

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: P554866

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-80-85-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: P554866  
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-80-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

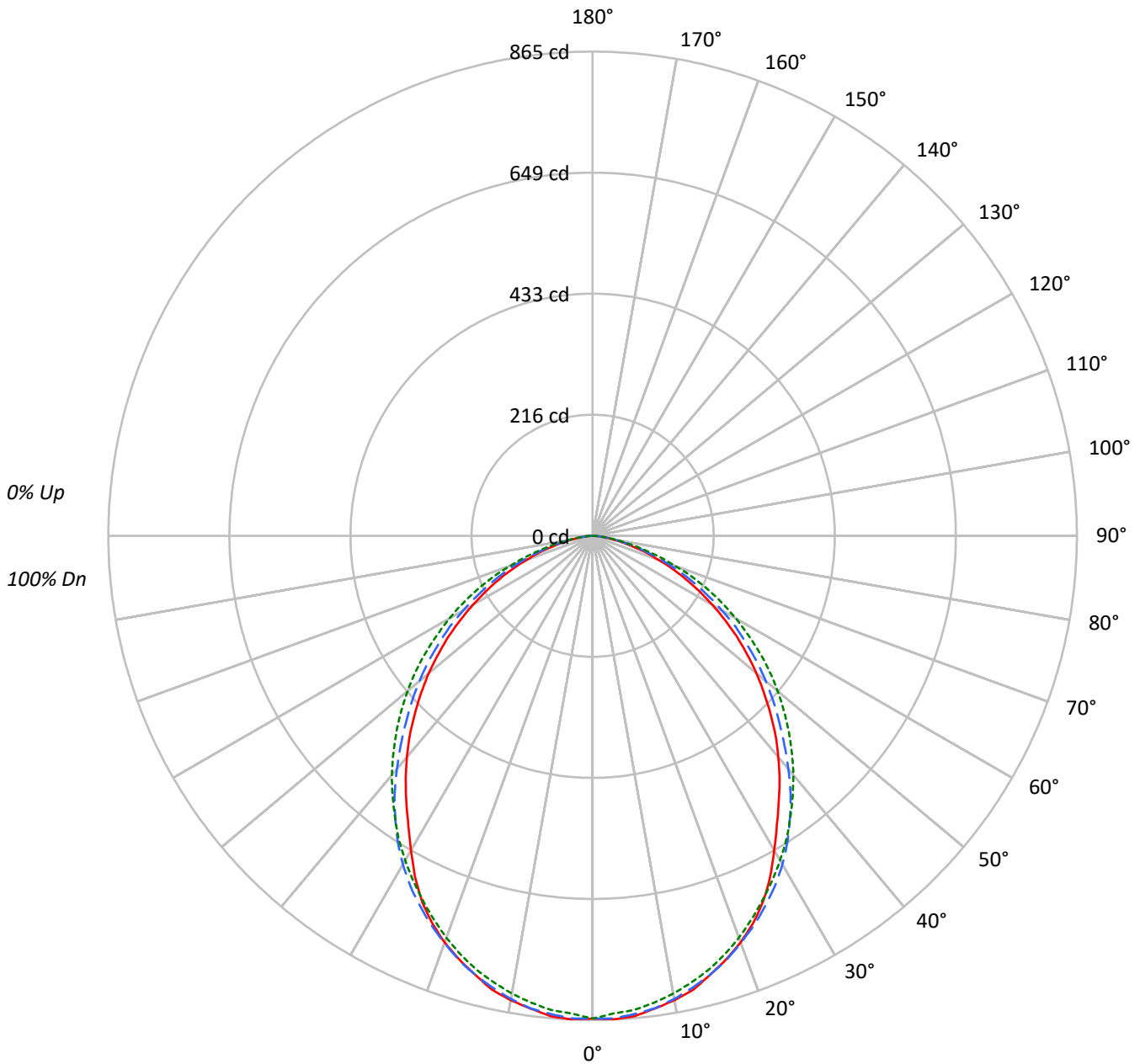
Lumens per Lamp: N/A  
Luminaire Lumens: 1994.0 lumens  
Efficiency: N/A  
Efficacy: 85.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (Ain): 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°	4641	4641	4641
5°	4654	4634	4594
10°	4604	4592	4539
15°	4523	4523	4471
20°	4427	4432	4376
25°	4281	4334	4265
30°	4031	4212	4161
35°	3809	4037	4044
40°	3624	3820	3920
45°	3417	3588	3772
50°	3198	3381	3611
55°	2950	3146	3416
60°	2657	2871	3178
65°	2346	2552	2890
70°	1954	2173	2455
75°	1537	1736	1921
80°	1097	1221	1354
85°	716	716	673



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.2	4.1
10°-20°	228.1	11.4
20°-30°	333.3	16.7
30°-40°	378.4	19.0
40°-50°	365.2	18.3
50°-60°	301.3	15.1
60°-70°	200.6	10.1
70°-80°	89.8	4.5
80°-90°	16.1	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°	642.6	32.2
0°-40°	1021.0	51.2
0°-60°	1687.5	84.6
0°-90°	1994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1994.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	862	862	862	862	862	
5°	861	861	858	853	850	82
15°	812	814	812	808	802	229
25°	721	726	730	724	718	330
35°	580	588	614	618	616	363
45°	449	456	471	493	496	346
55°	314	320	335	354	364	281
65°	184	189	200	215	227	183
75°	74	78	84	88	92	81
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°	862.4	862.4	862.4	862.4	862.4
2.5°	864.7	865.0	863.0	857.7	854.4
5°	861.4	861.0	857.7	853.1	850.4
7.5°	851.8	852.4	851.4	844.8	841.2
10°	842.5	842.8	840.2	834.9	830.5
12.5°	830.5	830.2	826.6	823.9	817.0
15°	811.7	813.7	811.7	808.0	802.4
17.5°	793.4	793.4	794.8	788.5	784.2
20°	772.9	773.9	773.9	768.9	764.0
22.5°	749.1	752.0	753.0	747.7	741.8
25°	720.9	726.5	729.8	724.5	718.2
27.5°	686.8	695.4	705.3	701.3	694.4
30°	648.7	661.3	677.8	674.5	669.5
32.5°	612.6	625.1	648.0	646.7	644.0
35°	579.8	587.7	614.5	617.9	615.5
37.5°	548.6	555.9	581.1	588.7	586.7
40°	515.8	523.8	543.7	557.2	557.9
42.5°	483.4	491.0	507.2	526.8	526.8
45°	448.9	456.5	471.4	493.0	495.6
47.5°	415.1	423.1	437.6	459.2	463.5
50°	382.0	389.3	403.8	424.7	431.3
52.5°	347.5	355.5	369.7	388.9	398.5
55°	314.4	319.7	335.3	353.8	364.1
57.5°	279.9	284.9	302.5	318.4	329.0
60°	246.8	253.1	266.7	282.9	295.2
62.5°	215.0	221.6	233.2	247.5	261.4
65°	184.2	189.2	200.4	214.7	226.9
67.5°	154.4	158.7	170.0	179.9	192.8
70°	124.2	129.9	138.1	147.8	156.0
72.5°	100.1	102.4	109.3	116.3	124.9
75°	73.9	77.9	83.5	87.5	92.4
77.5°	53.0	55.3	58.6	62.0	66.6
80°	35.4	36.4	39.4	40.1	43.7
82.5°	21.5	22.2	22.9	23.2	24.5
85°	11.6	11.6	11.6	10.9	10.9
87.5°	6.6	6.6	5.6	4.6	3.3
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)