

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: P555778

Luminaire Tested: **FUSL-12-2-LD4-3LO-40-UNV-81-85-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: P555778  
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-81-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

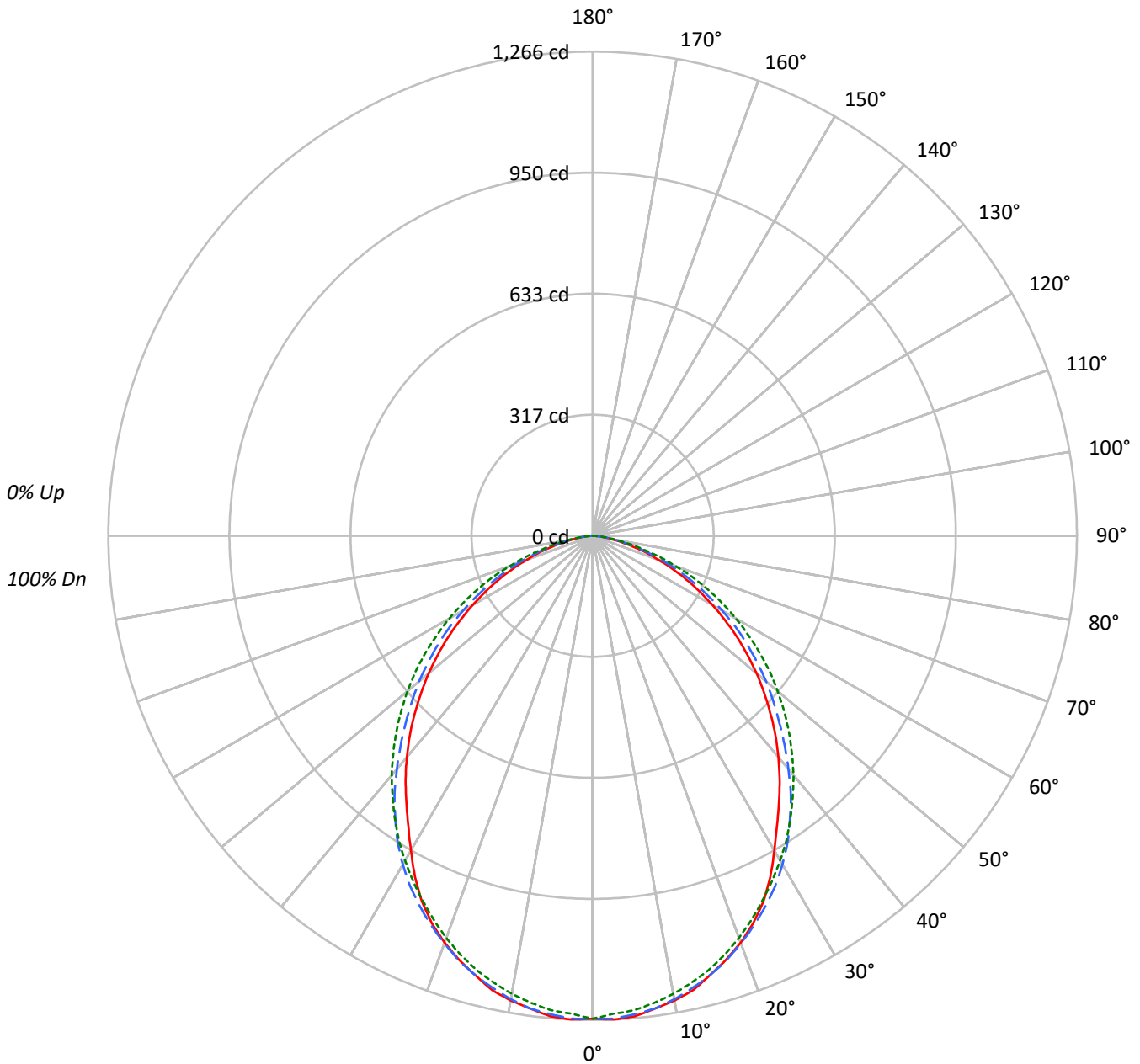
Lumens per Lamp: N/A  
Luminaire Lumens: 2920.0 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	6796	6796	6796
5°	6815	6786	6728
10°	6742	6724	6647
15°	6623	6623	6547
20°	6482	6491	6407
25°	6269	6347	6246
30°	5903	6169	6093
35°	5578	5912	5922
40°	5307	5593	5740
45°	5004	5255	5524
50°	4684	4952	5289
55°	4320	4607	5003
60°	3890	4203	4653
65°	3435	3738	4232
70°	2862	3183	3596
75°	2250	2543	2816
80°	1609	1788	1984
85°	1050	1050	988



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.9	4.1
10°-20°	334.0	11.4
20°-30°	488.1	16.7
30°-40°	554.1	19.0
40°-50°	534.9	18.3
50°-60°	441.2	15.1
60°-70°	293.8	10.1
70°-80°	131.5	4.5
80°-90°	23.5	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°	941.0	32.2
0°-40°	1495.1	51.2
0°-60°	2471.2	84.6
0°-90°	2920.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2920.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1263	1263	1263	1263	1263	
5°	1261	1261	1256	1249	1245	119
15°	1189	1192	1189	1183	1175	335
25°	1056	1064	1069	1061	1052	483
35°	849	861	900	905	901	532
45°	657	668	690	722	726	507
55°	460	468	491	518	533	411
65°	270	277	294	314	332	267
75°	108	114	122	128	135	118
85°	17	17	17	16	16	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1262.8	1262.8	1262.8	1262.8	1262.8
2.5°	1266.2	1266.7	1263.8	1256.0	1251.2
5°	1261.4	1260.9	1256.0	1249.2	1245.4
7.5°	1247.3	1248.3	1246.8	1237.1	1231.8
10°	1233.7	1234.2	1230.3	1222.6	1216.3
12.5°	1216.3	1215.8	1210.4	1206.5	1196.4
15°	1188.6	1191.5	1188.6	1183.3	1175.0
17.5°	1161.9	1161.9	1163.9	1154.6	1148.3
20°	1131.8	1133.3	1133.3	1126.0	1118.7
22.5°	1096.9	1101.3	1102.7	1095.0	1086.2
25°	1055.7	1063.9	1068.8	1061.0	1051.8
27.5°	1005.7	1018.3	1032.9	1027.0	1016.9
30°	949.9	968.3	992.6	987.7	980.5
32.5°	897.0	915.5	948.9	947.0	943.1
35°	849.0	860.6	899.9	904.8	901.4
37.5°	803.4	814.1	850.9	862.1	859.2
40°	755.4	767.0	796.1	816.0	817.0
42.5°	707.8	719.0	742.8	771.4	771.4
45°	657.4	668.5	690.4	721.9	725.8
47.5°	607.9	619.5	640.9	672.4	678.7
50°	559.4	570.0	591.4	622.0	631.7
52.5°	508.9	520.6	541.4	569.6	583.6
55°	460.4	468.2	491.0	518.1	533.2
57.5°	409.9	417.2	442.9	466.2	481.7
60°	361.4	370.6	390.5	414.3	432.3
62.5°	314.9	324.6	341.5	362.4	382.8
65°	269.7	277.0	293.5	314.4	332.3
67.5°	226.1	232.4	248.9	263.4	282.4
70°	181.9	190.2	202.3	216.4	228.5
72.5°	146.5	149.9	160.1	170.3	182.9
75°	108.2	114.0	122.3	128.1	135.4
77.5°	77.6	81.0	85.9	90.7	97.5
80°	51.9	53.4	57.7	58.7	64.0
82.5°	31.5	32.5	33.5	34.0	35.9
85°	17.0	17.0	17.0	16.0	16.0
87.5°	9.7	9.7	8.2	6.8	4.9
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)