

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: P557739

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-93-94-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: P557739
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-30-UNV-93-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

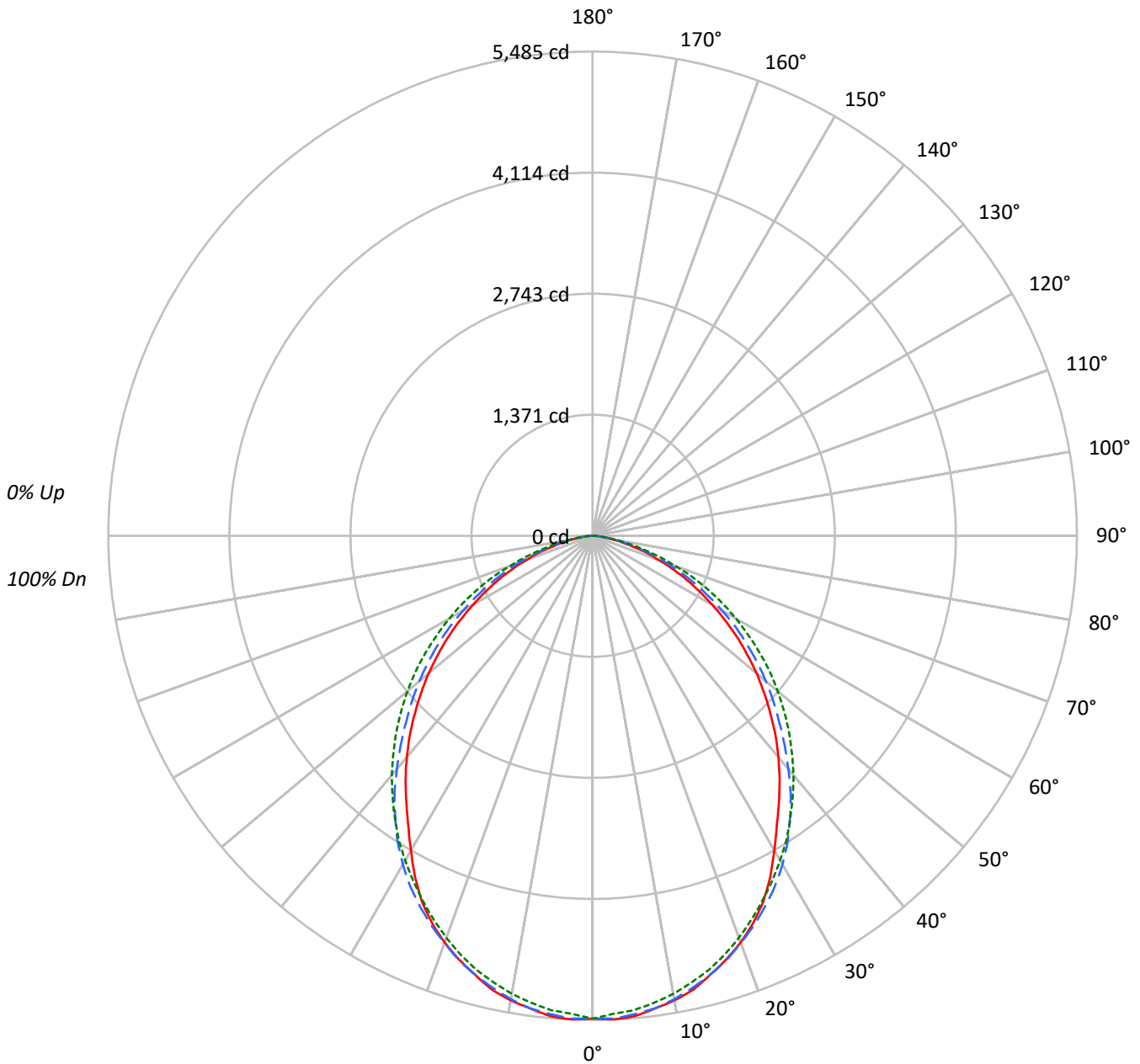
Lumens per Lamp: N/A
Luminaire Lumens: 12648.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P557739

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-93-94-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°	14719	14719	14719
5°	14759	14696	14571
10°	14602	14562	14395
15°	14343	14343	14179
20°	14039	14058	13877
25°	13577	13745	13527
30°	12785	13360	13196
35°	12081	12806	12826
40°	11494	12114	12431
45°	10836	11380	11964
50°	10143	10724	11454
55°	9356	9977	10835
60°	8425	9104	10077
65°	7440	8095	9166
70°	6200	6895	7788
75°	4872	5506	6096
80°	3484	3876	4299
85°	2269	2269	2140



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	515.0	4.1
10°-20°	1446.8	11.4
20°-30°	2114.3	16.7
30°-40°	2399.9	19.0
40°-50°	2316.7	18.3
50°-60°	1911.2	15.1
60°-70°	1272.7	10.1
70°-80°	569.5	4.5
80°-90°	101.9	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°	4076.1	32.2
0°-40°	6476.0	51.2
0°-60°	10703.9	84.6
0°-90°	12648.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12648.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5470	5470	5470	5470	5470	
5°	5464	5462	5440	5411	5394	517
15°	5148	5161	5148	5125	5090	1451
25°	4573	4608	4629	4596	4556	2094
35°	3677	3728	3898	3919	3904	2304
45°	2847	2896	2990	3127	3144	2197
55°	1994	2028	2127	2244	2309	1780
65°	1168	1200	1271	1362	1440	1159
75°	469	494	530	555	586	512
85°	74	74	74	69	69	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5469.9	5469.9	5469.9	5469.9	5469.9
2.5°	5484.6	5486.7	5474.1	5440.5	5419.5
5°	5463.6	5461.5	5440.5	5411.1	5394.3
7.5°	5402.7	5406.9	5400.6	5358.6	5335.4
10°	5343.8	5346.0	5329.1	5295.5	5268.2
12.5°	5268.2	5266.1	5243.0	5226.2	5182.0
15°	5148.4	5161.0	5148.4	5125.3	5089.6
17.5°	5032.8	5032.8	5041.2	5001.3	4974.0
20°	4902.6	4908.9	4908.9	4877.3	4845.8
22.5°	4751.3	4770.2	4776.5	4742.9	4705.0
25°	4572.6	4608.4	4629.4	4595.8	4555.8
27.5°	4356.2	4410.8	4473.9	4448.7	4404.5
30°	4114.5	4194.4	4299.5	4278.4	4246.9
32.5°	3885.5	3965.3	4110.3	4101.9	4085.1
35°	3677.4	3727.9	3898.1	3919.1	3904.4
37.5°	3479.9	3526.1	3685.8	3734.2	3721.6
40°	3271.9	3322.3	3448.4	3534.5	3538.8
42.5°	3065.9	3114.3	3217.2	3341.2	3341.2
45°	2847.4	2895.7	2990.3	3126.9	3143.7
47.5°	2633.0	2683.5	2775.9	2912.5	2939.9
50°	2422.9	2469.1	2561.6	2694.0	2736.0
52.5°	2204.4	2254.8	2345.2	2467.0	2528.0
55°	1994.2	2027.8	2126.6	2244.3	2309.4
57.5°	1775.7	1807.2	1918.6	2019.4	2086.7
60°	1565.5	1605.5	1691.6	1794.6	1872.3
62.5°	1363.8	1405.8	1479.4	1569.7	1658.0
65°	1168.4	1199.9	1271.3	1361.7	1439.5
67.5°	979.3	1006.6	1078.0	1141.1	1223.0
70°	788.0	823.7	876.3	937.2	989.8
72.5°	634.6	649.3	693.5	737.6	792.2
75°	468.6	493.8	529.6	554.8	586.3
77.5°	336.2	350.9	371.9	393.0	422.4
80°	224.8	231.2	250.1	254.3	277.4
82.5°	136.6	140.8	145.0	147.1	155.5
85°	73.5	73.5	73.5	69.3	69.3
87.5°	42.0	42.0	35.7	29.4	21.0
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)