

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: P557309

Luminaire Tested: **FUSL-12-4-LD4-2LO-40-UNV-80-96-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: P557309
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-40-UNV-80-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

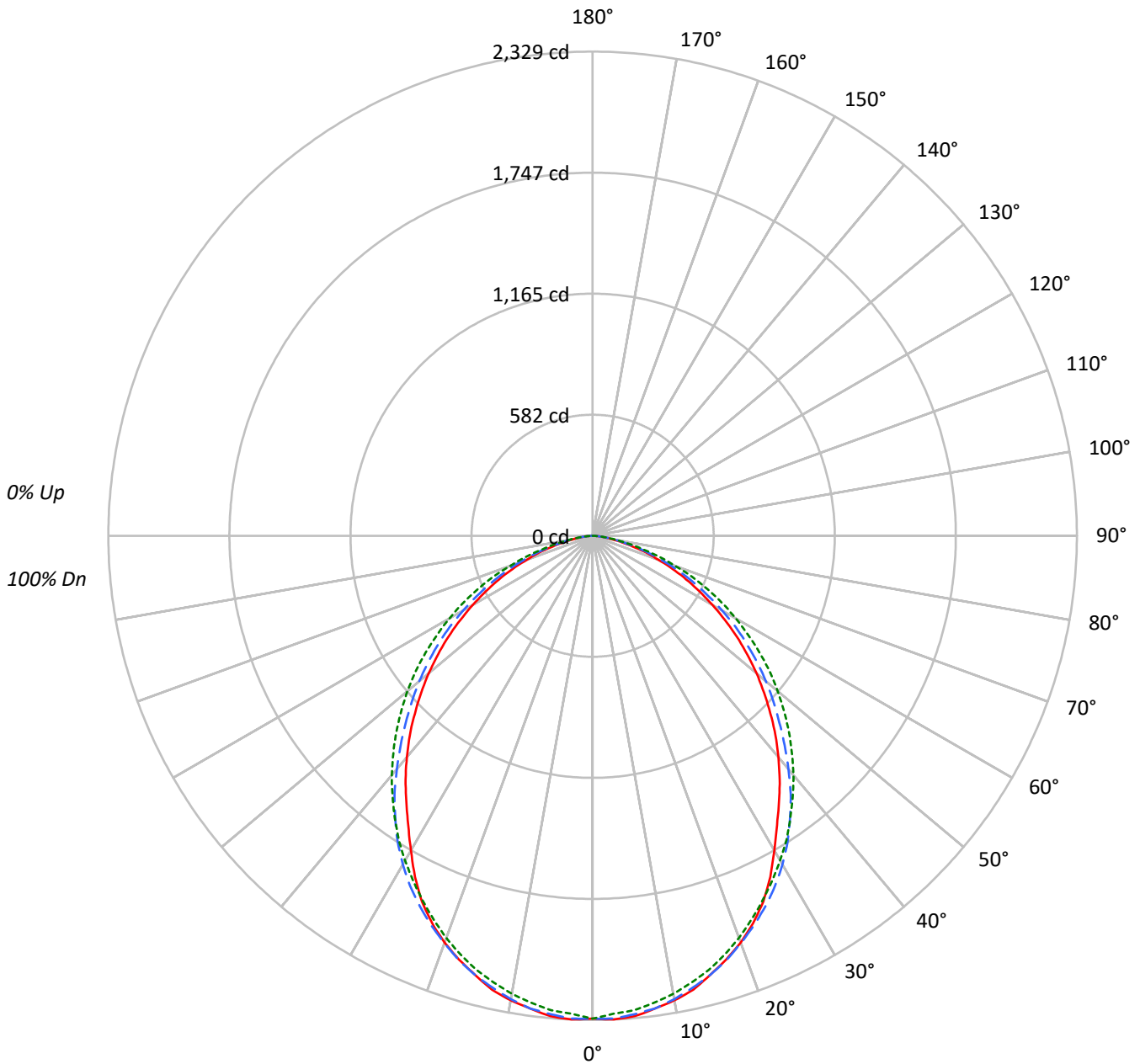
Lumens per Lamp: N/A
Luminaire Lumens: 5371.0 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	6251	6251	6251
5°	6267	6241	6188
10°	6201	6184	6113
15°	6091	6091	6021
20°	5962	5970	5893
25°	5766	5837	5744
30°	5429	5673	5604
35°	5130	5438	5447
40°	4881	5144	5279
45°	4602	4832	5081
50°	4307	4554	4864
55°	3973	4237	4601
60°	3578	3866	4279
65°	3160	3438	3892
70°	2633	2928	3307
75°	2069	2338	2589
80°	1480	1646	1826
85°	963	963	908



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.7	4.1
10°-20°	614.4	11.4
20°-30°	897.8	16.7
30°-40°	1019.1	19.0
40°-50°	983.8	18.3
50°-60°	811.6	15.1
60°-70°	540.5	10.1
70°-80°	241.8	4.5
80°-90°	43.3	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°	1730.9	32.2
0°-40°	2750.1	51.2
0°-60°	4545.5	84.6
0°-90°	5371.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5371.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2323	2323	2323	2323	2323	
5°	2320	2319	2310	2298	2291	220
15°	2186	2192	2186	2176	2161	616
25°	1942	1957	1966	1952	1935	889
35°	1562	1583	1655	1664	1658	978
45°	1209	1230	1270	1328	1335	933
55°	847	861	903	953	981	756
65°	496	510	540	578	611	492
75°	199	210	225	236	249	218
85°	31	31	31	29	29	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2322.8	2322.8	2322.8	2322.8	2322.8
2.5°	2329.1	2330.0	2324.6	2310.3	2301.4
5°	2320.1	2319.2	2310.3	2297.8	2290.7
7.5°	2294.3	2296.0	2293.4	2275.5	2265.7
10°	2269.3	2270.2	2263.0	2248.8	2237.2
12.5°	2237.2	2236.3	2226.4	2219.3	2200.6
15°	2186.3	2191.6	2186.3	2176.5	2161.3
17.5°	2137.2	2137.2	2140.8	2123.8	2112.2
20°	2081.9	2084.6	2084.6	2071.2	2057.8
22.5°	2017.6	2025.7	2028.3	2014.1	1998.0
25°	1941.8	1957.0	1965.9	1951.6	1934.6
27.5°	1849.9	1873.1	1899.8	1889.1	1870.4
30°	1747.2	1781.2	1825.8	1816.8	1803.5
32.5°	1650.0	1683.9	1745.5	1741.9	1734.8
35°	1561.6	1583.1	1655.3	1664.3	1658.0
37.5°	1477.8	1497.4	1565.2	1585.7	1580.4
40°	1389.4	1410.8	1464.4	1501.0	1502.7
42.5°	1302.0	1322.5	1366.2	1418.9	1418.9
45°	1209.2	1229.7	1269.8	1327.8	1335.0
47.5°	1118.1	1139.5	1178.8	1236.8	1248.4
50°	1028.9	1048.5	1087.8	1144.0	1161.9
52.5°	936.1	957.5	995.9	1047.6	1073.5
55°	846.9	861.1	903.1	953.0	980.7
57.5°	754.0	767.4	814.7	857.6	886.1
60°	664.8	681.8	718.4	762.1	795.1
62.5°	579.1	597.0	628.2	666.6	704.1
65°	496.2	509.5	539.9	578.3	611.3
67.5°	415.8	427.4	457.8	484.6	519.4
70°	334.6	349.8	372.1	398.0	420.3
72.5°	269.5	275.7	294.5	313.2	336.4
75°	199.0	209.7	224.9	235.6	249.0
77.5°	142.8	149.0	157.9	166.9	179.4
80°	95.5	98.2	106.2	108.0	117.8
82.5°	58.0	59.8	61.6	62.5	66.0
85°	31.2	31.2	31.2	29.4	29.4
87.5°	17.8	17.8	15.2	12.5	8.9
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)