

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: P558004

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-80-86-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: P558004
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-80-86-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

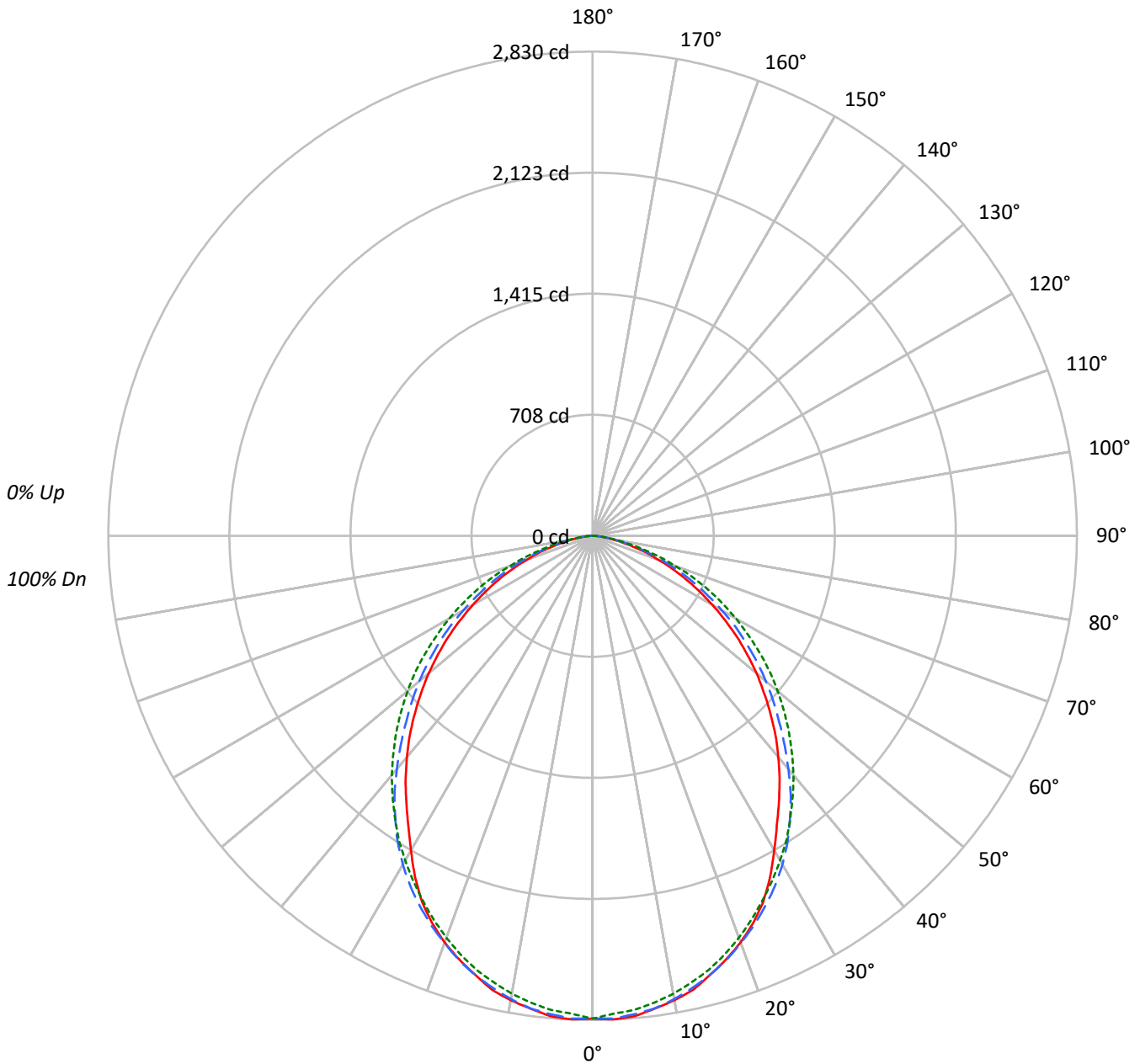
Lumens per Lamp: N/A
Luminaire Lumens: 6525.0 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	7594	7594	7594
5°	7614	7582	7517
10°	7533	7512	7426
15°	7399	7399	7315
20°	7243	7252	7159
25°	7004	7091	6978
30°	6596	6892	6808
35°	6232	6606	6617
40°	5929	6249	6413
45°	5590	5871	6172
50°	5233	5532	5909
55°	4827	5147	5590
60°	4346	4697	5198
65°	3838	4176	4728
70°	3198	3557	4017
75°	2514	2840	3145
80°	1798	1999	2218
85°	1170	1170	1105



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.7	4.1
10°-20°	746.4	11.4
20°-30°	1090.7	16.7
30°-40°	1238.1	19.0
40°-50°	1195.2	18.3
50°-60°	985.9	15.1
60°-70°	656.6	10.1
70°-80°	293.8	4.5
80°-90°	52.6	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°	2102.8	32.2
0°-40°	3340.9	51.2
0°-60°	5522.0	84.6
0°-90°	6525.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6525.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2822	2822	2822	2822	2822	
5°	2819	2818	2807	2792	2783	267
15°	2656	2662	2656	2644	2626	749
25°	2359	2377	2388	2371	2350	1080
35°	1897	1923	2011	2022	2014	1189
45°	1469	1494	1543	1613	1622	1133
55°	1029	1046	1097	1158	1191	918
65°	603	619	656	702	743	598
75°	242	255	273	286	302	264
85°	38	38	38	36	36	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2821.9	2821.9	2821.9	2821.9	2821.9
2.5°	2829.5	2830.6	2824.1	2806.7	2795.9
5°	2818.6	2817.6	2806.7	2791.5	2782.9
7.5°	2787.2	2789.4	2786.1	2764.4	2752.5
10°	2756.8	2757.9	2749.3	2731.9	2717.8
12.5°	2717.8	2716.7	2704.8	2696.1	2673.4
15°	2656.0	2662.5	2656.0	2644.1	2625.7
17.5°	2596.4	2596.4	2600.7	2580.1	2566.0
20°	2529.2	2532.4	2532.4	2516.2	2499.9
22.5°	2451.1	2460.9	2464.1	2446.8	2427.3
25°	2359.0	2377.4	2388.3	2370.9	2350.3
27.5°	2247.3	2275.5	2308.0	2295.0	2272.3
30°	2122.7	2163.8	2218.1	2207.2	2191.0
32.5°	2004.5	2045.7	2120.5	2116.1	2107.5
35°	1897.2	1923.2	2011.0	2021.8	2014.2
37.5°	1795.3	1819.1	1901.5	1926.4	1919.9
40°	1687.9	1714.0	1779.0	1823.4	1825.6
42.5°	1581.7	1606.6	1659.7	1723.7	1723.7
45°	1468.9	1493.9	1542.7	1613.1	1621.8
47.5°	1358.4	1384.4	1432.1	1502.6	1516.6
50°	1250.0	1273.8	1321.5	1389.8	1411.5
52.5°	1137.2	1163.2	1209.8	1272.7	1304.2
55°	1028.8	1046.1	1097.1	1157.8	1191.4
57.5°	916.1	932.3	989.8	1041.8	1076.5
60°	807.6	828.2	872.7	925.8	965.9
62.5°	703.6	725.3	763.2	809.8	855.3
65°	602.8	619.0	655.9	702.5	742.6
67.5°	505.2	519.3	556.1	588.7	630.9
70°	406.5	425.0	452.1	483.5	510.6
72.5°	327.4	335.0	357.8	380.5	408.7
75°	241.8	254.8	273.2	286.2	302.5
77.5°	173.5	181.0	191.9	202.7	217.9
80°	116.0	119.3	129.0	131.2	143.1
82.5°	70.5	72.6	74.8	75.9	80.2
85°	37.9	37.9	37.9	35.8	35.8
87.5°	21.7	21.7	18.4	15.2	10.8
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)