

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: P558043

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-82-94-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: P558043
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-82-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

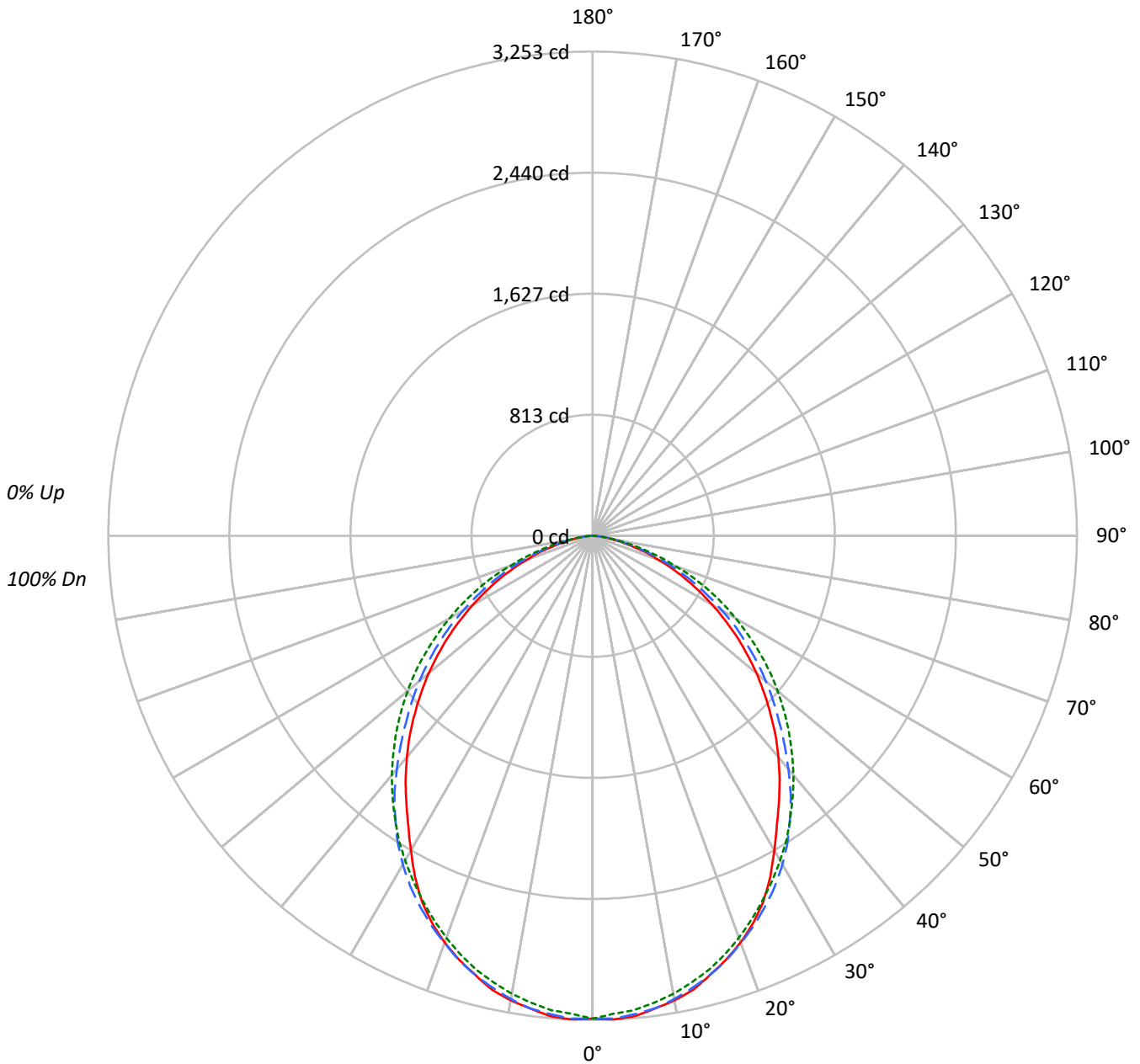
Lumens per Lamp: N/A
Luminaire Lumens: 7501.0 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P558043

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-82-94-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P558043

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-82-94-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°	8730	8730	8730
5°	8753	8716	8642
10°	8660	8636	8537
15°	8506	8506	8409
20°	8326	8337	8230
25°	8052	8152	8022
30°	7582	7923	7826
35°	7164	7594	7607
40°	6816	7184	7372
45°	6427	6749	7095
50°	6015	6360	6793
55°	5549	5917	6426
60°	4997	5399	5976
65°	4412	4801	5436
70°	3677	4089	4618
75°	2889	3266	3615
80°	2066	2298	2549
85°	1346	1346	1269



TEST NUMBER: P558043

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-82-94-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.4	4.1
10°-20°	858.0	11.4
20°-30°	1253.9	16.7
30°-40°	1423.3	19.0
40°-50°	1374.0	18.3
50°-60°	1133.4	15.1
60°-70°	754.8	10.1
70°-80°	337.7	4.5
80°-90°	60.4	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°	2417.4	32.2
0°-40°	3840.7	51.2
0°-60°	6348.0	84.6
0°-90°	7501.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7501.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3244	3244	3244	3244	3244	
5°	3240	3239	3226	3209	3199	307
15°	3053	3061	3053	3040	3018	861
25°	2712	2733	2746	2726	2702	1242
35°	2181	2211	2312	2324	2316	1366
45°	1689	1717	1773	1854	1864	1303
55°	1183	1203	1261	1331	1370	1056
65°	693	712	754	808	854	687
75°	278	293	314	329	348	304
85°	44	44	44	41	41	59
90°	0	0	0	0	0	



TEST NUMBER: P558043

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-82-94-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3244.0	3244.0	3244.0	3244.0	3244.0
2.5°	3252.7	3254.0	3246.5	3226.5	3214.1
5°	3240.3	3239.0	3226.5	3209.1	3199.1
7.5°	3204.1	3206.6	3202.9	3177.9	3164.2
10°	3169.2	3170.5	3160.5	3140.6	3124.3
12.5°	3124.3	3123.1	3109.4	3099.4	3073.3
15°	3053.3	3060.8	3053.3	3039.6	3018.4
17.5°	2984.8	2984.8	2989.8	2966.1	2949.9
20°	2907.5	2911.2	2911.2	2892.5	2873.9
22.5°	2817.8	2829.0	2832.7	2812.8	2790.4
25°	2711.8	2733.0	2745.5	2725.5	2701.9
27.5°	2583.5	2615.9	2653.3	2638.3	2612.1
30°	2440.2	2487.5	2549.8	2537.4	2518.7
32.5°	2304.3	2351.7	2437.7	2432.7	2422.7
35°	2180.9	2210.8	2311.8	2324.3	2315.5
37.5°	2063.8	2091.2	2185.9	2214.6	2207.1
40°	1940.4	1970.3	2045.1	2096.2	2098.7
42.5°	1818.3	1846.9	1908.0	1981.5	1981.5
45°	1688.7	1717.3	1773.4	1854.4	1864.4
47.5°	1561.6	1591.5	1646.3	1727.3	1743.5
50°	1436.9	1464.3	1519.2	1597.7	1622.6
52.5°	1307.3	1337.2	1390.8	1463.1	1499.2
55°	1182.7	1202.6	1261.2	1331.0	1369.6
57.5°	1053.1	1071.8	1137.8	1197.6	1237.5
60°	928.5	952.1	1003.2	1064.3	1110.4
62.5°	808.8	833.7	877.4	930.9	983.3
65°	692.9	711.6	754.0	807.6	853.7
67.5°	580.8	597.0	639.3	676.7	725.3
70°	467.3	488.5	519.7	555.8	587.0
72.5°	376.4	385.1	411.3	437.4	469.8
75°	277.9	292.9	314.1	329.0	347.7
77.5°	199.4	208.1	220.6	233.0	250.5
80°	133.3	137.1	148.3	150.8	164.5
82.5°	81.0	83.5	86.0	87.2	92.2
85°	43.6	43.6	43.6	41.1	41.1
87.5°	24.9	24.9	21.2	17.4	12.5
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)