

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: P555609

Luminaire Tested: **FUSL-12-2-LD4-3HI-50-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: P555609  
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-50-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 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

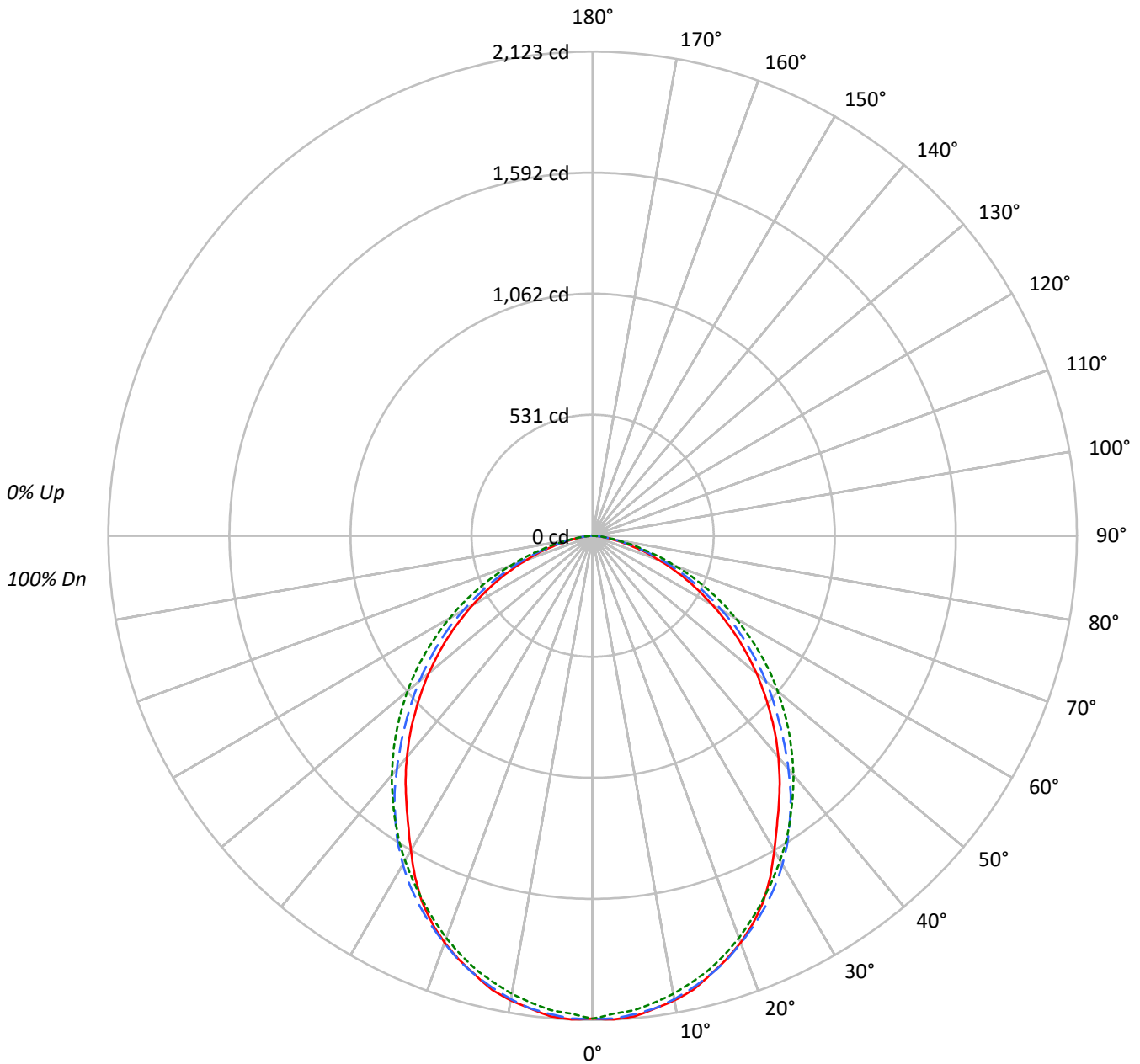
Lumens per Lamp: N/A  
Luminaire Lumens: 4896.0 lumens  
Efficiency: N/A  
Efficacy: 75.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
Input Voltage (V): NR  
Input Current (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									
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°	11396	11396	11396
5°	11426	11378	11281
10°	11305	11274	11145
15°	11104	11104	10978
20°	10869	10883	10743
25°	10511	10641	10472
30°	9898	10343	10217
35°	9353	9914	9930
40°	8898	9379	9624
45°	8389	8810	9262
50°	7853	8303	8868
55°	7244	7724	8389
60°	6523	7048	7802
65°	5760	6267	7096
70°	4799	5338	6028
75°	3772	4263	4720
80°	2696	3000	3329
85°	1760	1760	1655



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.4	4.1
10°-20°	560.1	11.4
20°-30°	818.4	16.7
30°-40°	929.0	19.0
40°-50°	896.8	18.3
50°-60°	739.8	15.1
60°-70°	492.6	10.1
70°-80°	220.5	4.5
80°-90°	39.4	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°	1577.8	32.2
0°-40°	2506.8	51.2
0°-60°	4143.5	84.6
0°-90°	4896.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4896.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2117	2117	2117	2117	2117	
5°	2115	2114	2106	2095	2088	200
15°	1993	1998	1993	1984	1970	562
25°	1770	1784	1792	1779	1764	811
35°	1424	1443	1509	1517	1511	892
45°	1102	1121	1158	1210	1217	850
55°	772	785	823	869	894	689
65°	452	464	492	527	557	448
75°	181	191	205	215	227	198
85°	28	28	28	27	27	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2117.4	2117.4	2117.4	2117.4	2117.4
2.5°	2123.1	2123.9	2119.0	2106.0	2097.9
5°	2115.0	2114.1	2106.0	2094.6	2088.1
7.5°	2091.4	2093.0	2090.5	2074.3	2065.3
10°	2068.6	2069.4	2062.9	2049.9	2039.3
12.5°	2039.3	2038.5	2029.5	2023.0	2006.0
15°	1992.9	1997.8	1992.9	1984.0	1970.2
17.5°	1948.2	1948.2	1951.5	1936.0	1925.4
20°	1897.8	1900.2	1900.2	1888.0	1875.8
22.5°	1839.2	1846.5	1849.0	1835.9	1821.3
25°	1770.1	1783.9	1792.0	1779.0	1763.5
27.5°	1686.3	1707.4	1731.8	1722.1	1705.0
30°	1592.7	1623.6	1664.3	1656.2	1644.0
32.5°	1504.1	1535.0	1591.1	1587.8	1581.3
35°	1423.5	1443.0	1508.9	1517.1	1511.4
37.5°	1347.1	1365.0	1426.8	1445.5	1440.6
40°	1266.5	1286.1	1334.9	1368.2	1369.8
42.5°	1186.8	1205.5	1245.4	1293.4	1293.4
45°	1102.2	1120.9	1157.5	1210.4	1216.9
47.5°	1019.2	1038.8	1074.6	1127.4	1138.0
50°	937.9	955.8	991.6	1042.8	1059.1
52.5°	853.3	872.8	907.8	955.0	978.6
55°	772.0	785.0	823.2	868.8	894.0
57.5°	687.4	699.6	742.7	781.7	807.7
60°	606.0	621.5	654.8	694.7	724.8
62.5°	527.9	544.2	572.7	607.6	641.8
65°	452.3	464.5	492.1	527.1	557.2
67.5°	379.1	389.6	417.3	441.7	473.4
70°	305.0	318.9	339.2	362.8	383.1
72.5°	245.7	251.4	268.4	285.5	306.7
75°	181.4	191.2	205.0	214.7	227.0
77.5°	130.2	135.8	144.0	152.1	163.5
80°	87.0	89.5	96.8	98.4	107.4
82.5°	52.9	54.5	56.1	56.9	60.2
85°	28.5	28.5	28.5	26.8	26.8
87.5°	16.3	16.3	13.8	11.4	8.1
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)