

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: P555366

Luminaire Tested: **FUSL-12-2-LD4-2STD-50-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: P555366  
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-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 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

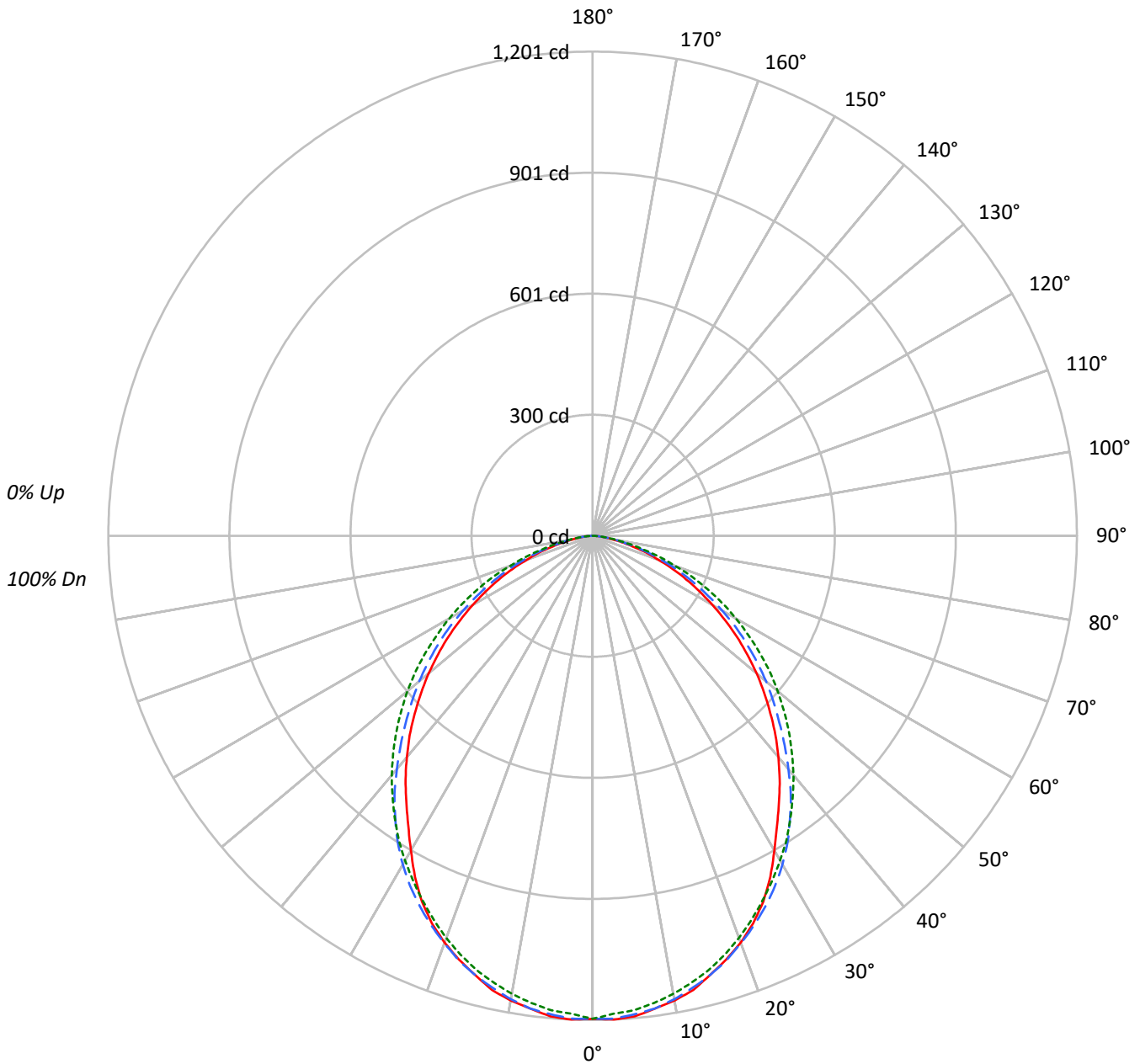
Lumens per Lamp: N/A  
Luminaire Lumens: 2770.0 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	6448	6448	6448
5°	6465	6437	6383
10°	6396	6378	6305
15°	6282	6282	6211
20°	6149	6157	6078
25°	5947	6021	5925
30°	5600	5852	5780
35°	5292	5609	5618
40°	5035	5306	5445
45°	4746	4985	5240
50°	4443	4697	5017
55°	4098	4370	4746
60°	3691	3988	4414
65°	3259	3545	4015
70°	2716	3020	3412
75°	2133	2412	2670
80°	1525	1698	1881
85°	994	994	939



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.8	4.1
10°-20°	316.9	11.4
20°-30°	463.0	16.7
30°-40°	525.6	19.0
40°-50°	507.4	18.3
50°-60°	418.6	15.1
60°-70°	278.7	10.1
70°-80°	124.7	4.5
80°-90°	22.3	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°	892.7	32.2
0°-40°	1418.3	51.2
0°-60°	2344.2	84.6
0°-90°	2770.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2770.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1198	1198	1198	1198	1198	
5°	1197	1196	1192	1185	1181	113
15°	1128	1130	1128	1122	1115	318
25°	1001	1009	1014	1006	998	459
35°	805	816	854	858	855	505
45°	624	634	655	685	688	481
55°	437	444	466	492	506	390
65°	256	263	278	298	315	254
75°	103	108	116	122	128	112
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°	1198.0	1198.0	1198.0	1198.0	1198.0
2.5°	1201.2	1201.6	1198.9	1191.5	1186.9
5°	1196.6	1196.1	1191.5	1185.1	1181.4
7.5°	1183.2	1184.1	1182.8	1173.6	1168.5
10°	1170.3	1170.8	1167.1	1159.8	1153.8
12.5°	1153.8	1153.3	1148.2	1144.6	1134.9
15°	1127.5	1130.3	1127.5	1122.5	1114.7
17.5°	1102.2	1102.2	1104.1	1095.3	1089.3
20°	1073.7	1075.1	1075.1	1068.2	1061.3
22.5°	1040.6	1044.7	1046.1	1038.7	1030.4
25°	1001.4	1009.3	1013.9	1006.5	997.8
27.5°	954.0	966.0	979.8	974.3	964.6
30°	901.1	918.6	941.6	937.0	930.1
32.5°	850.9	868.4	900.2	898.4	894.7
35°	805.4	816.4	853.7	858.3	855.1
37.5°	762.1	772.2	807.2	817.8	815.1
40°	716.6	727.6	755.2	774.1	775.0
42.5°	671.5	682.0	704.6	731.8	731.8
45°	623.6	634.2	654.9	684.8	688.5
47.5°	576.7	587.7	608.0	637.9	643.8
50°	530.6	540.8	561.0	590.0	599.2
52.5°	482.8	493.8	513.6	540.3	553.6
55°	436.7	444.1	465.7	491.5	505.8
57.5°	388.9	395.8	420.2	442.3	457.0
60°	342.9	351.6	370.5	393.0	410.1
62.5°	298.7	307.9	324.0	343.8	363.1
65°	255.9	262.8	278.4	298.2	315.3
67.5°	214.5	220.4	236.1	249.9	267.8
70°	172.6	180.4	191.9	205.3	216.8
72.5°	139.0	142.2	151.9	161.5	173.5
75°	102.6	108.2	116.0	121.5	128.4
77.5°	73.6	76.9	81.5	86.1	92.5
80°	49.2	50.6	54.8	55.7	60.7
82.5°	29.9	30.8	31.8	32.2	34.1
85°	16.1	16.1	16.1	15.2	15.2
87.5°	9.2	9.2	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)