

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: P554978

Luminaire Tested: **FUSL-12-2-LD4-2LO-35-UNV-93-85-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: P554978  
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-35-UNV-93-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

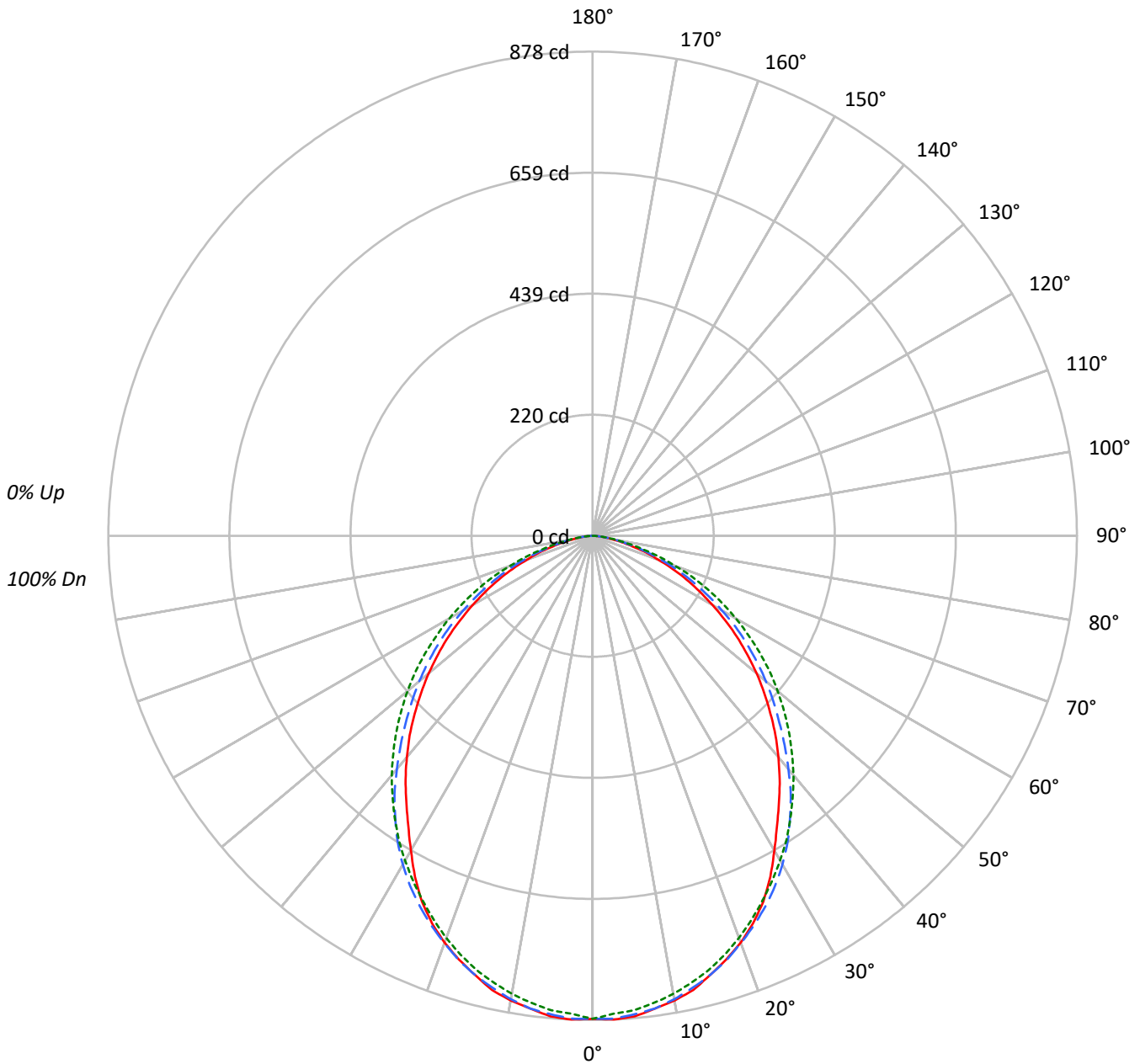
Lumens per Lamp: N/A  
Luminaire Lumens: 2025.0 lumens  
Efficiency: N/A  
Efficacy: 86.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4714	4714	4714
5°	4726	4706	4666
10°	4676	4663	4610
15°	4593	4593	4540
20°	4495	4501	4443
25°	4347	4401	4331
30°	4094	4278	4226
35°	3869	4100	4107
40°	3680	3879	3981
45°	3470	3644	3831
50°	3248	3434	3667
55°	2996	3195	3470
60°	2697	2915	3227
65°	2383	2592	2935
70°	1986	2208	2494
75°	1560	1763	1953
80°	1116	1240	1376
85°	729	729	685



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.5	4.1
10°-20°	231.6	11.4
20°-30°	338.5	16.7
30°-40°	384.2	19.0
40°-50°	370.9	18.3
50°-60°	306.0	15.1
60°-70°	203.8	10.1
70°-80°	91.2	4.5
80°-90°	16.3	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°	652.6	32.2
0°-40°	1036.8	51.2
0°-60°	1713.7	84.6
0°-90°	2025.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2025.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	876	876	876	876	876	
5°	875	874	871	866	864	83
15°	824	826	824	821	815	232
25°	732	738	741	736	729	335
35°	589	597	624	628	625	369
45°	456	464	479	501	503	352
55°	319	325	340	359	370	285
65°	187	192	204	218	230	186
75°	75	79	85	89	94	82
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	875.8	875.8	875.8	875.8	875.8
2.5°	878.1	878.5	876.4	871.1	867.7
5°	874.8	874.4	871.1	866.3	863.6
7.5°	865.0	865.7	864.7	857.9	854.2
10°	855.6	855.9	853.2	847.8	843.5
12.5°	843.5	843.1	839.4	836.7	829.7
15°	824.3	826.3	824.3	820.6	814.9
17.5°	805.8	805.8	807.1	800.7	796.4
20°	784.9	785.9	785.9	780.9	775.8
22.5°	760.7	763.7	764.7	759.4	753.3
25°	732.1	737.8	741.2	735.8	729.4
27.5°	697.4	706.2	716.3	712.2	705.2
30°	658.8	671.5	688.4	685.0	680.0
32.5°	622.1	634.9	658.1	656.7	654.0
35°	588.8	596.8	624.1	627.5	625.1
37.5°	557.1	564.6	590.1	597.9	595.8
40°	523.8	531.9	552.1	565.9	566.6
42.5°	490.9	498.6	515.1	534.9	534.9
45°	455.9	463.6	478.8	500.6	503.3
47.5°	421.6	429.6	444.4	466.3	470.7
50°	387.9	395.3	410.1	431.3	438.0
52.5°	352.9	361.0	375.5	395.0	404.7
55°	319.3	324.7	340.5	359.3	369.8
57.5°	284.3	289.3	307.2	323.3	334.1
60°	250.6	257.0	270.8	287.3	299.8
62.5°	218.4	225.1	236.9	251.3	265.5
65°	187.1	192.1	203.5	218.0	230.5
67.5°	156.8	161.2	172.6	182.7	195.8
70°	126.2	131.9	140.3	150.1	158.5
72.5°	101.6	104.0	111.0	118.1	126.8
75°	75.0	79.1	84.8	88.8	93.9
77.5°	53.8	56.2	59.6	62.9	67.6
80°	36.0	37.0	40.0	40.7	44.4
82.5°	21.9	22.5	23.2	23.6	24.9
85°	11.8	11.8	11.8	11.1	11.1
87.5°	6.7	6.7	5.7	4.7	3.4
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)