

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: 20064A

Luminaire Tested: **682-WP-CF2/32**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 20064A
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 682-WP-CF2/32
Description: EXTERIOR WALL MOUNT LUMINAIRE WITH WHITE INTERIOR AND FLAT WHITE
PLASTIC LENS
Light Source: TWO 32 WATT CPFL LAMPS. LUMEN RATING = 4800 LMS.

Ballast/Driver: -

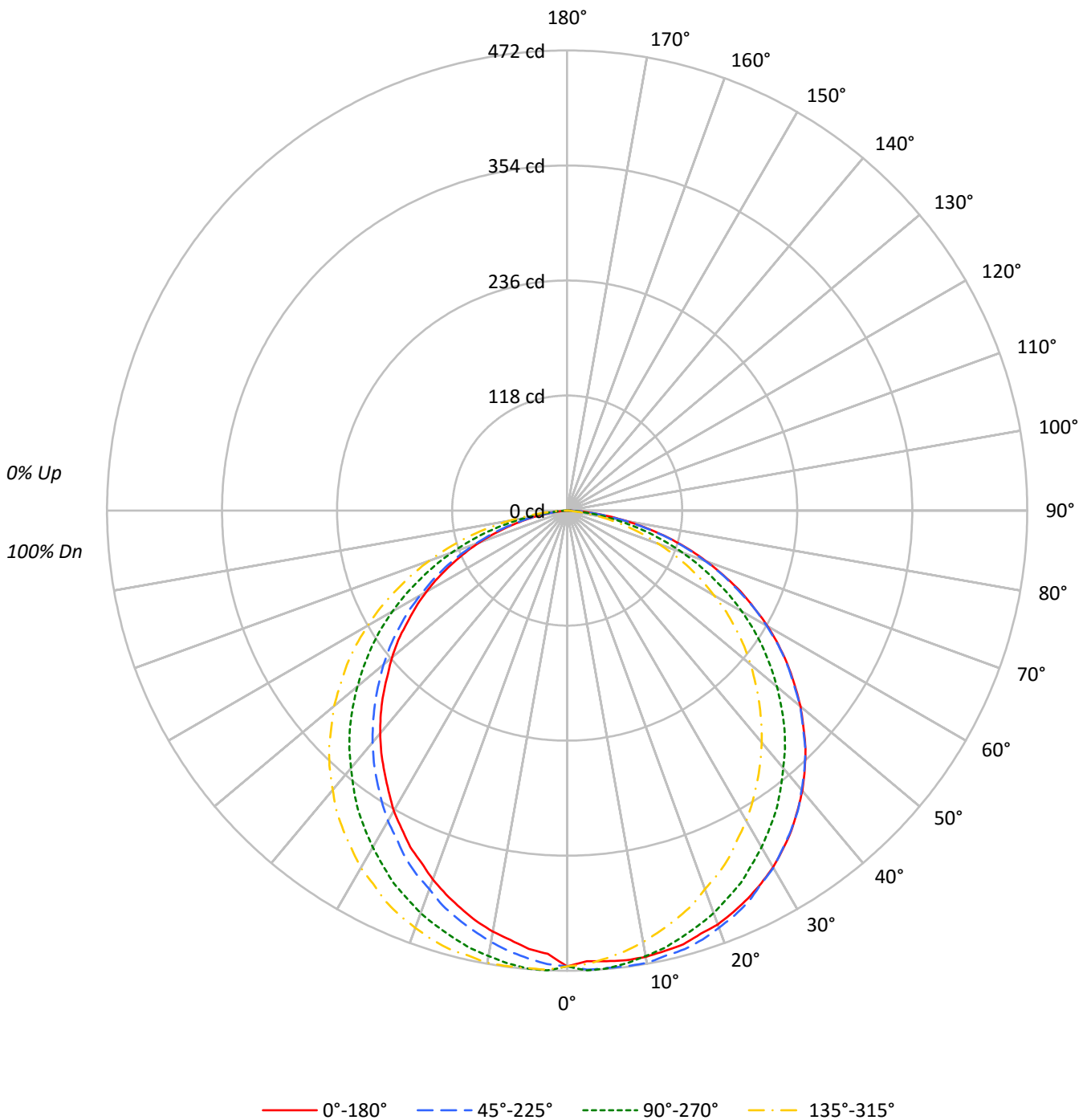
Summary

Lumens per Lamp: 4800 (1 lamp)
Luminaire Lumens: 1322.1 lumens
Efficiency: 27.5%
Efficacy: -
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.38
Luminous Opening: Rectangular (W 0.5' 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										
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	0														
RCR																																						
0	33	33	33	33	32	32	32	32	31	31	31	29	29	29	28	28	28	28	28	28	28	28	28	28														
1	30	29	28	26	29	28	27	26	27	26	25	26	25	24	25	24	24	25	24	24	25	24	24	23														
2	27	25	23	22	27	24	23	21	24	22	21	23	21	20	22	21	20	22	21	20	22	21	20	19														
3	25	22	20	18	24	22	19	18	21	19	17	20	18	17	19	18	17	19	18	17	19	18	17	16														
4	23	19	17	15	22	19	17	15	18	16	15	18	16	15	17	16	14	17	16	14	17	16	14	14														
5	21	17	15	13	20	17	15	13	16	14	13	16	14	13	15	14	13	15	14	13	15	14	13	12														
6	19	16	13	11	19	15	13	11	15	13	11	14	13	11	14	12	11	14	12	11	14	12	11	10														
7	18	14	12	10	17	14	12	10	13	11	10	13	11	10	13	11	10	13	11	10	13	11	10	9														
8	17	13	11	9	16	13	10	9	12	10	9	12	10	9	12	10	9	12	10	9	12	10	9	8														
9	16	12	10	8	15	12	10	8	11	9	8	11	9	8	11	9	8	11	9	8	11	9	8	7														
10	15	11	9	7	14	11	9	7	11	9	7	10	8	7	10	8	7	10	8	7	10	8	7	7														

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	17352	17352	17352	17352
5°	17284	17564	16811	17564
10°	17514	17484	16527	17484
15°	17699	17415	16224	17415
20°	17846	17352	15906	17352
25°	17979	17262	15595	17262
30°	18108	17088	15241	17088
35°	18170	16956	14808	16956
40°	18184	16707	14449	16707
45°	18151	16540	14005	16540
50°	18039	16214	13547	16214
55°	17880	15867	12955	15867
60°	17638	15352	12390	15352
65°	17223	14605	11470	14605
70°	16452	13663	10418	13663
75°	15373	12175	8619	12175
80°	13231	9597	6220	9597
85°	9752	5238	2513	5238



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	44.2	3.3	0.9
10°-20°	126.6	9.6	2.6
20°-30°	191.8	14.5	4.0
30°-40°	231.3	17.5	4.8
40°-50°	239.9	18.1	5.0
50°-60°	216.7	16.4	4.5
60°-70°	163.8	12.4	3.4
70°-80°	89.4	6.8	1.9
80°-90°	18.6	1.4	0.4
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°	362.5	27.4	7.6
0°-40°	593.8	44.9	12.4
0°-60°	1050.3	79.4	21.9
0°-90°	1322.1	100.0	27.5
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°	1322.1	100.0	27.5

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	468	468	468	468	468	
5°	464	471	451	471	464	44
15°	461	453	422	453	461	130
25°	439	422	381	422	439	202
35°	401	374	327	374	401	251
45°	346	315	267	315	346	266
55°	276	245	200	245	276	247
65°	196	166	131	166	196	193
75°	107	85	60	85	107	113
85°	23	12	6	12	23	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	467.5	467.5	467.5	467.5	467.5	467.5	467.5	467.5	467.5	467.5	467.5
2.5°	462.7	465.3	471.3	473.0	472.1	470.3	465.7	460.1	455.1	460.1	465.7
5°	463.9	466.9	471.0	474.4	471.4	466.1	461.0	453.7	451.2	453.7	461.0
7.5°	465.3	467.1	471.3	473.8	468.4	461.4	455.8	448.1	444.3	448.1	455.8
10°	464.7	468.2	471.1	471.9	463.9	455.7	449.3	441.3	438.5	441.3	449.3
12.5°	462.7	466.3	467.6	469.1	459.6	449.0	441.6	434.9	431.2	434.9	441.6
15°	460.6	463.3	465.8	464.8	453.2	441.3	433.6	424.9	422.2	424.9	433.6
17.5°	455.2	457.9	461.4	458.9	446.6	432.9	424.8	415.8	412.8	415.8	424.8
20°	451.8	454.2	455.4	453.7	439.3	423.5	413.1	406.5	402.7	406.5	413.1
22.5°	445.6	448.3	449.2	446.3	430.1	413.0	403.9	394.5	390.7	394.5	403.9
25°	439.0	440.7	441.7	438.2	421.5	401.3	392.8	384.7	380.8	384.7	392.8
27.5°	431.0	432.8	431.3	429.5	409.8	390.0	379.1	371.8	367.7	371.8	379.1
30°	422.5	424.1	423.2	419.3	398.7	377.8	367.7	359.4	355.6	359.4	367.7
32.5°	411.9	413.3	411.4	408.2	386.5	363.8	353.9	345.2	340.9	345.2	353.9
35°	401.0	402.4	400.3	396.7	374.2	349.5	339.7	331.3	326.8	331.3	339.7
37.5°	388.0	389.4	388.6	383.0	359.7	335.8	325.6	316.7	313.2	316.7	325.6
40°	375.3	376.5	374.1	369.9	344.8	320.1	310.5	302.1	298.2	302.1	310.5
42.5°	360.6	360.7	360.4	353.6	330.8	305.5	294.7	285.0	282.9	285.0	294.7
45°	345.8	346.6	345.5	339.0	315.1	289.5	278.6	269.4	266.8	269.4	278.6
47.5°	328.6	331.3	327.8	323.8	298.1	272.9	261.9	253.7	249.8	253.7	261.9
50°	312.4	313.5	312.1	305.2	280.8	254.1	245.7	238.2	234.6	238.2	245.7
52.5°	294.1	296.4	293.1	288.8	263.2	237.4	228.9	221.1	218.4	221.1	228.9
55°	276.3	276.6	275.7	269.1	245.2	219.7	210.8	204.1	200.2	204.1	210.8
57.5°	257.3	258.4	256.7	249.8	226.6	201.8	193.5	187.4	184.0	187.4	193.5
60°	237.6	237.0	236.2	231.2	206.8	182.3	173.8	168.9	166.9	168.9	173.8
62.5°	216.2	216.9	216.2	211.3	187.4	163.3	156.3	150.7	149.4	150.7	156.3
65°	196.1	196.7	193.4	189.1	166.3	145.0	138.1	133.3	130.6	133.3	138.1
67.5°	173.5	173.9	172.6	168.6	146.2	125.9	118.7	115.5	113.5	115.5	118.7
70°	151.6	151.6	150.3	147.5	125.9	106.6	100.0	97.4	96.0	97.4	100.0
72.5°	129.8	130.1	128.5	123.6	105.1	86.4	82.4	79.3	77.5	79.3	82.4
75°	107.2	107.4	106.1	102.0	84.9	67.7	64.5	62.0	60.1	62.0	64.5
77.5°	83.4	83.9	82.6	80.3	64.0	48.9	46.2	43.5	43.8	43.5	46.2
80°	61.9	62.0	60.5	59.0	44.9	32.3	30.8	28.8	29.1	28.8	30.8
82.5°	40.2	40.2	38.6	38.5	27.1	18.0	15.7	15.9	15.1	15.9	15.7
85°	22.9	22.9	21.4	20.8	12.3	7.1	5.4	6.2	5.9	6.2	5.4
87.5°	7.7	8.0	8.7	6.0	4.5	0.8	1.3	0.6	0.0	0.6	1.3
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°	467.5	467.5	467.5	467.5	467.5	467.5
2.5°	470.3	472.1	473.0	471.3	465.3	462.7
5°	466.1	471.4	474.4	471.0	466.9	463.9
7.5°	461.4	468.4	473.8	471.3	467.1	465.3
10°	455.7	463.9	471.9	471.1	468.2	464.7
12.5°	449.0	459.6	469.1	467.6	466.3	462.7
15°	441.3	453.2	464.8	465.8	463.3	460.6
17.5°	432.9	446.6	458.9	461.4	457.9	455.2
20°	423.5	439.3	453.7	455.4	454.2	451.8
22.5°	413.0	430.1	446.3	449.2	448.3	445.6
25°	401.3	421.5	438.2	441.7	440.7	439.0
27.5°	390.0	409.8	429.5	431.3	432.8	431.0
30°	377.8	398.7	419.3	423.2	424.1	422.5
32.5°	363.8	386.5	408.2	411.4	413.3	411.9
35°	349.5	374.2	396.7	400.3	402.4	401.0
37.5°	335.8	359.7	383.0	388.6	389.4	388.0
40°	320.1	344.8	369.9	374.1	376.5	375.3
42.5°	305.5	330.8	353.6	360.4	360.7	360.6
45°	289.5	315.1	339.0	345.5	346.6	345.8
47.5°	272.9	298.1	323.8	327.8	331.3	328.6
50°	254.1	280.8	305.2	312.1	313.5	312.4
52.5°	237.4	263.2	288.8	293.1	296.4	294.1
55°	219.7	245.2	269.1	275.7	276.6	276.3
57.5°	201.8	226.6	249.8	256.7	258.4	257.3
60°	182.3	206.8	231.2	236.2	237.0	237.6
62.5°	163.3	187.4	211.3	216.2	216.9	216.2
65°	145.0	166.3	189.1	193.4	196.7	196.1
67.5°	125.9	146.2	168.6	172.6	173.9	173.5
70°	106.6	125.9	147.5	150.3	151.6	151.6
72.5°	86.4	105.1	123.6	128.5	130.1	129.8
75°	67.7	84.9	102.0	106.1	107.4	107.2
77.5°	48.9	64.0	80.3	82.6	83.9	83.4
80°	32.3	44.9	59.0	60.5	62.0	61.9
82.5°	18.0	27.1	38.5	38.6	40.2	40.2
85°	7.1	12.3	20.8	21.4	22.9	22.9
87.5°	0.8	4.5	6.0	8.7	8.0	7.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)