

Scaled data based on original data using  
LM-66-11 Electrical and Photometric Measurements of Single-Ended Compact  
Fluorescent Lamps

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: SHAPER

Report Number: 17162B

Luminaire Tested: **499-RP-24**

Issue Date: 3/3/2020

**Test Information**

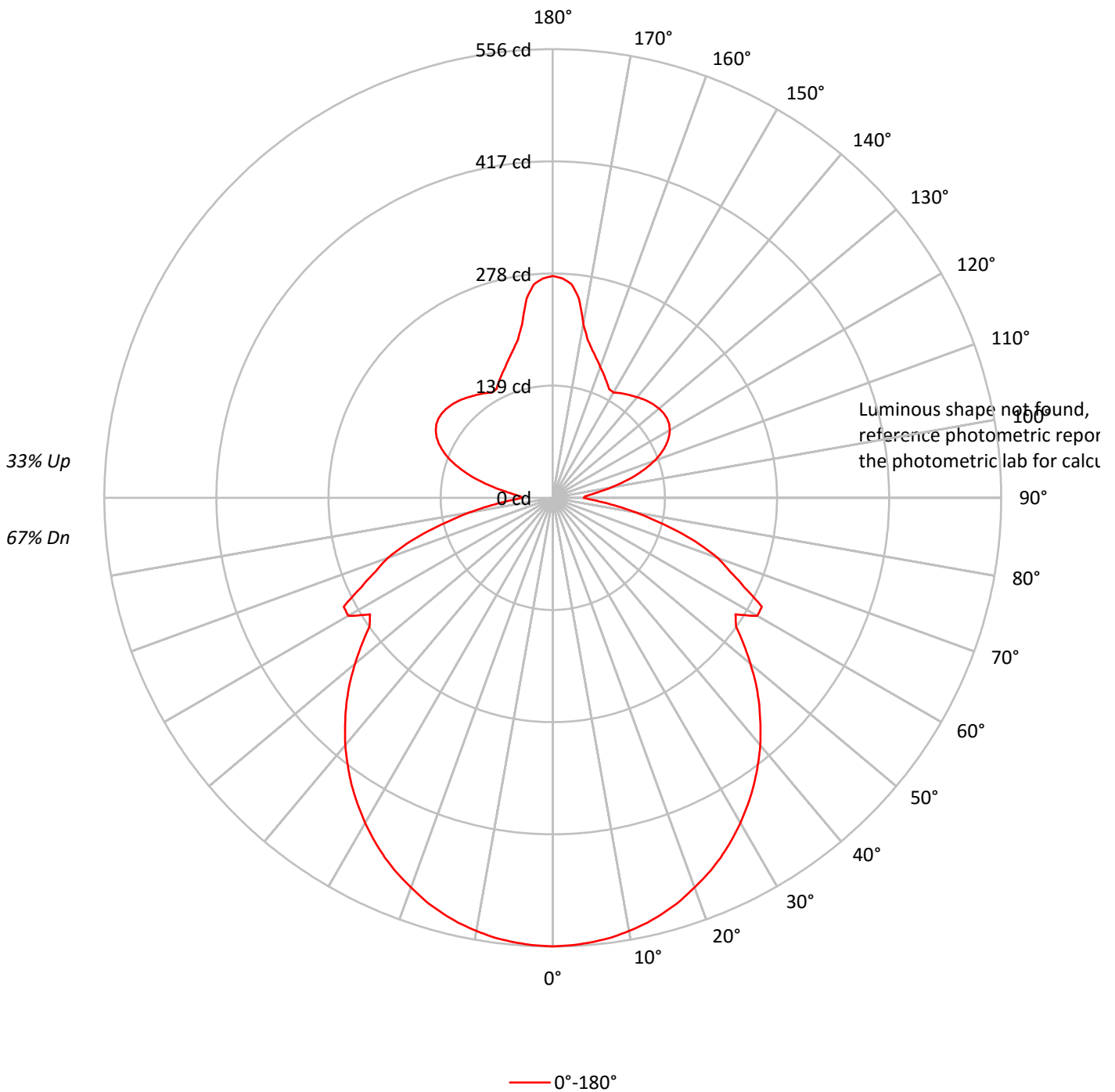
Test Method: LM-66-11  
Report Number: 17162B  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 499-RP-24  
Description: RECESSED LUMINAIRE WITH SUSPENDED BOWL - PORTFOLIO  
WITH SEMI-SPECULAR REFLECTOR AND WHITE PLASTIC LENS  
  
Light Source: TWO 32 WATT CPFL LAMPS. LUMEN RATING = 4800 LMS.  
  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 4800 (1 lamp)  
Luminaire Lumens: 2588.0 lumens  
Efficiency: 53.9%  
Efficacy: -  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36  
Luminous Opening: (L: 0' x W: -2' x H: 0.29'  
CIE Type: Semi-Direct  
  
Input Watts (W): 0  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	60	60	60	60	57	57	57	57	50	50	50	44	44	44	39	39	39	36
1	54	51	49	47	51	48	46	44	43	41	40	38	37	35	33	32	31	29
2	49	44	41	38	46	42	39	36	37	35	32	33	31	29	29	27	26	24
3	44	39	34	31	42	37	33	29	32	29	27	29	26	24	25	23	22	20
4	41	34	29	26	38	32	28	25	29	25	23	25	23	20	22	20	18	17
5	37	30	26	22	35	29	24	21	26	22	19	23	20	18	20	18	16	14
6	34	27	23	19	32	26	21	18	23	19	17	20	18	15	18	16	14	12
7	32	25	20	17	30	23	19	16	21	17	15	19	16	14	16	14	12	11
8	29	22	18	15	28	21	17	14	19	16	13	17	14	12	15	13	11	10
9	27	20	16	13	26	19	15	13	17	14	12	16	13	11	14	12	10	9
10	26	19	15	12	24	18	14	11	16	13	11	14	12	10	13	11	9	8

**AVERAGE LUMINANCE (cd/sqm):**





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	52.5	2.0	1.1
10°-20°	150.2	5.8	3.1
20°-30°	226.7	8.8	4.7
30°-40°	271.7	10.5	5.7
40°-50°	278.8	10.8	5.8
50°-60°	257.6	10.0	5.4
60°-70°	259.2	10.0	5.4
70°-80°	169.3	6.5	3.5
80°-90°	70.7	2.7	1.5
90°-100°	54.9	2.1	1.1
100°-110°	110.5	4.3	2.3
110°-120°	152.2	5.9	3.2
120°-130°	153.9	5.9	3.2
130°-140°	130.2	5.0	2.7
140°-150°	98.7	3.8	2.1
150°-160°	73.3	2.8	1.5
160°-170°	53.6	2.1	1.1
170°-180°	23.9	0.9	0.5
0°-30°	429.4	16.6	8.9
0°-40°	701.1	27.1	14.6
0°-60°	1237.6	47.8	25.8
0°-90°	1736.8	67.1	36.2
90°-120°	317.7	12.3	6.6
90°-150°	700.4	27.1	14.6
90°-180°	851.0	32.9	17.7
0°-180°	2588.0	100.0	53.9

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	556	
5°	553	53
15°	532	150
25°	492	227
35°	435	272
45°	362	279
55°	277	258
65°	262	259
75°	160	169
85°	61	59
90°	38	22
95°	47	44
105°	106	111
115°	155	152
125°	172	154
135°	168	130
145°	157	99
155°	158	73
165°	190	54
175°	266	24
180°	275	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	555.9
2.5°	554.9
5°	552.9
7.5°	549.8
10°	545.1
12.5°	539.5
15°	532.3
17.5°	524.1
20°	513.8
22.5°	503.7
25°	492.2
27.5°	479.1
30°	465.3
32.5°	450.2
35°	434.6
37.5°	417.6
40°	400.2
42.5°	381.1
45°	361.9
47.5°	341.6
50°	319.8
52.5°	298.3
55°	277.1
57.5°	268.6
60°	292.7
62.5°	292.2
65°	262.0
67.5°	237.5
70°	217.6
72.5°	190.1
75°	160.5
77.5°	130.2
80°	104.4
82.5°	80.9
85°	61.3
87.5°	46.0
90°	38.2
92.5°	39.8
95°	47.4
97.5°	58.7
100°	73.2
102.5°	88.8
105°	105.6
107.5°	120.6
110°	134.4

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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	145.8
115°	155.0
117.5°	162.4
120°	167.5
122.5°	171.0
125°	172.5
127.5°	172.8
130°	172.1
132.5°	170.5
135°	168.3
137.5°	165.7
140°	162.7
142.5°	159.8
145°	157.0
147.5°	154.0
150°	150.7
152.5°	151.6
155°	158.3
157.5°	165.2
160°	172.3
162.5°	180.7
165°	189.5
167.5°	200.2
170°	218.2
172.5°	249.0
175°	265.9
177.5°	272.3
180°	274.9

(END OF REPORT)