

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: P555988

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-82-86-EDD-90**

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: P555988  
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-LD4-3STD-35-UNV-82-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

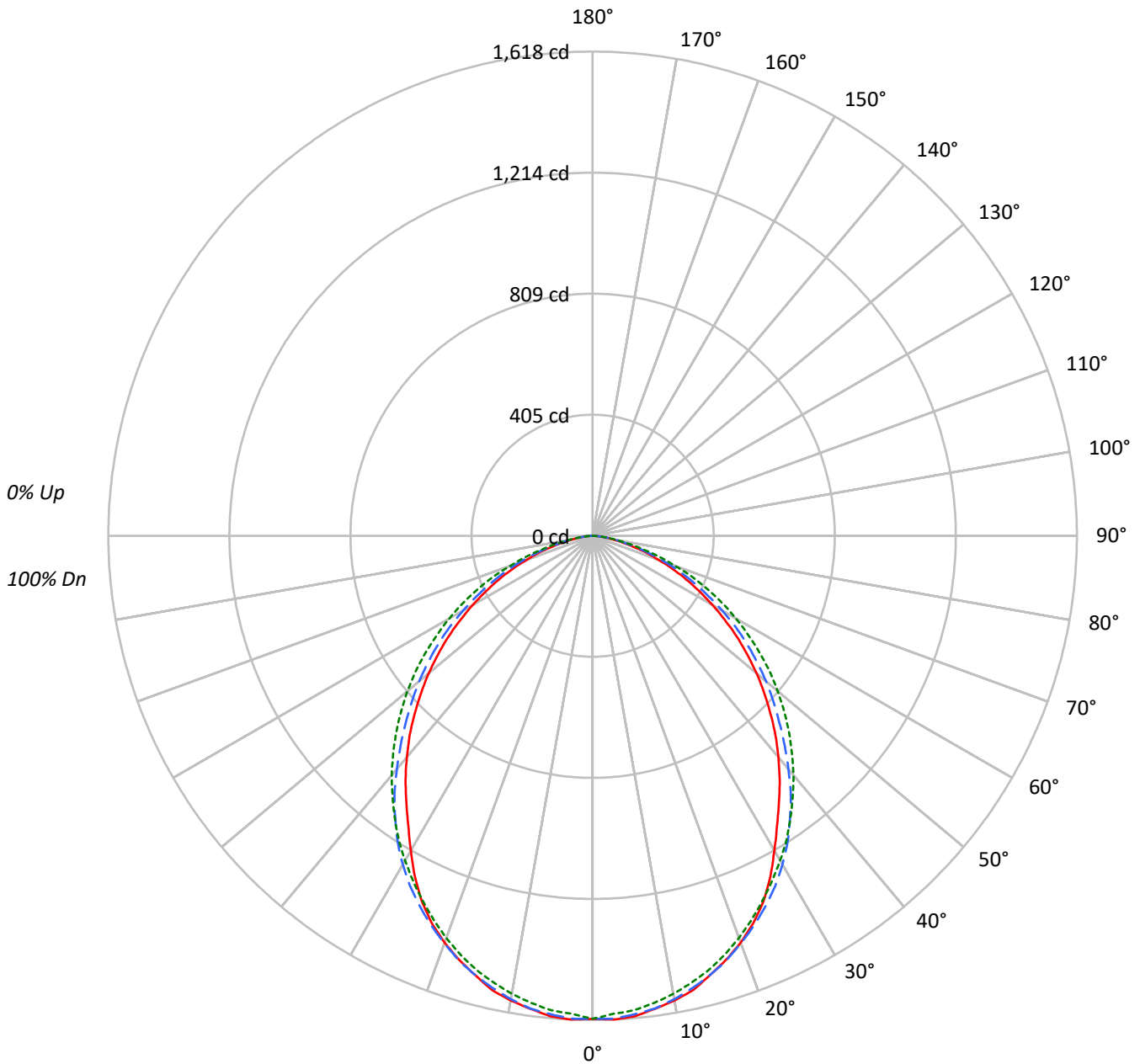
Lumens per Lamp: N/A  
Luminaire Lumens: 3732.0 lumens  
Efficiency: N/A  
Efficacy: 74.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
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°	8686	8686	8686
5°	8709	8673	8599
10°	8617	8594	8495
15°	8464	8464	8368
20°	8285	8296	8189
25°	8012	8112	7983
30°	7545	7884	7787
35°	7129	7557	7569
40°	6783	7149	7336
45°	6395	6715	7060
50°	5986	6328	6759
55°	5521	5888	6394
60°	4972	5372	5947
65°	4390	4777	5408
70°	3659	4069	4595
75°	2876	3250	3597
80°	2055	2287	2535
85°	1340	1340	1266



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.0	4.1
10°-20°	426.9	11.4
20°-30°	623.8	16.7
30°-40°	708.1	19.0
40°-50°	683.6	18.3
50°-60°	563.9	15.1
60°-70°	375.5	10.1
70°-80°	168.0	4.5
80°-90°	30.1	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°	1202.7	32.2
0°-40°	1910.8	51.2
0°-60°	3158.3	84.6
0°-90°	3732.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3732.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1614	1614	1614	1614	1614	
5°	1612	1612	1605	1597	1592	153
15°	1519	1523	1519	1512	1502	428
25°	1349	1360	1366	1356	1344	618
35°	1085	1100	1150	1156	1152	680
45°	840	854	882	923	928	648
55°	588	598	628	662	681	525
65°	345	354	375	402	425	342
75°	138	146	156	164	173	151
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°	1614.0	1614.0	1614.0	1614.0	1614.0
2.5°	1618.3	1619.0	1615.2	1605.3	1599.1
5°	1612.1	1611.5	1605.3	1596.6	1591.7
7.5°	1594.2	1595.4	1593.5	1581.1	1574.3
10°	1576.8	1577.4	1572.5	1562.5	1554.5
12.5°	1554.5	1553.8	1547.0	1542.1	1529.0
15°	1519.1	1522.8	1519.1	1512.3	1501.8
17.5°	1485.0	1485.0	1487.5	1475.7	1467.7
20°	1446.6	1448.4	1448.4	1439.1	1429.8
22.5°	1401.9	1407.5	1409.4	1399.5	1388.3
25°	1349.2	1359.8	1366.0	1356.1	1344.3
27.5°	1285.4	1301.5	1320.1	1312.6	1299.6
30°	1214.1	1237.6	1268.6	1262.4	1253.1
32.5°	1146.5	1170.0	1212.8	1210.3	1205.4
35°	1085.1	1100.0	1150.2	1156.4	1152.1
37.5°	1026.8	1040.4	1087.6	1101.8	1098.1
40°	965.4	980.3	1017.5	1042.9	1044.2
42.5°	904.7	918.9	949.3	985.9	985.9
45°	840.2	854.4	882.3	922.6	927.6
47.5°	776.9	791.8	819.1	859.4	867.5
50°	714.9	728.6	755.8	794.9	807.3
52.5°	650.4	665.3	692.0	727.9	745.9
55°	588.4	598.3	627.5	662.2	681.4
57.5°	523.9	533.2	566.1	595.9	615.7
60°	461.9	473.7	499.1	529.5	552.5
62.5°	402.4	414.8	436.5	463.2	489.2
65°	344.7	354.0	375.1	401.8	424.7
67.5°	288.9	297.0	318.1	336.7	360.9
70°	232.5	243.1	258.6	276.5	292.0
72.5°	187.3	191.6	204.6	217.6	233.8
75°	138.3	145.7	156.3	163.7	173.0
77.5°	99.2	103.5	109.7	115.9	124.6
80°	66.3	68.2	73.8	75.0	81.8
82.5°	40.3	41.5	42.8	43.4	45.9
85°	21.7	21.7	21.7	20.5	20.5
87.5°	12.4	12.4	10.5	8.7	6.2
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)