

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: P558068

Luminaire Tested: **FUSL-12-4-LD4-3LO-40-UNV-80-86-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: P558068
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-40-UNV-80-86-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

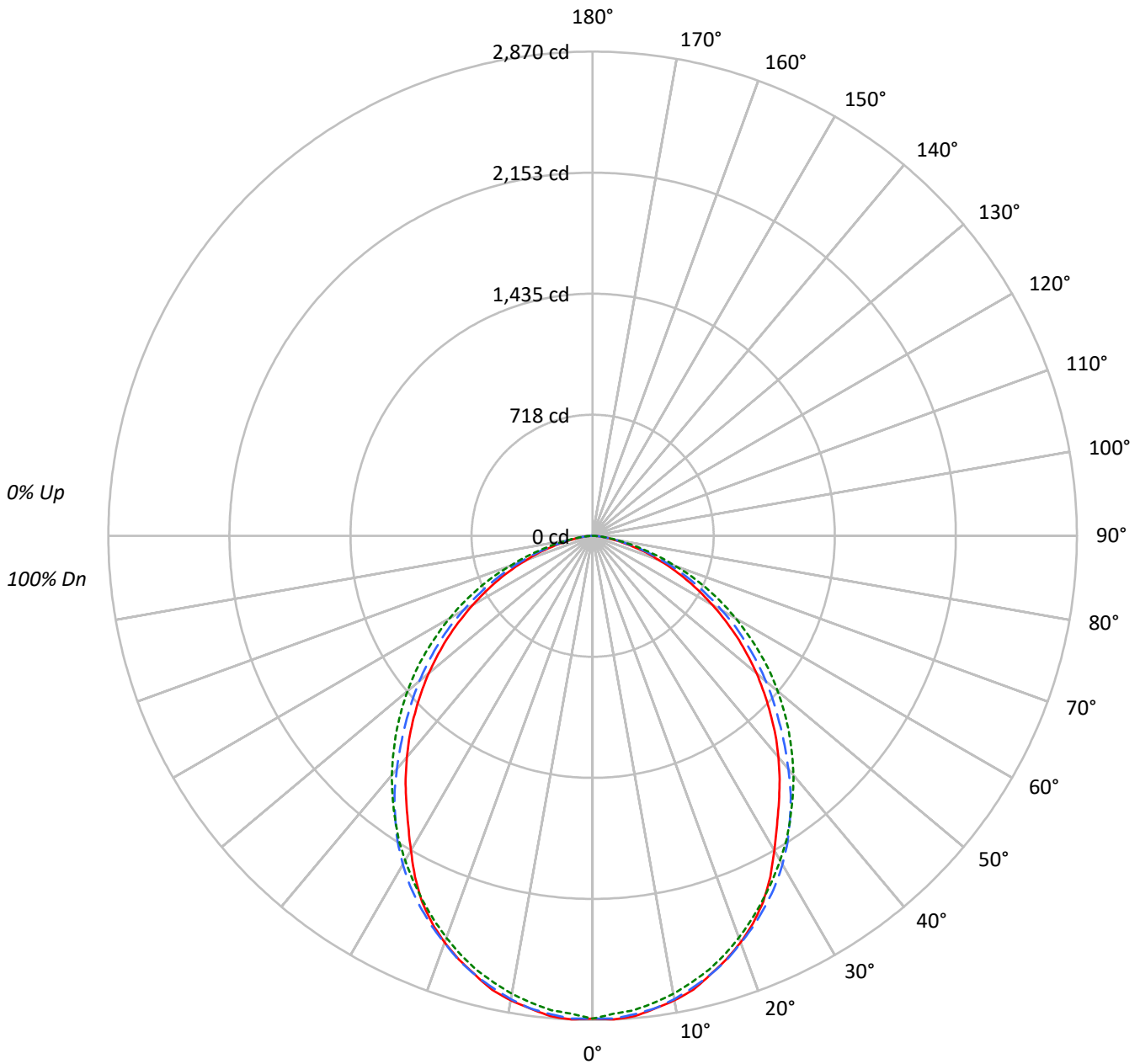
Lumens per Lamp: N/A
Luminaire Lumens: 6618.0 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P558068

CATALOG NUMBER: FUSL-12-4-LD4-3LO-40-UNV-80-86-EDD-90

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°	7702	7702	7702
5°	7722	7690	7624
10°	7640	7619	7532
15°	7505	7505	7419
20°	7346	7355	7261
25°	7104	7192	7078
30°	6690	6990	6905
35°	6321	6701	6711
40°	6014	6339	6504
45°	5670	5955	6260
50°	5308	5611	5993
55°	4896	5220	5669
60°	4409	4764	5273
65°	3892	4236	4796
70°	3244	3607	4075
75°	2549	2881	3190
80°	1824	2027	2249
85°	1189	1189	1121



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.5	4.1
10°-20°	757.0	11.4
20°-30°	1106.3	16.7
30°-40°	1255.8	19.0
40°-50°	1212.2	18.3
50°-60°	1000.0	15.1
60°-70°	665.9	10.1
70°-80°	298.0	4.5
80°-90°	53.3	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°	2132.8	32.2
0°-40°	3388.5	51.2
0°-60°	5600.8	84.6
0°-90°	6618.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6618.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2862	2862	2862	2862	2862	
5°	2859	2858	2847	2831	2822	271
15°	2694	2700	2694	2682	2663	759
25°	2393	2411	2422	2405	2384	1096
35°	1924	1951	2040	2051	2043	1206
45°	1490	1515	1565	1636	1645	1150
55°	1044	1061	1113	1174	1208	931
65°	611	628	665	712	753	606
75°	245	258	277	290	307	268
85°	38	38	38	36	36	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2862.1	2862.1	2862.1	2862.1	2862.1
2.5°	2869.8	2870.9	2864.3	2846.7	2835.7
5°	2858.8	2857.7	2846.7	2831.3	2822.5
7.5°	2826.9	2829.1	2825.8	2803.8	2791.7
10°	2796.1	2797.2	2788.4	2770.9	2756.6
12.5°	2756.6	2755.5	2743.4	2734.6	2711.5
15°	2693.9	2700.5	2693.9	2681.8	2663.1
17.5°	2633.4	2633.4	2637.8	2616.9	2602.6
20°	2565.2	2568.5	2568.5	2552.0	2535.5
22.5°	2486.1	2496.0	2499.3	2481.7	2461.9
25°	2392.6	2411.3	2422.3	2404.7	2383.8
27.5°	2279.4	2307.9	2340.9	2327.7	2304.6
30°	2152.9	2194.7	2249.7	2238.7	2222.2
32.5°	2033.1	2074.8	2150.7	2146.3	2137.5
35°	1924.2	1950.6	2039.7	2050.7	2043.0
37.5°	1820.8	1845.0	1928.6	1953.9	1947.3
40°	1712.0	1738.4	1804.4	1849.4	1851.6
42.5°	1604.2	1629.5	1683.4	1748.3	1748.3
45°	1489.9	1515.2	1564.7	1636.1	1644.9
47.5°	1377.7	1404.1	1452.5	1524.0	1538.3
50°	1267.8	1292.0	1340.3	1409.6	1431.6
52.5°	1153.4	1179.8	1227.1	1290.9	1322.8
55°	1043.5	1061.1	1112.7	1174.3	1208.4
57.5°	929.1	945.6	1003.9	1056.7	1091.8
60°	819.2	840.1	885.1	939.0	979.7
62.5°	713.6	735.6	774.1	821.4	867.5
65°	611.3	627.8	665.2	712.5	753.2
67.5°	512.4	526.7	564.1	597.1	639.9
70°	412.3	431.0	458.5	490.4	517.9
72.5°	332.1	339.8	362.8	385.9	414.5
75°	245.2	258.4	277.1	290.3	306.8
77.5°	175.9	183.6	194.6	205.6	221.0
80°	117.7	120.9	130.8	133.0	145.1
82.5°	71.5	73.7	75.9	77.0	81.4
85°	38.5	38.5	38.5	36.3	36.3
87.5°	22.0	22.0	18.7	15.4	11.0
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)