

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: P556982

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-80-87-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: P556982
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-80-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

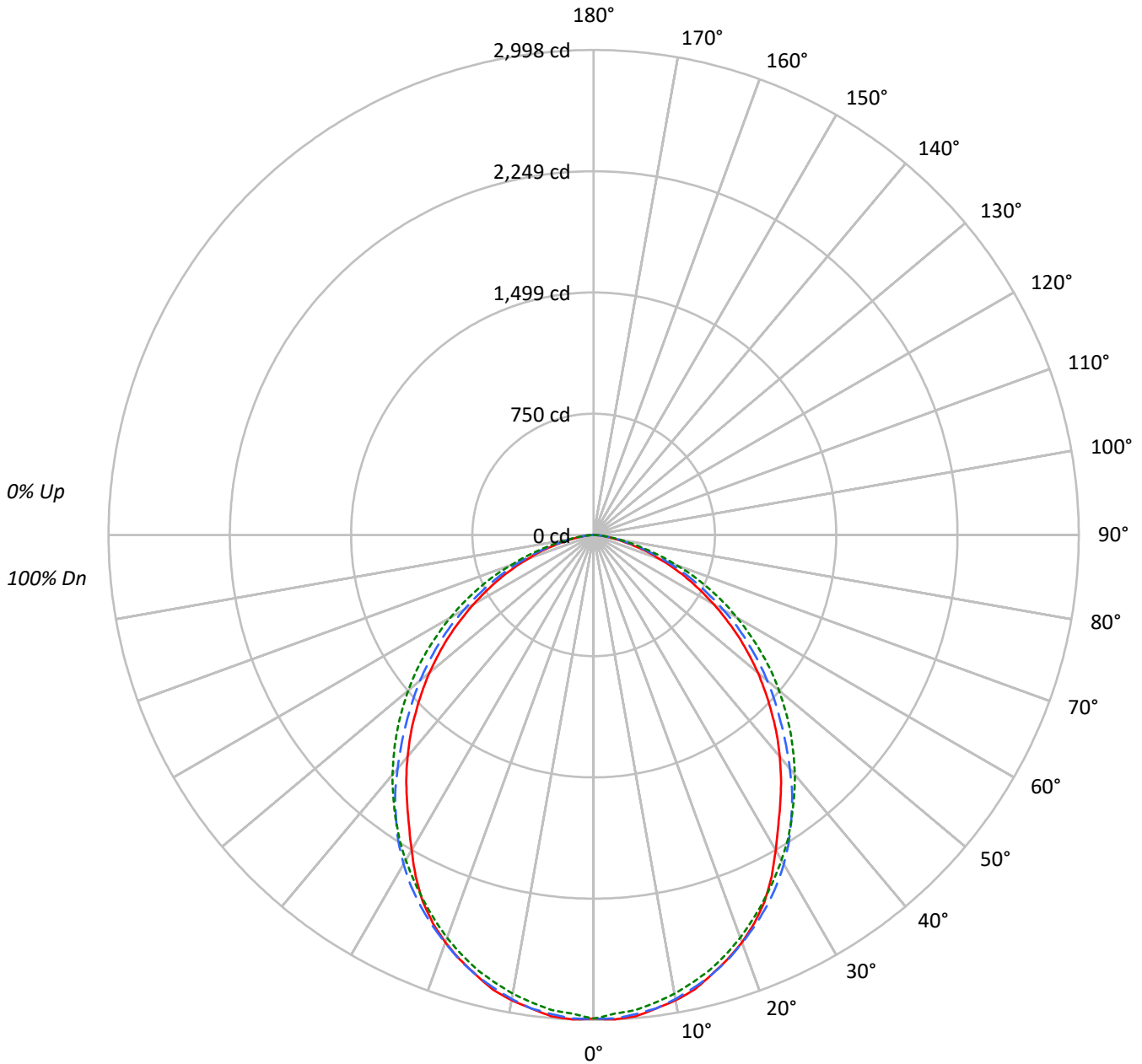
Lumens per Lamp: N/A
Luminaire Lumens: 6914.0 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-80-87-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°	8046	8046	8046
5°	8068	8034	7965
10°	7982	7960	7869
15°	7841	7841	7751
20°	7675	7684	7586
25°	7422	7514	7394
30°	6989	7303	7214
35°	6604	7000	7011
40°	6283	6622	6795
45°	5923	6221	6540
50°	5545	5862	6261
55°	5114	5454	5923
60°	4606	4977	5508
65°	4067	4425	5011
70°	3389	3769	4257
75°	2664	3010	3332
80°	1905	2118	2349
85°	1241	1241	1170



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.5	4.1
10°-20°	790.9	11.4
20°-30°	1155.8	16.7
30°-40°	1311.9	19.0
40°-50°	1266.4	18.3
50°-60°	1044.7	15.1
60°-70°	695.7	10.1
70°-80°	311.3	4.5
80°-90°	55.7	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°	2228.2	32.2
0°-40°	3540.1	51.2
0°-60°	5851.3	84.6
0°-90°	6914.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6914.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2990	2990	2990	2990	2990	
5°	2987	2986	2974	2958	2949	283
15°	2814	2821	2814	2802	2782	793
25°	2500	2519	2531	2512	2490	1145
35°	2010	2038	2131	2142	2134	1260
45°	1556	1583	1635	1709	1718	1201
55°	1090	1108	1162	1227	1262	973
65°	639	656	695	744	787	633
75°	256	270	290	303	320	280
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°	2990.1	2990.1	2990.1	2990.1	2990.1
2.5°	2998.2	2999.3	2992.4	2974.0	2962.6
5°	2986.7	2985.5	2974.0	2958.0	2948.8
7.5°	2953.4	2955.7	2952.2	2929.2	2916.6
10°	2921.2	2922.4	2913.2	2894.8	2879.8
12.5°	2879.8	2878.7	2866.1	2856.9	2832.8
15°	2814.4	2821.3	2814.4	2801.7	2782.2
17.5°	2751.2	2751.2	2755.8	2734.0	2719.0
20°	2680.0	2683.4	2683.4	2666.2	2649.0
22.5°	2597.3	2607.6	2611.0	2592.7	2572.0
25°	2499.6	2519.1	2530.6	2512.3	2490.4
27.5°	2381.3	2411.2	2445.6	2431.8	2407.7
30°	2249.2	2292.9	2350.3	2338.8	2321.6
32.5°	2124.0	2167.6	2246.9	2242.3	2233.1
35°	2010.3	2037.8	2130.9	2142.4	2134.3
37.5°	1902.3	1927.6	2014.9	2041.3	2034.4
40°	1788.6	1816.1	1885.1	1932.2	1934.4
42.5°	1676.0	1702.4	1758.7	1826.5	1826.5
45°	1556.5	1582.9	1634.6	1709.3	1718.5
47.5°	1439.4	1466.9	1517.5	1592.1	1607.1
50°	1324.5	1349.7	1400.3	1472.7	1495.6
52.5°	1205.0	1232.6	1282.0	1348.6	1381.9
55°	1090.1	1108.5	1162.5	1226.8	1262.4
57.5°	970.7	987.9	1048.8	1103.9	1140.7
60°	855.8	877.6	924.7	981.0	1023.5
62.5°	745.5	768.5	808.7	858.1	906.3
65°	638.7	655.9	695.0	744.4	786.9
67.5°	535.3	550.2	589.3	623.8	668.6
70°	430.8	450.3	479.0	512.3	541.0
72.5°	346.9	355.0	379.1	403.2	433.1
75°	256.2	269.9	289.5	303.3	320.5
77.5°	183.8	191.8	203.3	214.8	230.9
80°	122.9	126.4	136.7	139.0	151.6
82.5°	74.7	77.0	79.3	80.4	85.0
85°	40.2	40.2	40.2	37.9	37.9
87.5°	23.0	23.0	19.5	16.1	11.5
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)