

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: 19158A

Luminaire Tested: **641-WP-CF1/32**

Issue Date: 3/3/2020

**Test Information**

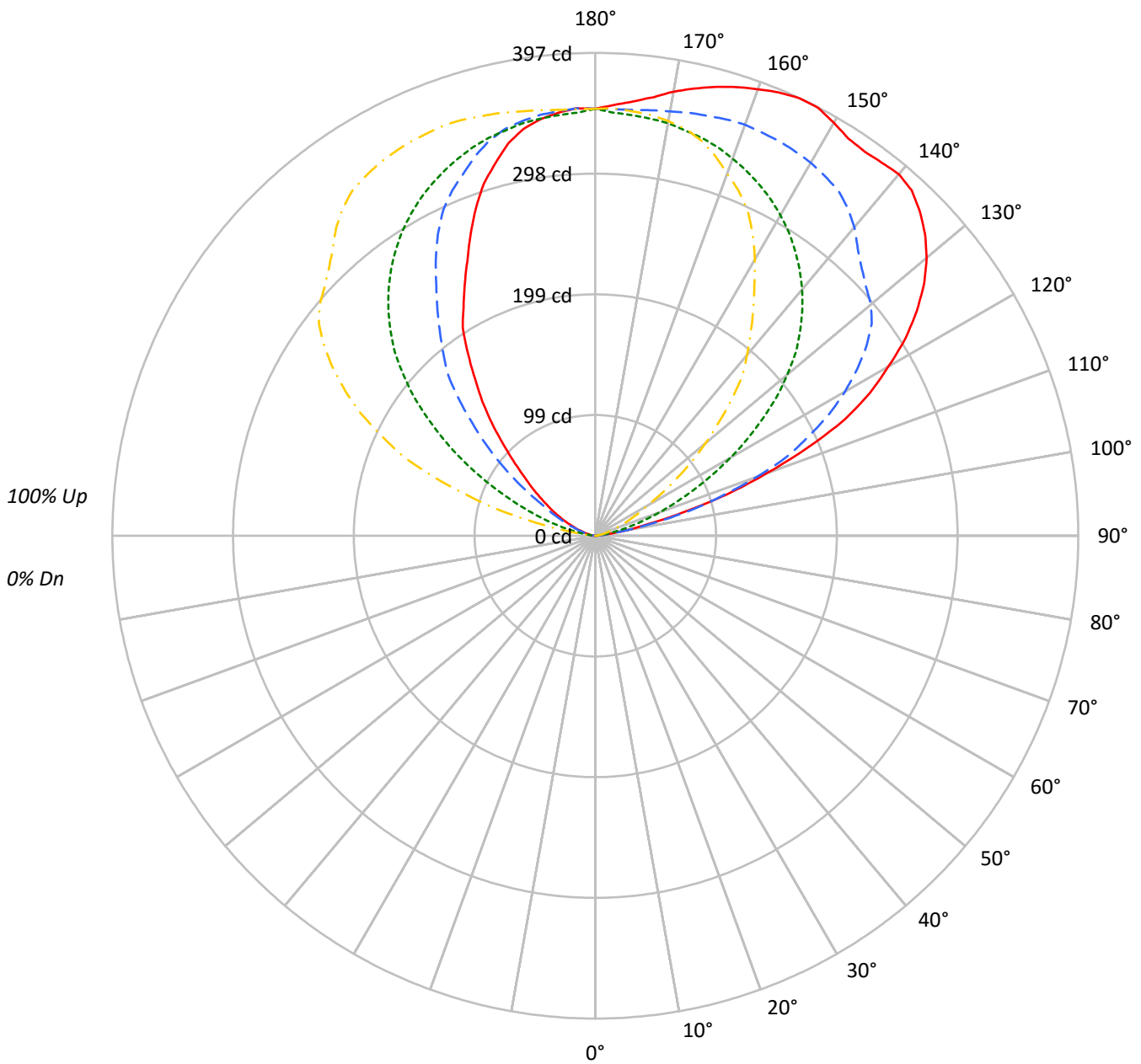
Test Method: LM-66-11  
Report Number: 19158A  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 641-WP-CF1/32  
Description: EXTERIOR WALL MOUNT LUMINAIRE WITH WHITE INTERIOR AND CLEAR FLAT  
PLASTIC LENS  
Light Source: ONE 32 WATT CPFL LAMP. LUMEN RATING = 2400 LMS.  
  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 2400 (1 lamp)  
Luminaire Lumens: 956.1 lumens  
Efficiency: 39.8%  
Efficacy: -  
N/A  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Indirect  
  
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



— 0°-180°    - - 45°-225°    ··· 90°-270°    - · 135°-315°



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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	38	38	38	38	32	32	32	32	22	22	22	13	13	13	4	4	4	0
1	34	33	31	30	29	28	27	26	19	19	18	11	11	10	4	3	3	0
2	31	29	26	25	27	25	23	21	17	16	15	10	9	9	3	3	3	0
3	29	25	23	20	24	22	19	18	15	13	12	9	8	7	3	3	2	0
4	26	22	19	17	22	19	17	15	13	12	10	8	7	6	2	2	2	0
5	24	20	17	14	20	17	14	13	12	10	9	7	6	5	2	2	2	0
6	22	17	15	12	19	15	13	11	10	9	8	6	5	5	2	2	1	0
7	20	16	13	11	17	13	11	9	9	8	7	5	5	4	2	1	1	0
8	19	14	11	9	16	12	10	8	8	7	6	5	4	3	2	1	1	0
9	17	13	10	8	15	11	9	7	8	6	5	4	4	3	1	1	1	0
10	16	12	9	7	14	10	8	6	7	5	4	4	3	3	1	1	1	0

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
95°	Luminaire represents a point source (luminous area is zero).			
100°	No luminance values can be calculated.			
105°				
110°				
115°				
120°				
125°				
130°				
135°				
140°				
145°				
150°				
155°				
160°				
165°				
170°				
175°				



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	0.0	0.0	0.0
10°-20°	0.0	0.0	0.0
20°-30°	0.0	0.0	0.0
30°-40°	0.0	0.0	0.0
40°-50°	0.0	0.0	0.0
50°-60°	0.0	0.0	0.0
60°-70°	0.0	0.0	0.0
70°-80°	0.0	0.0	0.0
80°-90°	0.0	0.0	0.0
90°-100°	4.3	0.5	0.2
100°-110°	43.6	4.6	1.8
110°-120°	107.7	11.3	4.5
120°-130°	158.4	16.6	6.6
130°-140°	183.6	19.2	7.7
140°-150°	178.9	18.7	7.5
150°-160°	148.8	15.6	6.2
160°-170°	97.3	10.2	4.1
170°-180°	33.4	3.5	1.4
0°-30°	0.0	0.0	0.0
0°-40°	0.0	0.0	0.0
0°-60°	0.0	0.0	0.0
0°-90°	0.0	0.0	0.0
90°-120°	155.7	16.3	6.5
90°-150°	676.5	70.8	28.2
90°-180°	956.0	100.0	39.8
0°-180°	956.1	100.0	39.8

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
90°	0	0	0	0	0	
95°	3	1	3	1	3	8
105°	75	30	8	30	75	85
115°	226	89	26	89	226	218
125°	323	168	56	168	323	287
135°	377	238	108	238	377	290
145°	386	286	182	286	386	243
155°	397	319	249	319	397	183
165°	382	339	317	339	382	108
175°	358	347	349	347	358	35
180°	351	351	351	351	351	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.9	0.8	0.4	0.6	0.1	0.4	0.6	1.4	1.4	1.4	0.6
95°	2.8	3.1	3.7	2.5	1.0	0.8	0.5	2.0	2.6	2.0	0.5
97.5°	11.5	12.0	11.6	7.5	3.5	2.2	2.2	2.6	2.9	2.6	2.2
100°	25.9	27.2	26.8	20.9	10.4	4.3	4.1	3.5	4.6	3.5	4.1
102.5°	44.9	47.7	50.5	41.9	19.4	7.3	6.4	4.2	5.1	4.2	6.4
105°	75.3	79.2	81.6	62.3	29.8	12.2	8.6	6.6	7.9	6.6	8.6
107.5°	113.8	114.2	109.5	83.2	41.6	18.8	12.9	9.5	10.4	9.5	12.9
110°	149.4	146.8	141.2	101.5	56.1	29.8	17.6	14.0	15.2	14.0	17.6
112.5°	188.3	183.2	171.3	117.8	71.3	42.8	24.0	18.3	19.5	18.3	24.0
115°	226.4	213.5	193.3	133.8	88.8	60.8	31.0	24.4	25.9	24.4	31.0
117.5°	254.6	240.9	216.9	152.6	108.3	80.8	39.5	31.2	32.4	31.2	39.5
120°	278.2	264.3	236.8	171.1	128.0	101.2	49.3	38.9	39.5	38.9	49.3
122.5°	302.4	285.4	255.4	189.9	148.3	120.2	63.7	47.5	47.0	47.5	63.7
125°	322.6	304.7	272.1	207.2	167.8	140.1	81.0	57.8	55.8	57.8	81.0
127.5°	340.8	320.5	286.4	222.9	188.1	161.9	99.3	69.5	66.3	69.5	99.3
130°	355.5	334.1	295.6	237.3	205.9	182.8	118.0	83.6	77.4	83.6	118.0
132.5°	367.5	345.9	302.0	251.2	223.5	203.5	137.3	100.3	91.4	100.3	137.3
135°	377.2	355.4	309.9	263.4	238.1	222.8	158.1	118.2	108.0	118.2	158.1
137.5°	385.0	359.5	319.3	274.3	251.8	240.4	179.1	136.8	125.8	136.8	179.1
140°	388.0	359.8	331.2	283.9	264.4	256.5	193.9	155.3	144.5	155.3	193.9
142.5°	386.7	361.4	340.4	292.7	275.9	270.0	209.5	174.9	162.3	174.9	209.5
145°	385.7	364.9	347.3	300.2	286.2	283.5	226.2	196.1	182.2	196.1	226.2
147.5°	387.1	372.4	350.8	307.5	295.9	294.7	243.3	210.4	202.8	210.4	243.3
150°	392.0	378.7	354.2	313.5	304.2	307.0	262.3	225.8	216.7	225.8	262.3
152.5°	396.6	381.5	356.1	319.1	312.0	316.2	280.0	241.9	232.5	241.9	280.0
155°	397.0	380.9	357.8	324.1	318.7	325.1	295.6	259.7	248.9	259.7	295.6
157.5°	394.5	379.2	358.6	328.3	324.7	331.1	307.3	278.9	267.9	278.9	307.3
160°	390.7	377.3	359.6	331.7	329.9	336.7	316.9	296.4	286.8	296.4	316.9
162.5°	386.8	374.4	358.9	335.8	334.9	341.3	327.5	310.2	304.0	310.2	327.5
165°	382.1	370.6	357.3	339.9	338.6	345.1	336.4	321.5	317.1	321.5	336.4
167.5°	376.6	365.9	356.2	342.6	341.3	347.4	342.6	333.1	330.5	333.1	342.6
170°	370.8	361.7	354.3	344.2	344.4	349.4	346.1	340.4	339.7	340.4	346.1
172.5°	363.6	357.4	352.8	346.6	345.9	351.0	348.9	345.7	345.4	345.7	348.9
175°	358.4	353.7	351.5	347.6	347.2	351.2	350.3	348.6	349.1	348.6	350.3
177.5°	354.5	350.9	351.0	349.0	348.1	351.7	351.7	350.1	351.8	350.1	351.7
180°	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0	351.0



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.4	0.1	0.6	0.4	0.8	0.9
95°	0.8	1.0	2.5	3.7	3.1	2.8
97.5°	2.2	3.5	7.5	11.6	12.0	11.5
100°	4.3	10.4	20.9	26.8	27.2	25.9
102.5°	7.3	19.4	41.9	50.5	47.7	44.9
105°	12.2	29.8	62.3	81.6	79.2	75.3
107.5°	18.8	41.6	83.2	109.5	114.2	113.8
110°	29.8	56.1	101.5	141.2	146.8	149.4
112.5°	42.8	71.3	117.8	171.3	183.2	188.3
115°	60.8	88.8	133.8	193.3	213.5	226.4
117.5°	80.8	108.3	152.6	216.9	240.9	254.6
120°	101.2	128.0	171.1	236.8	264.3	278.2
122.5°	120.2	148.3	189.9	255.4	285.4	302.4
125°	140.1	167.8	207.2	272.1	304.7	322.6
127.5°	161.9	188.1	222.9	286.4	320.5	340.8
130°	182.8	205.9	237.3	295.6	334.1	355.5
132.5°	203.5	223.5	251.2	302.0	345.9	367.5
135°	222.8	238.1	263.4	309.9	355.4	377.2
137.5°	240.4	251.8	274.3	319.3	359.5	385.0
140°	256.5	264.4	283.9	331.2	359.8	388.0
142.5°	270.0	275.9	292.7	340.4	361.4	386.7
145°	283.5	286.2	300.2	347.3	364.9	385.7
147.5°	294.7	295.9	307.5	350.8	372.4	387.1
150°	307.0	304.2	313.5	354.2	378.7	392.0
152.5°	316.2	312.0	319.1	356.1	381.5	396.6
155°	325.1	318.7	324.1	357.8	380.9	397.0
157.5°	331.1	324.7	328.3	358.6	379.2	394.5
160°	336.7	329.9	331.7	359.6	377.3	390.7
162.5°	341.3	334.9	335.8	358.9	374.4	386.8
165°	345.1	338.6	339.9	357.3	370.6	382.1
167.5°	347.4	341.3	342.6	356.2	365.9	376.6
170°	349.4	344.4	344.2	354.3	361.7	370.8
172.5°	351.0	345.9	346.6	352.8	357.4	363.6
175°	351.2	347.2	347.6	351.5	353.7	358.4
177.5°	351.7	348.1	349.0	351.0	350.9	354.5
180°	351.0	351.0	351.0	351.0	351.0	351.0

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