

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: P555590

Luminaire Tested: **FUSL-12-2-LD4-3HI-50-UNV-81-87-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: P555590  
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-81-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC 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**

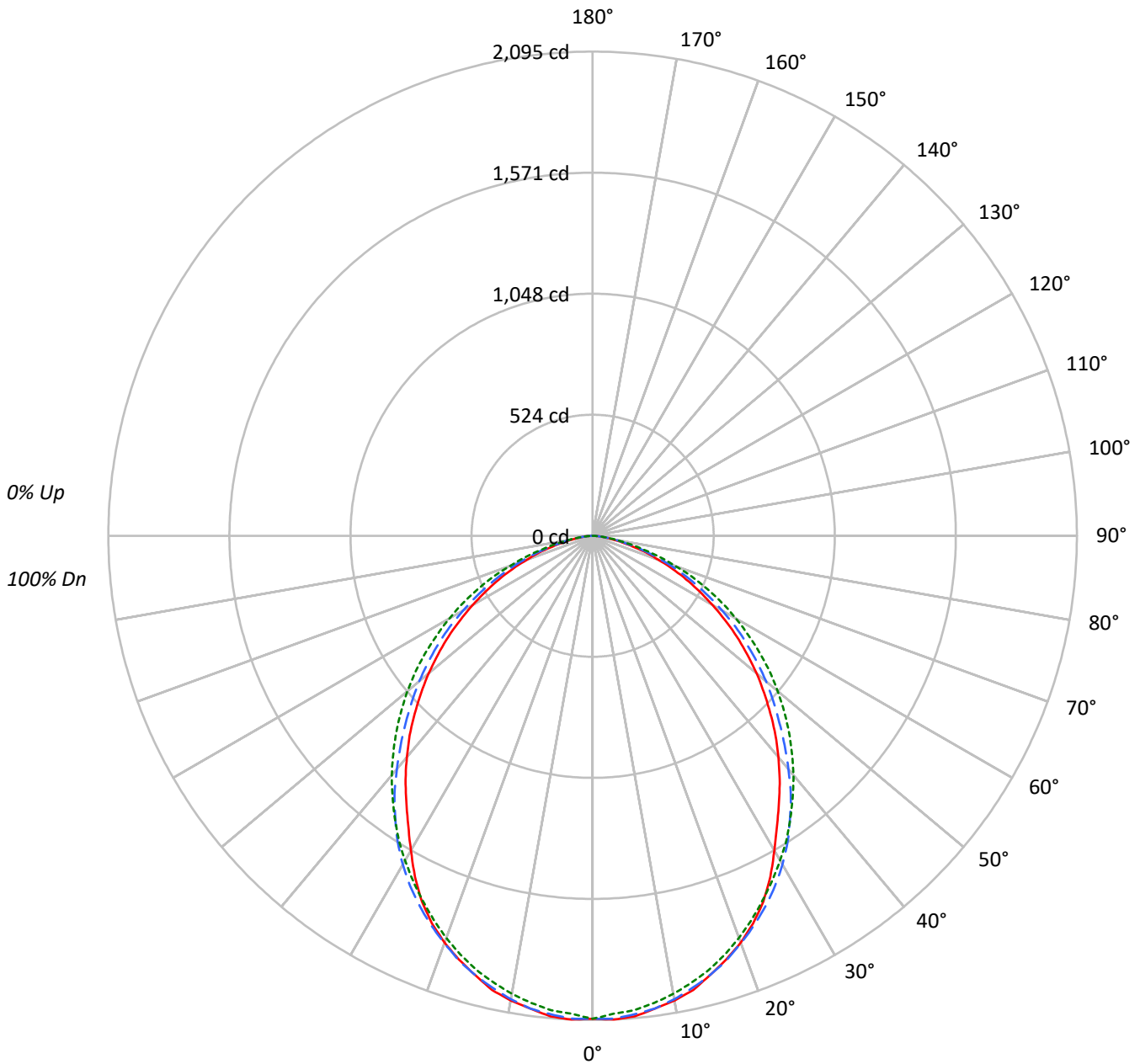
Lumens per Lamp: N/A  
Luminaire Lumens: 4832.0 lumens  
Efficiency: N/A  
Efficacy: 74.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
Input Voltage (V): NR  
Input Current (Ain): 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

TEST NUMBER: P555590

CATALOG NUMBER: FUSL-12-2-LD4-3HI-50-UNV-81-87-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P555590

CATALOG NUMBER: FUSL-12-2-LD4-3HI-50-UNV-81-87-EDD-90

**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°	11247	11247	11247
5°	11277	11229	11134
10°	11157	11126	10999
15°	10959	10959	10834
20°	10727	10741	10603
25°	10374	10503	10336
30°	9769	10207	10083
35°	9230	9784	9800
40°	8782	9256	9498
45°	8280	8695	9141
50°	7750	8194	8752
55°	7149	7623	8279
60°	6438	6957	7699
65°	5685	6185	7003
70°	4738	5268	5950
75°	3722	4207	4658
80°	2662	2960	3285
85°	1735	1735	1636



TEST NUMBER: P555590

CATALOG NUMBER: FUSL-12-2-LD4-3HI-50-UNV-81-87-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	196.8	4.1
10°-20°	552.7	11.4
20°-30°	807.7	16.7
30°-40°	916.9	19.0
40°-50°	885.1	18.3
50°-60°	730.1	15.1
60°-70°	486.2	10.1
70°-80°	217.6	4.5
80°-90°	38.9	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°	1557.2	32.2
0°-40°	2474.1	51.2
0°-60°	4089.3	84.6
0°-90°	4832.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4832.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2090	2090	2090	2090	2090	
5°	2087	2086	2078	2067	2061	198
15°	1967	1972	1967	1958	1944	554
25°	1747	1761	1769	1756	1740	800
35°	1405	1424	1489	1497	1492	880
45°	1088	1106	1142	1195	1201	839
55°	762	775	812	857	882	680
65°	446	458	486	520	550	443
75°	179	189	202	212	224	196
85°	28	28	28	26	26	38
90°	0	0	0	0	0	



TEST NUMBER: P555590

CATALOG NUMBER: FUSL-12-2-LD4-3HI-50-UNV-81-87-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2089.7	2089.7	2089.7	2089.7	2089.7
2.5°	2095.3	2096.1	2091.3	2078.5	2070.4
5°	2087.3	2086.5	2078.5	2067.2	2060.8
7.5°	2064.0	2065.6	2063.2	2047.2	2038.3
10°	2041.5	2042.3	2035.9	2023.1	2012.6
12.5°	2012.6	2011.8	2003.0	1996.6	1979.7
15°	1966.9	1971.7	1966.9	1958.1	1944.4
17.5°	1922.7	1922.7	1925.9	1910.7	1900.3
20°	1873.0	1875.4	1875.4	1863.3	1851.3
22.5°	1815.2	1822.4	1824.8	1811.9	1797.5
25°	1746.9	1760.6	1768.6	1755.7	1740.5
27.5°	1664.2	1685.1	1709.2	1699.5	1682.7
30°	1571.9	1602.4	1642.5	1634.5	1622.5
32.5°	1484.4	1514.9	1570.3	1567.1	1560.7
35°	1404.9	1424.2	1489.2	1497.2	1491.6
37.5°	1329.5	1347.1	1408.1	1426.6	1421.8
40°	1250.0	1269.2	1317.4	1350.3	1351.9
42.5°	1171.3	1189.8	1229.1	1276.5	1276.5
45°	1087.8	1106.3	1142.4	1194.6	1201.0
47.5°	1005.9	1025.2	1060.5	1112.7	1123.1
50°	925.6	943.3	978.6	1029.2	1045.3
52.5°	842.1	861.4	895.9	942.5	965.8
55°	761.9	774.7	812.4	857.4	882.3
57.5°	678.4	690.4	733.0	771.5	797.2
60°	598.1	613.3	646.3	685.6	715.3
62.5°	521.0	537.1	565.2	599.7	633.4
65°	446.4	458.4	485.7	520.2	549.9
67.5°	374.1	384.5	411.8	435.9	467.2
70°	301.1	314.7	334.8	358.1	378.1
72.5°	242.4	248.1	264.9	281.8	302.7
75°	179.0	188.7	202.3	211.9	224.0
77.5°	128.4	134.1	142.1	150.1	161.4
80°	85.9	88.3	95.5	97.1	106.0
82.5°	52.2	53.8	55.4	56.2	59.4
85°	28.1	28.1	28.1	26.5	26.5
87.5°	16.1	16.1	13.6	11.2	8.0
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)