

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: P558034

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-82-85-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: P558034
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-82-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

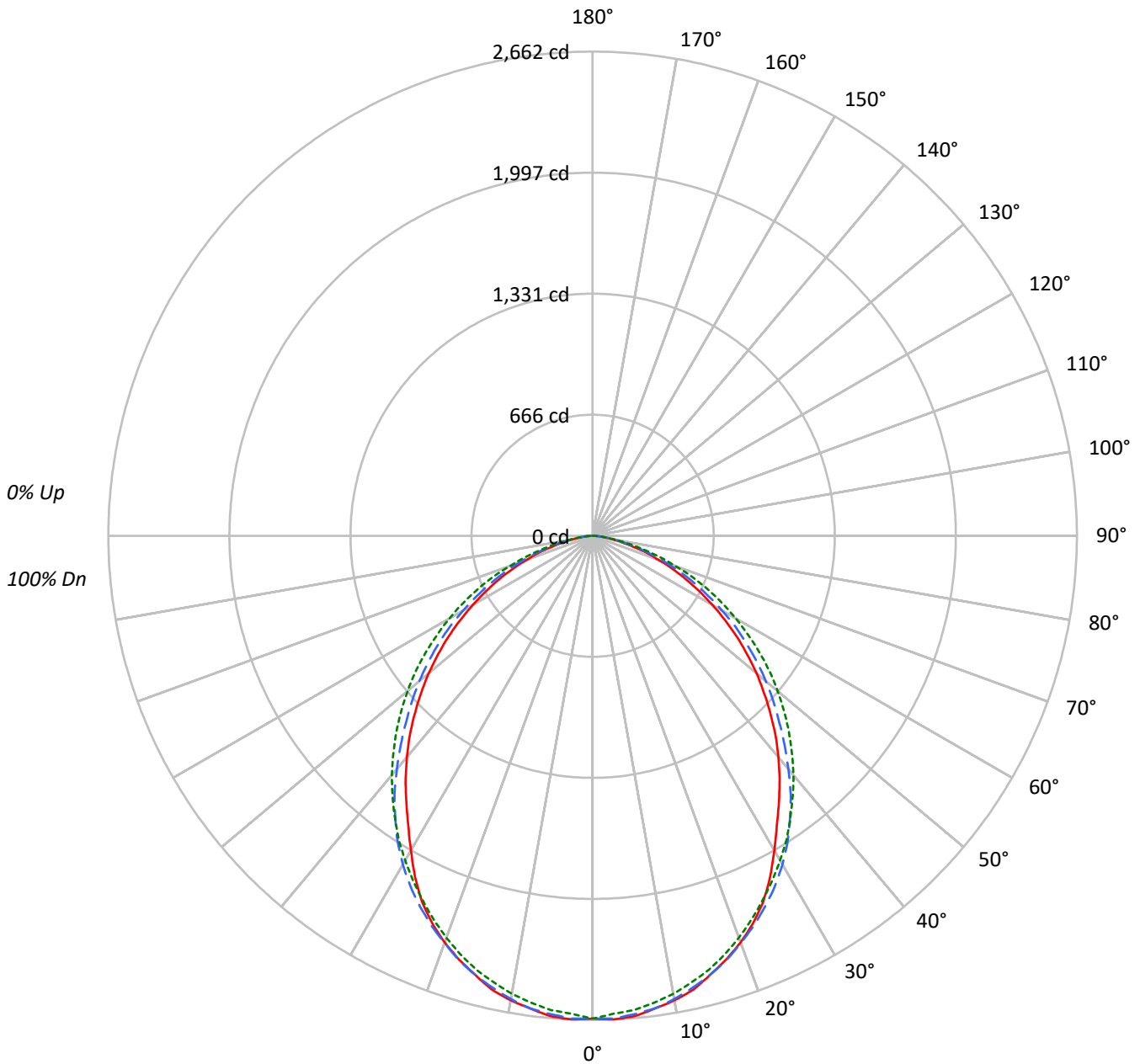
Lumens per Lamp: N/A
Luminaire Lumens: 6138.0 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	7143	7143	7143
5°	7162	7132	7071
10°	7086	7067	6986
15°	6961	6961	6881
20°	6813	6822	6734
25°	6589	6671	6565
30°	6205	6483	6404
35°	5863	6214	6225
40°	5578	5879	6033
45°	5259	5523	5806
50°	4922	5204	5559
55°	4541	4842	5258
60°	4089	4418	4890
65°	3610	3929	4448
70°	3009	3346	3779
75°	2364	2672	2958
80°	1691	1881	2086
85°	1102	1102	1041



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.9	4.1
10°-20°	702.1	11.4
20°-30°	1026.0	16.7
30°-40°	1164.7	19.0
40°-50°	1124.3	18.3
50°-60°	927.5	15.1
60°-70°	617.6	10.1
70°-80°	276.4	4.5
80°-90°	49.5	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°	1978.1	32.2
0°-40°	3142.8	51.2
0°-60°	5194.5	84.6
0°-90°	6138.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6138.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2654	2654	2654	2654	2654	
5°	2652	2650	2640	2626	2618	251
15°	2498	2505	2498	2487	2470	704
25°	2219	2236	2247	2230	2211	1016
35°	1785	1809	1892	1902	1895	1118
45°	1382	1405	1451	1518	1526	1066
55°	968	984	1032	1089	1121	864
65°	567	582	617	661	699	562
75°	227	240	257	269	284	249
85°	36	36	36	34	34	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2654.5	2654.5	2654.5	2654.5	2654.5
2.5°	2661.7	2662.7	2656.6	2640.2	2630.1
5°	2651.5	2650.4	2640.2	2626.0	2617.8
7.5°	2621.9	2623.9	2620.9	2600.5	2589.3
10°	2593.3	2594.4	2586.2	2569.9	2556.6
12.5°	2556.6	2555.6	2544.4	2536.2	2514.8
15°	2498.5	2504.6	2498.5	2487.3	2469.9
17.5°	2442.4	2442.4	2446.5	2427.1	2413.9
20°	2379.2	2382.2	2382.2	2366.9	2351.6
22.5°	2305.8	2314.9	2318.0	2301.7	2283.3
25°	2219.1	2236.4	2246.6	2230.3	2210.9
27.5°	2114.0	2140.5	2171.1	2158.9	2137.5
30°	1996.8	2035.5	2086.5	2076.3	2061.0
32.5°	1885.6	1924.4	1994.7	1990.6	1982.5
35°	1784.6	1809.1	1891.7	1901.9	1894.8
37.5°	1688.8	1711.2	1788.7	1812.2	1806.1
40°	1587.8	1612.3	1673.5	1715.3	1717.3
42.5°	1487.9	1511.3	1561.3	1621.5	1621.5
45°	1381.8	1405.3	1451.2	1517.5	1525.6
47.5°	1277.8	1302.3	1347.1	1413.4	1426.7
50°	1175.8	1198.3	1243.1	1307.4	1327.8
52.5°	1069.8	1094.2	1138.1	1197.2	1226.8
55°	967.8	984.1	1032.0	1089.1	1120.8
57.5°	861.7	877.0	931.1	980.0	1012.7
60°	759.7	779.1	820.9	870.9	908.6
62.5°	661.8	682.2	717.9	761.8	804.6
65°	567.0	582.3	617.0	660.8	698.6
67.5°	475.2	488.5	523.2	553.7	593.5
70°	382.4	399.8	425.3	454.8	480.3
72.5°	308.0	315.1	336.5	357.9	384.5
75°	227.4	239.7	257.0	269.2	284.5
77.5°	163.2	170.3	180.5	190.7	205.0
80°	109.1	112.2	121.4	123.4	134.6
82.5°	66.3	68.3	70.4	71.4	75.5
85°	35.7	35.7	35.7	33.7	33.7
87.5°	20.4	20.4	17.3	14.3	10.2
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)