

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: P554043

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-80-94-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: P554043  
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-80-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND  
5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

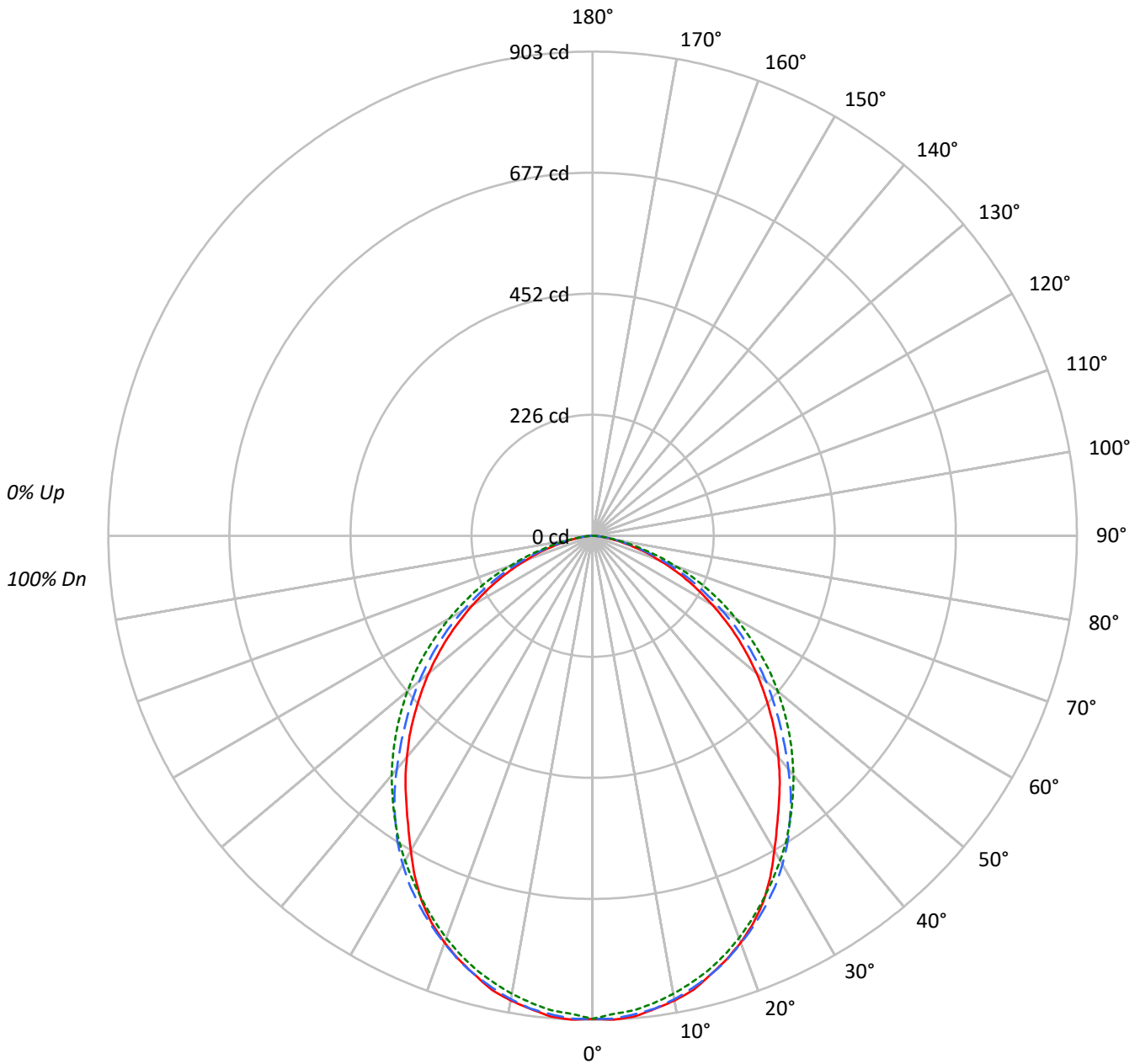
Lumens per Lamp: N/A  
Luminaire Lumens: 2083.0 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4848	4848	4848
5°	4861	4841	4800
10°	4810	4797	4741
15°	4724	4724	4670
20°	4624	4630	4571
25°	4472	4527	4456
30°	4211	4401	4346
35°	3979	4218	4225
40°	3785	3990	4095
45°	3569	3749	3940
50°	3341	3533	3773
55°	3081	3286	3568
60°	2775	2999	3320
65°	2450	2667	3019
70°	2043	2271	2565
75°	1605	1813	2009
80°	1147	1277	1416
85°	747	747	704



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.8	4.1
10°-20°	238.3	11.4
20°-30°	348.2	16.7
30°-40°	395.2	19.0
40°-50°	381.5	18.3
50°-60°	314.7	15.1
60°-70°	209.6	10.1
70°-80°	93.8	4.5
80°-90°	16.8	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°	671.3	32.2
0°-40°	1066.5	51.2
0°-60°	1762.8	84.6
0°-90°	2083.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2083.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	901	901	901	901	901	
5°	900	900	896	891	888	85
15°	848	850	848	844	838	239
25°	753	759	762	757	750	345
35°	606	614	642	645	643	379
45°	469	477	492	515	518	362
55°	328	334	350	370	380	293
65°	192	198	209	224	237	191
75°	77	81	87	91	97	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°	900.8	900.8	900.8	900.8	900.8
2.5°	903.3	903.6	901.5	896.0	892.5
5°	899.8	899.5	896.0	891.2	888.4
7.5°	889.8	890.5	889.4	882.5	878.7
10°	880.1	880.4	877.7	872.1	867.6
12.5°	867.6	867.3	863.5	860.7	853.4
15°	847.9	850.0	847.9	844.1	838.2
17.5°	828.9	828.9	830.2	823.7	819.2
20°	807.4	808.4	808.4	803.2	798.1
22.5°	782.5	785.6	786.6	781.1	774.9
25°	753.1	759.0	762.4	756.9	750.3
27.5°	717.4	726.4	736.8	732.6	725.4
30°	677.6	690.8	708.1	704.6	699.4
32.5°	639.9	653.1	676.9	675.5	672.8
35°	605.6	613.9	642.0	645.4	643.0
37.5°	573.1	580.7	607.0	615.0	612.9
40°	538.8	547.2	567.9	582.1	582.8
42.5°	504.9	512.9	529.8	550.3	550.3
45°	468.9	476.9	492.5	515.0	517.7
47.5°	433.6	441.9	457.2	479.7	484.2
50°	399.0	406.6	421.9	443.7	450.6
52.5°	363.0	371.3	386.2	406.3	416.3
55°	328.4	334.0	350.2	369.6	380.3
57.5°	292.4	297.6	316.0	332.6	343.7
60°	257.8	264.4	278.6	295.6	308.4
62.5°	224.6	231.5	243.6	258.5	273.1
65°	192.4	197.6	209.4	224.3	237.1
67.5°	161.3	165.8	177.5	187.9	201.4
70°	129.8	135.7	144.3	154.4	163.0
72.5°	104.5	106.9	114.2	121.5	130.5
75°	77.2	81.3	87.2	91.4	96.6
77.5°	55.4	57.8	61.3	64.7	69.6
80°	37.0	38.1	41.2	41.9	45.7
82.5°	22.5	23.2	23.9	24.2	25.6
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)