

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: P557996

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-93-96-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: P557996
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-30-UNV-93-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

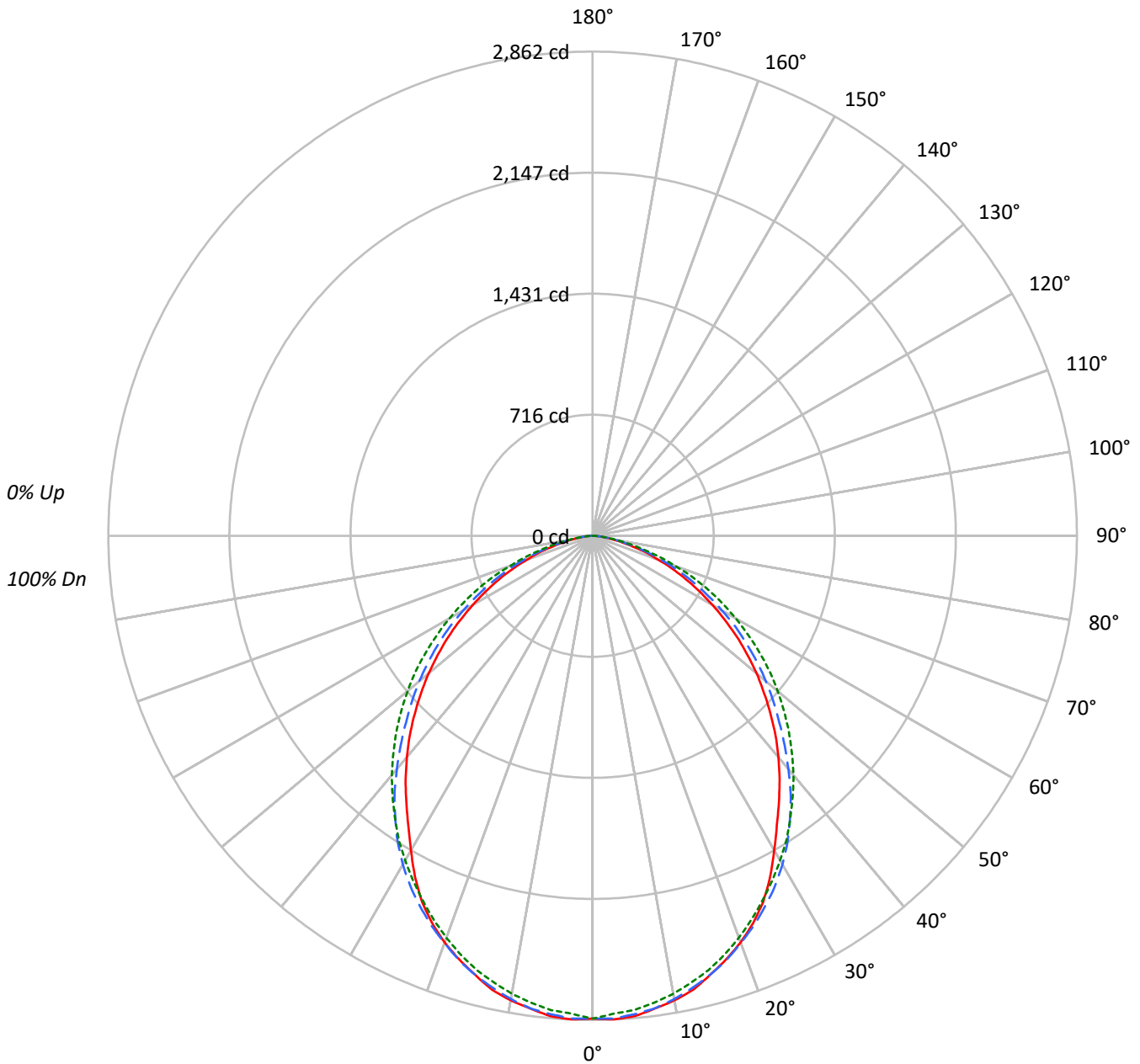
Lumens per Lamp: N/A
Luminaire Lumens: 6599.0 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	7680	7680	7680
5°	7700	7668	7602
10°	7618	7597	7511
15°	7483	7483	7398
20°	7325	7334	7240
25°	7084	7171	7058
30°	6670	6970	6885
35°	6303	6681	6692
40°	5997	6320	6486
45°	5654	5938	6242
50°	5292	5595	5976
55°	4882	5205	5653
60°	4396	4750	5258
65°	3882	4223	4782
70°	3234	3597	4063
75°	2542	2873	3180
80°	1818	2022	2242
85°	1186	1186	1118



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.7	4.1
10°-20°	754.9	11.4
20°-30°	1103.1	16.7
30°-40°	1252.1	19.0
40°-50°	1208.8	18.3
50°-60°	997.1	15.1
60°-70°	664.0	10.1
70°-80°	297.1	4.5
80°-90°	53.2	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°	2126.7	32.2
0°-40°	3378.8	51.2
0°-60°	5584.7	84.6
0°-90°	6599.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6599.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2854	2854	2854	2854	2854	
5°	2851	2850	2838	2823	2814	270
15°	2686	2693	2686	2674	2656	757
25°	2386	2404	2415	2398	2377	1093
35°	1919	1945	2034	2045	2037	1202
45°	1486	1511	1560	1631	1640	1146
55°	1040	1058	1110	1171	1205	929
65°	610	626	663	710	751	604
75°	244	258	276	289	306	267
85°	38	38	38	36	36	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2853.9	2853.9	2853.9	2853.9	2853.9
2.5°	2861.6	2862.7	2856.1	2838.5	2827.6
5°	2850.6	2849.5	2838.5	2823.2	2814.4
7.5°	2818.8	2821.0	2817.7	2795.8	2783.7
10°	2788.1	2789.2	2780.4	2762.9	2748.6
12.5°	2748.6	2747.5	2735.5	2726.7	2703.7
15°	2686.1	2692.7	2686.1	2674.1	2655.5
17.5°	2625.8	2625.8	2630.2	2609.4	2595.1
20°	2557.9	2561.2	2561.2	2544.7	2528.3
22.5°	2478.9	2488.8	2492.1	2474.5	2454.8
25°	2385.7	2404.4	2415.3	2397.8	2377.0
27.5°	2272.8	2301.3	2334.2	2321.1	2298.0
30°	2146.7	2188.4	2243.2	2232.2	2215.8
32.5°	2027.2	2068.9	2144.5	2140.1	2131.4
35°	1918.7	1945.0	2033.8	2044.8	2037.1
37.5°	1815.6	1839.7	1923.1	1948.3	1941.7
40°	1707.1	1733.4	1799.2	1844.1	1846.3
42.5°	1599.6	1624.8	1678.6	1743.3	1743.3
45°	1485.6	1510.8	1560.2	1631.4	1640.2
47.5°	1373.8	1400.1	1448.3	1519.6	1533.8
50°	1264.1	1288.3	1336.5	1405.6	1427.5
52.5°	1150.1	1176.4	1223.6	1287.2	1319.0
55°	1040.5	1058.0	1109.5	1170.9	1204.9
57.5°	926.4	942.9	1001.0	1053.6	1088.7
60°	816.8	837.6	882.6	936.3	976.9
62.5°	711.6	733.5	771.9	819.0	865.0
65°	609.6	626.0	663.3	710.5	751.0
67.5°	510.9	525.2	562.4	595.3	638.1
70°	411.1	429.8	457.2	489.0	516.4
72.5°	331.1	338.8	361.8	384.8	413.3
75°	244.5	257.7	276.3	289.4	305.9
77.5°	175.4	183.1	194.1	205.0	220.4
80°	117.3	120.6	130.5	132.7	144.7
82.5°	71.3	73.5	75.7	76.7	81.1
85°	38.4	38.4	38.4	36.2	36.2
87.5°	21.9	21.9	18.6	15.3	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)