

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: P557008

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-82-84-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: P557008
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-LD4-2HI-35-UNV-82-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

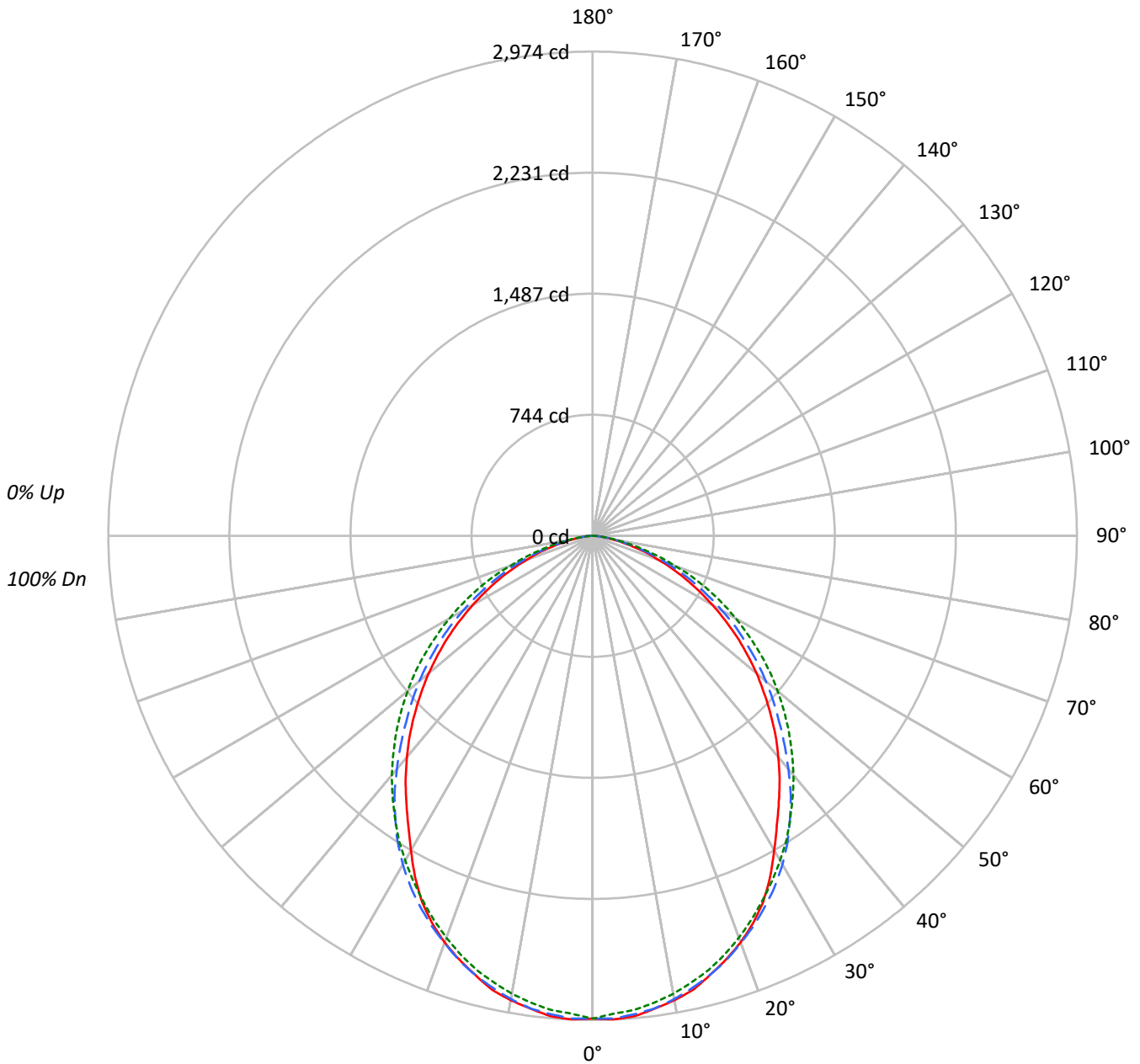
Lumens per Lamp: N/A
Luminaire Lumens: 6857.0 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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°	7980	7980	7980
5°	8001	7967	7900
10°	7916	7894	7804
15°	7776	7776	7687
20°	7611	7621	7523
25°	7361	7452	7334
30°	6931	7243	7154
35°	6549	6942	6954
40°	6231	6567	6739
45°	5875	6170	6486
50°	5499	5814	6210
55°	5073	5409	5874
60°	4568	4936	5463
65°	4033	4388	4969
70°	3361	3738	4222
75°	2642	2985	3305
80°	1889	2101	2331
85°	1232	1232	1161



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.2	4.1
10°-20°	784.4	11.4
20°-30°	1146.2	16.7
30°-40°	1301.1	19.0
40°-50°	1256.0	18.3
50°-60°	1036.1	15.1
60°-70°	690.0	10.1
70°-80°	308.8	4.5
80°-90°	55.2	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°	2209.8	32.2
0°-40°	3510.9	51.2
0°-60°	5803.0	84.6
0°-90°	6857.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6857.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2966	2966	2966	2966	2966	
5°	2962	2961	2950	2934	2924	280
15°	2791	2798	2791	2779	2759	787
25°	2479	2498	2510	2492	2470	1135
35°	1994	2021	2113	2125	2117	1249
45°	1544	1570	1621	1695	1704	1191
55°	1081	1099	1153	1217	1252	965
65°	633	650	689	738	780	628
75°	254	268	287	301	318	278
85°	40	40	40	38	38	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2965.5	2965.5	2965.5	2965.5	2965.5
2.5°	2973.5	2974.6	2967.8	2949.5	2938.1
5°	2962.1	2960.9	2949.5	2933.6	2924.5
7.5°	2929.0	2931.3	2927.9	2905.1	2892.6
10°	2897.1	2898.3	2889.1	2870.9	2856.1
12.5°	2856.1	2855.0	2842.4	2833.3	2809.4
15°	2791.2	2798.0	2791.2	2778.6	2759.3
17.5°	2728.5	2728.5	2733.1	2711.4	2696.6
20°	2657.9	2661.3	2661.3	2644.2	2627.1
22.5°	2575.9	2586.1	2589.5	2571.3	2550.8
25°	2479.0	2498.4	2509.8	2491.5	2469.9
27.5°	2361.7	2391.3	2425.5	2411.8	2387.9
30°	2230.7	2273.9	2330.9	2319.5	2302.4
32.5°	2106.5	2149.8	2228.4	2223.8	2214.7
35°	1993.7	2021.0	2113.3	2124.7	2116.7
37.5°	1886.6	1911.7	1998.2	2024.5	2017.6
40°	1773.8	1801.2	1869.5	1916.2	1918.5
42.5°	1662.2	1688.4	1744.2	1811.4	1811.4
45°	1543.7	1569.9	1621.2	1695.2	1704.3
47.5°	1427.5	1454.8	1505.0	1579.0	1593.8
50°	1313.6	1338.6	1388.7	1460.5	1483.3
52.5°	1195.1	1222.4	1271.4	1337.5	1370.5
55°	1081.2	1099.4	1152.9	1216.7	1252.0
57.5°	962.7	979.8	1040.1	1094.8	1131.3
60°	848.7	870.4	917.1	972.9	1015.1
62.5°	739.4	762.2	802.0	851.0	898.9
65°	633.4	650.5	689.2	738.2	780.4
67.5°	530.9	545.7	584.4	618.6	663.0
70°	427.2	446.6	475.1	508.1	536.6
72.5°	344.1	352.0	376.0	399.9	429.5
75°	254.1	267.7	287.1	300.8	317.9
77.5°	182.3	190.3	201.6	213.0	229.0
80°	121.9	125.3	135.6	137.8	150.4
82.5°	74.1	76.3	78.6	79.7	84.3
85°	39.9	39.9	39.9	37.6	37.6
87.5°	22.8	22.8	19.4	15.9	11.4
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)