

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: P556287

Luminaire Tested: **FUSL-12-4-LD4-1HI-40-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: P556287
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-40-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
4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

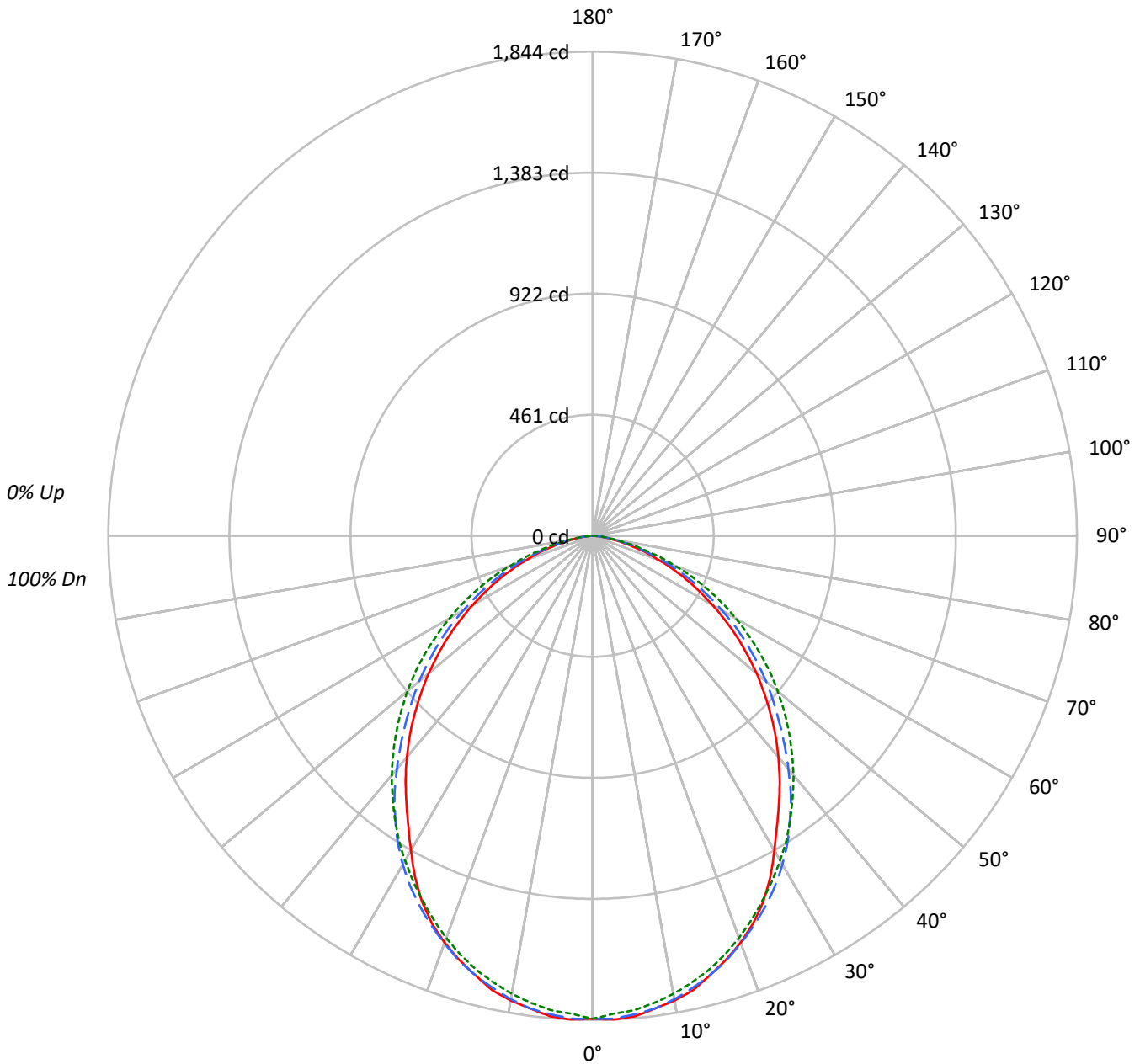
Lumens per Lamp: N/A
Luminaire Lumens: 4253.0 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	4950	4950	4950
5°	4963	4942	4900
10°	4910	4897	4841
15°	4823	4823	4768
20°	4721	4727	4666
25°	4565	4622	4548
30°	4299	4492	4437
35°	4062	4306	4313
40°	3865	4073	4180
45°	3644	3827	4023
50°	3411	3606	3852
55°	3146	3355	3643
60°	2833	3061	3388
65°	2502	2722	3082
70°	2085	2319	2618
75°	1639	1852	2049
80°	1172	1303	1446
85°	763	763	719



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.2	4.1
10°-20°	486.5	11.4
20°-30°	710.9	16.7
30°-40°	807.0	19.0
40°-50°	779.0	18.3
50°-60°	642.7	15.1
60°-70°	428.0	10.1
70°-80°	191.5	4.5
80°-90°	34.3	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°	1370.6	32.2
0°-40°	2177.6	51.2
0°-60°	3599.3	84.6
0°-90°	4253.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4253.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1839	1839	1839	1839	1839	
5°	1837	1836	1829	1820	1814	174
15°	1731	1735	1731	1723	1711	488
25°	1538	1550	1557	1545	1532	704
35°	1237	1254	1311	1318	1313	775
45°	958	974	1006	1051	1057	739
55°	671	682	715	755	777	599
65°	393	404	428	458	484	390
75°	158	166	178	186	197	172
85°	25	25	25	23	23	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1839.3	1839.3	1839.3	1839.3	1839.3
2.5°	1844.3	1845.0	1840.7	1829.4	1822.4
5°	1837.2	1836.5	1829.4	1819.5	1813.9
7.5°	1816.7	1818.1	1816.0	1801.9	1794.1
10°	1796.9	1797.6	1792.0	1780.7	1771.5
12.5°	1771.5	1770.8	1763.0	1757.3	1742.5
15°	1731.2	1735.4	1731.2	1723.4	1711.4
17.5°	1692.3	1692.3	1695.2	1681.7	1672.6
20°	1648.5	1650.6	1650.6	1640.0	1629.4
22.5°	1597.7	1604.0	1606.1	1594.8	1582.1
25°	1537.6	1549.6	1556.7	1545.4	1531.9
27.5°	1464.8	1483.2	1504.4	1495.9	1481.1
30°	1383.5	1410.4	1445.7	1438.7	1428.1
32.5°	1306.5	1333.4	1382.1	1379.3	1373.7
35°	1236.6	1253.5	1310.8	1317.8	1312.9
37.5°	1170.2	1185.7	1239.4	1255.7	1251.4
40°	1100.2	1117.2	1159.6	1188.5	1189.9
42.5°	1030.9	1047.2	1081.8	1123.5	1123.5
45°	957.5	973.7	1005.5	1051.4	1057.1
47.5°	885.4	902.3	933.4	979.4	988.6
50°	814.7	830.3	861.4	905.9	920.0
52.5°	741.2	758.2	788.6	829.6	850.1
55°	670.6	681.9	715.1	754.7	776.6
57.5°	597.1	607.7	645.1	679.1	701.7
60°	526.4	539.9	568.8	603.4	629.6
62.5°	458.6	472.7	497.5	527.8	557.5
65°	392.9	403.5	427.5	457.9	484.0
67.5°	329.3	338.5	362.5	383.7	411.2
70°	265.0	277.0	294.7	315.1	332.8
72.5°	213.4	218.3	233.2	248.0	266.4
75°	157.6	166.1	178.1	186.5	197.1
77.5°	113.1	118.0	125.1	132.1	142.0
80°	75.6	77.7	84.1	85.5	93.3
82.5°	45.9	47.3	48.8	49.5	52.3
85°	24.7	24.7	24.7	23.3	23.3
87.5°	14.1	14.1	12.0	9.9	7.1
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)