

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: P555232

Luminaire Tested: **FUSL-12-2-LD4-2STD-35-UNV-93-84-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: P555232  
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-35-UNV-93-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

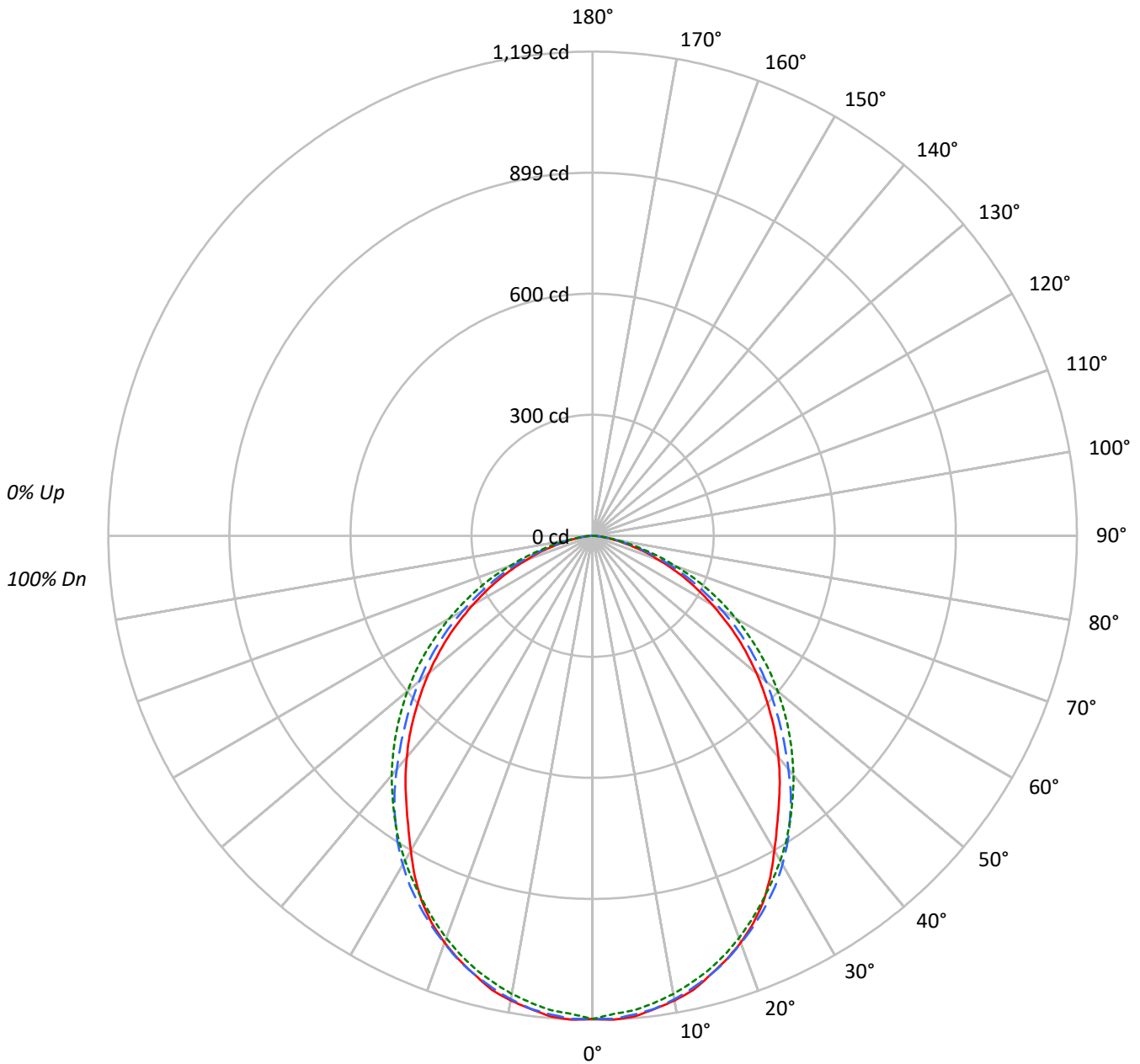
Lumens per Lamp: N/A  
Luminaire Lumens: 2766.0 lumens  
Efficiency: N/A  
Efficacy: 83.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	6438	6438	6438
5°	6455	6428	6373
10°	6387	6369	6296
15°	6273	6273	6201
20°	6140	6148	6069
25°	5938	6012	5916
30°	5592	5844	5772
35°	5284	5601	5610
40°	5027	5298	5437
45°	4740	4977	5233
50°	4437	4690	5009
55°	4092	4364	4739
60°	3686	3982	4408
65°	3254	3540	4009
70°	2711	3015	3407
75°	2131	2408	2666
80°	1525	1695	1881
85°	994	994	939



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.6	4.1
10°-20°	316.4	11.4
20°-30°	462.4	16.7
30°-40°	524.9	19.0
40°-50°	506.7	18.3
50°-60°	418.0	15.1
60°-70°	278.3	10.1
70°-80°	124.5	4.5
80°-90°	22.3	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°	891.4	32.2
0°-40°	1416.3	51.2
0°-60°	2340.9	84.6
0°-90°	2766.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2766.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1196	1196	1196	1196	1196	
5°	1195	1194	1190	1183	1180	113
15°	1126	1129	1126	1121	1113	317
25°	1000	1008	1012	1005	996	458
35°	804	815	852	857	854	504
45°	623	633	654	684	688	480
55°	436	444	465	491	505	389
65°	256	262	278	298	315	253
75°	102	108	116	121	128	112
85°	16	16	16	15	15	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1196.2	1196.2	1196.2	1196.2	1196.2
2.5°	1199.4	1199.9	1197.1	1189.8	1185.2
5°	1194.8	1194.4	1189.8	1183.4	1179.7
7.5°	1181.5	1182.4	1181.1	1171.9	1166.8
10°	1168.7	1169.1	1165.4	1158.1	1152.1
12.5°	1152.1	1151.6	1146.6	1142.9	1133.3
15°	1125.9	1128.7	1125.9	1120.9	1113.0
17.5°	1100.6	1100.6	1102.5	1093.7	1087.8
20°	1072.1	1073.5	1073.5	1066.6	1059.7
22.5°	1039.1	1043.2	1044.6	1037.2	1028.9
25°	1000.0	1007.8	1012.4	1005.0	996.3
27.5°	952.7	964.6	978.4	972.9	963.2
30°	899.8	917.3	940.3	935.7	928.8
32.5°	849.7	867.2	898.9	897.1	893.4
35°	804.2	815.3	852.5	857.1	853.9
37.5°	761.0	771.1	806.1	816.6	813.9
40°	715.5	726.6	754.1	773.0	773.9
42.5°	670.5	681.1	703.6	730.7	730.7
45°	622.7	633.3	653.9	683.8	687.5
47.5°	575.8	586.9	607.1	636.9	642.9
50°	529.9	540.0	560.2	589.2	598.3
52.5°	482.1	493.1	512.9	539.5	552.8
55°	436.1	443.5	465.1	490.8	505.1
57.5°	388.3	395.2	419.6	441.6	456.3
60°	342.4	351.1	369.9	392.5	409.5
62.5°	298.3	307.4	323.5	343.3	362.6
65°	255.5	262.4	278.0	297.8	314.8
67.5°	214.2	220.1	235.8	249.5	267.5
70°	172.3	180.1	191.6	205.0	216.5
72.5°	138.8	142.0	151.7	161.3	173.3
75°	102.5	108.0	115.8	121.3	128.2
77.5°	73.5	76.7	81.3	85.9	92.4
80°	49.2	50.6	54.7	55.6	60.7
82.5°	29.9	30.8	31.7	32.2	34.0
85°	16.1	16.1	16.1	15.2	15.2
87.5°	9.2	9.2	7.8	6.4	4.6
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)