

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: P557377

Luminaire Tested: **FUSL-12-4-LD4-2LO-50-UNV-81-84-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: P557377
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-81-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

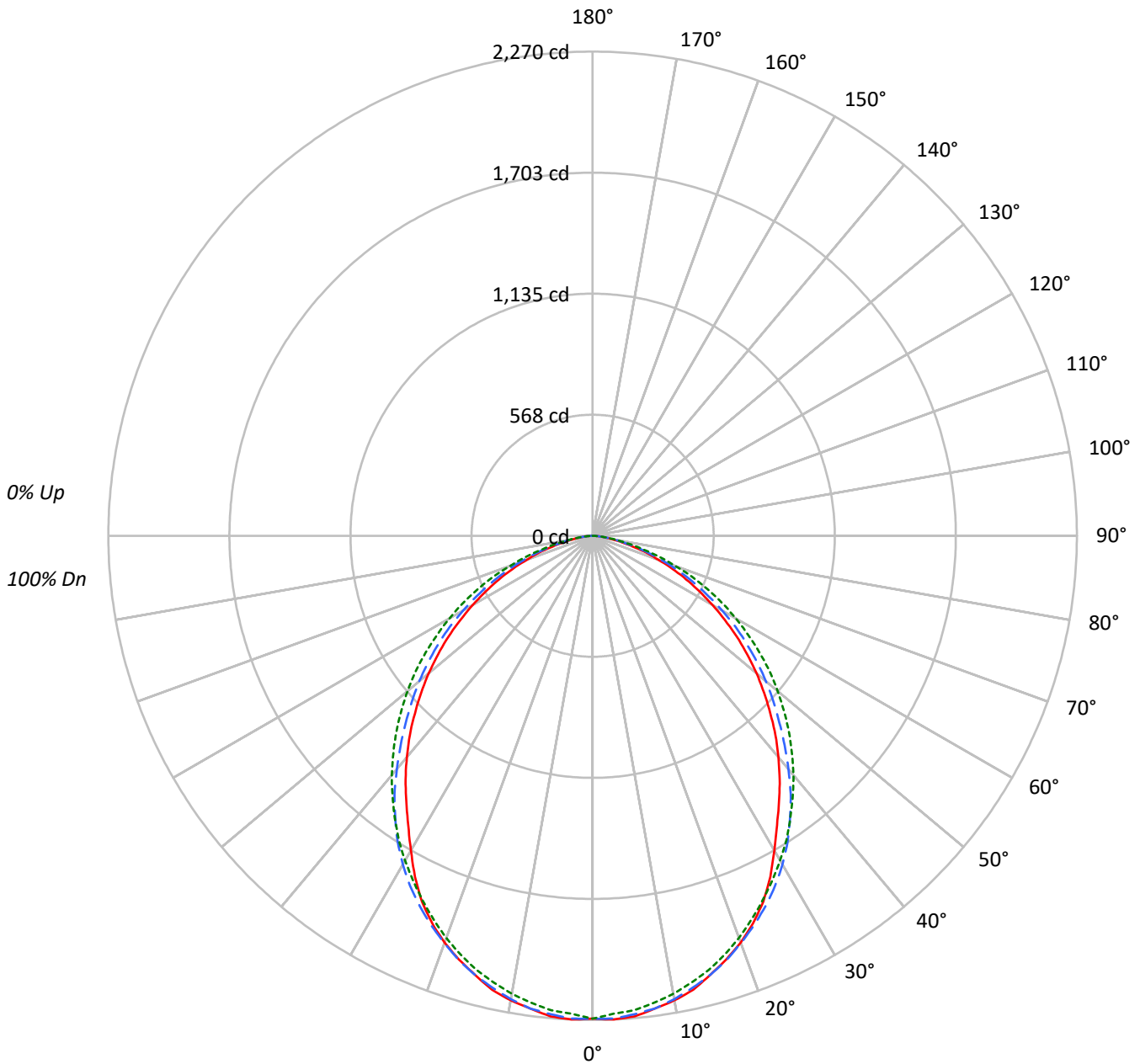
Lumens per Lamp: N/A
Luminaire Lumens: 5235.0 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	6092	6092	6092
5°	6109	6083	6031
10°	6044	6027	5958
15°	5936	5936	5869
20°	5811	5818	5744
25°	5619	5689	5599
30°	5292	5529	5462
35°	5000	5300	5309
40°	4757	5014	5145
45°	4485	4710	4952
50°	4198	4438	4741
55°	3872	4130	4485
60°	3488	3768	4171
65°	3079	3351	3794
70°	2567	2854	3223
75°	2017	2279	2523
80°	1443	1604	1779
85°	939	939	886



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.2	4.1
10°-20°	598.8	11.4
20°-30°	875.1	16.7
30°-40°	993.3	19.0
40°-50°	958.9	18.3
50°-60°	791.0	15.1
60°-70°	526.8	10.1
70°-80°	235.7	4.5
80°-90°	42.2	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°	1687.1	32.2
0°-40°	2680.4	51.2
0°-60°	4430.3	84.6
0°-90°	5235.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5235.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2264	2264	2264	2264	2264	
5°	2261	2260	2252	2240	2233	214
15°	2131	2136	2131	2121	2107	601
25°	1893	1907	1916	1902	1886	867
35°	1522	1543	1613	1622	1616	954
45°	1178	1198	1238	1294	1301	909
55°	825	839	880	929	956	737
65°	484	497	526	564	596	480
75°	194	204	219	230	243	212
85°	30	30	30	29	29	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2264.0	2264.0	2264.0	2264.0	2264.0
2.5°	2270.1	2271.0	2265.7	2251.8	2243.1
5°	2261.4	2260.5	2251.8	2239.6	2232.7
7.5°	2236.2	2237.9	2235.3	2217.9	2208.3
10°	2211.8	2212.7	2205.7	2191.8	2180.5
12.5°	2180.5	2179.6	2170.1	2163.1	2144.8
15°	2130.9	2136.1	2130.9	2121.4	2106.6
17.5°	2083.1	2083.1	2086.6	2070.0	2058.7
20°	2029.2	2031.8	2031.8	2018.7	2005.7
22.5°	1966.5	1974.4	1977.0	1963.1	1947.4
25°	1892.6	1907.4	1916.1	1902.2	1885.7
27.5°	1803.0	1825.6	1851.7	1841.3	1823.0
30°	1703.0	1736.1	1779.5	1770.8	1757.8
32.5°	1608.2	1641.2	1701.3	1697.8	1690.8
35°	1522.1	1543.0	1613.4	1622.1	1616.0
37.5°	1440.3	1459.5	1525.6	1545.6	1540.4
40°	1354.2	1375.1	1427.3	1462.9	1464.7
42.5°	1269.0	1289.0	1331.6	1382.9	1382.9
45°	1178.5	1198.5	1237.7	1294.2	1301.2
47.5°	1089.8	1110.7	1149.0	1205.5	1216.8
50°	1002.8	1022.0	1060.2	1115.0	1132.4
52.5°	912.4	933.3	970.7	1021.1	1046.3
55°	825.4	839.3	880.2	928.9	955.9
57.5°	735.0	748.0	794.1	835.8	863.7
60°	648.0	664.5	700.2	742.8	775.0
62.5°	564.5	581.9	612.3	649.7	686.2
65°	483.6	496.6	526.2	563.6	595.8
67.5°	405.3	416.6	446.2	472.3	506.2
70°	326.2	340.9	362.7	387.9	409.7
72.5°	262.7	268.8	287.0	305.3	327.9
75°	194.0	204.4	219.2	229.6	242.7
77.5°	139.2	145.3	153.9	162.6	174.8
80°	93.1	95.7	103.5	105.2	114.8
82.5°	56.5	58.3	60.0	60.9	64.4
85°	30.4	30.4	30.4	28.7	28.7
87.5°	17.4	17.4	14.8	12.2	8.7
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)