

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: P554809

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-80-88-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: P554809  
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-50-UNV-80-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

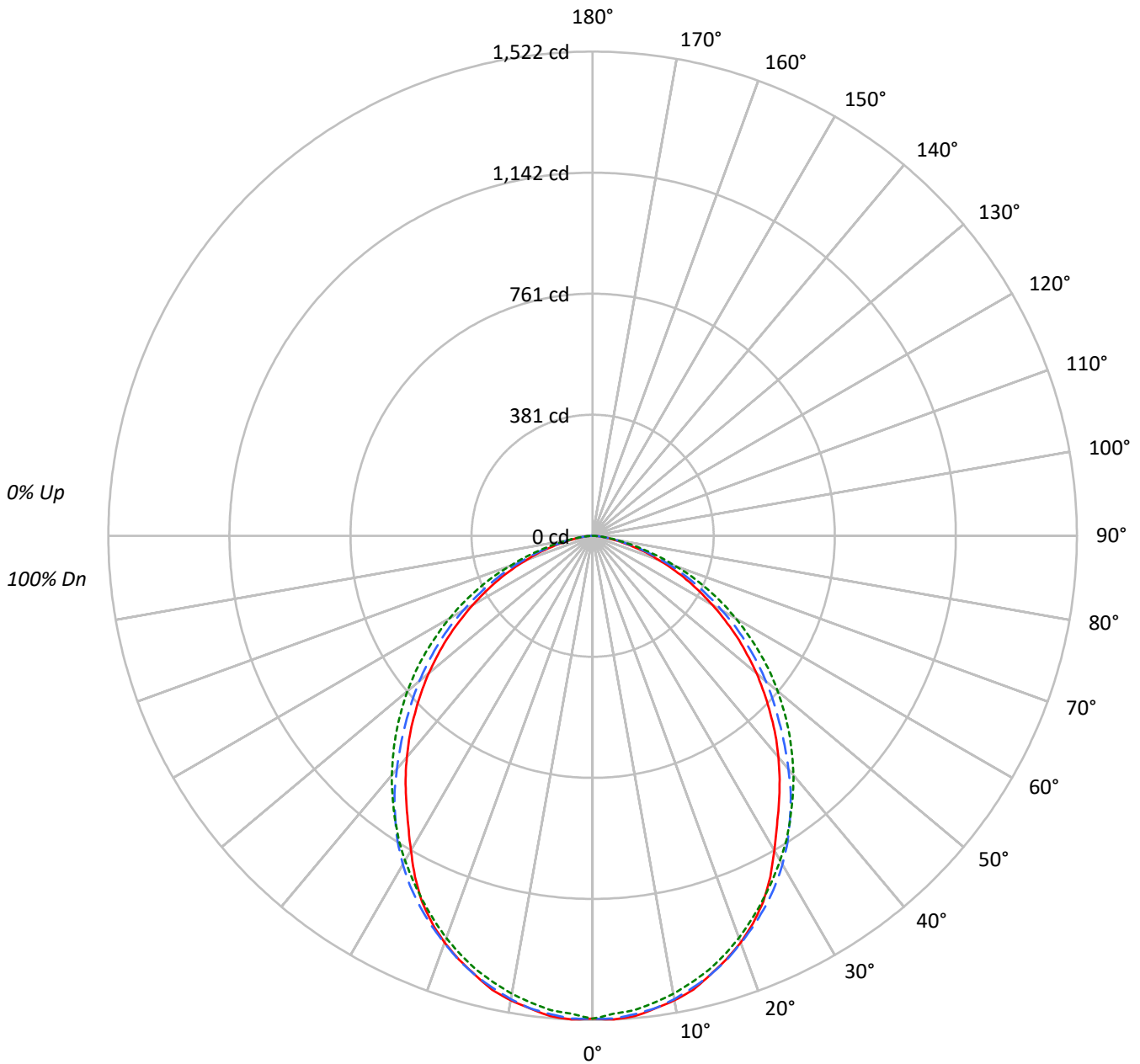
Lumens per Lamp: N/A  
Luminaire Lumens: 3510.0 lumens  
Efficiency: N/A  
Efficacy: 81.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	8170	8170	8170
5°	8191	8157	8088
10°	8105	8082	7990
15°	7961	7961	7870
20°	7792	7802	7702
25°	7536	7629	7508
30°	7096	7415	7324
35°	6705	7108	7119
40°	6379	6724	6900
45°	6014	6316	6640
50°	5630	5952	6357
55°	5193	5538	6014
60°	4677	5053	5593
65°	4129	4493	5088
70°	3441	3827	4323
75°	2703	3057	3383
80°	1934	2151	2386
85°	1260	1260	1186



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.9	4.1
10°-20°	401.5	11.4
20°-30°	586.7	16.7
30°-40°	666.0	19.0
40°-50°	642.9	18.3
50°-60°	530.4	15.1
60°-70°	353.2	10.1
70°-80°	158.0	4.5
80°-90°	28.3	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°	1131.2	32.2
0°-40°	1797.2	51.2
0°-60°	2970.5	84.6
0°-90°	3510.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3510.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1518	1518	1518	1518	1518	
5°	1516	1516	1510	1502	1497	144
15°	1429	1432	1429	1422	1412	403
25°	1269	1279	1285	1275	1264	581
35°	1020	1034	1082	1088	1084	639
45°	790	804	830	868	872	610
55°	553	563	590	623	641	494
65°	324	333	353	378	400	322
75°	130	137	147	154	163	142
85°	20	20	20	19	19	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1518.0	1518.0	1518.0	1518.0	1518.0
2.5°	1522.1	1522.6	1519.2	1509.8	1504.0
5°	1516.2	1515.7	1509.8	1501.7	1497.0
7.5°	1499.3	1500.5	1498.7	1487.1	1480.7
10°	1483.0	1483.6	1478.9	1469.6	1462.0
12.5°	1462.0	1461.4	1455.0	1450.3	1438.1
15°	1428.8	1432.3	1428.8	1422.3	1412.4
17.5°	1396.7	1396.7	1399.0	1387.9	1380.4
20°	1360.5	1362.3	1362.3	1353.5	1344.8
22.5°	1318.5	1323.8	1325.5	1316.2	1305.7
25°	1269.0	1278.9	1284.7	1275.4	1264.3
27.5°	1208.9	1224.1	1241.6	1234.6	1222.3
30°	1141.8	1164.0	1193.2	1187.3	1178.6
32.5°	1078.3	1100.4	1140.7	1138.3	1133.7
35°	1020.5	1034.5	1081.8	1087.6	1083.5
37.5°	965.7	978.6	1022.9	1036.3	1032.8
40°	908.0	922.0	957.0	980.9	982.1
42.5°	850.8	864.3	892.8	927.2	927.2
45°	790.2	803.6	829.8	867.8	872.4
47.5°	730.7	744.7	770.4	808.3	815.9
50°	672.4	685.2	710.9	747.6	759.3
52.5°	611.7	625.7	650.8	684.6	701.6
55°	553.4	562.8	590.2	622.8	640.9
57.5°	492.8	501.5	532.4	560.4	579.1
60°	434.5	445.5	469.4	498.0	519.6
62.5°	378.5	390.1	410.5	435.6	460.1
65°	324.2	333.0	352.8	377.9	399.5
67.5°	271.8	279.3	299.2	316.7	339.4
70°	218.7	228.6	243.2	260.1	274.7
72.5°	176.1	180.2	192.4	204.7	219.9
75°	130.0	137.0	147.0	154.0	162.7
77.5°	93.3	97.4	103.2	109.1	117.2
80°	62.4	64.1	69.4	70.6	77.0
82.5°	37.9	39.1	40.2	40.8	43.2
85°	20.4	20.4	20.4	19.2	19.2
87.5°	11.7	11.7	9.9	8.2	5.8
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)