

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: P556478

Luminaire Tested: **FUSL-12-4-LD4-1LO-35-UNV-80-97-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: P556478  
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-LD4-1LO-35-UNV-80-97-EDD-90  
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

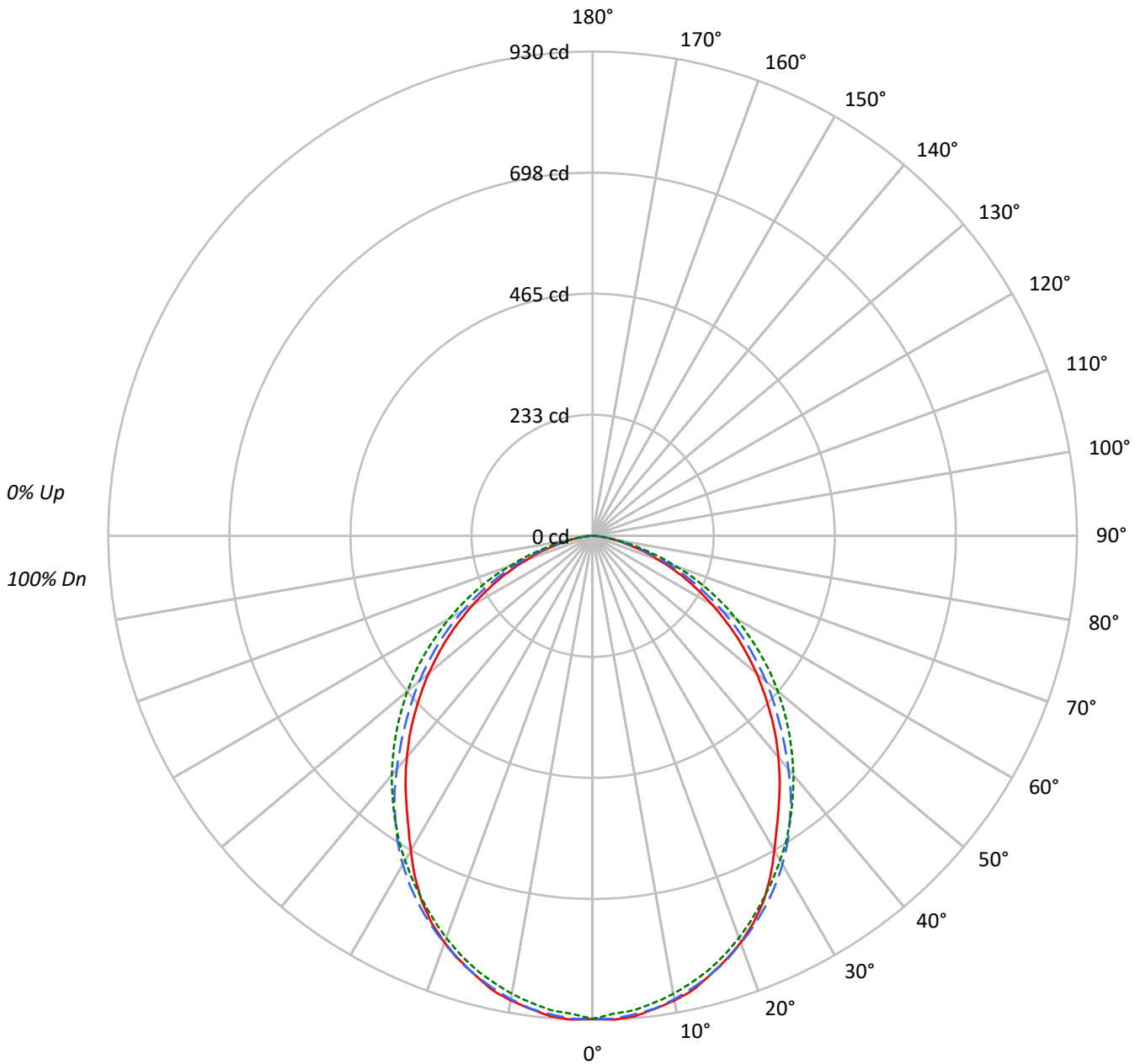
Lumens per Lamp: N/A  
Luminaire Lumens: 2145.0 lumens  
Efficiency: N/A  
Efficacy: 91.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	2496	2496	2496
5°	2503	2492	2471
10°	2476	2470	2441
15°	2432	2432	2405
20°	2381	2384	2353
25°	2303	2331	2294
30°	2168	2266	2238
35°	2049	2172	2175
40°	1949	2054	2108
45°	1838	1930	2029
50°	1720	1819	1942
55°	1587	1692	1838
60°	1429	1544	1709
65°	1261	1373	1554
70°	1051	1169	1321
75°	827	934	1033
80°	590	657	728
85°	386	386	364



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.3	4.1
10°-20°	245.4	11.4
20°-30°	358.6	16.7
30°-40°	407.0	19.0
40°-50°	392.9	18.3
50°-60°	324.1	15.1
60°-70°	215.8	10.1
70°-80°	96.6	4.5
80°-90°	17.3	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°	691.3	32.2
0°-40°	1098.3	51.2
0°-60°	1815.3	84.6
0°-90°	2145.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2145.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	928	928	928	928	928	
5°	927	926	923	918	915	88
15°	873	875	873	869	863	246
25°	776	782	785	779	773	355
35°	624	632	661	665	662	391
45°	483	491	507	530	533	373
55°	338	344	361	381	392	302
65°	198	204	216	231	244	196
75°	80	84	90	94	99	87
85°	12	12	12	12	12	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	927.7	927.7	927.7	927.7	927.7
2.5°	930.2	930.5	928.4	922.7	919.1
5°	926.6	926.2	922.7	917.7	914.8
7.5°	916.3	917.0	915.9	908.8	904.8
10°	906.3	906.6	903.8	898.1	893.4
12.5°	893.4	893.1	889.2	886.3	878.8
15°	873.1	875.3	873.1	869.2	863.2
17.5°	853.5	853.5	855.0	848.2	843.6
20°	831.4	832.5	832.5	827.2	821.8
22.5°	805.8	809.0	810.1	804.3	797.9
25°	775.5	781.5	785.1	779.4	772.6
27.5°	738.8	748.0	758.7	754.5	747.0
30°	697.8	711.3	729.2	725.6	720.2
32.5°	658.9	672.5	697.1	695.7	692.8
35°	623.7	632.2	661.1	664.6	662.2
37.5°	590.2	598.0	625.1	633.3	631.1
40°	554.9	563.4	584.8	599.4	600.1
42.5°	520.0	528.2	545.6	566.6	566.6
45°	482.9	491.1	507.1	530.3	533.1
47.5°	446.5	455.1	470.8	493.9	498.6
50°	410.9	418.7	434.4	456.9	464.0
52.5°	373.8	382.4	397.7	418.4	428.7
55°	338.2	343.9	360.7	380.6	391.7
57.5°	301.1	306.5	325.4	342.5	353.9
60°	265.5	272.3	286.9	304.3	317.5
62.5°	231.3	238.4	250.9	266.2	281.2
65°	198.1	203.5	215.6	230.9	244.1
67.5°	166.1	170.7	182.8	193.5	207.4
70°	133.6	139.7	148.6	158.9	167.9
72.5°	107.6	110.1	117.6	125.1	134.4
75°	79.5	83.7	89.8	94.1	99.4
77.5°	57.0	59.5	63.1	66.6	71.6
80°	38.1	39.2	42.4	43.1	47.0
82.5°	23.2	23.9	24.6	24.9	26.4
85°	12.5	12.5	12.5	11.8	11.8
87.5°	7.1	7.1	6.1	5.0	3.6
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)