

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: P558033

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-82-84-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: P558033
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-LD4-3LO-35-UNV-82-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

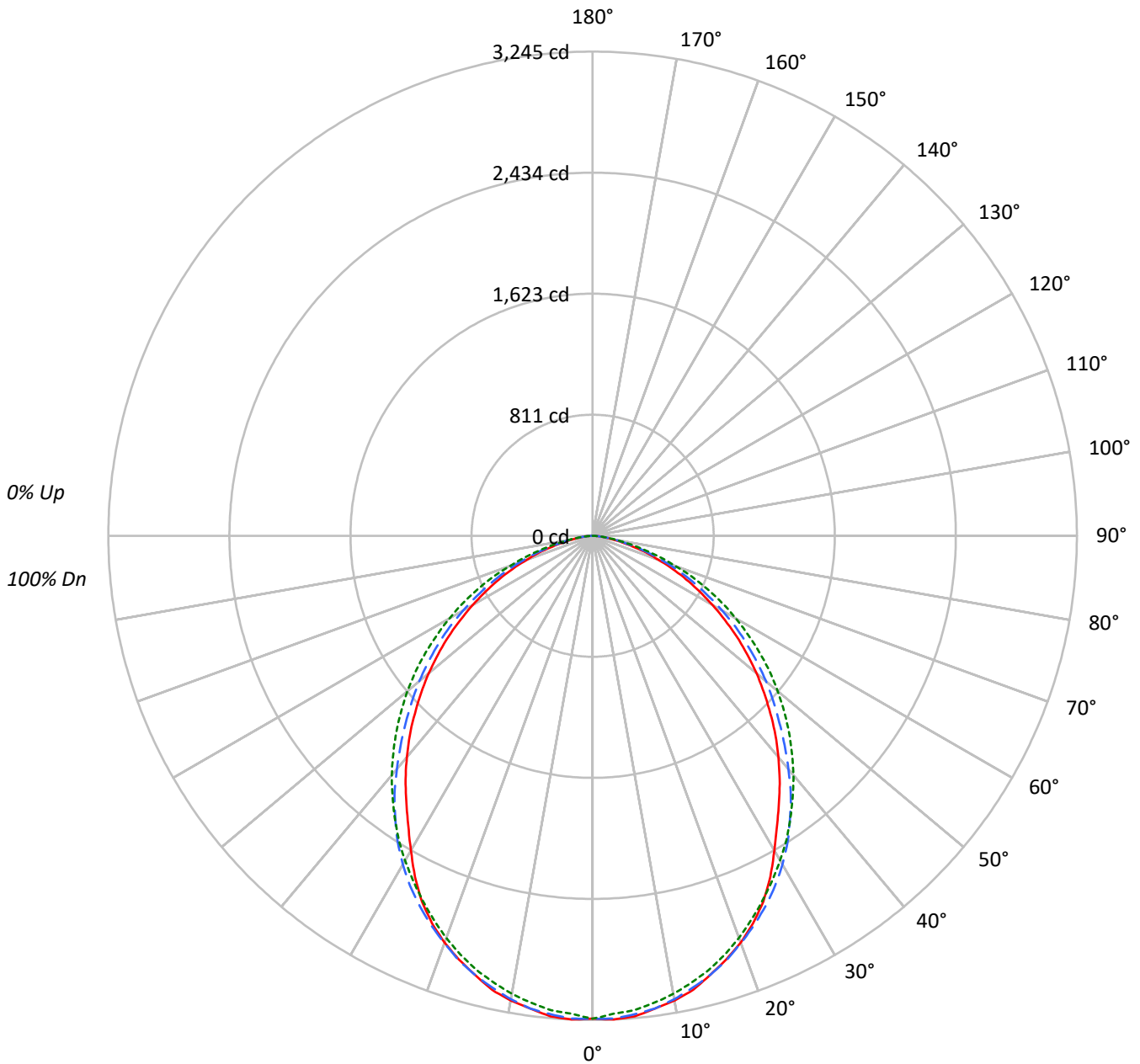
Lumens per Lamp: N/A
Luminaire Lumens: 7484.0 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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°	8710	8710	8710
5°	8733	8696	8622
10°	8640	8616	8518
15°	8487	8487	8390
20°	8307	8318	8211
25°	8034	8133	8004
30°	7565	7905	7809
35°	7148	7577	7590
40°	6801	7168	7356
45°	6412	6734	7079
50°	6002	6345	6777
55°	5536	5903	6411
60°	4986	5387	5963
65°	4402	4790	5423
70°	3669	4080	4608
75°	2883	3257	3607
80°	2061	2294	2543
85°	1343	1343	1266



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.7	4.1
10°-20°	856.1	11.4
20°-30°	1251.0	16.7
30°-40°	1420.1	19.0
40°-50°	1370.9	18.3
50°-60°	1130.9	15.1
60°-70°	753.1	10.1
70°-80°	337.0	4.5
80°-90°	60.3	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°	2411.9	32.2
0°-40°	3831.9	51.2
0°-60°	6333.7	84.6
0°-90°	7484.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7484.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3237	3237	3237	3237	3237	
5°	3233	3232	3219	3202	3192	306
15°	3046	3054	3046	3033	3012	859
25°	2706	2727	2739	2719	2696	1239
35°	2176	2206	2307	2319	2310	1363
45°	1685	1713	1769	1850	1860	1300
55°	1180	1200	1258	1328	1366	1053
65°	691	710	752	806	852	685
75°	277	292	313	328	347	303
85°	44	44	44	41	41	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3236.6	3236.6	3236.6	3236.6	3236.6
2.5°	3245.3	3246.6	3239.1	3219.2	3206.8
5°	3232.9	3231.7	3219.2	3201.8	3191.9
7.5°	3196.8	3199.3	3195.6	3170.7	3157.1
10°	3162.0	3163.3	3153.3	3133.4	3117.3
12.5°	3117.3	3116.0	3102.3	3092.4	3066.3
15°	3046.4	3053.9	3046.4	3032.7	3011.6
17.5°	2978.0	2978.0	2983.0	2959.4	2943.2
20°	2900.9	2904.6	2904.6	2886.0	2867.3
22.5°	2811.4	2822.6	2826.3	2806.4	2784.0
25°	2705.7	2726.8	2739.3	2719.4	2695.7
27.5°	2577.6	2610.0	2647.3	2632.3	2606.2
30°	2434.6	2481.9	2544.0	2531.6	2513.0
32.5°	2299.1	2346.3	2432.1	2427.2	2417.2
35°	2176.0	2205.8	2306.6	2319.0	2310.3
37.5°	2059.1	2086.5	2181.0	2209.6	2202.1
40°	1936.0	1965.9	2040.5	2091.4	2093.9
42.5°	1814.2	1842.8	1903.7	1977.0	1977.0
45°	1684.8	1713.4	1769.4	1850.2	1860.2
47.5°	1558.0	1587.9	1642.6	1723.4	1739.6
50°	1433.7	1461.0	1515.7	1594.1	1618.9
52.5°	1304.4	1334.2	1387.7	1459.8	1495.8
55°	1180.0	1199.9	1258.3	1328.0	1366.5
57.5°	1050.7	1069.3	1135.2	1194.9	1234.7
60°	926.4	950.0	1001.0	1061.9	1107.9
62.5°	807.0	831.9	875.4	928.8	981.1
65°	691.3	710.0	752.3	805.7	851.7
67.5°	579.4	595.6	637.9	675.2	723.7
70°	466.3	487.4	518.5	554.6	585.7
72.5°	375.5	384.2	410.3	436.4	468.8
75°	277.3	292.2	313.3	328.3	346.9
77.5°	198.9	207.7	220.1	232.5	249.9
80°	133.0	136.8	148.0	150.5	164.1
82.5°	80.8	83.3	85.8	87.0	92.0
85°	43.5	43.5	43.5	41.0	41.0
87.5°	24.9	24.9	21.1	17.4	12.4
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)