

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: P30617

Luminaire Tested: **109-S-18-S-CFL/2/26120V-MW-SBG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: P30617
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 109-S-18-S-CFL/2/26120V-MW-SBG
Description: 18" MEDIUM FABRIC SHAPER CUBE COMPACT FLUORESCENT LUMINAIRE
WITH SURFACE IN BEIGE (MEDIUM TONE), LAMPS POSITION
INWARD AT AN 45 DEGREE ANGLE PERPENDICULAR FROM
THE CORNERS WITH A TEST DISTANCE OF 24 FT
Light Source: (2) DELUX TRIPLE TWIN TUBE COMPACT FLUORESCENT LAMP 3000K
SYLVANIA CF26DT/E/IN830
Ballast/Driver: UNIVERSAL LIGHTING TECHNOLOGIES ELECTRONIC BALLAST
ULT TRIAD C242UNVME

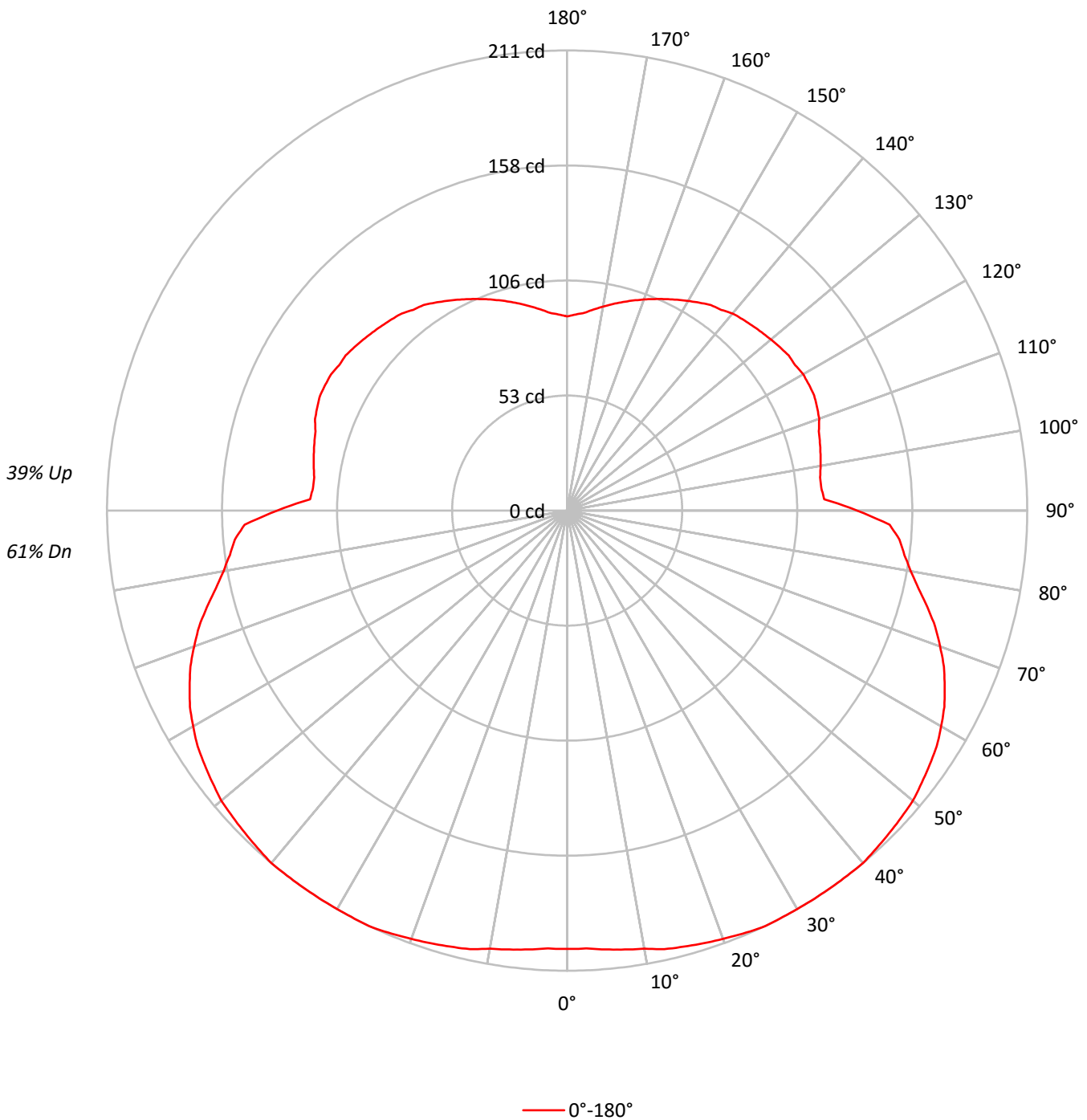
Summary

Lumens per Lamp: 1800 (2 lamps)
Luminaire Lumens: 1930.0 lumens
Efficiency: 53.6%
Efficacy: 37.8 lumens/watt
Spacing Criteria (0/90/45): 1.6 / 1.6 / 1.77
Luminous Opening: Rectangular w/ Sides (W: 1.52' x L: 1.52' x H: 1.67')
CIE Type: Semi-Direct

Input Watts (W): 51
Input Voltage (V): NR
Input Current (A_{in}): 0.4227
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	59	59	59	59	55	55	55	55	48	48	48	42	42	42	36	36	36	33
1	52	48	45	43	48	45	42	40	39	37	35	33	32	30	28	27	26	23
2	46	41	37	33	43	38	34	31	33	30	27	28	26	23	23	22	20	18
3	41	35	30	26	38	33	28	25	28	25	22	24	21	19	20	18	16	14
4	38	31	26	22	35	29	24	20	25	21	18	21	18	16	17	15	13	11
5	34	27	22	18	32	25	21	17	22	18	15	18	15	13	15	13	11	9
6	31	24	19	16	29	22	18	15	19	16	13	17	14	11	14	11	9	8
7	29	22	17	13	27	20	16	13	17	14	11	15	12	10	13	10	8	7
8	27	20	15	12	25	18	14	11	16	12	10	14	11	9	11	9	7	6
9	25	18	13	10	23	17	13	10	14	11	9	12	10	8	11	8	6	5
10	23	16	12	9	22	15	11	9	13	10	8	11	9	7	10	7	6	5

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	935
5°	861
10°	808
15°	771
20°	740
25°	717
30°	694
35°	678
40°	668
45°	656
50°	650
55°	642
60°	636
65°	628
70°	617
75°	604
80°	594
85°	604



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	19.3	1.0	0.5
10°-20°	58.7	3.0	1.6
20°-30°	97.5	5.0	2.7
30°-40°	132.5	6.9	3.7
40°-50°	161.8	8.4	4.5
50°-60°	181.9	9.4	5.1
60°-70°	189.2	9.8	5.3
70°-80°	180.8	9.4	5.0
80°-90°	164.6	8.5	4.6
90°-100°	130.3	6.7	3.6
100°-110°	127.1	6.6	3.5
110°-120°	123.6	6.4	3.4
120°-130°	110.9	5.7	3.1
130°-140°	93.0	4.8	2.6
140°-150°	72.1	3.7	2.0
150°-160°	49.6	2.6	1.4
160°-170°	28.2	1.5	0.8
170°-180°	8.8	0.5	0.2
0°-30°	175.5	9.1	4.9
0°-40°	308.1	16.0	8.6
0°-60°	651.8	33.8	18.1
0°-90°	1186.5	61.5	33.0
90°-120°	380.9	19.7	10.6
90°-150°	656.9	34.0	18.2
90°-180°	744.0	38.5	20.7
0°-180°	1930.0	100.0	53.6

CANDELA DISTRIBUTION:

	0°	Flux
0°	201	
5°	202	19
15°	207	59
25°	211	97
35°	211	133
45°	209	162
55°	203	182
65°	191	189
75°	171	181
85°	153	126
90°	133	73
95°	117	96
105°	120	127
115°	125	124
125°	124	111
135°	120	93
145°	115	72
155°	107	50
165°	99	28
175°	91	9
180°	89	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	201
2.5°	201
5°	202
7.5°	203
10°	204
12.5°	206
15°	207
17.5°	208
20°	209
22.5°	210
25°	211
27.5°	211
30°	211
32.5°	211
35°	211
37.5°	211
40°	211
42.5°	210
45°	209
47.5°	208
50°	207
52.5°	205
55°	203
57.5°	201
60°	198
62.5°	195
65°	191
67.5°	187
70°	182
72.5°	177
75°	171
77.5°	165
80°	160
82.5°	156
85°	153
87.5°	148
90°	133
92.5°	118
95°	117
97.5°	117
100°	118
102.5°	119
105°	120
107.5°	121
110°	123



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	124
115°	125
117.5°	125
120°	125
122.5°	124
125°	124
127.5°	123
130°	122
132.5°	121
135°	120
137.5°	119
140°	118
142.5°	116
145°	115
147.5°	113
150°	111
152.5°	109
155°	107
157.5°	105
160°	103
162.5°	101
165°	99
167.5°	97
170°	95
172.5°	93
175°	91
177.5°	90
180°	89

(END OF REPORT)