

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: 19376B

Luminaire Tested: **233-14-SH-CF2/42**

Issue Date: 3/3/2020

**Test Information**

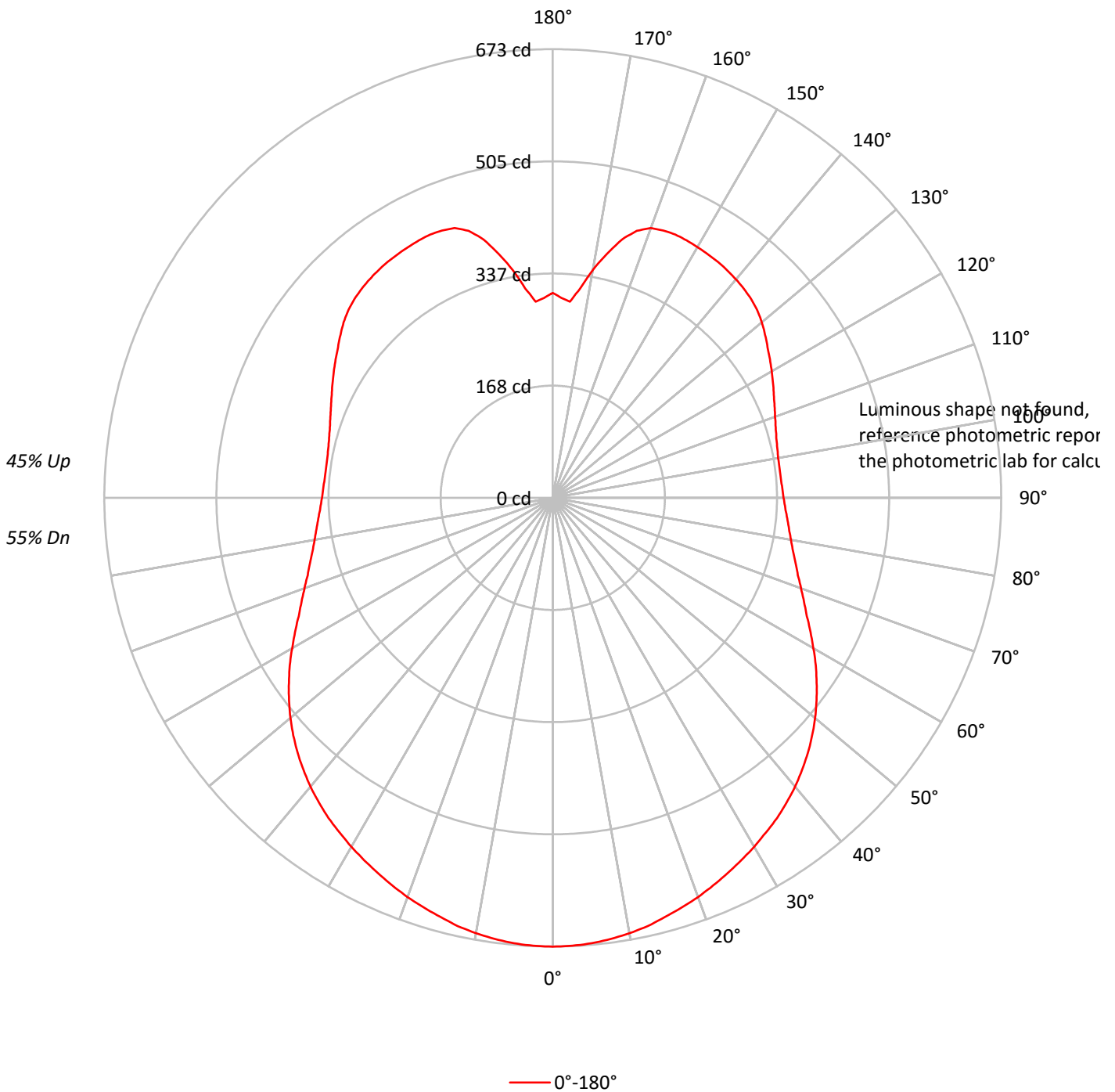
Test Method: LM-66-11  
Report Number: 19376B  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 233-14-SH-CF2/42  
Description: INTERIOR CEILING MOUNT LUMINAIRE WITH WHITE GLASS LENS  
  
Light Source: TWO 42 WATT CPFL LAMPS. LUMEN RATING = 6400 LMS.  
  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 6400 (1 lamp)  
Luminaire Lumens: 5359.4 lumens  
Efficiency: 83.7%  
Efficacy: -  
Spacing Criteria (0/90/45): 1.35 / 1.35 / 1.52  
Luminous Opening: (L: 0 ' x W: -0.08 ' x H: 0.46 '  
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	91	91	91	91	84	84	84	84	72	72	72	61	61	61	51	51	51	46
1	80	75	71	67	74	70	66	62	59	56	54	50	47	45	41	39	38	33
2	72	64	58	53	66	60	54	49	50	46	42	42	39	36	34	32	30	26
3	65	56	49	43	60	52	45	40	44	39	35	36	33	29	30	27	24	21
4	59	49	41	36	54	45	39	33	38	33	29	32	28	25	26	23	20	17
5	54	43	36	30	50	40	33	28	34	29	24	29	24	21	23	20	17	15
6	50	39	31	26	46	36	29	24	31	25	21	26	21	18	21	18	15	13
7	46	35	27	22	42	32	26	21	28	22	18	23	19	16	19	16	13	11
8	43	31	24	20	39	29	23	18	25	20	16	21	17	14	18	14	12	10
9	40	29	22	17	36	27	21	16	23	18	14	19	15	12	16	13	10	9
10	37	26	20	15	34	24	19	15	21	16	13	18	14	11	15	12	9	8

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	63.8	1.2	1.0
10°-20°	184.1	3.4	2.9
20°-30°	287.0	5.4	4.5
30°-40°	367.6	6.9	5.7
40°-50°	418.2	7.8	6.5
50°-60°	433.1	8.1	6.8
60°-70°	418.8	7.8	6.5
70°-80°	399.7	7.5	6.2
80°-90°	385.8	7.2	6.0
90°-100°	375.3	7.0	5.9
100°-110°	368.2	6.9	5.8
110°-120°	363.7	6.8	5.7
120°-130°	353.2	6.6	5.5
130°-140°	325.3	6.1	5.1
140°-150°	271.1	5.1	4.2
150°-160°	201.1	3.8	3.1
160°-170°	113.5	2.1	1.8
170°-180°	30.1	0.6	0.5
0°-30°	534.9	10.0	8.4
0°-40°	902.5	16.8	14.1
0°-60°	1753.7	32.7	27.4
0°-90°	2958.0	55.2	46.2
90°-120°	1107.2	20.7	17.3
90°-150°	2056.7	38.4	32.1
90°-180°	2401.0	44.8	37.5
0°-180°	5359.4	100.0	83.7

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	673	
5°	671	64
15°	651	184
25°	621	287
35°	587	368
45°	541	418
55°	483	433
65°	421	419
75°	377	400
85°	353	290
90°	346	190
95°	343	281
105°	347	368
115°	366	364
125°	394	353
135°	421	325
145°	432	271
155°	436	201
165°	401	114
175°	295	30
180°	307	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	673.3
2.5°	672.6
5°	670.7
7.5°	667.6
10°	663.2
12.5°	658.0
15°	651.0
17.5°	644.2
20°	637.3
22.5°	629.4
25°	621.0
27.5°	612.8
30°	604.5
32.5°	595.2
35°	586.6
37.5°	576.4
40°	565.8
42.5°	553.7
45°	541.4
47.5°	528.0
50°	513.9
52.5°	499.0
55°	483.4
57.5°	468.0
60°	451.6
62.5°	436.0
65°	420.8
67.5°	408.1
70°	396.4
72.5°	385.7
75°	377.1
77.5°	369.2
80°	362.9
82.5°	357.5
85°	353.2
87.5°	349.1
90°	346.4
92.5°	344.6
95°	343.3
97.5°	343.1
100°	343.4
102.5°	345.0
105°	347.4
107.5°	350.7
110°	355.1



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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	360.2
115°	365.9
117.5°	372.7
120°	379.4
122.5°	386.4
125°	393.5
127.5°	401.6
130°	409.6
132.5°	416.3
135°	421.2
137.5°	424.9
140°	427.8
142.5°	430.1
145°	432.1
147.5°	433.2
150°	434.3
152.5°	435.3
155°	435.6
157.5°	434.0
160°	430.7
162.5°	419.9
165°	401.2
167.5°	374.5
170°	347.2
172.5°	316.7
175°	295.2
177.5°	300.2
180°	307.3

(END OF REPORT)