

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: P556923

Luminaire Tested: **FUSL-12-4-LD4-2HI-30-UNV-80-94-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: P556923
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-30-UNV-80-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND
3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

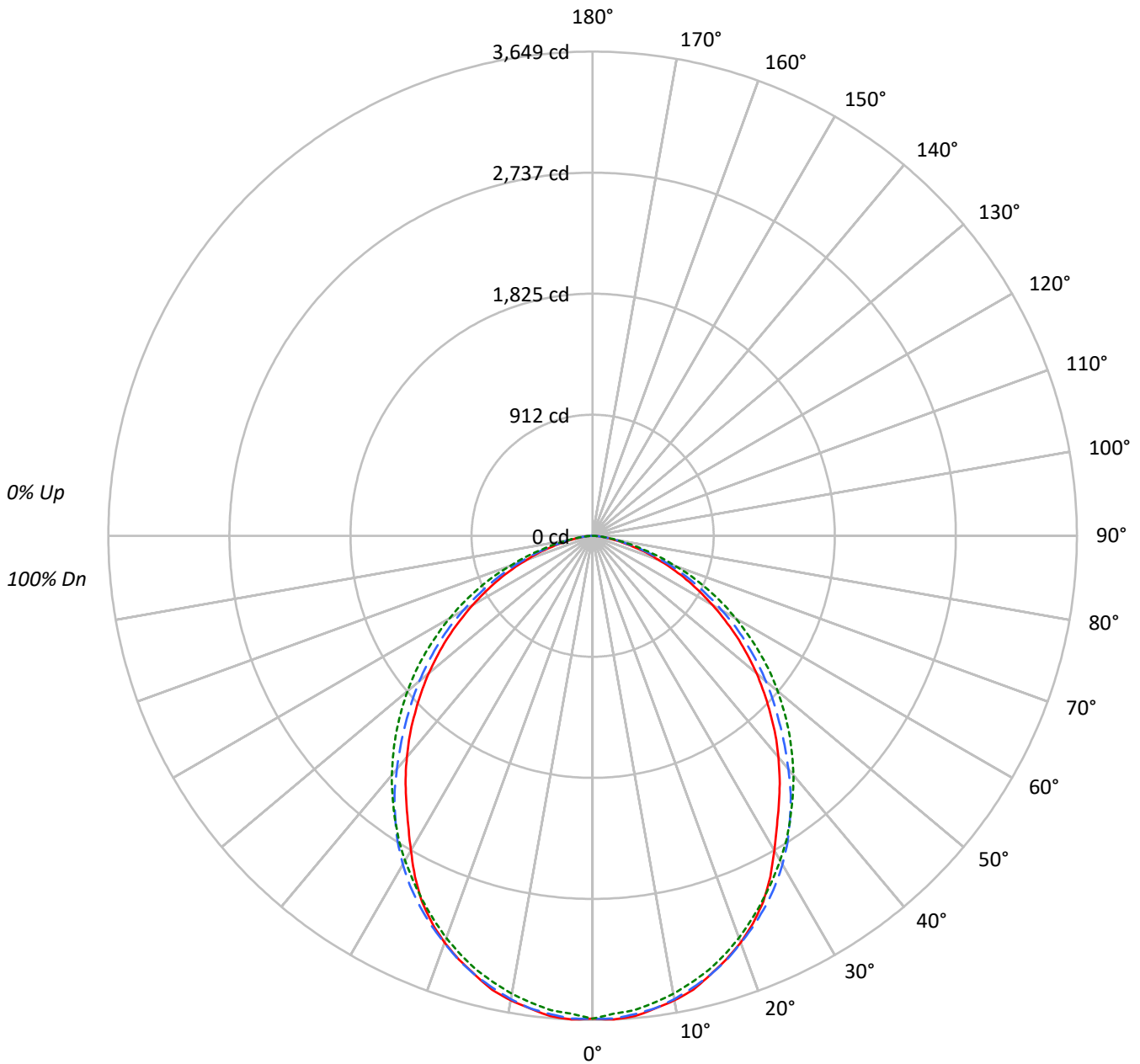
Lumens per Lamp: N/A
Luminaire Lumens: 8415.0 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
Input Voltage (V): NR
Input Current (A_{in}): 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°	9793	9793	9793
5°	9819	9778	9695
10°	9715	9688	9578
15°	9543	9543	9434
20°	9341	9353	9233
25°	9033	9145	9000
30°	8506	8888	8780
35°	8038	8520	8534
40°	7647	8059	8271
45°	7209	7571	7960
50°	6749	7135	7621
55°	6225	6638	7209
60°	5606	6057	6704
65°	4949	5386	6098
70°	4125	4587	5181
75°	3242	3663	4056
80°	2318	2579	2861
85°	1510	1510	1423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.6	4.1
10°-20°	962.6	11.4
20°-30°	1406.7	16.7
30°-40°	1596.7	19.0
40°-50°	1541.4	18.3
50°-60°	1271.6	15.1
60°-70°	846.8	10.1
70°-80°	378.9	4.5
80°-90°	67.8	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°	2711.9	32.2
0°-40°	4308.6	51.2
0°-60°	7121.6	84.6
0°-90°	8415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8415.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3639	3639	3639	3639	3639	
5°	3635	3634	3620	3600	3589	344
15°	3425	3434	3425	3410	3386	966
25°	3042	3066	3080	3058	3031	1393
35°	2447	2480	2594	2608	2598	1533
45°	1894	1927	1990	2080	2092	1462
55°	1327	1349	1415	1493	1536	1184
65°	777	798	846	906	958	771
75°	312	329	352	369	390	341
85°	49	49	49	46	46	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3639.3	3639.3	3639.3	3639.3	3639.3
2.5°	3649.1	3650.5	3642.1	3619.7	3605.7
5°	3635.1	3633.7	3619.7	3600.1	3588.9
7.5°	3594.5	3597.3	3593.1	3565.2	3549.8
10°	3555.4	3556.8	3545.6	3523.2	3505.1
12.5°	3505.1	3503.7	3488.3	3477.1	3447.7
15°	3425.4	3433.7	3425.4	3410.0	3386.2
17.5°	3348.5	3348.5	3354.1	3327.5	3309.3
20°	3261.8	3266.0	3266.0	3245.0	3224.0
22.5°	3161.1	3173.7	3177.9	3155.5	3130.4
25°	3042.3	3066.0	3080.0	3057.7	3031.1
27.5°	2898.3	2934.6	2976.6	2959.8	2930.4
30°	2737.5	2790.6	2860.5	2846.5	2825.6
32.5°	2585.1	2638.2	2734.7	2729.1	2717.9
35°	2446.7	2480.2	2593.5	2607.5	2597.7
37.5°	2315.3	2346.0	2452.3	2484.4	2476.0
40°	2176.9	2210.4	2294.3	2351.6	2354.4
42.5°	2039.8	2072.0	2140.5	2223.0	2223.0
45°	1894.4	1926.6	1989.5	2080.4	2091.6
47.5°	1751.8	1785.4	1846.9	1937.8	1956.0
50°	1612.0	1642.8	1704.3	1792.4	1820.3
52.5°	1466.6	1500.2	1560.3	1641.4	1681.9
55°	1326.8	1349.2	1414.9	1493.2	1536.5
57.5°	1181.4	1202.4	1276.5	1343.6	1388.3
60°	1041.6	1068.2	1125.5	1194.0	1245.7
62.5°	907.4	935.3	984.3	1044.4	1103.1
65°	777.3	798.3	845.9	906.0	957.7
67.5°	651.5	669.7	717.2	759.2	813.7
70°	524.3	548.1	583.0	623.6	658.5
72.5°	422.2	432.0	461.4	490.7	527.1
75°	311.8	328.6	352.3	369.1	390.1
77.5°	223.7	233.5	247.5	261.4	281.0
80°	149.6	153.8	166.4	169.2	184.6
82.5°	90.9	93.7	96.5	97.9	103.5
85°	48.9	48.9	48.9	46.1	46.1
87.5°	28.0	28.0	23.8	19.6	14.0
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)