

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: 20443A

Luminaire Tested: **682-CFL/1/42**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 20443A
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 682-CFL/1/42
Description: EXTERIOR WALL MOUNT LUMINAIRE WITH WHITE INTERIOR AND WHITE PLASTIC LENS
Light Source: ONE 42 WATT CPFL LAMP. LUMEN RATING = 3200 LMS.

Ballast/Driver: -

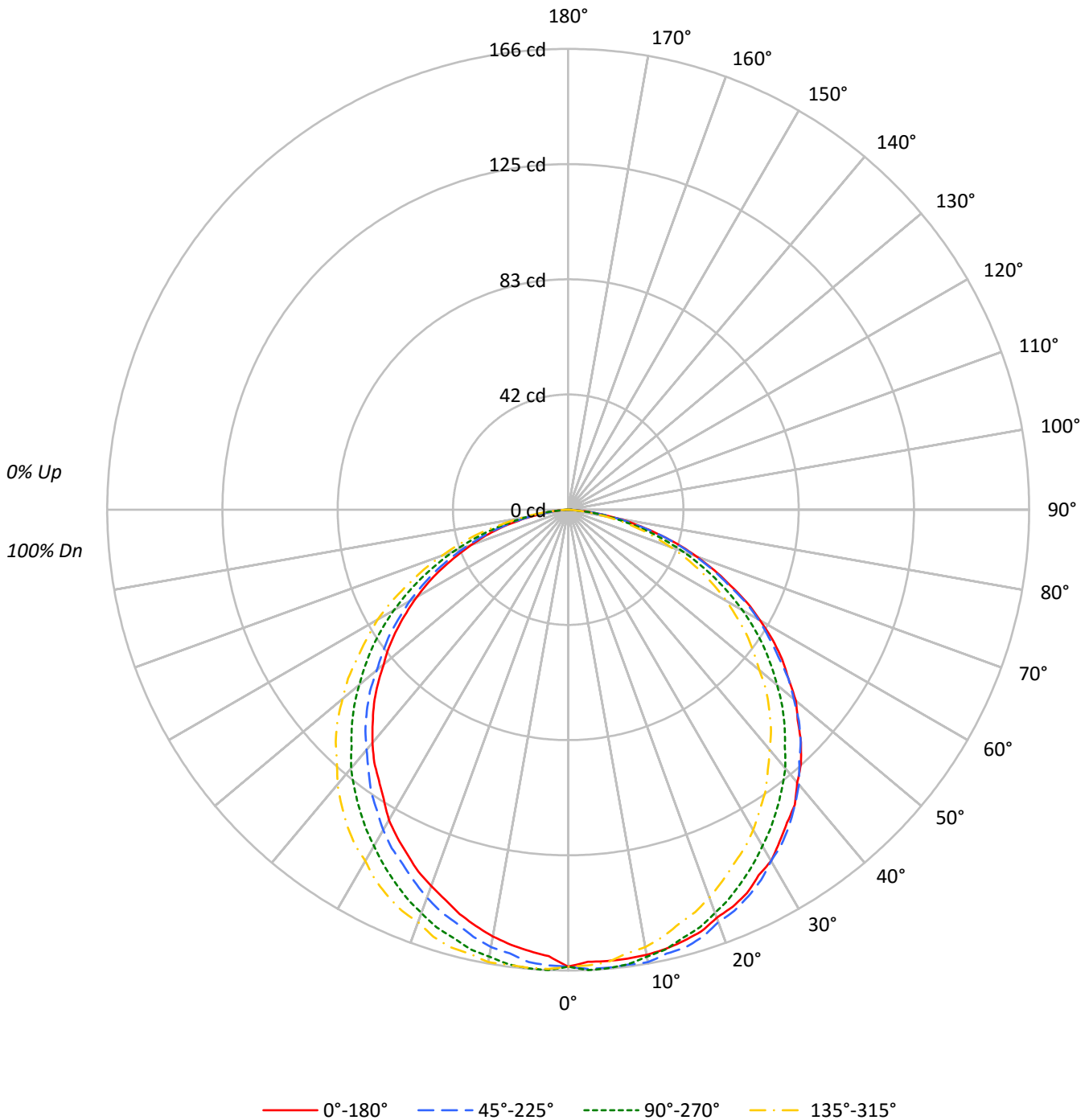
Summary

Lumens per Lamp: 3200 (1 lamp)
Luminaire Lumens: 464.4 lumens
Efficiency: 14.5%
Efficacy: -
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.49' x L: 0.58' x H: 0')
CIE Type: Direct

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	50	30	10	50	30	10	50	30	10	0																			
RCR																																														
0	17	17	17	17	17	17	17	17	16	16	16	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15																		
1	16	15	15	14	15	15	14	14	14	14	13	14	13	13	13	13	13	13	13	13	13	13	13	13	13	13	12																			
2	14	13	12	11	14	13	12	11	12	12	11	12	11	11	11	11	11	11	11	11	11	11	11	11	11	10	10																			
3	13	12	10	9	13	11	10	9	11	10	9	11	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9																			
4	12	10	9	8	12	10	9	8	10	9	8	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7																			
5	11	9	8	7	11	9	8	7	9	8	7	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6																			
6	10	8	7	6	10	8	7	6	8	7	6	8	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6																			
7	9	7	6	5	9	7	6	5	7	6	5	7	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5																			
8	9	7	6	5	9	7	6	5	7	5	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4																			
9	8	6	5	4	8	6	5	4	6	5	4	6	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4																			
10	8	6	5	4	8	6	5	4	6	5	4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6234	6234	6234	6234
5°	6205	6304	6068	6304
10°	6261	6288	6003	6288
15°	6305	6262	5913	6262
20°	6304	6231	5812	6231
25°	6369	6181	5725	6181
30°	6389	6118	5646	6118
35°	6357	6066	5497	6066
40°	6343	6012	5419	6012
45°	6347	5903	5297	5903
50°	6305	5786	5109	5786
55°	6214	5672	4972	5672
60°	6045	5492	4772	5492
65°	5762	5216	4499	5216
70°	5437	4850	4097	4850
75°	4829	4273	3673	4273
80°	3948	3293	2748	3293
85°	2434	1695	1608	1695



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	15.6	3.4	0.5
10°-20°	44.7	9.6	1.4
20°-30°	67.6	14.6	2.1
30°-40°	81.5	17.6	2.5
40°-50°	84.6	18.2	2.6
50°-60°	76.3	16.4	2.4
60°-70°	57.4	12.4	1.8
70°-80°	30.9	6.7	1.0
80°-90°	5.8	1.2	0.2
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	127.9	27.5	4.0
0°-40°	209.4	45.1	6.5
0°-60°	370.3	79.7	11.6
0°-90°	464.4	100.0	14.5
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	464.4	100.0	14.5

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	165	165	165	165	165	
5°	163	166	160	166	163	16
15°	161	160	151	160	161	45
25°	152	148	137	148	152	70
35°	138	131	119	131	138	86
45°	118	110	99	110	118	91
55°	94	86	75	86	94	84
65°	64	58	50	58	64	64
75°	33	29	25	29	33	35
85°	6	4	4	4	6	7
90°	0	0	0	0	0	



TEST NUMBER: 20443A
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6
2.5°	163.0	164.8	165.6	166.3	166.0	165.4	164.3	162.2	161.0	162.2	164.3
5°	163.2	165.1	165.6	165.4	165.8	163.5	163.6	160.9	159.6	160.9	163.6
7.5°	163.1	164.1	165.3	165.0	165.1	162.8	161.2	160.0	158.1	160.0	161.2
10°	162.8	164.4	165.5	164.8	163.5	161.0	160.0	157.8	156.1	157.8	160.0
12.5°	162.1	163.6	163.8	163.6	162.2	158.9	157.6	155.5	153.6	155.5	157.6
15°	160.8	161.5	163.2	161.9	159.7	156.4	154.4	152.8	150.8	152.8	154.4
17.5°	159.3	160.6	161.3	160.0	157.7	153.6	152.0	149.9	147.3	149.9	152.0
20°	156.4	158.7	158.1	156.7	154.6	150.4	148.7	146.5	144.2	146.5	148.7
22.5°	154.8	156.3	156.4	154.6	151.6	146.1	144.9	142.7	141.1	142.7	144.9
25°	152.4	153.4	153.6	151.5	147.9	143.4	140.9	138.3	137.0	138.3	140.9
27.5°	148.5	150.6	150.4	148.3	144.1	138.5	137.5	135.1	133.2	135.1	137.5
30°	146.1	147.3	146.1	144.2	139.9	134.2	133.2	130.8	129.1	130.8	133.2
32.5°	141.7	142.6	143.0	140.5	135.8	130.4	128.3	126.0	123.6	126.0	128.3
35°	137.5	139.1	138.8	136.3	131.2	125.7	123.8	121.4	118.9	121.4	123.8
37.5°	134.0	133.9	134.1	130.6	126.5	120.1	118.1	115.8	114.7	115.8	118.1
40°	128.3	128.9	129.2	126.2	121.6	114.7	112.9	110.7	109.6	110.7	112.9
42.5°	124.1	124.7	123.2	121.2	115.5	109.9	108.1	105.9	104.2	105.9	108.1
45°	118.5	119.3	118.4	115.6	110.2	104.1	102.5	100.2	98.9	100.2	102.5
47.5°	112.1	112.7	112.7	109.0	104.5	98.6	96.8	93.9	93.0	93.9	96.8
50°	107.0	107.3	106.0	103.7	98.2	92.5	89.9	88.8	86.7	88.8	89.9
52.5°	99.9	101.1	99.9	97.4	92.1	86.5	84.0	82.9	81.4	82.9	84.0
55°	94.1	94.1	92.4	90.4	85.9	79.7	78.5	76.7	75.3	76.7	78.5
57.5°	87.3	87.4	85.7	83.8	79.3	74.1	71.9	70.8	69.1	70.8	71.9
60°	79.8	79.4	79.2	76.8	72.5	67.5	65.9	64.0	63.0	64.0	65.9
62.5°	72.7	71.9	71.9	69.6	65.5	60.8	59.3	57.7	56.7	57.7	59.3
65°	64.3	65.2	63.4	62.1	58.2	54.3	52.8	51.3	50.2	51.3	52.8
67.5°	56.9	57.5	56.2	54.8	51.0	47.4	46.1	44.6	43.5	44.6	46.1
70°	49.1	49.8	48.3	47.4	43.8	40.2	39.1	37.9	37.0	37.9	39.1
72.5°	41.4	41.1	40.9	38.9	36.4	33.4	32.7	31.9	31.2	31.9	32.7
75°	33.0	33.5	33.2	31.3	29.2	26.5	26.1	25.6	25.1	25.6	26.1
77.5°	25.5	25.0	24.7	24.2	21.8	19.7	19.5	19.0	18.3	19.0	19.5
80°	18.1	17.4	17.6	17.2	15.1	13.4	13.4	13.4	12.6	13.4	13.4
82.5°	10.8	11.1	10.7	9.9	8.9	7.2	7.4	7.1	8.0	7.1	7.4
85°	5.6	5.5	4.7	4.4	3.9	2.4	3.0	3.0	3.7	3.0	3.0
87.5°	0.8	1.2	1.4	1.3	0.2	0.4	0.0	0.7	0.5	0.7	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	164.6	164.6	164.6	164.6	164.6	164.6
2.5°	165.4	166.0	166.3	165.6	164.8	163.0
5°	163.5	165.8	165.4	165.6	165.1	163.2
7.5°	162.8	165.1	165.0	165.3	164.1	163.1
10°	161.0	163.5	164.8	165.5	164.4	162.8
12.5°	158.9	162.2	163.6	163.8	163.6	162.1
15°	156.4	159.7	161.9	163.2	161.5	160.8
17.5°	153.6	157.7	160.0	161.3	160.6	159.3
20°	150.4	154.6	156.7	158.1	158.7	156.4
22.5°	146.1	151.6	154.6	156.4	156.3	154.8
25°	143.4	147.9	151.5	153.6	153.4	152.4
27.5°	138.5	144.1	148.3	150.4	150.6	148.5
30°	134.2	139.9	144.2	146.1	147.3	146.1
32.5°	130.4	135.8	140.5	143.0	142.6	141.7
35°	125.7	131.2	136.3	138.8	139.1	137.5
37.5°	120.1	126.5	130.6	134.1	133.9	134.0
40°	114.7	121.6	126.2	129.2	128.9	128.3
42.5°	109.9	115.5	121.2	123.2	124.7	124.1
45°	104.1	110.2	115.6	118.4	119.3	118.5
47.5°	98.6	104.5	109.0	112.7	112.7	112.1
50°	92.5	98.2	103.7	106.0	107.3	107.0
52.5°	86.5	92.1	97.4	99.9	101.1	99.9
55°	79.7	85.9	90.4	92.4	94.1	94.1
57.5°	74.1	79.3	83.8	85.7	87.4	87.3
60°	67.5	72.5	76.8	79.2	79.4	79.8
62.5°	60.8	65.5	69.6	71.9	71.9	72.7
65°	54.3	58.2	62.1	63.4	65.2	64.3
67.5°	47.4	51.0	54.8	56.2	57.5	56.9
70°	40.2	43.8	47.4	48.3	49.8	49.1
72.5°	33.4	36.4	38.9	40.9	41.1	41.4
75°	26.5	29.2	31.3	33.2	33.5	33.0
77.5°	19.7	21.8	24.2	24.7	25.0	25.5
80°	13.4	15.1	17.2	17.6	17.4	18.1
82.5°	7.2	8.9	9.9	10.7	11.1	10.8
85°	2.4	3.9	4.4	4.7	5.5	5.6
87.5°	0.4	0.2	1.3	1.4	1.2	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)