

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: P557692

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-80-96-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: P557692
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-30-UNV-80-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

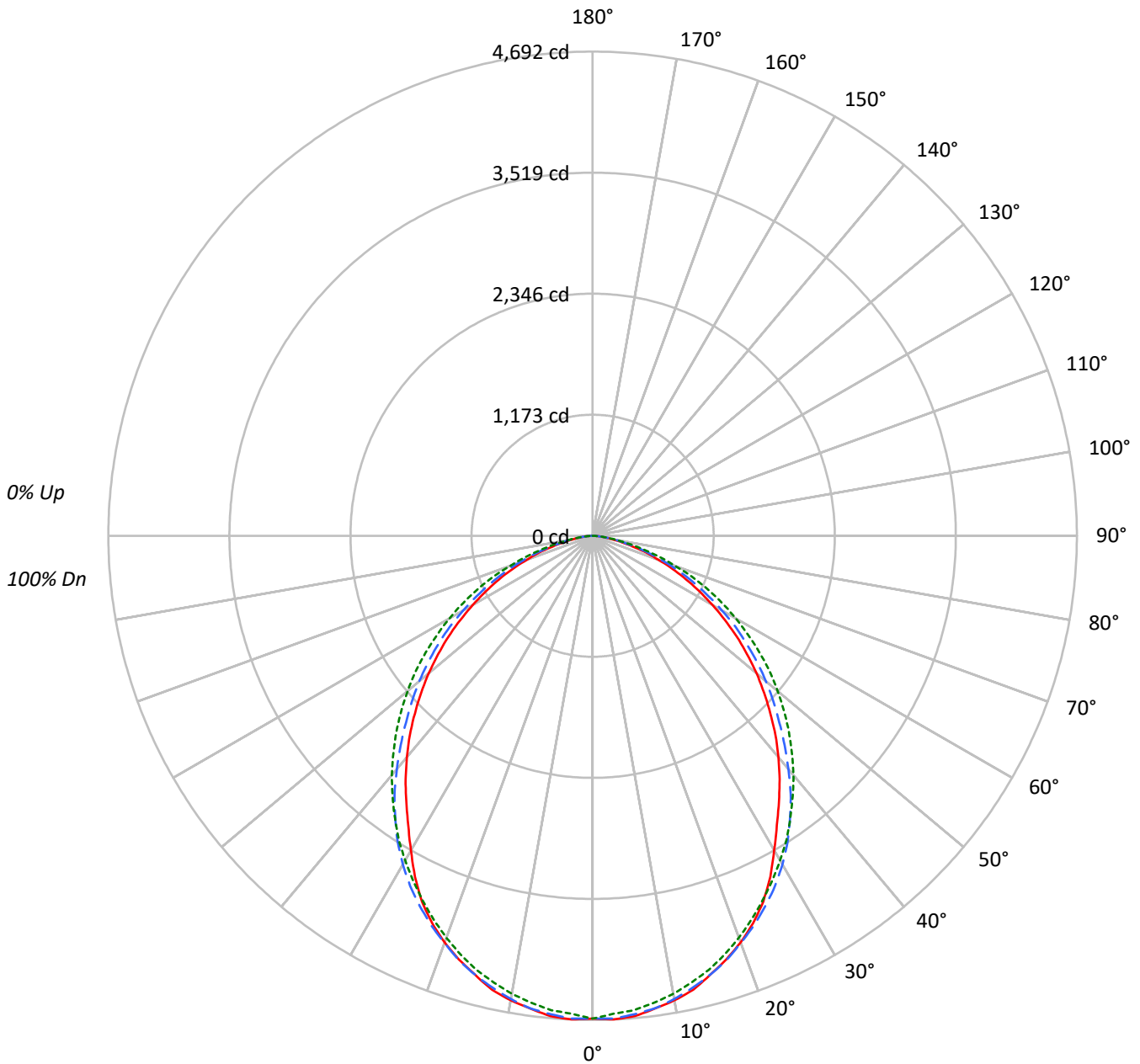
Lumens per Lamp: N/A
Luminaire Lumens: 10819.0 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
Input Voltage (V): NR
Input Current (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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12591	12591	12591
5°	12624	12571	12464
10°	12490	12456	12314
15°	12269	12269	12129
20°	12009	12025	11870
25°	11614	11758	11571
30°	10936	11428	11288
35°	10334	10954	10972
40°	9831	10362	10633
45°	9269	9734	10234
50°	8676	9173	9798
55°	8003	8534	9268
60°	7208	7788	8620
65°	6364	6925	7840
70°	5304	5898	6661
75°	4167	4710	5214
80°	2980	3315	3677
85°	1942	1942	1831



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	440.5	4.1
10°-20°	1237.6	11.4
20°-30°	1808.5	16.7
30°-40°	2052.9	19.0
40°-50°	1981.7	18.3
50°-60°	1634.8	15.1
60°-70°	1088.6	10.1
70°-80°	487.1	4.5
80°-90°	87.2	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°	3486.7	32.2
0°-40°	5539.5	51.2
0°-60°	9156.0	84.6
0°-90°	10819.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10819.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4679	4679	4679	4679	4679	
5°	4674	4672	4654	4629	4614	442
15°	4404	4415	4404	4384	4354	1242
25°	3911	3942	3960	3931	3897	1791
35°	3146	3189	3334	3352	3340	1971
45°	2436	2477	2558	2675	2689	1879
55°	1706	1735	1819	1920	1976	1523
65°	999	1026	1088	1165	1231	991
75°	401	422	453	474	502	438
85°	63	63	63	59	59	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4678.9	4678.9	4678.9	4678.9	4678.9
2.5°	4691.5	4693.3	4682.5	4653.8	4635.8
5°	4673.5	4671.7	4653.8	4628.6	4614.2
7.5°	4621.4	4625.0	4619.6	4583.7	4563.9
10°	4571.1	4572.9	4558.5	4529.7	4506.4
12.5°	4506.4	4504.6	4484.8	4470.4	4432.7
15°	4403.9	4414.7	4403.9	4384.1	4353.6
17.5°	4305.1	4305.1	4312.2	4278.1	4254.7
20°	4193.6	4199.0	4199.0	4172.0	4145.1
22.5°	4064.2	4080.4	4085.8	4057.0	4024.6
25°	3911.4	3942.0	3959.9	3931.2	3897.0
27.5°	3726.3	3773.0	3826.9	3805.3	3767.6
30°	3519.5	3587.8	3677.7	3659.7	3632.8
32.5°	3323.6	3391.9	3515.9	3508.8	3494.4
35°	3145.7	3188.8	3334.4	3352.4	3339.8
37.5°	2976.7	3016.2	3152.8	3194.2	3183.4
40°	2798.7	2841.9	2949.7	3023.4	3027.0
42.5°	2622.6	2663.9	2752.0	2858.1	2858.1
45°	2435.6	2477.0	2557.9	2674.7	2689.1
47.5°	2252.3	2295.4	2374.5	2491.4	2514.7
50°	2072.5	2112.1	2191.2	2304.4	2340.4
52.5°	1885.6	1928.7	2006.0	2110.3	2162.4
55°	1705.8	1734.6	1819.1	1919.7	1975.5
57.5°	1518.9	1545.9	1641.1	1727.4	1784.9
60°	1339.2	1373.3	1447.0	1535.1	1601.6
62.5°	1166.6	1202.5	1265.5	1342.7	1418.2
65°	999.4	1026.4	1087.5	1164.8	1231.3
67.5°	837.6	861.0	922.1	976.1	1046.2
70°	674.1	704.6	749.6	801.7	846.6
72.5°	542.9	555.4	593.2	630.9	677.7
75°	400.8	422.4	453.0	474.5	501.5
77.5°	287.6	300.2	318.2	336.1	361.3
80°	192.3	197.7	213.9	217.5	237.3
82.5°	116.8	120.4	124.0	125.8	133.0
85°	62.9	62.9	62.9	59.3	59.3
87.5°	36.0	36.0	30.6	25.2	18.0
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)