

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: P557526

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-82-87-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: P557526
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-LD4-2STD-35-UNV-82-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

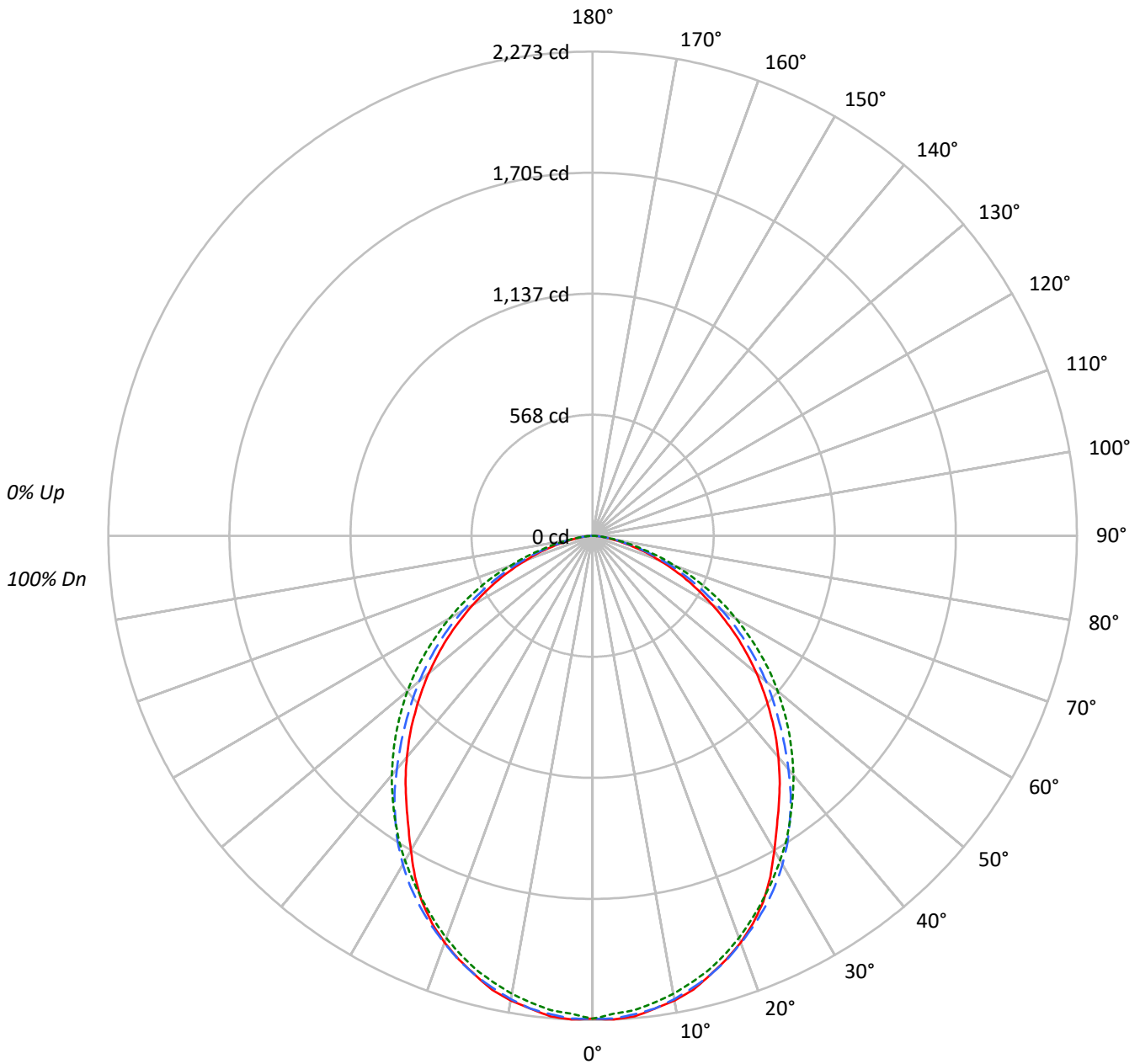
Lumens per Lamp: N/A
Luminaire Lumens: 5242.0 lumens
Efficiency: N/A
Efficacy: 78.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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

TEST NUMBER: P557526

CATALOG NUMBER: FUSL-12-4-LD4-2STD-35-UNV-82-87-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°	6100	6100	6100
5°	6117	6091	6039
10°	6052	6035	5966
15°	5945	5945	5877
20°	5819	5826	5751
25°	5627	5697	5606
30°	5299	5537	5469
35°	5007	5307	5316
40°	4763	5021	5152
45°	4491	4716	4958
50°	4204	4445	4747
55°	3878	4135	4491
60°	3492	3773	4176
65°	3083	3355	3799
70°	2570	2858	3227
75°	2019	2282	2527
80°	1444	1605	1782
85°	942	942	886



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.4	4.1
10°-20°	599.6	11.4
20°-30°	876.3	16.7
30°-40°	994.6	19.0
40°-50°	960.2	18.3
50°-60°	792.1	15.1
60°-70°	527.5	10.1
70°-80°	236.0	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°	1689.3	32.2
0°-40°	2684.0	51.2
0°-60°	4436.3	84.6
0°-90°	5242.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5242.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2267	2267	2267	2267	2267	
5°	2264	2264	2255	2243	2236	214
15°	2134	2139	2134	2124	2109	602
25°	1895	1910	1919	1905	1888	868
35°	1524	1545	1616	1624	1618	955
45°	1180	1200	1239	1296	1303	911
55°	826	840	881	930	957	738
65°	484	497	527	564	597	480
75°	194	205	220	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°	2267.0	2267.0	2267.0	2267.0	2267.0
2.5°	2273.1	2274.0	2268.8	2254.8	2246.1
5°	2264.4	2263.5	2254.8	2242.6	2235.7
7.5°	2239.2	2240.9	2238.3	2220.9	2211.3
10°	2214.8	2215.6	2208.7	2194.7	2183.4
12.5°	2183.4	2182.5	2173.0	2166.0	2147.7
15°	2133.8	2139.0	2133.8	2124.2	2109.4
17.5°	2085.9	2085.9	2089.4	2072.8	2061.5
20°	2031.9	2034.5	2034.5	2021.4	2008.4
22.5°	1969.2	1977.0	1979.6	1965.7	1950.0
25°	1895.1	1909.9	1918.7	1904.7	1888.2
27.5°	1805.4	1828.1	1854.2	1843.8	1825.5
30°	1705.3	1738.4	1781.9	1773.2	1760.1
32.5°	1610.3	1643.4	1703.5	1700.1	1693.1
35°	1524.1	1545.0	1615.6	1624.3	1618.2
37.5°	1442.3	1461.4	1527.6	1547.6	1542.4
40°	1356.0	1376.9	1429.2	1464.9	1466.6
42.5°	1270.7	1290.7	1333.4	1384.8	1384.8
45°	1180.1	1200.1	1239.3	1295.9	1302.9
47.5°	1091.3	1112.2	1150.5	1207.1	1218.4
50°	1004.2	1023.3	1061.7	1116.5	1134.0
52.5°	913.6	934.5	972.0	1022.5	1047.7
55°	826.5	840.4	881.4	930.2	957.2
57.5°	735.9	749.0	795.2	837.0	864.8
60°	648.8	665.4	701.1	743.8	776.0
62.5°	565.2	582.7	613.1	650.6	687.2
65°	484.2	497.3	526.9	564.4	596.6
67.5°	405.9	417.2	446.8	472.9	506.9
70°	326.6	341.4	363.2	388.4	410.2
72.5°	263.0	269.1	287.4	305.7	328.3
75°	194.2	204.7	219.5	229.9	243.0
77.5°	139.3	145.4	154.2	162.9	175.1
80°	93.2	95.8	103.6	105.4	115.0
82.5°	56.6	58.4	60.1	61.0	64.4
85°	30.5	30.5	30.5	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)