

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: P554033

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-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: P554033  
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-LD4-1HI-50-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 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

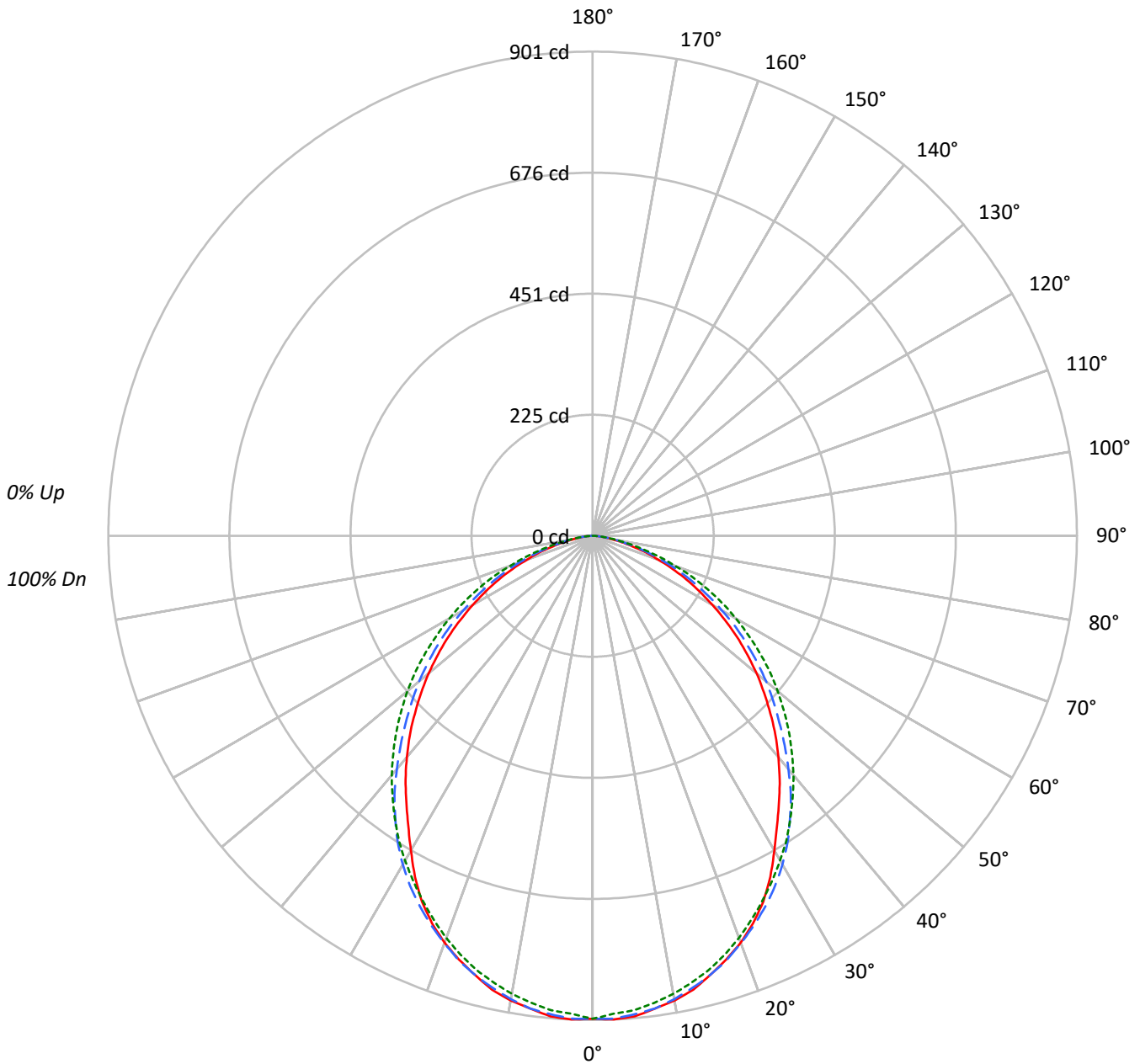
Lumens per Lamp: N/A  
Luminaire Lumens: 2078.0 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
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°	4837	4837	4837
5°	4849	4829	4788
10°	4798	4785	4730
15°	4713	4713	4659
20°	4613	4619	4560
25°	4461	4517	4445
30°	4201	4390	4336
35°	3970	4208	4215
40°	3777	3981	4085
45°	3561	3739	3931
50°	3333	3524	3764
55°	3074	3278	3560
60°	2768	2991	3311
65°	2445	2660	3012
70°	2038	2266	2559
75°	1601	1809	2002
80°	1144	1274	1413
85°	747	747	704



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.6	4.1
10°-20°	237.7	11.4
20°-30°	347.4	16.7
30°-40°	394.3	19.0
40°-50°	380.6	18.3
50°-60°	314.0	15.1
60°-70°	209.1	10.1
70°-80°	93.6	4.5
80°-90°	16.7	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°	669.7	32.2
0°-40°	1064.0	51.2
0°-60°	1758.6	84.6
0°-90°	2078.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2078.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	899	899	899	899	899	
5°	898	897	894	889	886	85
15°	846	848	846	842	836	238
25°	751	757	761	755	748	344
35°	604	612	640	644	642	379
45°	468	476	491	514	516	361
55°	328	333	349	369	379	292
65°	192	197	209	224	236	190
75°	77	81	87	91	96	84
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°	898.7	898.7	898.7	898.7	898.7
2.5°	901.1	901.4	899.4	893.8	890.4
5°	897.6	897.3	893.8	889.0	886.3
7.5°	887.6	888.3	887.3	880.4	876.6
10°	878.0	878.3	875.5	870.0	865.5
12.5°	865.5	865.2	861.4	858.6	851.4
15°	845.9	847.9	845.9	842.1	836.2
17.5°	826.9	826.9	828.3	821.7	817.2
20°	805.5	806.5	806.5	801.3	796.1
22.5°	780.6	783.7	784.7	779.2	773.0
25°	751.3	757.1	760.6	755.1	748.5
27.5°	715.7	724.7	735.0	730.9	723.6
30°	676.0	689.1	706.4	702.9	697.7
32.5°	638.4	651.5	675.3	673.9	671.2
35°	604.2	612.5	640.4	643.9	641.5
37.5°	571.7	579.3	605.6	613.5	611.4
40°	537.6	545.8	566.6	580.7	581.4
42.5°	503.7	511.7	528.6	548.9	548.9
45°	467.8	475.8	491.3	513.7	516.5
47.5°	432.6	440.9	456.1	478.5	483.0
50°	398.1	405.7	420.9	442.6	449.5
52.5°	362.2	370.5	385.3	405.3	415.3
55°	327.6	333.2	349.4	368.7	379.4
57.5°	291.7	296.9	315.2	331.8	342.8
60°	257.2	263.8	277.9	294.8	307.6
62.5°	224.1	231.0	243.1	257.9	272.4
65°	192.0	197.1	208.9	223.7	236.5
67.5°	160.9	165.4	177.1	187.5	200.9
70°	129.5	135.3	144.0	154.0	162.6
72.5°	104.3	106.7	113.9	121.2	130.2
75°	77.0	81.1	87.0	91.1	96.3
77.5°	55.2	57.7	61.1	64.6	69.4
80°	36.9	38.0	41.1	41.8	45.6
82.5°	22.4	23.1	23.8	24.2	25.5
85°	12.1	12.1	12.1	11.4	11.4
87.5°	6.9	6.9	5.9	4.8	3.5
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)