

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: P555037

Luminaire Tested: **FUSL-12-2-LD4-2LO-40-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: P555037  
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-40-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 4000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

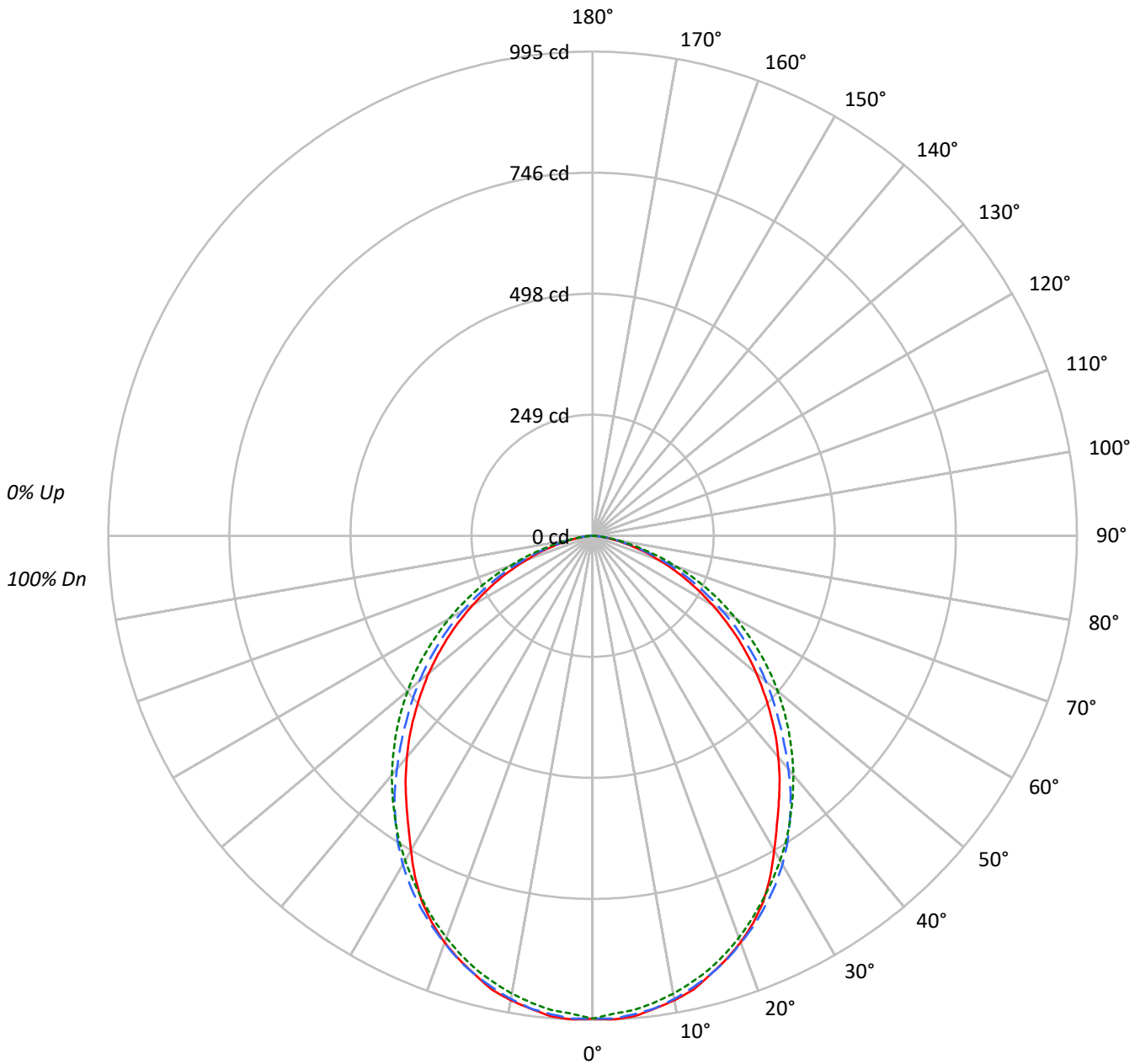
Lumens per Lamp: N/A  
Luminaire Lumens: 2294.0 lumens  
Efficiency: N/A  
Efficacy: 98.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	5339	5339	5339
5°	5354	5331	5286
10°	5297	5282	5222
15°	5203	5203	5143
20°	5093	5099	5034
25°	4925	4986	4907
30°	4638	4846	4787
35°	4382	4645	4652
40°	4169	4394	4509
45°	3930	4128	4340
50°	3679	3890	4155
55°	3394	3619	3931
60°	3056	3302	3655
65°	2699	2937	3325
70°	2249	2500	2825
75°	1768	1996	2210
80°	1265	1407	1559
85°	821	821	778



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.4	4.1
10°-20°	262.4	11.4
20°-30°	383.5	16.7
30°-40°	435.3	19.0
40°-50°	420.2	18.3
50°-60°	346.6	15.1
60°-70°	230.8	10.1
70°-80°	103.3	4.5
80°-90°	18.5	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°	739.3	32.2
0°-40°	1174.6	51.2
0°-60°	1941.4	84.6
0°-90°	2294.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2294.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	992	992	992	992	992	
5°	991	991	987	981	978	94
15°	934	936	934	930	923	263
25°	829	836	840	834	826	380
35°	667	676	707	711	708	418
45°	516	525	542	567	570	398
55°	362	368	386	407	419	323
65°	212	218	231	247	261	210
75°	85	90	96	101	106	93
85°	13	13	13	13	13	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	992.1	992.1	992.1	992.1	992.1
2.5°	994.8	995.1	992.9	986.8	982.9
5°	991.0	990.6	986.8	981.4	978.4
7.5°	979.9	980.7	979.5	971.9	967.7
10°	969.2	969.6	966.6	960.5	955.5
12.5°	955.5	955.1	950.9	947.9	939.9
15°	933.8	936.1	933.8	929.6	923.1
17.5°	912.8	912.8	914.3	907.1	902.1
20°	889.2	890.3	890.3	884.6	878.9
22.5°	861.7	865.2	866.3	860.2	853.4
25°	829.4	835.8	839.6	833.5	826.3
27.5°	790.1	800.0	811.4	806.9	798.9
30°	746.3	760.7	779.8	776.0	770.3
32.5°	704.7	719.2	745.5	744.0	740.9
35°	667.0	676.1	707.0	710.8	708.1
37.5°	631.2	639.5	668.5	677.3	675.0
40°	593.4	602.6	625.4	641.1	641.8
42.5°	556.1	564.8	583.5	606.0	606.0
45°	516.4	525.2	542.4	567.1	570.2
47.5°	477.6	486.7	503.5	528.3	533.2
50°	439.4	447.8	464.6	488.6	496.2
52.5°	399.8	409.0	425.3	447.5	458.5
55°	361.7	367.8	385.7	407.1	418.9
57.5°	322.1	327.8	348.0	366.3	378.5
60°	283.9	291.2	306.8	325.5	339.6
62.5°	247.4	255.0	268.3	284.7	300.7
65°	211.9	217.6	230.6	247.0	261.1
67.5°	177.6	182.6	195.5	207.0	221.8
70°	142.9	149.4	158.9	170.0	179.5
72.5°	115.1	117.8	125.8	133.8	143.7
75°	85.0	89.6	96.0	100.6	106.3
77.5°	61.0	63.6	67.5	71.3	76.6
80°	40.8	41.9	45.4	46.1	50.3
82.5°	24.8	25.5	26.3	26.7	28.2
85°	13.3	13.3	13.3	12.6	12.6
87.5°	7.6	7.6	6.5	5.3	3.8
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)