

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: P556655

Luminaire Tested: **FUSL-12-4-LD4-1LO-50-UNV-93-97-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: P556655
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-LD4-1LO-50-UNV-93-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

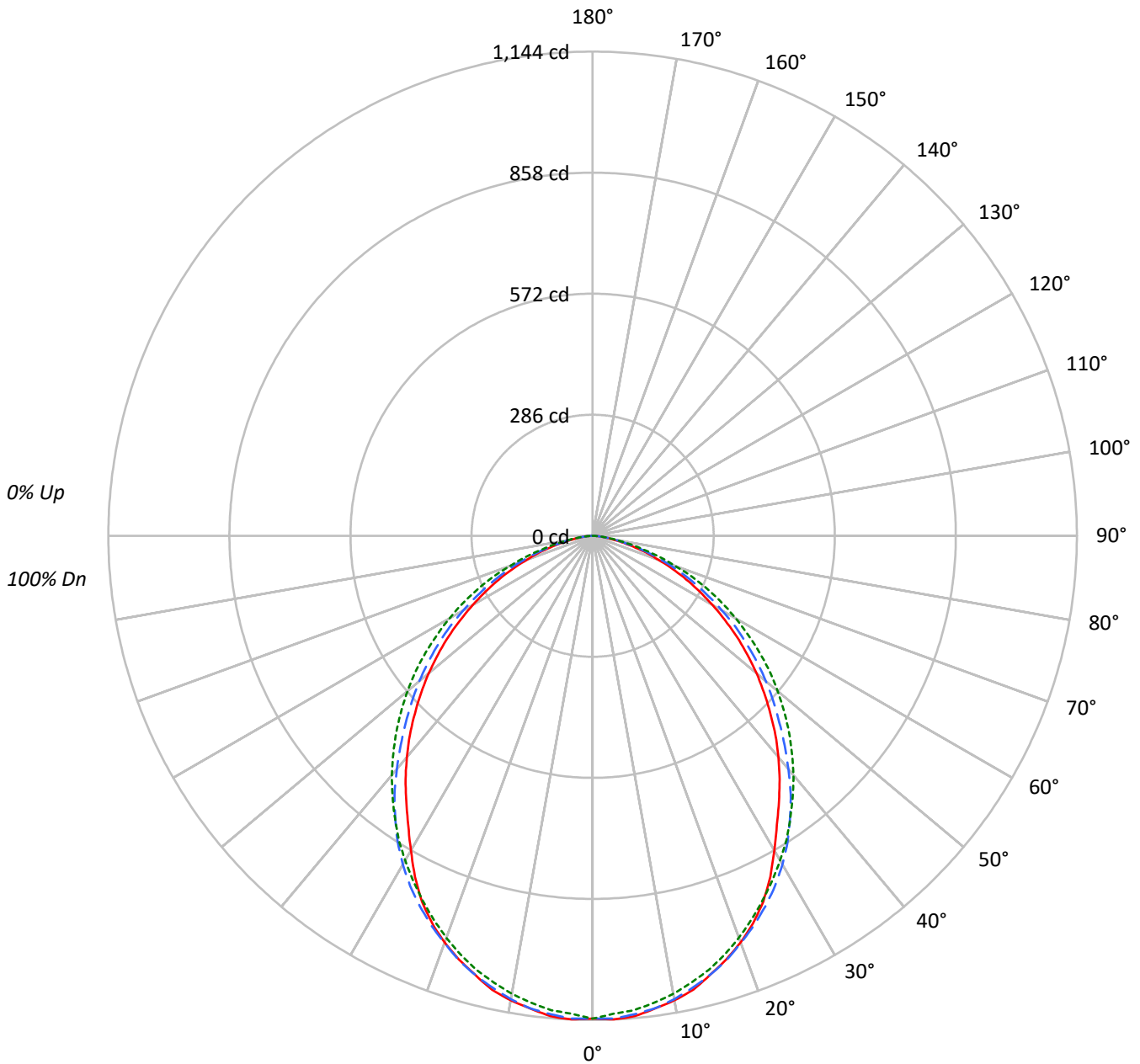
Lumens per Lamp: N/A
Luminaire Lumens: 2638.0 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	3070	3070	3070
5°	3078	3065	3039
10°	3046	3037	3002
15°	2992	2992	2957
20°	2928	2932	2894
25°	2832	2867	2821
30°	2667	2786	2752
35°	2520	2671	2675
40°	2397	2526	2593
45°	2260	2374	2495
50°	2115	2237	2389
55°	1951	2081	2260
60°	1757	1899	2102
65°	1552	1689	1911
70°	1293	1438	1624
75°	1016	1148	1272
80°	727	809	897
85°	472	472	448



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.4	4.1
10°-20°	301.8	11.4
20°-30°	441.0	16.7
30°-40°	500.5	19.0
40°-50°	483.2	18.3
50°-60°	398.6	15.1
60°-70°	265.4	10.1
70°-80°	118.8	4.5
80°-90°	21.3	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°	850.1	32.2
0°-40°	1350.7	51.2
0°-60°	2232.5	84.6
0°-90°	2638.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2638.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1141	1141	1141	1141	1141	
5°	1140	1139	1135	1129	1125	108
15°	1074	1076	1074	1069	1062	303
25°	954	961	966	958	950	437
35°	767	778	813	817	814	481
45°	594	604	624	652	656	458
55°	416	423	444	468	482	371
65°	244	250	265	284	300	242
75°	98	103	110	116	122	107
85°	15	15	15	14	14	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1140.9	1140.9	1140.9	1140.9	1140.9
2.5°	1143.9	1144.4	1141.7	1134.7	1130.3
5°	1139.6	1139.1	1134.7	1128.6	1125.1
7.5°	1126.8	1127.7	1126.4	1117.6	1112.8
10°	1114.6	1115.0	1111.5	1104.5	1098.8
12.5°	1098.8	1098.4	1093.5	1090.0	1080.8
15°	1073.8	1076.4	1073.8	1069.0	1061.5
17.5°	1049.7	1049.7	1051.5	1043.1	1037.4
20°	1022.5	1023.8	1023.8	1017.3	1010.7
22.5°	991.0	994.9	996.2	989.2	981.3
25°	953.7	961.2	965.6	958.5	950.2
27.5°	908.6	920.0	933.1	927.9	918.7
30°	858.2	874.8	896.7	892.4	885.8
32.5°	810.4	827.1	857.3	855.5	852.0
35°	767.0	777.5	813.0	817.4	814.3
37.5°	725.8	735.4	768.8	778.8	776.2
40°	682.4	692.9	719.2	737.2	738.1
42.5°	639.5	649.5	671.0	696.9	696.9
45°	593.9	604.0	623.7	652.2	655.7
47.5°	549.2	559.7	579.0	607.5	613.2
50°	505.3	515.0	534.3	561.9	570.7
52.5°	459.8	470.3	489.1	514.6	527.3
55°	415.9	422.9	443.5	468.1	481.7
57.5°	370.4	376.9	400.2	421.2	435.2
60°	326.5	334.9	352.8	374.3	390.5
62.5°	284.4	293.2	308.6	327.4	345.8
65°	243.7	250.3	265.2	284.0	300.2
67.5°	204.2	209.9	224.8	238.0	255.1
70°	164.4	171.8	182.8	195.5	206.4
72.5°	132.4	135.4	144.6	153.8	165.2
75°	97.7	103.0	110.4	115.7	122.3
77.5°	70.1	73.2	77.6	82.0	88.1
80°	46.9	48.2	52.2	53.0	57.9
82.5°	28.5	29.4	30.2	30.7	32.4
85°	15.3	15.3	15.3	14.5	14.5
87.5°	8.8	8.8	7.5	6.1	4.4
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)