

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: P558055

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-93-87-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: P558055
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-93-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

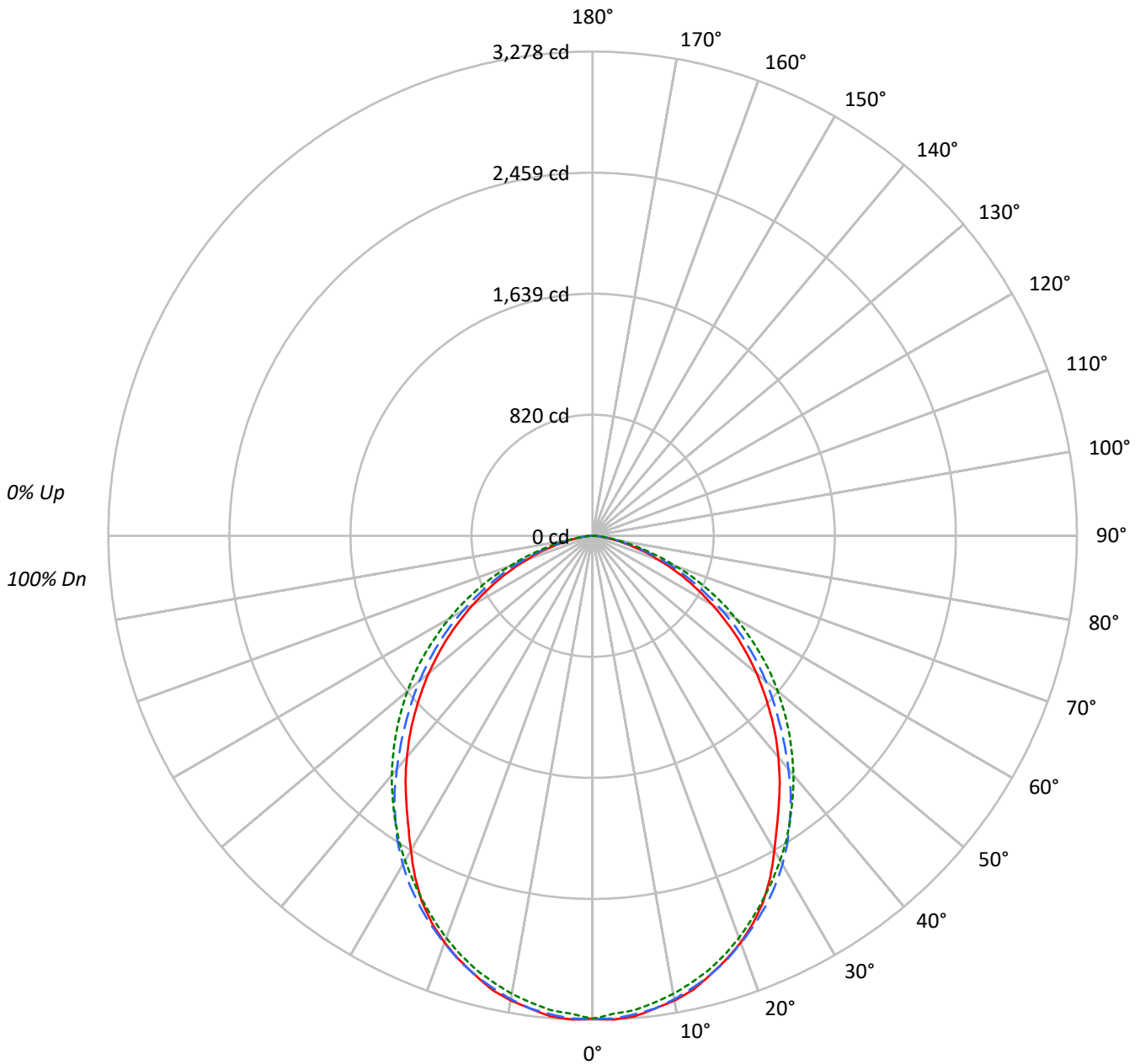
Lumens per Lamp: N/A
Luminaire Lumens: 7560.0 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8798	8798	8798
5°	8821	8784	8710
10°	8728	8704	8604
15°	8573	8573	8475
20°	8392	8402	8295
25°	8115	8216	8085
30°	7642	7985	7888
35°	7221	7654	7666
40°	6870	7241	7430
45°	6477	6802	7151
50°	6063	6410	6846
55°	5592	5963	6476
60°	5036	5442	6023
65°	4447	4839	5479
70°	3706	4121	4655
75°	2912	3291	3643
80°	2083	2317	2569
85°	1359	1359	1278



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	307.8	4.1
10°-20°	864.8	11.4
20°-30°	1263.7	16.7
30°-40°	1434.5	19.0
40°-50°	1384.8	18.3
50°-60°	1142.4	15.1
60°-70°	760.7	10.1
70°-80°	340.4	4.5
80°-90°	60.9	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°	2436.4	32.2
0°-40°	3870.9	51.2
0°-60°	6398.0	84.6
0°-90°	7560.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7560.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3270	3270	3270	3270	3270	
5°	3266	3264	3252	3234	3224	309
15°	3077	3085	3077	3064	3042	868
25°	2733	2754	2767	2747	2723	1252
35°	2198	2228	2330	2342	2334	1377
45°	1702	1731	1787	1869	1879	1313
55°	1192	1212	1271	1342	1380	1064
65°	698	717	760	814	860	692
75°	280	295	316	332	350	306
85°	44	44	44	41	41	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3269.5	3269.5	3269.5	3269.5	3269.5
2.5°	3278.3	3279.6	3272.0	3251.9	3239.4
5°	3265.7	3264.5	3251.9	3234.3	3224.3
7.5°	3229.3	3231.8	3228.1	3202.9	3189.1
10°	3194.1	3195.4	3185.3	3165.3	3148.9
12.5°	3148.9	3147.7	3133.9	3123.8	3097.4
15°	3077.3	3084.9	3077.3	3063.5	3042.2
17.5°	3008.2	3008.2	3013.3	2989.4	2973.1
20°	2930.4	2934.1	2934.1	2915.3	2896.5
22.5°	2839.9	2851.2	2855.0	2834.9	2812.3
25°	2733.2	2754.5	2767.1	2747.0	2723.1
27.5°	2603.8	2636.5	2674.1	2659.1	2632.7
30°	2459.4	2507.1	2569.9	2557.3	2538.5
32.5°	2322.4	2370.2	2456.8	2451.8	2441.8
35°	2198.1	2228.2	2330.0	2342.5	2333.7
37.5°	2080.0	2107.7	2203.1	2232.0	2224.5
40°	1955.7	1985.8	2061.2	2112.7	2115.2
42.5°	1832.6	1861.5	1923.0	1997.1	1997.1
45°	1702.0	1730.8	1787.4	1869.0	1879.1
47.5°	1573.8	1604.0	1659.2	1740.9	1757.2
50°	1448.2	1475.9	1531.1	1610.3	1635.4
52.5°	1317.6	1347.7	1401.8	1474.6	1511.0
55°	1192.0	1212.1	1271.1	1341.5	1380.4
57.5°	1061.4	1080.2	1146.8	1207.1	1247.3
60°	935.8	959.6	1011.1	1072.7	1119.1
62.5°	815.2	840.3	884.3	938.3	991.0
65°	698.4	717.2	759.9	813.9	860.4
67.5°	585.3	601.6	644.4	682.0	731.0
70°	471.0	492.4	523.8	560.2	591.6
72.5°	379.3	388.1	414.5	440.9	473.5
75°	280.1	295.2	316.5	331.6	350.4
77.5°	201.0	209.8	222.3	234.9	252.5
80°	134.4	138.2	149.5	152.0	165.8
82.5°	81.6	84.2	86.7	87.9	92.9
85°	44.0	44.0	44.0	41.4	41.4
87.5°	25.1	25.1	21.4	17.6	12.6
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)