

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: P553973

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-80-86-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: P553973  
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-80-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

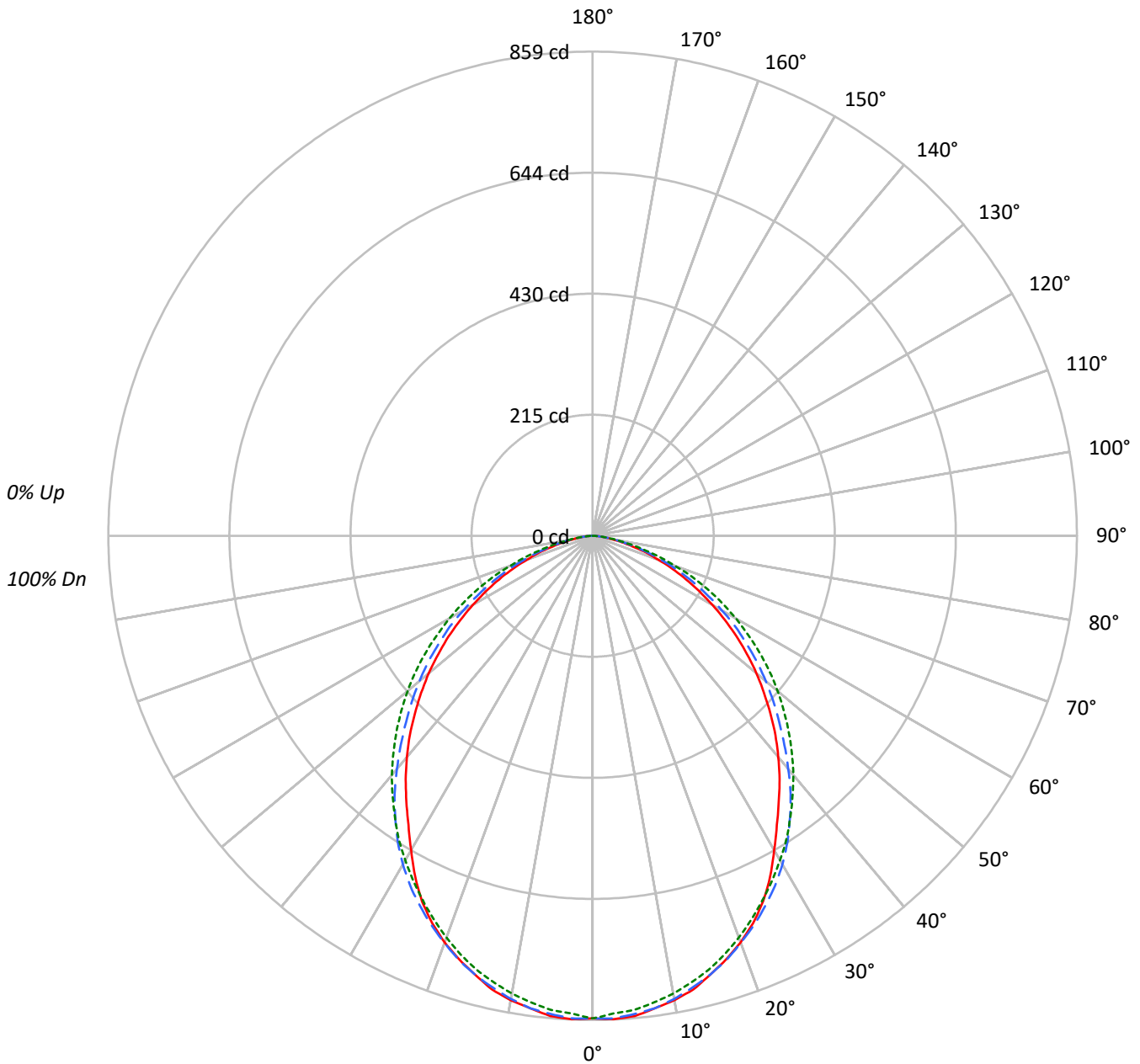
Lumens per Lamp: N/A  
Luminaire Lumens: 1980.0 lumens  
Efficiency: N/A  
Efficacy: 91.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4609	4609	4609
5°	4621	4601	4562
10°	4572	4559	4507
15°	4491	4491	4440
20°	4396	4401	4345
25°	4251	4304	4235
30°	4003	4183	4131
35°	3782	4009	4016
40°	3599	3792	3892
45°	3392	3563	3745
50°	3176	3358	3586
55°	2929	3124	3392
60°	2638	2850	3155
65°	2329	2534	2869
70°	1942	2159	2437
75°	1526	1724	1909
80°	1091	1212	1345
85°	710	710	673



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.6	4.1
10°-20°	226.5	11.4
20°-30°	331.0	16.7
30°-40°	375.7	19.0
40°-50°	362.7	18.3
50°-60°	299.2	15.1
60°-70°	199.2	10.1
70°-80°	89.2	4.5
80°-90°	15.9	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°	638.1	32.2
0°-40°	1013.8	51.2
0°-60°	1675.6	84.6
0°-90°	1980.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1980.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	856	856	856	856	856	
5°	855	855	852	847	844	81
15°	806	808	806	802	797	227
25°	716	721	725	719	713	328
35°	576	584	610	614	611	361
45°	446	453	468	490	492	344
55°	312	318	333	351	362	279
65°	183	188	199	213	225	181
75°	73	77	83	87	92	80
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°	856.3	856.3	856.3	856.3	856.3
2.5°	858.6	858.9	857.0	851.7	848.4
5°	855.3	855.0	851.7	847.1	844.5
7.5°	845.8	846.4	845.4	838.9	835.2
10°	836.6	836.9	834.3	829.0	824.7
12.5°	824.7	824.4	820.8	818.1	811.2
15°	806.0	807.9	806.0	802.3	796.8
17.5°	787.9	787.9	789.2	782.9	778.7
20°	767.5	768.5	768.5	763.5	758.6
22.5°	743.8	746.8	747.7	742.5	736.6
25°	715.8	721.4	724.7	719.4	713.2
27.5°	681.9	690.5	700.4	696.4	689.5
30°	644.1	656.6	673.1	669.8	664.8
32.5°	608.3	620.8	643.5	642.1	639.5
35°	575.7	583.6	610.2	613.5	611.2
37.5°	544.8	552.0	577.0	584.6	582.6
40°	512.2	520.1	539.8	553.3	554.0
42.5°	480.0	487.5	503.6	523.1	523.1
45°	445.7	453.3	468.1	489.5	492.1
47.5°	412.2	420.1	434.6	455.9	460.2
50°	379.3	386.5	401.0	421.7	428.3
52.5°	345.1	353.0	367.1	386.2	395.7
55°	312.2	317.5	332.9	351.3	361.5
57.5°	278.0	282.9	300.3	316.1	326.7
60°	245.1	251.3	264.8	280.9	293.1
62.5°	213.5	220.1	231.6	245.7	259.6
65°	182.9	187.8	199.0	213.2	225.3
67.5°	153.3	157.6	168.8	178.6	191.5
70°	123.4	129.0	137.2	146.7	154.9
72.5°	99.3	101.7	108.6	115.5	124.0
75°	73.4	77.3	82.9	86.8	91.8
77.5°	52.6	54.9	58.2	61.5	66.1
80°	35.2	36.2	39.1	39.8	43.4
82.5°	21.4	22.0	22.7	23.0	24.3
85°	11.5	11.5	11.5	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)