

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: P554981

Luminaire Tested: **FUSL-12-2-LD4-2LO-35-UNV-93-86-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: P554981  
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-LD4-2LO-35-UNV-93-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

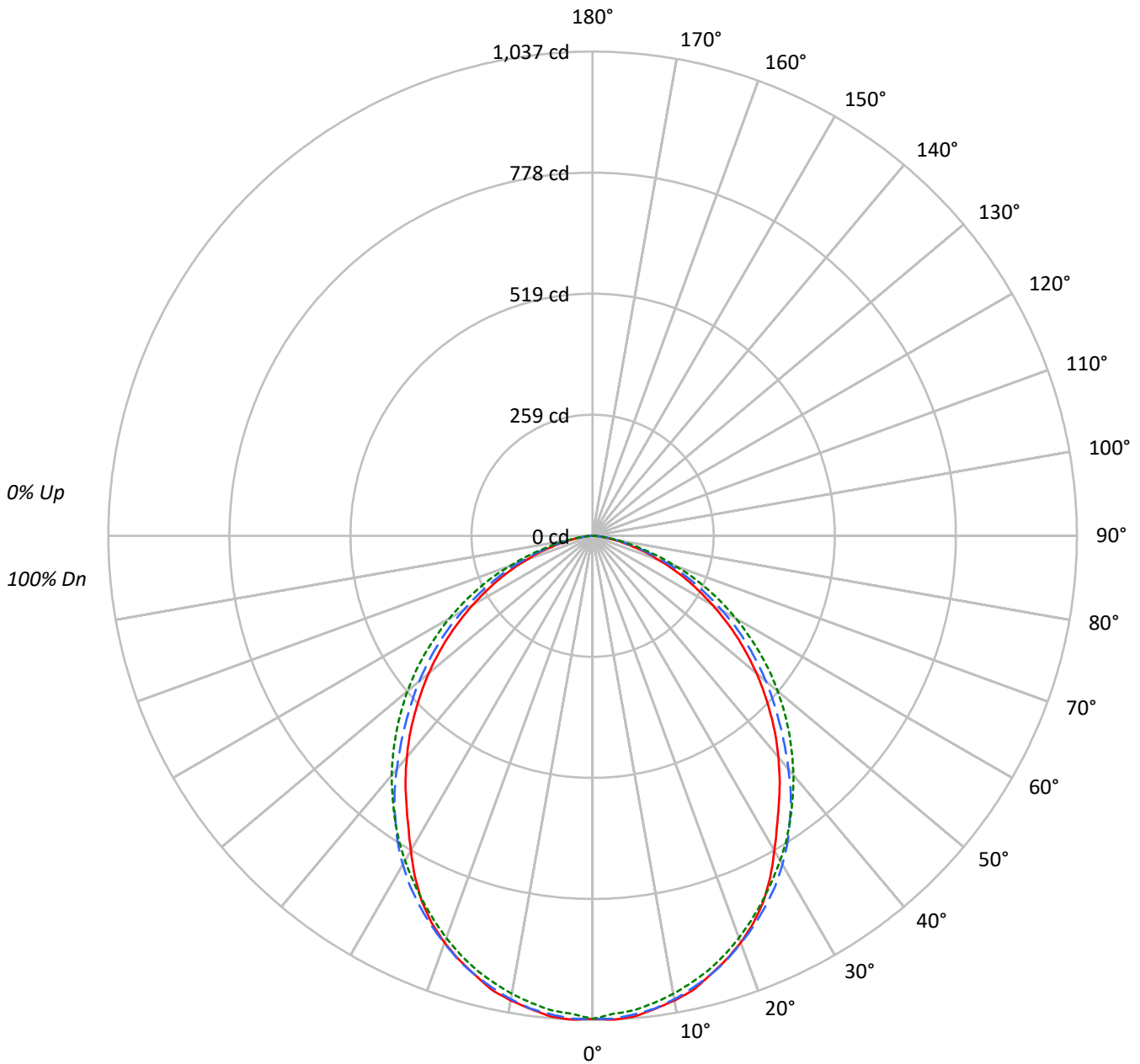
Lumens per Lamp: N/A  
Luminaire Lumens: 2392.0 lumens  
Efficiency: N/A  
Efficacy: 102.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
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					20					
RC	80					70					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°	5568	5568	5568
5°	5582	5559	5512
10°	5523	5508	5445
15°	5425	5425	5363
20°	5310	5317	5249
25°	5135	5199	5116
30°	4836	5053	4992
35°	4570	4844	4851
40°	4347	4582	4702
45°	4099	4304	4525
50°	3836	4057	4332
55°	3538	3774	4099
60°	3187	3443	3812
65°	2814	3061	3466
70°	2345	2607	2946
75°	1842	2082	2306
80°	1317	1466	1627
85°	858	858	809



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.4	4.1
10°-20°	273.6	11.4
20°-30°	399.8	16.7
30°-40°	453.9	19.0
40°-50°	438.1	18.3
50°-60°	361.4	15.1
60°-70°	240.7	10.1
70°-80°	107.7	4.5
80°-90°	19.3	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°	770.9	32.2
0°-40°	1224.7	51.2
0°-60°	2024.3	84.6
0°-90°	2392.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2392.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1034	1034	1034	1034	1034	
5°	1033	1033	1029	1023	1020	98
15°	974	976	974	969	962	274
25°	865	872	876	869	862	396
35°	696	705	737	741	738	436
45°	538	548	566	591	594	415
55°	377	384	402	424	437	337
65°	221	227	240	258	272	219
75°	89	93	100	105	111	97
85°	14	14	14	13	13	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1034.5	1034.5	1034.5	1034.5	1034.5
2.5°	1037.3	1037.7	1035.3	1028.9	1024.9
5°	1033.3	1032.9	1028.9	1023.4	1020.2
7.5°	1021.8	1022.6	1021.4	1013.4	1009.0
10°	1010.6	1011.0	1007.9	1001.5	996.3
12.5°	996.3	995.9	991.6	988.4	980.0
15°	973.7	976.1	973.7	969.3	962.5
17.5°	951.8	951.8	953.4	945.9	940.7
20°	927.2	928.4	928.4	922.4	916.4
22.5°	898.6	902.1	903.3	897.0	889.8
25°	864.8	871.5	875.5	869.2	861.6
27.5°	823.8	834.2	846.1	841.3	833.0
30°	778.1	793.2	813.1	809.1	803.2
32.5°	734.8	749.9	777.3	775.8	772.6
35°	695.5	705.0	737.2	741.2	738.4
37.5°	658.1	666.9	697.1	706.2	703.8
40°	618.8	628.3	652.2	668.5	669.3
42.5°	579.8	589.0	608.4	631.9	631.9
45°	538.5	547.6	565.5	591.4	594.5
47.5°	498.0	507.5	525.0	550.8	556.0
50°	458.2	467.0	484.5	509.5	517.4
52.5°	416.9	426.4	443.5	466.6	478.1
55°	377.1	383.5	402.2	424.4	436.8
57.5°	335.8	341.8	362.8	381.9	394.6
60°	296.1	303.6	319.9	339.4	354.1
62.5°	257.9	265.9	279.8	296.9	313.6
65°	221.0	226.9	240.4	257.5	272.2
67.5°	185.2	190.4	203.9	215.8	231.3
70°	149.0	155.8	165.7	177.2	187.2
72.5°	120.0	122.8	131.1	139.5	149.8
75°	88.6	93.4	100.1	104.9	110.9
77.5°	63.6	66.4	70.3	74.3	79.9
80°	42.5	43.7	47.3	48.1	52.5
82.5°	25.8	26.6	27.4	27.8	29.4
85°	13.9	13.9	13.9	13.1	13.1
87.5°	7.9	7.9	6.8	5.6	4.0
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)