

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: 19376A

Luminaire Tested: **433-14-SH-CF2/32**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 19376A
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 433-14-SH-CF2/32
Description: INTERIOR CEILING MOUNT LUMINAIRE WITH WHITE GLASS LENS

Light Source: TWO 32 WATT CPFL LAMPS. LUMEN RATING = 4800 LMS.

Ballast/Driver: -

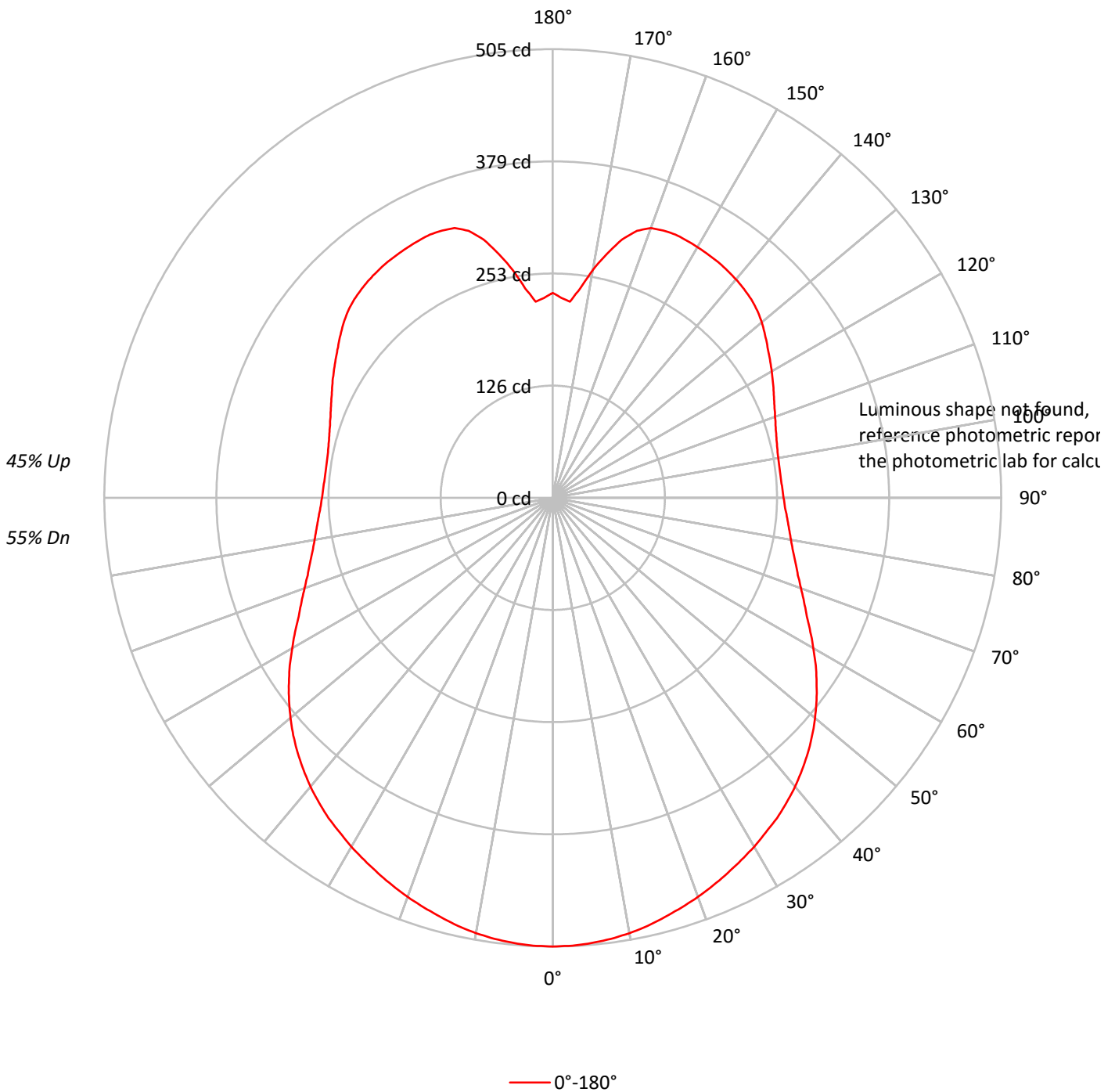
Summary

Lumens per Lamp: 4800 (1 lamp)
Luminaire Lumens: 4021.1 lumens
Efficiency: 83.8%
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





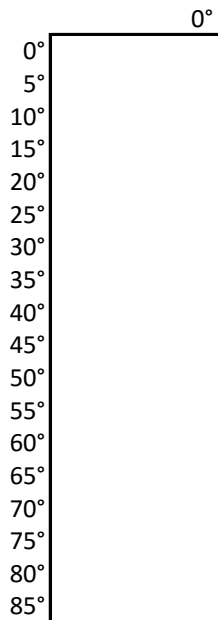
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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	25		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°	47.8	1.2	1.0
10°-20°	138.1	3.4	2.9
20°-30°	215.3	5.4	4.5
30°-40°	275.8	6.9	5.7
40°-50°	313.8	7.8	6.5
50°-60°	324.9	8.1	6.8
60°-70°	314.2	7.8	6.5
70°-80°	299.9	7.5	6.2
80°-90°	289.5	7.2	6.0
90°-100°	281.6	7.0	5.9
100°-110°	276.3	6.9	5.8
110°-120°	272.9	6.8	5.7
120°-130°	265.0	6.6	5.5
130°-140°	244.1	6.1	5.1
140°-150°	203.4	5.1	4.2
150°-160°	150.9	3.8	3.1
160°-170°	85.2	2.1	1.8
170°-180°	22.6	0.6	0.5
0°-30°	401.3	10.0	8.4
0°-40°	677.0	16.8	14.1
0°-60°	1315.7	32.7	27.4
0°-90°	2219.3	55.2	46.2
90°-120°	830.7	20.7	17.3
90°-150°	1543.2	38.4	32.1
90°-180°	1802.0	44.8	37.5
0°-180°	4021.1	100.0	83.8

CANDELA DISTRIBUTION:

	0°	Flux
0°	505	
5°	503	48
15°	488	138
25°	466	215
35°	440	276
45°	406	314
55°	363	325
65°	316	314
75°	283	300
85°	265	218
90°	260	143
95°	258	211
105°	261	276
115°	275	273
125°	295	265
135°	316	244
145°	324	203
155°	327	151
165°	301	85
175°	222	23
180°	231	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	505.1
2.5°	504.5
5°	503.1
7.5°	500.8
10°	497.5
12.5°	493.6
15°	488.4
17.5°	483.3
20°	478.1
22.5°	472.2
25°	465.9
27.5°	459.7
30°	453.5
32.5°	446.5
35°	440.1
37.5°	432.5
40°	424.5
42.5°	415.4
45°	406.2
47.5°	396.2
50°	385.5
52.5°	374.4
55°	362.7
57.5°	351.1
60°	338.8
62.5°	327.1
65°	315.7
67.5°	306.2
70°	297.4
72.5°	289.4
75°	282.9
77.5°	277.1
80°	272.3
82.5°	268.3
85°	265.0
87.5°	261.9
90°	259.9
92.5°	258.6
95°	257.6
97.5°	257.4
100°	257.7
102.5°	258.8
105°	260.7
107.5°	263.2
110°	266.4



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	270.2
115°	274.6
117.5°	279.7
120°	284.7
122.5°	289.9
125°	295.3
127.5°	301.3
130°	307.3
132.5°	312.3
135°	316.0
137.5°	318.8
140°	321.0
142.5°	322.7
145°	324.2
147.5°	325.0
150°	325.8
152.5°	326.6
155°	326.9
157.5°	325.6
160°	323.2
162.5°	315.1
165°	301.0
167.5°	281.0
170°	260.5
172.5°	237.6
175°	221.5
177.5°	225.3
180°	230.6

(END OF REPORT)