

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: P557492

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-80-86-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: P557492
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-35-UNV-80-86-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

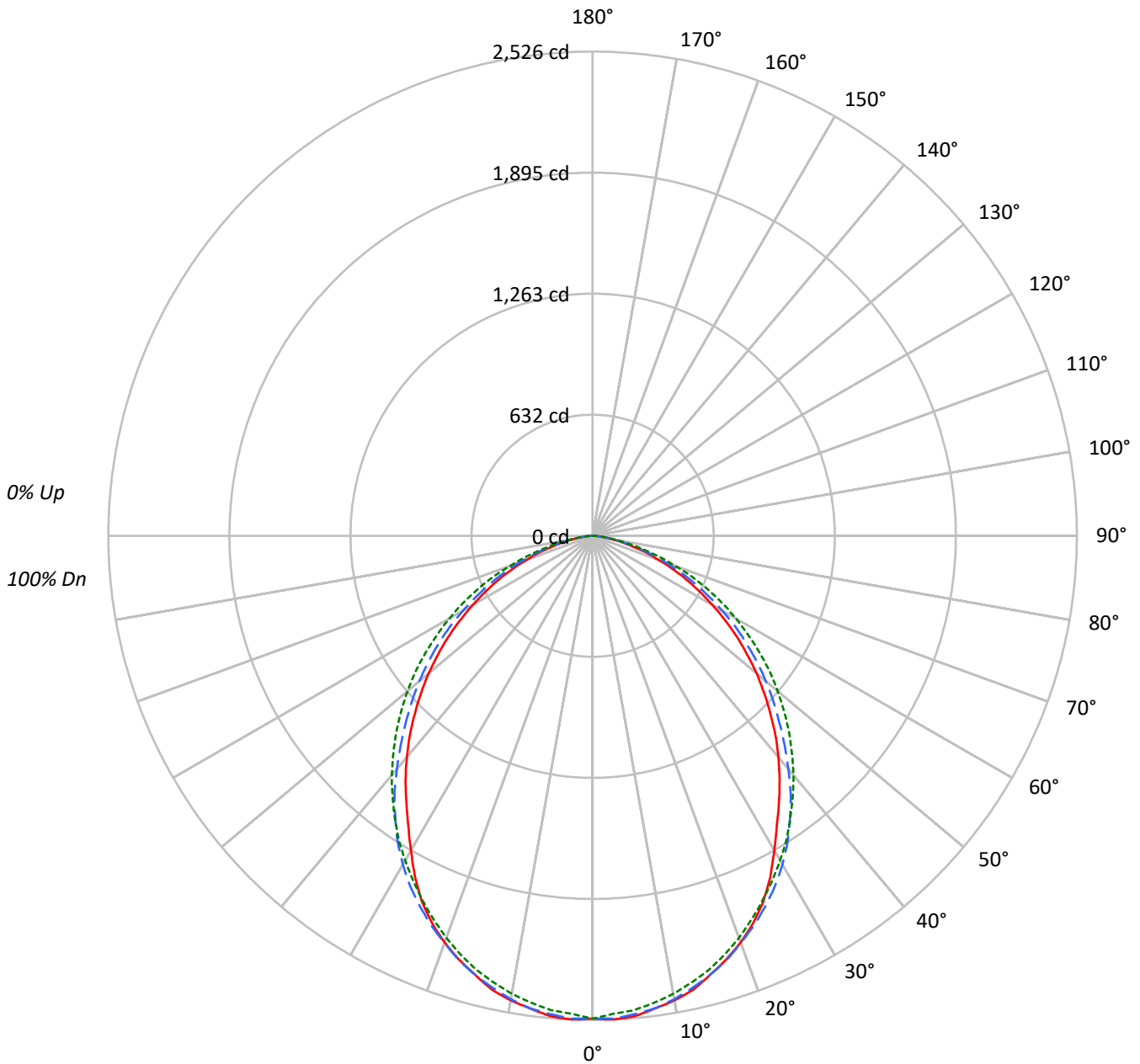
Lumens per Lamp: N/A
Luminaire Lumens: 5825.0 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	6779	6779	6779
5°	6797	6768	6711
10°	6725	6706	6630
15°	6606	6606	6530
20°	6466	6474	6391
25°	6253	6330	6230
30°	5888	6153	6078
35°	5564	5898	5907
40°	5293	5579	5725
45°	4991	5241	5510
50°	4672	4939	5275
55°	4309	4595	4990
60°	3880	4193	4641
65°	3426	3728	4221
70°	2855	3175	3586
75°	2244	2536	2807
80°	1605	1785	1979
85°	1047	1047	985



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.2	4.1
10°-20°	666.3	11.4
20°-30°	973.7	16.7
30°-40°	1105.3	19.0
40°-50°	1067.0	18.3
50°-60°	880.2	15.1
60°-70°	586.1	10.1
70°-80°	262.3	4.5
80°-90°	46.9	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°	1877.2	32.2
0°-40°	2982.5	51.2
0°-60°	4929.7	84.6
0°-90°	5825.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5825.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2519	2519	2519	2519	2519	
5°	2516	2515	2506	2492	2484	238
15°	2371	2377	2371	2360	2344	668
25°	2106	2122	2132	2117	2098	964
35°	1694	1717	1795	1805	1798	1061
45°	1311	1334	1377	1440	1448	1012
55°	918	934	979	1034	1064	820
65°	538	553	586	627	663	534
75°	216	227	244	256	270	236
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°	2519.2	2519.2	2519.2	2519.2	2519.2
2.5°	2525.9	2526.9	2521.1	2505.6	2495.9
5°	2516.3	2515.3	2505.6	2492.1	2484.3
7.5°	2488.2	2490.1	2487.2	2467.9	2457.2
10°	2461.1	2462.1	2454.3	2438.8	2426.3
12.5°	2426.3	2425.3	2414.6	2406.9	2386.6
15°	2371.1	2376.9	2371.1	2360.4	2344.0
17.5°	2317.9	2317.9	2321.7	2303.3	2290.8
20°	2257.9	2260.8	2260.8	2246.2	2231.7
22.5°	2188.2	2196.9	2199.8	2184.3	2166.9
25°	2105.9	2122.4	2132.0	2116.6	2098.2
27.5°	2006.2	2031.4	2060.4	2048.8	2028.5
30°	1894.9	1931.7	1980.1	1970.4	1955.9
32.5°	1789.4	1826.2	1893.0	1889.1	1881.4
35°	1693.6	1716.9	1795.3	1804.9	1798.2
37.5°	1602.7	1624.0	1697.5	1719.8	1714.0
40°	1506.9	1530.1	1588.1	1627.8	1629.8
42.5°	1412.0	1434.3	1481.7	1538.8	1538.8
45°	1311.4	1333.6	1377.2	1440.1	1447.8
47.5°	1212.6	1235.9	1278.5	1341.4	1353.9
50°	1115.9	1137.2	1179.7	1240.7	1260.1
52.5°	1015.2	1038.4	1080.1	1136.2	1164.3
55°	918.4	933.9	979.4	1033.6	1063.6
57.5°	817.8	832.3	883.6	930.0	961.0
60°	721.0	739.4	779.1	826.5	862.3
62.5°	628.1	647.5	681.3	722.9	763.6
65°	538.1	552.6	585.5	627.1	662.9
67.5°	451.0	463.6	496.5	525.5	563.3
70°	362.9	379.4	403.6	431.6	455.8
72.5°	292.3	299.0	319.4	339.7	364.9
75°	215.8	227.4	243.9	255.5	270.0
77.5°	154.8	161.6	171.3	181.0	194.5
80°	103.6	106.5	115.2	117.1	127.7
82.5°	62.9	64.8	66.8	67.7	71.6
85°	33.9	33.9	33.9	31.9	31.9
87.5°	19.4	19.4	16.5	13.5	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)