

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: 17162

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

Issue Date: 3/3/2020

**Test Information**

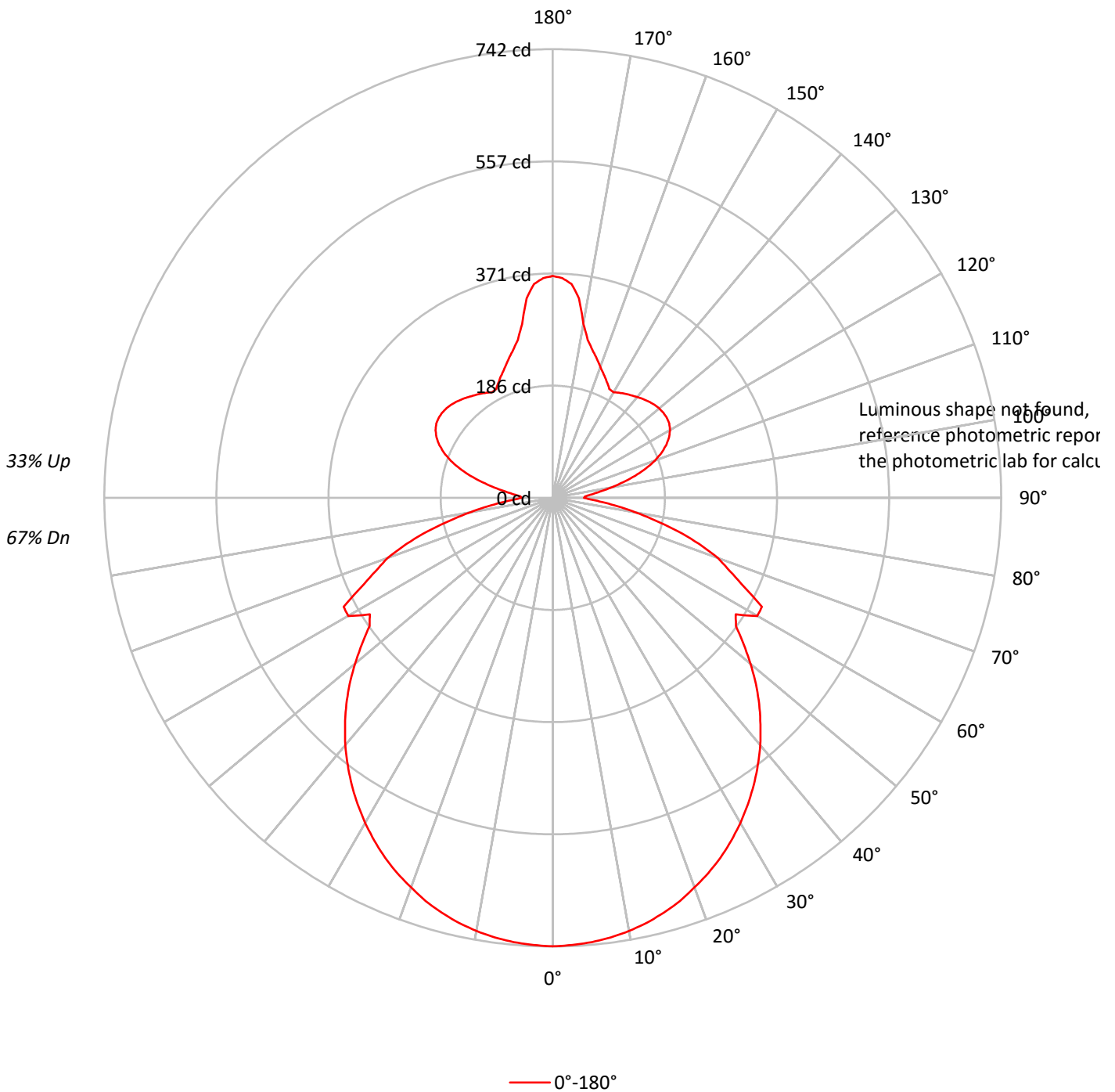
Test Method: LM-66-11  
Report Number: 17162  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 499-RP-24  
Description: RECESSED LUMINAIRE WITH SUSPENDED BOWL WITH SEMI-SPECULAR REFLECTOR  
AND  
WHITE PLASTIC LENS  
Light Source: TWO PHILIPS 42 WATT CPFL LAMPS  
  
PL-T 42W/41/4P. LUMEN RATING = 6400 LMS.  
  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 6400 (1 lamp)  
Luminaire Lumens: 3457.0 lumens  
Efficiency: 54.0%  
Efficacy: 39.3 lumens/watt  
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): 88  
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	52	49	47	51	49	46	45	43	41	40	38	37	36	33	32	31	29
2	49	45	41	38	46	42	39	36	37	35	32	33	31	29	29	27	26	24
3	45	39	34	31	42	37	33	30	33	29	27	29	26	24	25	23	22	20
4	41	34	30	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	22	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	15	12	10	13	11	9	8

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	70.1	2.0	1.1
10°-20°	200.4	5.8	3.1
20°-30°	302.4	8.7	4.7
30°-40°	362.6	10.5	5.7
40°-50°	372.2	10.8	5.8
50°-60°	344.0	9.9	5.4
60°-70°	346.1	10.0	5.4
70°-80°	226.2	6.5	3.5
80°-90°	94.8	2.7	1.5
90°-100°	73.9	2.1	1.2
100°-110°	147.9	4.3	2.3
110°-120°	203.4	5.9	3.2
120°-130°	205.6	5.9	3.2
130°-140°	174.0	5.0	2.7
140°-150°	131.9	3.8	2.1
150°-160°	98.0	2.8	1.5
160°-170°	71.7	2.1	1.1
170°-180°	31.9	0.9	0.5
0°-30°	572.9	16.6	9.0
0°-40°	935.5	27.1	14.6
0°-60°	1651.7	47.8	25.8
0°-90°	2318.8	67.1	36.2
90°-120°	425.2	12.3	6.6
90°-150°	936.6	27.1	14.6
90°-180°	1138.0	32.9	17.8
0°-180°	3457.0	100.0	54.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	742	
5°	738	70
15°	710	200
25°	657	302
35°	580	363
45°	483	372
55°	370	344
65°	350	346
75°	214	226
85°	82	79
90°	52	30
95°	64	59
105°	141	148
115°	207	203
125°	230	206
135°	225	174
145°	210	132
155°	212	98
165°	253	72
175°	355	32
180°	367	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	741.7
2.5°	740.3
5°	737.7
7.5°	733.5
10°	727.4
12.5°	719.9
15°	710.2
17.5°	699.3
20°	685.5
22.5°	672.1
25°	656.7
27.5°	639.3
30°	620.9
32.5°	600.8
35°	579.9
37.5°	557.3
40°	534.1
42.5°	508.7
45°	483.0
47.5°	456.0
50°	426.9
52.5°	398.2
55°	369.9
57.5°	358.7
60°	390.8
62.5°	390.1
65°	349.8
67.5°	317.1
70°	290.6
72.5°	253.9
75°	214.5
77.5°	174.1
80°	139.7
82.5°	108.3
85°	82.2
87.5°	61.8
90°	51.5
92.5°	53.6
95°	63.8
97.5°	78.8
100°	98.1
102.5°	118.9
105°	141.3
107.5°	161.4
110°	179.6



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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	194.8
115°	207.1
117.5°	217.1
120°	223.9
122.5°	228.5
125°	230.5
127.5°	230.9
130°	229.9
132.5°	227.8
135°	225.0
137.5°	221.5
140°	217.4
142.5°	213.6
145°	209.8
147.5°	205.9
150°	201.5
152.5°	202.7
155°	211.6
157.5°	220.8
160°	230.2
162.5°	241.5
165°	253.1
167.5°	267.5
170°	291.4
172.5°	332.4
175°	355.0
177.5°	363.6
180°	367.0

(END OF REPORT)