

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: P558126

Luminaire Tested: **FUSL-12-4-LD4-3LO-40-UNV-93-97-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: P558126
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-40-UNV-93-97-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

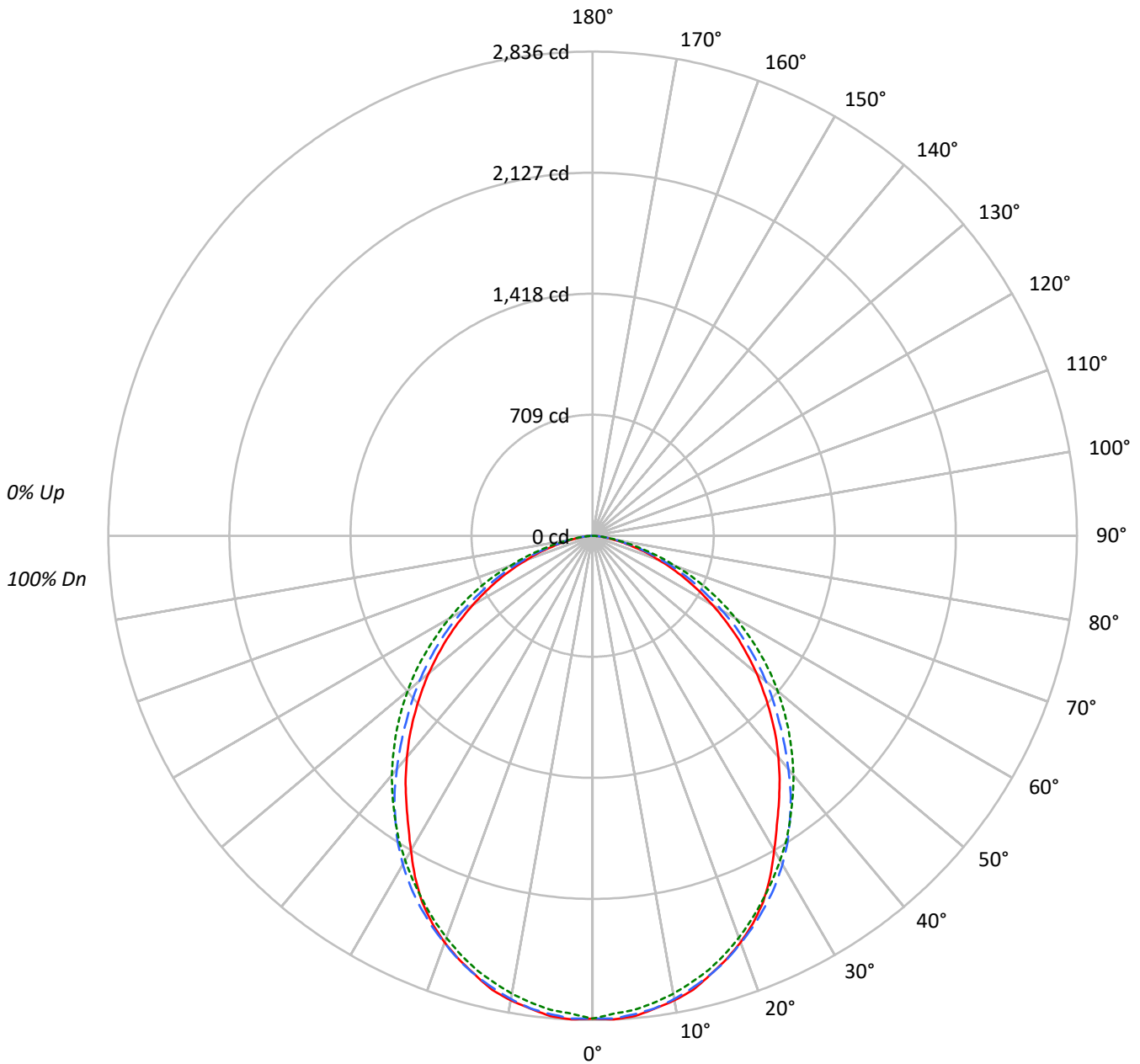
Lumens per Lamp: N/A
Luminaire Lumens: 6539.0 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	7610	7610	7610
5°	7630	7598	7533
10°	7549	7529	7442
15°	7415	7415	7331
20°	7258	7268	7174
25°	7019	7106	6994
30°	6610	6907	6823
35°	6246	6620	6631
40°	5942	6263	6427
45°	5602	5883	6185
50°	5244	5544	5922
55°	4837	5158	5602
60°	4356	4707	5210
65°	3846	4185	4739
70°	3205	3564	4026
75°	2519	2847	3151
80°	1801	2004	2222
85°	1173	1173	1108



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.3	4.1
10°-20°	748.0	11.4
20°-30°	1093.1	16.7
30°-40°	1240.8	19.0
40°-50°	1197.8	18.3
50°-60°	988.1	15.1
60°-70°	658.0	10.1
70°-80°	294.4	4.5
80°-90°	52.7	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°	2107.3	32.2
0°-40°	3348.1	51.2
0°-60°	5533.9	84.6
0°-90°	6539.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6539.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2828	2828	2828	2828	2828	
5°	2825	2824	2813	2798	2789	267
15°	2662	2668	2662	2650	2631	750
25°	2364	2382	2393	2376	2355	1083
35°	1901	1927	2015	2026	2019	1191
45°	1472	1497	1546	1617	1625	1136
55°	1031	1048	1100	1160	1194	920
65°	604	620	657	704	744	599
75°	242	255	274	287	303	265
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°	2827.9	2827.9	2827.9	2827.9	2827.9
2.5°	2835.6	2836.6	2830.1	2812.7	2801.9
5°	2824.7	2823.6	2812.7	2797.5	2788.8
7.5°	2793.2	2795.4	2792.1	2770.4	2758.4
10°	2762.8	2763.8	2755.2	2737.8	2723.7
12.5°	2723.7	2722.6	2710.6	2701.9	2679.1
15°	2661.7	2668.2	2661.7	2649.8	2631.3
17.5°	2602.0	2602.0	2606.3	2585.7	2571.6
20°	2534.6	2537.9	2537.9	2521.6	2505.3
22.5°	2456.4	2466.2	2469.4	2452.0	2432.5
25°	2364.0	2382.5	2393.4	2376.0	2355.4
27.5°	2252.1	2280.4	2313.0	2299.9	2277.1
30°	2127.2	2168.5	2222.8	2211.9	2195.7
32.5°	2008.8	2050.1	2125.0	2120.7	2112.0
35°	1901.2	1927.3	2015.3	2026.2	2018.6
37.5°	1799.1	1823.0	1905.6	1930.6	1924.0
40°	1691.6	1717.6	1782.8	1827.4	1829.5
42.5°	1585.1	1610.1	1663.3	1727.4	1727.4
45°	1472.1	1497.1	1546.0	1616.6	1625.3
47.5°	1361.3	1387.4	1435.2	1505.8	1519.9
50°	1252.6	1276.5	1324.3	1392.8	1414.5
52.5°	1139.7	1165.7	1212.4	1275.5	1307.0
55°	1031.0	1048.4	1099.5	1160.3	1194.0
57.5°	918.0	934.3	991.9	1044.0	1078.8
60°	809.4	830.0	874.6	927.8	968.0
62.5°	705.1	726.8	764.8	811.6	857.2
65°	604.0	620.3	657.3	704.0	744.2
67.5°	506.3	520.4	557.3	589.9	632.3
70°	407.4	425.9	453.0	484.5	511.7
72.5°	328.1	335.7	358.5	381.3	409.6
75°	242.3	255.3	273.8	286.8	303.1
77.5°	173.8	181.4	192.3	203.2	218.4
80°	116.2	119.5	129.3	131.5	143.4
82.5°	70.6	72.8	75.0	76.0	80.4
85°	38.0	38.0	38.0	35.9	35.9
87.5°	21.7	21.7	18.5	15.2	10.9
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)