

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: P557756

Luminaire Tested: **FUSL-12-4-LD4-3HI-35-UNV-80-96-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: P557756
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-35-UNV-80-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

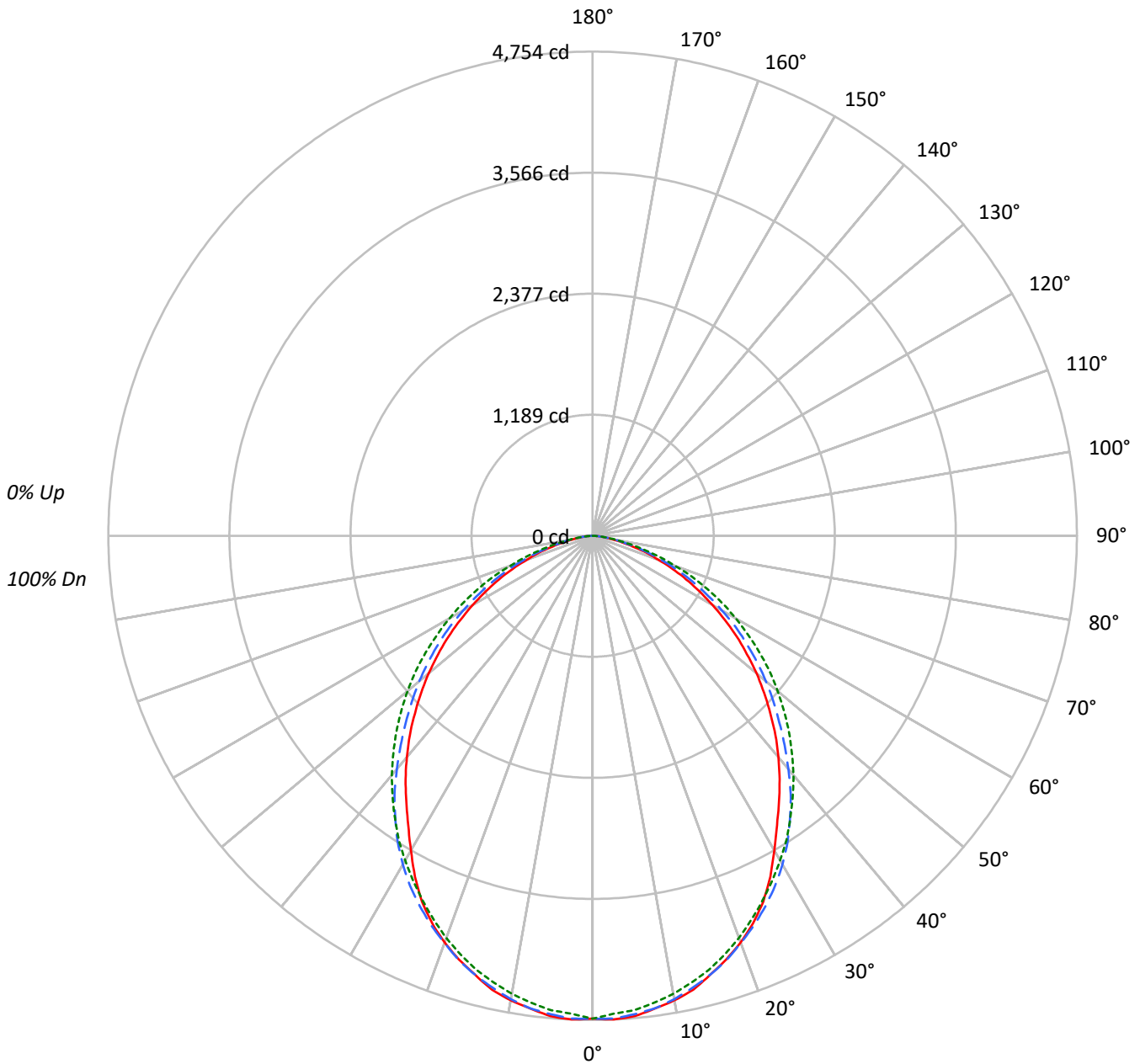
Lumens per Lamp: N/A
Luminaire Lumens: 10963.0 lumens
Efficiency: N/A
Efficacy: 84.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	12758	12758	12758
5°	12793	12738	12630
10°	12657	12622	12478
15°	12432	12432	12290
20°	12169	12185	12028
25°	11768	11914	11725
30°	11082	11580	11438
35°	10471	11100	11117
40°	9962	10500	10775
45°	9393	9864	10370
50°	8792	9295	9928
55°	8109	8648	9392
60°	7303	7892	8734
65°	6448	7017	7945
70°	5374	5976	6750
75°	4223	4772	5284
80°	3020	3360	3725
85°	1970	1970	1856



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	446.4	4.1
10°-20°	1254.1	11.4
20°-30°	1832.6	16.7
30°-40°	2080.2	19.0
40°-50°	2008.1	18.3
50°-60°	1656.6	15.1
60°-70°	1103.1	10.1
70°-80°	493.6	4.5
80°-90°	88.3	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°	3533.1	32.2
0°-40°	5613.3	51.2
0°-60°	9277.9	84.6
0°-90°	10963.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10963.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4741	4741	4741	4741	4741	
5°	4736	4734	4716	4690	4676	448
15°	4462	4474	4462	4442	4412	1258
25°	3964	3994	4013	3984	3949	1815
35°	3188	3231	3379	3397	3384	1997
45°	2468	2510	2592	2710	2725	1904
55°	1728	1758	1843	1945	2002	1543
65°	1013	1040	1102	1180	1248	1004
75°	406	428	459	481	508	444
85°	64	64	64	60	60	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4741.2	4741.2	4741.2	4741.2	4741.2
2.5°	4754.0	4755.8	4744.9	4715.7	4697.5
5°	4735.8	4733.9	4715.7	4690.2	4675.6
7.5°	4682.9	4686.6	4681.1	4644.7	4624.6
10°	4631.9	4633.7	4619.2	4590.0	4566.4
12.5°	4566.4	4564.5	4544.5	4529.9	4491.7
15°	4462.5	4473.5	4462.5	4442.5	4411.5
17.5°	4362.4	4362.4	4369.6	4335.0	4311.4
20°	4249.4	4254.9	4254.9	4227.6	4200.2
22.5°	4118.3	4134.7	4140.1	4111.0	4078.2
25°	3963.5	3994.4	4012.6	3983.5	3948.9
27.5°	3775.8	3823.2	3877.9	3856.0	3817.7
30°	3566.4	3635.6	3726.7	3708.5	3681.1
32.5°	3367.8	3437.1	3562.7	3555.5	3540.9
35°	3187.5	3231.2	3378.8	3397.0	3384.2
37.5°	3016.3	3056.4	3194.8	3236.7	3225.8
40°	2836.0	2879.7	2989.0	3063.7	3067.3
42.5°	2657.5	2699.4	2788.6	2896.1	2896.1
45°	2468.1	2509.9	2591.9	2710.3	2724.9
47.5°	2282.3	2326.0	2406.1	2524.5	2548.2
50°	2100.1	2140.2	2220.3	2335.1	2371.5
52.5°	1910.7	1954.4	2032.7	2138.4	2191.2
55°	1728.5	1757.7	1843.3	1945.3	2001.8
57.5°	1539.1	1566.4	1663.0	1750.4	1808.7
60°	1357.0	1391.6	1466.3	1555.5	1622.9
62.5°	1182.1	1218.5	1282.3	1360.6	1437.1
65°	1012.7	1040.0	1102.0	1180.3	1247.7
67.5°	848.8	872.5	934.4	989.0	1060.1
70°	683.0	714.0	759.5	812.4	857.9
72.5°	550.1	562.8	601.1	639.3	686.7
75°	406.2	428.0	459.0	480.9	508.2
77.5°	291.4	304.2	322.4	340.6	366.1
80°	194.9	200.4	216.8	220.4	240.4
82.5°	118.4	122.0	125.7	127.5	134.8
85°	63.8	63.8	63.8	60.1	60.1
87.5°	36.4	36.4	31.0	25.5	18.2
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)