

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: P554037

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-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: P554037  
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-80-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

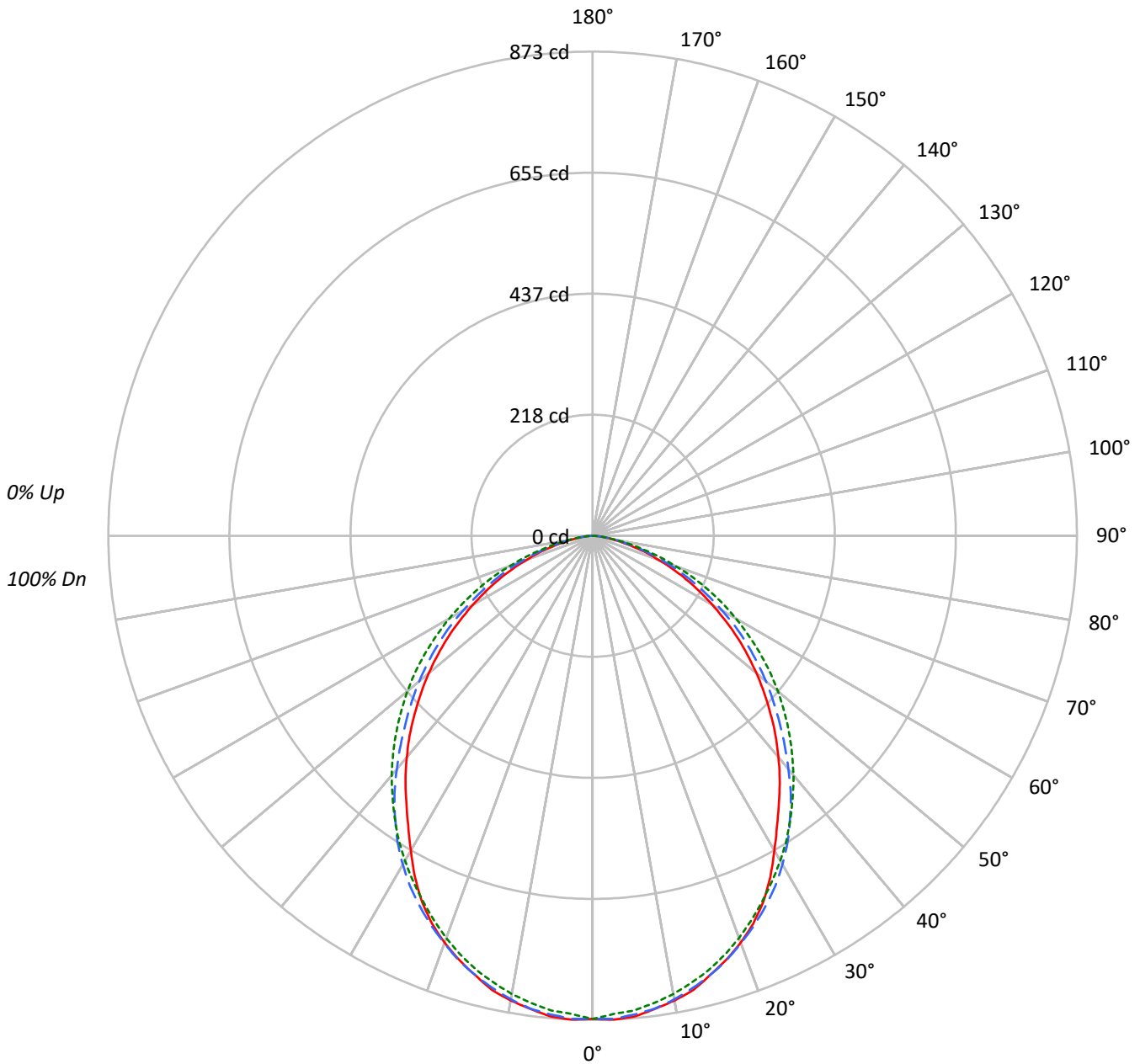
Lumens per Lamp: N/A  
Luminaire Lumens: 2014.0 lumens  
Efficiency: N/A  
Efficacy: 93.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
Input Voltage (V): NR  
Input Current (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°	4688	4688	4688
5°	4700	4680	4641
10°	4650	4638	4585
15°	4568	4568	4515
20°	4471	4477	4419
25°	4324	4378	4308
30°	4072	4254	4203
35°	3847	4078	4085
40°	3660	3858	3959
45°	3451	3624	3810
50°	3230	3415	3648
55°	2979	3177	3450
60°	2683	2900	3209
65°	2369	2578	2919
70°	1975	2195	2480
75°	1551	1753	1942
80°	1110	1234	1370
85°	722	722	679



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.0	4.1
10°-20°	230.4	11.4
20°-30°	336.7	16.7
30°-40°	382.2	19.0
40°-50°	368.9	18.3
50°-60°	304.3	15.1
60°-70°	202.7	10.1
70°-80°	90.7	4.5
80°-90°	16.2	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°	649.1	32.2
0°-40°	1031.2	51.2
0°-60°	1704.4	84.6
0°-90°	2014.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2014.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	871	871	871	871	871	
5°	870	870	866	862	859	82
15°	820	822	820	816	810	231
25°	728	734	737	732	725	333
35°	586	594	621	624	622	367
45°	453	461	476	498	501	350
55°	318	323	339	357	368	283
65°	186	191	202	217	229	184
75°	75	79	84	88	93	82
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°	871.0	871.0	871.0	871.0	871.0
2.5°	873.3	873.7	871.7	866.3	863.0
5°	870.0	869.7	866.3	861.6	859.0
7.5°	860.3	861.0	860.0	853.3	849.6
10°	850.9	851.3	848.6	843.2	838.9
12.5°	838.9	838.5	834.9	832.2	825.2
15°	819.8	821.8	819.8	816.1	810.4
17.5°	801.4	801.4	802.7	796.4	792.0
20°	780.7	781.7	781.7	776.6	771.6
22.5°	756.6	759.6	760.6	755.2	749.2
25°	728.1	733.8	737.2	731.8	725.4
27.5°	693.7	702.4	712.4	708.4	701.4
30°	655.2	667.9	684.6	681.3	676.3
32.5°	618.7	631.4	654.5	653.2	650.5
35°	585.6	593.6	620.7	624.1	621.7
37.5°	554.1	561.5	586.9	594.6	592.6
40°	521.0	529.0	549.1	562.8	563.5
42.5°	488.2	495.9	512.3	532.0	532.0
45°	453.4	461.1	476.2	497.9	500.6
47.5°	419.3	427.3	442.0	463.8	468.1
50°	385.8	393.2	407.9	429.0	435.7
52.5°	351.0	359.0	373.4	392.8	402.5
55°	317.5	322.9	338.6	357.4	367.7
57.5°	282.7	287.8	305.5	321.6	332.3
60°	249.3	255.6	269.4	285.8	298.1
62.5°	217.2	223.9	235.6	250.0	264.0
65°	186.0	191.1	202.4	216.8	229.2
67.5°	155.9	160.3	171.7	181.7	194.7
70°	125.5	131.2	139.5	149.2	157.6
72.5°	101.1	103.4	110.4	117.4	126.1
75°	74.6	78.6	84.3	88.3	93.4
77.5°	53.5	55.9	59.2	62.6	67.3
80°	35.8	36.8	39.8	40.5	44.2
82.5°	21.7	22.4	23.1	23.4	24.8
85°	11.7	11.7	11.7	11.0	11.0
87.5°	6.7	6.7	5.7	4.7	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)