

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: P558105

Luminaire Tested: **FUSL-12-4-LD4-3LO-40-UNV-82-88-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: P558105
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-40-UNV-82-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

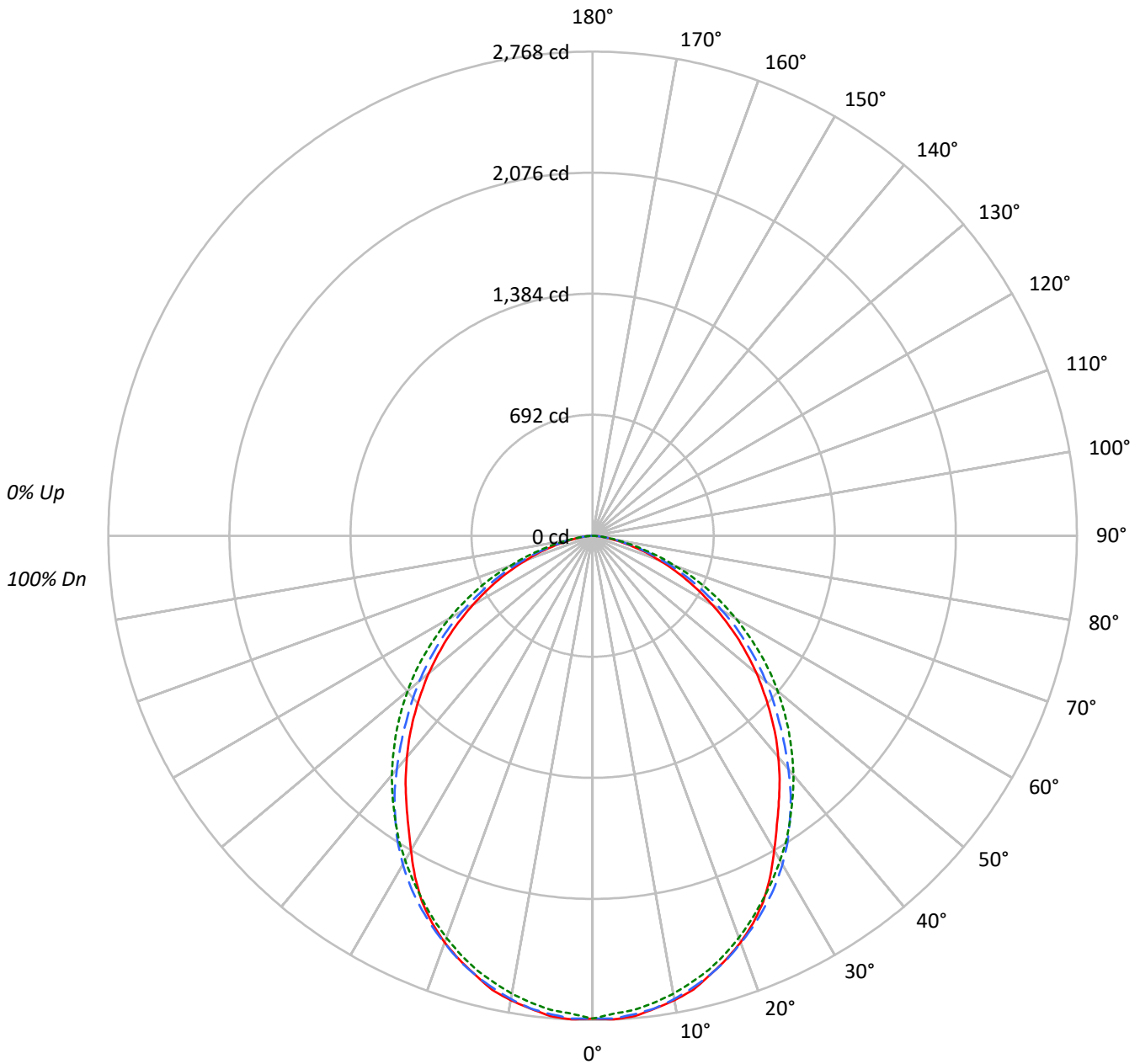
Lumens per Lamp: N/A
Luminaire Lumens: 6382.0 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
Input Voltage (V): NR
Input Current (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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CATALOG NUMBER: FUSL-12-4-LD4-3LO-40-UNV-82-88-EDD

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°	7427	7427	7427
5°	7447	7415	7353
10°	7368	7348	7264
15°	7237	7237	7154
20°	7084	7093	7002
25°	6851	6936	6826
30°	6451	6741	6659
35°	6096	6461	6472
40°	5799	6112	6272
45°	5468	5742	6037
50°	5118	5411	5780
55°	4721	5035	5467
60°	4251	4594	5085
65°	3754	4085	4625
70°	3128	3479	3929
75°	2459	2778	3075
80°	1759	1956	2170
85°	1145	1145	1081



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.9	4.1
10°-20°	730.0	11.4
20°-30°	1066.8	16.7
30°-40°	1211.0	19.0
40°-50°	1169.0	18.3
50°-60°	964.3	15.1
60°-70°	642.2	10.1
70°-80°	287.4	4.5
80°-90°	51.4	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°	2056.7	32.2
0°-40°	3267.7	51.2
0°-60°	5401.0	84.6
0°-90°	6382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6382.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2760	2760	2760	2760	2760	
5°	2757	2756	2745	2730	2722	261
15°	2598	2604	2598	2586	2568	732
25°	2307	2325	2336	2319	2299	1057
35°	1856	1881	1967	1978	1970	1163
45°	1437	1461	1509	1578	1586	1109
55°	1006	1023	1073	1132	1165	898
65°	590	606	642	687	726	585
75°	236	249	267	280	296	259
85°	37	37	37	35	35	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2760.1	2760.1	2760.1	2760.1	2760.1
2.5°	2767.5	2768.5	2762.2	2745.2	2734.6
5°	2756.9	2755.8	2745.2	2730.4	2721.9
7.5°	2726.1	2728.2	2725.1	2703.9	2692.2
10°	2696.4	2697.5	2689.0	2672.0	2658.3
12.5°	2658.3	2657.2	2645.5	2637.1	2614.8
15°	2597.8	2604.2	2597.8	2586.2	2568.1
17.5°	2539.5	2539.5	2543.7	2523.6	2509.8
20°	2473.8	2476.9	2476.9	2461.0	2445.1
22.5°	2397.4	2407.0	2410.1	2393.2	2374.1
25°	2307.3	2325.3	2335.9	2319.0	2298.8
27.5°	2198.1	2225.6	2257.5	2244.7	2222.5
30°	2076.1	2116.4	2169.4	2158.8	2142.9
32.5°	1960.6	2000.9	2074.0	2069.8	2061.3
35°	1855.6	1881.0	1966.9	1977.5	1970.1
37.5°	1755.9	1779.2	1859.8	1884.2	1877.9
40°	1650.9	1676.4	1740.0	1783.5	1785.6
42.5°	1547.0	1571.4	1623.4	1685.9	1685.9
45°	1436.8	1461.1	1508.9	1577.8	1586.3
47.5°	1328.6	1354.0	1400.7	1469.6	1483.4
50°	1222.6	1245.9	1292.5	1359.3	1380.6
52.5°	1112.3	1137.7	1183.3	1244.8	1275.6
55°	1006.3	1023.2	1073.1	1132.4	1165.3
57.5°	896.0	911.9	968.1	1019.0	1052.9
60°	789.9	810.1	853.6	905.5	944.8
62.5°	688.2	709.4	746.5	792.1	836.6
65°	589.5	605.5	641.5	687.1	726.3
67.5°	494.1	507.9	544.0	575.8	617.1
70°	397.6	415.7	442.2	472.9	499.4
72.5°	320.2	327.6	349.9	372.2	399.7
75°	236.5	249.2	267.2	279.9	295.8
77.5°	169.7	177.1	187.7	198.3	213.1
80°	113.5	116.6	126.2	128.3	140.0
82.5°	68.9	71.0	73.2	74.2	78.5
85°	37.1	37.1	37.1	35.0	35.0
87.5°	21.2	21.2	18.0	14.8	10.6
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)