

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: P558063

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-93-97-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: P558063
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-LD4-3LO-35-UNV-93-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

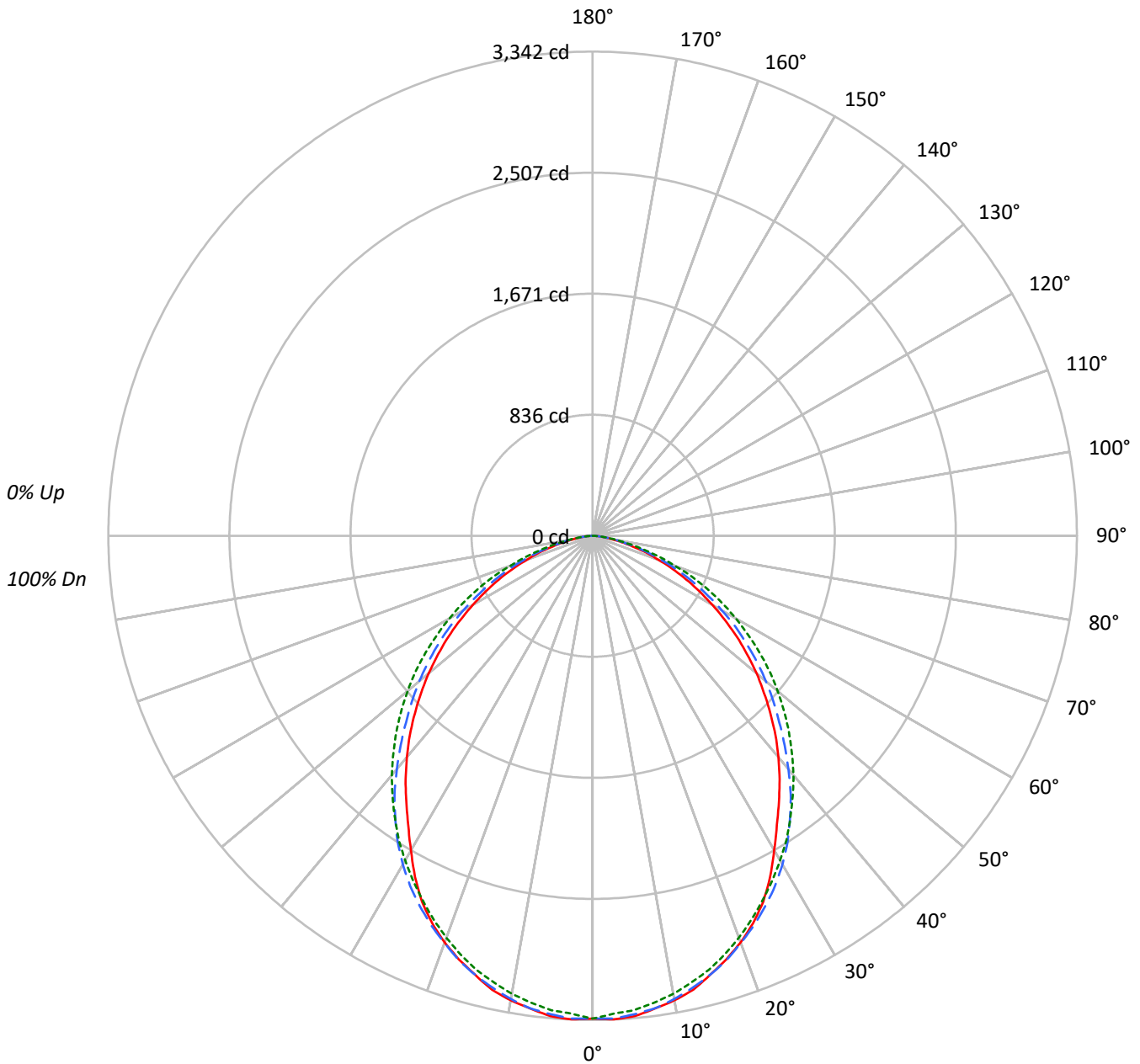
Lumens per Lamp: N/A
Luminaire Lumens: 7706.0 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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°	8968	8968	8968
5°	8992	8954	8878
10°	8896	8872	8770
15°	8739	8739	8639
20°	8554	8565	8455
25°	8272	8375	8242
30°	7789	8140	8040
35°	7360	7802	7815
40°	7002	7380	7574
45°	6602	6933	7289
50°	6180	6534	6979
55°	5700	6079	6602
60°	5133	5547	6140
65°	4533	4932	5584
70°	3777	4201	4744
75°	2968	3354	3714
80°	2123	2362	2619
85°	1383	1383	1306



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.8	4.1
10°-20°	881.5	11.4
20°-30°	1288.1	16.7
30°-40°	1462.2	19.0
40°-50°	1411.5	18.3
50°-60°	1164.4	15.1
60°-70°	775.4	10.1
70°-80°	347.0	4.5
80°-90°	62.1	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°	2483.4	32.2
0°-40°	3945.6	51.2
0°-60°	6521.6	84.6
0°-90°	7706.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7706.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3333	3333	3333	3333	3333	
5°	3329	3328	3315	3297	3287	315
15°	3137	3144	3137	3123	3101	884
25°	2786	2808	2820	2800	2776	1276
35°	2240	2271	2375	2388	2379	1404
45°	1735	1764	1822	1905	1915	1339
55°	1215	1236	1296	1367	1407	1084
65°	712	731	775	830	877	706
75°	286	301	323	338	357	312
85°	45	45	45	42	42	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3332.6	3332.6	3332.6	3332.6	3332.6
2.5°	3341.6	3342.9	3335.2	3314.7	3301.9
5°	3328.8	3327.5	3314.7	3296.8	3286.6
7.5°	3291.7	3294.2	3290.4	3264.8	3250.7
10°	3255.8	3257.1	3246.9	3226.4	3209.7
12.5°	3209.7	3208.5	3194.4	3184.1	3157.2
15°	3136.8	3144.4	3136.8	3122.7	3100.9
17.5°	3066.3	3066.3	3071.5	3047.1	3030.5
20°	2987.0	2990.8	2990.8	2971.6	2952.4
22.5°	2894.8	2906.3	2910.1	2889.7	2866.6
25°	2786.0	2807.7	2820.5	2800.0	2775.7
27.5°	2654.1	2687.4	2725.8	2710.4	2683.5
30°	2506.8	2555.5	2619.5	2606.7	2587.5
32.5°	2367.3	2415.9	2504.3	2499.2	2488.9
35°	2240.5	2271.3	2375.0	2387.8	2378.8
37.5°	2120.2	2148.4	2245.7	2275.1	2267.4
40°	1993.4	2024.2	2101.0	2153.5	2156.0
42.5°	1868.0	1897.4	1960.2	2035.7	2035.7
45°	1734.8	1764.3	1821.9	1905.1	1915.3
47.5°	1604.2	1635.0	1691.3	1774.5	1791.2
50°	1476.2	1504.4	1560.7	1641.4	1667.0
52.5°	1343.0	1373.8	1428.8	1503.1	1540.2
55°	1215.0	1235.5	1295.7	1367.4	1407.1
57.5°	1081.9	1101.1	1168.9	1230.4	1271.3
60°	953.8	978.2	1030.6	1093.4	1140.8
62.5°	830.9	856.5	901.3	956.4	1010.2
65°	711.9	731.1	774.6	829.6	877.0
67.5°	596.6	613.3	656.8	695.2	745.1
70°	480.1	501.9	533.9	571.0	603.0
72.5°	386.7	395.6	422.5	449.4	482.7
75°	285.5	300.9	322.6	338.0	357.2
77.5°	204.8	213.8	226.6	239.4	257.3
80°	137.0	140.8	152.4	154.9	169.0
82.5°	83.2	85.8	88.3	89.6	94.7
85°	44.8	44.8	44.8	42.3	42.3
87.5°	25.6	25.6	21.8	17.9	12.8
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)