

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: P555406

Luminaire Tested: **FUSL-12-2-LD4-3HI-30-UNV-81-97-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: P555406  
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-81-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

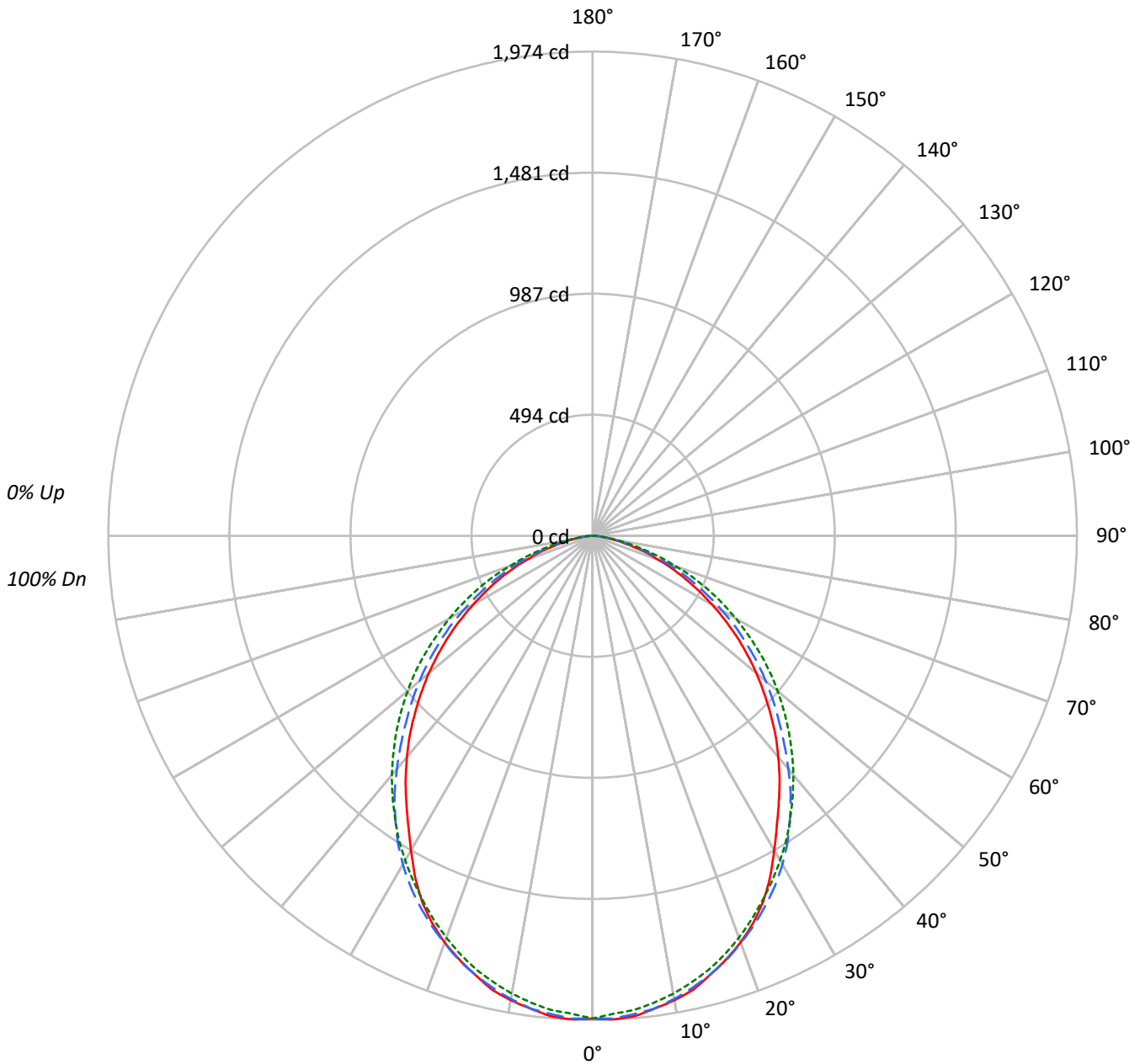
Lumens per Lamp: N/A  
Luminaire Lumens: 4551.0 lumens  
Efficiency: N/A  
Efficacy: 70.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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					20					
RC	80					70					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°	10593	10593	10593
5°	10621	10576	10486
10°	10508	10479	10359
15°	10322	10322	10204
20°	10103	10116	9986
25°	9770	9891	9735
30°	9201	9614	9496
35°	8694	9215	9230
40°	8271	8717	8946
45°	7798	8190	8610
50°	7299	7717	8243
55°	6733	7180	7797
60°	6063	6552	7252
65°	5354	5826	6595
70°	4461	4961	5604
75°	3506	3961	4388
80°	2507	2789	3093
85°	1636	1636	1544



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.3	4.1
10°-20°	520.6	11.4
20°-30°	760.8	16.7
30°-40°	863.5	19.0
40°-50°	833.6	18.3
50°-60°	687.7	15.1
60°-70°	457.9	10.1
70°-80°	204.9	4.5
80°-90°	36.7	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°	1466.7	32.2
0°-40°	2330.2	51.2
0°-60°	3851.5	84.6
0°-90°	4551.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4551.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1968	1968	1968	1968	1968	
5°	1966	1965	1958	1947	1941	186
15°	1852	1857	1852	1844	1831	522
25°	1645	1658	1666	1654	1639	753
35°	1323	1341	1403	1410	1405	829
45°	1024	1042	1076	1125	1131	790
55°	718	730	765	808	831	640
65°	420	432	458	490	518	417
75°	169	178	190	200	211	184
85°	26	26	26	25	25	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1968.2	1968.2	1968.2	1968.2	1968.2
2.5°	1973.5	1974.2	1969.7	1957.6	1950.0
5°	1965.9	1965.2	1957.6	1947.0	1941.0
7.5°	1944.0	1945.5	1943.2	1928.1	1919.8
10°	1922.8	1923.6	1917.5	1905.4	1895.6
12.5°	1895.6	1894.8	1886.5	1880.5	1864.6
15°	1852.5	1857.0	1852.5	1844.2	1831.3
17.5°	1810.9	1810.9	1813.9	1799.6	1789.7
20°	1764.0	1766.3	1766.3	1755.0	1743.6
22.5°	1709.6	1716.4	1718.7	1706.6	1693.0
25°	1645.3	1658.2	1665.7	1653.6	1639.3
27.5°	1567.4	1587.1	1609.8	1600.7	1584.8
30°	1480.5	1509.2	1547.0	1539.5	1528.1
32.5°	1398.1	1426.8	1479.0	1476.0	1469.9
35°	1323.2	1341.4	1402.6	1410.2	1404.9
37.5°	1252.1	1268.8	1326.2	1343.6	1339.1
40°	1177.3	1195.4	1240.8	1271.8	1273.3
42.5°	1103.2	1120.6	1157.6	1202.2	1202.2
45°	1024.5	1041.9	1076.0	1125.1	1131.2
47.5°	947.4	965.6	998.8	1048.0	1057.8
50°	871.8	888.4	921.7	969.4	984.5
52.5°	793.2	811.3	843.8	887.7	909.6
55°	717.6	729.7	765.2	807.5	831.0
57.5°	638.9	650.3	690.3	726.6	750.8
60°	563.3	577.7	608.7	645.7	673.7
62.5°	490.7	505.8	532.3	564.8	596.6
65°	420.4	431.7	457.5	490.0	517.9
67.5°	352.4	362.2	387.9	410.6	440.1
70°	283.5	296.4	315.3	337.2	356.1
72.5°	228.3	233.6	249.5	265.4	285.1
75°	168.6	177.7	190.5	199.6	211.0
77.5°	121.0	126.3	133.8	141.4	152.0
80°	80.9	83.2	90.0	91.5	99.8
82.5°	49.1	50.7	52.2	52.9	56.0
85°	26.5	26.5	26.5	25.0	25.0
87.5°	15.1	15.1	12.9	10.6	7.6
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)