

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: 17159

Luminaire Tested: **420-RP**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 17159
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 420-RP
Description: RECESSED LUMINAIRE WITH SUSPENDED BOWL WITH SEMI-SPECULAR
REFLECTOR AND WHITE MINI CELL LOUVER
Light Source: TWO PHILIPS 42 WATT CPFL LAMPS

PL-T 42W/41/4P. LUMEN RATING = 6400 LMS.

Ballast/Driver: -

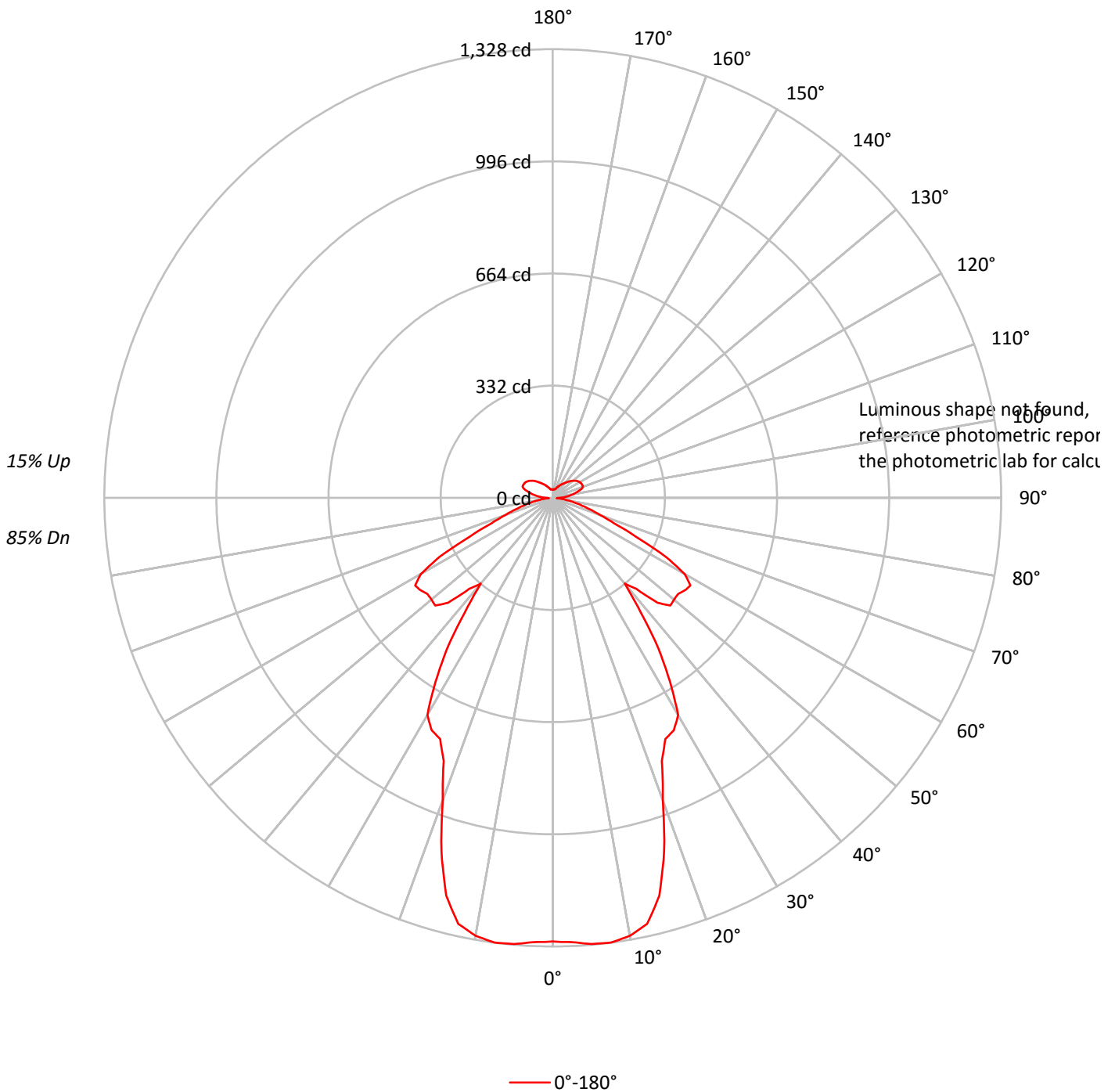
Summary

Lumens per Lamp: 6400 (1 lamp)
Luminaire Lumens: 2732.7 lumens
Efficiency: 42.7%
Efficacy: 31.1 lumens/watt
Spacing Criteria (0/90/45): 0.84 / 0.84 / 0.96
Luminous Opening: (L: 0 ' x W: -1.08 ' x H: 0 '
CIE Type: Semi-Direct

Input Watts (W): 88
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

TEST NUMBER: 17159
CATALOG NUMBER: 420-RP

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	49	49	49	49	47	47	47	47	44	44	44	41	41	41	38	38	38	36
1	45	44	42	40	44	42	40	39	39	38	37	36	35	34	34	33	32	31
2	42	38	36	33	40	37	35	33	34	32	31	32	31	29	30	29	28	26
3	38	34	31	28	36	33	30	27	31	28	26	29	27	25	27	25	24	23
4	35	30	27	24	34	29	26	24	27	25	23	26	23	22	24	22	21	20
5	32	27	24	21	31	26	23	21	25	22	20	23	21	19	22	20	18	17
6	30	25	21	18	29	24	21	18	22	20	18	21	19	17	20	18	16	15
7	28	22	19	17	27	22	19	16	21	18	16	19	17	15	18	16	15	14
8	26	21	17	15	25	20	17	15	19	16	14	18	16	14	17	15	13	12
9	24	19	16	14	23	19	15	13	18	15	13	17	14	13	16	14	12	11
10	23	18	15	12	22	17	14	12	16	14	12	16	13	12	15	13	11	10

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: 17159
 CATALOG NUMBER: 420-RP

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	126.3	4.6	2.0
10°-20°	330.6	12.1	5.2
20°-30°	374.2	13.7	5.8
30°-40°	333.6	12.2	5.2
40°-50°	326.4	11.9	5.1
50°-60°	423.5	15.5	6.6
60°-70°	281.4	10.3	4.4
70°-80°	98.6	3.6	1.5
80°-90°	26.2	1.0	0.4
90°-100°	44.3	1.6	0.7
100°-110°	84.0	3.1	1.3
110°-120°	94.0	3.4	1.5
120°-130°	77.7	2.8	1.2
130°-140°	53.2	1.9	0.8
140°-150°	31.6	1.2	0.5
150°-160°	16.9	0.6	0.3
160°-170°	7.7	0.3	0.1
170°-180°	2.4	0.1	0.0
0°-30°	831.1	30.4	13.0
0°-40°	1164.7	42.6	18.2
0°-60°	1914.7	70.1	29.9
0°-90°	2320.8	84.9	36.3
90°-120°	222.3	8.1	3.5
90°-150°	384.8	14.1	6.0
90°-180°	412.0	15.1	6.4
0°-180°	2732.7	100.0	42.7

CANDELA DISTRIBUTION:

	0°	Flux
0°	1313	
5°	1326	126
15°	1219	331
25°	788	374
35°	546	334
45°	439	326
55°	478	424
65°	269	281
75°	90	99
85°	18	22
90°	20	11
95°	41	37
105°	80	84
115°	95	94
125°	87	78
135°	68	53
145°	50	32
155°	36	17
165°	26	8
175°	26	2
180°	24	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1313.4
2.5°	1316.3
5°	1325.9
7.5°	1327.5
10°	1316.1
12.5°	1291.6
15°	1218.8
17.5°	1096.9
20°	952.8
22.5°	843.3
25°	788.2
27.5°	775.8
30°	742.5
32.5°	646.2
35°	545.9
37.5°	428.1
40°	331.2
42.5°	365.6
45°	439.1
47.5°	472.0
50°	468.9
52.5°	467.4
55°	477.7
57.5°	483.2
60°	450.8
62.5°	377.0
65°	269.0
67.5°	195.5
70°	150.9
72.5°	116.7
75°	90.4
77.5°	67.5
80°	48.5
82.5°	31.2
85°	18.4
87.5°	12.4
90°	19.7
92.5°	30.7
95°	41.0
97.5°	50.7
100°	60.7
102.5°	70.2
105°	80.5
107.5°	89.6
110°	95.2



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	95.6
115°	95.1
117.5°	94.2
120°	92.6
122.5°	90.2
125°	87.0
127.5°	83.0
130°	78.8
132.5°	73.9
135°	68.2
137.5°	62.9
140°	58.0
142.5°	53.7
145°	49.7
147.5°	46.3
150°	42.8
152.5°	39.4
155°	35.8
157.5°	33.0
160°	30.5
162.5°	28.1
165°	26.1
167.5°	24.9
170°	25.1
172.5°	26.2
175°	25.8
177.5°	24.3
180°	24.5

(END OF REPORT)