

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: P555620

Luminaire Tested: **FUSL-12-2-LD4-3HI-50-UNV-93-86-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: P555620  
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-93-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

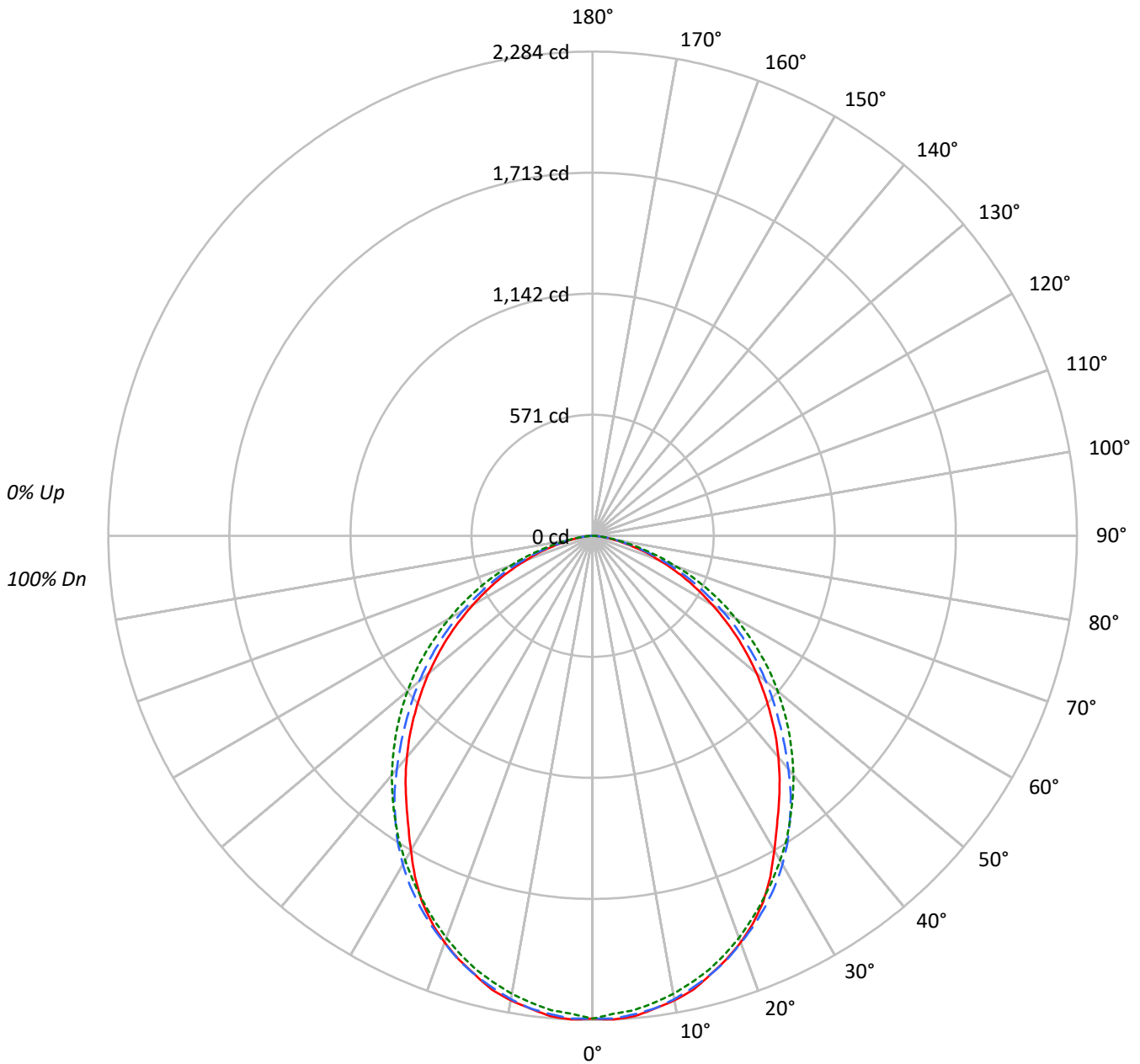
Lumens per Lamp: N/A  
Luminaire Lumens: 5267.0 lumens  
Efficiency: N/A  
Efficacy: 81.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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									
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°	12259	12259	12259
5°	12292	12240	12136
10°	12161	12128	11989
15°	11946	11946	11809
20°	11693	11708	11557
25°	11308	11448	11266
30°	10648	11127	10990
35°	10062	10665	10682
40°	9572	10089	10353
45°	9025	9478	9964
50°	8448	8931	9540
55°	7793	8310	9024
60°	7017	7582	8393
65°	6195	6742	7633
70°	5164	5742	6486
75°	4057	4585	5076
80°	2901	3226	3580
85°	1890	1890	1785



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.5	4.1
10°-20°	602.5	11.4
20°-30°	880.4	16.7
30°-40°	999.4	19.0
40°-50°	964.8	18.3
50°-60°	795.9	15.1
60°-70°	530.0	10.1
70°-80°	237.2	4.5
80°-90°	42.4	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°	1697.4	32.2
0°-40°	2696.8	51.2
0°-60°	4457.5	84.6
0°-90°	5267.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5267.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2278	2278	2278	2278	2278	
5°	2275	2274	2266	2253	2246	215
15°	2144	2149	2144	2134	2120	604
25°	1904	1919	1928	1914	1897	872
35°	1531	1552	1623	1632	1626	959
45°	1186	1206	1245	1302	1309	915
55°	830	844	886	935	962	741
65°	486	500	529	567	599	482
75°	195	206	220	231	244	213
85°	31	31	31	29	29	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2277.8	2277.8	2277.8	2277.8	2277.8
2.5°	2284.0	2284.8	2279.6	2265.6	2256.8
5°	2275.2	2274.3	2265.6	2253.3	2246.3
7.5°	2249.8	2251.6	2249.0	2231.5	2221.8
10°	2225.3	2226.2	2219.2	2205.2	2193.8
12.5°	2193.8	2193.0	2183.3	2176.3	2158.0
15°	2144.0	2149.2	2144.0	2134.3	2119.5
17.5°	2095.8	2095.8	2099.3	2082.7	2071.3
20°	2041.6	2044.2	2044.2	2031.1	2017.9
22.5°	1978.6	1986.4	1989.1	1975.1	1959.3
25°	1904.2	1919.1	1927.8	1913.8	1897.2
27.5°	1814.0	1836.8	1863.1	1852.6	1834.2
30°	1713.4	1746.7	1790.4	1781.7	1768.5
32.5°	1618.0	1651.3	1711.7	1708.2	1701.2
35°	1531.4	1552.4	1623.3	1632.0	1625.9
37.5°	1449.1	1468.4	1534.9	1555.0	1549.8
40°	1362.5	1383.5	1436.0	1471.9	1473.6
42.5°	1276.7	1296.9	1339.8	1391.4	1391.4
45°	1185.7	1205.9	1245.2	1302.1	1309.1
47.5°	1096.5	1117.5	1156.0	1212.9	1224.2
50°	1009.0	1028.2	1066.7	1121.9	1139.4
52.5°	918.0	939.0	976.6	1027.3	1052.7
55°	830.5	844.5	885.6	934.6	961.7
57.5°	739.4	752.6	799.0	841.0	869.0
60°	651.9	668.6	704.4	747.3	779.7
62.5°	567.9	585.4	616.1	653.7	690.4
65°	486.5	499.7	529.4	567.1	599.4
67.5°	407.8	419.2	448.9	475.2	509.3
70°	328.2	343.0	364.9	390.3	412.2
72.5°	264.3	270.4	288.8	307.2	329.9
75°	195.1	205.6	220.5	231.0	244.1
77.5°	140.0	146.1	154.9	163.6	175.9
80°	93.6	96.3	104.1	105.9	115.5
82.5°	56.9	58.6	60.4	61.3	64.8
85°	30.6	30.6	30.6	28.9	28.9
87.5°	17.5	17.5	14.9	12.3	8.8
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)