

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: P555430

Luminaire Tested: **FUSL-12-2-LD4-3HI-30-UNV-93-87-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: P555430  
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-30-UNV-93-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

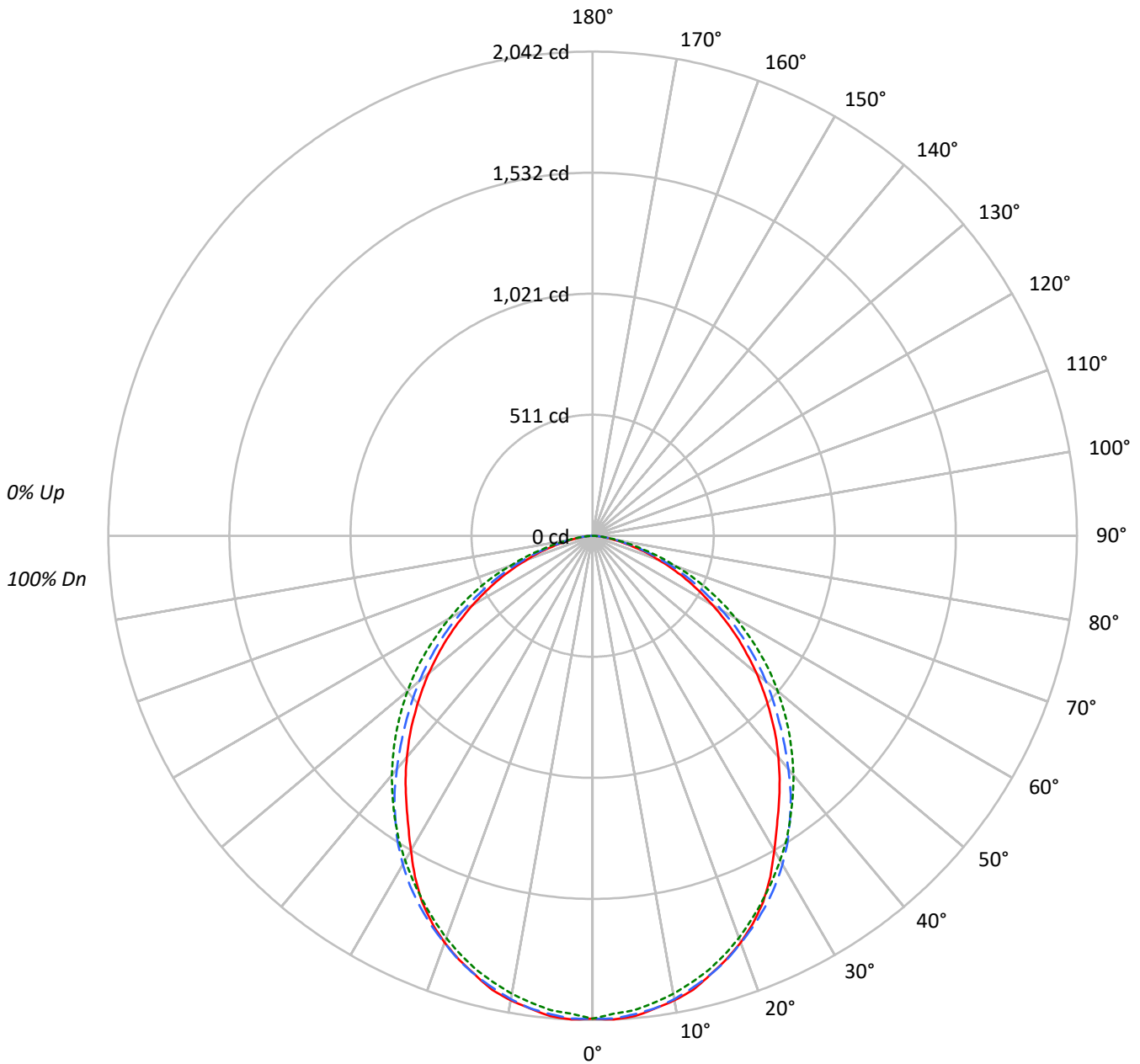
Lumens per Lamp: N/A  
Luminaire Lumens: 4709.0 lumens  
Efficiency: N/A  
Efficacy: 72.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	10960	10960	10960
5°	10990	10943	10850
10°	10873	10843	10719
15°	10680	10680	10558
20°	10454	10467	10333
25°	10109	10235	10073
30°	9520	9948	9826
35°	8996	9535	9551
40°	8559	9020	9256
45°	8069	8474	8908
50°	7553	7985	8529
55°	6967	7430	8068
60°	6274	6779	7504
65°	5540	6027	6825
70°	4617	5135	5799
75°	3629	4101	4539
80°	2594	2885	3202
85°	1692	1692	1593



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.7	4.1
10°-20°	538.7	11.4
20°-30°	787.2	16.7
30°-40°	893.5	19.0
40°-50°	862.6	18.3
50°-60°	711.5	15.1
60°-70°	473.8	10.1
70°-80°	212.1	4.5
80°-90°	37.9	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°	1517.6	32.2
0°-40°	2411.1	51.2
0°-60°	3985.2	84.6
0°-90°	4709.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4709.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2036	2036	2036	2036	2036	
5°	2034	2033	2026	2015	2008	193
15°	1917	1922	1917	1908	1895	540
25°	1702	1716	1724	1711	1696	780
35°	1369	1388	1451	1459	1454	858
45°	1060	1078	1113	1164	1170	818
55°	742	755	792	836	860	663
65°	435	447	473	507	536	431
75°	174	184	197	206	218	191
85°	27	27	27	26	26	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2036.5	2036.5	2036.5	2036.5	2036.5
2.5°	2042.0	2042.8	2038.1	2025.6	2017.7
5°	2034.2	2033.4	2025.6	2014.6	2008.4
7.5°	2011.5	2013.0	2010.7	1995.1	1986.4
10°	1989.6	1990.4	1984.1	1971.6	1961.4
12.5°	1961.4	1960.6	1952.0	1945.8	1929.3
15°	1916.8	1921.5	1916.8	1908.2	1894.9
17.5°	1873.8	1873.8	1876.9	1862.1	1851.9
20°	1825.3	1827.6	1827.6	1815.9	1804.2
22.5°	1768.9	1776.0	1778.3	1765.8	1751.7
25°	1702.4	1715.7	1723.6	1711.1	1696.2
27.5°	1621.9	1642.2	1665.7	1656.3	1639.9
30°	1531.9	1561.6	1600.7	1592.9	1581.2
32.5°	1446.6	1476.3	1530.3	1527.2	1520.9
35°	1369.2	1387.9	1451.3	1459.1	1453.7
37.5°	1295.6	1312.8	1372.3	1390.3	1385.6
40°	1218.2	1236.9	1283.9	1316.0	1317.5
42.5°	1141.5	1159.5	1197.8	1244.0	1244.0
45°	1060.1	1078.1	1113.3	1164.2	1170.4
47.5°	980.3	999.1	1033.5	1084.4	1094.5
50°	902.1	919.3	953.7	1003.0	1018.7
52.5°	820.7	839.5	873.1	918.5	941.2
55°	742.5	755.0	791.8	835.6	859.8
57.5°	661.1	672.8	714.3	751.9	776.9
60°	582.9	597.7	629.8	668.1	697.1
62.5°	507.8	523.4	550.8	584.4	617.3
65°	435.0	446.7	473.3	507.0	535.9
67.5°	364.6	374.8	401.4	424.8	455.3
70°	293.4	306.7	326.3	348.9	368.5
72.5°	236.3	241.8	258.2	274.6	295.0
75°	174.5	183.9	197.2	206.5	218.3
77.5°	125.2	130.7	138.5	146.3	157.3
80°	83.7	86.1	93.1	94.7	103.3
82.5°	50.9	52.4	54.0	54.8	57.9
85°	27.4	27.4	27.4	25.8	25.8
87.5°	15.6	15.6	13.3	11.0	7.8
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)