

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: P553842

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-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: P553842  
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-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 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

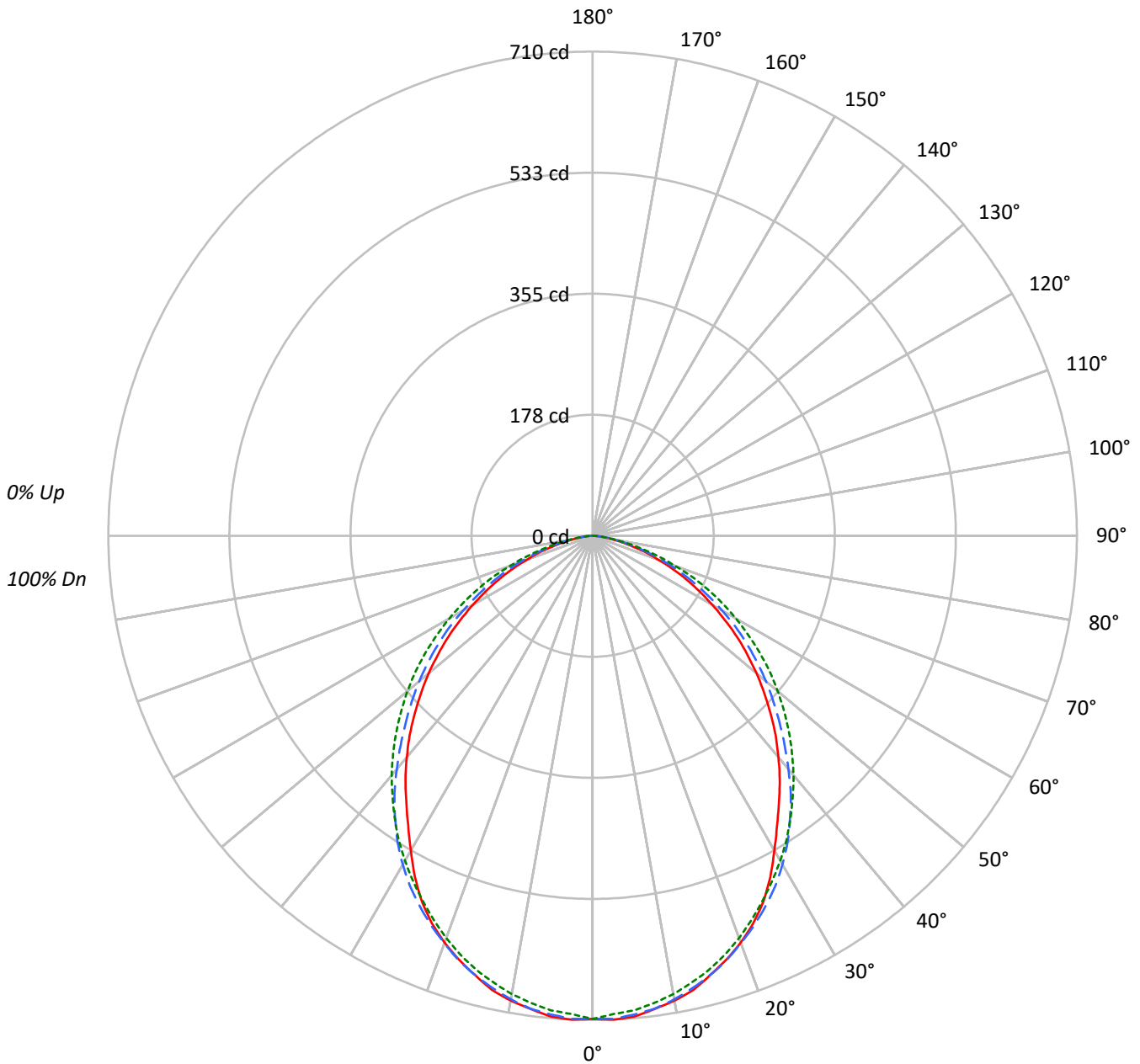
Lumens per Lamp: N/A  
Luminaire Lumens: 1638.0 lumens  
Efficiency: N/A  
Efficacy: 75.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
Input Voltage (V): NR  
Input Current (Ain): 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°	3813	3813	3813
5°	3823	3807	3774
10°	3782	3772	3729
15°	3715	3715	3672
20°	3636	3641	3594
25°	3517	3560	3504
30°	3312	3460	3418
35°	3129	3317	3322
40°	2977	3138	3220
45°	2807	2948	3099
50°	2627	2777	2966
55°	2424	2584	2807
60°	2182	2358	2610
65°	1927	2096	2374
70°	1607	1786	2017
75°	1262	1426	1578
80°	902	1004	1113
85°	587	587	556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.7	4.1
10°-20°	187.4	11.4
20°-30°	273.8	16.7
30°-40°	310.8	19.0
40°-50°	300.0	18.3
50°-60°	247.5	15.1
60°-70°	164.8	10.1
70°-80°	73.8	4.5
80°-90°	13.2	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°	527.9	32.2
0°-40°	838.7	51.2
0°-60°	1386.2	84.6
0°-90°	1638.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1638.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	708	707	705	701	699	67
15°	667	668	667	664	659	188
25°	592	597	600	595	590	271
35°	476	483	505	508	506	298
45°	369	375	387	405	407	285
55°	258	263	275	291	299	231
65°	151	155	165	176	186	150
75°	61	64	69	72	76	66
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°	708.4	708.4	708.4	708.4	708.4
2.5°	710.3	710.6	708.9	704.6	701.9
5°	707.6	707.3	704.6	700.8	698.6
7.5°	699.7	700.2	699.4	694.0	691.0
10°	692.1	692.3	690.2	685.8	682.3
12.5°	682.3	682.0	679.0	676.8	671.1
15°	666.8	668.4	666.8	663.8	659.1
17.5°	651.8	651.8	652.9	647.7	644.2
20°	634.9	635.7	635.7	631.6	627.6
22.5°	615.3	617.8	618.6	614.2	609.3
25°	592.2	596.8	599.5	595.2	590.0
27.5°	564.2	571.2	579.4	576.1	570.4
30°	532.9	543.2	556.8	554.1	550.0
32.5°	503.2	513.5	532.3	531.2	529.0
35°	476.3	482.8	504.8	507.5	505.6
37.5°	450.7	456.7	477.3	483.6	482.0
40°	423.7	430.3	446.6	457.7	458.3
42.5°	397.1	403.3	416.7	432.7	432.7
45°	368.8	375.0	387.3	405.0	407.1
47.5°	341.0	347.5	359.5	377.2	380.7
50°	313.8	319.8	331.7	348.9	354.3
52.5°	285.5	292.0	303.7	319.5	327.4
55°	258.3	262.6	275.4	290.7	299.1
57.5°	230.0	234.0	248.5	261.5	270.2
60°	202.7	207.9	219.1	232.4	242.5
62.5°	176.6	182.1	191.6	203.3	214.7
65°	151.3	155.4	164.6	176.3	186.4
67.5°	126.8	130.4	139.6	147.8	158.4
70°	102.1	106.7	113.5	121.4	128.2
72.5°	82.2	84.1	89.8	95.5	102.6
75°	60.7	64.0	68.6	71.8	75.9
77.5°	43.5	45.4	48.2	50.9	54.7
80°	29.1	29.9	32.4	32.9	35.9
82.5°	17.7	18.2	18.8	19.1	20.1
85°	9.5	9.5	9.5	9.0	9.0
87.5°	5.4	5.4	4.6	3.8	2.7
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)