

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: P554096

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-80-84-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: P554096  
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-LD4-1LO-30-UNV-80-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

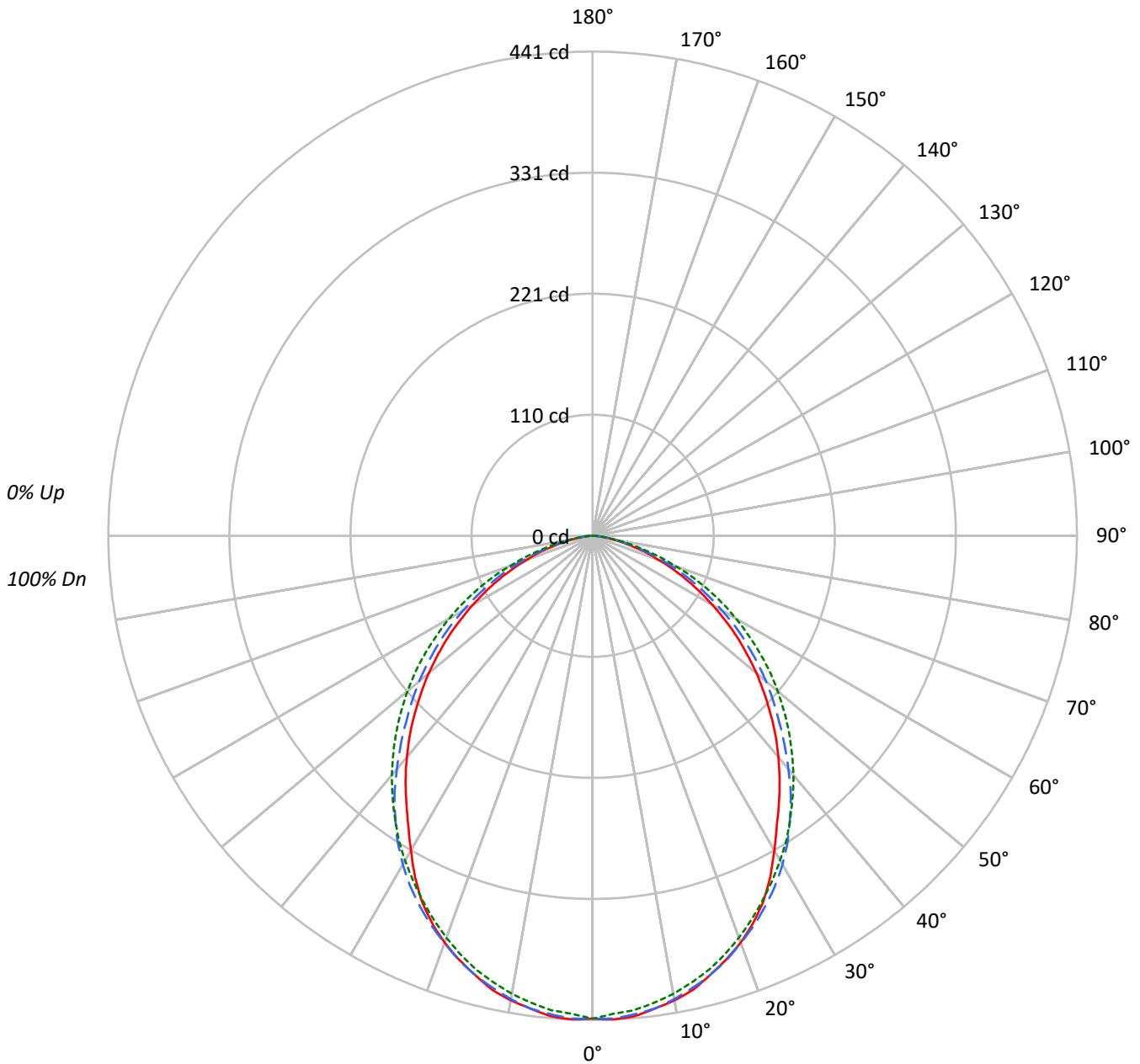
Lumens per Lamp: N/A  
Luminaire Lumens: 1017.0 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
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°	2367	2367	2367
5°	2373	2364	2343
10°	2348	2342	2315
15°	2307	2307	2280
20°	2258	2261	2231
25°	2184	2210	2175
30°	2056	2148	2122
35°	1943	2059	2062
40°	1848	1948	1999
45°	1743	1830	1924
50°	1631	1725	1842
55°	1505	1605	1742
60°	1355	1464	1621
65°	1196	1301	1473
70°	998	1109	1253
75°	784	886	979
80°	561	623	691
85°	364	364	346



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.4	4.1
10°-20°	116.3	11.4
20°-30°	170.0	16.7
30°-40°	193.0	19.0
40°-50°	186.3	18.3
50°-60°	153.7	15.1
60°-70°	102.3	10.1
70°-80°	45.8	4.5
80°-90°	8.2	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°	327.8	32.2
0°-40°	520.7	51.2
0°-60°	860.7	84.6
0°-90°	1017.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1017.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	440	440	440	440	440	
5°	439	439	438	435	434	42
15°	414	415	414	412	409	117
25°	368	370	372	370	366	168
35°	296	300	313	315	314	185
45°	229	233	240	251	253	177
55°	160	163	171	180	186	143
65°	94	96	102	110	116	93
75°	38	40	43	45	47	41
85°	6	6	6	6	6	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	439.8	439.8	439.8	439.8	439.8
2.5°	441.0	441.2	440.2	437.5	435.8
5°	439.3	439.2	437.5	435.1	433.7
7.5°	434.4	434.8	434.3	430.9	429.0
10°	429.7	429.9	428.5	425.8	423.6
12.5°	423.6	423.4	421.6	420.2	416.7
15°	414.0	415.0	414.0	412.1	409.2
17.5°	404.7	404.7	405.4	402.1	399.9
20°	394.2	394.7	394.7	392.2	389.6
22.5°	382.0	383.6	384.1	381.4	378.3
25°	367.7	370.5	372.2	369.5	366.3
27.5°	350.3	354.7	359.7	357.7	354.2
30°	330.8	337.3	345.7	344.0	341.5
32.5°	312.4	318.8	330.5	329.8	328.5
35°	295.7	299.8	313.4	315.1	313.9
37.5°	279.8	283.5	296.4	300.3	299.2
40°	263.1	267.1	277.3	284.2	284.5
42.5°	246.5	250.4	258.7	268.7	268.7
45°	229.0	232.8	240.4	251.4	252.8
47.5°	211.7	215.8	223.2	234.2	236.4
50°	194.8	198.5	206.0	216.6	220.0
52.5°	177.2	181.3	188.6	198.4	203.3
55°	160.4	163.1	171.0	180.5	185.7
57.5°	142.8	145.3	154.3	162.4	167.8
60°	125.9	129.1	136.0	144.3	150.6
62.5°	109.7	113.0	119.0	126.2	133.3
65°	93.9	96.5	102.2	109.5	115.7
67.5°	78.7	80.9	86.7	91.8	98.3
70°	63.4	66.2	70.5	75.4	79.6
72.5°	51.0	52.2	55.8	59.3	63.7
75°	37.7	39.7	42.6	44.6	47.1
77.5°	27.0	28.2	29.9	31.6	34.0
80°	18.1	18.6	20.1	20.4	22.3
82.5°	11.0	11.3	11.7	11.8	12.5
85°	5.9	5.9	5.9	5.6	5.6
87.5°	3.4	3.4	2.9	2.4	1.7
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)