

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: P555302

Luminaire Tested: **FUSL-12-2-LD4-2STD-40-UNV-93-87-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: P555302  
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-93-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

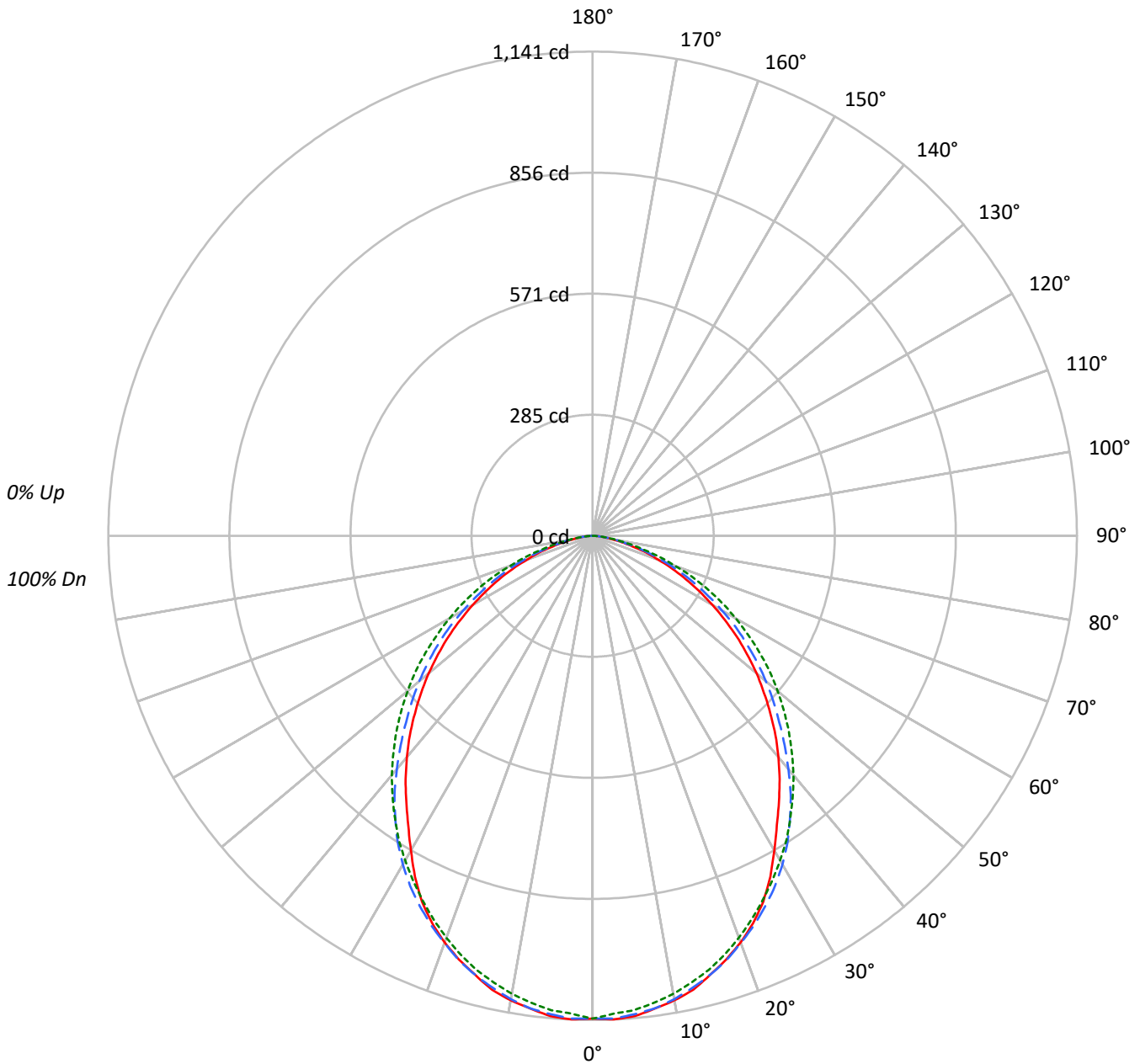
Lumens per Lamp: N/A  
Luminaire Lumens: 2631.0 lumens  
Efficiency: N/A  
Efficacy: 79.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	6124	6124	6124
5°	6140	6114	6062
10°	6075	6058	5989
15°	5967	5967	5899
20°	5841	5848	5773
25°	5649	5719	5628
30°	5319	5558	5490
35°	5026	5328	5336
40°	4782	5039	5172
45°	4508	4734	4977
50°	4220	4462	4765
55°	3892	4151	4508
60°	3506	3788	4193
65°	3095	3368	3813
70°	2579	2869	3240
75°	2027	2292	2537
80°	1450	1612	1788
85°	945	945	889



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.1	4.1
10°-20°	301.0	11.4
20°-30°	439.8	16.7
30°-40°	499.2	19.0
40°-50°	481.9	18.3
50°-60°	397.6	15.1
60°-70°	264.7	10.1
70°-80°	118.5	4.5
80°-90°	21.2	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°	847.9	32.2
0°-40°	1347.1	51.2
0°-60°	2226.6	84.6
0°-90°	2631.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2631.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1138	1138	1138	1138	1138	
5°	1136	1136	1132	1126	1122	108
15°	1071	1074	1071	1066	1059	302
25°	951	959	963	956	948	436
35°	765	776	811	815	812	479
45°	592	602	622	650	654	457
55°	415	422	442	467	480	370
65°	243	250	264	283	299	241
75°	98	103	110	115	122	107
85°	15	15	15	14	14	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1137.8	1137.8	1137.8	1137.8	1137.8
2.5°	1140.9	1141.3	1138.7	1131.7	1127.3
5°	1136.5	1136.1	1131.7	1125.6	1122.1
7.5°	1123.9	1124.7	1123.4	1114.7	1109.9
10°	1111.6	1112.0	1108.6	1101.6	1095.9
12.5°	1095.9	1095.4	1090.6	1087.1	1078.0
15°	1071.0	1073.6	1071.0	1066.2	1058.7
17.5°	1046.9	1046.9	1048.7	1040.4	1034.7
20°	1019.8	1021.1	1021.1	1014.6	1008.0
22.5°	988.3	992.3	993.6	986.6	978.7
25°	951.2	958.6	963.0	956.0	947.7
27.5°	906.2	917.5	930.6	925.4	916.2
30°	855.9	872.5	894.4	890.0	883.4
32.5°	808.2	824.9	855.0	853.3	849.8
35°	765.0	775.5	810.9	815.2	812.2
37.5°	723.9	733.5	766.7	776.8	774.2
40°	680.6	691.1	717.3	735.2	736.1
42.5°	637.8	647.8	669.2	695.0	695.0
45°	592.3	602.4	622.0	650.4	653.9
47.5°	547.7	558.2	577.4	605.9	611.5
50°	504.0	513.6	532.9	560.4	569.1
52.5°	458.5	469.0	487.8	513.2	525.9
55°	414.8	421.8	442.4	466.9	480.4
57.5°	369.4	375.9	399.1	420.1	434.1
60°	325.7	334.0	351.9	373.3	389.5
62.5°	283.7	292.4	307.7	326.5	344.9
65°	243.0	249.6	264.5	283.3	299.4
67.5°	203.7	209.4	224.2	237.4	254.4
70°	163.9	171.4	182.3	195.0	205.9
72.5°	132.0	135.1	144.3	153.4	164.8
75°	97.5	102.7	110.2	115.4	122.0
77.5°	69.9	73.0	77.4	81.7	87.9
80°	46.8	48.1	52.0	52.9	57.7
82.5°	28.4	29.3	30.2	30.6	32.3
85°	15.3	15.3	15.3	14.4	14.4
87.5°	8.7	8.7	7.4	6.1	4.4
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)