

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: P556725

Luminaire Tested: **FUSL-12-4-LD4-1STD-35-UNV-80-86-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: P556725  
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-12-4-LD4-1STD-35-UNV-80-86-EDD  
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

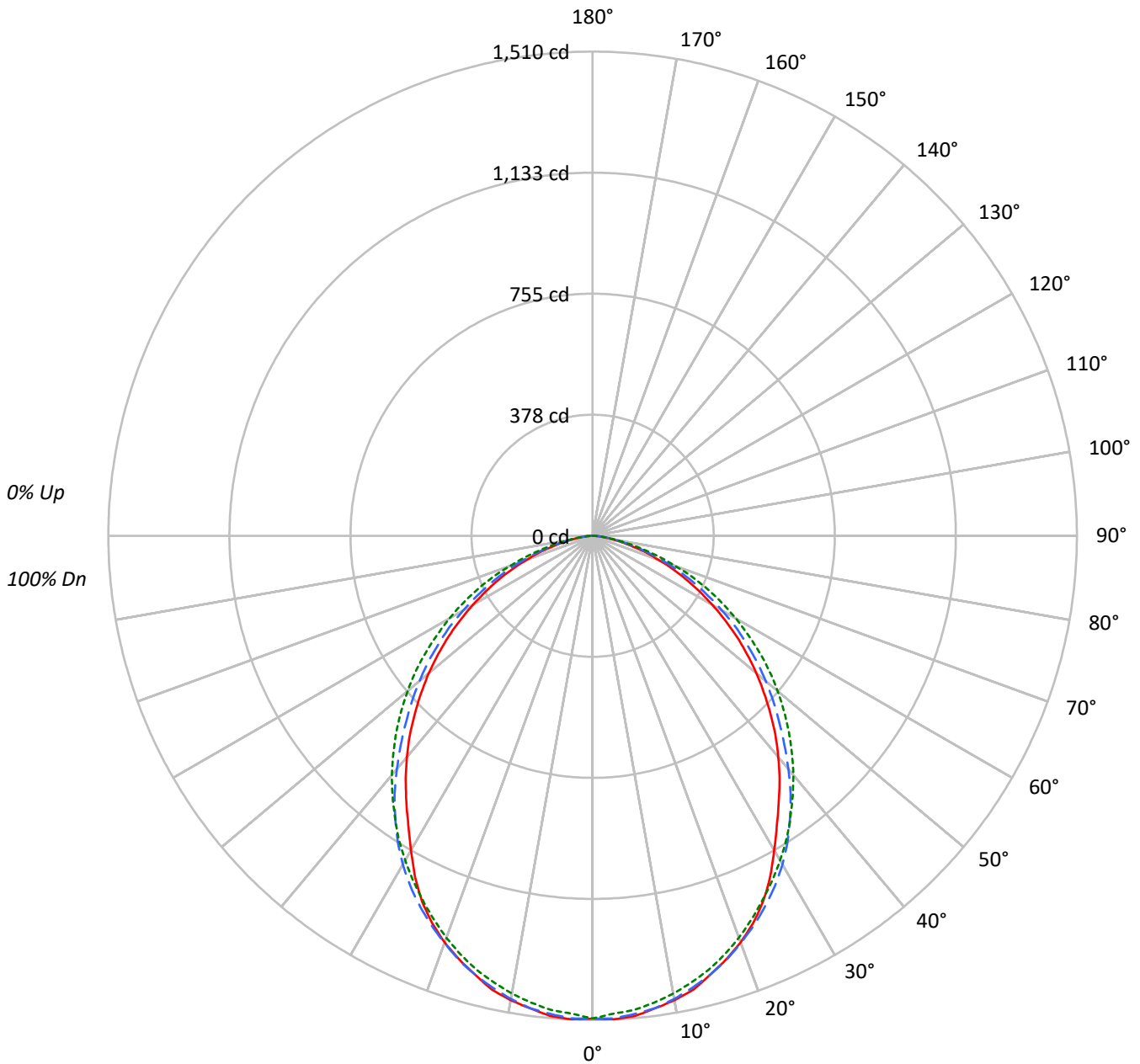
Lumens per Lamp: N/A  
Luminaire Lumens: 3481.0 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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°	4051	4051	4051
5°	4062	4045	4010
10°	4019	4008	3962
15°	3948	3948	3902
20°	3864	3869	3819
25°	3737	3783	3723
30°	3519	3677	3632
35°	3325	3524	3530
40°	3163	3334	3421
45°	2982	3132	3293
50°	2792	2951	3152
55°	2575	2746	2982
60°	2319	2506	2773
65°	2048	2228	2523
70°	1707	1898	2143
75°	1341	1515	1678
80°	959	1066	1182
85°	624	624	590



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.7	4.1
10°-20°	398.2	11.4
20°-30°	581.9	16.7
30°-40°	660.5	19.0
40°-50°	637.6	18.3
50°-60°	526.0	15.1
60°-70°	350.3	10.1
70°-80°	156.7	4.5
80°-90°	28.0	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°	1121.8	32.2
0°-40°	1782.3	51.2
0°-60°	2946.0	84.6
0°-90°	3481.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3481.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1505	1505	1505	1505	1505	
5°	1504	1503	1497	1489	1485	142
15°	1417	1420	1417	1411	1401	399
25°	1258	1268	1274	1265	1254	576
35°	1012	1026	1073	1079	1075	634
45°	784	797	823	861	865	605
55°	549	558	585	618	636	490
65°	322	330	350	375	396	319
75°	129	136	146	153	161	141
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°	1505.4	1505.4	1505.4	1505.4	1505.4
2.5°	1509.5	1510.1	1506.6	1497.3	1491.6
5°	1503.7	1503.1	1497.3	1489.2	1484.6
7.5°	1486.9	1488.1	1486.4	1474.8	1468.4
10°	1470.7	1471.3	1466.7	1457.4	1449.9
12.5°	1449.9	1449.3	1443.0	1438.4	1426.2
15°	1417.0	1420.4	1417.0	1410.6	1400.8
17.5°	1385.1	1385.1	1387.5	1376.5	1369.0
20°	1349.3	1351.0	1351.0	1342.3	1333.7
22.5°	1307.6	1312.9	1314.6	1305.3	1294.9
25°	1258.5	1268.3	1274.1	1264.8	1253.9
27.5°	1198.9	1214.0	1231.3	1224.4	1212.2
30°	1132.4	1154.4	1183.3	1177.5	1168.8
32.5°	1069.4	1091.3	1131.3	1128.9	1124.3
35°	1012.1	1026.0	1072.8	1078.6	1074.6
37.5°	957.7	970.5	1014.4	1027.7	1024.3
40°	900.5	914.4	949.1	972.8	973.9
42.5°	843.8	857.1	885.5	919.6	919.6
45°	783.7	797.0	823.0	860.6	865.2
47.5°	724.7	738.6	764.0	801.6	809.1
50°	666.8	679.6	705.0	741.4	753.0
52.5°	606.7	620.6	645.4	679.0	695.8
55°	548.9	558.1	585.3	617.7	635.6
57.5°	488.7	497.4	528.0	555.8	574.3
60°	430.9	441.9	465.6	493.9	515.3
62.5°	375.3	386.9	407.2	432.0	456.3
65°	321.6	330.2	349.9	374.8	396.2
67.5°	269.5	277.0	296.7	314.0	336.6
70°	216.9	226.7	241.2	257.9	272.4
72.5°	174.7	178.7	190.9	203.0	218.0
75°	129.0	135.9	145.7	152.7	161.4
77.5°	92.5	96.6	102.4	108.2	116.2
80°	61.9	63.6	68.8	70.0	76.3
82.5°	37.6	38.7	39.9	40.5	42.8
85°	20.2	20.2	20.2	19.1	19.1
87.5°	11.6	11.6	9.8	8.1	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)