

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: P555250

Luminaire Tested: **FUSL-12-2-LD4-2STD-40-UNV-80-85-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: P555250  
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-80-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC 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**

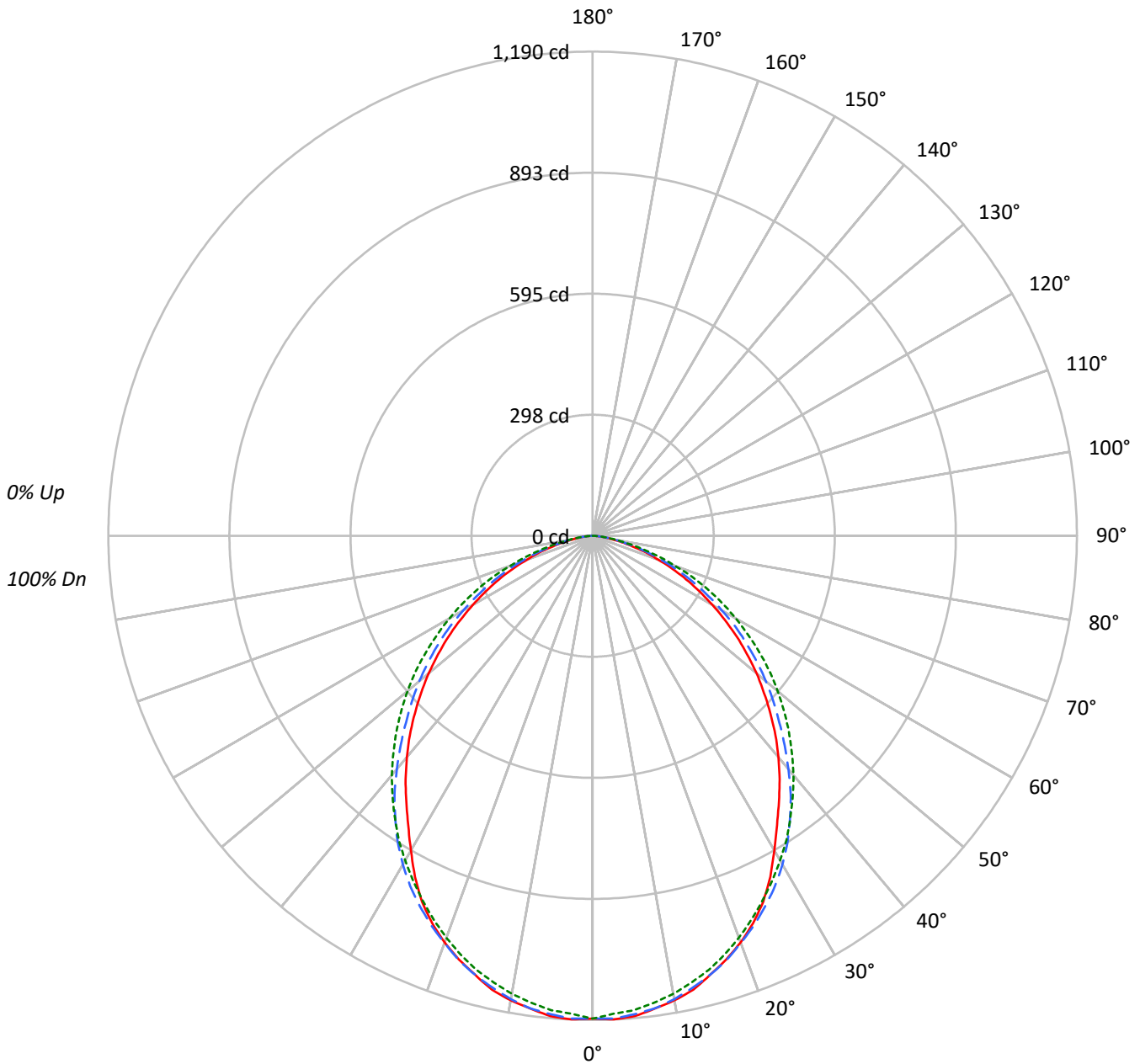
Lumens per Lamp: N/A  
Luminaire Lumens: 2744.0 lumens  
Efficiency: N/A  
Efficacy: 82.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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°	6387	6387	6387
5°	6404	6377	6323
10°	6336	6319	6246
15°	6224	6224	6152
20°	6092	6100	6021
25°	5891	5964	5869
30°	5548	5797	5726
35°	5242	5556	5566
40°	4987	5256	5394
45°	4701	4937	5191
50°	4402	4653	4970
55°	4059	4329	4701
60°	3655	3950	4372
65°	3228	3512	3977
70°	2691	2991	3378
75°	2115	2389	2645
80°	1512	1683	1866
85°	988	988	926



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.7	4.1
10°-20°	313.9	11.4
20°-30°	458.7	16.7
30°-40°	520.7	19.0
40°-50°	502.6	18.3
50°-60°	414.6	15.1
60°-70°	276.1	10.1
70°-80°	123.6	4.5
80°-90°	22.1	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°	884.3	32.2
0°-40°	1405.0	51.2
0°-60°	2322.2	84.6
0°-90°	2744.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2744.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1187	1187	1187	1187	1187	
5°	1185	1185	1180	1174	1170	112
15°	1117	1120	1117	1112	1104	315
25°	992	1000	1004	997	988	454
35°	798	809	846	850	847	500
45°	618	628	649	678	682	477
55°	433	440	461	487	501	386
65°	254	260	276	295	312	251
75°	102	107	115	120	127	111
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°	1186.7	1186.7	1186.7	1186.7	1186.7
2.5°	1189.9	1190.4	1187.6	1180.3	1175.8
5°	1185.3	1184.9	1180.3	1173.9	1170.3
7.5°	1172.1	1173.0	1171.7	1162.5	1157.5
10°	1159.4	1159.8	1156.2	1148.9	1142.9
12.5°	1142.9	1142.5	1137.5	1133.8	1124.3
15°	1117.0	1119.7	1117.0	1111.9	1104.2
17.5°	1091.9	1091.9	1093.7	1085.0	1079.1
20°	1063.6	1065.0	1065.0	1058.1	1051.3
22.5°	1030.8	1034.9	1036.3	1029.0	1020.8
25°	992.0	999.8	1004.3	997.1	988.4
27.5°	945.1	956.9	970.6	965.1	955.6
30°	892.7	910.0	932.8	928.2	921.4
32.5°	843.0	860.3	891.7	889.9	886.3
35°	797.8	808.8	845.7	850.3	847.1
37.5°	755.0	765.0	799.6	810.1	807.4
40°	709.8	720.8	748.1	766.8	767.7
42.5°	665.2	675.6	698.0	724.9	724.9
45°	617.7	628.2	648.7	678.4	682.0
47.5°	571.2	582.2	602.2	631.9	637.8
50°	525.7	535.7	555.7	584.5	593.6
52.5°	478.2	489.2	508.8	535.2	548.4
55°	432.6	439.9	461.4	486.9	501.0
57.5°	385.2	392.1	416.2	438.1	452.7
60°	339.6	348.3	367.0	389.3	406.2
62.5°	295.9	305.0	321.0	340.6	359.7
65°	253.5	260.3	275.8	295.4	312.3
67.5°	212.4	218.4	233.9	247.6	265.3
70°	171.0	178.7	190.1	203.3	214.7
72.5°	137.7	140.9	150.4	160.0	171.9
75°	101.7	107.1	114.9	120.4	127.2
77.5°	72.9	76.1	80.7	85.3	91.6
80°	48.8	50.1	54.3	55.2	60.2
82.5°	29.6	30.5	31.5	31.9	33.7
85°	16.0	16.0	16.0	15.0	15.0
87.5°	9.1	9.1	7.8	6.4	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)