

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: P557978

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-82-94-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: P557978
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-30-UNV-82-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

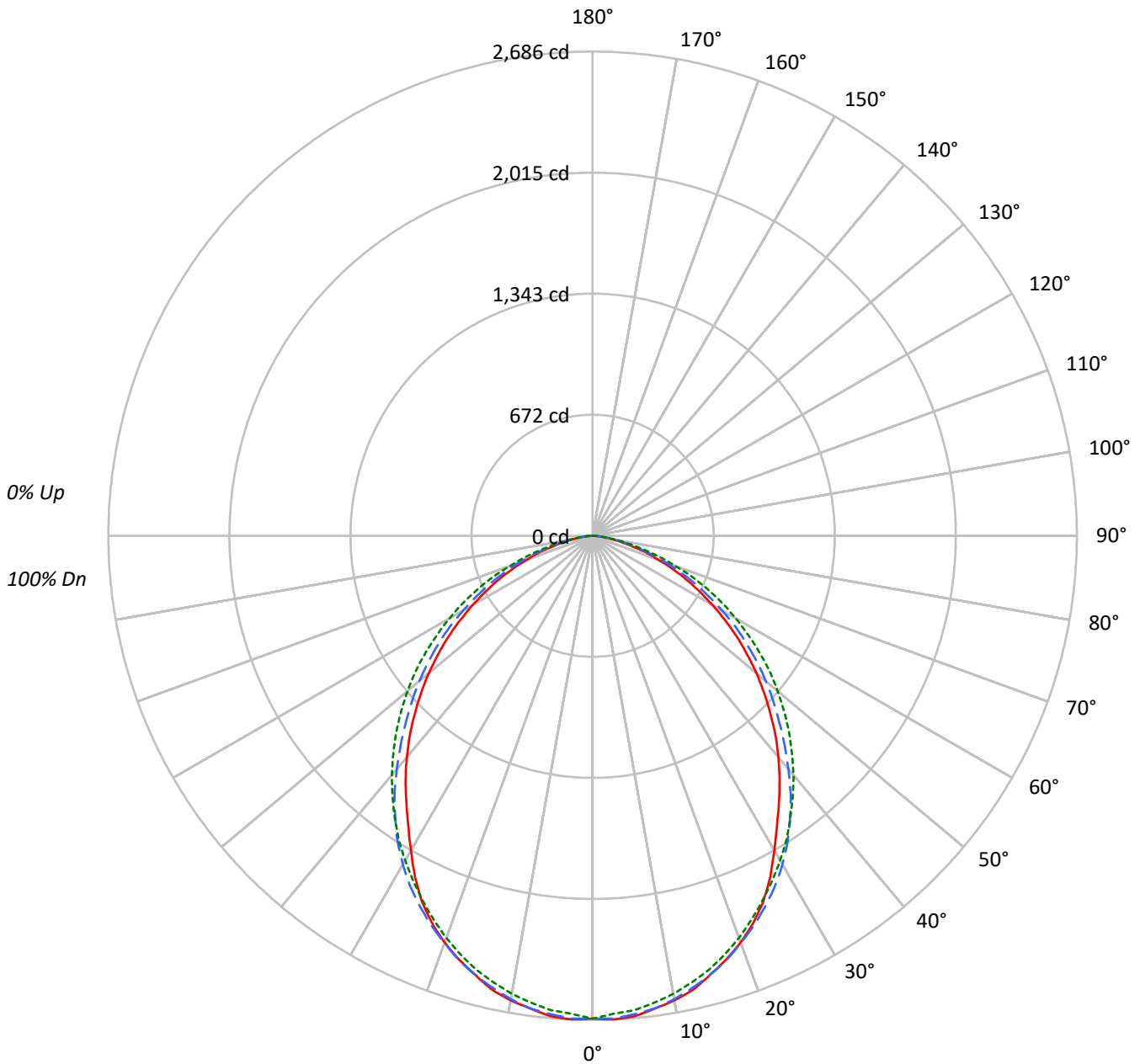
Lumens per Lamp: N/A
Luminaire Lumens: 6194.0 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P557978

CATALOG NUMBER: FUSL-12-4-LD4-3LO-30-UNV-82-94-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P557978

CATALOG NUMBER: FUSL-12-4-LD4-3LO-30-UNV-82-94-EDD-90

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°	7208	7208	7208
5°	7228	7197	7136
10°	7151	7131	7050
15°	7024	7024	6944
20°	6875	6884	6796
25°	6649	6731	6625
30°	6261	6542	6463
35°	5916	6271	6281
40°	5629	5932	6088
45°	5307	5573	5859
50°	4968	5252	5609
55°	4582	4886	5306
60°	4126	4458	4935
65°	3643	3964	4488
70°	3036	3376	3814
75°	2386	2696	2985
80°	1706	1898	2104
85°	1112	1112	1050



TEST NUMBER: P557978

CATALOG NUMBER: FUSL-12-4-LD4-3LO-30-UNV-82-94-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.2	4.1
10°-20°	708.5	11.4
20°-30°	1035.4	16.7
30°-40°	1175.3	19.0
40°-50°	1134.6	18.3
50°-60°	935.9	15.1
60°-70°	623.3	10.1
70°-80°	278.9	4.5
80°-90°	49.9	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°	1996.2	32.2
0°-40°	3171.4	51.2
0°-60°	5242.0	84.6
0°-90°	6194.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6194.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2679	2679	2679	2679	2679	
5°	2676	2675	2664	2650	2642	253
15°	2521	2528	2521	2510	2492	711
25°	2239	2257	2267	2251	2231	1025
35°	1801	1826	1909	1919	1912	1128
45°	1394	1418	1464	1531	1540	1076
55°	977	993	1041	1099	1131	872
65°	572	588	623	667	705	567
75°	230	242	259	272	287	251
85°	36	36	36	34	34	49
90°	0	0	0	0	0	



TEST NUMBER: P557978

CATALOG NUMBER: FUSL-12-4-LD4-3LO-30-UNV-82-94-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2678.7	2678.7	2678.7	2678.7	2678.7
2.5°	2685.9	2687.0	2680.8	2664.3	2654.0
5°	2675.7	2674.6	2664.3	2649.9	2641.7
7.5°	2645.8	2647.9	2644.8	2624.2	2612.9
10°	2617.0	2618.0	2609.8	2593.3	2580.0
12.5°	2580.0	2578.9	2567.6	2559.4	2537.8
15°	2521.3	2527.5	2521.3	2510.0	2492.5
17.5°	2464.7	2464.7	2468.8	2449.3	2435.9
20°	2400.9	2404.0	2404.0	2388.5	2373.1
22.5°	2326.8	2336.1	2339.1	2322.7	2304.2
25°	2239.3	2256.8	2267.1	2250.6	2231.1
27.5°	2133.3	2160.1	2191.0	2178.6	2157.0
30°	2015.0	2054.1	2105.5	2095.2	2079.8
32.5°	1902.8	1941.9	2012.9	2008.8	2000.6
35°	1800.9	1825.6	1909.0	1919.3	1912.1
37.5°	1704.2	1726.8	1805.0	1828.7	1822.5
40°	1602.3	1627.0	1688.8	1730.9	1733.0
42.5°	1501.5	1525.1	1575.6	1636.3	1636.3
45°	1394.4	1418.1	1464.4	1531.3	1539.5
47.5°	1289.5	1314.2	1359.4	1426.3	1439.7
50°	1186.6	1209.2	1254.5	1319.3	1339.9
52.5°	1079.5	1104.2	1148.5	1208.2	1238.0
55°	976.6	993.1	1041.4	1099.1	1131.0
57.5°	869.6	885.0	939.6	989.0	1021.9
60°	766.7	786.2	828.4	878.9	916.9
62.5°	667.9	688.5	724.5	768.7	812.0
65°	572.2	587.6	622.6	666.9	704.9
67.5°	479.6	492.9	527.9	558.8	598.9
70°	385.9	403.4	429.1	459.0	484.7
72.5°	310.8	318.0	339.6	361.2	388.0
75°	229.5	241.8	259.3	271.7	287.1
77.5°	164.7	171.9	182.2	192.4	206.8
80°	110.1	113.2	122.5	124.5	135.8
82.5°	66.9	68.9	71.0	72.0	76.2
85°	36.0	36.0	36.0	34.0	34.0
87.5°	20.6	20.6	17.5	14.4	10.3
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)