

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: P556204

Luminaire Tested: **FUSL-12-4-LD4-1HI-30-UNV-93-96-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: P556204
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-12-4-LD4-1HI-30-UNV-93-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

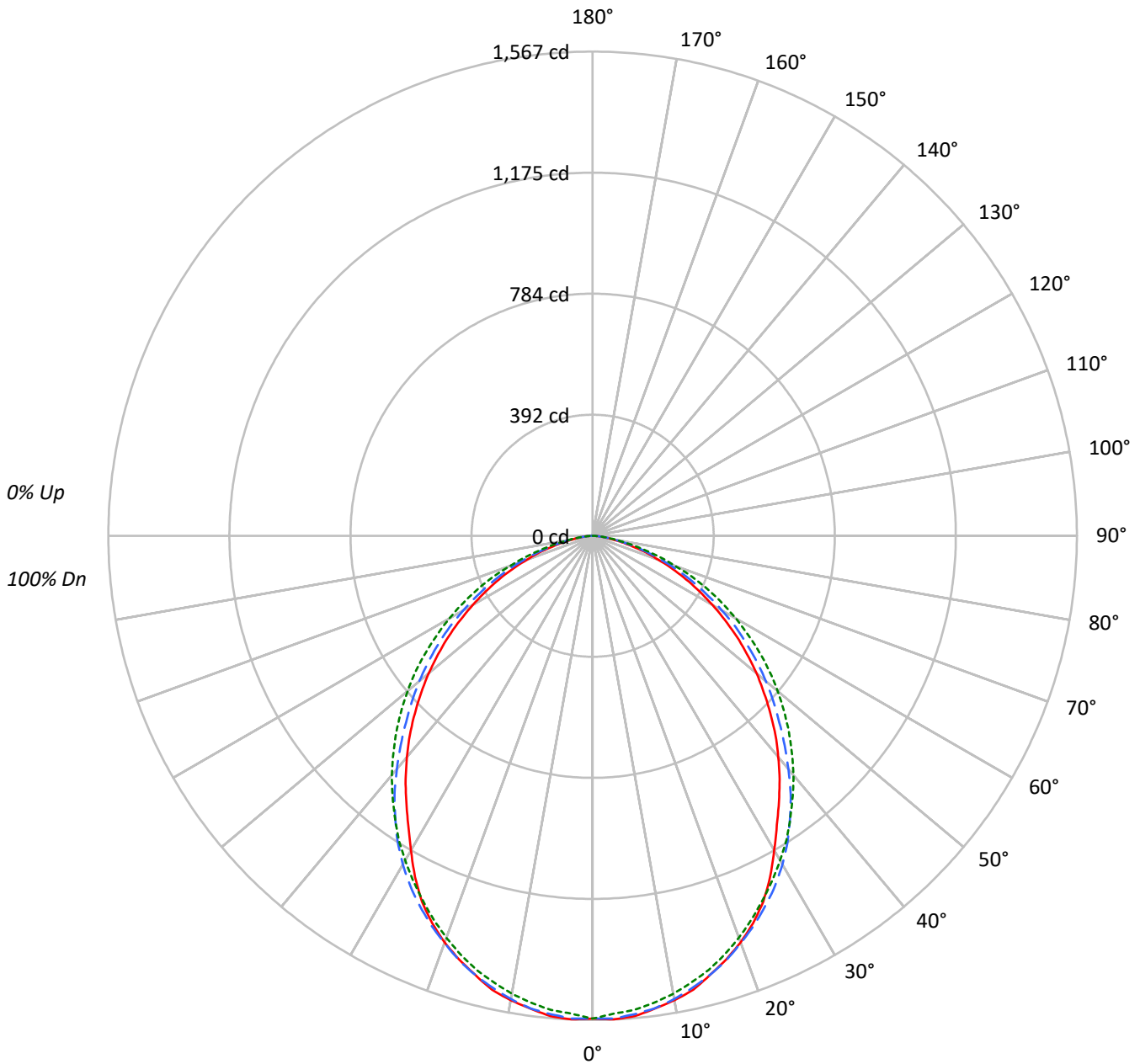
Lumens per Lamp: N/A
Luminaire Lumens: 3613.0 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (A_{in}): 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°	4205	4205	4205
5°	4216	4198	4162
10°	4171	4160	4112
15°	4097	4097	4050
20°	4011	4016	3964
25°	3878	3926	3864
30°	3652	3816	3770
35°	3451	3658	3664
40°	3283	3460	3551
45°	3095	3251	3417
50°	2897	3063	3272
55°	2673	2850	3095
60°	2407	2601	2878
65°	2125	2313	2618
70°	1771	1969	2224
75°	1392	1573	1742
80°	995	1106	1227
85°	648	648	611



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.1	4.1
10°-20°	413.3	11.4
20°-30°	604.0	16.7
30°-40°	685.6	19.0
40°-50°	661.8	18.3
50°-60°	545.9	15.1
60°-70°	363.6	10.1
70°-80°	162.7	4.5
80°-90°	29.1	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°	1164.4	32.2
0°-40°	1849.9	51.2
0°-60°	3057.7	84.6
0°-90°	3613.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3613.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1562	1562	1562	1562	1562	
5°	1561	1560	1554	1546	1541	148
15°	1471	1474	1471	1464	1454	415
25°	1306	1316	1322	1313	1301	598
35°	1050	1065	1114	1120	1115	658
45°	813	827	854	893	898	628
55°	570	579	608	641	660	508
65°	334	343	363	389	411	331
75°	134	141	151	158	168	146
85°	21	21	21	20	20	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1562.5	1562.5	1562.5	1562.5	1562.5
2.5°	1566.7	1567.3	1563.7	1554.1	1548.1
5°	1560.7	1560.1	1554.1	1545.7	1540.9
7.5°	1543.3	1544.5	1542.7	1530.7	1524.1
10°	1526.5	1527.1	1522.3	1512.7	1504.9
12.5°	1504.9	1504.3	1497.7	1492.9	1480.3
15°	1470.7	1474.3	1470.7	1464.1	1453.9
17.5°	1437.7	1437.7	1440.1	1428.7	1420.9
20°	1400.5	1402.3	1402.3	1393.3	1384.2
22.5°	1357.2	1362.6	1364.4	1354.8	1344.0
25°	1306.2	1316.4	1322.4	1312.8	1301.4
27.5°	1244.4	1260.0	1278.0	1270.8	1258.2
30°	1175.3	1198.2	1228.2	1222.2	1213.2
32.5°	1109.9	1132.7	1174.1	1171.7	1166.9
35°	1050.5	1064.9	1113.5	1119.5	1115.3
37.5°	994.1	1007.3	1052.9	1066.7	1063.1
40°	934.6	949.0	985.1	1009.7	1010.9
42.5°	875.8	889.6	919.0	954.4	954.4
45°	813.4	827.2	854.2	893.2	898.0
47.5°	752.2	766.6	793.0	832.0	839.8
50°	692.1	705.3	731.7	769.6	781.6
52.5°	629.7	644.1	669.9	704.7	722.1
55°	569.7	579.3	607.5	641.1	659.7
57.5°	507.2	516.2	548.1	576.9	596.1
60°	447.2	458.6	483.2	512.6	534.8
62.5°	389.6	401.6	422.6	448.4	473.6
65°	333.8	342.8	363.2	389.0	411.2
67.5°	279.7	287.5	307.9	326.0	349.4
70°	225.1	235.3	250.3	267.7	282.7
72.5°	181.3	185.5	198.1	210.7	226.3
75°	133.9	141.1	151.3	158.5	167.5
77.5°	96.0	100.2	106.2	112.3	120.7
80°	64.2	66.0	71.4	72.6	79.2
82.5°	39.0	40.2	41.4	42.0	44.4
85°	21.0	21.0	21.0	19.8	19.8
87.5°	12.0	12.0	10.2	8.4	6.0
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)