

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: P558038

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-82-87-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: P558038
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-35-UNV-82-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC 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

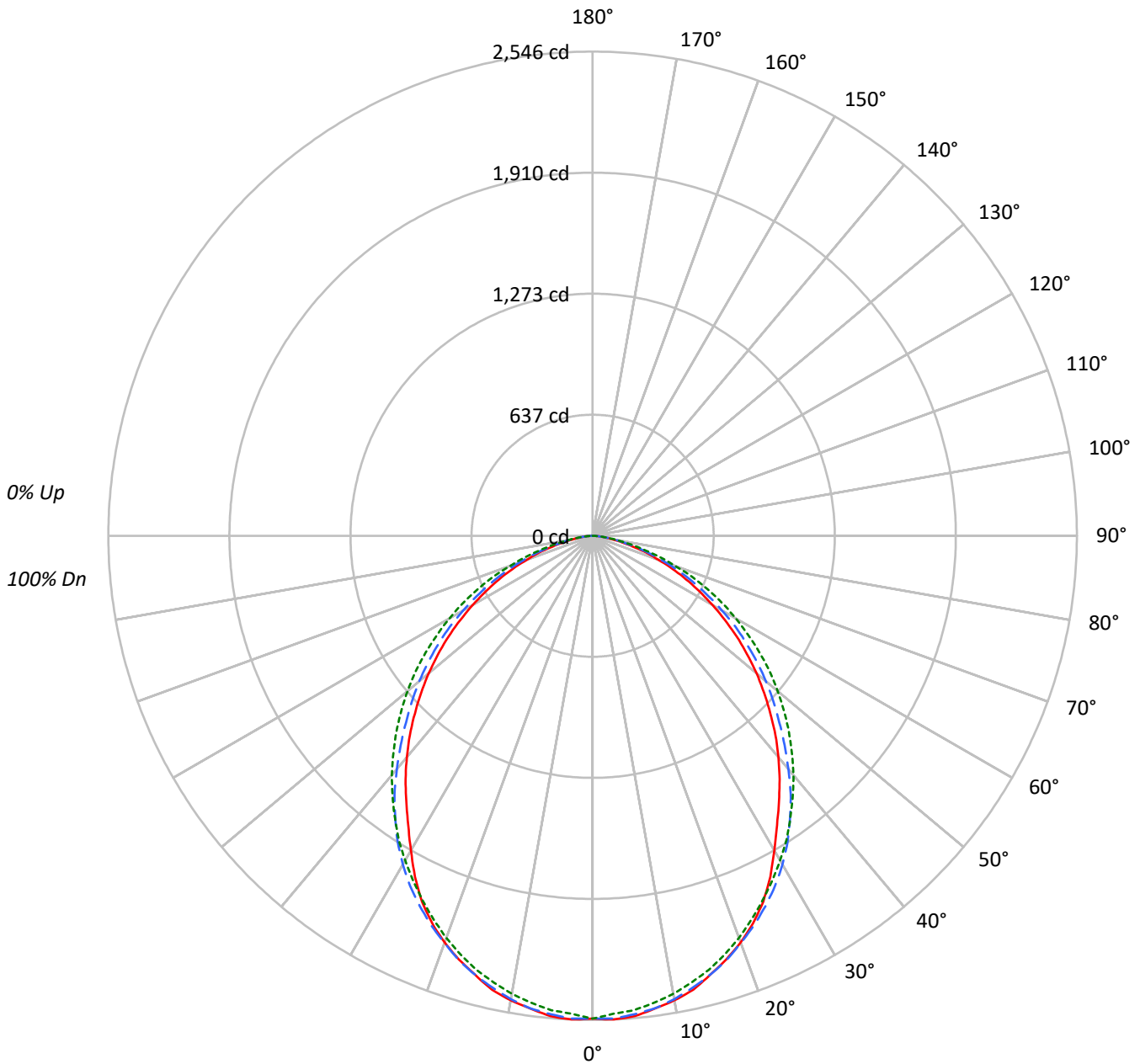
Lumens per Lamp: N/A
Luminaire Lumens: 5871.0 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	6833	6833	6833
5°	6851	6822	6764
10°	6778	6759	6682
15°	6658	6658	6582
20°	6517	6525	6442
25°	6302	6380	6279
30°	5935	6201	6126
35°	5608	5944	5954
40°	5335	5623	5770
45°	5030	5282	5553
50°	4708	4978	5317
55°	4343	4631	5029
60°	3911	4226	4677
65°	3453	3757	4255
70°	2878	3201	3615
75°	2261	2556	2829
80°	1618	1799	1996
85°	1053	1053	994



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.1	4.1
10°-20°	671.6	11.4
20°-30°	981.4	16.7
30°-40°	1114.0	19.0
40°-50°	1075.4	18.3
50°-60°	887.1	15.1
60°-70°	590.8	10.1
70°-80°	264.4	4.5
80°-90°	47.3	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°	1892.1	32.2
0°-40°	3006.1	51.2
0°-60°	4968.6	84.6
0°-90°	5871.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5871.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2539	2539	2539	2539	2539	
5°	2536	2535	2525	2512	2504	240
15°	2390	2396	2390	2379	2362	674
25°	2122	2139	2149	2133	2115	972
35°	1707	1730	1809	1819	1812	1070
45°	1322	1344	1388	1451	1459	1020
55°	926	941	987	1042	1072	826
65°	542	557	590	632	668	538
75°	218	229	246	258	272	238
85°	34	34	34	32	32	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2539.1	2539.1	2539.1	2539.1	2539.1
2.5°	2545.9	2546.9	2541.0	2525.4	2515.6
5°	2536.1	2535.2	2525.4	2511.7	2503.9
7.5°	2507.8	2509.8	2506.9	2487.4	2476.6
10°	2480.5	2481.5	2473.7	2458.1	2445.4
12.5°	2445.4	2444.4	2433.7	2425.9	2405.4
15°	2389.8	2395.7	2389.8	2379.1	2362.5
17.5°	2336.2	2336.2	2340.1	2321.5	2308.9
20°	2275.7	2278.6	2278.6	2264.0	2249.4
22.5°	2205.5	2214.2	2217.2	2201.6	2184.0
25°	2122.5	2139.1	2148.9	2133.3	2114.7
27.5°	2022.1	2047.4	2076.7	2065.0	2044.5
30°	1909.9	1947.0	1995.7	1986.0	1971.4
32.5°	1803.6	1840.6	1907.9	1904.0	1896.2
35°	1707.0	1730.4	1809.4	1819.2	1812.4
37.5°	1615.3	1636.8	1710.9	1733.3	1727.5
40°	1518.8	1542.2	1600.7	1640.7	1642.6
42.5°	1423.2	1445.6	1493.4	1550.9	1550.9
45°	1321.7	1344.1	1388.0	1451.4	1459.2
47.5°	1222.2	1245.6	1288.5	1352.0	1364.6
50°	1124.7	1146.1	1189.1	1250.5	1270.0
52.5°	1023.2	1046.6	1088.6	1145.2	1173.4
55°	925.7	941.3	987.1	1041.8	1072.0
57.5°	824.2	838.9	890.6	937.4	968.6
60°	726.7	745.2	785.2	833.0	869.1
62.5°	633.1	652.6	686.7	728.6	769.6
65°	542.3	557.0	590.1	632.1	668.2
67.5°	454.6	467.2	500.4	529.7	567.7
70°	365.8	382.4	406.8	435.0	459.4
72.5°	294.6	301.4	321.9	342.4	367.7
75°	217.5	229.2	245.8	257.5	272.1
77.5°	156.1	162.9	172.7	182.4	196.1
80°	104.4	107.3	116.1	118.0	128.8
82.5°	63.4	65.4	67.3	68.3	72.2
85°	34.1	34.1	34.1	32.2	32.2
87.5°	19.5	19.5	16.6	13.7	9.8
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)