

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: P555246

Luminaire Tested: **FUSL-12-2-LD4-2STD-35-UNV-93-97-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: P555246  
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-93-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE  
AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND  
3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

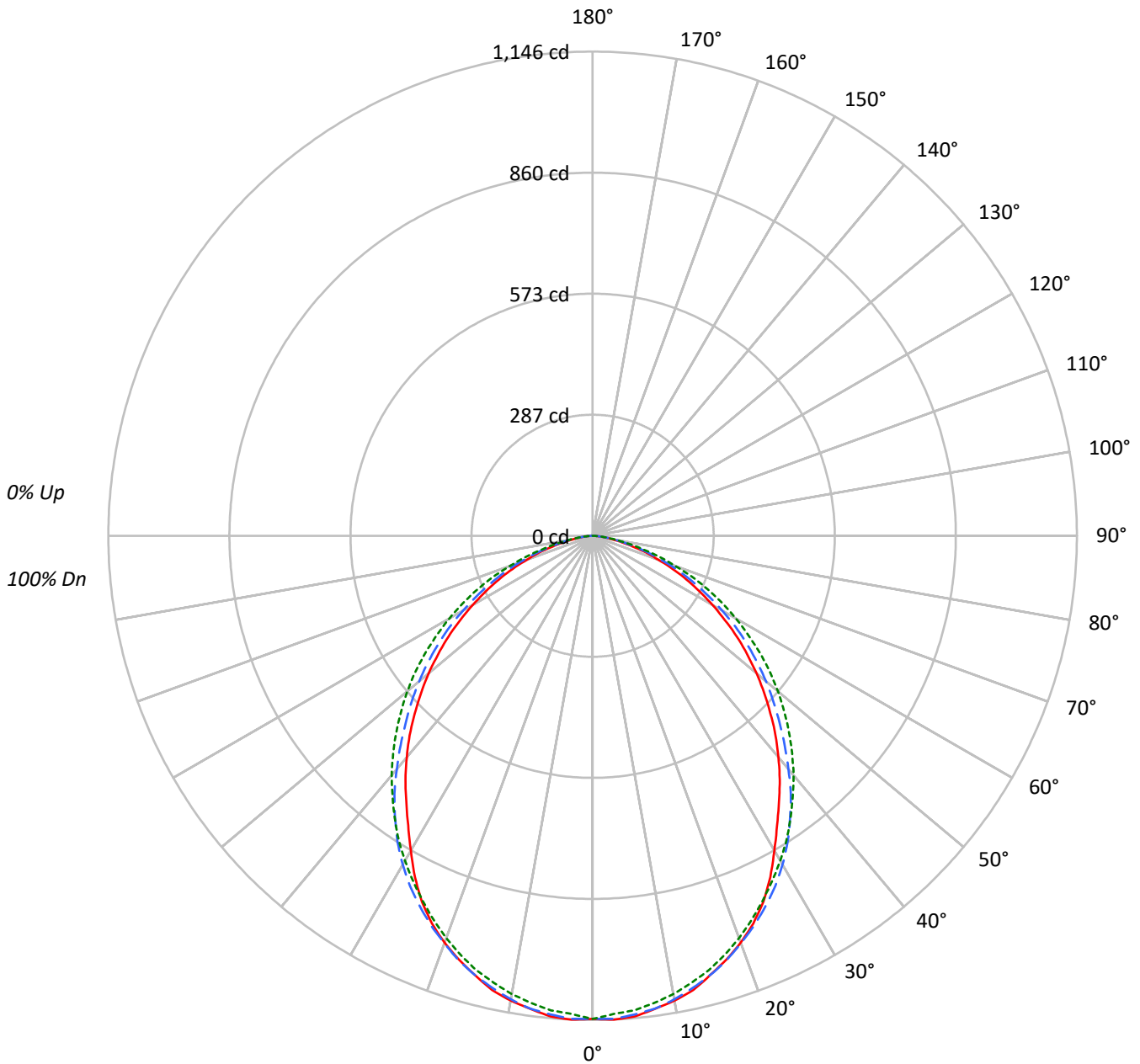
Lumens per Lamp: N/A  
Luminaire Lumens: 2644.1 lumens  
Efficiency: N/A  
Efficacy: 79.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	6154	6154	6154
5°	6170	6144	6092
10°	6105	6088	6019
15°	5997	5997	5928
20°	5870	5877	5802
25°	5676	5747	5656
30°	5345	5586	5517
35°	5051	5354	5363
40°	4806	5065	5198
45°	4530	4758	5002
50°	4241	4484	4789
55°	3912	4172	4530
60°	3523	3806	4213
65°	3110	3385	3832
70°	2592	2883	3256
75°	2038	2302	2549
80°	1457	1621	1798
85°	951	951	895



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.7	4.1
10°-20°	302.5	11.4
20°-30°	442.0	16.7
30°-40°	501.7	19.0
40°-50°	484.3	18.3
50°-60°	399.5	15.1
60°-70°	266.0	10.1
70°-80°	119.1	4.5
80°-90°	21.3	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°	852.1	32.2
0°-40°	1353.8	51.2
0°-60°	2237.6	84.6
0°-90°	2644.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2644.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1142	1142	1137	1131	1128	108
15°	1076	1079	1076	1071	1064	303
25°	956	963	968	961	952	438
35°	769	779	815	819	816	482
45°	595	605	625	654	657	459
55°	417	424	445	469	483	372
65°	244	251	266	285	301	242
75°	98	103	111	116	123	107
85°	15	15	15	14	14	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1143.5	1143.5	1143.5	1143.5	1143.5
2.5°	1146.5	1147.0	1144.3	1137.3	1132.9
5°	1142.1	1141.7	1137.3	1131.2	1127.6
7.5°	1129.4	1130.3	1129.0	1120.2	1115.3
10°	1117.1	1117.5	1114.0	1107.0	1101.3
12.5°	1101.3	1100.9	1096.0	1092.5	1083.3
15°	1076.3	1078.9	1076.3	1071.4	1064.0
17.5°	1052.1	1052.1	1053.8	1045.5	1039.8
20°	1024.9	1026.2	1026.2	1019.6	1013.0
22.5°	993.2	997.2	998.5	991.5	983.6
25°	955.9	963.4	967.7	960.7	952.4
27.5°	910.6	922.1	935.2	930.0	920.7
30°	860.1	876.8	898.8	894.4	887.8
32.5°	812.2	828.9	859.2	857.5	854.0
35°	768.8	779.3	814.9	819.3	816.2
37.5°	727.5	737.1	770.5	780.6	778.0
40°	684.0	694.5	720.9	738.9	739.8
42.5°	640.9	651.0	672.5	698.5	698.5
45°	595.2	605.3	625.1	653.7	657.2
47.5°	550.4	561.0	580.3	608.9	614.6
50°	506.5	516.2	535.5	563.2	572.0
52.5°	460.8	471.4	490.2	515.7	528.5
55°	416.9	423.9	444.6	469.2	482.8
57.5°	371.2	377.8	401.1	422.2	436.2
60°	327.3	335.6	353.6	375.2	391.4
62.5°	285.1	293.9	309.3	328.1	346.6
65°	244.2	250.8	265.8	284.7	300.9
67.5°	204.7	210.4	225.4	238.5	255.7
70°	164.7	172.2	183.2	195.9	206.9
72.5°	132.7	135.7	145.0	154.2	165.6
75°	98.0	103.2	110.7	116.0	122.6
77.5°	70.3	73.4	77.8	82.1	88.3
80°	47.0	48.3	52.3	53.2	58.0
82.5°	28.6	29.4	30.3	30.8	32.5
85°	15.4	15.4	15.4	14.5	14.5
87.5°	8.8	8.8	7.5	6.2	4.4
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)