

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: P555270

Luminaire Tested: **FUSL-12-2-LD4-2STD-40-UNV-81-87-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: P555270  
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-40-UNV-81-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375  
CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

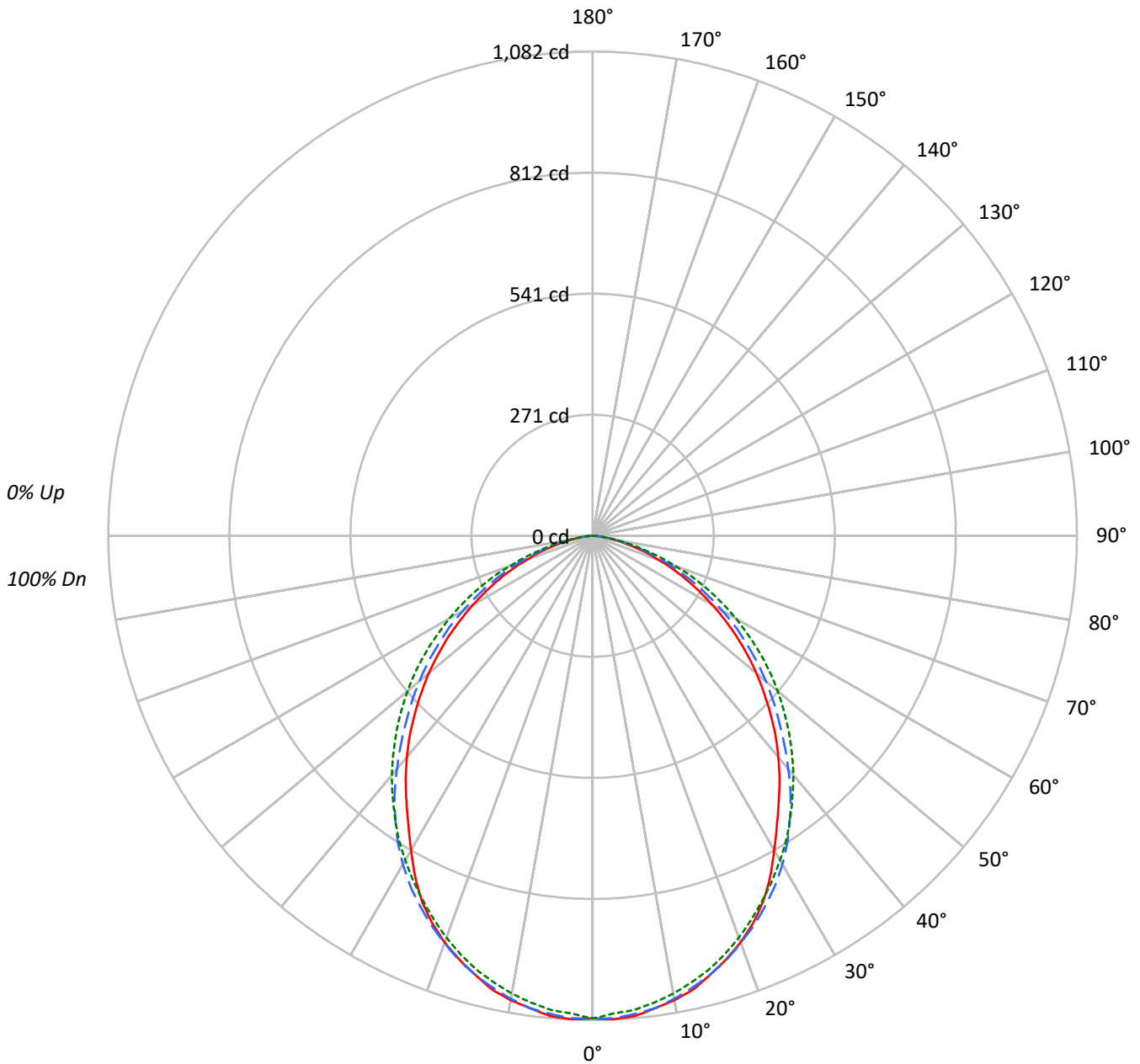
Lumens per Lamp: N/A  
Luminaire Lumens: 2494.0 lumens  
Efficiency: N/A  
Efficacy: 74.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	5805	5805	5805
5°	5820	5796	5747
10°	5758	5743	5677
15°	5657	5657	5592
20°	5537	5544	5472
25°	5355	5421	5334
30°	5042	5269	5204
35°	4764	5050	5058
40°	4533	4777	4902
45°	4274	4488	4718
50°	4001	4229	4517
55°	3689	3934	4273
60°	3323	3591	3974
65°	2934	3193	3614
70°	2445	2719	3072
75°	1921	2171	2404
80°	1373	1528	1695
85°	895	895	846



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.6	4.1
10°-20°	285.3	11.4
20°-30°	416.9	16.7
30°-40°	473.2	19.0
40°-50°	456.8	18.3
50°-60°	376.9	15.1
60°-70°	251.0	10.1
70°-80°	112.3	4.5
80°-90°	20.1	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°	803.7	32.2
0°-40°	1277.0	51.2
0°-60°	2110.7	84.6
0°-90°	2494.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2494.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1079	1079	1079	1079	1079	
5°	1077	1077	1073	1067	1064	102
15°	1015	1018	1015	1011	1004	286
25°	902	909	913	906	898	413
35°	725	735	769	773	770	454
45°	562	571	590	617	620	433
55°	393	400	419	442	455	351
65°	230	237	251	268	284	228
75°	92	97	104	109	116	101
85°	14	14	14	14	14	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1078.6	1078.6	1078.6	1078.6	1078.6
2.5°	1081.5	1081.9	1079.4	1072.8	1068.6
5°	1077.3	1076.9	1072.8	1067.0	1063.7
7.5°	1065.3	1066.2	1064.9	1056.6	1052.1
10°	1053.7	1054.1	1050.8	1044.2	1038.8
12.5°	1038.8	1038.4	1033.8	1030.5	1021.8
15°	1015.2	1017.7	1015.2	1010.6	1003.6
17.5°	992.4	992.4	994.1	986.2	980.8
20°	966.7	968.0	968.0	961.7	955.5
22.5°	936.9	940.6	941.9	935.2	927.8
25°	901.7	908.7	912.8	906.2	898.3
27.5°	859.0	869.8	882.2	877.2	868.5
30°	811.3	827.1	847.8	843.6	837.4
32.5°	766.2	781.9	810.5	808.8	805.5
35°	725.1	735.1	768.6	772.8	769.9
37.5°	686.2	695.3	726.8	736.3	733.8
40°	645.2	655.1	680.0	697.0	697.8
42.5°	604.6	614.1	634.4	658.8	658.8
45°	561.5	571.0	589.6	616.6	619.9
47.5°	519.2	529.1	547.4	574.3	579.7
50°	477.8	486.9	505.1	531.2	539.5
52.5°	434.7	444.6	462.4	486.5	498.5
55°	393.2	399.9	419.3	442.5	455.4
57.5°	350.1	356.4	378.3	398.2	411.5
60°	308.7	316.6	333.6	353.9	369.2
62.5°	268.9	277.2	291.7	309.5	326.9
65°	230.4	236.6	250.7	268.5	283.8
67.5°	193.1	198.5	212.6	225.0	241.2
70°	155.4	162.4	172.8	184.8	195.2
72.5°	125.1	128.0	136.7	145.4	156.2
75°	92.4	97.4	104.4	109.4	115.6
77.5°	66.3	69.2	73.3	77.5	83.3
80°	44.3	45.6	49.3	50.1	54.7
82.5°	26.9	27.8	28.6	29.0	30.7
85°	14.5	14.5	14.5	13.7	13.7
87.5°	8.3	8.3	7.0	5.8	4.1
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)