

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: 19425B

Luminaire Tested: **404-28-CF4/13**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 19425B
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 404-28-CF4/13
Description: INTERIOR SUSPENDED LUMINAIRE WITH WHITE INTERIOR AND WHITE PLASTIC BOWL LENS
Light Source: FOUR 13 WATT CPFL LAMPS. LUMEN RATING = 3600 LMS.

Ballast/Driver: -

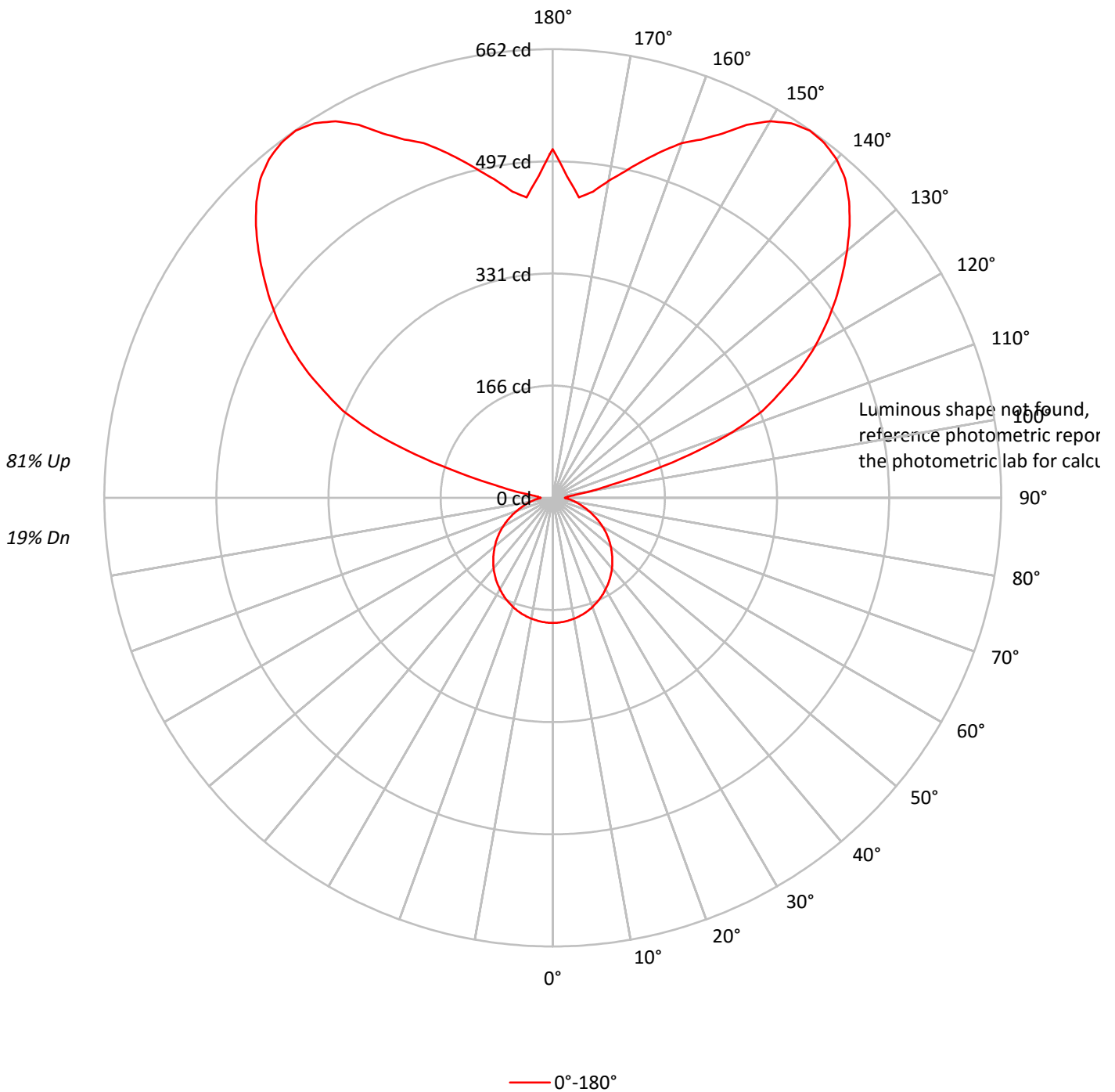
Summary

Lumens per Lamp: 3600 (1 lamp)
Luminaire Lumens: 2932.7 lumens
Efficiency: 81.5%
Efficacy: -
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: (L: 0 ' x W: -2.33 ' x H: 0.44 '
CIE Type: Semi-Indirect

Input Watts (W): 0
Input Voltage (V): NR
Input Current (Ain): 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



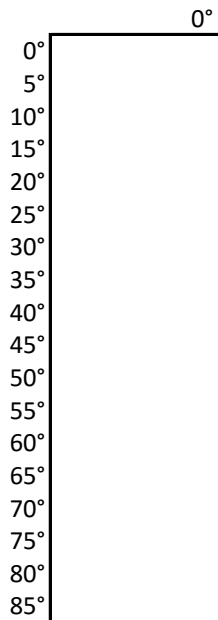


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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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	81	81	81	81	72	72	72	72	54	54	54	38	38	38	23	23	23	16
1	74	70	67	64	65	62	60	57	47	45	43	33	32	31	20	19	19	13
2	67	61	56	52	59	54	50	47	41	38	36	28	27	25	17	16	15	10
3	61	54	48	43	54	47	43	39	36	33	30	25	23	21	15	14	13	9
4	56	47	41	36	49	42	37	33	32	28	25	22	20	18	13	12	11	7
5	51	42	36	31	45	37	32	28	28	24	22	20	17	15	12	11	10	6
6	47	37	31	27	41	33	28	24	25	21	19	18	15	13	11	9	8	6
7	43	34	27	23	38	30	25	21	23	19	16	16	14	12	10	8	7	5
8	40	30	24	20	35	27	22	18	21	17	14	15	12	10	9	8	7	4
9	37	27	22	18	33	24	19	16	19	15	13	13	11	9	8	7	6	4
10	34	25	19	16	30	22	17	14	17	14	11	12	10	8	8	6	5	4

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	17.4	0.6	0.5
10°-20°	50.0	1.7	1.4
20°-30°	75.7	2.6	2.1
30°-40°	91.7	3.1	2.5
40°-50°	95.8	3.3	2.7
50°-60°	88.1	3.0	2.4
60°-70°	69.8	2.4	1.9
70°-80°	47.0	1.6	1.3
80°-90°	27.0	0.9	0.7
90°-100°	31.4	1.1	0.9
100°-110°	160.5	5.5	4.5
110°-120°	367.1	12.5	10.2
120°-130°	455.2	15.5	12.6
130°-140°	475.6	16.2	13.2
140°-150°	412.0	14.0	11.4
150°-160°	277.1	9.5	7.7
160°-170°	147.2	5.0	4.1
170°-180°	44.0	1.5	1.2
0°-30°	143.2	4.9	4.0
0°-40°	234.8	8.0	6.5
0°-60°	418.7	14.3	11.6
0°-90°	562.5	19.2	15.6
90°-120°	559.0	19.1	15.5
90°-150°	1901.9	64.9	52.8
90°-180°	2370.0	80.8	65.8
0°-180°	2932.7	100.0	81.5

CANDELA DISTRIBUTION:

	0°	Flux
0°	185	
5°	184	17
15°	177	50
25°	164	76
35°	146	92
45°	124	96
55°	99	88
65°	70	70
75°	44	47
85°	24	22
90°	18	11
95°	22	26
105°	142	160
115°	372	367
125°	510	455
135°	618	476
145°	662	412
155°	593	277
165°	515	147
175°	445	44
180°	515	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	184.6
2.5°	184.4
5°	183.6
7.5°	182.5
10°	181.1
12.5°	179.3
15°	177.1
17.5°	174.5
20°	171.4
22.5°	168.0
25°	164.4
27.5°	160.3
30°	156.0
32.5°	151.4
35°	146.5
37.5°	141.4
40°	135.9
42.5°	130.1
45°	124.1
47.5°	118.0
50°	111.6
52.5°	105.3
55°	98.6
57.5°	91.8
60°	84.8
62.5°	77.7
65°	70.4
67.5°	63.2
70°	56.5
72.5°	50.2
75°	44.2
77.5°	38.7
80°	33.4
82.5°	28.7
85°	24.3
87.5°	20.3
90°	17.9
92.5°	21.0
95°	22.5
97.5°	33.4
100°	59.2
102.5°	86.1
105°	141.6
107.5°	212.4
110°	281.1



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	334.9
115°	372.5
117.5°	412.0
120°	447.1
122.5°	479.3
125°	509.6
127.5°	538.3
130°	567.0
132.5°	594.3
135°	618.5
137.5°	638.8
140°	651.9
142.5°	659.3
145°	661.5
147.5°	655.2
150°	641.5
152.5°	620.3
155°	592.8
157.5°	572.2
160°	557.1
162.5°	535.9
165°	514.8
167.5°	493.4
170°	474.6
172.5°	455.7
175°	444.7
177.5°	475.2
180°	514.6

(END OF REPORT)