

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: P555794

Luminaire Tested: **FUSL-12-2-LD4-3LO-40-UNV-82-85-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: P555794  
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-40-UNV-82-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

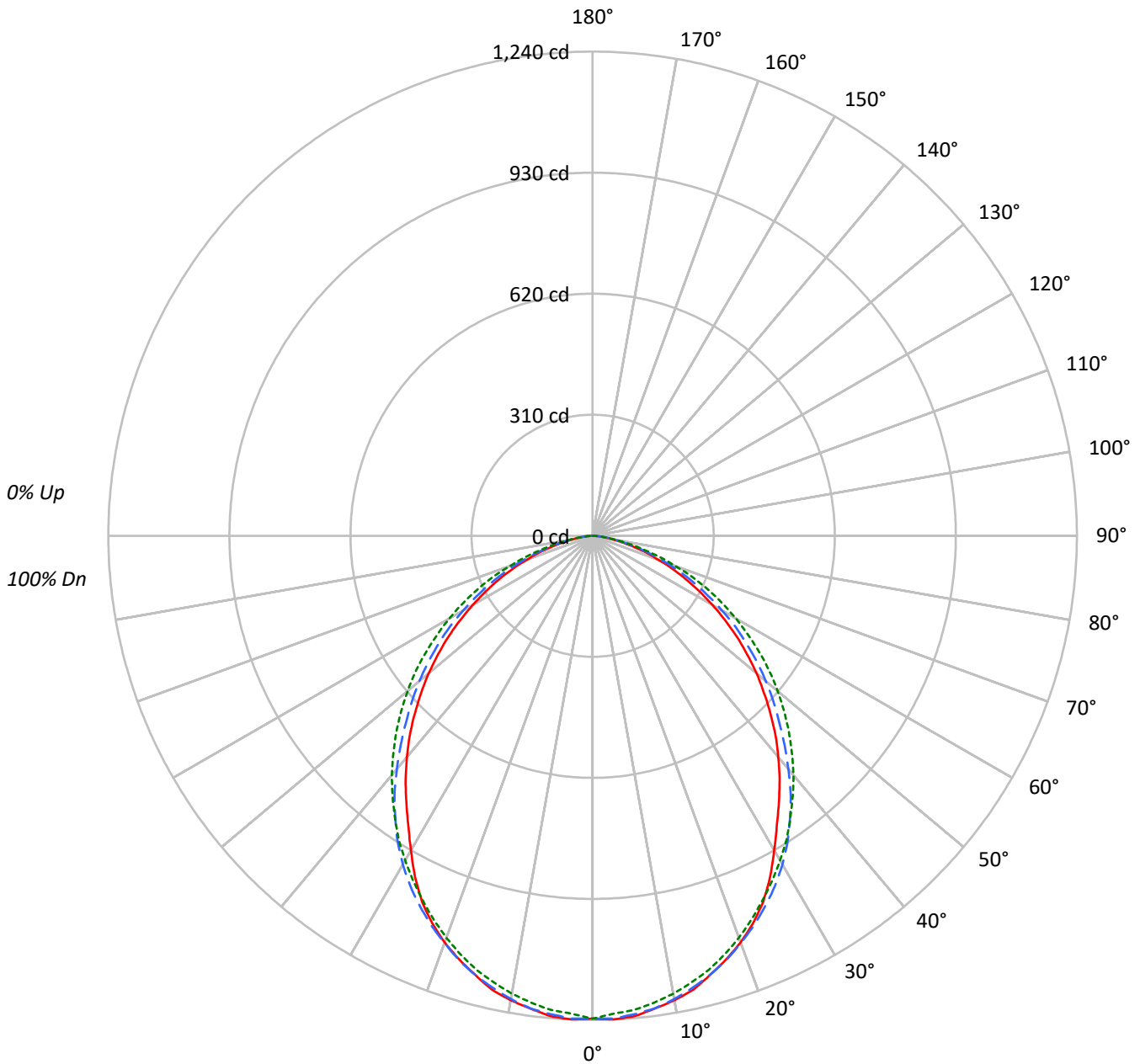
Lumens per Lamp: N/A  
Luminaire Lumens: 2859.0 lumens  
Efficiency: N/A  
Efficacy: 81.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
Input Voltage (V): NR  
Input Current (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°	6654	6654	6654
5°	6672	6644	6587
10°	6601	6583	6508
15°	6484	6484	6410
20°	6347	6355	6274
25°	6138	6214	6115
30°	5780	6040	5966
35°	5462	5789	5799
40°	5196	5476	5620
45°	4899	5144	5409
50°	4586	4848	5179
55°	4230	4510	4898
60°	3809	4116	4555
65°	3363	3660	4144
70°	2803	3117	3520
75°	2202	2489	2755
80°	1574	1751	1943
85°	1025	1025	969



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.4	4.1
10°-20°	327.0	11.4
20°-30°	477.9	16.7
30°-40°	542.5	19.0
40°-50°	523.7	18.3
50°-60°	432.0	15.1
60°-70°	287.7	10.1
70°-80°	128.7	4.5
80°-90°	23.0	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°	921.4	32.2
0°-40°	1463.9	51.2
0°-60°	2419.6	84.6
0°-90°	2859.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2859.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1236	1236	1236	1236	1236	
5°	1235	1234	1230	1223	1219	117
15°	1164	1167	1164	1158	1150	328
25°	1034	1042	1046	1039	1030	473
35°	831	843	881	886	883	521
45°	644	655	676	707	711	497
55°	451	458	481	507	522	402
65°	264	271	287	308	325	262
75°	106	112	120	125	132	116
85°	17	17	17	16	16	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1236.4	1236.4	1236.4	1236.4	1236.4
2.5°	1239.8	1240.2	1237.4	1229.8	1225.0
5°	1235.0	1234.5	1229.8	1223.1	1219.3
7.5°	1221.2	1222.2	1220.8	1211.3	1206.0
10°	1207.9	1208.4	1204.6	1197.0	1190.8
12.5°	1190.8	1190.4	1185.1	1181.3	1171.4
15°	1163.8	1166.6	1163.8	1158.5	1150.5
17.5°	1137.6	1137.6	1139.5	1130.5	1124.3
20°	1108.2	1109.6	1109.6	1102.5	1095.4
22.5°	1074.0	1078.3	1079.7	1072.1	1063.5
25°	1033.6	1041.7	1046.4	1038.8	1029.8
27.5°	984.7	997.0	1011.3	1005.6	995.6
30°	930.1	948.1	971.9	967.1	960.0
32.5°	878.3	896.3	929.1	927.2	923.4
35°	831.3	842.7	881.1	885.9	882.6
37.5°	786.6	797.1	833.2	844.1	841.2
40°	739.6	751.0	779.5	799.0	799.9
42.5°	693.0	704.0	727.2	755.3	755.3
45°	643.6	654.6	675.9	706.8	710.6
47.5°	595.2	606.6	627.5	658.4	664.5
50°	547.7	558.1	579.0	609.0	618.5
52.5°	498.3	509.7	530.1	557.7	571.4
55°	450.8	458.4	480.7	507.3	522.0
57.5°	401.4	408.5	433.7	456.5	471.7
60°	353.9	362.9	382.4	405.7	423.2
62.5°	308.3	317.8	334.4	354.8	374.8
65°	264.1	271.2	287.4	307.8	325.4
67.5°	221.4	227.5	243.7	257.9	276.5
70°	178.1	186.2	198.1	211.9	223.7
72.5°	143.5	146.8	156.8	166.7	179.1
75°	105.9	111.6	119.7	125.4	132.5
77.5°	76.0	79.3	84.1	88.8	95.5
80°	50.8	52.3	56.5	57.5	62.7
82.5°	30.9	31.8	32.8	33.3	35.2
85°	16.6	16.6	16.6	15.7	15.7
87.5°	9.5	9.5	8.1	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)