

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: P553893

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-UNV-93-86-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: P553893  
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-30-UNV-93-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

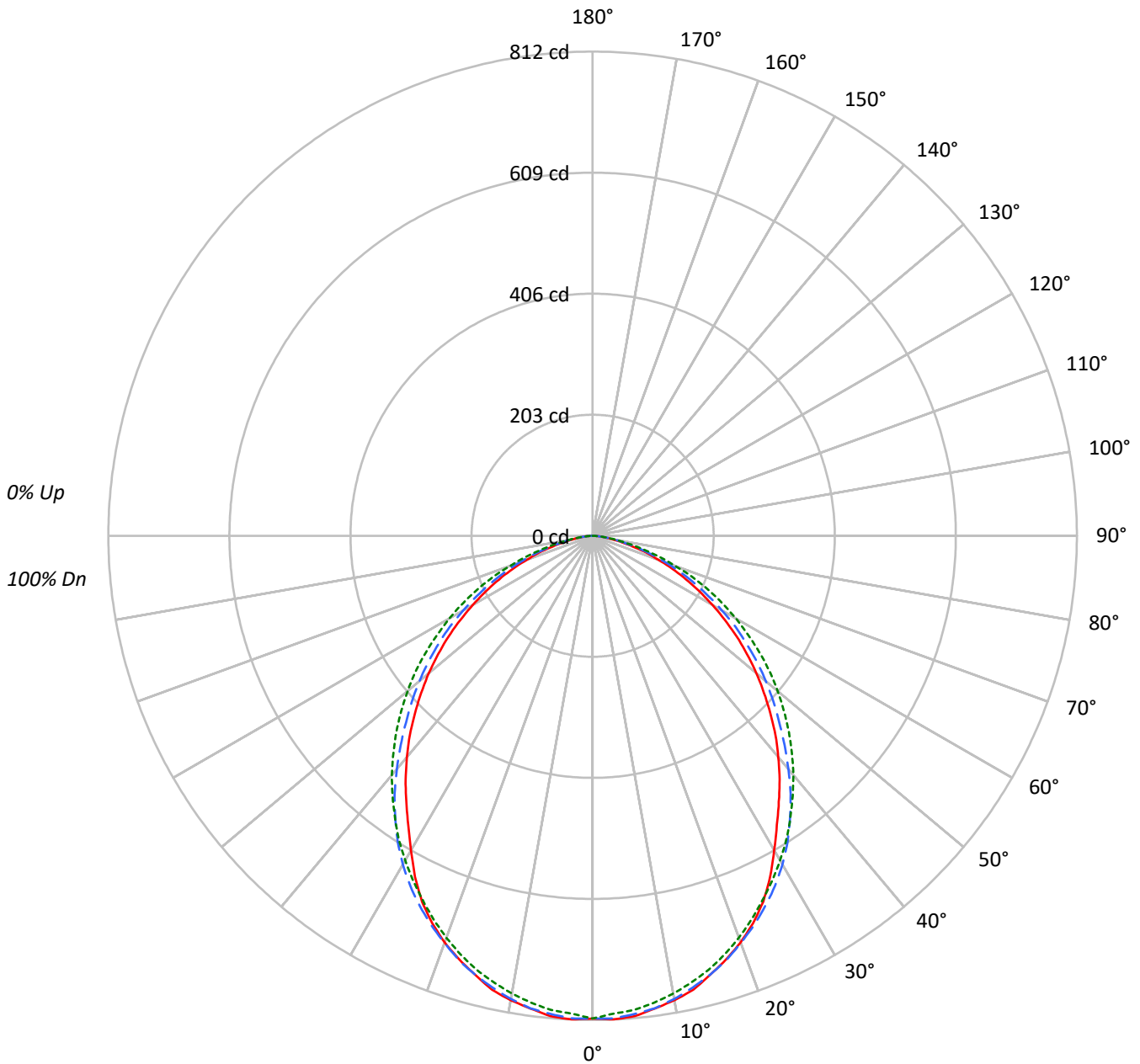
Lumens per Lamp: N/A  
Luminaire Lumens: 1872.0 lumens  
Efficiency: N/A  
Efficacy: 86.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4357	4357	4357
5°	4369	4350	4313
10°	4322	4311	4261
15°	4246	4246	4197
20°	4156	4161	4108
25°	4019	4069	4004
30°	3785	3955	3906
35°	3576	3790	3797
40°	3403	3586	3680
45°	3207	3369	3542
50°	3003	3174	3391
55°	2770	2954	3207
60°	2494	2695	2983
65°	2202	2397	2714
70°	1835	2041	2305
75°	1443	1630	1805
80°	1032	1147	1274
85°	673	673	636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.2	4.1
10°-20°	214.1	11.4
20°-30°	312.9	16.7
30°-40°	355.2	19.0
40°-50°	342.9	18.3
50°-60°	282.9	15.1
60°-70°	188.4	10.1
70°-80°	84.3	4.5
80°-90°	15.1	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°	603.3	32.2
0°-40°	958.5	51.2
0°-60°	1584.3	84.6
0°-90°	1872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1872.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	809	808	805	801	798	77
15°	762	764	762	759	753	215
25°	677	682	685	680	674	310
35°	544	552	577	580	578	341
45°	421	429	443	463	465	325
55°	295	300	315	332	342	263
65°	173	178	188	202	213	171
75°	69	73	78	82	87	76
85°	11	11	11	10	10	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	809.6	809.6	809.6	809.6	809.6
2.5°	811.8	812.1	810.2	805.2	802.1
5°	808.7	808.3	805.2	800.9	798.4
7.5°	799.6	800.3	799.3	793.1	789.7
10°	790.9	791.2	788.8	783.8	779.7
12.5°	779.7	779.4	776.0	773.5	767.0
15°	762.0	763.9	762.0	758.6	753.3
17.5°	744.9	744.9	746.1	740.2	736.2
20°	725.6	726.5	726.5	721.9	717.2
22.5°	703.2	706.0	707.0	702.0	696.4
25°	676.8	682.1	685.2	680.2	674.3
27.5°	644.7	652.8	662.2	658.4	651.9
30°	609.0	620.8	636.4	633.2	628.6
32.5°	575.1	586.9	608.4	607.1	604.6
35°	544.3	551.8	576.9	580.1	577.9
37.5°	515.1	521.9	545.5	552.7	550.8
40°	484.3	491.7	510.4	523.1	523.8
42.5°	453.8	460.9	476.2	494.5	494.5
45°	421.4	428.6	442.6	462.8	465.3
47.5°	389.7	397.2	410.9	431.1	435.1
50°	358.6	365.5	379.1	398.7	405.0
52.5°	326.3	333.7	347.1	365.1	374.2
55°	295.2	300.1	314.8	332.2	341.8
57.5°	262.8	267.5	284.0	298.9	308.8
60°	231.7	237.6	250.4	265.6	277.1
62.5°	201.9	208.1	219.0	232.3	245.4
65°	172.9	177.6	188.2	201.5	213.1
67.5°	144.9	149.0	159.6	168.9	181.0
70°	116.6	121.9	129.7	138.7	146.5
72.5°	93.9	96.1	102.6	109.2	117.3
75°	69.4	73.1	78.4	82.1	86.8
77.5°	49.8	51.9	55.1	58.2	62.5
80°	33.3	34.2	37.0	37.6	41.1
82.5°	20.2	20.8	21.5	21.8	23.0
85°	10.9	10.9	10.9	10.3	10.3
87.5°	6.2	6.2	5.3	4.4	3.1
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)