

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: P555446

Luminaire Tested: **FUSL-12-2-LD4-3HI-35-UNV-80-87-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: P555446  
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-80-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

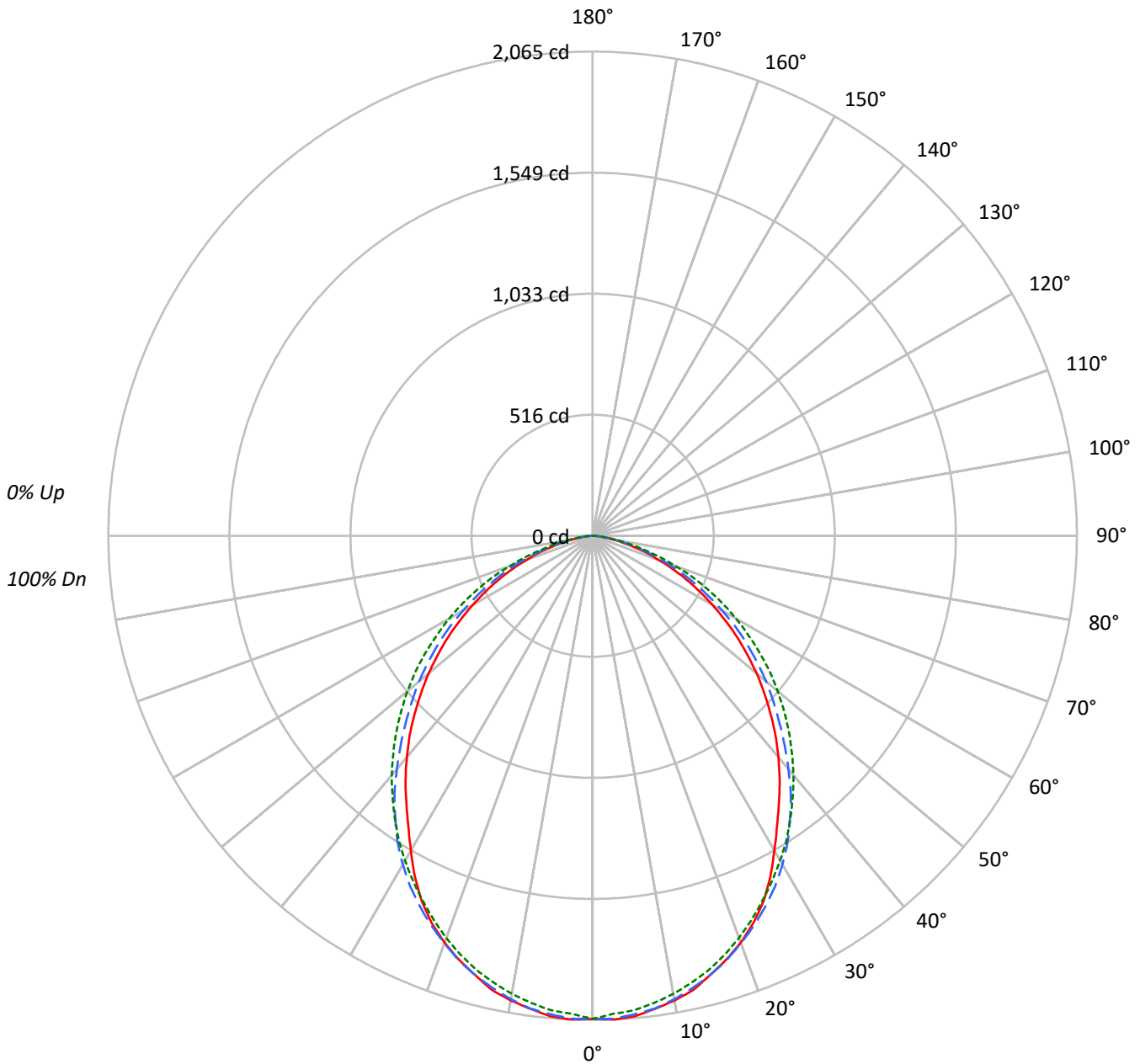
Lumens per Lamp: N/A  
Luminaire Lumens: 4763.0 lumens  
Efficiency: N/A  
Efficacy: 73.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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					20					
RC	80					70					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°	11086	11086	11086
5°	11116	11069	10975
10°	10998	10968	10842
15°	10803	10803	10679
20°	10574	10588	10451
25°	10226	10352	10188
30°	9629	10062	9939
35°	9099	9644	9660
40°	8656	9124	9362
45°	8162	8571	9011
50°	7639	8077	8627
55°	7047	7514	8161
60°	6346	6857	7590
65°	5603	6097	6904
70°	4670	5193	5865
75°	3670	4146	4591
80°	2625	2920	3239
85°	1711	1711	1612



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.9	4.1
10°-20°	544.8	11.4
20°-30°	796.2	16.7
30°-40°	903.8	19.0
40°-50°	872.4	18.3
50°-60°	719.7	15.1
60°-70°	479.3	10.1
70°-80°	214.5	4.5
80°-90°	38.4	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°	1535.0	32.2
0°-40°	2438.7	51.2
0°-60°	4030.9	84.6
0°-90°	4763.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4763.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2060	2060	2060	2060	2060	
5°	2058	2057	2049	2038	2031	195
15°	1939	1944	1939	1930	1917	547
25°	1722	1735	1743	1731	1716	789
35°	1385	1404	1468	1476	1470	868
45°	1072	1090	1126	1178	1184	827
55°	751	764	801	845	870	670
65°	440	452	479	513	542	436
75°	176	186	199	209	221	193
85°	28	28	28	26	26	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2059.9	2059.9	2059.9	2059.9	2059.9
2.5°	2065.4	2066.2	2061.5	2048.8	2040.9
5°	2057.5	2056.7	2048.8	2037.7	2031.4
7.5°	2034.6	2036.1	2033.8	2017.9	2009.2
10°	2012.4	2013.2	2006.9	1994.2	1983.9
12.5°	1983.9	1983.1	1974.4	1968.1	1951.5
15°	1938.8	1943.5	1938.8	1930.1	1916.6
17.5°	1895.3	1895.3	1898.4	1883.4	1873.1
20°	1846.2	1848.6	1848.6	1836.7	1824.8
22.5°	1789.2	1796.4	1798.7	1786.1	1771.8
25°	1722.0	1735.4	1743.3	1730.7	1715.6
27.5°	1640.5	1661.0	1684.8	1675.3	1658.7
30°	1549.5	1579.5	1619.1	1611.2	1599.3
32.5°	1463.2	1493.3	1547.9	1544.7	1538.4
35°	1384.9	1403.8	1467.9	1475.9	1470.3
37.5°	1310.5	1327.9	1388.0	1406.2	1401.5
40°	1232.1	1251.1	1298.6	1331.0	1332.6
42.5°	1154.6	1172.8	1211.6	1258.2	1258.2
45°	1072.3	1090.5	1126.1	1177.5	1183.9
47.5°	991.6	1010.5	1045.4	1096.8	1107.1
50°	912.4	929.8	964.7	1014.5	1030.3
52.5°	830.1	849.1	883.1	929.0	952.0
55°	751.0	763.6	800.8	845.2	869.7
57.5°	668.7	680.6	722.5	760.5	785.8
60°	589.6	604.6	637.0	675.8	705.1
62.5°	513.6	529.4	557.1	591.1	624.4
65°	440.0	451.9	478.8	512.8	542.1
67.5°	368.8	379.1	406.0	429.7	460.6
70°	296.8	310.2	330.0	352.9	372.7
72.5°	239.0	244.5	261.1	277.8	298.3
75°	176.5	186.0	199.4	208.9	220.8
77.5°	126.6	132.2	140.1	148.0	159.1
80°	84.7	87.0	94.2	95.8	104.5
82.5°	51.4	53.0	54.6	55.4	58.6
85°	27.7	27.7	27.7	26.1	26.1
87.5°	15.8	15.8	13.5	11.1	7.9
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)