

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: P557567

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-80-97-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: P557567  
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-40-UNV-80-97-EDD  
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND  
4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

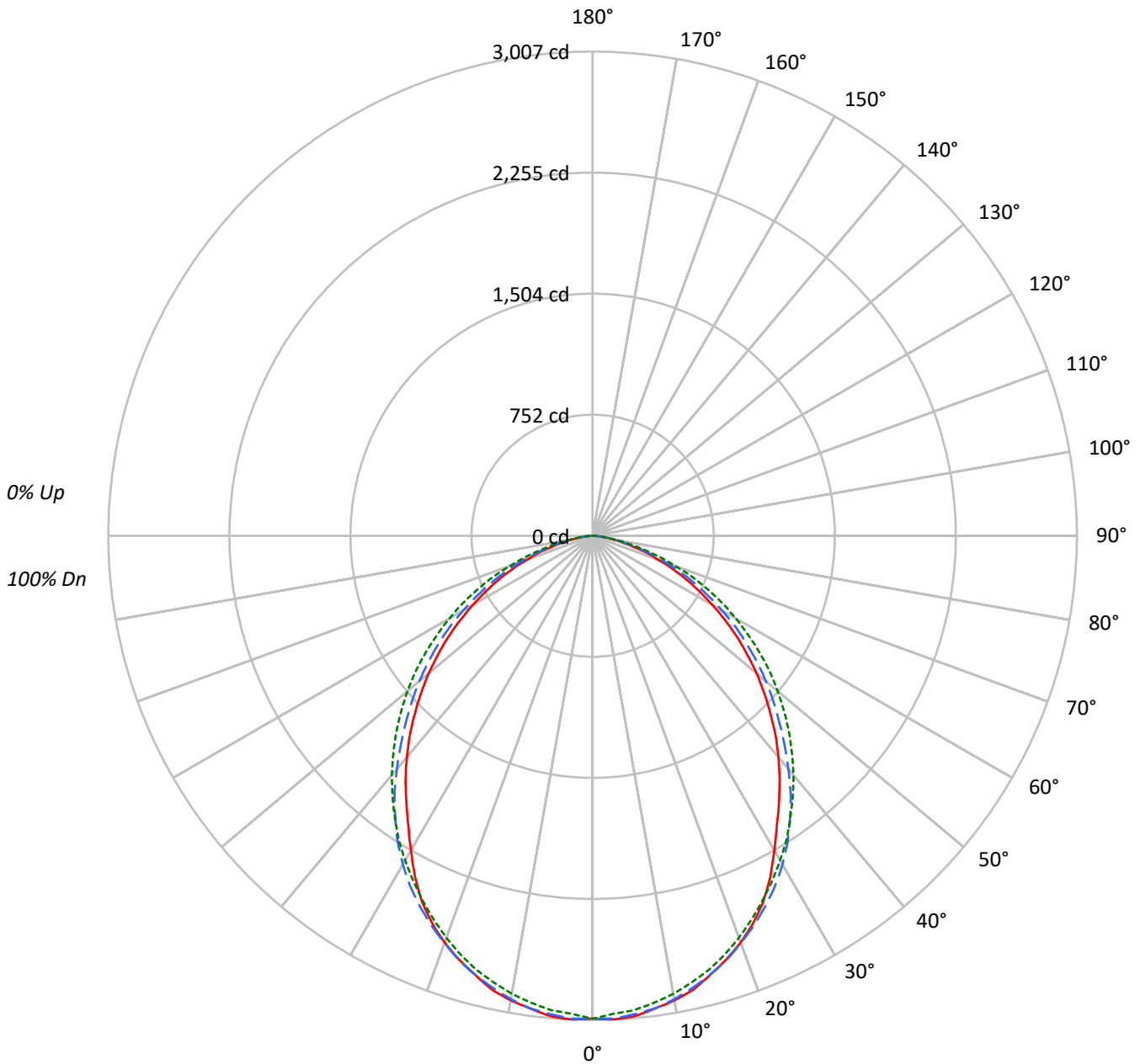
Lumens per Lamp: N/A  
Luminaire Lumens: 6934.0 lumens  
Efficiency: N/A  
Efficacy: 104.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 66.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	8070	8070	8070
5°	8091	8057	7988
10°	8005	7983	7892
15°	7863	7863	7774
20°	7697	7707	7608
25°	7443	7536	7416
30°	7009	7324	7235
35°	6623	7020	7032
40°	6301	6641	6815
45°	5941	6239	6559
50°	5561	5879	6280
55°	5129	5470	5940
60°	4619	4991	5525
65°	4078	4438	5025
70°	3399	3780	4269
75°	2671	3018	3342
80°	1911	2125	2357
85°	1244	1244	1173



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	282.3	4.1
10°-20°	793.2	11.4
20°-30°	1159.1	16.7
30°-40°	1315.7	19.0
40°-50°	1270.1	18.3
50°-60°	1047.8	15.1
60°-70°	697.7	10.1
70°-80°	312.2	4.5
80°-90°	55.8	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°	2234.6	32.2
0°-40°	3550.3	51.2
0°-60°	5868.2	84.6
0°-90°	6934.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6934.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2999	2999	2999	2999	2999	
5°	2995	2994	2983	2966	2957	284
15°	2822	2829	2822	2810	2790	796
25°	2507	2526	2538	2520	2498	1148
35°	2016	2044	2137	2149	2140	1263
45°	1561	1588	1639	1714	1724	1204
55°	1093	1112	1166	1230	1266	976
65°	640	658	697	746	789	635
75°	257	271	290	304	321	281
85°	40	40	40	38	38	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2998.8	2998.8	2998.8	2998.8	2998.8
2.5°	3006.8	3008.0	3001.1	2982.6	2971.1
5°	2995.3	2994.2	2982.6	2966.5	2957.3
7.5°	2961.9	2964.2	2960.8	2937.7	2925.0
10°	2929.7	2930.8	2921.6	2903.2	2888.2
12.5°	2888.2	2887.0	2874.4	2865.1	2840.9
15°	2822.5	2829.4	2822.5	2809.8	2790.3
17.5°	2759.2	2759.2	2763.8	2741.9	2726.9
20°	2687.7	2691.2	2691.2	2673.9	2656.6
22.5°	2604.8	2615.1	2618.6	2600.2	2579.4
25°	2506.9	2526.4	2538.0	2519.5	2497.6
27.5°	2388.2	2418.1	2452.7	2438.9	2414.7
30°	2255.7	2299.5	2357.1	2345.6	2328.3
32.5°	2130.1	2173.9	2253.4	2248.8	2239.6
35°	2016.1	2043.7	2137.0	2148.6	2140.5
37.5°	1907.8	1933.1	2020.7	2047.2	2040.3
40°	1793.7	1821.4	1890.5	1937.7	1940.0
42.5°	1680.8	1707.3	1763.8	1831.8	1831.8
45°	1561.0	1587.5	1639.4	1714.2	1723.5
47.5°	1443.5	1471.2	1521.9	1596.7	1611.7
50°	1328.3	1353.7	1404.3	1476.9	1500.0
52.5°	1208.5	1236.1	1285.7	1352.5	1385.9
55°	1093.3	1111.7	1165.9	1230.4	1266.1
57.5°	973.5	990.8	1051.8	1107.1	1144.0
60°	858.3	880.2	927.4	983.8	1026.5
62.5°	747.7	770.7	811.0	860.6	909.0
65°	640.5	657.8	697.0	746.5	789.2
67.5°	536.9	551.8	591.0	625.6	670.5
70°	432.0	451.6	480.4	513.8	542.6
72.5°	347.9	356.0	380.2	404.4	434.3
75°	256.9	270.7	290.3	304.1	321.4
77.5°	184.3	192.4	203.9	215.4	231.6
80°	123.3	126.7	137.1	139.4	152.1
82.5°	74.9	77.2	79.5	80.6	85.3
85°	40.3	40.3	40.3	38.0	38.0
87.5°	23.0	23.0	19.6	16.1	11.5
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)