

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: 19435

Luminaire Tested: **441-16-CF1/42**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 19435
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 441-16-CF1/42
Description: INTERIOR SUSPENDED LUMINAIRE WITH WHITE PLASTIC GLOBE LENS

Light Source: ONE SYLVANIA 42 WATT CPFL LAMP

CF42DT/E/IN/841. LUMEN RATING = 3200 LMS.

Ballast/Driver: -

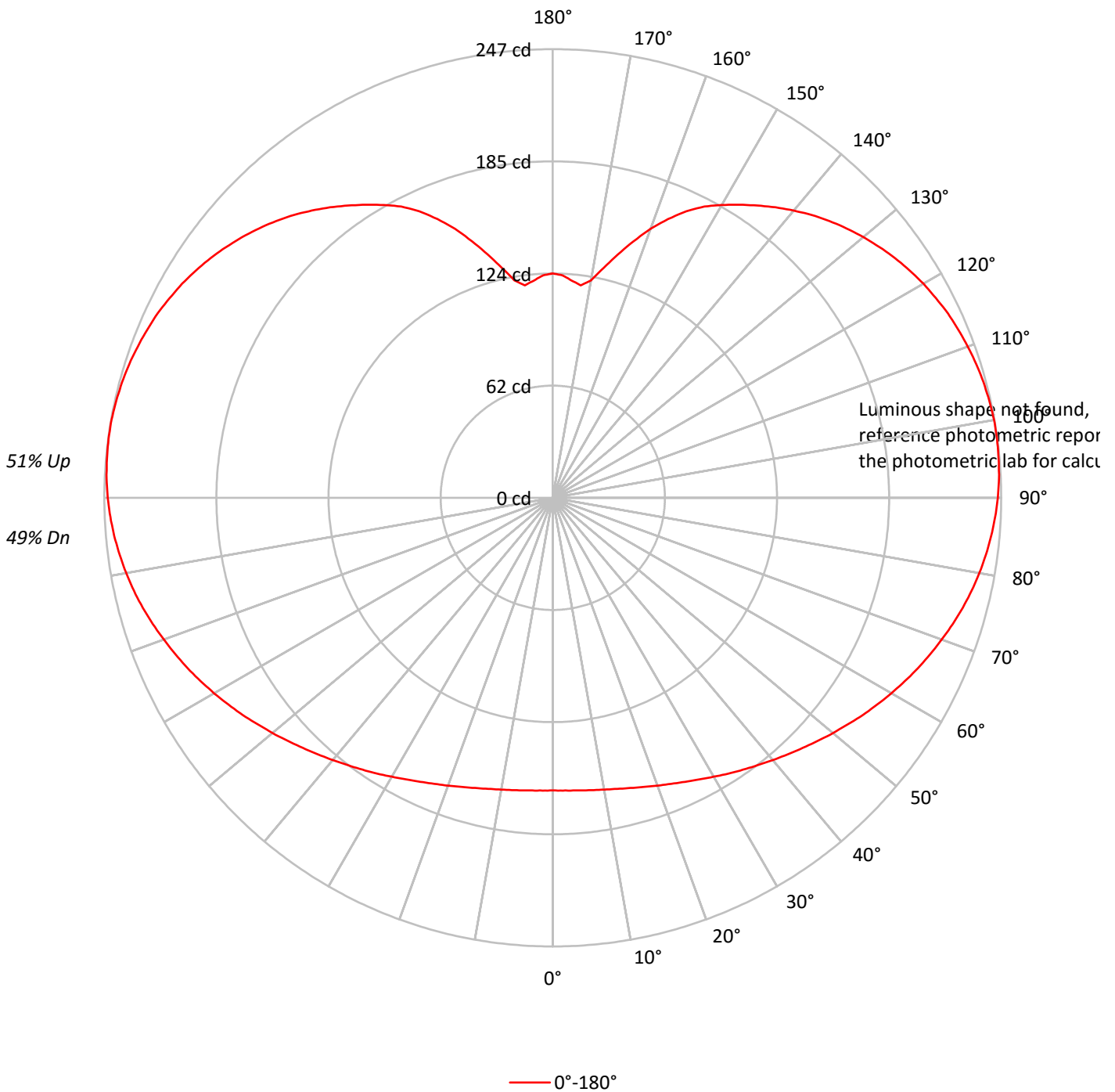
Summary

Lumens per Lamp: 3200 (1 lamp)
Luminaire Lumens: 2722.4 lumens
Efficiency: 85.1%
Efficacy: 63.3 lumens/watt
Spacing Criteria (0/90/45): 1.76 / 1.76 / 1.99
Luminous Opening: (L: 0' x W: -0.08' x H: 0.67'
CIE Type: General Diffuse

Input Watts (W): 43
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: 19435
CATALOG NUMBER: 441-16-CF1/42

Luminous Intensity Polar Plot



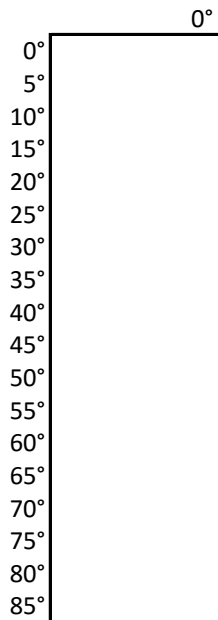


TEST NUMBER: 19435
 CATALOG NUMBER: 441-16-CF1/42

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	91	91	91	91	84	84	84	84	70	70	70		58	58	58		47	47	47	41
1	79	73	69	64	72	67	63	59	56	52	49		45	42	40		35	33	31	27
2	70	62	55	49	64	57	51	45	46	42	38		37	34	31		29	26	24	19
3	63	53	46	39	57	49	42	36	40	35	30		32	28	24		24	21	18	15
4	57	46	38	32	52	42	35	30	35	29	25		28	23	20		21	18	15	12
5	52	41	33	27	47	37	30	25	31	25	21		24	20	16		18	15	12	9
6	48	36	29	23	43	33	26	21	27	22	18		22	17	14		17	13	11	8
7	44	33	25	20	40	30	23	18	25	19	15		20	15	12		15	12	9	7
8	41	29	22	17	37	27	20	16	22	17	13		18	14	11		14	10	8	6
9	38	27	20	15	34	24	18	14	20	15	12		16	12	9		13	9	7	5
10	35	24	18	13	32	22	16	12	19	14	10		15	11	8		12	8	6	4

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: 19435
 CATALOG NUMBER: 441-16-CF1/42

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	15.5	0.6	0.5
10°-20°	47.0	1.7	1.5
20°-30°	80.0	2.9	2.5
30°-40°	115.0	4.2	3.6
40°-50°	151.0	5.5	4.7
50°-60°	187.1	6.9	5.8
60°-70°	220.2	8.1	6.9
70°-80°	247.2	9.1	7.7
80°-90°	264.3	9.7	8.3
90°-100°	268.7	9.9	8.4
100°-110°	259.6	9.5	8.1
110°-120°	238.1	8.7	7.4
120°-130°	206.3	7.6	6.4
130°-140°	166.9	6.1	5.2
140°-150°	123.6	4.5	3.9
150°-160°	80.6	3.0	2.5
160°-170°	39.9	1.5	1.2
170°-180°	11.5	0.4	0.4
0°-30°	142.5	5.2	4.5
0°-40°	257.5	9.5	8.0
0°-60°	595.5	21.9	18.6
0°-90°	1327.2	48.8	41.5
90°-120°	766.5	28.2	24.0
90°-150°	1263.3	46.4	39.5
90°-180°	1395.0	51.2	43.6
0°-180°	2722.4	100.0	85.1

CANDELA DISTRIBUTION:

	0°	Flux
0°	161	
5°	162	15
15°	165	47
25°	172	80
35°	183	115
45°	195	151
55°	208	187
65°	222	220
75°	234	247
85°	242	197
90°	245	134
95°	246	201
105°	246	260
115°	240	238
125°	230	206
135°	216	167
145°	196	124
155°	174	81
165°	139	40
175°	120	11
180°	124	



TEST NUMBER: 19435
CATALOG NUMBER: 441-16-CF1/42

CANDELA DISTRIBUTION (FULL):

0°	
0°	161.1
2.5°	161.3
5°	161.7
7.5°	162.3
10°	163.1
12.5°	164.1
15°	165.4
17.5°	166.9
20°	168.6
22.5°	170.4
25°	172.5
27.5°	174.8
30°	177.3
32.5°	180.0
35°	182.7
37.5°	185.5
40°	188.5
42.5°	191.5
45°	194.7
47.5°	198.0
50°	201.5
52.5°	204.8
55°	208.5
57.5°	211.8
60°	215.3
62.5°	218.6
65°	221.9
67.5°	225.0
70°	228.0
72.5°	231.0
75°	233.8
77.5°	236.3
80°	238.6
82.5°	240.6
85°	242.4
87.5°	243.9
90°	245.1
92.5°	246.0
95°	246.5
97.5°	246.8
100°	246.8
102.5°	246.3
105°	245.6
107.5°	244.6
110°	243.3



TEST NUMBER: 19435
CATALOG NUMBER: 441-16-CF1/42

CANDELA DISTRIBUTION (continued):

	0°
112.5°	241.8
115°	240.2
117.5°	237.9
120°	235.7
122.5°	233.0
125°	230.1
127.5°	226.8
130°	223.3
132.5°	219.5
135°	215.5
137.5°	211.2
140°	206.4
142.5°	201.6
145°	196.4
147.5°	191.3
150°	186.1
152.5°	180.8
155°	174.0
157.5°	166.1
160°	157.6
162.5°	148.1
165°	138.7
167.5°	129.6
170°	121.5
172.5°	118.0
175°	120.0
177.5°	122.6
180°	123.5

(END OF REPORT)