

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: P555494

Luminaire Tested: **FUSL-12-2-LD4-3HI-35-UNV-93-87-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: P555494  
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-93-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS 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**

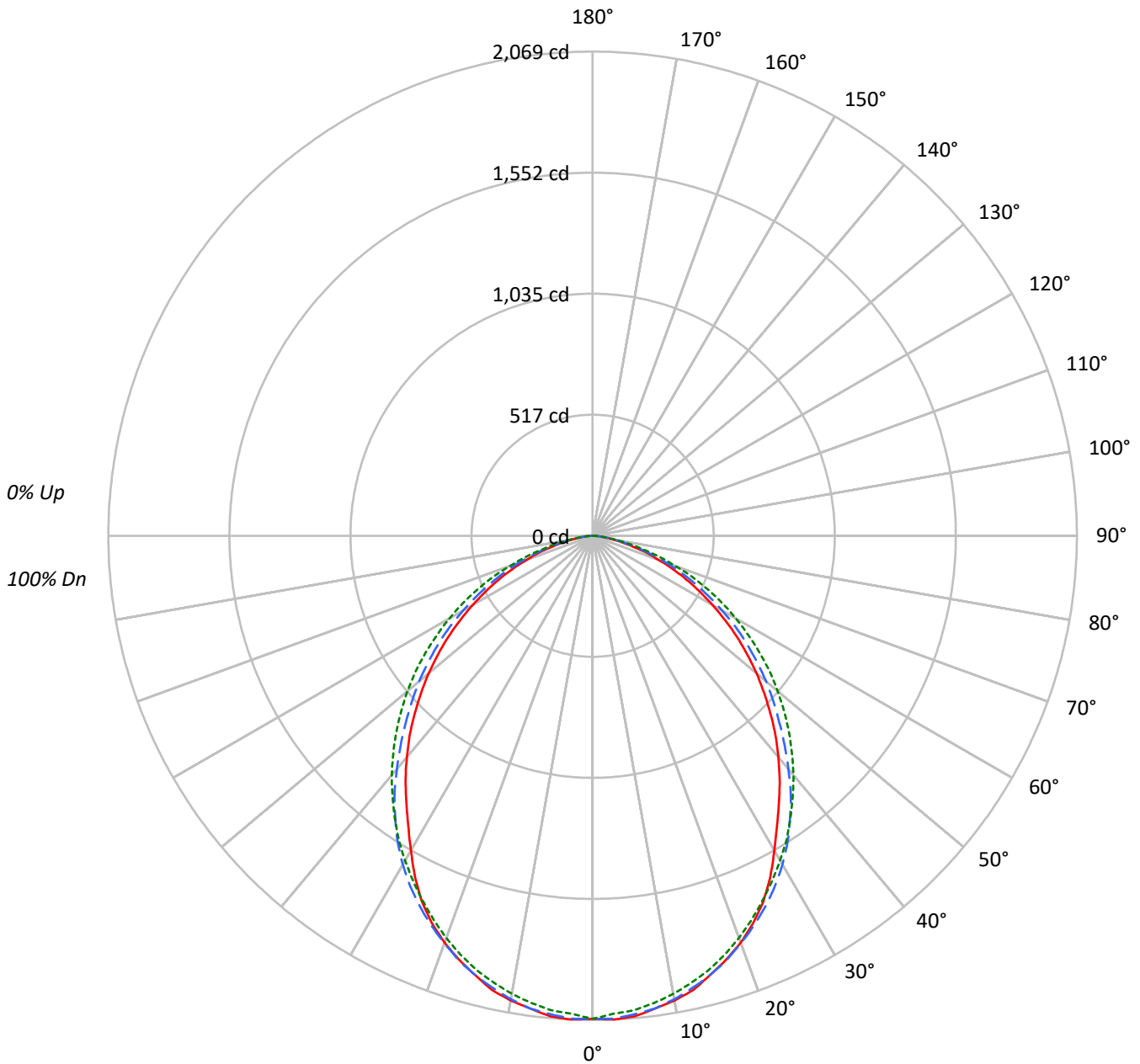
Lumens per Lamp: N/A  
Luminaire Lumens: 4772.0 lumens  
Efficiency: N/A  
Efficacy: 73.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	11107	11107	11107
5°	11137	11090	10995
10°	11018	10988	10863
15°	10823	10823	10700
20°	10594	10608	10471
25°	10245	10372	10207
30°	9647	10081	9958
35°	9116	9663	9678
40°	8673	9141	9380
45°	8177	8587	9028
50°	7654	8092	8643
55°	7060	7529	8176
60°	6358	6870	7604
65°	5613	6109	6916
70°	4678	5202	5876
75°	3676	4155	4600
80°	2628	2923	3245
85°	1711	1711	1618



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.3	4.1
10°-20°	545.9	11.4
20°-30°	797.7	16.7
30°-40°	905.5	19.0
40°-50°	874.1	18.3
50°-60°	721.1	15.1
60°-70°	480.2	10.1
70°-80°	214.9	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°	1537.9	32.2
0°-40°	2443.4	51.2
0°-60°	4038.5	84.6
0°-90°	4772.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4772.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2064	2064	2064	2064	2064	
5°	2061	2061	2053	2042	2035	195
15°	1942	1947	1942	1934	1920	548
25°	1725	1739	1747	1734	1719	790
35°	1388	1406	1471	1479	1473	869
45°	1074	1092	1128	1180	1186	829
55°	752	765	802	847	871	672
65°	441	453	480	514	543	437
75°	177	186	200	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°	2063.8	2063.8	2063.8	2063.8	2063.8
2.5°	2069.3	2070.1	2065.4	2052.7	2044.7
5°	2061.4	2060.6	2052.7	2041.6	2035.2
7.5°	2038.4	2040.0	2037.6	2021.7	2013.0
10°	2016.2	2017.0	2010.6	1998.0	1987.7
12.5°	1987.7	1986.9	1978.1	1971.8	1955.1
15°	1942.5	1947.2	1942.5	1933.7	1920.3
17.5°	1898.9	1898.9	1902.0	1887.0	1876.7
20°	1849.7	1852.1	1852.1	1840.2	1828.3
22.5°	1792.6	1799.8	1802.1	1789.4	1775.2
25°	1725.2	1738.7	1746.6	1733.9	1718.9
27.5°	1643.6	1664.2	1688.0	1678.4	1661.8
30°	1552.4	1582.5	1622.2	1614.2	1602.3
32.5°	1466.0	1496.1	1550.8	1547.6	1541.3
35°	1387.5	1406.5	1470.7	1478.6	1473.1
37.5°	1312.9	1330.4	1390.6	1408.9	1404.1
40°	1234.5	1253.5	1301.1	1333.6	1335.1
42.5°	1156.8	1175.0	1213.8	1260.6	1260.6
45°	1074.3	1092.5	1128.2	1179.7	1186.1
47.5°	993.4	1012.5	1047.3	1098.9	1109.2
50°	914.1	931.6	966.5	1016.4	1032.3
52.5°	831.7	850.7	884.8	930.8	953.8
55°	752.4	765.1	802.4	846.8	871.3
57.5°	670.0	681.8	723.9	761.9	787.3
60°	590.7	605.7	638.2	677.1	706.4
62.5°	514.6	530.4	558.2	592.3	625.6
65°	440.8	452.7	479.7	513.8	543.1
67.5°	369.5	379.8	406.7	430.5	461.4
70°	297.3	310.8	330.6	353.6	373.4
72.5°	239.4	245.0	261.6	278.3	298.9
75°	176.8	186.3	199.8	209.3	221.2
77.5°	126.9	132.4	140.3	148.3	159.4
80°	84.8	87.2	94.3	95.9	104.7
82.5°	51.5	53.1	54.7	55.5	58.7
85°	27.7	27.7	27.7	26.2	26.2
87.5°	15.9	15.9	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)