

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: P557661

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-82-96-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: P557661
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-50-UNV-82-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

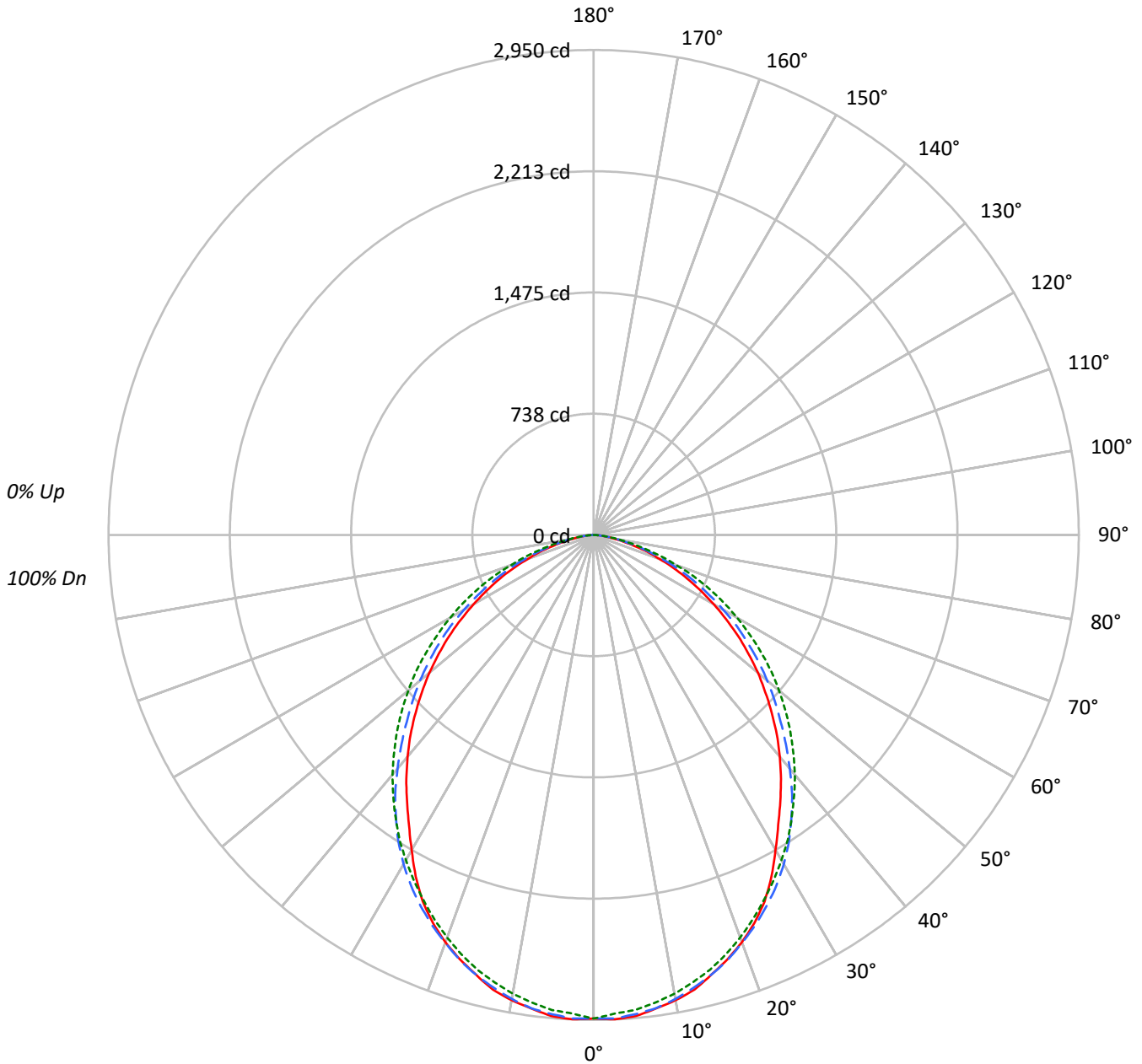
Lumens per Lamp: N/A
Luminaire Lumens: 6802.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	7916	7916	7916
5°	7937	7904	7836
10°	7853	7831	7742
15°	7714	7714	7625
20°	7550	7560	7463
25°	7301	7392	7275
30°	6876	7185	7097
35°	6497	6887	6898
40°	6181	6515	6685
45°	5828	6120	6434
50°	5455	5767	6160
55°	5032	5366	5827
60°	4531	4896	5419
65°	4001	4353	4929
70°	3334	3708	4188
75°	2620	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°	778.1	11.4
20°-30°	1137.0	16.7
30°-40°	1290.7	19.0
40°-50°	1245.9	18.3
50°-60°	1027.8	15.1
60°-70°	684.4	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°	2192.1	32.2
0°-40°	3482.7	51.2
0°-60°	5756.5	84.6
0°-90°	6802.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6802.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2942	2942	2942	2942	2942	
5°	2938	2937	2926	2910	2901	278
15°	2769	2776	2769	2756	2737	781
25°	2459	2478	2490	2472	2450	1126
35°	1978	2005	2096	2108	2100	1239
45°	1531	1557	1608	1682	1691	1181
55°	1072	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°	2941.7	2941.7	2941.7	2941.7	2941.7
2.5°	2949.6	2950.7	2943.9	2925.9	2914.6
5°	2938.3	2937.2	2925.9	2910.0	2901.0
7.5°	2905.5	2907.8	2904.4	2881.8	2869.4
10°	2873.9	2875.0	2866.0	2847.9	2833.2
12.5°	2833.2	2832.1	2819.6	2810.6	2786.9
15°	2768.8	2775.6	2768.8	2756.4	2737.1
17.5°	2706.6	2706.6	2711.1	2689.7	2675.0
20°	2636.6	2639.9	2639.9	2623.0	2606.0
22.5°	2555.2	2565.4	2568.8	2550.7	2530.3
25°	2459.1	2478.3	2489.6	2471.6	2450.1
27.5°	2342.7	2372.1	2406.0	2392.5	2368.7
30°	2212.8	2255.7	2312.2	2300.9	2284.0
32.5°	2089.6	2132.5	2210.5	2206.0	2196.9
35°	1977.7	2004.8	2096.4	2107.7	2099.8
37.5°	1871.5	1896.3	1982.2	2008.2	2001.4
40°	1759.6	1786.7	1854.5	1900.9	1903.1
42.5°	1648.8	1674.8	1730.2	1796.9	1796.9
45°	1531.3	1557.3	1608.2	1681.6	1690.7
47.5°	1416.0	1443.2	1492.9	1566.3	1581.0
50°	1303.0	1327.9	1377.6	1448.8	1471.4
52.5°	1185.5	1212.6	1261.2	1326.8	1359.5
55°	1072.5	1090.6	1143.7	1207.0	1242.0
57.5°	954.9	971.9	1031.8	1086.0	1122.2
60°	841.9	863.4	909.7	965.1	1006.9
62.5°	733.4	756.0	795.6	844.2	891.7
65°	628.3	645.3	683.7	732.3	774.1
67.5°	526.6	541.3	579.7	613.7	657.7
70°	423.8	443.0	471.3	504.0	532.3
72.5°	341.3	349.2	372.9	396.7	426.1
75°	252.0	265.6	284.8	298.4	315.3
77.5°	180.8	188.7	200.0	211.3	227.2
80°	120.9	124.3	134.5	136.7	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)