

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: P558077

Luminaire Tested: **FUSL-12-4-LD4-3LO-40-UNV-80-96-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: P558077
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-40-UNV-80-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND
4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

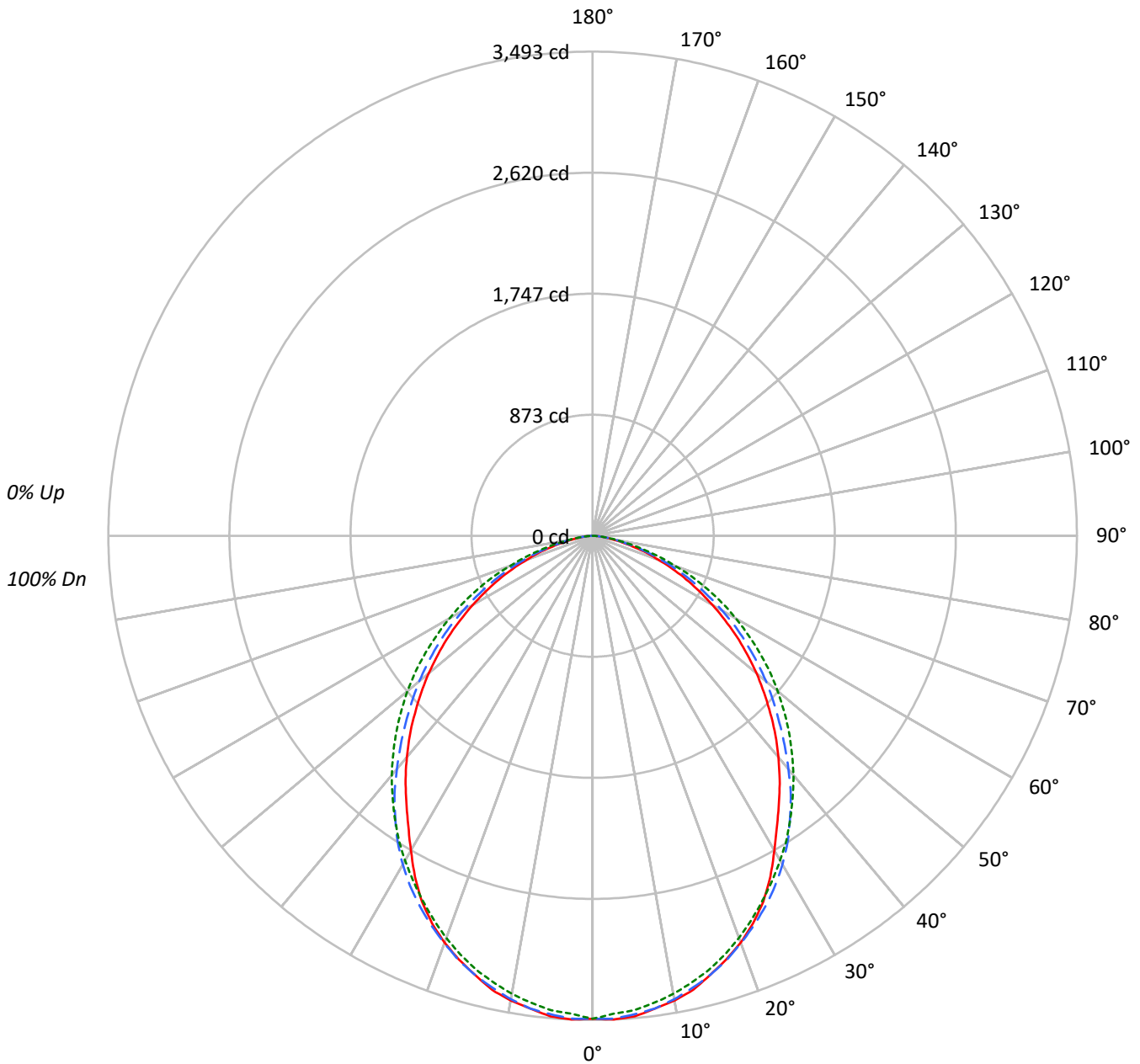
Lumens per Lamp: N/A
Luminaire Lumens: 8056.0 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	9375	9375	9375
5°	9400	9361	9281
10°	9301	9275	9169
15°	9136	9136	9031
20°	8942	8954	8839
25°	8648	8755	8616
30°	8143	8509	8405
35°	7695	8156	8170
40°	7321	7716	7918
45°	6902	7248	7620
50°	6460	6831	7296
55°	5959	6355	6901
60°	5367	5799	6419
65°	4739	5156	5838
70°	3949	4391	4960
75°	3104	3507	3882
80°	2219	2469	2738
85°	1445	1445	1365



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.0	4.1
10°-20°	921.5	11.4
20°-30°	1346.7	16.7
30°-40°	1528.6	19.0
40°-50°	1475.6	18.3
50°-60°	1217.3	15.1
60°-70°	810.6	10.1
70°-80°	362.7	4.5
80°-90°	64.9	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°	2596.2	32.2
0°-40°	4124.8	51.2
0°-60°	6817.7	84.6
0°-90°	8056.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8056.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3484	3484	3484	3484	3484	
5°	3480	3479	3465	3446	3436	329
15°	3279	3287	3279	3264	3242	924
25°	2912	2935	2949	2927	2902	1334
35°	2342	2374	2483	2496	2487	1468
45°	1814	1844	1905	1992	2002	1399
55°	1270	1292	1354	1430	1471	1134
65°	744	764	810	867	917	738
75°	298	314	337	353	373	326
85°	47	47	47	44	44	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3484.0	<i>3484.0</i>	3484.0	3484.0	3484.0
2.5°	<i>3493.4</i>	<i>3494.7</i>	<i>3486.7</i>	<i>3465.3</i>	<i>3451.9</i>
5°	3480.0	<i>3478.7</i>	3465.3	3446.5	3435.8
7.5°	3441.2	<i>3443.9</i>	3439.8	3413.1	3398.4
10°	3403.7	<i>3405.0</i>	3394.3	3372.9	3355.5
12.5°	3355.5	<i>3354.2</i>	3339.5	3328.8	3300.6
15°	3279.2	<i>3287.3</i>	3279.2	3264.5	3241.8
17.5°	3205.6	<i>3205.6</i>	3211.0	3185.5	3168.1
20°	3122.6	<i>3126.6</i>	3126.6	3106.6	3086.5
22.5°	3026.3	<i>3038.3</i>	3042.3	3020.9	2996.8
25°	2912.5	<i>2935.2</i>	2948.6	2927.2	2901.8
27.5°	2774.6	<i>2809.4</i>	2849.6	2833.5	2805.4
30°	2620.7	<i>2671.6</i>	2738.5	2725.1	2705.0
32.5°	2474.8	<i>2525.7</i>	2618.0	2612.7	2602.0
35°	2342.3	<i>2374.4</i>	2482.8	2496.2	2486.9
37.5°	2216.5	<i>2245.9</i>	2347.7	2378.4	2370.4
40°	2084.0	<i>2116.1</i>	2196.4	2251.3	2254.0
42.5°	1952.8	<i>1983.6</i>	2049.2	2128.2	2128.2
45°	1813.6	<i>1844.4</i>	1904.6	1991.6	2002.3
47.5°	1677.1	<i>1709.2</i>	1768.1	1855.1	1872.5
50°	1543.2	<i>1572.7</i>	1631.6	1715.9	1742.7
52.5°	1404.0	<i>1436.2</i>	1493.7	1571.4	1610.2
55°	1270.2	<i>1291.6</i>	1354.5	1429.5	1471.0
57.5°	1131.0	<i>1151.1</i>	1222.0	1286.3	1329.1
60°	997.2	<i>1022.6</i>	1077.5	1143.0	1192.6
62.5°	868.7	<i>895.4</i>	942.3	999.8	1056.0
65°	744.2	<i>764.3</i>	809.8	867.3	916.8
67.5°	623.7	<i>641.1</i>	686.6	726.8	779.0
70°	501.9	<i>524.7</i>	558.1	597.0	630.4
72.5°	404.2	<i>413.6</i>	441.7	469.8	504.6
75°	298.5	<i>314.5</i>	337.3	353.4	373.4
77.5°	214.2	<i>223.5</i>	236.9	250.3	269.0
80°	143.2	<i>147.2</i>	159.3	162.0	176.7
82.5°	87.0	<i>89.7</i>	92.4	93.7	99.0
85°	46.8	<i>46.8</i>	46.8	44.2	44.2
87.5°	26.8	<i>26.8</i>	22.8	18.7	13.4
90°	0.0	<i>0.0</i>	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)