

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: 19856

Luminaire Tested: **248-EL-20-CF2/26**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 19856
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 248-EL-20-CF2/26
Description: INTERIOR CEILING MOUNT LUMINAIRE WITH WHITE INTERIOR AND WHITE
PLASTIC BOWL LENS
Light Source: TWO SYLVANIA 26 WATT CPFL LAMPS

CF26DD/E/841. LUMEN RATING = 3600 LMS.

Ballast/Driver: -

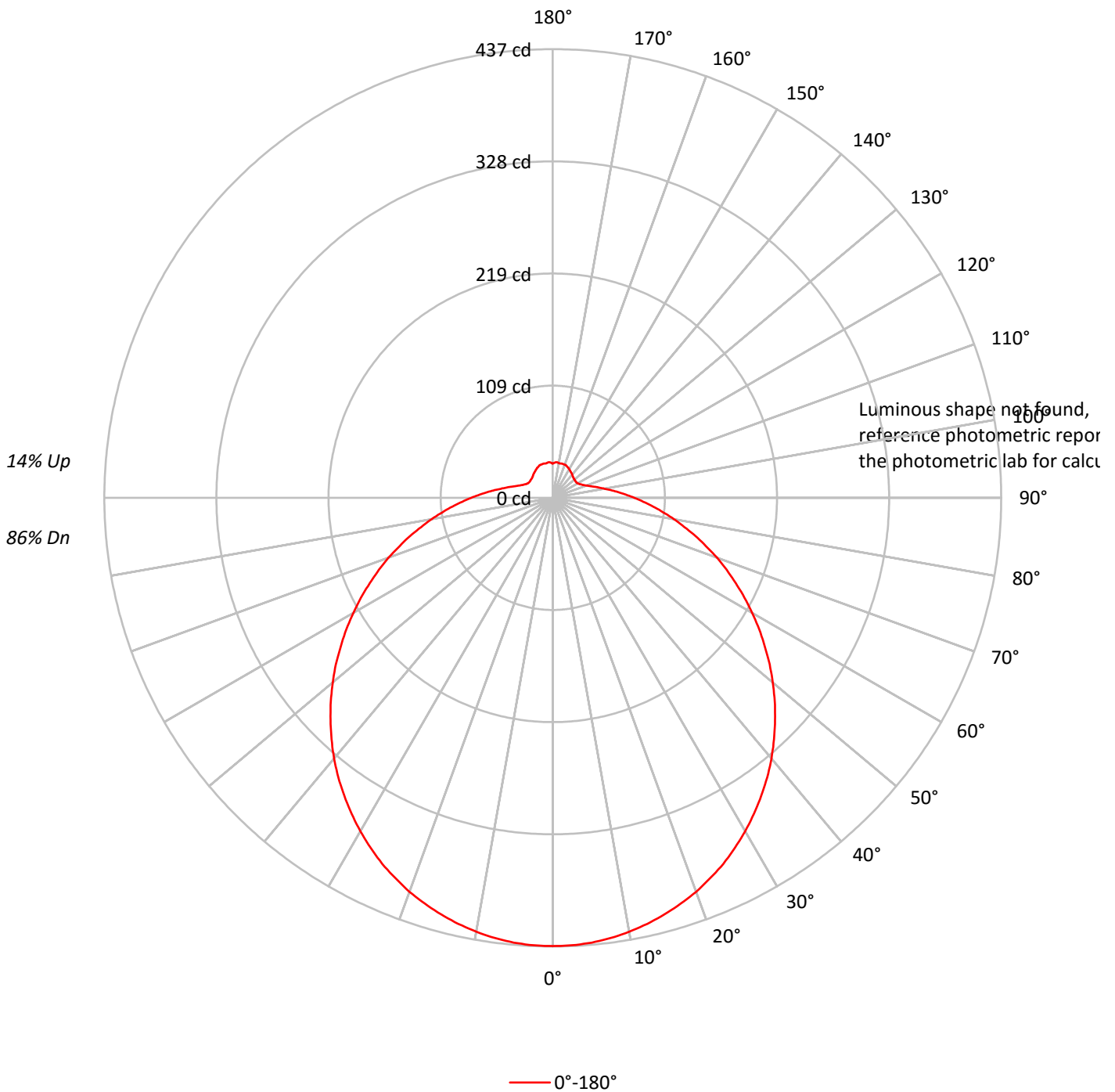
Summary

Lumens per Lamp: 3600 (1 lamp)
Luminaire Lumens: 1720.7 lumens
Efficiency: 47.8%
Efficacy: 38.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.41
Luminous Opening: (L: 0' x W: -0.08' x H: 0.29'
CIE Type: Semi-Direct

Input Watts (W): 45
Input Voltage (V): NR
Input Current (A_{in}): 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	55	55	55	55	53	53	53	53	49	49	49	46	46	46	43	43	43	41
1	49	47	44	42	47	45	43	41	42	40	38	39	37	36	36	35	34	32
2	44	40	36	33	43	39	35	32	36	33	31	33	31	29	31	29	27	26
3	40	35	31	27	39	34	30	27	31	28	25	29	26	24	27	25	23	21
4	37	31	26	23	35	30	26	22	28	24	21	26	23	20	24	21	19	18
5	34	27	23	20	32	26	22	19	25	21	18	23	20	17	21	19	17	15
6	31	24	20	17	30	24	20	17	22	19	16	21	18	15	19	17	15	13
7	29	22	18	15	28	21	17	15	20	17	14	19	16	13	18	15	13	12
8	27	20	16	13	26	20	16	13	18	15	12	17	14	12	16	13	11	10
9	25	18	14	12	24	18	14	12	17	13	11	16	13	11	15	12	10	9
10	23	17	13	11	22	16	13	10	16	12	10	15	12	10	14	11	9	8

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	41.3	2.4	1.1
10°-20°	118.7	6.9	3.3
20°-30°	181.3	10.5	5.0
30°-40°	221.8	12.9	6.2
40°-50°	236.5	13.7	6.6
50°-60°	225.9	13.1	6.3
60°-70°	195.2	11.3	5.4
70°-80°	152.4	8.9	4.2
80°-90°	107.6	6.3	3.0
90°-100°	70.3	4.1	2.0
100°-110°	44.7	2.6	1.2
110°-120°	30.7	1.8	0.9
120°-130°	24.8	1.4	0.7
130°-140°	21.9	1.3	0.6
140°-150°	19.3	1.1	0.5
150°-160°	15.4	0.9	0.4
160°-170°	9.7	0.6	0.3
170°-180°	3.3	0.2	0.1
0°-30°	341.3	19.8	9.5
0°-40°	563.1	32.7	15.6
0°-60°	1025.4	59.6	28.5
0°-90°	1480.6	86.0	41.1
90°-120°	145.7	8.5	4.0
90°-150°	211.6	12.3	5.9
90°-180°	240.0	13.9	6.7
0°-180°	1720.7	100.0	47.8

CANDELA DISTRIBUTION:

	0°	Flux
0°	437	
5°	435	41
15°	420	119
25°	393	181
35°	354	222
45°	306	237
55°	252	226
65°	197	195
75°	144	152
85°	98	85
90°	80	44
95°	64	50
105°	42	45
115°	31	31
125°	27	25
135°	28	22
145°	31	19
155°	33	15
165°	35	10
175°	35	3
180°	33	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	436.6
2.5°	436.3
5°	434.9
7.5°	432.5
10°	429.2
12.5°	425.1
15°	420.2
17.5°	414.5
20°	408.4
22.5°	401.0
25°	393.3
27.5°	384.4
30°	375.0
32.5°	364.9
35°	354.3
37.5°	343.2
40°	331.5
42.5°	319.1
45°	306.3
47.5°	293.4
50°	279.8
52.5°	266.4
55°	252.1
57.5°	238.5
60°	224.4
62.5°	210.7
65°	196.6
67.5°	183.3
70°	170.1
72.5°	156.5
75°	144.0
77.5°	131.4
80°	119.8
82.5°	108.5
85°	98.2
87.5°	88.4
90°	79.5
92.5°	71.3
95°	63.7
97.5°	57.1
100°	51.2
102.5°	46.1
105°	41.8
107.5°	37.9
110°	34.9

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CANDELA DISTRIBUTION (continued):

	0°
112.5°	32.4
115°	30.6
117.5°	29.1
120°	28.1
122.5°	27.6
125°	27.4
127.5°	27.5
130°	27.7
132.5°	27.7
135°	28.2
137.5°	28.7
140°	29.5
142.5°	30.1
145°	30.7
147.5°	31.4
150°	32.1
152.5°	32.9
155°	33.4
157.5°	34.2
160°	34.3
162.5°	34.3
165°	34.6
167.5°	34.2
170°	34.2
172.5°	34.9
175°	34.9
177.5°	34.1
180°	33.4

(END OF REPORT)