

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: P554919

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-93-87-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: P554919  
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-LD4-2LO-30-UNV-93-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

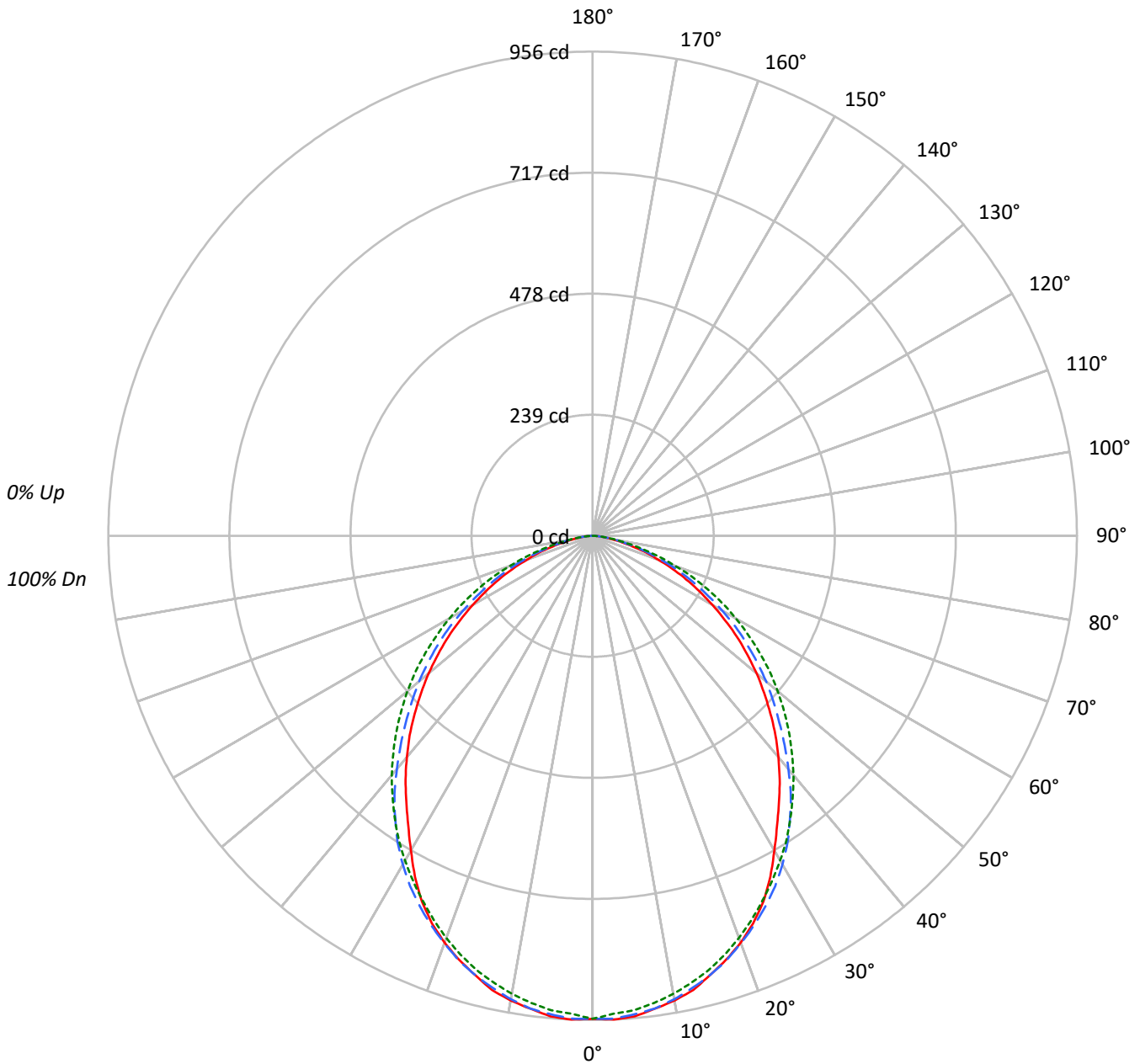
Lumens per Lamp: N/A  
Luminaire Lumens: 2205.0 lumens  
Efficiency: N/A  
Efficacy: 94.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
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°	5132	5132	5132
5°	5146	5124	5081
10°	5091	5078	5019
15°	5001	5001	4944
20°	4895	4901	4838
25°	4734	4793	4716
30°	4458	4658	4601
35°	4212	4465	4472
40°	4007	4224	4334
45°	3778	3968	4172
50°	3537	3739	3994
55°	3263	3478	3778
60°	2937	3174	3513
65°	2594	2822	3195
70°	2162	2404	2716
75°	1699	1919	2125
80°	1215	1351	1500
85°	790	790	747



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.8	4.1
10°-20°	252.2	11.4
20°-30°	368.6	16.7
30°-40°	418.4	19.0
40°-50°	403.9	18.3
50°-60°	333.2	15.1
60°-70°	221.9	10.1
70°-80°	99.3	4.5
80°-90°	17.7	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°	710.6	32.2
0°-40°	1129.0	51.2
0°-60°	1866.1	84.6
0°-90°	2205.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2205.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	954	954	954	954	954	
5°	952	952	948	943	940	90
15°	898	900	898	894	887	253
25°	797	803	807	801	794	365
35°	641	650	680	683	681	402
45°	496	505	521	545	548	383
55°	348	354	371	391	403	310
65°	204	209	222	237	251	202
75°	82	86	92	97	102	89
85°	13	13	13	12	12	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	953.6	953.6	953.6	953.6	953.6
2.5°	956.2	956.5	954.3	948.5	944.8
5°	952.5	952.1	948.5	943.3	940.4
7.5°	941.9	942.6	941.5	934.2	930.2
10°	931.6	932.0	929.1	923.2	918.4
12.5°	918.4	918.1	914.0	911.1	903.4
15°	897.6	899.8	897.6	893.5	887.3
17.5°	877.4	877.4	878.9	871.9	867.1
20°	854.7	855.8	855.8	850.3	844.8
22.5°	828.3	831.6	832.7	826.8	820.3
25°	797.2	803.4	807.1	801.2	794.2
27.5°	759.4	769.0	780.0	775.6	767.9
30°	717.3	731.2	749.5	745.9	740.4
32.5°	677.4	691.3	716.6	715.1	712.2
35°	641.1	649.9	679.6	683.2	680.7
37.5°	606.7	614.7	642.6	651.0	648.8
40°	570.4	579.2	601.2	616.2	616.9
42.5°	534.5	542.9	560.9	582.5	582.5
45°	496.4	504.8	521.3	545.1	548.1
47.5°	459.0	467.8	483.9	507.8	512.5
50°	422.4	430.5	446.6	469.7	477.0
52.5°	384.3	393.1	408.8	430.1	440.7
55°	347.7	353.5	370.7	391.3	402.6
57.5°	309.6	315.1	334.5	352.1	363.8
60°	272.9	279.9	294.9	312.9	326.4
62.5°	237.8	245.1	257.9	273.7	289.0
65°	203.7	209.2	221.6	237.4	250.9
67.5°	170.7	175.5	187.9	198.9	213.2
70°	137.4	143.6	152.8	163.4	172.6
72.5°	110.6	113.2	120.9	128.6	138.1
75°	81.7	86.1	92.3	96.7	102.2
77.5°	58.6	61.2	64.8	68.5	73.6
80°	39.2	40.3	43.6	44.3	48.4
82.5°	23.8	24.5	25.3	25.6	27.1
85°	12.8	12.8	12.8	12.1	12.1
87.5°	7.3	7.3	6.2	5.1	3.7
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)