

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: P555347

Luminaire Tested: **FUSL-12-2-LD4-2STD-50-UNV-82-85-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: P555347  
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-LD4-2STD-50-UNV-82-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

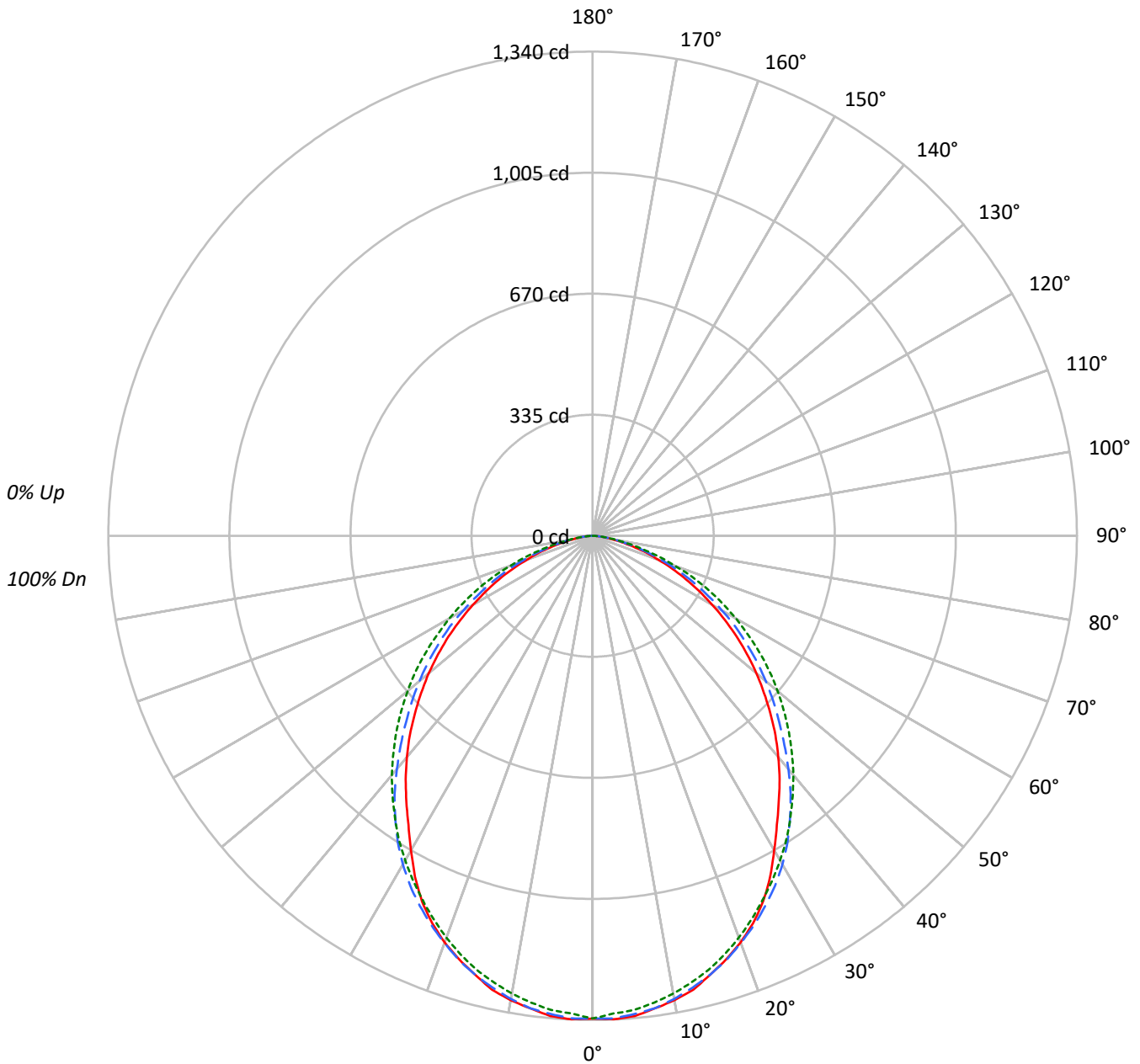
Lumens per Lamp: N/A  
Luminaire Lumens: 3089.0 lumens  
Efficiency: N/A  
Efficacy: 92.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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°	7190	7190	7190
5°	7209	7178	7117
10°	7132	7113	7031
15°	7006	7006	6926
20°	6857	6867	6778
25°	6632	6714	6608
30°	6245	6525	6446
35°	5901	6255	6265
40°	5614	5917	6072
45°	5293	5558	5844
50°	4954	5238	5595
55°	4570	4874	5292
60°	4115	4447	4922
65°	3635	3954	4478
70°	3029	3367	3803
75°	2379	2689	2978
80°	1702	1894	2098
85°	1112	1112	1044



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.8	4.1
10°-20°	353.4	11.4
20°-30°	516.4	16.7
30°-40°	586.1	19.0
40°-50°	565.8	18.3
50°-60°	466.8	15.1
60°-70°	310.8	10.1
70°-80°	139.1	4.5
80°-90°	24.9	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°	995.5	32.2
0°-40°	1581.6	51.2
0°-60°	2614.2	84.6
0°-90°	3089.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3089.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1336	1336	1336	1336	1336	
5°	1334	1334	1329	1322	1317	126
15°	1257	1260	1257	1252	1243	354
25°	1117	1126	1131	1122	1113	511
35°	898	910	952	957	954	563
45°	695	707	730	764	768	537
55°	487	495	519	548	564	435
65°	285	293	310	333	352	283
75°	114	121	129	136	143	125
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1335.9	1335.9	1335.9	1335.9	1335.9
2.5°	1339.5	1340.0	1336.9	1328.7	1323.6
5°	1334.4	1333.9	1328.7	1321.5	1317.4
7.5°	1319.5	1320.5	1319.0	1308.7	1303.1
10°	1305.1	1305.6	1301.5	1293.3	1286.6
12.5°	1286.6	1286.1	1280.5	1276.4	1265.6
15°	1257.4	1260.5	1257.4	1251.7	1243.0
17.5°	1229.2	1229.2	1231.2	1221.5	1214.8
20°	1197.3	1198.9	1198.9	1191.2	1183.5
22.5°	1160.4	1165.0	1166.5	1158.3	1149.1
25°	1116.8	1125.5	1130.6	1122.4	1112.7
27.5°	1063.9	1077.2	1092.6	1086.5	1075.7
30°	1004.9	1024.4	1050.0	1044.9	1037.2
32.5°	948.9	968.4	1003.9	1001.8	997.7
35°	898.1	910.5	952.0	957.2	953.6
37.5°	849.9	861.2	900.2	912.0	908.9
40°	799.1	811.4	842.2	863.2	864.3
42.5°	748.8	760.6	785.7	816.0	816.0
45°	695.4	707.2	730.3	763.7	767.8
47.5°	643.1	655.4	678.0	711.3	718.0
50°	591.7	603.0	625.6	657.9	668.2
52.5°	538.4	550.7	572.8	602.5	617.4
55°	487.0	495.3	519.4	548.1	564.0
57.5°	433.7	441.4	468.6	493.2	509.6
60°	382.3	392.1	413.1	438.3	457.3
62.5°	333.1	343.3	361.3	383.4	404.9
65°	285.4	293.0	310.5	332.6	351.6
67.5°	239.2	245.8	263.3	278.7	298.7
70°	192.5	201.2	214.0	228.9	241.7
72.5°	155.0	158.6	169.4	180.1	193.5
75°	114.4	120.6	129.3	135.5	143.2
77.5°	82.1	85.7	90.8	96.0	103.2
80°	54.9	56.5	61.1	62.1	67.7
82.5°	33.4	34.4	35.4	35.9	38.0
85°	18.0	18.0	18.0	16.9	16.9
87.5°	10.3	10.3	8.7	7.2	5.1
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)