

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: P555844

Luminaire Tested: **FUSL-12-2-LD4-3LO-50-UNV-81-86-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: P555844  
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-50-UNV-81-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

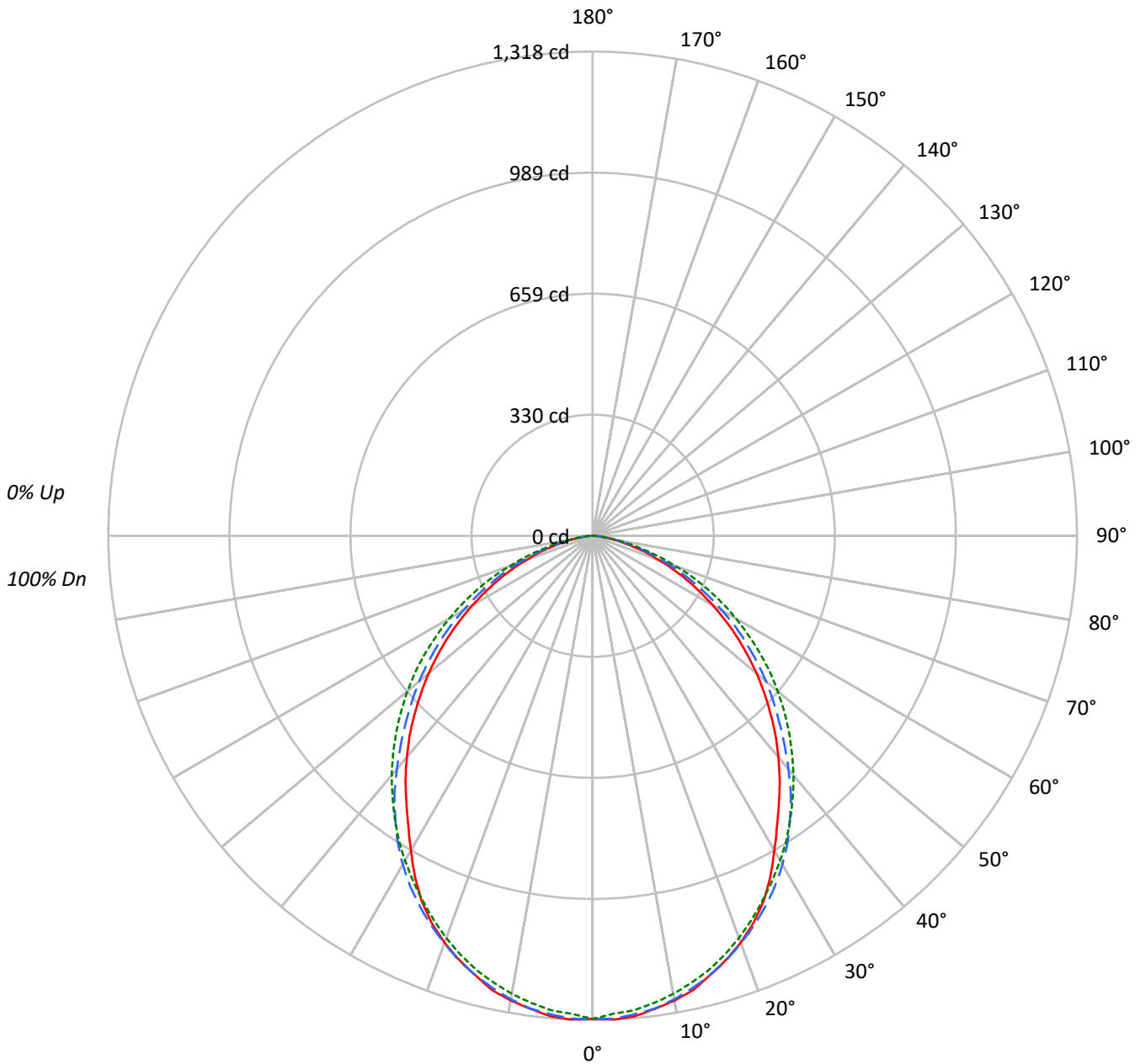
Lumens per Lamp: N/A  
Luminaire Lumens: 3040.0 lumens  
Efficiency: N/A  
Efficacy: 86.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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									
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°	7076	7076	7076
5°	7095	7065	7004
10°	7019	7000	6920
15°	6895	6895	6816
20°	6749	6758	6671
25°	6527	6608	6502
30°	6146	6422	6344
35°	5807	6156	6165
40°	5525	5823	5976
45°	5209	5470	5751
50°	4876	5155	5506
55°	4497	4796	5209
60°	4050	4377	4844
65°	3576	3892	4406
70°	2980	3314	3744
75°	2341	2647	2930
80°	1674	1863	2067
85°	1093	1093	1031



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.8	4.1
10°-20°	347.7	11.4
20°-30°	508.2	16.7
30°-40°	576.8	19.0
40°-50°	556.8	18.3
50°-60°	459.4	15.1
60°-70°	305.9	10.1
70°-80°	136.9	4.5
80°-90°	24.5	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°	979.7	32.2
0°-40°	1556.5	51.2
0°-60°	2572.7	84.6
0°-90°	3040.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3040.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1315	1315	1315	1315	1315	
5°	1313	1313	1308	1301	1296	124
15°	1237	1240	1237	1232	1223	349
25°	1099	1108	1113	1105	1095	503
35°	884	896	937	942	938	554
45°	684	696	719	752	756	528
55°	479	487	511	539	555	428
65°	281	288	306	327	346	278
75°	113	119	127	133	141	123
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1314.7	1314.7	1314.7	1314.7	1314.7
2.5°	1318.3	1318.8	1315.7	1307.7	1302.6
5°	1313.2	1312.7	1307.7	1300.6	1296.5
7.5°	1298.6	1299.6	1298.1	1288.0	1282.4
10°	1284.4	1284.9	1280.9	1272.8	1266.2
12.5°	1266.2	1265.7	1260.2	1256.1	1245.5
15°	1237.4	1240.5	1237.4	1231.9	1223.3
17.5°	1209.7	1209.7	1211.7	1202.1	1195.5
20°	1178.4	1179.9	1179.9	1172.3	1164.7
22.5°	1142.0	1146.5	1148.0	1140.0	1130.9
25°	1099.1	1107.6	1112.7	1104.6	1095.0
27.5°	1047.0	1060.2	1075.3	1069.3	1058.6
30°	988.9	1008.1	1033.4	1028.3	1020.8
32.5°	933.9	953.1	987.9	985.9	981.9
35°	883.9	896.0	936.9	942.0	938.4
37.5°	836.4	847.5	885.9	897.5	894.5
40°	786.4	798.5	828.8	849.5	850.6
42.5°	736.9	748.5	773.3	803.1	803.1
45°	684.4	696.0	718.7	751.6	755.6
47.5°	632.9	645.0	667.2	700.0	706.6
50°	582.4	593.5	615.7	647.5	657.6
52.5°	529.8	542.0	563.7	593.0	607.6
55°	479.3	487.4	511.1	539.4	555.1
57.5°	426.8	434.4	461.1	485.4	501.5
60°	376.3	385.9	406.6	431.3	450.0
62.5°	327.8	337.9	355.6	377.3	398.5
65°	280.8	288.4	305.6	327.3	346.0
67.5°	235.4	241.9	259.1	274.3	294.0
70°	189.4	198.0	210.6	225.3	237.9
72.5°	152.5	156.1	166.7	177.3	190.4
75°	112.6	118.7	127.3	133.3	140.9
77.5°	80.8	84.3	89.4	94.4	101.5
80°	54.0	55.6	60.1	61.1	66.7
82.5°	32.8	33.8	34.9	35.4	37.4
85°	17.7	17.7	17.7	16.7	16.7
87.5°	10.1	10.1	8.6	7.1	5.1
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)