

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: P553887

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-UNV-82-97-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: P553887  
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-30-UNV-82-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

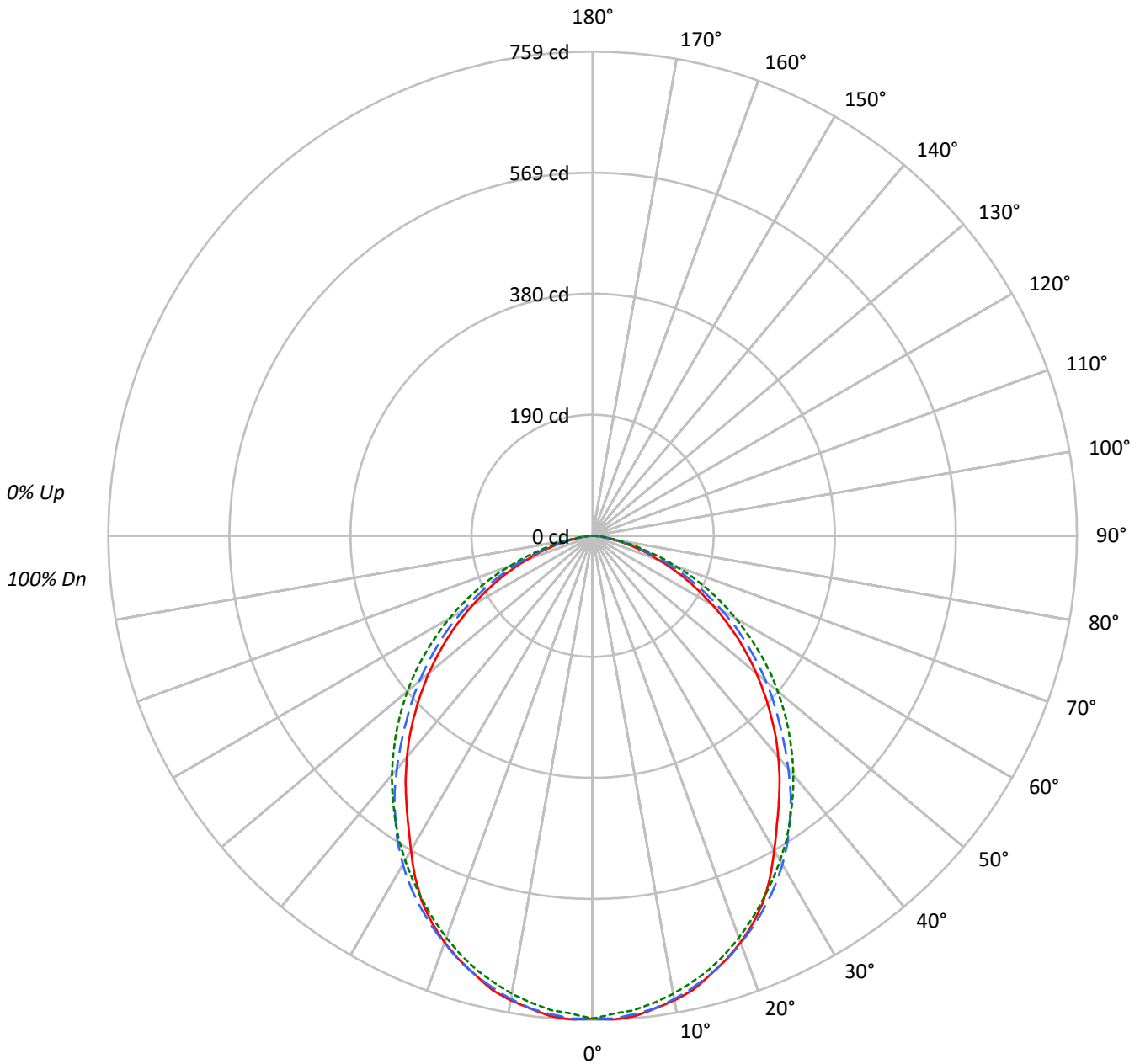
Lumens per Lamp: N/A  
Luminaire Lumens: 1750.0 lumens  
Efficiency: N/A  
Efficacy: 81.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4073	4073	4073
5°	4084	4067	4032
10°	4041	4029	3983
15°	3969	3969	3924
20°	3885	3890	3840
25°	3757	3804	3744
30°	3538	3697	3652
35°	3343	3543	3549
40°	3181	3352	3440
45°	2999	3149	3311
50°	2807	2967	3170
55°	2589	2761	2998
60°	2331	2520	2789
65°	2059	2240	2537
70°	1715	1907	2154
75°	1347	1524	1686
80°	964	1072	1190
85°	630	630	593



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.3	4.1
10°-20°	200.2	11.4
20°-30°	292.5	16.7
30°-40°	332.1	19.0
40°-50°	320.5	18.3
50°-60°	264.4	15.1
60°-70°	176.1	10.1
70°-80°	78.8	4.5
80°-90°	14.1	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°	564.0	32.2
0°-40°	896.0	51.2
0°-60°	1481.0	84.6
0°-90°	1750.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1750.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	757	757	757	757	757	
5°	756	756	753	749	746	72
15°	712	714	712	709	704	201
25°	633	638	640	636	630	290
35°	509	516	539	542	540	319
45°	394	401	414	433	435	304
55°	276	281	294	310	320	246
65°	162	166	176	188	199	160
75°	65	68	73	77	81	71
85°	10	10	10	10	10	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	756.8	756.8	756.8	756.8	756.8
2.5°	758.9	759.2	757.4	752.8	749.9
5°	756.0	755.7	752.8	748.7	746.4
7.5°	747.5	748.1	747.2	741.4	738.2
10°	739.4	739.7	737.3	732.7	728.9
12.5°	728.9	728.6	725.4	723.1	717.0
15°	712.3	714.1	712.3	709.1	704.2
17.5°	696.4	696.4	697.5	692.0	688.2
20°	678.3	679.2	679.2	674.8	670.5
22.5°	657.4	660.0	660.9	656.2	651.0
25°	632.7	637.6	640.5	635.9	630.4
27.5°	602.7	610.3	619.0	615.5	609.4
30°	569.3	580.3	594.9	592.0	587.6
32.5°	537.6	548.7	568.7	567.5	565.2
35°	508.8	515.8	539.3	542.3	540.2
37.5°	481.5	487.9	510.0	516.7	514.9
40°	452.7	459.7	477.1	489.0	489.6
42.5°	424.2	430.9	445.1	462.3	462.3
45°	394.0	400.7	413.7	432.6	435.0
47.5°	364.3	371.3	384.1	403.0	406.8
50°	335.2	341.6	354.4	372.7	378.6
52.5°	305.0	312.0	324.5	341.3	349.8
55°	275.9	280.6	294.2	310.5	319.5
57.5°	245.7	250.0	265.5	279.4	288.7
60°	216.6	222.1	234.1	248.3	259.1
62.5°	188.7	194.5	204.7	217.2	229.4
65°	161.7	166.0	175.9	188.4	199.2
67.5°	135.5	139.3	149.2	157.9	169.2
70°	109.0	114.0	121.2	129.7	136.9
72.5°	87.8	89.8	95.9	102.1	109.6
75°	64.8	68.3	73.3	76.8	81.1
77.5°	46.5	48.6	51.5	54.4	58.4
80°	31.1	32.0	34.6	35.2	38.4
82.5°	18.9	19.5	20.1	20.4	21.5
85°	10.2	10.2	10.2	9.6	9.6
87.5°	5.8	5.8	4.9	4.1	2.9
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)