

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: P555473

Luminaire Tested: **FUSL-12-2-LD4-3HI-35-UNV-82-84-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: P555473  
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-12-2-LD4-3HI-35-UNV-82-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

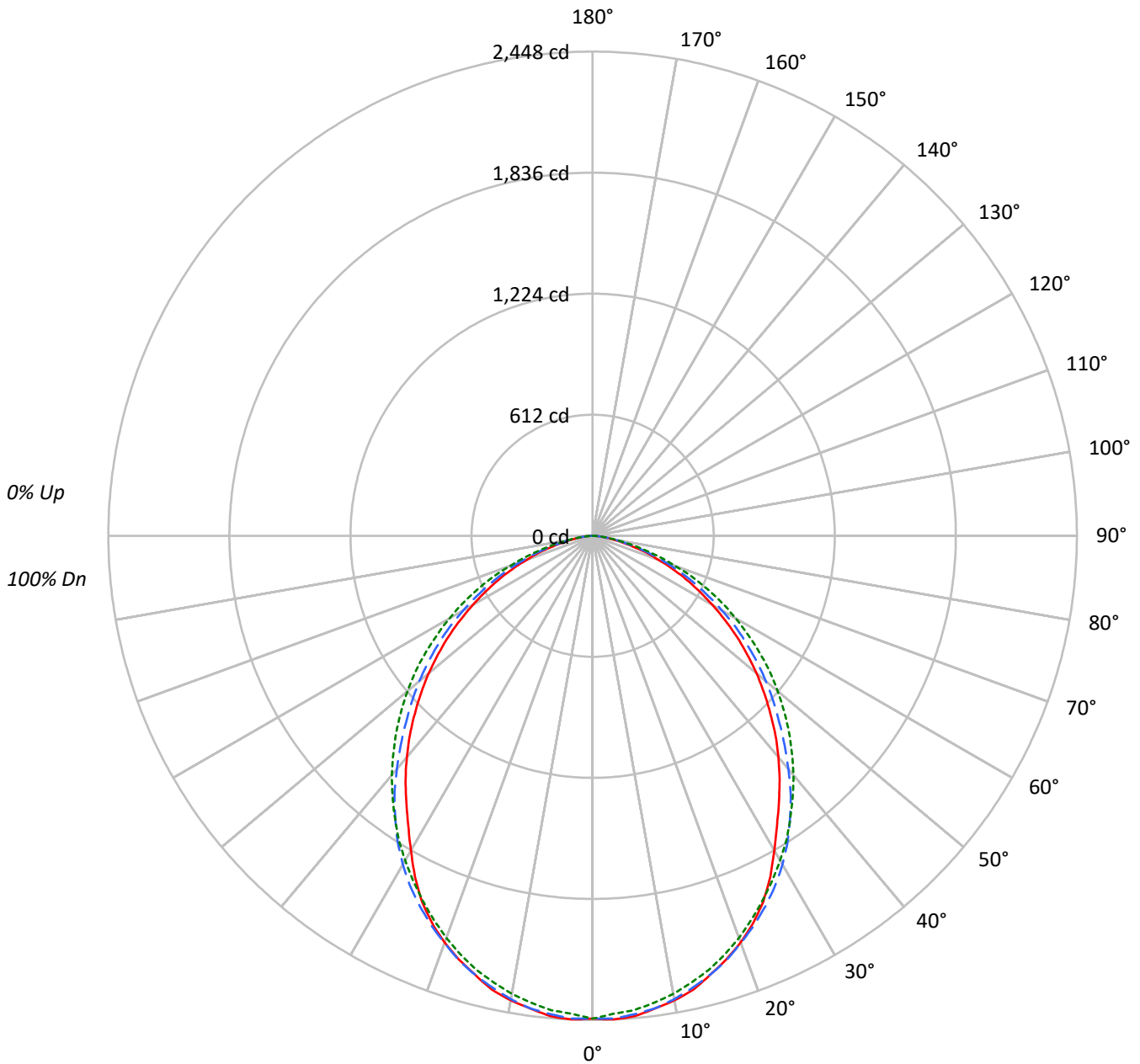
Lumens per Lamp: N/A  
Luminaire Lumens: 5645.0 lumens  
Efficiency: N/A  
Efficacy: 87.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
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°	13139	13139	13139
5°	13174	13118	13007
10°	13034	12998	12850
15°	12803	12803	12657
20°	12532	12548	12387
25°	12119	12270	12074
30°	11412	11925	11780
35°	10784	11431	11449
40°	10260	10813	11096
45°	9672	10158	10679
50°	9054	9573	10224
55°	8352	8906	9671
60°	7521	8127	8995
65°	6641	7226	8182
70°	5534	6154	6950
75°	4348	4914	5442
80°	3112	3459	3837
85°	2025	2025	1914



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	229.9	4.1
10°-20°	645.7	11.4
20°-30°	943.6	16.7
30°-40°	1071.1	19.0
40°-50°	1034.0	18.3
50°-60°	853.0	15.1
60°-70°	568.0	10.1
70°-80°	254.2	4.5
80°-90°	45.5	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°	1819.2	32.2
0°-40°	2890.3	51.2
0°-60°	4777.3	84.6
0°-90°	5645.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5645.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2441	2441	2441	2441	2441	
5°	2438	2438	2428	2415	2408	231
15°	2298	2303	2298	2288	2272	648
25°	2041	2057	2066	2051	2033	935
35°	1641	1664	1740	1749	1743	1028
45°	1271	1292	1335	1396	1403	981
55°	890	905	949	1002	1031	794
65°	522	536	567	608	642	517
75°	209	220	236	248	262	229
85°	33	33	33	31	31	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2441.3	2441.3	2441.3	2441.3	2441.3
2.5°	2447.9	2448.8	2443.2	2428.2	2418.8
5°	2438.5	2437.6	2428.2	2415.1	2407.6
7.5°	2411.3	2413.2	2410.4	2391.6	2381.3
10°	2385.0	2386.0	2378.5	2363.5	2351.3
12.5°	2351.3	2350.3	2340.0	2332.5	2312.8
15°	2297.8	2303.4	2297.8	2287.5	2271.6
17.5°	2246.2	2246.2	2250.0	2232.2	2220.0
20°	2188.1	2190.9	2190.9	2176.8	2162.8
22.5°	2120.6	2129.0	2131.8	2116.8	2099.9
25°	2040.8	2056.8	2066.2	2051.2	2033.3
27.5°	1944.2	1968.6	1996.8	1985.5	1965.8
30°	1836.4	1872.0	1918.9	1909.5	1895.5
32.5°	1734.2	1769.8	1834.5	1830.8	1823.2
35°	1641.3	1663.8	1739.8	1749.2	1742.6
37.5°	1553.1	1573.8	1645.1	1666.6	1661.0
40°	1460.3	1482.8	1539.1	1577.5	1579.4
42.5°	1368.4	1389.9	1435.9	1491.2	1491.2
45°	1270.8	1292.4	1334.6	1395.6	1403.1
47.5°	1175.2	1197.7	1238.9	1299.9	1312.1
50°	1081.4	1102.0	1143.3	1202.4	1221.1
52.5°	983.8	1006.4	1046.7	1101.1	1128.3
55°	890.1	905.1	949.1	1001.7	1030.7
57.5°	792.5	806.6	856.3	901.3	931.3
60°	698.7	716.5	755.0	801.0	835.7
62.5°	608.7	627.4	660.3	700.6	740.0
65°	521.5	535.5	567.4	607.7	642.5
67.5°	437.1	449.2	481.1	509.3	545.8
70°	351.7	367.7	391.1	418.3	441.7
72.5°	283.2	289.8	309.5	329.2	353.6
75°	209.1	220.4	236.3	247.6	261.7
77.5°	150.1	156.6	166.0	175.4	188.5
80°	100.4	103.2	111.6	113.5	123.8
82.5°	61.0	62.8	64.7	65.7	69.4
85°	32.8	32.8	32.8	31.0	31.0
87.5°	18.8	18.8	15.9	13.1	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)