

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: P555487

Luminaire Tested: **FUSL-12-2-LD4-3HI-35-UNV-82-97-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: P555487  
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-35-UNV-82-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

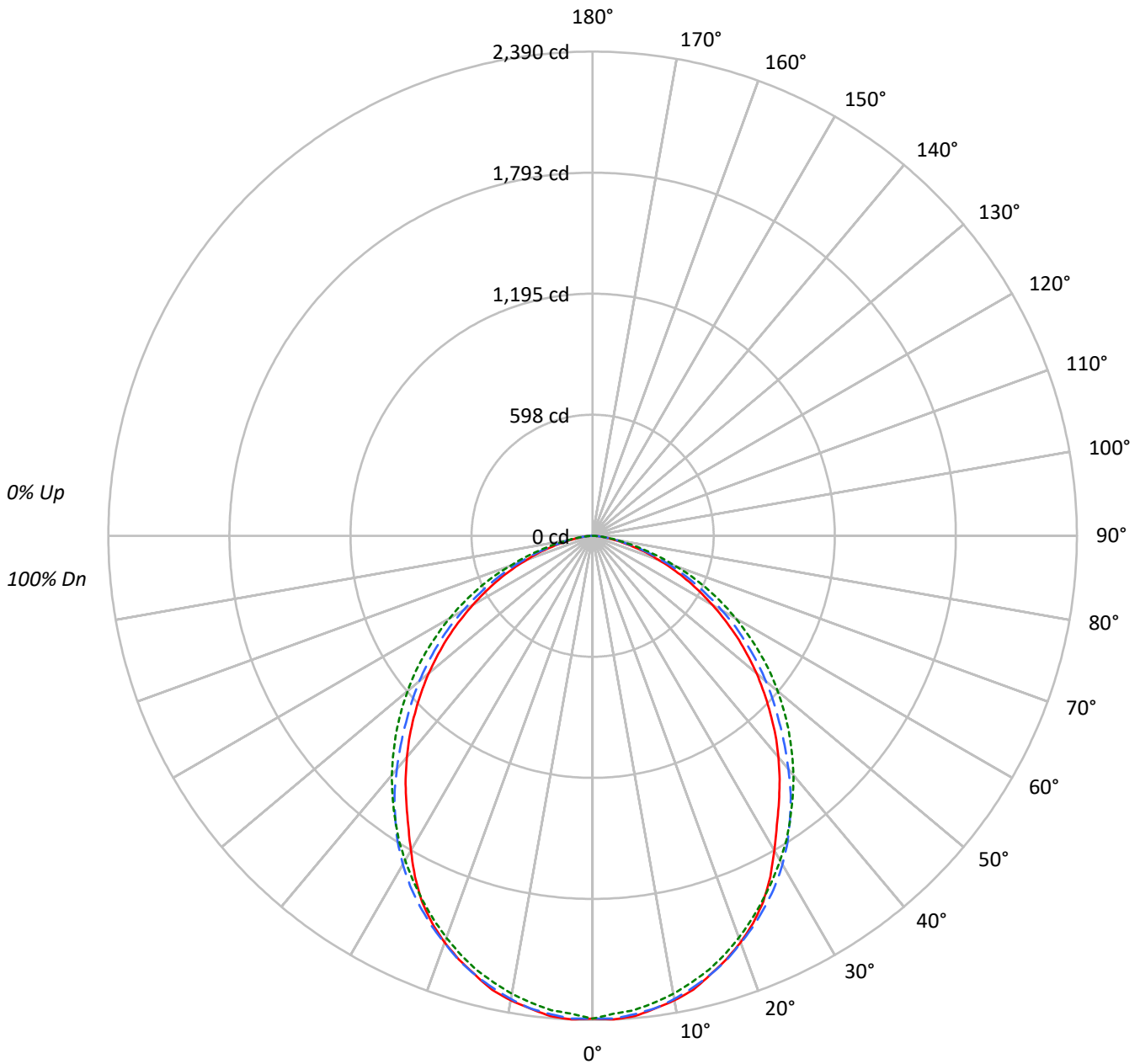
Lumens per Lamp: N/A  
Luminaire Lumens: 5511.0 lumens  
Efficiency: N/A  
Efficacy: 85.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	12827	12827	12827
5°	12861	12807	12698
10°	12725	12690	12545
15°	12499	12499	12356
20°	12234	12250	12093
25°	11832	11978	11788
30°	11141	11642	11500
35°	10527	11159	11177
40°	10016	10556	10833
45°	9443	9917	10426
50°	8839	9345	9981
55°	8153	8694	9442
60°	7342	7934	8781
65°	6483	7055	7987
70°	5404	6008	6787
75°	4246	4797	5313
80°	3037	3378	3747
85°	1976	1976	1865



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	224.4	4.1
10°-20°	630.4	11.4
20°-30°	921.2	16.7
30°-40°	1045.7	19.0
40°-50°	1009.5	18.3
50°-60°	832.7	15.1
60°-70°	554.5	10.1
70°-80°	248.2	4.5
80°-90°	44.4	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°	1776.0	32.2
0°-40°	2821.7	51.2
0°-60°	4663.9	84.6
0°-90°	5511.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5511.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2383	2383	2383	2383	2383	
5°	2381	2380	2370	2358	2350	225
15°	2243	2249	2243	2233	2218	632
25°	1992	2008	2017	2002	1985	912
35°	1602	1624	1698	1708	1701	1004
45°	1241	1262	1303	1362	1370	957
55°	869	884	927	978	1006	776
65°	509	523	554	593	627	505
75°	204	215	231	242	256	223
85°	32	32	32	30	30	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2383.4	<i>2383.4</i>	2383.4	2383.4	2383.4
2.5°	<i>2389.8</i>	<i>2390.7</i>	<i>2385.2</i>	<i>2370.5</i>	<i>2361.4</i>
5°	2380.6	<i>2379.7</i>	2370.5	2357.7	2350.4
7.5°	2354.1	<i>2355.9</i>	2353.1	2334.8	2324.8
10°	2328.4	<i>2329.3</i>	2322.0	2307.4	2295.5
12.5°	2295.5	<i>2294.5</i>	2284.5	2277.2	2257.9
15°	2243.3	<i>2248.8</i>	2243.3	2233.2	2217.6
17.5°	2192.9	<i>2192.9</i>	2196.6	2179.2	2167.3
20°	2136.1	<i>2138.9</i>	2138.9	2125.2	2111.4
22.5°	2070.2	<i>2078.5</i>	2081.2	2066.6	2050.1
25°	1992.4	<i>2008.0</i>	2017.1	2002.5	1985.1
27.5°	1898.1	<i>1921.9</i>	1949.4	1938.4	1919.1
30°	1792.8	<i>1827.6</i>	1873.4	1864.2	1850.5
32.5°	1693.0	<i>1727.8</i>	1791.0	1787.3	1780.0
35°	1602.3	<i>1624.3</i>	1698.5	1707.6	1701.2
37.5°	1516.3	<i>1536.4</i>	1606.0	1627.1	1621.6
40°	1425.6	<i>1447.6</i>	1502.5	1540.1	1541.9
42.5°	1335.9	<i>1357.0</i>	1401.8	1455.8	1455.8
45°	1240.7	<i>1261.7</i>	1302.9	1362.4	1369.8
47.5°	1147.3	<i>1169.2</i>	1209.5	1269.1	1281.0
50°	1055.7	<i>1075.9</i>	1116.1	1173.8	1192.1
52.5°	960.5	<i>982.5</i>	1021.8	1074.9	1101.5
55°	868.9	<i>883.6</i>	926.6	977.9	1006.3
57.5°	773.7	<i>787.4</i>	836.0	879.9	909.2
60°	682.1	<i>699.5</i>	737.1	781.9	815.8
62.5°	594.2	<i>612.6</i>	644.6	684.0	722.4
65°	509.1	<i>522.8</i>	554.0	593.3	627.2
67.5°	426.7	<i>438.6</i>	469.7	497.2	532.9
70°	343.4	<i>358.9</i>	381.8	408.4	431.3
72.5°	276.5	<i>282.9</i>	302.2	321.4	345.2
75°	204.2	<i>215.2</i>	230.7	241.7	255.5
77.5°	146.5	<i>152.9</i>	162.1	171.2	184.0
80°	98.0	<i>100.7</i>	109.0	110.8	120.9
82.5°	59.5	<i>61.3</i>	63.2	64.1	67.8
85°	32.0	<i>32.0</i>	32.0	30.2	30.2
87.5°	18.3	<i>18.3</i>	15.6	12.8	9.2
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)