

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: P558288

Luminaire Tested: **FUSL-12-4-LD4-3STD-35-UNV-82-84-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: P558288
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-35-UNV-82-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

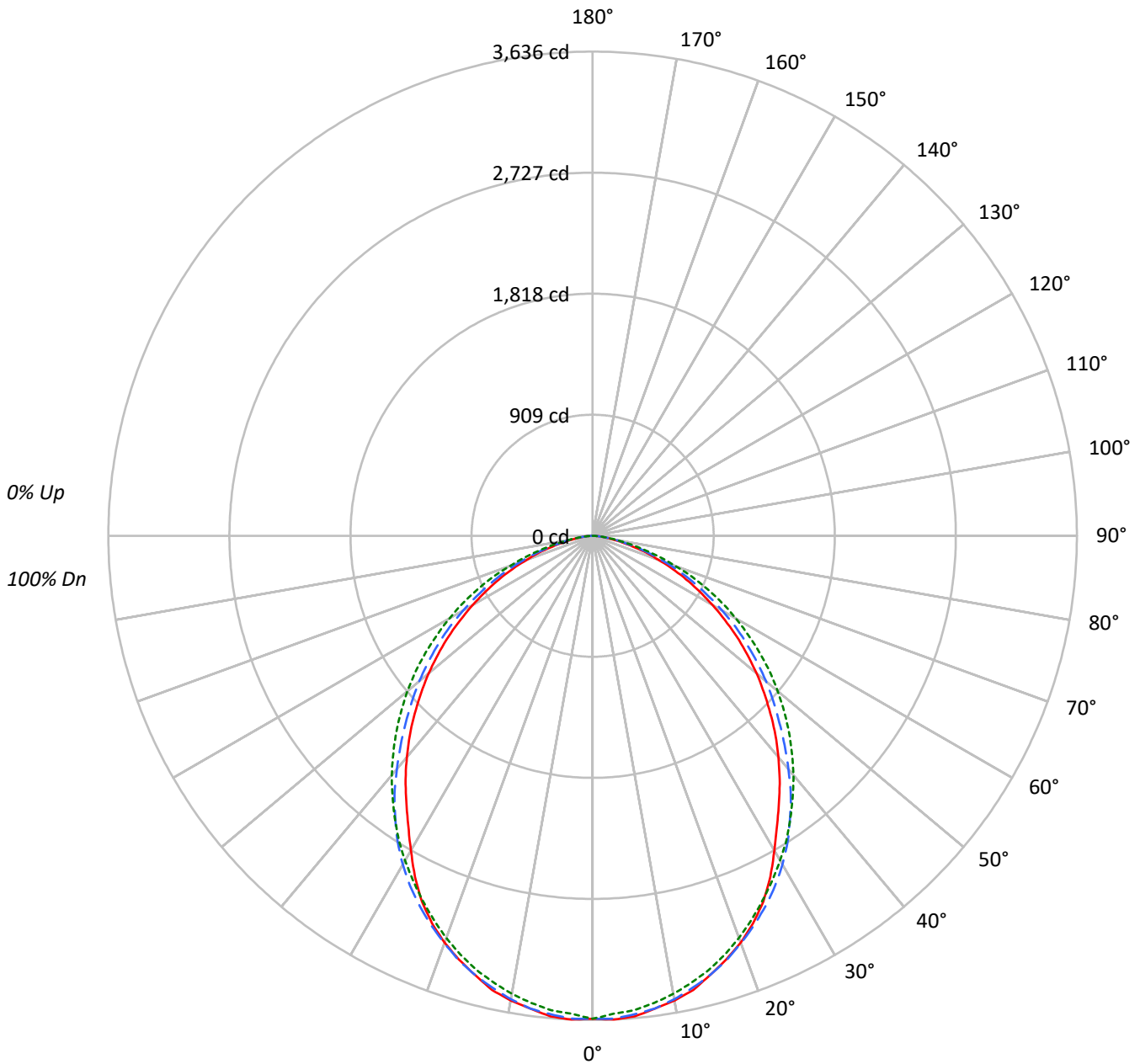
Lumens per Lamp: N/A
Luminaire Lumens: 8386.0 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	9759	9759	9759
5°	9785	9744	9661
10°	9681	9655	9545
15°	9510	9510	9401
20°	9308	9320	9201
25°	9002	9114	8969
30°	8477	8858	8749
35°	8010	8490	8504
40°	7620	8032	8242
45°	7185	7545	7932
50°	6725	7110	7595
55°	6203	6615	7184
60°	5586	6036	6681
65°	4933	5367	6077
70°	4111	4571	5163
75°	3230	3650	4041
80°	2311	2569	2850
85°	1507	1507	1420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.5	4.1
10°-20°	959.3	11.4
20°-30°	1401.8	16.7
30°-40°	1591.2	19.0
40°-50°	1536.1	18.3
50°-60°	1267.1	15.1
60°-70°	843.8	10.1
70°-80°	377.6	4.5
80°-90°	67.6	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°	2702.6	32.2
0°-40°	4293.8	51.2
0°-60°	7097.0	84.6
0°-90°	8386.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8386.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3627	3627	3627	3627	3627	
5°	3622	3621	3607	3588	3577	343
15°	3414	3422	3414	3398	3374	962
25°	3032	3056	3069	3047	3021	1388
35°	2438	2472	2584	2598	2589	1528
45°	1888	1920	1983	2073	2084	1457
55°	1322	1344	1410	1488	1531	1180
65°	775	796	843	903	954	768
75°	311	327	351	368	389	340
85°	49	49	49	46	46	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3626.7	3626.7	3626.7	3626.7	3626.7
2.5°	3636.5	3637.9	3629.5	3607.2	3593.3
5°	3622.5	3621.2	3607.2	3587.7	3576.6
7.5°	3582.1	3584.9	3580.7	3552.9	3537.6
10°	3543.1	3544.5	3533.4	3511.1	3493.0
12.5°	3493.0	3491.6	3476.3	3465.1	3435.8
15°	3413.6	3421.9	3413.6	3398.2	3374.5
17.5°	3336.9	3336.9	3342.5	3316.0	3297.9
20°	3250.5	3254.7	3254.7	3233.8	3212.9
22.5°	3150.2	3162.8	3166.9	3144.7	3119.6
25°	3031.8	3055.5	3069.4	3047.1	3020.6
27.5°	2888.3	2924.5	2966.3	2949.6	2920.3
30°	2728.1	2781.0	2850.7	2836.7	2815.8
32.5°	2576.2	2629.1	2725.3	2719.7	2708.6
35°	2438.3	2471.7	2584.5	2598.5	2588.7
37.5°	2307.3	2337.9	2443.8	2475.9	2467.5
40°	2169.3	2202.8	2286.4	2343.5	2346.3
42.5°	2032.8	2064.9	2133.1	2215.3	2215.3
45°	1887.9	1920.0	1982.6	2073.2	2084.4
47.5°	1745.8	1779.2	1840.5	1931.1	1949.2
50°	1606.5	1637.1	1698.4	1786.2	1814.1
52.5°	1461.6	1495.0	1554.9	1635.7	1676.1
55°	1322.2	1344.5	1410.0	1488.0	1531.2
57.5°	1177.3	1198.2	1272.1	1338.9	1383.5
60°	1038.0	1064.5	1121.6	1189.9	1241.4
62.5°	904.2	932.1	980.9	1040.8	1099.3
65°	774.7	795.6	842.9	902.9	954.4
67.5°	649.3	667.4	714.8	756.6	810.9
70°	522.5	546.2	581.0	621.4	656.2
72.5°	420.8	430.5	459.8	489.0	525.3
75°	310.7	327.4	351.1	367.8	388.7
77.5°	222.9	232.7	246.6	260.5	280.1
80°	149.1	153.3	165.8	168.6	183.9
82.5°	90.6	93.4	96.1	97.5	103.1
85°	48.8	48.8	48.8	46.0	46.0
87.5°	27.9	27.9	23.7	19.5	13.9
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)