

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: P557499

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-80-94-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: P557499
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-LD4-2STD-35-UNV-80-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC 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

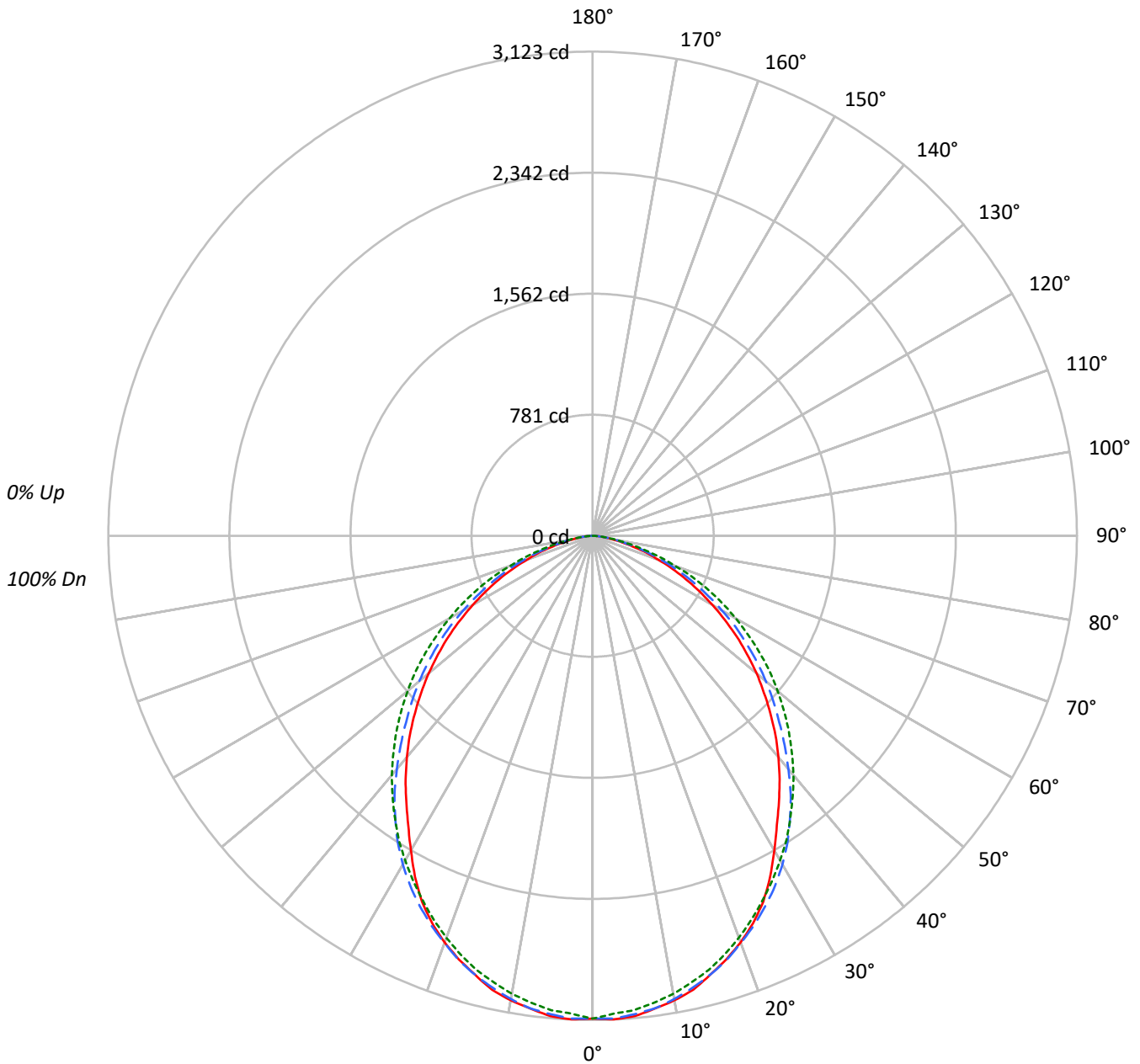
Lumens per Lamp: N/A
Luminaire Lumens: 7201.0 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	8380	8380	8380
5°	8403	8367	8296
10°	8314	8291	8196
15°	8166	8166	8073
20°	7993	8003	7901
25°	7730	7826	7701
30°	7279	7606	7513
35°	6878	7291	7302
40°	6544	6897	7077
45°	6169	6479	6811
50°	5775	6105	6521
55°	5327	5681	6169
60°	4797	5183	5737
65°	4236	4609	5218
70°	3530	3925	4434
75°	2774	3135	3471
80°	1984	2207	2447
85°	1294	1294	1220



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.2	4.1
10°-20°	823.7	11.4
20°-30°	1203.7	16.7
30°-40°	1366.4	19.0
40°-50°	1319.0	18.3
50°-60°	1088.1	15.1
60°-70°	724.6	10.1
70°-80°	324.2	4.5
80°-90°	58.0	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°	2320.7	32.2
0°-40°	3687.0	51.2
0°-60°	6094.2	84.6
0°-90°	7201.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7201.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3114	3114	3114	3114	3114	
5°	3111	3110	3098	3081	3071	294
15°	2931	2938	2931	2918	2898	826
25°	2603	2624	2636	2616	2594	1192
35°	2094	2122	2219	2231	2223	1312
45°	1621	1649	1702	1780	1790	1251
55°	1135	1154	1211	1278	1315	1013
65°	665	683	724	775	820	660
75°	267	281	302	316	334	292
85°	42	42	42	40	40	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3114.2	<i>3114.2</i>	3114.2	3114.2	3114.2
2.5°	<i>3122.6</i>	<i>3123.8</i>	<i>3116.6</i>	<i>3097.5</i>	<i>3085.5</i>
5°	3110.7	<i>3109.5</i>	3097.5	3080.7	3071.2
7.5°	3076.0	<i>3078.4</i>	3074.8	3050.8	3037.7
10°	3042.5	<i>3043.7</i>	3034.1	3014.9	2999.4
12.5°	2999.4	<i>2998.2</i>	2985.0	2975.5	2950.3
15°	2931.2	<i>2938.4</i>	2931.2	2918.0	2897.7
17.5°	2865.4	<i>2865.4</i>	2870.2	2847.4	2831.9
20°	2791.2	<i>2794.8</i>	2794.8	2776.9	2758.9
22.5°	2705.1	<i>2715.8</i>	2719.4	2700.3	2678.8
25°	2603.4	<i>2623.7</i>	2635.7	2616.5	2593.8
27.5°	2480.2	<i>2511.3</i>	2547.1	2532.8	2507.7
30°	2342.6	<i>2388.0</i>	2447.8	2435.9	2417.9
32.5°	2212.2	<i>2257.6</i>	2340.2	2335.4	2325.8
35°	2093.7	<i>2122.4</i>	2219.3	2231.3	2222.9
37.5°	1981.2	<i>2007.6</i>	2098.5	2126.0	2118.8
40°	1862.8	<i>1891.5</i>	1963.3	2012.4	2014.7
42.5°	1745.6	<i>1773.1</i>	1831.7	1902.3	1902.3
45°	1621.1	<i>1648.6</i>	1702.5	1780.3	1789.8
47.5°	1499.1	<i>1527.8</i>	1580.5	1658.2	1673.8
50°	1379.5	<i>1405.8</i>	1458.4	1533.8	1557.7
52.5°	1255.0	<i>1283.7</i>	1335.2	1404.6	1439.3
55°	1135.4	<i>1154.5</i>	1210.8	1277.8	1314.9
57.5°	1011.0	<i>1028.9</i>	1092.3	1149.7	1188.0
60°	891.3	<i>914.1</i>	963.1	1021.7	1066.0
62.5°	776.5	<i>800.4</i>	842.3	893.7	944.0
65°	665.2	<i>683.1</i>	723.8	775.3	819.5
67.5°	557.5	<i>573.1</i>	613.8	649.6	696.3
70°	448.7	<i>469.0</i>	498.9	533.6	563.5
72.5°	361.3	<i>369.7</i>	394.8	419.9	451.0
75°	266.8	<i>281.2</i>	301.5	315.9	333.8
77.5°	191.4	<i>199.8</i>	211.8	223.7	240.5
80°	128.0	<i>131.6</i>	142.4	144.8	157.9
82.5°	77.8	<i>80.2</i>	82.6	83.7	88.5
85°	41.9	<i>41.9</i>	41.9	39.5	39.5
87.5°	23.9	<i>23.9</i>	20.3	16.7	12.0
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)