

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: P555400

Luminaire Tested: **FUSL-12-2-LD4-3HI-30-UNV-81-88-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: P555400  
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-81-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

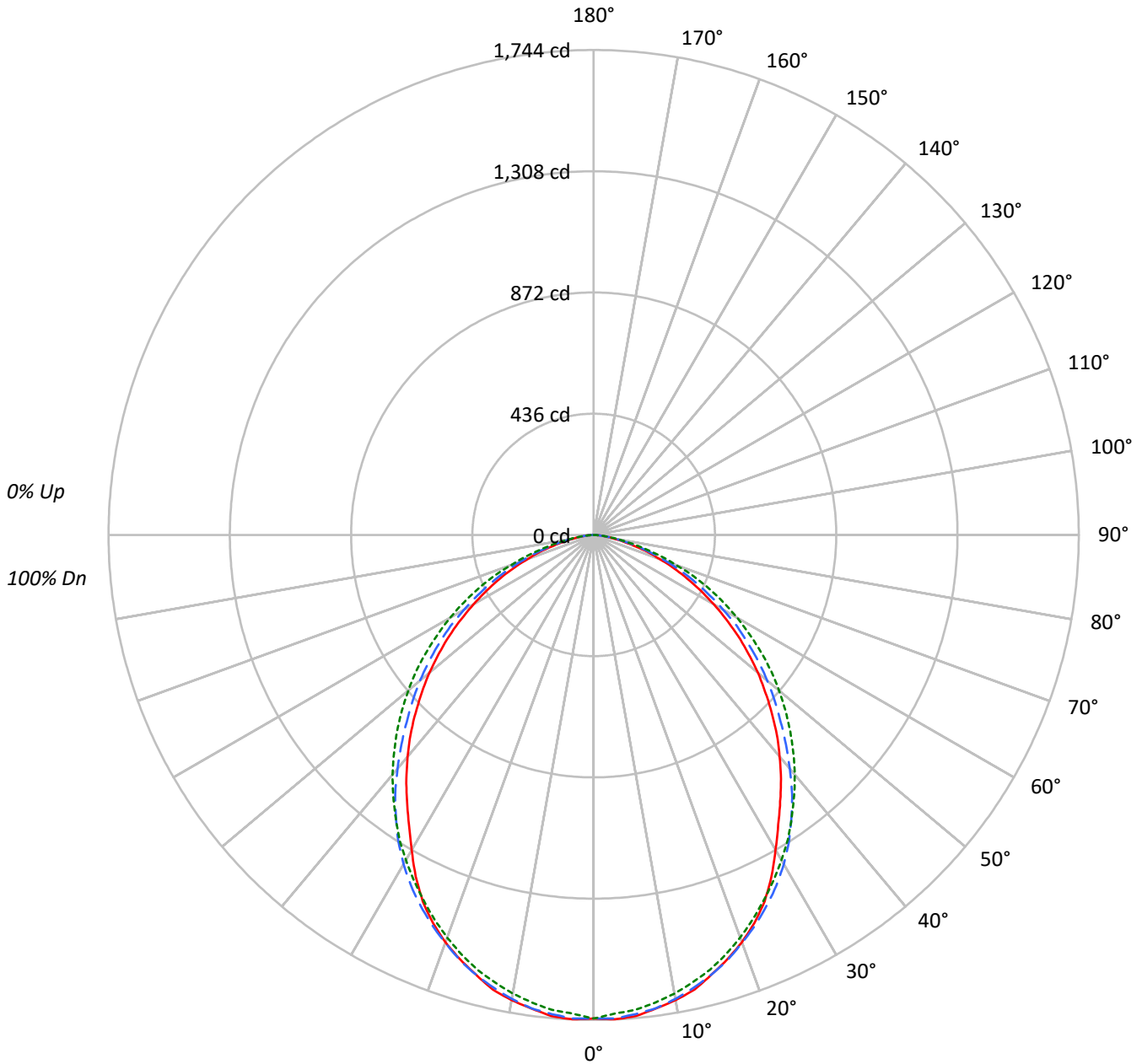
Lumens per Lamp: N/A  
Luminaire Lumens: 4021.0 lumens  
Efficiency: N/A  
Efficacy: 62.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P555400

CATALOG NUMBER: FUSL-12-2-LD4-3HI-30-UNV-81-88-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P555400

CATALOG NUMBER: FUSL-12-2-LD4-3HI-30-UNV-81-88-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°	9359	9359	9359
5°	9384	9344	9265
10°	9284	9259	9153
15°	9120	9120	9016
20°	8927	8938	8824
25°	8633	8740	8601
30°	8129	8495	8391
35°	7681	8142	8156
40°	7308	7702	7904
45°	6890	7236	7607
50°	6450	6819	7283
55°	5949	6344	6889
60°	5357	5789	6407
65°	4730	5147	5827
70°	3942	4384	4952
75°	3098	3502	3876
80°	2216	2464	2734
85°	1445	1445	1359



TEST NUMBER: P555400

CATALOG NUMBER: FUSL-12-2-LD4-3HI-30-UNV-81-88-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.7	4.1
10°-20°	460.0	11.4
20°-30°	672.2	16.7
30°-40°	763.0	19.0
40°-50°	736.5	18.3
50°-60°	607.6	15.1
60°-70°	404.6	10.1
70°-80°	181.1	4.5
80°-90°	32.4	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°	1295.9	32.2
0°-40°	2058.8	51.2
0°-60°	3403.0	84.6
0°-90°	4021.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4021.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1739	1739	1739	1739	1739	
5°	1737	1736	1730	1720	1715	164
15°	1637	1641	1637	1629	1618	461
25°	1454	1465	1472	1461	1448	666
35°	1169	1185	1239	1246	1241	733
45°	905	921	951	994	999	698
55°	634	645	676	714	734	566
65°	371	382	404	433	458	368
75°	149	157	168	176	186	163
85°	23	23	23	22	22	32
90°	0	0	0	0	0	



TEST NUMBER: P555400

CATALOG NUMBER: FUSL-12-2-LD4-3HI-30-UNV-81-88-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1739.0	1739.0	1739.0	1739.0	1739.0
2.5°	1743.7	1744.3	1740.3	1729.6	1722.9
5°	1737.0	1736.3	1729.6	1720.3	1714.9
7.5°	1717.6	1718.9	1716.9	1703.6	1696.2
10°	1698.9	1699.6	1694.2	1683.5	1674.8
12.5°	1674.8	1674.2	1666.8	1661.5	1647.5
15°	1636.8	1640.8	1636.8	1629.4	1618.1
17.5°	1600.0	1600.0	1602.7	1590.0	1581.3
20°	1558.6	1560.6	1560.6	1550.6	1540.6
22.5°	1510.5	1516.5	1518.5	1507.8	1495.8
25°	1453.7	1465.1	1471.8	1461.1	1448.4
27.5°	1384.9	1402.3	1422.3	1414.3	1400.3
30°	1308.1	1333.5	1366.9	1360.2	1350.2
32.5°	1235.3	1260.6	1306.7	1304.1	1298.7
35°	1169.1	1185.2	1239.3	1245.9	1241.3
37.5°	1106.3	1121.0	1171.8	1187.2	1183.1
40°	1040.2	1056.2	1096.3	1123.7	1125.0
42.5°	974.7	990.1	1022.8	1062.2	1062.2
45°	905.2	920.6	950.7	994.1	999.4
47.5°	837.1	853.1	882.5	925.9	934.6
50°	770.3	785.0	814.4	856.5	869.8
52.5°	700.8	716.8	745.6	784.3	803.7
55°	634.0	644.7	676.1	713.5	734.2
57.5°	564.5	574.5	609.9	642.0	663.4
60°	497.7	510.4	537.8	570.5	595.2
62.5°	433.6	446.9	470.3	499.0	527.1
65°	371.4	381.5	404.2	432.9	457.6
67.5°	311.3	320.0	342.7	362.8	388.8
70°	250.5	261.9	278.6	298.0	314.7
72.5°	201.8	206.4	220.5	234.5	251.9
75°	149.0	157.0	168.4	176.4	186.4
77.5°	106.9	111.6	118.2	124.9	134.3
80°	71.5	73.5	79.5	80.8	88.2
82.5°	43.4	44.8	46.1	46.8	49.4
85°	23.4	23.4	23.4	22.0	22.0
87.5°	13.4	13.4	11.4	9.4	6.7
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)