

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: 19374B

Luminaire Tested: **233-14-SH-CF1/42**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 19374B
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 233-14-SH-CF1/42
Description: INTERIOR CEILING MOUNT LUMINAIRE WITH WHITE GLASS LENS

Light Source: ONE 42 WATT CPFL LAMP. LUMEN RATING = 3200 LMS.

Ballast/Driver: -

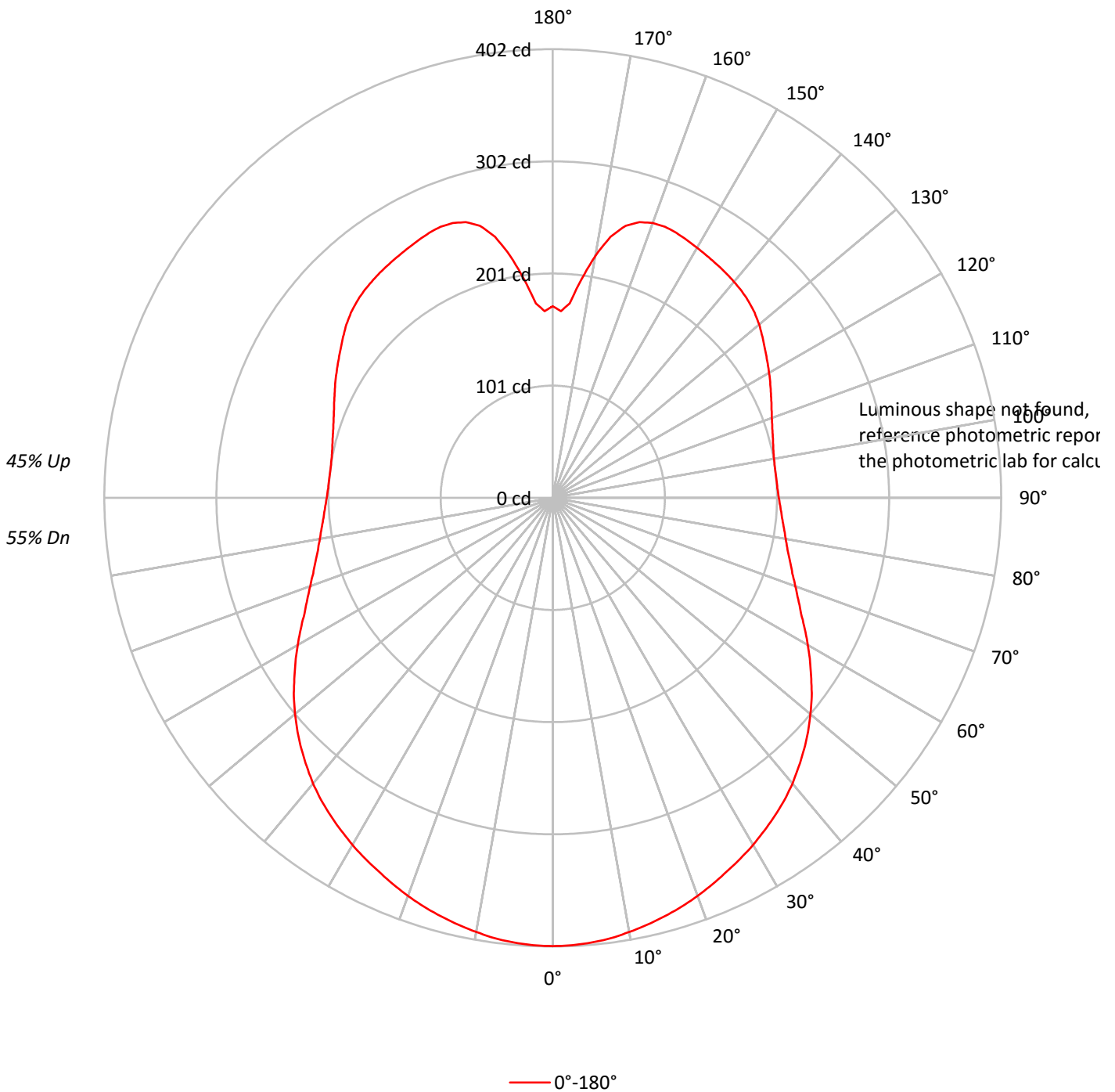
Summary

Lumens per Lamp: 3200 (1 lamp)
Luminaire Lumens: 3160.8 lumens
Efficiency: 98.8%
Efficacy: -
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.5
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





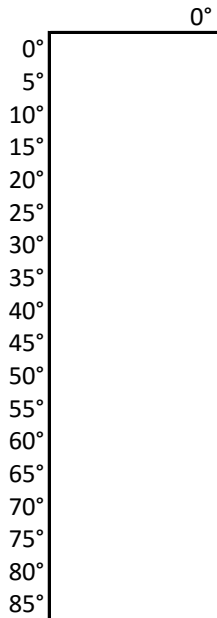
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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	107	107	107	107	99	99	99	99	85	85	85		72	72	72		60	60	60	54
1	94	89	84	79	87	82	78	74	70	66	63		58	56	53		48	46	44	39
2	85	76	69	62	78	70	64	58	60	54	50		50	46	42		41	38	35	31
3	77	66	57	51	71	61	53	47	52	46	41		43	39	35		35	32	29	25
4	70	58	49	42	64	53	46	39	45	39	34		38	33	29		31	27	24	20
5	64	51	42	36	59	47	39	33	40	34	29		34	29	25		28	24	21	17
6	59	46	37	31	54	42	34	29	36	30	25		30	25	21		25	21	18	15
7	54	41	33	27	50	38	30	25	33	26	22		27	22	19		23	19	16	13
8	50	37	29	23	46	35	27	22	30	24	19		25	20	16		21	17	14	11
9	47	34	26	21	43	32	24	19	27	21	17		23	18	15		19	15	12	10
10	44	31	23	18	40	29	22	17	25	19	15		21	16	13		18	14	11	9

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	38.0	1.2	1.2
10°-20°	109.7	3.5	3.4
20°-30°	170.7	5.4	5.3
30°-40°	217.8	6.9	6.8
40°-50°	246.2	7.8	7.7
50°-60°	253.5	8.0	7.9
60°-70°	244.5	7.7	7.6
70°-80°	233.4	7.4	7.3
80°-90°	225.5	7.1	7.0
90°-100°	219.7	7.0	6.9
100°-110°	216.4	6.8	6.8
110°-120°	214.4	6.8	6.7
120°-130°	208.4	6.6	6.5
130°-140°	191.9	6.1	6.0
140°-150°	160.6	5.1	5.0
150°-160°	120.9	3.8	3.8
160°-170°	70.9	2.2	2.2
170°-180°	18.3	0.6	0.6
0°-30°	318.5	10.1	10.0
0°-40°	536.2	17.0	16.8
0°-60°	1035.9	32.8	32.4
0°-90°	1739.3	55.0	54.4
90°-120°	650.4	20.6	20.3
90°-150°	1211.3	38.3	37.9
90°-180°	1421.0	45.0	44.4
0°-180°	3160.8	100.0	98.8

CANDELA DISTRIBUTION:

	0°	Flux
0°	402	
5°	400	38
15°	388	110
25°	369	171
35°	347	218
45°	319	246
55°	283	253
65°	246	244
75°	220	233
85°	206	170
90°	203	111
95°	201	164
105°	204	216
115°	216	214
125°	232	208
135°	248	192
145°	256	161
155°	262	121
165°	252	71
175°	175	18
180°	172	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	401.7
2.5°	401.3
5°	400.0
7.5°	398.1
10°	395.0
12.5°	391.8
15°	388.1
17.5°	384.1
20°	379.6
22.5°	374.6
25°	369.3
27.5°	364.4
30°	359.1
32.5°	353.3
35°	347.4
37.5°	341.2
40°	334.2
42.5°	326.5
45°	318.6
47.5°	310.3
50°	301.5
52.5°	292.6
55°	282.8
57.5°	273.5
60°	264.0
62.5°	254.7
65°	245.6
67.5°	238.1
70°	231.4
72.5°	225.2
75°	220.1
77.5°	215.6
80°	212.0
82.5°	209.0
85°	206.3
87.5°	204.3
90°	202.6
92.5°	201.5
95°	201.0
97.5°	200.9
100°	201.3
102.5°	202.4
105°	204.3
107.5°	206.3
110°	209.0

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CANDELA DISTRIBUTION (continued):

	0°
112.5°	212.2
115°	215.9
117.5°	219.9
120°	223.9
122.5°	227.9
125°	232.2
127.5°	236.9
130°	241.5
132.5°	245.4
135°	248.5
137.5°	250.9
140°	252.7
142.5°	254.4
145°	255.7
147.5°	257.2
150°	258.6
152.5°	260.3
155°	262.0
157.5°	262.9
160°	262.0
162.5°	259.0
165°	252.4
167.5°	239.5
170°	220.2
172.5°	197.3
175°	174.8
177.5°	167.4
180°	171.7

(END OF REPORT)