

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: P557181

Luminaire Tested: **FUSL-12-4-LD4-2LO-30-UNV-80-96-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: P557181
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-30-UNV-80-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

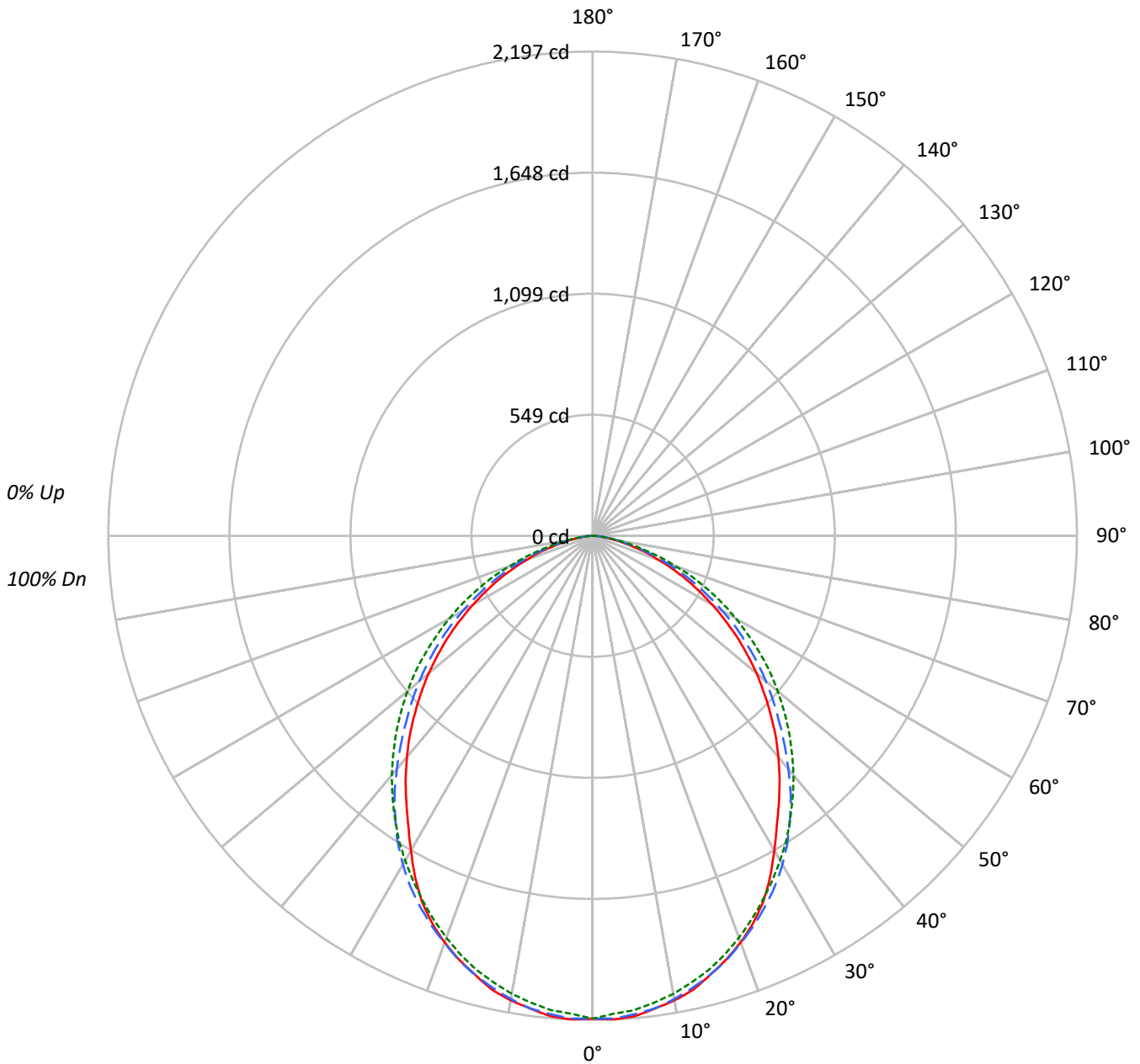
Lumens per Lamp: N/A
Luminaire Lumens: 5066.0 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P557181

CATALOG NUMBER: FUSL-12-4-LD4-2LO-30-UNV-80-96-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°	5896	5896	5896
5°	5911	5886	5836
10°	5849	5833	5766
15°	5745	5745	5679
20°	5623	5631	5558
25°	5438	5505	5418
30°	5121	5351	5286
35°	4839	5129	5138
40°	4604	4852	4979
45°	4340	4558	4792
50°	4063	4295	4588
55°	3748	3996	4340
60°	3375	3647	4036
65°	2980	3242	3671
70°	2483	2762	3119
75°	1952	2205	2441
80°	1396	1553	1722
85°	911	911	858



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.3	4.1
10°-20°	579.5	11.4
20°-30°	846.8	16.7
30°-40°	961.3	19.0
40°-50°	927.9	18.3
50°-60°	765.5	15.1
60°-70°	509.8	10.1
70°-80°	228.1	4.5
80°-90°	40.8	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°	1632.6	32.2
0°-40°	2593.9	51.2
0°-60°	4287.3	84.6
0°-90°	5066.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5066.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2191	2191	2191	2191	2191	
5°	2188	2188	2179	2167	2161	207
15°	2062	2067	2062	2053	2039	581
25°	1832	1846	1854	1841	1825	839
35°	1473	1493	1561	1570	1564	923
45°	1140	1160	1198	1252	1259	880
55°	799	812	852	899	925	713
65°	468	481	509	545	577	464
75°	188	198	212	222	235	205
85°	30	30	30	28	28	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2190.9	2190.9	2190.9	2190.9	2190.9
2.5°	2196.8	2197.6	2192.6	2179.1	2170.7
5°	2188.4	2187.5	2179.1	2167.3	2160.6
7.5°	2164.0	2165.7	2163.1	2146.3	2137.0
10°	2140.4	2141.3	2134.5	2121.1	2110.1
12.5°	2110.1	2109.3	2100.0	2093.3	2075.6
15°	2062.1	2067.2	2062.1	2052.9	2038.6
17.5°	2015.8	2015.8	2019.2	2003.2	1992.3
20°	1963.7	1966.2	1966.2	1953.6	1940.9
22.5°	1903.1	1910.6	1913.2	1899.7	1884.5
25°	1831.5	1845.8	1854.2	1840.8	1824.8
27.5°	1744.8	1766.7	1792.0	1781.9	1764.2
30°	1648.0	1680.0	1722.1	1713.7	1701.1
32.5°	1556.3	1588.3	1646.3	1643.0	1636.2
35°	1473.0	1493.2	1561.3	1569.7	1563.9
37.5°	1393.8	1412.4	1476.3	1495.7	1490.6
40°	1310.5	1330.7	1381.2	1415.7	1417.4
42.5°	1228.0	1247.4	1288.6	1338.3	1338.3
45°	1140.5	1159.8	1197.7	1252.4	1259.2
47.5°	1054.6	1074.8	1111.9	1166.6	1177.5
50°	970.5	989.0	1026.0	1079.0	1095.9
52.5°	882.9	903.1	939.3	988.1	1012.6
55°	798.8	812.2	851.8	898.9	925.0
57.5°	711.2	723.9	768.5	808.9	835.8
60°	627.1	643.0	677.6	718.8	749.9
62.5°	546.3	563.1	592.5	628.7	664.1
65°	468.0	480.6	509.2	545.4	576.6
67.5°	392.2	403.2	431.8	457.0	489.9
70°	315.6	329.9	351.0	375.4	396.4
72.5°	254.2	260.1	277.8	295.4	317.3
75°	187.7	197.8	212.1	222.2	234.8
77.5°	134.7	140.6	149.0	157.4	169.2
80°	90.1	92.6	100.2	101.8	111.1
82.5°	54.7	56.4	58.1	58.9	62.3
85°	29.5	29.5	29.5	27.8	27.8
87.5°	16.8	16.8	14.3	11.8	8.4
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)