

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: P555654

Luminaire Tested: **FUSL-12-2-LD4-3LO-30-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: P555654  
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-30-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 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

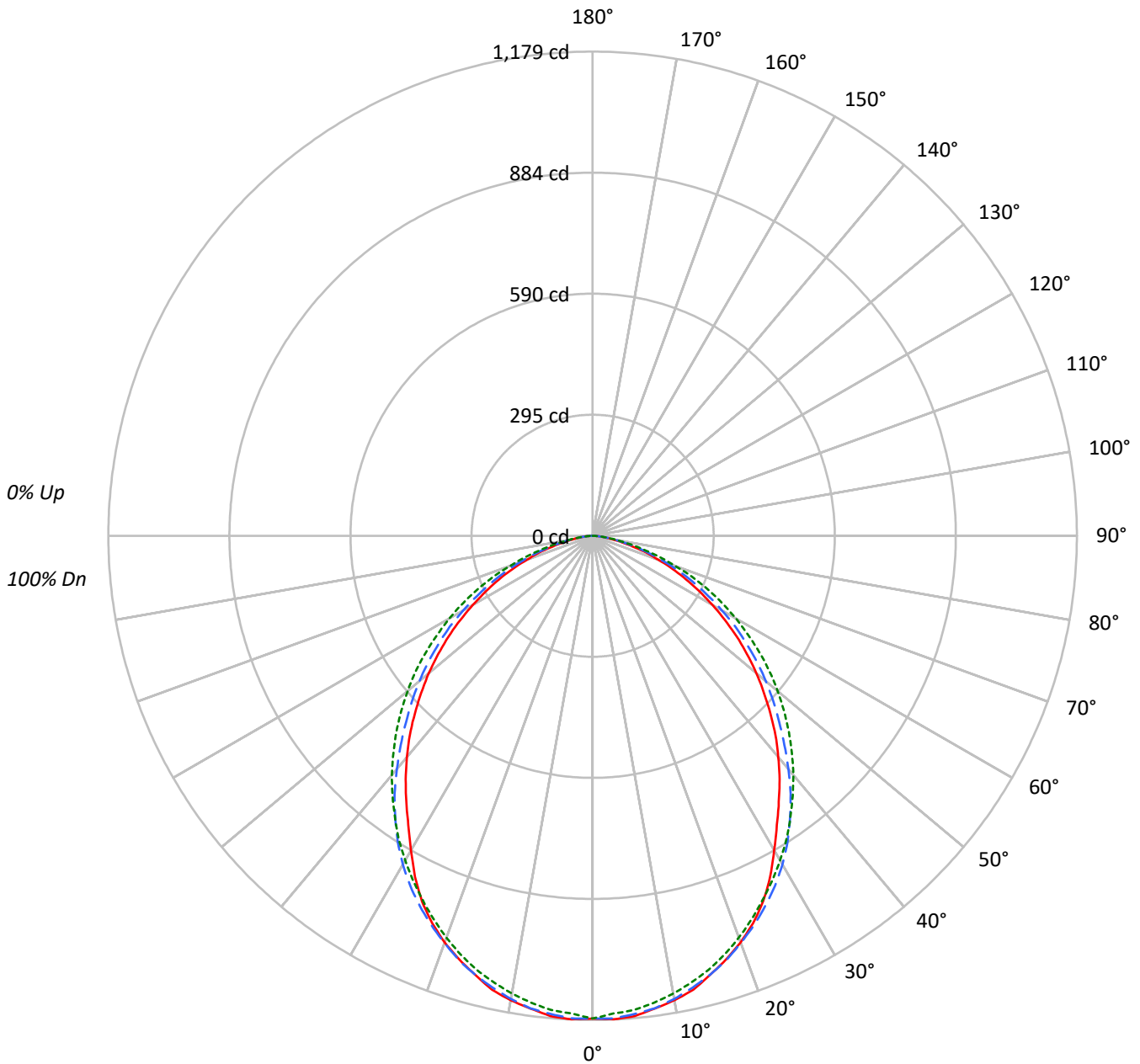
Lumens per Lamp: N/A  
Luminaire Lumens: 2718.0 lumens  
Efficiency: N/A  
Efficacy: 77.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	6326	6326	6326
5°	6343	6316	6263
10°	6276	6258	6187
15°	6165	6165	6094
20°	6034	6042	5964
25°	5835	5907	5814
30°	5495	5742	5671
35°	5192	5504	5512
40°	4940	5206	5343
45°	4657	4891	5142
50°	4360	4609	4923
55°	4022	4288	4657
60°	3621	3913	4331
65°	3198	3479	3939
70°	2664	2963	3347
75°	2094	2366	2620
80°	1497	1664	1847
85°	976	976	920



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.7	4.1
10°-20°	310.9	11.4
20°-30°	454.3	16.7
30°-40°	515.7	19.0
40°-50°	497.9	18.3
50°-60°	410.7	15.1
60°-70°	273.5	10.1
70°-80°	122.4	4.5
80°-90°	21.9	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°	875.9	32.2
0°-40°	1391.7	51.2
0°-60°	2300.2	84.6
0°-90°	2718.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2718.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1176	1176	1176	1176	1176	
5°	1174	1174	1169	1163	1159	111
15°	1106	1109	1106	1101	1094	312
25°	983	990	995	988	979	450
35°	790	801	838	842	839	495
45°	612	622	643	672	676	472
55°	429	436	457	482	496	383
65°	251	258	273	293	309	249
75°	101	106	114	119	126	110
85°	16	16	16	15	15	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1175.5	1175.5	1175.5	1175.5	1175.5
2.5°	1178.6	1179.1	1176.4	1169.1	1164.6
5°	1174.1	1173.7	1169.1	1162.8	1159.2
7.5°	1161.0	1161.9	1160.6	1151.5	1146.6
10°	1148.4	1148.8	1145.2	1138.0	1132.1
12.5°	1132.1	1131.7	1126.7	1123.1	1113.6
15°	1106.4	1109.1	1106.4	1101.4	1093.7
17.5°	1081.5	1081.5	1083.3	1074.8	1068.9
20°	1053.5	1054.9	1054.9	1048.1	1041.3
22.5°	1021.0	1025.1	1026.4	1019.2	1011.1
25°	982.6	990.3	994.8	987.6	979.0
27.5°	936.1	947.9	961.4	956.0	946.5
30°	884.2	901.4	923.9	919.4	912.6
32.5°	835.0	852.1	883.3	881.5	877.9
35°	790.3	801.1	837.7	842.2	839.0
37.5°	747.8	757.8	792.1	802.5	799.7
40°	703.1	713.9	741.0	759.6	760.5
42.5°	658.9	669.2	691.4	718.0	718.0
45°	611.9	622.3	642.6	672.0	675.6
47.5°	565.8	576.7	596.5	625.9	631.8
50°	520.7	530.6	550.5	578.9	588.0
52.5°	473.7	484.5	504.0	530.2	543.3
55°	428.6	435.8	457.0	482.3	496.3
57.5°	381.6	388.4	412.3	434.0	448.4
60°	336.4	345.0	363.5	385.6	402.4
62.5°	293.1	302.1	317.9	337.3	356.3
65°	251.1	257.9	273.2	292.6	309.3
67.5°	210.4	216.3	231.7	245.2	262.8
70°	169.3	177.0	188.3	201.4	212.7
72.5°	136.4	139.5	149.0	158.5	170.2
75°	100.7	106.1	113.8	119.2	126.0
77.5°	72.3	75.4	79.9	84.4	90.8
80°	48.3	49.7	53.7	54.6	59.6
82.5°	29.4	30.3	31.2	31.6	33.4
85°	15.8	15.8	15.8	14.9	14.9
87.5°	9.0	9.0	7.7	6.3	4.5
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)