

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: P555969

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-81-84-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: P555969  
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-LD4-3STD-35-UNV-81-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

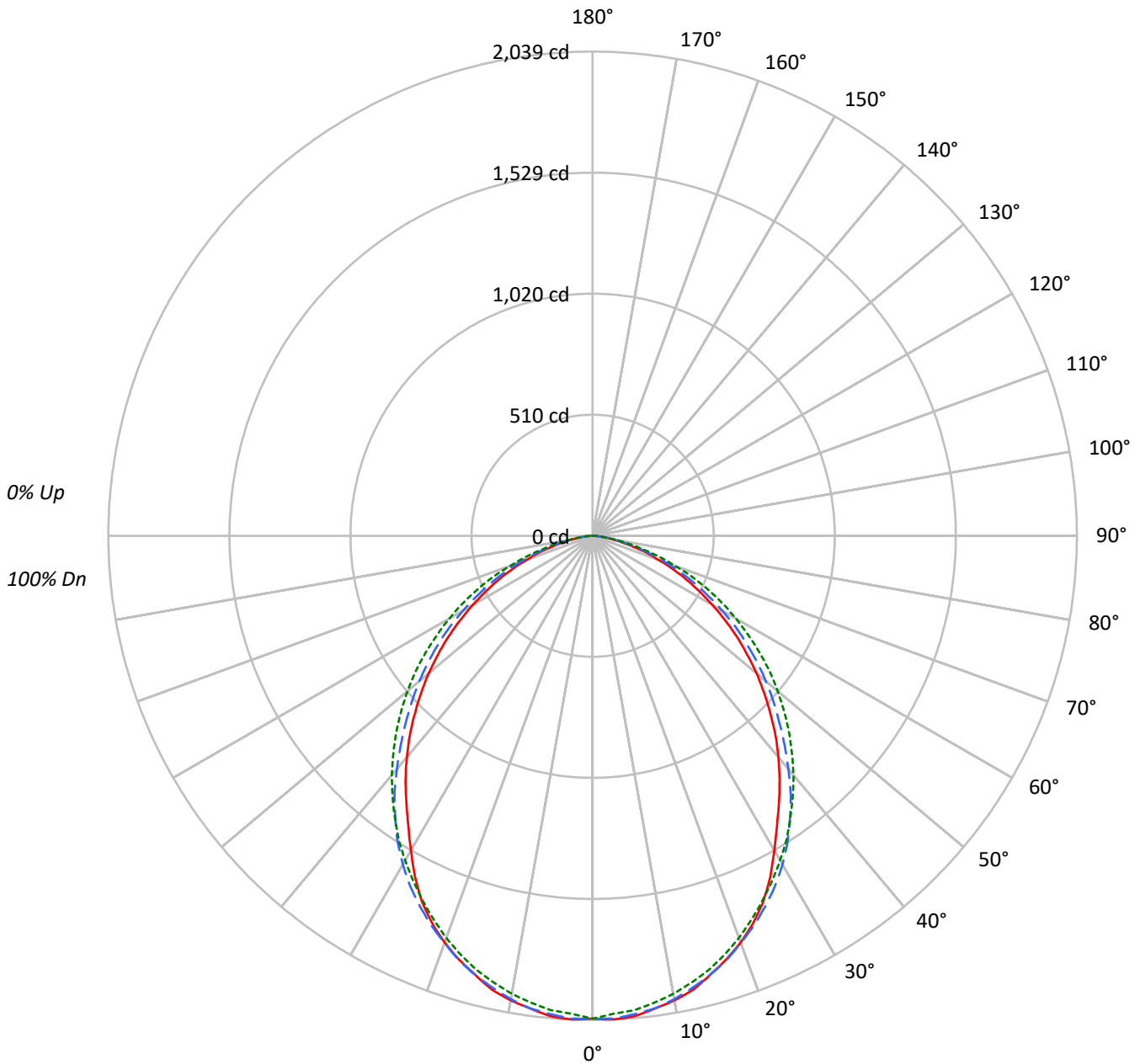
Lumens per Lamp: N/A  
Luminaire Lumens: 4702.0 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
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°	10944	10944	10944
5°	10973	10927	10834
10°	10857	10827	10703
15°	10664	10664	10542
20°	10439	10452	10318
25°	10095	10220	10058
30°	9506	9933	9812
35°	8982	9521	9537
40°	8545	9007	9243
45°	8056	8461	8895
50°	7541	7973	8516
55°	6957	7418	8056
60°	6265	6769	7493
65°	5532	6018	6814
70°	4611	5127	5791
75°	3622	4094	4533
80°	2591	2882	3195
85°	1686	1686	1593



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.5	4.1
10°-20°	537.9	11.4
20°-30°	786.0	16.7
30°-40°	892.2	19.0
40°-50°	861.3	18.3
50°-60°	710.5	15.1
60°-70°	473.1	10.1
70°-80°	211.7	4.5
80°-90°	37.9	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°	1515.3	32.2
0°-40°	2407.5	51.2
0°-60°	3979.3	84.6
0°-90°	4702.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4702.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2034	2034	2034	2034	2034	
5°	2031	2030	2023	2012	2005	192
15°	1914	1919	1914	1905	1892	540
25°	1700	1713	1721	1708	1694	778
35°	1367	1386	1449	1457	1452	857
45°	1058	1076	1112	1162	1169	817
55°	741	754	791	834	859	662
65°	434	446	473	506	535	431
75°	174	184	197	206	218	190
85°	27	27	27	26	26	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2033.5	2033.5	2033.5	2033.5	2033.5
2.5°	2039.0	2039.7	2035.1	2022.6	2014.7
5°	2031.1	2030.4	2022.6	2011.6	2005.4
7.5°	2008.5	2010.1	2007.7	1992.1	1983.5
10°	1986.6	1987.4	1981.2	1968.7	1958.5
12.5°	1958.5	1957.7	1949.1	1942.9	1926.5
15°	1914.0	1918.7	1914.0	1905.4	1892.1
17.5°	1871.0	1871.0	1874.1	1859.3	1849.1
20°	1822.6	1824.9	1824.9	1813.2	1801.5
22.5°	1766.3	1773.4	1775.7	1763.2	1749.1
25°	1699.9	1713.2	1721.0	1708.5	1693.7
27.5°	1619.5	1639.8	1663.2	1653.8	1637.4
30°	1529.6	1559.3	1598.4	1590.5	1578.8
32.5°	1444.5	1474.1	1528.0	1524.9	1518.7
35°	1367.1	1385.9	1449.1	1457.0	1451.5
37.5°	1293.7	1310.9	1370.2	1388.2	1383.5
40°	1216.3	1235.1	1282.0	1314.0	1315.6
42.5°	1139.8	1157.8	1196.0	1242.1	1242.1
45°	1058.5	1076.5	1111.7	1162.4	1168.7
47.5°	978.9	997.6	1032.0	1082.8	1092.9
50°	900.7	917.9	952.3	1001.5	1017.1
52.5°	819.5	838.2	871.8	917.1	939.8
55°	741.4	753.9	790.6	834.3	858.6
57.5°	660.1	671.8	713.2	750.7	775.7
60°	582.0	596.8	628.9	667.2	696.1
62.5°	507.0	522.6	550.0	583.6	616.4
65°	434.4	446.1	472.6	506.2	535.1
67.5°	364.0	374.2	400.8	424.2	454.7
70°	293.0	306.2	325.8	348.4	368.0
72.5°	235.9	241.4	257.8	274.2	294.5
75°	174.2	183.6	196.9	206.2	218.0
77.5°	125.0	130.5	138.3	146.1	157.0
80°	83.6	85.9	93.0	94.5	103.1
82.5°	50.8	52.3	53.9	54.7	57.8
85°	27.3	27.3	27.3	25.8	25.8
87.5°	15.6	15.6	13.3	10.9	7.8
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)