

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: P557868

Luminaire Tested: **FUSL-12-4-LD4-3HI-40-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: P557868
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-LD4-3HI-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

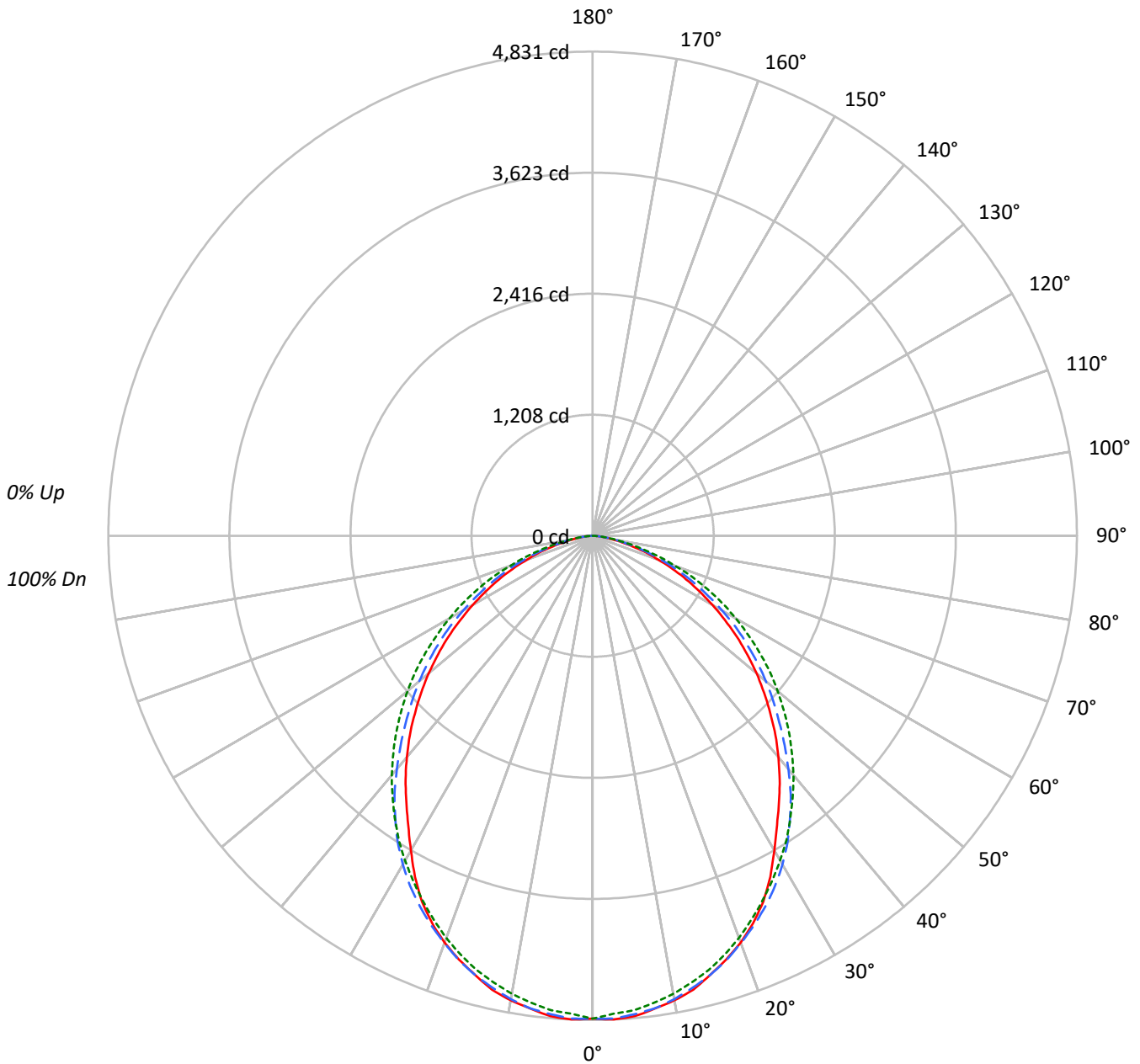
Lumens per Lamp: N/A
Luminaire Lumens: 11141.0 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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°	12966	12966	12966
5°	13000	12945	12835
10°	12862	12827	12680
15°	12634	12634	12490
20°	12367	12383	12223
25°	11959	12108	11915
30°	11262	11768	11624
35°	10641	11280	11298
40°	10124	10670	10950
45°	9545	10024	10538
50°	8935	9446	10089
55°	8241	8788	9544
60°	7422	8020	8876
65°	6553	7131	8073
70°	5461	6073	6859
75°	4292	4850	5369
80°	3070	3414	3786
85°	2001	2001	1886



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	453.6	4.1
10°-20°	1274.4	11.4
20°-30°	1862.4	16.7
30°-40°	2114.0	19.0
40°-50°	2040.7	18.3
50°-60°	1683.4	15.1
60°-70°	1121.0	10.1
70°-80°	501.7	4.5
80°-90°	89.8	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°	3590.4	32.2
0°-40°	5704.4	51.2
0°-60°	9428.6	84.6
0°-90°	11141.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11141.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4818	4818	4818	4818	4818	
5°	4813	4811	4792	4766	4752	456
15°	4535	4546	4535	4515	4483	1278
25°	4028	4059	4078	4048	4013	1845
35°	3239	3284	3434	3452	3439	2030
45°	2508	2551	2634	2754	2769	1935
55°	1757	1786	1873	1977	2034	1568
65°	1029	1057	1120	1200	1268	1020
75°	413	435	466	489	516	451
85°	65	65	65	61	61	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4818.2	4818.2	4818.2	4818.2	4818.2
2.5°	4831.2	4833.0	4821.9	4792.3	4773.8
5°	4812.6	4810.8	4792.3	4766.4	4751.6
7.5°	4759.0	4762.7	4757.1	4720.1	4699.7
10°	4707.1	4709.0	4694.2	4664.6	4640.5
12.5°	4640.5	4638.6	4618.3	4603.5	4564.6
15°	4535.0	4546.1	4535.0	4514.6	4483.2
17.5°	4433.2	4433.2	4440.6	4405.4	4381.4
20°	4318.4	4324.0	4324.0	4296.2	4268.4
22.5°	4185.1	4201.8	4207.4	4177.7	4144.4
25°	4027.8	4059.3	4077.8	4048.2	4013.0
27.5°	3837.2	3885.3	3940.8	3918.6	3879.7
30°	3624.3	3694.6	3787.2	3768.7	3740.9
32.5°	3422.5	3492.9	3620.6	3613.2	3598.4
35°	3239.3	3283.7	3433.6	3452.1	3439.2
37.5°	3065.3	3106.0	3246.7	3289.3	3278.1
40°	2882.0	2926.5	3037.5	3113.4	3117.1
42.5°	2700.6	2743.2	2833.9	2943.1	2943.1
45°	2508.1	2550.7	2634.0	2754.3	2769.1
47.5°	2319.3	2363.7	2445.2	2565.5	2589.6
50°	2134.2	2174.9	2256.4	2373.0	2410.0
52.5°	1941.7	1986.1	2065.7	2173.1	2226.8
55°	1756.6	1786.2	1873.2	1976.9	2034.3
57.5°	1564.1	1591.9	1690.0	1778.8	1838.1
60°	1379.0	1414.2	1490.1	1580.8	1649.3
62.5°	1201.3	1238.3	1303.1	1382.7	1460.5
65°	1029.2	1056.9	1119.9	1199.5	1267.9
67.5°	862.6	886.6	949.6	1005.1	1077.3
70°	694.1	725.6	771.9	825.6	871.8
72.5°	559.0	572.0	610.8	649.7	697.8
75°	412.8	435.0	466.5	488.7	516.4
77.5°	296.2	309.1	327.6	346.1	372.1
80°	198.1	203.6	220.3	224.0	244.3
82.5°	120.3	124.0	127.7	129.6	137.0
85°	64.8	64.8	64.8	61.1	61.1
87.5°	37.0	37.0	31.5	25.9	18.5
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)