

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: P558392

Luminaire Tested: **FUSL-12-4-LD4-3STD-50-UNV-80-88-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: P558392
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-50-UNV-80-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

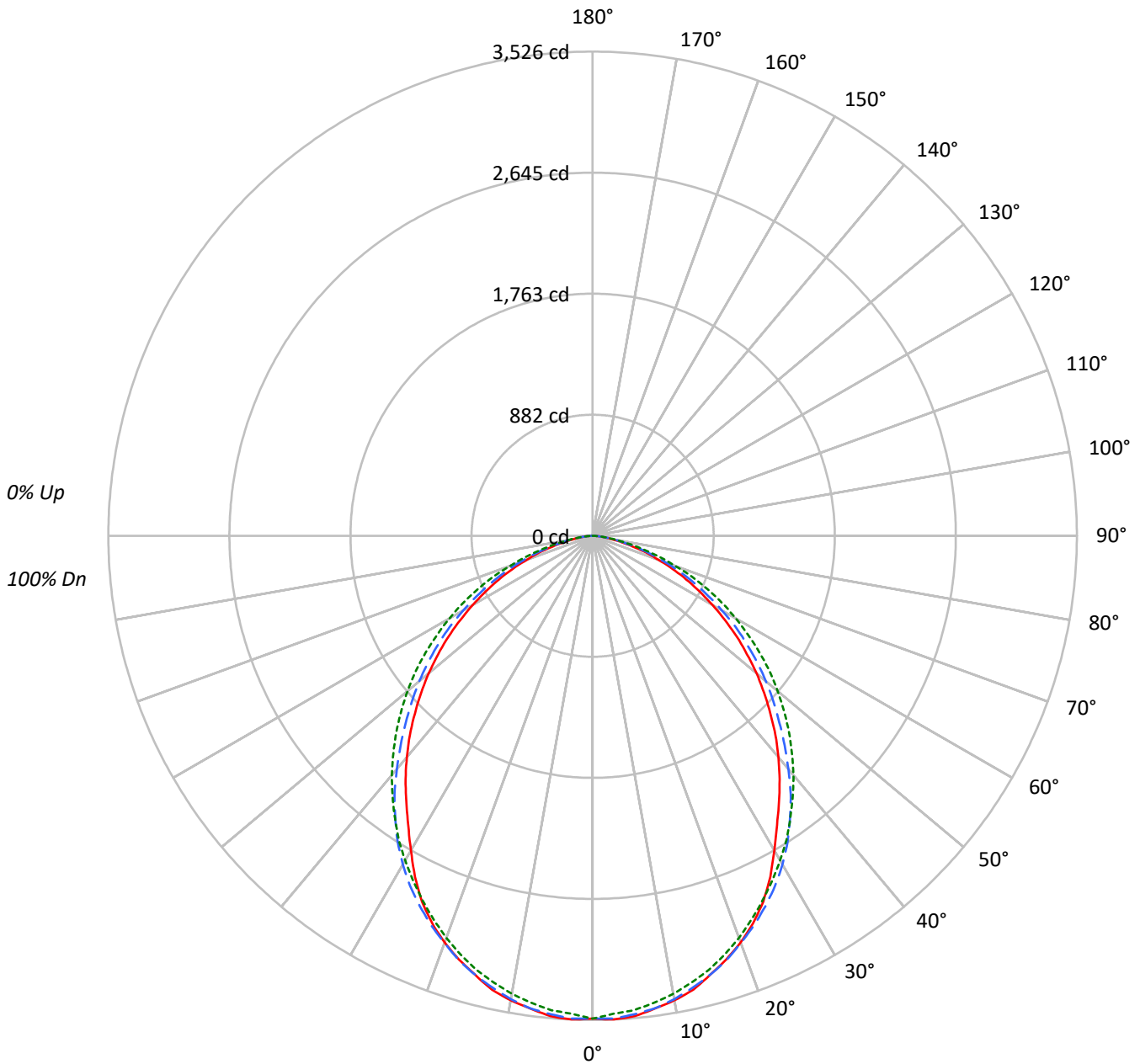
Lumens per Lamp: N/A
Luminaire Lumens: 8131.0 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
Input Voltage (V): NR
Input Current (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°	9463	9463	9463
5°	9488	9448	9367
10°	9387	9361	9254
15°	9221	9221	9115
20°	9025	9037	8921
25°	8728	8837	8696
30°	8219	8589	8483
35°	7766	8232	8246
40°	7389	7788	7992
45°	6966	7316	7691
50°	6521	6894	7363
55°	6015	6414	6966
60°	5416	5853	6478
65°	4783	5204	5892
70°	3986	4432	5006
75°	3133	3539	3919
80°	2239	2492	2763
85°	1460	1460	1377



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.1	4.1
10°-20°	930.1	11.4
20°-30°	1359.2	16.7
30°-40°	1542.8	19.0
40°-50°	1489.4	18.3
50°-60°	1228.6	15.1
60°-70°	818.2	10.1
70°-80°	366.1	4.5
80°-90°	65.5	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°	2620.4	32.2
0°-40°	4163.2	51.2
0°-60°	6881.2	84.6
0°-90°	8131.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8131.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3516	3516	3516	3516	3516	
5°	3512	3511	3498	3479	3468	332
15°	3310	3318	3310	3295	3272	933
25°	2940	2963	2976	2954	2929	1346
35°	2364	2396	2506	2520	2510	1481
45°	1830	1862	1922	2010	2021	1412
55°	1282	1304	1367	1443	1485	1144
65°	751	771	817	875	925	745
75°	301	318	340	357	377	329
85°	47	47	47	45	45	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3516.4	3516.4	3516.4	3516.4	3516.4
2.5°	3525.9	3527.3	3519.1	3497.5	3484.0
5°	3512.4	3511.0	3497.5	3478.6	3467.8
7.5°	3473.2	3475.9	3471.9	3444.8	3430.0
10°	3435.4	3436.7	3425.9	3404.3	3386.8
12.5°	3386.8	3385.4	3370.5	3359.7	3331.4
15°	3309.8	3317.9	3309.8	3294.9	3271.9
17.5°	3235.5	3235.5	3240.9	3215.2	3197.6
20°	3151.7	3155.8	3155.8	3135.5	3115.2
22.5°	3054.4	3066.6	3070.6	3049.0	3024.7
25°	2939.6	2962.6	2976.1	2954.5	2928.8
27.5°	2800.5	2835.6	2876.1	2859.9	2831.5
30°	2645.1	2696.4	2764.0	2750.5	2730.2
32.5°	2497.9	2549.2	2642.4	2637.0	2626.2
35°	2364.1	2396.5	2506.0	2519.5	2510.0
37.5°	2237.1	2266.8	2369.5	2400.6	2392.5
40°	2103.4	2135.8	2216.9	2272.2	2275.0
42.5°	1971.0	2002.1	2068.3	2148.0	2148.0
45°	1830.5	1861.6	1922.4	2010.2	2021.0
47.5°	1692.7	1725.1	1784.6	1872.4	1889.9
50°	1557.6	1587.3	1646.8	1731.9	1758.9
52.5°	1417.1	1449.5	1507.6	1586.0	1625.2
55°	1282.0	1303.6	1367.1	1442.8	1484.7
57.5°	1141.5	1161.8	1233.4	1298.2	1341.5
60°	1006.4	1032.1	1087.5	1153.7	1203.7
62.5°	876.7	903.8	951.0	1009.1	1065.9
65°	751.1	771.4	817.3	875.4	925.4
67.5°	629.5	647.1	693.0	733.6	786.2
70°	506.6	529.6	563.3	602.5	636.3
72.5°	408.0	417.4	445.8	474.2	509.3
75°	301.3	317.5	340.4	356.6	376.9
77.5°	216.1	225.6	239.1	252.6	271.5
80°	144.5	148.6	160.8	163.5	178.3
82.5°	87.8	90.5	93.2	94.6	100.0
85°	47.3	47.3	47.3	44.6	44.6
87.5°	27.0	27.0	23.0	18.9	13.5
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)