

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: P558201

Luminaire Tested: **FUSL-12-4-LD4-3STD-30-UNV-80-88-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: P558201
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-LD4-3STD-30-UNV-80-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

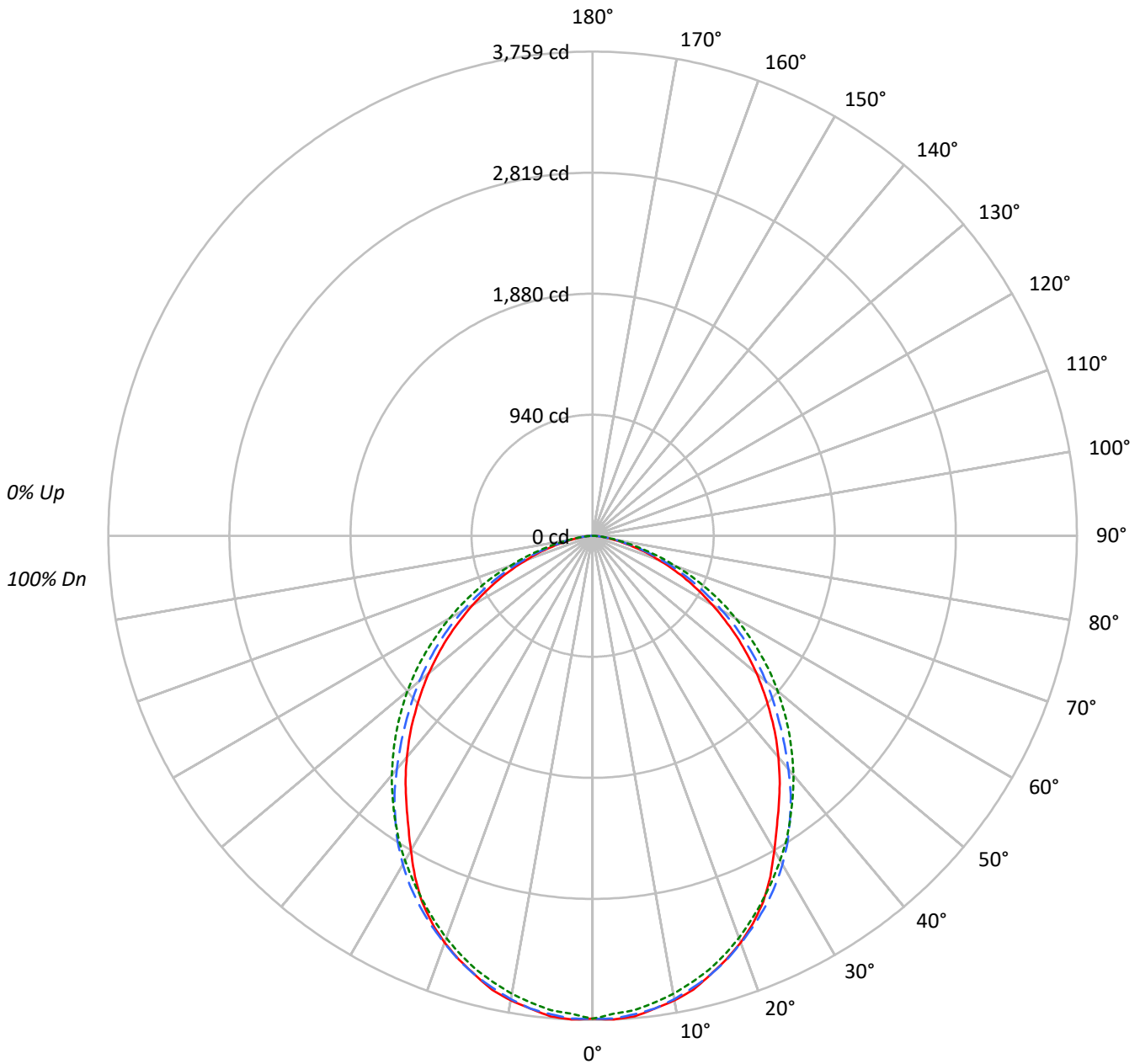
Lumens per Lamp: N/A
Luminaire Lumens: 8669.0 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
Input Voltage (V): NR
Input Current (Ain): 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: P558201

CATALOG NUMBER: FUSL-12-4-LD4-3STD-30-UNV-80-88-EDD

Luminous Intensity Polar Plot





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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°	10089	10089	10089
5°	10116	10073	9987
10°	10008	9981	9866
15°	9831	9831	9718
20°	9623	9635	9511
25°	9306	9421	9272
30°	8763	9157	9045
35°	8280	8777	8791
40°	7878	8303	8520
45°	7427	7800	8200
50°	6952	7350	7851
55°	6413	6838	7426
60°	5775	6240	6907
65°	5099	5549	6282
70°	4249	4725	5338
75°	3340	3774	4178
80°	2388	2656	2946
85°	1556	1556	1467



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.0	4.1
10°-20°	991.6	11.4
20°-30°	1449.1	16.7
30°-40°	1644.9	19.0
40°-50°	1587.9	18.3
50°-60°	1309.9	15.1
60°-70°	872.3	10.1
70°-80°	390.3	4.5
80°-90°	69.8	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°	2793.8	32.2
0°-40°	4438.7	51.2
0°-60°	7336.5	84.6
0°-90°	8669.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8669.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3749	3749	3749	3749	3749	
5°	3745	3743	3729	3709	3697	354
15°	3529	3537	3529	3513	3488	995
25°	3134	3159	3173	3150	3123	1435
35°	2520	2555	2672	2686	2676	1579
45°	1952	1985	2050	2143	2155	1506
55°	1367	1390	1458	1538	1583	1220
65°	801	822	871	933	987	794
75°	321	338	363	380	402	351
85°	50	50	50	48	48	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3749.1	3749.1	3749.1	3749.1	3749.1
2.5°	3759.2	3760.6	3752.0	3729.0	3714.6
5°	3744.8	3743.4	3729.0	3708.8	3697.3
7.5°	3703.0	3705.9	3701.6	3672.8	3656.9
10°	3662.7	3664.1	3652.6	3629.6	3610.8
12.5°	3610.8	3609.4	3593.6	3582.0	3551.8
15°	3528.8	3537.4	3528.8	3512.9	3488.4
17.5°	3449.5	3449.5	3455.3	3427.9	3409.2
20°	3360.2	3364.6	3364.6	3343.0	3321.3
22.5°	3256.5	3269.5	3273.8	3250.8	3224.8
25°	3134.1	3158.6	3173.0	3150.0	3122.6
27.5°	2985.8	3023.2	3066.4	3049.1	3018.9
30°	2820.1	2874.9	2946.9	2932.5	2910.9
32.5°	2663.1	2717.9	2817.2	2811.5	2800.0
35°	2520.5	2555.1	2671.8	2686.2	2676.1
37.5°	2385.1	2416.8	2526.3	2559.4	2550.8
40°	2242.6	2277.1	2363.5	2422.6	2425.5
42.5°	2101.4	2134.5	2205.1	2290.1	2290.1
45°	1951.6	1984.7	2049.6	2143.2	2154.7
47.5°	1804.7	1839.3	1902.6	1996.3	2015.0
50°	1660.7	1692.4	1755.7	1846.5	1875.3
52.5°	1510.9	1545.4	1607.4	1690.9	1732.7
55°	1366.9	1389.9	1457.6	1538.2	1582.9
57.5°	1217.1	1238.7	1315.0	1384.1	1430.2
60°	1073.0	1100.4	1159.4	1230.0	1283.3
62.5°	934.8	963.6	1014.0	1075.9	1136.4
65°	800.8	822.4	871.4	933.3	986.6
67.5°	671.2	689.9	738.9	782.1	838.3
70°	540.1	564.6	600.6	642.4	678.4
72.5°	435.0	445.1	475.3	505.5	543.0
75°	321.2	338.5	363.0	380.2	401.8
77.5°	230.4	240.5	254.9	269.3	289.5
80°	154.1	158.4	171.4	174.3	190.1
82.5°	93.6	96.5	99.4	100.8	106.6
85°	50.4	50.4	50.4	47.5	47.5
87.5°	28.8	28.8	24.5	20.2	14.4
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)