

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: P557964

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-81-96-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: P557964
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-81-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

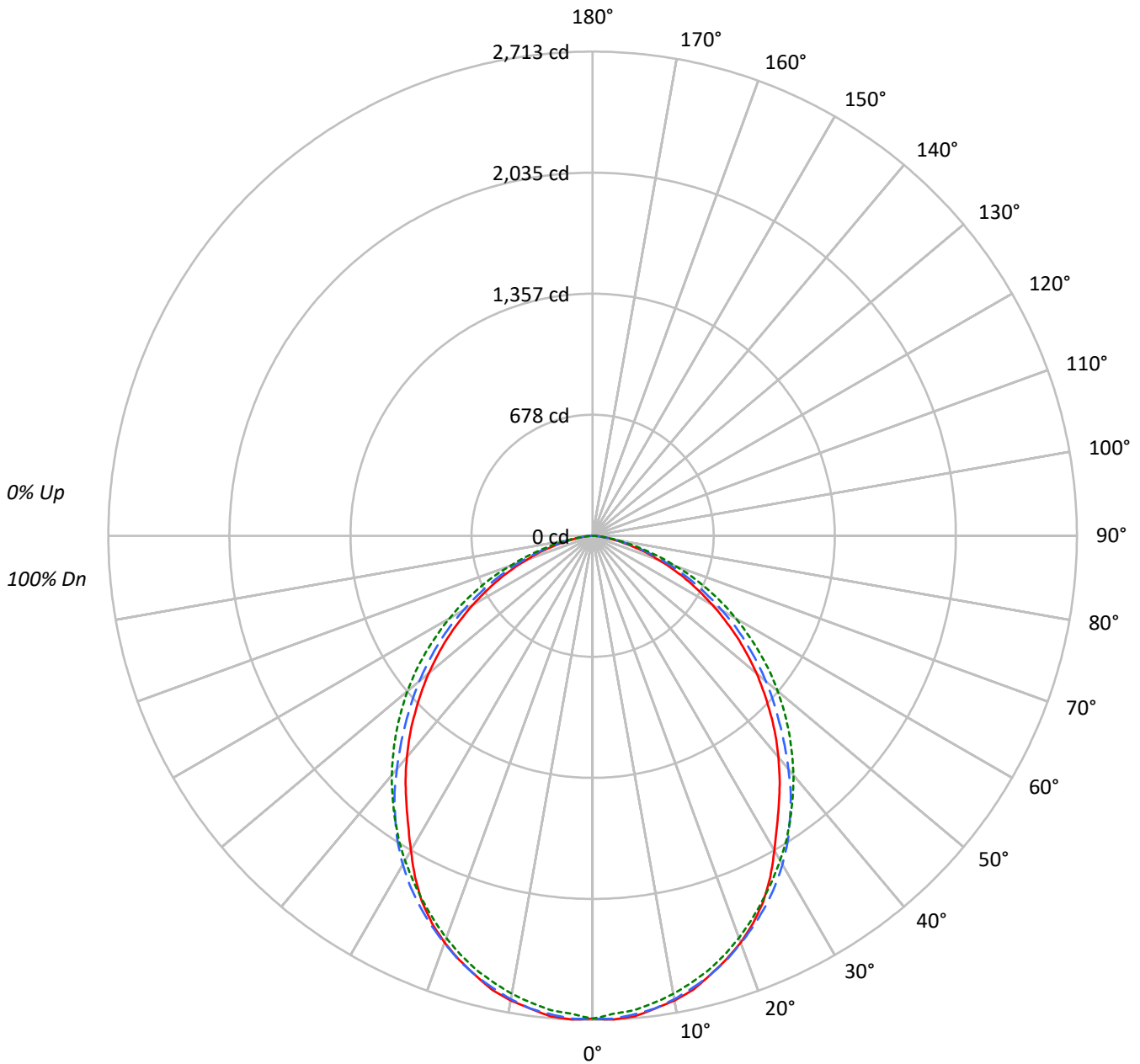
Lumens per Lamp: N/A
Luminaire Lumens: 6257.0 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	7282	7282	7282
5°	7301	7270	7209
10°	7224	7204	7121
15°	7095	7095	7014
20°	6945	6954	6865
25°	6717	6800	6692
30°	6325	6609	6528
35°	5976	6335	6345
40°	5686	5993	6150
45°	5361	5630	5918
50°	5018	5305	5666
55°	4628	4936	5360
60°	4168	4504	4985
65°	3680	4004	4534
70°	3067	3411	3852
75°	2410	2724	3015
80°	1723	1917	2126
85°	1124	1124	1059



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.8	4.1
10°-20°	715.7	11.4
20°-30°	1045.9	16.7
30°-40°	1187.3	19.0
40°-50°	1146.1	18.3
50°-60°	945.5	15.1
60°-70°	629.6	10.1
70°-80°	281.7	4.5
80°-90°	50.4	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°	2016.5	32.2
0°-40°	3203.7	51.2
0°-60°	5295.3	84.6
0°-90°	6257.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6257.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2706	2706	2706	2706	2706	
5°	2703	2702	2691	2677	2669	256
15°	2547	2553	2547	2536	2518	718
25°	2262	2280	2290	2274	2254	1036
35°	1819	1844	1928	1939	1932	1140
45°	1409	1432	1479	1547	1555	1087
55°	986	1003	1052	1110	1142	881
65°	578	594	629	674	712	573
75°	232	244	262	274	290	253
85°	36	36	36	34	34	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2706.0	2706.0	2706.0	2706.0	2706.0
2.5°	2713.3	2714.3	2708.1	2691.4	2681.0
5°	2702.9	2701.8	2691.4	2676.9	2668.6
7.5°	2672.7	2674.8	2671.7	2650.9	2639.5
10°	2643.6	2644.7	2636.3	2619.7	2606.2
12.5°	2606.2	2605.2	2593.7	2585.4	2563.6
15°	2546.9	2553.2	2546.9	2535.5	2517.8
17.5°	2489.8	2489.8	2493.9	2474.2	2460.7
20°	2425.3	2428.4	2428.4	2412.8	2397.2
22.5°	2350.5	2359.8	2362.9	2346.3	2327.6
25°	2262.1	2279.8	2290.2	2273.5	2253.8
27.5°	2155.0	2182.0	2213.2	2200.8	2178.9
30°	2035.5	2075.0	2127.0	2116.6	2101.0
32.5°	1922.2	1961.7	2033.4	2029.2	2020.9
35°	1819.2	1844.2	1928.4	1938.8	1931.5
37.5°	1721.5	1744.4	1823.4	1847.3	1841.1
40°	1618.6	1643.6	1705.9	1748.6	1750.6
42.5°	1516.7	1540.6	1591.6	1652.9	1652.9
45°	1408.6	1432.5	1479.3	1546.9	1555.2
47.5°	1302.6	1327.5	1373.3	1440.8	1454.4
50°	1198.6	1221.5	1267.2	1332.7	1353.5
52.5°	1090.5	1115.5	1160.2	1220.5	1250.6
55°	986.5	1003.2	1052.0	1110.3	1142.5
57.5°	878.4	894.0	949.1	999.0	1032.3
60°	774.5	794.2	836.9	887.8	926.3
62.5°	674.7	695.5	731.9	776.6	820.2
65°	578.0	593.6	628.9	673.6	712.1
67.5°	484.4	498.0	533.3	564.5	605.0
70°	389.8	407.5	433.5	463.6	489.6
72.5°	313.9	321.2	343.1	364.9	391.9
75°	231.8	244.3	262.0	274.4	290.0
77.5°	166.3	173.6	184.0	194.4	209.0
80°	111.2	114.4	123.7	125.8	137.2
82.5°	67.6	69.7	71.7	72.8	76.9
85°	36.4	36.4	36.4	34.3	34.3
87.5°	20.8	20.8	17.7	14.6	10.4
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)