

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: P557242

Luminaire Tested: **FUSL-12-4-LD4-2LO-35-UNV-80-94-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: P557242
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-35-UNV-80-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

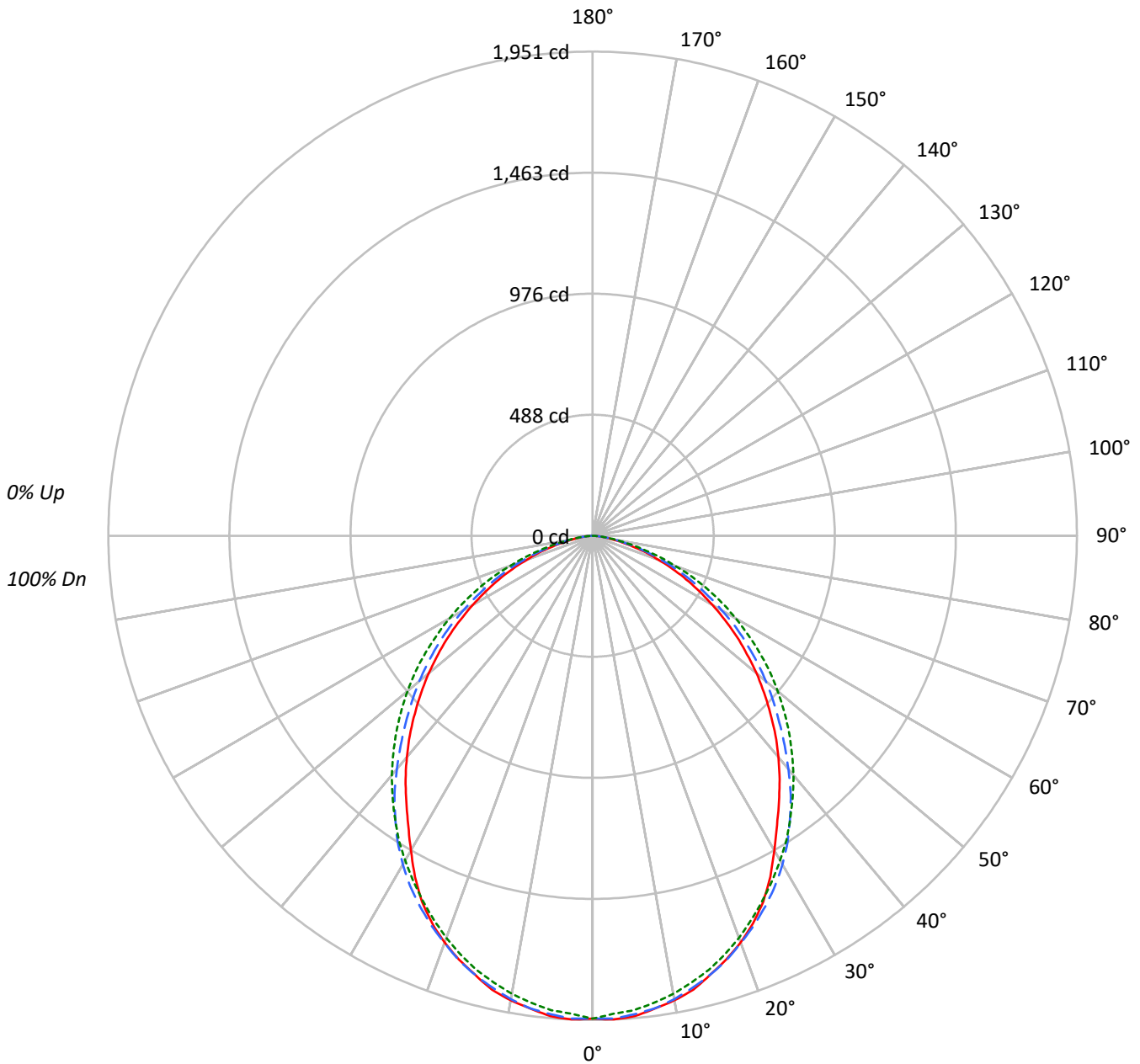
Lumens per Lamp: N/A
Luminaire Lumens: 4499.0 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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-35-UNV-80-94-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°	5236	5236	5236
5°	5250	5227	5183
10°	5194	5180	5120
15°	5102	5102	5044
20°	4994	5000	4936
25°	4829	4889	4812
30°	4548	4752	4694
35°	4297	4555	4562
40°	4088	4309	4422
45°	3854	4048	4255
50°	3608	3815	4074
55°	3328	3549	3854
60°	2997	3238	3584
65°	2646	2879	3260
70°	2205	2452	2770
75°	1733	1959	2168
80°	1240	1379	1530
85°	809	809	763



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.2	4.1
10°-20°	514.6	11.4
20°-30°	752.1	16.7
30°-40°	853.7	19.0
40°-50°	824.1	18.3
50°-60°	679.8	15.1
60°-70°	452.7	10.1
70°-80°	202.6	4.5
80°-90°	36.3	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°	1449.9	32.2
0°-40°	2303.6	51.2
0°-60°	3807.5	84.6
0°-90°	4499.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4499.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1946	1946	1946	1946	1946	
5°	1944	1943	1935	1925	1919	184
15°	1831	1836	1831	1823	1810	516
25°	1626	1639	1647	1635	1620	745
35°	1308	1326	1387	1394	1389	820
45°	1013	1030	1064	1112	1118	781
55°	709	721	756	798	822	633
65°	416	427	452	484	512	412
75°	167	176	188	197	208	182
85°	26	26	26	25	25	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1945.7	1945.7	1945.7	1945.7	1945.7
2.5°	1950.9	1951.7	1947.2	1935.2	1927.8
5°	1943.5	1942.7	1935.2	1924.8	1918.8
7.5°	1921.8	1923.3	1921.0	1906.1	1897.9
10°	1900.9	1901.6	1895.6	1883.7	1873.9
12.5°	1873.9	1873.2	1865.0	1859.0	1843.3
15°	1831.3	1835.8	1831.3	1823.1	1810.4
17.5°	1790.2	1790.2	1793.2	1779.0	1769.3
20°	1743.9	1746.1	1746.1	1734.9	1723.7
22.5°	1690.1	1696.8	1699.0	1687.1	1673.6
25°	1626.5	1639.2	1646.7	1634.7	1620.5
27.5°	1549.5	1569.0	1591.4	1582.4	1566.7
30°	1463.6	1492.0	1529.4	1521.9	1510.7
32.5°	1382.1	1410.5	1462.1	1459.1	1453.1
35°	1308.1	1326.0	1386.6	1394.1	1388.8
37.5°	1237.8	1254.3	1311.1	1328.3	1323.8
40°	1163.8	1181.8	1226.6	1257.3	1258.8
42.5°	1090.6	1107.8	1144.4	1188.5	1188.5
45°	1012.8	1030.0	1063.7	1112.3	1118.2
47.5°	936.6	954.5	987.4	1036.0	1045.7
50°	861.8	878.3	911.2	958.3	973.2
52.5°	784.1	802.1	834.2	877.5	899.2
55°	709.4	721.3	756.5	798.3	821.5
57.5°	631.6	642.8	682.5	718.3	742.3
60°	556.9	571.1	601.7	638.4	666.0
62.5°	485.1	500.1	526.2	558.4	589.8
65°	415.6	426.8	452.2	484.4	512.0
67.5°	348.3	358.0	383.5	405.9	435.0
70°	280.3	293.0	311.7	333.4	352.1
72.5°	225.7	231.0	246.7	262.4	281.8
75°	166.7	175.7	188.4	197.3	208.5
77.5°	119.6	124.8	132.3	139.8	150.2
80°	80.0	82.2	89.0	90.4	98.7
82.5°	48.6	50.1	51.6	52.3	55.3
85°	26.2	26.2	26.2	24.7	24.7
87.5°	14.9	14.9	12.7	10.5	7.5
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)