

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: P556211

Luminaire Tested: **FUSL-12-4-LD4-1HI-35-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: P556211
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-LD4-1HI-35-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 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

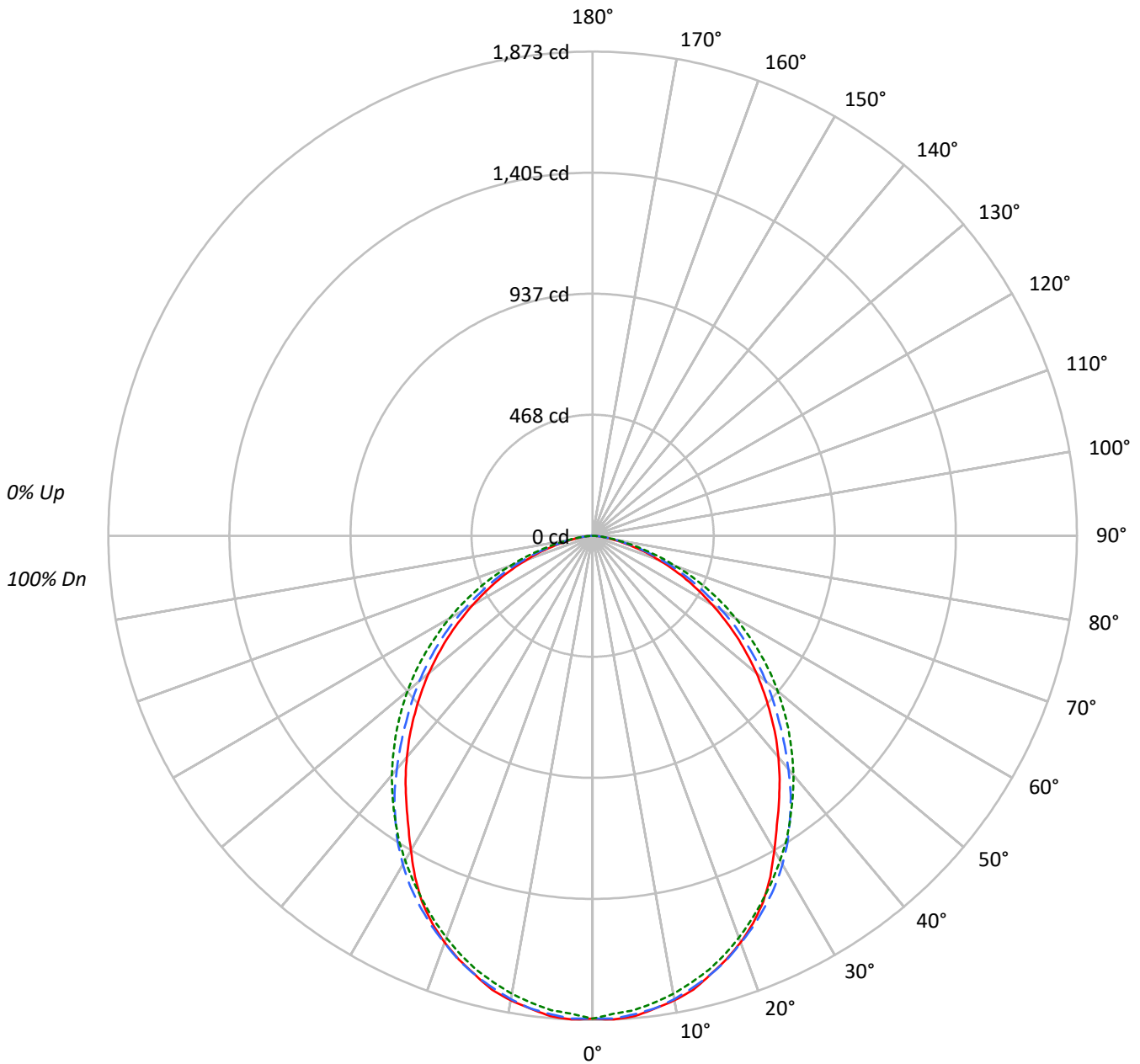
Lumens per Lamp: N/A
Luminaire Lumens: 4319.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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°	5026	5026	5026
5°	5040	5018	4976
10°	4986	4973	4916
15°	4898	4898	4842
20°	4794	4800	4739
25°	4636	4694	4619
30°	4366	4562	4506
35°	4125	4373	4380
40°	3925	4136	4245
45°	3700	3886	4085
50°	3464	3662	3911
55°	3195	3407	3700
60°	2877	3109	3441
65°	2541	2764	3130
70°	2117	2354	2659
75°	1664	1880	2082
80°	1190	1323	1468
85°	775	775	732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.9	4.1
10°-20°	494.1	11.4
20°-30°	722.0	16.7
30°-40°	819.5	19.0
40°-50°	791.1	18.3
50°-60°	652.6	15.1
60°-70°	434.6	10.1
70°-80°	194.5	4.5
80°-90°	34.8	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°	1391.9	32.2
0°-40°	2211.4	51.2
0°-60°	3655.1	84.6
0°-90°	4319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4319.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1868	1868	1868	1868	1868	
5°	1866	1865	1858	1848	1842	177
15°	1758	1762	1758	1750	1738	496
25°	1562	1574	1581	1569	1556	715
35°	1256	1273	1331	1338	1333	787
45°	972	989	1021	1068	1074	750
55°	681	692	726	766	789	608
65°	399	410	434	465	492	396
75°	160	169	181	189	200	175
85°	25	25	25	24	24	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1867.9	1867.9	1867.9	1867.9	1867.9
2.5°	1872.9	1873.6	1869.3	1857.8	1850.6
5°	1865.7	1865.0	1857.8	1847.8	1842.0
7.5°	1844.9	1846.3	1844.2	1829.8	1821.9
10°	1824.8	1825.5	1819.8	1808.3	1799.0
12.5°	1799.0	1798.3	1790.4	1784.6	1769.5
15°	1758.1	1762.4	1758.1	1750.2	1738.0
17.5°	1718.6	1718.6	1721.5	1707.8	1698.5
20°	1674.1	1676.3	1676.3	1665.5	1654.7
22.5°	1622.4	1628.9	1631.1	1619.6	1606.7
25°	1561.5	1573.6	1580.8	1569.3	1555.7
27.5°	1487.5	1506.2	1527.7	1519.1	1504.0
30°	1405.0	1432.3	1468.2	1461.0	1450.2
32.5°	1326.8	1354.1	1403.6	1400.7	1395.0
35°	1255.8	1273.0	1331.1	1338.3	1333.3
37.5°	1188.3	1204.1	1258.6	1275.1	1270.8
40°	1117.3	1134.5	1177.5	1207.0	1208.4
42.5°	1046.9	1063.5	1098.6	1140.9	1140.9
45°	972.3	988.8	1021.1	1067.8	1073.5
47.5°	899.1	916.3	947.9	994.6	1003.9
50°	827.4	843.2	874.7	919.9	934.3
52.5°	752.7	770.0	800.8	842.4	863.2
55°	681.0	692.5	726.2	766.4	788.6
57.5°	606.4	617.1	655.1	689.6	712.6
60°	534.6	548.2	577.7	612.8	639.4
62.5°	465.7	480.1	505.2	536.0	566.2
65°	399.0	409.7	434.1	465.0	491.5
67.5°	334.4	343.7	368.1	389.6	417.6
70°	269.1	281.3	299.2	320.0	338.0
72.5°	216.7	221.7	236.8	251.9	270.5
75°	160.0	168.6	180.8	189.4	200.2
77.5°	114.8	119.8	127.0	134.2	144.2
80°	76.8	78.9	85.4	86.8	94.7
82.5°	46.6	48.1	49.5	50.2	53.1
85°	25.1	25.1	25.1	23.7	23.7
87.5°	14.4	14.4	12.2	10.0	7.2
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)