

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: P555509

Luminaire Tested: **FUSL-12-2-LD4-3HI-40-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: P555509  
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-40-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 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

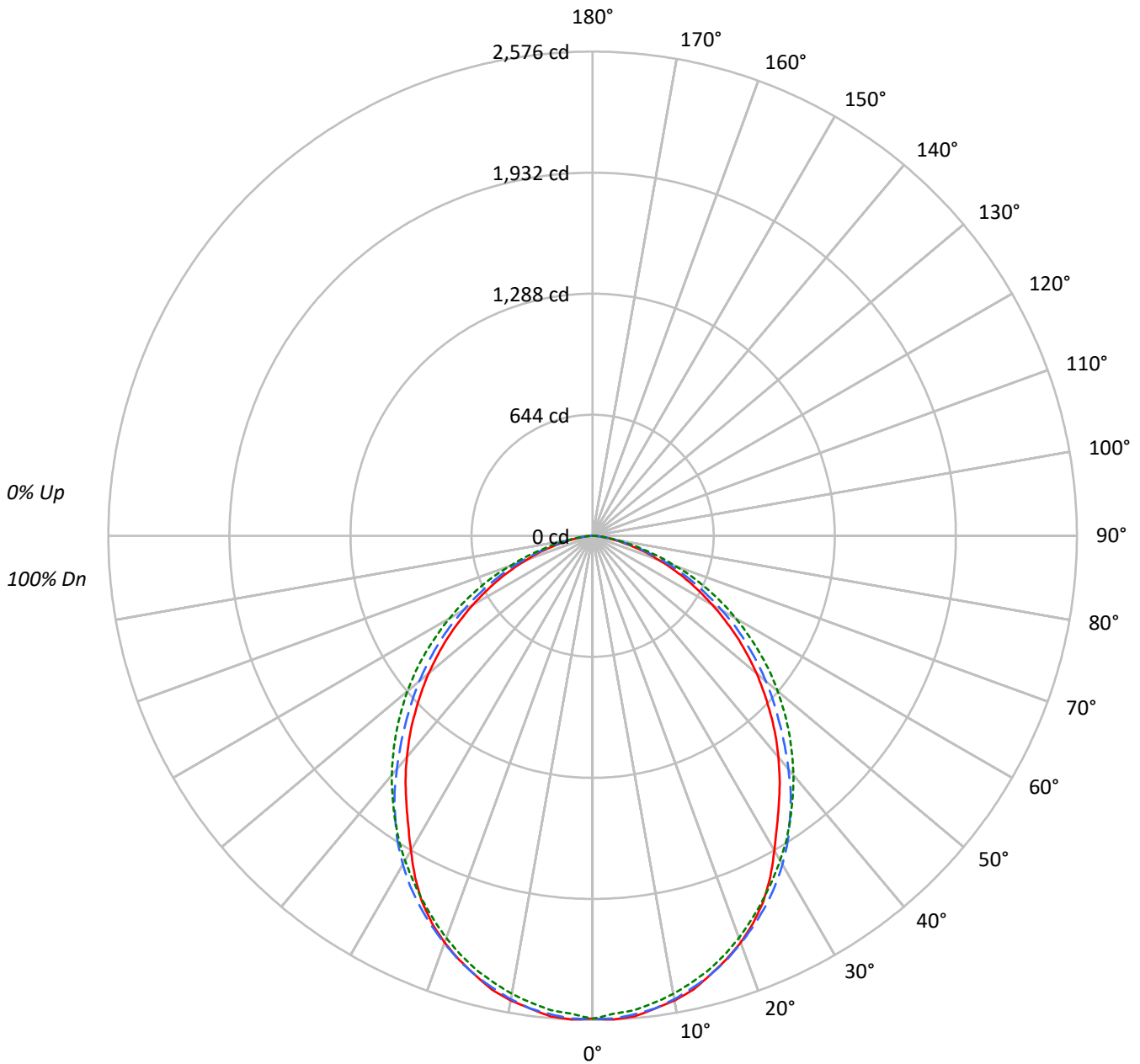
Lumens per Lamp: N/A  
Luminaire Lumens: 5941.0 lumens  
Efficiency: N/A  
Efficacy: 91.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	13828	13828	13828
5°	13865	13806	13689
10°	13718	13680	13524
15°	13474	13474	13321
20°	13189	13206	13037
25°	12755	12913	12708
30°	12011	12550	12397
35°	11349	12030	12050
40°	10798	11380	11678
45°	10180	10691	11239
50°	9529	10074	10761
55°	8789	9373	10179
60°	7916	8553	9467
65°	6989	7605	8610
70°	5824	6477	7316
75°	4577	5172	5727
80°	3273	3642	4038
85°	2130	2130	2013



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.9	4.1
10°-20°	679.6	11.4
20°-30°	993.1	16.7
30°-40°	1127.3	19.0
40°-50°	1088.2	18.3
50°-60°	897.7	15.1
60°-70°	597.8	10.1
70°-80°	267.5	4.5
80°-90°	47.8	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°	1914.6	32.2
0°-40°	3041.9	51.2
0°-60°	5027.8	84.6
0°-90°	5941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5941.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2569	2569	2569	2569	2569	
5°	2566	2565	2556	2542	2534	243
15°	2418	2424	2418	2408	2391	682
25°	2148	2165	2174	2159	2140	984
35°	1727	1751	1831	1841	1834	1082
45°	1338	1360	1405	1469	1477	1032
55°	937	952	999	1054	1085	836
65°	549	564	597	640	676	544
75°	220	232	249	261	275	241
85°	34	34	34	33	33	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2569.3	2569.3	2569.3	2569.3	2569.3
2.5°	2576.2	2577.2	2571.3	2555.5	2545.6
5°	2566.4	2565.4	2555.5	2541.7	2533.8
7.5°	2537.7	2539.7	2536.8	2517.0	2506.2
10°	2510.1	2511.1	2503.2	2487.4	2474.6
12.5°	2474.6	2473.6	2462.7	2454.8	2434.1
15°	2418.3	2424.2	2418.3	2407.5	2390.7
17.5°	2364.0	2364.0	2368.0	2349.2	2336.4
20°	2302.8	2305.8	2305.8	2291.0	2276.2
22.5°	2231.8	2240.6	2243.6	2227.8	2210.0
25°	2147.9	2164.6	2174.5	2158.7	2140.0
27.5°	2046.2	2071.8	2101.5	2089.6	2068.9
30°	1932.7	1970.2	2019.5	2009.7	1994.9
32.5°	1825.1	1862.6	1930.7	1926.8	1918.9
35°	1727.4	1751.1	1831.0	1840.9	1834.0
37.5°	1634.6	1656.3	1731.3	1754.0	1748.1
40°	1536.9	1560.5	1619.8	1660.2	1662.2
42.5°	1440.1	1462.8	1511.2	1569.4	1569.4
45°	1337.5	1360.2	1404.6	1468.8	1476.6
47.5°	1236.8	1260.5	1303.9	1368.1	1380.9
50°	1138.1	1159.8	1203.2	1265.4	1285.2
52.5°	1035.4	1059.1	1101.6	1158.8	1187.4
55°	936.7	952.5	998.9	1054.2	1084.8
57.5°	834.1	848.9	901.2	948.6	980.2
60°	735.4	754.1	794.6	843.0	879.5
62.5°	640.6	660.3	694.9	737.3	778.8
65°	548.8	563.6	597.2	639.6	676.1
67.5°	460.0	472.8	506.4	536.0	574.5
70°	370.1	386.9	411.6	440.2	464.9
72.5°	298.1	305.0	325.7	346.5	372.1
75°	220.1	232.0	248.7	260.6	275.4
77.5°	157.9	164.8	174.7	184.6	198.4
80°	105.6	108.6	117.5	119.4	130.3
82.5°	64.2	66.1	68.1	69.1	73.0
85°	34.5	34.5	34.5	32.6	32.6
87.5°	19.7	19.7	16.8	13.8	9.9
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)