

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: P558011

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-80-94-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: P558011
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-LD4-3LO-35-UNV-80-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

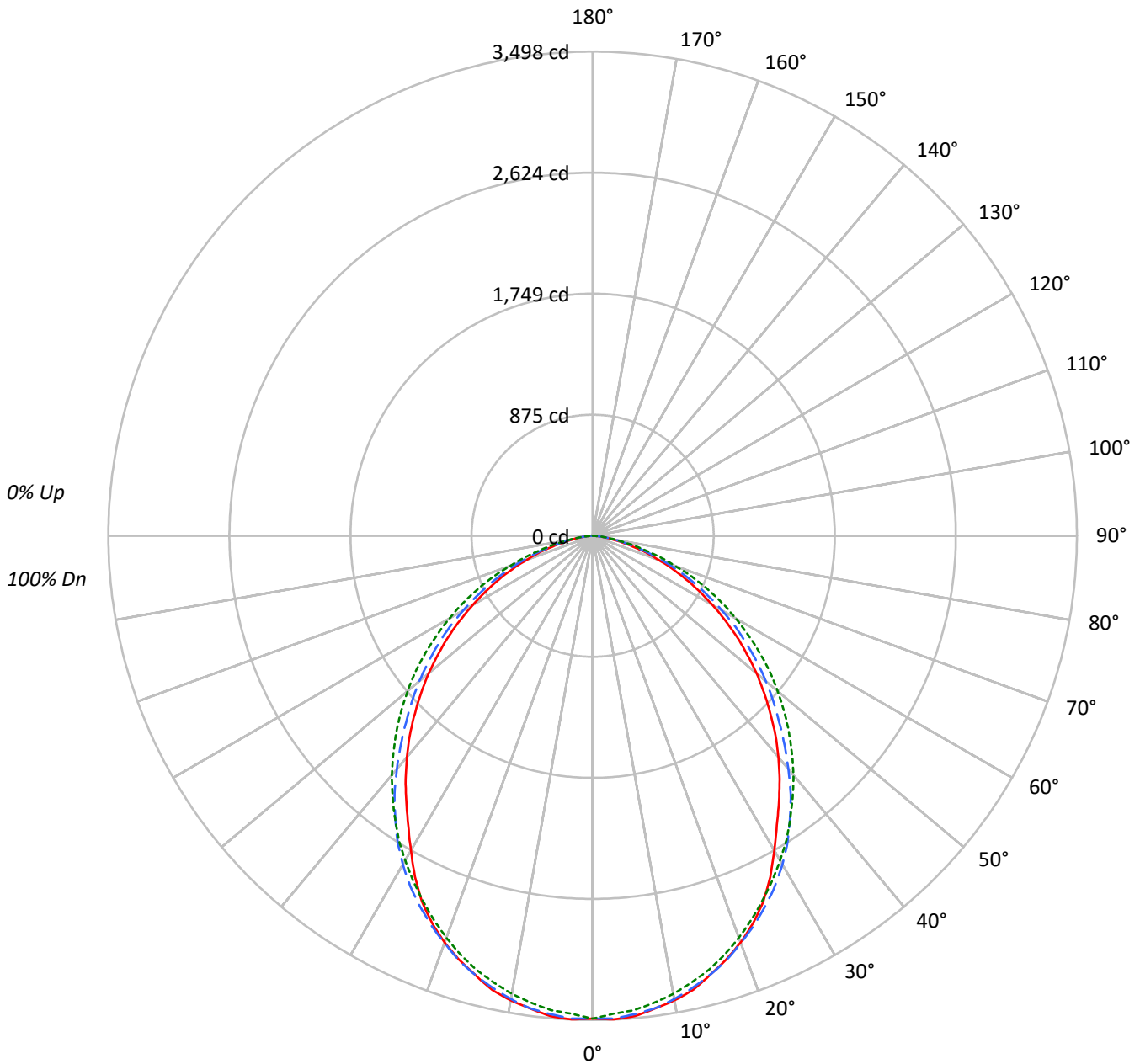
Lumens per Lamp: N/A
Luminaire Lumens: 8066.0 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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°	9387	9387	9387
5°	9412	9372	9293
10°	9312	9286	9180
15°	9147	9147	9042
20°	8953	8965	8850
25°	8658	8766	8627
30°	8153	8520	8416
35°	7704	8166	8180
40°	7330	7725	7928
45°	6911	7257	7630
50°	6469	6839	7304
55°	5967	6363	6910
60°	5373	5806	6426
65°	4744	5163	5845
70°	3954	4397	4966
75°	3107	3511	3887
80°	2222	2472	2741
85°	1448	1448	1365



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.4	4.1
10°-20°	922.7	11.4
20°-30°	1348.3	16.7
30°-40°	1530.5	19.0
40°-50°	1477.5	18.3
50°-60°	1218.8	15.1
60°-70°	811.6	10.1
70°-80°	363.2	4.5
80°-90°	65.0	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°	2599.4	32.2
0°-40°	4129.9	51.2
0°-60°	6826.2	84.6
0°-90°	8066.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8066.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3488	3488	3488	3488	3488	
5°	3484	3483	3470	3451	3440	330
15°	3283	3291	3283	3269	3246	926
25°	2916	2939	2952	2931	2905	1335
35°	2345	2377	2486	2499	2490	1469
45°	1816	1847	1907	1994	2005	1401
55°	1272	1293	1356	1431	1473	1135
65°	745	765	811	868	918	739
75°	299	315	338	354	374	327
85°	47	47	47	44	44	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3488.3	<i>3488.3</i>	3488.3	3488.3	3488.3
2.5°	<i>3497.7</i>	<i>3499.1</i>	<i>3491.0</i>	<i>3469.6</i>	<i>3456.2</i>
5°	3484.3	<i>3483.0</i>	3469.6	3450.8	3440.1
7.5°	3445.5	<i>3448.1</i>	3444.1	3417.3	3402.6
10°	3407.9	<i>3409.3</i>	3398.5	3377.1	3359.7
12.5°	3359.7	<i>3358.3</i>	3343.6	3332.9	3304.7
15°	3283.3	<i>3291.3</i>	3283.3	3268.6	3245.8
17.5°	3209.6	<i>3209.6</i>	3215.0	3189.5	3172.1
20°	3126.5	<i>3130.5</i>	3130.5	3110.4	3090.3
22.5°	3030.0	<i>3042.1</i>	3046.1	3024.7	3000.5
25°	2916.1	<i>2938.9</i>	2952.3	2930.8	2905.4
27.5°	2778.1	<i>2812.9</i>	2853.1	2837.0	2808.9
30°	2624.0	<i>2674.9</i>	2741.9	2728.5	2708.4
32.5°	2477.9	<i>2528.8</i>	2621.3	2615.9	2605.2
35°	2345.2	<i>2377.4</i>	2485.9	2499.3	2489.9
37.5°	2219.2	<i>2248.7</i>	2350.6	2381.4	2373.4
40°	2086.6	<i>2118.7</i>	2199.1	2254.1	2256.8
42.5°	1955.2	<i>1986.1</i>	2051.7	2130.8	2130.8
45°	1815.9	<i>1846.7</i>	1907.0	1994.1	2004.8
47.5°	1679.2	<i>1711.3</i>	1770.3	1857.4	1874.8
50°	1545.2	<i>1574.6</i>	1633.6	1718.0	1744.8
52.5°	1405.8	<i>1438.0</i>	1495.6	1573.3	1612.2
55°	1271.8	<i>1293.2</i>	1356.2	1431.2	1472.8
57.5°	1132.4	<i>1152.5</i>	1223.5	1287.9	1330.7
60°	998.4	<i>1023.9</i>	1078.8	1144.5	1194.0
62.5°	869.7	<i>896.5</i>	943.4	1001.1	1057.4
65°	745.1	<i>765.2</i>	810.8	868.4	918.0
67.5°	624.5	<i>641.9</i>	687.5	727.7	780.0
70°	502.5	<i>525.3</i>	558.8	597.7	631.2
72.5°	404.7	<i>414.1</i>	442.2	470.4	505.2
75°	298.8	<i>314.9</i>	337.7	353.8	373.9
77.5°	214.4	<i>223.8</i>	237.2	250.6	269.4
80°	143.4	<i>147.4</i>	159.5	162.2	176.9
82.5°	87.1	<i>89.8</i>	92.5	93.8	99.2
85°	46.9	<i>46.9</i>	46.9	44.2	44.2
87.5°	26.8	<i>26.8</i>	22.8	18.8	13.4
90°	0.0	<i>0.0</i>	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)