

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: P557906

Luminaire Tested: **FUSL-12-4-LD4-3HI-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: P557906
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-LD4-3HI-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

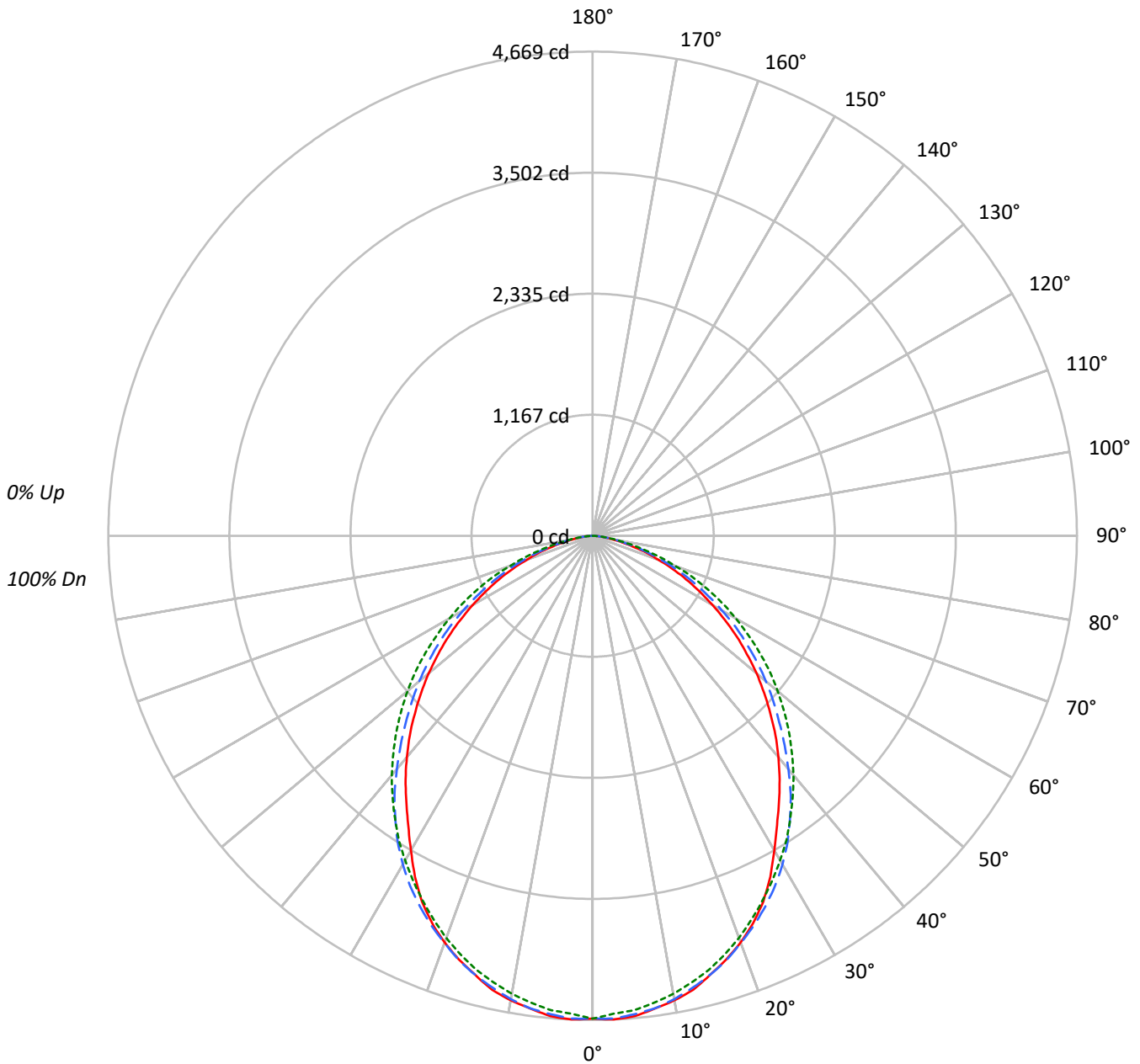
Lumens per Lamp: N/A
Luminaire Lumens: 10767.0 lumens
Efficiency: N/A
Efficacy: 83.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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°	12530	12530	12530
5°	12564	12511	12404
10°	12430	12396	12254
15°	12210	12210	12070
20°	11952	11967	11813
25°	11558	11701	11515
30°	10884	11373	11234
35°	10284	10901	10919
40°	9784	10312	10582
45°	9224	9688	10185
50°	8635	9129	9751
55°	7964	8493	9224
60°	7173	7750	8578
65°	6333	6891	7803
70°	5278	5869	6629
75°	4147	4687	5189
80°	2966	3299	3659
85°	1933	1933	1822



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	438.4	4.1
10°-20°	1231.6	11.4
20°-30°	1799.8	16.7
30°-40°	2043.0	19.0
40°-50°	1972.2	18.3
50°-60°	1626.9	15.1
60°-70°	1083.4	10.1
70°-80°	484.8	4.5
80°-90°	86.7	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°	3469.9	32.2
0°-40°	5512.9	51.2
0°-60°	9112.0	84.6
0°-90°	10767.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10767.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4656	4656	4656	4656	4656	
5°	4651	4649	4631	4606	4592	440
15°	4383	4394	4383	4363	4333	1236
25°	3893	3923	3941	3912	3878	1783
35°	3130	3174	3318	3336	3324	1961
45°	2424	2465	2546	2662	2676	1870
55°	1698	1726	1810	1910	1966	1515
65°	995	1021	1082	1159	1225	986
75°	399	420	451	472	499	436
85°	63	63	63	59	59	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4656.4	4656.4	4656.4	4656.4	4656.4
2.5°	4669.0	4670.8	4660.0	4631.4	4613.5
5°	4651.1	4649.3	4631.4	4606.4	4592.0
7.5°	4599.2	4602.8	4597.4	4561.6	4542.0
10°	4549.1	4550.9	4536.6	4508.0	4484.7
12.5°	4484.7	4482.9	4463.3	4448.9	4411.4
15°	4382.8	4393.5	4382.8	4363.1	4332.7
17.5°	4284.4	4284.4	4291.5	4257.5	4234.3
20°	4173.5	4178.8	4178.8	4152.0	4125.2
22.5°	4044.7	4060.8	4066.1	4037.5	4005.3
25°	3892.6	3923.0	3940.9	3912.3	3878.3
27.5°	3708.3	3754.9	3808.5	3787.1	3749.5
30°	3502.6	3570.6	3660.0	3642.2	3615.3
32.5°	3307.6	3375.6	3499.0	3491.9	3477.6
35°	3130.5	3173.5	3318.4	3336.3	3323.7
37.5°	2962.4	3001.7	3137.7	3178.8	3168.1
40°	2785.3	2828.2	2935.5	3008.9	3012.5
42.5°	2610.0	2651.1	2738.8	2844.3	2844.3
45°	2423.9	2465.1	2545.6	2661.9	2676.2
47.5°	2241.5	2284.4	2363.1	2479.4	2502.6
50°	2062.6	2101.9	2180.6	2293.3	2329.1
52.5°	1876.5	1919.5	1996.4	2100.1	2152.0
55°	1697.6	1726.3	1810.3	1910.5	1966.0
57.5°	1511.6	1538.4	1633.2	1719.1	1776.4
60°	1332.7	1366.7	1440.0	1527.7	1593.9
62.5°	1161.0	1196.8	1259.4	1336.3	1411.4
65°	994.6	1021.4	1082.3	1159.2	1225.4
67.5°	833.6	856.9	917.7	971.4	1041.1
70°	670.8	701.2	746.0	797.8	842.6
72.5°	540.2	552.8	590.3	627.9	674.4
75°	398.9	420.4	450.8	472.3	499.1
77.5°	286.2	298.7	316.6	334.5	359.6
80°	191.4	196.8	212.9	216.5	236.1
82.5°	116.3	119.9	123.4	125.2	132.4
85°	62.6	62.6	62.6	59.0	59.0
87.5°	35.8	35.8	30.4	25.0	17.9
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)