

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: P555980

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-81-96-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: P555980  
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-LD4-3STD-35-UNV-81-96-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

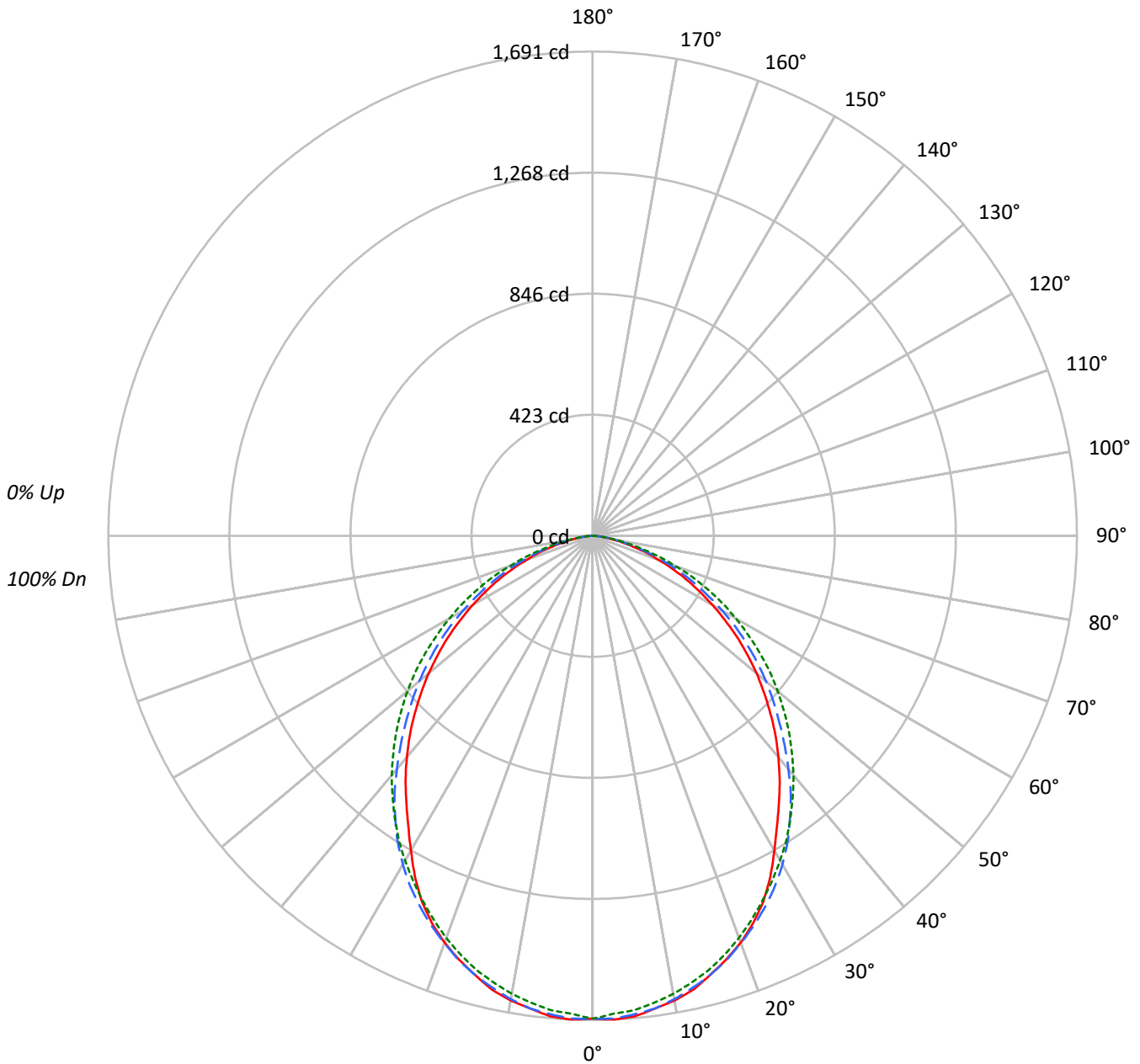
Lumens per Lamp: N/A  
Luminaire Lumens: 3900.0 lumens  
Efficiency: N/A  
Efficacy: 78.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
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: P555980

CATALOG NUMBER: FUSL-12-2-LD4-3STD-35-UNV-81-96-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P555980

CATALOG NUMBER: FUSL-12-2-LD4-3STD-35-UNV-81-96-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°	9077	9077	9077
5°	9102	9063	8986
10°	9005	8980	8877
15°	8845	8845	8744
20°	8658	8669	8558
25°	8373	8477	8342
30°	7884	8239	8138
35°	7450	7897	7910
40°	7088	7470	7666
45°	6683	7018	7378
50°	6255	6614	7063
55°	5770	6153	6682
60°	5196	5614	6214
65°	4588	4992	5653
70°	3824	4252	4803
75°	3005	3396	3760
80°	2148	2390	2650
85°	1402	1402	1321



TEST NUMBER: P555980

CATALOG NUMBER: FUSL-12-2-LD4-3STD-35-UNV-81-96-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.8	4.1
10°-20°	446.1	11.4
20°-30°	651.9	16.7
30°-40°	740.0	19.0
40°-50°	714.4	18.3
50°-60°	589.3	15.1
60°-70°	392.4	10.1
70°-80°	175.6	4.5
80°-90°	31.4	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°	1256.9	32.2
0°-40°	1996.9	51.2
0°-60°	3300.5	84.6
0°-90°	3900.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3900.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1687	1687	1687	1687	1687	
5°	1685	1684	1678	1668	1663	159
15°	1588	1591	1588	1580	1569	448
25°	1410	1421	1428	1417	1405	646
35°	1134	1150	1202	1208	1204	710
45°	878	893	922	964	969	677
55°	615	625	656	692	712	549
65°	360	370	392	420	444	357
75°	144	152	163	171	181	158
85°	23	23	23	21	21	31
90°	0	0	0	0	0	



TEST NUMBER: P555980

CATALOG NUMBER: FUSL-12-2-LD4-3STD-35-UNV-81-96-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1686.6	1686.6	1686.6	1686.6	1686.6
2.5°	1691.2	1691.8	1687.9	1677.6	1671.1
5°	1684.7	1684.1	1677.6	1668.5	1663.3
7.5°	1665.9	1667.2	1665.3	1652.3	1645.2
10°	1647.8	1648.4	1643.2	1632.9	1624.4
12.5°	1624.4	1623.8	1616.7	1611.5	1597.9
15°	1587.5	1591.4	1587.5	1580.4	1569.4
17.5°	1551.9	1551.9	1554.5	1542.2	1533.7
20°	1511.7	1513.6	1513.6	1503.9	1494.2
22.5°	1465.0	1470.9	1472.8	1462.5	1450.8
25°	1410.0	1421.0	1427.5	1417.1	1404.8
27.5°	1343.2	1360.1	1379.5	1371.7	1358.1
30°	1268.7	1293.3	1325.7	1319.3	1309.5
32.5°	1198.1	1222.7	1267.4	1264.8	1259.6
35°	1133.9	1149.5	1202.0	1208.5	1203.9
37.5°	1073.0	1087.3	1136.5	1151.4	1147.5
40°	1008.9	1024.4	1063.3	1089.9	1091.2
42.5°	945.4	960.3	992.0	1030.3	1030.3
45°	878.0	892.9	922.1	964.2	969.4
47.5°	811.9	827.4	856.0	898.1	906.5
50°	747.1	761.4	789.9	830.7	843.6
52.5°	679.7	695.3	723.1	760.7	779.5
55°	614.9	625.3	655.7	692.0	712.1
57.5°	547.5	557.2	591.6	622.7	643.4
60°	482.7	495.0	521.6	553.4	577.3
62.5°	420.5	433.5	456.2	484.0	511.2
65°	360.3	370.0	392.0	419.9	443.9
67.5°	302.0	310.4	332.4	351.8	377.1
70°	243.0	254.0	270.2	289.0	305.2
72.5°	195.7	200.2	213.8	227.4	244.3
75°	144.5	152.3	163.3	171.1	180.8
77.5°	103.7	108.2	114.7	121.2	130.2
80°	69.3	71.3	77.1	78.4	85.5
82.5°	42.1	43.4	44.7	45.4	47.9
85°	22.7	22.7	22.7	21.4	21.4
87.5°	13.0	13.0	11.0	9.1	6.5
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)