

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: P558044

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-82-96-EDD-90**

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: P558044
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-82-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

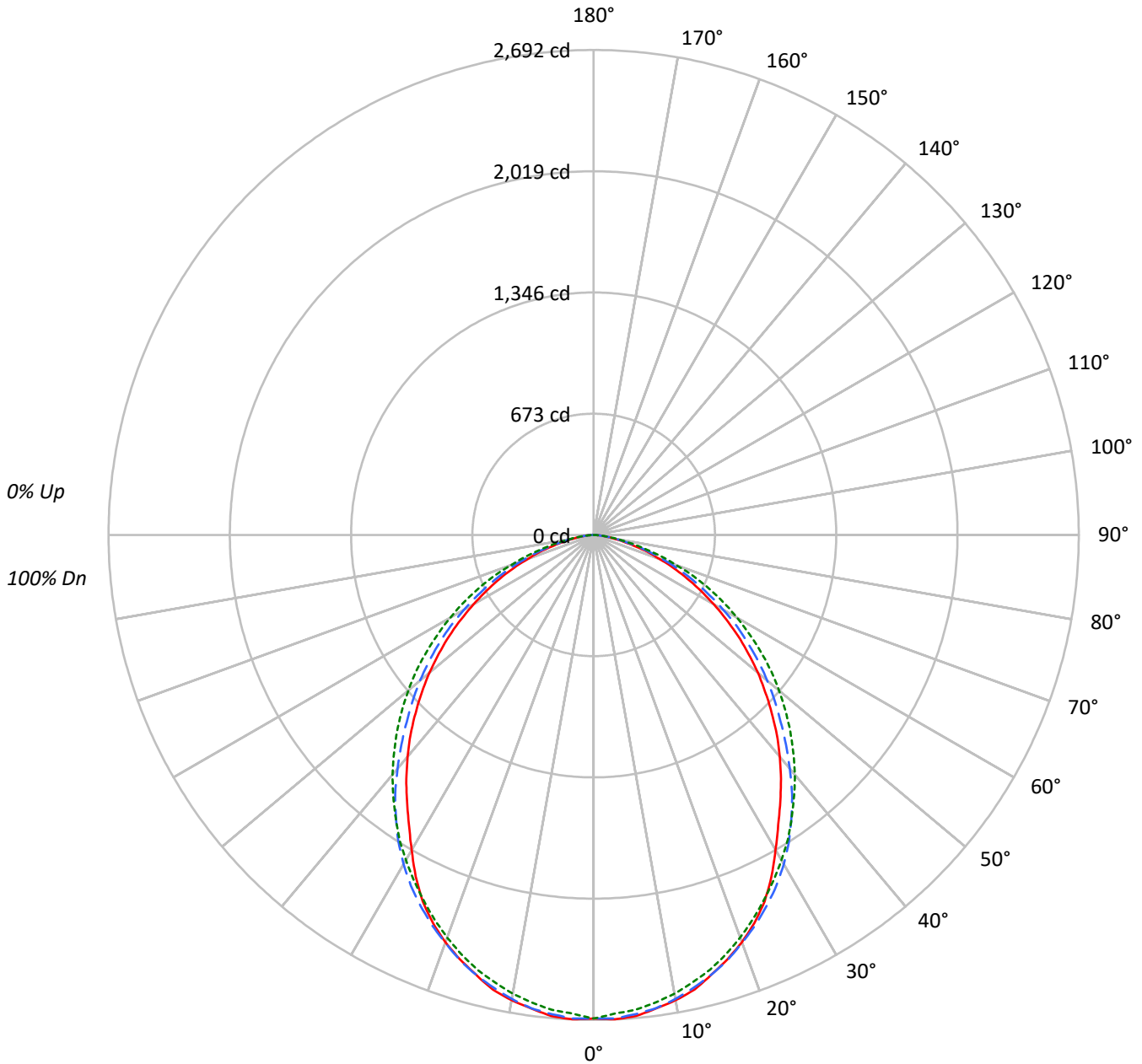
Lumens per Lamp: N/A
Luminaire Lumens: 6207.0 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	7224	7224	7224
5°	7243	7212	7151
10°	7166	7146	7065
15°	7039	7039	6958
20°	6890	6899	6810
25°	6663	6746	6638
30°	6274	6556	6476
35°	5929	6284	6295
40°	5641	5945	6100
45°	5318	5585	5871
50°	4978	5263	5621
55°	4592	4896	5317
60°	4135	4468	4945
65°	3651	3973	4498
70°	3043	3383	3821
75°	2391	2702	2991
80°	1709	1901	2109
85°	1115	1115	1050



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.7	4.1
10°-20°	710.0	11.4
20°-30°	1037.6	16.7
30°-40°	1177.8	19.0
40°-50°	1136.9	18.3
50°-60°	937.9	15.1
60°-70°	624.6	10.1
70°-80°	279.5	4.5
80°-90°	50.0	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°	2000.3	32.2
0°-40°	3178.1	51.2
0°-60°	5253.0	84.6
0°-90°	6207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6207.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2684	2684	2684	2684	2684	
5°	2681	2680	2670	2656	2647	254
15°	2527	2533	2527	2515	2498	712
25°	2244	2262	2272	2255	2236	1028
35°	1805	1830	1913	1923	1916	1131
45°	1397	1421	1468	1534	1543	1078
55°	979	995	1044	1101	1133	873
65°	573	589	624	668	706	569
75°	230	242	260	272	288	251
85°	36	36	36	34	34	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2684.4	2684.4	2684.4	2684.4	2684.4
2.5°	2691.6	2692.6	2686.4	2669.9	2659.6
5°	2681.3	2680.2	2669.9	2655.5	2647.2
7.5°	2651.4	2653.4	2650.3	2629.7	2618.4
10°	2622.5	2623.5	2615.3	2598.8	2585.4
12.5°	2585.4	2584.3	2573.0	2564.7	2543.1
15°	2526.6	2532.8	2526.6	2515.2	2497.7
17.5°	2469.9	2469.9	2474.0	2454.4	2441.0
20°	2405.9	2409.0	2409.0	2393.6	2378.1
22.5°	2331.7	2341.0	2344.1	2327.6	2309.0
25°	2244.0	2261.6	2271.9	2255.4	2235.8
27.5°	2137.8	2164.6	2195.6	2183.2	2161.5
30°	2019.2	2058.4	2110.0	2099.6	2084.2
32.5°	1906.8	1946.0	2017.1	2013.0	2004.8
35°	1804.7	1829.5	1913.0	1923.3	1916.1
37.5°	1707.8	1730.5	1808.8	1832.5	1826.4
40°	1605.7	1630.4	1692.3	1734.6	1736.6
42.5°	1504.6	1528.3	1578.9	1639.7	1639.7
45°	1397.4	1421.1	1467.5	1534.5	1542.8
47.5°	1292.2	1316.9	1362.3	1429.3	1442.7
50°	1189.0	1211.7	1257.1	1322.1	1342.7
52.5°	1081.8	1106.5	1150.9	1210.7	1240.6
55°	978.7	995.2	1043.6	1101.4	1133.4
57.5°	871.4	886.9	941.5	991.0	1024.0
60°	768.3	787.9	830.2	880.7	918.9
62.5°	669.3	689.9	726.0	770.4	813.7
65°	573.4	588.8	623.9	668.3	706.4
67.5°	480.6	494.0	529.0	560.0	600.2
70°	386.7	404.3	430.0	459.9	485.7
72.5°	311.4	318.7	340.3	362.0	388.8
75°	230.0	242.3	259.9	272.3	287.7
77.5°	165.0	172.2	182.5	192.8	207.3
80°	110.3	113.4	122.7	124.8	136.1
82.5°	67.0	69.1	71.2	72.2	76.3
85°	36.1	36.1	36.1	34.0	34.0
87.5°	20.6	20.6	17.5	14.4	10.3
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)