

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: P555977

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-81-88-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: P555977  
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-81-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

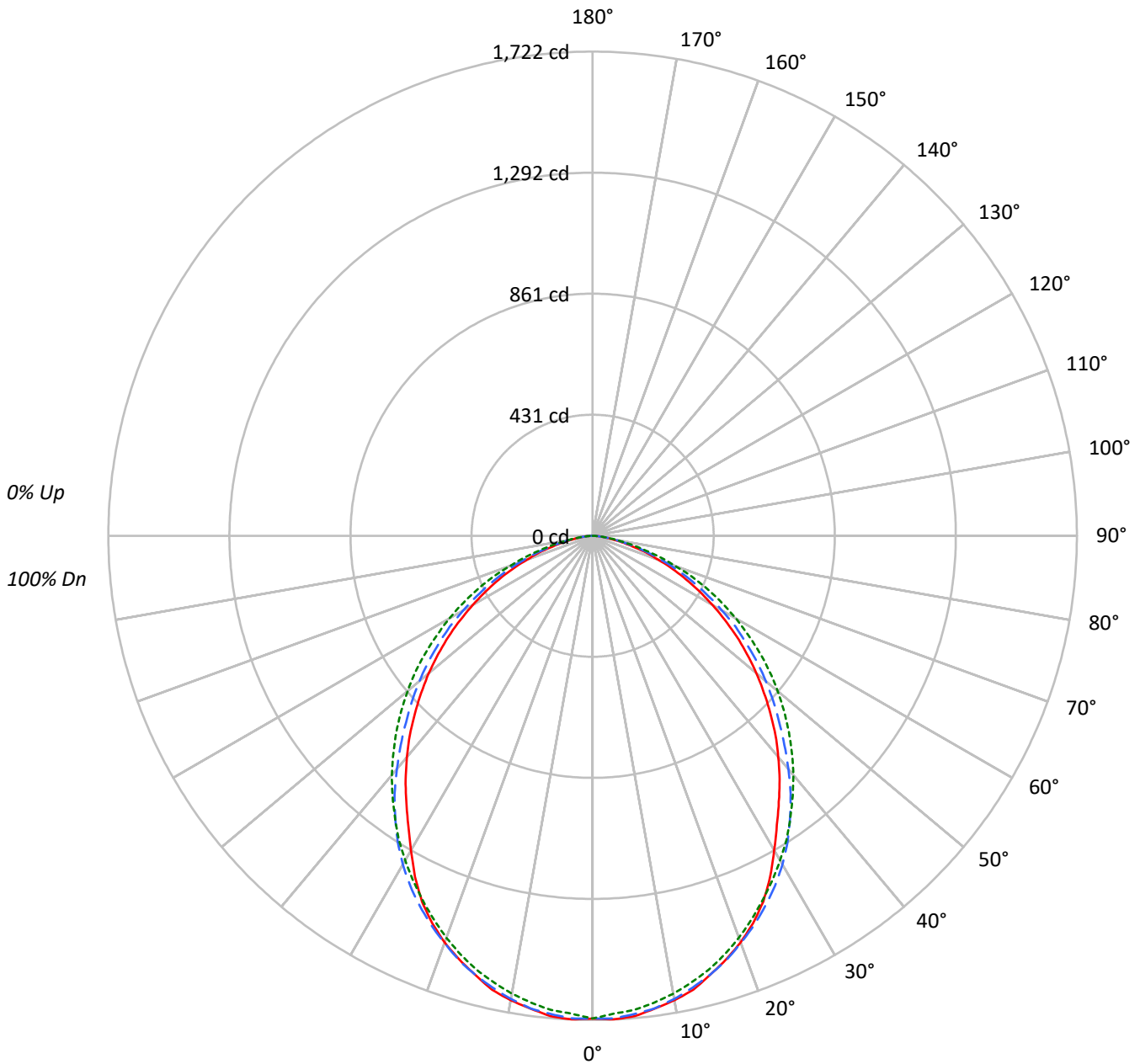
Lumens per Lamp: N/A  
Luminaire Lumens: 3970.0 lumens  
Efficiency: N/A  
Efficacy: 79.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	9240	9240	9240
5°	9265	9226	9148
10°	9166	9141	9037
15°	9004	9004	8901
20°	8813	8825	8711
25°	8523	8629	8492
30°	8026	8387	8284
35°	7584	8039	8052
40°	7215	7605	7804
45°	6802	7144	7511
50°	6368	6732	7191
55°	5874	6263	6802
60°	5289	5716	6326
65°	4670	5082	5754
70°	3891	4329	4889
75°	3059	3456	3826
80°	2188	2433	2700
85°	1426	1426	1346



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.7	4.1
10°-20°	454.1	11.4
20°-30°	663.6	16.7
30°-40°	753.3	19.0
40°-50°	727.2	18.3
50°-60°	599.9	15.1
60°-70°	399.5	10.1
70°-80°	178.8	4.5
80°-90°	32.0	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°	1279.4	32.2
0°-40°	2032.7	51.2
0°-60°	3359.8	84.6
0°-90°	3970.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3970.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1717	1717	1717	1717	1717	
5°	1715	1714	1708	1698	1693	162
15°	1616	1620	1616	1609	1598	456
25°	1435	1446	1453	1442	1430	657
35°	1154	1170	1224	1230	1226	723
45°	894	909	939	982	987	690
55°	626	636	668	704	725	559
65°	367	377	399	427	452	364
75°	147	155	166	174	184	161
85°	23	23	23	22	22	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1716.9	1716.9	1716.9	1716.9	1716.9
2.5°	1721.5	1722.2	1718.2	1707.7	1701.1
5°	1714.9	1714.3	1707.7	1698.5	1693.2
7.5°	1695.8	1697.1	1695.2	1682.0	1674.7
10°	1677.3	1678.0	1672.7	1662.2	1653.6
12.5°	1653.6	1652.9	1645.7	1640.4	1626.6
15°	1616.0	1620.0	1616.0	1608.7	1597.5
17.5°	1579.7	1579.7	1582.4	1569.8	1561.3
20°	1538.8	1540.8	1540.8	1530.9	1521.0
22.5°	1491.3	1497.3	1499.3	1488.7	1476.8
25°	1435.3	1446.5	1453.1	1442.5	1430.0
27.5°	1367.3	1384.5	1404.3	1396.4	1382.5
30°	1291.5	1316.5	1349.5	1342.9	1333.0
32.5°	1219.6	1244.7	1290.2	1287.5	1282.3
35°	1154.3	1170.1	1223.5	1230.1	1225.5
37.5°	1092.3	1106.8	1156.9	1172.1	1168.1
40°	1027.0	1042.8	1082.4	1109.4	1110.8
42.5°	962.3	977.5	1009.8	1048.8	1048.8
45°	893.7	908.9	938.6	981.5	986.8
47.5°	826.5	842.3	871.3	914.2	922.8
50°	760.5	775.0	804.0	845.6	858.8
52.5°	691.9	707.7	736.1	774.4	793.5
55°	626.0	636.5	667.5	704.4	724.9
57.5°	557.4	567.3	602.2	633.9	655.0
60°	491.4	503.9	531.0	563.3	587.7
62.5°	428.1	441.3	464.4	492.7	520.4
65°	366.7	376.6	399.1	427.4	451.8
67.5°	307.4	315.9	338.4	358.2	383.9
70°	247.3	258.6	275.1	294.2	310.7
72.5°	199.2	203.8	217.7	231.5	248.7
75°	147.1	155.0	166.2	174.1	184.0
77.5°	105.5	110.2	116.7	123.3	132.6
80°	70.6	72.6	78.5	79.8	87.1
82.5°	42.9	44.2	45.5	46.2	48.8
85°	23.1	23.1	23.1	21.8	21.8
87.5°	13.2	13.2	11.2	9.2	6.6
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)