

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: P554715

Luminaire Tested: **FUSL-12-2-LD4-2HI-35-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: P554715  
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-35-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 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

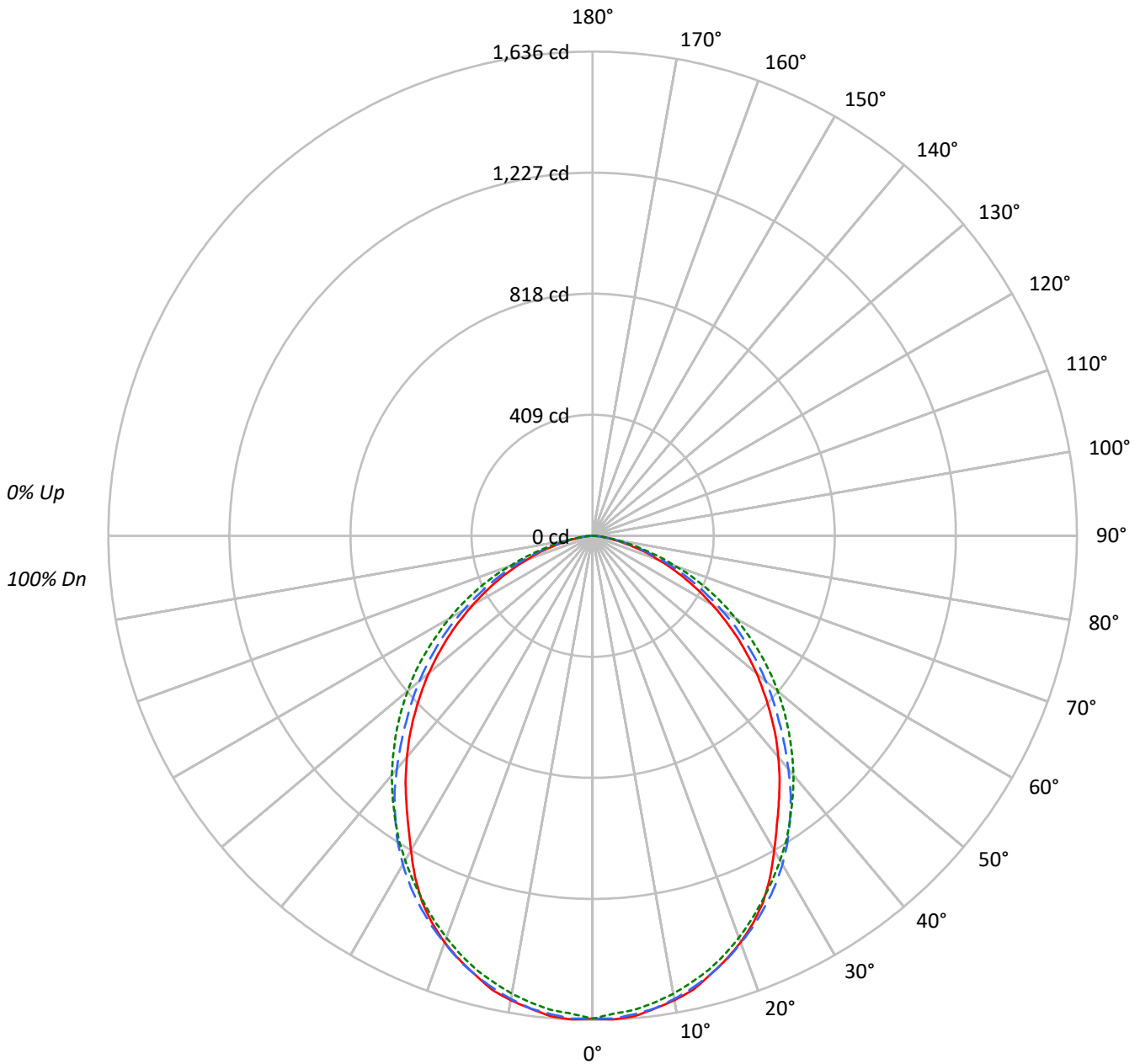
Lumens per Lamp: N/A  
Luminaire Lumens: 3772.0 lumens  
Efficiency: N/A  
Efficacy: 87.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	8780	8780	8780
5°	8803	8766	8691
10°	8710	8685	8586
15°	8555	8555	8457
20°	8374	8385	8277
25°	8098	8198	8068
30°	7626	7968	7871
35°	7205	7638	7650
40°	6856	7225	7415
45°	6463	6788	7136
50°	6050	6396	6832
55°	5580	5951	6462
60°	5026	5430	6011
65°	4437	4829	5467
70°	3698	4112	4645
75°	2907	3283	3635
80°	2080	2312	2563
85°	1352	1352	1278



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.6	4.1
10°-20°	431.5	11.4
20°-30°	630.5	16.7
30°-40°	715.7	19.0
40°-50°	690.9	18.3
50°-60°	570.0	15.1
60°-70°	379.5	10.1
70°-80°	169.8	4.5
80°-90°	30.4	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°	1215.6	32.2
0°-40°	1931.3	51.2
0°-60°	3192.2	84.6
0°-90°	3772.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3772.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1631	1631	1631	1631	1631	
5°	1629	1629	1622	1614	1609	154
15°	1535	1539	1535	1528	1518	433
25°	1364	1374	1381	1371	1359	625
35°	1097	1112	1162	1169	1164	687
45°	849	864	892	932	938	655
55°	595	605	634	669	689	531
65°	348	358	379	406	429	345
75°	140	147	158	165	175	153
85°	22	22	22	21	21	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1631.3	1631.3	1631.3	1631.3	1631.3
2.5°	1635.7	1636.3	1632.5	1622.5	1616.3
5°	1629.4	1628.8	1622.5	1613.7	1608.7
7.5°	1611.2	1612.5	1610.6	1598.1	1591.2
10°	1593.7	1594.3	1589.3	1579.3	1571.1
12.5°	1571.1	1570.5	1563.6	1558.6	1545.4
15°	1535.4	1539.2	1535.4	1528.5	1517.9
17.5°	1500.9	1500.9	1503.4	1491.5	1483.4
20°	1462.1	1464.0	1464.0	1454.6	1445.2
22.5°	1417.0	1422.6	1424.5	1414.5	1403.2
25°	1363.7	1374.3	1380.6	1370.6	1358.7
27.5°	1299.1	1315.4	1334.2	1326.7	1313.6
30°	1227.1	1250.9	1282.2	1276.0	1266.6
32.5°	1158.8	1182.6	1225.8	1223.3	1218.3
35°	1096.7	1111.8	1162.5	1168.8	1164.4
37.5°	1037.8	1051.6	1099.2	1113.6	1109.9
40°	975.8	990.8	1028.4	1054.1	1055.4
42.5°	914.4	928.8	959.5	996.4	996.4
45°	849.2	863.6	891.8	932.5	937.5
47.5°	785.3	800.3	827.9	868.6	876.7
50°	722.6	736.4	763.9	803.4	816.0
52.5°	657.4	672.4	699.4	735.7	753.9
55°	594.7	604.8	634.2	669.3	688.7
57.5°	529.6	539.0	572.2	602.3	622.3
60°	466.9	478.8	504.5	535.2	558.4
62.5°	406.7	419.3	441.2	468.1	494.5
65°	348.4	357.8	379.2	406.1	429.3
67.5°	292.0	300.2	321.5	340.3	364.7
70°	235.0	245.7	261.3	279.5	295.2
72.5°	189.3	193.6	206.8	220.0	236.3
75°	139.8	147.3	157.9	165.4	174.8
77.5°	100.3	104.7	110.9	117.2	126.0
80°	67.1	68.9	74.6	75.8	82.7
82.5°	40.7	42.0	43.2	43.9	46.4
85°	21.9	21.9	21.9	20.7	20.7
87.5°	12.5	12.5	10.7	8.8	6.3
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)