

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: P558006

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-80-87-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: P558006  
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-80-87-EDD-90  
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

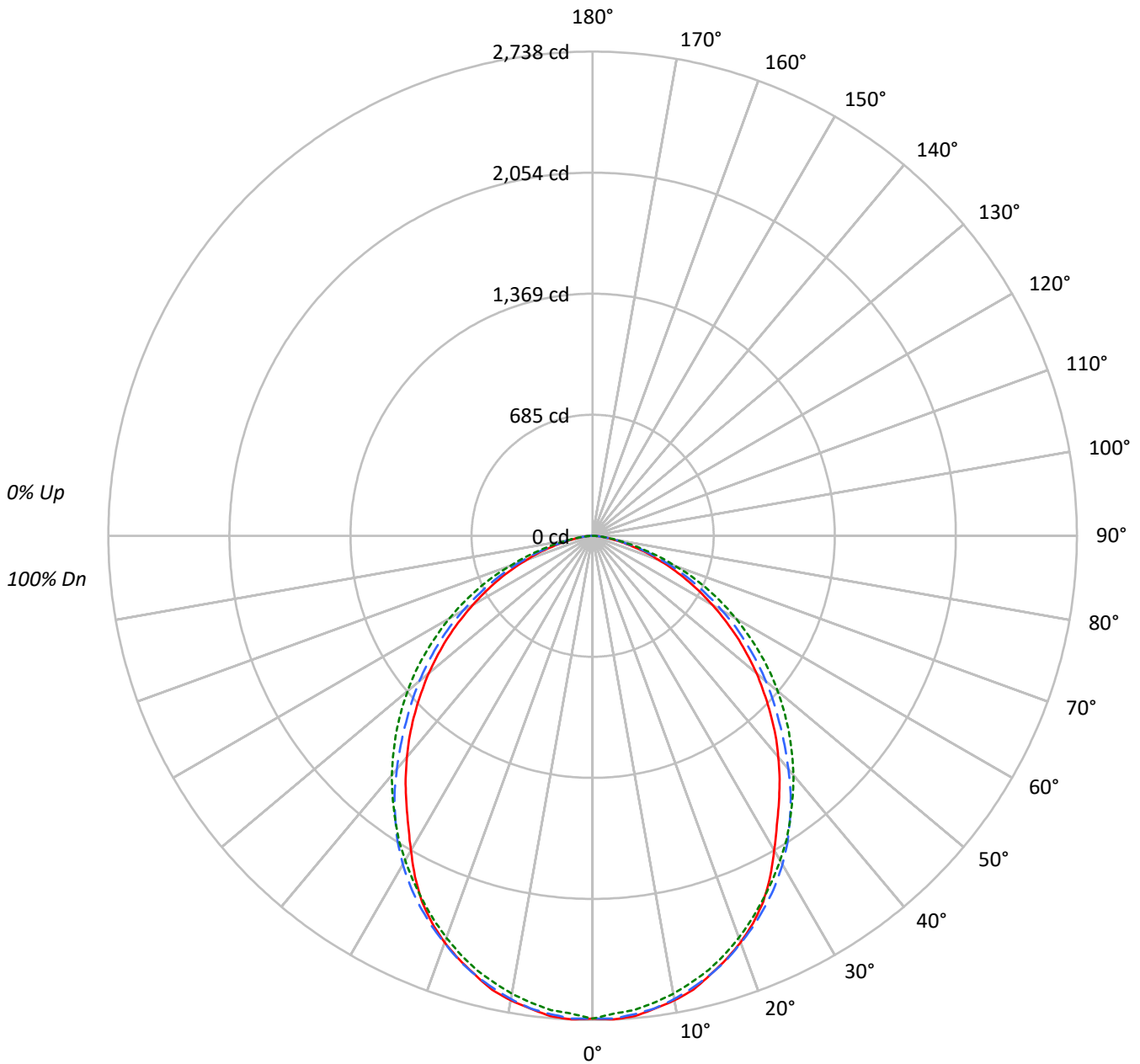
Lumens per Lamp: N/A  
Luminaire Lumens: 6313.0 lumens  
Efficiency: N/A  
Efficacy: 89.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7347	7347	7347
5°	7367	7335	7273
10°	7288	7268	7185
15°	7159	7159	7077
20°	7007	7017	6926
25°	6777	6861	6752
30°	6381	6668	6587
35°	6030	6392	6402
40°	5737	6046	6205
45°	5409	5680	5971
50°	5063	5353	5717
55°	4670	4980	5408
60°	4205	4544	5029
65°	3713	4041	4575
70°	3094	3441	3887
75°	2432	2748	3042
80°	1739	1934	2146
85°	1133	1133	1068



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	257.1	4.1
10°-20°	722.1	11.4
20°-30°	1055.3	16.7
30°-40°	1197.9	19.0
40°-50°	1156.4	18.3
50°-60°	953.9	15.1
60°-70°	635.2	10.1
70°-80°	284.3	4.5
80°-90°	50.9	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°	2034.5	32.2
0°-40°	3232.4	51.2
0°-60°	5342.6	84.6
0°-90°	6313.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6313.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2730	2730	2730	2730	2730	
5°	2727	2726	2716	2701	2692	258
15°	2570	2576	2570	2558	2540	724
25°	2282	2300	2311	2294	2274	1045
35°	1836	1861	1946	1956	1949	1150
45°	1421	1445	1492	1561	1569	1097
55°	995	1012	1062	1120	1153	888
65°	583	599	635	680	718	578
75°	234	246	264	277	293	256
85°	37	37	37	35	35	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2730.2	2730.2	2730.2	2730.2	2730.2
2.5°	2737.6	2738.6	2732.3	2715.5	2705.0
5°	2727.1	2726.0	2715.5	2700.8	2692.5
7.5°	2696.6	2698.7	2695.6	2674.6	2663.1
10°	2667.3	2668.3	2659.9	2643.2	2629.5
12.5°	2629.5	2628.5	2616.9	2608.5	2586.5
15°	2569.7	2576.0	2569.7	2558.2	2540.4
17.5°	2512.0	2512.0	2516.2	2496.3	2482.7
20°	2447.0	2450.2	2450.2	2434.4	2418.7
22.5°	2371.5	2380.9	2384.1	2367.3	2348.4
25°	2282.3	2300.2	2310.7	2293.9	2274.0
27.5°	2174.3	2201.6	2233.0	2220.5	2198.4
30°	2053.7	2093.5	2146.0	2135.5	2119.8
32.5°	1939.4	1979.2	2051.6	2047.4	2039.0
35°	1835.5	1860.7	1945.7	1956.1	1948.8
37.5°	1736.9	1760.0	1839.7	1863.8	1857.5
40°	1633.1	1658.3	1721.2	1764.2	1766.3
42.5°	1530.3	1554.4	1605.8	1667.7	1667.7
45°	1421.2	1445.3	1492.5	1560.7	1569.1
47.5°	1314.2	1339.4	1385.6	1453.7	1467.4
50°	1209.3	1232.4	1278.6	1344.7	1365.6
52.5°	1100.3	1125.4	1170.5	1231.4	1261.8
55°	995.4	1012.2	1061.5	1120.2	1152.7
57.5°	886.3	902.0	957.6	1008.0	1041.5
60°	781.4	801.3	844.3	895.7	934.5
62.5°	680.7	701.7	738.4	783.5	827.6
65°	583.2	598.9	634.6	679.7	718.5
67.5°	488.8	502.4	538.1	569.5	610.4
70°	393.3	411.2	437.4	467.8	494.0
72.5°	316.8	324.1	346.1	368.2	395.4
75°	233.9	246.5	264.3	276.9	292.6
77.5°	167.8	175.2	185.7	196.1	210.8
80°	112.2	115.4	124.8	126.9	138.5
82.5°	68.2	70.3	72.4	73.4	77.6
85°	36.7	36.7	36.7	34.6	34.6
87.5°	21.0	21.0	17.8	14.7	10.5
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)