

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: P554032

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-80-84-EDD-90**

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: P554032  
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-80-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

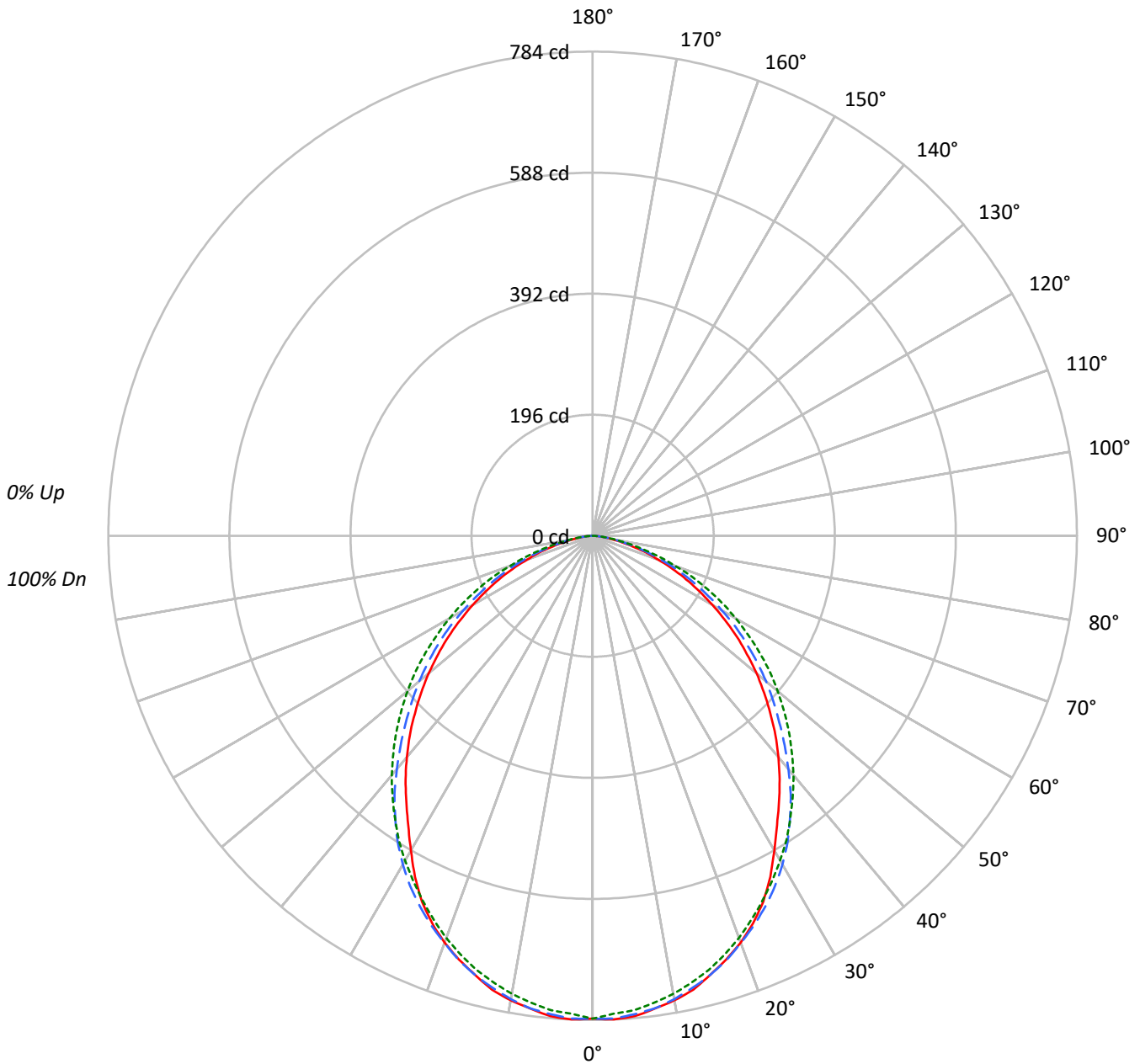
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1808.0 lumens  
Efficiency: N/A  
Efficacy: 83.7 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 (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°	4208	4208	4208
5°	4219	4202	4166
10°	4175	4163	4116
15°	4101	4101	4053
20°	4014	4019	3967
25°	3881	3930	3867
30°	3655	3819	3773
35°	3454	3661	3667
40°	3286	3463	3554
45°	3098	3254	3420
50°	2900	3066	3275
55°	2675	2852	3097
60°	2409	2603	2880
65°	2127	2314	2621
70°	1772	1972	2227
75°	1393	1574	1743
80°	995	1106	1230
85°	648	648	611



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.6	4.1
10°-20°	206.8	11.4
20°-30°	302.2	16.7
30°-40°	343.1	19.0
40°-50°	331.2	18.3
50°-60°	273.2	15.1
60°-70°	181.9	10.1
70°-80°	81.4	4.5
80°-90°	14.5	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°	582.7	32.2
0°-40°	925.7	51.2
0°-60°	1530.1	84.6
0°-90°	1808.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1808.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	781	781	778	774	771	74
15°	736	738	736	733	728	207
25°	654	659	662	657	651	299
35°	526	533	557	560	558	329
45°	407	414	428	447	449	314
55°	285	290	304	321	330	254
65°	167	172	182	195	206	166
75°	67	71	76	79	84	73
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°	781.9	781.9	781.9	781.9	781.9
2.5°	784.0	784.3	782.5	777.7	774.7
5°	781.0	780.7	777.7	773.5	771.1
7.5°	772.3	772.9	772.0	766.0	762.7
10°	763.9	764.2	761.8	757.0	753.1
12.5°	753.1	752.8	749.5	747.1	740.8
15°	736.0	737.8	736.0	732.6	727.5
17.5°	719.4	719.4	720.6	714.9	711.0
20°	700.8	701.7	701.7	697.2	692.7
22.5°	679.2	681.9	682.8	678.0	672.6
25°	653.6	658.8	661.8	657.0	651.2
27.5°	622.7	630.5	639.5	635.9	629.6
30°	588.2	599.6	614.6	611.6	607.1
32.5°	555.4	566.8	587.6	586.4	584.0
35°	525.7	532.9	557.2	560.2	558.1
37.5°	497.4	504.1	526.9	533.8	532.0
40°	467.7	474.9	492.9	505.3	505.9
42.5°	438.3	445.2	459.9	477.6	477.6
45°	407.0	413.9	427.5	447.0	449.4
47.5°	376.4	383.6	396.8	416.3	420.2
50°	346.3	353.0	366.2	385.1	391.1
52.5°	315.1	322.3	335.2	352.7	361.4
55°	285.1	289.9	304.0	320.8	330.1
57.5°	253.8	258.3	274.3	288.7	298.3
60°	223.8	229.5	241.8	256.5	267.6
62.5°	195.0	201.0	211.5	224.4	237.0
65°	167.0	171.5	181.7	194.7	205.8
67.5°	140.0	143.9	154.1	163.1	174.8
70°	112.6	117.8	125.3	134.0	141.5
72.5°	90.7	92.8	99.1	105.4	113.2
75°	67.0	70.6	75.7	79.3	83.8
77.5°	48.1	50.2	53.2	56.2	60.4
80°	32.1	33.0	35.7	36.3	39.7
82.5°	19.5	20.1	20.7	21.0	22.2
85°	10.5	10.5	10.5	9.9	9.9
87.5°	6.0	6.0	5.1	4.2	3.0
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)