

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: P557871

Luminaire Tested: **FUSL-12-4-LD4-3HI-40-UNV-93-97-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: P557871
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-LD4-3HI-40-UNV-93-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

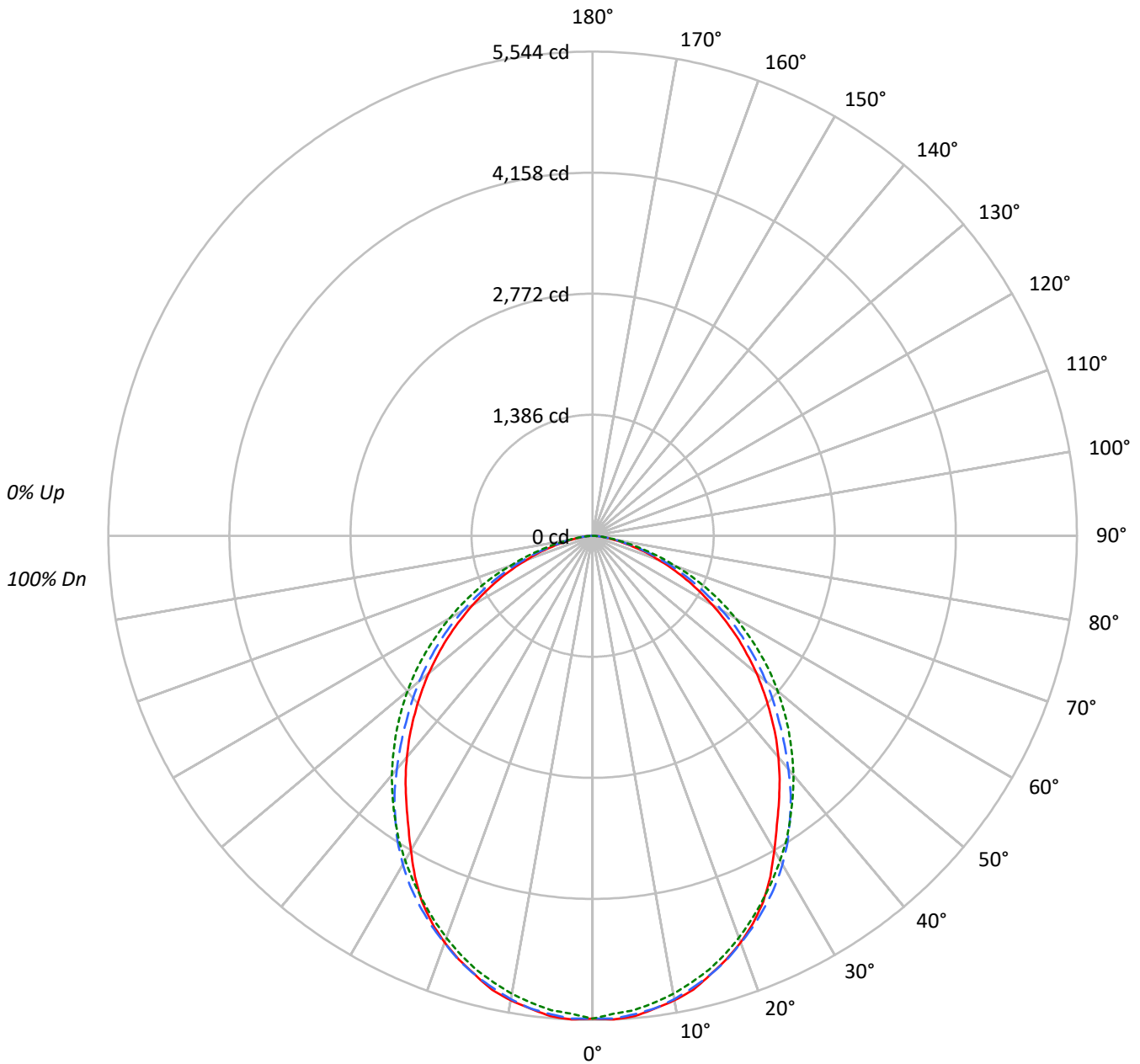
Lumens per Lamp: N/A
Luminaire Lumens: 12784.0 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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°	14878	14878	14878
5°	14917	14854	14728
10°	14759	14718	14550
15°	14497	14497	14332
20°	14190	14208	14026
25°	13723	13893	13672
30°	12923	13503	13338
35°	12211	12943	12964
40°	11617	12244	12565
45°	10953	11502	12092
50°	10253	10839	11577
55°	9457	10085	10952
60°	8516	9202	10185
65°	7519	8182	9264
70°	6267	6969	7871
75°	4925	5565	6161
80°	3522	3918	4345
85°	2294	2294	2164



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	520.5	4.1
10°-20°	1462.4	11.4
20°-30°	2137.0	16.7
30°-40°	2425.7	19.0
40°-50°	2341.7	18.3
50°-60°	1931.7	15.1
60°-70°	1286.4	10.1
70°-80°	575.6	4.5
80°-90°	103.0	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°	4119.9	32.2
0°-40°	6545.6	51.2
0°-60°	10819.0	84.6
0°-90°	12784.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12784.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5529	5529	5529	5529	5529	
5°	5522	5520	5499	5469	5452	523
15°	5204	5216	5204	5180	5144	1467
25°	4622	4658	4679	4645	4605	2117
35°	3717	3768	3940	3961	3946	2329
45°	2878	2927	3022	3160	3178	2221
55°	2016	2050	2150	2268	2334	1799
65°	1181	1213	1285	1376	1455	1171
75°	474	499	535	561	593	518
85°	74	74	74	70	70	100
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5528.7	5528.7	5528.7	5528.7	5528.7
2.5°	5543.6	5545.7	5533.0	5499.0	5477.8
5°	5522.4	5520.3	5499.0	5469.3	5452.3
7.5°	5460.8	5465.0	5458.7	5416.2	5392.8
10°	5401.3	5403.4	5386.4	5352.5	5324.8
12.5°	5324.8	5322.7	5299.4	5282.4	5237.8
15°	5203.8	5216.5	5203.8	5180.4	5144.3
17.5°	5087.0	5087.0	5095.5	5055.1	5027.5
20°	4955.3	4961.6	4961.6	4929.8	4897.9
22.5°	4802.3	4821.5	4827.8	4793.8	4755.6
25°	4621.8	4657.9	4679.2	4645.2	4604.8
27.5°	4403.0	4458.3	4522.0	4496.5	4451.9
30°	4158.8	4239.5	4345.7	4324.4	4292.6
32.5°	3927.3	4008.0	4154.5	4146.0	4129.0
35°	3717.0	3768.0	3940.0	3961.2	3946.4
37.5°	3517.3	3564.1	3725.5	3774.3	3761.6
40°	3307.1	3358.0	3485.5	3572.6	3576.8
42.5°	3098.9	3147.8	3251.8	3377.1	3377.1
45°	2878.0	2926.9	3022.4	3160.5	3177.5
47.5°	2661.4	2712.3	2805.8	2943.9	2971.5
50°	2449.0	2495.7	2589.1	2723.0	2765.4
52.5°	2228.1	2279.0	2370.4	2493.6	2555.2
55°	2015.7	2049.7	2149.5	2268.4	2334.3
57.5°	1794.8	1826.6	1939.2	2041.2	2109.1
60°	1582.4	1622.7	1709.8	1813.9	1892.5
62.5°	1378.5	1421.0	1495.3	1586.6	1675.8
65°	1180.9	1212.8	1285.0	1376.3	1454.9
67.5°	989.8	1017.4	1089.6	1153.3	1236.2
70°	796.5	832.6	885.7	947.3	1000.4
72.5°	641.4	656.3	700.9	745.5	800.7
75°	473.7	499.1	535.2	560.7	592.6
77.5°	339.8	354.7	375.9	397.2	426.9
80°	227.3	233.6	252.8	257.0	280.4
82.5°	138.1	142.3	146.6	148.7	157.2
85°	74.3	74.3	74.3	70.1	70.1
87.5°	42.5	42.5	36.1	29.7	21.2
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)