

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: P553979

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-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: P553979  
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-80-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND  
4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

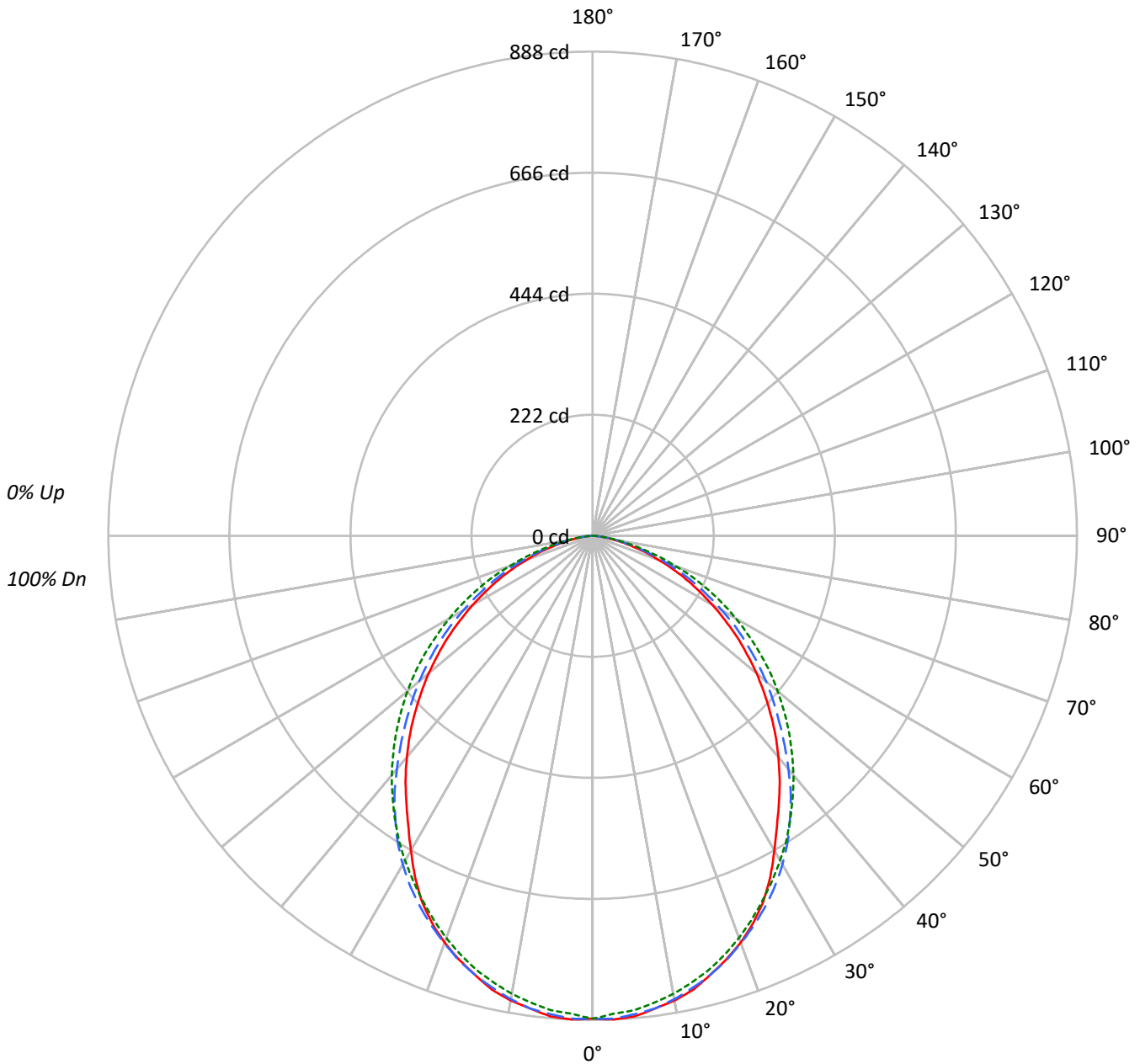
Lumens per Lamp: N/A  
Luminaire Lumens: 2048.0 lumens  
Efficiency: N/A  
Efficacy: 94.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4767	4767	4767
5°	4780	4759	4719
10°	4729	4716	4662
15°	4645	4645	4592
20°	4546	4553	4494
25°	4397	4451	4381
30°	4140	4327	4274
35°	3913	4147	4154
40°	3722	3923	4026
45°	3510	3685	3874
50°	3285	3473	3709
55°	3030	3231	3509
60°	2729	2948	3264
65°	2409	2622	2968
70°	2008	2233	2522
75°	1578	1782	1973
80°	1128	1255	1392
85°	735	735	692



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.4	4.1
10°-20°	234.3	11.4
20°-30°	342.3	16.7
30°-40°	388.6	19.0
40°-50°	375.1	18.3
50°-60°	309.5	15.1
60°-70°	206.1	10.1
70°-80°	92.2	4.5
80°-90°	16.5	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°	660.0	32.2
0°-40°	1048.6	51.2
0°-60°	1733.2	84.6
0°-90°	2048.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2048.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	886	886	886	886	886	
5°	885	884	881	876	874	84
15°	834	836	834	830	824	235
25°	740	746	750	744	738	339
35°	596	604	631	635	632	373
45°	461	469	484	506	509	356
55°	323	328	344	363	374	288
65°	189	194	206	220	233	188
75°	76	80	86	90	95	83
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°	885.7	885.7	885.7	885.7	885.7
2.5°	888.1	888.4	886.4	880.9	877.5
5°	884.7	884.3	880.9	876.2	873.5
7.5°	874.8	875.5	874.5	867.7	863.9
10°	865.3	865.6	862.9	857.5	853.0
12.5°	853.0	852.7	849.0	846.2	839.1
15°	833.6	835.7	833.6	829.9	824.1
17.5°	814.9	814.9	816.3	809.8	805.4
20°	793.8	794.9	794.9	789.8	784.6
22.5°	769.3	772.4	773.4	768.0	761.9
25°	740.4	746.2	749.6	744.2	737.7
27.5°	705.4	714.2	724.4	720.3	713.2
30°	666.2	679.2	696.2	692.8	687.7
32.5°	629.1	642.1	665.6	664.2	661.5
35°	595.5	603.6	631.2	634.6	632.2
37.5°	563.5	571.0	596.8	604.6	602.6
40°	529.8	538.0	558.4	572.3	573.0
42.5°	496.4	504.3	520.9	541.0	541.0
45°	461.1	468.9	484.2	506.3	509.0
47.5°	426.4	434.5	449.5	471.6	476.0
50°	392.3	399.8	414.8	436.2	443.0
52.5°	356.9	365.1	379.7	399.5	409.3
55°	322.9	328.4	344.3	363.4	374.0
57.5°	287.5	292.6	310.7	327.0	337.9
60°	253.5	260.0	273.9	290.6	303.2
62.5°	220.8	227.6	239.5	254.2	268.5
65°	189.2	194.3	205.9	220.5	233.1
67.5°	158.6	163.0	174.6	184.8	198.0
70°	127.6	133.4	141.9	151.8	160.3
72.5°	102.8	105.1	112.3	119.4	128.3
75°	75.9	80.0	85.7	89.8	94.9
77.5°	54.4	56.8	60.2	63.6	68.4
80°	36.4	37.4	40.5	41.2	44.9
82.5°	22.1	22.8	23.5	23.8	25.2
85°	11.9	11.9	11.9	11.2	11.2
87.5°	6.8	6.8	5.8	4.8	3.4
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)