

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: P557461

Luminaire Tested: **FUSL-12-4-LD4-2STD-30-UNV-82-86-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: P557461
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-LD4-2STD-30-UNV-82-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

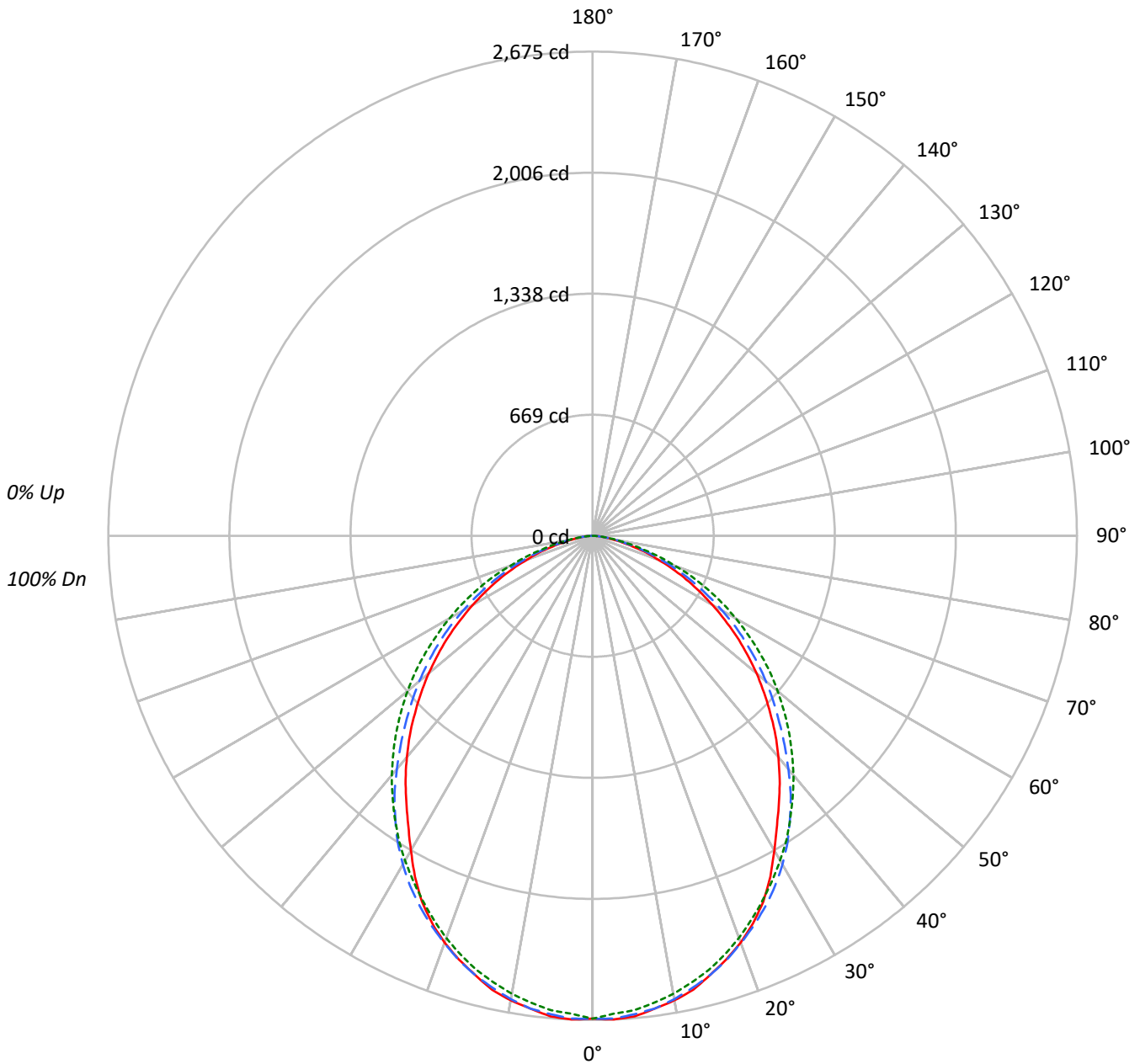
Lumens per Lamp: N/A
Luminaire Lumens: 6169.0 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	7179	7179	7179
5°	7199	7168	7107
10°	7122	7103	7021
15°	6996	6996	6916
20°	6848	6857	6768
25°	6622	6704	6598
30°	6236	6516	6436
35°	5892	6246	6256
40°	5606	5908	6063
45°	5285	5550	5835
50°	4948	5231	5587
55°	4563	4866	5285
60°	4110	4441	4915
65°	3629	3948	4471
70°	3024	3363	3798
75°	2377	2686	2974
80°	1700	1891	2097
85°	1108	1108	1044



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.2	4.1
10°-20°	705.7	11.4
20°-30°	1031.2	16.7
30°-40°	1170.6	19.0
40°-50°	1130.0	18.3
50°-60°	932.2	15.1
60°-70°	620.7	10.1
70°-80°	277.8	4.5
80°-90°	49.7	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°	1988.1	32.2
0°-40°	3158.6	51.2
0°-60°	5220.8	84.6
0°-90°	6169.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6169.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2668	2668	2668	2668	2668	
5°	2665	2664	2654	2639	2631	252
15°	2511	2517	2511	2500	2482	708
25°	2230	2248	2258	2242	2222	1021
35°	1794	1818	1901	1912	1904	1124
45°	1389	1412	1458	1525	1533	1072
55°	973	989	1037	1095	1126	868
65°	570	585	620	664	702	565
75°	229	241	258	271	286	250
85°	36	36	36	34	34	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2667.9	2667.9	2667.9	2667.9	2667.9
2.5°	2675.1	2676.1	2670.0	2653.6	2643.3
5°	2664.9	2663.8	2653.6	2639.2	2631.0
7.5°	2635.1	2637.2	2634.1	2613.6	2602.3
10°	2606.4	2607.5	2599.3	2582.9	2569.5
12.5°	2569.5	2568.5	2557.2	2549.0	2527.5
15°	2511.1	2517.3	2511.1	2499.8	2482.4
17.5°	2454.7	2454.7	2458.8	2439.4	2426.0
20°	2391.2	2394.3	2394.3	2378.9	2363.5
22.5°	2317.4	2326.6	2329.7	2313.3	2294.9
25°	2230.3	2247.7	2258.0	2241.6	2222.1
27.5°	2124.7	2151.4	2182.1	2169.8	2148.3
30°	2006.8	2045.8	2097.0	2086.8	2071.4
32.5°	1895.1	1934.1	2004.8	2000.7	1992.5
35°	1793.7	1818.3	1901.3	1911.5	1904.3
37.5°	1697.3	1719.9	1797.8	1821.3	1815.2
40°	1595.8	1620.4	1681.9	1724.0	1726.0
42.5°	1495.4	1519.0	1569.2	1629.7	1629.7
45°	1388.8	1412.4	1458.5	1525.1	1533.3
47.5°	1284.3	1308.9	1354.0	1420.6	1433.9
50°	1181.8	1204.3	1249.4	1314.0	1334.5
52.5°	1075.2	1099.8	1143.8	1203.3	1233.0
55°	972.7	989.1	1037.2	1094.6	1126.4
57.5°	866.1	881.5	935.8	985.0	1017.8
60°	763.6	783.1	825.1	875.3	913.2
62.5°	665.2	685.7	721.6	765.6	808.7
65°	569.9	585.2	620.1	664.2	702.1
67.5°	477.6	490.9	525.8	556.5	596.5
70°	384.4	401.8	427.4	457.1	482.7
72.5°	309.5	316.7	338.2	359.8	386.4
75°	228.6	240.9	258.3	270.6	286.0
77.5°	164.0	171.2	181.4	191.7	206.0
80°	109.7	112.7	122.0	124.0	135.3
82.5°	66.6	68.7	70.7	71.7	75.8
85°	35.9	35.9	35.9	33.8	33.8
87.5°	20.5	20.5	17.4	14.3	10.2
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)