

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: P558059

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-93-94-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: P558059
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-93-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

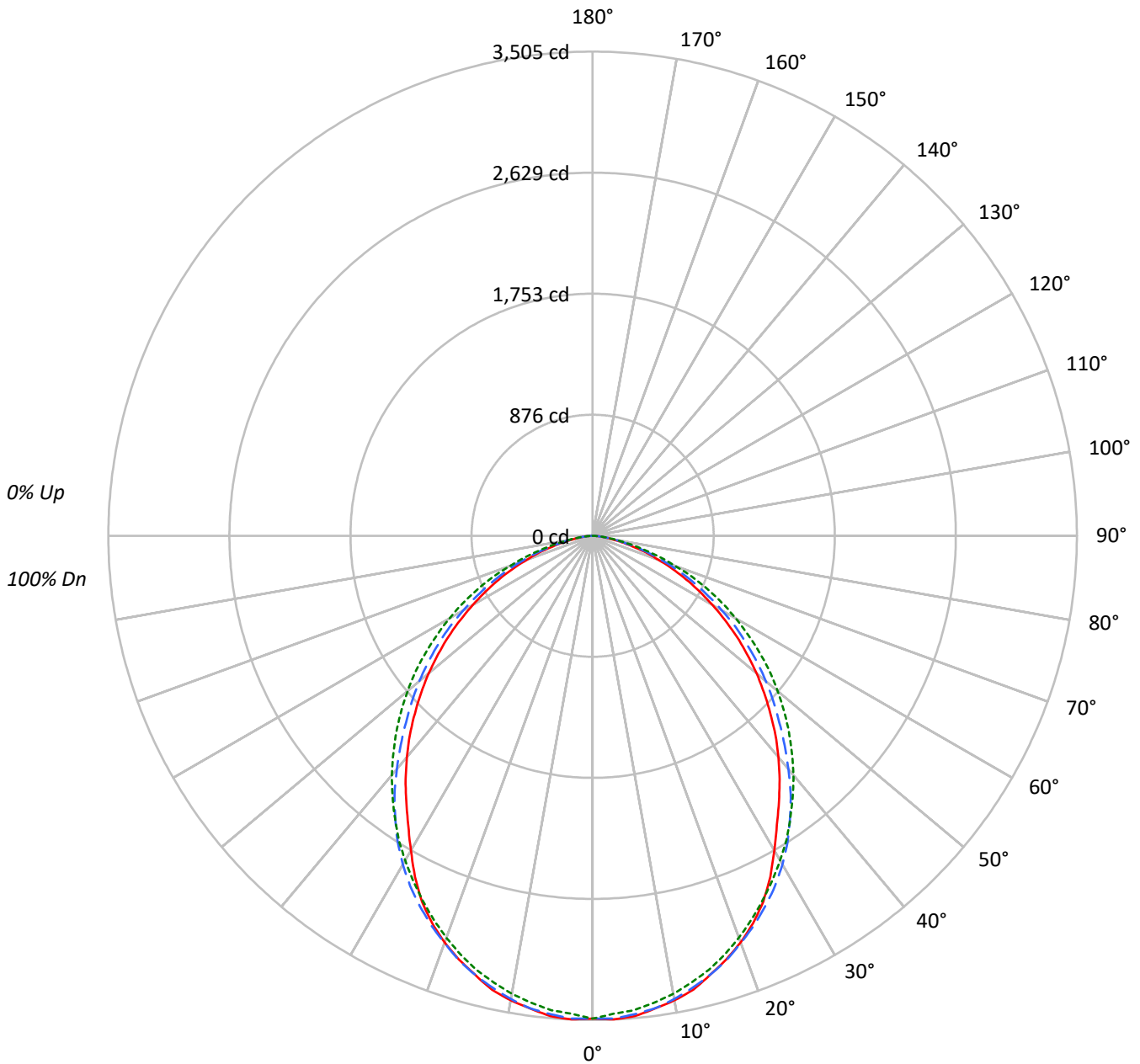
Lumens per Lamp: N/A
Luminaire Lumens: 8082.0 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
Input Voltage (V): NR
Input Current (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°	9406	9406	9406
5°	9431	9391	9311
10°	9331	9305	9198
15°	9165	9165	9060
20°	8971	8983	8867
25°	8676	8783	8644
30°	8170	8537	8433
35°	7720	8183	8196
40°	7344	7741	7943
45°	6924	7272	7645
50°	6481	6852	7319
55°	5978	6375	6923
60°	5384	5817	6439
65°	4754	5173	5857
70°	3961	4405	4976
75°	3113	3518	3895
80°	2227	2476	2746
85°	1451	1451	1368



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	329.1	4.1
10°-20°	924.5	11.4
20°-30°	1351.0	16.7
30°-40°	1533.5	19.0
40°-50°	1480.4	18.3
50°-60°	1221.2	15.1
60°-70°	813.2	10.1
70°-80°	363.9	4.5
80°-90°	65.1	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°	2604.6	32.2
0°-40°	4138.1	51.2
0°-60°	6839.7	84.6
0°-90°	8082.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8082.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3495	3495	3495	3495	3495	
5°	3491	3490	3476	3458	3447	330
15°	3290	3298	3290	3275	3252	927
25°	2922	2945	2958	2937	2911	1338
35°	2350	2382	2491	2504	2495	1472
45°	1820	1850	1911	1998	2009	1404
55°	1274	1296	1359	1434	1476	1137
65°	747	767	812	870	920	740
75°	299	316	338	354	375	327
85°	47	47	47	44	44	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3495.3	3495.3	3495.3	3495.3	3495.3
2.5°	3504.7	3506.0	3497.9	3476.5	3463.0
5°	3491.2	3489.9	3476.5	3457.7	3446.9
7.5°	3452.3	3455.0	3450.9	3424.1	3409.3
10°	3414.7	3416.0	3405.3	3383.8	3366.3
12.5°	3366.3	3365.0	3350.2	3339.5	3311.3
15°	3289.8	3297.9	3289.8	3275.0	3252.2
17.5°	3216.0	3216.0	3221.3	3195.8	3178.4
20°	3132.7	3136.7	3136.7	3116.6	3096.5
22.5°	3036.0	3048.1	3052.1	3030.7	3006.5
25°	2921.9	2944.7	2958.1	2936.7	2911.1
27.5°	2783.6	2818.5	2858.8	2842.7	2814.5
30°	2629.2	2680.2	2747.3	2733.9	2713.8
32.5°	2482.8	2533.8	2626.5	2621.1	2610.4
35°	2349.9	2382.1	2490.9	2504.3	2494.9
37.5°	2223.6	2253.2	2355.2	2386.1	2378.1
40°	2090.7	2122.9	2203.5	2258.6	2261.2
42.5°	1959.1	1990.0	2055.8	2135.0	2135.0
45°	1819.5	1850.4	1910.8	1998.1	2008.8
47.5°	1682.5	1714.7	1773.8	1861.1	1878.5
50°	1548.2	1577.8	1636.8	1721.4	1748.3
52.5°	1408.6	1440.8	1498.5	1576.4	1615.4
55°	1274.3	1295.8	1358.9	1434.1	1475.7
57.5°	1134.6	1154.8	1226.0	1290.4	1333.4
60°	1000.4	1025.9	1080.9	1146.7	1196.4
62.5°	871.5	898.3	945.3	1003.1	1059.5
65°	746.6	766.7	812.4	870.1	919.8
67.5°	625.7	643.2	688.8	729.1	781.5
70°	503.5	526.4	559.9	598.9	632.4
72.5°	405.5	414.9	443.1	471.3	506.2
75°	299.4	315.6	338.4	354.5	374.6
77.5°	214.8	224.2	237.7	251.1	269.9
80°	143.7	147.7	159.8	162.5	177.2
82.5°	87.3	90.0	92.7	94.0	99.4
85°	47.0	47.0	47.0	44.3	44.3
87.5°	26.9	26.9	22.8	18.8	13.4
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)