

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: P555528

Luminaire Tested: **FUSL-12-2-LD4-3HI-40-UNV-81-88-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: P555528  
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-40-UNV-81-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

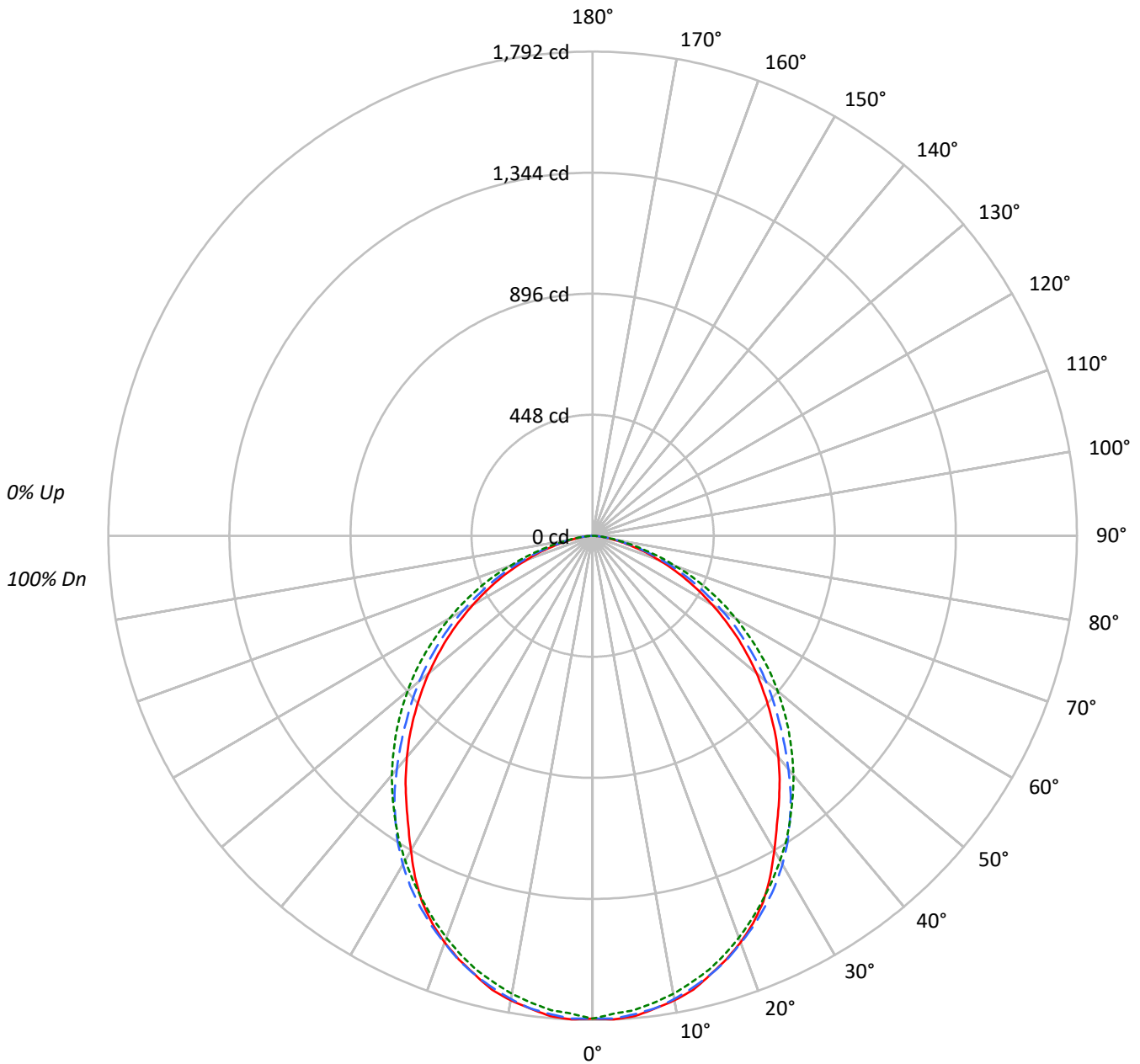
Lumens per Lamp: N/A  
Luminaire Lumens: 4132.0 lumens  
Efficiency: N/A  
Efficacy: 63.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	9618	9618	9618
5°	9643	9602	9521
10°	9541	9515	9406
15°	9371	9371	9264
20°	9173	9185	9067
25°	8871	8981	8839
30°	8354	8729	8622
35°	7893	8367	8380
40°	7510	7915	8122
45°	7080	7435	7817
50°	6627	7007	7484
55°	6113	6518	7080
60°	5505	5948	6584
65°	4861	5289	5989
70°	4050	4505	5087
75°	3184	3597	3982
80°	2278	2532	2808
85°	1482	1482	1402



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.2	4.1
10°-20°	472.7	11.4
20°-30°	690.7	16.7
30°-40°	784.0	19.0
40°-50°	756.9	18.3
50°-60°	624.4	15.1
60°-70°	415.8	10.1
70°-80°	186.0	4.5
80°-90°	33.3	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°	1331.6	32.2
0°-40°	2115.7	51.2
0°-60°	3496.9	84.6
0°-90°	4132.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4132.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1787	1787	1787	1787	1787	
5°	1785	1784	1777	1768	1762	169
15°	1682	1686	1682	1674	1663	474
25°	1494	1506	1512	1501	1488	684
35°	1201	1218	1274	1280	1276	753
45°	930	946	977	1022	1027	718
55°	652	662	695	733	754	581
65°	382	392	415	445	470	378
75°	153	161	173	181	192	167
85°	24	24	24	23	23	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1787.0	1787.0	1787.0	1787.0	1787.0
2.5°	1791.8	1792.5	1788.4	1777.4	1770.5
5°	1784.9	1784.2	1777.4	1767.8	1762.3
7.5°	1765.0	1766.4	1764.3	1750.6	1743.0
10°	1745.8	1746.5	1741.0	1730.0	1721.1
12.5°	1721.1	1720.4	1712.8	1707.3	1692.9
15°	1681.9	1686.1	1681.9	1674.4	1662.7
17.5°	1644.2	1644.2	1646.9	1633.9	1625.0
20°	1601.6	1603.7	1603.7	1593.4	1583.1
22.5°	1552.2	1558.4	1560.4	1549.5	1537.1
25°	1493.8	1505.5	1512.4	1501.4	1488.4
27.5°	1423.1	1441.0	1461.6	1453.3	1438.9
30°	1344.2	1370.3	1404.6	1397.7	1387.4
32.5°	1269.4	1295.4	1342.8	1340.1	1334.6
35°	1201.4	1217.9	1273.5	1280.3	1275.5
37.5°	1136.9	1152.0	1204.1	1219.9	1215.8
40°	1068.9	1085.4	1126.6	1154.7	1156.1
42.5°	1001.6	1017.4	1051.0	1091.5	1091.5
45°	930.2	946.0	976.9	1021.5	1027.0
47.5°	860.2	876.7	906.9	951.5	960.4
50°	791.5	806.6	836.9	880.1	893.8
52.5°	720.1	736.6	766.1	806.0	825.9
55°	651.5	662.5	694.7	733.2	754.5
57.5°	580.1	590.4	626.8	659.7	681.7
60°	511.4	524.5	552.6	586.3	611.7
62.5°	445.5	459.3	483.3	512.8	541.7
65°	381.7	392.0	415.3	444.9	470.3
67.5°	319.9	328.8	352.2	372.8	399.5
70°	257.4	269.1	286.3	306.2	323.3
72.5°	207.3	212.1	226.5	241.0	258.8
75°	153.1	161.3	173.0	181.2	191.5
77.5°	109.8	114.6	121.5	128.4	138.0
80°	73.5	75.5	81.7	83.1	90.6
82.5°	44.6	46.0	47.4	48.1	50.8
85°	24.0	24.0	24.0	22.7	22.7
87.5°	13.7	13.7	11.7	9.6	6.9
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)