

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: P557054

Luminaire Tested: **FUSL-12-4-LD4-2HI-40-UNV-80-97-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: P557054
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-80-97-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

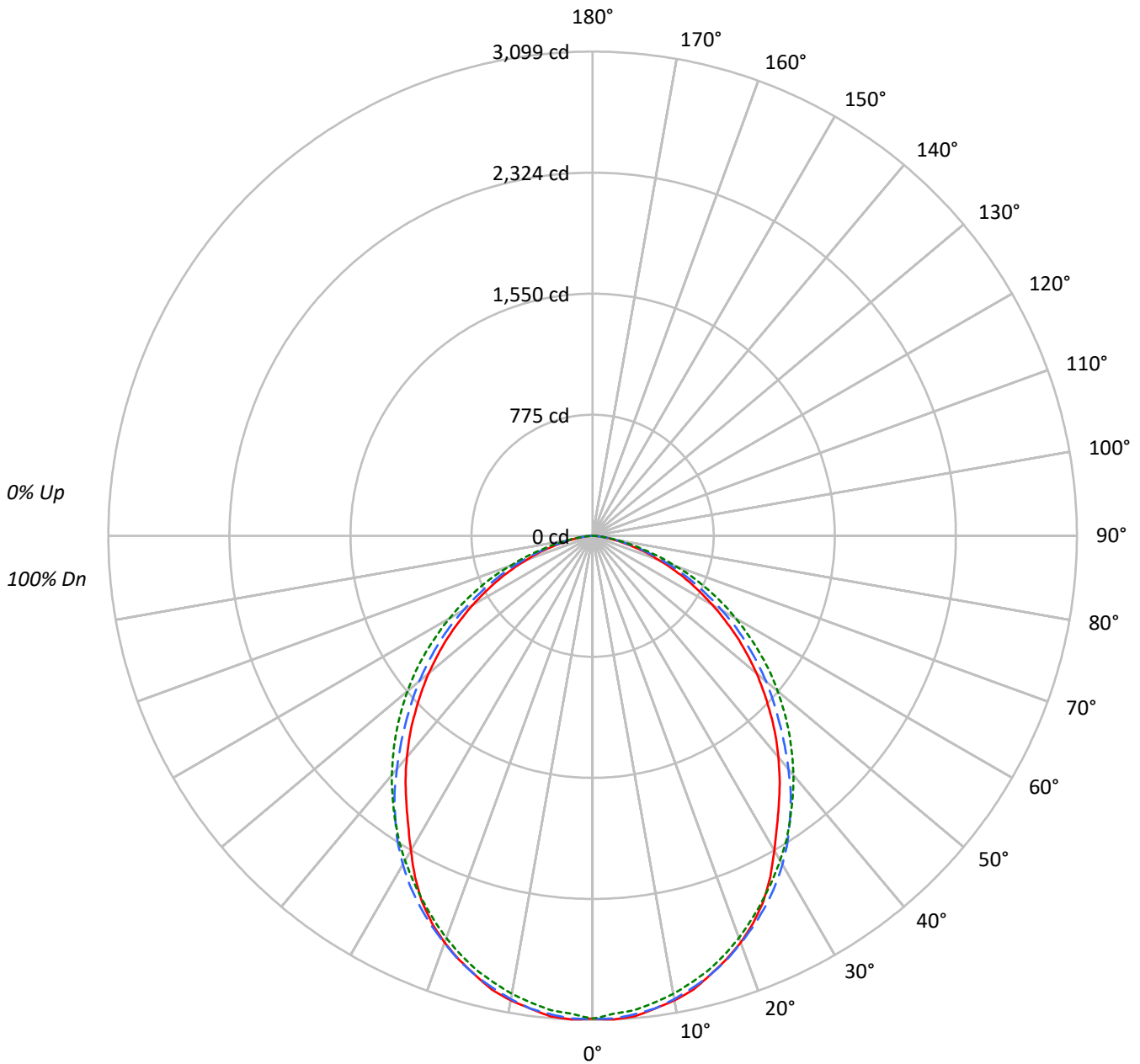
Lumens per Lamp: N/A
Luminaire Lumens: 7147.0 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
Input Voltage (V): NR
Input Current (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°	8318	8318	8318
5°	8340	8304	8234
10°	8251	8228	8134
15°	8105	8105	8012
20°	7933	7943	7841
25°	7672	7767	7644
30°	7224	7549	7457
35°	6826	7236	7248
40°	6495	6845	7024
45°	6123	6430	6760
50°	5732	6060	6472
55°	5287	5638	6123
60°	4761	5145	5694
65°	4204	4574	5179
70°	3504	3896	4401
75°	2753	3111	3445
80°	1970	2190	2428
85°	1284	1284	1210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.0	4.1
10°-20°	817.5	11.4
20°-30°	1194.7	16.7
30°-40°	1356.1	19.0
40°-50°	1309.1	18.3
50°-60°	1079.9	15.1
60°-70°	719.2	10.1
70°-80°	321.8	4.5
80°-90°	57.6	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°	2303.3	32.2
0°-40°	3659.4	51.2
0°-60°	6048.5	84.6
0°-90°	7147.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7147.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3091	3091	3091	3091	3091	
5°	3087	3086	3074	3058	3048	292
15°	2909	2916	2909	2896	2876	820
25°	2584	2604	2616	2597	2574	1183
35°	2078	2106	2203	2215	2206	1302
45°	1609	1636	1690	1767	1776	1241
55°	1127	1146	1202	1268	1305	1006
65°	660	678	718	770	813	655
75°	265	279	299	314	331	290
85°	42	42	42	39	39	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3090.9	3090.9	3090.9	3090.9	3090.9
2.5°	3099.2	3100.4	3093.3	3074.3	3062.4
5°	3087.3	3086.1	3074.3	3057.6	3048.1
7.5°	3052.9	3055.3	3051.7	3028.0	3014.9
10°	3019.6	3020.8	3011.3	2992.3	2976.9
12.5°	2976.9	2975.7	2962.6	2953.2	2928.2
15°	2909.2	2916.3	2909.2	2896.2	2876.0
17.5°	2843.9	2843.9	2848.7	2826.1	2810.7
20°	2770.3	2773.8	2773.8	2756.0	2738.2
22.5°	2684.8	2695.5	2699.0	2680.0	2658.7
25°	2583.9	2604.0	2615.9	2596.9	2574.4
27.5°	2461.6	2492.4	2528.0	2513.8	2488.9
30°	2325.0	2370.1	2429.5	2417.6	2399.8
32.5°	2195.6	2240.7	2322.6	2317.9	2308.4
35°	2078.0	2106.5	2202.7	2214.6	2206.3
37.5°	1966.4	1992.5	2082.8	2110.1	2102.9
40°	1848.8	1877.3	1948.6	1997.3	1999.6
42.5°	1732.5	1759.8	1818.0	1888.0	1888.0
45°	1609.0	1636.3	1689.7	1766.9	1776.4
47.5°	1487.9	1516.4	1568.6	1645.8	1661.2
50°	1369.1	1395.2	1447.5	1522.3	1546.0
52.5°	1245.6	1274.1	1325.2	1394.0	1428.5
55°	1126.9	1145.9	1201.7	1268.2	1305.0
57.5°	1003.4	1021.2	1084.1	1141.1	1179.1
60°	884.6	907.2	955.9	1014.1	1058.0
62.5°	770.6	794.4	836.0	887.0	936.9
65°	660.2	678.0	718.4	769.5	813.4
67.5°	553.3	568.8	609.2	644.8	691.1
70°	445.3	465.5	495.2	529.6	559.3
72.5°	358.6	366.9	391.9	416.8	447.7
75°	264.8	279.0	299.2	313.5	331.3
77.5°	190.0	198.3	210.2	222.1	238.7
80°	127.1	130.6	141.3	143.7	156.7
82.5°	77.2	79.6	81.9	83.1	87.9
85°	41.6	41.6	41.6	39.2	39.2
87.5°	23.7	23.7	20.2	16.6	11.9
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)