

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: P557066

Luminaire Tested: **FUSL-12-4-LD4-2HI-40-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: P557066
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-LD4-2HI-40-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 4000K CCT LEADS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

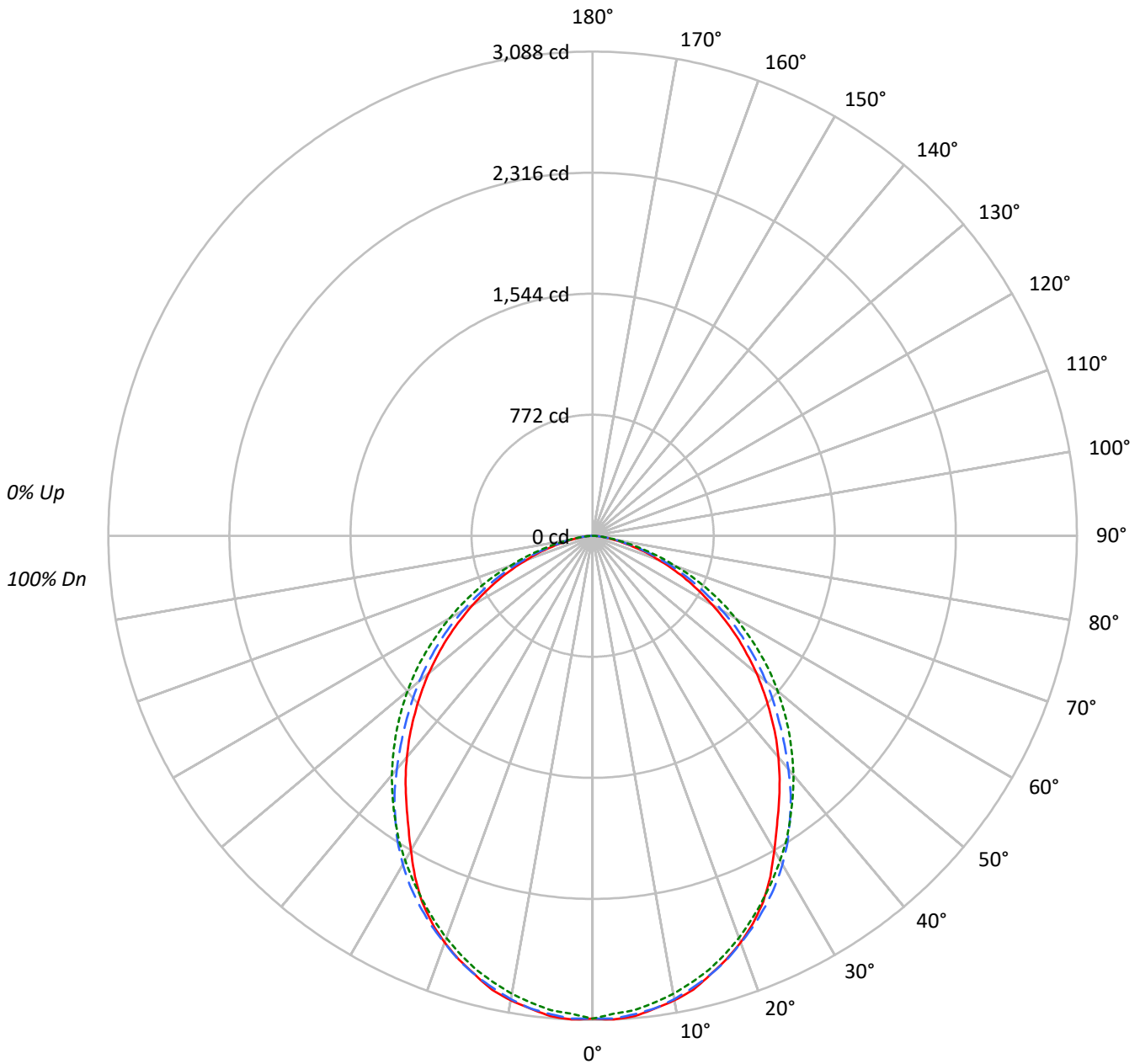
Lumens per Lamp: N/A
Luminaire Lumens: 7121.0 lumens
Efficiency: N/A
Efficacy: 82.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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: P557066

CATALOG NUMBER: FUSL-12-4-LD4-2HI-40-UNV-81-94-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P557066

CATALOG NUMBER: FUSL-12-4-LD4-2HI-40-UNV-81-94-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°	8287	8287	8287
5°	8309	8274	8204
10°	8221	8199	8105
15°	8075	8075	7983
20°	7904	7915	7813
25°	7644	7739	7616
30°	7198	7522	7430
35°	6802	7210	7221
40°	6471	6820	6999
45°	6101	6407	6736
50°	5711	6038	6449
55°	5268	5617	6100
60°	4744	5126	5674
65°	4188	4558	5160
70°	3491	3882	4384
75°	2743	3099	3432
80°	1962	2182	2421
85°	1278	1278	1204



TEST NUMBER: P557066

CATALOG NUMBER: FUSL-12-4-LD4-2HI-40-UNV-81-94-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.0	4.1
10°-20°	814.6	11.4
20°-30°	1190.4	16.7
30°-40°	1351.2	19.0
40°-50°	1304.4	18.3
50°-60°	1076.0	15.1
60°-70°	716.5	10.1
70°-80°	320.6	4.5
80°-90°	57.4	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°	2294.9	32.2
0°-40°	3646.1	51.2
0°-60°	6026.5	84.6
0°-90°	7121.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7121.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3080	3080	3080	3080	3080	
5°	3076	3075	3063	3046	3037	291
15°	2899	2906	2899	2886	2866	817
25°	2574	2595	2606	2588	2565	1179
35°	2070	2099	2195	2206	2198	1297
45°	1603	1630	1684	1760	1770	1237
55°	1123	1142	1197	1264	1300	1002
65°	658	676	716	767	810	652
75°	264	278	298	312	330	288
85°	41	41	41	39	39	56
90°	0	0	0	0	0	



TEST NUMBER: P557066

CATALOG NUMBER: FUSL-12-4-LD4-2HI-40-UNV-81-94-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3079.6	3079.6	3079.6	3079.6	3079.6
2.5°	3087.9	3089.1	3082.0	3063.1	3051.3
5°	3076.1	3074.9	3063.1	3046.5	3037.1
7.5°	3041.8	3044.2	3040.6	3016.9	3003.9
10°	3008.7	3009.8	3000.4	2981.5	2966.1
12.5°	2966.1	2964.9	2951.9	2942.4	2917.6
15°	2898.6	2905.7	2898.6	2885.6	2865.5
17.5°	2833.6	2833.6	2838.3	2815.8	2800.4
20°	2760.2	2763.8	2763.8	2746.0	2728.3
22.5°	2675.0	2685.7	2689.2	2670.3	2649.0
25°	2574.5	2594.6	2606.4	2587.5	2565.0
27.5°	2452.6	2483.4	2518.9	2504.7	2479.8
30°	2316.5	2361.5	2420.7	2408.8	2391.1
32.5°	2187.6	2232.5	2314.2	2309.4	2300.0
35°	2070.5	2098.8	2194.7	2206.5	2198.2
37.5°	1959.2	1985.3	2075.2	2102.4	2095.3
40°	1842.1	1870.5	1941.5	1990.0	1992.4
42.5°	1726.2	1753.4	1811.3	1881.2	1881.2
45°	1603.1	1630.3	1683.6	1760.5	1769.9
47.5°	1482.4	1510.8	1562.9	1639.8	1655.2
50°	1364.1	1390.2	1442.2	1516.8	1540.4
52.5°	1241.1	1269.5	1320.4	1389.0	1423.3
55°	1122.8	1141.7	1197.3	1263.6	1300.2
57.5°	999.7	1017.5	1080.2	1137.0	1174.8
60°	881.4	903.9	952.4	1010.4	1054.2
62.5°	767.8	791.5	832.9	883.8	933.5
65°	657.8	675.6	715.8	766.7	810.4
67.5°	551.3	566.7	606.9	642.4	688.6
70°	443.7	463.8	493.4	527.7	557.2
72.5°	357.3	365.6	390.4	415.3	446.0
75°	263.8	278.0	298.1	312.3	330.1
77.5°	189.3	197.6	209.4	221.2	237.8
80°	126.6	130.1	140.8	143.2	156.2
82.5°	76.9	79.3	81.6	82.8	87.6
85°	41.4	41.4	41.4	39.0	39.0
87.5°	23.7	23.7	20.1	16.6	11.8
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)