

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: P557360

Luminaire Tested: **FUSL-12-4-LD4-2LO-50-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: P557360
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-50-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 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

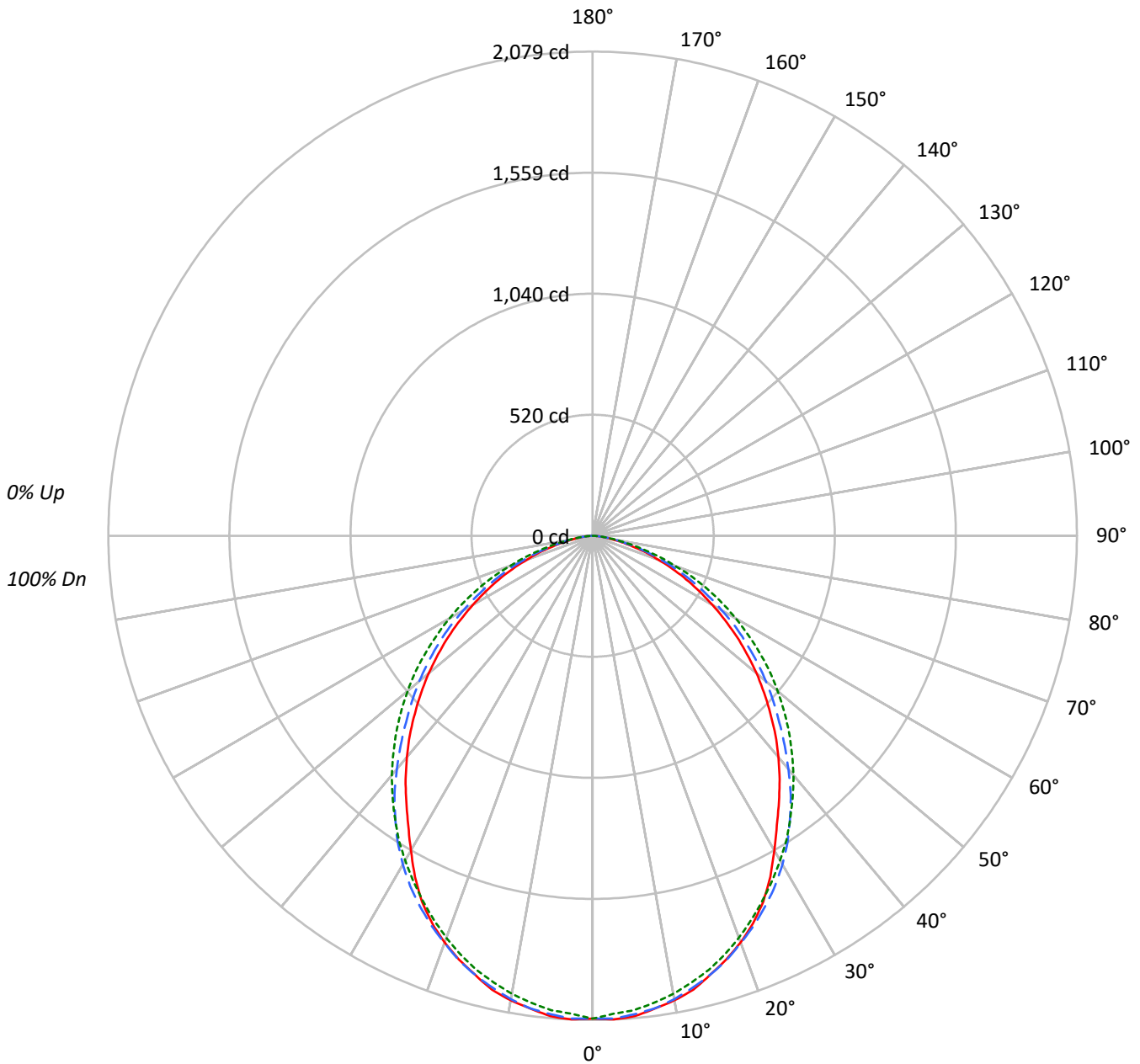
Lumens per Lamp: N/A
Luminaire Lumens: 4794.0 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-80-84-EDD-90

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°	5579	5579	5579
5°	5594	5570	5523
10°	5535	5519	5456
15°	5436	5436	5374
20°	5321	5328	5260
25°	5146	5210	5127
30°	4846	5064	5002
35°	4579	4854	4862
40°	4356	4592	4712
45°	4107	4313	4535
50°	3845	4065	4341
55°	3546	3782	4107
60°	3194	3451	3820
65°	2820	3068	3474
70°	2350	2613	2951
75°	1847	2087	2310
80°	1320	1469	1629
85°	861	861	812



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.2	4.1
10°-20°	548.4	11.4
20°-30°	801.4	16.7
30°-40°	909.7	19.0
40°-50°	878.1	18.3
50°-60°	724.4	15.1
60°-70°	482.4	10.1
70°-80°	215.9	4.5
80°-90°	38.6	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°	1545.0	32.2
0°-40°	2454.6	51.2
0°-60°	4057.1	84.6
0°-90°	4794.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4794.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2073	2073	2073	2073	2073	
5°	2071	2070	2062	2051	2045	196
15°	1951	1956	1951	1943	1929	550
25°	1733	1747	1755	1742	1727	794
35°	1394	1413	1478	1486	1480	873
45°	1079	1098	1133	1185	1192	833
55°	756	769	806	851	875	675
65°	443	455	482	516	546	439
75°	178	187	201	210	222	194
85°	28	28	28	26	26	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2073.3	2073.3	2073.3	2073.3	2073.3
2.5°	2078.9	2079.7	2074.9	2062.1	2054.2
5°	2070.9	2070.1	2062.1	2051.0	2044.6
7.5°	2047.8	2049.4	2047.0	2031.1	2022.3
10°	2025.5	2026.3	2019.9	2007.2	1996.8
12.5°	1996.8	1996.0	1987.3	1980.9	1964.2
15°	1951.4	1956.2	1951.4	1942.7	1929.1
17.5°	1907.6	1907.6	1910.8	1895.7	1885.3
20°	1858.2	1860.6	1860.6	1848.7	1836.7
22.5°	1800.9	1808.0	1810.4	1797.7	1783.4
25°	1733.2	1746.7	1754.7	1741.9	1726.8
27.5°	1651.1	1671.8	1695.7	1686.2	1669.5
30°	1559.5	1589.8	1629.6	1621.7	1609.7
32.5°	1472.7	1503.0	1557.9	1554.8	1548.4
35°	1393.9	1413.0	1477.5	1485.5	1479.9
37.5°	1319.0	1336.5	1397.1	1415.4	1410.6
40°	1240.1	1259.3	1307.1	1339.7	1341.3
42.5°	1162.1	1180.4	1219.4	1266.4	1266.4
45°	1079.3	1097.6	1133.4	1185.2	1191.6
47.5°	998.0	1017.1	1052.2	1103.9	1114.3
50°	918.4	935.9	970.9	1021.1	1037.0
52.5°	835.5	854.6	888.9	935.1	958.2
55°	755.9	768.6	806.1	850.7	875.3
57.5°	673.0	685.0	727.2	765.4	790.9
60°	593.4	608.5	641.2	680.2	709.7
62.5°	516.9	532.9	560.7	595.0	628.4
65°	442.9	454.8	481.9	516.1	545.6
67.5°	371.2	381.5	408.6	432.5	463.6
70°	298.7	312.2	332.1	355.2	375.1
72.5°	240.5	246.1	262.8	279.6	300.3
75°	177.6	187.2	200.7	210.3	222.2
77.5°	127.4	133.0	141.0	148.9	160.1
80°	85.2	87.6	94.8	96.4	105.1
82.5°	51.8	53.4	55.0	55.8	58.9
85°	27.9	27.9	27.9	26.3	26.3
87.5°	15.9	15.9	13.5	11.2	8.0
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)