

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: P554748

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-UNV-80-96-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: P554748  
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-80-96-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

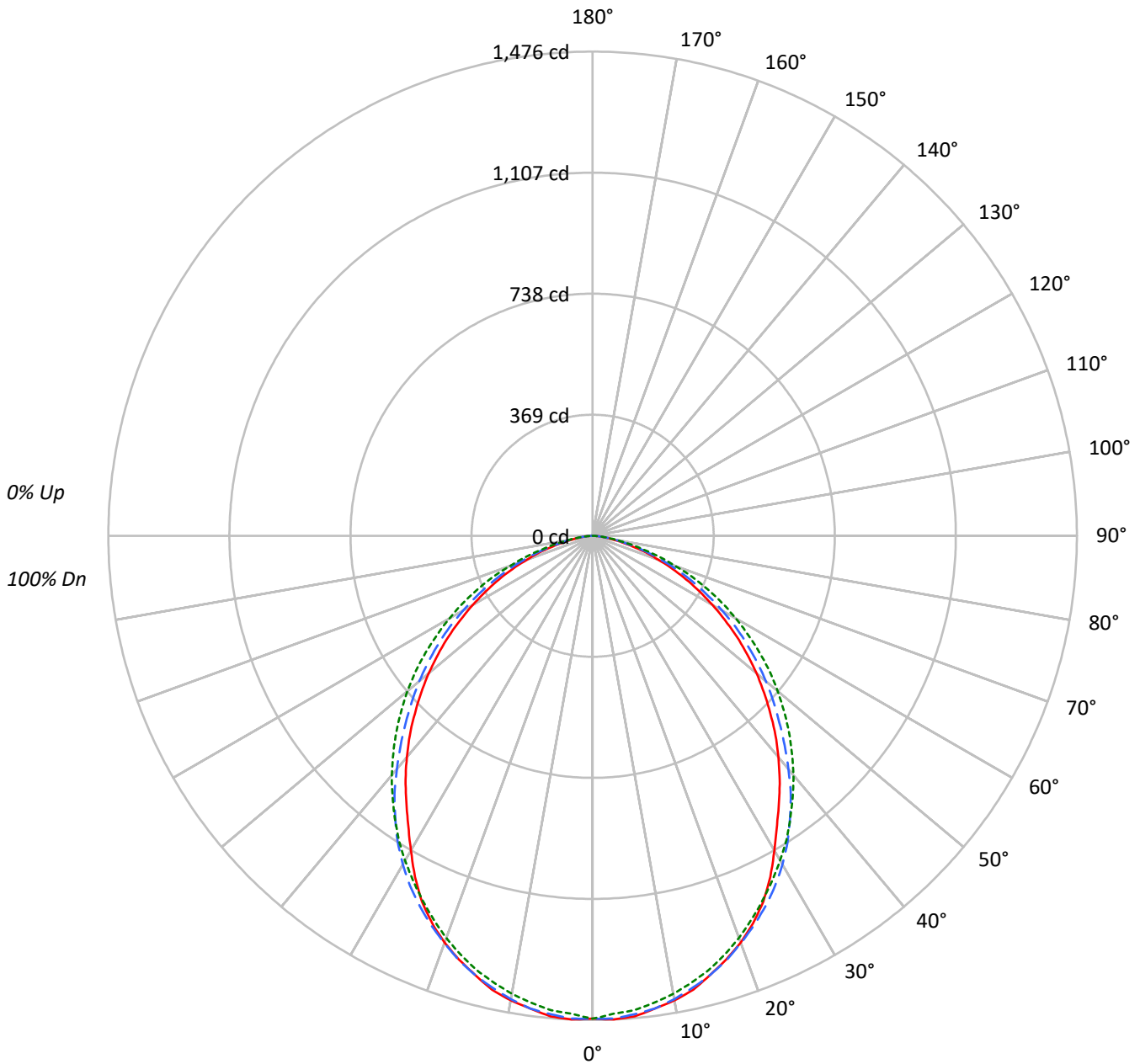
Lumens per Lamp: N/A  
Luminaire Lumens: 3404.0 lumens  
Efficiency: N/A  
Efficacy: 78.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
Input Voltage (V): NR  
Input Current (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°	7923	7923	7923
5°	7944	7910	7843
10°	7860	7838	7748
15°	7720	7720	7632
20°	7557	7566	7470
25°	7308	7399	7281
30°	6882	7191	7103
35°	6502	6893	6904
40°	6187	6521	6691
45°	5832	6126	6440
50°	5460	5772	6166
55°	5036	5370	5832
60°	4535	4901	5424
65°	4004	4358	4933
70°	3338	3710	4192
75°	2622	2963	3281
80°	1875	2086	2315
85°	1223	1223	1155



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.6	4.1
10°-20°	389.4	11.4
20°-30°	569.0	16.7
30°-40°	645.9	19.0
40°-50°	623.5	18.3
50°-60°	514.4	15.1
60°-70°	342.5	10.1
70°-80°	153.3	4.5
80°-90°	27.4	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°	1097.0	32.2
0°-40°	1742.9	51.2
0°-60°	2880.8	84.6
0°-90°	3404.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3404.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1472	1472	1472	1472	1472	
5°	1470	1470	1464	1456	1452	139
15°	1386	1389	1386	1379	1370	391
25°	1231	1240	1246	1237	1226	564
35°	990	1003	1049	1055	1051	620
45°	766	779	805	842	846	591
55°	537	546	572	604	622	479
65°	314	323	342	366	387	312
75°	126	133	142	149	158	138
85°	20	20	20	19	19	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1472.1	1472.1	1472.1	1472.1	1472.1
2.5°	1476.1	1476.7	1473.3	1464.2	1458.6
5°	1470.4	1469.9	1464.2	1456.3	1451.8
7.5°	1454.0	1455.2	1453.5	1442.2	1435.9
10°	1438.2	1438.8	1434.2	1425.2	1417.8
12.5°	1417.8	1417.3	1411.1	1406.5	1394.7
15°	1385.6	1389.0	1385.6	1379.4	1369.8
17.5°	1354.5	1354.5	1356.8	1346.0	1338.7
20°	1319.4	1321.1	1321.1	1312.7	1304.2
22.5°	1278.7	1283.8	1285.5	1276.5	1266.3
25°	1230.6	1240.3	1245.9	1236.9	1226.1
27.5°	1172.4	1187.1	1204.1	1197.3	1185.4
30°	1107.4	1128.8	1157.1	1151.5	1143.0
32.5°	1045.7	1067.2	1106.2	1104.0	1099.4
35°	989.7	1003.3	1049.1	1054.8	1050.8
37.5°	936.6	949.0	992.0	1005.0	1001.6
40°	880.6	894.1	928.1	951.3	952.4
42.5°	825.1	838.2	865.9	899.2	899.2
45°	766.3	779.3	804.8	841.5	846.1
47.5°	708.6	722.2	747.1	783.9	791.2
50°	652.1	664.5	689.4	725.0	736.4
52.5°	593.3	606.8	631.2	664.0	680.4
55°	536.7	545.8	572.3	604.0	621.5
57.5°	477.9	486.4	516.4	543.5	561.6
60°	421.3	432.1	455.3	483.0	503.9
62.5°	367.0	378.4	398.2	422.5	446.2
65°	314.4	322.9	342.2	366.5	387.4
67.5°	263.5	270.9	290.1	307.1	329.2
70°	212.1	221.7	235.8	252.2	266.4
72.5°	170.8	174.8	186.6	198.5	213.2
75°	126.1	132.9	142.5	149.3	157.8
77.5°	90.5	94.4	100.1	105.8	113.7
80°	60.5	62.2	67.3	68.4	74.7
82.5°	36.8	37.9	39.0	39.6	41.9
85°	19.8	19.8	19.8	18.7	18.7
87.5°	11.3	11.3	9.6	7.9	5.7
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)