

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: P554637

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-UNV-81-96-EDD**

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: P554637  
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-30-UNV-81-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

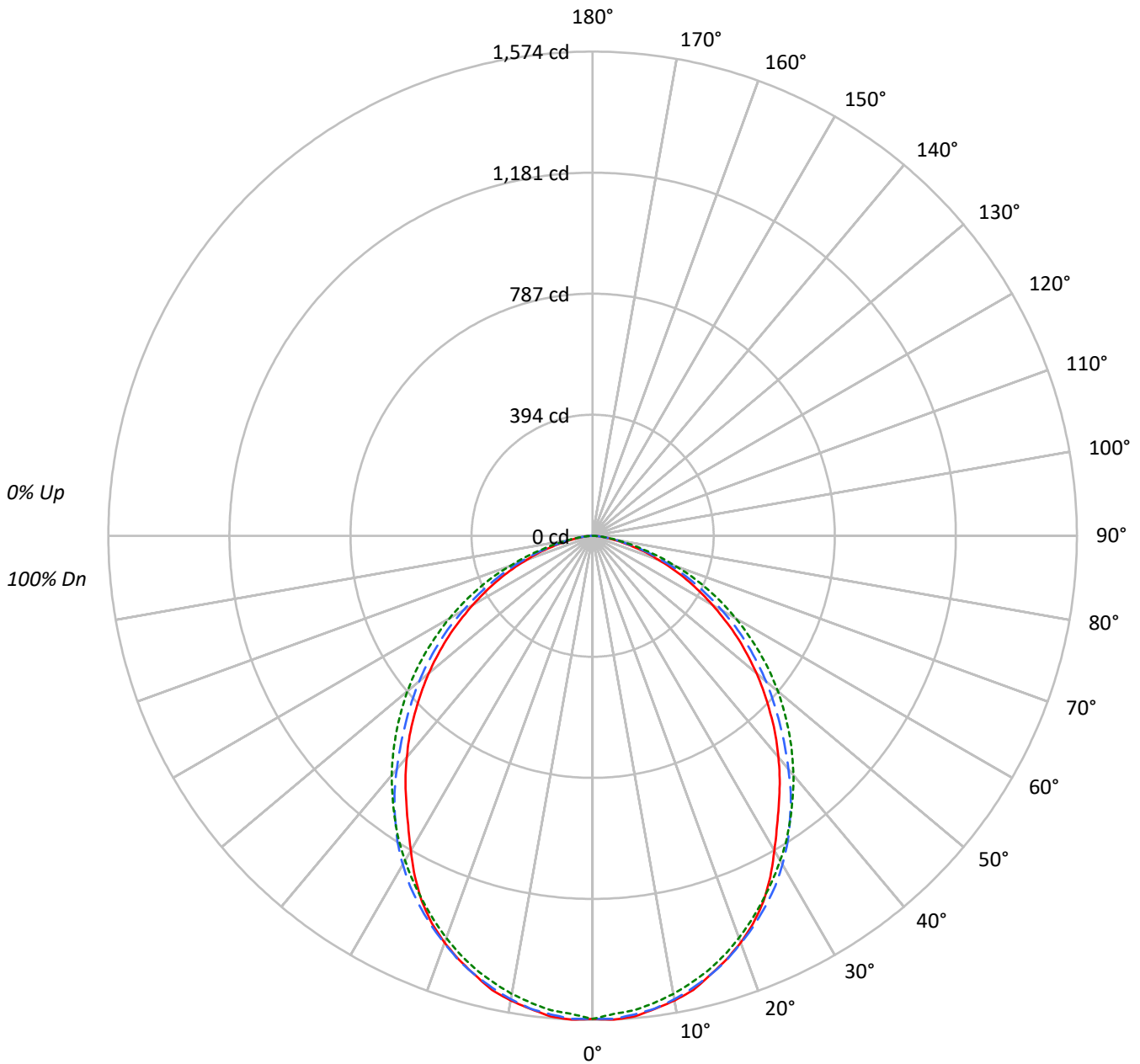
Lumens per Lamp: N/A  
Luminaire Lumens: 3631.0 lumens  
Efficiency: N/A  
Efficacy: 84.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	8451	8451	8451
5°	8474	8438	8366
10°	8384	8361	8265
15°	8235	8235	8141
20°	8061	8071	7967
25°	7795	7892	7767
30°	7341	7671	7577
35°	6936	7353	7364
40°	6599	6955	7137
45°	6221	6534	6869
50°	5824	6157	6577
55°	5372	5728	6221
60°	4837	5227	5786
65°	4271	4648	5262
70°	3559	3959	4471
75°	2797	3161	3500
80°	1999	2225	2467
85°	1303	1303	1229



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.8	4.1
10°-20°	415.3	11.4
20°-30°	607.0	16.7
30°-40°	689.0	19.0
40°-50°	665.1	18.3
50°-60°	548.7	15.1
60°-70°	365.4	10.1
70°-80°	163.5	4.5
80°-90°	29.2	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°	1170.2	32.2
0°-40°	1859.1	51.2
0°-60°	3072.9	84.6
0°-90°	3631.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3631.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1570	1570	1570	1570	1570	
5°	1568	1568	1562	1553	1549	148
15°	1478	1482	1478	1471	1461	417
25°	1313	1323	1329	1319	1308	601
35°	1056	1070	1119	1125	1121	661
45°	817	831	858	898	902	631
55°	572	582	610	644	663	511
65°	335	344	365	391	413	333
75°	134	142	152	159	168	147
85°	21	21	21	20	20	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1570.3	1570.3	1570.3	1570.3	1570.3
2.5°	1574.5	1575.1	1571.5	1561.9	1555.8
5°	1568.5	1567.9	1561.9	1553.4	1548.6
7.5°	1551.0	1552.2	1550.4	1538.3	1531.7
10°	1534.1	1534.7	1529.9	1520.2	1512.4
12.5°	1512.4	1511.8	1505.2	1500.3	1487.7
15°	1478.0	1481.6	1478.0	1471.4	1461.1
17.5°	1444.8	1444.8	1447.2	1435.8	1427.9
20°	1407.4	1409.2	1409.2	1400.2	1391.1
22.5°	1364.0	1369.4	1371.2	1361.6	1350.7
25°	1312.7	1323.0	1329.0	1319.4	1307.9
27.5°	1250.6	1266.3	1284.4	1277.1	1264.5
30°	1181.2	1204.1	1234.3	1228.3	1219.2
32.5°	1115.4	1138.4	1180.0	1177.6	1172.8
35°	1055.7	1070.2	1119.1	1125.1	1120.9
37.5°	999.0	1012.3	1058.1	1072.0	1068.4
40°	939.3	953.8	990.0	1014.7	1015.9
42.5°	880.2	894.0	923.6	959.2	959.2
45°	817.4	831.3	858.5	897.7	902.5
47.5°	755.9	770.4	796.9	836.1	844.0
50°	695.6	708.8	735.4	773.4	785.5
52.5°	632.8	647.3	673.3	708.2	725.7
55°	572.5	582.2	610.5	644.3	663.0
57.5°	509.8	518.8	550.8	579.7	599.0
60°	449.4	460.9	485.6	515.2	537.5
62.5°	391.5	403.6	424.7	450.6	476.0
65°	335.4	344.5	365.0	390.9	413.2
67.5°	281.1	289.0	309.5	327.6	351.1
70°	226.2	236.5	251.6	269.1	284.1
72.5°	182.2	186.4	199.1	211.7	227.4
75°	134.5	141.8	152.0	159.3	168.3
77.5°	96.5	100.7	106.8	112.8	121.3
80°	64.5	66.4	71.8	73.0	79.6
82.5°	39.2	40.4	41.6	42.2	44.6
85°	21.1	21.1	21.1	19.9	19.9
87.5°	12.1	12.1	10.3	8.4	6.0
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)