

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: P558007

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-80-87-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: P558007  
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  
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

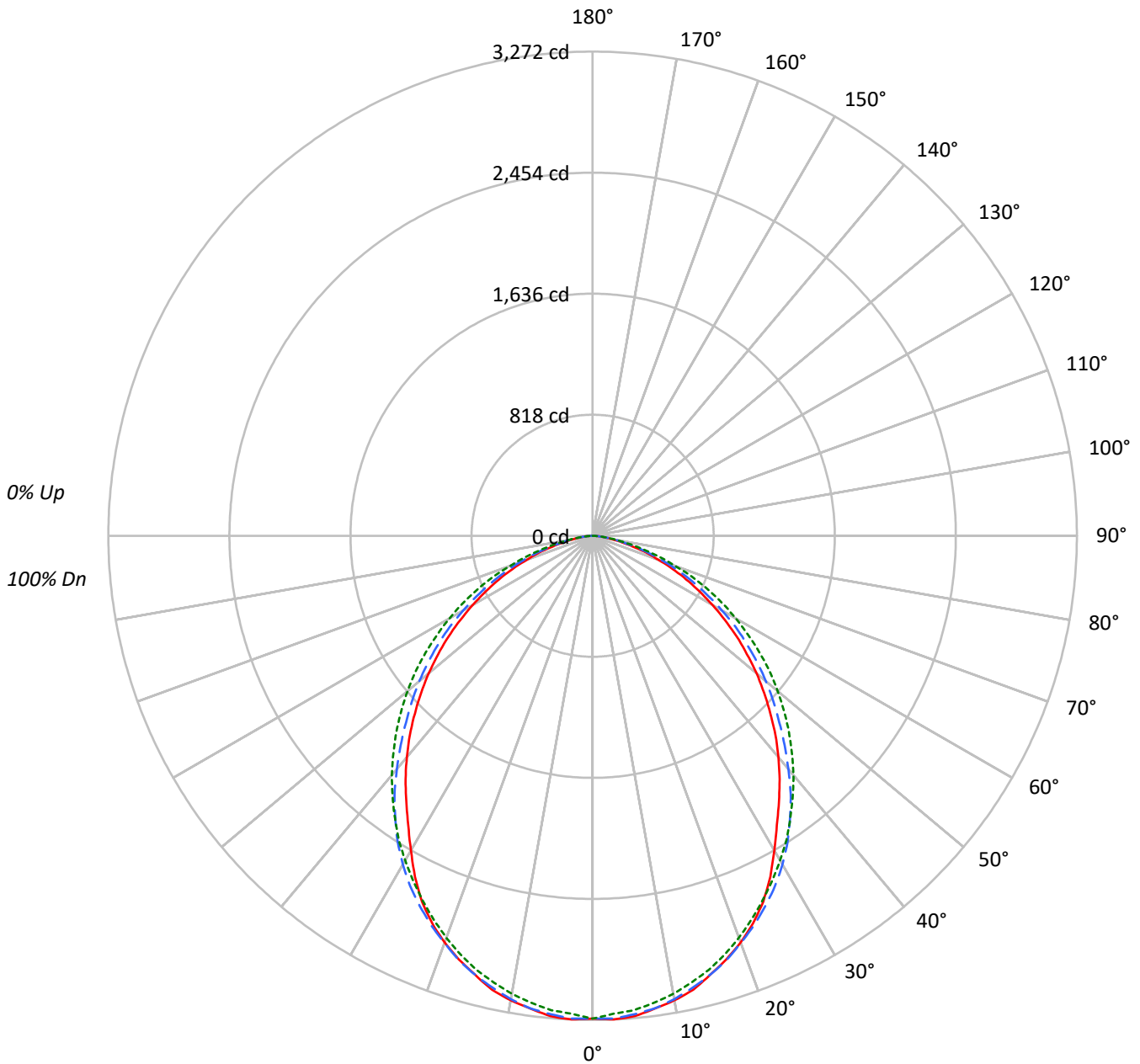
Lumens per Lamp: N/A  
Luminaire Lumens: 7545.0 lumens  
Efficiency: N/A  
Efficacy: 107.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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: P558007

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-80-87-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P558007

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-80-87-EDD

**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°	8781	8781	8781
5°	8804	8767	8692
10°	8711	8687	8587
15°	8556	8556	8458
20°	8375	8386	8278
25°	8099	8200	8069
30°	7627	7970	7872
35°	7206	7639	7651
40°	6856	7226	7416
45°	6464	6788	7137
50°	6051	6397	6833
55°	5581	5952	6464
60°	5026	5431	6011
65°	4438	4829	5468
70°	3699	4113	4645
75°	2906	3284	3636
80°	2078	2312	2565
85°	1355	1355	1278



TEST NUMBER: P558007

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-80-87-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	307.2	4.1
10°-20°	863.1	11.4
20°-30°	1261.2	16.7
30°-40°	1431.6	19.0
40°-50°	1382.0	18.3
50°-60°	1140.1	15.1
60°-70°	759.2	10.1
70°-80°	339.7	4.5
80°-90°	60.8	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°	2431.5	32.2
0°-40°	3863.2	51.2
0°-60°	6385.3	84.6
0°-90°	7545.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7545.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3263	3263	3263	3263	3263	
5°	3259	3258	3246	3228	3218	308
15°	3071	3079	3071	3057	3036	866
25°	2728	2749	2762	2742	2718	1249
35°	2194	2224	2325	2338	2329	1374
45°	1699	1727	1784	1865	1875	1311
55°	1190	1210	1269	1339	1378	1062
65°	697	716	758	812	859	691
75°	280	295	316	331	350	306
85°	44	44	44	41	41	59
90°	0	0	0	0	0	



TEST NUMBER: P558007

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-80-87-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3263.0	3263.0	3263.0	3263.0	3263.0
2.5°	3271.8	3273.0	3265.5	3245.5	3232.9
5°	3259.3	3258.0	3245.5	3227.9	3217.9
7.5°	3222.9	3225.4	3221.7	3196.6	3182.8
10°	3187.8	3189.1	3179.0	3159.0	3142.7
12.5°	3142.7	3141.4	3127.6	3117.6	3091.3
15°	3071.2	3078.7	3071.2	3057.4	3036.1
17.5°	3002.3	3002.3	3007.3	2983.5	2967.2
20°	2924.6	2928.3	2928.3	2909.5	2890.7
22.5°	2834.3	2845.6	2849.3	2829.3	2806.7
25°	2727.7	2749.1	2761.6	2741.5	2717.7
27.5°	2598.6	2631.2	2668.8	2653.8	2627.5
30°	2454.5	2502.1	2564.8	2552.2	2533.4
32.5°	2317.8	2365.5	2452.0	2446.9	2436.9
35°	2193.7	2223.8	2325.4	2337.9	2329.1
37.5°	2075.9	2103.5	2198.7	2227.6	2220.1
40°	1951.8	1981.9	2057.1	2108.5	2111.0
42.5°	1828.9	1857.8	1919.2	1993.2	1993.2
45°	1698.6	1727.4	1783.8	1865.3	1875.3
47.5°	1570.7	1600.8	1656.0	1737.4	1753.7
50°	1445.4	1472.9	1528.1	1607.1	1632.1
52.5°	1315.0	1345.1	1399.0	1471.7	1508.0
55°	1189.6	1209.7	1268.6	1338.8	1377.7
57.5°	1059.3	1078.1	1144.5	1204.7	1244.8
60°	933.9	957.7	1009.1	1070.5	1116.9
62.5°	813.6	838.6	882.5	936.4	989.1
65°	697.0	715.8	758.4	812.3	858.7
67.5°	584.2	600.5	643.1	680.7	729.6
70°	470.1	491.4	522.7	559.1	590.4
72.5°	378.6	387.4	413.7	440.0	472.6
75°	279.5	294.6	315.9	330.9	349.7
77.5°	200.6	209.3	221.9	234.4	252.0
80°	134.1	137.9	149.2	151.7	165.5
82.5°	81.5	84.0	86.5	87.7	92.8
85°	43.9	43.9	43.9	41.4	41.4
87.5°	25.1	25.1	21.3	17.5	12.5
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)