

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: P556983

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-80-87-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: P556983
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
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC 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

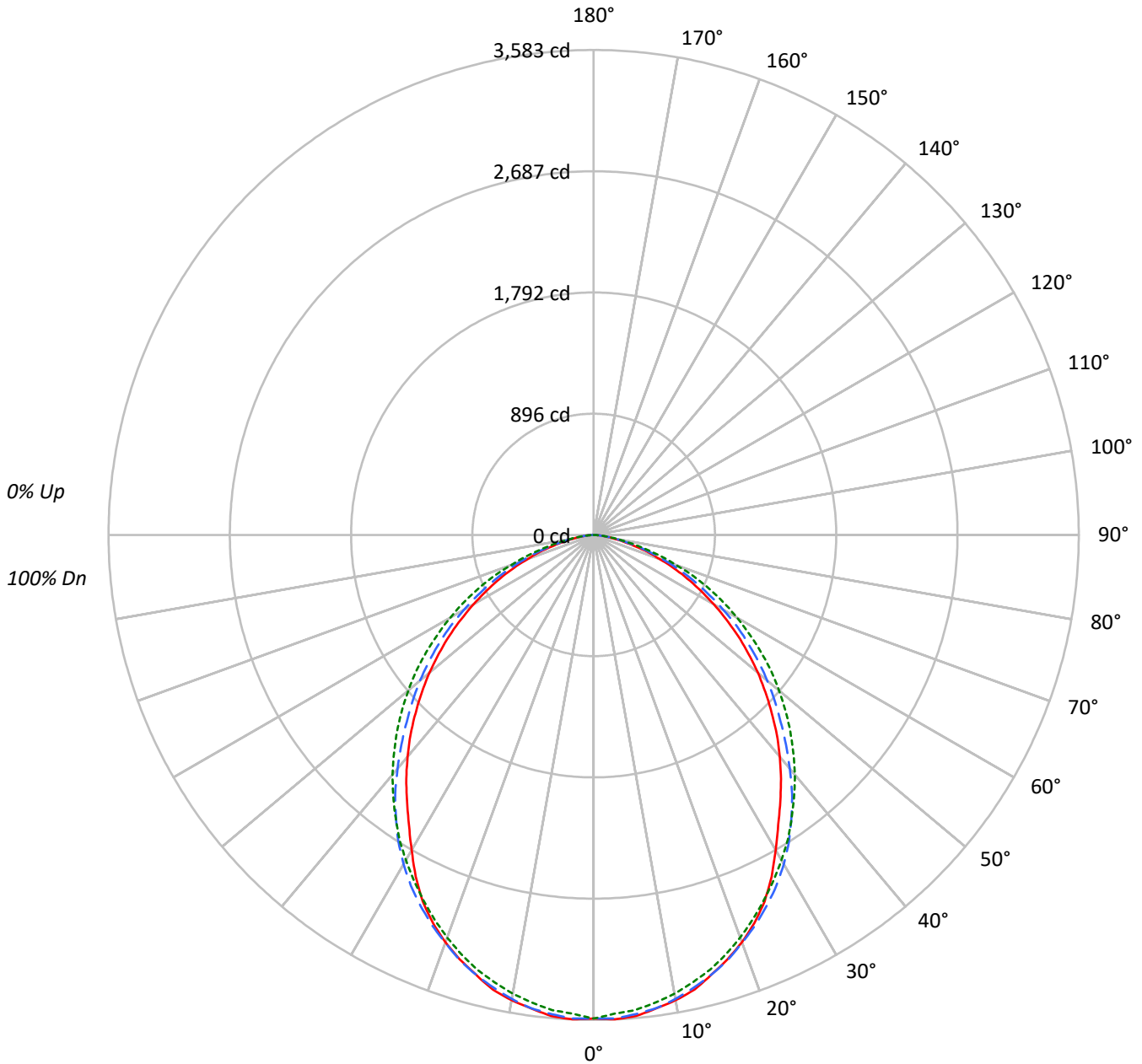
Lumens per Lamp: N/A
Luminaire Lumens: 8262.0 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	9615	9615	9615
5°	9641	9600	9518
10°	9538	9512	9403
15°	9369	9369	9262
20°	9171	9183	9065
25°	8869	8979	8836
30°	8351	8727	8620
35°	7891	8365	8379
40°	7508	7913	8120
45°	7078	7434	7815
50°	6626	7005	7482
55°	6112	6518	7078
60°	5504	5947	6583
65°	4860	5288	5987
70°	4050	4504	5087
75°	3183	3596	3982
80°	2276	2531	2808
85°	1482	1482	1399



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	336.4	4.1
10°-20°	945.1	11.4
20°-30°	1381.1	16.7
30°-40°	1567.7	19.0
40°-50°	1513.4	18.3
50°-60°	1248.4	15.1
60°-70°	831.4	10.1
70°-80°	372.0	4.5
80°-90°	66.5	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°	2662.6	32.2
0°-40°	4230.3	51.2
0°-60°	6992.1	84.6
0°-90°	8262.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8262.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3573	3573	3573	3573	3573	
5°	3569	3568	3554	3535	3524	338
15°	3363	3371	3363	3348	3325	948
25°	2987	3010	3024	3002	2976	1368
35°	2402	2435	2546	2560	2550	1505
45°	1860	1892	1953	2043	2054	1435
55°	1303	1325	1389	1466	1509	1163
65°	763	784	830	890	940	757
75°	306	323	346	362	383	335
85°	48	48	48	45	45	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3573.1	3573.1	3573.1	3573.1	3573.1
2.5°	3582.7	3584.1	3575.8	3553.9	3540.2
5°	3569.0	3567.6	3553.9	3534.7	3523.7
7.5°	3529.2	3531.9	3527.8	3500.3	3485.2
10°	3490.7	3492.1	3481.1	3459.2	3441.3
12.5°	3441.3	3440.0	3424.9	3413.9	3385.0
15°	3363.1	3371.3	3363.1	3348.0	3324.6
17.5°	3287.6	3287.6	3293.1	3267.0	3249.1
20°	3202.5	3206.6	3206.6	3186.0	3165.4
22.5°	3103.6	3116.0	3120.1	3098.2	3073.4
25°	2987.0	3010.3	3024.0	3002.1	2976.0
27.5°	2845.6	2881.3	2922.4	2906.0	2877.1
30°	2687.7	2739.9	2808.5	2794.8	2774.2
32.5°	2538.1	2590.3	2685.0	2679.5	2668.5
35°	2402.2	2435.1	2546.3	2560.1	2550.5
37.5°	2273.2	2303.4	2407.7	2439.3	2431.0
40°	2137.3	2170.2	2252.6	2308.9	2311.6
42.5°	2002.7	2034.3	2101.6	2182.6	2182.6
45°	1860.0	1891.6	1953.3	2042.6	2053.5
47.5°	1720.0	1752.9	1813.3	1902.5	1920.4
50°	1582.7	1612.9	1673.3	1759.8	1787.2
52.5°	1439.9	1472.9	1531.9	1611.5	1651.3
55°	1302.7	1324.6	1389.2	1466.0	1508.6
57.5°	1159.9	1180.5	1253.3	1319.2	1363.1
60°	1022.7	1048.7	1105.0	1172.3	1223.1
62.5°	890.9	918.3	966.4	1025.4	1083.0
65°	763.2	783.8	830.5	889.5	940.3
67.5°	639.7	657.5	704.2	745.4	798.9
70°	514.8	538.1	572.4	612.2	646.5
72.5°	414.6	424.2	453.0	481.8	517.5
75°	306.1	322.6	345.9	362.4	383.0
77.5°	219.6	229.2	243.0	256.7	275.9
80°	146.9	151.0	163.3	166.1	181.2
82.5°	89.2	92.0	94.7	96.1	101.6
85°	48.0	48.0	48.0	45.3	45.3
87.5°	27.5	27.5	23.3	19.2	13.7
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)