

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: P555560

Luminaire Tested: **FUSL-12-2-LD4-3HI-40-UNV-93-88-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: P555560  
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-93-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

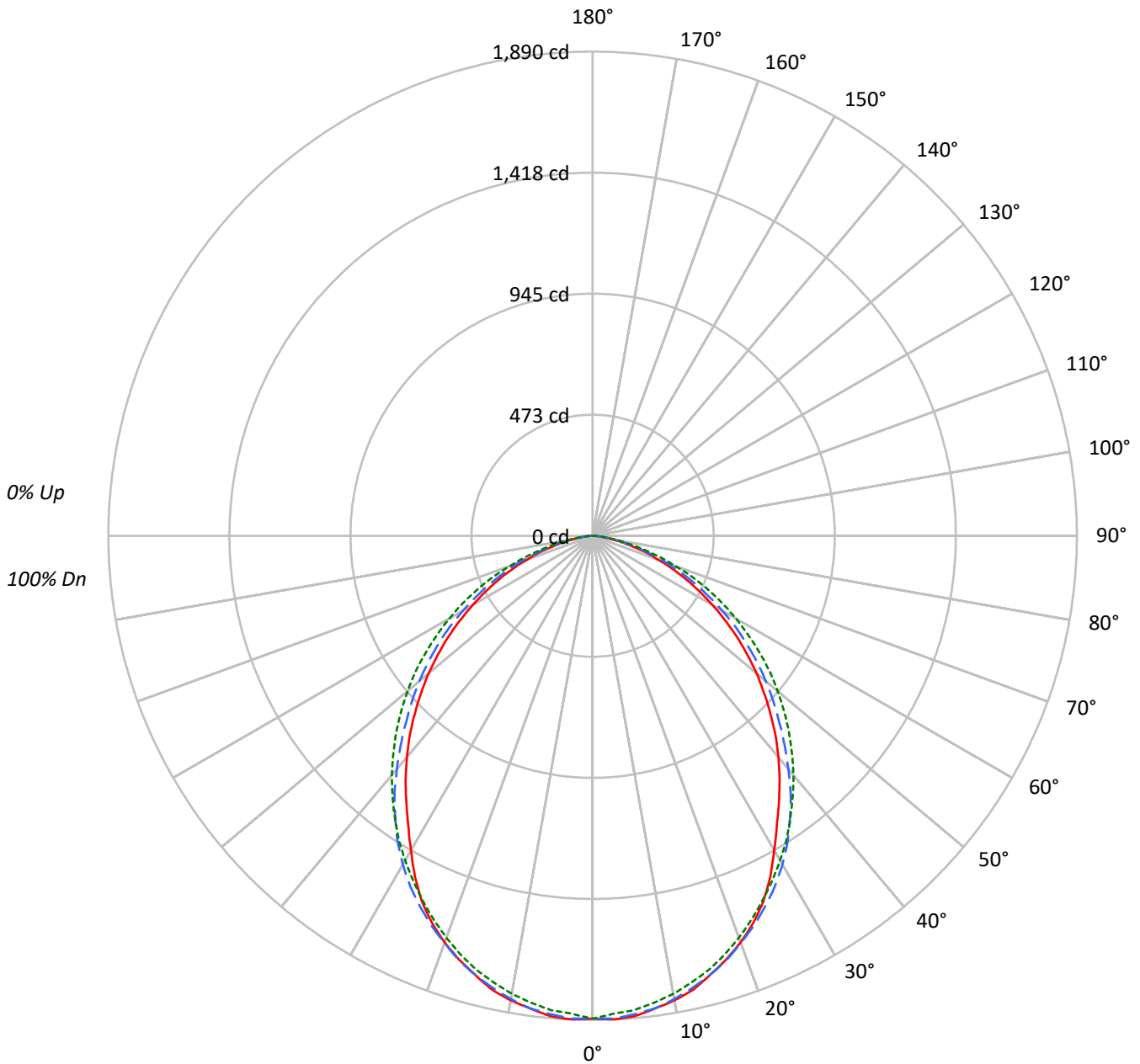
Lumens per Lamp: N/A  
Luminaire Lumens: 4358.0 lumens  
Efficiency: N/A  
Efficacy: 67.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
Input Voltage (V): NR  
Input Current (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					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10143	10143	10143
5°	10171	10128	10042
10°	10063	10035	9920
15°	9884	9884	9771
20°	9675	9687	9563
25°	9356	9472	9322
30°	8810	9206	9094
35°	8325	8824	8839
40°	7921	8348	8566
45°	7467	7842	8244
50°	6990	7390	7893
55°	6447	6875	7466
60°	5806	6274	6944
65°	5127	5579	6316
70°	4272	4751	5366
75°	3358	3795	4200
80°	2402	2672	2963
85°	1562	1562	1476



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.5	4.1
10°-20°	498.5	11.4
20°-30°	728.5	16.7
30°-40°	826.9	19.0
40°-50°	798.3	18.3
50°-60°	658.5	15.1
60°-70°	438.5	10.1
70°-80°	196.2	4.5
80°-90°	35.1	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°	1404.5	32.2
0°-40°	2231.4	51.2
0°-60°	3688.1	84.6
0°-90°	4358.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4358.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1885	1885	1885	1885	1885	
5°	1883	1882	1875	1864	1859	178
15°	1774	1778	1774	1766	1754	500
25°	1576	1588	1595	1584	1570	722
35°	1267	1284	1343	1350	1345	794
45°	981	998	1030	1077	1083	757
55°	687	699	733	773	796	613
65°	403	413	438	469	496	399
75°	162	170	182	191	202	177
85°	25	25	25	24	24	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1884.7	1884.7	1884.7	1884.7	1884.7
2.5°	1889.8	1890.5	1886.2	1874.6	1867.3
5°	1882.6	1881.8	1874.6	1864.4	1858.7
7.5°	1861.6	1863.0	1860.8	1846.3	1838.4
10°	1841.3	1842.0	1836.2	1824.6	1815.2
12.5°	1815.2	1814.5	1806.5	1800.7	1785.5
15°	1773.9	1778.3	1773.9	1766.0	1753.7
17.5°	1734.1	1734.1	1737.0	1723.3	1713.8
20°	1689.2	1691.4	1691.4	1680.5	1669.7
22.5°	1637.1	1643.6	1645.8	1634.2	1621.2
25°	1575.5	1587.9	1595.1	1583.5	1569.8
27.5°	1501.0	1519.8	1541.5	1532.8	1517.6
30°	1417.7	1445.2	1481.4	1474.2	1463.3
32.5°	1338.8	1366.3	1416.3	1413.4	1407.6
35°	1267.1	1284.5	1343.1	1350.4	1345.3
37.5°	1199.0	1215.0	1270.0	1286.7	1282.3
40°	1127.4	1144.7	1188.2	1217.9	1219.3
42.5°	1056.4	1073.1	1108.5	1151.3	1151.3
45°	981.1	997.8	1030.3	1077.4	1083.2
47.5°	907.2	924.6	956.5	1003.5	1013.0
50°	834.8	850.8	882.6	928.2	942.7
52.5°	759.5	776.9	808.0	850.0	871.0
55°	687.1	698.7	732.7	773.3	795.7
57.5°	611.8	622.7	661.1	695.8	719.0
60°	539.4	553.2	582.9	618.3	645.1
62.5°	469.9	484.4	509.7	540.9	571.3
65°	402.6	413.4	438.1	469.2	496.0
67.5°	337.4	346.8	371.4	393.2	421.4
70°	271.5	283.8	301.9	322.9	341.0
72.5°	218.7	223.7	238.9	254.1	273.0
75°	161.5	170.2	182.5	191.2	202.0
77.5°	115.8	120.9	128.2	135.4	145.5
80°	77.5	79.6	86.2	87.6	95.6
82.5°	47.1	48.5	50.0	50.7	53.6
85°	25.3	25.3	25.3	23.9	23.9
87.5°	14.5	14.5	12.3	10.1	7.2
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)