

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: 19430

Luminaire Tested: **431-CF4/26**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 19430
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 431-CF4/26
Description: INTERIOR SUSPENDED LUMINAIRE WITH WHITE INTERIOR AND WHITE PLASTIC
BOWL LENS AND HEXCEL LOUVER
Light Source: FOUR SYLVANIA 26 WATT CPFL LAMPS

CF26DT/E/IN/830. LUMEN RATING = 7200 LMS.

Ballast/Driver: -

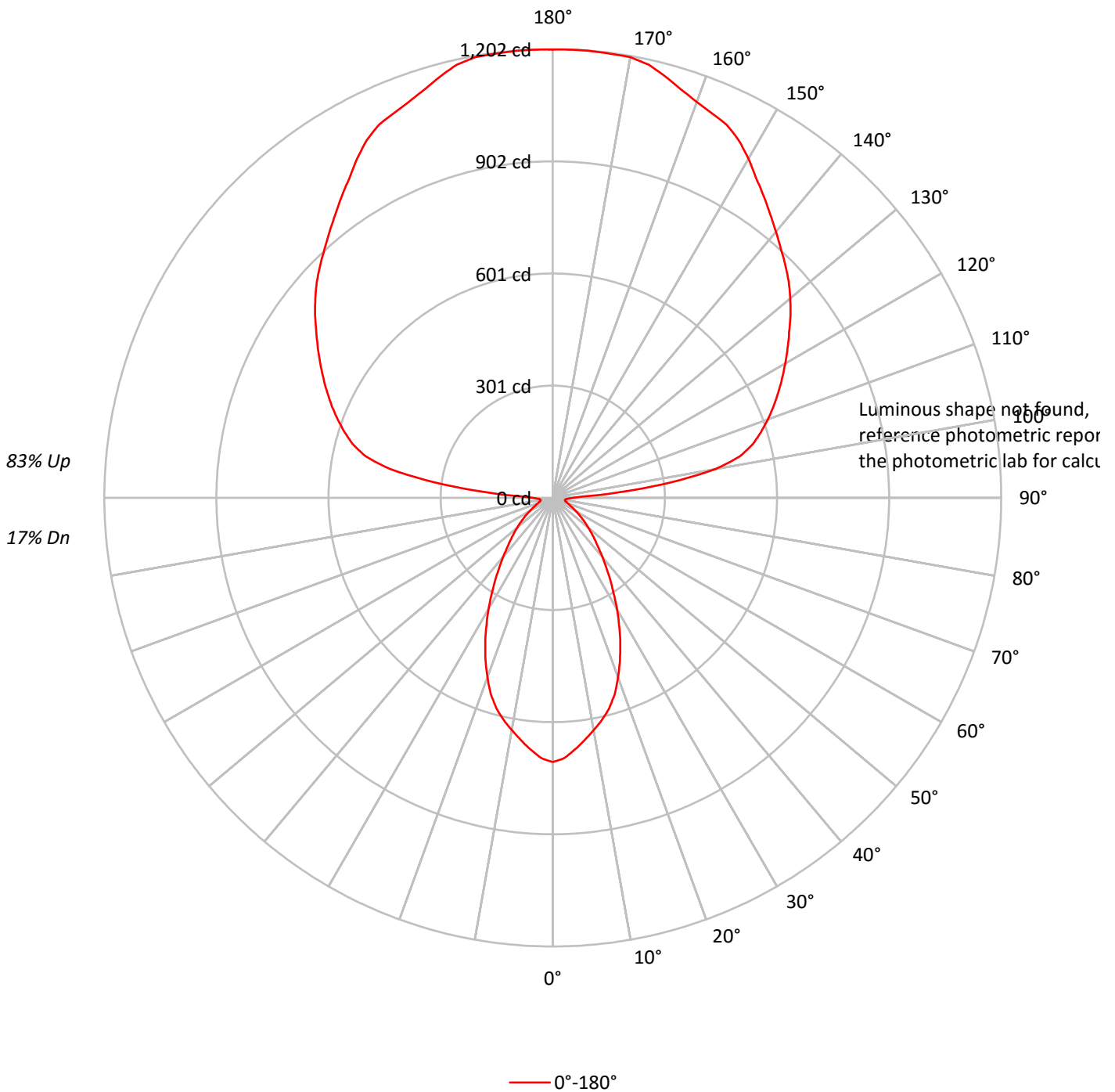
Summary

Lumens per Lamp: 7200 (1 lamp)
Luminaire Lumens: 5346.6 lumens
Efficiency: 74.3%
Efficacy: 48.2 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.91
Luminous Opening: (L: 0 ' x W: -1.17 ' x H: 0.4 '
CIE Type: Semi-Indirect

Input Watts (W): 111
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



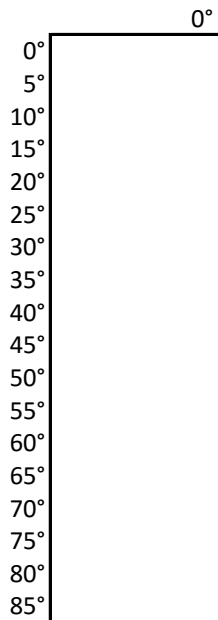


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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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	74	74	74	74	65	65	65	65	48	48	48	33	33	33	20	20	20	13
1	67	64	62	59	59	57	54	52	42	41	40	29	29	28	17	17	17	11
2	61	56	52	49	54	50	46	43	37	35	33	26	25	24	16	15	14	10
3	56	50	45	41	49	44	40	37	33	31	28	23	22	20	14	13	13	9
4	52	44	39	35	45	39	35	31	30	27	24	21	19	18	13	12	11	8
5	47	39	34	30	42	35	30	27	27	23	21	19	17	15	12	11	10	7
6	44	35	30	26	38	31	27	23	24	21	18	17	15	14	11	10	9	6
7	40	32	26	23	35	28	24	20	22	19	16	16	14	12	10	9	8	6
8	37	29	24	20	33	26	21	18	20	17	14	14	12	11	9	8	7	5
9	35	26	21	18	31	24	19	16	18	15	13	13	11	10	9	7	7	5
10	32	24	19	16	29	22	17	14	17	14	12	12	10	9	8	7	6	5

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	63.2	1.2	0.9
10°-20°	162.5	3.0	2.3
20°-30°	195.8	3.7	2.7
30°-40°	168.3	3.1	2.3
40°-50°	124.5	2.3	1.7
50°-60°	86.0	1.6	1.2
60°-70°	54.6	1.0	0.8
70°-80°	38.1	0.7	0.5
80°-90°	42.7	0.8	0.6
90°-100°	229.0	4.3	3.2
100°-110°	576.4	10.8	8.0
110°-120°	661.1	12.4	9.2
120°-130°	693.9	13.0	9.6
130°-140°	681.4	12.7	9.5
140°-150°	618.5	11.6	8.6
150°-160°	506.5	9.5	7.0
160°-170°	329.6	6.2	4.6
170°-180°	114.6	2.1	1.6
0°-30°	421.5	7.9	5.9
0°-40°	589.8	11.0	8.2
0°-60°	800.2	15.0	11.1
0°-90°	935.6	17.5	13.0
90°-120°	1466.5	27.4	20.4
90°-150°	3460.3	64.7	48.1
90°-180°	4411.0	82.5	61.3
0°-180°	5346.6	100.0	74.3

CANDELA DISTRIBUTION:

	0°	Flux
0°	708	
5°	677	63
15°	584	162
25°	428	196
35°	268	168
45°	160	124
55°	95	86
65°	54	55
75°	35	38
85°	37	30
90°	53	31
95°	191	211
105°	555	576
115°	667	661
125°	773	694
135°	881	681
145°	986	619
155°	1103	507
165°	1168	330
175°	1201	115
180°	1201	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	707.7
2.5°	698.2
5°	677.4
7.5°	654.8
10°	631.8
12.5°	609.4
15°	584.0
17.5°	551.4
20°	512.0
22.5°	470.5
25°	428.3
27.5°	384.8
30°	344.4
32.5°	303.5
35°	268.0
37.5°	234.9
40°	206.9
42.5°	181.0
45°	159.5
47.5°	141.2
50°	124.2
52.5°	109.5
55°	95.1
57.5°	82.8
60°	71.6
62.5°	62.1
65°	54.0
67.5°	47.8
70°	42.5
72.5°	38.1
75°	35.2
77.5°	33.2
80°	32.8
82.5°	34.1
85°	36.9
87.5°	42.3
90°	53.4
92.5°	79.2
95°	191.1
97.5°	323.3
100°	442.9
102.5°	514.1
105°	554.7
107.5°	585.0
110°	613.1



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	640.7
115°	666.7
117.5°	693.0
120°	719.3
122.5°	746.4
125°	773.4
127.5°	803.1
130°	830.9
132.5°	857.6
135°	881.4
137.5°	905.0
140°	930.6
142.5°	957.1
145°	986.0
147.5°	1014.7
150°	1048.9
152.5°	1079.9
155°	1102.7
157.5°	1115.1
160°	1128.4
162.5°	1146.1
165°	1167.9
167.5°	1188.6
170°	1198.6
172.5°	1199.7
175°	1201.2
177.5°	1201.8
180°	1200.9

(END OF REPORT)