

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: P555162

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-82-94-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: P555162  
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-30-UNV-82-94-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

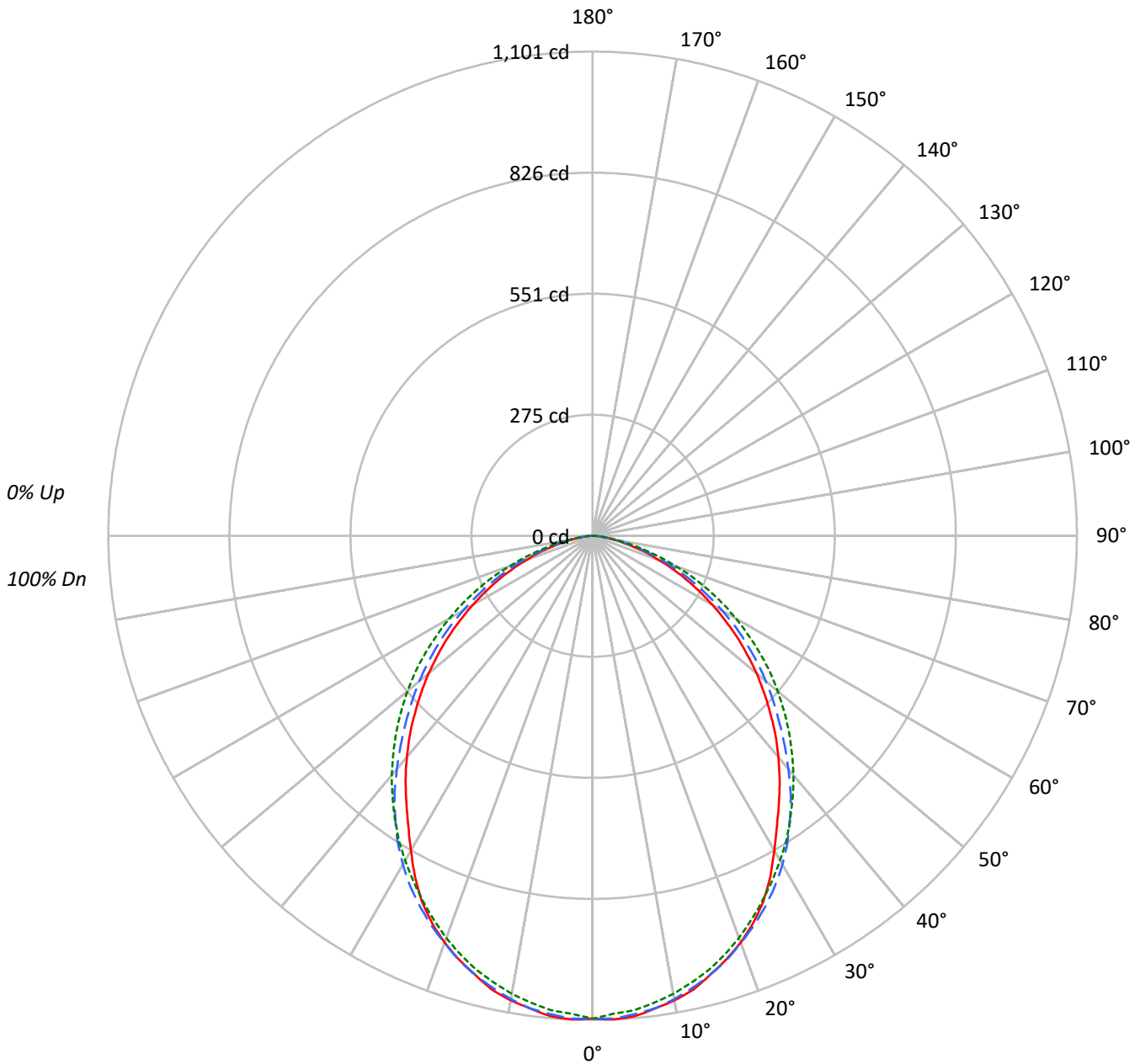
Lumens per Lamp: N/A  
Luminaire Lumens: 2539.0 lumens  
Efficiency: N/A  
Efficacy: 76.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	5910	5910	5910
5°	5925	5900	5850
10°	5862	5846	5780
15°	5758	5758	5693
20°	5637	5644	5572
25°	5451	5518	5431
30°	5133	5364	5298
35°	4850	5141	5150
40°	4614	4863	4991
45°	4351	4569	4803
50°	4073	4305	4598
55°	3756	4006	4350
60°	3383	3655	4046
65°	2986	3250	3680
70°	2489	2768	3127
75°	1957	2210	2447
80°	1398	1556	1726
85°	914	914	858



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.4	4.1
10°-20°	290.4	11.4
20°-30°	424.4	16.7
30°-40°	481.8	19.0
40°-50°	465.1	18.3
50°-60°	383.7	15.1
60°-70°	255.5	10.1
70°-80°	114.3	4.5
80°-90°	20.5	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°	818.2	32.2
0°-40°	1300.0	51.2
0°-60°	2148.7	84.6
0°-90°	2539.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2539.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1098	1098	1098	1098	1098	
5°	1097	1096	1092	1086	1083	104
15°	1034	1036	1034	1029	1022	291
25°	918	925	929	923	915	420
35°	738	748	782	787	784	463
45°	572	581	600	628	631	441
55°	400	407	427	450	464	357
65°	234	241	255	273	289	233
75°	94	99	106	111	118	103
85°	15	15	15	14	14	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1098.1	1098.1	1098.1	1098.1	1098.1
2.5°	1101.0	1101.4	1098.9	1092.1	1087.9
5°	1096.8	1096.4	1092.1	1086.2	1082.9
7.5°	1084.6	1085.4	1084.1	1075.7	1071.1
10°	1072.7	1073.2	1069.8	1063.0	1057.6
12.5°	1057.6	1057.1	1052.5	1049.1	1040.3
15°	1033.5	1036.0	1033.5	1028.9	1021.7
17.5°	1010.3	1010.3	1012.0	1004.0	998.5
20°	984.2	985.4	985.4	979.1	972.8
22.5°	953.8	957.6	958.8	952.1	944.5
25°	917.9	925.1	929.3	922.6	914.6
27.5°	874.5	885.4	898.1	893.0	884.2
30°	826.0	842.0	863.1	858.9	852.5
32.5°	780.0	796.0	825.1	823.4	820.1
35°	738.2	748.3	782.5	786.7	783.8
37.5°	698.6	707.8	739.9	749.6	747.1
40°	656.8	666.9	692.2	709.5	710.4
42.5°	615.5	625.2	645.8	670.7	670.7
45°	571.6	581.3	600.3	627.7	631.1
47.5°	528.6	538.7	557.3	584.7	590.2
50°	486.4	495.7	514.2	540.8	549.2
52.5°	442.5	452.6	470.8	495.2	507.5
55°	400.3	407.1	426.9	450.5	463.6
57.5°	356.5	362.8	385.1	405.4	418.9
60°	314.3	322.3	339.6	360.3	375.9
62.5°	273.8	282.2	297.0	315.1	332.8
65°	234.5	240.9	255.2	273.4	289.0
67.5°	196.6	202.1	216.4	229.1	245.5
70°	158.2	165.4	175.9	188.1	198.7
72.5°	127.4	130.3	139.2	148.1	159.0
75°	94.1	99.1	106.3	111.4	117.7
77.5°	67.5	70.4	74.7	78.9	84.8
80°	45.1	46.4	50.2	51.0	55.7
82.5°	27.4	28.3	29.1	29.5	31.2
85°	14.8	14.8	14.8	13.9	13.9
87.5°	8.4	8.4	7.2	5.9	4.2
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)