

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: P558160

Luminaire Tested: **FUSL-12-4-LD4-3LO-50-UNV-82-84-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: P558160
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-50-UNV-82-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

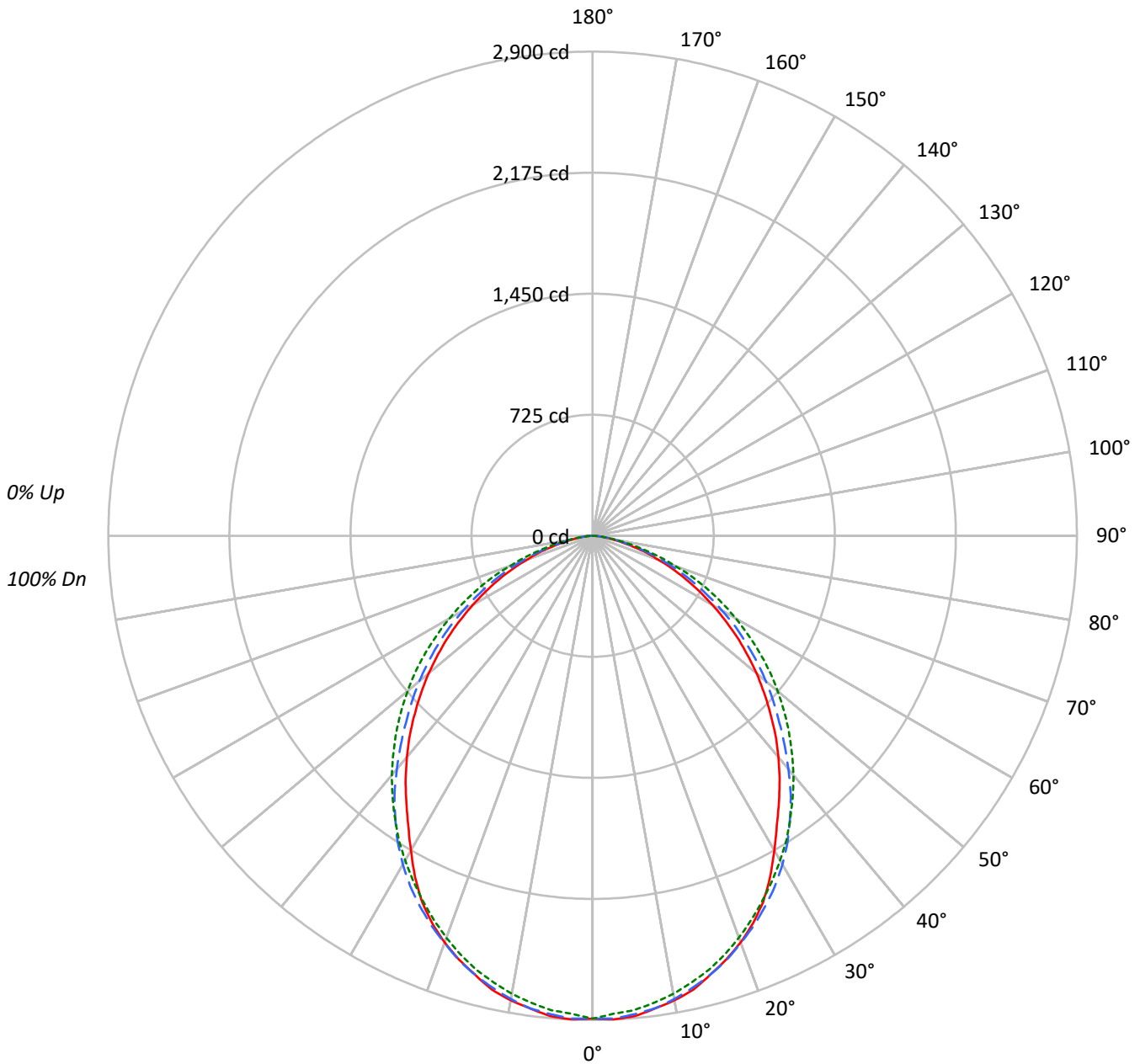
Lumens per Lamp: N/A
Luminaire Lumens: 6687.0 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
Input Voltage (V): NR
Input Current (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°	7782	7782	7782
5°	7803	7770	7704
10°	7720	7699	7611
15°	7583	7583	7497
20°	7423	7432	7337
25°	7178	7267	7152
30°	6760	7063	6977
35°	6387	6770	6781
40°	6076	6405	6572
45°	5729	6017	6325
50°	5363	5670	6056
55°	4946	5275	5728
60°	4455	4814	5328
65°	3933	4280	4846
70°	3278	3645	4117
75°	2576	2911	3223
80°	1843	2049	2273
85°	1201	1201	1133



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.3	4.1
10°-20°	764.9	11.4
20°-30°	1117.8	16.7
30°-40°	1268.8	19.0
40°-50°	1224.9	18.3
50°-60°	1010.4	15.1
60°-70°	672.9	10.1
70°-80°	301.1	4.5
80°-90°	53.9	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°	2155.0	32.2
0°-40°	3423.9	51.2
0°-60°	5659.2	84.6
0°-90°	6687.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6687.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2892	2892	2892	2892	2892	
5°	2889	2888	2876	2861	2852	273
15°	2722	2729	2722	2710	2691	767
25°	2418	2436	2448	2430	2409	1107
35°	1944	1971	2061	2072	2064	1218
45°	1505	1531	1581	1653	1662	1162
55°	1054	1072	1124	1187	1221	941
65°	618	634	672	720	761	612
75°	248	261	280	293	310	271
85°	39	39	39	37	37	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2892.0	2892.0	2892.0	2892.0	2892.0
2.5°	2899.7	2900.8	2894.2	2876.4	2865.3
5°	2888.6	2887.5	2876.4	2860.8	2852.0
7.5°	2856.4	2858.6	2855.3	2833.1	2820.9
10°	2825.3	2826.4	2817.5	2799.7	2785.3
12.5°	2785.3	2784.2	2772.0	2763.1	2739.7
15°	2722.0	2728.6	2722.0	2709.7	2690.9
17.5°	2660.9	2660.9	2665.3	2644.2	2629.8
20°	2592.0	2595.3	2595.3	2578.7	2562.0
22.5°	2512.0	2522.0	2525.3	2507.5	2487.5
25°	2417.6	2436.4	2447.6	2429.8	2408.7
27.5°	2303.1	2332.0	2365.3	2352.0	2328.7
30°	2175.4	2217.6	2273.1	2262.0	2245.3
32.5°	2054.3	2096.5	2173.1	2168.7	2159.8
35°	1944.3	1970.9	2060.9	2072.0	2064.3
37.5°	1839.8	1864.3	1948.7	1974.3	1967.6
40°	1729.8	1756.5	1823.2	1868.7	1870.9
42.5°	1621.0	1646.5	1701.0	1766.5	1766.5
45°	1505.4	1531.0	1581.0	1653.2	1662.1
47.5°	1392.1	1418.8	1467.6	1539.9	1554.3
50°	1281.0	1305.4	1354.3	1424.3	1446.5
52.5°	1165.4	1192.1	1239.9	1304.3	1336.5
55°	1054.3	1072.1	1124.3	1186.6	1221.0
57.5°	938.8	955.5	1014.4	1067.7	1103.2
60°	827.7	848.8	894.4	948.8	989.9
62.5°	721.0	743.3	782.1	829.9	876.6
65°	617.7	634.4	672.2	719.9	761.0
67.5°	517.7	532.2	569.9	603.3	646.6
70°	416.6	435.5	463.3	495.5	523.3
72.5°	335.5	343.3	366.6	390.0	418.9
75°	247.8	261.1	280.0	293.3	310.0
77.5°	177.8	185.5	196.6	207.8	223.3
80°	118.9	122.2	132.2	134.4	146.7
82.5°	72.2	74.4	76.7	77.8	82.2
85°	38.9	38.9	38.9	36.7	36.7
87.5°	22.2	22.2	18.9	15.6	11.1
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)