

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: P557129

Luminaire Tested: **FUSL-12-4-LD4-2HI-50-UNV-81-88-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: P557129
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-LD4-2HI-50-UNV-81-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

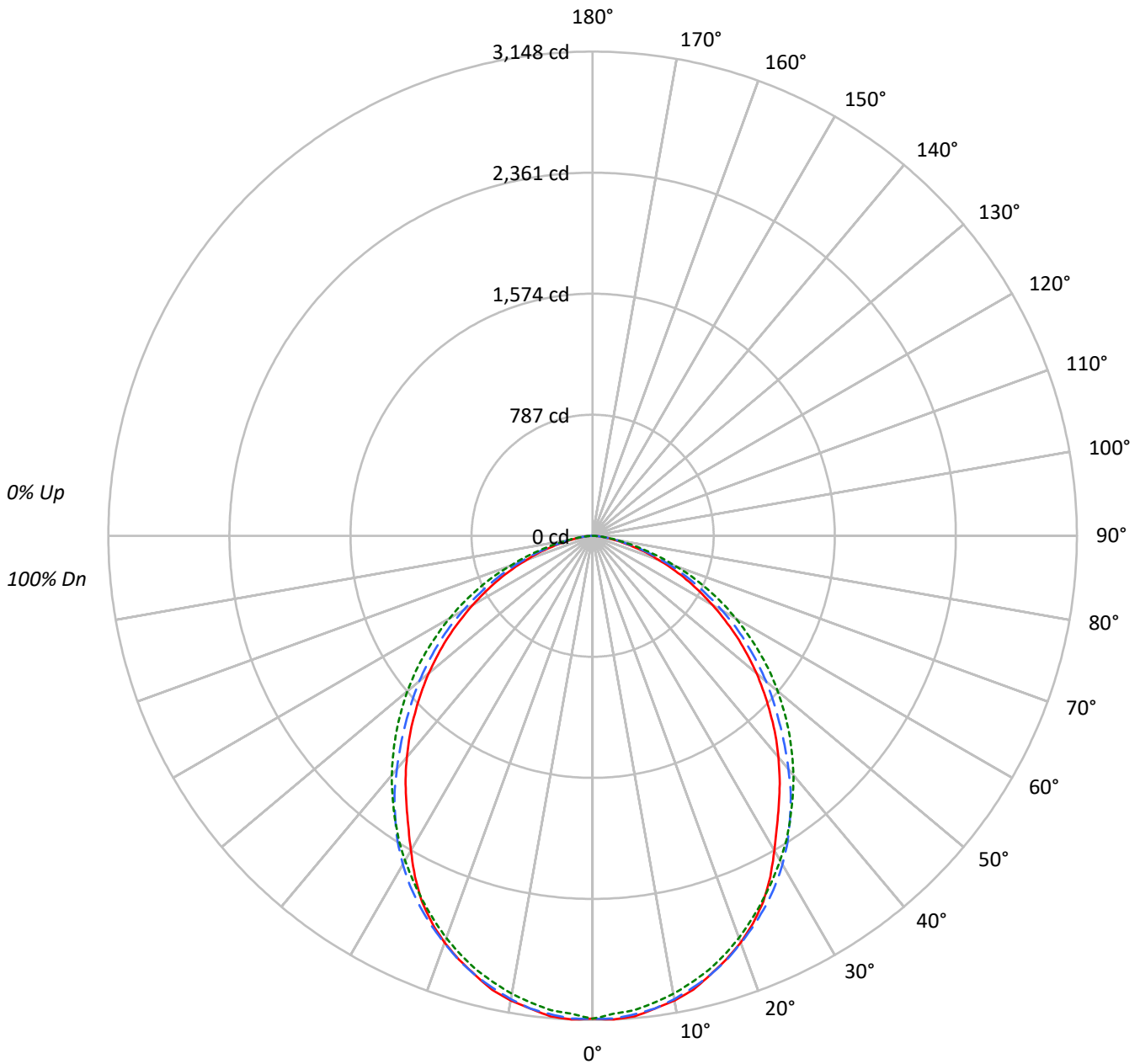
Lumens per Lamp: N/A
Luminaire Lumens: 7260.0 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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°	8449	8449	8449
5°	8471	8436	8364
10°	8382	8358	8263
15°	8233	8233	8139
20°	8059	8069	7965
25°	7793	7890	7765
30°	7339	7668	7575
35°	6934	7350	7362
40°	6597	6953	7136
45°	6220	6532	6867
50°	5822	6156	6575
55°	5370	5727	6219
60°	4836	5226	5784
65°	4271	4647	5261
70°	3559	3958	4470
75°	2797	3161	3499
80°	2001	2224	2467
85°	1303	1303	1229



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	295.6	4.1
10°-20°	830.5	11.4
20°-30°	1213.6	16.7
30°-40°	1377.6	19.0
40°-50°	1329.8	18.3
50°-60°	1097.0	15.1
60°-70°	730.5	10.1
70°-80°	326.9	4.5
80°-90°	58.5	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°	2339.7	32.2
0°-40°	3717.2	51.2
0°-60°	6144.1	84.6
0°-90°	7260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7260.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3140	3140	3140	3140	3140	
5°	3136	3135	3123	3106	3096	297
15°	2955	2962	2955	2942	2921	833
25°	2625	2645	2657	2638	2615	1202
35°	2111	2140	2238	2250	2241	1323
45°	1634	1662	1716	1795	1804	1261
55°	1145	1164	1221	1288	1326	1022
65°	671	689	730	782	826	665
75°	269	284	304	318	336	294
85°	42	42	42	40	40	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3139.8	3139.8	3139.8	3139.8	3139.8
2.5°	3148.2	3149.4	3142.2	3122.9	3110.8
5°	3136.1	3134.9	3122.9	3106.0	3096.3
7.5°	3101.2	3103.6	3100.0	3075.8	3062.6
10°	3067.4	3068.6	3058.9	3039.6	3024.0
12.5°	3024.0	3022.8	3009.5	2999.8	2974.5
15°	2955.2	2962.4	2955.2	2941.9	2921.4
17.5°	2888.9	2888.9	2893.7	2870.8	2855.1
20°	2814.1	2817.7	2817.7	2799.6	2781.5
22.5°	2727.2	2738.1	2741.7	2722.4	2700.7
25°	2624.7	2645.2	2657.3	2638.0	2615.1
27.5°	2500.5	2531.8	2568.0	2553.5	2528.2
30°	2361.8	2407.6	2467.9	2455.8	2437.7
32.5°	2230.3	2276.1	2359.3	2354.5	2344.9
35°	2110.9	2139.8	2237.5	2249.6	2241.1
37.5°	1997.5	2024.0	2115.7	2143.4	2136.2
40°	1878.1	1907.0	1979.4	2028.8	2031.3
42.5°	1759.9	1787.6	1846.7	1917.9	1917.9
45°	1634.4	1662.2	1716.4	1794.8	1804.5
47.5°	1511.4	1540.3	1593.4	1671.8	1687.5
50°	1390.8	1417.3	1470.4	1546.4	1570.5
52.5°	1265.3	1294.3	1346.1	1416.1	1451.1
55°	1144.7	1164.0	1220.7	1288.2	1325.6
57.5°	1019.2	1037.3	1101.3	1159.2	1197.8
60°	898.6	921.5	971.0	1030.1	1074.7
62.5°	782.8	807.0	849.2	901.0	951.7
65°	670.7	688.7	729.8	781.6	826.3
67.5°	562.1	577.8	618.8	655.0	702.0
70°	452.3	472.8	503.0	538.0	568.1
72.5°	364.3	372.7	398.0	423.4	454.7
75°	269.0	283.5	304.0	318.4	336.5
77.5°	193.0	201.4	213.5	225.6	242.4
80°	129.1	132.7	143.5	146.0	159.2
82.5°	78.4	80.8	83.2	84.4	89.3
85°	42.2	42.2	42.2	39.8	39.8
87.5°	24.1	24.1	20.5	16.9	12.1
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)