

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: P557298

Luminaire Tested: **FUSL-12-4-LD4-2LO-40-UNV-80-85-EDD-90**

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: P557298
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-LD4-2LO-40-UNV-80-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

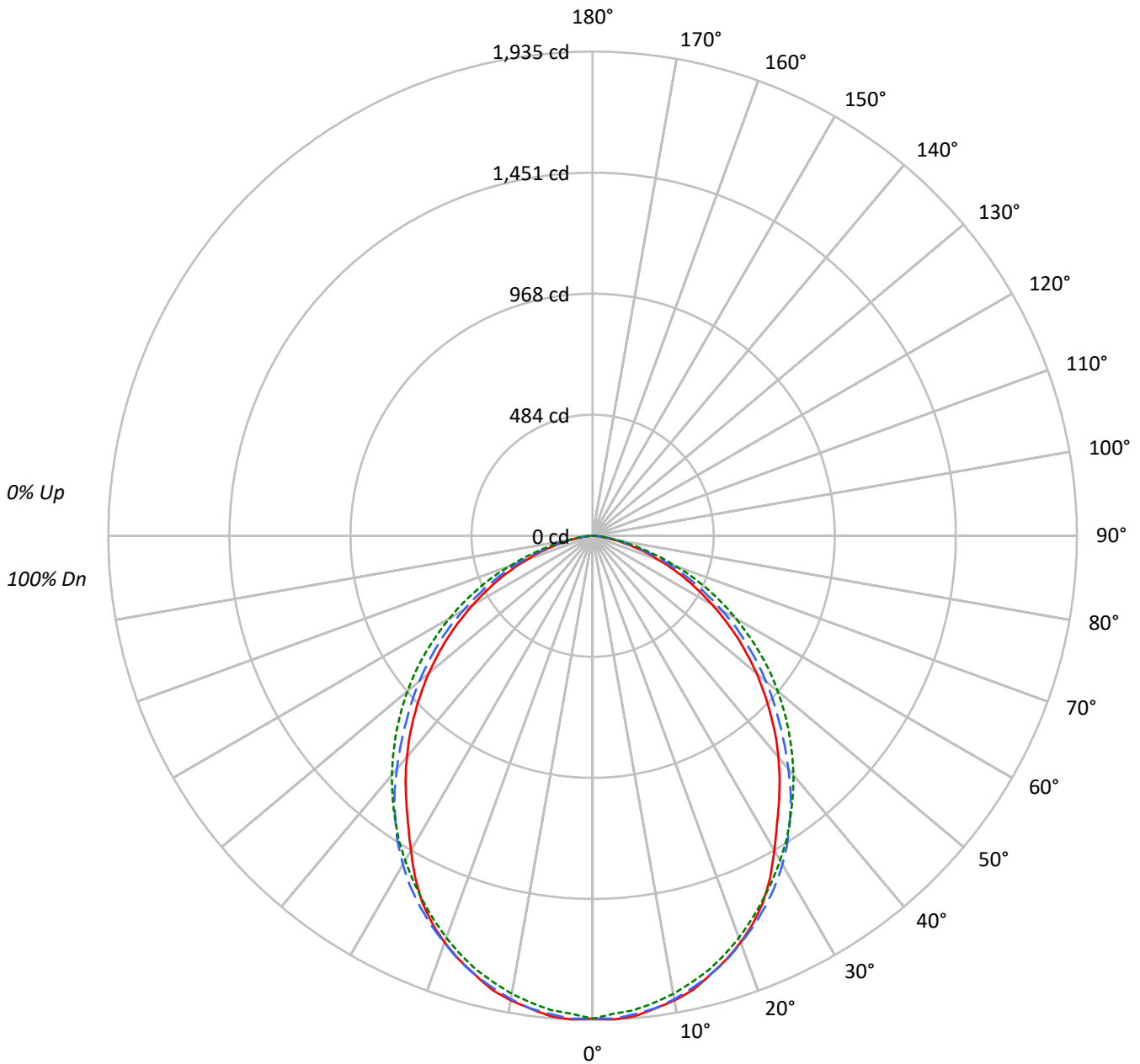
Lumens per Lamp: N/A
Luminaire Lumens: 4462.0 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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°	5193	5193	5193
5°	5207	5185	5140
10°	5151	5137	5078
15°	5060	5060	5002
20°	4953	4959	4895
25°	4790	4849	4772
30°	4510	4713	4655
35°	4262	4518	4525
40°	4055	4273	4385
45°	3823	4015	4220
50°	3579	3783	4041
55°	3301	3520	3822
60°	2972	3212	3555
65°	2625	2856	3233
70°	2187	2432	2747
75°	1719	1942	2150
80°	1229	1367	1517
85°	800	800	756



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.7	4.1
10°-20°	510.4	11.4
20°-30°	745.9	16.7
30°-40°	846.7	19.0
40°-50°	817.3	18.3
50°-60°	674.2	15.1
60°-70°	449.0	10.1
70°-80°	200.9	4.5
80°-90°	35.9	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°	1438.0	32.2
0°-40°	2284.6	51.2
0°-60°	3776.2	84.6
0°-90°	4462.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4462.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1930	1930	1930	1930	1930	
5°	1928	1927	1919	1909	1903	182
15°	1816	1821	1816	1808	1796	512
25°	1613	1626	1633	1621	1607	739
35°	1297	1315	1375	1383	1377	813
45°	1004	1022	1055	1103	1109	775
55°	704	715	750	792	815	628
65°	412	423	448	480	508	409
75°	165	174	187	196	207	181
85°	26	26	26	24	24	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1929.7	1929.7	1929.7	1929.7	1929.7
2.5°	1934.9	1935.6	1931.2	1919.3	1911.9
5°	1927.5	1926.7	1919.3	1908.9	1903.0
7.5°	1906.0	1907.5	1905.2	1890.4	1882.3
10°	1885.2	1886.0	1880.0	1868.2	1858.5
12.5°	1858.5	1857.8	1849.6	1843.7	1828.1
15°	1816.3	1820.7	1816.3	1808.1	1795.5
17.5°	1775.5	1775.5	1778.5	1764.4	1754.7
20°	1729.5	1731.8	1731.8	1720.6	1709.5
22.5°	1676.2	1682.8	1685.1	1673.2	1659.9
25°	1613.1	1625.8	1633.2	1621.3	1607.2
27.5°	1536.8	1556.1	1578.3	1569.4	1553.8
30°	1451.5	1479.7	1516.8	1509.4	1498.2
32.5°	1370.7	1398.9	1450.1	1447.1	1441.2
35°	1297.3	1315.1	1375.2	1382.6	1377.4
37.5°	1227.7	1244.0	1300.3	1317.4	1312.9
40°	1154.3	1172.1	1216.5	1246.9	1248.4
42.5°	1081.6	1098.7	1135.0	1178.7	1178.7
45°	1004.5	1021.6	1054.9	1103.1	1109.0
47.5°	928.9	946.7	979.3	1027.5	1037.1
50°	854.8	871.1	903.7	950.4	965.2
52.5°	777.7	795.5	827.3	870.3	891.8
55°	703.5	715.4	750.2	791.7	814.7
57.5°	626.4	637.5	676.8	712.4	736.1
60°	552.3	566.4	596.8	633.1	660.5
62.5°	481.1	496.0	521.9	553.8	584.9
65°	412.2	423.3	448.5	480.4	507.8
67.5°	345.5	355.1	380.3	402.5	431.5
70°	278.0	290.6	309.1	330.6	349.2
72.5°	223.9	229.1	244.6	260.2	279.5
75°	165.3	174.2	186.8	195.7	206.8
77.5°	118.6	123.8	131.2	138.6	149.0
80°	79.3	81.5	88.2	89.7	97.9
82.5°	48.2	49.7	51.2	51.9	54.9
85°	25.9	25.9	25.9	24.5	24.5
87.5°	14.8	14.8	12.6	10.4	7.4
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)