

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: P557514

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-81-94-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: P557514
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-81-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC 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

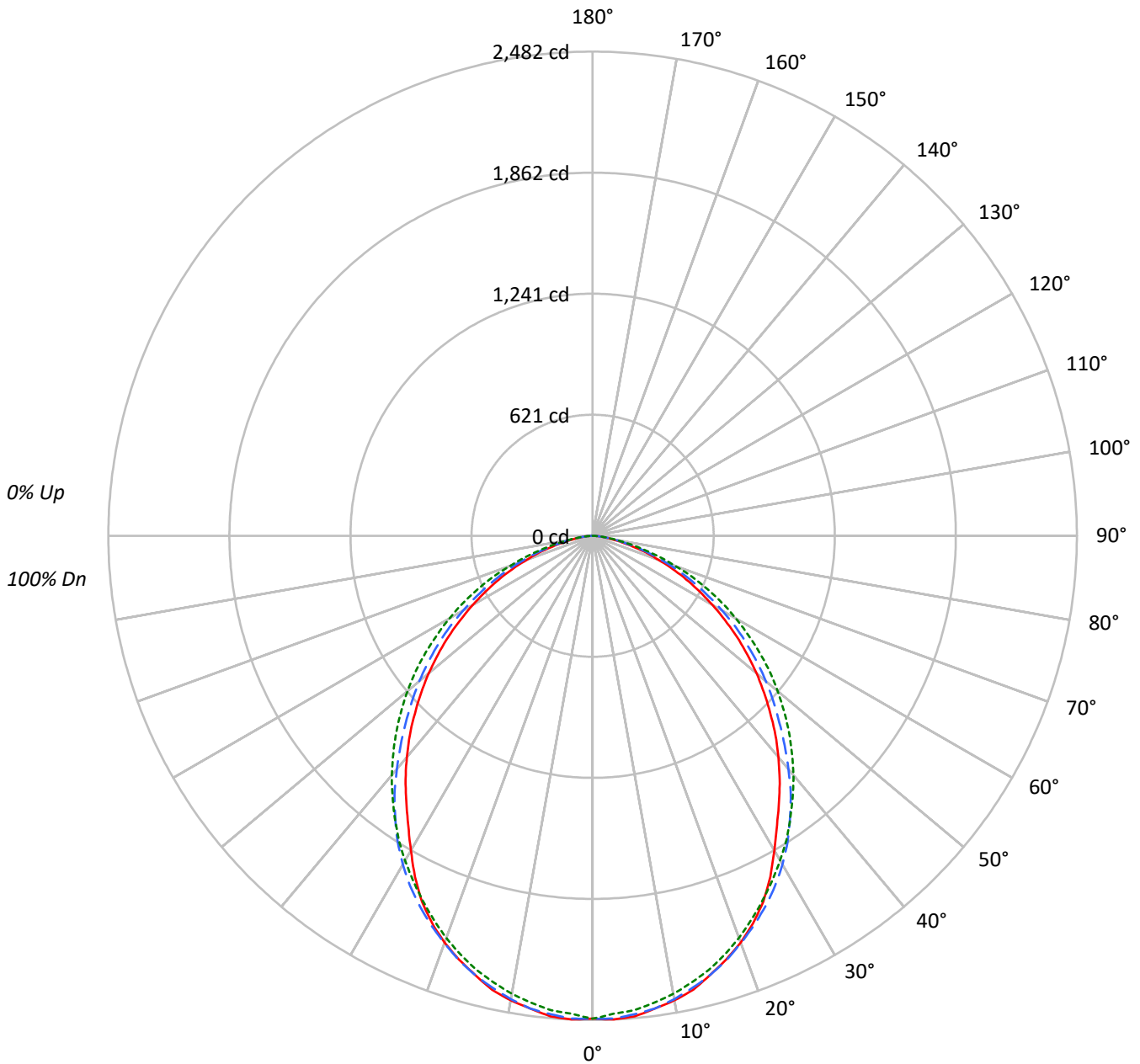
Lumens per Lamp: N/A
Luminaire Lumens: 5724.0 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6662	6662	6662
5°	6679	6651	6594
10°	6608	6590	6515
15°	6491	6491	6417
20°	6354	6362	6280
25°	6144	6221	6122
30°	5786	6046	5972
35°	5467	5795	5805
40°	5201	5482	5626
45°	4904	5150	5414
50°	4590	4853	5184
55°	4234	4515	4904
60°	3813	4120	4561
65°	3367	3664	4148
70°	2806	3120	3524
75°	2205	2492	2758
80°	1578	1754	1945
85°	1028	1028	969



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.1	4.1
10°-20°	654.8	11.4
20°-30°	956.8	16.7
30°-40°	1086.1	19.0
40°-50°	1048.5	18.3
50°-60°	864.9	15.1
60°-70°	576.0	10.1
70°-80°	257.7	4.5
80°-90°	46.1	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°	1844.7	32.2
0°-40°	2930.8	51.2
0°-60°	4844.2	84.6
0°-90°	5724.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5724.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2476	2476	2476	2476	2476	
5°	2473	2472	2462	2449	2441	234
15°	2330	2336	2330	2320	2303	657
25°	2069	2086	2095	2080	2062	948
35°	1664	1687	1764	1774	1767	1043
45°	1289	1310	1353	1415	1423	994
55°	902	918	962	1016	1045	806
65°	529	543	575	616	651	524
75°	212	224	240	251	265	232
85°	33	33	33	31	31	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2475.5	2475.5	2475.5	2475.5	2475.5
2.5°	2482.1	2483.1	2477.4	2462.2	2452.7
5°	2472.6	2471.7	2462.2	2448.9	2441.2
7.5°	2445.0	2447.0	2444.1	2425.1	2414.6
10°	2418.4	2419.4	2411.8	2396.5	2384.2
12.5°	2384.2	2383.2	2372.8	2365.2	2345.2
15°	2330.0	2335.7	2330.0	2319.5	2303.3
17.5°	2277.7	2277.7	2281.5	2263.4	2251.0
20°	2218.7	2221.6	2221.6	2207.3	2193.0
22.5°	2150.2	2158.8	2161.6	2146.4	2129.3
25°	2069.4	2085.6	2095.1	2079.9	2061.8
27.5°	1971.4	1996.2	2024.7	2013.3	1993.3
30°	1862.1	1898.2	1945.8	1936.3	1922.0
32.5°	1758.4	1794.6	1860.2	1856.4	1848.8
35°	1664.3	1687.1	1764.1	1773.6	1767.0
37.5°	1574.9	1595.8	1668.1	1689.9	1684.2
40°	1480.7	1503.5	1560.6	1599.6	1601.5
42.5°	1387.5	1409.4	1456.0	1512.1	1512.1
45°	1288.6	1310.5	1353.3	1415.1	1422.7
47.5°	1191.6	1214.4	1256.3	1318.1	1330.5
50°	1096.5	1117.4	1159.3	1219.2	1238.2
52.5°	997.6	1020.4	1061.3	1116.5	1144.1
55°	902.5	917.7	962.4	1015.7	1045.2
57.5°	803.6	817.9	868.3	913.9	944.4
60°	708.5	726.6	765.6	812.2	847.4
62.5°	617.2	636.2	669.5	710.4	750.3
65°	528.8	543.0	575.4	616.3	651.4
67.5°	443.2	455.5	487.9	516.4	553.5
70°	356.6	372.8	396.6	424.2	447.9
72.5°	287.2	293.9	313.8	333.8	358.5
75°	212.1	223.5	239.7	251.1	265.3
77.5°	152.2	158.8	168.3	177.8	191.2
80°	101.8	104.6	113.2	115.1	125.5
82.5°	61.8	63.7	65.6	66.6	70.4
85°	33.3	33.3	33.3	31.4	31.4
87.5°	19.0	19.0	16.2	13.3	9.5
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)