

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: P555417

Luminaire Tested: **FUSL-12-2-LD4-3HI-30-UNV-82-88-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: P555417  
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-30-UNV-82-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

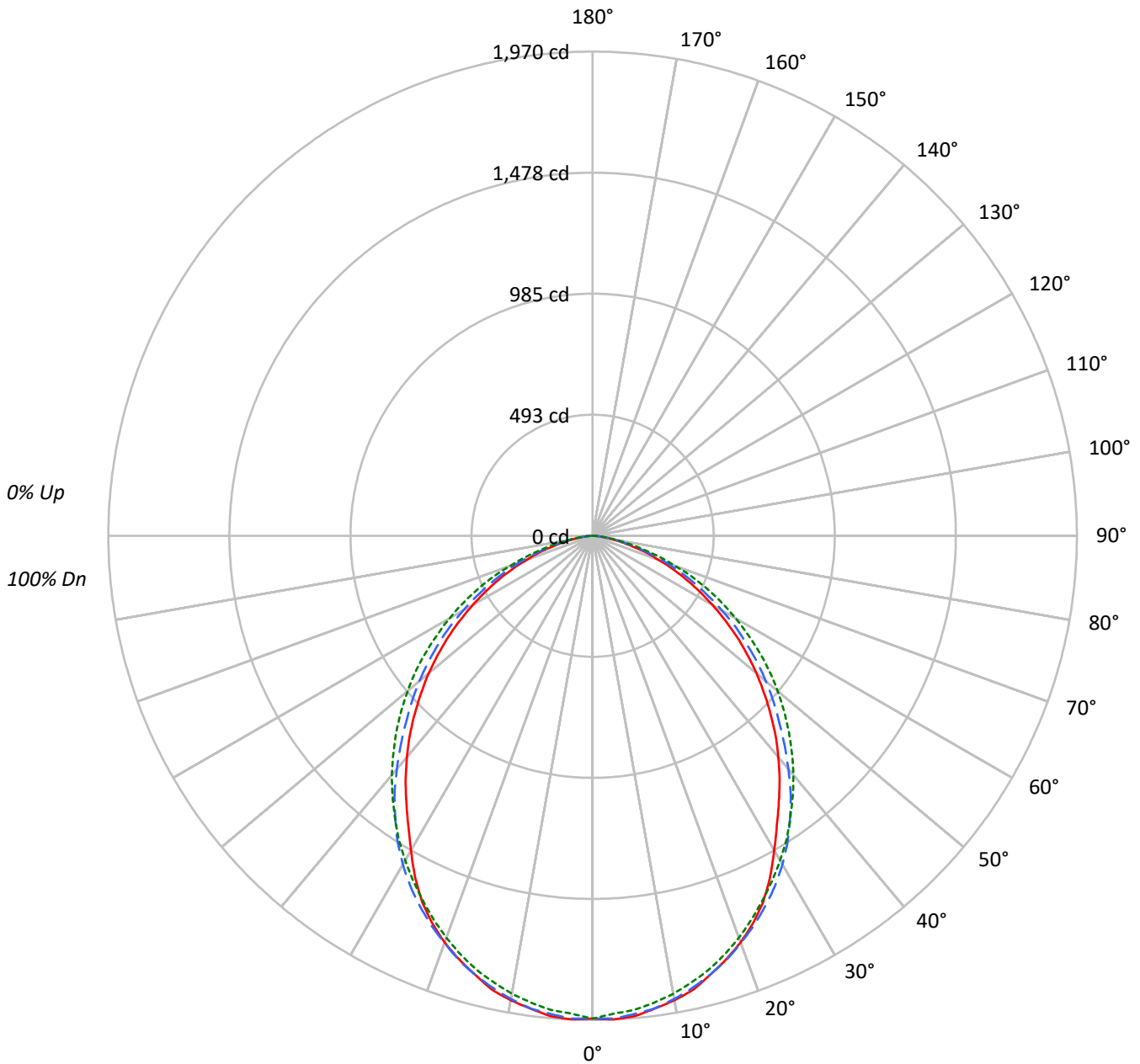
Lumens per Lamp: N/A  
Luminaire Lumens: 4542.0 lumens  
Efficiency: N/A  
Efficacy: 70.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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				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				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°	10572	10572	10572
5°	10600	10555	10465
10°	10487	10458	10339
15°	10301	10301	10184
20°	10083	10096	9967
25°	9751	9872	9715
30°	9183	9595	9478
35°	8677	9197	9212
40°	8255	8700	8928
45°	7782	8173	8592
50°	7285	7702	8226
55°	6719	7166	7781
60°	6051	6539	7238
65°	5344	5815	6583
70°	4453	4952	5593
75°	3500	3955	4377
80°	2501	2783	3087
85°	1630	1630	1538



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.9	4.1
10°-20°	519.6	11.4
20°-30°	759.2	16.7
30°-40°	861.8	19.0
40°-50°	832.0	18.3
50°-60°	686.3	15.1
60°-70°	457.0	10.1
70°-80°	204.5	4.5
80°-90°	36.6	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°	1463.8	32.2
0°-40°	2325.6	51.2
0°-60°	3843.9	84.6
0°-90°	4542.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4542.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1964	1964	1964	1964	1964	
5°	1962	1961	1954	1943	1937	186
15°	1849	1853	1849	1840	1828	521
25°	1642	1655	1662	1650	1636	752
35°	1321	1339	1400	1407	1402	827
45°	1022	1040	1074	1123	1129	789
55°	716	728	764	806	829	639
65°	420	431	457	489	517	416
75°	168	177	190	199	210	184
85°	26	26	26	25	25	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1964.3	1964.3	1964.3	1964.3	1964.3
2.5°	1969.6	1970.3	1965.8	1953.7	1946.2
5°	1962.0	1961.3	1953.7	1943.2	1937.1
7.5°	1940.1	1941.7	1939.4	1924.3	1916.0
10°	1919.0	1919.8	1913.7	1901.7	1891.9
12.5°	1891.9	1891.1	1882.8	1876.8	1860.9
15°	1848.8	1853.4	1848.8	1840.5	1827.7
17.5°	1807.3	1807.3	1810.4	1796.0	1786.2
20°	1760.5	1762.8	1762.8	1751.5	1740.2
22.5°	1706.2	1713.0	1715.3	1703.2	1689.6
25°	1642.1	1654.9	1662.4	1650.4	1636.0
27.5°	1564.3	1584.0	1606.6	1597.5	1581.7
30°	1477.6	1506.2	1544.0	1536.4	1525.1
32.5°	1395.3	1424.0	1476.1	1473.0	1467.0
35°	1320.6	1338.7	1399.8	1407.4	1402.1
37.5°	1249.7	1266.3	1323.6	1341.0	1336.4
40°	1175.0	1193.1	1238.3	1269.3	1270.8
42.5°	1101.0	1118.4	1155.3	1199.9	1199.9
45°	1022.5	1039.9	1073.8	1122.9	1128.9
47.5°	945.5	963.7	996.9	1045.9	1055.7
50°	870.1	886.7	919.9	967.4	982.5
52.5°	791.6	809.7	842.2	885.9	907.8
55°	716.1	728.2	763.7	805.9	829.3
57.5°	637.7	649.0	689.0	725.2	749.3
60°	562.2	576.5	607.5	644.5	672.4
62.5°	489.8	504.8	531.3	563.7	595.4
65°	419.6	430.9	456.6	489.0	516.9
67.5°	351.7	361.5	387.1	409.8	439.2
70°	283.0	295.8	314.7	336.6	355.4
72.5°	227.9	233.2	249.0	264.9	284.5
75°	168.3	177.3	190.2	199.2	210.5
77.5°	120.7	126.0	133.6	141.1	151.7
80°	80.7	83.0	89.8	91.3	99.6
82.5°	49.1	50.6	52.1	52.8	55.8
85°	26.4	26.4	26.4	24.9	24.9
87.5°	15.1	15.1	12.8	10.6	7.5
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)