

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: P555492

Luminaire Tested: **FUSL-12-2-LD4-3HI-35-UNV-93-86-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: P555492  
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-LD4-3HI-35-UNV-93-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS 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**

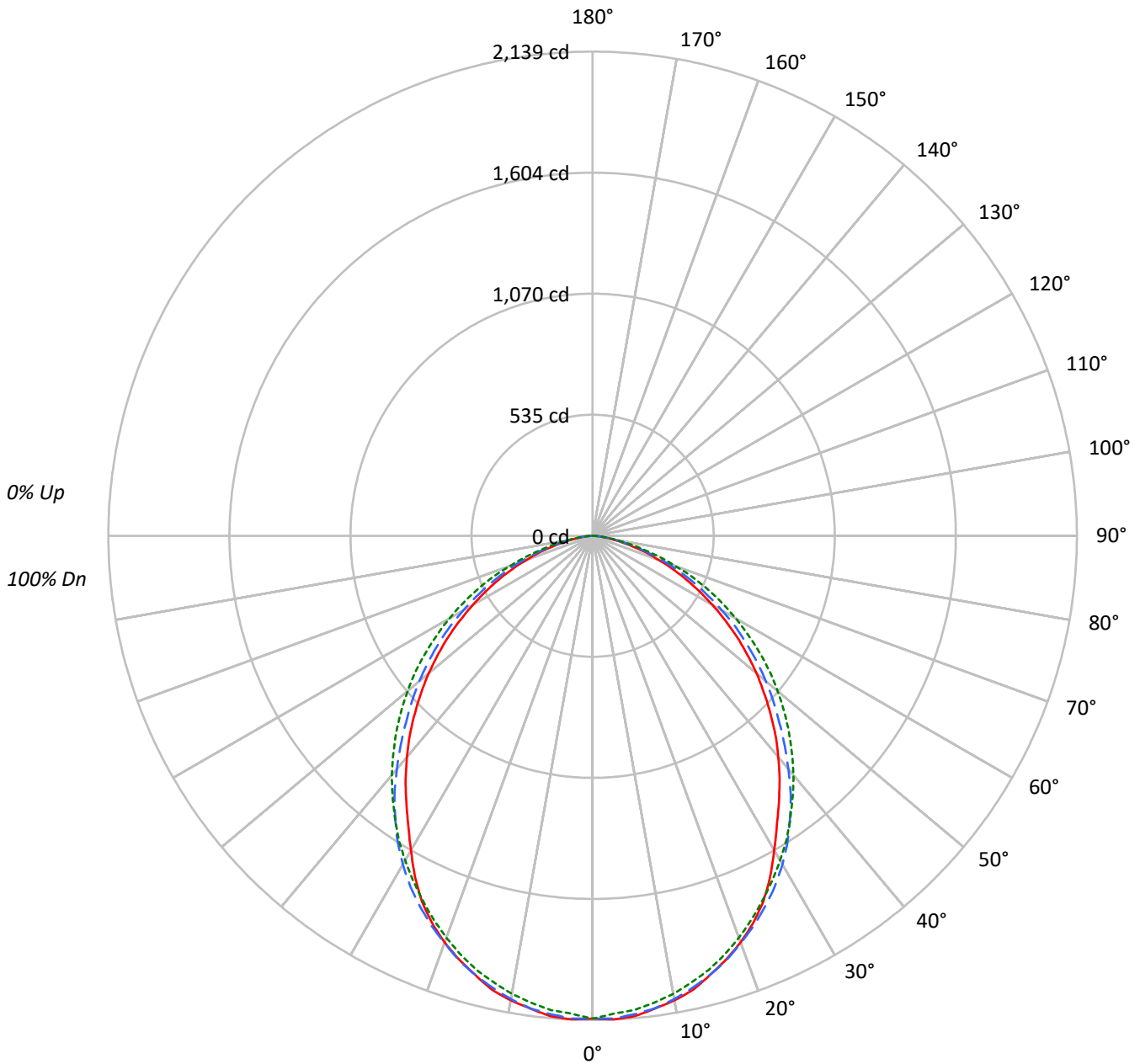
Lumens per Lamp: N/A  
Luminaire Lumens: 4932.0 lumens  
Efficiency: N/A  
Efficacy: 76.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
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°	11480	11480	11480
5°	11510	11461	11364
10°	11388	11357	11227
15°	11186	11186	11058
20°	10949	10963	10822
25°	10589	10720	10549
30°	9971	10419	10292
35°	9422	9987	10003
40°	8963	9447	9695
45°	8451	8875	9331
50°	7911	8364	8933
55°	7296	7781	8450
60°	6571	7100	7859
65°	5802	6314	7148
70°	4836	5377	6072
75°	3799	4294	4754
80°	2718	3022	3353
85°	1772	1772	1667



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.8	4.1
10°-20°	564.2	11.4
20°-30°	824.4	16.7
30°-40°	935.8	19.0
40°-50°	903.4	18.3
50°-60°	745.2	15.1
60°-70°	496.3	10.1
70°-80°	222.1	4.5
80°-90°	39.7	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°	1589.4	32.2
0°-40°	2525.3	51.2
0°-60°	4173.9	84.6
0°-90°	4932.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4932.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2133	2133	2133	2133	2133	
5°	2130	2130	2122	2110	2104	202
15°	2008	2012	2008	1999	1985	566
25°	1783	1797	1805	1792	1776	817
35°	1434	1454	1520	1528	1522	898
45°	1110	1129	1166	1219	1226	857
55°	778	791	829	875	900	694
65°	456	468	496	531	561	452
75°	183	193	206	216	229	200
85°	29	29	29	27	27	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2133.0	2133.0	2133.0	2133.0	2133.0
2.5°	2138.7	2139.5	2134.6	2121.5	2113.3
5°	2130.5	2129.7	2121.5	2110.0	2103.5
7.5°	2106.7	2108.4	2105.9	2089.5	2080.5
10°	2083.8	2084.6	2078.1	2065.0	2054.3
12.5°	2054.3	2053.5	2044.5	2037.9	2020.7
15°	2007.6	2012.5	2007.6	1998.6	1984.6
17.5°	1962.5	1962.5	1965.8	1950.2	1939.6
20°	1911.7	1914.2	1914.2	1901.9	1889.6
22.5°	1852.7	1860.1	1862.6	1849.4	1834.7
25°	1783.1	1797.0	1805.2	1792.1	1776.5
27.5°	1698.7	1720.0	1744.6	1734.7	1717.5
30°	1604.4	1635.6	1676.5	1668.3	1656.1
32.5°	1515.1	1546.3	1602.8	1599.5	1593.0
35°	1434.0	1453.7	1520.0	1528.2	1522.5
37.5°	1357.0	1375.0	1437.3	1456.1	1451.2
40°	1275.8	1295.5	1344.7	1378.3	1379.9
42.5°	1195.5	1214.4	1254.5	1302.9	1302.9
45°	1110.3	1129.2	1166.0	1219.3	1225.9
47.5°	1026.7	1046.4	1082.5	1135.7	1146.4
50°	944.8	962.8	998.9	1050.5	1066.9
52.5°	859.6	879.2	914.5	962.0	985.8
55°	777.6	790.7	829.3	875.1	900.5
57.5°	692.4	704.7	748.1	787.5	813.7
60°	610.5	626.0	659.6	699.8	730.1
62.5°	531.8	548.2	576.9	612.1	646.5
65°	455.6	467.9	495.8	531.0	561.3
67.5°	381.9	392.5	420.4	444.9	476.9
70°	307.3	321.2	341.7	365.5	385.9
72.5°	247.5	253.2	270.4	287.6	308.9
75°	182.7	192.6	206.5	216.3	228.6
77.5°	131.1	136.8	145.0	153.2	164.7
80°	87.7	90.1	97.5	99.2	108.2
82.5°	53.3	54.9	56.5	57.4	60.6
85°	28.7	28.7	28.7	27.0	27.0
87.5°	16.4	16.4	13.9	11.5	8.2
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)