

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: P555508

Luminaire Tested: **FUSL-12-2-LD4-3HI-40-UNV-80-86-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: P555508  
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-80-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

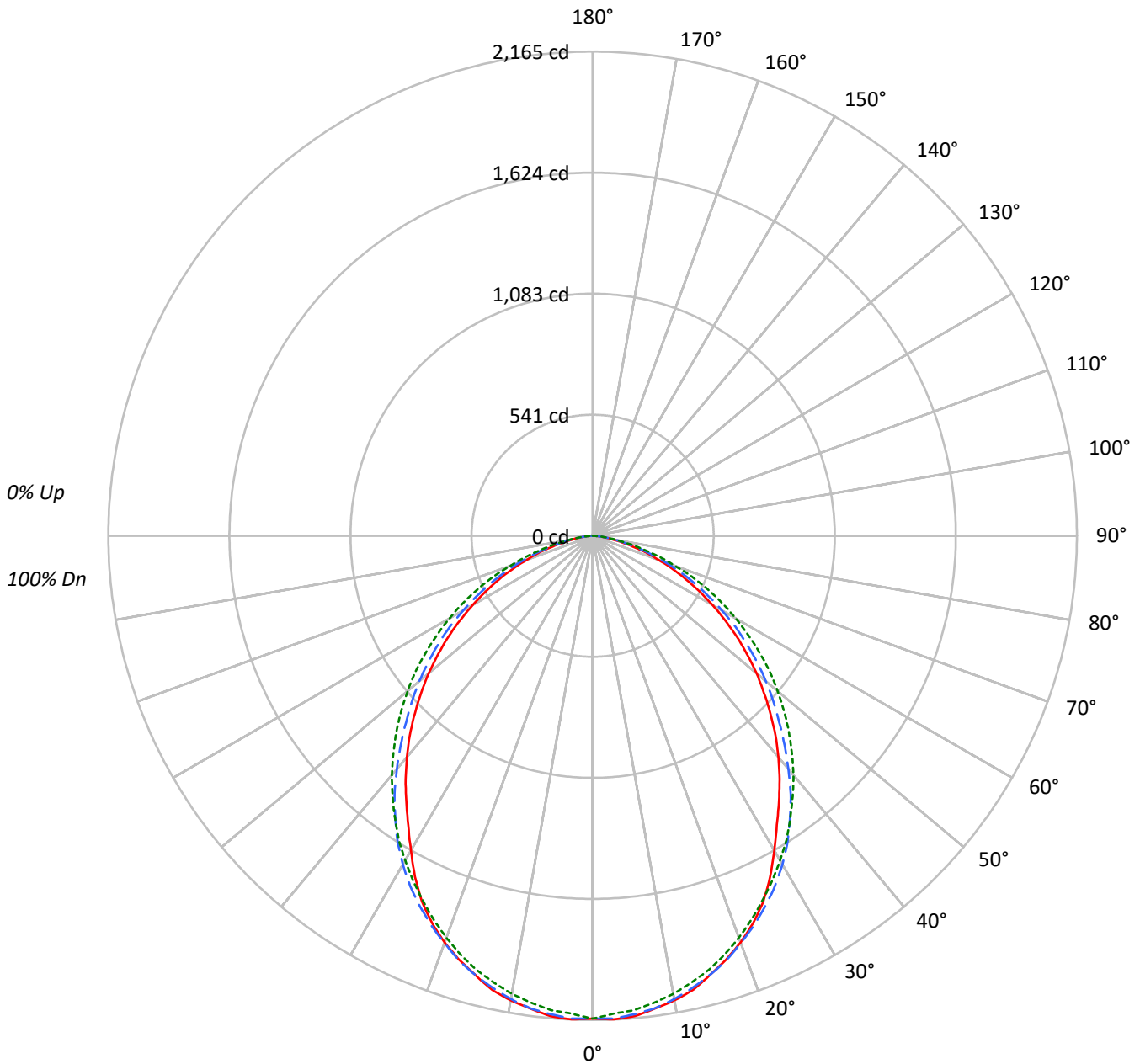
Lumens per Lamp: N/A  
Luminaire Lumens: 4992.0 lumens  
Efficiency: N/A  
Efficacy: 77.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
Input Voltage (V): NR  
Input Current (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°	11619	11619	11619
5°	11650	11601	11502
10°	11526	11494	11363
15°	11322	11322	11193
20°	11082	11097	10954
25°	10718	10851	10678
30°	10092	10545	10417
35°	9536	10108	10125
40°	9073	9562	9813
45°	8554	8983	9444
50°	8007	8465	9042
55°	7385	7875	8553
60°	6651	7187	7955
65°	5872	6390	7235
70°	4894	5443	6146
75°	3847	4346	4812
80°	2749	3059	3394
85°	1791	1791	1692



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.3	4.1
10°-20°	571.0	11.4
20°-30°	834.5	16.7
30°-40°	947.2	19.0
40°-50°	914.4	18.3
50°-60°	754.3	15.1
60°-70°	502.3	10.1
70°-80°	224.8	4.5
80°-90°	40.2	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°	1608.8	32.2
0°-40°	2556.0	51.2
0°-60°	4224.7	84.6
0°-90°	4992.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4992.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2159	2159	2159	2159	2159	
5°	2156	2156	2147	2136	2129	204
15°	2032	2037	2032	2023	2009	573
25°	1805	1819	1827	1814	1798	827
35°	1451	1471	1538	1547	1541	909
45°	1124	1143	1180	1234	1241	867
55°	787	800	839	886	912	702
65°	461	474	502	537	568	457
75°	185	195	209	219	231	202
85°	29	29	29	27	27	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2158.9	2158.9	2158.9	2158.9	2158.9
2.5°	2164.7	2165.5	2160.6	2147.3	2139.0
5°	2156.4	2155.6	2147.3	2135.7	2129.1
7.5°	2132.4	2134.0	2131.5	2115.0	2105.8
10°	2109.1	2110.0	2103.3	2090.1	2079.3
12.5°	2079.3	2078.5	2069.3	2062.7	2045.3
15°	2032.0	2037.0	2032.0	2022.9	2008.8
17.5°	1986.4	1986.4	1989.7	1974.0	1963.2
20°	1935.0	1937.5	1937.5	1925.0	1912.6
22.5°	1875.3	1882.7	1885.2	1871.9	1857.0
25°	1804.8	1818.9	1827.2	1813.9	1798.1
27.5°	1719.3	1740.9	1765.8	1755.8	1738.4
30°	1624.0	1655.5	1696.9	1688.6	1676.2
32.5°	1533.5	1565.1	1622.3	1619.0	1612.3
35°	1451.4	1471.3	1538.5	1546.8	1541.0
37.5°	1373.5	1391.7	1454.8	1473.8	1468.9
40°	1291.4	1311.3	1361.0	1395.0	1396.7
42.5°	1210.1	1229.2	1269.8	1318.7	1318.7
45°	1123.8	1142.9	1180.2	1234.1	1240.8
47.5°	1039.2	1059.1	1095.6	1149.5	1160.3
50°	956.3	974.5	1011.0	1063.3	1079.9
52.5°	870.0	889.9	925.6	973.7	997.8
55°	787.1	800.4	839.3	885.8	911.5
57.5°	700.8	713.3	757.2	797.0	823.6
60°	617.9	633.7	667.7	708.3	739.0
62.5°	538.3	554.9	583.9	619.6	654.4
65°	461.1	473.6	501.8	537.4	568.1
67.5°	386.5	397.3	425.5	450.4	482.7
70°	311.0	325.1	345.9	369.9	390.6
72.5°	250.5	256.3	273.7	291.1	312.7
75°	185.0	194.9	209.0	219.0	231.4
77.5°	132.7	138.5	146.8	155.1	166.7
80°	88.7	91.2	98.7	100.4	109.5
82.5°	53.9	55.6	57.2	58.1	61.4
85°	29.0	29.0	29.0	27.4	27.4
87.5°	16.6	16.6	14.1	11.6	8.3
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)