

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: P558334

Luminaire Tested: **FUSL-12-4-LD4-3STD-40-UNV-80-97-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: P558334
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-LD4-3STD-40-UNV-80-97-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

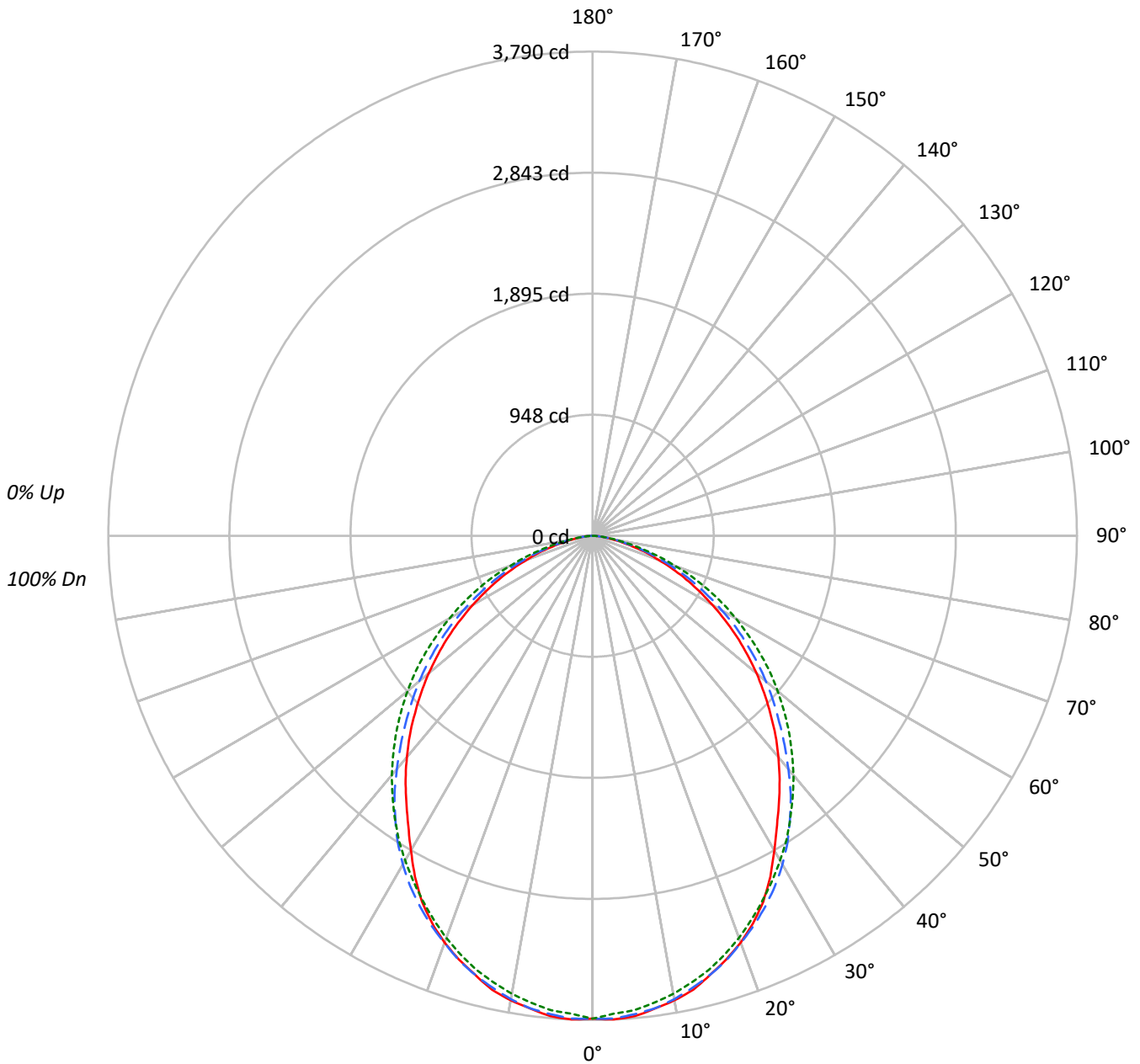
Lumens per Lamp: N/A
Luminaire Lumens: 8740.0 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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°	10171	10171	10171
5°	10199	10155	10069
10°	10090	10062	9947
15°	9911	9911	9798
20°	9702	9714	9589
25°	9382	9498	9348
30°	8835	9232	9119
35°	8348	8849	8863
40°	7942	8371	8590
45°	7488	7864	8267
50°	7009	7410	7915
55°	6465	6894	7487
60°	5822	6291	6963
65°	5141	5594	6334
70°	4284	4764	5381
75°	3367	3804	4212
80°	2408	2678	2971
85°	1568	1568	1479



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	355.9	4.1
10°-20°	999.8	11.4
20°-30°	1461.0	16.7
30°-40°	1658.4	19.0
40°-50°	1600.9	18.3
50°-60°	1320.6	15.1
60°-70°	879.4	10.1
70°-80°	393.5	4.5
80°-90°	70.4	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°	2816.7	32.2
0°-40°	4475.0	51.2
0°-60°	7396.6	84.6
0°-90°	8740.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8740.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3780	3780	3780	3780	3780	
5°	3776	3774	3760	3739	3728	357
15°	3558	3566	3558	3542	3517	1003
25°	3160	3184	3199	3176	3148	1447
35°	2541	2576	2694	2708	2698	1592
45°	1968	2001	2066	2161	2172	1518
55°	1378	1401	1470	1551	1596	1230
65°	807	829	878	941	995	801
75°	324	341	366	383	405	354
85°	51	51	51	48	48	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3779.8	3779.8	3779.8	3779.8	3779.8
2.5°	3790.0	3791.4	3782.7	3759.5	3745.0
5°	3775.5	3774.0	3759.5	3739.2	3727.5
7.5°	3733.4	3736.3	3731.9	3702.9	3686.9
10°	3692.7	3694.2	3682.5	3659.3	3640.4
12.5°	3640.4	3639.0	3623.0	3611.4	3580.9
15°	3557.7	3566.4	3557.7	3541.7	3517.0
17.5°	3477.8	3477.8	3483.6	3456.0	3437.1
20°	3387.8	3392.1	3392.1	3370.3	3348.5
22.5°	3283.2	3296.3	3300.6	3277.4	3251.3
25°	3159.8	3184.5	3199.0	3175.7	3148.2
27.5°	3010.2	3048.0	3091.5	3074.1	3043.6
30°	2843.2	2898.4	2971.0	2956.5	2934.7
32.5°	2684.9	2740.1	2840.3	2834.5	2822.9
35°	2541.2	2576.0	2693.7	2708.2	2698.0
37.5°	2404.7	2436.6	2547.0	2580.4	2571.7
40°	2260.9	2295.8	2382.9	2442.4	2445.3
42.5°	2118.6	2152.0	2223.2	2308.8	2308.8
45°	1967.6	2001.0	2066.3	2160.7	2172.3
47.5°	1819.5	1854.3	1918.2	2012.6	2031.5
50°	1674.3	1706.2	1770.1	1861.6	1890.6
52.5°	1523.3	1558.1	1620.5	1704.8	1746.9
55°	1378.0	1401.3	1469.5	1550.8	1595.9
57.5°	1227.0	1248.8	1325.8	1395.5	1441.9
60°	1081.8	1109.4	1168.9	1240.1	1293.8
62.5°	942.4	971.5	1022.3	1084.7	1145.7
65°	807.4	829.2	878.5	941.0	994.7
67.5°	676.7	695.6	744.9	788.5	845.1
70°	544.5	569.2	605.5	647.6	683.9
72.5°	438.5	448.7	479.2	509.7	547.4
75°	323.8	341.2	365.9	383.4	405.1
77.5°	232.3	242.5	257.0	271.5	291.9
80°	155.4	159.7	172.8	175.7	191.7
82.5°	94.4	97.3	100.2	101.6	107.5
85°	50.8	50.8	50.8	47.9	47.9
87.5°	29.0	29.0	24.7	20.3	14.5
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)