

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: P557232

Luminaire Tested: **FUSL-12-4-LD4-2LO-35-UNV-80-84-EDD-90**

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: P557232
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-LD4-2LO-35-UNV-80-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

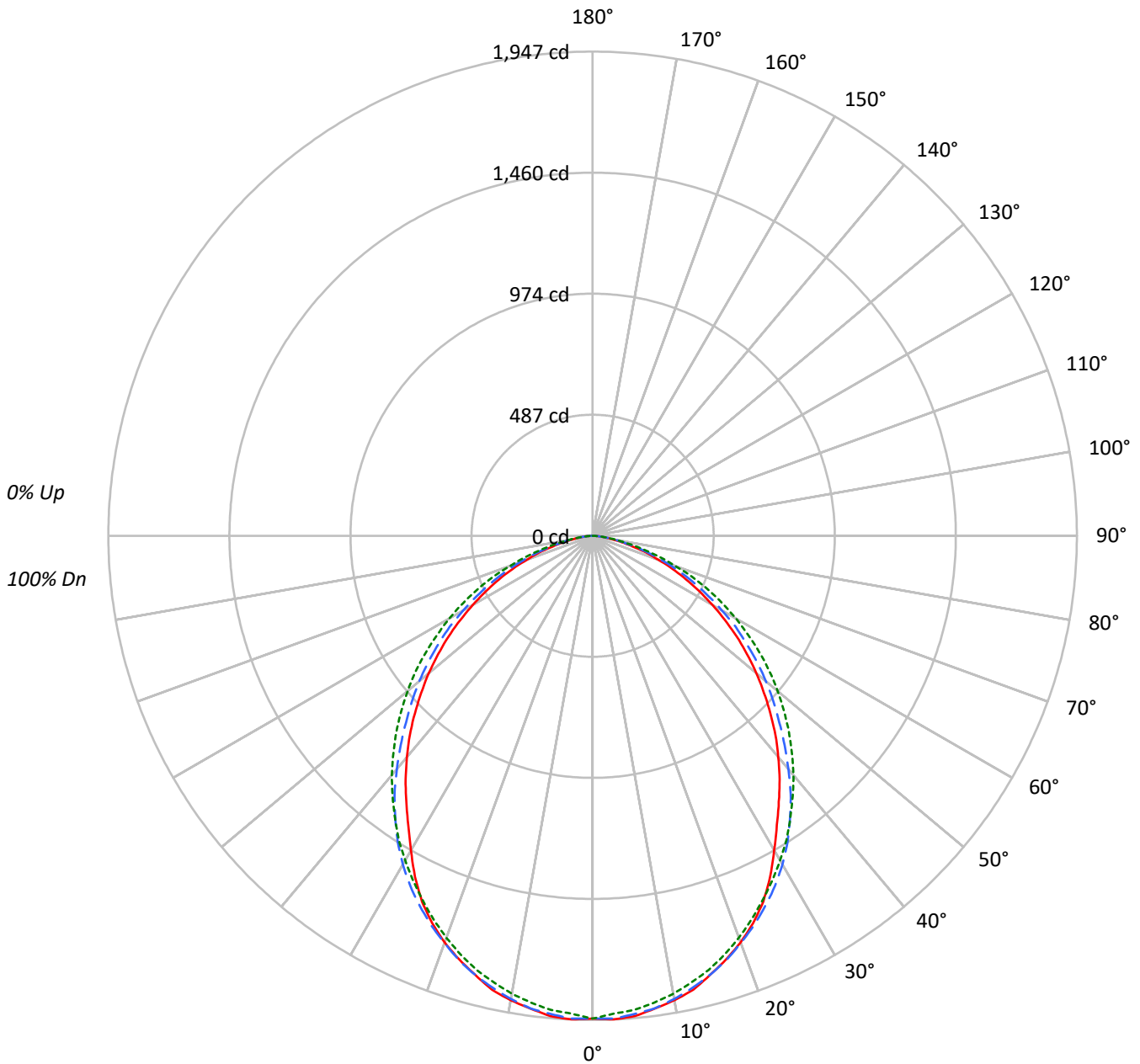
Lumens per Lamp: N/A
Luminaire Lumens: 4489.0 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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°	5224	5224	5224
5°	5238	5216	5172
10°	5182	5168	5109
15°	5091	5091	5032
20°	4983	4989	4925
25°	4819	4878	4801
30°	4538	4742	4684
35°	4288	4545	4552
40°	4079	4299	4412
45°	3846	4039	4246
50°	3600	3806	4065
55°	3321	3541	3846
60°	2990	3231	3576
65°	2641	2873	3253
70°	2201	2447	2764
75°	1729	1954	2164
80°	1237	1376	1525
85°	806	806	760



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.8	4.1
10°-20°	513.5	11.4
20°-30°	750.4	16.7
30°-40°	851.8	19.0
40°-50°	822.3	18.3
50°-60°	678.3	15.1
60°-70°	451.7	10.1
70°-80°	202.1	4.5
80°-90°	36.2	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°	1446.7	32.2
0°-40°	2298.5	51.2
0°-60°	3799.0	84.6
0°-90°	4489.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4489.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1941	1941	1941	1941	1941	
5°	1939	1938	1931	1920	1914	184
15°	1827	1832	1827	1819	1806	515
25°	1623	1636	1643	1631	1617	743
35°	1305	1323	1384	1391	1386	818
45°	1011	1028	1061	1110	1116	780
55°	708	720	755	796	820	632
65°	415	426	451	483	511	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°	1941.4	1941.4	1941.4	1941.4	1941.4
2.5°	1946.6	1947.3	1942.9	1930.9	1923.5
5°	1939.1	1938.4	1930.9	1920.5	1914.5
7.5°	1917.5	1919.0	1916.8	1901.8	1893.6
10°	1896.6	1897.4	1891.4	1879.5	1869.8
12.5°	1869.8	1869.0	1860.8	1854.9	1839.2
15°	1827.3	1831.7	1827.3	1819.1	1806.4
17.5°	1786.2	1786.2	1789.2	1775.1	1765.4
20°	1740.0	1742.2	1742.2	1731.1	1719.9
22.5°	1686.3	1693.0	1695.3	1683.3	1669.9
25°	1622.9	1635.6	1643.0	1631.1	1616.9
27.5°	1546.1	1565.5	1587.9	1578.9	1563.2
30°	1460.3	1488.7	1526.0	1518.5	1507.3
32.5°	1379.0	1407.4	1458.8	1455.8	1449.9
35°	1305.2	1323.1	1383.5	1391.0	1385.7
37.5°	1235.1	1251.5	1308.2	1325.3	1320.9
40°	1161.2	1179.1	1223.9	1254.5	1256.0
42.5°	1088.2	1105.3	1141.9	1185.9	1185.9
45°	1010.6	1027.7	1061.3	1109.8	1115.8
47.5°	934.5	952.4	985.2	1033.7	1043.4
50°	859.9	876.3	909.2	956.1	971.1
52.5°	782.4	800.3	832.3	875.6	897.2
55°	707.8	719.7	754.8	796.5	819.7
57.5°	630.2	641.4	680.9	716.7	740.6
60°	555.6	569.8	600.4	636.9	664.5
62.5°	484.0	499.0	525.1	557.1	588.5
65°	414.7	425.9	451.2	483.3	510.9
67.5°	347.6	357.2	382.6	405.0	434.1
70°	279.7	292.4	311.0	332.6	351.3
72.5°	225.2	230.5	246.1	261.8	281.2
75°	166.3	175.3	187.9	196.9	208.1
77.5°	119.3	124.6	132.0	139.5	149.9
80°	79.8	82.0	88.8	90.2	98.4
82.5°	48.5	50.0	51.5	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)