

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: P557771

Luminaire Tested: **FUSL-12-4-LD4-3HI-35-UNV-81-94-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: P557771
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-81-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

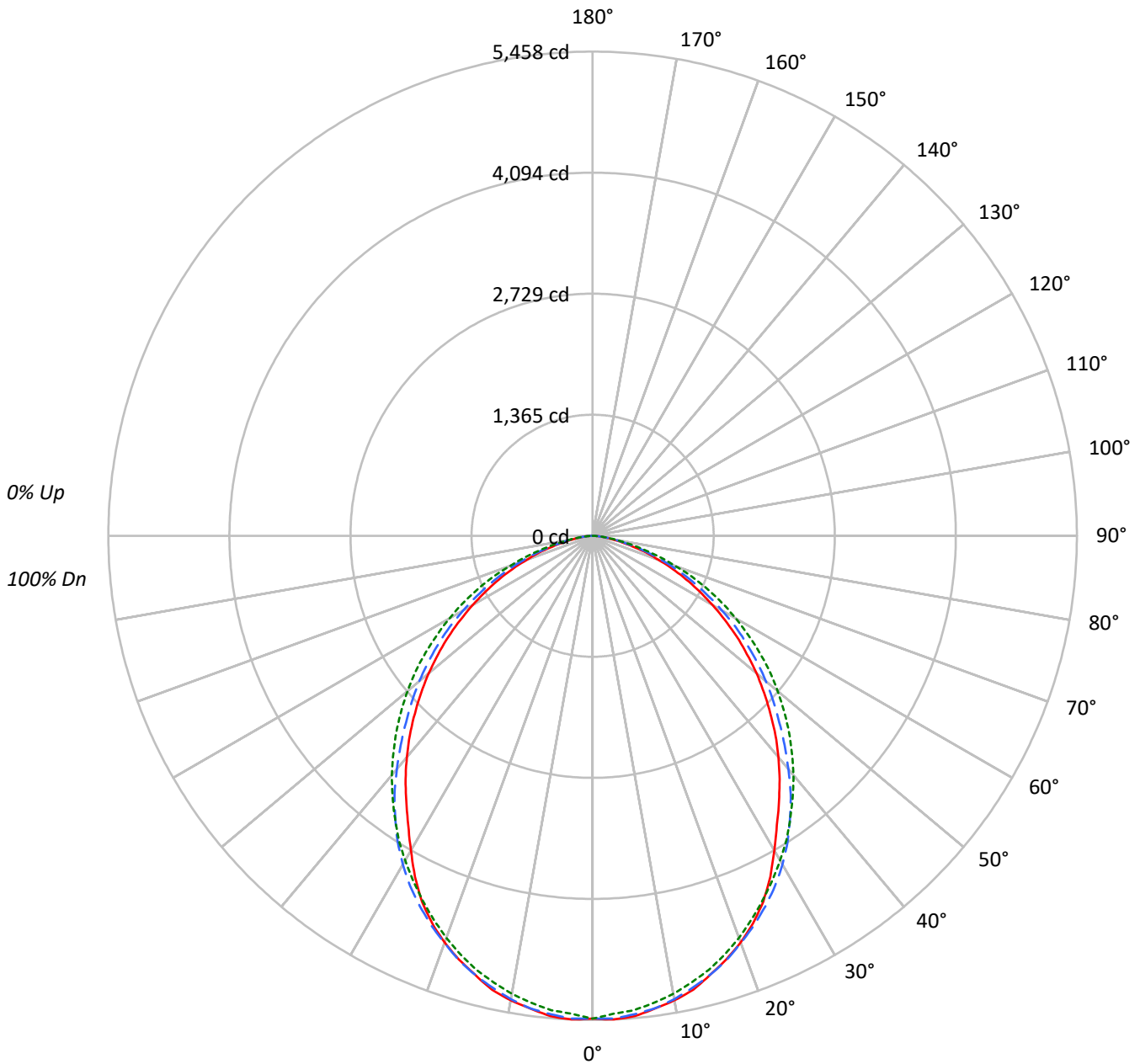
Lumens per Lamp: N/A
Luminaire Lumens: 12586.0 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	14647	14647	14647
5°	14686	14624	14500
10°	14531	14490	14325
15°	14273	14273	14110
20°	13970	13989	13809
25°	13510	13678	13461
30°	12722	13294	13132
35°	12021	12743	12764
40°	11437	12054	12370
45°	10783	11324	11905
50°	10093	10671	11398
55°	9310	9928	10782
60°	8385	9059	10028
65°	7403	8055	9121
70°	6170	6861	7749
75°	4848	5479	6066
80°	3467	3856	4277
85°	2260	2260	2130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	512.5	4.1
10°-20°	1439.7	11.4
20°-30°	2103.9	16.7
30°-40°	2388.2	19.0
40°-50°	2305.4	18.3
50°-60°	1901.8	15.1
60°-70°	1266.4	10.1
70°-80°	566.7	4.5
80°-90°	101.4	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°	4056.1	32.2
0°-40°	6444.3	51.2
0°-60°	10651.4	84.6
0°-90°	12586.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12586.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5443	5443	5443	5443	5443	
5°	5437	5435	5414	5385	5368	515
15°	5123	5136	5123	5100	5065	1444
25°	4550	4586	4607	4573	4534	2084
35°	3659	3710	3879	3900	3885	2293
45°	2833	2882	2976	3112	3128	2186
55°	1984	2018	2116	2233	2298	1771
65°	1163	1194	1265	1355	1432	1153
75°	466	491	527	552	583	510
85°	73	73	73	69	69	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5443.1	5443.1	5443.1	5443.1	5443.1
2.5°	5457.8	5459.8	5447.3	5413.8	5392.9
5°	5436.8	5434.8	5413.8	5384.6	5367.8
7.5°	5376.2	5380.4	5374.1	5332.3	5309.3
10°	5317.7	5319.7	5303.0	5269.6	5242.4
12.5°	5242.4	5240.3	5217.3	5200.6	5156.6
15°	5123.2	5135.7	5123.2	5100.2	5064.6
17.5°	5008.2	5008.2	5016.5	4976.8	4949.6
20°	4878.5	4884.8	4884.8	4853.4	4822.1
22.5°	4728.0	4746.8	4753.1	4719.6	4682.0
25°	4550.2	4585.8	4606.7	4573.2	4533.5
27.5°	4334.8	4389.2	4451.9	4426.8	4382.9
30°	4094.4	4173.8	4278.4	4257.5	4226.1
32.5°	3866.4	3945.9	4090.2	4081.8	4065.1
35°	3659.4	3709.6	3879.0	3899.9	3885.3
37.5°	3462.9	3508.9	3667.8	3715.9	3703.3
40°	3255.8	3306.0	3431.5	3517.2	3521.4
42.5°	3050.9	3099.0	3201.5	3324.8	3324.8
45°	2833.4	2881.5	2975.6	3111.5	3128.3
47.5°	2620.1	2670.3	2762.3	2898.3	2925.4
50°	2411.0	2457.0	2549.0	2680.8	2722.6
52.5°	2193.6	2243.7	2333.7	2454.9	2515.6
55°	1984.4	2017.9	2116.2	2233.3	2298.1
57.5°	1767.0	1798.3	1909.2	2009.5	2076.5
60°	1557.9	1597.6	1683.3	1785.8	1863.2
62.5°	1357.1	1398.9	1472.1	1562.0	1649.9
65°	1162.6	1194.0	1265.1	1355.0	1432.4
67.5°	974.5	1001.6	1072.7	1135.5	1217.0
70°	784.2	819.7	872.0	932.6	984.9
72.5°	631.5	646.1	690.1	734.0	788.3
75°	466.3	491.4	527.0	552.0	583.4
77.5°	334.6	349.2	370.1	391.0	420.3
80°	223.7	230.0	248.8	253.0	276.0
82.5°	135.9	140.1	144.3	146.4	154.7
85°	73.2	73.2	73.2	69.0	69.0
87.5°	41.8	41.8	35.5	29.3	20.9
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)