

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: P554161

Luminaire Tested: **FUSL-12-2-LD4-1LO-35-UNV-80-84-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: P554161  
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-35-UNV-80-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

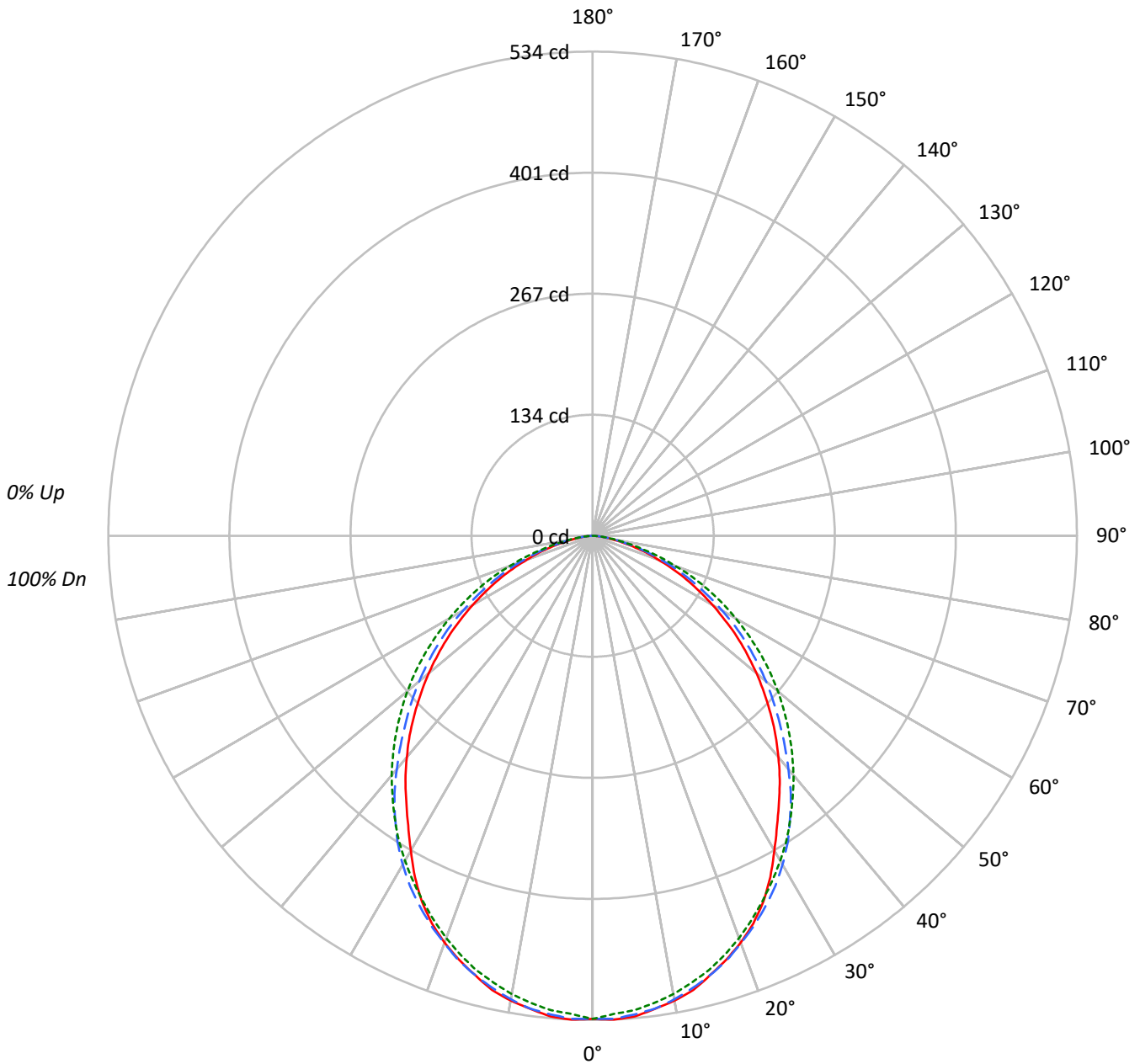
Lumens per Lamp: N/A  
Luminaire Lumens: 1232.0 lumens  
Efficiency: N/A  
Efficacy: 105.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
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°	2868	2868	2868
5°	2875	2863	2838
10°	2845	2837	2805
15°	2794	2794	2763
20°	2735	2739	2703
25°	2645	2678	2635
30°	2491	2603	2571
35°	2353	2495	2499
40°	2239	2360	2422
45°	2111	2217	2331
50°	1976	2089	2231
55°	1823	1943	2111
60°	1641	1774	1963
65°	1449	1577	1785
70°	1209	1344	1517
75°	948	1073	1187
80°	679	756	837
85°	445	445	420



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.2	4.1
10°-20°	140.9	11.4
20°-30°	205.9	16.7
30°-40°	233.8	19.0
40°-50°	225.7	18.3
50°-60°	186.2	15.1
60°-70°	124.0	10.1
70°-80°	55.5	4.5
80°-90°	9.9	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°	397.0	32.2
0°-40°	630.8	51.2
0°-60°	1042.6	84.6
0°-90°	1232.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1232.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	533	533	533	533	533	
5°	532	532	530	527	525	50
15°	502	503	502	499	496	141
25°	445	449	451	448	444	204
35°	358	363	380	382	380	224
45°	277	282	291	305	306	214
55°	194	198	207	219	225	173
65°	114	117	124	133	140	113
75°	46	48	52	54	57	50
85°	7	7	7	7	7	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	532.8	532.8	532.8	532.8	532.8
2.5°	534.2	534.4	533.2	529.9	527.9
5°	532.2	532.0	529.9	527.1	525.4
7.5°	526.3	526.7	526.1	522.0	519.7
10°	520.5	520.7	519.1	515.8	513.2
12.5°	513.2	513.0	510.7	509.1	504.8
15°	501.5	502.7	501.5	499.2	495.8
17.5°	490.2	490.2	491.1	487.2	484.5
20°	477.5	478.2	478.2	475.1	472.0
22.5°	462.8	464.6	465.3	462.0	458.3
25°	445.4	448.9	450.9	447.7	443.8
27.5°	424.3	429.6	435.8	433.3	429.0
30°	400.8	408.6	418.8	416.7	413.7
32.5°	378.5	386.3	400.4	399.6	397.9
35°	358.2	363.1	379.7	381.7	380.3
37.5°	339.0	343.5	359.0	363.7	362.5
40°	318.7	323.6	335.9	344.3	344.7
42.5°	298.6	303.4	313.4	325.5	325.5
45°	277.4	282.1	291.3	304.6	306.2
47.5°	256.5	261.4	270.4	283.7	286.4
50°	236.0	240.5	249.5	262.4	266.5
52.5°	214.7	219.6	228.4	240.3	246.2
55°	194.3	197.5	207.1	218.6	225.0
57.5°	173.0	176.0	186.9	196.7	203.3
60°	152.5	156.4	164.8	174.8	182.4
62.5°	132.8	136.9	144.1	152.9	161.5
65°	113.8	116.9	123.8	132.6	140.2
67.5°	95.4	98.0	105.0	111.1	119.1
70°	76.8	80.2	85.4	91.3	96.4
72.5°	61.8	63.2	67.5	71.8	77.2
75°	45.6	48.1	51.6	54.0	57.1
77.5°	32.8	34.2	36.2	38.3	41.1
80°	21.9	22.5	24.4	24.8	27.0
82.5°	13.3	13.7	14.1	14.3	15.1
85°	7.2	7.2	7.2	6.8	6.8
87.5°	4.1	4.1	3.5	2.9	2.0
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)