

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: 19377B

Luminaire Tested: **433-14-SP-CF2/42**

Issue Date: 3/3/2020

**Test Information**

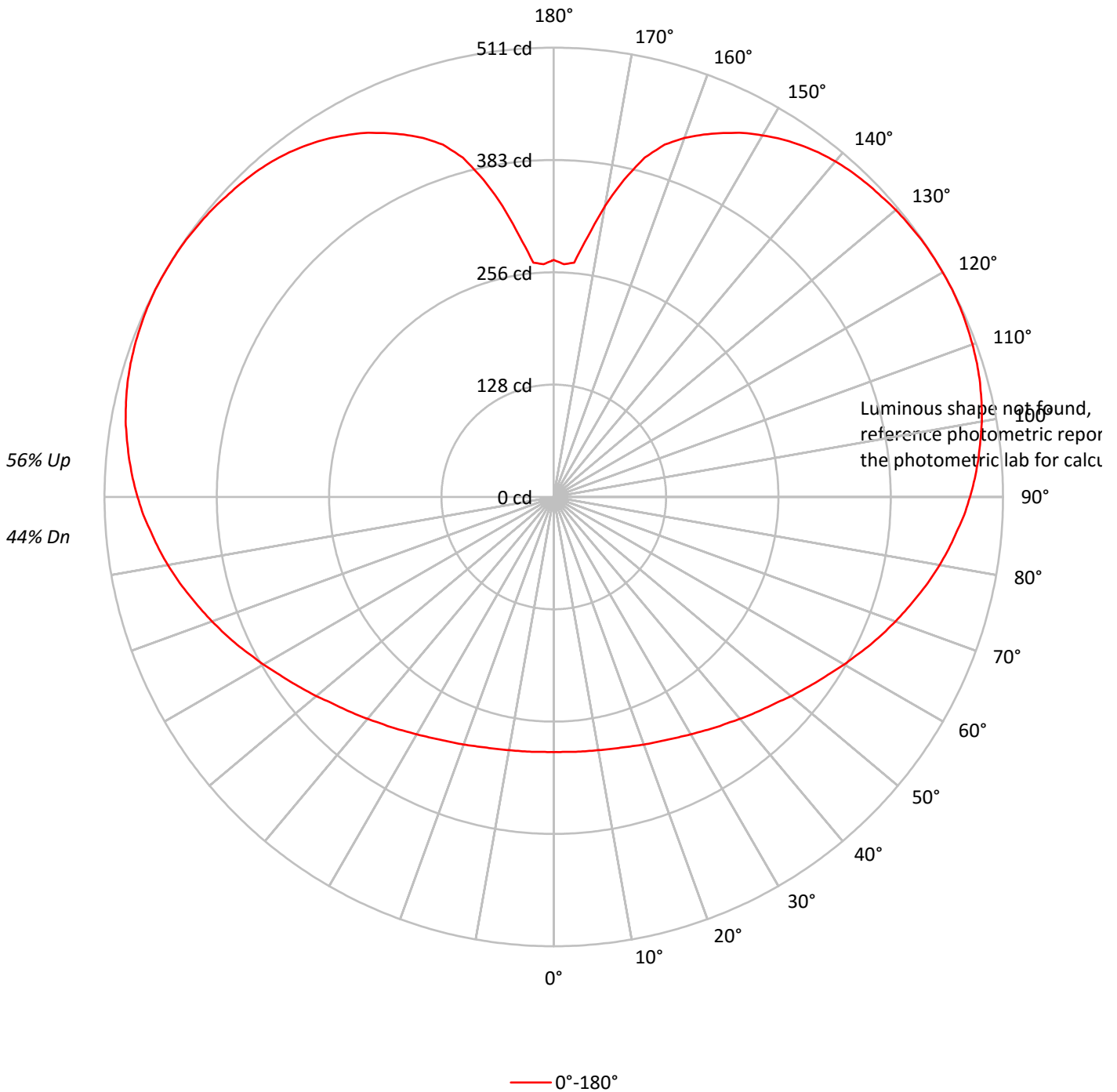
Test Method: LM-66-11  
Report Number: 19377B  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 433-14-SP-CF2/42  
Description: INTERIOR CEILING MOUNT LUMINAIRE WITH WHITE GLASS LENS  
  
Light Source: TWO 42 WATT CPFL LAMPS. LUMEN RATING = 6400 LMS.  
  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 6400 (1 lamp)  
Luminaire Lumens: 5469.7 lumens  
Efficiency: 85.5%  
Efficacy: -  
Spacing Criteria (0/90/45): 1.71 / 1.71 / 1.97  
Luminous Opening: (L: 0 ' x W: -0.08 ' x H: 0.58 '  
CIE Type: General Diffuse  
  
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



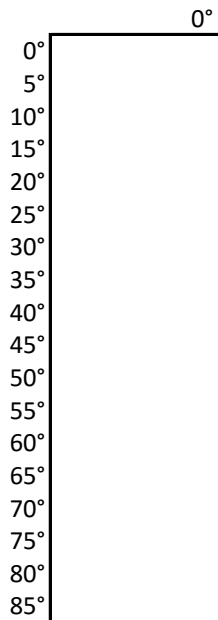


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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

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	90	90	90	90	83	83	83	83	68	68	68	55	55	55	43	43	43	37
1	79	73	68	64	71	67	62	59	54	51	48	43	40	38	32	30	29	24
2	70	62	55	50	63	56	50	45	45	41	37	35	32	29	26	24	22	17
3	63	53	46	40	57	48	42	36	39	34	30	30	26	23	22	19	17	13
4	57	47	39	33	52	42	35	30	34	29	24	26	22	19	19	16	14	10
5	52	41	33	27	47	37	30	25	30	25	20	23	19	16	17	14	11	8
6	48	36	29	23	43	33	26	21	27	21	17	21	17	13	15	12	10	7
7	44	33	25	20	40	30	23	18	24	19	15	19	15	12	14	11	8	6
8	41	29	22	17	37	27	20	16	22	17	13	17	13	10	13	10	7	5
9	38	27	20	15	34	24	18	14	20	15	11	16	12	9	12	9	6	4
10	35	24	18	13	32	22	16	12	18	13	10	14	11	8	11	8	6	4

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	27.8	0.5	0.4
10°-20°	83.9	1.5	1.3
20°-30°	141.4	2.6	2.2
30°-40°	201.3	3.7	3.1
40°-50°	263.7	4.8	4.1
50°-60°	328.8	6.0	5.1
60°-70°	394.6	7.2	6.2
70°-80°	454.8	8.3	7.1
80°-90°	501.8	9.2	7.8
90°-100°	528.4	9.7	8.3
100°-110°	530.4	9.7	8.3
110°-120°	505.8	9.2	7.9
120°-130°	457.5	8.4	7.1
130°-140°	390.0	7.1	6.1
140°-150°	306.8	5.6	4.8
150°-160°	211.7	3.9	3.3
160°-170°	113.0	2.1	1.8
170°-180°	28.1	0.5	0.4
0°-30°	253.1	4.6	4.0
0°-40°	454.4	8.3	7.1
0°-60°	1046.9	19.1	16.4
0°-90°	2398.1	43.8	37.5
90°-120°	1564.6	28.6	24.4
90°-150°	2718.9	49.7	42.5
90°-180°	3072.0	56.2	48.0
0°-180°	5469.7	100.0	85.5

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	290	
5°	291	28
15°	295	84
25°	305	141
35°	320	201
45°	340	264
55°	366	329
65°	398	395
75°	430	455
85°	460	373
90°	473	259
95°	485	398
105°	502	530
115°	510	506
125°	510	457
135°	504	390
145°	489	307
155°	457	212
165°	400	113
175°	268	28
180°	270	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	290.1
2.5°	290.2
5°	290.9
7.5°	291.5
10°	292.4
12.5°	293.7
15°	295.2
17.5°	297.2
20°	299.7
22.5°	301.9
25°	304.7
27.5°	308.0
30°	311.7
32.5°	315.6
35°	320.2
37.5°	324.3
40°	329.4
42.5°	334.6
45°	339.9
47.5°	345.5
50°	352.4
52.5°	358.9
55°	366.0
57.5°	373.1
60°	381.2
62.5°	388.9
65°	397.5
67.5°	405.5
70°	413.6
72.5°	421.7
75°	429.7
77.5°	438.0
80°	445.6
82.5°	453.1
85°	459.8
87.5°	467.3
90°	473.4
92.5°	479.3
95°	484.6
97.5°	489.5
100°	494.5
102.5°	498.3
105°	501.9
107.5°	504.7
110°	506.8



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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	508.6
115°	510.0
117.5°	510.8
120°	510.9
122.5°	510.7
125°	510.3
127.5°	509.1
130°	507.9
132.5°	505.7
135°	503.8
137.5°	501.5
140°	498.3
142.5°	494.0
145°	488.7
147.5°	482.5
150°	474.8
152.5°	466.8
155°	456.7
157.5°	446.2
160°	434.4
162.5°	420.2
165°	399.5
167.5°	369.6
170°	336.1
172.5°	298.9
175°	267.5
177.5°	264.9
180°	269.5

(END OF REPORT)