

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: P555622

Luminaire Tested: **FUSL-12-2-LD4-3HI-50-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: P555622  
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-50-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 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

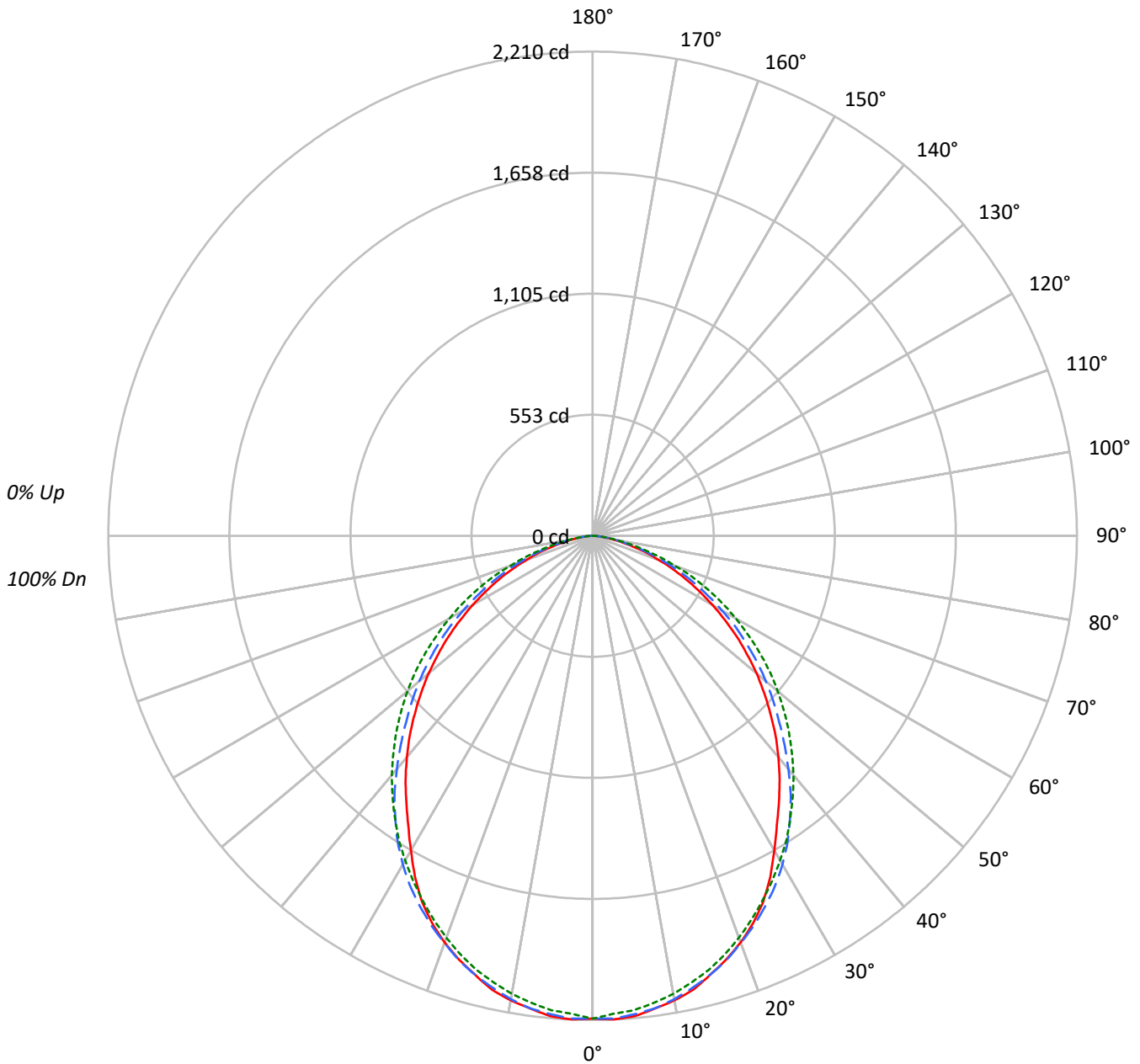
Lumens per Lamp: N/A  
Luminaire Lumens: 5096.0 lumens  
Efficiency: N/A  
Efficacy: 78.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	11861	11861	11861
5°	11893	11842	11742
10°	11767	11734	11600
15°	11558	11558	11426
20°	11313	11328	11182
25°	10941	11076	10900
30°	10302	10765	10634
35°	9735	10319	10336
40°	9262	9761	10017
45°	8732	9170	9640
50°	8174	8642	9230
55°	7539	8039	8731
60°	6790	7337	8120
65°	5994	6523	7386
70°	4996	5556	6275
75°	3926	4438	4912
80°	2808	3124	3465
85°	1828	1828	1723



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.5	4.1
10°-20°	582.9	11.4
20°-30°	851.9	16.7
30°-40°	967.0	19.0
40°-50°	933.4	18.3
50°-60°	770.0	15.1
60°-70°	512.8	10.1
70°-80°	229.5	4.5
80°-90°	41.0	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°	1642.3	32.2
0°-40°	2609.2	51.2
0°-60°	4312.7	84.6
0°-90°	5096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5096.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2204	2204	2204	2204	2204	
5°	2201	2200	2192	2180	2173	208
15°	2074	2079	2074	2065	2051	585
25°	1842	1857	1865	1852	1836	844
35°	1482	1502	1571	1579	1573	928
45°	1147	1167	1205	1260	1267	885
55°	804	817	857	904	930	717
65°	471	483	512	549	580	467
75°	189	199	213	224	236	206
85°	30	30	30	28	28	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2203.9	2203.9	2203.9	2203.9	2203.9
2.5°	2209.8	2210.7	2205.6	2192.0	2183.6
5°	2201.3	2200.5	2192.0	2180.2	2173.4
7.5°	2176.8	2178.5	2175.9	2159.0	2149.7
10°	2153.1	2153.9	2147.2	2133.6	2122.6
12.5°	2122.6	2121.8	2112.4	2105.7	2087.9
15°	2074.3	2079.4	2074.3	2065.0	2050.6
17.5°	2027.8	2027.8	2031.2	2015.1	2004.1
20°	1975.3	1977.8	1977.8	1965.1	1952.4
22.5°	1914.3	1921.9	1924.5	1910.9	1895.7
25°	1842.4	1856.8	1865.2	1851.7	1835.6
27.5°	1755.2	1777.2	1802.6	1792.4	1774.6
30°	1657.8	1690.0	1732.3	1723.8	1711.1
32.5°	1565.5	1597.7	1656.1	1652.7	1645.9
35°	1481.7	1502.0	1570.6	1579.0	1573.1
37.5°	1402.1	1420.7	1485.1	1504.5	1499.5
40°	1318.3	1338.6	1389.4	1424.1	1425.8
42.5°	1235.3	1254.8	1296.3	1346.2	1346.2
45°	1147.2	1166.7	1204.8	1259.8	1266.6
47.5°	1060.9	1081.2	1118.5	1173.5	1184.5
50°	976.2	994.8	1032.1	1085.4	1102.4
52.5°	888.2	908.5	944.9	994.0	1018.5
55°	803.5	817.0	856.8	904.2	930.5
57.5°	715.4	728.1	773.0	813.7	840.7
60°	630.8	646.9	681.6	723.1	754.4
62.5°	549.5	566.4	596.1	632.5	668.0
65°	470.7	483.4	512.2	548.6	580.0
67.5°	394.5	405.6	434.3	459.7	492.8
70°	317.5	331.9	353.1	377.6	398.8
72.5°	255.7	261.6	279.4	297.2	319.2
75°	188.8	199.0	213.4	223.5	236.2
77.5°	135.5	141.4	149.9	158.3	170.2
80°	90.6	93.1	100.8	102.4	111.8
82.5°	55.0	56.7	58.4	59.3	62.7
85°	29.6	29.6	29.6	27.9	27.9
87.5°	16.9	16.9	14.4	11.9	8.5
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)