

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: P556464

Luminaire Tested: **FUSL-12-4-LD4-1LO-35-UNV-80-84-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: P556464
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-LD4-1LO-35-UNV-80-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

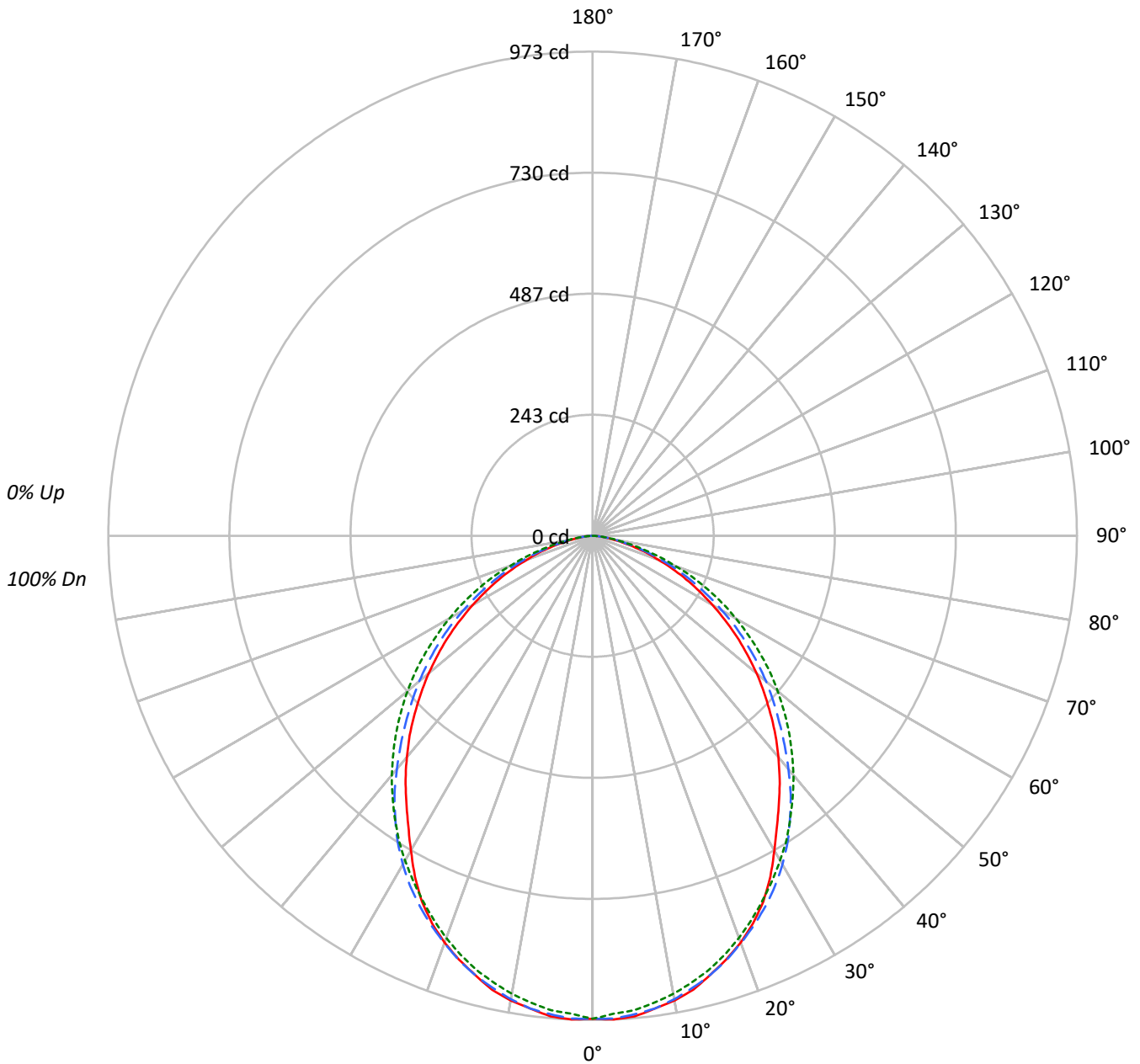
Lumens per Lamp: N/A
Luminaire Lumens: 2244.0 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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

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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°	2612	2612	2612
5°	2619	2608	2585
10°	2591	2584	2554
15°	2545	2545	2516
20°	2491	2494	2462
25°	2409	2439	2400
30°	2268	2370	2341
35°	2143	2272	2276
40°	2039	2149	2205
45°	1923	2019	2123
50°	1800	1903	2032
55°	1660	1770	1922
60°	1495	1615	1788
65°	1320	1436	1626
70°	1100	1223	1382
75°	864	977	1081
80°	618	688	762
85°	401	401	380



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	4.1
10°-20°	256.7	11.4
20°-30°	375.1	16.7
30°-40°	425.8	19.0
40°-50°	411.0	18.3
50°-60°	339.1	15.1
60°-70°	225.8	10.1
70°-80°	101.0	4.5
80°-90°	18.1	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°	723.2	32.2
0°-40°	1149.0	51.2
0°-60°	1899.1	84.6
0°-90°	2244.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2244.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	969	969	965	960	957	92
15°	913	916	913	909	903	257
25°	811	818	821	815	808	372
35°	652	661	692	695	693	409
45°	505	514	530	555	558	390
55°	354	360	377	398	410	316
65°	207	213	226	242	255	206
75°	83	88	94	98	104	91
85°	13	13	13	12	12	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	970.5	970.5	970.5	970.5	970.5
2.5°	973.1	973.5	971.2	965.3	961.5
5°	969.4	969.0	965.3	960.0	957.1
7.5°	958.5	959.3	958.2	950.7	946.6
10°	948.1	948.5	945.5	939.5	934.7
12.5°	934.7	934.3	930.2	927.2	919.4
15°	913.4	915.7	913.4	909.3	903.0
17.5°	892.9	892.9	894.4	887.3	882.5
20°	869.8	870.9	870.9	865.3	859.7
22.5°	843.0	846.3	847.4	841.5	834.8
25°	811.3	817.6	821.3	815.4	808.3
27.5°	772.9	782.6	793.8	789.3	781.4
30°	730.0	744.2	762.8	759.1	753.5
32.5°	689.4	703.5	729.3	727.8	724.8
35°	652.4	661.4	691.6	695.3	692.7
37.5°	617.4	625.6	653.9	662.5	660.3
40°	580.5	589.4	611.8	627.1	627.8
42.5°	544.0	552.5	570.8	592.8	592.8
45°	505.2	513.8	530.5	554.8	557.8
47.5°	467.2	476.1	492.5	516.7	521.6
50°	429.9	438.1	454.5	478.0	485.4
52.5°	391.1	400.0	416.1	437.7	448.5
55°	353.8	359.8	377.3	398.2	409.7
57.5°	315.0	320.6	340.4	358.3	370.2
60°	277.8	284.8	300.1	318.4	332.2
62.5°	242.0	249.4	262.5	278.5	294.2
65°	207.3	212.9	225.6	241.6	255.4
67.5°	173.7	178.6	191.3	202.4	217.0
70°	139.8	146.1	155.5	166.3	175.6
72.5°	112.6	115.2	123.0	130.9	140.6
75°	83.1	87.6	94.0	98.4	104.0
77.5°	59.7	62.3	66.0	69.7	74.9
80°	39.9	41.0	44.4	45.1	49.2
82.5°	24.2	25.0	25.7	26.1	27.6
85°	13.0	13.0	13.0	12.3	12.3
87.5°	7.5	7.5	6.3	5.2	3.7
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)