

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: P554707

Luminaire Tested: **FUSL-12-2-LD4-2HI-35-UNV-82-85-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: P554707  
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-35-UNV-82-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

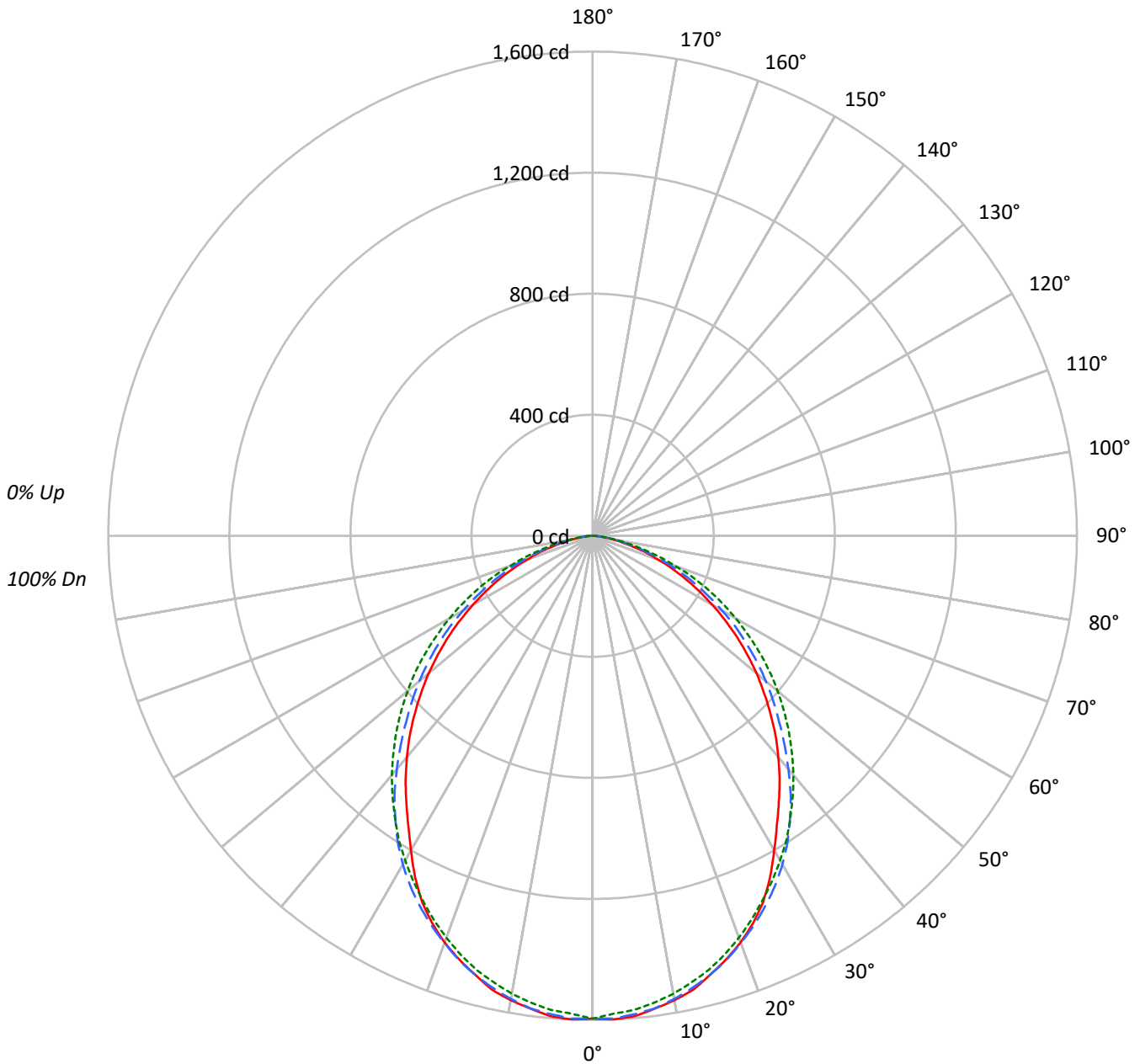
Lumens per Lamp: N/A  
Luminaire Lumens: 3689.0 lumens  
Efficiency: N/A  
Efficacy: 85.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	8586	8586	8586
5°	8609	8573	8500
10°	8518	8494	8397
15°	8367	8367	8271
20°	8190	8200	8095
25°	7920	8018	7891
30°	7458	7793	7698
35°	7047	7470	7482
40°	6705	7066	7251
45°	6321	6639	6979
50°	5917	6255	6682
55°	5457	5820	6320
60°	4915	5311	5878
65°	4340	4722	5346
70°	3616	4022	4543
75°	2843	3213	3556
80°	2033	2259	2507
85°	1328	1328	1247



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.2	4.1
10°-20°	422.0	11.4
20°-30°	616.7	16.7
30°-40°	700.0	19.0
40°-50°	675.7	18.3
50°-60°	557.4	15.1
60°-70°	371.2	10.1
70°-80°	166.1	4.5
80°-90°	29.7	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°	1188.9	32.2
0°-40°	1888.8	51.2
0°-60°	3122.0	84.6
0°-90°	3689.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3689.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1595	1595	1595	1595	1595	
5°	1594	1593	1587	1578	1573	151
15°	1502	1505	1502	1495	1484	423
25°	1334	1344	1350	1340	1329	611
35°	1073	1087	1137	1143	1139	672
45°	830	845	872	912	917	641
55°	582	592	620	655	674	519
65°	341	350	371	397	420	338
75°	137	144	154	162	171	149
85°	22	22	22	20	20	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1595.4	1595.4	1595.4	1595.4	1595.4
2.5°	1599.7	1600.3	1596.6	1586.8	1580.7
5°	1593.6	1592.9	1586.8	1578.2	1573.3
7.5°	1575.8	1577.0	1575.2	1562.9	1556.2
10°	1558.6	1559.2	1554.3	1544.5	1536.6
12.5°	1536.6	1535.9	1529.2	1524.3	1511.4
15°	1501.6	1505.3	1501.6	1494.9	1484.5
17.5°	1467.9	1467.9	1470.4	1458.7	1450.8
20°	1429.9	1431.8	1431.8	1422.6	1413.4
22.5°	1385.8	1391.3	1393.1	1383.3	1372.3
25°	1333.7	1344.1	1350.2	1340.4	1328.8
27.5°	1270.6	1286.5	1304.9	1297.5	1284.7
30°	1200.1	1223.4	1254.0	1247.9	1238.7
32.5°	1133.3	1156.6	1198.8	1196.4	1191.5
35°	1072.6	1087.3	1136.9	1143.1	1138.8
37.5°	1015.0	1028.5	1075.0	1089.1	1085.5
40°	954.3	969.0	1005.8	1030.9	1032.1
42.5°	894.2	908.3	938.4	974.5	974.5
45°	830.5	844.6	872.2	912.0	916.9
47.5°	768.0	782.7	809.7	849.5	857.5
50°	706.7	720.2	747.1	785.7	798.0
52.5°	642.9	657.6	684.0	719.6	737.3
55°	581.6	591.5	620.3	654.6	673.6
57.5°	517.9	527.1	559.6	589.0	608.6
60°	456.6	468.3	493.4	523.4	546.1
62.5°	397.8	410.0	431.5	457.8	483.6
65°	340.8	350.0	370.8	397.2	419.8
67.5°	285.6	293.6	314.4	332.8	356.7
70°	229.8	240.3	255.6	273.4	288.7
72.5°	185.1	189.4	202.3	215.1	231.1
75°	136.7	144.0	154.5	161.8	171.0
77.5°	98.1	102.4	108.5	114.6	123.2
80°	65.6	67.4	72.9	74.2	80.9
82.5°	39.8	41.1	42.3	42.9	45.4
85°	21.5	21.5	21.5	20.2	20.2
87.5°	12.3	12.3	10.4	8.6	6.1
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)