

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: P555170

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-93-85-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: P555170  
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-30-UNV-93-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

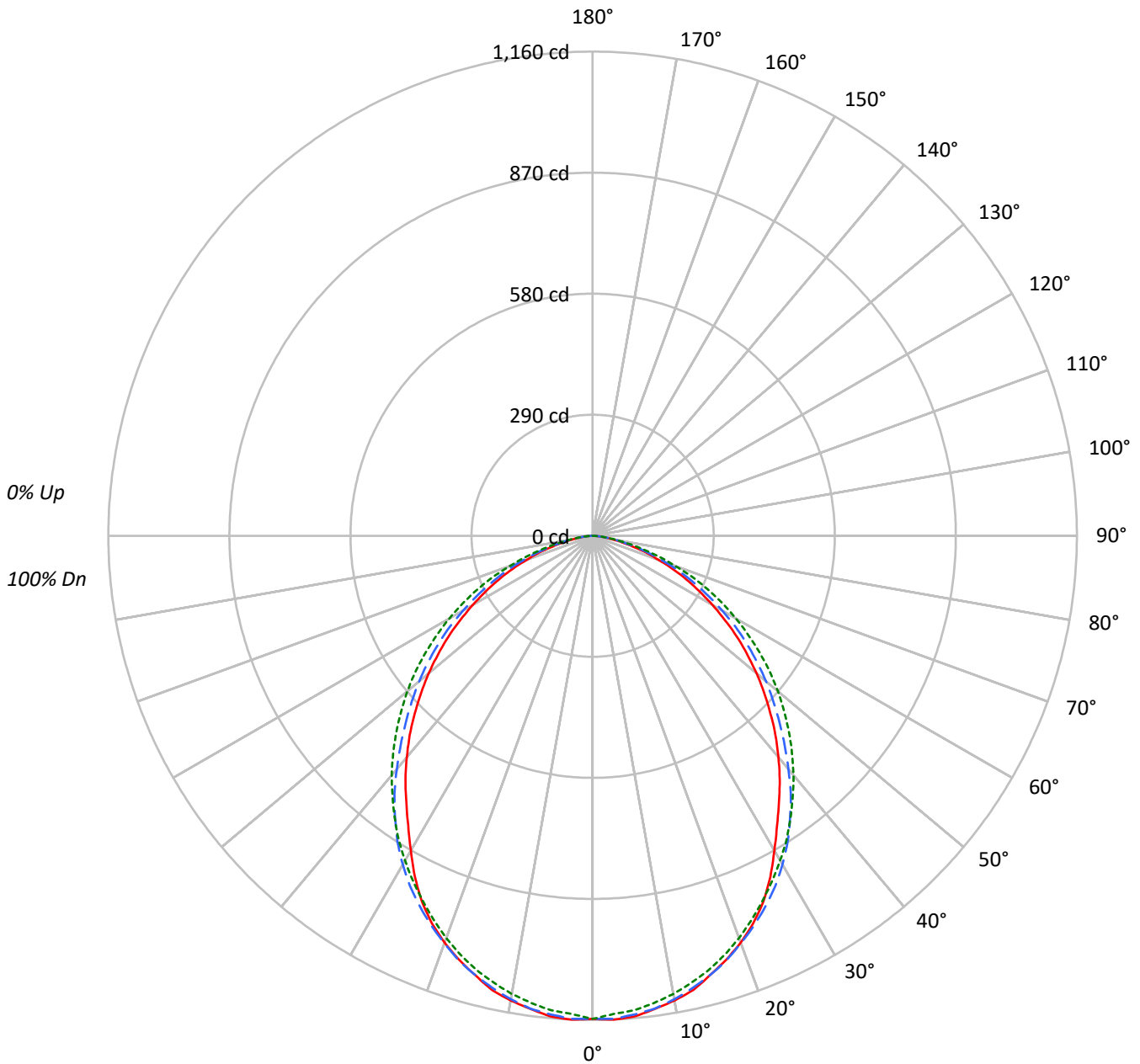
Lumens per Lamp: N/A  
Luminaire Lumens: 2676.0 lumens  
Efficiency: N/A  
Efficacy: 80.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (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°	6229	6229	6229
5°	6245	6219	6166
10°	6179	6162	6091
15°	6069	6069	6000
20°	5941	5948	5872
25°	5745	5817	5724
30°	5410	5653	5584
35°	5112	5418	5428
40°	4863	5126	5260
45°	4585	4816	5062
50°	4292	4538	4847
55°	3959	4221	4585
60°	3565	3852	4264
65°	3148	3426	3879
70°	2623	2917	3295
75°	2061	2329	2578
80°	1475	1640	1819
85°	963	963	908



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.0	4.1
10°-20°	306.1	11.4
20°-30°	447.3	16.7
30°-40°	507.8	19.0
40°-50°	490.2	18.3
50°-60°	404.4	15.1
60°-70°	269.3	10.1
70°-80°	120.5	4.5
80°-90°	21.6	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°	862.4	32.2
0°-40°	1370.2	51.2
0°-60°	2264.7	84.6
0°-90°	2676.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2676.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1157	1157	1157	1157	1157	
5°	1156	1156	1151	1145	1141	109
15°	1089	1092	1089	1084	1077	307
25°	968	975	980	972	964	443
35°	778	789	825	829	826	488
45°	602	613	633	662	665	465
55°	422	429	450	475	489	377
65°	247	254	269	288	305	245
75°	99	104	112	117	124	108
85°	16	16	16	15	15	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1157.3	1157.3	1157.3	1157.3	1157.3
2.5°	1160.4	1160.9	1158.2	1151.1	1146.6
5°	1156.0	1155.5	1151.1	1144.9	1141.3
7.5°	1143.1	1144.0	1142.6	1133.7	1128.8
10°	1130.6	1131.1	1127.5	1120.4	1114.6
12.5°	1114.6	1114.2	1109.3	1105.7	1096.4
15°	1089.3	1091.9	1089.3	1084.4	1076.8
17.5°	1064.8	1064.8	1066.6	1058.2	1052.4
20°	1037.3	1038.6	1038.6	1031.9	1025.3
22.5°	1005.2	1009.2	1010.6	1003.5	995.5
25°	967.5	975.0	979.5	972.3	963.9
27.5°	921.7	933.2	946.6	941.2	931.9
30°	870.5	887.4	909.7	905.2	898.5
32.5°	822.1	839.0	869.6	867.9	864.3
35°	778.1	788.7	824.7	829.2	826.1
37.5°	736.3	746.0	779.8	790.1	787.4
40°	692.2	702.9	729.6	747.8	748.7
42.5°	648.7	658.9	680.7	706.9	706.9
45°	602.4	612.7	632.7	661.6	665.1
47.5°	557.1	567.8	587.3	616.2	622.0
50°	512.6	522.4	542.0	570.0	578.9
52.5°	466.4	477.1	496.2	522.0	534.9
55°	421.9	429.0	449.9	474.8	488.6
57.5°	375.7	382.4	405.9	427.3	441.5
60°	331.2	339.7	357.9	379.7	396.1
62.5°	288.5	297.4	313.0	332.1	350.8
65°	247.2	253.9	269.0	288.1	304.6
67.5°	207.2	213.0	228.1	241.4	258.8
70°	166.7	174.3	185.4	198.3	209.4
72.5°	134.3	137.4	146.7	156.1	167.6
75°	99.1	104.5	112.0	117.4	124.0
77.5°	71.1	74.2	78.7	83.1	89.4
80°	47.6	48.9	52.9	53.8	58.7
82.5°	28.9	29.8	30.7	31.1	32.9
85°	15.6	15.6	15.6	14.7	14.7
87.5°	8.9	8.9	7.6	6.2	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)