

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: P557682

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-80-85-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: P557682
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-80-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

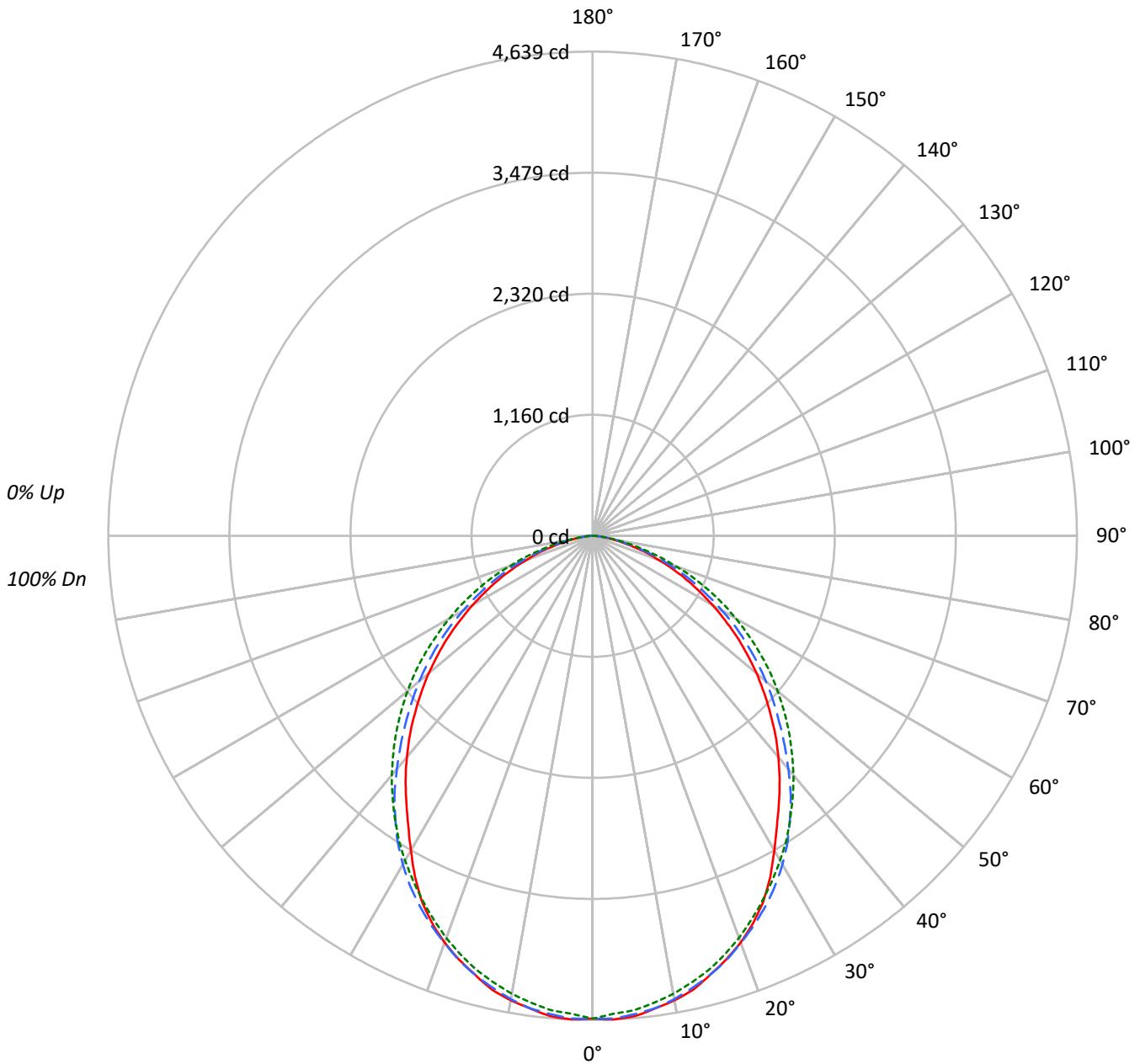
Lumens per Lamp: N/A
Luminaire Lumens: 10698.0 lumens
Efficiency: N/A
Efficacy: 82.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	12450	12450	12450
5°	12483	12430	12325
10°	12351	12317	12176
15°	12132	12132	11993
20°	11875	11890	11737
25°	11484	11626	11441
30°	10814	11300	11162
35°	10218	10831	10849
40°	9721	10246	10515
45°	9165	9626	10119
50°	8580	9071	9688
55°	7914	8439	9165
60°	7127	7701	8523
65°	6292	6847	7752
70°	5244	5832	6587
75°	4121	4657	5156
80°	2947	3278	3636
85°	1920	1920	1812



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	435.6	4.1
10°-20°	1223.7	11.4
20°-30°	1788.3	16.7
30°-40°	2029.9	19.0
40°-50°	1959.6	18.3
50°-60°	1616.5	15.1
60°-70°	1076.5	10.1
70°-80°	481.7	4.5
80°-90°	86.2	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°	3447.7	32.2
0°-40°	5477.6	51.2
0°-60°	9053.7	84.6
0°-90°	10698.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10698.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4627	4627	4627	4627	4627	
5°	4621	4620	4602	4577	4563	437
15°	4355	4365	4355	4335	4305	1228
25°	3868	3898	3916	3887	3853	1771
35°	3110	3153	3297	3315	3302	1949
45°	2408	2449	2529	2645	2659	1858
55°	1687	1715	1799	1898	1953	1506
65°	988	1015	1075	1152	1218	980
75°	396	418	448	469	496	433
85°	62	62	62	59	59	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4626.6	4626.6	4626.6	4626.6	4626.6
2.5°	4639.1	4640.8	4630.2	4601.7	4584.0
5°	4621.3	4619.5	4601.7	4576.8	4562.6
7.5°	4569.7	4573.3	4568.0	4532.4	4512.9
10°	4520.0	4521.7	4507.5	4479.1	4456.0
12.5°	4456.0	4454.2	4434.6	4420.4	4383.1
15°	4354.7	4365.3	4354.7	4335.1	4304.9
17.5°	4256.9	4256.9	4264.0	4230.2	4207.1
20°	4146.7	4152.0	4152.0	4125.4	4098.7
22.5°	4018.7	4034.7	4040.1	4011.6	3979.6
25°	3867.7	3897.9	3915.6	3887.2	3853.4
27.5°	3684.6	3730.8	3784.1	3762.8	3725.5
30°	3480.2	3547.7	3636.6	3618.8	3592.2
32.5°	3286.4	3354.0	3476.6	3469.5	3455.3
35°	3110.5	3153.1	3297.1	3314.9	3302.4
37.5°	2943.4	2982.5	3117.6	3158.5	3147.8
40°	2767.4	2810.1	2916.7	2989.6	2993.2
42.5°	2593.2	2634.1	2721.2	2826.1	2826.1
45°	2408.4	2449.3	2529.3	2644.8	2659.0
47.5°	2227.1	2269.8	2348.0	2463.5	2486.6
50°	2049.4	2088.5	2166.7	2278.6	2314.2
52.5°	1864.5	1907.2	1983.6	2086.7	2138.2
55°	1686.8	1715.2	1798.7	1898.3	1953.4
57.5°	1501.9	1528.6	1622.8	1708.1	1765.0
60°	1324.2	1357.9	1430.8	1517.9	1583.7
62.5°	1153.5	1189.1	1251.3	1327.7	1402.4
65°	988.2	1014.9	1075.3	1151.8	1217.5
67.5°	828.3	851.4	911.8	965.1	1034.5
70°	666.5	696.7	741.2	792.7	837.2
72.5°	536.8	549.2	586.5	623.9	670.1
75°	396.4	417.7	447.9	469.2	495.9
77.5°	284.4	296.8	314.6	332.4	357.3
80°	190.2	195.5	211.5	215.1	234.6
82.5°	115.5	119.1	122.6	124.4	131.5
85°	62.2	62.2	62.2	58.7	58.7
87.5°	35.5	35.5	30.2	24.9	17.8
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)