

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: P554740

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-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: P554740  
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-LD4-2HI-40-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 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

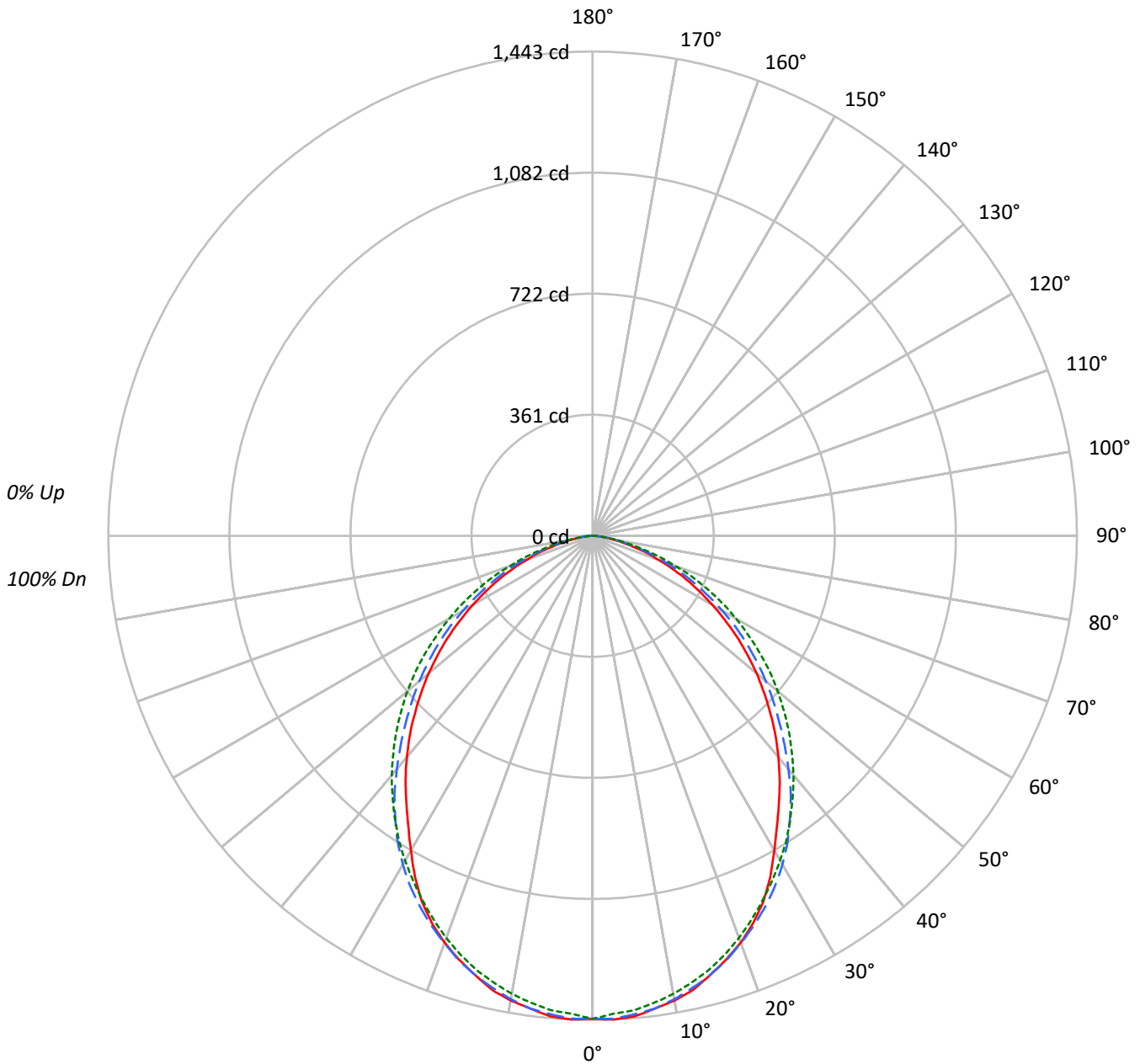
Lumens per Lamp: N/A  
Luminaire Lumens: 3328.0 lumens  
Efficiency: N/A  
Efficacy: 77.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
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°	7746	7746	7746
5°	7767	7734	7668
10°	7684	7663	7576
15°	7548	7548	7462
20°	7388	7397	7303
25°	7145	7233	7118
30°	6728	7031	6945
35°	6357	6739	6750
40°	6048	6375	6542
45°	5702	5989	6296
50°	5338	5643	6028
55°	4923	5251	5702
60°	4434	4791	5303
65°	3915	4260	4824
70°	3262	3629	4098
75°	2564	2897	3209
80°	1835	2039	2263
85°	1198	1198	1124



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.5	4.1
10°-20°	380.7	11.4
20°-30°	556.3	16.7
30°-40°	631.5	19.0
40°-50°	609.6	18.3
50°-60°	502.9	15.1
60°-70°	334.9	10.1
70°-80°	149.9	4.5
80°-90°	26.8	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°	1072.5	32.2
0°-40°	1704.0	51.2
0°-60°	2816.5	84.6
0°-90°	3328.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3328.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1439	1439	1439	1439	1439	
5°	1438	1437	1432	1424	1419	136
15°	1355	1358	1355	1349	1339	382
25°	1203	1213	1218	1209	1199	551
35°	968	981	1026	1031	1027	606
45°	749	762	787	823	827	578
55°	525	534	560	590	608	468
65°	307	316	334	358	379	305
75°	123	130	139	146	154	135
85°	19	19	19	18	18	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1439.3	1439.3	1439.3	1439.3	1439.3
2.5°	1443.1	1443.7	1440.4	1431.5	1426.0
5°	1437.6	1437.1	1431.5	1423.8	1419.4
7.5°	1421.6	1422.7	1421.0	1410.0	1403.9
10°	1406.1	1406.7	1402.2	1393.4	1386.2
12.5°	1386.2	1385.6	1379.6	1375.1	1363.5
15°	1354.7	1358.0	1354.7	1348.6	1339.2
17.5°	1324.3	1324.3	1326.5	1316.0	1308.8
20°	1290.0	1291.6	1291.6	1283.3	1275.1
22.5°	1250.2	1255.1	1256.8	1248.0	1238.0
25°	1203.2	1212.6	1218.1	1209.3	1198.7
27.5°	1146.2	1160.6	1177.2	1170.6	1158.9
30°	1082.6	1103.6	1131.3	1125.8	1117.5
32.5°	1022.4	1043.4	1081.5	1079.3	1074.9
35°	967.6	980.9	1025.7	1031.2	1027.3
37.5°	915.7	927.8	969.8	982.6	979.2
40°	860.9	874.2	907.4	930.0	931.1
42.5°	806.7	819.4	846.5	879.2	879.2
45°	749.2	761.9	786.8	822.8	827.2
47.5°	692.8	706.1	730.4	766.4	773.5
50°	637.5	649.7	674.0	708.9	719.9
52.5°	580.0	593.3	617.1	649.1	665.2
55°	524.7	533.6	559.6	590.5	607.7
57.5°	467.2	475.5	504.8	531.4	549.1
60°	411.9	422.4	445.1	472.2	492.7
62.5°	358.9	369.9	389.3	413.0	436.3
65°	307.4	315.7	334.5	358.3	378.8
67.5°	257.7	264.9	283.7	300.2	321.8
70°	207.3	216.7	230.6	246.6	260.4
72.5°	167.0	170.9	182.5	194.1	208.5
75°	123.3	129.9	139.3	146.0	154.3
77.5°	88.5	92.3	97.9	103.4	111.1
80°	59.2	60.8	65.8	66.9	73.0
82.5°	35.9	37.0	38.2	38.7	40.9
85°	19.4	19.4	19.4	18.2	18.2
87.5°	11.1	11.1	9.4	7.7	5.5
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)