

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: P557559

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-80-87-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: P557559
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-40-UNV-80-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

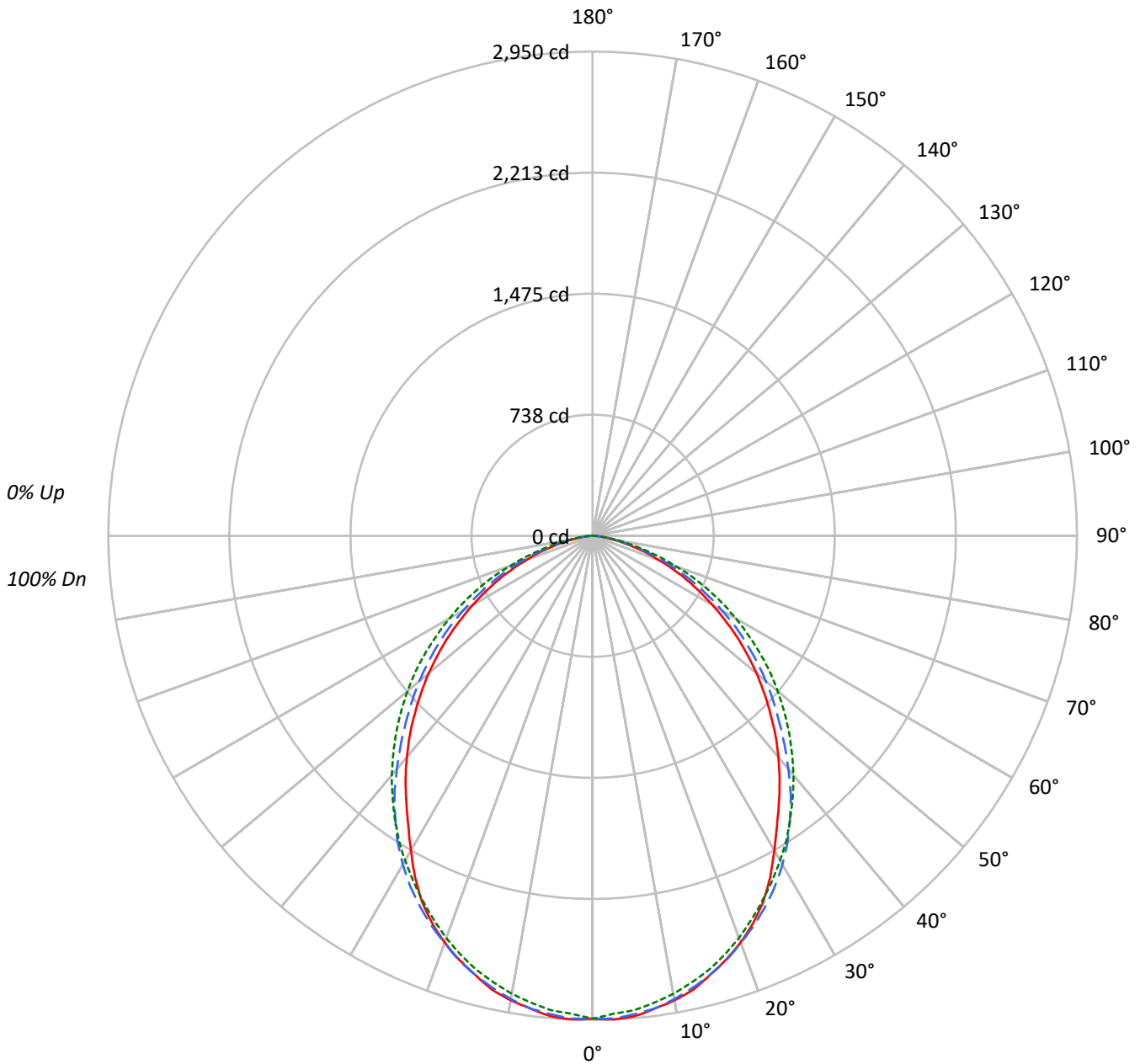
Lumens per Lamp: N/A
Luminaire Lumens: 6803.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	7917	7917	7917
5°	7938	7905	7837
10°	7854	7832	7743
15°	7715	7715	7626
20°	7551	7561	7464
25°	7303	7393	7276
30°	6877	7186	7098
35°	6498	6888	6899
40°	6182	6516	6686
45°	5828	6121	6435
50°	5456	5768	6161
55°	5032	5366	5828
60°	4532	4897	5420
65°	4001	4354	4930
70°	3335	3708	4189
75°	2621	2961	3278
80°	1874	2084	2312
85°	1223	1223	1152



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.0	4.1
10°-20°	778.2	11.4
20°-30°	1137.2	16.7
30°-40°	1290.8	19.0
40°-50°	1246.1	18.3
50°-60°	1028.0	15.1
60°-70°	684.5	10.1
70°-80°	306.3	4.5
80°-90°	54.8	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°	2192.4	32.2
0°-40°	3483.3	51.2
0°-60°	5757.3	84.6
0°-90°	6803.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6803.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2942	2942	2942	2942	2942	
5°	2939	2938	2926	2910	2901	278
15°	2769	2776	2769	2757	2738	781
25°	2460	2479	2490	2472	2450	1126
35°	1978	2005	2097	2108	2100	1239
45°	1532	1558	1608	1682	1691	1182
55°	1073	1091	1144	1207	1242	957
65°	628	645	684	732	774	623
75°	252	266	285	298	315	276
85°	40	40	40	37	37	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2942.1	2942.1	2942.1	2942.1	2942.1
2.5°	2950.0	2951.2	2944.4	2926.3	2915.0
5°	2938.7	2937.6	2926.3	2910.5	2901.4
7.5°	2906.0	2908.2	2904.8	2882.2	2869.8
10°	2874.3	2875.4	2866.4	2848.3	2833.6
12.5°	2833.6	2832.5	2820.1	2811.0	2787.3
15°	2769.2	2776.0	2769.2	2756.8	2737.5
17.5°	2707.0	2707.0	2711.5	2690.1	2675.4
20°	2636.9	2640.3	2640.3	2623.4	2606.4
22.5°	2555.6	2565.7	2569.1	2551.0	2530.7
25°	2459.5	2478.7	2490.0	2471.9	2450.4
27.5°	2343.1	2372.5	2406.4	2392.8	2369.1
30°	2213.1	2256.0	2312.6	2301.3	2284.3
32.5°	2089.9	2132.8	2210.8	2206.3	2197.3
35°	1978.0	2005.1	2096.7	2108.0	2100.1
37.5°	1871.7	1896.6	1982.5	2008.5	2001.7
40°	1759.8	1787.0	1854.8	1901.1	1903.4
42.5°	1649.1	1675.1	1730.5	1797.1	1797.1
45°	1531.5	1557.5	1608.4	1681.9	1690.9
47.5°	1416.2	1443.4	1493.1	1566.6	1581.3
50°	1303.2	1328.1	1377.8	1449.0	1471.6
52.5°	1185.7	1212.8	1261.4	1327.0	1359.7
55°	1072.6	1090.7	1143.8	1207.1	1242.2
57.5°	955.1	972.0	1031.9	1086.2	1122.4
60°	842.1	863.5	909.9	965.3	1007.1
62.5°	733.6	756.2	795.7	844.3	891.8
65°	628.4	645.4	683.8	732.4	774.2
67.5°	526.7	541.4	579.8	613.7	657.8
70°	423.9	443.1	471.3	504.1	532.4
72.5°	341.3	349.3	373.0	396.7	426.1
75°	252.1	265.6	284.8	298.4	315.3
77.5°	180.8	188.8	200.1	211.4	227.2
80°	120.9	124.3	134.5	136.8	149.2
82.5°	73.5	75.7	78.0	79.1	83.6
85°	39.6	39.6	39.6	37.3	37.3
87.5°	22.6	22.6	19.2	15.8	11.3
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)