

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: 19372

Luminaire Tested: **233-12-SH-CF1/26**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 19372
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 233-12-SH-CF1/26
Description: INTERIOR CEILING MOUNT LUMINAIRE WITH WHITE GLASS LENS

Light Source: ONE SYLVANIA 26 WATT CPFL LAMP

CF26DT/E/IN/841. LUMEN RATING = 1800 LMS.

Ballast/Driver: -

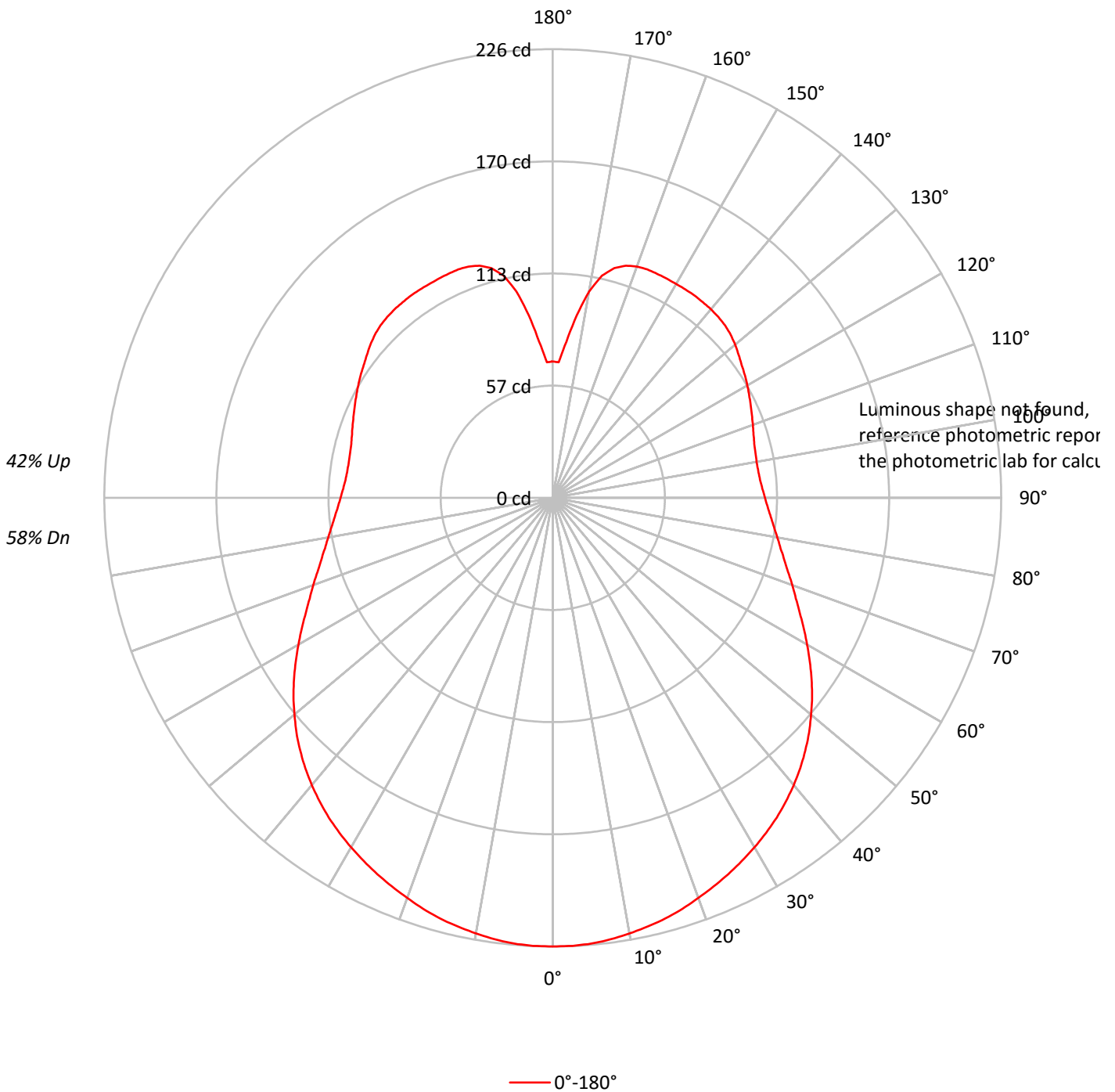
Summary

Lumens per Lamp: 1800 (1 lamp)
Luminaire Lumens: 1682.5 lumens
Efficiency: 93.5%
Efficacy: 60.1 lumens/watt
Spacing Criteria (0/90/45): 1.35 / 1.35 / 1.51
Luminous Opening: (L: 0 ' x W: -0.08 ' x H: 0.38 '
CIE Type: General Diffuse

Input Watts (W): 28
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: 19372
CATALOG NUMBER: 233-12-SH-CF1/26

Luminous Intensity Polar Plot





TEST NUMBER: 19372

CATALOG NUMBER: 233-12-SH-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	0
RCR																				
0	102	102	102	102	95	95	95	95	82	82	82		70	70	70		59	59	59	54
1	90	85	80	75	83	79	74	70	67	64	61		57	54	52		47	46	44	39
2	81	72	65	59	75	67	61	56	57	53	48		48	45	41		40	37	35	31
3	73	63	55	48	67	58	51	45	50	44	39		42	38	34		35	31	28	25
4	67	55	47	40	61	51	44	38	44	38	33		37	32	28		31	27	24	20
5	61	49	40	34	56	45	38	32	39	33	28		33	28	24		27	23	20	17
6	56	43	35	29	52	40	33	27	35	29	24		30	25	21		25	21	18	15
7	52	39	31	25	48	36	29	24	31	25	21		27	22	18		22	18	15	13
8	48	35	28	22	44	33	26	21	29	23	19		24	20	16		20	17	14	11
9	45	32	25	20	41	30	23	19	26	20	16		22	18	14		19	15	12	10
10	42	30	22	18	38	28	21	17	24	19	15		21	16	13		17	14	11	9

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: 19372

CATALOG NUMBER: 233-12-SH-CF1/26

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	21.4	1.3	1.2
10°-20°	62.0	3.7	3.4
20°-30°	96.6	5.7	5.4
30°-40°	123.2	7.3	6.8
40°-50°	139.0	8.3	7.7
50°-60°	142.6	8.5	7.9
60°-70°	136.5	8.1	7.6
70°-80°	128.1	7.6	7.1
80°-90°	120.6	7.2	6.7
90°-100°	114.7	6.8	6.4
100°-110°	111.5	6.6	6.2
110°-120°	109.3	6.5	6.1
120°-130°	104.4	6.2	5.8
130°-140°	94.8	5.6	5.3
140°-150°	78.1	4.6	4.3
150°-160°	57.6	3.4	3.2
160°-170°	33.7	2.0	1.9
170°-180°	8.4	0.5	0.5
0°-30°	180.0	10.7	10.0
0°-40°	303.3	18.0	16.8
0°-60°	584.9	34.8	32.5
0°-90°	970.0	57.7	53.9
90°-120°	335.5	19.9	18.6
90°-150°	612.8	36.4	34.0
90°-180°	712.0	42.3	39.6
0°-180°	1682.5	100.0	93.5

CANDELA DISTRIBUTION:

	0°	Flux
0°	226	
5°	225	21
15°	219	62
25°	209	97
35°	197	123
45°	180	139
55°	159	143
65°	137	137
75°	121	128
85°	110	91
90°	107	59
95°	105	86
105°	105	111
115°	110	109
125°	116	104
135°	123	95
145°	124	78
155°	124	58
165°	120	34
175°	79	8
180°	69	



TEST NUMBER: 19372

CATALOG NUMBER: 233-12-SH-CF1/26

CANDELA DISTRIBUTION (FULL):

0°	
0°	226.0
2.5°	225.9
5°	225.4
7.5°	224.3
10°	222.8
12.5°	221.2
15°	219.4
17.5°	217.1
20°	214.5
22.5°	211.9
25°	209.2
27.5°	206.3
30°	203.3
32.5°	200.1
35°	196.7
37.5°	192.9
40°	188.9
42.5°	184.6
45°	180.0
47.5°	175.2
50°	169.9
52.5°	164.7
55°	159.2
57.5°	153.6
60°	148.0
62.5°	142.6
65°	137.3
67.5°	132.6
70°	128.5
72.5°	124.3
75°	120.8
77.5°	117.6
80°	114.9
82.5°	112.4
85°	110.3
87.5°	108.4
90°	106.9
92.5°	105.7
95°	104.8
97.5°	104.4
100°	104.3
102.5°	104.6
105°	105.1
107.5°	106.1
110°	107.3



TEST NUMBER: 19372

CATALOG NUMBER: 233-12-SH-CF1/26

CANDELA DISTRIBUTION (continued):

	0°
112.5°	108.6
115°	110.1
117.5°	111.6
120°	113.2
122.5°	114.8
125°	116.3
127.5°	118.1
130°	120.0
132.5°	121.6
135°	122.8
137.5°	123.5
140°	124.0
142.5°	124.2
145°	124.5
147.5°	124.4
150°	124.4
152.5°	124.4
155°	124.5
157.5°	124.5
160°	124.0
162.5°	122.6
165°	119.8
167.5°	114.6
170°	105.6
172.5°	92.7
175°	78.9
177.5°	68.3
180°	68.7

(END OF REPORT)