

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: P553957

Luminaire Tested: **FUSL-12-2-LD4-1HI-35-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: P553957  
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-35-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 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

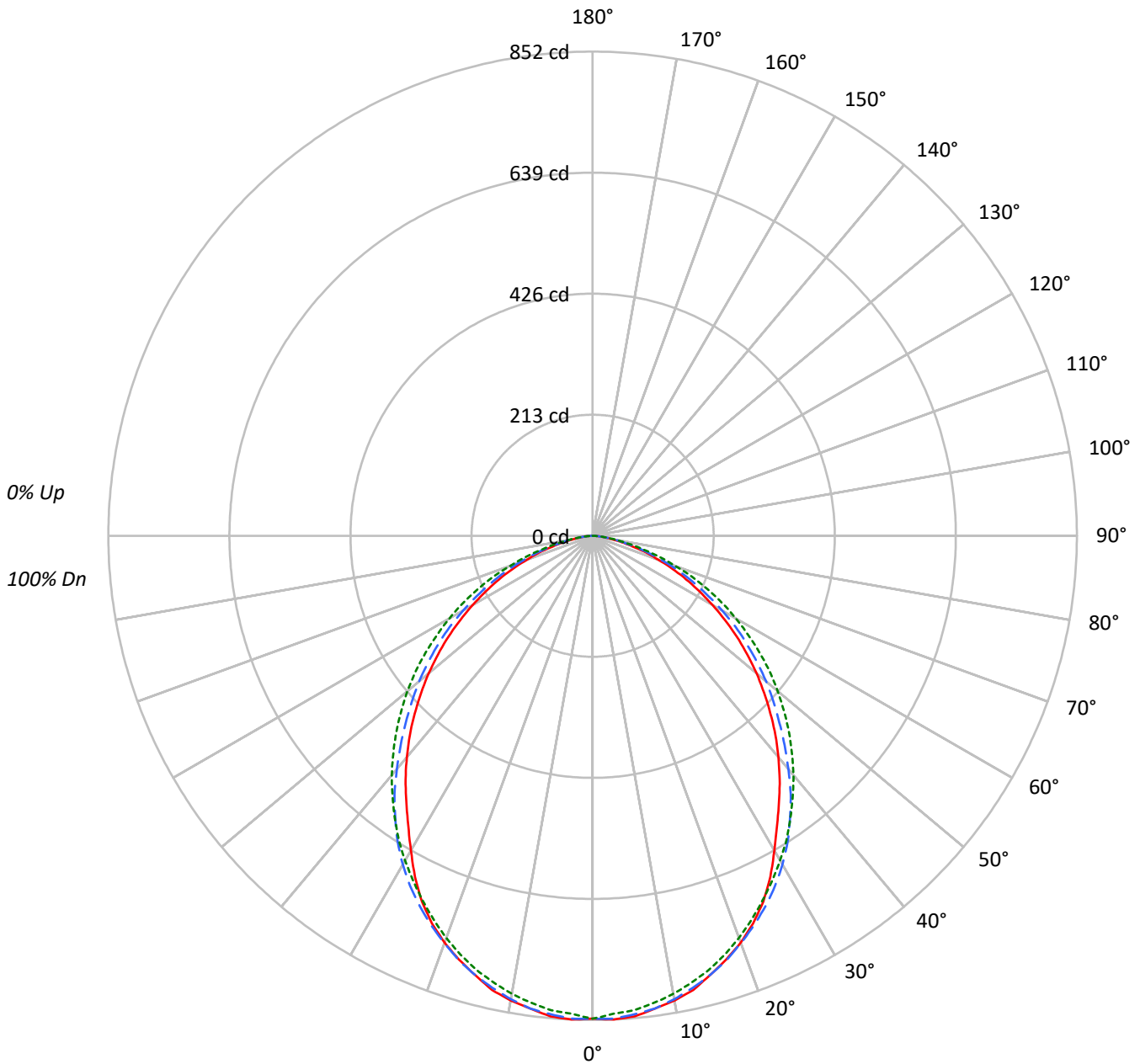
Lumens per Lamp: N/A  
Luminaire Lumens: 1965.0 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4574	4574	4574
5°	4586	4566	4528
10°	4537	4524	4473
15°	4457	4457	4406
20°	4363	4368	4312
25°	4219	4271	4203
30°	3972	4151	4100
35°	3754	3979	3985
40°	3571	3764	3863
45°	3367	3536	3717
50°	3152	3332	3559
55°	2907	3100	3367
60°	2618	2829	3131
65°	2311	2515	2848
70°	1926	2142	2420
75°	1514	1711	1894
80°	1082	1206	1336
85°	704	704	667



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.0	4.1
10°-20°	224.8	11.4
20°-30°	328.5	16.7
30°-40°	372.9	19.0
40°-50°	359.9	18.3
50°-60°	296.9	15.1
60°-70°	197.7	10.1
70°-80°	88.5	4.5
80°-90°	15.8	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°	633.3	32.2
0°-40°	1006.1	51.2
0°-60°	1663.0	84.6
0°-90°	1965.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1965.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	850	850	850	850	850	
5°	849	848	845	841	838	80
15°	800	802	800	796	791	225
25°	710	716	719	714	708	325
35°	571	579	606	609	607	358
45°	442	450	465	486	488	341
55°	310	315	330	349	359	277
65°	182	186	198	212	224	180
75°	73	77	82	86	91	80
85°	11	11	11	11	11	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	849.8	849.8	849.8	849.8	849.8
2.5°	852.1	852.4	850.5	845.2	842.0
5°	848.8	848.5	845.2	840.7	838.1
7.5°	839.4	840.0	839.0	832.5	828.9
10°	830.2	830.5	827.9	822.7	818.5
12.5°	818.5	818.1	814.6	811.9	805.1
15°	799.9	801.8	799.9	796.3	790.7
17.5°	781.9	781.9	783.2	777.0	772.8
20°	761.7	762.6	762.6	757.7	752.8
22.5°	738.2	741.1	742.1	736.9	731.0
25°	710.4	716.0	719.2	714.0	707.8
27.5°	676.8	685.3	695.1	691.1	684.3
30°	639.2	651.6	668.0	664.7	659.8
32.5°	603.7	616.1	638.6	637.3	634.7
35°	571.3	579.2	605.6	608.9	606.6
37.5°	540.6	547.8	572.6	580.1	578.2
40°	508.3	516.2	535.7	549.1	549.8
42.5°	476.3	483.8	499.8	519.1	519.1
45°	442.4	449.9	464.6	485.8	488.4
47.5°	409.1	416.9	431.3	452.5	456.7
50°	376.4	383.6	398.0	418.5	425.1
52.5°	342.5	350.3	364.3	383.3	392.7
55°	309.8	315.0	330.4	348.7	358.8
57.5°	275.9	280.8	298.1	313.7	324.2
60°	243.2	249.4	262.8	278.8	290.9
62.5°	211.9	218.4	229.8	243.9	257.6
65°	181.5	186.4	197.5	211.6	223.6
67.5°	152.1	156.4	167.5	177.3	190.0
70°	122.4	128.0	136.1	145.6	153.8
72.5°	98.6	100.9	107.7	114.6	123.1
75°	72.8	76.7	82.3	86.2	91.1
77.5°	52.2	54.5	57.8	61.1	65.6
80°	34.9	35.9	38.9	39.5	43.1
82.5°	21.2	21.9	22.5	22.9	24.2
85°	11.4	11.4	11.4	10.8	10.8
87.5°	6.5	6.5	5.6	4.6	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)