

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: P557650

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-82-85-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: P557650
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-LD4-2STD-50-UNV-82-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

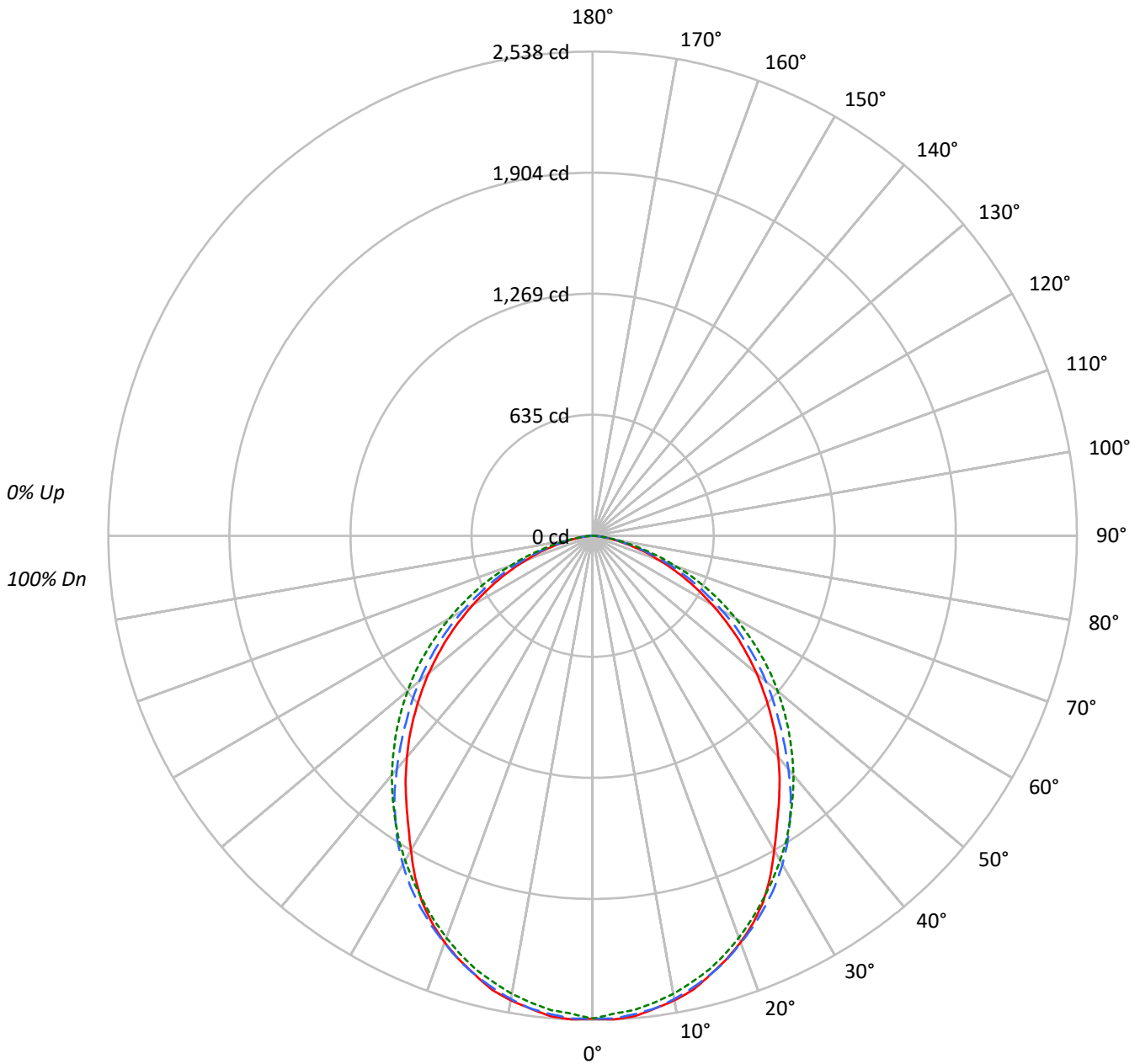
Lumens per Lamp: N/A
Luminaire Lumens: 5852.0 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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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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°	6810	6810	6810
5°	6829	6800	6742
10°	6756	6738	6660
15°	6636	6636	6561
20°	6496	6504	6421
25°	6282	6360	6259
30°	5915	6181	6106
35°	5590	5925	5934
40°	5318	5605	5752
45°	5014	5265	5535
50°	4693	4962	5300
55°	4329	4616	5013
60°	3898	4212	4662
65°	3442	3745	4241
70°	2869	3190	3603
75°	2254	2547	2821
80°	1612	1793	1988
85°	1050	1050	991



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.3	4.1
10°-20°	669.4	11.4
20°-30°	978.2	16.7
30°-40°	1110.4	19.0
40°-50°	1071.9	18.3
50°-60°	884.3	15.1
60°-70°	588.8	10.1
70°-80°	263.5	4.5
80°-90°	47.1	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°	1885.9	32.2
0°-40°	2996.3	51.2
0°-60°	4952.5	84.6
0°-90°	5852.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5852.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2531	2531	2531	2531	2531	
5°	2528	2527	2517	2504	2496	239
15°	2382	2388	2382	2371	2355	672
25°	2116	2132	2142	2126	2108	969
35°	1702	1725	1804	1813	1806	1066
45°	1317	1340	1384	1447	1454	1016
55°	923	938	984	1038	1068	824
65°	541	555	588	630	666	536
75°	217	228	245	257	271	237
85°	34	34	34	32	32	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2530.8	2530.8	2530.8	2530.8	2530.8
2.5°	2537.6	2538.6	2532.8	2517.2	2507.5
5°	2527.9	2526.9	2517.2	2503.6	2495.8
7.5°	2499.7	2501.7	2498.8	2479.3	2468.6
10°	2472.5	2473.5	2465.7	2450.1	2437.5
12.5°	2437.5	2436.5	2425.8	2418.1	2397.6
15°	2382.1	2387.9	2382.1	2371.4	2354.9
17.5°	2328.6	2328.6	2332.5	2314.0	2301.4
20°	2268.3	2271.2	2271.2	2256.7	2242.1
22.5°	2198.3	2207.1	2210.0	2194.4	2176.9
25°	2115.7	2132.2	2141.9	2126.4	2107.9
27.5°	2015.5	2040.8	2070.0	2058.3	2037.9
30°	1903.7	1940.7	1989.3	1979.6	1965.0
32.5°	1797.7	1834.7	1901.8	1897.9	1890.1
35°	1701.5	1724.8	1803.6	1813.3	1806.5
37.5°	1610.1	1631.5	1705.4	1727.7	1721.9
40°	1513.8	1537.2	1595.5	1635.4	1637.3
42.5°	1418.6	1440.9	1488.6	1545.9	1545.9
45°	1317.4	1339.8	1383.6	1446.7	1454.5
47.5°	1218.3	1241.6	1284.4	1347.6	1360.2
50°	1121.0	1142.4	1185.2	1246.5	1265.9
52.5°	1019.9	1043.3	1085.1	1141.5	1169.7
55°	922.7	938.2	983.9	1038.4	1068.5
57.5°	821.6	836.2	887.7	934.4	965.5
60°	724.3	742.8	782.7	830.3	866.3
62.5°	631.0	650.5	684.5	726.3	767.1
65°	540.6	555.2	588.2	630.0	666.0
67.5°	453.1	465.7	498.8	527.9	565.9
70°	364.6	381.1	405.4	433.6	457.9
72.5°	293.6	300.4	320.9	341.3	366.5
75°	216.8	228.5	245.0	256.7	271.3
77.5°	155.6	162.4	172.1	181.8	195.4
80°	104.0	107.0	115.7	117.6	128.3
82.5°	63.2	65.1	67.1	68.1	71.9
85°	34.0	34.0	34.0	32.1	32.1
87.5°	19.4	19.4	16.5	13.6	9.7
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)