

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: P555806

Luminaire Tested: **FUSL-12-2-LD4-3LO-40-UNV-82-97-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: P555806  
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-40-UNV-82-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

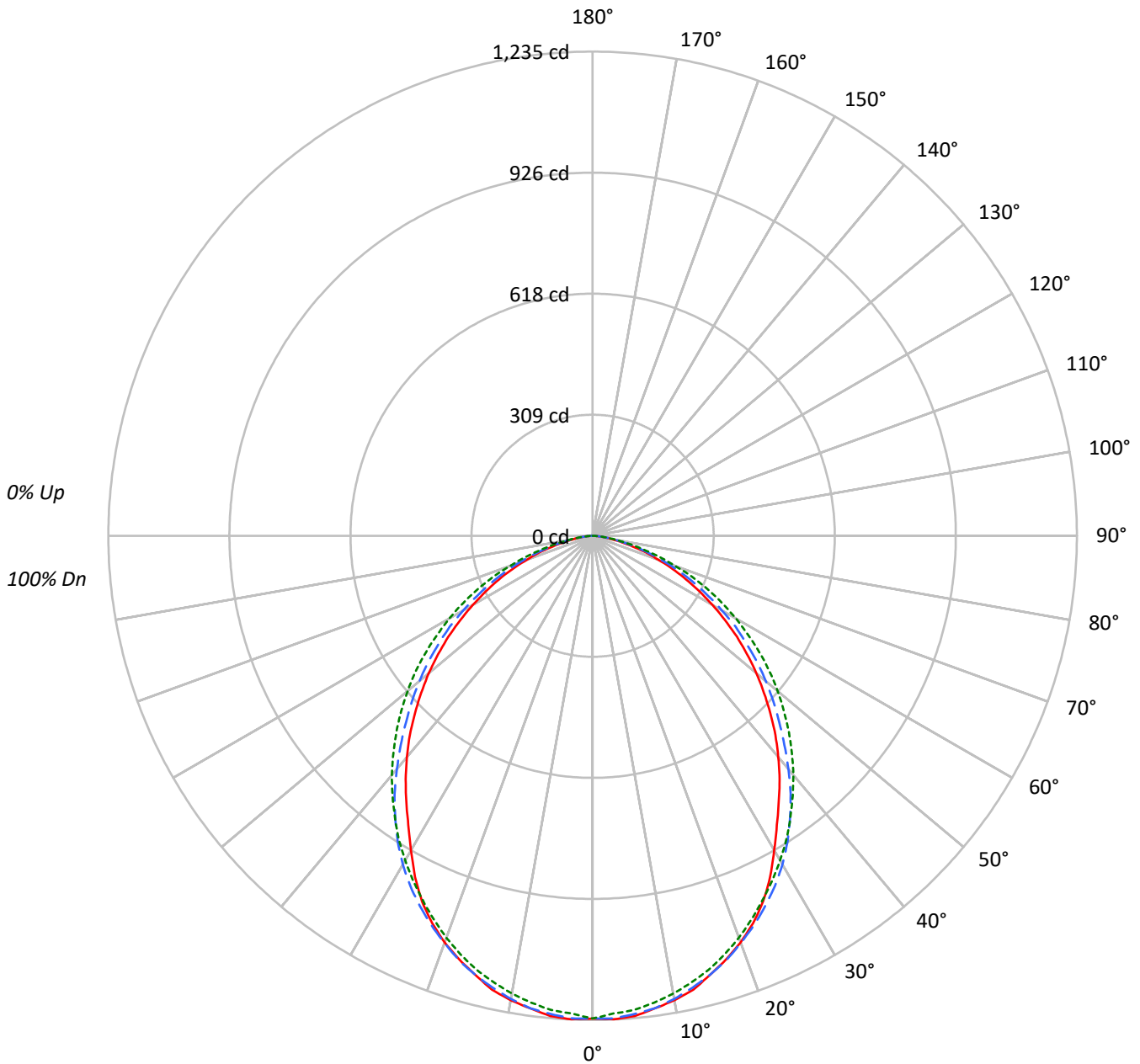
Lumens per Lamp: N/A  
Luminaire Lumens: 2847.0 lumens  
Efficiency: N/A  
Efficacy: 81.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	6627	6627	6627
5°	6644	6616	6560
10°	6574	6556	6480
15°	6457	6457	6383
20°	6320	6329	6247
25°	6112	6188	6090
30°	5756	6014	5941
35°	5439	5765	5775
40°	5174	5453	5597
45°	4878	5123	5386
50°	4567	4828	5157
55°	4212	4492	4877
60°	3793	4099	4537
65°	3349	3645	4126
70°	2792	3103	3506
75°	2194	2479	2745
80°	1568	1745	1934
85°	1025	1025	963



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.9	4.1
10°-20°	325.7	11.4
20°-30°	475.9	16.7
30°-40°	540.2	19.0
40°-50°	521.5	18.3
50°-60°	430.2	15.1
60°-70°	286.5	10.1
70°-80°	128.2	4.5
80°-90°	22.9	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°	917.5	32.2
0°-40°	1457.7	51.2
0°-60°	2409.4	84.6
0°-90°	2847.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2847.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1231	1231	1231	1231	1231	
5°	1230	1229	1225	1218	1214	116
15°	1159	1162	1159	1154	1146	327
25°	1029	1037	1042	1034	1026	471
35°	828	839	877	882	879	519
45°	641	652	673	704	708	495
55°	449	456	479	505	520	401
65°	263	270	286	306	324	261
75°	106	111	119	125	132	115
85°	17	17	17	16	16	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1231.3	<i>1231.3</i>	1231.3	1231.3	1231.3
2.5°	<i>1234.6</i>	<i>1235.0</i>	<i>1232.2</i>	<i>1224.6</i>	<i>1219.9</i>
5°	1229.8	<i>1229.4</i>	1224.6	1218.0	1214.2
7.5°	1216.1	<i>1217.1</i>	1215.6	1206.2	1201.0
10°	1202.9	<i>1203.3</i>	1199.6	1192.0	1185.8
12.5°	1185.8	<i>1185.4</i>	1180.2	1176.4	1166.5
15°	1158.9	<i>1161.7</i>	1158.9	1153.7	1145.6
17.5°	1132.9	<i>1132.9</i>	1134.8	1125.8	1119.6
20°	1103.5	<i>1105.0</i>	1105.0	1097.9	1090.8
22.5°	1069.5	<i>1073.7</i>	1075.2	1067.6	1059.1
25°	1029.3	<i>1037.3</i>	1042.0	1034.5	1025.5
27.5°	980.6	<i>992.9</i>	1007.0	1001.4	991.4
30°	926.2	<i>944.1</i>	967.8	963.1	956.0
32.5°	874.6	<i>892.6</i>	925.2	923.3	919.5
35°	827.8	<i>839.1</i>	877.4	882.2	878.9
37.5°	783.3	<i>793.7</i>	829.7	840.5	837.7
40°	736.5	<i>747.8</i>	776.2	795.6	796.6
42.5°	690.1	<i>701.0</i>	724.2	752.1	752.1
45°	640.9	<i>651.8</i>	673.1	703.8	707.6
47.5°	592.7	<i>604.0</i>	624.9	655.6	661.7
50°	545.4	<i>555.8</i>	576.6	606.4	615.9
52.5°	496.2	<i>507.5</i>	527.9	555.3	569.0
55°	448.9	<i>456.5</i>	478.7	505.2	519.8
57.5°	399.7	<i>406.8</i>	431.9	454.6	469.7
60°	352.4	<i>361.4</i>	380.8	404.0	421.5
62.5°	307.0	<i>316.4</i>	333.0	353.3	373.2
65°	263.0	<i>270.1</i>	286.2	306.5	324.0
67.5°	220.4	<i>226.6</i>	242.7	256.8	275.3
70°	177.4	<i>185.4</i>	197.2	211.0	222.8
72.5°	142.9	<i>146.2</i>	156.1	166.0	178.3
75°	105.5	<i>111.2</i>	119.2	124.9	132.0
77.5°	75.7	<i>79.0</i>	83.7	88.5	95.1
80°	50.6	<i>52.0</i>	56.3	57.2	62.4
82.5°	30.7	<i>31.7</i>	32.6	33.1	35.0
85°	16.6	<i>16.6</i>	16.6	15.6	15.6
87.5°	9.5	<i>9.5</i>	8.0	6.6	4.7
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)