

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: P555854

Luminaire Tested: **FUSL-12-2-LD4-3LO-50-UNV-81-97-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: P555854  
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-81-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

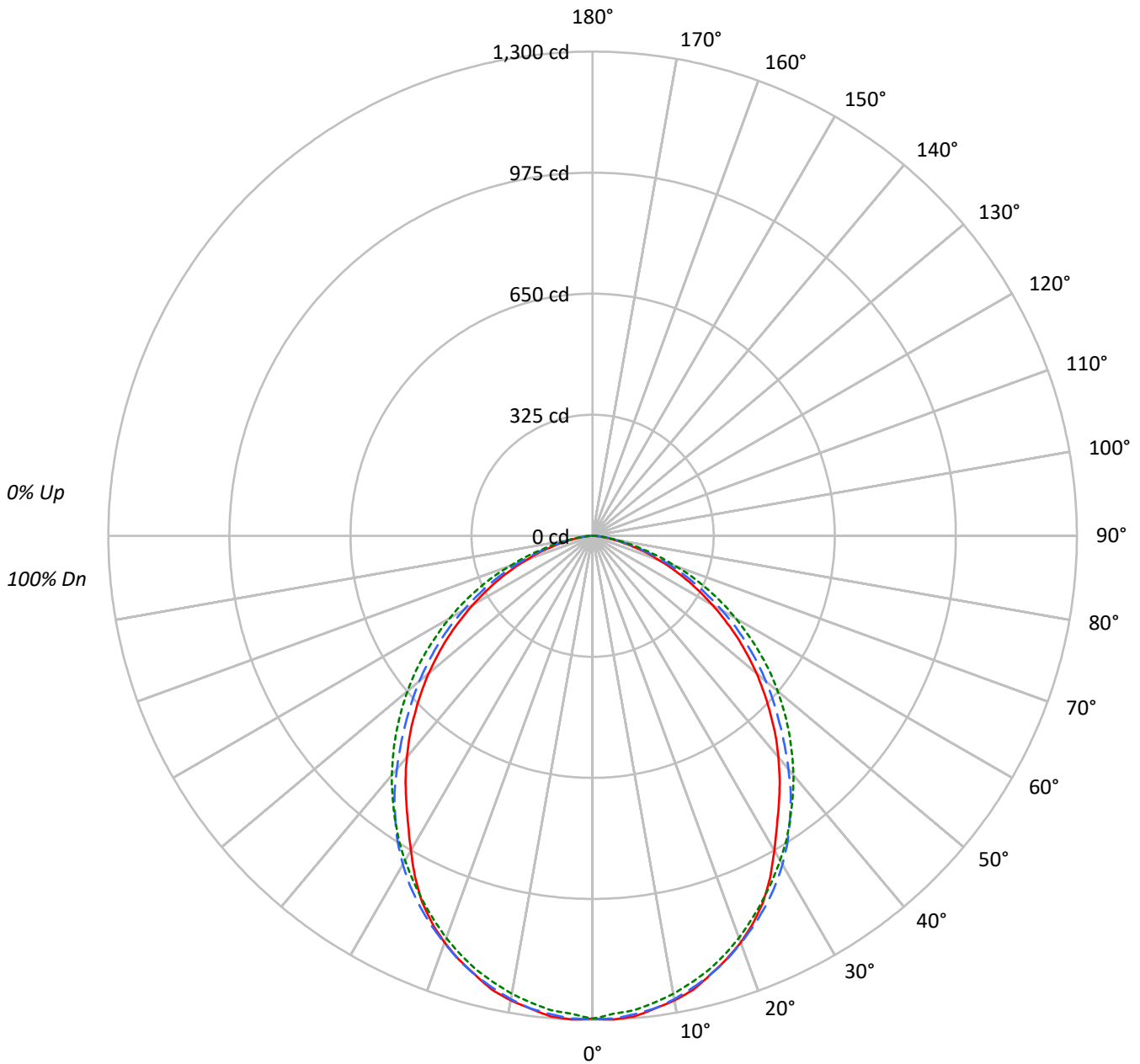
Lumens per Lamp: N/A  
Luminaire Lumens: 2998.0 lumens  
Efficiency: N/A  
Efficacy: 85.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	6978	6978	6978
5°	6997	6967	6908
10°	6922	6903	6824
15°	6799	6799	6722
20°	6656	6664	6578
25°	6437	6516	6413
30°	6061	6333	6256
35°	5727	6071	6081
40°	5448	5743	5893
45°	5137	5395	5672
50°	4809	5084	5430
55°	4435	4730	5136
60°	3994	4316	4777
65°	3526	3838	4345
70°	2939	3268	3692
75°	2310	2610	2890
80°	1652	1838	2036
85°	1074	1074	1013



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.1	4.1
10°-20°	342.9	11.4
20°-30°	501.2	16.7
30°-40°	568.9	19.0
40°-50°	549.2	18.3
50°-60°	453.0	15.1
60°-70°	301.7	10.1
70°-80°	135.0	4.5
80°-90°	24.2	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°	966.2	32.2
0°-40°	1535.0	51.2
0°-60°	2537.2	84.6
0°-90°	2998.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2998.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1297	1297	1297	1297	1297	
5°	1295	1295	1290	1283	1279	123
15°	1220	1223	1220	1215	1206	344
25°	1084	1092	1097	1089	1080	496
35°	872	884	924	929	926	546
45°	675	686	709	741	745	521
55°	473	481	504	532	547	422
65°	277	284	301	323	341	275
75°	111	117	126	132	139	121
85°	17	17	17	16	16	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1296.6	1296.6	1296.6	1296.6	1296.6
2.5°	1300.0	1300.5	1297.6	1289.6	1284.6
5°	1295.1	1294.6	1289.6	1282.6	1278.6
7.5°	1280.6	1281.6	1280.1	1270.2	1264.7
10°	1266.7	1267.2	1263.2	1255.2	1248.7
12.5°	1248.7	1248.2	1242.8	1238.8	1228.3
15°	1220.3	1223.3	1220.3	1214.9	1206.4
17.5°	1193.0	1193.0	1194.9	1185.5	1179.0
20°	1162.1	1163.6	1163.6	1156.1	1148.6
22.5°	1126.2	1130.7	1132.2	1124.2	1115.2
25°	1083.9	1092.3	1097.3	1089.3	1079.9
27.5°	1032.6	1045.5	1060.5	1054.5	1044.0
30°	975.3	994.2	1019.1	1014.1	1006.7
32.5°	921.0	939.9	974.3	972.3	968.3
35°	871.7	883.6	924.0	929.0	925.5
37.5°	824.9	835.8	873.7	885.1	882.1
40°	775.5	787.5	817.4	837.8	838.8
42.5°	726.7	738.2	762.6	792.0	792.0
45°	674.9	686.4	708.8	741.2	745.2
47.5°	624.1	636.1	658.0	690.4	696.8
50°	574.3	585.3	607.2	638.6	648.5
52.5°	522.5	534.5	555.9	584.8	599.2
55°	472.7	480.7	504.1	532.0	547.4
57.5°	420.9	428.4	454.8	478.7	494.6
60°	371.1	380.5	401.0	425.4	443.8
62.5°	323.3	333.2	350.7	372.1	393.0
65°	276.9	284.4	301.4	322.8	341.2
67.5°	232.1	238.6	255.5	270.5	289.9
70°	186.8	195.3	207.7	222.2	234.6
72.5°	150.4	153.9	164.4	174.8	187.8
75°	111.1	117.1	125.5	131.5	139.0
77.5°	79.7	83.2	88.2	93.1	100.1
80°	53.3	54.8	59.3	60.3	65.7
82.5°	32.4	33.4	34.4	34.9	36.9
85°	17.4	17.4	17.4	16.4	16.4
87.5°	10.0	10.0	8.5	7.0	5.0
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)