

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: P555103

Luminaire Tested: **FUSL-12-2-LD4-2LO-50-UNV-82-97-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: P555103  
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-50-UNV-82-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

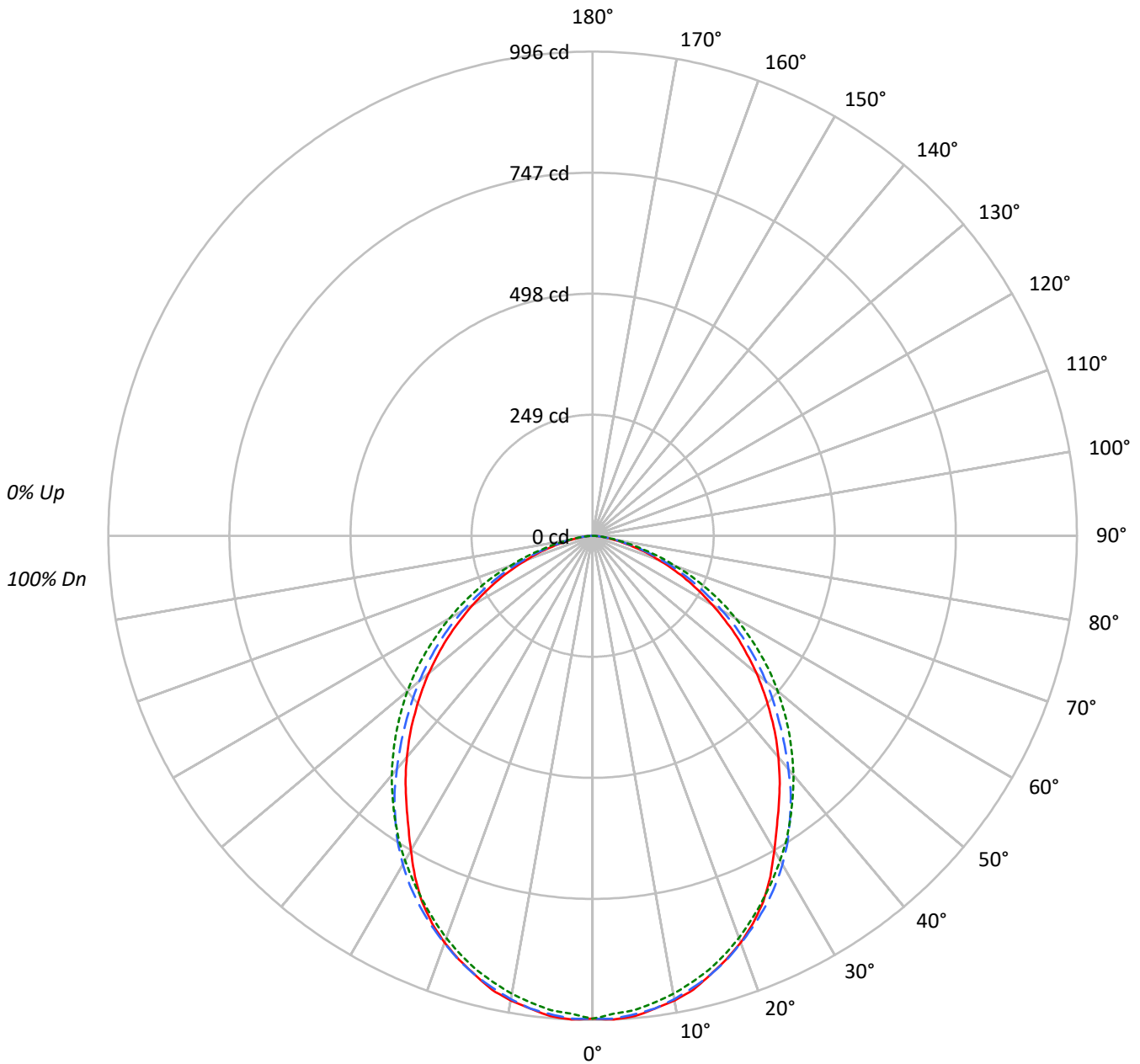
Lumens per Lamp: N/A  
Luminaire Lumens: 2297.0 lumens  
Efficiency: N/A  
Efficacy: 98.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	5346	5346	5346
5°	5360	5338	5293
10°	5304	5289	5229
15°	5210	5210	5150
20°	5100	5106	5040
25°	4931	4992	4913
30°	4644	4852	4793
35°	4388	4651	4659
40°	4175	4400	4515
45°	3936	4134	4345
50°	3684	3895	4160
55°	3399	3624	3935
60°	3060	3307	3660
65°	2702	2940	3329
70°	2252	2504	2828
75°	1770	2000	2215
80°	1265	1407	1562
85°	827	827	778



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.5	4.1
10°-20°	262.8	11.4
20°-30°	384.0	16.7
30°-40°	435.8	19.0
40°-50°	420.7	18.3
50°-60°	347.1	15.1
60°-70°	231.1	10.1
70°-80°	103.4	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°	740.3	32.2
0°-40°	1176.1	51.2
0°-60°	1943.9	84.6
0°-90°	2297.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2297.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	993	993	993	993	993	
5°	992	992	988	983	980	94
15°	935	937	935	931	924	264
25°	830	837	841	835	827	380
35°	668	677	708	712	709	418
45°	517	526	543	568	571	399
55°	362	368	386	408	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°	993.4	993.4	993.4	993.4	993.4
2.5°	996.1	996.4	994.2	988.1	984.2
5°	992.2	991.9	988.1	982.7	979.7
7.5°	981.2	981.9	980.8	973.2	969.0
10°	970.5	970.9	967.8	961.7	956.8
12.5°	956.8	956.4	952.2	949.1	941.1
15°	935.0	937.3	935.0	930.8	924.3
17.5°	914.0	914.0	915.5	908.3	903.3
20°	890.4	891.5	891.5	885.8	880.0
22.5°	862.9	866.3	867.5	861.3	854.5
25°	830.4	836.9	840.7	834.6	827.4
27.5°	791.1	801.0	812.5	807.9	799.9
30°	747.2	761.7	780.8	777.0	771.3
32.5°	705.6	720.1	746.5	744.9	741.9
35°	667.9	677.0	707.9	711.7	709.1
37.5°	632.0	640.4	669.4	678.2	675.9
40°	594.2	603.4	626.3	641.9	642.7
42.5°	556.8	565.6	584.3	606.8	606.8
45°	517.1	525.9	543.1	567.9	570.9
47.5°	478.2	487.3	504.1	528.9	533.9
50°	440.0	448.4	465.2	489.3	496.9
52.5°	400.3	409.5	425.9	448.0	459.1
55°	362.2	368.3	386.2	407.6	419.4
57.5°	322.5	328.2	348.4	366.8	379.0
60°	284.3	291.6	307.2	325.9	340.0
62.5°	247.7	255.3	268.7	285.1	301.1
65°	212.2	217.9	230.9	247.3	261.4
67.5°	177.8	182.8	195.8	207.2	222.1
70°	143.1	149.6	159.1	170.2	179.7
72.5°	115.3	117.9	125.9	134.0	143.9
75°	85.1	89.7	96.2	100.8	106.5
77.5°	61.1	63.7	67.5	71.4	76.7
80°	40.8	42.0	45.4	46.2	50.4
82.5°	24.8	25.6	26.3	26.7	28.2
85°	13.4	13.4	13.4	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)