

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: P555782

Luminaire Tested: **FUSL-12-2-LD4-3LO-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: P555782  
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-LD4-3LO-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**

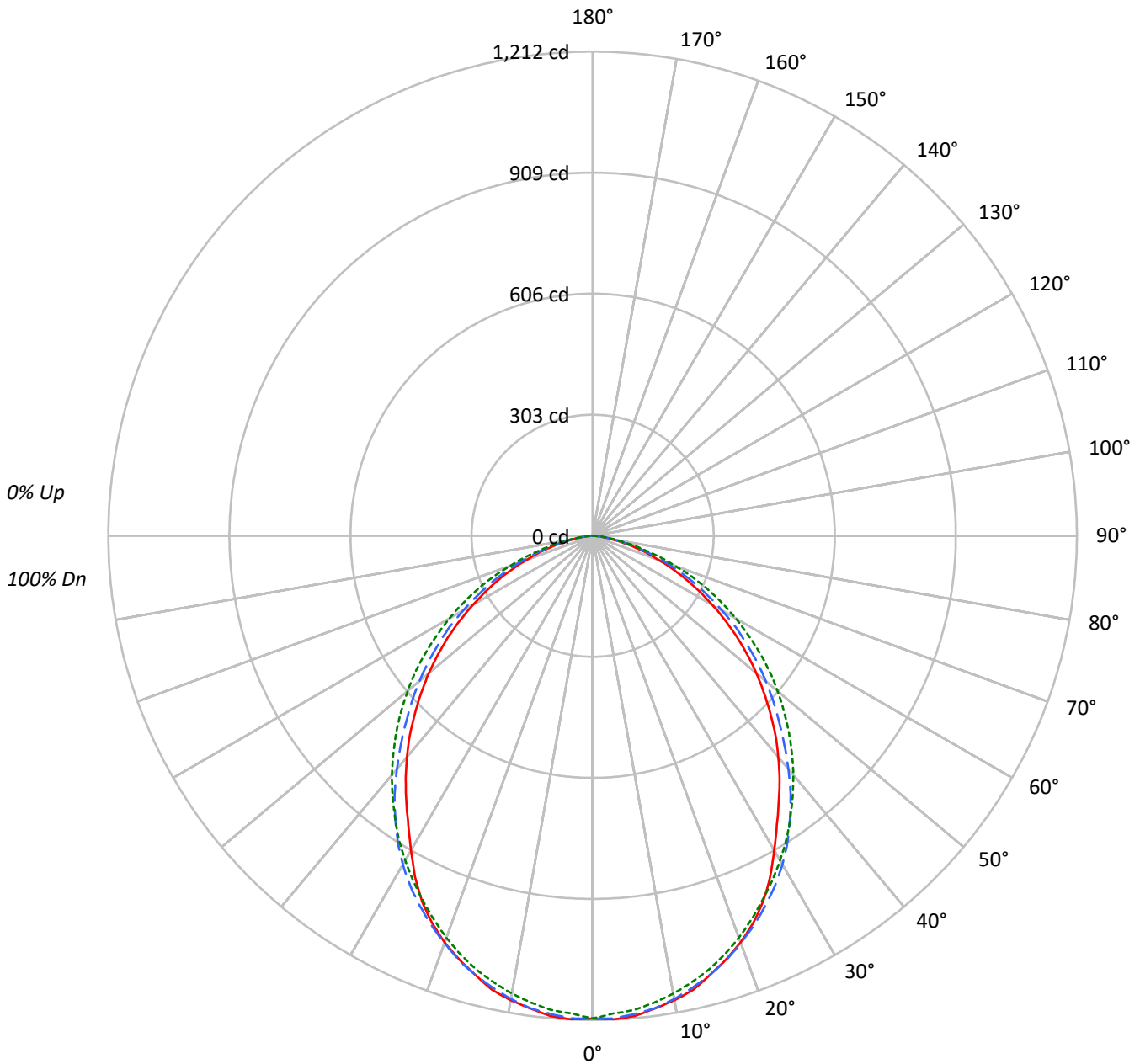
Lumens per Lamp: N/A  
Luminaire Lumens: 2794.0 lumens  
Efficiency: N/A  
Efficacy: 79.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
Input Voltage (V): NR  
Input Current (Ain): 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				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6503	6503	6503
5°	6520	6493	6438
10°	6451	6433	6360
15°	6337	6337	6264
20°	6203	6211	6131
25°	5998	6073	5976
30°	5648	5903	5830
35°	5338	5658	5667
40°	5078	5352	5492
45°	4787	5028	5286
50°	4481	4738	5061
55°	4133	4408	4787
60°	3722	4022	4452
65°	3287	3576	4050
70°	2740	3046	3440
75°	2152	2433	2693
80°	1540	1711	1900
85°	1000	1000	945



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.8	4.1
10°-20°	319.6	11.4
20°-30°	467.1	16.7
30°-40°	530.2	19.0
40°-50°	511.8	18.3
50°-60°	422.2	15.1
60°-70°	281.2	10.1
70°-80°	125.8	4.5
80°-90°	22.5	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°	900.4	32.2
0°-40°	1430.6	51.2
0°-60°	2364.6	84.6
0°-90°	2794.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2794.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1208	1208	1208	1208	1208	
5°	1207	1206	1202	1195	1192	114
15°	1137	1140	1137	1132	1124	321
25°	1010	1018	1023	1015	1006	463
35°	812	824	861	866	862	509
45°	629	640	661	691	694	485
55°	440	448	470	496	510	393
65°	258	265	281	301	318	256
75°	104	109	117	123	130	113
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°	1208.3	1208.3	1208.3	1208.3	1208.3
2.5°	1211.6	1212.0	1209.3	1201.8	1197.2
5°	1206.9	1206.5	1201.8	1195.3	1191.6
7.5°	1193.5	1194.4	1193.0	1183.7	1178.6
10°	1180.5	1180.9	1177.2	1169.8	1163.8
12.5°	1163.8	1163.3	1158.2	1154.5	1144.7
15°	1137.3	1140.1	1137.3	1132.2	1124.3
17.5°	1111.8	1111.8	1113.6	1104.8	1098.8
20°	1083.0	1084.4	1084.4	1077.4	1070.5
22.5°	1049.6	1053.8	1055.1	1047.7	1039.4
25°	1010.1	1018.0	1022.6	1015.2	1006.4
27.5°	962.3	974.4	988.3	982.7	973.0
30°	908.9	926.6	949.8	945.1	938.2
32.5°	858.3	876.0	908.0	906.1	902.4
35°	812.4	823.5	861.1	865.7	862.5
37.5°	768.7	778.9	814.2	824.9	822.1
40°	722.8	733.9	761.8	780.8	781.7
42.5°	677.3	688.0	710.7	738.1	738.1
45°	629.0	639.7	660.6	690.7	694.5
47.5°	581.7	592.8	613.2	643.4	649.4
50°	535.2	545.4	565.9	595.1	604.4
52.5°	487.0	498.1	518.1	545.0	558.4
55°	440.5	448.0	469.8	495.8	510.2
57.5°	392.3	399.2	423.8	446.1	461.0
60°	345.8	354.7	373.7	396.4	413.6
62.5°	301.3	310.6	326.8	346.8	366.3
65°	258.1	265.1	280.8	300.8	318.0
67.5°	216.3	222.4	238.1	252.1	270.2
70°	174.1	182.0	193.6	207.0	218.6
72.5°	140.2	143.4	153.2	162.9	175.0
75°	103.5	109.1	117.0	122.6	129.5
77.5°	74.3	77.5	82.2	86.8	93.3
80°	49.7	51.1	55.2	56.2	61.3
82.5°	30.2	31.1	32.0	32.5	34.4
85°	16.2	16.2	16.2	15.3	15.3
87.5°	9.3	9.3	7.9	6.5	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)