

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: P556572

Luminaire Tested: **FUSL-12-4-LD4-1LO-40-UNV-82-96-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: P556572
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-82-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

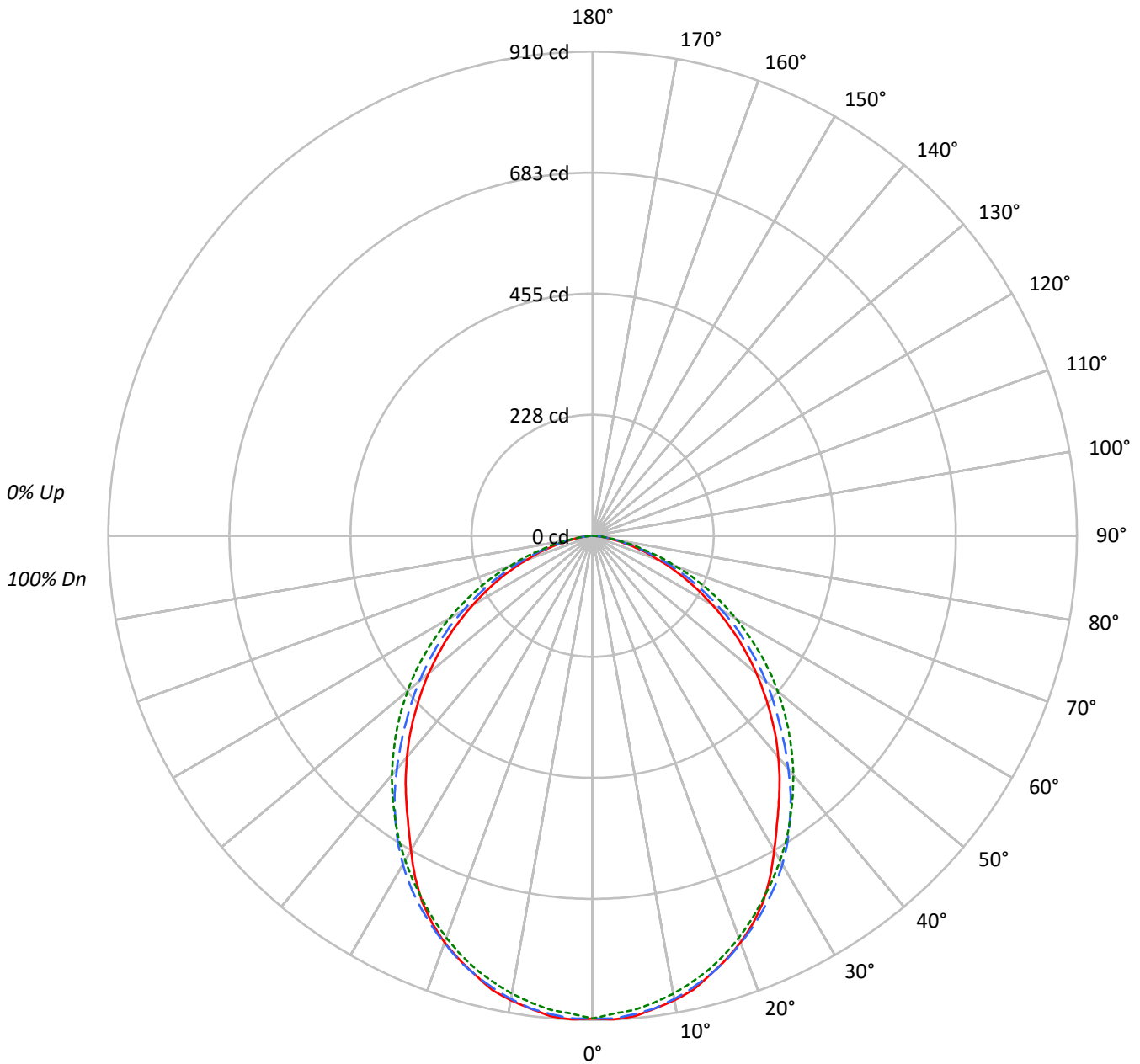
Lumens per Lamp: N/A
Luminaire Lumens: 2098.0 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	2442	2442	2442
5°	2448	2438	2417
10°	2422	2416	2388
15°	2379	2379	2352
20°	2329	2332	2302
25°	2252	2280	2244
30°	2121	2216	2189
35°	2004	2124	2127
40°	1906	2009	2062
45°	1797	1888	1985
50°	1683	1779	1900
55°	1552	1655	1797
60°	1398	1510	1672
65°	1234	1343	1521
70°	1028	1144	1292
75°	808	913	1012
80°	578	643	713
85°	377	377	355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.4	4.1
10°-20°	240.0	11.4
20°-30°	350.7	16.7
30°-40°	398.1	19.0
40°-50°	384.3	18.3
50°-60°	317.0	15.1
60°-70°	211.1	10.1
70°-80°	94.5	4.5
80°-90°	16.9	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°	676.1	32.2
0°-40°	1074.2	51.2
0°-60°	1775.5	84.6
0°-90°	2098.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2098.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	907	907	907	907	907	
5°	906	906	902	898	895	86
15°	854	856	854	850	844	241
25°	758	764	768	762	756	347
35°	610	618	647	650	648	382
45°	472	480	496	519	522	364
55°	331	336	353	372	383	295
65°	194	199	211	226	239	192
75°	78	82	88	92	97	85
85°	12	12	12	12	12	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	907.3	907.3	907.3	907.3	907.3
2.5°	909.8	910.1	908.0	902.5	899.0
5°	906.3	905.9	902.5	897.6	894.8
7.5°	896.2	896.9	895.8	888.9	885.0
10°	886.4	886.8	884.0	878.4	873.9
12.5°	873.9	873.5	869.7	866.9	859.6
15°	854.0	856.1	854.0	850.2	844.2
17.5°	834.8	834.8	836.2	829.6	825.1
20°	813.2	814.3	814.3	809.0	803.8
22.5°	788.1	791.3	792.3	786.7	780.5
25°	758.5	764.4	767.9	762.3	755.7
27.5°	722.6	731.7	742.1	737.9	730.6
30°	682.5	695.7	713.2	709.7	704.5
32.5°	644.5	657.8	681.8	680.4	677.6
35°	610.0	618.4	646.6	650.1	647.6
37.5°	577.2	584.9	611.4	619.4	617.3
40°	542.7	551.1	572.0	586.3	587.0
42.5°	508.6	516.6	533.7	554.2	554.2
45°	472.3	480.3	496.0	518.7	521.5
47.5°	436.8	445.1	460.5	483.1	487.7
50°	401.9	409.6	424.9	446.9	453.8
52.5°	365.7	374.0	389.0	409.2	419.3
55°	330.8	336.4	352.8	372.3	383.1
57.5°	294.5	299.8	318.2	335.0	346.1
60°	259.7	266.3	280.6	297.7	310.6
62.5°	226.2	233.2	245.4	260.4	275.0
65°	193.8	199.0	210.9	225.9	238.8
67.5°	162.4	167.0	178.8	189.3	202.9
70°	130.7	136.6	145.4	155.5	164.2
72.5°	105.3	107.7	115.0	122.3	131.4
75°	77.7	81.9	87.8	92.0	97.3
77.5°	55.8	58.2	61.7	65.2	70.1
80°	37.3	38.3	41.5	42.2	46.0
82.5°	22.7	23.4	24.1	24.4	25.8
85°	12.2	12.2	12.2	11.5	11.5
87.5°	7.0	7.0	5.9	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)