

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: P557594

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-82-94-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: P557594
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-40-UNV-82-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

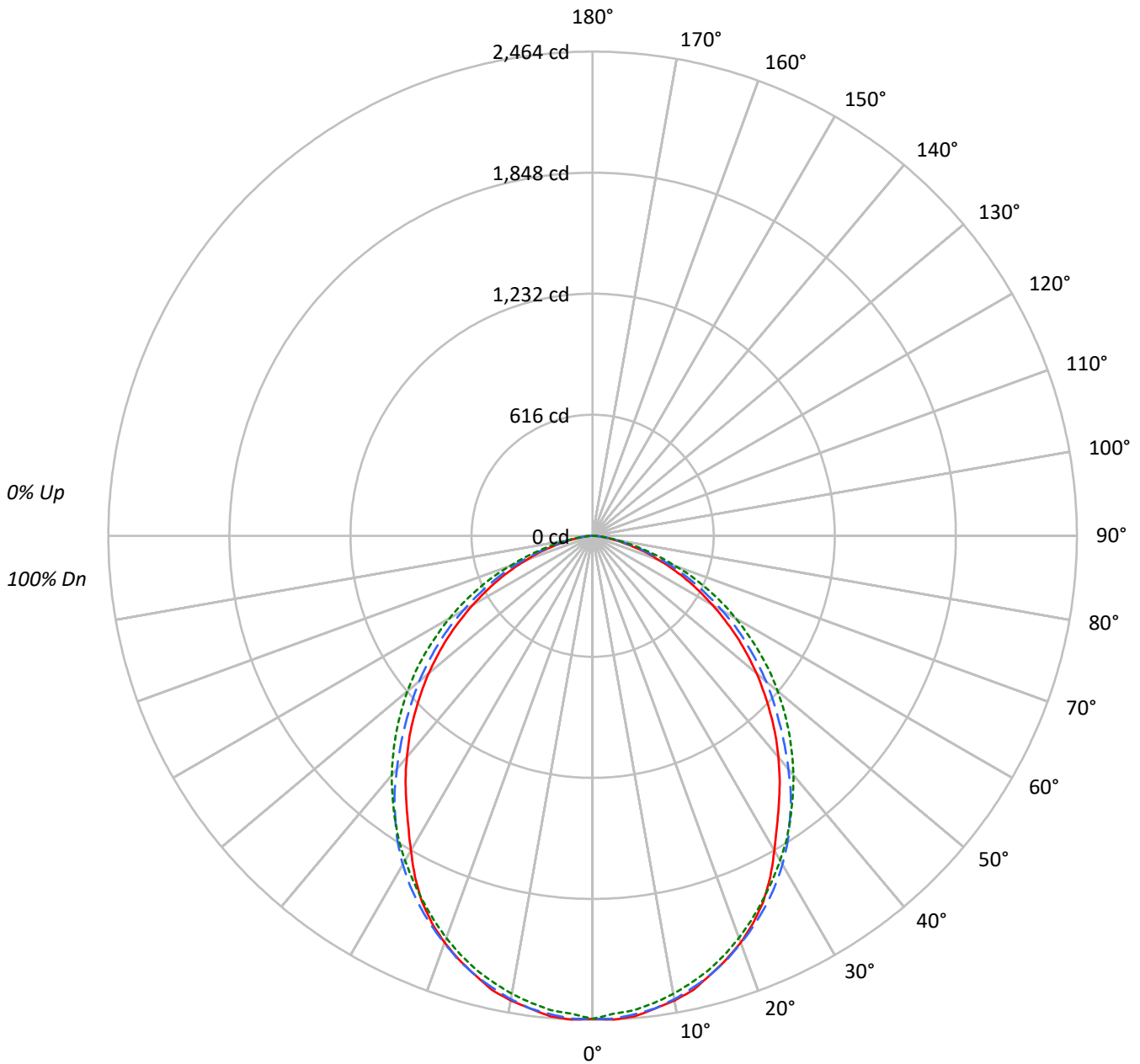
Lumens per Lamp: N/A
Luminaire Lumens: 5683.0 lumens
Efficiency: N/A
Efficacy: 85.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (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°	6614	6614	6614
5°	6631	6603	6547
10°	6561	6543	6468
15°	6445	6445	6371
20°	6308	6316	6235
25°	6100	6176	6078
30°	5744	6003	5929
35°	5428	5754	5763
40°	5164	5443	5585
45°	4869	5113	5375
50°	4558	4819	5146
55°	4204	4483	4868
60°	3786	4091	4528
65°	3343	3637	4118
70°	2786	3098	3499
75°	2190	2473	2739
80°	1565	1742	1931
85°	1019	1019	963



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.4	4.1
10°-20°	650.1	11.4
20°-30°	950.0	16.7
30°-40°	1078.3	19.0
40°-50°	1041.0	18.3
50°-60°	858.7	15.1
60°-70°	571.8	10.1
70°-80°	255.9	4.5
80°-90°	45.8	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°	1831.5	32.2
0°-40°	2909.8	51.2
0°-60°	4809.5	84.6
0°-90°	5683.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5683.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2458	2458	2458	2458	2458	
5°	2455	2454	2444	2431	2424	232
15°	2313	2319	2313	2303	2287	652
25°	2055	2071	2080	2065	2047	941
35°	1652	1675	1752	1761	1754	1035
45°	1279	1301	1344	1405	1412	987
55°	896	911	956	1008	1038	800
65°	525	539	571	612	647	521
75°	211	222	238	249	263	230
85°	33	33	33	31	31	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2457.8	2457.8	2457.8	2457.8	2457.8
2.5°	2464.4	2465.3	2459.6	2444.5	2435.1
5°	2454.9	2454.0	2444.5	2431.3	2423.8
7.5°	2427.5	2429.4	2426.6	2407.7	2397.3
10°	2401.1	2402.0	2394.5	2379.4	2367.1
12.5°	2367.1	2366.2	2355.8	2348.2	2328.4
15°	2313.3	2319.0	2313.3	2302.9	2286.9
17.5°	2261.4	2261.4	2265.1	2247.2	2234.9
20°	2202.8	2205.6	2205.6	2191.5	2177.3
22.5°	2134.8	2143.3	2146.2	2131.1	2114.1
25°	2054.6	2070.6	2080.1	2065.0	2047.0
27.5°	1957.3	1981.9	2010.2	1998.9	1979.0
30°	1848.7	1884.6	1931.8	1922.4	1908.2
32.5°	1745.8	1781.7	1846.9	1843.1	1835.5
35°	1652.3	1675.0	1751.5	1760.9	1754.3
37.5°	1563.6	1584.4	1656.1	1677.8	1672.2
40°	1470.1	1492.8	1549.4	1588.1	1590.0
42.5°	1377.6	1399.3	1445.6	1501.3	1501.3
45°	1279.4	1301.1	1343.6	1405.0	1412.5
47.5°	1183.1	1205.7	1247.3	1308.7	1320.9
50°	1088.7	1109.4	1151.0	1210.5	1229.3
52.5°	990.5	1013.1	1053.7	1108.5	1135.9
55°	896.0	911.2	955.5	1008.4	1037.7
57.5°	797.8	812.0	862.1	907.4	937.6
60°	703.4	721.4	760.1	806.3	841.3
62.5°	612.8	631.7	664.7	705.3	745.0
65°	525.0	539.1	571.2	611.8	646.8
67.5°	440.0	452.3	484.4	512.7	549.5
70°	354.1	370.1	393.7	421.1	444.7
72.5°	285.1	291.8	311.6	331.4	356.0
75°	210.6	221.9	237.9	249.3	263.4
77.5°	151.1	157.7	167.1	176.6	189.8
80°	101.0	103.9	112.4	114.2	124.6
82.5°	61.4	63.3	65.1	66.1	69.9
85°	33.0	33.0	33.0	31.2	31.2
87.5°	18.9	18.9	16.1	13.2	9.4
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)