

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: 20065

Luminaire Tested: **685-WP-CF1/26**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 20065
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 685-WP-CF1/26
Description: EXTERIOR WALL MOUNT LUMINAIRE WITH WHITE INTERIOR AND NO LENS

Light Source: ONE SYLVANIA 26 WATT CPFL LAMP

CF26DD/E/841. LUMEN RATING = 1800 LMS.

Ballast/Driver: -

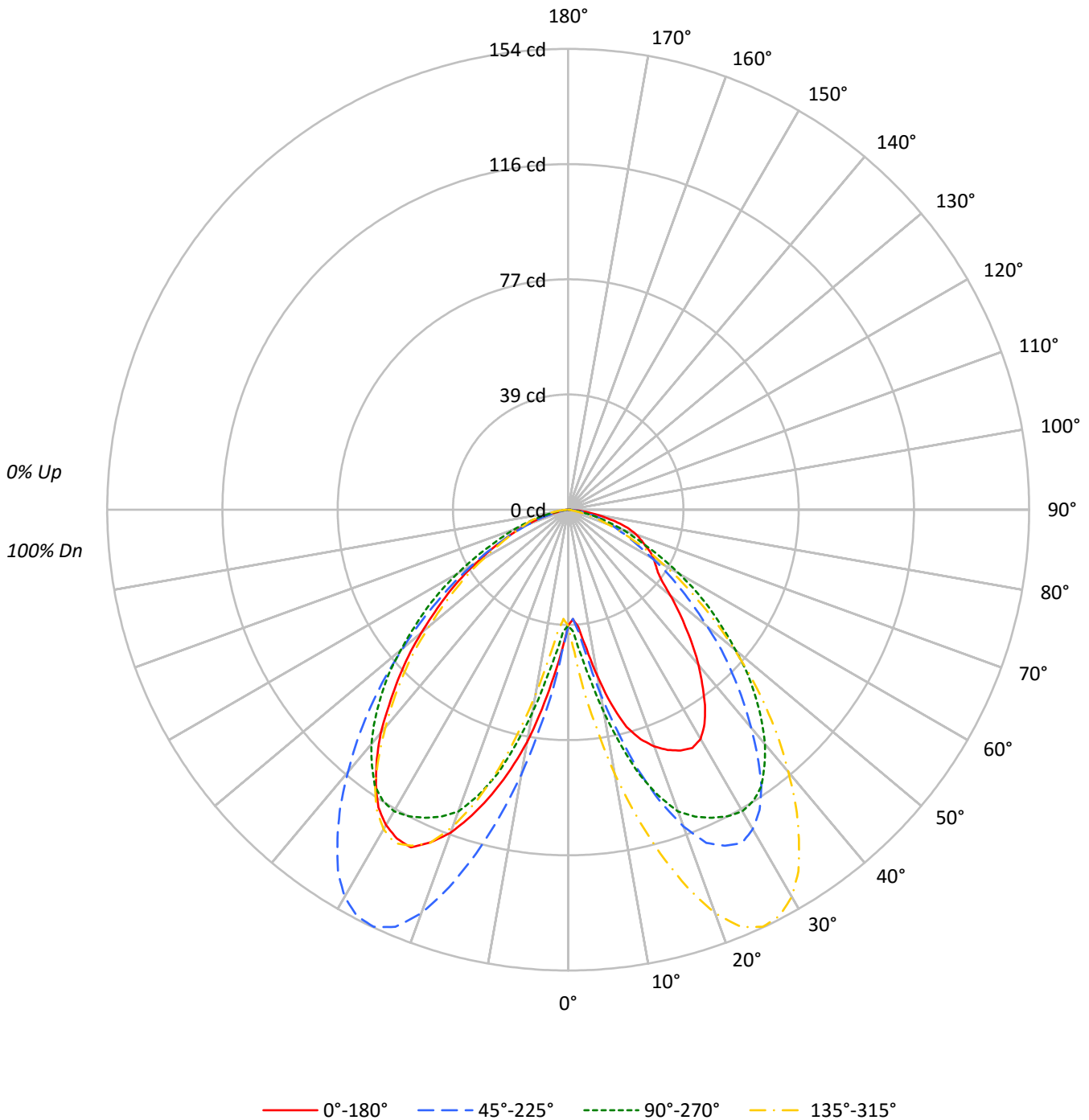
Summary

Lumens per Lamp: 1800 (1 lamp)
Luminaire Lumens: 307.4 lumens
Efficiency: 17.1%
Efficacy: 12.8 lumens/watt
Spacing Criteria (0/90/45): 2.16 / 2.38 / 2
Luminous Opening: Rectangular (W 0.32' x L: 0.38' x H: 0')
CIE Type: Direct

Input Watts (W): 24
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: 20065
CATALOG NUMBER: 685-WP-CF1/26

Luminous Intensity Polar Plot





TEST NUMBER: 20065
 CATALOG NUMBER: 685-WP-CF1/26

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	20	20	20	20	20	20	20	20	19	19	19	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	17	17																		
1	19	18	17	17	18	18	17	17	17	17	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15																		
2	17	16	15	14	17	16	15	14	15	14	14	15	14	13	14	13	13	14	13	13	14	13	13	14	13	13	14	13	13																	
3	16	14	13	12	15	14	13	12	13	12	12	13	12	11	13	12	11	13	12	11	13	12	11	13	12	11	13	12	11																	
4	15	13	11	10	14	12	11	10	12	11	10	12	11	10	12	11	10	11	10	10	11	10	10	11	10	10	11	10	9																	
5	13	11	10	9	13	11	10	9	11	10	9	10	9	9	10	9	8	10	9	8	10	9	8	10	9	8	10	9	8																	
6	12	10	9	8	12	10	9	8	10	8	8	9	8	7	9	8	7	9	8	7	9	8	7	9	8	7	9	8	7																	
7	11	9	8	7	11	9	8	7	9	8	7	9	7	7	8	7	7	8	7	7	8	7	7	8	7	7	8	7	6																	
8	11	8	7	6	10	8	7	6	8	7	6	8	7	6	8	7	6	8	7	6	8	7	6	8	7	6	8	7	6																	
9	10	8	6	5	10	8	6	5	7	6	5	7	6	5	7	6	5	7	6	5	7	6	5	7	6	5	7	6	5																	
10	9	7	6	5	9	7	6	5	7	6	5	7	6	5	7	6	5	7	6	5	7	6	5	7	6	5	7	6	5	4																

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	3426	3426	3426	3426
5°	3501	4318	4985	4318
10°	5087	6175	7074	6175
15°	6882	8376	9027	8376
20°	7932	10108	10824	10108
25°	8673	11095	12160	11095
30°	9046	11898	12439	11898
35°	8613	12168	12103	12168
40°	7835	11821	11255	11821
45°	6935	11091	10065	11091
50°	6128	10053	8814	10053
55°	5648	8936	7593	8936
60°	5842	7577	6214	7577
65°	5948	6053	4922	6053
70°	6237	4995	3727	4995
75°	6122	3557	2394	3557
80°	5098	1886	1172	1886
85°	3453	914	914	914



TEST NUMBER: 20065
 CATALOG NUMBER: 685-WP-CF1/26

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	5.4	1.8	0.3
10°-20°	27.9	9.1	1.6
20°-30°	57.3	18.6	3.2
30°-40°	70.9	23.1	3.9
40°-50°	63.4	20.6	3.5
50°-60°	44.7	14.6	2.5
60°-70°	25.4	8.3	1.4
70°-80°	10.6	3.5	0.6
80°-90°	1.7	0.5	0.1
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°	90.6	29.5	5.0
0°-40°	161.6	52.6	9.0
0°-60°	269.7	87.7	15.0
0°-90°	307.4	100.0	17.1
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°	307.4	100.0	17.1

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	39	39	39	39	39	
5°	39	49	56	49	39	4
15°	75	91	98	91	75	21
25°	89	114	124	114	89	41
35°	80	113	112	113	80	49
45°	55	89	80	89	55	43
55°	37	58	49	58	37	33
65°	28	29	24	29	28	28
75°	18	10	7	10	18	18
85°	3	1	1	1	3	4
90°	0	0	0	0	0	



TEST NUMBER: 20065
 CATALOG NUMBER: 685-WP-CF1/26

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
2.5°	36.6	35.9	36.5	37.1	40.9	46.2	47.6	48.0	46.7	48.0	47.6
5°	39.4	39.7	41.1	41.7	48.6	57.3	60.9	59.7	56.1	59.7	60.9
7.5°	46.8	46.7	50.3	50.5	57.5	69.5	74.0	72.7	67.1	72.7	74.0
10°	56.6	57.7	62.7	62.6	68.7	83.7	89.6	86.6	78.7	86.6	89.6
12.5°	66.5	69.1	75.6	74.6	80.1	97.6	104.5	99.1	88.9	99.1	104.5
15°	75.1	80.5	89.7	87.3	91.4	112.8	118.9	111.5	98.5	111.5	118.9
17.5°	80.4	89.3	102.2	99.8	100.2	124.7	132.3	121.7	107.1	121.7	132.3
20°	84.2	95.9	112.6	110.6	107.3	133.4	143.5	130.1	114.9	130.1	143.5
22.5°	86.9	100.7	120.5	117.4	111.0	140.0	150.9	135.0	120.3	135.0	150.9
25°	88.8	103.4	123.9	121.2	113.6	142.3	153.8	138.7	124.5	138.7	153.8
27.5°	89.8	104.5	125.6	122.5	115.5	142.7	153.0	137.4	123.9	137.4	153.0
30°	88.5	103.1	123.3	121.4	116.4	140.7	149.3	134.1	121.7	134.1	149.3
32.5°	84.8	98.8	119.0	118.4	115.3	136.6	143.2	129.3	118.0	129.3	143.2
35°	79.7	92.7	112.5	113.6	112.6	131.1	134.4	122.2	112.0	122.2	134.4
37.5°	73.5	85.9	103.9	107.3	107.7	123.5	125.0	114.1	105.0	114.1	125.0
40°	67.8	79.1	95.0	100.2	102.3	115.5	114.4	105.4	97.4	105.4	114.4
42.5°	61.6	71.6	86.4	91.7	95.7	106.9	104.2	95.0	88.5	95.0	104.2
45°	55.4	65.1	77.7	83.3	88.6	96.9	93.4	85.5	80.4	85.5	93.4
47.5°	49.9	58.7	69.4	74.8	81.3	86.7	82.9	76.2	72.4	76.2	82.9
50°	44.5	52.2	60.4	66.6	73.0	76.3	72.1	66.7	64.0	66.7	72.1
52.5°	39.7	46.0	52.6	58.6	65.1	67.0	62.7	57.9	56.1	57.9	62.7
55°	36.6	39.9	45.4	51.0	57.9	57.5	53.3	49.9	49.2	49.9	53.3
57.5°	34.7	35.3	39.0	44.2	50.4	48.7	45.0	42.0	42.2	42.0	45.0
60°	33.0	31.3	32.3	37.9	42.8	40.2	37.0	35.0	35.1	35.0	37.0
62.5°	31.1	27.9	26.9	31.3	35.7	33.0	30.2	28.8	29.4	28.8	30.2
65°	28.4	24.9	22.7	24.9	28.9	26.8	23.8	22.8	23.5	22.8	23.8
67.5°	26.3	22.4	18.8	21.1	23.6	20.7	18.3	18.2	18.9	18.2	18.3
70°	24.1	19.6	15.9	17.3	19.3	16.0	13.6	14.1	14.4	14.1	13.6
72.5°	21.4	17.4	13.8	13.0	14.4	11.4	10.0	9.8	10.4	9.8	10.0
75°	17.9	14.6	11.3	9.6	10.4	7.6	6.3	6.7	7.0	6.7	6.3
77.5°	13.5	11.5	7.9	6.8	6.8	3.9	3.9	3.9	3.9	3.9	3.9
80°	10.0	8.4	5.6	4.2	3.7	2.4	1.4	1.8	2.3	1.8	1.4
82.5°	6.6	4.5	3.9	2.2	2.0	1.2	0.9	1.3	1.4	1.3	0.9
85°	3.4	1.9	1.9	1.2	0.9	0.7	0.0	0.7	0.9	0.7	0.0
87.5°	0.6	0.8	0.7	0.0	0.3	0.0	0.0	0.3	0.3	0.3	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



TEST NUMBER: 20065
 CATALOG NUMBER: 685-WP-CF1/26

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	38.7	38.7	38.7	38.7	38.7	38.7
2.5°	46.2	40.9	37.1	36.5	35.9	36.6
5°	57.3	48.6	41.7	41.1	39.7	39.4
7.5°	69.5	57.5	50.5	50.3	46.7	46.8
10°	83.7	68.7	62.6	62.7	57.7	56.6
12.5°	97.6	80.1	74.6	75.6	69.1	66.5
15°	112.8	91.4	87.3	89.7	80.5	75.1
17.5°	124.7	100.2	99.8	102.2	89.3	80.4
20°	133.4	107.3	110.6	112.6	95.9	84.2
22.5°	140.0	111.0	117.4	120.5	100.7	86.9
25°	142.3	113.6	121.2	123.9	103.4	88.8
27.5°	142.7	115.5	122.5	125.6	104.5	89.8
30°	140.7	116.4	121.4	123.3	103.1	88.5
32.5°	136.6	115.3	118.4	119.0	98.8	84.8
35°	131.1	112.6	113.6	112.5	92.7	79.7
37.5°	123.5	107.7	107.3	103.9	85.9	73.5
40°	115.5	102.3	100.2	95.0	79.1	67.8
42.5°	106.9	95.7	91.7	86.4	71.6	61.6
45°	96.9	88.6	83.3	77.7	65.1	55.4
47.5°	86.7	81.3	74.8	69.4	58.7	49.9
50°	76.3	73.0	66.6	60.4	52.2	44.5
52.5°	67.0	65.1	58.6	52.6	46.0	39.7
55°	57.5	57.9	51.0	45.4	39.9	36.6
57.5°	48.7	50.4	44.2	39.0	35.3	34.7
60°	40.2	42.8	37.9	32.3	31.3	33.0
62.5°	33.0	35.7	31.3	26.9	27.9	31.1
65°	26.8	28.9	24.9	22.7	24.9	28.4
67.5°	20.7	23.6	21.1	18.8	22.4	26.3
70°	16.0	19.3	17.3	15.9	19.6	24.1
72.5°	11.4	14.4	13.0	13.8	17.4	21.4
75°	7.6	10.4	9.6	11.3	14.6	17.9
77.5°	3.9	6.8	6.8	7.9	11.5	13.5
80°	2.4	3.7	4.2	5.6	8.4	10.0
82.5°	1.2	2.0	2.2	3.9	4.5	6.6
85°	0.7	0.9	1.2	1.9	1.9	3.4
87.5°	0.0	0.3	0.0	0.7	0.8	0.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)