

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: P557111

Luminaire Tested: **FUSL-12-4-LD4-2HI-50-UNV-80-87-EDD**

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: P557111
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-LD4-2HI-50-UNV-80-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

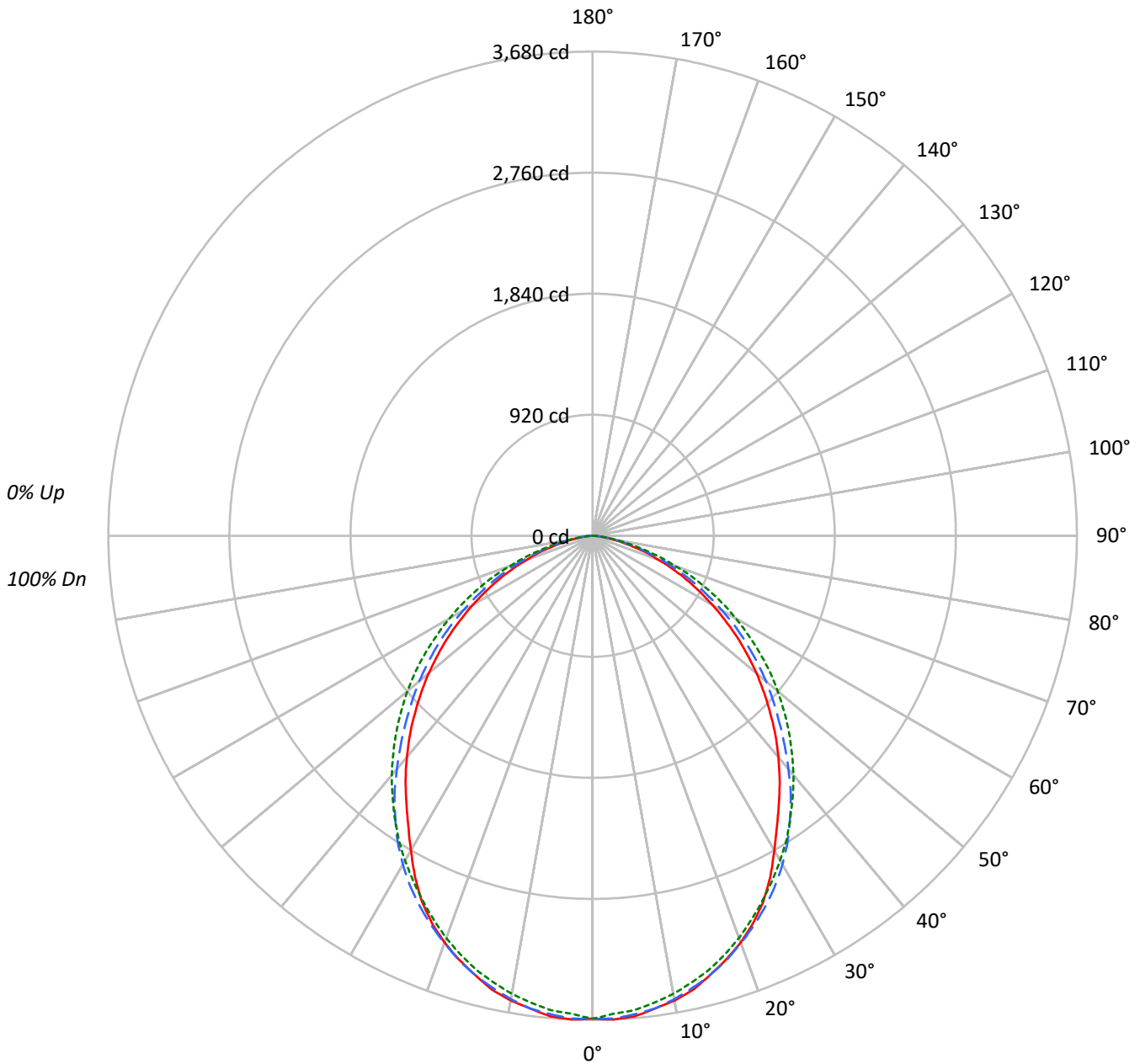
Lumens per Lamp: N/A
Luminaire Lumens: 8487.0 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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

TEST NUMBER: P557111

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-80-87-EDD

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°	9877	9877	9877
5°	9903	9861	9777
10°	9798	9771	9659
15°	9624	9624	9514
20°	9421	9433	9312
25°	9110	9223	9077
30°	8579	8964	8855
35°	8106	8593	8607
40°	7712	8128	8342
45°	7271	7636	8028
50°	6806	7196	7686
55°	6278	6695	7271
60°	5654	6109	6762
65°	4992	5432	6150
70°	4161	4626	5225
75°	3269	3694	4090
80°	2338	2600	2884
85°	1525	1525	1436



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	345.6	4.1
10°-20°	970.8	11.4
20°-30°	1418.7	16.7
30°-40°	1610.4	19.0
40°-50°	1554.6	18.3
50°-60°	1282.4	15.1
60°-70°	854.0	10.1
70°-80°	382.1	4.5
80°-90°	68.4	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°	2735.1	32.2
0°-40°	4345.5	51.2
0°-60°	7182.5	84.6
0°-90°	8487.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8487.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3670	3670	3670	3670	3670	
5°	3666	3665	3651	3631	3620	347
15°	3455	3463	3455	3439	3415	974
25°	3068	3092	3106	3084	3057	1405
35°	2468	2502	2616	2630	2620	1546
45°	1911	1943	2006	2098	2110	1474
55°	1338	1361	1427	1506	1550	1194
65°	784	805	853	914	966	777
75°	314	331	355	372	393	344
85°	49	49	49	46	46	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3670.4	3670.4	3670.4	3670.4	3670.4
2.5°	3680.3	3681.7	3673.2	3650.7	3636.6
5°	3666.2	3664.8	3650.7	3630.9	3619.6
7.5°	3625.3	3628.1	3623.9	3595.7	3580.2
10°	3585.8	3587.2	3575.9	3553.4	3535.0
12.5°	3535.0	3533.6	3518.1	3506.8	3477.2
15°	3454.7	3463.1	3454.7	3439.2	3415.2
17.5°	3377.1	3377.1	3382.8	3356.0	3337.6
20°	3289.7	3293.9	3293.9	3272.8	3251.6
22.5°	3188.2	3200.9	3205.1	3182.5	3157.1
25°	3068.3	3092.3	3106.4	3083.8	3057.0
27.5°	2923.1	2959.7	3002.0	2985.1	2955.5
30°	2760.9	2814.5	2885.0	2870.9	2849.7
32.5°	2607.2	2660.8	2758.1	2752.5	2741.2
35°	2467.6	2501.5	2615.7	2629.8	2619.9
37.5°	2335.1	2366.1	2473.3	2505.7	2497.2
40°	2195.5	2229.3	2313.9	2371.7	2374.6
42.5°	2057.3	2089.7	2158.8	2242.0	2242.0
45°	1910.6	1943.1	2006.5	2098.2	2109.5
47.5°	1766.8	1800.7	1862.7	1954.4	1972.7
50°	1625.8	1656.8	1718.9	1807.7	1835.9
52.5°	1479.2	1513.0	1573.6	1655.4	1696.3
55°	1338.2	1360.7	1427.0	1506.0	1549.7
57.5°	1191.5	1212.7	1287.4	1355.1	1400.2
60°	1050.5	1077.3	1135.1	1204.2	1256.4
62.5°	915.1	943.3	992.7	1053.3	1112.5
65°	784.0	805.1	853.1	913.7	965.9
67.5°	657.1	675.4	723.4	765.7	820.7
70°	528.8	552.7	588.0	628.9	664.1
72.5°	425.8	435.7	465.3	494.9	531.6
75°	314.4	331.4	355.3	372.3	393.4
77.5°	225.6	235.5	249.6	263.7	283.4
80°	150.9	155.1	167.8	170.6	186.1
82.5°	91.7	94.5	97.3	98.7	104.3
85°	49.4	49.4	49.4	46.5	46.5
87.5°	28.2	28.2	24.0	19.7	14.1
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)