

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: P553906

Luminaire Tested: **FUSL-12-2-LD4-1HI-35-UNV-80-85-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: P553906  
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-80-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

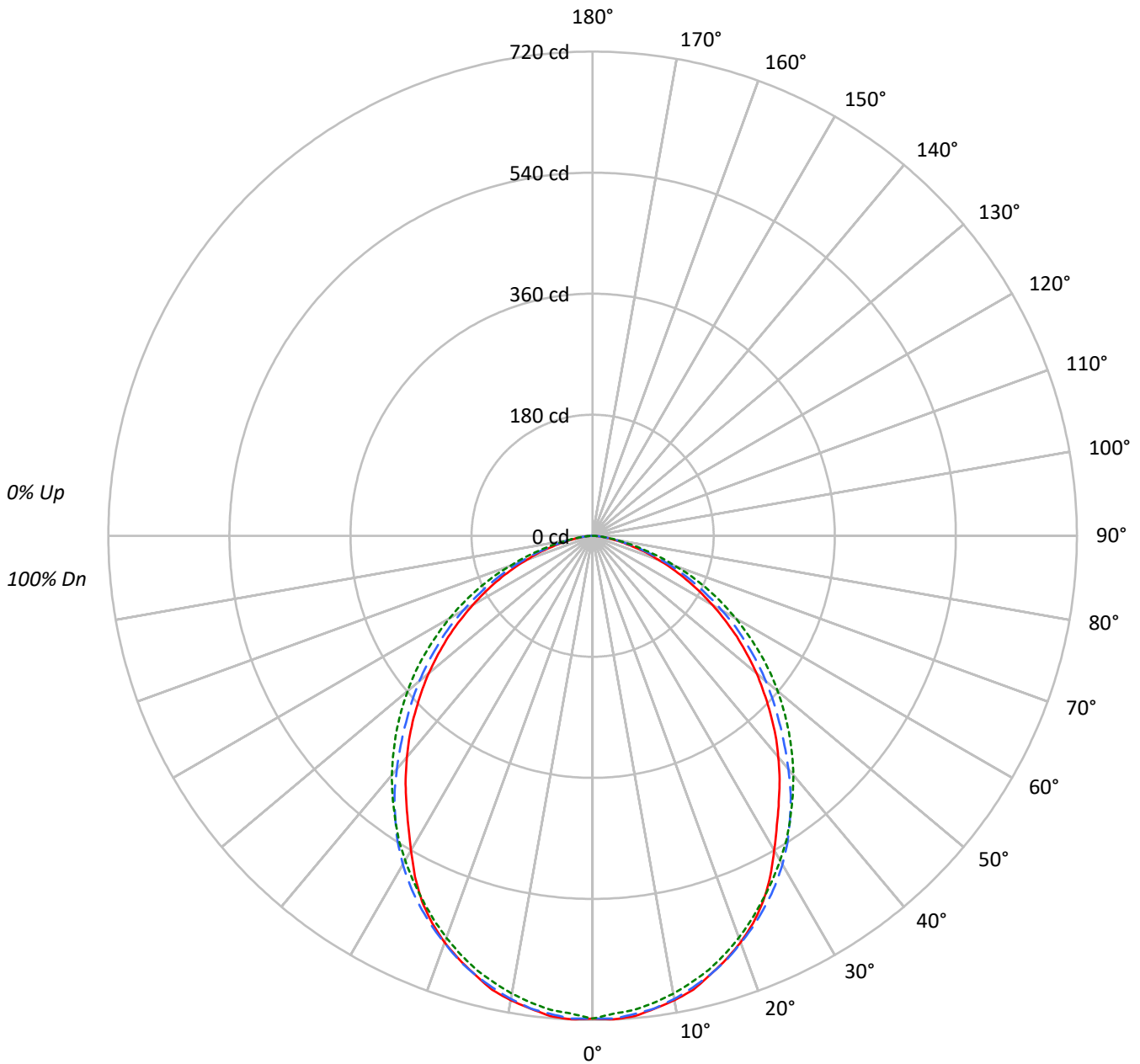
Lumens per Lamp: N/A  
Luminaire Lumens: 1660.0 lumens  
Efficiency: N/A  
Efficacy: 76.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3864	3864	3864
5°	3874	3857	3825
10°	3833	3822	3778
15°	3765	3765	3722
20°	3685	3690	3643
25°	3564	3608	3551
30°	3356	3507	3464
35°	3171	3361	3367
40°	3017	3180	3263
45°	2844	2987	3140
50°	2663	2815	3007
55°	2456	2619	2844
60°	2212	2390	2645
65°	1952	2125	2406
70°	1627	1810	2044
75°	1279	1445	1599
80°	914	1017	1128
85°	599	599	562



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.6	4.1
10°-20°	189.9	11.4
20°-30°	277.5	16.7
30°-40°	315.0	19.0
40°-50°	304.1	18.3
50°-60°	250.8	15.1
60°-70°	167.0	10.1
70°-80°	74.7	4.5
80°-90°	13.4	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°	535.0	32.2
0°-40°	850.0	51.2
0°-60°	1404.8	84.6
0°-90°	1660.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1660.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	717	717	714	710	708	68
15°	676	677	676	673	668	190
25°	600	605	608	603	598	275
35°	483	489	512	514	512	302
45°	374	380	392	410	413	288
55°	262	266	279	295	303	234
65°	153	158	167	179	189	152
75°	62	65	70	73	77	67
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	717.9	717.9	717.9	717.9	717.9
2.5°	719.8	720.1	718.5	714.0	711.3
5°	717.1	716.8	714.0	710.2	708.0
7.5°	709.1	709.6	708.8	703.3	700.3
10°	701.4	701.6	699.4	695.0	691.4
12.5°	691.4	691.2	688.1	685.9	680.1
15°	675.7	677.4	675.7	672.7	668.0
17.5°	660.5	660.5	661.6	656.4	652.8
20°	643.4	644.3	644.3	640.1	636.0
22.5°	623.6	626.1	626.9	622.5	617.5
25°	600.1	604.8	607.6	603.2	597.9
27.5°	571.7	578.9	587.2	583.9	578.1
30°	540.0	550.5	564.3	561.5	557.4
32.5°	510.0	520.4	539.5	538.4	536.2
35°	482.6	489.3	511.6	514.4	512.4
37.5°	456.7	462.8	483.8	490.1	488.4
40°	429.4	436.0	452.6	463.9	464.4
42.5°	402.4	408.7	422.2	438.5	438.5
45°	373.7	380.1	392.5	410.4	412.6
47.5°	345.6	352.2	364.3	382.3	385.8
50°	318.0	324.1	336.2	353.6	359.1
52.5°	289.3	295.9	307.8	323.8	331.8
55°	261.7	266.1	279.1	294.6	303.1
57.5°	233.1	237.2	251.8	265.0	273.9
60°	205.5	210.7	222.0	235.5	245.7
62.5°	179.0	184.5	194.2	206.0	217.6
65°	153.3	157.5	166.9	178.7	188.9
67.5°	128.5	132.1	141.5	149.8	160.5
70°	103.4	108.1	115.0	123.0	129.9
72.5°	83.3	85.2	91.0	96.8	104.0
75°	61.5	64.8	69.5	72.8	76.9
77.5°	44.1	46.1	48.8	51.6	55.4
80°	29.5	30.3	32.8	33.4	36.4
82.5°	17.9	18.5	19.0	19.3	20.4
85°	9.7	9.7	9.7	9.1	9.1
87.5°	5.5	5.5	4.7	3.9	2.8
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)