

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: P554651

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-UNV-82-94-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: P554651  
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-LD4-2HI-30-UNV-82-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

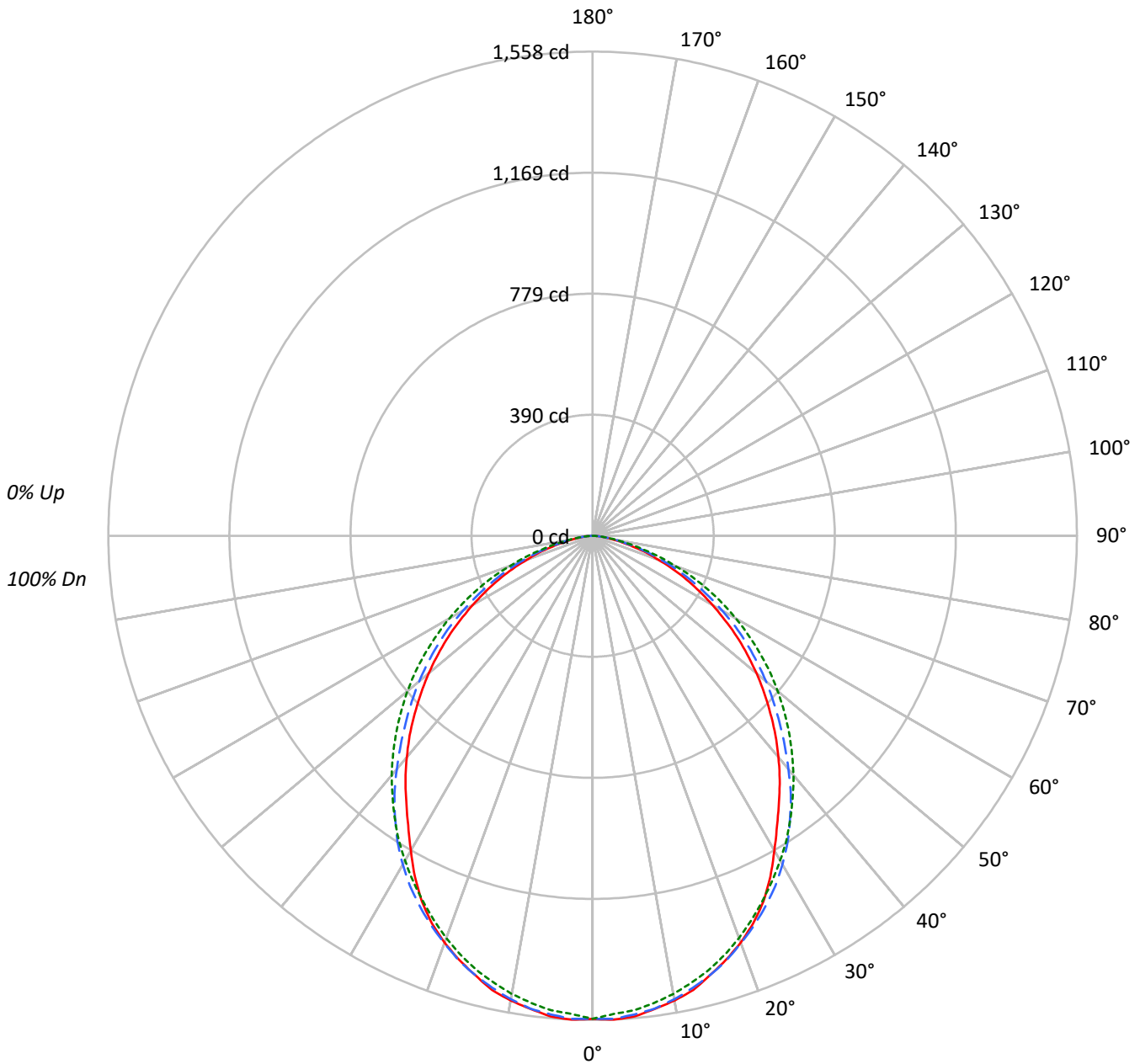
Lumens per Lamp: N/A  
Luminaire Lumens: 3594.0 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
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°	8365	8365	8365
5°	8387	8352	8281
10°	8299	8276	8181
15°	8152	8152	8058
20°	7979	7989	7887
25°	7716	7812	7688
30°	7266	7592	7500
35°	6866	7278	7290
40°	6532	6884	7065
45°	6158	6467	6799
50°	5765	6095	6510
55°	5317	5670	6157
60°	4789	5174	5726
65°	4228	4601	5209
70°	3523	3918	4425
75°	2770	3130	3464
80°	1980	2204	2442
85°	1291	1291	1216



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.3	4.1
10°-20°	411.1	11.4
20°-30°	600.8	16.7
30°-40°	682.0	19.0
40°-50°	658.3	18.3
50°-60°	543.1	15.1
60°-70°	361.6	10.1
70°-80°	161.8	4.5
80°-90°	29.0	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°	1158.3	32.2
0°-40°	1840.2	51.2
0°-60°	3041.6	84.6
0°-90°	3594.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3594.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1554	1554	1554	1554	1554	
5°	1552	1552	1546	1538	1533	147
15°	1463	1466	1463	1456	1446	412
25°	1299	1310	1316	1306	1295	595
35°	1045	1059	1108	1114	1110	655
45°	809	823	850	888	893	624
55°	567	576	604	638	656	506
65°	332	341	361	387	409	329
75°	133	140	150	158	167	146
85°	21	21	21	20	20	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1554.3	1554.3	1554.3	1554.3	1554.3
2.5°	1558.5	1559.1	1555.5	1546.0	1540.0
5°	1552.5	1551.9	1546.0	1537.6	1532.8
7.5°	1535.2	1536.4	1534.6	1522.7	1516.1
10°	1518.5	1519.1	1514.3	1504.8	1497.0
12.5°	1497.0	1496.4	1489.8	1485.0	1472.5
15°	1463.0	1466.5	1463.0	1456.4	1446.2
17.5°	1430.1	1430.1	1432.5	1421.2	1413.4
20°	1393.1	1394.9	1394.9	1385.9	1377.0
22.5°	1350.1	1355.5	1357.3	1347.7	1337.0
25°	1299.3	1309.5	1315.5	1305.9	1294.6
27.5°	1237.8	1253.4	1271.3	1264.1	1251.6
30°	1169.2	1191.9	1221.7	1215.7	1206.8
32.5°	1104.1	1126.8	1168.0	1165.6	1160.8
35°	1045.0	1059.3	1107.7	1113.6	1109.5
37.5°	988.8	1002.0	1047.4	1061.1	1057.5
40°	929.7	944.1	979.9	1004.4	1005.6
42.5°	871.2	884.9	914.2	949.4	949.4
45°	809.1	822.8	849.7	888.5	893.3
47.5°	748.2	762.5	788.8	827.6	835.4
50°	688.5	701.6	727.9	765.5	777.5
52.5°	626.4	640.7	666.4	701.0	718.3
55°	566.7	576.2	604.3	637.7	656.2
57.5°	504.6	513.5	545.2	573.8	592.9
60°	444.9	456.2	480.7	509.9	532.0
62.5°	387.5	399.5	420.4	446.1	471.1
65°	332.0	341.0	361.3	386.9	409.0
67.5°	278.3	286.0	306.3	324.2	347.5
70°	223.9	234.1	249.0	266.3	281.2
72.5°	180.3	184.5	197.1	209.6	225.1
75°	133.2	140.3	150.5	157.6	166.6
77.5°	95.5	99.7	105.7	111.7	120.0
80°	63.9	65.7	71.1	72.3	78.8
82.5°	38.8	40.0	41.2	41.8	44.2
85°	20.9	20.9	20.9	19.7	19.7
87.5°	11.9	11.9	10.2	8.4	6.0
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)