

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: P554805

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-80-86-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: P554805  
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-LD4-2HI-50-UNV-80-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

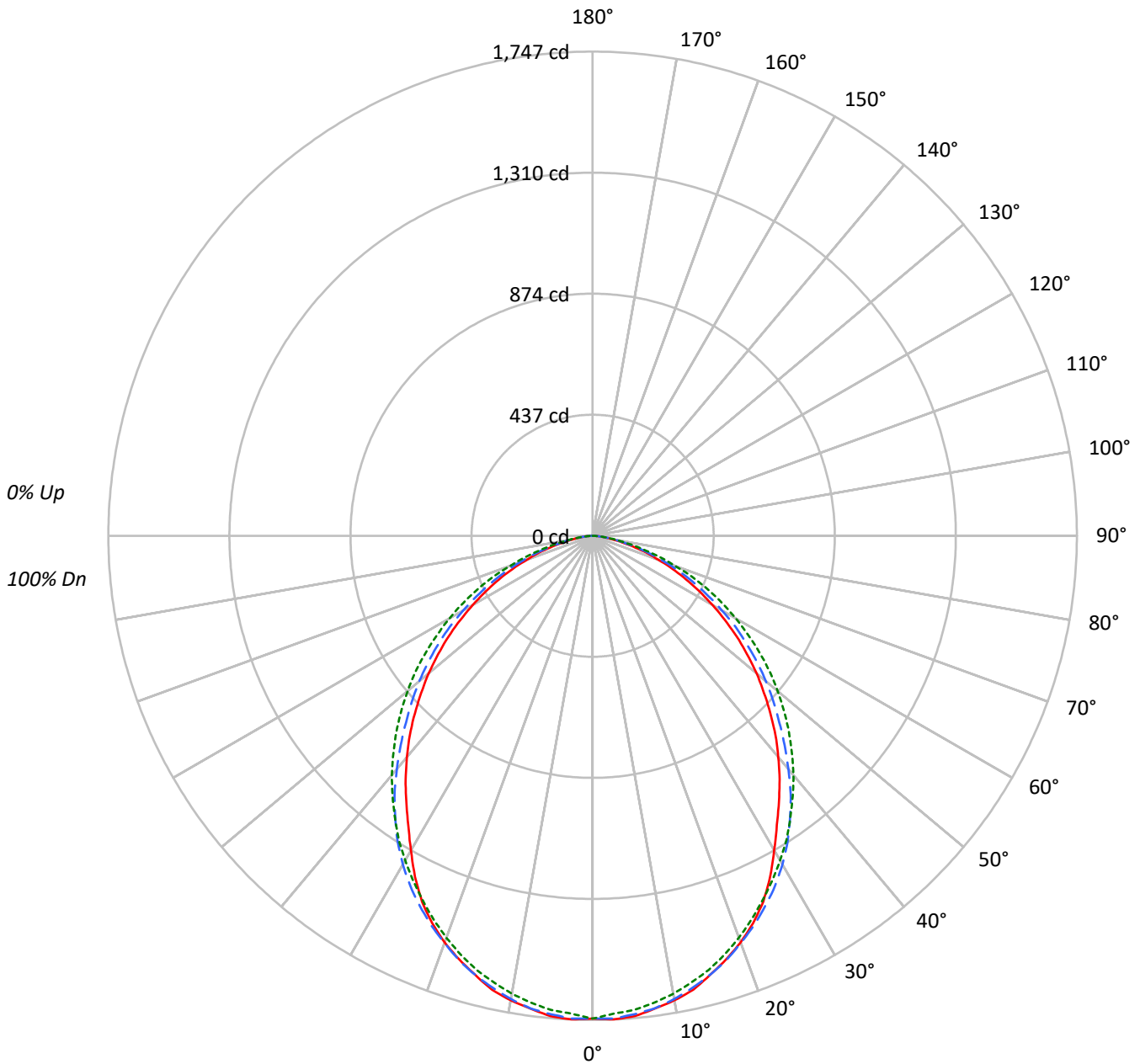
Lumens per Lamp: N/A  
Luminaire Lumens: 4028.0 lumens  
Efficiency: N/A  
Efficacy: 93.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
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°	9375	9375	9375
5°	9400	9360	9281
10°	9301	9275	9169
15°	9136	9136	9031
20°	8942	8954	8838
25°	8647	8755	8616
30°	8144	8509	8405
35°	7695	8156	8169
40°	7321	7716	7918
45°	6902	7248	7620
50°	6460	6831	7295
55°	5959	6355	6901
60°	5367	5799	6419
65°	4739	5156	5838
70°	3950	4392	4960
75°	3103	3506	3882
80°	2219	2467	2737
85°	1445	1445	1365



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.0	4.1
10°-20°	460.8	11.4
20°-30°	673.3	16.7
30°-40°	764.3	19.0
40°-50°	737.8	18.3
50°-60°	608.6	15.1
60°-70°	405.3	10.1
70°-80°	181.4	4.5
80°-90°	32.4	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°	1298.1	32.2
0°-40°	2062.4	51.2
0°-60°	3408.9	84.6
0°-90°	4028.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4028.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1742	1742	1742	1742	1742	
5°	1740	1739	1733	1723	1718	165
15°	1640	1644	1640	1632	1621	462
25°	1456	1468	1474	1464	1451	667
35°	1171	1187	1241	1248	1243	734
45°	907	922	952	996	1001	700
55°	635	646	677	715	736	567
65°	372	382	405	434	458	369
75°	149	157	169	177	187	163
85°	23	23	23	22	22	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1742.0	1742.0	1742.0	1742.0	1742.0
2.5°	1746.7	1747.4	1743.3	1732.6	1725.9
5°	1740.0	1739.3	1732.6	1723.3	1717.9
7.5°	1720.6	1721.9	1719.9	1706.5	1699.2
10°	1701.9	1702.5	1697.2	1686.5	1677.8
12.5°	1677.8	1677.1	1669.7	1664.4	1650.3
15°	1639.6	1643.6	1639.6	1632.3	1620.9
17.5°	1602.8	1602.8	1605.5	1592.8	1584.1
20°	1561.3	1563.3	1563.3	1553.3	1543.2
22.5°	1513.1	1519.2	1521.2	1510.5	1498.4
25°	1456.2	1467.6	1474.3	1463.6	1450.9
27.5°	1387.3	1404.7	1424.8	1416.8	1402.7
30°	1310.4	1335.8	1369.2	1362.6	1352.5
32.5°	1237.4	1262.8	1309.0	1306.3	1301.0
35°	1171.2	1187.2	1241.4	1248.1	1243.4
37.5°	1108.2	1123.0	1173.8	1189.2	1185.2
40°	1042.0	1058.1	1098.2	1125.6	1127.0
42.5°	976.4	991.8	1024.6	1064.1	1064.1
45°	906.8	922.2	952.3	995.8	1001.2
47.5°	838.5	854.6	884.1	927.6	936.3
50°	771.6	786.3	815.8	858.0	871.3
52.5°	702.0	718.1	746.9	785.7	805.1
55°	635.1	645.8	677.3	714.7	735.5
57.5°	565.5	575.5	611.0	643.1	664.5
60°	498.6	511.3	538.7	571.5	596.3
62.5°	434.3	447.7	471.1	499.9	528.0
65°	372.1	382.1	404.9	433.7	458.4
67.5°	311.9	320.6	343.3	363.4	389.5
70°	251.0	262.3	279.1	298.5	315.2
72.5°	202.1	206.8	220.8	234.9	252.3
75°	149.2	157.3	168.6	176.7	186.7
77.5°	107.1	111.8	118.5	125.1	134.5
80°	71.6	73.6	79.6	81.0	88.3
82.5°	43.5	44.8	46.2	46.8	49.5
85°	23.4	23.4	23.4	22.1	22.1
87.5°	13.4	13.4	11.4	9.4	6.7
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)