

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: P557641

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-81-88-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: P557641
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-LD4-2STD-50-UNV-81-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

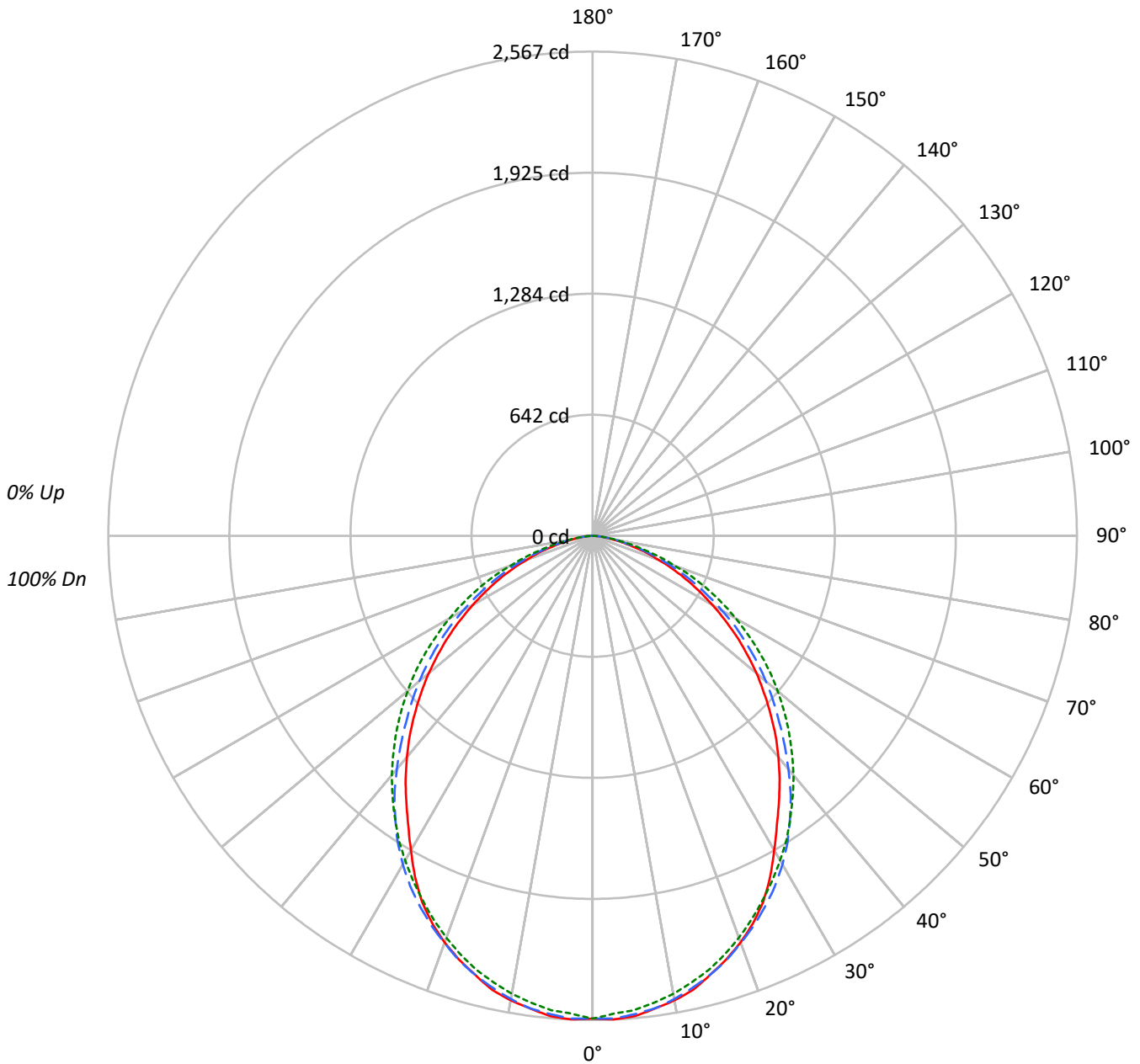
Lumens per Lamp: N/A
Luminaire Lumens: 5919.0 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	6888	6888	6888
5°	6907	6877	6819
10°	6833	6815	6737
15°	6712	6712	6635
20°	6570	6578	6494
25°	6354	6433	6330
30°	5983	6252	6176
35°	5654	5993	6002
40°	5379	5669	5818
45°	5071	5326	5599
50°	4747	5019	5360
55°	4379	4669	5071
60°	3943	4260	4716
65°	3482	3789	4289
70°	2902	3227	3644
75°	2280	2576	2853
80°	1630	1813	2011
85°	1062	1062	1003



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.0	4.1
10°-20°	677.1	11.4
20°-30°	989.4	16.7
30°-40°	1123.1	19.0
40°-50°	1084.2	18.3
50°-60°	894.4	15.1
60°-70°	595.6	10.1
70°-80°	266.5	4.5
80°-90°	47.7	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°	1907.5	32.2
0°-40°	3030.6	51.2
0°-60°	5009.2	84.6
0°-90°	5919.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5919.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2560	2560	2560	2560	2560	
5°	2557	2556	2546	2532	2524	242
15°	2409	2415	2409	2398	2382	679
25°	2140	2157	2166	2151	2132	980
35°	1721	1745	1824	1834	1827	1078
45°	1332	1355	1399	1463	1471	1028
55°	933	949	995	1050	1081	833
65°	547	562	595	637	674	542
75°	219	231	248	260	274	240
85°	34	34	34	32	32	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2559.8	2559.8	2559.8	2559.8	2559.8
2.5°	2566.7	2567.7	2561.8	2546.0	2536.2
5°	2556.9	2555.9	2546.0	2532.3	2524.4
7.5°	2528.3	2530.3	2527.4	2507.7	2496.9
10°	2500.8	2501.8	2493.9	2478.2	2465.4
12.5°	2465.4	2464.4	2453.6	2445.7	2425.1
15°	2409.4	2415.3	2409.4	2398.5	2381.8
17.5°	2355.3	2355.3	2359.2	2340.5	2327.7
20°	2294.3	2297.2	2297.2	2282.5	2267.7
22.5°	2223.5	2232.3	2235.3	2219.6	2201.9
25°	2139.9	2156.6	2166.5	2150.7	2132.0
27.5°	2038.6	2064.2	2093.7	2081.9	2061.2
30°	1925.5	1962.9	2012.1	2002.2	1987.5
32.5°	1818.3	1855.7	1923.5	1919.6	1911.7
35°	1721.0	1744.6	1824.2	1834.1	1827.2
37.5°	1628.5	1650.2	1724.9	1747.5	1741.6
40°	1531.2	1554.8	1613.8	1654.1	1656.1
42.5°	1434.8	1457.4	1505.6	1563.6	1563.6
45°	1332.5	1355.1	1399.4	1463.3	1471.2
47.5°	1232.2	1255.8	1299.1	1363.0	1375.8
50°	1133.9	1155.5	1198.8	1260.7	1280.4
52.5°	1031.6	1055.2	1097.5	1154.5	1183.0
55°	933.3	949.0	995.2	1050.3	1080.8
57.5°	831.0	845.7	897.9	945.1	976.5
60°	732.6	751.3	791.6	839.8	876.2
62.5°	638.2	657.9	692.3	734.6	775.9
65°	546.8	561.5	595.0	637.2	673.6
67.5°	458.3	471.1	504.5	534.0	572.3
70°	368.8	385.5	410.1	438.6	463.2
72.5°	297.0	303.9	324.5	345.2	370.7
75°	219.3	231.1	247.8	259.6	274.4
77.5°	157.3	164.2	174.1	183.9	197.7
80°	105.2	108.2	117.0	119.0	129.8
82.5°	63.9	65.9	67.9	68.8	72.8
85°	34.4	34.4	34.4	32.5	32.5
87.5°	19.7	19.7	16.7	13.8	9.8
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)