

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: P556159

Luminaire Tested: **FUSL-12-4-LD4-1HI-30-UNV-80-97-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: P556159
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-LD4-1HI-30-UNV-80-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

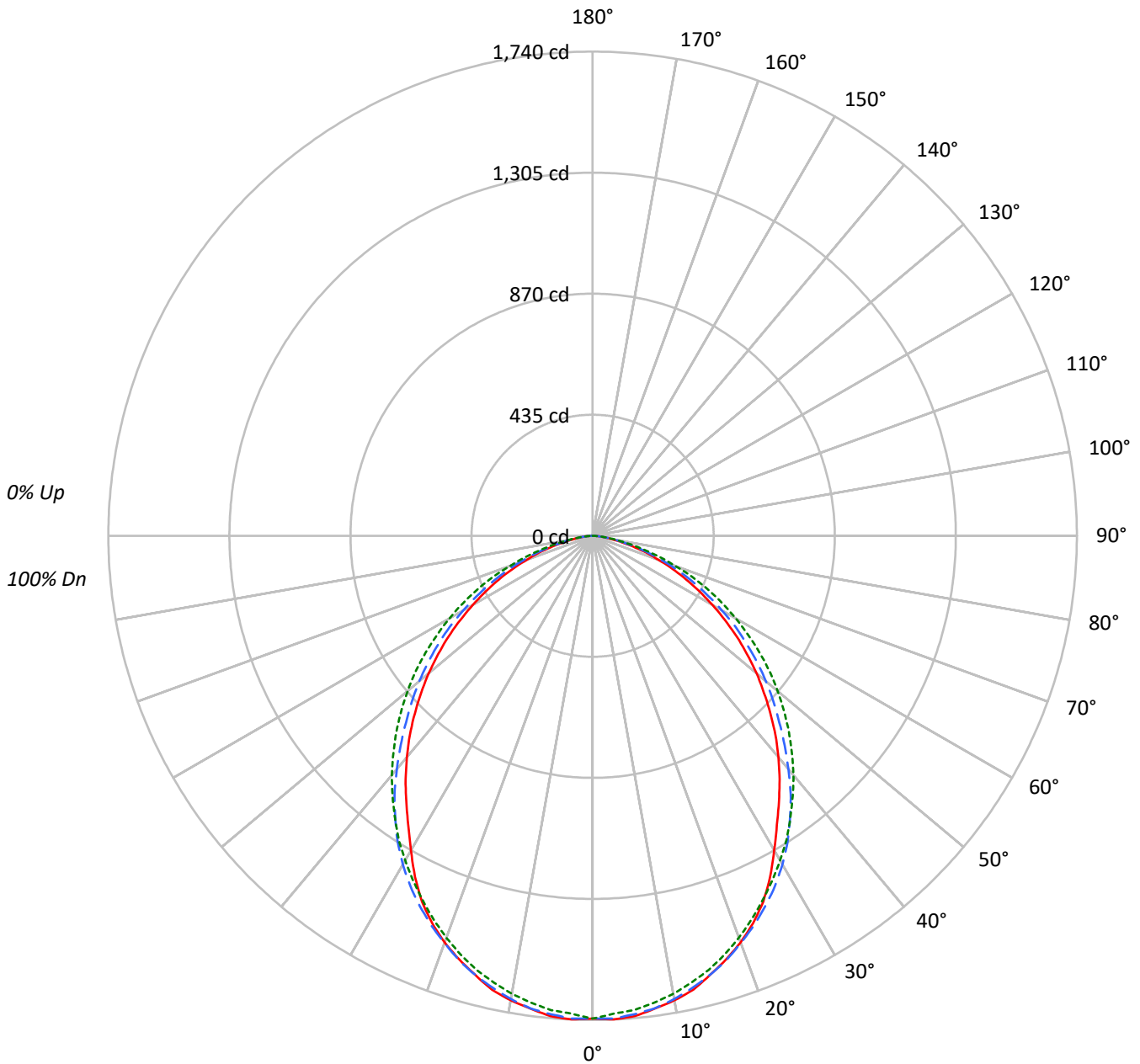
Lumens per Lamp: N/A
Luminaire Lumens: 4012.0 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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

TEST NUMBER: P556159

CATALOG NUMBER: FUSL-12-4-LD4-1HI-30-UNV-80-97-EDD

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°	4669	4669	4669
5°	4682	4662	4622
10°	4632	4619	4566
15°	4550	4550	4498
20°	4453	4459	4402
25°	4307	4360	4291
30°	4055	4238	4186
35°	3832	4062	4069
40°	3646	3842	3943
45°	3437	3610	3795
50°	3218	3402	3633
55°	2968	3165	3437
60°	2673	2888	3196
65°	2360	2568	2907
70°	1967	2187	2471
75°	1545	1747	1934
80°	1105	1229	1364
85°	719	719	679



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.4	4.1
10°-20°	458.9	11.4
20°-30°	670.7	16.7
30°-40°	761.3	19.0
40°-50°	734.9	18.3
50°-60°	606.2	15.1
60°-70°	403.7	10.1
70°-80°	180.7	4.5
80°-90°	32.3	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°	1292.9	32.2
0°-40°	2054.2	51.2
0°-60°	3395.3	84.6
0°-90°	4012.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4012.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1735	1735	1735	1735	1735	
5°	1733	1732	1726	1716	1711	164
15°	1633	1637	1633	1626	1614	460
25°	1450	1462	1468	1458	1445	664
35°	1166	1182	1236	1243	1238	731
45°	903	918	948	992	997	697
55°	633	643	675	712	733	565
65°	371	381	403	432	457	367
75°	149	157	168	176	186	163
85°	23	23	23	22	22	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1735.1	1735.1	1735.1	1735.1	1735.1
2.5°	1739.8	1740.4	1736.4	1725.8	1719.1
5°	1733.1	1732.4	1725.8	1716.4	1711.1
7.5°	1713.8	1715.1	1713.1	1699.8	1692.4
10°	1695.1	1695.8	1690.4	1679.8	1671.1
12.5°	1671.1	1670.4	1663.1	1657.8	1643.8
15°	1633.1	1637.1	1633.1	1625.8	1614.4
17.5°	1596.4	1596.4	1599.1	1586.4	1577.8
20°	1555.1	1557.1	1557.1	1547.1	1537.1
22.5°	1507.1	1513.1	1515.1	1504.5	1492.5
25°	1450.5	1461.8	1468.5	1457.8	1445.1
27.5°	1381.8	1399.1	1419.1	1411.1	1397.1
30°	1305.1	1330.5	1363.8	1357.1	1347.1
32.5°	1232.5	1257.8	1303.8	1301.1	1295.8
35°	1166.5	1182.5	1236.5	1243.2	1238.5
37.5°	1103.8	1118.5	1169.2	1184.5	1180.5
40°	1037.9	1053.9	1093.8	1121.2	1122.5
42.5°	972.5	987.9	1020.5	1059.8	1059.8
45°	903.2	918.5	948.5	991.9	997.2
47.5°	835.2	851.2	880.5	923.9	932.5
50°	768.6	783.2	812.6	854.5	867.9
52.5°	699.2	715.2	743.9	782.6	801.9
55°	632.6	643.2	674.6	711.9	732.6
57.5°	563.3	573.3	608.6	640.6	661.9
60°	496.6	509.3	536.6	569.3	593.9
62.5°	432.6	445.9	469.3	497.9	525.9
65°	370.6	380.6	403.3	431.9	456.6
67.5°	310.6	319.3	342.0	361.9	387.9
70°	250.0	261.3	278.0	297.3	314.0
72.5°	201.3	206.0	220.0	234.0	251.3
75°	148.6	156.6	168.0	176.0	186.0
77.5°	106.7	111.3	118.0	124.6	134.0
80°	71.3	73.3	79.3	80.7	88.0
82.5°	43.3	44.7	46.0	46.7	49.3
85°	23.3	23.3	23.3	22.0	22.0
87.5°	13.3	13.3	11.3	9.3	6.7
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)