

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: P556569

Luminaire Tested: **FUSL-12-4-LD4-1LO-40-UNV-82-88-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: P556569
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-LD4-1LO-40-UNV-82-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

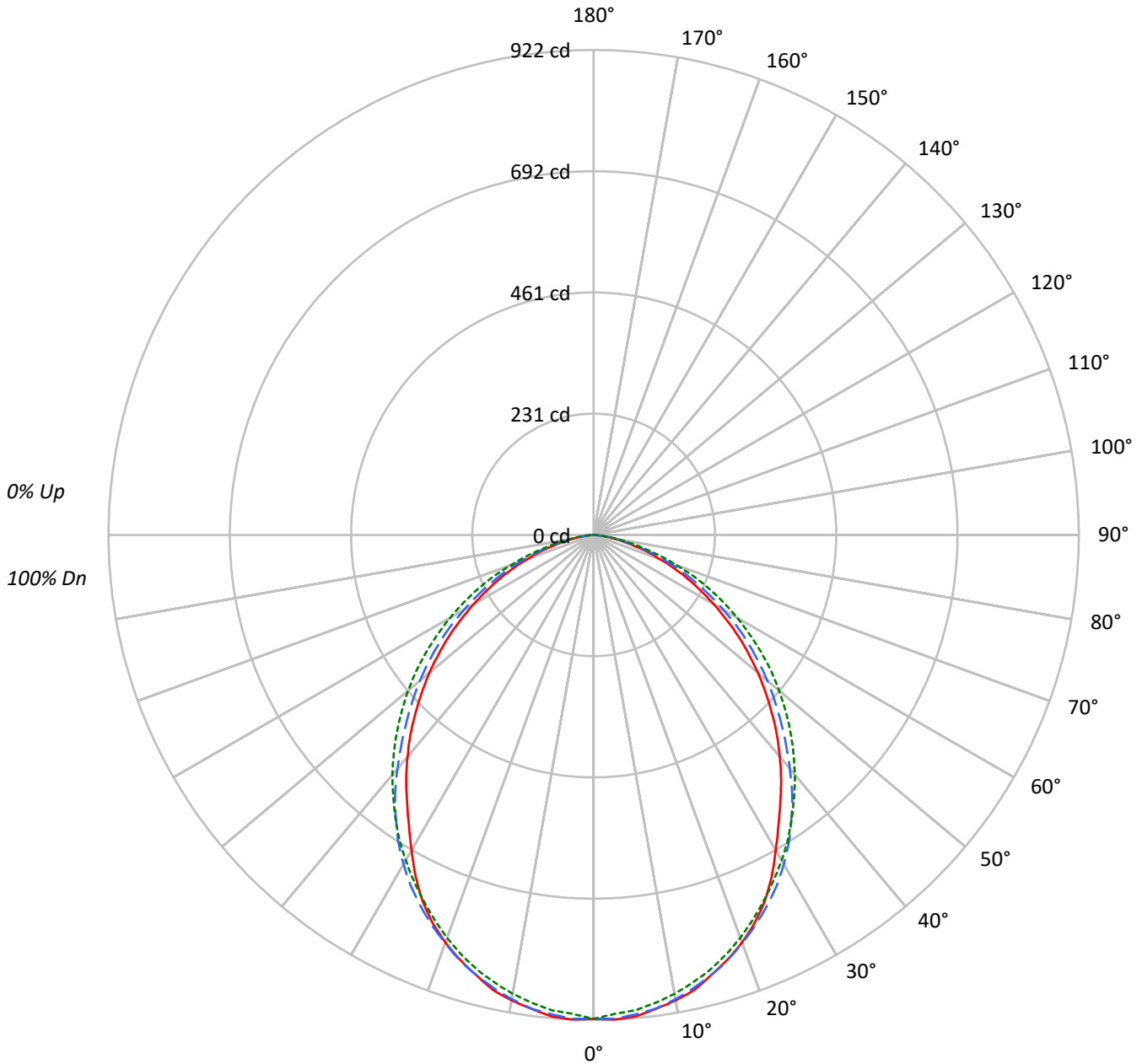
Lumens per Lamp: N/A
Luminaire Lumens: 2127.0 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	2475	2475	2475
5°	2482	2471	2451
10°	2456	2449	2421
15°	2412	2412	2384
20°	2361	2364	2334
25°	2283	2311	2275
30°	2150	2247	2219
35°	2031	2153	2157
40°	1933	2037	2090
45°	1822	1914	2012
50°	1706	1804	1926
55°	1574	1678	1822
60°	1417	1531	1695
65°	1251	1361	1542
70°	1042	1160	1309
75°	819	926	1025
80°	586	652	722
85°	383	383	361



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.6	4.1
10°-20°	243.3	11.4
20°-30°	355.6	16.7
30°-40°	403.6	19.0
40°-50°	389.6	18.3
50°-60°	321.4	15.1
60°-70°	214.0	10.1
70°-80°	95.8	4.5
80°-90°	17.1	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°	685.5	32.2
0°-40°	1089.1	51.2
0°-60°	1800.1	84.6
0°-90°	2127.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2127.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	920	920	920	920	920	
5°	919	918	915	910	907	87
15°	866	868	866	862	856	244
25°	769	775	778	773	766	352
35°	618	627	656	659	657	387
45°	479	487	503	526	529	369
55°	335	341	358	377	388	299
65°	196	202	214	229	242	195
75°	79	83	89	93	99	86
85°	12	12	12	12	12	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	919.9	919.9	919.9	919.9	919.9
2.5°	922.3	922.7	920.6	914.9	911.4
5°	918.8	918.5	914.9	910.0	907.2
7.5°	908.6	909.3	908.2	901.1	897.3
10°	898.7	899.0	896.2	890.5	885.9
12.5°	885.9	885.6	881.7	878.9	871.5
15°	865.8	867.9	865.8	861.9	855.9
17.5°	846.4	846.4	847.8	841.1	836.5
20°	824.5	825.5	825.5	820.2	814.9
22.5°	799.0	802.2	803.3	797.6	791.2
25°	769.0	775.0	778.5	772.9	766.1
27.5°	732.6	741.8	752.4	748.1	740.7
30°	691.9	705.4	723.0	719.5	714.2
32.5°	653.4	666.8	691.2	689.8	687.0
35°	618.4	626.9	655.5	659.1	656.6
37.5°	585.2	593.0	619.8	628.0	625.9
40°	550.2	558.7	579.9	594.4	595.1
42.5°	515.6	523.7	541.0	561.9	561.9
45°	478.8	487.0	502.9	525.8	528.7
47.5°	442.8	451.3	466.8	489.8	494.4
50°	407.5	415.2	430.8	453.0	460.1
52.5°	370.7	379.2	394.4	414.9	425.1
55°	335.4	341.0	357.6	377.4	388.4
57.5°	298.6	303.9	322.6	339.6	350.9
60°	263.3	270.0	284.5	301.8	314.9
62.5°	229.3	236.4	248.8	264.0	278.8
65°	196.5	201.8	213.8	229.0	242.1
67.5°	164.7	169.3	181.3	191.9	205.7
70°	132.5	138.5	147.4	157.6	166.4
72.5°	106.7	109.2	116.6	124.0	133.2
75°	78.8	83.0	89.1	93.3	98.6
77.5°	56.5	59.0	62.5	66.1	71.0
80°	37.8	38.9	42.1	42.8	46.6
82.5°	23.0	23.7	24.4	24.7	26.2
85°	12.4	12.4	12.4	11.7	11.7
87.5°	7.1	7.1	6.0	4.9	3.5
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)