

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: P557031

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-93-87-EDD**

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: P557031
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-35-UNV-93-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

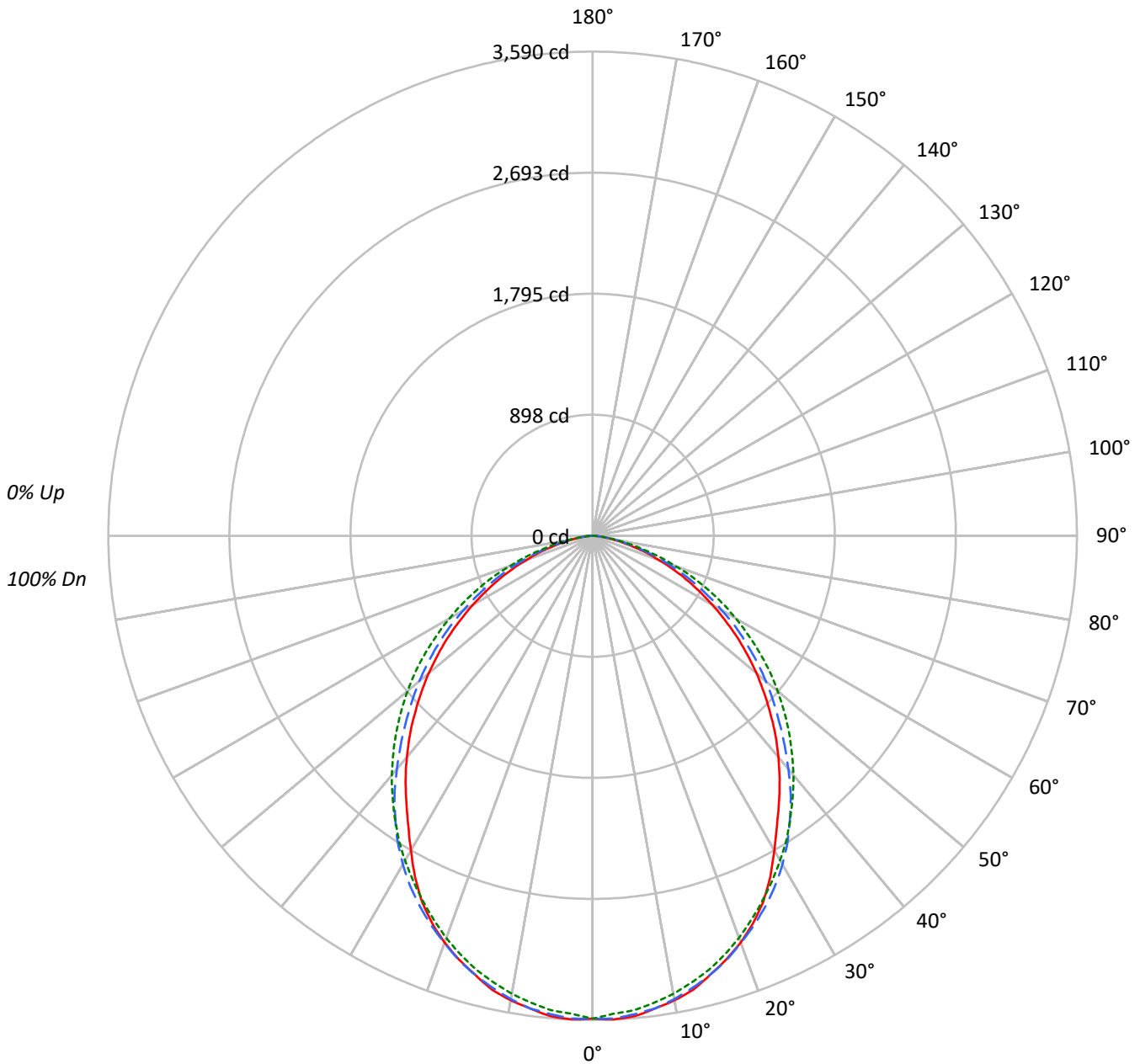
Lumens per Lamp: N/A
Luminaire Lumens: 8279.0 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P557031

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-93-87-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557031

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-93-87-EDD

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°	9635	9635	9635
5°	9661	9620	9538
10°	9558	9532	9423
15°	9389	9389	9281
20°	9190	9202	9083
25°	8887	8997	8854
30°	8369	8745	8638
35°	7908	8382	8396
40°	7523	7929	8137
45°	7093	7449	7831
50°	6640	7019	7497
55°	6124	6531	7092
60°	5515	5959	6596
65°	4870	5299	5999
70°	4058	4513	5098
75°	3189	3604	3990
80°	2281	2537	2814
85°	1485	1485	1402



TEST NUMBER: P557031

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-93-87-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	337.1	4.1
10°-20°	947.0	11.4
20°-30°	1383.9	16.7
30°-40°	1570.9	19.0
40°-50°	1516.5	18.3
50°-60°	1251.0	15.1
60°-70°	833.1	10.1
70°-80°	372.8	4.5
80°-90°	66.7	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°	2668.1	32.2
0°-40°	4239.0	51.2
0°-60°	7006.5	84.6
0°-90°	8279.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8279.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3580	3580	3580	3580	3580	
5°	3576	3575	3561	3542	3531	338
15°	3370	3378	3370	3355	3332	950
25°	2993	3016	3030	3008	2982	1371
35°	2407	2440	2552	2565	2556	1508
45°	1864	1896	1957	2047	2058	1438
55°	1305	1327	1392	1469	1512	1165
65°	765	785	832	891	942	758
75°	307	323	347	363	384	335
85°	48	48	48	45	45	65
90°	0	0	0	0	0	



TEST NUMBER: P557031

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-93-87-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3580.5	3580.5	3580.5	3580.5	3580.5
2.5°	3590.1	3591.5	3583.2	3561.2	3547.4
5°	3576.3	3575.0	3561.2	3541.9	3530.9
7.5°	3536.4	3539.2	3535.1	3507.6	3492.4
10°	3497.9	3499.3	3488.3	3466.3	3448.4
12.5°	3448.4	3447.0	3431.9	3420.9	3392.0
15°	3370.0	3378.3	3370.0	3354.9	3331.5
17.5°	3294.3	3294.3	3299.8	3273.7	3255.8
20°	3209.1	3213.2	3213.2	3192.6	3171.9
22.5°	3110.0	3122.4	3126.5	3104.5	3079.8
25°	2993.1	3016.5	3030.2	3008.2	2982.1
27.5°	2851.4	2887.2	2928.5	2912.0	2883.1
30°	2693.2	2745.5	2814.3	2800.5	2779.9
32.5°	2543.3	2595.6	2690.5	2685.0	2674.0
35°	2407.1	2440.2	2551.6	2565.3	2555.7
37.5°	2277.8	2308.1	2412.6	2444.3	2436.0
40°	2141.7	2174.7	2257.2	2313.6	2316.4
42.5°	2006.9	2038.5	2105.9	2187.1	2187.1
45°	1863.8	1895.5	1957.4	2046.8	2057.8
47.5°	1723.5	1756.5	1817.0	1906.5	1924.3
50°	1586.0	1616.2	1676.7	1763.4	1790.9
52.5°	1442.9	1475.9	1535.1	1614.8	1654.7
55°	1305.4	1327.4	1392.0	1469.0	1511.7
57.5°	1162.3	1182.9	1255.8	1321.9	1365.9
60°	1024.8	1050.9	1107.3	1174.7	1225.6
62.5°	892.7	920.2	968.4	1027.5	1085.3
65°	764.8	785.4	832.2	891.3	942.2
67.5°	641.0	658.9	705.6	746.9	800.5
70°	515.8	539.2	573.6	613.5	647.9
72.5°	415.4	425.0	453.9	482.8	518.6
75°	306.7	323.2	346.6	363.1	383.8
77.5°	220.1	229.7	243.5	257.2	276.5
80°	147.2	151.3	163.7	166.4	181.6
82.5°	89.4	92.2	94.9	96.3	101.8
85°	48.1	48.1	48.1	45.4	45.4
87.5°	27.5	27.5	23.4	19.3	13.8
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)