

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: P557753

Luminaire Tested: **FUSL-12-4-LD4-3HI-35-UNV-80-88-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: P557753
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-35-UNV-80-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

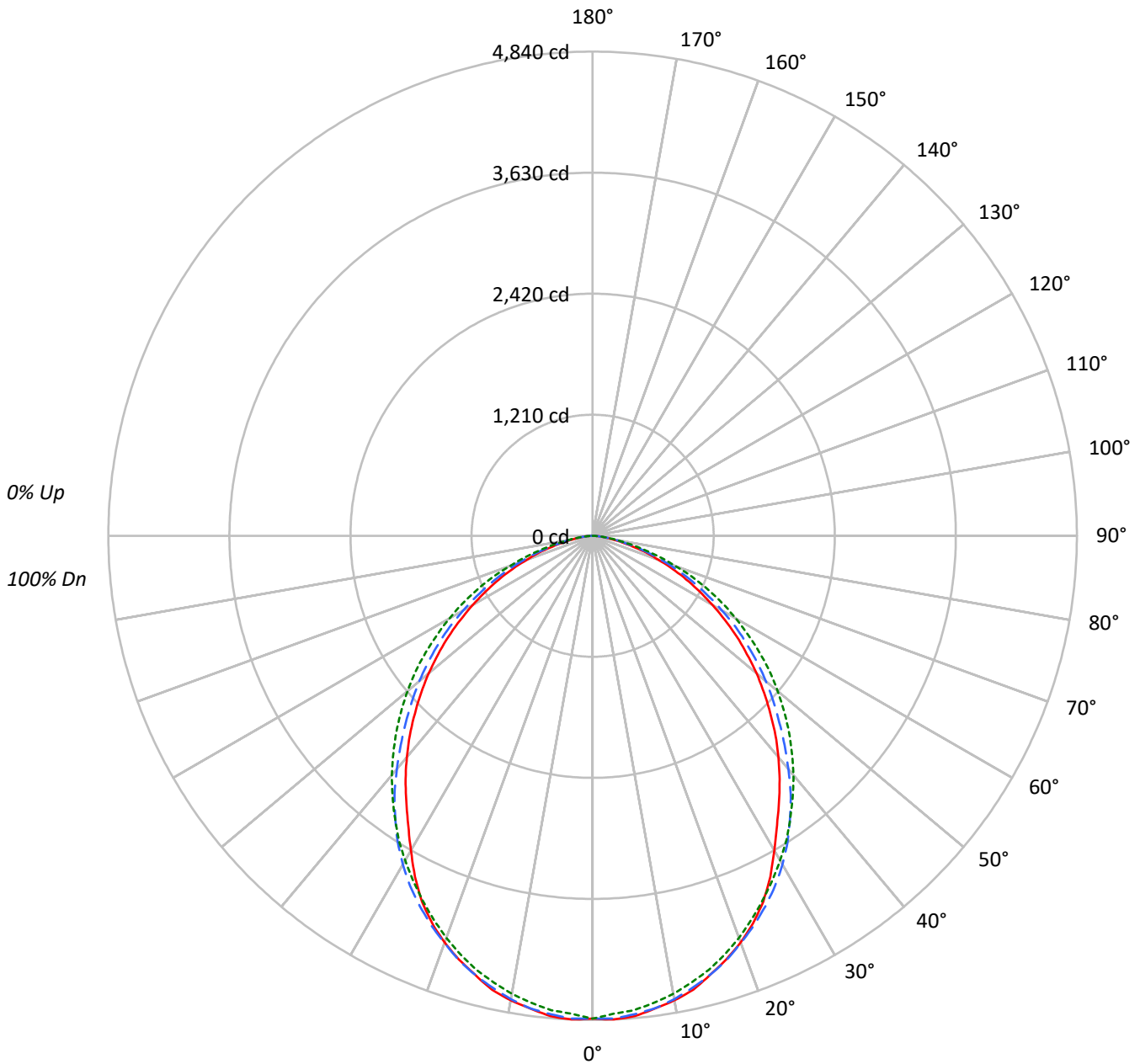
Lumens per Lamp: N/A
Luminaire Lumens: 11161.0 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
Input Voltage (V): NR
Input Current (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°	12989	12989	12989
5°	13024	12968	12858
10°	12885	12850	12703
15°	12657	12657	12512
20°	12389	12405	12245
25°	11981	12129	11937
30°	11282	11789	11645
35°	10660	11300	11318
40°	10142	10690	10969
45°	9562	10042	10557
50°	8951	9463	10107
55°	8256	8804	9561
60°	7435	8034	8892
65°	6565	7144	8088
70°	5471	6084	6872
75°	4299	4859	5379
80°	3075	3420	3794
85°	2004	2004	1890



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	454.5	4.1
10°-20°	1276.7	11.4
20°-30°	1865.7	16.7
30°-40°	2117.8	19.0
40°-50°	2044.4	18.3
50°-60°	1686.5	15.1
60°-70°	1123.1	10.1
70°-80°	502.6	4.5
80°-90°	89.9	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°	3596.9	32.2
0°-40°	5714.6	51.2
0°-60°	9445.5	84.6
0°-90°	11161.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11161.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4827	4827	4827	4827	4827	
5°	4821	4819	4801	4775	4760	456
15°	4543	4554	4543	4523	4491	1281
25°	4035	4067	4085	4055	4020	1848
35°	3245	3290	3440	3458	3445	2033
45°	2513	2555	2639	2759	2774	1939
55°	1760	1789	1877	1980	2038	1571
65°	1031	1059	1122	1202	1270	1022
75°	414	436	467	490	517	452
85°	65	65	65	61	61	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4826.8	4826.8	4826.8	4826.8	4826.8
2.5°	4839.8	4841.7	4830.6	4800.9	4782.3
5°	4821.3	4819.4	4800.9	4774.9	4760.1
7.5°	4767.5	4771.2	4765.7	4728.6	4708.2
10°	4715.6	4717.4	4702.6	4672.9	4648.8
12.5°	4648.8	4647.0	4626.6	4611.7	4572.8
15°	4543.1	4554.3	4543.1	4522.7	4491.2
17.5°	4441.1	4441.1	4448.6	4413.3	4389.2
20°	4326.2	4331.7	4331.7	4303.9	4276.1
22.5°	4192.7	4209.3	4214.9	4185.2	4151.9
25°	4035.0	4066.6	4085.1	4055.4	4020.2
27.5°	3844.0	3892.3	3947.9	3925.6	3886.7
30°	3630.8	3701.3	3794.0	3775.4	3747.6
32.5°	3428.7	3499.1	3627.1	3619.7	3604.8
35°	3245.1	3289.6	3439.8	3458.3	3445.4
37.5°	3070.8	3111.6	3252.5	3295.2	3284.0
40°	2887.2	2931.7	3043.0	3119.0	3122.7
42.5°	2705.5	2748.1	2839.0	2948.4	2948.4
45°	2512.6	2555.3	2638.7	2759.3	2774.1
47.5°	2323.5	2368.0	2449.6	2570.1	2594.2
50°	2138.1	2178.8	2260.4	2377.3	2414.3
52.5°	1945.2	1989.7	2069.4	2177.0	2230.8
55°	1759.8	1789.4	1876.6	1980.4	2037.9
57.5°	1566.9	1594.7	1693.0	1782.0	1841.4
60°	1381.5	1416.7	1492.7	1583.6	1652.2
62.5°	1203.5	1240.6	1305.5	1385.2	1463.1
65°	1031.0	1058.8	1121.9	1201.6	1270.2
67.5°	864.1	888.2	951.3	1006.9	1079.2
70°	695.4	726.9	773.3	827.0	873.4
72.5°	560.0	573.0	611.9	650.9	699.1
75°	413.5	435.8	467.3	489.5	517.4
77.5°	296.7	309.7	328.2	346.8	372.7
80°	198.4	204.0	220.7	224.4	244.8
82.5°	120.5	124.2	127.9	129.8	137.2
85°	64.9	64.9	64.9	61.2	61.2
87.5°	37.1	37.1	31.5	26.0	18.5
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)