

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: P558061

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-93-96-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: P558061
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-LD4-3LO-35-UNV-93-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

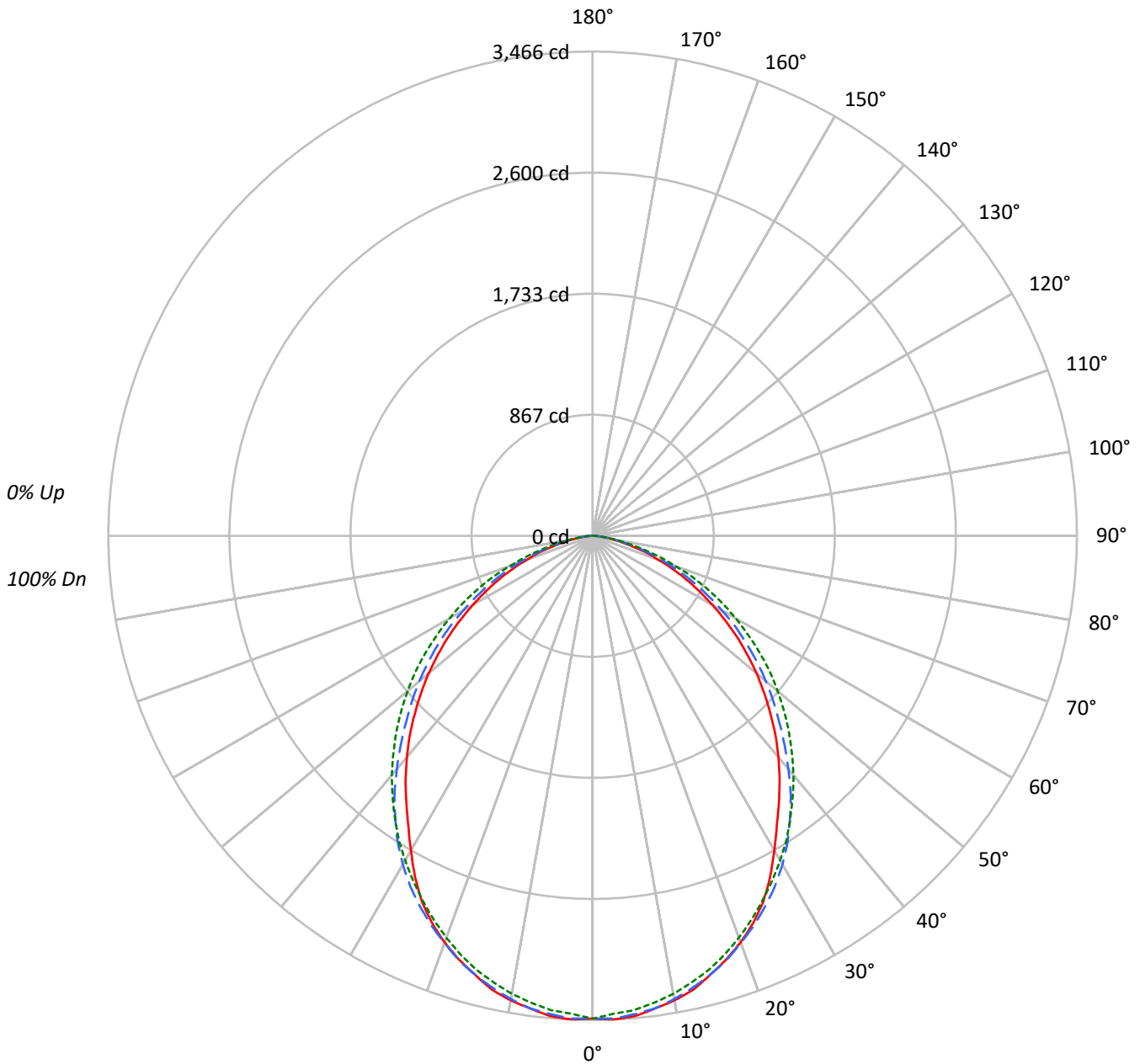
Lumens per Lamp: N/A
Luminaire Lumens: 7992.0 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9301	9301	9301
5°	9326	9286	9207
10°	9227	9201	9096
15°	9063	9063	8959
20°	8871	8883	8769
25°	8579	8685	8547
30°	8079	8442	8338
35°	7634	8091	8105
40°	7262	7654	7855
45°	6847	7191	7559
50°	6409	6776	7237
55°	5912	6305	6846
60°	5324	5753	6367
65°	4701	5115	5792
70°	3917	4356	4921
75°	3079	3479	3852
80°	2202	2448	2717
85°	1436	1436	1352



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.4	4.1
10°-20°	914.2	11.4
20°-30°	1336.0	16.7
30°-40°	1516.5	19.0
40°-50°	1463.9	18.3
50°-60°	1207.6	15.1
60°-70°	804.2	10.1
70°-80°	359.9	4.5
80°-90°	64.4	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°	2575.6	32.2
0°-40°	4092.0	51.2
0°-60°	6763.6	84.6
0°-90°	7992.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7992.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3456	3456	3456	3456	3456	
5°	3452	3451	3438	3419	3408	327
15°	3253	3261	3253	3239	3216	917
25°	2889	2912	2925	2904	2879	1323
35°	2324	2356	2463	2476	2467	1456
45°	1799	1830	1890	1976	1986	1388
55°	1260	1281	1344	1418	1459	1125
65°	738	758	803	860	910	732
75°	296	312	335	350	370	324
85°	46	46	46	44	44	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3456.3	3456.3	3456.3	3456.3	3456.3
2.5°	3465.6	3467.0	3459.0	3437.7	3424.5
5°	3452.4	3451.0	3437.7	3419.2	3408.5
7.5°	3413.8	3416.5	3412.5	3386.0	3371.4
10°	3376.7	3378.0	3367.4	3346.1	3328.9
12.5°	3328.9	3327.5	3312.9	3302.3	3274.4
15°	3253.2	3261.1	3253.2	3238.6	3216.0
17.5°	3180.1	3180.1	3185.5	3160.2	3143.0
20°	3097.8	3101.8	3101.8	3081.9	3062.0
22.5°	3002.2	3014.2	3018.2	2996.9	2973.0
25°	2889.4	2911.9	2925.2	2904.0	2878.7
27.5°	2752.6	2787.1	2826.9	2811.0	2783.1
30°	2599.9	2650.3	2716.7	2703.5	2683.5
32.5°	2455.2	2505.6	2597.2	2591.9	2581.3
35°	2323.7	2355.6	2463.1	2476.4	2467.1
37.5°	2198.9	2228.1	2329.0	2359.5	2351.6
40°	2067.4	2099.3	2179.0	2233.4	2236.1
42.5°	1937.3	1967.8	2032.9	2111.2	2111.2
45°	1799.2	1829.7	1889.5	1975.8	1986.4
47.5°	1663.8	1695.6	1754.1	1840.4	1857.6
50°	1531.0	1560.2	1618.6	1702.3	1728.8
52.5°	1392.9	1424.8	1481.9	1558.9	1597.4
55°	1260.1	1281.4	1343.8	1418.1	1459.3
57.5°	1122.0	1141.9	1212.3	1276.0	1318.5
60°	989.2	1014.5	1068.9	1134.0	1183.1
62.5°	861.8	888.3	934.8	991.9	1047.7
65°	738.3	758.2	803.3	860.4	909.6
67.5°	618.8	636.0	681.2	721.0	772.8
70°	497.9	520.5	553.7	592.2	625.4
72.5°	401.0	410.3	438.2	466.1	500.6
75°	296.1	312.0	334.6	350.5	370.5
77.5°	212.5	221.7	235.0	248.3	266.9
80°	142.1	146.1	158.0	160.7	175.3
82.5°	86.3	89.0	91.6	92.9	98.3
85°	46.5	46.5	46.5	43.8	43.8
87.5°	26.6	26.6	22.6	18.6	13.3
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)