

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: P557545

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-93-88-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: P557545
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-LD4-2STD-35-UNV-93-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS 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

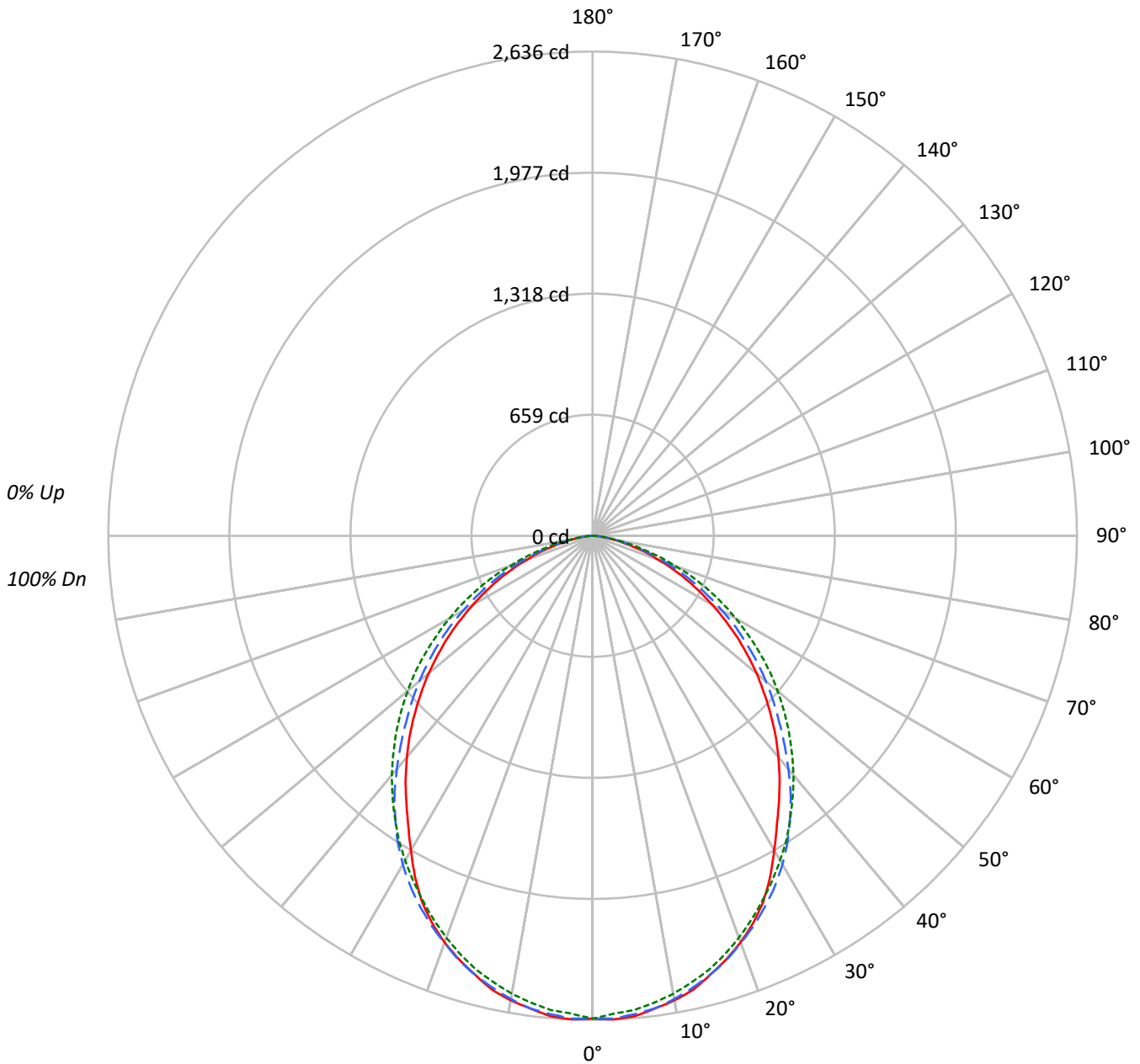
Lumens per Lamp: N/A
Luminaire Lumens: 6078.0 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	7074	7074	7074
5°	7092	7062	7002
10°	7017	6998	6918
15°	6893	6893	6814
20°	6747	6755	6669
25°	6524	6605	6500
30°	6144	6420	6342
35°	5805	6154	6164
40°	5523	5821	5974
45°	5207	5469	5749
50°	4874	5153	5504
55°	4496	4794	5207
60°	4049	4375	4843
65°	3575	3890	4404
70°	2980	3313	3742
75°	2341	2646	2929
80°	1675	1863	2066
85°	1090	1090	1028



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.5	4.1
10°-20°	695.3	11.4
20°-30°	1016.0	16.7
30°-40°	1153.3	19.0
40°-50°	1113.3	18.3
50°-60°	918.4	15.1
60°-70°	611.6	10.1
70°-80°	273.7	4.5
80°-90°	49.0	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°	1958.8	32.2
0°-40°	3112.0	51.2
0°-60°	5143.8	84.6
0°-90°	6078.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6078.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2629	2629	2629	2629	2629	
5°	2626	2624	2614	2600	2592	249
15°	2474	2480	2474	2463	2446	697
25°	2197	2214	2225	2208	2189	1006
35°	1767	1791	1873	1883	1876	1107
45°	1368	1392	1437	1503	1511	1056
55°	958	974	1022	1078	1110	855
65°	562	577	611	654	692	557
75°	225	237	254	267	282	246
85°	35	35	35	33	33	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2628.6	2628.6	2628.6	2628.6	2628.6
2.5°	2635.6	2636.7	2630.6	2614.4	2604.3
5°	2625.5	2624.5	2614.4	2600.3	2592.2
7.5°	2596.3	2598.3	2595.3	2575.1	2563.9
10°	2568.0	2569.0	2560.9	2544.8	2531.6
12.5°	2531.6	2530.6	2519.5	2511.4	2490.2
15°	2474.1	2480.1	2474.1	2463.0	2445.8
17.5°	2418.5	2418.5	2422.6	2403.4	2390.3
20°	2355.9	2359.0	2359.0	2343.8	2328.7
22.5°	2283.2	2292.3	2295.3	2279.2	2261.0
25°	2197.4	2214.5	2224.6	2208.5	2189.3
27.5°	2093.4	2119.6	2149.9	2137.8	2116.6
30°	1977.2	2015.6	2066.1	2056.0	2040.9
32.5°	1867.2	1905.5	1975.2	1971.2	1963.1
35°	1767.2	1791.4	1873.2	1883.3	1876.3
37.5°	1672.3	1694.5	1771.2	1794.5	1788.4
40°	1572.3	1596.5	1657.1	1698.5	1700.5
42.5°	1473.3	1496.6	1546.0	1605.6	1605.6
45°	1368.3	1391.5	1437.0	1502.6	1510.7
47.5°	1265.3	1289.5	1334.0	1399.6	1412.7
50°	1164.3	1186.5	1231.0	1294.6	1314.8
52.5°	1059.3	1083.5	1127.0	1185.5	1214.8
55°	958.3	974.5	1021.9	1078.5	1109.8
57.5°	853.3	868.5	922.0	970.4	1002.8
60°	752.3	771.5	812.9	862.4	899.8
62.5°	655.4	675.6	710.9	754.3	796.8
65°	561.5	576.6	610.9	654.4	691.7
67.5°	470.6	483.7	518.0	548.3	587.7
70°	378.7	395.9	421.1	450.4	475.6
72.5°	305.0	312.0	333.2	354.4	380.7
75°	225.2	237.3	254.5	266.6	281.7
77.5°	161.6	168.6	178.7	188.8	203.0
80°	108.1	111.1	120.2	122.2	133.3
82.5°	65.6	67.7	69.7	70.7	74.7
85°	35.3	35.3	35.3	33.3	33.3
87.5°	20.2	20.2	17.2	14.1	10.1
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)