

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: P554717

Luminaire Tested: **FUSL-12-2-LD4-2HI-35-UNV-82-96-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: P554717  
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-35-UNV-82-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

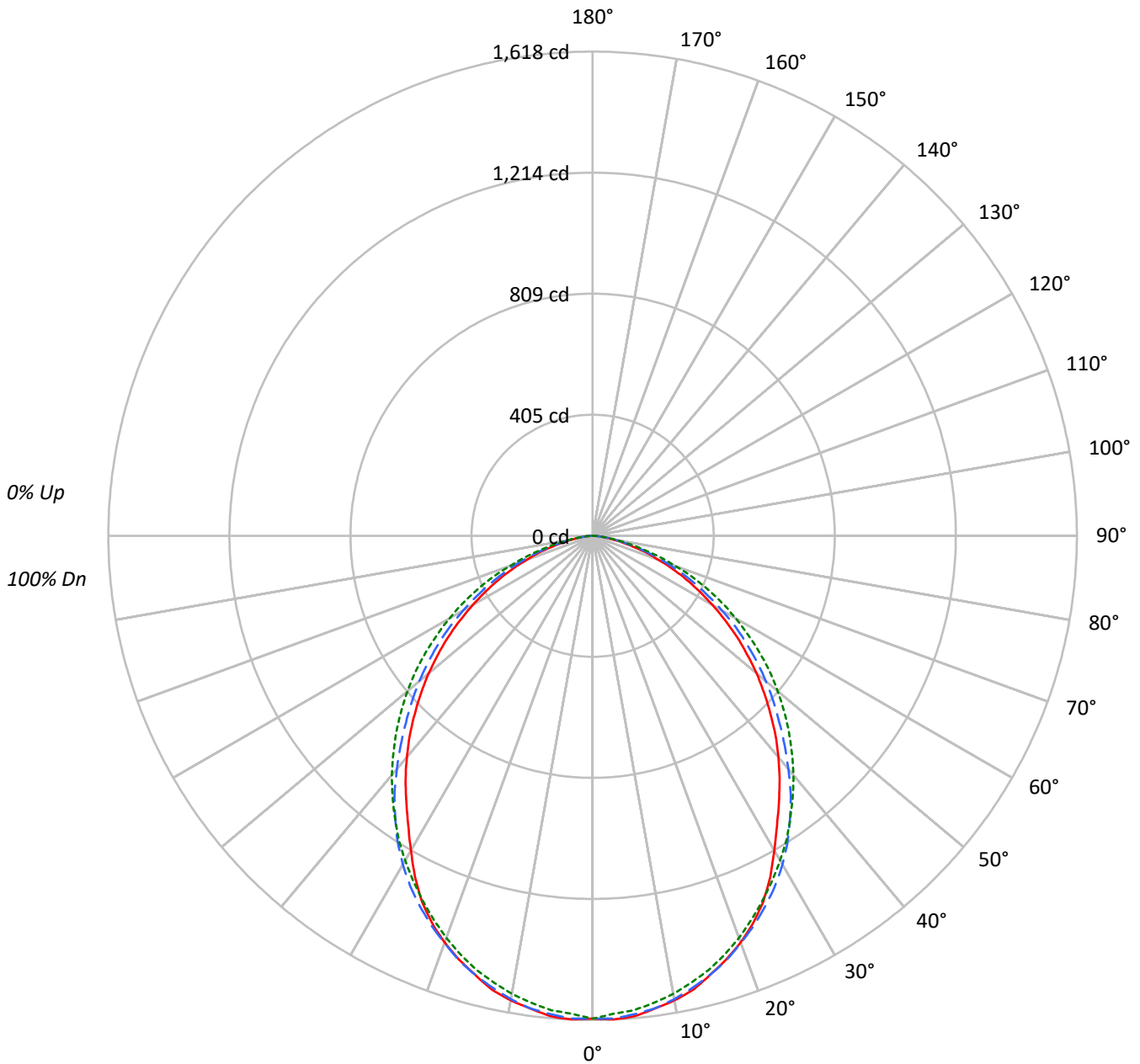
Lumens per Lamp: N/A  
Luminaire Lumens: 3731.0 lumens  
Efficiency: N/A  
Efficacy: 86.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
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°	8684	8684	8684
5°	8707	8670	8596
10°	8615	8591	8493
15°	8462	8462	8366
20°	8283	8294	8187
25°	8010	8109	7981
30°	7543	7882	7786
35°	7127	7555	7567
40°	6781	7146	7334
45°	6393	6714	7058
50°	5984	6327	6758
55°	5520	5886	6393
60°	4971	5371	5945
65°	4390	4776	5407
70°	3659	4068	4595
75°	2874	3248	3595
80°	2055	2287	2535
85°	1340	1340	1266



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.9	4.1
10°-20°	426.8	11.4
20°-30°	623.7	16.7
30°-40°	707.9	19.0
40°-50°	683.4	18.3
50°-60°	563.8	15.1
60°-70°	375.4	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°	1202.4	32.2
0°-40°	1910.3	51.2
0°-60°	3157.5	84.6
0°-90°	3731.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3731.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1614	1614	1614	1614	1614	
5°	1612	1611	1605	1596	1591	153
15°	1519	1522	1519	1512	1501	428
25°	1349	1359	1366	1356	1344	618
35°	1085	1100	1150	1156	1152	680
45°	840	854	882	922	927	648
55°	588	598	627	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°	1613.6	1613.6	1613.6	1613.6	1613.6
2.5°	1617.9	1618.5	1614.8	1604.9	1598.7
5°	1611.7	1611.1	1604.9	1596.2	1591.2
7.5°	1593.7	1595.0	1593.1	1580.7	1573.9
10°	1576.4	1577.0	1572.0	1562.1	1554.1
12.5°	1554.1	1553.4	1546.6	1541.7	1528.6
15°	1518.7	1522.4	1518.7	1511.9	1501.4
17.5°	1484.6	1484.6	1487.1	1475.3	1467.3
20°	1446.2	1448.1	1448.1	1438.8	1429.5
22.5°	1401.6	1407.1	1409.0	1399.1	1387.9
25°	1348.9	1359.4	1365.6	1355.7	1343.9
27.5°	1285.0	1301.1	1319.7	1312.3	1299.3
30°	1213.7	1237.3	1268.3	1262.1	1252.8
32.5°	1146.2	1169.7	1212.5	1210.0	1205.1
35°	1084.8	1099.7	1149.9	1156.1	1151.7
37.5°	1026.5	1040.2	1087.3	1101.5	1097.8
40°	965.2	980.0	1017.2	1042.6	1043.9
42.5°	904.4	918.7	949.0	985.6	985.6
45°	839.9	854.2	882.1	922.4	927.3
47.5°	776.7	791.6	818.9	859.2	867.2
50°	714.7	728.4	755.6	794.7	807.1
52.5°	650.3	665.1	691.8	727.7	745.7
55°	588.3	598.2	627.3	662.0	681.3
57.5°	523.8	533.1	566.0	595.7	615.5
60°	461.8	473.6	499.0	529.4	552.3
62.5°	402.3	414.7	436.4	463.1	489.1
65°	344.7	354.0	375.0	401.7	424.6
67.5°	288.9	296.9	318.0	336.6	360.8
70°	232.5	243.0	258.5	276.5	292.0
72.5°	187.2	191.5	204.6	217.6	233.7
75°	138.2	145.7	156.2	163.6	172.9
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)