

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: P558008

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-80-88-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: P558008  
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-80-88-EDD-90  
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

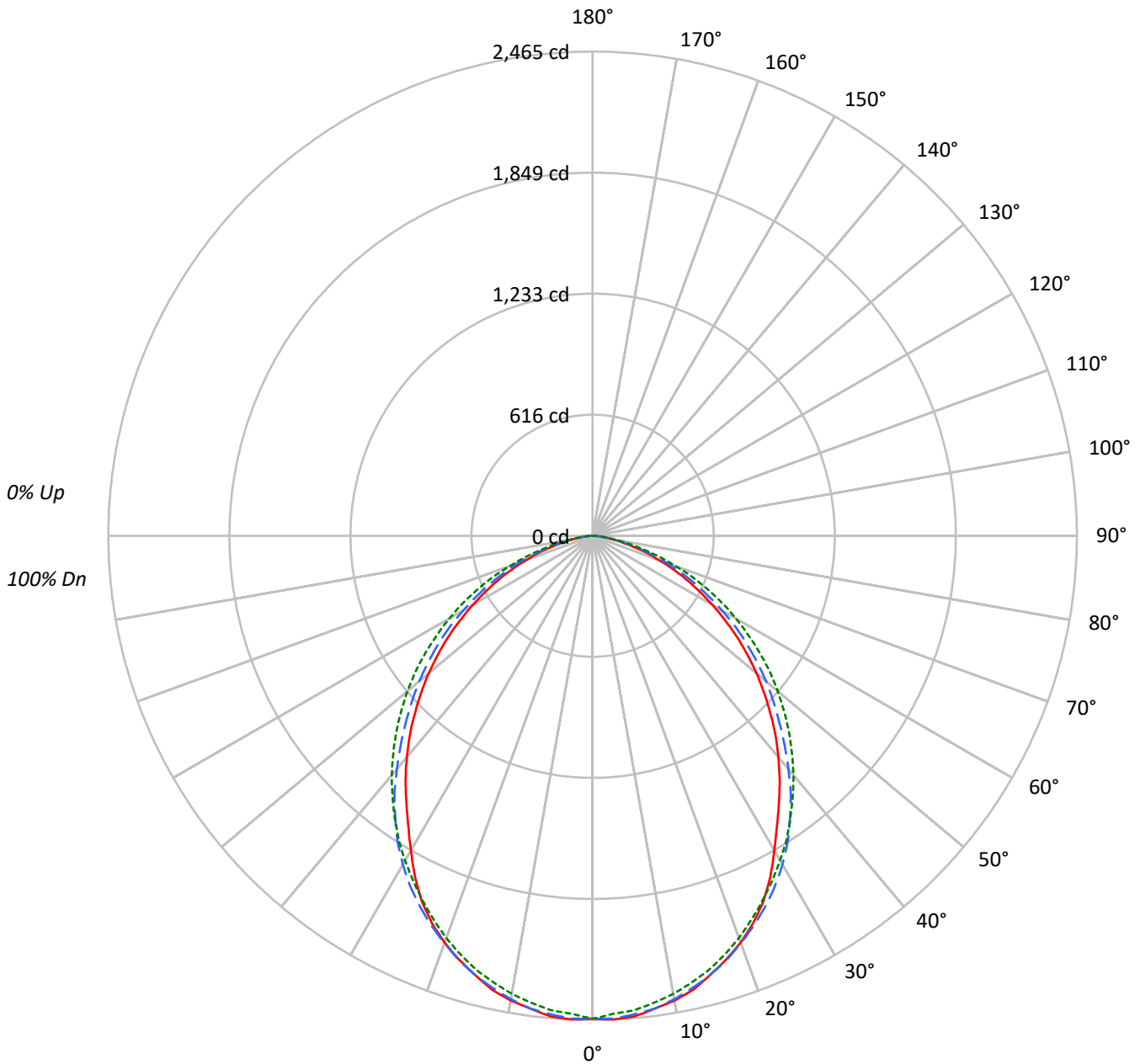
Lumens per Lamp: N/A  
Luminaire Lumens: 5685.0 lumens  
Efficiency: N/A  
Efficacy: 81.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P558008

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-80-88-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P558008

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-80-88-EDD-90

**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°	6616	6616	6616
5°	6634	6606	6549
10°	6563	6545	6470
15°	6447	6447	6373
20°	6310	6318	6237
25°	6103	6178	6080
30°	5747	6005	5931
35°	5430	5756	5765
40°	5166	5445	5587
45°	4870	5115	5377
50°	4559	4820	5148
55°	4206	4485	4870
60°	3787	4092	4529
65°	3344	3638	4120
70°	2787	3099	3500
75°	2190	2475	2740
80°	1567	1742	1932
85°	1022	1022	963



TEST NUMBER: P558008

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-80-88-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	231.5	4.1
10°-20°	650.3	11.4
20°-30°	950.3	16.7
30°-40°	1078.7	19.0
40°-50°	1041.3	18.3
50°-60°	859.0	15.1
60°-70°	572.0	10.1
70°-80°	256.0	4.5
80°-90°	45.8	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°	1832.1	32.2
0°-40°	2910.8	51.2
0°-60°	4811.2	84.6
0°-90°	5685.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5685.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2459	2459	2459	2459	2459	
5°	2456	2455	2445	2432	2425	232
15°	2314	2320	2314	2304	2288	652
25°	2055	2071	2081	2066	2048	941
35°	1653	1676	1752	1762	1755	1036
45°	1280	1302	1344	1406	1413	987
55°	896	912	956	1009	1038	800
65°	525	539	571	612	647	521
75°	211	222	238	249	264	230
85°	33	33	33	31	31	45
90°	0	0	0	0	0	



TEST NUMBER: P558008

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-80-88-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2458.6	2458.6	2458.6	2458.6	2458.6
2.5°	2465.2	2466.2	2460.5	2445.4	2435.9
5°	2455.8	2454.8	2445.4	2432.2	2424.6
7.5°	2428.4	2430.3	2427.4	2408.6	2398.2
10°	2401.9	2402.9	2395.3	2380.2	2367.9
12.5°	2367.9	2367.0	2356.6	2349.1	2329.2
15°	2314.1	2319.8	2314.1	2303.7	2287.7
17.5°	2262.2	2262.2	2265.9	2248.0	2235.7
20°	2203.6	2206.4	2206.4	2192.3	2178.1
22.5°	2135.6	2144.1	2146.9	2131.8	2114.8
25°	2055.3	2071.4	2080.8	2065.7	2047.7
27.5°	1958.0	1982.6	2010.9	1999.6	1979.7
30°	1849.4	1885.3	1932.5	1923.1	1908.9
32.5°	1746.4	1782.3	1847.5	1843.7	1836.2
35°	1652.9	1675.6	1752.1	1761.6	1754.9
37.5°	1564.1	1584.9	1656.7	1678.4	1672.8
40°	1470.6	1493.3	1550.0	1588.7	1590.6
42.5°	1378.1	1399.8	1446.1	1501.8	1501.8
45°	1279.8	1301.6	1344.1	1405.5	1413.0
47.5°	1183.5	1206.2	1247.7	1309.1	1321.4
50°	1089.0	1109.8	1151.4	1210.9	1229.8
52.5°	990.8	1013.5	1054.1	1108.9	1136.3
55°	896.4	911.5	955.9	1008.8	1038.0
57.5°	798.1	812.3	862.4	907.7	937.9
60°	703.7	721.6	760.3	806.6	841.6
62.5°	613.0	631.9	665.0	705.6	745.2
65°	525.2	539.3	571.4	612.1	647.0
67.5°	440.2	452.4	484.5	512.9	549.7
70°	354.2	370.3	393.9	421.3	444.9
72.5°	285.2	291.9	311.7	331.5	356.1
75°	210.6	222.0	238.0	249.4	263.5
77.5°	151.1	157.7	167.2	176.6	189.9
80°	101.1	103.9	112.4	114.3	124.7
82.5°	61.4	63.3	65.2	66.1	69.9
85°	33.1	33.1	33.1	31.2	31.2
87.5°	18.9	18.9	16.1	13.2	9.4
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)