

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: 19382A

Luminaire Tested: **233-12-SP-CF1/32**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 19382A
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 233-12-SP-CF1/32
Description: INTERIOR CEILING MOUNT LUMINAIRE WITH WHITE GLASS LENS

Light Source: ONE 32 WATT CPFL LAMP. LUMEN RATING = 2400 LMS.

Ballast/Driver: -

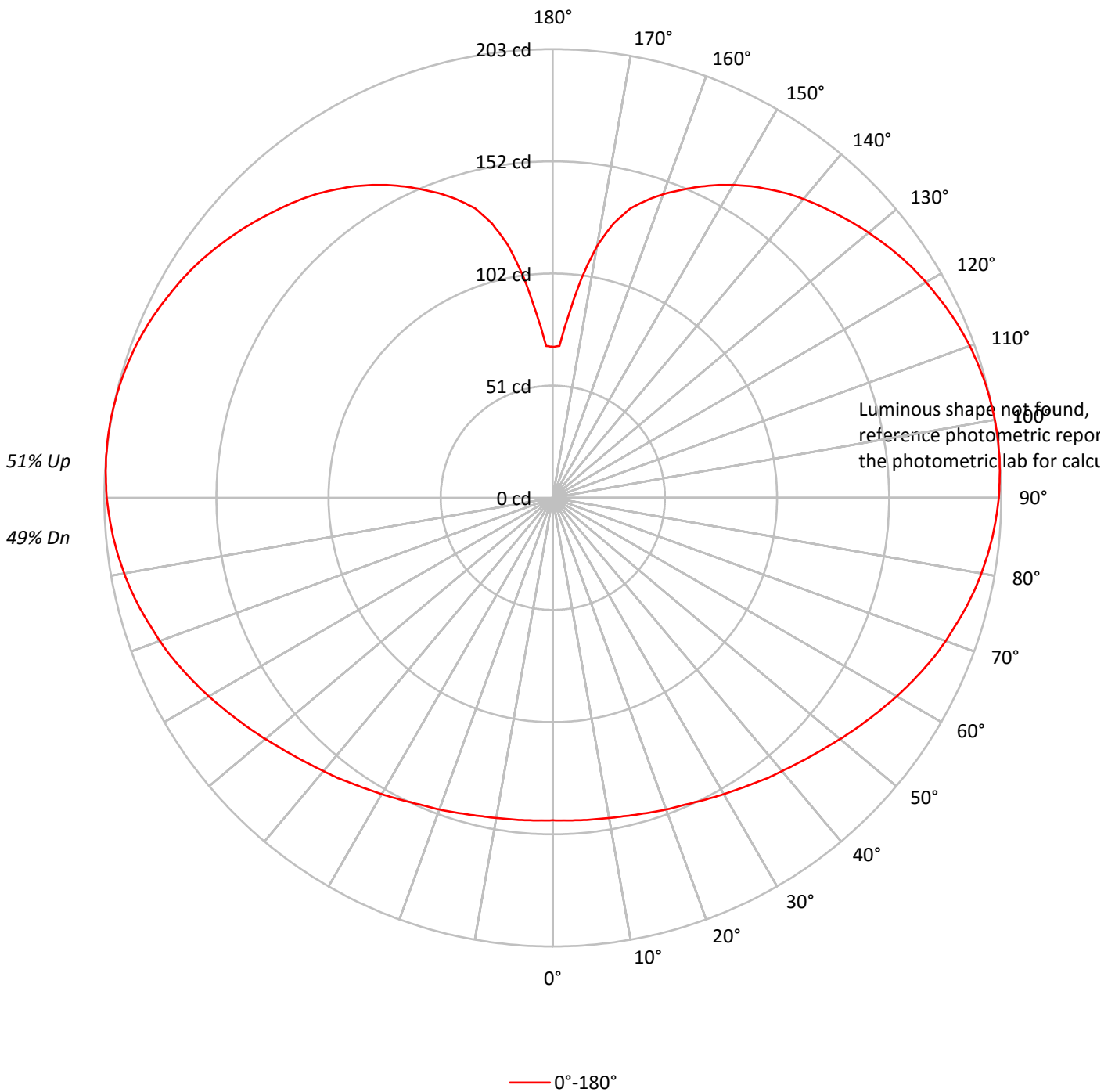
Summary

Lumens per Lamp: 2400 (1 lamp)
Luminaire Lumens: 2287.4 lumens
Efficiency: 95.3%
Efficacy: -
Spacing Criteria (0/90/45): 1.67 / 1.67 / 1.91
Luminous Opening: (L: 0 ' x W: -0.08 ' x H: 0.5 '
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





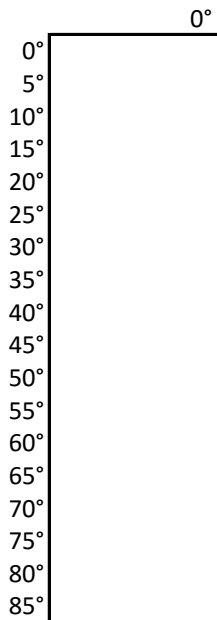
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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	102	102	102	102	94	94	94	94	79	79	79	65	65	65	52	52	52	47
1	88	82	77	72	81	75	71	66	62	59	55	50	48	45	39	37	35	30
2	79	70	62	56	72	64	57	51	52	47	43	42	38	34	32	29	27	22
3	71	60	51	44	64	55	47	41	45	39	34	36	31	27	27	24	21	17
4	64	52	43	37	58	48	40	34	39	33	28	31	26	22	24	20	17	13
5	59	46	37	31	53	42	34	28	35	28	23	27	23	19	21	17	14	11
6	54	41	32	26	49	37	30	24	31	25	20	25	20	16	19	15	12	9
7	50	37	28	22	45	34	26	21	28	22	17	22	17	14	17	13	10	8
8	46	33	25	19	42	30	23	18	25	19	15	20	15	12	16	12	9	7
9	43	30	22	17	39	28	21	16	23	17	13	18	14	11	14	11	8	6
10	40	27	20	15	36	25	18	14	21	15	12	17	13	9	13	10	7	5

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	14.0	0.6	0.6
10°-20°	42.1	1.8	1.8
20°-30°	70.5	3.1	2.9
30°-40°	99.4	4.3	4.1
40°-50°	128.2	5.6	5.3
50°-60°	156.8	6.9	6.5
60°-70°	183.3	8.0	7.6
70°-80°	204.5	8.9	8.5
80°-90°	217.9	9.5	9.1
90°-100°	221.3	9.7	9.2
100°-110°	214.0	9.4	8.9
110°-120°	196.7	8.6	8.2
120°-130°	171.5	7.5	7.1
130°-140°	140.8	6.2	5.9
140°-150°	107.2	4.7	4.5
150°-160°	72.0	3.1	3.0
160°-170°	38.3	1.7	1.6
170°-180°	9.0	0.4	0.4
0°-30°	126.6	5.5	5.3
0°-40°	226.0	9.9	9.4
0°-60°	510.9	22.3	21.3
0°-90°	1116.6	48.8	46.5
90°-120°	632.0	27.6	26.3
90°-150°	1051.5	46.0	43.8
90°-180°	1171.0	51.2	48.8
0°-180°	2287.4	100.0	95.3

CANDELA DISTRIBUTION:

	0°	Flux
0°	146	
5°	146	14
15°	148	42
25°	152	71
35°	158	99
45°	165	128
55°	175	157
65°	185	183
75°	193	205
85°	200	163
90°	202	111
95°	203	166
105°	202	214
115°	198	197
125°	191	172
135°	182	141
145°	170	107
155°	155	72
165°	136	38
175°	83	9
180°	68	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	145.9
2.5°	146.1
5°	146.4
7.5°	146.7
10°	147.1
12.5°	147.6
15°	148.3
17.5°	149.1
20°	150.1
22.5°	150.9
25°	152.0
27.5°	153.4
30°	154.8
32.5°	156.3
35°	157.9
37.5°	159.8
40°	161.4
42.5°	163.3
45°	165.3
47.5°	167.4
50°	169.8
52.5°	172.2
55°	174.6
57.5°	177.1
60°	179.7
62.5°	182.2
65°	184.7
67.5°	187.1
70°	189.3
72.5°	191.3
75°	193.4
77.5°	195.3
80°	197.0
82.5°	198.5
85°	199.8
87.5°	200.9
90°	201.9
92.5°	202.5
95°	203.0
97.5°	203.2
100°	203.2
102.5°	202.9
105°	202.5
107.5°	201.7
110°	200.9



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	199.7
115°	198.3
117.5°	196.7
120°	195.1
122.5°	193.3
125°	191.2
127.5°	189.0
130°	186.6
132.5°	184.2
135°	181.6
137.5°	179.1
140°	176.5
142.5°	173.7
145°	170.4
147.5°	167.2
150°	163.4
152.5°	159.5
155°	155.2
157.5°	150.7
160°	146.2
162.5°	141.1
165°	135.5
167.5°	127.1
170°	115.8
172.5°	100.4
175°	83.0
177.5°	68.8
180°	68.3

(END OF REPORT)