

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: P558002

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-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: P558002  
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-80-85-EDD-90  
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

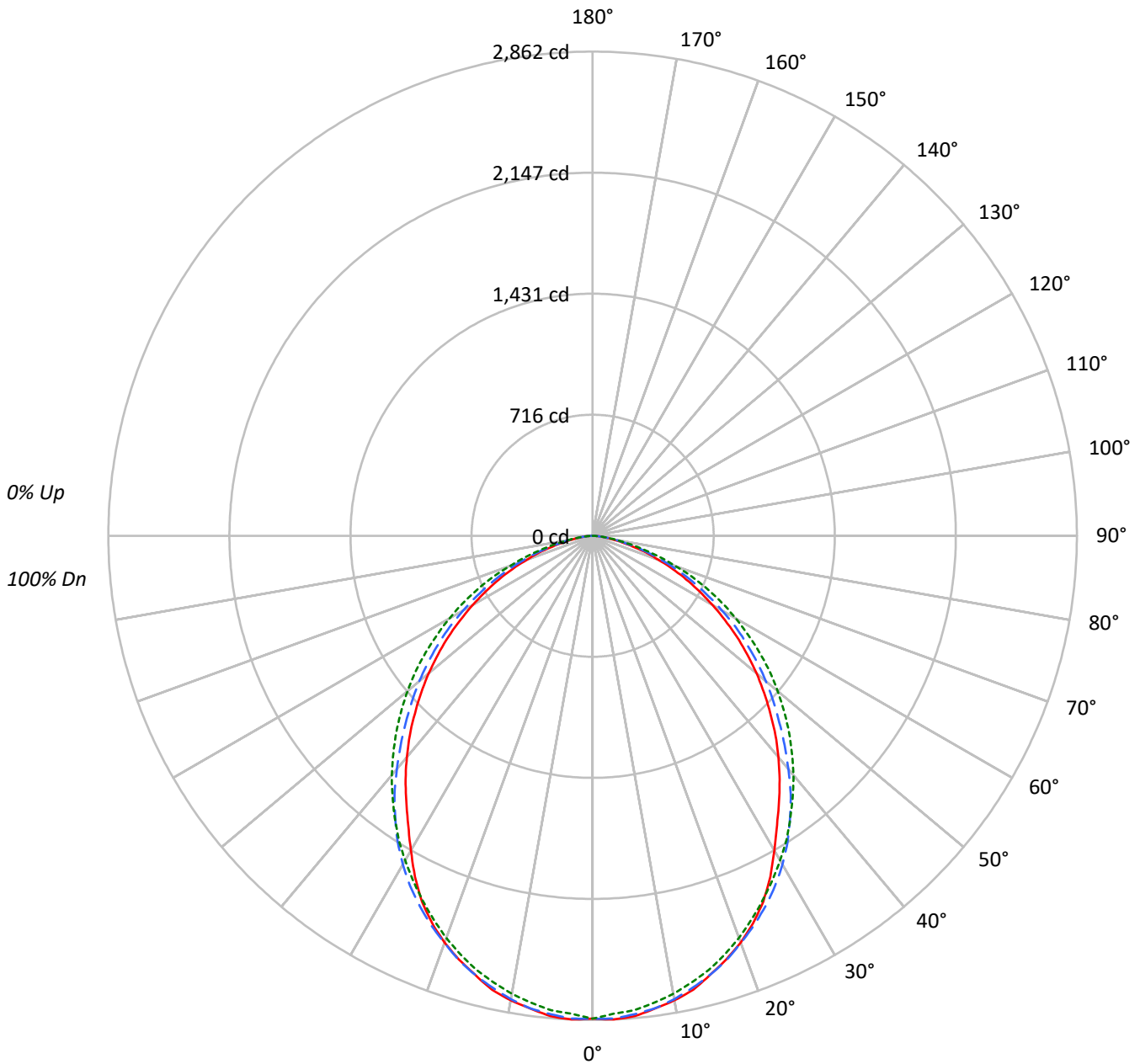
Lumens per Lamp: N/A  
Luminaire Lumens: 6600.0 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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°	7681	7681	7681
5°	7701	7669	7604
10°	7620	7599	7512
15°	7485	7485	7399
20°	7326	7335	7241
25°	7085	7173	7059
30°	6672	6971	6886
35°	6304	6682	6693
40°	5997	6321	6487
45°	5654	5938	6243
50°	5293	5596	5977
55°	4882	5206	5654
60°	4397	4751	5258
65°	3882	4224	4783
70°	3235	3598	4064
75°	2542	2873	3180
80°	1818	2022	2242
85°	1186	1186	1118



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	268.7	4.1
10°-20°	755.0	11.4
20°-30°	1103.3	16.7
30°-40°	1252.3	19.0
40°-50°	1208.9	18.3
50°-60°	997.3	15.1
60°-70°	664.1	10.1
70°-80°	297.2	4.5
80°-90°	53.2	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°	2127.0	32.2
0°-40°	3379.3	51.2
0°-60°	5585.6	84.6
0°-90°	6600.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6600.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2854	2854	2854	2854	2854	
5°	2851	2850	2839	2824	2815	270
15°	2687	2693	2687	2674	2656	757
25°	2386	2405	2416	2398	2377	1093
35°	1919	1945	2034	2045	2037	1202
45°	1486	1511	1560	1632	1640	1146
55°	1041	1058	1110	1171	1205	929
65°	610	626	663	711	751	605
75°	244	258	276	290	306	267
85°	38	38	38	36	36	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2854.3	2854.3	2854.3	2854.3	2854.3
2.5°	2862.0	2863.1	2856.5	2839.0	2828.0
5°	2851.0	2849.9	2839.0	2823.6	2814.9
7.5°	2819.2	2821.4	2818.1	2796.2	2784.2
10°	2788.5	2789.6	2780.9	2763.3	2749.1
12.5°	2749.1	2748.0	2735.9	2727.1	2704.1
15°	2686.6	2693.1	2686.6	2674.5	2655.9
17.5°	2626.2	2626.2	2630.6	2609.8	2595.5
20°	2558.3	2561.5	2561.5	2545.1	2528.7
22.5°	2479.3	2489.2	2492.5	2474.9	2455.2
25°	2386.1	2404.7	2415.7	2398.2	2377.3
27.5°	2273.2	2301.7	2334.6	2321.4	2298.4
30°	2147.1	2188.7	2243.5	2232.6	2216.1
32.5°	2027.5	2069.2	2144.9	2140.5	2131.7
35°	1919.0	1945.3	2034.1	2045.1	2037.4
37.5°	1815.9	1840.0	1923.4	1948.6	1942.0
40°	1707.3	1733.7	1799.4	1844.4	1846.6
42.5°	1599.9	1625.1	1678.8	1743.5	1743.5
45°	1485.8	1511.1	1560.4	1631.7	1640.4
47.5°	1374.0	1400.3	1448.5	1519.8	1534.1
50°	1264.3	1288.5	1336.7	1405.8	1427.7
52.5°	1150.3	1176.6	1223.8	1287.4	1319.2
55°	1040.6	1058.2	1109.7	1171.1	1205.1
57.5°	926.6	943.0	1001.2	1053.8	1088.9
60°	816.9	837.8	882.7	936.5	977.0
62.5°	711.7	733.6	772.0	819.1	865.2
65°	609.7	626.1	663.4	710.6	751.1
67.5°	511.0	525.2	562.5	595.4	638.2
70°	411.2	429.8	457.3	489.1	516.5
72.5°	331.2	338.8	361.9	384.9	413.4
75°	244.5	257.7	276.3	289.5	305.9
77.5°	175.4	183.1	194.1	205.1	220.4
80°	117.3	120.6	130.5	132.7	144.7
82.5°	71.3	73.5	75.7	76.8	81.1
85°	38.4	38.4	38.4	36.2	36.2
87.5°	21.9	21.9	18.6	15.4	11.0
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)