

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: 19434B

Luminaire Tested: **434-SP-16-CF2/42**

Issue Date: 3/3/2020

**Test Information**

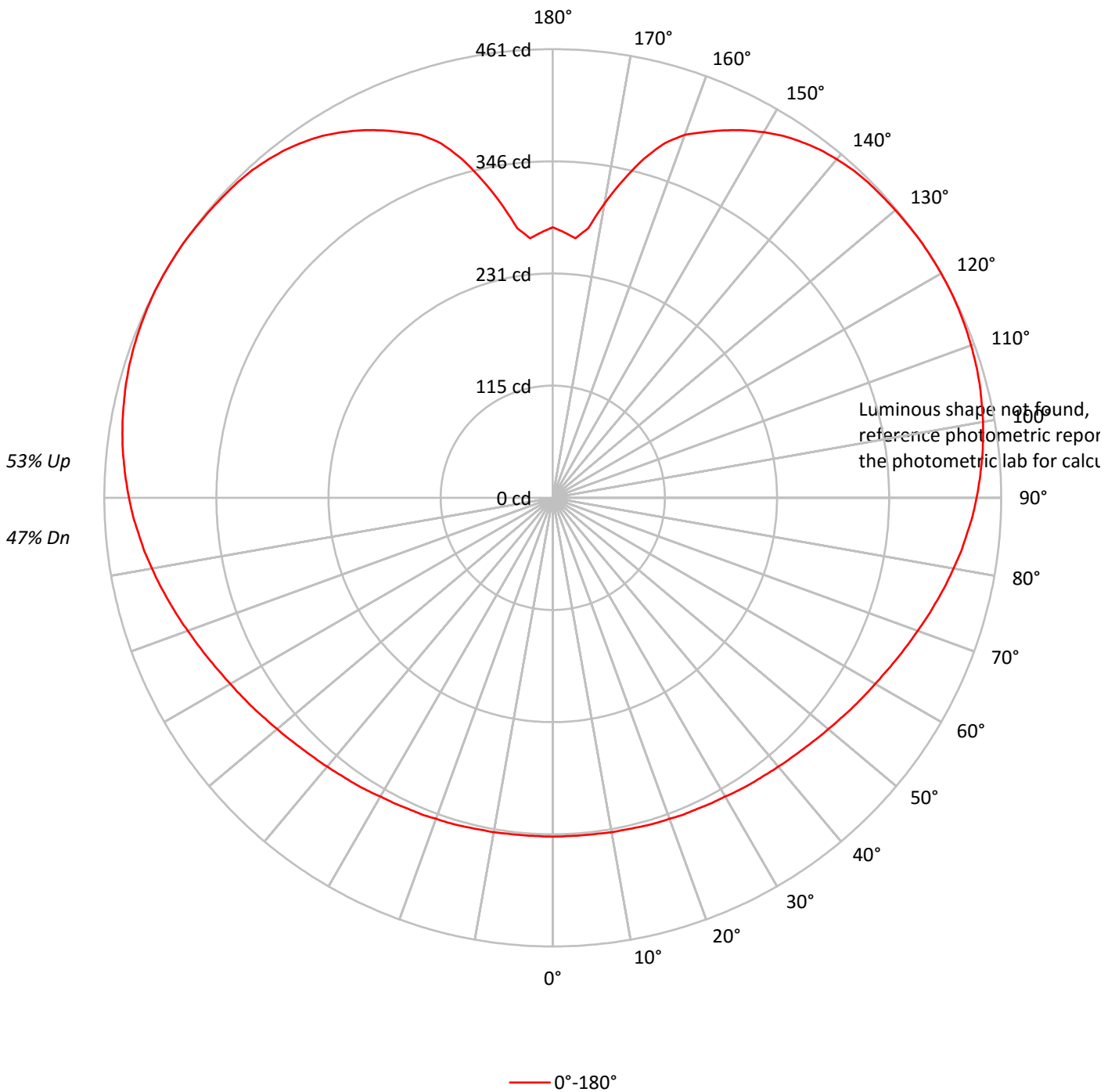
Test Method: LM-66-11  
Report Number: 19434B  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 434-SP-16-CF2/42  
Description: INTERIOR SUSPENDED LUMINAIRE WITH WHITE GLASS GLOBE LENS  
  
Light Source: TWO 42 WATT CPFL LAMPS. LUMEN RATING = 6400 LMS.  
  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 6400 (1 lamp)  
Luminaire Lumens: 5217.5 lumens  
Efficiency: 81.5%  
Efficacy: -  
Spacing Criteria (0/90/45): 1.58 / 1.58 / 1.81  
Luminous Opening: (L: 0 ' x W: -0.08 ' x H: 0.67 '  
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	87	87	87	87	80	80	80	80	66	66	66		54	54	54		43	43	43	38
1	76	71	66	62	69	64	60	57	53	50	47		42	40	38		33	31	29	25
2	67	60	53	48	61	54	49	44	44	40	36		35	32	29		27	24	22	18
3	61	52	44	39	55	47	41	35	38	33	29		30	26	23		23	20	18	14
4	55	45	37	32	50	41	34	29	33	28	24		26	22	19		20	17	14	11
5	50	40	32	27	46	36	29	24	30	24	20		23	19	16		18	15	12	9
6	46	35	28	23	42	32	26	21	26	21	17		21	17	14		16	13	10	8
7	43	32	25	20	39	29	23	18	24	19	15		19	15	12		14	11	9	7
8	39	29	22	17	36	26	20	16	21	17	13		17	13	10		13	10	8	6
9	37	26	19	15	33	24	18	14	20	15	11		16	12	9		12	9	7	5
10	34	24	17	13	31	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°	33.2	0.6	0.5
10°-20°	99.2	1.9	1.6
20°-30°	163.3	3.1	2.6
30°-40°	224.7	4.3	3.5
40°-50°	282.7	5.4	4.4
50°-60°	337.5	6.5	5.3
60°-70°	387.9	7.4	6.1
70°-80°	432.6	8.3	6.8
80°-90°	466.3	8.9	7.3
90°-100°	483.0	9.3	7.5
100°-110°	480.0	9.2	7.5
110°-120°	456.4	8.7	7.1
120°-130°	413.3	7.9	6.5
130°-140°	354.6	6.8	5.5
140°-150°	280.1	5.4	4.4
150°-160°	193.1	3.7	3.0
160°-170°	102.6	2.0	1.6
170°-180°	26.9	0.5	0.4
0°-30°	295.8	5.7	4.6
0°-40°	520.4	10.0	8.1
0°-60°	1140.6	21.9	17.8
0°-90°	2427.4	46.5	37.9
90°-120°	1419.4	27.2	22.2
90°-150°	2467.5	47.3	38.6
90°-180°	2790.0	53.5	43.6
0°-180°	5217.5	100.0	81.5

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	348	
5°	348	33
15°	350	99
25°	352	163
35°	358	225
45°	365	283
55°	376	338
65°	391	388
75°	409	433
85°	427	347
90°	436	239
95°	443	363
105°	454	480
115°	460	456
125°	461	413
135°	458	355
145°	446	280
155°	417	193
165°	360	103
175°	268	27
180°	278	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	348.2
2.5°	347.9
5°	348.0
7.5°	348.2
10°	348.9
12.5°	349.0
15°	349.8
17.5°	350.6
20°	351.0
22.5°	352.1
25°	352.5
27.5°	353.6
30°	354.4
32.5°	356.2
35°	357.6
37.5°	358.8
40°	360.7
42.5°	362.5
45°	364.7
47.5°	367.1
50°	369.8
52.5°	372.7
55°	376.0
57.5°	379.3
60°	382.7
62.5°	386.3
65°	390.6
67.5°	394.8
70°	399.3
72.5°	404.2
75°	408.8
77.5°	413.7
80°	418.3
82.5°	423.2
85°	427.3
87.5°	431.9
90°	435.7
92.5°	439.3
95°	442.8
97.5°	446.2
100°	449.1
102.5°	451.6
105°	454.1
107.5°	456.1
110°	457.7

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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	459.0
115°	460.1
117.5°	460.8
120°	461.1
122.5°	461.1
125°	461.0
127.5°	460.3
130°	459.8
132.5°	459.0
135°	458.3
137.5°	456.8
140°	454.1
142.5°	451.0
145°	446.3
147.5°	441.0
150°	433.8
152.5°	425.8
155°	416.6
157.5°	406.8
160°	397.0
162.5°	382.0
165°	360.3
167.5°	334.3
170°	307.4
172.5°	279.3
175°	267.6
177.5°	272.9
180°	278.0

(END OF REPORT)