

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: 19436B

Luminaire Tested: **447-CF4/42**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 19436B
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 447-CF4/42
Description: INTERIOR SUSPENDED LUMINAIRE WITH WHITE INTERIOR AND WHITE PLASTIC BOWL LENS
Light Source: FOUR 42 WATT CPFL LAMPS. LUMEN RATING = 12800 LMS.

Ballast/Driver: -

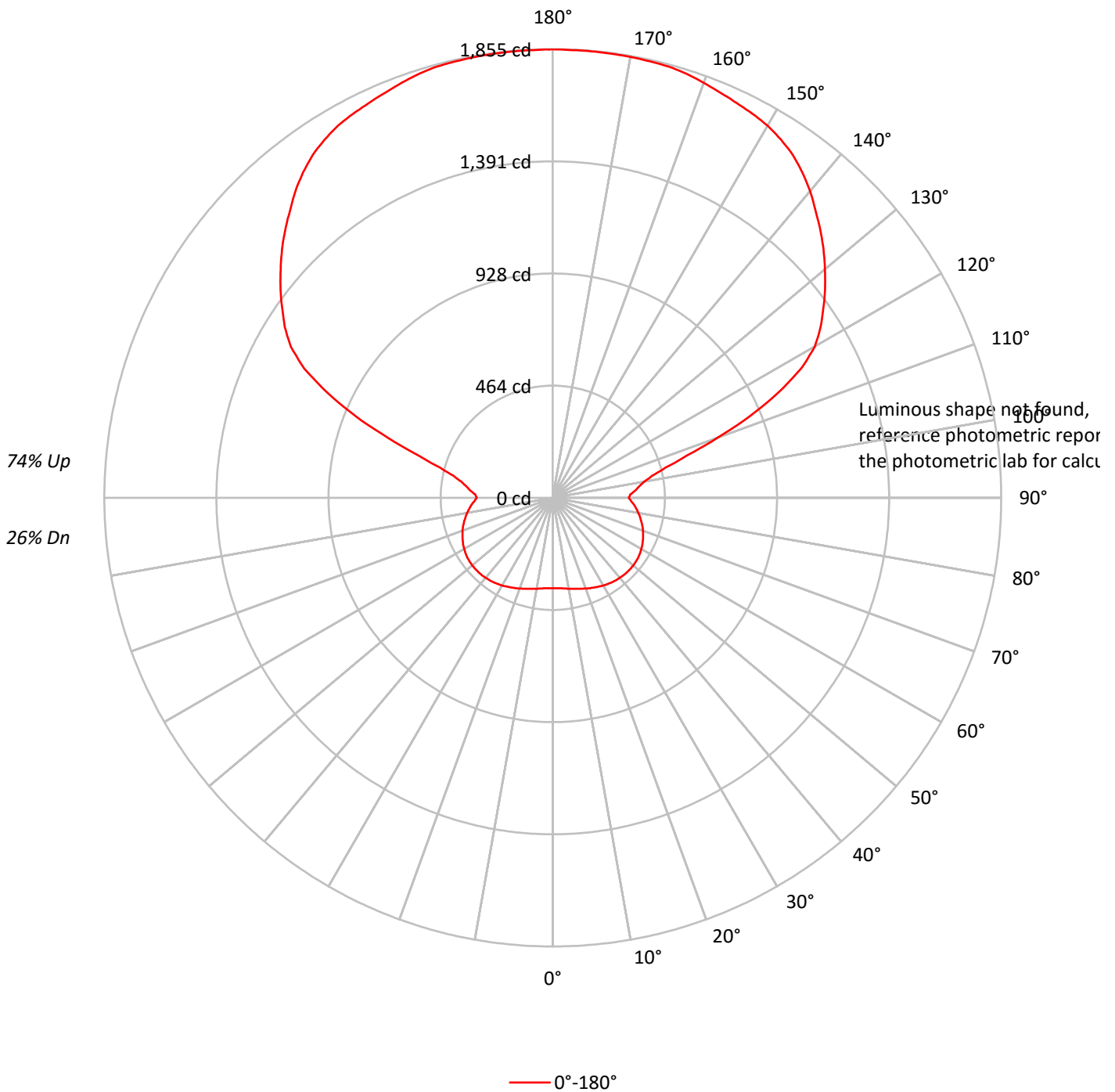
Summary

Lumens per Lamp: 12800 (1 lamp)
Luminaire Lumens: 9466.6 lumens
Efficiency: 74.0%
Efficacy: -
Spacing Criteria (0/90/45): 1.73 / 1.73 / 1.89
Luminous Opening: (L: 0 ' x W: -0.08 ' x H: 1.25 '
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	75	75	75	75	67	67	67	67	52	52	52	38	38	38	26	26	26	20
1	67	63	60	57	59	56	53	51	43	41	39	31	30	29	20	19	19	14
2	60	54	49	45	53	48	44	41	37	34	32	27	25	23	17	16	15	10
3	55	47	42	37	48	42	37	33	32	29	26	23	21	19	15	13	12	8
4	50	41	35	31	44	37	32	28	28	24	21	20	18	16	13	11	10	6
5	45	37	30	26	40	33	27	23	25	21	18	18	15	13	11	10	8	5
6	42	33	26	22	37	29	24	20	22	18	15	16	13	11	10	8	7	4
7	38	29	23	19	34	26	21	17	20	16	13	14	12	10	9	7	6	4
8	35	26	21	17	31	23	18	15	18	14	12	13	10	8	8	7	5	3
9	33	24	18	15	29	21	16	13	16	13	10	12	9	7	8	6	5	3
10	31	22	16	13	27	19	15	12	15	11	9	11	8	7	7	5	4	3

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	36.0	0.4	0.3
10°-20°	110.8	1.2	0.9
20°-30°	189.5	2.0	1.5
30°-40°	267.8	2.8	2.1
40°-50°	336.3	3.6	2.6
50°-60°	385.9	4.1	3.0
60°-70°	407.8	4.3	3.2
70°-80°	401.0	4.2	3.1
80°-90°	367.7	3.9	2.9
90°-100°	374.5	4.0	2.9
100°-110°	538.4	5.7	4.2
110°-120°	1004.2	10.6	7.8
120°-130°	1223.0	12.9	9.6
130°-140°	1209.5	12.8	9.4
140°-150°	1082.2	11.4	8.5
150°-160°	833.1	8.8	6.5
160°-170°	522.1	5.5	4.1
170°-180°	176.8	1.9	1.4
0°-30°	336.3	3.6	2.6
0°-40°	604.0	6.4	4.7
0°-60°	1326.3	14.0	10.4
0°-90°	2502.7	26.4	19.6
90°-120°	1917.1	20.3	15.0
90°-150°	5431.8	57.4	42.4
90°-180°	6964.0	73.6	54.4
0°-180°	9466.6	100.0	74.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	374	
5°	375	36
15°	390	111
25°	409	189
35°	426	268
45°	435	336
55°	431	386
65°	411	408
75°	380	401
85°	337	280
90°	314	175
95°	343	287
105°	483	538
115°	1029	1004
125°	1366	1223
135°	1566	1209
145°	1731	1082
155°	1801	833
165°	1846	522
175°	1853	177
180°	1855	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	374.2
2.5°	373.9
5°	375.2
7.5°	378.2
10°	381.6
12.5°	385.6
15°	389.5
17.5°	393.9
20°	399.1
22.5°	404.2
25°	408.7
27.5°	413.6
30°	418.5
32.5°	422.7
35°	426.3
37.5°	429.7
40°	431.8
42.5°	433.8
45°	434.6
47.5°	435.0
50°	434.8
52.5°	433.4
55°	431.2
57.5°	427.6
60°	423.2
62.5°	418.0
65°	411.2
67.5°	404.6
70°	397.2
72.5°	388.8
75°	379.6
77.5°	369.8
80°	359.7
82.5°	348.8
85°	337.3
87.5°	325.1
90°	314.5
92.5°	321.0
95°	343.0
97.5°	359.7
100°	384.6
102.5°	420.9
105°	483.3
107.5°	582.1
110°	724.1



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	884.4
115°	1028.6
117.5°	1159.5
120°	1251.7
122.5°	1314.0
125°	1366.4
127.5°	1419.9
130°	1469.6
132.5°	1519.1
135°	1565.7
137.5°	1609.3
140°	1656.1
142.5°	1696.2
145°	1731.3
147.5°	1756.3
150°	1776.9
152.5°	1789.6
155°	1800.9
157.5°	1812.9
160°	1826.1
162.5°	1838.8
165°	1846.5
167.5°	1848.7
170°	1851.2
172.5°	1852.1
175°	1853.0
177.5°	1852.8
180°	1854.7

(END OF REPORT)