

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: P557145

Luminaire Tested: **FUSL-12-4-LD4-2HI-50-UNV-82-88-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: P557145
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-82-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 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

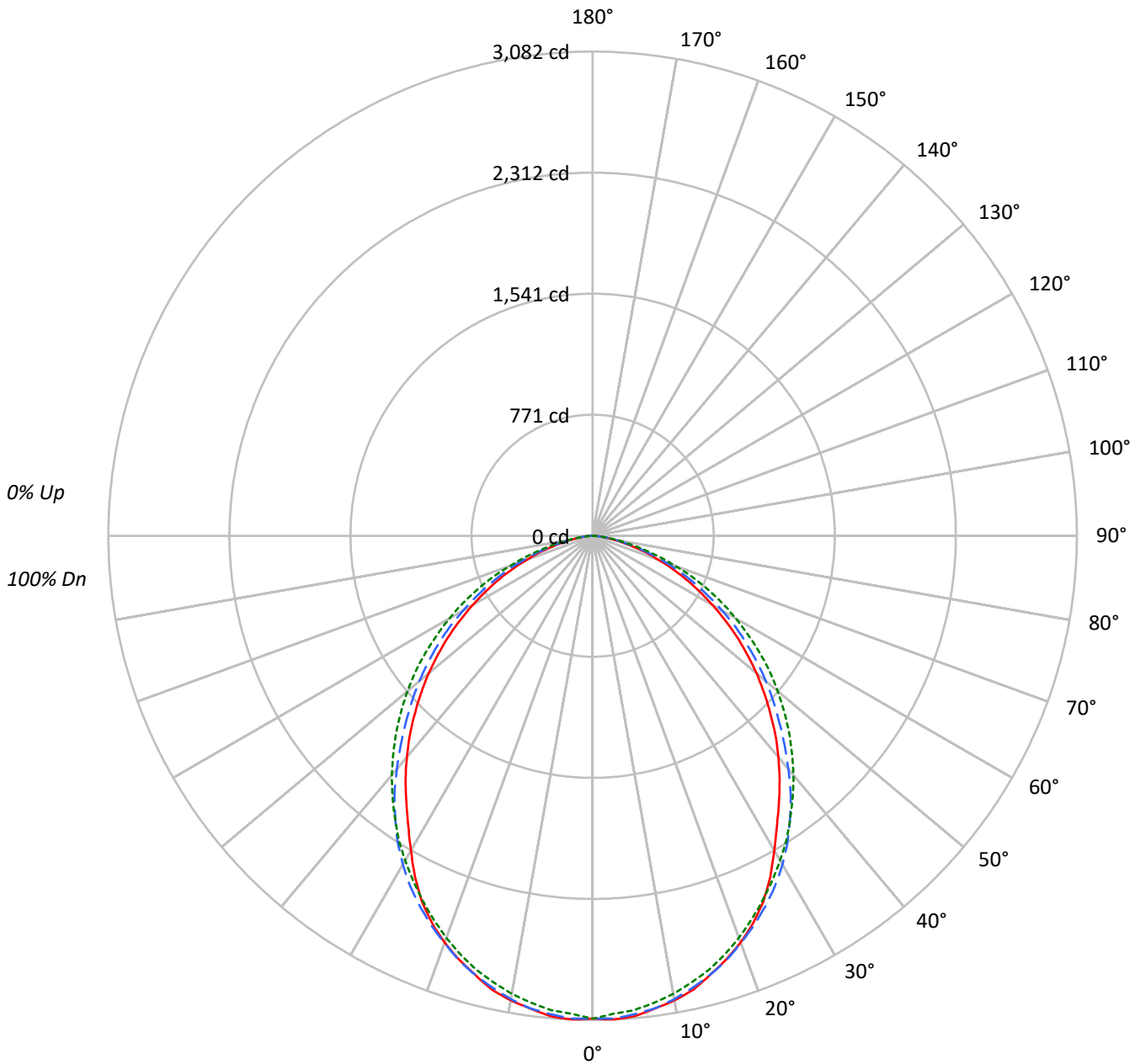
Lumens per Lamp: N/A
Luminaire Lumens: 7107.0 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P557145

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-82-88-EDD

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°	8271	8271	8271
5°	8293	8258	8188
10°	8205	8182	8089
15°	8059	8059	7967
20°	7889	7899	7798
25°	7629	7724	7601
30°	7184	7507	7415
35°	6788	7196	7207
40°	6458	6807	6985
45°	6089	6395	6723
50°	5699	6026	6436
55°	5257	5606	6088
60°	4735	5116	5662
65°	4180	4549	5150
70°	3484	3874	4376
75°	2738	3094	3425
80°	1957	2177	2416
85°	1275	1275	1204



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.4	4.1
10°-20°	813.0	11.4
20°-30°	1188.0	16.7
30°-40°	1348.5	19.0
40°-50°	1301.8	18.3
50°-60°	1073.9	15.1
60°-70°	715.1	10.1
70°-80°	320.0	4.5
80°-90°	57.3	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°	2290.4	32.2
0°-40°	3638.9	51.2
0°-60°	6014.6	84.6
0°-90°	7107.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7107.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3074	3074	3074	3074	3074	
5°	3070	3069	3057	3040	3031	291
15°	2893	2900	2893	2880	2860	816
25°	2569	2590	2601	2582	2560	1177
35°	2066	2095	2190	2202	2194	1295
45°	1600	1627	1680	1757	1766	1234
55°	1121	1140	1195	1261	1298	1000
65°	656	674	714	765	809	651
75°	263	278	298	312	329	288
85°	41	41	41	39	39	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3073.6	3073.6	3073.6	3073.6	3073.6
2.5°	3081.9	3083.0	3076.0	3057.1	3045.3
5°	3070.1	3068.9	3057.1	3040.5	3031.1
7.5°	3035.8	3038.2	3034.6	3011.0	2998.0
10°	3002.7	3003.9	2994.5	2975.6	2960.2
12.5°	2960.2	2959.1	2946.1	2936.6	2911.8
15°	2892.9	2900.0	2892.9	2879.9	2859.9
17.5°	2828.0	2828.0	2832.7	2810.3	2794.9
20°	2754.8	2758.3	2758.3	2740.6	2722.9
22.5°	2669.8	2680.4	2683.9	2665.0	2643.8
25°	2569.4	2589.5	2601.3	2582.4	2560.0
27.5°	2447.8	2478.5	2513.9	2499.7	2474.9
30°	2312.0	2356.9	2415.9	2404.1	2386.4
32.5°	2183.3	2228.1	2309.6	2304.9	2295.5
35°	2066.4	2094.7	2190.4	2202.2	2193.9
37.5°	1955.4	1981.4	2071.1	2098.3	2091.2
40°	1838.5	1866.8	1937.7	1986.1	1988.4
42.5°	1722.8	1749.9	1807.8	1877.5	1877.5
45°	1600.0	1627.1	1680.3	1757.0	1766.5
47.5°	1479.5	1507.9	1559.8	1636.6	1651.9
50°	1361.4	1387.4	1439.4	1513.8	1537.4
52.5°	1238.6	1267.0	1317.8	1386.2	1420.5
55°	1120.6	1139.5	1195.0	1261.1	1297.7
57.5°	997.8	1015.5	1078.1	1134.7	1172.5
60°	879.7	902.1	950.5	1008.4	1052.1
62.5°	766.3	789.9	831.3	882.0	931.6
65°	656.5	674.2	714.4	765.2	808.8
67.5°	550.2	565.6	605.7	641.2	687.2
70°	442.8	462.9	492.4	526.6	556.2
72.5°	356.6	364.9	389.7	414.5	445.2
75°	263.3	277.5	297.6	311.7	329.4
77.5°	188.9	197.2	209.0	220.8	237.3
80°	126.3	129.9	140.5	142.9	155.9
82.5°	76.8	79.1	81.5	82.7	87.4
85°	41.3	41.3	41.3	39.0	39.0
87.5°	23.6	23.6	20.1	16.5	11.8
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)