

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: P557546

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-93-94-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: P557546
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-35-UNV-93-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

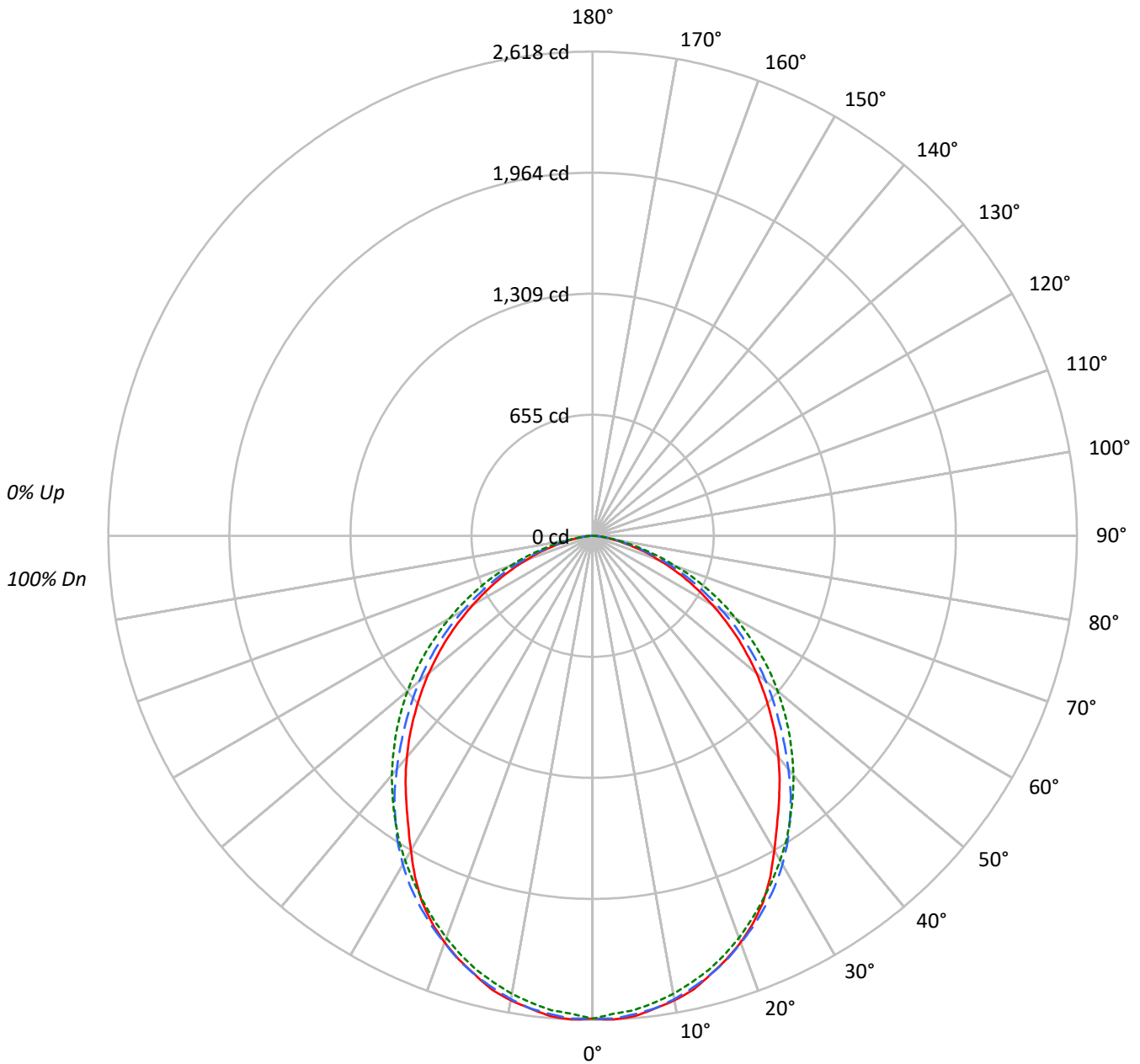
Lumens per Lamp: N/A
Luminaire Lumens: 6037.0 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (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°	7026	7026	7026
5°	7044	7015	6955
10°	6970	6950	6871
15°	6846	6846	6768
20°	6701	6710	6624
25°	6481	6561	6456
30°	6102	6377	6299
35°	5766	6112	6122
40°	5486	5782	5934
45°	5172	5432	5710
50°	4842	5119	5467
55°	4466	4762	5172
60°	4021	4345	4810
65°	3551	3864	4375
70°	2959	3291	3717
75°	2326	2628	2909
80°	1663	1850	2052
85°	1084	1084	1022



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.8	4.1
10°-20°	690.6	11.4
20°-30°	1009.2	16.7
30°-40°	1145.5	19.0
40°-50°	1105.8	18.3
50°-60°	912.2	15.1
60°-70°	607.5	10.1
70°-80°	271.8	4.5
80°-90°	48.6	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°	1945.5	32.2
0°-40°	3091.1	51.2
0°-60°	5109.1	84.6
0°-90°	6037.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6037.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2611	2611	2611	2611	2611	
5°	2608	2607	2597	2583	2575	247
15°	2457	2463	2457	2446	2429	693
25°	2183	2200	2210	2194	2174	1000
35°	1755	1779	1861	1871	1864	1100
45°	1359	1382	1427	1492	1500	1049
55°	952	968	1015	1071	1102	850
65°	558	573	607	650	687	553
75°	224	236	253	265	280	245
85°	35	35	35	33	33	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2610.8	2610.8	2610.8	2610.8	2610.8
2.5°	2617.9	2618.9	2612.9	2596.8	2586.8
5°	2607.8	2606.8	2596.8	2582.8	2574.7
7.5°	2578.8	2580.8	2577.7	2557.7	2546.7
10°	2550.7	2551.7	2543.6	2527.6	2514.6
12.5°	2514.6	2513.6	2502.5	2494.5	2473.4
15°	2457.4	2463.4	2457.4	2446.4	2429.3
17.5°	2402.2	2402.2	2406.2	2387.2	2374.1
20°	2340.0	2343.0	2343.0	2328.0	2313.0
22.5°	2267.8	2276.8	2279.9	2263.8	2245.7
25°	2182.6	2199.6	2209.6	2193.6	2174.5
27.5°	2079.2	2105.3	2135.4	2123.4	2102.3
30°	1963.9	2002.0	2052.2	2042.1	2027.1
32.5°	1854.6	1892.7	1961.9	1957.9	1949.9
35°	1755.3	1779.3	1860.6	1870.6	1863.6
37.5°	1661.0	1683.1	1759.3	1782.4	1776.3
40°	1561.7	1585.8	1645.9	1687.1	1689.1
42.5°	1463.4	1486.5	1535.6	1594.8	1594.8
45°	1359.1	1382.2	1427.3	1492.5	1500.5
47.5°	1256.8	1280.8	1325.0	1390.2	1403.2
50°	1156.5	1178.5	1222.7	1285.9	1305.9
52.5°	1052.2	1076.2	1119.4	1177.5	1206.6
55°	951.9	967.9	1015.1	1071.2	1102.3
57.5°	847.5	862.6	915.8	963.9	996.0
60°	747.2	766.3	807.4	856.6	893.7
62.5°	651.0	671.0	706.1	749.3	791.4
65°	557.7	572.7	606.8	650.0	687.1
67.5°	467.4	480.4	514.5	544.6	583.8
70°	376.1	393.2	418.3	447.3	472.4
72.5°	302.9	309.9	331.0	352.1	378.1
75°	223.7	235.7	252.8	264.8	279.8
77.5°	160.5	167.5	177.5	187.6	201.6
80°	107.3	110.3	119.4	121.4	132.4
82.5°	65.2	67.2	69.2	70.2	74.2
85°	35.1	35.1	35.1	33.1	33.1
87.5°	20.1	20.1	17.1	14.0	10.0
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)