

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: P558107

Luminaire Tested: **FUSL-12-4-LD4-3LO-40-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: P558107
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-LD4-3LO-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

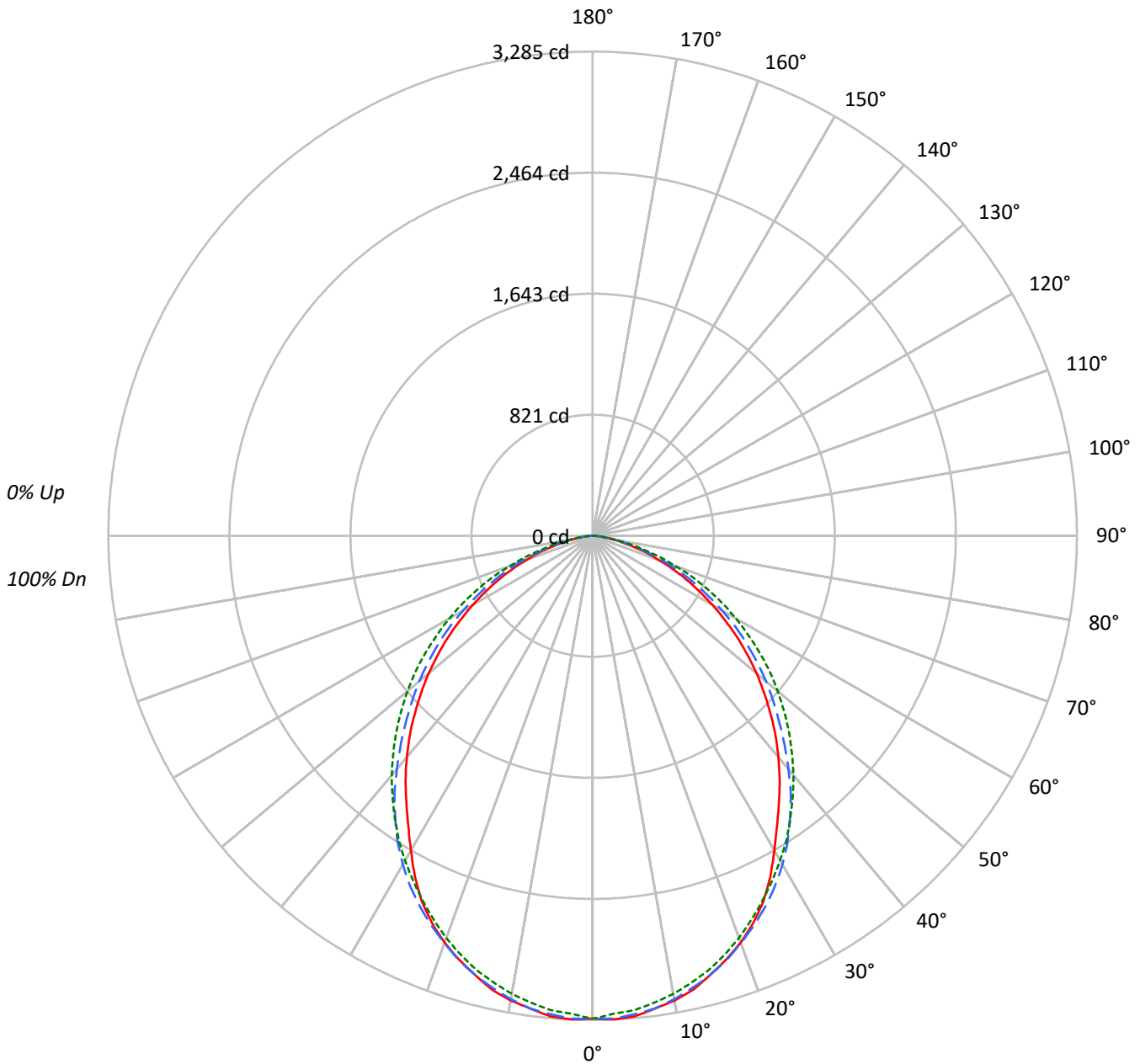
Lumens per Lamp: N/A
Luminaire Lumens: 7576.0 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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°	8817	8817	8817
5°	8840	8803	8728
10°	8746	8722	8623
15°	8591	8591	8493
20°	8409	8420	8312
25°	8133	8233	8103
30°	7658	8002	7905
35°	7236	7670	7683
40°	6884	7256	7446
45°	6491	6816	7166
50°	6076	6424	6861
55°	5604	5976	6490
60°	5047	5454	6036
65°	4456	4849	5490
70°	3714	4130	4665
75°	2918	3298	3651
80°	2087	2321	2574
85°	1362	1362	1281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.5	4.1
10°-20°	866.6	11.4
20°-30°	1266.4	16.7
30°-40°	1437.5	19.0
40°-50°	1387.7	18.3
50°-60°	1144.8	15.1
60°-70°	762.3	10.1
70°-80°	341.1	4.5
80°-90°	61.0	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°	2441.5	32.2
0°-40°	3879.0	51.2
0°-60°	6411.5	84.6
0°-90°	7576.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7576.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3276	3276	3276	3276	3276	
5°	3273	3271	3259	3241	3231	310
15°	3084	3091	3084	3070	3049	869
25°	2739	2760	2773	2753	2729	1254
35°	2203	2233	2335	2348	2339	1380
45°	1706	1734	1791	1873	1883	1316
55°	1194	1215	1274	1344	1383	1066
65°	700	719	762	816	862	694
75°	281	296	317	332	351	307
85°	44	44	44	42	42	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3276.4	3276.4	3276.4	3276.4	3276.4
2.5°	3285.2	3286.5	3278.9	3258.8	3246.2
5°	3272.6	3271.4	3258.8	3241.2	3231.1
7.5°	3236.1	3238.7	3234.9	3209.7	3195.9
10°	3200.9	3202.2	3192.1	3172.0	3155.6
12.5°	3155.6	3154.3	3140.5	3130.4	3104.0
15°	3083.8	3091.4	3083.8	3070.0	3048.6
17.5°	3014.6	3014.6	3019.6	2995.7	2979.4
20°	2936.6	2940.3	2940.3	2921.5	2902.6
22.5°	2845.9	2857.3	2861.0	2840.9	2818.3
25°	2739.0	2760.4	2772.9	2752.8	2728.9
27.5°	2609.3	2642.0	2679.8	2664.7	2638.3
30°	2464.6	2512.4	2575.3	2562.7	2543.9
32.5°	2327.4	2375.2	2462.0	2457.0	2446.9
35°	2202.7	2233.0	2334.9	2347.5	2338.7
37.5°	2084.4	2112.1	2207.8	2236.7	2229.2
40°	1959.8	1990.0	2065.5	2117.2	2119.7
42.5°	1836.5	1865.4	1927.1	2001.4	2001.4
45°	1705.6	1734.5	1791.1	1873.0	1883.0
47.5°	1577.2	1607.4	1662.8	1744.6	1760.9
50°	1451.3	1479.0	1534.4	1613.7	1638.8
52.5°	1320.4	1350.6	1404.7	1477.7	1514.2
55°	1194.5	1214.7	1273.8	1344.3	1383.3
57.5°	1063.6	1082.5	1149.2	1209.6	1249.9
60°	937.7	961.7	1013.3	1074.9	1121.5
62.5°	816.9	842.1	886.1	940.3	993.1
65°	699.8	718.7	761.5	815.6	862.2
67.5°	586.6	602.9	645.7	683.5	732.6
70°	472.0	493.4	524.9	561.4	592.9
72.5°	380.1	388.9	415.4	441.8	474.5
75°	280.7	295.8	317.2	332.3	351.2
77.5°	201.4	210.2	222.8	235.4	253.0
80°	134.7	138.5	149.8	152.3	166.1
82.5°	81.8	84.3	86.9	88.1	93.1
85°	44.1	44.1	44.1	41.5	41.5
87.5°	25.2	25.2	21.4	17.6	12.6
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)