

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: P553977

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-80-88-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: P553977  
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-40-UNV-80-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

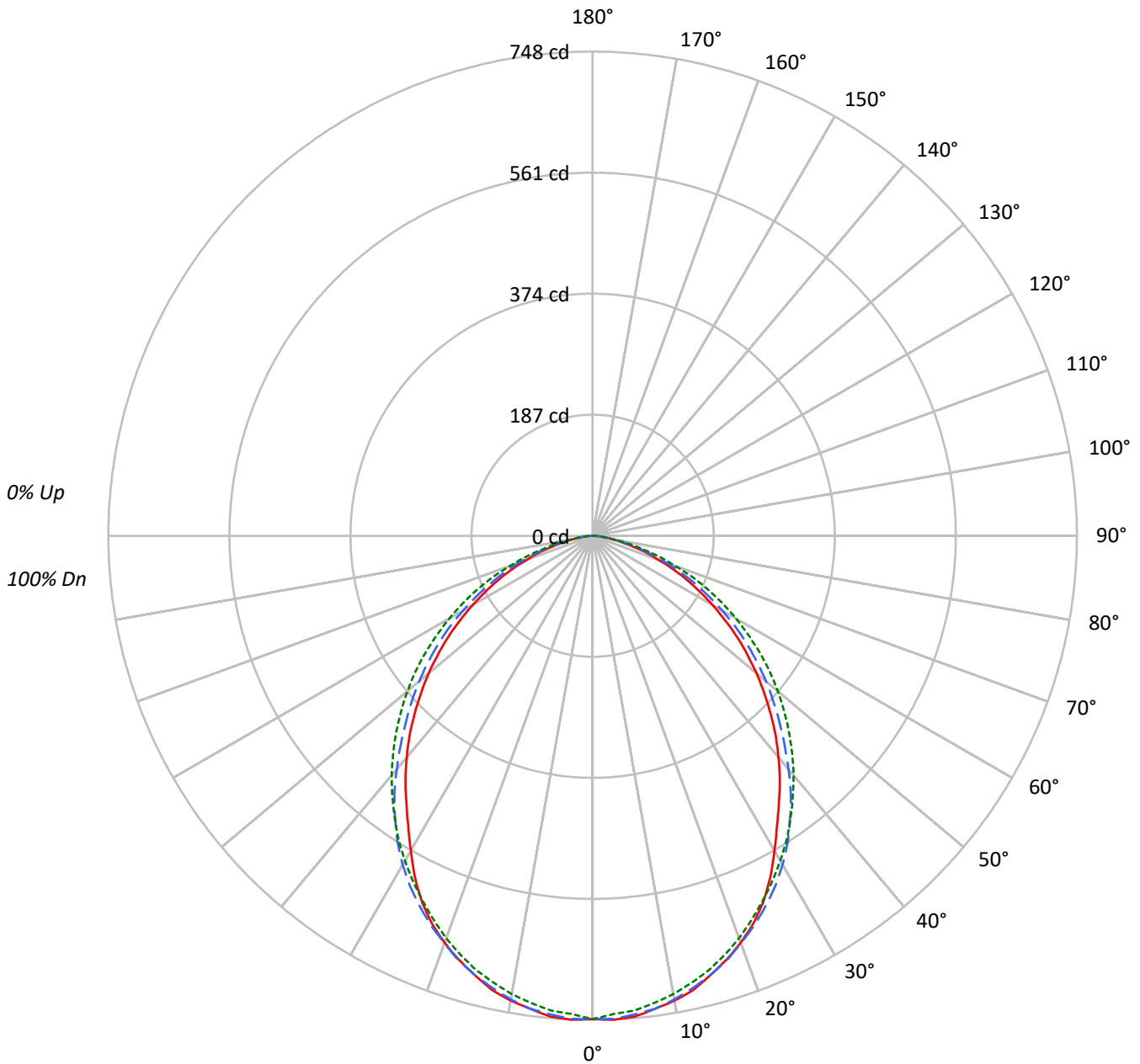
Lumens per Lamp: N/A  
Luminaire Lumens: 1726.0 lumens  
Efficiency: N/A  
Efficacy: 79.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
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°	4018	4018	4018
5°	4028	4011	3977
10°	3985	3974	3929
15°	3915	3915	3870
20°	3832	3837	3788
25°	3706	3751	3692
30°	3489	3646	3602
35°	3297	3495	3501
40°	3137	3306	3393
45°	2958	3106	3265
50°	2768	2927	3126
55°	2553	2723	2958
60°	2299	2484	2750
65°	2030	2209	2501
70°	1692	1882	2126
75°	1329	1503	1664
80°	951	1057	1175
85°	618	618	587



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.3	4.1
10°-20°	197.4	11.4
20°-30°	288.5	16.7
30°-40°	327.5	19.0
40°-50°	316.2	18.3
50°-60°	260.8	15.1
60°-70°	173.7	10.1
70°-80°	77.7	4.5
80°-90°	13.9	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°	556.2	32.2
0°-40°	883.7	51.2
0°-60°	1460.7	84.6
0°-90°	1726.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1726.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	746	745	742	738	736	71
15°	703	704	703	699	694	198
25°	624	629	632	627	622	286
35°	502	509	532	535	533	314
45°	389	395	408	427	429	300
55°	272	277	290	306	315	243
65°	159	164	174	186	196	158
75°	64	67	72	76	80	70
85°	10	10	10	10	10	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	746.5	746.5	746.5	746.5	746.5
2.5°	748.5	748.7	747.0	742.4	739.6
5°	745.6	745.3	742.4	738.4	736.1
7.5°	737.3	737.8	737.0	731.3	728.1
10°	729.2	729.5	727.2	722.6	718.9
12.5°	718.9	718.6	715.5	713.2	707.2
15°	702.6	704.3	702.6	699.4	694.5
17.5°	686.8	686.8	688.0	682.5	678.8
20°	669.0	669.9	669.9	665.6	661.3
22.5°	648.4	651.0	651.8	647.2	642.1
25°	624.0	628.9	631.7	627.2	621.7
27.5°	594.5	601.9	610.5	607.1	601.1
30°	561.5	572.4	586.7	583.9	579.6
32.5°	530.2	541.1	560.9	559.8	557.5
35°	501.8	508.7	531.9	534.8	532.8
37.5°	474.9	481.2	503.0	509.6	507.9
40°	446.5	453.4	470.6	482.3	482.9
42.5°	418.4	425.0	439.0	456.0	456.0
45°	388.6	395.2	408.1	426.7	429.0
47.5°	359.3	366.2	378.8	397.5	401.2
50°	330.6	336.9	349.6	367.6	373.4
52.5°	300.8	307.7	320.0	336.7	345.0
55°	272.1	276.7	290.2	306.3	315.2
57.5°	242.3	246.6	261.8	275.6	284.8
60°	213.6	219.1	230.8	244.9	255.5
62.5°	186.1	191.8	201.9	214.2	226.3
65°	159.4	163.7	173.5	185.8	196.4
67.5°	133.6	137.4	147.1	155.7	166.9
70°	107.5	112.4	119.6	127.9	135.1
72.5°	86.6	88.6	94.6	100.7	108.1
75°	63.9	67.4	72.3	75.7	80.0
77.5°	45.9	47.9	50.8	53.6	57.6
80°	30.7	31.5	34.1	34.7	37.9
82.5°	18.6	19.2	19.8	20.1	21.2
85°	10.0	10.0	10.0	9.5	9.5
87.5°	5.7	5.7	4.9	4.0	2.9
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)