

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: P558012

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-80-96-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: P558012
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-80-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

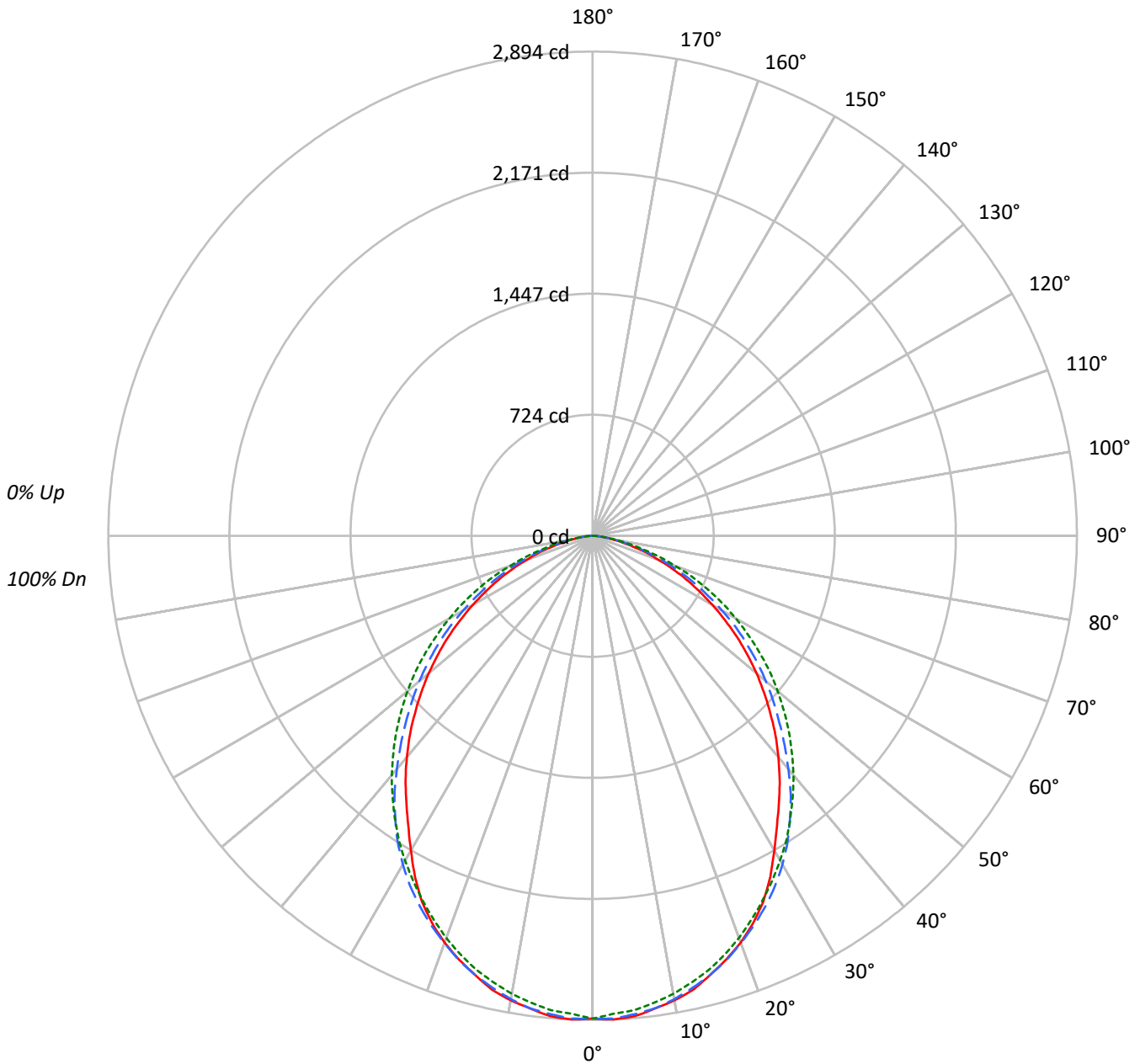
Lumens per Lamp: N/A
Luminaire Lumens: 6674.0 lumens
Efficiency: N/A
Efficacy: 95.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
Input Voltage (V): NR
Input Current (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

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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°	7767	7767	7767
5°	7788	7755	7689
10°	7705	7684	7596
15°	7568	7568	7482
20°	7408	7418	7322
25°	7164	7253	7138
30°	6746	7049	6963
35°	6375	6757	6768
40°	6065	6392	6559
45°	5718	6005	6313
50°	5352	5659	6044
55°	4937	5265	5717
60°	4446	4804	5317
65°	3926	4272	4837
70°	3271	3638	4109
75°	2571	2905	3217
80°	1838	2046	2269
85°	1198	1198	1130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.8	4.1
10°-20°	763.4	11.4
20°-30°	1115.6	16.7
30°-40°	1266.4	19.0
40°-50°	1222.5	18.3
50°-60°	1008.5	15.1
60°-70°	671.6	10.1
70°-80°	300.5	4.5
80°-90°	53.8	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°	2150.8	32.2
0°-40°	3417.2	51.2
0°-60°	5648.2	84.6
0°-90°	6674.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6674.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2886	2886	2886	2886	2886	
5°	2883	2882	2871	2855	2846	273
15°	2717	2723	2717	2704	2686	766
25°	2413	2432	2443	2425	2404	1105
35°	1940	1967	2057	2068	2060	1216
45°	1502	1528	1578	1650	1659	1159
55°	1052	1070	1122	1184	1219	939
65°	616	633	671	718	760	611
75°	247	261	279	293	309	270
85°	39	39	39	37	37	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2886.3	2886.3	2886.3	2886.3	2886.3
2.5°	2894.1	2895.2	2888.6	2870.8	2859.7
5°	2883.0	2881.9	2870.8	2855.3	2846.4
7.5°	2850.8	2853.1	2849.7	2827.6	2815.4
10°	2819.8	2820.9	2812.0	2794.3	2779.9
12.5°	2779.9	2778.8	2766.6	2757.7	2734.4
15°	2716.7	2723.3	2716.7	2704.5	2685.6
17.5°	2655.7	2655.7	2660.1	2639.1	2624.6
20°	2586.9	2590.3	2590.3	2573.6	2557.0
22.5°	2507.1	2517.1	2520.4	2502.7	2482.7
25°	2412.9	2431.7	2442.8	2425.1	2404.0
27.5°	2298.6	2327.5	2360.7	2347.4	2324.1
30°	2171.1	2213.3	2268.7	2257.6	2241.0
32.5°	2050.3	2092.4	2168.9	2164.5	2155.6
35°	1940.5	1967.1	2056.9	2068.0	2060.2
37.5°	1836.3	1860.6	1944.9	1970.4	1963.8
40°	1726.5	1753.1	1819.6	1865.1	1867.3
42.5°	1617.8	1643.3	1697.6	1763.1	1763.1
45°	1502.5	1528.0	1577.9	1650.0	1658.8
47.5°	1389.4	1416.0	1464.8	1536.9	1551.3
50°	1278.5	1302.9	1351.7	1421.5	1443.7
52.5°	1163.2	1189.8	1237.5	1301.8	1333.9
55°	1052.3	1070.0	1122.2	1184.3	1218.6
57.5°	937.0	953.6	1012.4	1065.6	1101.1
60°	826.1	847.2	892.6	947.0	988.0
62.5°	719.6	741.8	780.6	828.3	874.9
65°	616.5	633.2	670.9	718.5	759.6
67.5°	516.7	531.1	568.8	602.1	645.3
70°	415.8	434.7	462.4	494.5	522.3
72.5°	334.9	342.6	365.9	389.2	418.0
75°	247.3	260.6	279.4	292.7	309.4
77.5°	177.4	185.2	196.3	207.4	222.9
80°	118.6	122.0	132.0	134.2	146.4
82.5°	72.1	74.3	76.5	77.6	82.1
85°	38.8	38.8	38.8	36.6	36.6
87.5°	22.2	22.2	18.9	15.5	11.1
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)