

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: P557651

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-82-85-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: P557651
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-82-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

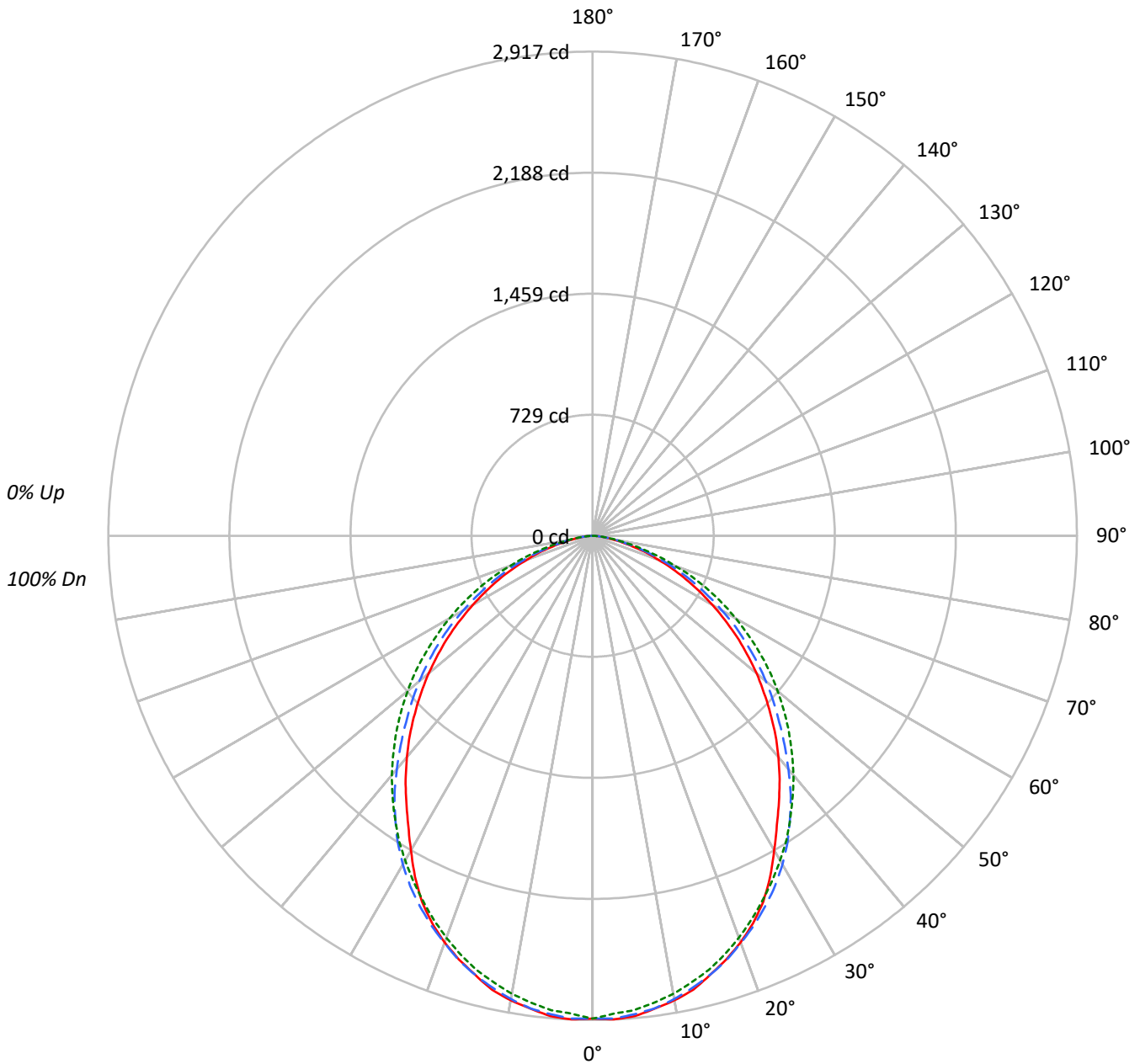
Lumens per Lamp: N/A
Luminaire Lumens: 6726.0 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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

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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°	7828	7828	7828
5°	7849	7815	7749
10°	7765	7744	7655
15°	7627	7627	7540
20°	7466	7476	7379
25°	7220	7309	7193
30°	6799	7104	7017
35°	6424	6810	6821
40°	6112	6442	6610
45°	5762	6052	6362
50°	5394	5703	6091
55°	4975	5306	5762
60°	4480	4842	5359
65°	3956	4305	4874
70°	3297	3666	4141
75°	2591	2928	3242
80°	1853	2061	2286
85°	1207	1207	1139



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.9	4.1
10°-20°	769.4	11.4
20°-30°	1124.3	16.7
30°-40°	1276.2	19.0
40°-50°	1232.0	18.3
50°-60°	1016.3	15.1
60°-70°	676.8	10.1
70°-80°	302.9	4.5
80°-90°	54.2	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°	2167.6	32.2
0°-40°	3443.8	51.2
0°-60°	5692.2	84.6
0°-90°	6726.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6726.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2909	2909	2909	2909	2909	
5°	2906	2904	2893	2878	2869	275
15°	2738	2745	2738	2726	2707	772
25°	2432	2451	2462	2444	2423	1114
35°	1956	1982	2073	2084	2076	1225
45°	1514	1540	1590	1663	1672	1168
55°	1060	1078	1131	1194	1228	947
65°	621	638	676	724	766	616
75°	249	263	282	295	312	273
85°	39	39	39	37	37	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2908.8	2908.8	2908.8	2908.8	2908.8
2.5°	2916.6	2917.8	2911.1	2893.2	2882.0
5°	2905.5	2904.4	2893.2	2877.5	2868.6
7.5°	2873.1	2875.3	2871.9	2849.6	2837.3
10°	2841.8	2842.9	2833.9	2816.1	2801.5
12.5°	2801.5	2800.4	2788.1	2779.2	2755.7
15°	2737.8	2744.6	2737.8	2725.6	2706.6
17.5°	2676.4	2676.4	2680.9	2659.6	2645.1
20°	2607.1	2610.5	2610.5	2593.7	2576.9
22.5°	2526.6	2536.7	2540.1	2522.2	2502.1
25°	2431.7	2450.7	2461.8	2443.9	2422.7
27.5°	2316.6	2345.6	2379.1	2365.7	2342.3
30°	2188.0	2230.5	2286.4	2275.2	2258.4
32.5°	2066.2	2108.7	2185.8	2181.3	2172.4
35°	1955.6	1982.4	2072.9	2084.1	2076.3
37.5°	1850.6	1875.1	1960.1	1985.8	1979.1
40°	1739.9	1766.7	1833.8	1879.6	1881.8
42.5°	1630.4	1656.1	1710.9	1776.8	1776.8
45°	1514.2	1539.9	1590.2	1662.8	1671.8
47.5°	1400.2	1427.0	1476.2	1548.8	1563.4
50°	1288.5	1313.0	1362.2	1432.6	1455.0
52.5°	1172.2	1199.1	1247.1	1311.9	1344.3
55°	1060.5	1078.4	1130.9	1193.5	1228.1
57.5°	944.3	961.0	1020.3	1073.9	1109.7
60°	832.5	853.8	899.6	954.3	995.7
62.5°	725.2	747.6	786.7	834.8	881.7
65°	621.3	638.1	676.1	724.1	765.5
67.5°	520.7	535.3	573.3	606.8	650.4
70°	419.1	438.1	466.0	498.4	526.3
72.5°	337.5	345.3	368.8	392.2	421.3
75°	249.2	262.6	281.6	295.0	311.8
77.5°	178.8	186.6	197.8	209.0	224.6
80°	119.6	122.9	133.0	135.2	147.5
82.5°	72.6	74.9	77.1	78.2	82.7
85°	39.1	39.1	39.1	36.9	36.9
87.5°	22.3	22.3	19.0	15.6	11.2
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)