

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: P556325

Luminaire Tested: **FUSL-12-4-LD4-1HI-40-UNV-93-86-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: P556325
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-93-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

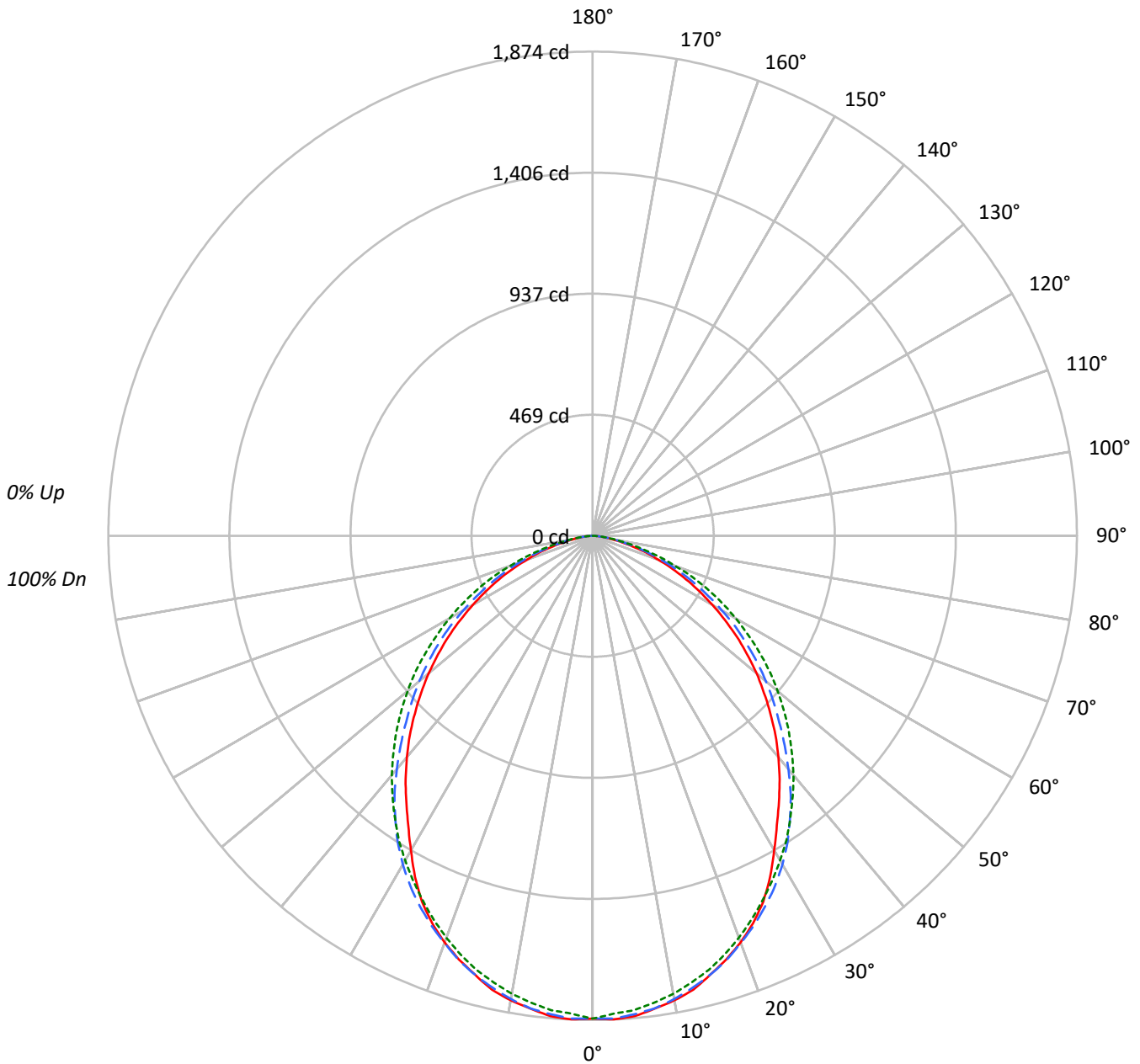
Lumens per Lamp: N/A
Luminaire Lumens: 4321.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	5029	5029	5029
5°	5042	5021	4978
10°	4988	4975	4918
15°	4900	4900	4844
20°	4796	4802	4741
25°	4638	4696	4621
30°	4368	4564	4508
35°	4127	4375	4382
40°	3927	4138	4247
45°	3702	3888	4087
50°	3466	3664	3913
55°	3196	3408	3702
60°	2878	3110	3443
65°	2542	2765	3131
70°	2118	2356	2660
75°	1665	1881	2083
80°	1190	1323	1469
85°	775	775	732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.9	4.1
10°-20°	494.3	11.4
20°-30°	722.3	16.7
30°-40°	819.9	19.0
40°-50°	791.5	18.3
50°-60°	652.9	15.1
60°-70°	434.8	10.1
70°-80°	194.6	4.5
80°-90°	34.8	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°	1392.5	32.2
0°-40°	2212.4	51.2
0°-60°	3656.8	84.6
0°-90°	4321.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4321.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1869	1869	1869	1869	1869	
5°	1867	1866	1859	1849	1843	177
15°	1759	1763	1759	1751	1739	496
25°	1562	1574	1582	1570	1556	715
35°	1256	1274	1332	1339	1334	787
45°	973	989	1022	1068	1074	751
55°	681	693	726	767	789	608
65°	399	410	434	465	492	396
75°	160	169	181	190	200	175
85°	25	25	25	24	24	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1868.7	1868.7	1868.7	1868.7	1868.7
2.5°	1873.7	1874.5	1870.2	1858.7	1851.5
5°	1866.6	1865.8	1858.7	1848.6	1842.9
7.5°	1845.7	1847.2	1845.0	1830.7	1822.8
10°	1825.6	1826.4	1820.6	1809.1	1799.8
12.5°	1799.8	1799.1	1791.2	1785.4	1770.4
15°	1758.9	1763.2	1758.9	1751.0	1738.8
17.5°	1719.4	1719.4	1722.3	1708.6	1699.3
20°	1674.9	1677.0	1677.0	1666.3	1655.5
22.5°	1623.2	1629.7	1631.8	1620.3	1607.4
25°	1562.2	1574.4	1581.6	1570.1	1556.4
27.5°	1488.2	1506.9	1528.4	1519.8	1504.7
30°	1405.7	1432.9	1468.8	1461.7	1450.9
32.5°	1327.4	1354.7	1404.2	1401.4	1395.6
35°	1256.3	1273.6	1331.7	1338.9	1333.9
37.5°	1188.9	1204.7	1259.2	1275.7	1271.4
40°	1117.8	1135.0	1178.1	1207.5	1209.0
42.5°	1047.4	1063.9	1099.1	1141.5	1141.5
45°	972.8	989.3	1021.6	1068.3	1074.0
47.5°	899.5	916.8	948.4	995.0	1004.4
50°	827.8	843.5	875.1	920.4	934.7
52.5°	753.1	770.3	801.2	842.8	863.6
55°	681.3	692.8	726.5	766.7	789.0
57.5°	606.6	617.4	655.5	689.9	712.9
60°	534.8	548.5	577.9	613.1	639.7
62.5°	465.9	480.3	505.4	536.3	566.4
65°	399.2	409.9	434.3	465.2	491.8
67.5°	334.5	343.9	368.3	389.8	417.8
70°	269.2	281.4	299.4	320.2	338.1
72.5°	216.8	221.8	236.9	252.0	270.7
75°	160.1	168.7	180.9	189.5	200.3
77.5°	114.9	119.9	127.1	134.2	144.3
80°	76.8	79.0	85.4	86.9	94.8
82.5°	46.7	48.1	49.5	50.3	53.1
85°	25.1	25.1	25.1	23.7	23.7
87.5°	14.4	14.4	12.2	10.1	7.2
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)