

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: P556349

Luminaire Tested: **FUSL-12-4-LD4-1HI-50-UNV-80-96-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: P556349
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-50-UNV-80-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND
5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

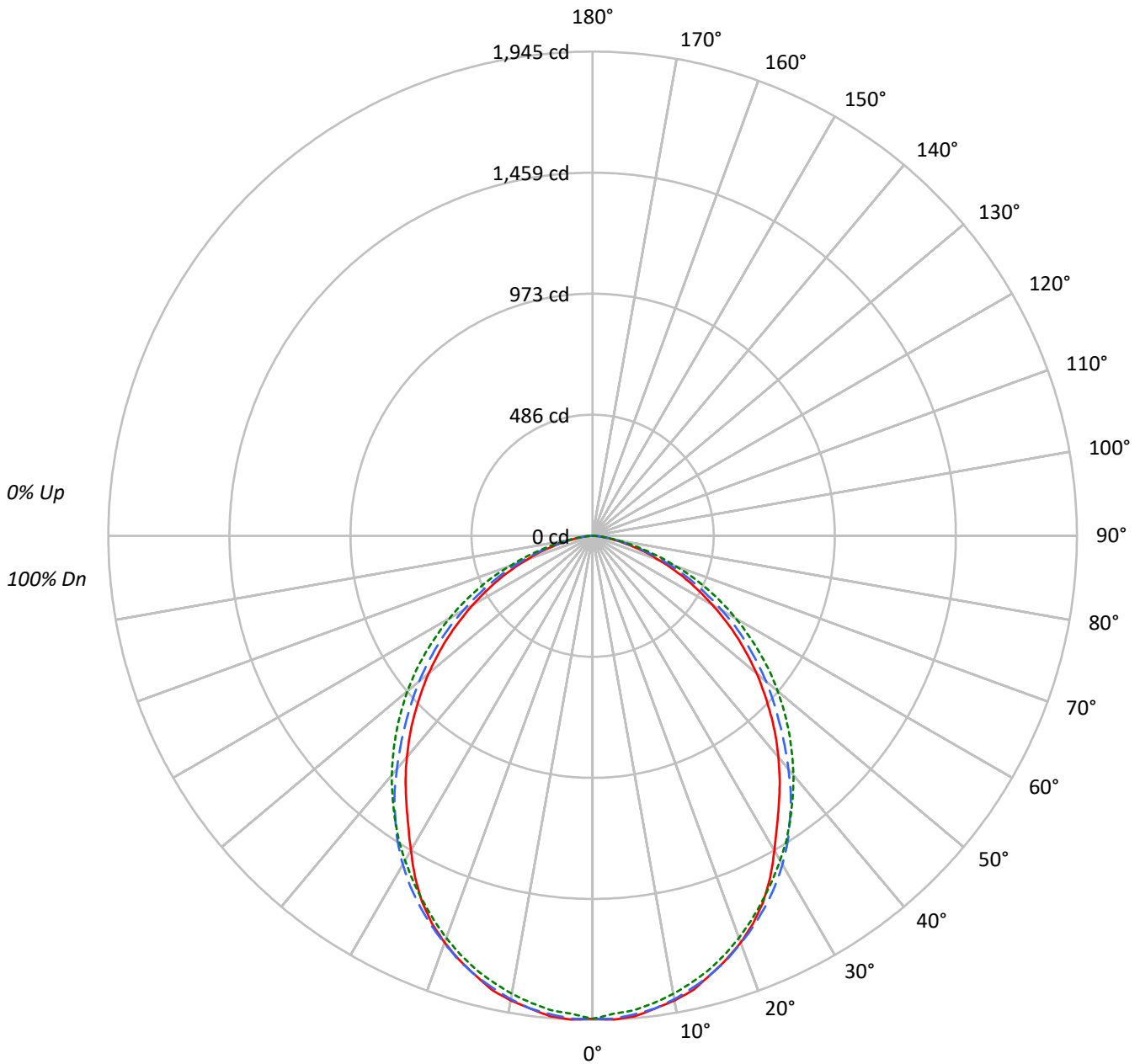
Lumens per Lamp: N/A
Luminaire Lumens: 4486.0 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	5221	5221	5221
5°	5234	5212	5168
10°	5179	5165	5106
15°	5087	5087	5029
20°	4979	4986	4922
25°	4815	4875	4798
30°	4534	4738	4680
35°	4285	4542	4549
40°	4077	4297	4409
45°	3843	4036	4243
50°	3598	3804	4063
55°	3318	3539	3843
60°	2989	3229	3574
65°	2639	2871	3251
70°	2199	2445	2762
75°	1728	1953	2162
80°	1235	1375	1525
85°	806	806	760



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.7	4.1
10°-20°	513.2	11.4
20°-30°	749.9	16.7
30°-40°	851.2	19.0
40°-50°	821.7	18.3
50°-60°	677.9	15.1
60°-70°	451.4	10.1
70°-80°	202.0	4.5
80°-90°	36.1	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°	1445.7	32.2
0°-40°	2296.9	51.2
0°-60°	3796.5	84.6
0°-90°	4486.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4486.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1940	1940	1940	1940	1940	
5°	1938	1937	1930	1919	1913	183
15°	1826	1830	1826	1818	1805	515
25°	1622	1634	1642	1630	1616	743
35°	1304	1322	1383	1390	1385	817
45°	1010	1027	1061	1109	1115	779
55°	707	719	754	796	819	631
65°	414	426	451	483	510	411
75°	166	175	188	197	208	182
85°	26	26	26	25	25	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1940.1	1940.1	1940.1	1940.1	1940.1
2.5°	1945.3	1946.0	1941.6	1929.6	1922.2
5°	1937.8	1937.1	1929.6	1919.2	1913.2
7.5°	1916.2	1917.7	1915.5	1900.6	1892.4
10°	1895.4	1896.1	1890.1	1878.2	1868.5
12.5°	1868.5	1867.8	1859.6	1853.6	1838.0
15°	1826.0	1830.5	1826.0	1817.8	1805.2
17.5°	1785.1	1785.1	1788.0	1773.9	1764.2
20°	1738.8	1741.1	1741.1	1729.9	1718.7
22.5°	1685.2	1691.9	1694.1	1682.2	1668.8
25°	1621.8	1634.5	1641.9	1630.0	1615.9
27.5°	1545.1	1564.4	1586.8	1577.9	1562.2
30°	1459.3	1487.7	1524.9	1517.5	1506.3
32.5°	1378.1	1406.4	1457.9	1454.9	1448.9
35°	1304.3	1322.2	1382.6	1390.0	1384.8
37.5°	1234.3	1250.7	1307.3	1324.4	1320.0
40°	1160.5	1178.4	1223.1	1253.6	1255.1
42.5°	1087.4	1104.6	1141.1	1185.1	1185.1
45°	1009.9	1027.1	1060.6	1109.0	1115.0
47.5°	933.9	951.8	984.6	1033.0	1042.7
50°	859.4	875.8	908.6	955.5	970.4
52.5°	781.8	799.7	831.8	875.0	896.6
55°	707.3	719.2	754.3	796.0	819.1
57.5°	629.8	641.0	680.5	716.3	740.1
60°	555.3	569.4	600.0	636.5	664.1
62.5°	483.7	498.6	524.7	556.8	588.1
65°	414.4	425.6	450.9	483.0	510.5
67.5°	347.3	357.0	382.4	404.7	433.8
70°	279.5	292.2	310.8	332.4	351.0
72.5°	225.1	230.3	246.0	261.6	281.0
75°	166.2	175.2	187.8	196.8	207.9
77.5°	119.3	124.5	131.9	139.4	149.8
80°	79.7	82.0	88.7	90.2	98.4
82.5°	48.4	49.9	51.4	52.2	55.2
85°	26.1	26.1	26.1	24.6	24.6
87.5°	14.9	14.9	12.7	10.4	7.5
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)