

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: P554081

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-93-84-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: P554081  
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-93-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

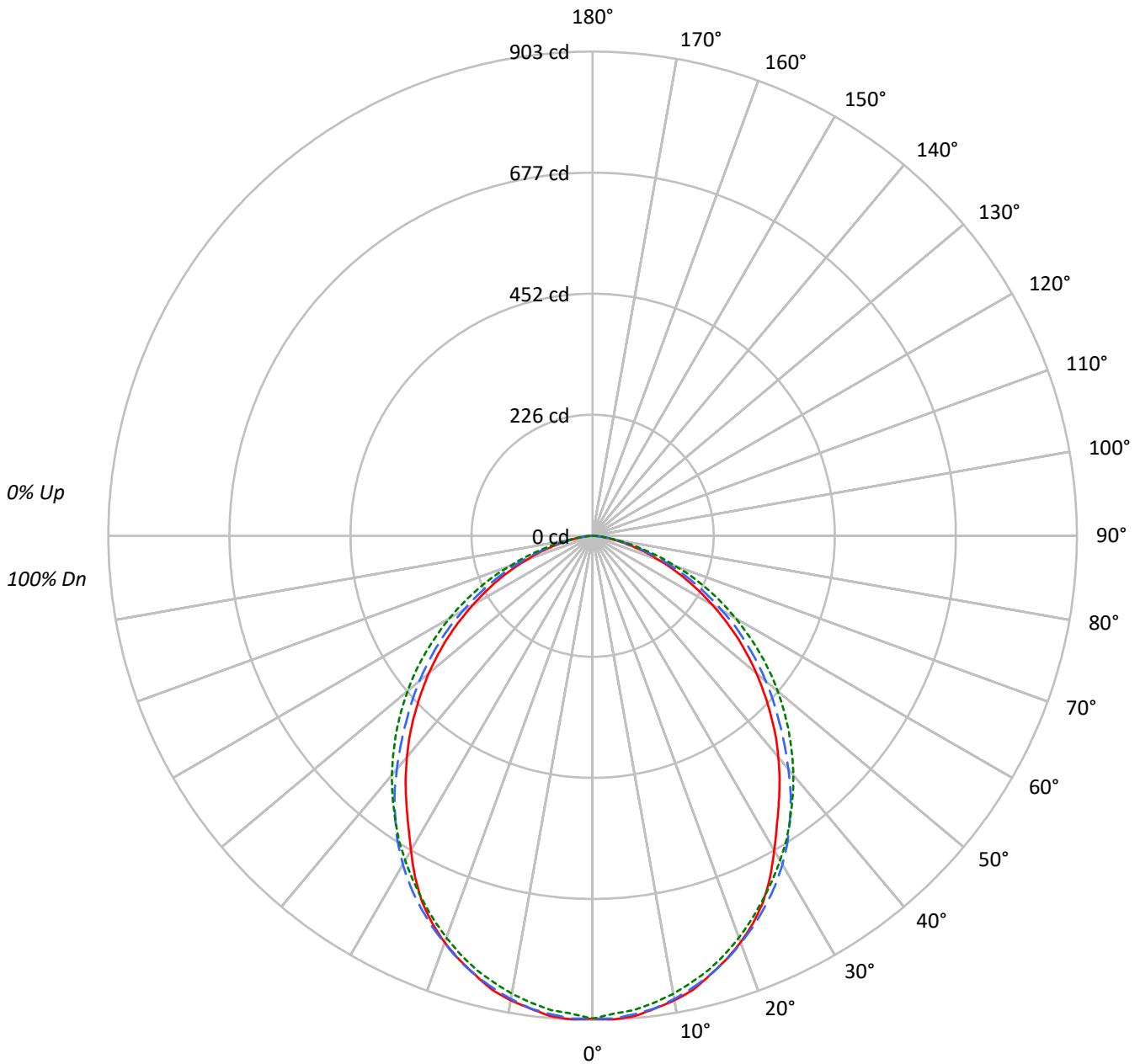
Lumens per Lamp: N/A  
Luminaire Lumens: 2082.0 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4846	4846	4846
5°	4859	4838	4797
10°	4808	4794	4739
15°	4722	4722	4668
20°	4622	4628	4569
25°	4470	4525	4453
30°	4209	4398	4345
35°	3977	4216	4223
40°	3784	3988	4092
45°	3567	3746	3939
50°	3339	3531	3771
55°	3080	3285	3567
60°	2774	2998	3317
65°	2449	2665	3018
70°	2041	2269	2563
75°	1603	1813	2007
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°	238.2	11.4
20°-30°	348.0	16.7
30°-40°	395.0	19.0
40°-50°	381.4	18.3
50°-60°	314.6	15.1
60°-70°	209.5	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°	671.0	32.2
0°-40°	1066.0	51.2
0°-60°	1762.0	84.6
0°-90°	2082.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2082.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	900	900	900	900	900	
5°	899	899	896	891	888	85
15°	848	850	848	844	838	239
25°	753	759	762	756	750	345
35°	605	614	642	645	643	379
45°	469	477	492	515	518	362
55°	328	334	350	369	380	293
65°	192	198	209	224	237	191
75°	77	81	87	91	96	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°	900.4	900.4	900.4	900.4	900.4
2.5°	902.8	903.2	901.1	895.6	892.1
5°	899.4	899.0	895.6	890.7	888.0
7.5°	889.3	890.0	889.0	882.1	878.3
10°	879.7	880.0	877.2	871.7	867.2
12.5°	867.2	866.9	863.1	860.3	853.0
15°	847.5	849.6	847.5	843.7	837.8
17.5°	828.5	828.5	829.8	823.3	818.8
20°	807.0	808.1	808.1	802.9	797.7
22.5°	782.1	785.2	786.3	780.7	774.5
25°	752.7	758.6	762.0	756.5	749.9
27.5°	717.1	726.1	736.4	732.3	725.0
30°	677.3	690.4	707.7	704.3	699.1
32.5°	639.6	652.7	676.6	675.2	672.5
35°	605.3	613.6	641.7	645.1	642.7
37.5°	572.8	580.4	606.7	614.7	612.6
40°	538.6	546.9	567.6	581.8	582.5
42.5°	504.7	512.6	529.6	550.0	550.0
45°	468.7	476.7	492.2	514.7	517.5
47.5°	433.4	441.7	457.0	479.4	483.9
50°	398.8	406.4	421.7	443.5	450.4
52.5°	362.9	371.2	386.0	406.1	416.1
55°	328.3	333.8	350.1	369.4	380.2
57.5°	292.3	297.5	315.8	332.4	343.5
60°	257.7	264.3	278.5	295.4	308.2
62.5°	224.5	231.4	243.5	258.4	272.9
65°	192.3	197.5	209.3	224.2	237.0
67.5°	161.2	165.7	177.5	187.8	201.3
70°	129.7	135.6	144.2	154.3	162.9
72.5°	104.5	106.9	114.2	121.4	130.4
75°	77.1	81.3	87.2	91.3	96.5
77.5°	55.3	57.8	61.2	64.7	69.5
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)