

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: P558256

Luminaire Tested: **FUSL-12-4-LD4-3STD-35-UNV-80-84-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: P558256
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-LD4-3STD-35-UNV-80-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

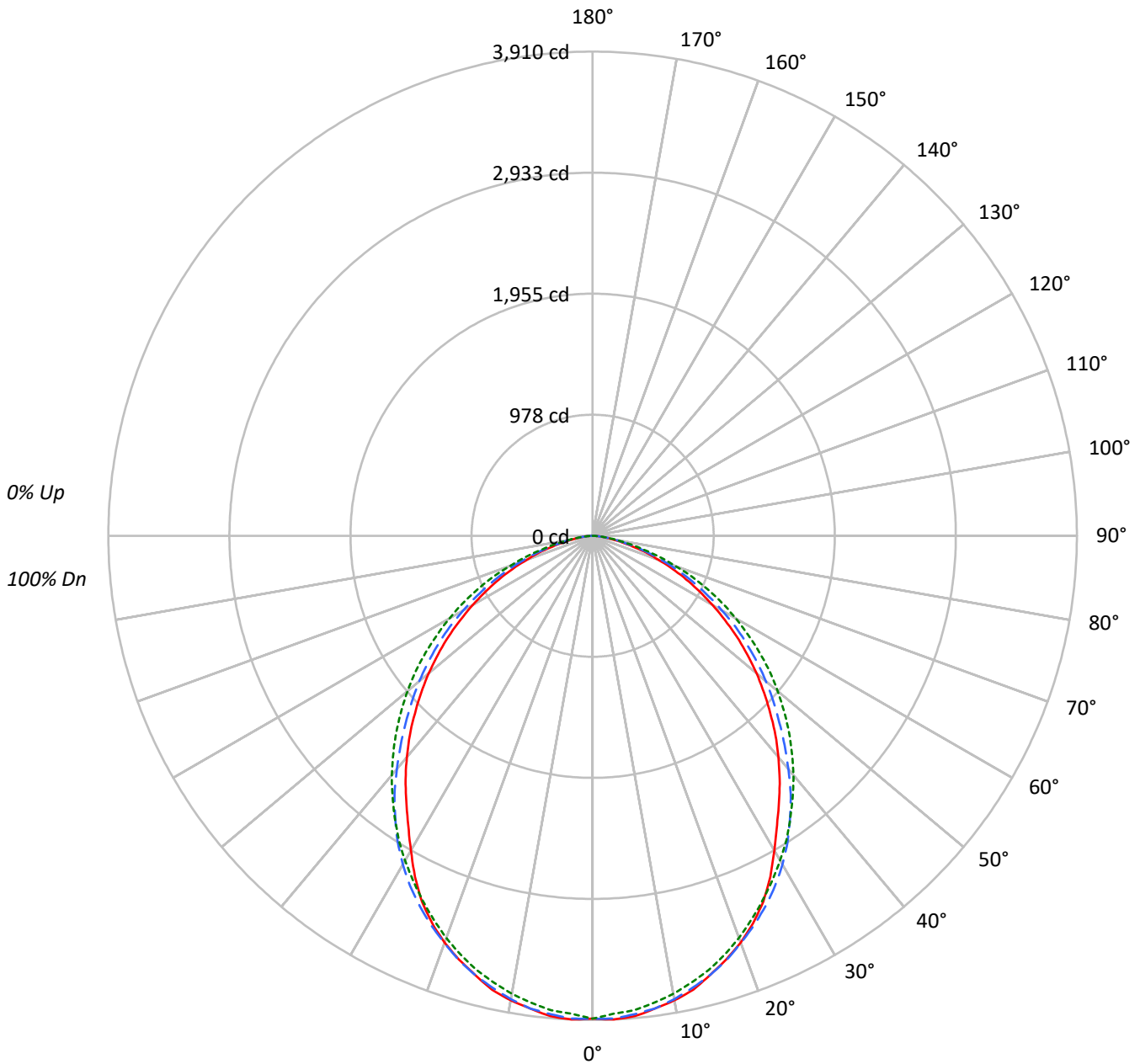
Lumens per Lamp: N/A
Luminaire Lumens: 9017.0 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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°	10494	10494	10494
5°	10522	10477	10388
10°	10410	10381	10263
15°	10225	10225	10109
20°	10009	10022	9893
25°	9679	9799	9644
30°	9115	9524	9408
35°	8612	9129	9144
40°	8194	8636	8862
45°	7725	8113	8529
50°	7231	7645	8166
55°	6670	7113	7724
60°	6007	6491	7184
65°	5304	5771	6534
70°	4420	4915	5552
75°	3474	3925	4346
80°	2484	2763	3065
85°	1618	1618	1525



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	367.2	4.1
10°-20°	1031.5	11.4
20°-30°	1507.3	16.7
30°-40°	1711.0	19.0
40°-50°	1651.7	18.3
50°-60°	1362.5	15.1
60°-70°	907.3	10.1
70°-80°	406.0	4.5
80°-90°	72.6	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°	2905.9	32.2
0°-40°	4616.9	51.2
0°-60°	7631.0	84.6
0°-90°	9017.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9017.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3900	3900	3900	3900	3900	
5°	3895	3894	3879	3858	3846	369
15°	3670	3679	3670	3654	3628	1035
25°	3260	3285	3300	3276	3248	1493
35°	2622	2658	2779	2794	2784	1643
45°	2030	2064	2132	2229	2241	1566
55°	1422	1446	1516	1600	1646	1269
65°	833	855	906	971	1026	826
75°	334	352	378	396	418	365
85°	52	52	52	49	49	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3899.6	3899.6	3899.6	3899.6	3899.6
2.5°	3910.1	3911.6	3902.6	3878.6	3863.7
5°	3895.1	3893.6	3878.6	3857.7	3845.7
7.5°	3851.7	3854.7	3850.2	3820.2	3803.7
10°	3809.7	3811.2	3799.2	3775.3	3755.8
12.5°	3755.8	3754.3	3737.8	3725.8	3694.4
15°	3670.4	3679.4	3670.4	3653.9	3628.5
17.5°	3588.0	3588.0	3594.0	3565.5	3546.1
20°	3495.1	3499.6	3499.6	3477.1	3454.7
22.5°	3387.3	3400.7	3405.2	3381.3	3354.3
25°	3259.9	3285.4	3300.4	3276.4	3247.9
27.5°	3105.6	3144.6	3189.5	3171.5	3140.1
30°	2933.3	2990.3	3065.2	3050.2	3027.7
32.5°	2770.0	2827.0	2930.3	2924.3	2912.4
35°	2621.7	2657.7	2779.0	2794.0	2783.5
37.5°	2480.9	2513.9	2627.7	2662.2	2653.2
40°	2332.6	2368.5	2458.4	2519.8	2522.8
42.5°	2185.8	2220.2	2293.6	2382.0	2382.0
45°	2030.0	2064.4	2131.8	2229.2	2241.2
47.5°	1877.2	1913.1	1979.0	2076.4	2095.9
50°	1727.3	1760.3	1826.2	1920.6	1950.6
52.5°	1571.5	1607.5	1671.9	1758.8	1802.2
55°	1421.7	1445.7	1516.1	1600.0	1646.4
57.5°	1265.9	1288.4	1367.8	1439.7	1487.6
60°	1116.1	1144.6	1206.0	1279.4	1334.8
62.5°	972.3	1002.2	1054.7	1119.1	1182.0
65°	833.0	855.4	906.4	970.8	1026.2
67.5°	698.1	717.6	768.5	813.5	871.9
70°	561.8	587.3	624.7	668.2	705.6
72.5°	452.4	462.9	494.4	525.8	564.8
75°	334.1	352.1	377.5	395.5	418.0
77.5°	239.7	250.2	265.2	280.1	301.1
80°	160.3	164.8	178.3	181.3	197.8
82.5°	97.4	100.4	103.4	104.9	110.9
85°	52.4	52.4	52.4	49.4	49.4
87.5°	30.0	30.0	25.5	21.0	15.0
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)