

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: P557687

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-80-87-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: P557687
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-80-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

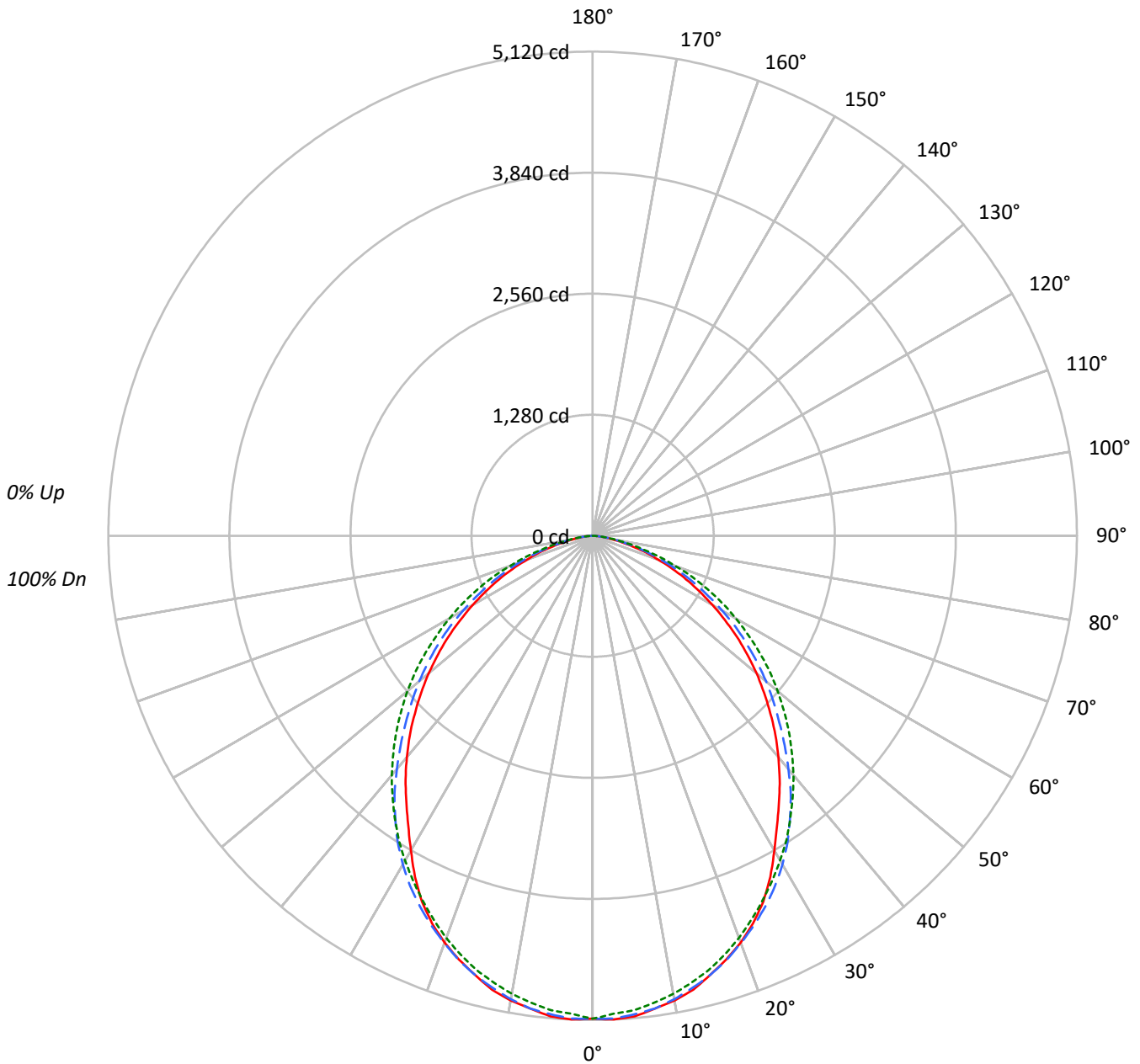
Lumens per Lamp: N/A
Luminaire Lumens: 11808.0 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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					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								
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°	13742	13742	13742
5°	13779	13720	13604
10°	13632	13595	13439
15°	13390	13390	13238
20°	13107	13124	12955
25°	12675	12832	12629
30°	11936	12472	12320
35°	11278	11955	11974
40°	10730	11309	11605
45°	10116	10624	11169
50°	9470	10012	10693
55°	8735	9315	10116
60°	7866	8500	9408
65°	6946	7557	8557
70°	5788	6437	7270
75°	4549	5140	5691
80°	3253	3618	4014
85°	2121	2121	1998



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	480.8	4.1
10°-20°	1350.7	11.4
20°-30°	1973.8	16.7
30°-40°	2240.5	19.0
40°-50°	2162.9	18.3
50°-60°	1784.2	15.1
60°-70°	1188.2	10.1
70°-80°	531.7	4.5
80°-90°	95.1	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°	3805.4	32.2
0°-40°	6045.9	51.2
0°-60°	9993.1	84.6
0°-90°	11808.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11808.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5107	5107	5107	5107	5107	
5°	5101	5099	5079	5052	5036	483
15°	4806	4818	4806	4785	4752	1355
25°	4269	4302	4322	4290	4253	1955
35°	3433	3480	3639	3659	3645	2151
45°	2658	2703	2792	2919	2935	2051
55°	1862	1893	1985	2095	2156	1662
65°	1091	1120	1187	1271	1344	1082
75°	438	461	494	518	547	478
85°	69	69	69	65	65	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5106.7	5106.7	5106.7	5106.7	5106.7
2.5°	5120.4	5122.3	5110.6	5079.2	5059.6
5°	5100.8	5098.8	5079.2	5051.7	5036.0
7.5°	5043.9	5047.8	5041.9	5002.7	4981.1
10°	4988.9	4990.9	4975.2	4943.8	4918.3
12.5°	4918.3	4916.4	4894.8	4879.1	4837.9
15°	4806.5	4818.3	4806.5	4784.9	4751.6
17.5°	4698.6	4698.6	4706.4	4669.2	4643.7
20°	4577.0	4582.8	4582.8	4553.4	4524.0
22.5°	4435.7	4453.4	4459.2	4427.9	4392.5
25°	4269.0	4302.3	4321.9	4290.5	4253.3
27.5°	4066.9	4117.9	4176.7	4153.2	4112.0
30°	3841.3	3915.8	4013.9	3994.3	3964.9
32.5°	3627.4	3702.0	3837.3	3829.5	3813.8
35°	3433.2	3480.3	3639.2	3658.8	3645.1
37.5°	3248.8	3292.0	3441.1	3486.2	3474.4
40°	3054.6	3101.7	3219.4	3299.8	3303.7
42.5°	2862.3	2907.4	3003.6	3119.3	3119.3
45°	2658.3	2703.4	2791.7	2919.2	2934.9
47.5°	2458.2	2505.3	2591.6	2719.1	2744.6
50°	2262.0	2305.2	2391.5	2515.1	2554.3
52.5°	2058.0	2105.0	2189.4	2303.2	2360.1
55°	1861.8	1893.2	1985.4	2095.2	2156.1
57.5°	1657.8	1687.2	1791.2	1885.3	1948.1
60°	1461.6	1498.8	1579.3	1675.4	1748.0
62.5°	1273.2	1312.5	1381.1	1465.5	1547.9
65°	1090.8	1120.2	1186.9	1271.3	1343.9
67.5°	914.2	939.7	1006.4	1065.3	1141.8
70°	735.7	769.0	818.1	875.0	924.0
72.5°	592.5	606.2	647.4	688.6	739.6
75°	437.5	461.0	494.4	517.9	547.4
77.5°	313.9	327.6	347.2	366.9	394.3
80°	209.9	215.8	233.5	237.4	259.0
82.5°	127.5	131.4	135.4	137.3	145.2
85°	68.7	68.7	68.7	64.7	64.7
87.5°	39.2	39.2	33.4	27.5	19.6
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)