

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: P554908

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-82-96-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: P554908  
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-LD4-2LO-30-UNV-82-96-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

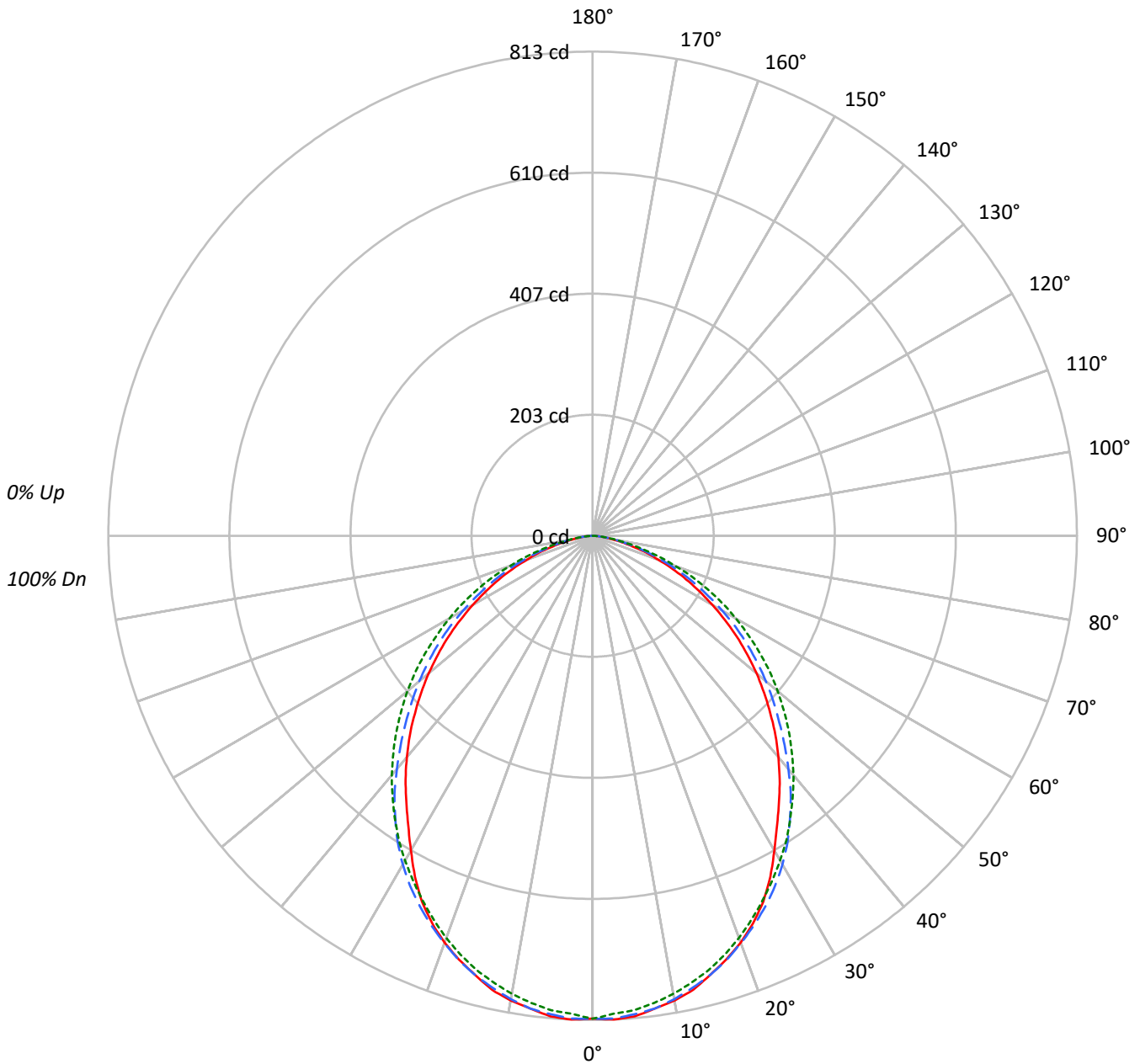
Lumens per Lamp: N/A  
Luminaire Lumens: 1875.0 lumens  
Efficiency: N/A  
Efficacy: 80.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
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°	4364	4364	4364
5°	4376	4357	4320
10°	4329	4317	4268
15°	4252	4252	4204
20°	4163	4168	4115
25°	4026	4075	4011
30°	3791	3961	3913
35°	3582	3797	3803
40°	3407	3592	3686
45°	3213	3374	3547
50°	3008	3179	3396
55°	2774	2959	3213
60°	2498	2700	2988
65°	2206	2401	2718
70°	1838	2044	2308
75°	1445	1632	1807
80°	1032	1150	1274
85°	673	673	636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.3	4.1
10°-20°	214.5	11.4
20°-30°	313.4	16.7
30°-40°	355.8	19.0
40°-50°	343.4	18.3
50°-60°	283.3	15.1
60°-70°	188.7	10.1
70°-80°	84.4	4.5
80°-90°	15.1	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°	604.3	32.2
0°-40°	960.0	51.2
0°-60°	1586.8	84.6
0°-90°	1875.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1875.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	811	811	811	811	811	
5°	810	810	806	802	800	77
15°	763	765	763	760	754	215
25°	678	683	686	681	675	310
35°	545	553	578	581	579	342
45°	422	429	443	464	466	326
55°	296	301	315	333	342	264
65°	173	178	188	202	213	172
75°	70	73	78	82	87	76
85°	11	11	11	10	10	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	810.9	810.9	810.9	810.9	810.9
2.5°	813.1	813.4	811.5	806.5	803.4
5°	810.0	809.6	806.5	802.2	799.7
7.5°	800.9	801.5	800.6	794.4	791.0
10°	792.2	792.5	790.0	785.0	781.0
12.5°	781.0	780.7	777.2	774.8	768.2
15°	763.2	765.1	763.2	759.8	754.5
17.5°	746.1	746.1	747.3	741.4	737.4
20°	726.8	727.7	727.7	723.0	718.4
22.5°	704.3	707.2	708.1	703.1	697.5
25°	677.9	683.2	686.3	681.3	675.4
27.5°	645.8	653.9	663.2	659.5	652.9
30°	610.0	621.8	637.4	634.3	629.6
32.5°	576.0	587.8	609.3	608.1	605.6
35°	545.2	552.6	577.9	581.0	578.8
37.5°	515.9	522.7	546.4	553.6	551.7
40°	485.0	492.5	511.2	524.0	524.6
42.5°	454.5	461.7	476.9	495.3	495.3
45°	422.1	429.3	443.3	463.5	466.0
47.5°	390.3	397.8	411.5	431.8	435.8
50°	359.2	366.0	379.7	399.4	405.6
52.5°	326.8	334.3	347.7	365.7	374.8
55°	295.6	300.6	315.3	332.7	342.4
57.5°	263.2	267.9	284.4	299.4	309.3
60°	232.1	238.0	250.8	266.0	277.6
62.5°	202.2	208.4	219.3	232.7	245.8
65°	173.2	177.9	188.5	201.9	213.4
67.5°	145.2	149.2	159.8	169.2	181.3
70°	116.8	122.1	129.9	138.9	146.7
72.5°	94.1	96.3	102.8	109.3	117.4
75°	69.5	73.2	78.5	82.2	86.9
77.5°	49.8	52.0	55.1	58.3	62.6
80°	33.3	34.3	37.1	37.7	41.1
82.5°	20.2	20.9	21.5	21.8	23.1
85°	10.9	10.9	10.9	10.3	10.3
87.5°	6.2	6.2	5.3	4.4	3.1
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)