

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: P557302

Luminaire Tested: **FUSL-12-4-LD4-2LO-40-UNV-80-87-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: P557302
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-80-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

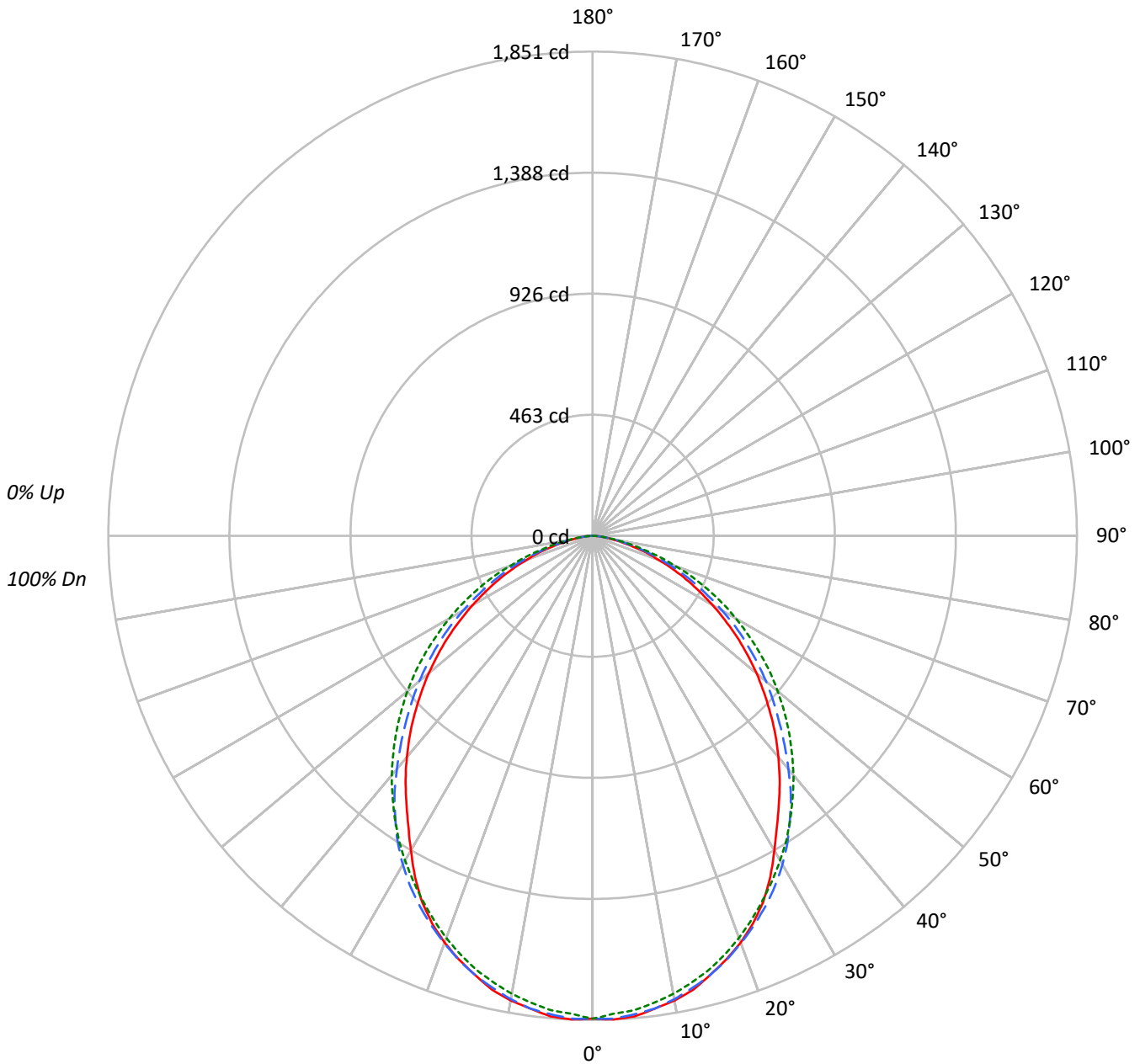
Lumens per Lamp: N/A
Luminaire Lumens: 4269.0 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
Input Voltage (V): NR
Input Current (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°	4968	4968	4968
5°	4981	4960	4918
10°	4929	4915	4859
15°	4841	4841	4786
20°	4739	4745	4684
25°	4583	4639	4566
30°	4315	4509	4454
35°	4077	4322	4329
40°	3879	4089	4196
45°	3658	3841	4038
50°	3424	3620	3866
55°	3158	3368	3657
60°	2844	3073	3401
65°	2511	2732	3094
70°	2093	2327	2629
75°	1645	1858	2058
80°	1176	1308	1450
85°	766	766	722



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.8	4.1
10°-20°	488.3	11.4
20°-30°	713.6	16.7
30°-40°	810.0	19.0
40°-50°	782.0	18.3
50°-60°	645.1	15.1
60°-70°	429.6	10.1
70°-80°	192.2	4.5
80°-90°	34.4	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°	1375.8	32.2
0°-40°	2185.8	51.2
0°-60°	3612.8	84.6
0°-90°	4269.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4269.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1846	1846	1846	1846	1846	
5°	1844	1843	1836	1826	1821	175
15°	1738	1742	1738	1730	1718	490
25°	1543	1555	1562	1551	1538	707
35°	1241	1258	1316	1323	1318	778
45°	961	977	1009	1055	1061	742
55°	673	684	718	758	780	601
65°	394	405	429	460	486	391
75°	158	167	179	187	198	173
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°	1846.2	1846.2	1846.2	1846.2	1846.2
2.5°	1851.2	1851.9	1847.7	1836.3	1829.2
5°	1844.1	1843.4	1836.3	1826.4	1820.7
7.5°	1823.5	1825.0	1822.8	1808.6	1800.8
10°	1803.7	1804.4	1798.7	1787.4	1778.1
12.5°	1778.1	1777.4	1769.6	1764.0	1749.1
15°	1737.7	1742.0	1737.7	1729.9	1717.9
17.5°	1698.7	1698.7	1701.5	1688.1	1678.8
20°	1654.7	1656.9	1656.9	1646.2	1635.6
22.5°	1603.7	1610.0	1612.2	1600.8	1588.1
25°	1543.4	1555.4	1562.5	1551.2	1537.7
27.5°	1470.3	1488.8	1510.0	1501.5	1486.6
30°	1388.8	1415.7	1451.2	1444.1	1433.4
32.5°	1311.4	1338.4	1387.3	1384.5	1378.8
35°	1241.2	1258.2	1315.7	1322.8	1317.8
37.5°	1174.6	1190.2	1244.1	1260.4	1256.1
40°	1104.3	1121.4	1163.9	1193.0	1194.4
42.5°	1034.8	1051.1	1085.9	1127.7	1127.7
45°	961.1	977.4	1009.3	1055.4	1061.1
47.5°	888.7	905.7	936.9	983.0	992.3
50°	817.8	833.4	864.6	909.3	923.5
52.5°	744.0	761.0	791.5	832.7	853.3
55°	673.1	684.4	717.8	757.5	779.5
57.5°	599.3	610.0	647.6	681.6	704.3
60°	528.4	541.9	571.0	605.7	632.0
62.5°	460.3	474.5	499.3	529.8	559.6
65°	394.4	405.0	429.1	459.6	485.9
67.5°	330.5	339.7	363.9	385.1	412.8
70°	266.0	278.0	295.8	316.3	334.1
72.5°	214.2	219.2	234.1	249.0	267.4
75°	158.2	166.7	178.7	187.2	197.9
77.5°	113.5	118.4	125.5	132.6	142.6
80°	75.9	78.0	84.4	85.8	93.6
82.5°	46.1	47.5	48.9	49.6	52.5
85°	24.8	24.8	24.8	23.4	23.4
87.5°	14.2	14.2	12.1	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)