

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: P558279

Luminaire Tested: **FUSL-12-4-LD4-3STD-35-UNV-81-87-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: P558279
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-LD4-3STD-35-UNV-81-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

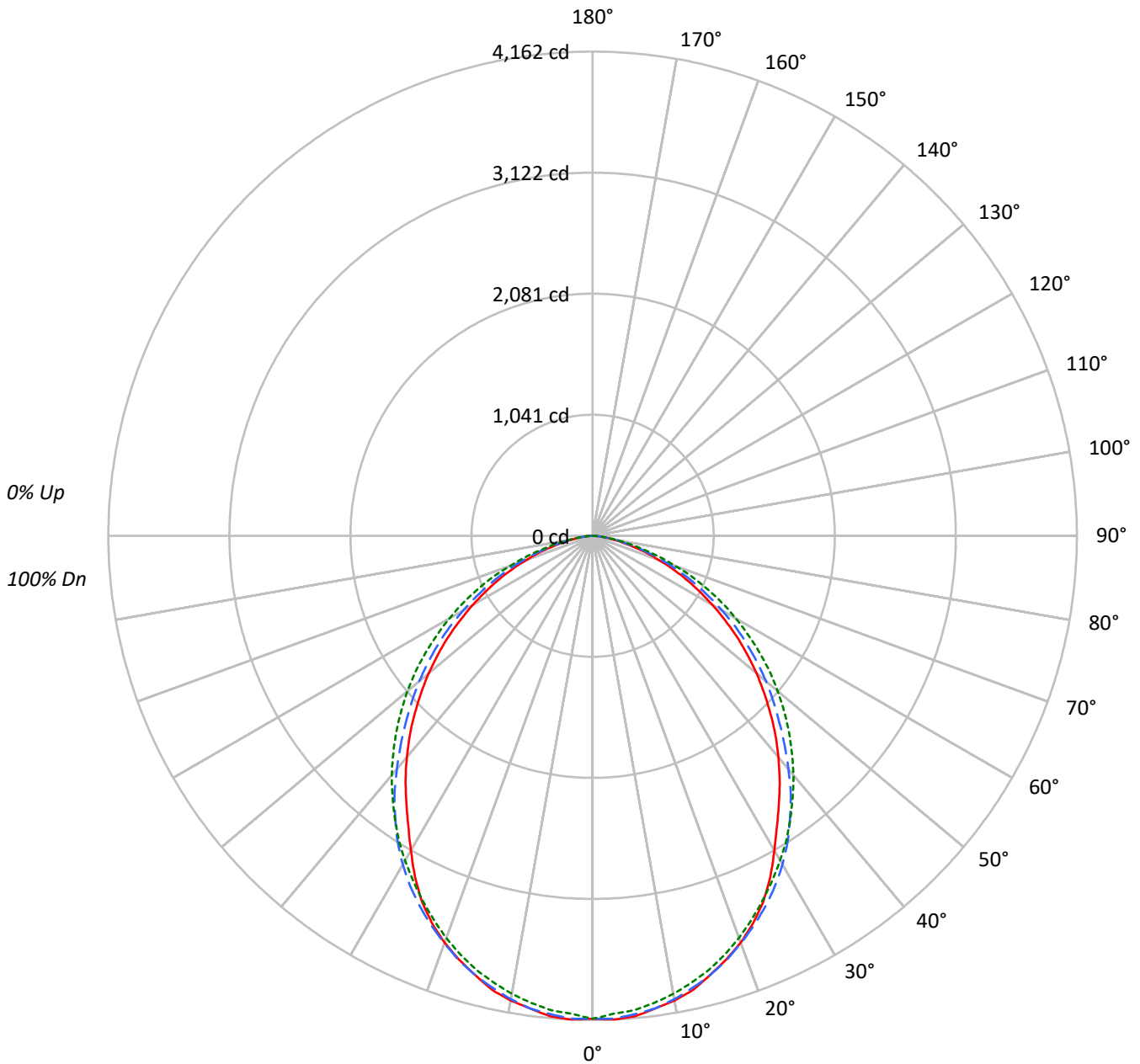
Lumens per Lamp: N/A
Luminaire Lumens: 9599.0 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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°	11171	11171	11171
5°	11201	11153	11059
10°	11082	11052	10925
15°	10885	10885	10761
20°	10655	10669	10532
25°	10304	10432	10266
30°	9703	10139	10015
35°	9168	9719	9734
40°	8723	9193	9434
45°	8224	8636	9080
50°	7698	8139	8693
55°	7101	7572	8223
60°	6394	6909	7648
65°	5646	6144	6956
70°	4706	5232	5910
75°	3697	4179	4627
80°	2644	2941	3262
85°	1723	1723	1624



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.9	4.1
10°-20°	1098.0	11.4
20°-30°	1604.6	16.7
30°-40°	1821.4	19.0
40°-50°	1758.3	18.3
50°-60°	1450.4	15.1
60°-70°	965.9	10.1
70°-80°	432.2	4.5
80°-90°	77.3	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°	3093.5	32.2
0°-40°	4914.9	51.2
0°-60°	8123.6	84.6
0°-90°	9599.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9599.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4151	4151	4151	4151	4151	
5°	4146	4145	4129	4107	4094	392
15°	3907	3917	3907	3890	3863	1101
25°	3470	3497	3513	3488	3458	1589
35°	2791	2829	2958	2974	2963	1749
45°	2161	2198	2269	2373	2386	1667
55°	1514	1539	1614	1703	1753	1351
65°	887	911	965	1033	1092	879
75°	356	375	402	421	445	389
85°	56	56	56	53	53	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4151.3	4151.3	4151.3	4151.3	4151.3
2.5°	4162.5	4164.1	4154.5	4129.0	4113.0
5°	4146.5	4144.9	4129.0	4106.7	4093.9
7.5°	4100.3	4103.5	4098.7	4066.8	4049.3
10°	4055.6	4057.2	4044.5	4018.9	3998.2
12.5°	3998.2	3996.6	3979.1	3966.3	3932.8
15°	3907.3	3916.9	3907.3	3889.8	3862.7
17.5°	3819.6	3819.6	3826.0	3795.7	3774.9
20°	3720.7	3725.5	3725.5	3701.6	3677.7
22.5°	3605.9	3620.2	3625.0	3599.5	3570.8
25°	3470.3	3497.4	3513.4	3487.9	3457.6
27.5°	3306.1	3347.5	3395.4	3376.2	3342.7
30°	3122.7	3183.3	3263.0	3247.1	3223.1
32.5°	2948.8	3009.4	3119.5	3113.1	3100.3
35°	2790.9	2829.2	2958.4	2974.3	2963.2
37.5°	2641.0	2676.1	2797.3	2834.0	2824.4
40°	2483.1	2521.4	2617.1	2682.5	2685.7
42.5°	2326.8	2363.5	2441.7	2535.8	2535.8
45°	2161.0	2197.7	2269.4	2373.1	2385.9
47.5°	1998.3	2036.6	2106.8	2210.4	2231.2
50°	1838.8	1873.9	1944.1	2044.6	2076.5
52.5°	1673.0	1711.2	1779.8	1872.3	1918.6
55°	1513.5	1539.0	1614.0	1703.3	1752.7
57.5°	1347.6	1371.5	1456.1	1532.6	1583.7
60°	1188.1	1218.4	1283.8	1362.0	1421.0
62.5°	1035.0	1066.9	1122.8	1191.3	1258.3
65°	886.7	910.6	964.9	1033.4	1092.5
67.5°	743.2	763.9	818.1	866.0	928.2
70°	598.1	625.2	665.0	711.3	751.2
72.5°	481.6	492.8	526.3	559.8	601.2
75°	355.6	374.8	401.9	421.0	445.0
77.5°	255.2	266.3	282.3	298.2	320.6
80°	170.6	175.4	189.8	193.0	210.5
82.5°	103.7	106.9	110.0	111.6	118.0
85°	55.8	55.8	55.8	52.6	52.6
87.5°	31.9	31.9	27.1	22.3	15.9
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)