

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: P553949

Luminaire Tested: **FUSL-12-2-LD4-1HI-35-UNV-82-96-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: P553949  
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-82-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

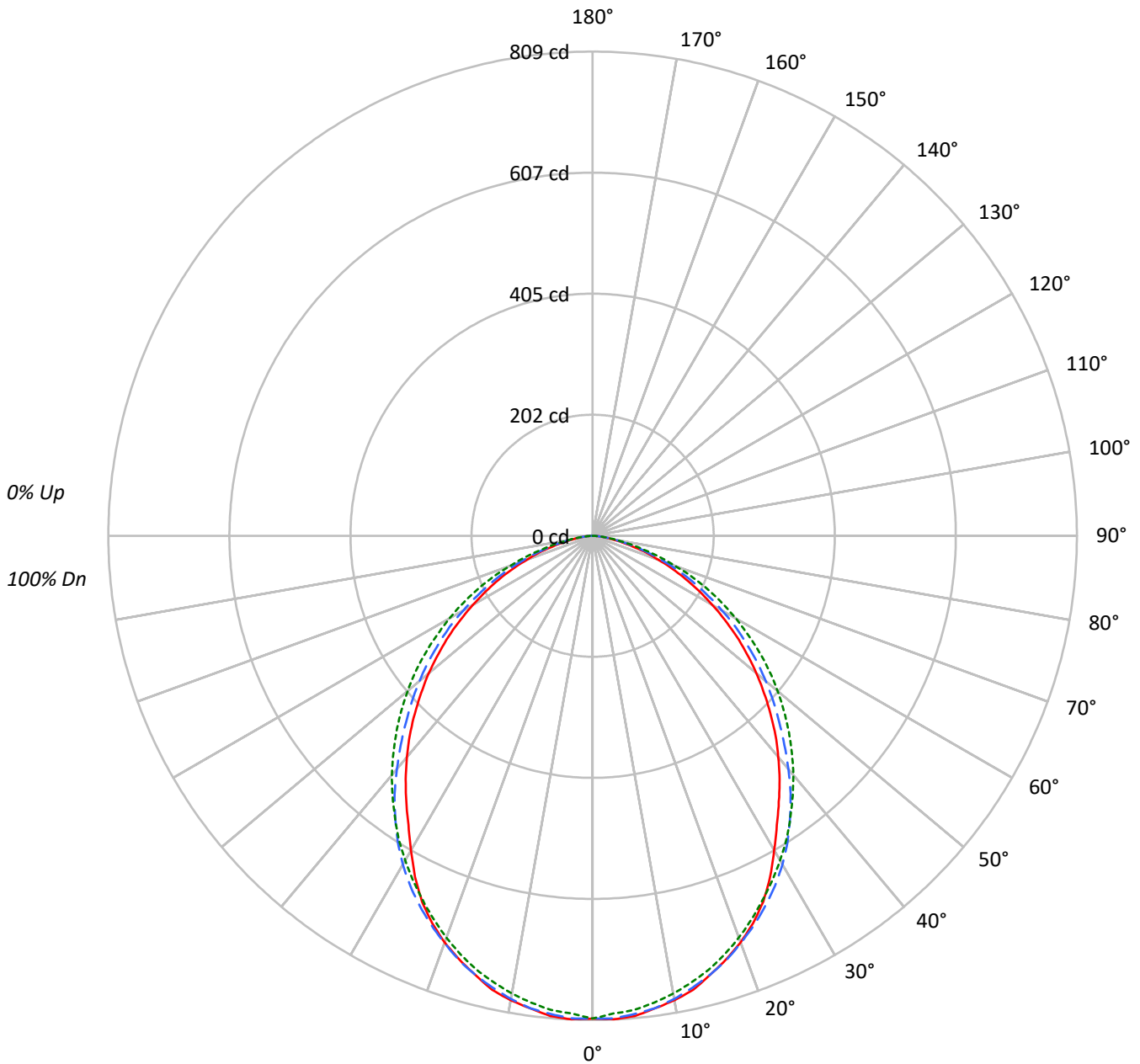
Lumens per Lamp: N/A  
Luminaire Lumens: 1865.0 lumens  
Efficiency: N/A  
Efficacy: 86.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4341	4341	4341
5°	4352	4334	4297
10°	4306	4294	4245
15°	4230	4230	4182
20°	4140	4145	4092
25°	4004	4054	3989
30°	3770	3940	3892
35°	3563	3777	3782
40°	3390	3573	3666
45°	3196	3356	3528
50°	2992	3162	3378
55°	2760	2943	3195
60°	2484	2685	2972
65°	2194	2388	2704
70°	1828	2033	2296
75°	1437	1624	1799
80°	1029	1144	1268
85°	667	667	630



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.9	4.1
10°-20°	213.3	11.4
20°-30°	311.8	16.7
30°-40°	353.9	19.0
40°-50°	341.6	18.3
50°-60°	281.8	15.1
60°-70°	187.7	10.1
70°-80°	84.0	4.5
80°-90°	15.0	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°	601.0	32.2
0°-40°	954.9	51.2
0°-60°	1578.3	84.6
0°-90°	1865.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1865.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	807	807	807	807	807	
5°	806	805	802	798	795	76
15°	759	761	759	756	750	214
25°	674	680	683	678	672	309
35°	542	550	575	578	576	340
45°	420	427	441	461	464	324
55°	294	299	314	331	340	262
65°	172	177	188	201	212	171
75°	69	73	78	82	86	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°	806.6	806.6	806.6	806.6	806.6
2.5°	808.7	809.0	807.2	802.2	799.1
5°	805.6	805.3	802.2	797.9	795.4
7.5°	796.6	797.3	796.3	790.1	786.7
10°	788.0	788.3	785.8	780.8	776.8
12.5°	776.8	776.5	773.1	770.6	764.1
15°	759.2	761.0	759.2	755.7	750.5
17.5°	742.1	742.1	743.4	737.5	733.4
20°	722.9	723.8	723.8	719.2	714.5
22.5°	700.6	703.4	704.3	699.4	693.8
25°	674.3	679.5	682.6	677.7	671.8
27.5°	642.3	650.4	659.7	656.0	649.5
30°	606.7	618.5	634.0	630.9	626.2
32.5°	572.9	584.7	606.1	604.8	602.4
35°	542.3	549.7	574.8	577.9	575.7
37.5°	513.1	519.9	543.5	550.6	548.8
40°	482.5	489.9	508.5	521.2	521.8
42.5°	452.1	459.2	474.4	492.7	492.7
45°	419.9	427.0	440.9	461.1	463.5
47.5°	388.3	395.7	409.3	429.5	433.5
50°	357.3	364.1	377.7	397.2	403.4
52.5°	325.0	332.5	345.8	363.8	372.8
55°	294.1	299.0	313.6	330.9	340.5
57.5°	261.8	266.5	282.9	297.8	307.7
60°	230.8	236.7	249.4	264.6	276.1
62.5°	201.1	207.3	218.1	231.5	244.5
65°	172.3	176.9	187.5	200.8	212.3
67.5°	144.4	148.4	159.0	168.3	180.3
70°	116.2	121.5	129.2	138.2	145.9
72.5°	93.6	95.7	102.3	108.8	116.8
75°	69.1	72.8	78.1	81.8	86.5
77.5°	49.6	51.7	54.8	57.9	62.3
80°	33.2	34.1	36.9	37.5	40.9
82.5°	20.1	20.8	21.4	21.7	22.9
85°	10.8	10.8	10.8	10.2	10.2
87.5°	6.2	6.2	5.3	4.3	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)