

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: P557018

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-82-94-EDD-90**

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: P557018
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-35-UNV-82-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

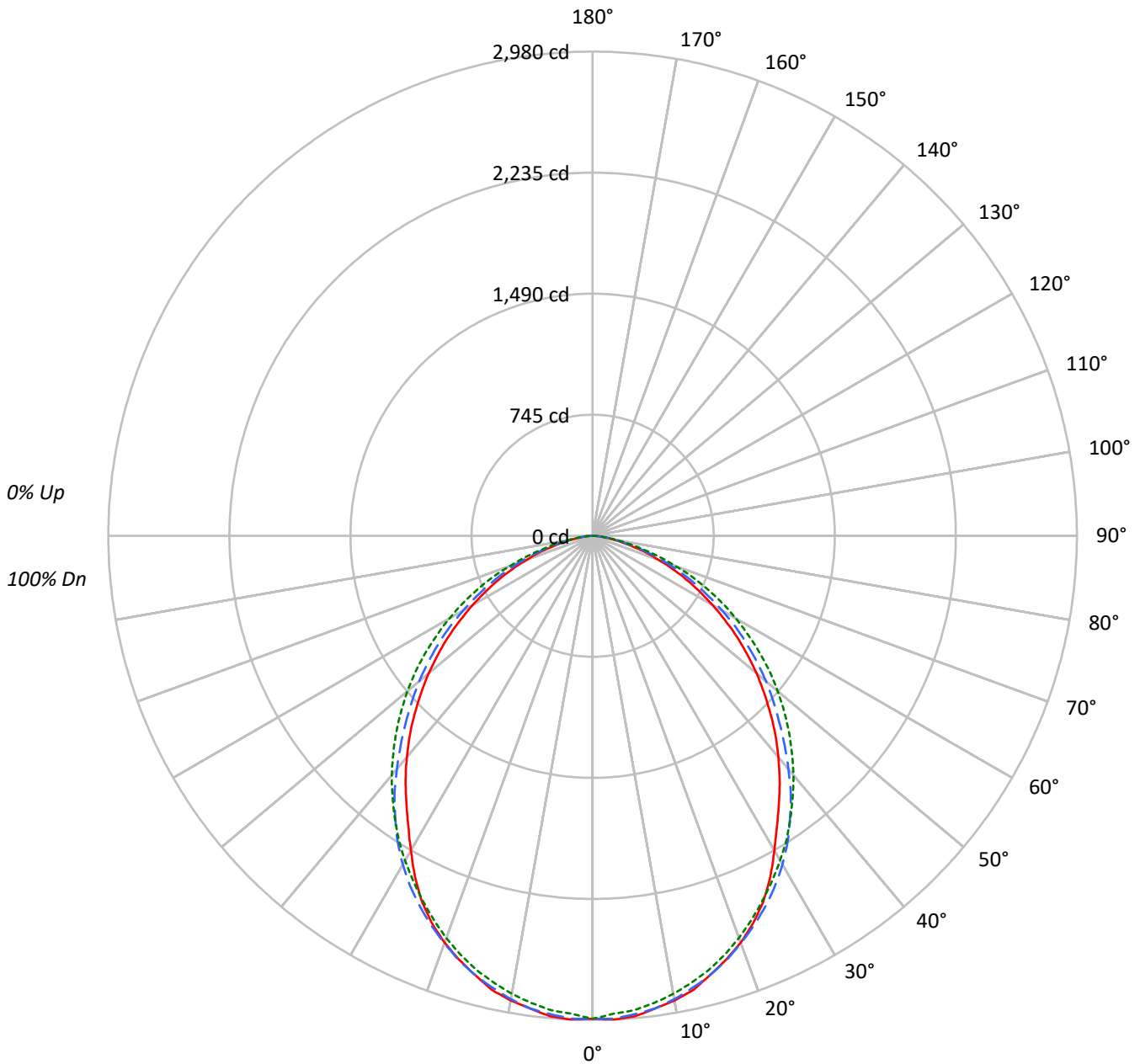
Lumens per Lamp: N/A
Luminaire Lumens: 6873.0 lumens
Efficiency: N/A
Efficacy: 79.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	7999	7999	7999
5°	8020	7986	7918
10°	7935	7913	7823
15°	7794	7794	7705
20°	7629	7639	7541
25°	7378	7469	7351
30°	6948	7260	7171
35°	6565	6958	6970
40°	6246	6583	6755
45°	5888	6184	6501
50°	5512	5827	6224
55°	5084	5422	5888
60°	4578	4947	5476
65°	4043	4399	4981
70°	3369	3747	4231
75°	2647	2992	3313
80°	1894	2106	2335
85°	1235	1235	1164



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.9	4.1
10°-20°	786.2	11.4
20°-30°	1148.9	16.7
30°-40°	1304.1	19.0
40°-50°	1258.9	18.3
50°-60°	1038.5	15.1
60°-70°	691.6	10.1
70°-80°	309.5	4.5
80°-90°	55.4	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°	2215.0	32.2
0°-40°	3519.1	51.2
0°-60°	5816.6	84.6
0°-90°	6873.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6873.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2972	2972	2972	2972	2972	
5°	2969	2968	2956	2940	2931	281
15°	2798	2804	2798	2785	2766	789
25°	2485	2504	2516	2497	2476	1138
35°	1998	2026	2118	2130	2122	1252
45°	1547	1574	1625	1699	1708	1194
55°	1084	1102	1156	1220	1255	967
65°	635	652	691	740	782	630
75°	255	268	288	302	319	278
85°	40	40	40	38	38	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2972.4	2972.4	2972.4	2972.4	2972.4
2.5°	2980.4	2981.5	2974.7	2956.4	2945.0
5°	2969.0	2967.8	2956.4	2940.4	2931.3
7.5°	2935.9	2938.1	2934.7	2911.9	2899.3
10°	2903.9	2905.0	2895.9	2877.6	2862.8
12.5°	2862.8	2861.6	2849.1	2839.9	2816.0
15°	2797.7	2804.5	2797.7	2785.1	2765.7
17.5°	2734.9	2734.9	2739.4	2717.7	2702.9
20°	2664.1	2667.5	2667.5	2650.4	2633.2
22.5°	2581.9	2592.1	2595.6	2577.3	2556.7
25°	2484.8	2504.2	2515.6	2497.4	2475.7
27.5°	2367.2	2396.9	2431.1	2417.4	2393.4
30°	2235.9	2279.3	2336.4	2324.9	2307.8
32.5°	2111.4	2154.8	2233.6	2229.0	2219.9
35°	1998.3	2025.8	2118.2	2129.7	2121.7
37.5°	1891.0	1916.1	2002.9	2029.2	2022.3
40°	1778.0	1805.4	1873.9	1920.7	1923.0
42.5°	1666.0	1692.3	1748.3	1815.6	1815.6
45°	1547.3	1573.6	1624.9	1699.2	1708.3
47.5°	1430.8	1458.2	1508.5	1582.7	1597.5
50°	1316.6	1341.7	1392.0	1463.9	1486.8
52.5°	1197.9	1225.3	1274.4	1340.6	1373.7
55°	1083.7	1101.9	1155.6	1219.6	1255.0
57.5°	964.9	982.0	1042.6	1097.4	1133.9
60°	850.7	872.4	919.2	975.2	1017.4
62.5°	741.1	763.9	803.9	853.0	901.0
65°	634.9	652.0	690.9	740.0	782.2
67.5°	532.1	547.0	585.8	620.1	664.6
70°	428.2	447.6	476.2	509.3	537.8
72.5°	344.9	352.9	376.8	400.8	430.5
75°	254.6	268.3	287.8	301.5	318.6
77.5°	182.7	190.7	202.1	213.5	229.5
80°	122.2	125.6	135.9	138.2	150.7
82.5°	74.2	76.5	78.8	79.9	84.5
85°	40.0	40.0	40.0	37.7	37.7
87.5°	22.8	22.8	19.4	16.0	11.4
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)