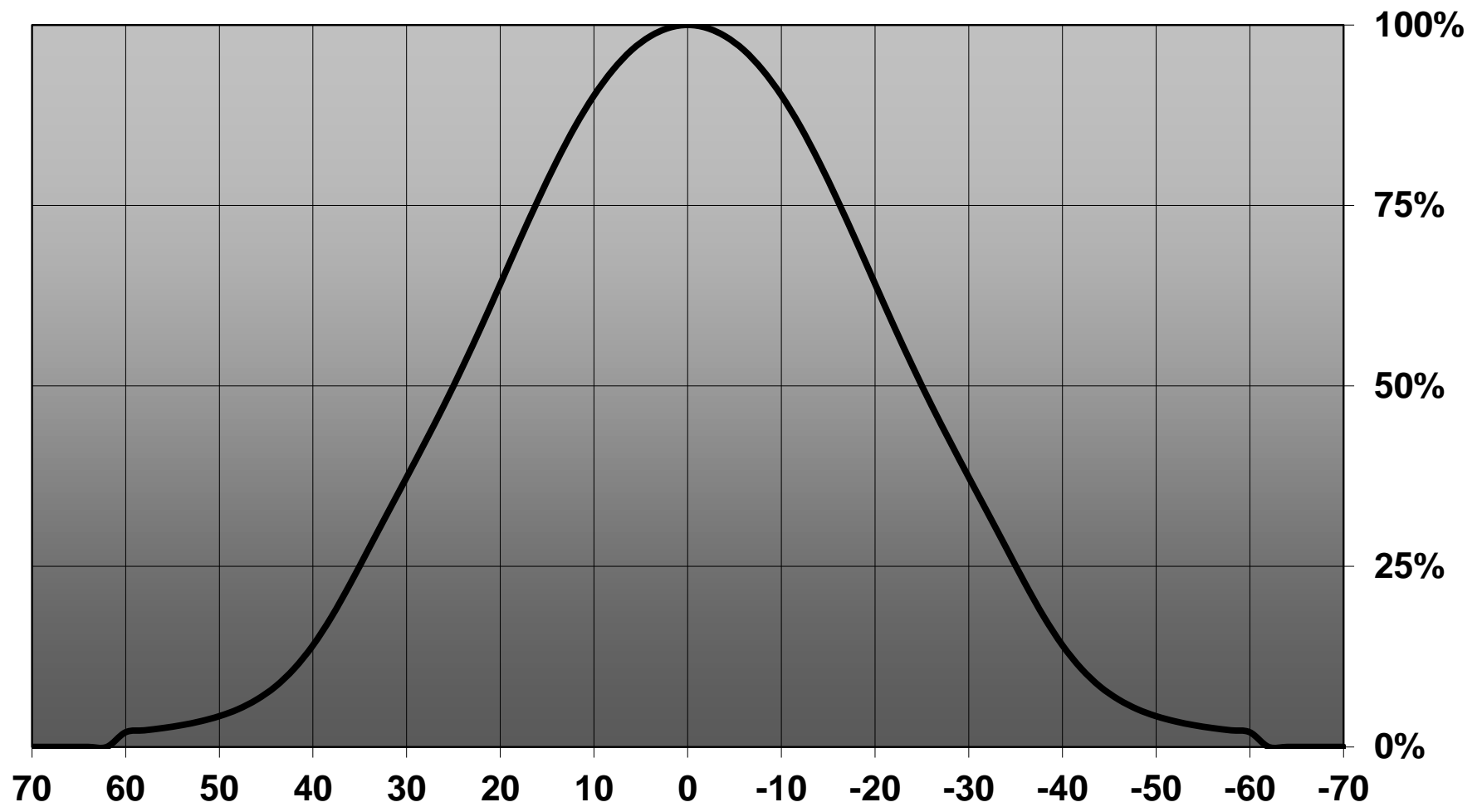


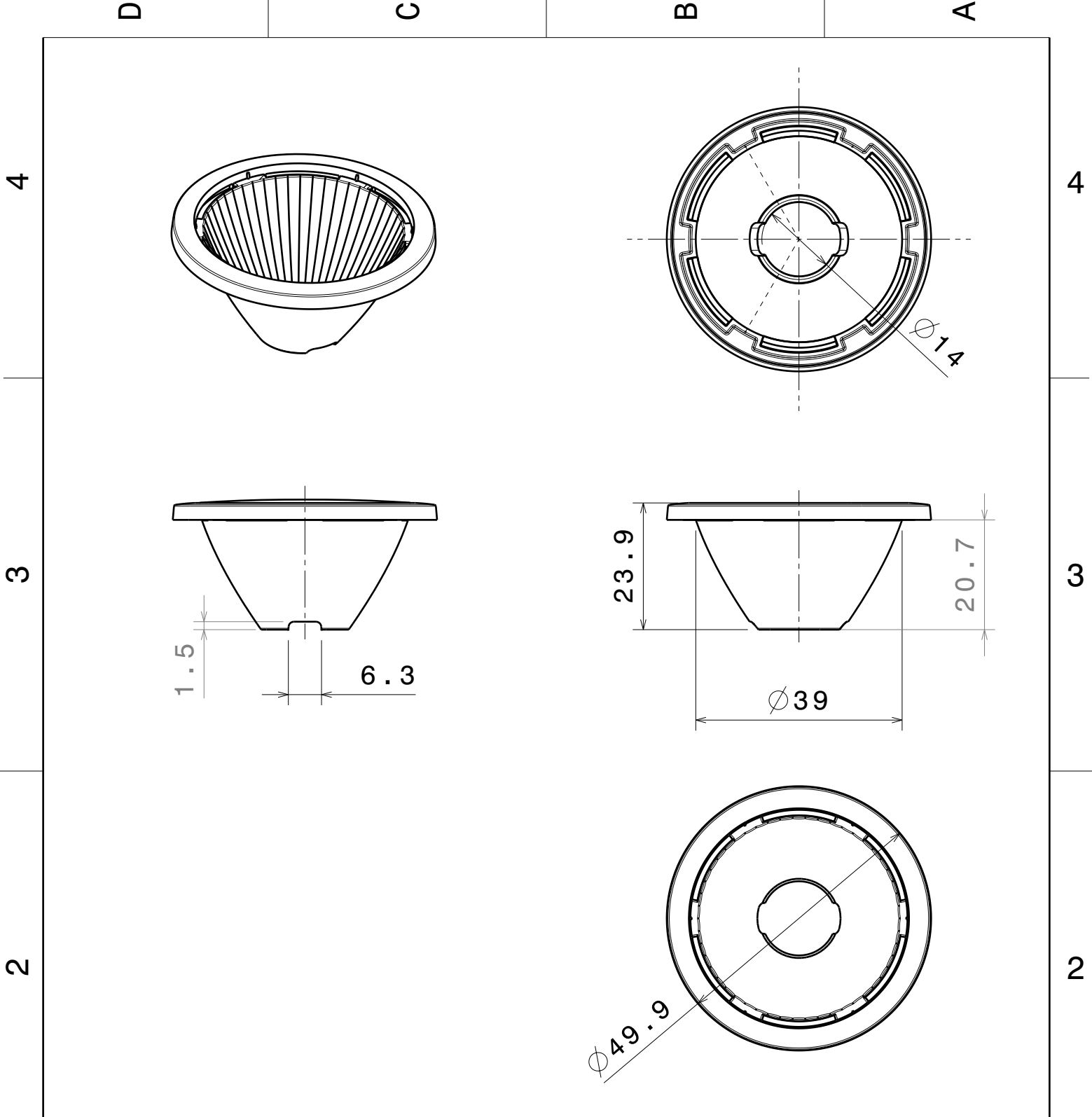
12	0.82115
14	0.764022
16	0.700122
18	0.634138
20	0.567286
22	0.503039
24	0.444174
26	0.39104
28	0.346848
30	0.311061
32	0.282896
34	0.259854
36	0.24025
38	0.215367
40	0.172756
42	0.114013
44	0.056638
46	0.020116
48	0.00605
50	0.004341
52	0
54	0
56	0
58	0
60	0
62	0
64	0
66	0
68	0
70	0
72	0
74	0
76	0
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)





Material: PC, metal plated

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Ledil Oy
Salorankatu 10
FIN-24240 SALO
Finland

DRAWING TITLE

Datasheet Mirella reflector

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

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