

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: P557653

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-82-86-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: P557653
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-50-UNV-82-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

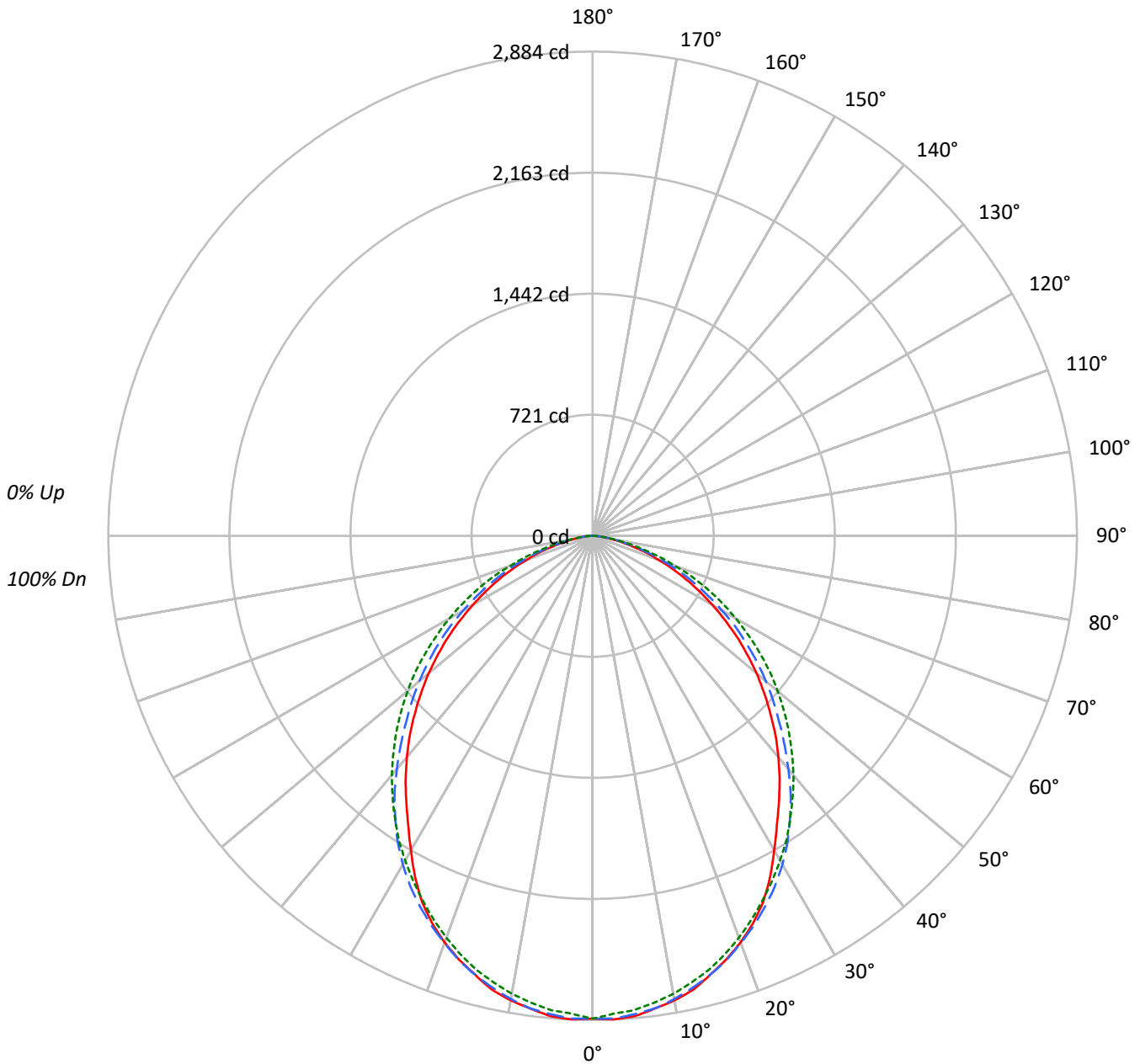
Lumens per Lamp: N/A
Luminaire Lumens: 6650.0 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	7739	7739	7739
5°	7760	7727	7661
10°	7677	7656	7569
15°	7541	7541	7455
20°	7381	7391	7296
25°	7138	7227	7112
30°	6722	7024	6938
35°	6352	6733	6744
40°	6043	6369	6536
45°	5697	5983	6290
50°	5333	5638	6022
55°	4919	5246	5697
60°	4430	4787	5298
65°	3911	4256	4819
70°	3260	3625	4094
75°	2562	2895	3205
80°	1832	2038	2259
85°	1195	1195	1127



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.8	4.1
10°-20°	760.7	11.4
20°-30°	1111.6	16.7
30°-40°	1261.8	19.0
40°-50°	1218.1	18.3
50°-60°	1004.8	15.1
60°-70°	669.1	10.1
70°-80°	299.4	4.5
80°-90°	53.6	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°	2143.1	32.2
0°-40°	3404.9	51.2
0°-60°	5627.8	84.6
0°-90°	6650.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6650.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2876	2876	2876	2876	2876	
5°	2873	2872	2860	2845	2836	272
15°	2707	2714	2707	2695	2676	763
25°	2404	2423	2434	2416	2395	1101
35°	1934	1960	2050	2061	2053	1211
45°	1497	1522	1572	1644	1653	1155
55°	1048	1066	1118	1180	1214	936
65°	614	631	668	716	757	609
75°	246	260	278	292	308	269
85°	39	39	39	36	36	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2876.0	2876.0	2876.0	2876.0	2876.0
2.5°	2883.7	2884.8	2878.2	2860.5	2849.4
5°	2872.6	2871.5	2860.5	2845.0	2836.2
7.5°	2840.6	2842.8	2839.5	2817.4	2805.2
10°	2809.7	2810.8	2801.9	2784.2	2769.9
12.5°	2769.9	2768.8	2756.6	2747.8	2724.6
15°	2706.9	2713.5	2706.9	2694.8	2676.0
17.5°	2646.1	2646.1	2650.6	2629.6	2615.2
20°	2577.6	2581.0	2581.0	2564.4	2547.8
22.5°	2498.1	2508.0	2511.3	2493.7	2473.8
25°	2404.2	2423.0	2434.0	2416.3	2395.3
27.5°	2290.4	2319.1	2352.2	2339.0	2315.8
30°	2163.3	2205.3	2260.5	2249.5	2232.9
32.5°	2042.9	2084.9	2161.1	2156.7	2147.8
35°	1933.5	1960.0	2049.5	2060.6	2052.8
37.5°	1829.6	1854.0	1937.9	1963.3	1956.7
40°	1720.3	1746.8	1813.1	1858.4	1860.6
42.5°	1612.0	1637.4	1691.5	1756.7	1756.7
45°	1497.1	1522.5	1572.2	1644.0	1652.9
47.5°	1384.4	1410.9	1459.5	1531.3	1545.7
50°	1273.9	1298.2	1346.8	1416.4	1438.5
52.5°	1159.0	1185.5	1233.0	1297.1	1329.1
55°	1048.5	1066.2	1118.1	1180.0	1214.2
57.5°	933.6	950.2	1008.7	1061.8	1097.1
60°	823.1	844.1	889.4	943.6	984.4
62.5°	717.1	739.2	777.8	825.3	871.7
65°	614.3	630.9	668.4	715.9	756.8
67.5°	514.9	529.2	566.8	599.9	643.0
70°	414.3	433.1	460.7	492.8	520.4
72.5°	333.7	341.4	364.6	387.8	416.5
75°	246.4	259.6	278.4	291.7	308.3
77.5°	176.8	184.5	195.6	206.6	222.1
80°	118.2	121.5	131.5	133.7	145.8
82.5°	71.8	74.0	76.2	77.3	81.8
85°	38.7	38.7	38.7	36.5	36.5
87.5°	22.1	22.1	18.8	15.5	11.0
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)