

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: P557403

Luminaire Tested: **FUSL-12-4-LD4-2LO-50-UNV-82-94-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: P557403
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-82-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

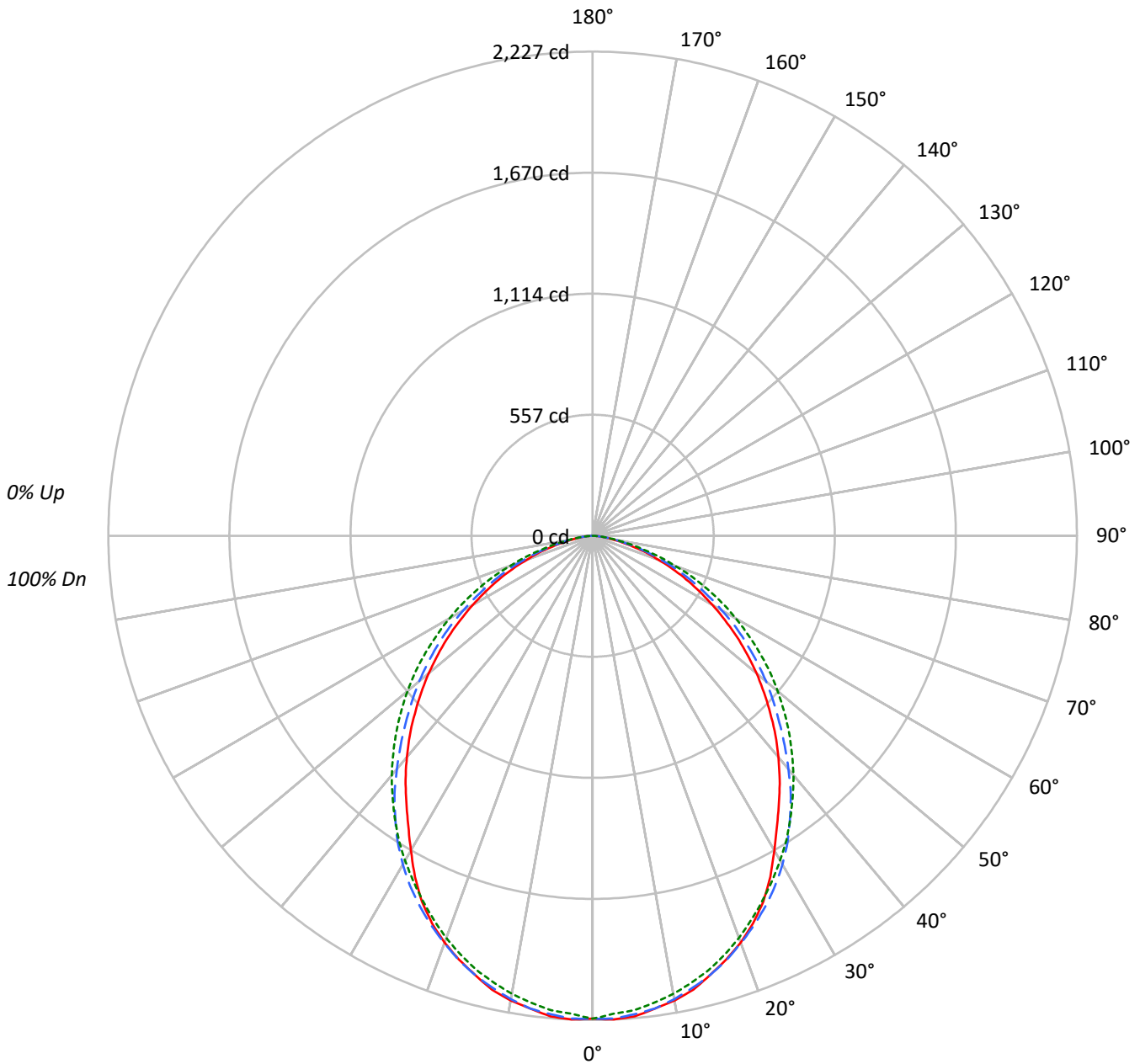
Lumens per Lamp: N/A
Luminaire Lumens: 5136.0 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	5977	5977	5977
5°	5993	5968	5917
10°	5930	5913	5846
15°	5824	5824	5758
20°	5701	5708	5635
25°	5513	5582	5493
30°	5192	5425	5359
35°	4906	5200	5208
40°	4667	4919	5048
45°	4400	4621	4858
50°	4119	4355	4651
55°	3799	4052	4400
60°	3421	3697	4092
65°	3021	3287	3722
70°	2518	2799	3162
75°	1979	2235	2476
80°	1415	1573	1745
85°	923	923	871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.1	4.1
10°-20°	587.5	11.4
20°-30°	858.5	16.7
30°-40°	974.5	19.0
40°-50°	940.8	18.3
50°-60°	776.1	15.1
60°-70°	516.8	10.1
70°-80°	231.3	4.5
80°-90°	41.4	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°	1655.2	32.2
0°-40°	2629.7	51.2
0°-60°	4346.6	84.6
0°-90°	5136.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5136.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2221	2221	2221	2221	2221	
5°	2219	2218	2209	2197	2190	210
15°	2091	2096	2091	2081	2067	589
25°	1857	1871	1880	1866	1850	850
35°	1493	1514	1583	1591	1586	936
45°	1156	1176	1214	1270	1277	892
55°	810	824	864	911	938	723
65°	474	487	516	553	584	470
75°	190	200	215	225	238	208
85°	30	30	30	28	28	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2221.2	2221.2	2221.2	2221.2	2221.2
2.5°	2227.2	2228.0	2222.9	2209.2	2200.7
5°	2218.6	2217.8	2209.2	2197.3	2190.5
7.5°	2193.9	2195.6	2193.0	2176.0	2166.6
10°	2170.0	2170.8	2164.0	2150.4	2139.3
12.5°	2139.3	2138.4	2129.0	2122.2	2104.3
15°	2090.6	2095.7	2090.6	2081.2	2066.7
17.5°	2043.7	2043.7	2047.1	2030.9	2019.8
20°	1990.8	1993.4	1993.4	1980.6	1967.8
22.5°	1929.4	1937.0	1939.6	1925.9	1910.6
25°	1856.8	1871.3	1879.9	1866.2	1850.0
27.5°	1768.9	1791.1	1816.7	1806.5	1788.6
30°	1670.8	1703.2	1745.9	1737.4	1724.6
32.5°	1577.8	1610.2	1669.1	1665.7	1658.9
35°	1493.3	1513.8	1582.9	1591.4	1585.5
37.5°	1413.1	1431.9	1496.7	1516.3	1511.2
40°	1328.6	1349.1	1400.3	1435.3	1437.0
42.5°	1245.0	1264.6	1306.4	1356.8	1356.8
45°	1156.2	1175.9	1214.3	1269.7	1276.6
47.5°	1069.2	1089.7	1127.2	1182.7	1193.8
50°	983.9	1002.6	1040.2	1094.0	1111.0
52.5°	895.1	915.6	952.3	1001.8	1026.5
55°	809.8	823.5	863.6	911.3	937.8
57.5°	721.1	733.9	779.1	820.0	847.3
60°	635.7	651.9	686.9	728.7	760.3
62.5°	553.8	570.9	600.7	637.4	673.3
65°	474.4	487.2	516.3	553.0	584.5
67.5°	397.6	408.7	437.8	463.4	496.6
70°	320.0	334.5	355.8	380.6	401.9
72.5°	257.7	263.7	281.6	299.5	321.7
75°	190.3	200.5	215.0	225.3	238.1
77.5°	136.5	142.5	151.0	159.6	171.5
80°	91.3	93.9	101.5	103.3	112.6
82.5°	55.5	57.2	58.9	59.7	63.1
85°	29.9	29.9	29.9	28.2	28.2
87.5°	17.1	17.1	14.5	11.9	8.5
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)