

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: P557938

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-80-85-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: P557938
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-80-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

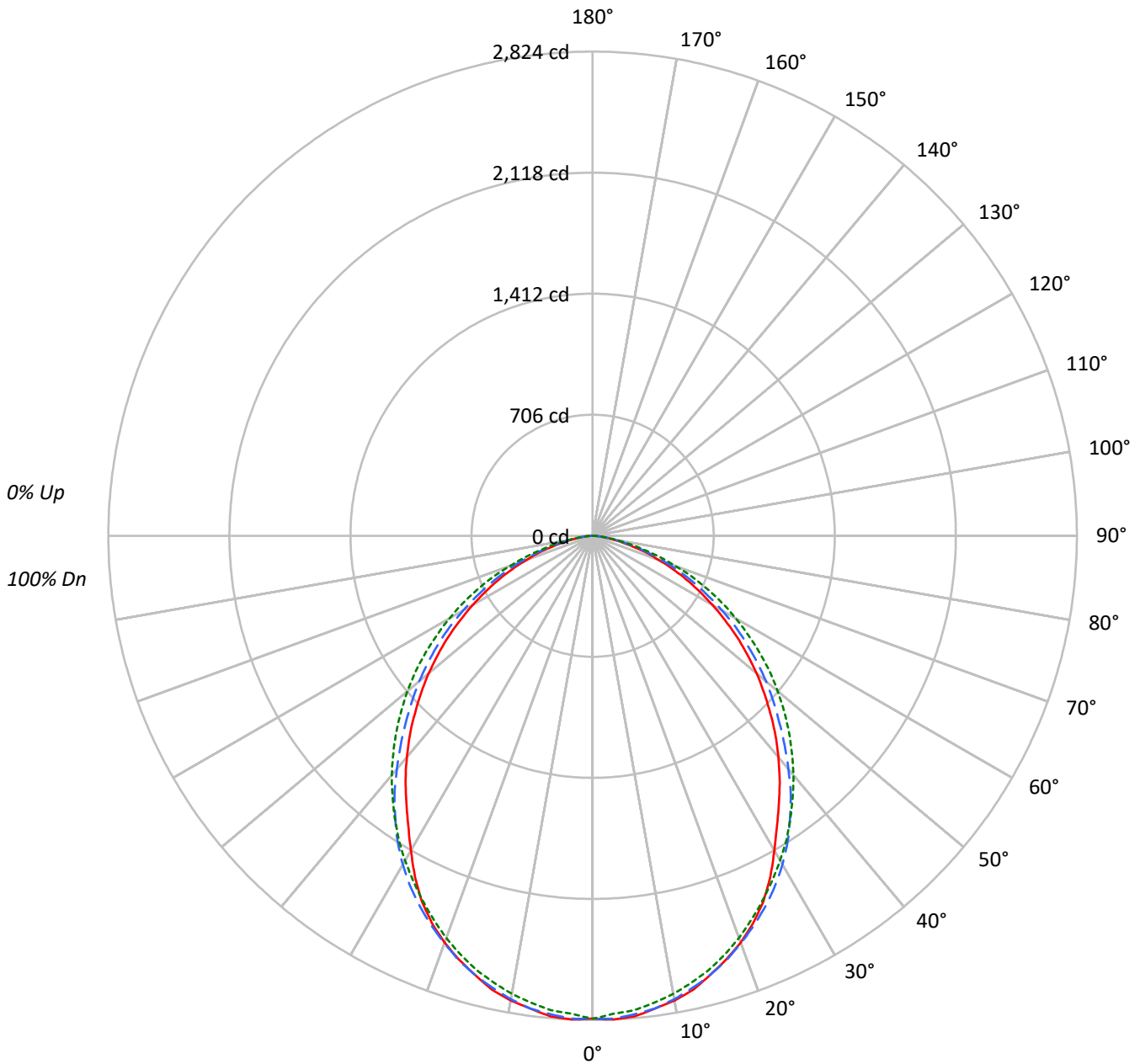
Lumens per Lamp: N/A
Luminaire Lumens: 6513.0 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7580	7580	7580
5°	7600	7568	7503
10°	7519	7499	7413
15°	7386	7386	7301
20°	7229	7239	7146
25°	6991	7078	6966
30°	6584	6880	6795
35°	6221	6594	6605
40°	5918	6238	6401
45°	5580	5860	6161
50°	5223	5522	5898
55°	4818	5138	5579
60°	4339	4688	5189
65°	3831	4169	4720
70°	3193	3550	4010
75°	2509	2835	3139
80°	1795	1996	2213
85°	1170	1170	1102



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.2	4.1
10°-20°	745.0	11.4
20°-30°	1088.7	16.7
30°-40°	1235.8	19.0
40°-50°	1193.0	18.3
50°-60°	984.1	15.1
60°-70°	655.4	10.1
70°-80°	293.3	4.5
80°-90°	52.5	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°	2099.0	32.2
0°-40°	3334.8	51.2
0°-60°	5511.9	84.6
0°-90°	6513.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6513.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2817	2817	2817	2817	2817	
5°	2814	2812	2802	2786	2778	266
15°	2651	2658	2651	2639	2621	747
25°	2355	2373	2384	2367	2346	1078
35°	1894	1920	2007	2018	2010	1187
45°	1466	1491	1540	1610	1619	1131
55°	1027	1044	1095	1156	1189	917
65°	602	618	655	701	741	597
75°	241	254	273	286	302	264
85°	38	38	38	36	36	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2816.7	2816.7	2816.7	2816.7	2816.7
2.5°	2824.3	2825.4	2818.9	2801.6	2790.7
5°	2813.5	2812.4	2801.6	2786.4	2777.7
7.5°	2782.1	2784.2	2781.0	2759.4	2747.4
10°	2751.8	2752.9	2744.2	2726.9	2712.8
12.5°	2712.8	2711.7	2699.8	2691.2	2668.5
15°	2651.1	2657.6	2651.1	2639.2	2620.8
17.5°	2591.6	2591.6	2596.0	2575.4	2561.3
20°	2524.5	2527.8	2527.8	2511.6	2495.3
22.5°	2446.6	2456.4	2459.6	2442.3	2422.8
25°	2354.6	2373.0	2383.9	2366.6	2346.0
27.5°	2243.2	2271.3	2303.8	2290.8	2268.1
30°	2118.8	2159.9	2214.0	2203.2	2186.9
32.5°	2000.8	2041.9	2116.6	2112.3	2103.6
35°	1893.7	1919.6	2007.3	2018.1	2010.5
37.5°	1792.0	1815.8	1898.0	1922.9	1916.4
40°	1684.8	1710.8	1775.7	1820.1	1822.3
42.5°	1578.8	1603.7	1656.7	1720.5	1720.5
45°	1466.2	1491.1	1539.8	1610.2	1618.8
47.5°	1355.9	1381.8	1429.5	1499.8	1513.9
50°	1247.7	1271.5	1319.1	1387.3	1408.9
52.5°	1135.1	1161.1	1207.6	1270.4	1301.8
55°	1026.9	1044.2	1095.1	1155.7	1189.2
57.5°	914.4	930.6	988.0	1039.9	1074.5
60°	806.2	826.7	871.1	924.1	964.2
62.5°	702.3	723.9	761.8	808.3	853.8
65°	601.6	617.9	654.7	701.2	741.2
67.5°	504.3	518.3	555.1	587.6	629.8
70°	405.8	424.2	451.2	482.6	509.7
72.5°	326.8	334.4	357.1	379.8	408.0
75°	241.3	254.3	272.7	285.7	301.9
77.5°	173.1	180.7	191.5	202.4	217.5
80°	115.8	119.0	128.8	130.9	142.8
82.5°	70.3	72.5	74.7	75.7	80.1
85°	37.9	37.9	37.9	35.7	35.7
87.5°	21.6	21.6	18.4	15.1	10.8
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)