

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: P555685

Luminaire Tested: **FUSL-12-2-LD4-3LO-30-UNV-93-86-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: P555685  
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-30-UNV-93-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

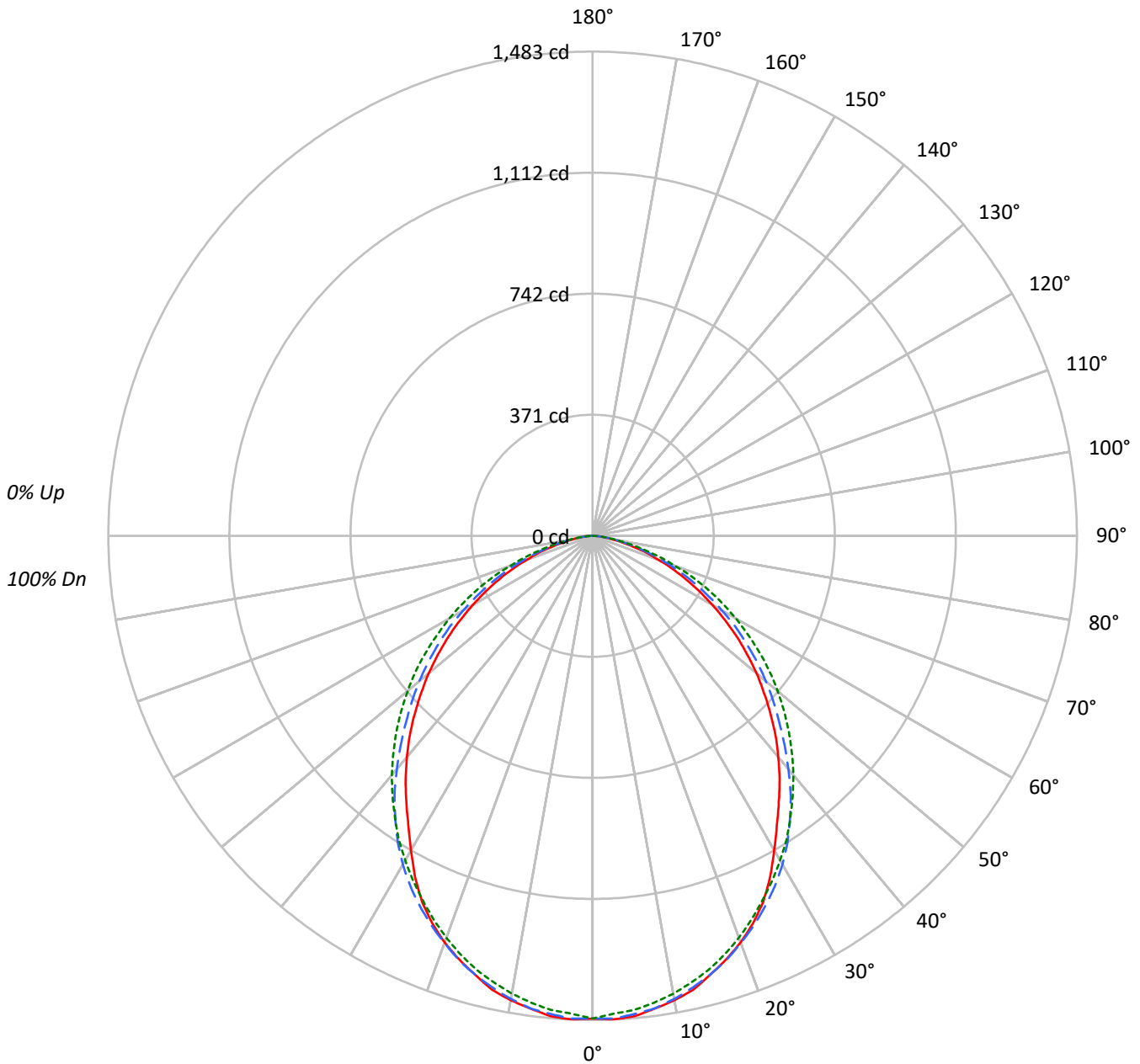
Lumens per Lamp: N/A  
Luminaire Lumens: 3419.0 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7958	7958	7958
5°	7979	7945	7878
10°	7894	7873	7783
15°	7754	7754	7666
20°	7590	7600	7502
25°	7340	7431	7313
30°	6912	7223	7134
35°	6531	6923	6934
40°	6214	6549	6721
45°	5858	6152	6468
50°	5484	5798	6193
55°	5058	5394	5858
60°	4555	4922	5448
65°	4022	4377	4955
70°	3352	3728	4211
75°	2635	2976	3296
80°	1884	2095	2325
85°	1229	1229	1155



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.2	4.1
10°-20°	391.1	11.4
20°-30°	571.5	16.7
30°-40°	648.7	19.0
40°-50°	626.3	18.3
50°-60°	516.6	15.1
60°-70°	344.0	10.1
70°-80°	154.0	4.5
80°-90°	27.6	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°	1101.8	32.2
0°-40°	1750.6	51.2
0°-60°	2893.5	84.6
0°-90°	3419.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3419.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1479	1479	1479	1479	1479	
5°	1477	1476	1471	1463	1458	140
15°	1392	1395	1392	1386	1376	392
25°	1236	1246	1251	1242	1232	566
35°	994	1008	1054	1059	1055	623
45°	770	783	808	845	850	594
55°	539	548	575	607	624	481
65°	316	324	344	368	389	313
75°	127	134	143	150	158	139
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°	1478.6	1478.6	1478.6	1478.6	1478.6
2.5°	1482.6	1483.2	1479.8	1470.7	1465.0
5°	1476.9	1476.4	1470.7	1462.7	1458.2
7.5°	1460.5	1461.6	1459.9	1448.5	1442.3
10°	1444.5	1445.1	1440.6	1431.5	1424.1
12.5°	1424.1	1423.5	1417.3	1412.7	1400.8
15°	1391.7	1395.1	1391.7	1385.5	1375.8
17.5°	1360.5	1360.5	1362.7	1352.0	1344.6
20°	1325.3	1327.0	1327.0	1318.4	1309.9
22.5°	1284.4	1289.5	1291.2	1282.1	1271.9
25°	1236.1	1245.7	1251.4	1242.3	1231.5
27.5°	1177.6	1192.3	1209.4	1202.6	1190.6
30°	1112.2	1133.8	1162.2	1156.5	1148.0
32.5°	1050.3	1071.9	1111.1	1108.8	1104.3
35°	994.1	1007.7	1053.7	1059.4	1055.4
37.5°	940.7	953.2	996.4	1009.4	1006.0
40°	884.5	898.1	932.2	955.5	956.6
42.5°	828.8	841.8	869.7	903.2	903.2
45°	769.7	782.8	808.3	845.3	849.8
47.5°	711.8	725.4	750.4	787.3	794.7
50°	655.0	667.5	692.5	728.2	739.6
52.5°	595.9	609.5	633.9	666.9	683.4
55°	539.1	548.2	574.9	606.7	624.3
57.5°	480.0	488.5	518.6	545.9	564.1
60°	423.2	434.0	457.3	485.1	506.1
62.5°	368.7	380.0	399.9	424.3	448.2
65°	315.8	324.4	343.7	368.1	389.1
67.5°	264.7	272.1	291.4	308.5	330.6
70°	213.0	222.7	236.9	253.3	267.6
72.5°	171.6	175.5	187.5	199.4	214.2
75°	126.7	133.5	143.1	150.0	158.5
77.5°	90.9	94.9	100.5	106.2	114.2
80°	60.8	62.5	67.6	68.7	75.0
82.5°	36.9	38.1	39.2	39.8	42.0
85°	19.9	19.9	19.9	18.7	18.7
87.5°	11.4	11.4	9.7	8.0	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)