

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: 19425A

Luminaire Tested: **404-28-CF4/32**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 19425A
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 404-28-CF4/32
Description: INTERIOR SUSPENDED LUMINAIRE WITH WHITE INTERIOR AND WHITE PLASTIC BOWL LENS
Light Source: FOUR 32 WATT CPFL LAMPS. LUMEN RATING = 9600 LMS.

Ballast/Driver: -

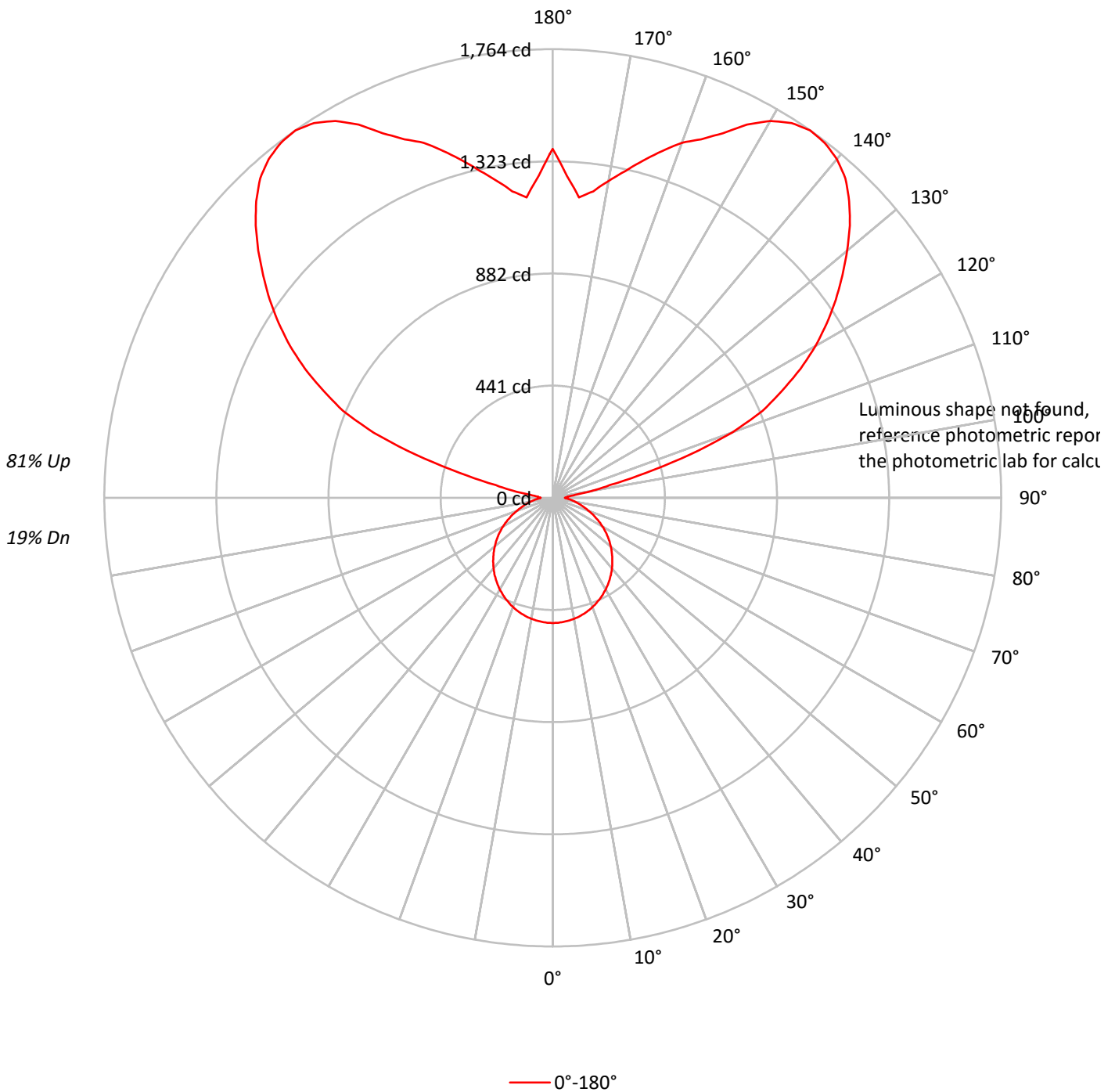
Summary

Lumens per Lamp: 9600 (1 lamp)
Luminaire Lumens: 7820.5 lumens
Efficiency: 81.5%
Efficacy: -
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: (L: 0 ' x W: -0.38 ' 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



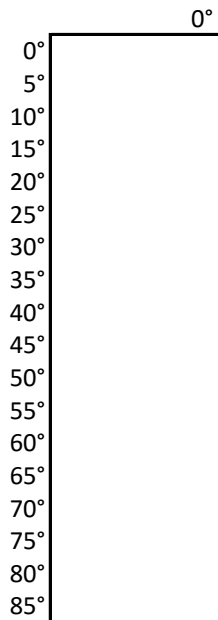


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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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°	46.5	0.6	0.5
10°-20°	133.2	1.7	1.4
20°-30°	202.0	2.6	2.1
30°-40°	244.5	3.1	2.5
40°-50°	255.3	3.3	2.7
50°-60°	235.0	3.0	2.4
60°-70°	186.1	2.4	1.9
70°-80°	125.3	1.6	1.3
80°-90°	72.0	0.9	0.7
90°-100°	83.8	1.1	0.9
100°-110°	428.0	5.5	4.5
110°-120°	979.0	12.5	10.2
120°-130°	1214.0	15.5	12.6
130°-140°	1268.2	16.2	13.2
140°-150°	1098.7	14.0	11.4
150°-160°	739.0	9.4	7.7
160°-170°	392.5	5.0	4.1
170°-180°	117.4	1.5	1.2
0°-30°	381.8	4.9	4.0
0°-40°	626.2	8.0	6.5
0°-60°	1116.6	14.3	11.6
0°-90°	1499.9	19.2	15.6
90°-120°	1490.8	19.1	15.5
90°-150°	5071.7	64.9	52.8
90°-180°	6321.0	80.8	65.8
0°-180°	7820.5	100.0	81.5

CANDELA DISTRIBUTION:

	0°	Flux
0°	492	
5°	490	47
15°	472	133
25°	438	202
35°	391	244
45°	331	255
55°	263	235
65°	188	186
75°	118	125
85°	65	58
90°	48	28
95°	60	70
105°	378	428
115°	993	979
125°	1359	1214
135°	1649	1268
145°	1764	1099
155°	1581	739
165°	1373	392
175°	1186	117
180°	1372	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	492.3
2.5°	491.6
5°	489.7
7.5°	486.7
10°	483.0
12.5°	478.1
15°	472.2
17.5°	465.2
20°	457.1
22.5°	448.0
25°	438.3
27.5°	427.5
30°	416.0
32.5°	403.8
35°	390.8
37.5°	377.0
40°	362.3
42.5°	346.9
45°	330.9
47.5°	314.6
50°	297.7
52.5°	280.7
55°	263.0
57.5°	244.8
60°	226.1
62.5°	207.1
65°	187.8
67.5°	168.5
70°	150.6
72.5°	133.8
75°	117.9
77.5°	103.1
80°	89.1
82.5°	76.6
85°	64.8
87.5°	54.2
90°	47.7
92.5°	55.9
95°	60.0
97.5°	89.1
100°	157.7
102.5°	229.7
105°	377.6
107.5°	566.5
110°	749.6



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	893.0
115°	993.4
117.5°	1098.8
120°	1192.3
122.5°	1278.1
125°	1359.0
127.5°	1435.4
130°	1512.0
132.5°	1584.7
135°	1649.2
137.5°	1703.6
140°	1738.5
142.5°	1758.1
145°	1764.0
147.5°	1747.3
150°	1710.7
152.5°	1654.2
155°	1580.7
157.5°	1525.8
160°	1485.6
162.5°	1429.1
165°	1372.8
167.5°	1315.7
170°	1265.5
172.5°	1215.2
175°	1185.7
177.5°	1267.1
180°	1372.2

(END OF REPORT)