

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: P557553

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-80-84-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: P557553
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-80-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

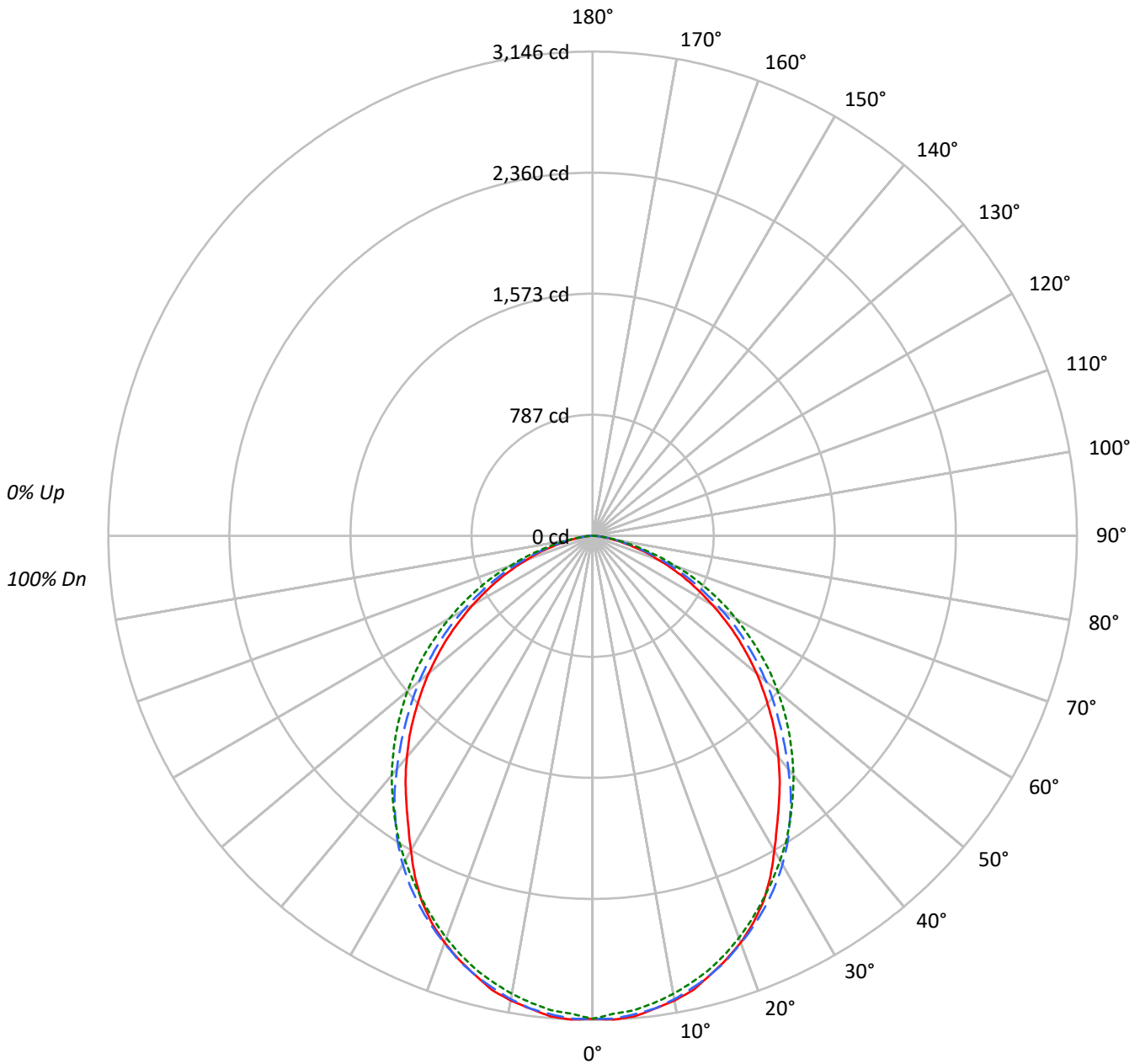
Lumens per Lamp: N/A
Luminaire Lumens: 7256.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8444	8444	8444
5°	8467	8431	8359
10°	8377	8354	8258
15°	8228	8228	8134
20°	8054	8065	7961
25°	7789	7886	7760
30°	7335	7664	7571
35°	6931	7346	7358
40°	6594	6949	7131
45°	6216	6529	6863
50°	5819	6152	6571
55°	5368	5724	6216
60°	4834	5223	5781
65°	4268	4644	5258
70°	3557	3955	4467
75°	2795	3159	3497
80°	1999	2224	2466
85°	1303	1303	1229



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	295.5	4.1
10°-20°	830.0	11.4
20°-30°	1212.9	16.7
30°-40°	1376.8	19.0
40°-50°	1329.1	18.3
50°-60°	1096.4	15.1
60°-70°	730.1	10.1
70°-80°	326.7	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°	2338.4	32.2
0°-40°	3715.2	51.2
0°-60°	6140.7	84.6
0°-90°	7256.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7256.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3138	3138	3138	3138	3138	
5°	3134	3133	3121	3104	3095	297
15°	2954	2961	2954	2940	2920	833
25°	2623	2644	2656	2636	2614	1201
35°	2110	2139	2236	2248	2240	1322
45°	1634	1661	1716	1794	1804	1260
55°	1144	1163	1220	1288	1325	1021
65°	670	688	729	781	826	665
75°	269	283	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°	3138.0	3138.0	3138.0	3138.0	3138.0
2.5°	3146.5	3147.7	3140.4	3121.2	3109.1
5°	3134.4	3133.2	3121.2	3104.3	3094.6
7.5°	3099.5	3101.9	3098.2	3074.1	3060.9
10°	3065.7	3066.9	3057.3	3038.0	3022.3
12.5°	3022.3	3021.1	3007.8	2998.2	2972.9
15°	2953.6	2960.8	2953.6	2940.3	2919.8
17.5°	2887.3	2887.3	2892.1	2869.2	2853.5
20°	2812.5	2816.2	2816.2	2798.1	2780.0
22.5°	2725.7	2736.6	2740.2	2720.9	2699.2
25°	2623.3	2643.8	2655.8	2636.5	2613.6
27.5°	2499.1	2530.4	2566.6	2552.1	2526.8
30°	2360.5	2406.3	2466.5	2454.5	2436.4
32.5°	2229.1	2274.9	2358.0	2353.2	2343.6
35°	2109.7	2138.6	2236.3	2248.3	2239.9
37.5°	1996.4	2022.9	2114.5	2142.3	2135.0
40°	1877.0	1906.0	1978.3	2027.7	2030.1
42.5°	1758.9	1786.6	1845.7	1916.8	1916.8
45°	1633.5	1661.2	1715.5	1793.9	1803.5
47.5°	1510.5	1539.5	1592.5	1670.9	1686.6
50°	1390.0	1416.5	1469.6	1545.5	1569.6
52.5°	1264.6	1293.5	1345.4	1415.3	1450.3
55°	1144.1	1163.4	1220.0	1287.5	1324.9
57.5°	1018.7	1036.8	1100.7	1158.5	1197.1
60°	898.1	921.0	970.5	1029.5	1074.1
62.5°	782.4	806.5	848.7	900.5	951.2
65°	670.3	688.4	729.4	781.2	825.8
67.5°	561.8	577.5	618.4	654.6	701.6
70°	452.1	472.6	502.7	537.7	567.8
72.5°	364.1	372.5	397.8	423.1	454.5
75°	268.8	283.3	303.8	318.3	336.3
77.5°	192.9	201.3	213.4	225.4	242.3
80°	129.0	132.6	143.5	145.9	159.1
82.5°	78.4	80.8	83.2	84.4	89.2
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)