

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: P556223

Luminaire Tested: **FUSL-12-4-LD4-1HI-35-UNV-80-97-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: P556223
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-80-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND
3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

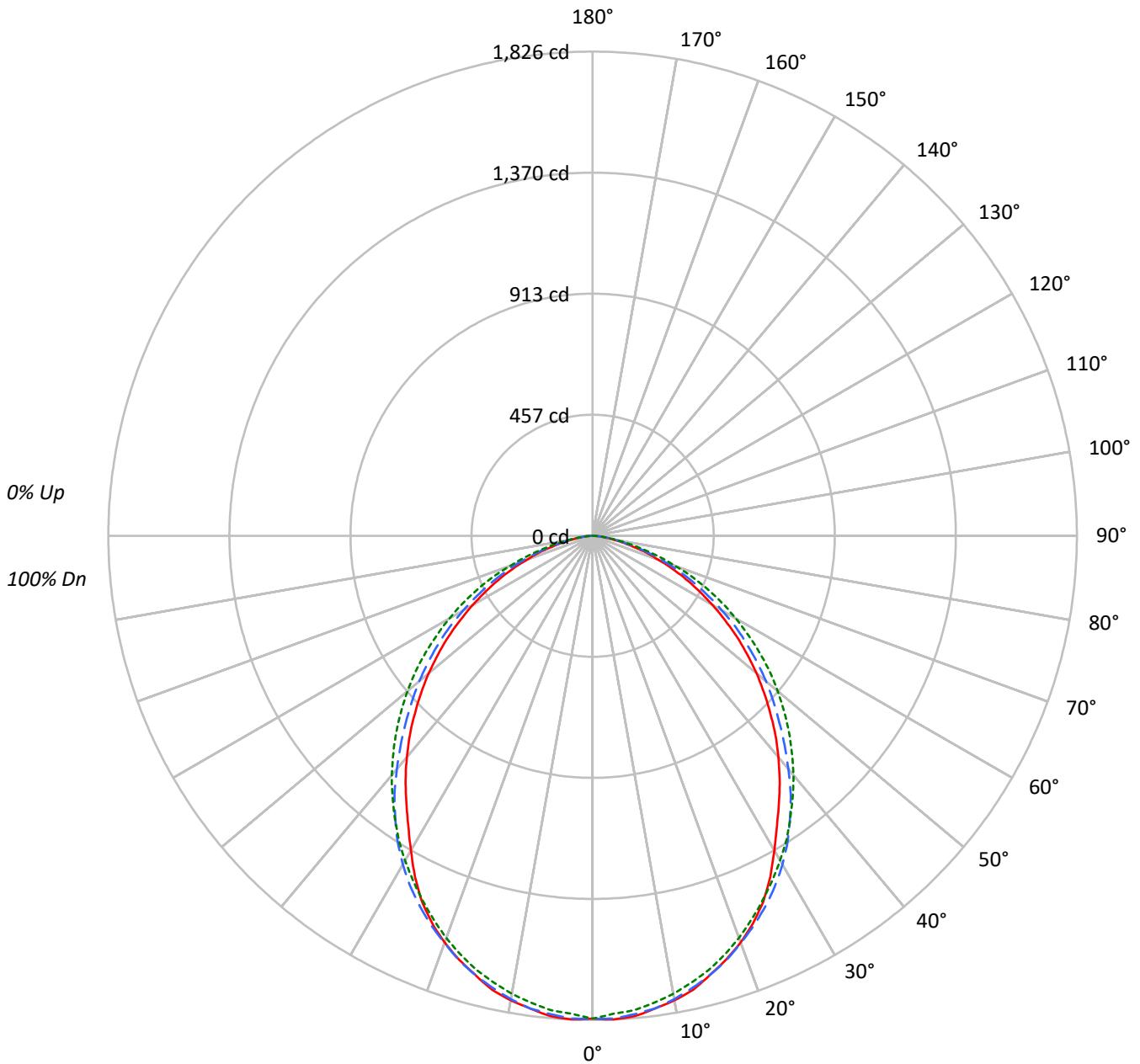
Lumens per Lamp: N/A
Luminaire Lumens: 4211.0 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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°	4901	4901	4901
5°	4914	4893	4851
10°	4862	4848	4793
15°	4775	4775	4721
20°	4674	4680	4620
25°	4520	4576	4504
30°	4257	4448	4394
35°	4022	4263	4270
40°	3827	4033	4139
45°	3608	3789	3983
50°	3377	3571	3813
55°	3115	3322	3607
60°	2805	3031	3355
65°	2477	2695	3051
70°	2065	2295	2592
75°	1622	1833	2030
80°	1161	1291	1432
85°	756	756	713



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.5	4.1
10°-20°	481.7	11.4
20°-30°	703.9	16.7
30°-40°	799.0	19.0
40°-50°	771.3	18.3
50°-60°	636.3	15.1
60°-70°	423.7	10.1
70°-80°	189.6	4.5
80°-90°	33.9	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°	1357.1	32.2
0°-40°	2156.1	51.2
0°-60°	3563.8	84.6
0°-90°	4211.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4211.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1821	1821	1821	1821	1821	
5°	1819	1818	1811	1802	1796	172
15°	1714	1718	1714	1706	1694	483
25°	1522	1534	1541	1530	1517	697
35°	1224	1241	1298	1305	1300	767
45°	948	964	996	1041	1047	731
55°	664	675	708	747	769	593
65°	389	400	423	453	479	386
75°	156	164	176	185	195	171
85°	24	24	24	23	23	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1821.1	1821.1	1821.1	1821.1	1821.1
2.5°	1826.0	1826.7	1822.5	1811.4	1804.4
5°	1819.0	1818.4	1811.4	1801.6	1796.0
7.5°	1798.8	1800.2	1798.1	1784.1	1776.4
10°	1779.2	1779.9	1774.3	1763.1	1754.0
12.5°	1754.0	1753.3	1745.6	1740.0	1725.3
15°	1714.1	1718.3	1714.1	1706.4	1694.5
17.5°	1675.6	1675.6	1678.4	1665.1	1656.0
20°	1632.2	1634.3	1634.3	1623.9	1613.4
22.5°	1581.9	1588.2	1590.3	1579.1	1566.5
25°	1522.4	1534.3	1541.3	1530.1	1516.8
27.5°	1450.3	1468.5	1489.5	1481.1	1466.4
30°	1369.9	1396.5	1431.5	1424.5	1414.0
32.5°	1293.6	1320.2	1368.5	1365.7	1360.1
35°	1224.4	1241.2	1297.8	1304.8	1299.9
37.5°	1158.6	1174.0	1227.2	1243.3	1239.1
40°	1089.3	1106.1	1148.1	1176.8	1178.2
42.5°	1020.8	1036.9	1071.1	1112.4	1112.4
45°	948.0	964.1	995.6	1041.1	1046.7
47.5°	876.6	893.4	924.2	969.7	978.8
50°	806.7	822.1	852.9	896.9	910.9
52.5°	733.9	750.7	780.8	821.4	841.7
55°	664.0	675.1	708.0	747.2	768.9
57.5°	591.2	601.7	638.8	672.3	694.7
60°	521.2	534.5	563.2	597.5	623.4
62.5°	454.1	468.1	492.5	522.6	552.0
65°	389.0	399.5	423.3	453.4	479.2
67.5°	326.0	335.1	358.9	379.9	407.2
70°	262.4	274.3	291.7	312.0	329.5
72.5°	211.3	216.2	230.9	245.6	263.8
75°	156.0	164.4	176.3	184.7	195.2
77.5°	111.9	116.8	123.8	130.8	140.6
80°	74.9	77.0	83.3	84.7	92.4
82.5°	45.5	46.9	48.3	49.0	51.8
85°	24.5	24.5	24.5	23.1	23.1
87.5°	14.0	14.0	11.9	9.8	7.0
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)