

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: P557239

Luminaire Tested: **FUSL-12-4-LD4-2LO-35-UNV-80-87-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: P557239
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-80-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

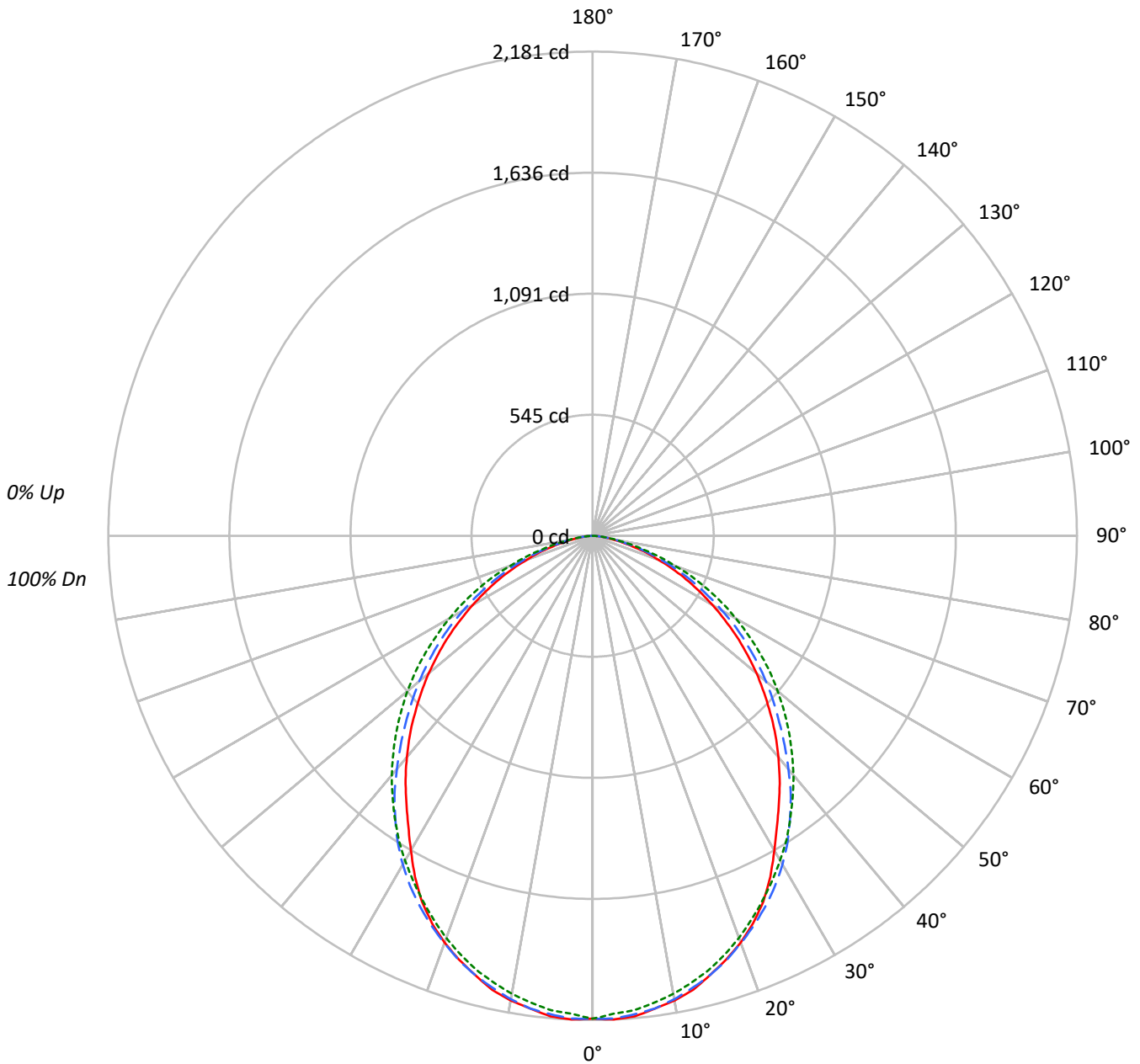
Lumens per Lamp: N/A
Luminaire Lumens: 5030.0 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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°	5854	5854	5854
5°	5869	5844	5795
10°	5807	5791	5725
15°	5704	5704	5639
20°	5583	5590	5519
25°	5399	5467	5380
30°	5084	5313	5248
35°	4804	5093	5101
40°	4571	4817	4944
45°	4309	4526	4758
50°	4034	4265	4555
55°	3721	3968	4309
60°	3351	3620	4007
65°	2959	3219	3645
70°	2466	2742	3097
75°	1938	2190	2425
80°	1385	1540	1709
85°	902	902	852



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.8	4.1
10°-20°	575.4	11.4
20°-30°	840.8	16.7
30°-40°	954.4	19.0
40°-50°	921.4	18.3
50°-60°	760.1	15.1
60°-70°	506.1	10.1
70°-80°	226.5	4.5
80°-90°	40.5	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°	1621.0	32.2
0°-40°	2575.5	51.2
0°-60°	4256.9	84.6
0°-90°	5030.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5030.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2175	2175	2175	2175	2175	
5°	2173	2172	2164	2152	2145	206
15°	2048	2052	2048	2038	2024	577
25°	1818	1833	1841	1828	1812	833
35°	1462	1482	1550	1559	1553	916
45°	1132	1152	1189	1244	1250	874
55°	793	806	846	892	918	708
65°	465	477	506	542	572	461
75°	186	196	211	221	233	204
85°	29	29	29	28	28	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2175.3	2175.3	2175.3	2175.3	2175.3
2.5°	2181.2	2182.0	2177.0	2163.6	2155.3
5°	2172.8	2172.0	2163.6	2151.9	2145.3
7.5°	2148.6	2150.3	2147.8	2131.1	2121.9
10°	2125.2	2126.0	2119.4	2106.0	2095.1
12.5°	2095.1	2094.3	2085.1	2078.4	2060.9
15°	2047.5	2052.5	2047.5	2038.3	2024.1
17.5°	2001.5	2001.5	2004.9	1989.0	1978.1
20°	1949.7	1952.2	1952.2	1939.7	1927.1
22.5°	1889.5	1897.1	1899.6	1886.2	1871.1
25°	1818.5	1832.7	1841.1	1827.7	1811.8
27.5°	1732.4	1754.1	1779.2	1769.2	1751.6
30°	1636.3	1668.1	1709.9	1701.5	1689.0
32.5°	1545.2	1577.0	1634.6	1631.3	1624.6
35°	1462.5	1482.5	1550.2	1558.6	1552.7
37.5°	1383.9	1402.3	1465.8	1485.1	1480.0
40°	1301.2	1321.3	1371.4	1405.7	1407.3
42.5°	1219.3	1238.5	1279.5	1328.8	1328.8
45°	1132.4	1151.6	1189.2	1243.5	1250.2
47.5°	1047.1	1067.2	1104.0	1158.3	1169.2
50°	963.6	982.0	1018.7	1071.4	1088.1
52.5°	876.7	896.7	932.6	981.1	1005.4
55°	793.1	806.5	845.7	892.5	918.4
57.5°	706.2	718.7	763.0	803.1	829.9
60°	622.6	638.5	672.7	713.7	744.6
62.5°	542.4	559.1	588.3	624.3	659.4
65°	464.7	477.2	505.6	541.5	572.5
67.5°	389.4	400.3	428.7	453.8	486.4
70°	313.4	327.6	348.5	372.7	393.6
72.5°	252.4	258.2	275.8	293.3	315.1
75°	186.4	196.4	210.6	220.6	233.2
77.5°	133.7	139.6	147.9	156.3	168.0
80°	89.4	91.9	99.4	101.1	110.3
82.5°	54.3	56.0	57.7	58.5	61.8
85°	29.2	29.2	29.2	27.6	27.6
87.5°	16.7	16.7	14.2	11.7	8.4
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)