

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: P554143

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-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: P554143  
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-LD4-1LO-30-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 3000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

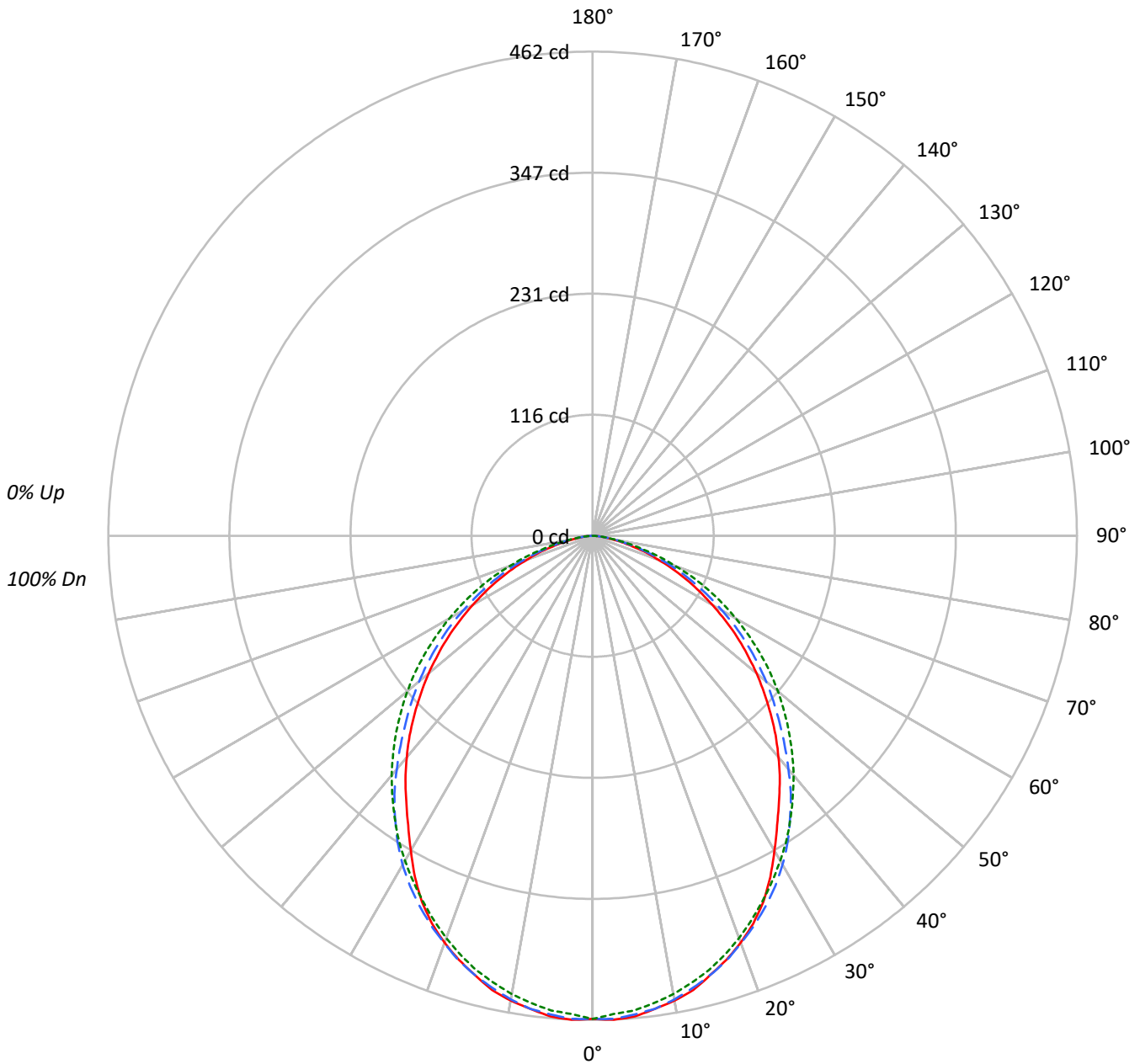
Lumens per Lamp: N/A  
Luminaire Lumens: 1066.0 lumens  
Efficiency: N/A  
Efficacy: 91.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
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°	2481	2481	2481
5°	2488	2477	2456
10°	2461	2455	2426
15°	2418	2418	2390
20°	2367	2369	2339
25°	2289	2317	2280
30°	2155	2252	2224
35°	2036	2158	2162
40°	1938	2042	2096
45°	1827	1918	2017
50°	1710	1808	1931
55°	1577	1681	1826
60°	1420	1535	1699
65°	1254	1365	1545
70°	1045	1163	1312
75°	821	927	1027
80°	589	654	725
85°	383	383	358



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.4	4.1
10°-20°	121.9	11.4
20°-30°	178.2	16.7
30°-40°	202.3	19.0
40°-50°	195.3	18.3
50°-60°	161.1	15.1
60°-70°	107.3	10.1
70°-80°	48.0	4.5
80°-90°	8.6	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°	343.5	32.2
0°-40°	545.8	51.2
0°-60°	902.2	84.6
0°-90°	1066.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1066.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	461	461	461	461	461	
5°	460	460	458	456	455	44
15°	434	435	434	432	429	122
25°	385	388	390	387	384	176
35°	310	314	328	330	329	194
45°	240	244	252	264	265	185
55°	168	171	179	189	195	150
65°	98	101	107	115	121	98
75°	40	42	45	47	49	43
85°	6	6	6	6	6	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	461.0	461.0	461.0	461.0	461.0
2.5°	462.3	462.4	461.4	458.5	456.8
5°	460.5	460.3	458.5	456.1	454.6
7.5°	455.3	455.7	455.2	451.6	449.7
10°	450.4	450.6	449.2	446.3	444.0
12.5°	444.0	443.8	441.9	440.5	436.8
15°	433.9	435.0	433.9	432.0	429.0
17.5°	424.2	424.2	424.9	421.5	419.2
20°	413.2	413.7	413.7	411.1	408.4
22.5°	400.4	402.0	402.6	399.7	396.5
25°	385.4	388.4	390.2	387.3	384.0
27.5°	367.1	371.8	377.1	374.9	371.2
30°	346.8	353.5	362.4	360.6	357.9
32.5°	327.5	334.2	346.4	345.7	344.3
35°	309.9	314.2	328.5	330.3	329.1
37.5°	293.3	297.2	310.7	314.7	313.7
40°	275.8	280.0	290.6	297.9	298.3
42.5°	258.4	262.5	271.2	281.6	281.6
45°	240.0	244.1	252.0	263.5	265.0
47.5°	221.9	226.2	234.0	245.5	247.8
50°	204.2	208.1	215.9	227.1	230.6
52.5°	185.8	190.0	197.7	207.9	213.1
55°	168.1	170.9	179.2	189.2	194.6
57.5°	149.7	152.3	161.7	170.2	175.9
60°	131.9	135.3	142.6	151.3	157.8
62.5°	114.9	118.5	124.7	132.3	139.7
65°	98.5	101.1	107.2	114.8	121.3
67.5°	82.5	84.8	90.9	96.2	103.1
70°	66.4	69.4	73.9	79.0	83.4
72.5°	53.5	54.7	58.4	62.2	66.8
75°	39.5	41.6	44.6	46.8	49.4
77.5°	28.3	29.6	31.3	33.1	35.6
80°	19.0	19.5	21.1	21.4	23.4
82.5°	11.5	11.9	12.2	12.4	13.1
85°	6.2	6.2	6.2	5.8	5.8
87.5°	3.5	3.5	3.0	2.5	1.8
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)