

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: P557878

Luminaire Tested: **FUSL-12-4-LD4-3HI-50-UNV-80-87-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: P557878
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-50-UNV-80-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

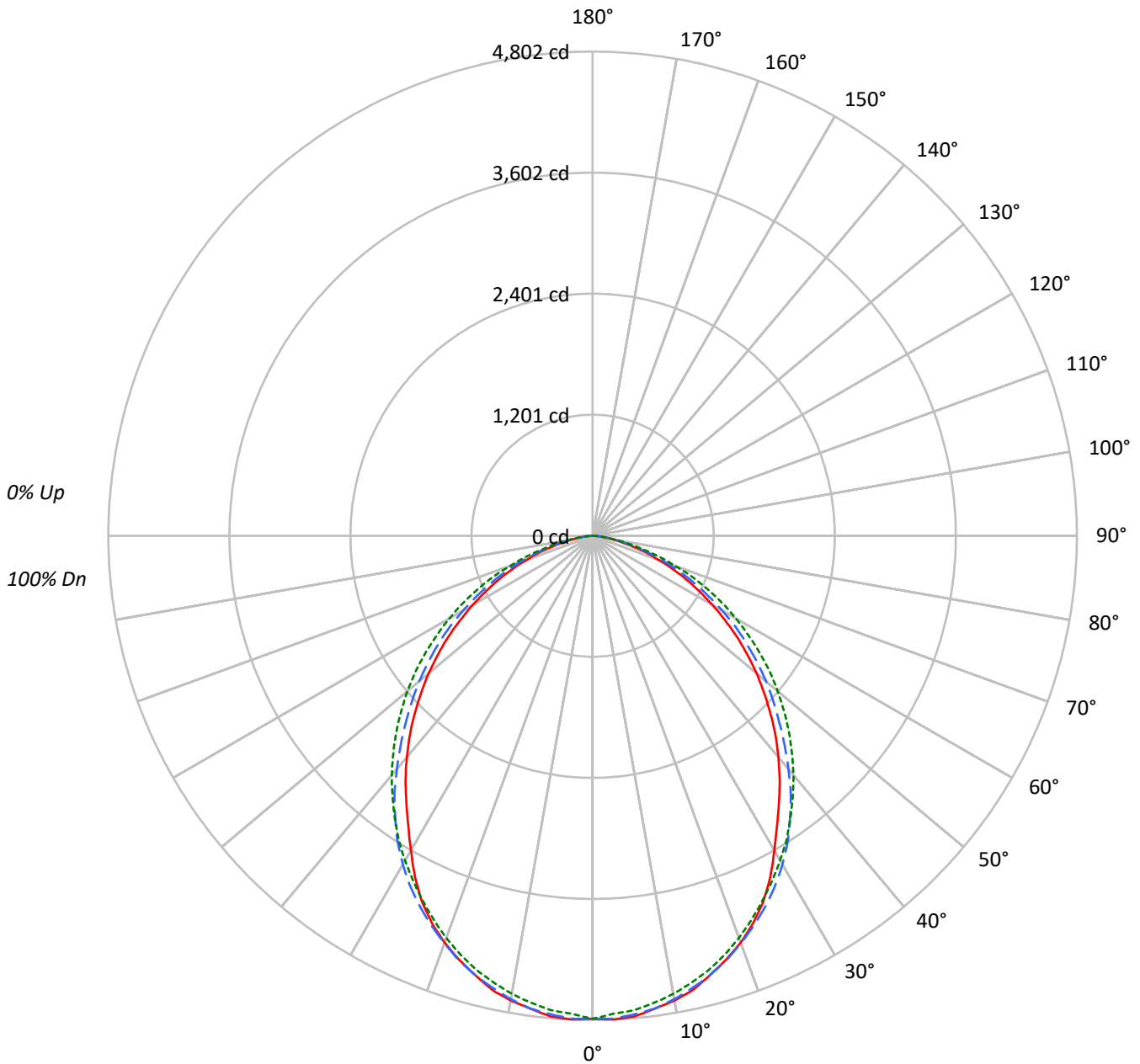
Lumens per Lamp: N/A
Luminaire Lumens: 11075.0 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
Input Voltage (V): NR
Input Current (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°	12889	12889	12889
5°	12923	12869	12759
10°	12786	12751	12605
15°	12559	12559	12416
20°	12293	12309	12151
25°	11888	12036	11845
30°	11195	11698	11555
35°	10578	11213	11231
40°	10064	10607	10885
45°	9489	9965	10476
50°	8882	9390	10029
55°	8192	8736	9487
60°	7378	7972	8824
65°	6514	7088	8025
70°	5429	6037	6819
75°	4266	4821	5338
80°	3051	3394	3764
85°	1988	1988	1874



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	451.0	4.1
10°-20°	1266.9	11.4
20°-30°	1851.3	16.7
30°-40°	2101.4	19.0
40°-50°	2028.6	18.3
50°-60°	1673.5	15.1
60°-70°	1114.4	10.1
70°-80°	498.7	4.5
80°-90°	89.2	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°	3569.2	32.2
0°-40°	5670.6	51.2
0°-60°	9372.7	84.6
0°-90°	11075.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11075.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4790	4790	4790	4790	4790	
5°	4784	4782	4764	4738	4723	453
15°	4508	4519	4508	4488	4457	1271
25°	4004	4035	4054	4024	3989	1834
35°	3220	3264	3413	3432	3419	2018
45°	2493	2536	2618	2738	2753	1924
55°	1746	1776	1862	1965	2022	1559
65°	1023	1051	1113	1192	1260	1014
75°	410	432	464	486	513	449
85°	64	64	64	61	61	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4789.7	4789.7	4789.7	4789.7	4789.7
2.5°	4802.5	4804.4	4793.3	4763.9	4745.5
5°	4784.1	4782.3	4763.9	4738.1	4723.4
7.5°	4730.8	4734.4	4728.9	4692.1	4671.9
10°	4679.2	4681.1	4666.4	4636.9	4613.0
12.5°	4613.0	4611.2	4590.9	4576.2	4537.6
15°	4508.1	4519.2	4508.1	4487.9	4456.6
17.5°	4406.9	4406.9	4414.3	4379.3	4355.4
20°	4292.8	4298.4	4298.4	4270.8	4243.2
22.5°	4160.4	4176.9	4182.4	4153.0	4119.9
25°	4003.9	4035.2	4053.6	4024.2	3989.2
27.5°	3814.4	3862.3	3917.5	3895.4	3856.7
30°	3602.8	3672.7	3764.7	3746.3	3718.7
32.5°	3402.3	3472.2	3599.1	3591.8	3577.1
35°	3220.1	3264.2	3413.3	3431.7	3418.8
37.5°	3047.1	3087.6	3227.4	3269.8	3258.7
40°	2865.0	2909.1	3019.5	3095.0	3098.6
42.5°	2684.6	2727.0	2817.1	2925.7	2925.7
45°	2493.3	2535.6	2618.4	2738.0	2752.7
47.5°	2305.6	2349.7	2430.7	2550.3	2574.2
50°	2121.6	2162.1	2243.0	2358.9	2395.7
52.5°	1930.2	1974.4	2053.5	2160.2	2213.6
55°	1746.2	1775.6	1862.1	1965.2	2022.2
57.5°	1554.8	1582.4	1680.0	1768.3	1827.2
60°	1370.8	1405.8	1481.2	1571.4	1639.5
62.5°	1194.2	1231.0	1295.4	1374.5	1451.8
65°	1023.1	1050.7	1113.2	1192.4	1260.4
67.5°	857.5	881.4	943.9	999.1	1070.9
70°	690.0	721.3	767.3	820.7	866.7
72.5°	555.7	568.6	607.2	645.9	693.7
75°	410.3	432.4	463.7	485.8	513.4
77.5°	294.4	307.3	325.7	344.1	369.9
80°	196.9	202.4	219.0	222.6	242.9
82.5°	119.6	123.3	127.0	128.8	136.2
85°	64.4	64.4	64.4	60.7	60.7
87.5°	36.8	36.8	31.3	25.8	18.4
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)