

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: P556594

Luminaire Tested: **FUSL-12-4-LD4-1LO-50-UNV-80-85-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: P556594
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-50-UNV-80-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

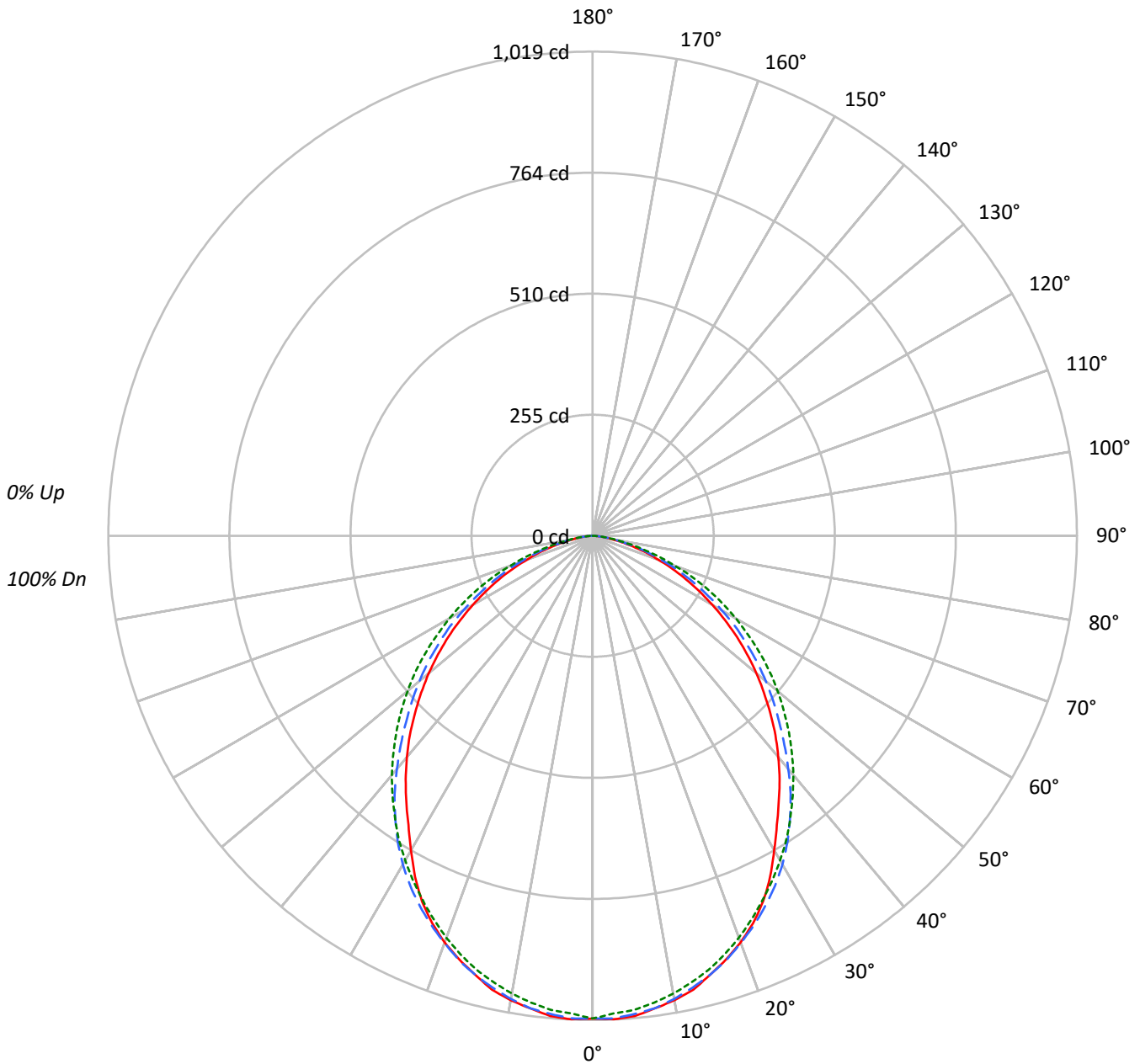
Lumens per Lamp: N/A
Luminaire Lumens: 2349.0 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (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°	2734	2734	2734
5°	2741	2729	2706
10°	2712	2704	2673
15°	2664	2664	2633
20°	2607	2611	2577
25°	2521	2553	2512
30°	2375	2481	2451
35°	2244	2378	2382
40°	2135	2250	2309
45°	2012	2114	2222
50°	1884	1991	2127
55°	1738	1853	2012
60°	1565	1691	1871
65°	1382	1503	1702
70°	1152	1280	1446
75°	905	1022	1132
80°	648	719	798
85°	423	423	398



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.6	4.1
10°-20°	268.7	11.4
20°-30°	392.7	16.7
30°-40°	445.7	19.0
40°-50°	430.3	18.3
50°-60°	354.9	15.1
60°-70°	236.4	10.1
70°-80°	105.8	4.5
80°-90°	18.9	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°	757.0	32.2
0°-40°	1202.7	51.2
0°-60°	1987.9	84.6
0°-90°	2349.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2349.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1016	1016	1016	1016	1016	
5°	1015	1014	1010	1005	1002	96
15°	956	958	956	952	945	270
25°	849	856	860	854	846	389
35°	683	692	724	728	725	428
45°	529	538	555	581	584	408
55°	370	377	395	417	429	331
65°	217	223	236	253	267	215
75°	87	92	98	103	109	95
85°	14	14	14	13	13	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1015.9	1015.9	1015.9	1015.9	1015.9
2.5°	1018.6	1019.0	1016.7	1010.4	1006.5
5°	1014.7	1014.3	1010.4	1005.0	1001.8
7.5°	1003.4	1004.2	1003.0	995.2	990.9
10°	992.5	992.9	989.7	983.5	978.4
12.5°	978.4	978.0	973.7	970.6	962.4
15°	956.2	958.5	956.2	951.9	945.2
17.5°	934.7	934.7	936.3	928.9	923.8
20°	910.5	911.7	911.7	905.8	900.0
22.5°	882.4	885.9	887.1	880.8	873.8
25°	849.2	855.9	859.8	853.5	846.1
27.5°	809.0	819.2	830.9	826.2	818.0
30°	764.2	779.0	798.5	794.6	788.7
32.5°	721.6	736.4	763.4	761.8	758.7
35°	683.0	692.3	724.0	727.9	725.1
37.5°	646.3	654.9	684.5	693.5	691.2
40°	607.7	617.0	640.4	656.4	657.2
42.5°	569.4	578.4	597.5	620.5	620.5
45°	528.8	537.8	555.4	580.7	583.8
47.5°	489.0	498.4	515.6	540.9	546.0
50°	450.0	458.6	475.7	500.3	508.1
52.5°	409.4	418.8	435.5	458.2	469.5
55°	370.4	376.6	395.0	416.8	428.9
57.5°	329.8	335.6	356.3	375.1	387.5
60°	290.8	298.2	314.2	333.3	347.7
62.5°	253.3	261.1	274.8	291.5	307.9
65°	217.0	222.8	236.1	252.9	267.3
67.5°	181.9	186.9	200.2	211.9	227.1
70°	146.4	153.0	162.7	174.1	183.8
72.5°	117.9	120.6	128.8	137.0	147.1
75°	87.0	91.7	98.3	103.0	108.9
77.5°	62.4	65.2	69.1	73.0	78.4
80°	41.8	42.9	46.4	47.2	51.5
82.5°	25.4	26.1	26.9	27.3	28.9
85°	13.7	13.7	13.7	12.9	12.9
87.5°	7.8	7.8	6.6	5.5	3.9
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)