

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: P557042

Luminaire Tested: **FUSL-12-4-LD4-2HI-40-UNV-80-85-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: P557042
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-LD4-2HI-40-UNV-80-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

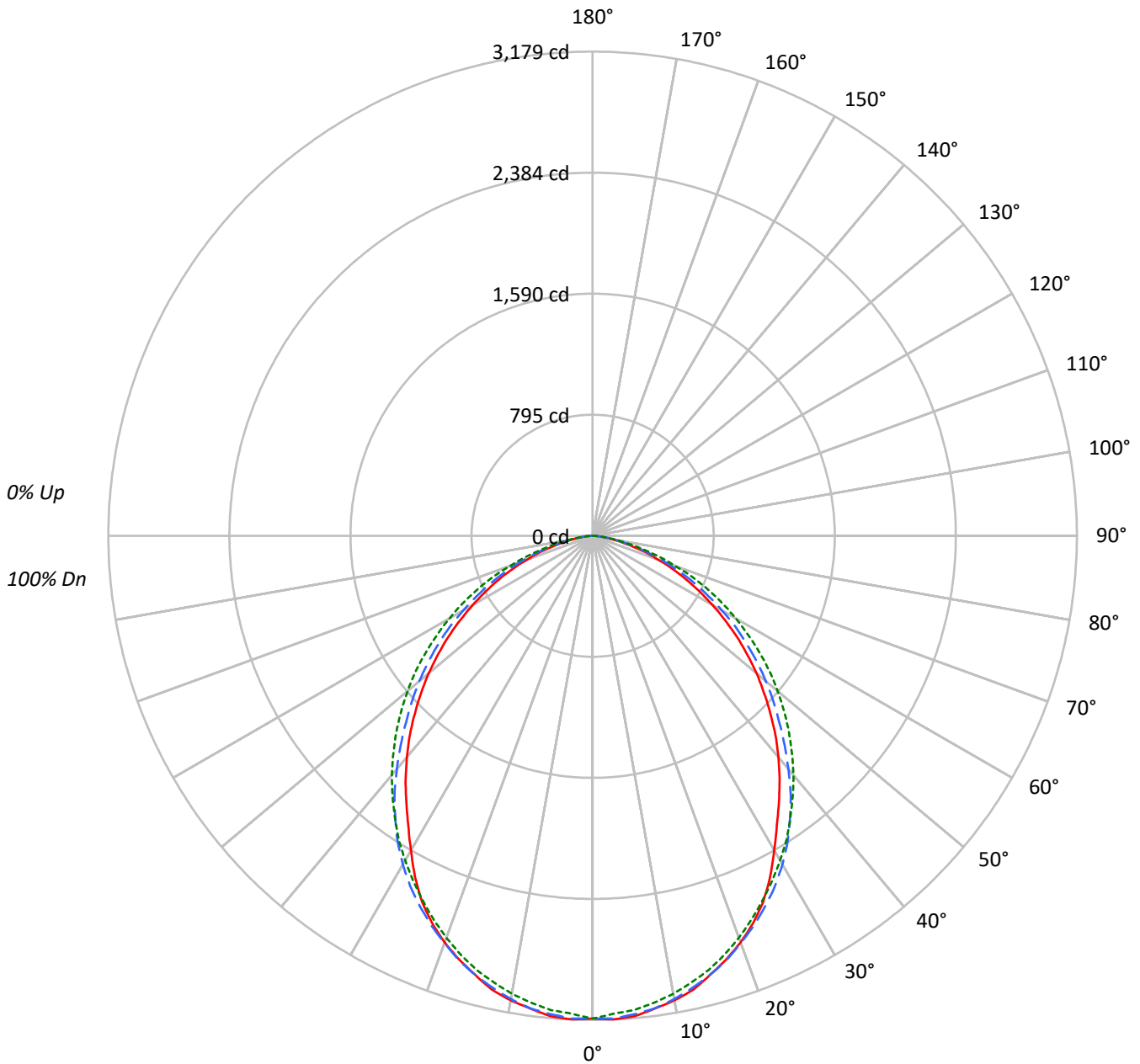
Lumens per Lamp: N/A
Luminaire Lumens: 7330.0 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
Input Voltage (V): NR
Input Current (Ain): 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°	8530	8530	8530
5°	8553	8517	8445
10°	8463	8439	8343
15°	8312	8312	8217
20°	8136	8147	8042
25°	7868	7966	7839
30°	7409	7742	7648
35°	7001	7421	7433
40°	6661	7020	7204
45°	6280	6595	6933
50°	5879	6215	6638
55°	5422	5782	6279
60°	4883	5276	5840
65°	4311	4691	5312
70°	3593	3995	4513
75°	2824	3191	3533
80°	2019	2245	2492
85°	1315	1315	1241



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	298.5	4.1
10°-20°	838.5	11.4
20°-30°	1225.3	16.7
30°-40°	1390.8	19.0
40°-50°	1342.7	18.3
50°-60°	1107.6	15.1
60°-70°	737.6	10.1
70°-80°	330.1	4.5
80°-90°	59.0	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°	2362.2	32.2
0°-40°	3753.1	51.2
0°-60°	6203.3	84.6
0°-90°	7330.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7330.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3170	3170	3170	3170	3170	
5°	3166	3165	3153	3136	3126	300
15°	2984	2991	2984	2970	2950	841
25°	2650	2671	2683	2663	2640	1214
35°	2131	2160	2259	2271	2263	1335
45°	1650	1678	1733	1812	1822	1273
55°	1156	1175	1232	1301	1338	1032
65°	677	695	737	789	834	671
75°	272	286	307	322	340	297
85°	43	43	43	40	40	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3170.0	3170.0	3170.0	3170.0	3170.0
2.5°	3178.6	3179.8	3172.5	3153.0	3140.8
5°	3166.4	3165.2	3153.0	3135.9	3126.2
7.5°	3131.1	3133.5	3129.8	3105.5	3092.1
10°	3097.0	3098.2	3088.4	3069.0	3053.1
12.5°	3053.1	3051.9	3038.5	3028.8	3003.2
15°	2983.7	2991.0	2983.7	2970.3	2949.6
17.5°	2916.7	2916.7	2921.6	2898.5	2882.6
20°	2841.2	2844.9	2844.9	2826.6	2808.3
22.5°	2753.5	2764.5	2768.1	2748.7	2726.7
25°	2650.0	2670.7	2682.9	2663.4	2640.3
27.5°	2524.6	2556.2	2592.8	2578.2	2552.6
30°	2384.5	2430.8	2491.7	2479.5	2461.3
32.5°	2251.8	2298.1	2382.1	2377.2	2367.5
35°	2131.2	2160.4	2259.1	2271.3	2262.7
37.5°	2016.7	2043.5	2136.1	2164.1	2156.8
40°	1896.2	1925.4	1998.5	2048.4	2050.8
42.5°	1776.8	1804.8	1864.5	1936.4	1936.4
45°	1650.2	1678.2	1733.0	1812.1	1821.9
47.5°	1526.0	1555.2	1608.8	1687.9	1703.8
50°	1404.2	1431.0	1484.5	1561.3	1585.6
52.5°	1277.5	1306.7	1359.1	1429.7	1465.1
55°	1155.7	1175.2	1232.5	1300.7	1338.4
57.5°	1029.1	1047.3	1111.9	1170.3	1209.3
60°	907.3	930.4	980.4	1040.0	1085.1
62.5°	790.4	814.7	857.4	909.7	960.9
65°	677.1	695.4	736.8	789.2	834.2
67.5°	567.5	583.3	624.8	661.3	708.8
70°	456.7	477.4	507.8	543.2	573.6
72.5°	367.8	376.3	401.9	427.5	459.1
75°	271.6	286.2	306.9	321.5	339.8
77.5°	194.9	203.4	215.6	227.7	244.8
80°	130.3	134.0	144.9	147.4	160.8
82.5°	79.2	81.6	84.0	85.2	90.1
85°	42.6	42.6	42.6	40.2	40.2
87.5°	24.4	24.4	20.7	17.0	12.2
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)