

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: P558195

Luminaire Tested: **FUSL-12-4-LD4-3STD-30-UNV-80-85-EDD**

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: P558195
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-30-UNV-80-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

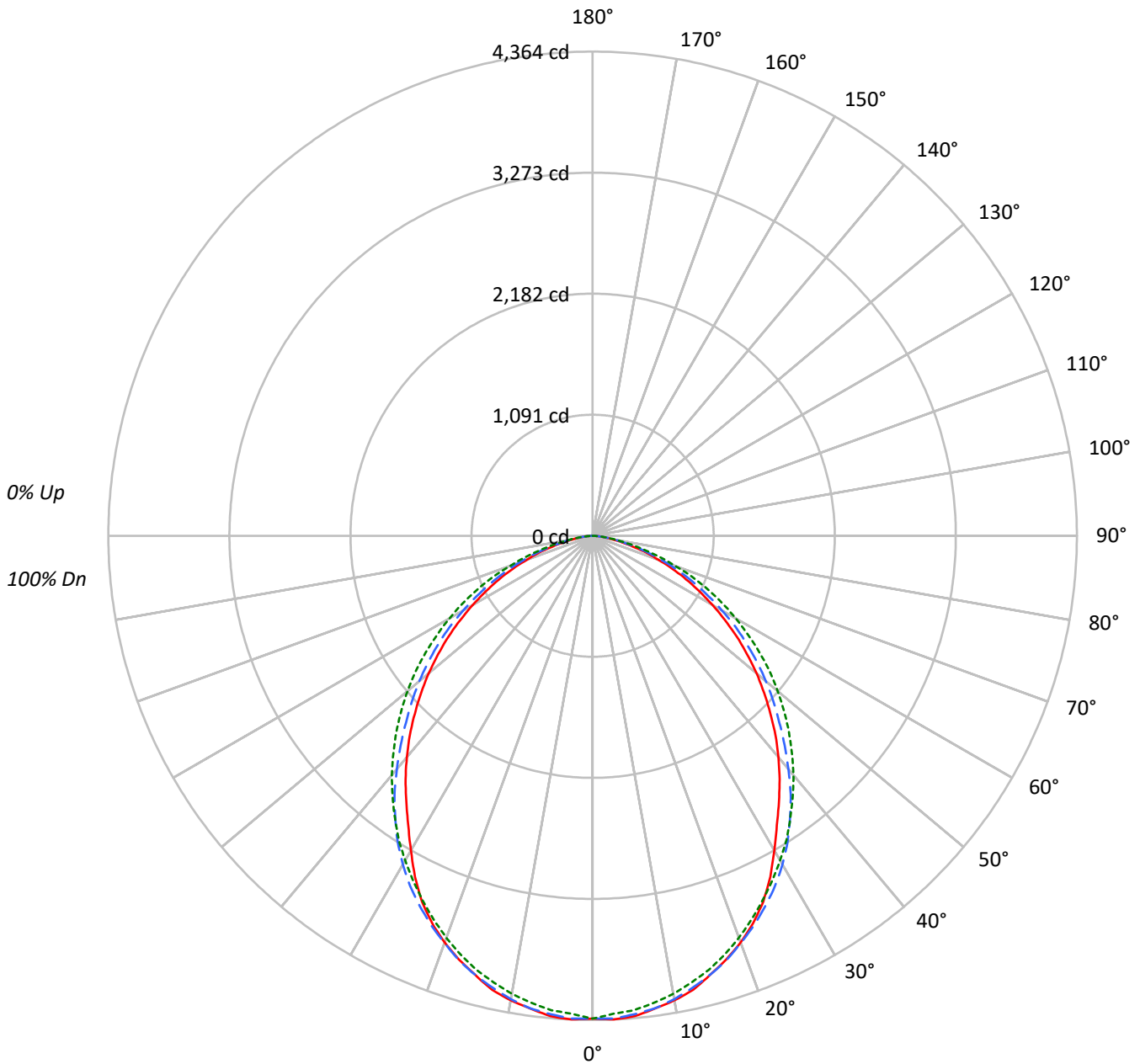
Lumens per Lamp: N/A
Luminaire Lumens: 10063.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	11711	11711	11711
5°	11742	11693	11593
10°	11618	11586	11453
15°	11412	11412	11281
20°	11170	11184	11041
25°	10802	10936	10762
30°	10172	10629	10499
35°	9611	10188	10205
40°	9145	9638	9890
45°	8621	9054	9519
50°	8070	8532	9113
55°	7444	7938	8620
60°	6704	7244	8018
65°	5919	6441	7293
70°	4933	5485	6196
75°	3876	4380	4850
80°	2772	3084	3420
85°	1806	1806	1704



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	409.8	4.1
10°-20°	1151.1	11.4
20°-30°	1682.1	16.7
30°-40°	1909.4	19.0
40°-50°	1843.3	18.3
50°-60°	1520.6	15.1
60°-70°	1012.6	10.1
70°-80°	453.1	4.5
80°-90°	81.1	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°	3243.0	32.2
0°-40°	5152.4	51.2
0°-60°	8516.3	84.6
0°-90°	10063.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10063.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4352	4352	4352	4352	4352	
5°	4347	4345	4329	4305	4292	411
15°	4096	4106	4096	4078	4049	1155
25°	3638	3666	3683	3656	3625	1666
35°	2926	2966	3101	3118	3106	1833
45°	2265	2304	2379	2488	2501	1748
55°	1587	1613	1692	1786	1837	1416
65°	930	955	1012	1083	1145	922
75°	373	393	421	441	466	408
85°	58	58	58	55	55	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4352.0	4352.0	4352.0	4352.0	4352.0
2.5°	4363.7	4365.4	4355.3	4328.6	4311.9
5°	4347.0	4345.3	4328.6	4305.2	4291.8
7.5°	4298.5	4301.8	4296.8	4263.4	4245.0
10°	4251.7	4253.3	4240.0	4213.2	4191.5
12.5°	4191.5	4189.8	4171.4	4158.0	4122.9
15°	4096.2	4106.2	4096.2	4077.8	4049.4
17.5°	4004.2	4004.2	4010.9	3979.2	3957.4
20°	3900.6	3905.6	3905.6	3880.5	3855.4
22.5°	3780.2	3795.2	3800.3	3773.5	3743.4
25°	3638.1	3666.5	3683.2	3656.5	3624.7
27.5°	3465.9	3509.3	3559.5	3539.4	3504.3
30°	3273.6	3337.1	3420.7	3404.0	3378.9
32.5°	3091.4	3154.9	3270.3	3263.6	3250.2
35°	2925.8	2966.0	3101.4	3118.1	3106.4
37.5°	2768.7	2805.5	2932.5	2971.0	2961.0
40°	2603.2	2643.3	2743.6	2812.2	2815.5
42.5°	2439.3	2477.8	2559.7	2658.3	2658.3
45°	2265.4	2303.9	2379.1	2487.8	2501.2
47.5°	2094.9	2135.0	2208.6	2317.3	2339.0
50°	1927.7	1964.5	2038.1	2143.4	2176.8
52.5°	1753.8	1794.0	1865.9	1962.8	2011.3
55°	1586.6	1613.4	1692.0	1785.6	1837.4
57.5°	1412.8	1437.8	1526.5	1606.7	1660.2
60°	1245.6	1277.3	1345.9	1427.8	1489.7
62.5°	1085.1	1118.5	1177.0	1248.9	1319.1
65°	929.6	954.7	1011.5	1083.4	1145.3
67.5°	779.1	800.8	857.7	907.8	973.1
70°	627.0	655.4	697.2	745.7	787.5
72.5°	504.9	516.6	551.7	586.8	630.3
75°	372.8	392.9	421.3	441.4	466.5
77.5°	267.5	279.2	295.9	312.6	336.1
80°	178.9	183.9	199.0	202.3	220.7
82.5°	108.7	112.0	115.4	117.0	123.7
85°	58.5	58.5	58.5	55.2	55.2
87.5°	33.4	33.4	28.4	23.4	16.7
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)