

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P558001

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-80-84-EDD**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P558001
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-12-4-LD4-3LO-35-UNV-80-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

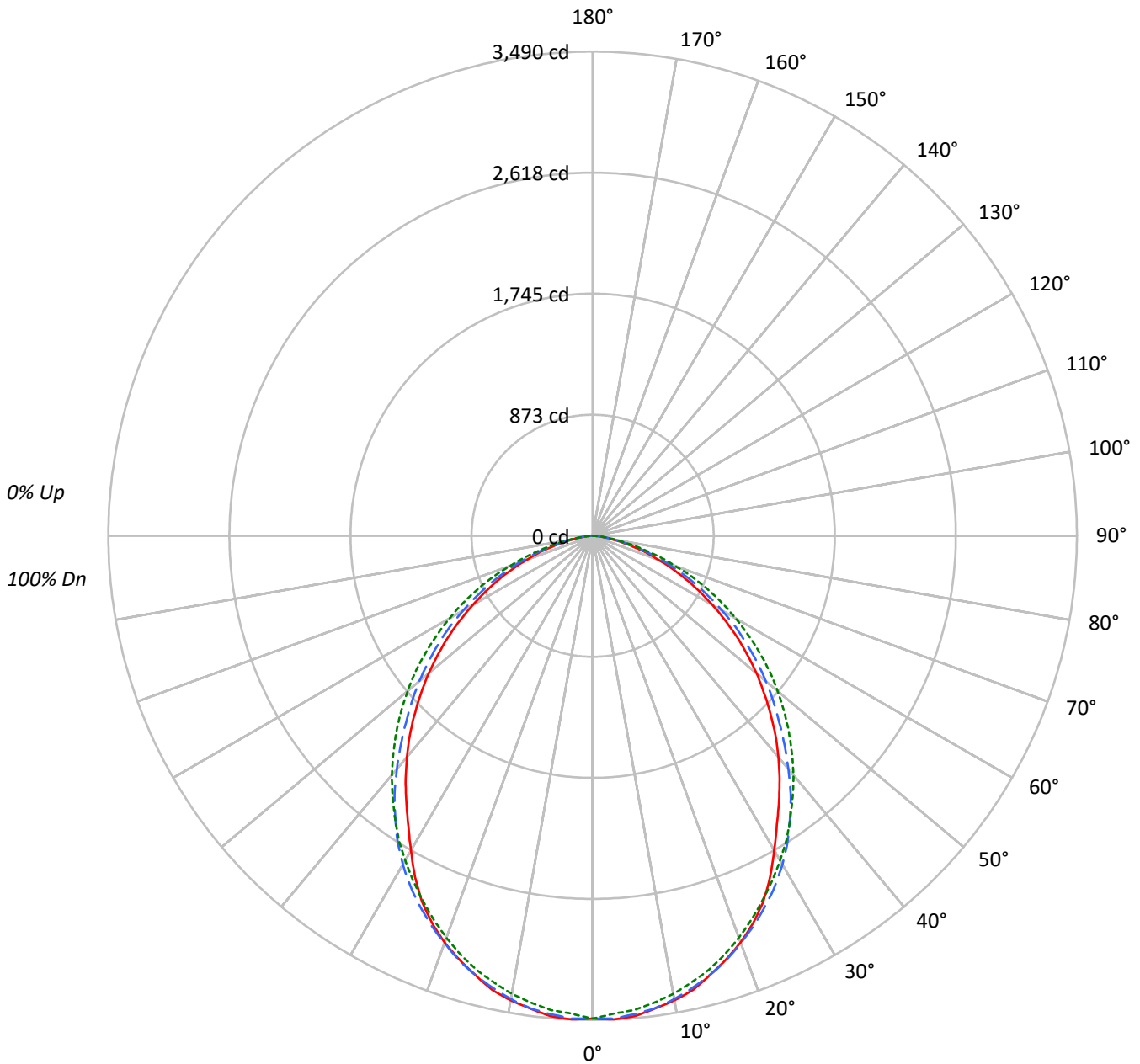
Lumens per Lamp: N/A
Luminaire Lumens: 8047.0 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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

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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									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9365	9365	9365
5°	9390	9350	9271
10°	9290	9265	9159
15°	9126	9126	9021
20°	8932	8944	8829
25°	8638	8745	8606
30°	8134	8500	8396
35°	7686	8147	8160
40°	7313	7707	7909
45°	6894	7240	7612
50°	6453	6823	7287
55°	5953	6348	6893
60°	5360	5793	6411
65°	4734	5151	5831
70°	3945	4386	4954
75°	3099	3503	3878
80°	2218	2466	2735
85°	1445	1445	1362



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	327.7	4.1
10°-20°	920.5	11.4
20°-30°	1345.2	16.7
30°-40°	1526.9	19.0
40°-50°	1474.0	18.3
50°-60°	1215.9	15.1
60°-70°	809.7	10.1
70°-80°	362.3	4.5
80°-90°	64.8	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2593.3	32.2
0°-40°	4120.2	51.2
0°-60°	6810.1	84.6
0°-90°	8047.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8047.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3480	3480	3480	3480	3480	
5°	3476	3475	3461	3443	3432	329
15°	3276	3284	3276	3261	3238	923
25°	2909	2932	2945	2924	2898	1332
35°	2340	2372	2480	2493	2484	1466
45°	1812	1842	1902	1989	2000	1398
55°	1269	1290	1353	1428	1469	1132
65°	743	763	809	866	916	737
75°	298	314	337	353	373	326
85°	47	47	47	44	44	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3480.1	3480.1	3480.1	3480.1	3480.1
2.5°	3489.5	3490.8	3482.8	3461.4	3448.0
5°	3476.1	3474.8	3461.4	3442.7	3432.0
7.5°	3437.3	3440.0	3436.0	3409.3	3394.6
10°	3399.9	3401.2	3390.5	3369.2	3351.8
12.5°	3351.8	3350.4	3335.7	3325.0	3297.0
15°	3275.6	3283.6	3275.6	3260.9	3238.1
17.5°	3202.0	3202.0	3207.4	3182.0	3164.6
20°	3119.1	3123.2	3123.2	3103.1	3083.0
22.5°	3022.9	3034.9	3038.9	3017.5	2993.5
25°	2909.2	2932.0	2945.3	2923.9	2898.5
27.5°	2771.5	2806.3	2846.4	2830.4	2802.3
30°	2617.8	2668.6	2735.4	2722.1	2702.0
32.5°	2472.0	2522.9	2615.1	2609.8	2599.1
35°	2339.7	2371.8	2480.1	2493.4	2484.1
37.5°	2214.0	2243.4	2345.0	2375.8	2367.8
40°	2081.7	2113.7	2194.0	2248.8	2251.4
42.5°	1950.6	1981.4	2046.9	2125.8	2125.8
45°	1811.6	1842.3	1902.5	1989.4	2000.1
47.5°	1675.2	1707.3	1766.1	1853.0	1870.4
50°	1541.5	1570.9	1629.8	1714.0	1740.7
52.5°	1402.5	1434.6	1492.1	1569.6	1608.4
55°	1268.8	1290.2	1353.0	1427.9	1469.3
57.5°	1129.7	1149.8	1220.6	1284.8	1327.6
60°	996.0	1021.4	1076.3	1141.8	1191.2
62.5°	867.7	894.4	941.2	998.7	1054.9
65°	743.4	763.4	808.9	866.4	915.8
67.5°	623.0	640.4	685.9	726.0	778.1
70°	501.4	524.1	557.5	596.3	629.7
72.5°	403.8	413.1	441.2	469.3	504.0
75°	298.1	314.2	336.9	353.0	373.0
77.5°	213.9	223.3	236.6	250.0	268.7
80°	143.1	147.1	159.1	161.8	176.5
82.5°	86.9	89.6	92.3	93.6	98.9
85°	46.8	46.8	46.8	44.1	44.1
87.5°	26.7	26.7	22.7	18.7	13.4
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)