

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: P555141

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-81-86-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: P555141  
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-30-UNV-81-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

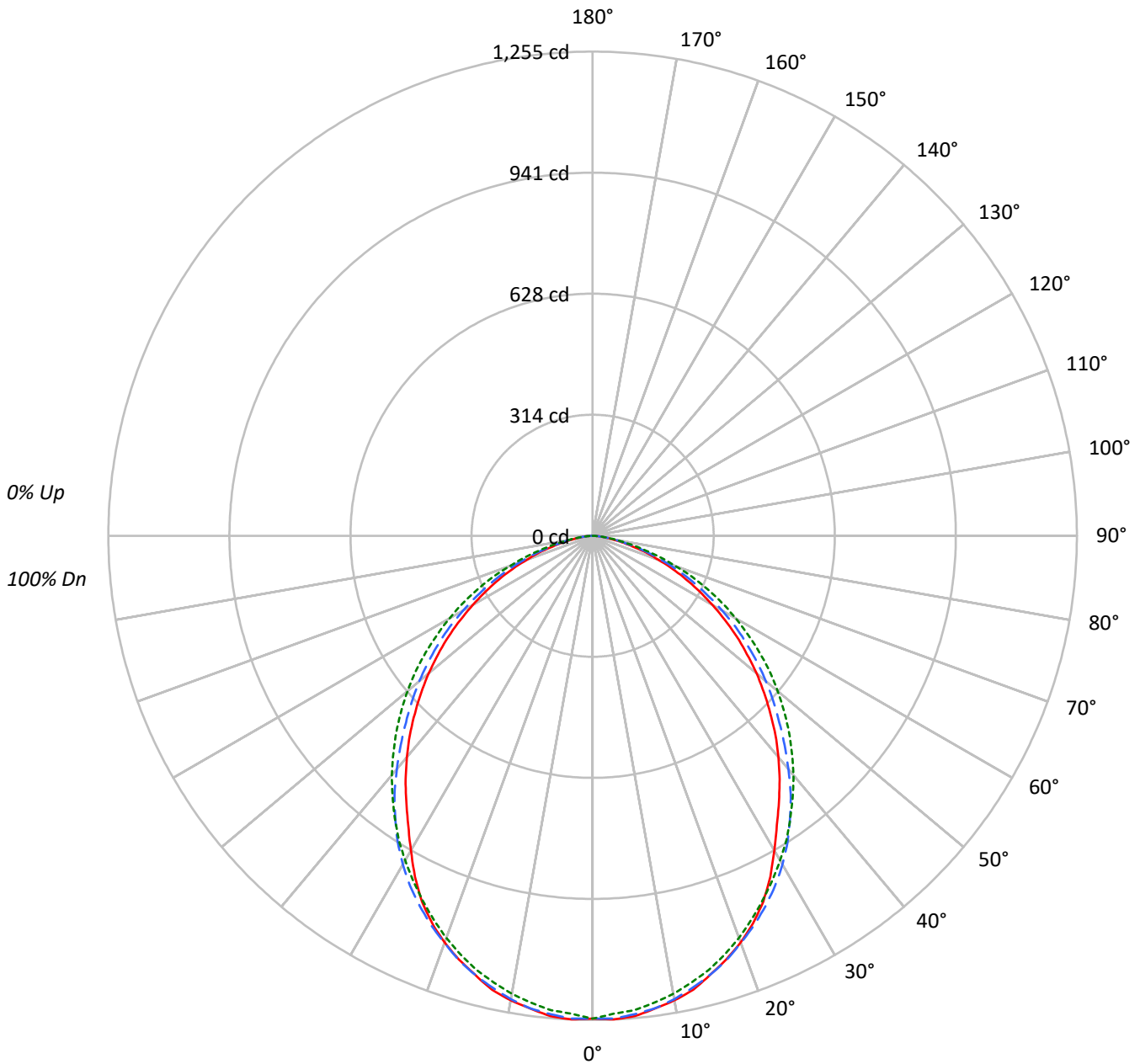
Lumens per Lamp: N/A  
Luminaire Lumens: 2894.0 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): 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°	6736	6736	6736
5°	6754	6725	6668
10°	6682	6664	6587
15°	6564	6564	6489
20°	6425	6433	6350
25°	6213	6290	6190
30°	5850	6114	6039
35°	5528	5860	5870
40°	5259	5543	5689
45°	4959	5208	5475
50°	4642	4907	5241
55°	4282	4566	4958
60°	3856	4167	4611
65°	3404	3705	4195
70°	2837	3155	3564
75°	2229	2520	2789
80°	1593	1773	1968
85°	1037	1037	982



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.8	4.1
10°-20°	331.0	11.4
20°-30°	483.8	16.7
30°-40°	549.1	19.0
40°-50°	530.1	18.3
50°-60°	437.3	15.1
60°-70°	291.2	10.1
70°-80°	130.3	4.5
80°-90°	23.3	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°	932.7	32.2
0°-40°	1481.8	51.2
0°-60°	2449.2	84.6
0°-90°	2894.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2894.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1252	1252	1252	1252	1252	
5°	1250	1250	1245	1238	1234	118
15°	1178	1181	1178	1173	1165	332
25°	1046	1054	1059	1052	1042	479
35°	841	853	892	897	893	527
45°	652	663	684	716	719	503
55°	456	464	487	514	528	407
65°	267	274	291	312	329	265
75°	107	113	121	127	134	117
85°	17	17	17	16	16	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1251.6	1251.6	1251.6	1251.6	1251.6
2.5°	1254.9	1255.4	1252.5	1244.8	1240.0
5°	1250.1	1249.7	1244.8	1238.1	1234.3
7.5°	1236.2	1237.2	1235.7	1226.1	1220.8
10°	1222.7	1223.2	1219.4	1211.7	1205.4
12.5°	1205.4	1204.9	1199.7	1195.8	1185.7
15°	1178.0	1180.9	1178.0	1172.7	1164.6
17.5°	1151.6	1151.6	1153.5	1144.4	1138.1
20°	1121.8	1123.2	1123.2	1116.0	1108.8
22.5°	1087.1	1091.5	1092.9	1085.2	1076.6
25°	1046.3	1054.4	1059.3	1051.6	1042.4
27.5°	996.7	1009.2	1023.7	1017.9	1007.8
30°	941.4	959.7	983.8	979.0	971.7
32.5°	889.0	907.3	940.5	938.6	934.7
35°	841.4	853.0	891.9	896.7	893.4
37.5°	796.2	806.8	843.4	854.4	851.5
40°	748.6	760.2	789.0	808.7	809.7
42.5°	701.5	712.6	736.1	764.5	764.5
45°	651.5	662.6	684.2	715.5	719.3
47.5°	602.5	614.0	635.2	666.4	672.7
50°	554.4	565.0	586.1	616.4	626.0
52.5°	504.4	515.9	536.6	564.5	578.4
55°	456.3	464.0	486.6	513.5	528.4
57.5°	406.3	413.5	439.0	462.1	477.5
60°	358.2	367.3	387.1	410.6	428.4
62.5°	312.1	321.7	338.5	359.2	379.4
65°	267.3	274.5	290.9	311.6	329.4
67.5°	224.1	230.3	246.7	261.1	279.8
70°	180.3	188.5	200.5	214.4	226.5
72.5°	145.2	148.6	158.7	168.8	181.3
75°	107.2	113.0	121.2	126.9	134.1
77.5°	76.9	80.3	85.1	89.9	96.6
80°	51.4	52.9	57.2	58.2	63.5
82.5°	31.3	32.2	33.2	33.7	35.6
85°	16.8	16.8	16.8	15.9	15.9
87.5°	9.6	9.6	8.2	6.7	4.8
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)