

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: P555303

Luminaire Tested: **FUSL-12-2-LD4-2STD-40-UNV-93-87-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: P555303  
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-LD4-2STD-40-UNV-93-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

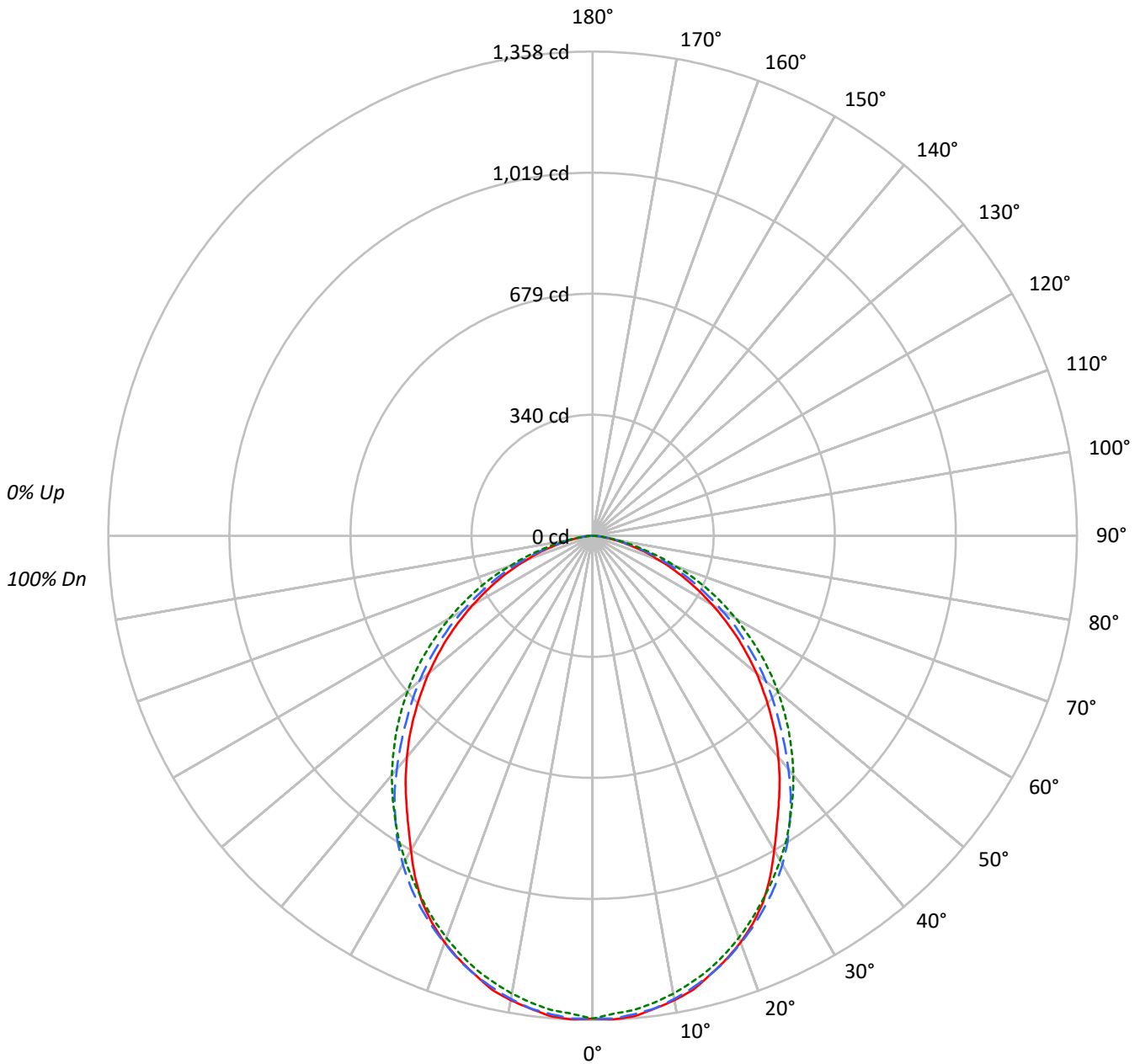
Lumens per Lamp: N/A  
Luminaire Lumens: 3131.0 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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°	7288	7288	7288
5°	7307	7276	7214
10°	7230	7209	7127
15°	7101	7101	7020
20°	6951	6960	6871
25°	6722	6805	6697
30°	6330	6614	6533
35°	5981	6340	6350
40°	5690	5997	6154
45°	5365	5634	5923
50°	5022	5309	5671
55°	4632	4939	5364
60°	4171	4508	4989
65°	3683	4008	4537
70°	3070	3413	3855
75°	2412	2726	3017
80°	1726	1918	2129
85°	1124	1124	1062



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.5	4.1
10°-20°	358.2	11.4
20°-30°	523.4	16.7
30°-40°	594.1	19.0
40°-50°	573.5	18.3
50°-60°	473.1	15.1
60°-70°	315.0	10.1
70°-80°	141.0	4.5
80°-90°	25.2	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°	1009.0	32.2
0°-40°	1603.1	51.2
0°-60°	2649.7	84.6
0°-90°	3131.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3131.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1354	1354	1354	1354	1354	
5°	1352	1352	1347	1340	1335	128
15°	1274	1278	1274	1269	1260	359
25°	1132	1141	1146	1138	1128	518
35°	910	923	965	970	966	570
45°	705	717	740	774	778	544
55°	494	502	526	556	572	441
65°	289	297	315	337	356	287
75°	116	122	131	137	145	127
85°	18	18	18	17	17	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1354.1	<i>1354.1</i>	1354.1	1354.1	1354.1
2.5°	<i>1357.7</i>	<i>1358.2</i>	<i>1355.1</i>	<i>1346.8</i>	<i>1341.6</i>
5°	1352.5	<i>1352.0</i>	1346.8	1339.5	1335.3
7.5°	1337.4	<i>1338.5</i>	1336.9	1326.5	1320.8
10°	1322.9	<i>1323.4</i>	1319.2	1310.9	1304.1
12.5°	1304.1	<i>1303.6</i>	1297.9	1293.7	1282.8
15°	1274.5	<i>1277.6</i>	1274.5	1268.8	1259.9
17.5°	1245.9	<i>1245.9</i>	1248.0	1238.1	1231.3
20°	1213.6	<i>1215.2</i>	1215.2	1207.4	1199.6
22.5°	1176.2	<i>1180.9</i>	1182.4	1174.1	1164.7
25°	1132.0	<i>1140.8</i>	1146.0	1137.7	1127.8
27.5°	1078.4	<i>1091.9</i>	1107.5	1101.3	1090.3
30°	1018.5	<i>1038.3</i>	1064.3	1059.1	1051.3
32.5°	961.8	<i>981.6</i>	1017.5	1015.4	1011.3
35°	910.3	<i>922.8</i>	965.0	970.2	966.5
37.5°	861.4	<i>872.9</i>	912.4	924.4	921.3
40°	809.9	<i>822.4</i>	853.6	875.0	876.0
42.5°	759.0	<i>770.9</i>	796.4	827.1	827.1
45°	704.9	<i>716.8</i>	740.2	774.1	778.2
47.5°	651.8	<i>664.3</i>	687.2	721.0	727.8
50°	599.8	<i>611.2</i>	634.1	666.9	677.3
52.5°	545.7	<i>558.2</i>	580.5	610.7	625.8
55°	493.7	<i>502.0</i>	526.4	555.6	571.7
57.5°	439.6	<i>447.4</i>	474.9	499.9	516.6
60°	387.5	<i>397.4</i>	418.8	444.2	463.5
62.5°	337.6	<i>348.0</i>	366.2	388.6	410.4
65°	289.2	<i>297.0</i>	314.7	337.1	356.3
67.5°	242.4	<i>249.2</i>	266.9	282.5	302.8
70°	195.1	<i>203.9</i>	216.9	232.0	245.0
72.5°	157.1	<i>160.7</i>	171.7	182.6	196.1
75°	116.0	<i>122.2</i>	131.1	137.3	145.1
77.5°	83.2	<i>86.9</i>	92.1	97.3	104.6
80°	55.7	<i>57.2</i>	61.9	62.9	68.7
82.5°	33.8	<i>34.9</i>	35.9	36.4	38.5
85°	18.2	<i>18.2</i>	18.2	17.2	17.2
87.5°	10.4	<i>10.4</i>	8.8	7.3	5.2
90°	0.0	<i>0.0</i>	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)