

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: P555527

Luminaire Tested: **FUSL-12-2-LD4-3HI-40-UNV-81-87-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: P555527  
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-40-UNV-81-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

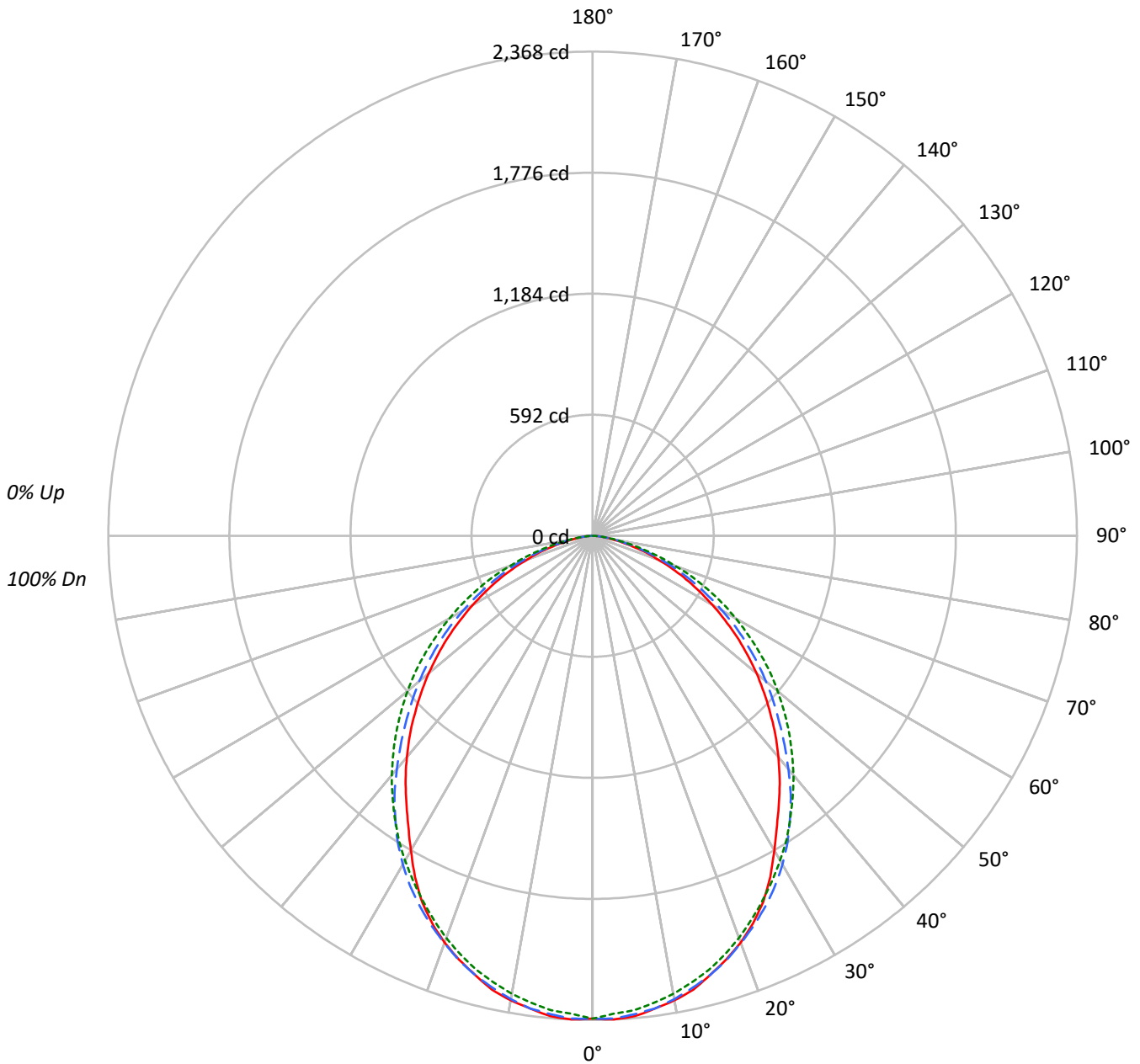
Lumens per Lamp: N/A  
Luminaire Lumens: 5461.0 lumens  
Efficiency: N/A  
Efficacy: 84.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	12711	12711	12711
5°	12745	12691	12583
10°	12609	12575	12431
15°	12386	12386	12244
20°	12124	12139	11983
25°	11724	11870	11681
30°	11040	11537	11396
35°	10432	11058	11076
40°	9925	10460	10734
45°	9357	9827	10331
50°	8759	9260	9891
55°	8079	8616	9356
60°	7275	7862	8702
65°	6425	6990	7915
70°	5353	5954	6724
75°	4207	4754	5263
80°	3009	3347	3713
85°	1964	1964	1846



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	222.4	4.1
10°-20°	624.7	11.4
20°-30°	912.9	16.7
30°-40°	1036.2	19.0
40°-50°	1000.3	18.3
50°-60°	825.2	15.1
60°-70°	549.5	10.1
70°-80°	245.9	4.5
80°-90°	44.0	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°	1759.9	32.2
0°-40°	2796.1	51.2
0°-60°	4621.6	84.6
0°-90°	5461.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5461.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2362	2362	2362	2362	2362	
5°	2359	2358	2349	2336	2329	223
15°	2223	2228	2223	2213	2198	627
25°	1974	1990	1999	1984	1967	904
35°	1588	1610	1683	1692	1686	995
45°	1229	1250	1291	1350	1357	949
55°	861	876	918	969	997	768
65°	504	518	549	588	622	500
75°	202	213	229	240	253	221
85°	32	32	32	30	30	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2361.7	2361.7	2361.7	2361.7	2361.7
2.5°	2368.1	2369.0	2363.6	2349.0	2340.0
5°	2359.0	2358.1	2349.0	2336.3	2329.1
7.5°	2332.7	2334.5	2331.8	2313.7	2303.7
10°	2307.3	2308.2	2301.0	2286.4	2274.6
12.5°	2274.6	2273.7	2263.8	2256.5	2237.4
15°	2222.9	2228.4	2222.9	2212.9	2197.5
17.5°	2173.0	2173.0	2176.6	2159.4	2147.6
20°	2116.8	2119.5	2119.5	2105.9	2092.3
22.5°	2051.4	2059.6	2062.3	2047.8	2031.5
25°	1974.3	1989.7	1998.8	1984.3	1967.1
27.5°	1880.9	1904.5	1931.7	1920.8	1901.7
30°	1776.5	1811.0	1856.4	1847.3	1833.7
32.5°	1677.6	1712.1	1774.7	1771.1	1763.8
35°	1587.8	1609.6	1683.1	1692.1	1685.8
37.5°	1502.5	1522.5	1591.4	1612.3	1606.9
40°	1412.7	1434.5	1488.9	1526.1	1527.9
42.5°	1323.8	1344.6	1389.1	1442.6	1442.6
45°	1229.4	1250.3	1291.1	1350.1	1357.3
47.5°	1136.9	1158.6	1198.6	1257.5	1269.3
50°	1046.1	1066.1	1106.0	1163.2	1181.3
52.5°	951.8	973.5	1012.6	1065.2	1091.5
55°	861.0	875.6	918.2	969.0	997.1
57.5°	766.7	780.3	828.4	871.9	901.0
60°	675.9	693.2	730.4	774.8	808.4
62.5°	588.8	607.0	638.7	677.8	715.9
65°	504.5	518.1	548.9	587.9	621.5
67.5°	422.8	434.6	465.5	492.7	528.1
70°	340.2	355.7	378.4	404.7	427.3
72.5°	274.0	280.4	299.4	318.5	342.1
75°	202.3	213.2	228.6	239.5	253.1
77.5°	145.2	151.5	160.6	169.7	182.4
80°	97.1	99.8	108.0	109.8	119.8
82.5°	59.0	60.8	62.6	63.5	67.1
85°	31.8	31.8	31.8	29.9	29.9
87.5°	18.1	18.1	15.4	12.7	9.1
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)