

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: P555555

Luminaire Tested: **FUSL-12-2-LD4-3HI-40-UNV-93-85-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: P555555  
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-12-2-LD4-3HI-40-UNV-93-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

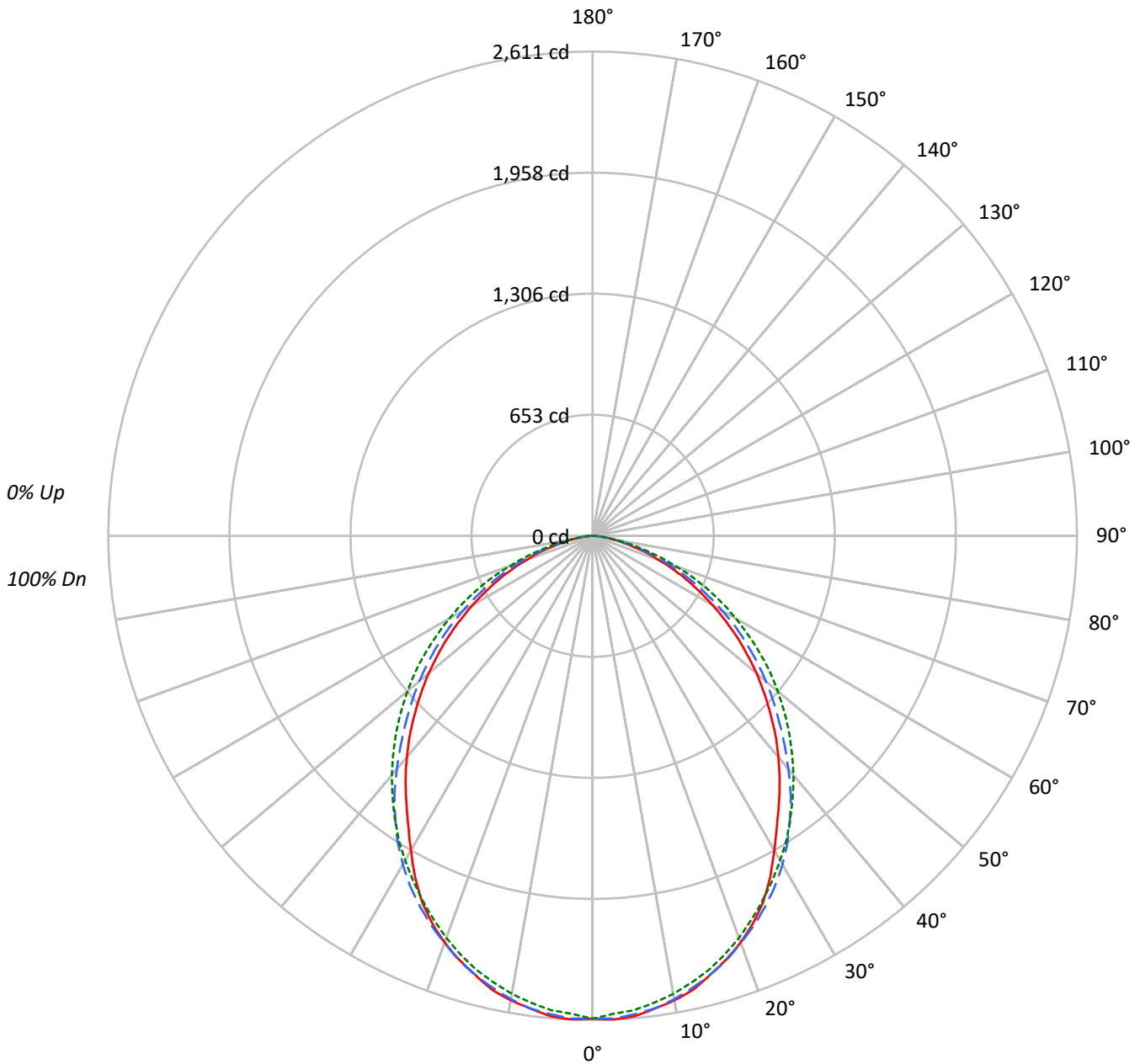
Lumens per Lamp: N/A  
Luminaire Lumens: 6021.0 lumens  
Efficiency: N/A  
Efficacy: 92.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
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°	14014	14014	14014
5°	14051	13992	13873
10°	13902	13864	13706
15°	13656	13656	13500
20°	13367	13384	13212
25°	12927	13087	12879
30°	12172	12719	12564
35°	11502	12192	12212
40°	10943	11533	11835
45°	10317	10835	11390
50°	9657	10210	10906
55°	8907	9500	10316
60°	8022	8668	9594
65°	7083	7707	8726
70°	5902	6563	7415
75°	4639	5242	5804
80°	3316	3688	4091
85°	2161	2161	2038



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	245.2	4.1
10°-20°	688.7	11.4
20°-30°	1006.5	16.7
30°-40°	1142.5	19.0
40°-50°	1102.9	18.3
50°-60°	909.8	15.1
60°-70°	605.9	10.1
70°-80°	271.1	4.5
80°-90°	48.5	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°	1940.4	32.2
0°-40°	3082.9	51.2
0°-60°	5095.5	84.6
0°-90°	6021.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6021.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2604	2604	2604	2604	2604	
5°	2601	2600	2590	2576	2568	246
15°	2451	2457	2451	2440	2423	691
25°	2177	2194	2204	2188	2169	997
35°	1751	1775	1856	1866	1859	1097
45°	1356	1378	1424	1488	1496	1046
55°	949	965	1012	1068	1099	847
65°	556	571	605	648	685	552
75°	223	235	252	264	279	244
85°	35	35	35	33	33	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2603.9	2603.9	2603.9	2603.9	2603.9
2.5°	2610.9	2611.9	2605.9	2589.9	2579.9
5°	2600.9	2599.9	2589.9	2575.9	2567.9
7.5°	2571.9	2573.9	2570.9	2550.9	2539.9
10°	2543.9	2544.9	2536.9	2520.9	2507.9
12.5°	2507.9	2506.9	2495.9	2487.9	2466.9
15°	2450.9	2456.9	2450.9	2439.9	2422.9
17.5°	2395.9	2395.9	2399.9	2380.8	2367.8
20°	2333.8	2336.8	2336.8	2321.8	2306.8
22.5°	2261.8	2270.8	2273.8	2257.8	2239.8
25°	2176.8	2193.8	2203.8	2187.8	2168.8
27.5°	2073.7	2099.7	2129.8	2117.8	2096.7
30°	1958.7	1996.7	2046.7	2036.7	2021.7
32.5°	1849.7	1887.7	1956.7	1952.7	1944.7
35°	1750.6	1774.6	1855.7	1865.7	1858.7
37.5°	1656.6	1678.6	1754.6	1777.6	1771.6
40°	1557.6	1581.6	1641.6	1682.6	1684.6
42.5°	1459.5	1482.5	1531.5	1590.6	1590.6
45°	1355.5	1378.5	1423.5	1488.5	1496.5
47.5°	1253.4	1277.5	1321.5	1386.5	1399.5
50°	1153.4	1175.4	1219.4	1282.5	1302.5
52.5°	1049.4	1073.4	1116.4	1174.4	1203.4
55°	949.3	965.3	1012.4	1068.4	1099.4
57.5°	845.3	860.3	913.3	961.3	993.4
60°	745.3	764.3	805.3	854.3	891.3
62.5°	649.2	669.2	704.3	747.3	789.3
65°	556.2	571.2	605.2	648.2	685.2
67.5°	466.2	479.2	513.2	543.2	582.2
70°	375.1	392.1	417.1	446.2	471.2
72.5°	302.1	309.1	330.1	351.1	377.1
75°	223.1	235.1	252.1	264.1	279.1
77.5°	160.1	167.1	177.1	187.1	201.1
80°	107.0	110.0	119.0	121.0	132.0
82.5°	65.0	67.0	69.0	70.0	74.0
85°	35.0	35.0	35.0	33.0	33.0
87.5°	20.0	20.0	17.0	14.0	10.0
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)