

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: P553955

Luminaire Tested: **FUSL-12-2-LD4-1HI-35-UNV-93-85-EDD**

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: P553955  
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-LD4-1HI-35-UNV-93-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

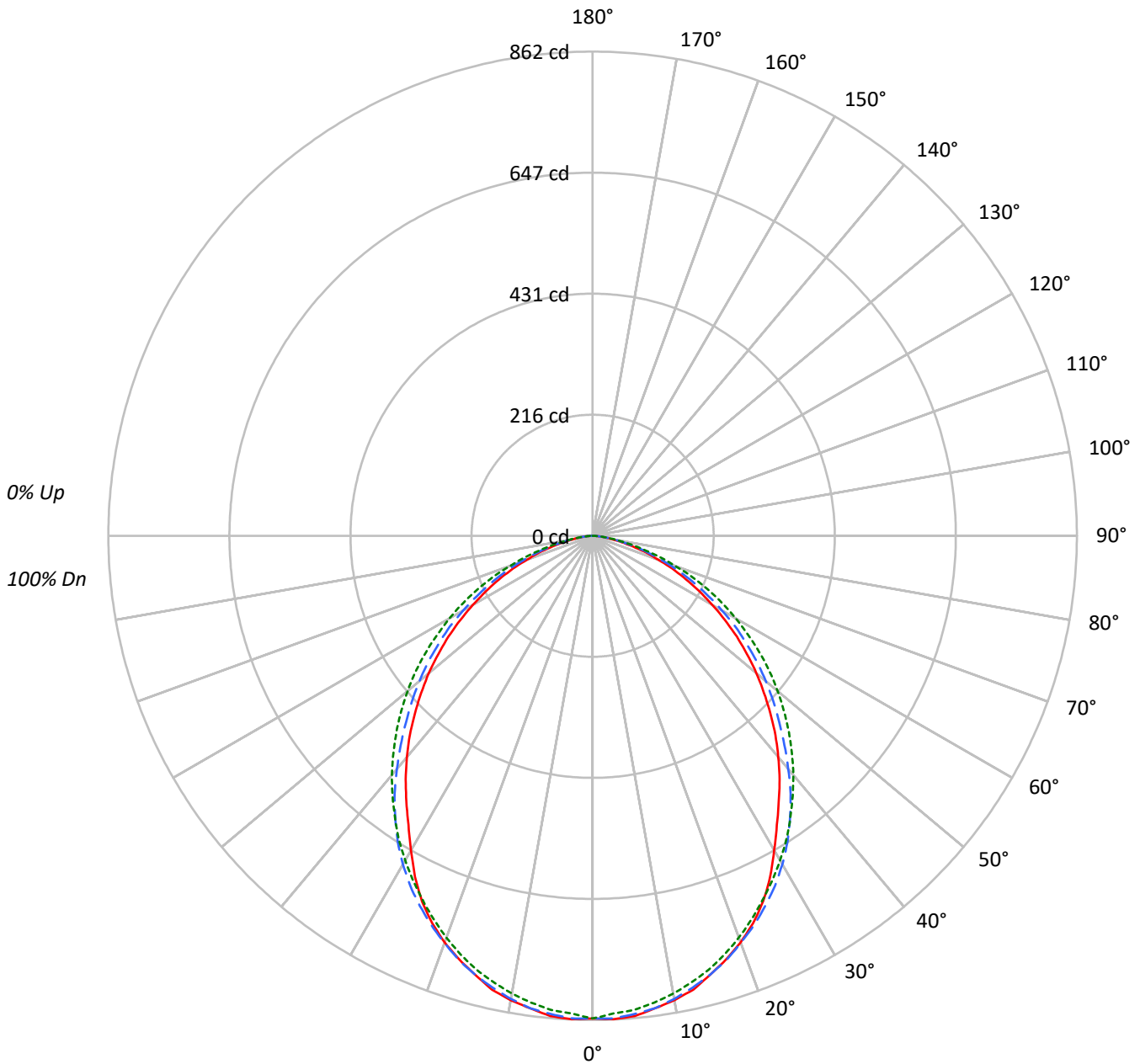
Lumens per Lamp: N/A  
Luminaire Lumens: 1987.0 lumens  
Efficiency: N/A  
Efficacy: 92.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
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°	4625	4625	4625
5°	4637	4618	4578
10°	4588	4575	4523
15°	4506	4506	4455
20°	4411	4417	4360
25°	4266	4319	4250
30°	4017	4197	4146
35°	3796	4024	4030
40°	3611	3806	3906
45°	3405	3576	3759
50°	3187	3369	3599
55°	2940	3135	3404
60°	2647	2861	3166
65°	2338	2543	2879
70°	1948	2167	2447
75°	1530	1730	1915
80°	1094	1218	1351
85°	716	716	673



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.9	4.1
10°-20°	227.3	11.4
20°-30°	332.2	16.7
30°-40°	377.0	19.0
40°-50°	364.0	18.3
50°-60°	300.2	15.1
60°-70°	199.9	10.1
70°-80°	89.5	4.5
80°-90°	16.0	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°	640.4	32.2
0°-40°	1017.4	51.2
0°-60°	1681.6	84.6
0°-90°	1987.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1987.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	858	858	855	850	847	81
15°	809	811	809	805	800	228
25°	718	724	727	722	716	329
35°	578	586	612	616	613	362
45°	447	455	470	491	494	345
55°	313	319	334	353	363	280
65°	184	188	200	214	226	182
75°	74	78	83	87	92	80
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	859.3	859.3	859.3	859.3	859.3
2.5°	861.6	862.0	860.0	854.7	851.4
5°	858.3	858.0	854.7	850.1	847.4
7.5°	848.8	849.4	848.4	841.8	838.2
10°	839.5	839.8	837.2	831.9	827.6
12.5°	827.6	827.3	823.7	821.0	814.1
15°	808.8	810.8	808.8	805.2	799.6
17.5°	790.7	790.7	792.0	785.7	781.4
20°	770.2	771.2	771.2	766.2	761.3
22.5°	746.4	749.4	750.4	745.1	739.2
25°	718.4	724.0	727.3	722.0	715.7
27.5°	684.4	692.9	702.8	698.9	692.0
30°	646.4	658.9	675.4	672.1	667.2
32.5°	610.4	623.0	645.7	644.4	641.8
35°	577.7	585.6	612.4	615.7	613.4
37.5°	546.7	554.0	579.0	586.6	584.7
40°	514.0	521.9	541.7	555.3	555.9
42.5°	481.7	489.3	505.4	524.9	524.9
45°	447.3	454.9	469.8	491.2	493.9
47.5°	413.7	421.6	436.1	457.6	461.9
50°	380.6	387.9	402.4	423.2	429.8
52.5°	346.3	354.2	368.4	387.6	397.1
55°	313.3	318.6	334.1	352.6	362.8
57.5°	279.0	283.9	301.4	317.3	327.8
60°	245.9	252.2	265.8	281.9	294.1
62.5°	214.3	220.9	232.4	246.6	260.5
65°	183.6	188.5	199.7	213.9	226.1
67.5°	153.8	158.1	169.4	179.3	192.1
70°	123.8	129.4	137.7	147.2	155.5
72.5°	99.7	102.0	108.9	115.9	124.5
75°	73.6	77.6	83.2	87.2	92.1
77.5°	52.8	55.1	58.4	61.7	66.4
80°	35.3	36.3	39.3	39.9	43.6
82.5°	21.5	22.1	22.8	23.1	24.4
85°	11.6	11.6	11.6	10.9	10.9
87.5°	6.6	6.6	5.6	4.6	3.3
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)