

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: P555828

Luminaire Tested: **FUSL-12-2-LD4-3LO-50-UNV-80-86-EDD-90**

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: P555828  
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-LD4-3LO-50-UNV-80-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

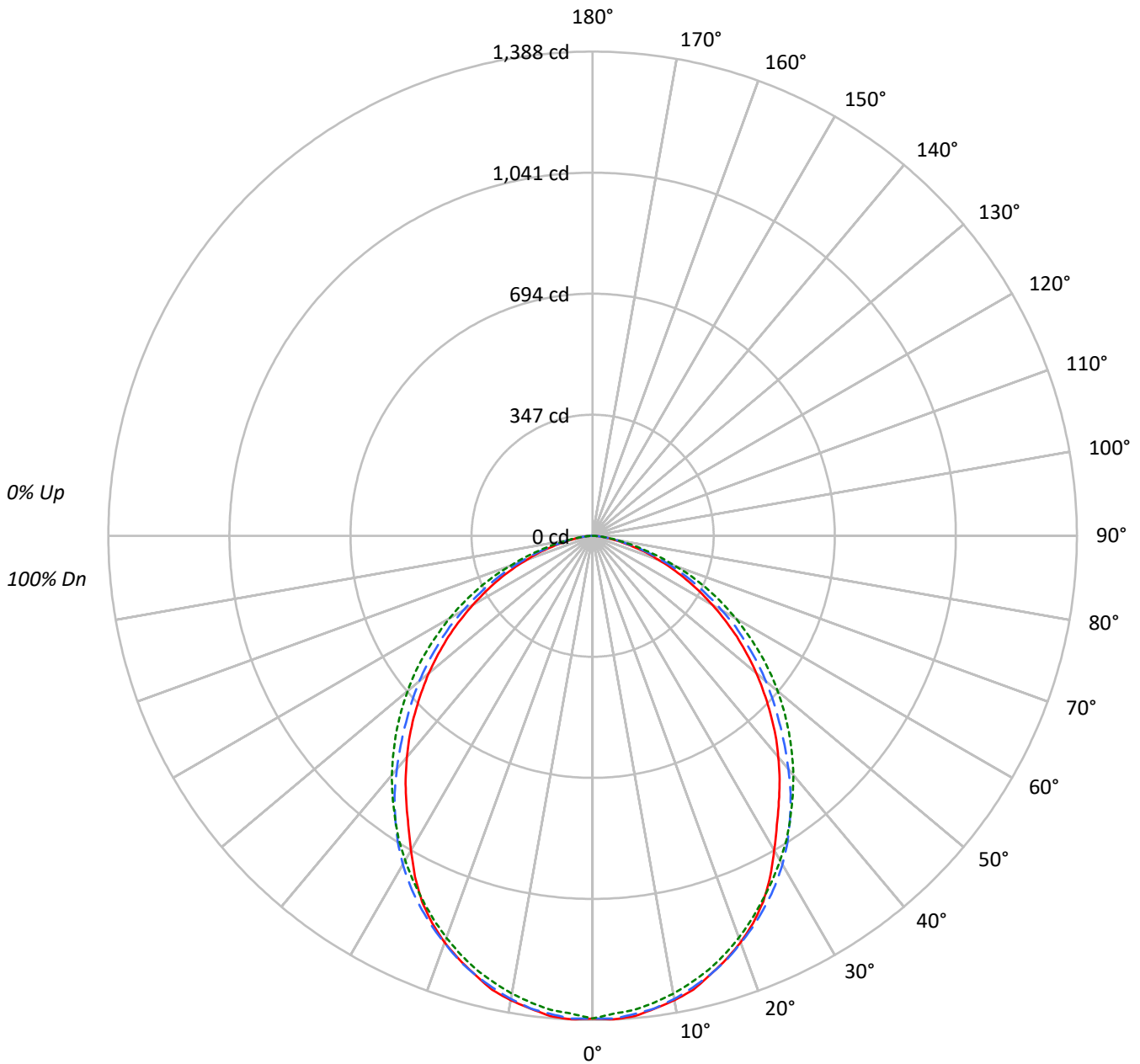
Lumens per Lamp: N/A  
Luminaire Lumens: 3200.0 lumens  
Efficiency: N/A  
Efficacy: 91.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
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°	7448	7448	7448
5°	7468	7437	7373
10°	7389	7368	7284
15°	7258	7258	7175
20°	7104	7113	7022
25°	6870	6956	6845
30°	6469	6760	6678
35°	6113	6479	6490
40°	5816	6130	6290
45°	5483	5759	6054
50°	5133	5426	5796
55°	4734	5048	5483
60°	4264	4607	5099
65°	3764	4097	4638
70°	3138	3489	3940
75°	2466	2786	3084
80°	1764	1962	2176
85°	1149	1149	1081



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.3	4.1
10°-20°	366.1	11.4
20°-30°	534.9	16.7
30°-40°	607.2	19.0
40°-50°	586.1	18.3
50°-60°	483.5	15.1
60°-70°	322.0	10.1
70°-80°	144.1	4.5
80°-90°	25.8	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°	1031.3	32.2
0°-40°	1638.5	51.2
0°-60°	2708.1	84.6
0°-90°	3200.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3200.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1384	1384	1384	1384	1384	
5°	1382	1382	1376	1369	1365	131
15°	1303	1306	1303	1297	1288	367
25°	1157	1166	1171	1163	1153	530
35°	930	943	986	992	988	583
45°	720	733	757	791	795	556
55°	504	513	538	568	584	450
65°	296	304	322	344	364	293
75°	119	125	134	140	148	130
85°	19	19	19	18	18	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1383.9	<i>1383.9</i>	1383.9	1383.9	1383.9
2.5°	<i>1387.6</i>	<i>1388.2</i>	<i>1385.0</i>	<i>1376.5</i>	<i>1371.2</i>
5°	1382.3	<i>1381.8</i>	1376.5	1369.0	1364.8
7.5°	1366.9	<i>1368.0</i>	1366.4	1355.7	1349.9
10°	1352.0	<i>1352.5</i>	1348.3	1339.8	1332.9
12.5°	1332.9	<i>1332.3</i>	1326.5	1322.2	1311.1
15°	1302.6	<i>1305.8</i>	1302.6	1296.7	1287.7
17.5°	1273.3	<i>1273.3</i>	1275.5	1265.4	1258.4
20°	1240.4	<i>1242.0</i>	1242.0	1234.0	1226.0
22.5°	1202.1	<i>1206.9</i>	1208.5	1200.0	1190.4
25°	1156.9	<i>1165.9</i>	1171.3	1162.7	1152.6
27.5°	1102.1	<i>1116.0</i>	1131.9	1125.5	1114.4
30°	1041.0	<i>1061.2</i>	1087.8	1082.5	1074.5
32.5°	983.0	<i>1003.2</i>	1039.9	1037.8	1033.6
35°	930.4	<i>943.2</i>	986.2	991.6	987.8
37.5°	880.4	<i>892.1</i>	932.5	944.8	941.6
40°	827.8	<i>840.6</i>	872.5	894.3	895.3
42.5°	775.7	<i>787.9</i>	814.0	845.3	845.3
45°	720.4	<i>732.6</i>	756.6	791.1	795.4
47.5°	666.2	<i>678.9</i>	702.3	736.9	743.8
50°	613.0	<i>624.7</i>	648.1	681.6	692.2
52.5°	557.7	<i>570.5</i>	593.3	624.2	639.6
55°	504.5	<i>513.1</i>	538.0	567.8	584.3
57.5°	449.3	<i>457.2</i>	485.4	510.9	527.9
60°	396.1	<i>406.2</i>	428.0	454.0	473.7
62.5°	345.0	<i>355.7</i>	374.3	397.2	419.5
65°	295.6	<i>303.6</i>	321.7	344.5	364.2
67.5°	247.8	<i>254.7</i>	272.7	288.7	309.4
70°	199.4	<i>208.4</i>	221.7	237.1	250.4
72.5°	160.6	<i>164.3</i>	175.4	186.6	200.4
75°	118.6	<i>124.9</i>	134.0	140.4	148.3
77.5°	85.1	<i>88.8</i>	94.1	99.4	106.9
80°	56.9	<i>58.5</i>	63.3	64.3	70.2
82.5°	34.6	<i>35.6</i>	36.7	37.2	39.3
85°	18.6	<i>18.6</i>	18.6	17.5	17.5
87.5°	10.6	<i>10.6</i>	9.0	7.4	5.3
90°	0.0	<i>0.0</i>	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)