

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: P555354

Luminaire Tested: **FUSL-12-2-LD4-2STD-50-UNV-82-94-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: P555354  
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-50-UNV-82-94-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

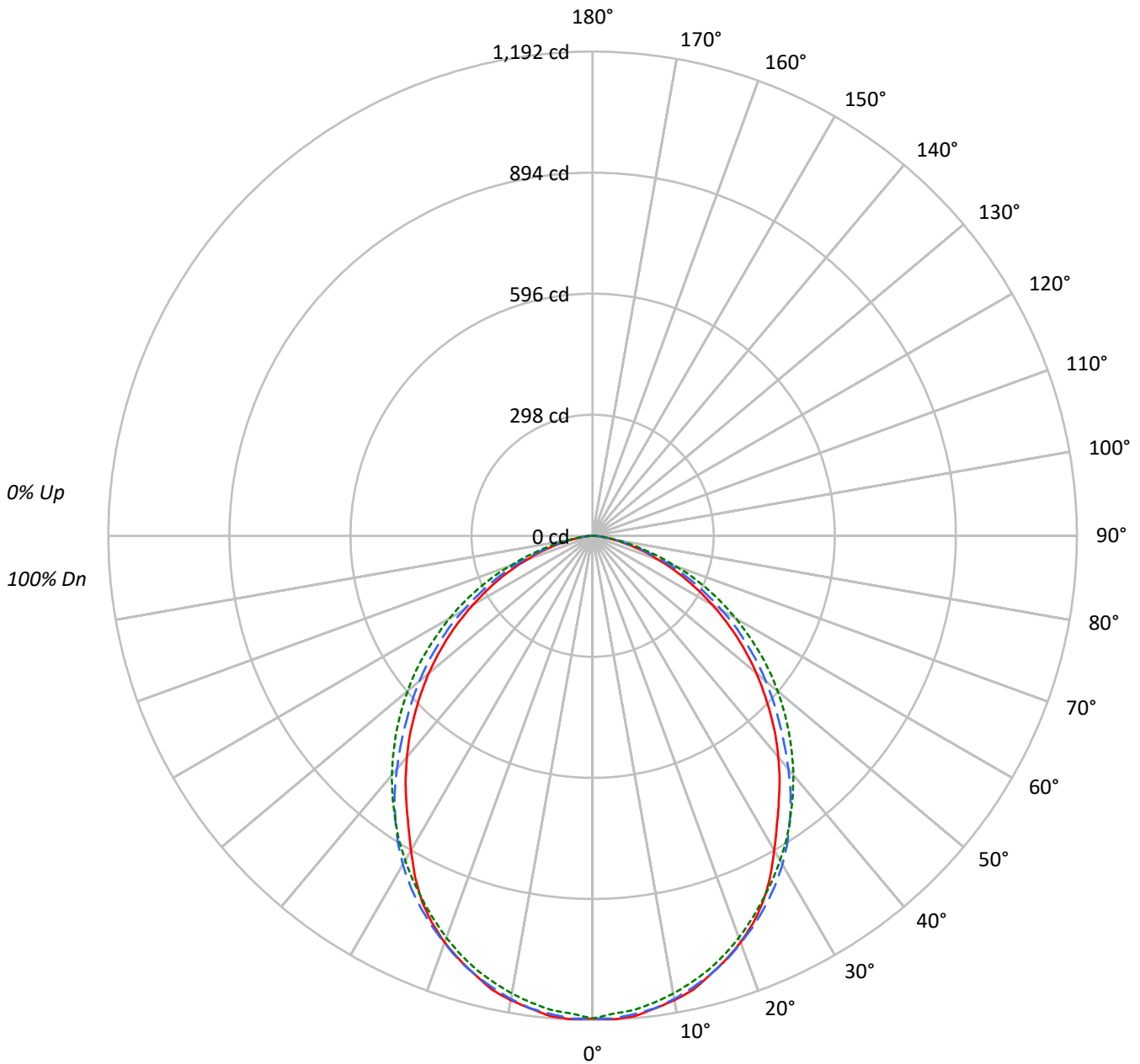
Lumens per Lamp: N/A  
Luminaire Lumens: 2748.0 lumens  
Efficiency: N/A  
Efficacy: 82.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	6396	6396	6396
5°	6413	6386	6332
10°	6345	6327	6255
15°	6233	6233	6161
20°	6101	6108	6030
25°	5900	5973	5878
30°	5556	5805	5734
35°	5250	5564	5573
40°	4995	5264	5402
45°	4708	4945	5198
50°	4407	4660	4977
55°	4066	4335	4708
60°	3661	3956	4379
65°	3233	3517	3982
70°	2694	2996	3383
75°	2117	2393	2649
80°	1516	1683	1869
85°	988	988	932



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.9	4.1
10°-20°	314.3	11.4
20°-30°	459.4	16.7
30°-40°	521.4	19.0
40°-50°	503.3	18.3
50°-60°	415.2	15.1
60°-70°	276.5	10.1
70°-80°	123.7	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°	885.6	32.2
0°-40°	1407.0	51.2
0°-60°	2325.6	84.6
0°-90°	2748.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2748.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1188	1188	1188	1188	1188	
5°	1187	1187	1182	1176	1172	112
15°	1119	1121	1119	1114	1106	315
25°	994	1001	1006	998	990	455
35°	799	810	847	852	848	501
45°	619	629	650	679	683	477
55°	433	441	462	488	502	387
65°	254	261	276	296	313	252
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°	1188.4	1188.4	1188.4	1188.4	1188.4
2.5°	1191.6	1192.1	1189.4	1182.0	1177.5
5°	1187.1	1186.6	1182.0	1175.7	1172.0
7.5°	1173.8	1174.7	1173.4	1164.2	1159.2
10°	1161.0	1161.5	1157.8	1150.5	1144.6
12.5°	1144.6	1144.2	1139.1	1135.5	1125.9
15°	1118.6	1121.3	1118.6	1113.6	1105.8
17.5°	1093.5	1093.5	1095.3	1086.6	1080.7
20°	1065.2	1066.5	1066.5	1059.7	1052.8
22.5°	1032.3	1036.4	1037.8	1030.5	1022.2
25°	993.5	1001.2	1005.8	998.5	989.8
27.5°	946.5	958.3	972.0	966.5	957.0
30°	894.0	911.3	934.1	929.6	922.7
32.5°	844.2	861.5	893.0	891.2	887.6
35°	799.0	809.9	846.9	851.5	848.3
37.5°	756.1	766.1	800.8	811.3	808.6
40°	710.9	721.8	749.2	767.9	768.9
42.5°	666.1	676.6	699.0	725.9	725.9
45°	618.6	629.1	649.7	679.4	683.0
47.5°	572.1	583.0	603.1	632.8	638.7
50°	526.4	536.5	556.6	585.3	594.4
52.5°	478.9	489.9	509.5	536.0	549.2
55°	433.3	440.6	462.0	487.6	501.8
57.5°	385.8	392.6	416.8	438.8	453.4
60°	340.1	348.8	367.5	389.9	406.8
62.5°	296.3	305.4	321.4	341.1	360.2
65°	253.9	260.7	276.2	295.9	312.7
67.5°	212.8	218.7	234.2	247.9	265.7
70°	171.2	179.0	190.4	203.6	215.0
72.5°	137.9	141.1	150.7	160.3	172.1
75°	101.8	107.3	115.1	120.5	127.4
77.5°	73.1	76.2	80.8	85.4	91.8
80°	48.9	50.2	54.3	55.2	60.3
82.5°	29.7	30.6	31.5	32.0	33.8
85°	16.0	16.0	16.0	15.1	15.1
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)