

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: P558060

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-93-96-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: P558060
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-35-UNV-93-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

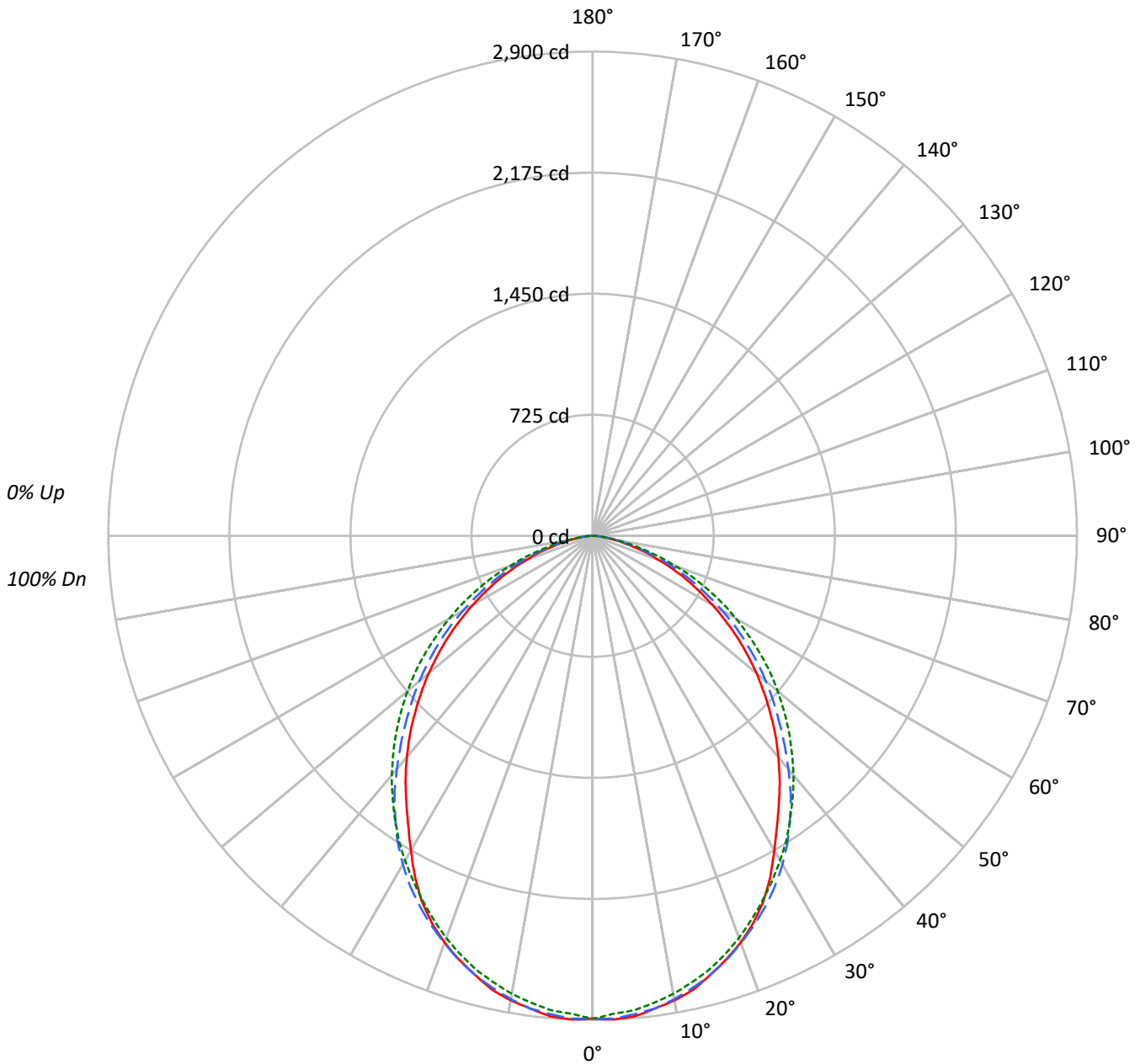
Lumens per Lamp: N/A
Luminaire Lumens: 6688.0 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
Input Voltage (V): NR
Input Current (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°	7783	7783	7783
5°	7804	7771	7705
10°	7721	7700	7612
15°	7584	7584	7498
20°	7424	7433	7338
25°	7179	7268	7153
30°	6760	7064	6978
35°	6388	6771	6782
40°	6078	6405	6573
45°	5730	6017	6326
50°	5364	5671	6056
55°	4947	5276	5729
60°	4455	4814	5329
65°	3934	4281	4847
70°	3279	3646	4118
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°	765.0	11.4
20°-30°	1118.0	16.7
30°-40°	1269.0	19.0
40°-50°	1225.1	18.3
50°-60°	1010.6	15.1
60°-70°	673.0	10.1
70°-80°	301.2	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°	2155.4	32.2
0°-40°	3424.4	51.2
0°-60°	5660.0	84.6
0°-90°	6688.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6688.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2892	2892	2892	2892	2892	
5°	2889	2888	2877	2861	2852	273
15°	2722	2729	2722	2710	2691	767
25°	2418	2437	2448	2430	2409	1107
35°	1945	1971	2061	2072	2065	1218
45°	1506	1531	1581	1653	1662	1162
55°	1054	1072	1124	1187	1221	941
65°	618	634	672	720	761	613
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°	2892.4	2892.4	2892.4	2892.4	2892.4
2.5°	2900.2	2901.3	2894.6	2876.8	2865.7
5°	2889.1	2887.9	2876.8	2861.3	2852.4
7.5°	2856.8	2859.1	2855.7	2833.5	2821.3
10°	2825.7	2826.8	2817.9	2800.2	2785.7
12.5°	2785.7	2784.6	2772.4	2763.5	2740.2
15°	2722.4	2729.0	2722.4	2710.2	2691.3
17.5°	2661.3	2661.3	2665.7	2644.6	2630.2
20°	2592.4	2595.7	2595.7	2579.0	2562.4
22.5°	2512.4	2522.4	2525.7	2507.9	2487.9
25°	2417.9	2436.8	2447.9	2430.1	2409.0
27.5°	2303.5	2332.4	2365.7	2352.4	2329.0
30°	2175.7	2217.9	2273.5	2262.4	2245.7
32.5°	2054.6	2096.8	2173.5	2169.0	2160.1
35°	1944.6	1971.2	2061.2	2072.3	2064.6
37.5°	1840.1	1864.6	1949.0	1974.6	1967.9
40°	1730.1	1756.8	1823.4	1869.0	1871.2
42.5°	1621.2	1646.8	1701.2	1766.8	1766.8
45°	1505.6	1531.2	1581.2	1653.4	1662.3
47.5°	1392.3	1419.0	1467.9	1540.1	1554.5
50°	1281.2	1305.6	1354.5	1424.5	1446.7
52.5°	1165.6	1192.3	1240.1	1304.5	1336.7
55°	1054.5	1072.3	1124.5	1186.7	1221.2
57.5°	938.9	955.6	1014.5	1067.8	1103.4
60°	827.8	848.9	894.5	948.9	990.1
62.5°	721.2	743.4	782.3	830.0	876.7
65°	617.8	634.5	672.3	720.0	761.2
67.5°	517.8	532.3	570.0	603.4	646.7
70°	416.7	435.6	463.4	495.6	523.4
72.5°	335.6	343.4	366.7	390.0	418.9
75°	247.8	261.1	280.0	293.4	310.0
77.5°	177.8	185.6	196.7	207.8	223.3
80°	118.9	122.2	132.2	134.5	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)