

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: P555877

Luminaire Tested: **FUSL-12-2-LD4-3LO-50-UNV-93-86-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: P555877  
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-LD4-3LO-50-UNV-93-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

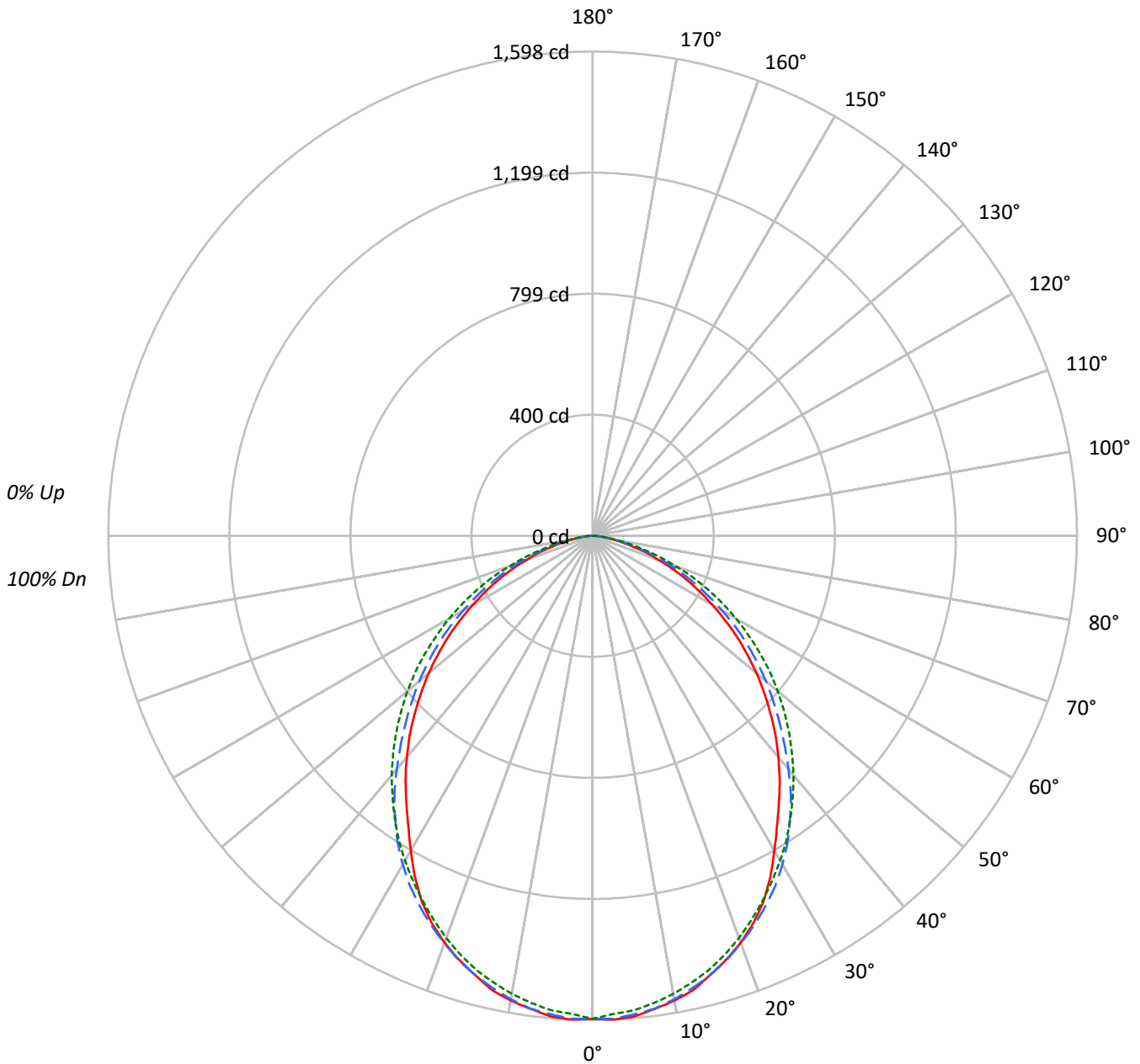
Lumens per Lamp: N/A  
Luminaire Lumens: 3686.0 lumens  
Efficiency: N/A  
Efficacy: 105.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	8579	8579	8579
5°	8602	8566	8493
10°	8511	8488	8390
15°	8360	8360	8265
20°	8183	8194	8088
25°	7913	8011	7884
30°	7452	7787	7692
35°	7041	7464	7476
40°	6699	7061	7246
45°	6316	6633	6973
50°	5912	6250	6677
55°	5453	5816	6315
60°	4910	5307	5874
65°	4336	4718	5342
70°	3615	4019	4538
75°	2840	3209	3554
80°	2030	2259	2504
85°	1321	1321	1247



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.1	4.1
10°-20°	421.6	11.4
20°-30°	616.2	16.7
30°-40°	699.4	19.0
40°-50°	675.2	18.3
50°-60°	557.0	15.1
60°-70°	370.9	10.1
70°-80°	166.0	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°	1187.9	32.2
0°-40°	1887.3	51.2
0°-60°	3119.4	84.6
0°-90°	3686.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3686.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1592	1592	1586	1577	1572	151
15°	1500	1504	1500	1494	1483	423
25°	1333	1343	1349	1339	1328	610
35°	1072	1086	1136	1142	1138	671
45°	830	844	872	911	916	640
55°	581	591	620	654	673	519
65°	340	350	370	397	420	338
75°	137	144	154	162	171	149
85°	21	21	21	20	20	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1594.1	1594.1	1594.1	1594.1	1594.1
2.5°	1598.4	1599.0	1595.3	1585.5	1579.4
5°	1592.3	1591.7	1585.5	1577.0	1572.1
7.5°	1574.5	1575.7	1573.9	1561.6	1554.9
10°	1557.4	1558.0	1553.1	1543.3	1535.3
12.5°	1535.3	1534.7	1528.0	1523.1	1510.2
15°	1500.4	1504.1	1500.4	1493.7	1483.3
17.5°	1466.7	1466.7	1469.2	1457.5	1449.6
20°	1428.7	1430.6	1430.6	1421.4	1412.2
22.5°	1384.7	1390.2	1392.0	1382.2	1371.2
25°	1332.6	1343.0	1349.1	1339.3	1327.7
27.5°	1269.5	1285.4	1303.8	1296.5	1283.6
30°	1199.1	1222.4	1253.0	1246.9	1237.7
32.5°	1132.3	1155.6	1197.9	1195.4	1190.5
35°	1071.7	1086.4	1136.0	1142.1	1137.9
37.5°	1014.1	1027.6	1074.2	1088.3	1084.6
40°	953.5	968.2	1005.0	1030.1	1031.3
42.5°	893.5	907.6	937.6	973.7	973.7
45°	829.8	843.9	871.5	911.3	916.2
47.5°	767.3	782.0	809.0	848.8	856.8
50°	706.1	719.6	746.5	785.1	797.4
52.5°	642.4	657.1	683.4	719.0	736.7
55°	581.2	591.0	619.8	654.1	673.0
57.5°	517.5	526.7	559.1	588.5	608.1
60°	456.2	467.9	493.0	523.0	545.7
62.5°	397.5	409.7	431.1	457.5	483.2
65°	340.5	349.7	370.5	396.8	419.5
67.5°	285.4	293.3	314.2	332.5	356.4
70°	229.7	240.1	255.4	273.1	288.4
72.5°	184.9	189.2	202.1	215.0	230.9
75°	136.6	143.9	154.3	161.7	170.9
77.5°	98.0	102.3	108.4	114.5	123.1
80°	65.5	67.4	72.9	74.1	80.8
82.5°	39.8	41.0	42.3	42.9	45.3
85°	21.4	21.4	21.4	20.2	20.2
87.5°	12.2	12.2	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)