

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: P557549

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-93-96-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: P557549
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-LD4-2STD-35-UNV-93-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

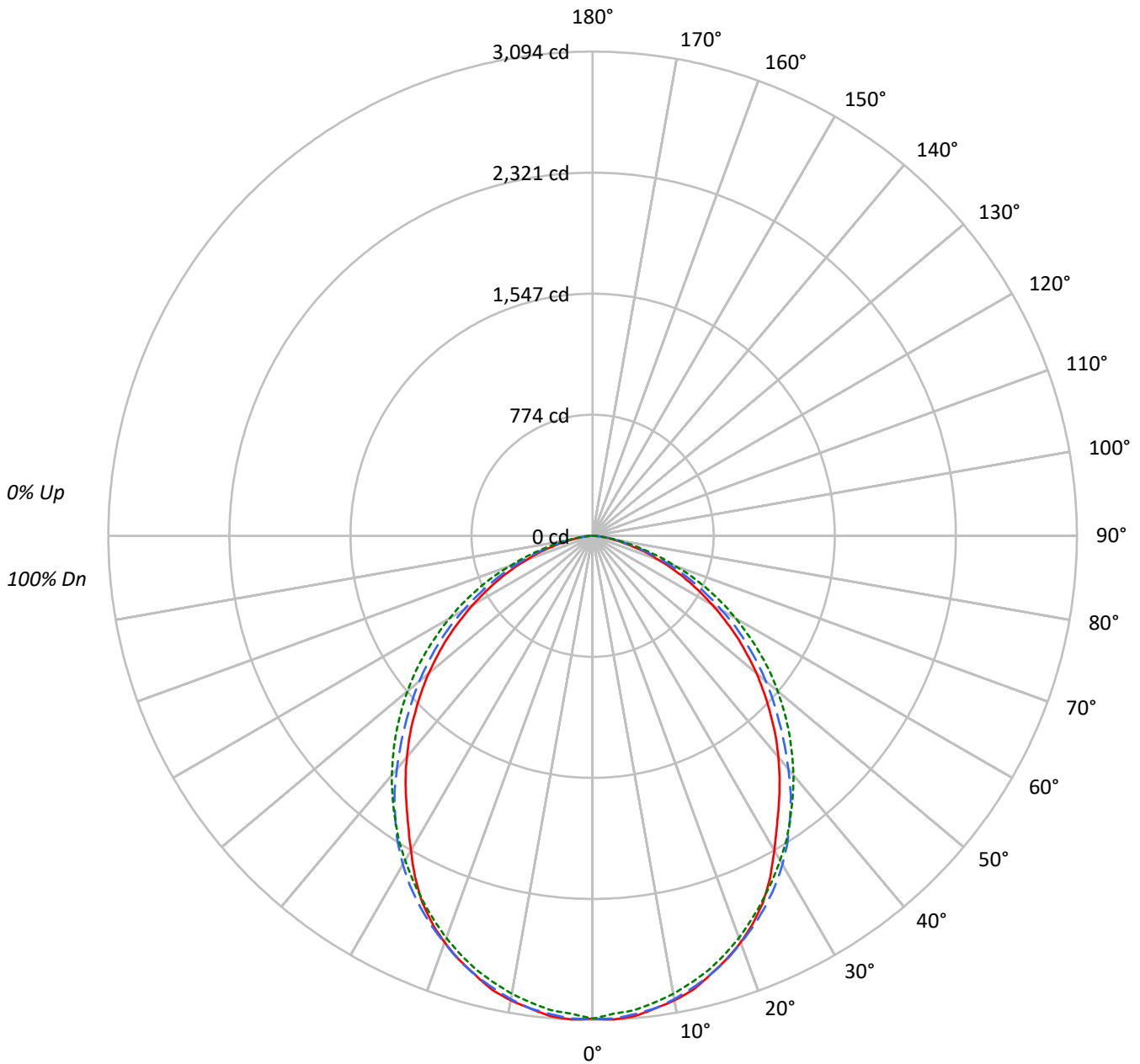
Lumens per Lamp: N/A
Luminaire Lumens: 7135.0 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	8304	8304	8304
5°	8326	8290	8220
10°	8237	8215	8121
15°	8091	8091	7999
20°	7920	7930	7828
25°	7659	7754	7631
30°	7212	7536	7444
35°	6815	7224	7235
40°	6484	6833	7013
45°	6113	6420	6749
50°	5722	6050	6461
55°	5278	5628	6112
60°	4753	5136	5684
65°	4197	4567	5170
70°	3497	3889	4393
75°	2749	3106	3438
80°	1965	2187	2425
85°	1281	1281	1207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.5	4.1
10°-20°	816.2	11.4
20°-30°	1192.7	16.7
30°-40°	1353.8	19.0
40°-50°	1306.9	18.3
50°-60°	1078.1	15.1
60°-70°	717.9	10.1
70°-80°	321.3	4.5
80°-90°	57.5	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°	2299.4	32.2
0°-40°	3653.2	51.2
0°-60°	6038.3	84.6
0°-90°	7135.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7135.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3086	3086	3086	3086	3086	
5°	3082	3081	3069	3052	3043	292
15°	2904	2911	2904	2891	2871	819
25°	2580	2600	2612	2593	2570	1181
35°	2074	2103	2199	2211	2202	1300
45°	1606	1634	1687	1764	1773	1239
55°	1125	1144	1200	1266	1303	1004
65°	659	677	717	768	812	654
75°	264	279	299	313	331	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°	3085.7	3085.7	3085.7	3085.7	3085.7
2.5°	3094.0	3095.2	3088.1	3069.1	3057.3
5°	3082.1	3081.0	3069.1	3052.5	3043.0
7.5°	3047.8	3050.1	3046.6	3022.9	3009.8
10°	3014.6	3015.8	3006.3	2987.3	2971.9
12.5°	2971.9	2970.7	2957.7	2948.2	2923.3
15°	2904.3	2911.4	2904.3	2891.3	2871.1
17.5°	2839.1	2839.1	2843.9	2821.3	2805.9
20°	2765.6	2769.2	2769.2	2751.4	2733.6
22.5°	2680.3	2691.0	2694.5	2675.5	2654.2
25°	2579.5	2599.7	2611.5	2592.6	2570.0
27.5°	2457.4	2488.2	2523.8	2509.6	2484.7
30°	2321.1	2366.1	2425.4	2413.6	2395.8
32.5°	2191.9	2236.9	2318.7	2314.0	2304.5
35°	2074.5	2103.0	2199.0	2210.8	2202.5
37.5°	1963.1	1989.2	2079.3	2106.5	2099.4
40°	1845.7	1874.2	1945.3	1993.9	1996.3
42.5°	1729.6	1756.8	1814.9	1884.9	1884.9
45°	1606.3	1633.5	1686.9	1763.9	1773.4
47.5°	1485.4	1513.8	1566.0	1643.0	1658.4
50°	1366.8	1392.9	1445.1	1519.7	1543.4
52.5°	1243.5	1272.0	1323.0	1391.7	1426.1
55°	1125.0	1144.0	1199.7	1266.1	1302.8
57.5°	1001.7	1019.5	1082.3	1139.2	1177.1
60°	883.2	905.7	954.3	1012.4	1056.2
62.5°	769.4	793.1	834.6	885.5	935.3
65°	659.1	676.9	717.2	768.2	812.0
67.5°	552.4	567.8	608.1	643.7	689.9
70°	444.5	464.7	494.3	528.7	558.3
72.5°	358.0	366.3	391.2	416.1	446.9
75°	264.4	278.6	298.7	313.0	330.7
77.5°	189.7	198.0	209.8	221.7	238.3
80°	126.8	130.4	141.1	143.4	156.5
82.5°	77.1	79.4	81.8	83.0	87.7
85°	41.5	41.5	41.5	39.1	39.1
87.5°	23.7	23.7	20.2	16.6	11.9
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)