

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: P557310

Luminaire Tested: **FUSL-12-4-LD4-2LO-40-UNV-80-97-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: P557310
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-80-97-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

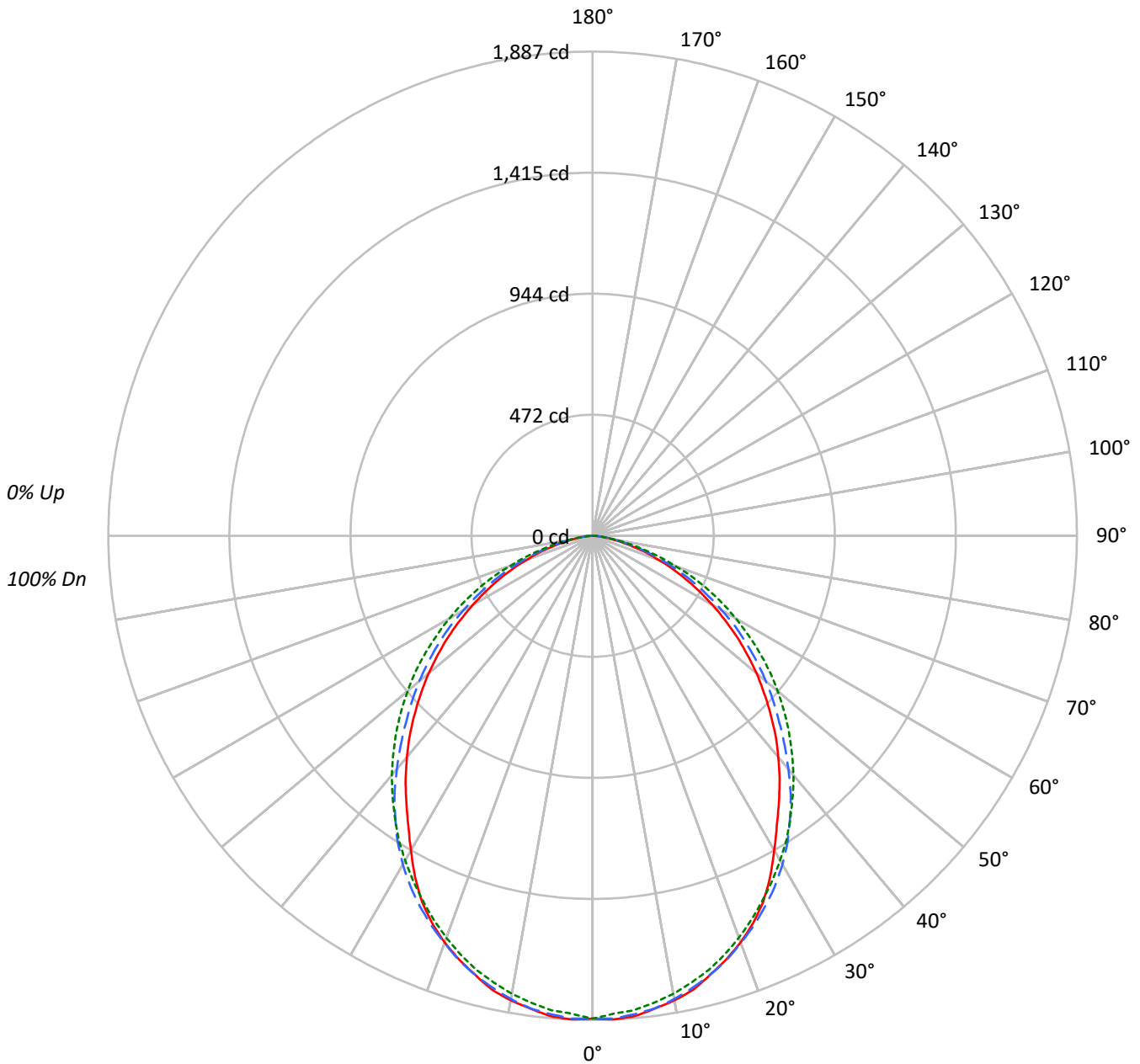
Lumens per Lamp: N/A
Luminaire Lumens: 4351.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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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CATALOG NUMBER: FUSL-12-4-LD4-2LO-40-UNV-80-97-EDD-90

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°	5064	5064	5064
5°	5077	5056	5013
10°	5023	5009	4952
15°	4934	4934	4878
20°	4830	4836	4774
25°	4670	4728	4653
30°	4398	4596	4540
35°	4156	4405	4412
40°	3954	4167	4277
45°	3728	3915	4116
50°	3489	3689	3940
55°	3218	3432	3727
60°	2899	3132	3467
65°	2559	2785	3153
70°	2133	2371	2679
75°	1676	1894	2097
80°	1198	1333	1478
85°	781	781	738



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.2	4.1
10°-20°	497.7	11.4
20°-30°	727.3	16.7
30°-40°	825.6	19.0
40°-50°	797.0	18.3
50°-60°	657.5	15.1
60°-70°	437.8	10.1
70°-80°	195.9	4.5
80°-90°	35.1	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°	1402.2	32.2
0°-40°	2227.8	51.2
0°-60°	3682.2	84.6
0°-90°	4351.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4351.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1882	1882	1882	1882	1882	
5°	1880	1879	1872	1862	1856	178
15°	1771	1775	1771	1763	1751	499
25°	1573	1585	1592	1581	1567	720
35°	1265	1282	1341	1348	1343	793
45°	980	996	1029	1076	1082	756
55°	686	698	732	772	794	612
65°	402	413	437	468	495	399
75°	161	170	182	191	202	176
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°	1881.7	1881.7	1881.7	1881.7	1881.7
2.5°	1886.8	1887.5	1883.1	1871.6	1864.3
5°	1879.5	1878.8	1871.6	1861.5	1855.7
7.5°	1858.6	1860.0	1857.8	1843.4	1835.4
10°	1838.3	1839.0	1833.3	1821.7	1812.3
12.5°	1812.3	1811.6	1803.6	1797.8	1782.7
15°	1771.1	1775.4	1771.1	1763.1	1750.9
17.5°	1731.3	1731.3	1734.2	1720.5	1711.1
20°	1686.5	1688.7	1688.7	1677.8	1667.0
22.5°	1634.5	1641.0	1643.1	1631.6	1618.6
25°	1573.0	1585.3	1592.5	1581.0	1567.2
27.5°	1498.6	1517.4	1539.0	1530.4	1515.2
30°	1415.4	1442.9	1479.0	1471.8	1461.0
32.5°	1336.6	1364.1	1414.0	1411.1	1405.3
35°	1265.1	1282.4	1341.0	1348.2	1343.1
37.5°	1197.1	1213.0	1268.0	1284.6	1280.2
40°	1125.5	1142.9	1186.3	1215.9	1217.4
42.5°	1054.7	1071.3	1106.8	1149.4	1149.4
45°	979.5	996.1	1028.7	1075.7	1081.5
47.5°	905.8	923.1	954.9	1001.9	1011.3
50°	833.5	849.4	881.2	926.8	941.2
52.5°	758.3	775.7	806.8	848.7	869.6
55°	686.0	697.6	731.6	772.1	794.5
57.5°	610.8	621.7	660.0	694.7	717.8
60°	538.6	552.3	581.9	617.4	644.1
62.5°	469.2	483.6	508.9	540.0	570.4
65°	401.9	412.8	437.4	468.4	495.2
67.5°	336.9	346.3	370.8	392.5	420.7
70°	271.1	283.4	301.4	322.4	340.5
72.5°	218.3	223.4	238.6	253.7	272.5
75°	161.2	169.9	182.2	190.8	201.7
77.5°	115.7	120.7	128.0	135.2	145.3
80°	77.3	79.5	86.0	87.5	95.4
82.5°	47.0	48.4	49.9	50.6	53.5
85°	25.3	25.3	25.3	23.9	23.9
87.5°	14.5	14.5	12.3	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)