

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: P557548

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-93-96-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: P557548
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-LD4-2STD-35-UNV-93-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

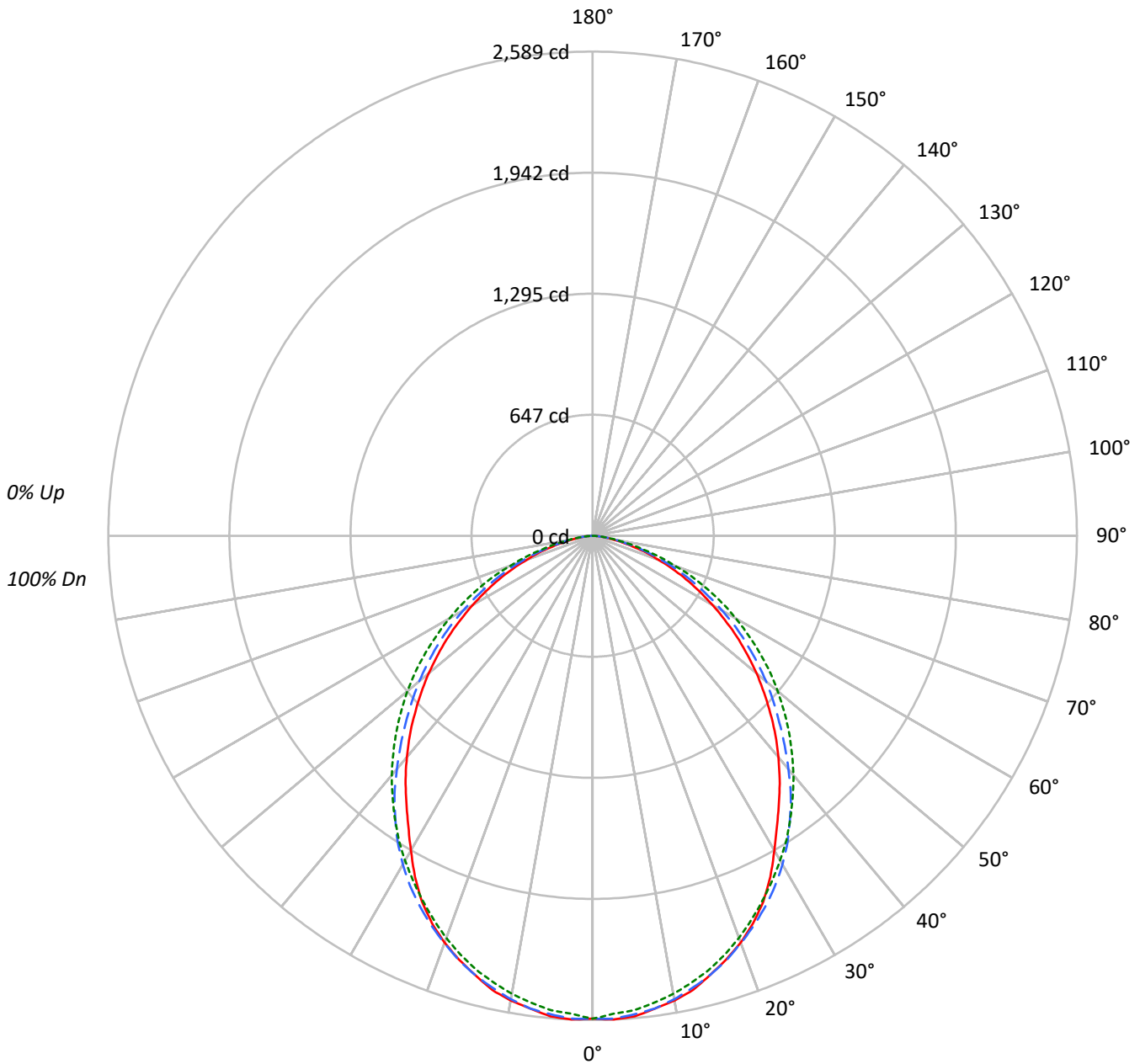
Lumens per Lamp: N/A
Luminaire Lumens: 5971.0 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	6949	6949	6949
5°	6967	6938	6879
10°	6894	6874	6796
15°	6771	6771	6694
20°	6628	6636	6551
25°	6410	6489	6386
30°	6036	6307	6230
35°	5703	6046	6055
40°	5426	5719	5869
45°	5116	5372	5648
50°	4788	5063	5407
55°	4417	4710	5115
60°	3978	4298	4757
65°	3512	3822	4327
70°	2927	3255	3677
75°	2300	2599	2878
80°	1644	1830	2030
85°	1071	1071	1010



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.1	4.1
10°-20°	683.0	11.4
20°-30°	998.1	16.7
30°-40°	1133.0	19.0
40°-50°	1093.7	18.3
50°-60°	902.2	15.1
60°-70°	600.8	10.1
70°-80°	268.9	4.5
80°-90°	48.1	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°	1924.3	32.2
0°-40°	3057.3	51.2
0°-60°	5053.2	84.6
0°-90°	5971.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5971.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2582	2582	2582	2582	2582	
5°	2579	2578	2568	2554	2547	244
15°	2430	2436	2430	2420	2403	685
25°	2159	2176	2186	2170	2151	989
35°	1736	1760	1840	1850	1843	1088
45°	1344	1367	1412	1476	1484	1037
55°	942	957	1004	1060	1090	840
65°	552	566	600	643	680	547
75°	221	233	250	262	277	242
85°	35	35	35	33	33	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2582.3	2582.3	2582.3	2582.3	2582.3
2.5°	2589.2	2590.2	2584.3	2568.4	2558.5
5°	2579.3	2578.3	2568.4	2554.5	2546.6
7.5°	2550.6	2552.5	2549.6	2529.7	2518.8
10°	2522.8	2523.8	2515.8	2500.0	2487.1
12.5°	2487.1	2486.1	2475.2	2467.2	2446.4
15°	2430.5	2436.5	2430.5	2419.6	2402.7
17.5°	2376.0	2376.0	2379.9	2361.1	2348.2
20°	2314.5	2317.4	2317.4	2302.5	2287.7
22.5°	2243.0	2252.0	2254.9	2239.1	2221.2
25°	2158.7	2175.6	2185.5	2169.6	2150.8
27.5°	2056.5	2082.3	2112.1	2100.2	2079.3
30°	1942.4	1980.1	2029.7	2019.8	2004.9
32.5°	1834.3	1872.0	1940.4	1936.5	1928.5
35°	1736.1	1759.9	1840.3	1850.2	1843.2
37.5°	1642.8	1664.7	1740.1	1762.9	1756.9
40°	1544.6	1568.4	1628.0	1668.6	1670.6
42.5°	1447.4	1470.2	1518.8	1577.4	1577.4
45°	1344.2	1367.0	1411.7	1476.2	1484.1
47.5°	1243.0	1266.8	1310.5	1375.0	1387.9
50°	1143.8	1165.7	1209.3	1271.8	1291.6
52.5°	1040.7	1064.5	1107.1	1164.7	1193.4
55°	941.5	957.3	1004.0	1059.5	1090.3
57.5°	838.3	853.2	905.7	953.4	985.1
60°	739.1	757.9	798.6	847.2	883.9
62.5°	643.8	663.7	698.4	741.1	782.7
65°	551.6	566.5	600.2	642.8	679.6
67.5°	462.3	475.2	508.9	538.7	577.4
70°	372.0	388.9	413.7	442.5	467.3
72.5°	299.6	306.5	327.4	348.2	374.0
75°	221.2	233.1	250.0	261.9	276.8
77.5°	158.7	165.7	175.6	185.5	199.4
80°	106.1	109.1	118.1	120.0	131.0
82.5°	64.5	66.5	68.5	69.4	73.4
85°	34.7	34.7	34.7	32.7	32.7
87.5°	19.8	19.8	16.9	13.9	9.9
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)