

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: P557969

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-82-84-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: P557969
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-82-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

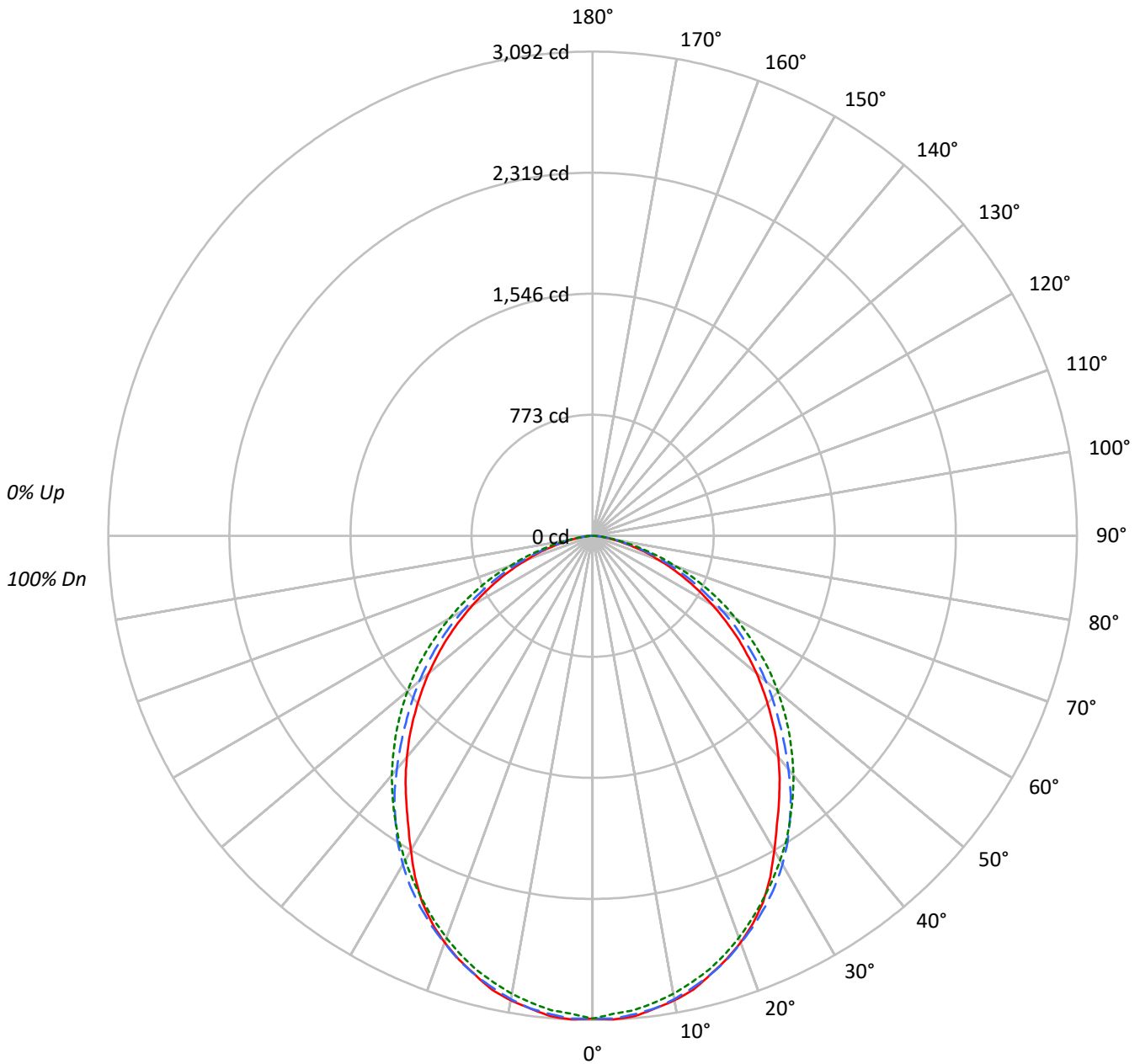
Lumens per Lamp: N/A
Luminaire Lumens: 7130.0 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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									
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°	8298	8298	8298
5°	8320	8285	8214
10°	8232	8209	8115
15°	8086	8086	7993
20°	7914	7924	7823
25°	7654	7749	7625
30°	7207	7531	7439
35°	6810	7219	7230
40°	6479	6829	7008
45°	6108	6415	6744
50°	5718	6045	6457
55°	5274	5624	6108
60°	4750	5132	5681
65°	4194	4564	5167
70°	3495	3887	4390
75°	2747	3104	3436
80°	1965	2185	2424
85°	1281	1281	1207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.3	4.1
10°-20°	815.6	11.4
20°-30°	1191.9	16.7
30°-40°	1352.9	19.0
40°-50°	1306.0	18.3
50°-60°	1077.4	15.1
60°-70°	717.4	10.1
70°-80°	321.0	4.5
80°-90°	57.4	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°	2297.8	32.2
0°-40°	3650.7	51.2
0°-60°	6034.1	84.6
0°-90°	7130.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7130.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3084	3084	3084	3084	3084	
5°	3080	3079	3067	3050	3041	292
15°	2902	2909	2902	2889	2869	818
25°	2578	2598	2610	2591	2568	1180
35°	2073	2102	2198	2209	2201	1299
45°	1605	1632	1686	1763	1772	1238
55°	1124	1143	1199	1265	1302	1003
65°	659	676	717	768	812	653
75°	264	278	298	313	330	289
85°	42	42	42	39	39	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3083.5	3083.5	3083.5	3083.5	3083.5
2.5°	3091.8	3093.0	3085.9	3067.0	3055.1
5°	3080.0	3078.8	3067.0	3050.4	3040.9
7.5°	3045.6	3048.0	3044.4	3020.8	3007.7
10°	3012.5	3013.6	3004.2	2985.2	2969.8
12.5°	2969.8	2968.6	2955.6	2946.1	2921.2
15°	2902.3	2909.4	2902.3	2889.3	2869.1
17.5°	2837.1	2837.1	2841.9	2819.4	2804.0
20°	2763.7	2767.2	2767.2	2749.5	2731.7
22.5°	2678.4	2689.1	2692.6	2673.7	2652.3
25°	2577.7	2597.9	2609.7	2590.7	2568.2
27.5°	2455.7	2486.5	2522.0	2507.8	2482.9
30°	2319.5	2364.5	2423.7	2411.9	2394.1
32.5°	2190.3	2235.4	2317.1	2312.4	2302.9
35°	2073.1	2101.5	2197.5	2209.3	2201.0
37.5°	1961.7	1987.8	2077.8	2105.1	2097.9
40°	1844.4	1872.9	1943.9	1992.5	1994.9
42.5°	1728.3	1755.6	1813.6	1883.5	1883.5
45°	1605.1	1632.4	1685.7	1762.7	1772.2
47.5°	1484.3	1512.7	1564.9	1641.9	1657.3
50°	1365.9	1391.9	1444.0	1518.7	1542.4
52.5°	1242.7	1271.1	1322.0	1390.7	1425.1
55°	1124.2	1143.1	1198.8	1265.2	1301.9
57.5°	1001.0	1018.8	1081.5	1138.4	1176.3
60°	882.5	905.0	953.6	1011.7	1055.5
62.5°	768.8	792.5	834.0	884.9	934.7
65°	658.6	676.4	716.7	767.6	811.5
67.5°	552.0	567.4	607.7	643.2	689.4
70°	444.2	464.4	494.0	528.3	558.0
72.5°	357.8	366.0	390.9	415.8	446.6
75°	264.2	278.4	298.5	312.7	330.5
77.5°	189.5	197.8	209.7	221.5	238.1
80°	126.8	130.3	141.0	143.3	156.4
82.5°	77.0	79.4	81.7	82.9	87.7
85°	41.5	41.5	41.5	39.1	39.1
87.5°	23.7	23.7	20.1	16.6	11.8
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)