

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: P553846

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-UNV-80-87-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: P553846  
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-80-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

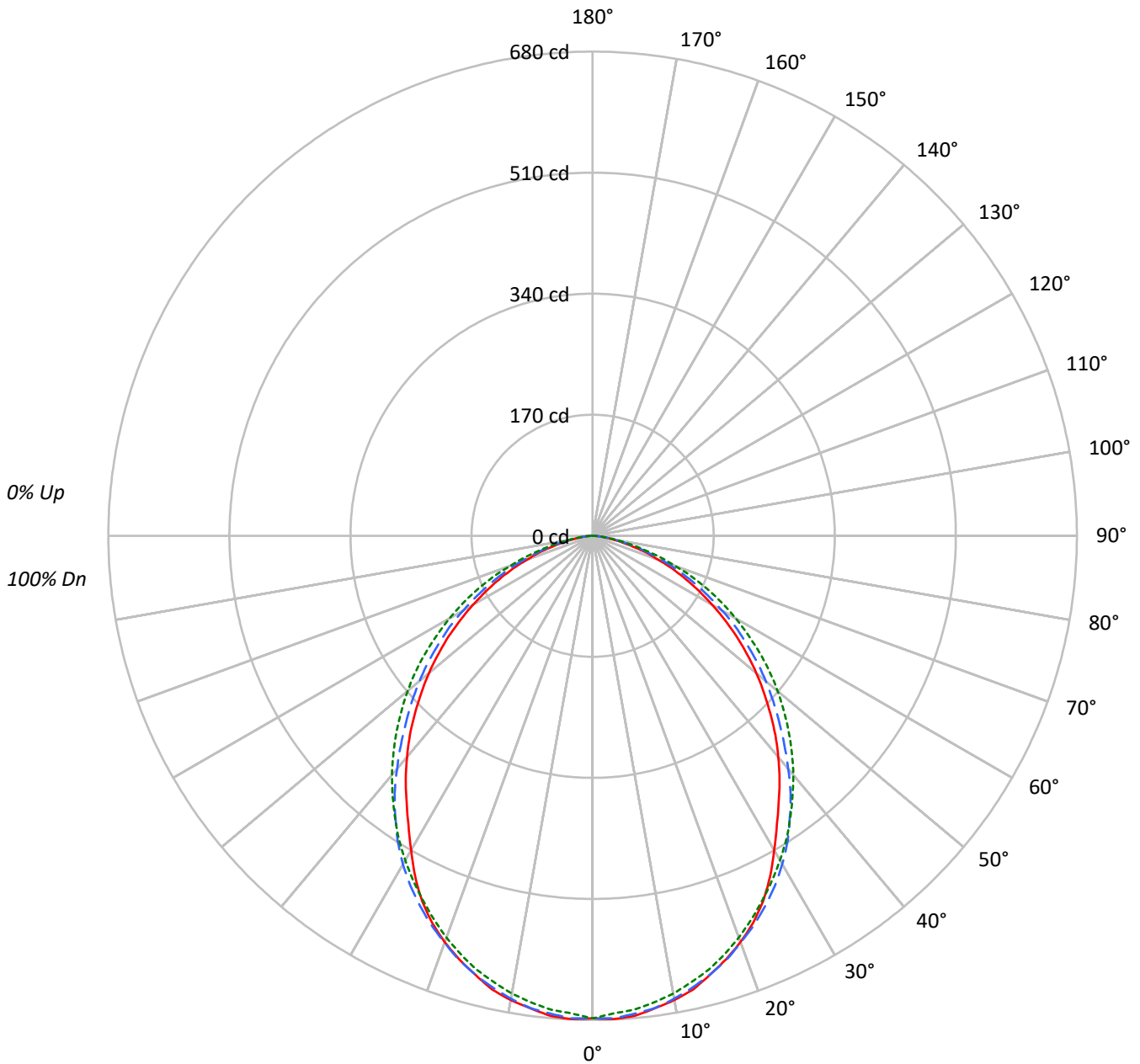
Lumens per Lamp: N/A  
Luminaire Lumens: 1567.0 lumens  
Efficiency: N/A  
Efficacy: 72.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3647	3647	3647
5°	3657	3641	3611
10°	3618	3608	3567
15°	3554	3554	3514
20°	3479	3483	3439
25°	3364	3406	3352
30°	3168	3310	3270
35°	2993	3173	3178
40°	2848	3001	3080
45°	2685	2820	2965
50°	2514	2658	2838
55°	2319	2472	2685
60°	2088	2256	2497
65°	1844	2006	2271
70°	1536	1709	1929
75°	1208	1364	1510
80°	865	961	1066
85°	562	562	531



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.8	4.1
10°-20°	179.3	11.4
20°-30°	261.9	16.7
30°-40°	297.3	19.0
40°-50°	287.0	18.3
50°-60°	236.8	15.1
60°-70°	157.7	10.1
70°-80°	70.6	4.5
80°-90°	12.6	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°	505.0	32.2
0°-40°	802.3	51.2
0°-60°	1326.2	84.6
0°-90°	1567.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1567.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	678	678	678	678	678	
5°	677	677	674	670	668	64
15°	638	639	638	635	631	180
25°	566	571	574	569	564	259
35°	456	462	483	486	484	285
45°	353	359	370	387	390	272
55°	247	251	264	278	286	221
65°	145	149	158	169	178	144
75°	58	61	66	69	73	64
85°	9	9	9	9	9	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	677.7	677.7	677.7	677.7	677.7
2.5°	679.5	679.8	678.2	674.0	671.4
5°	676.9	676.6	674.0	670.4	668.3
7.5°	669.4	669.9	669.1	663.9	661.0
10°	662.1	662.3	660.2	656.1	652.7
12.5°	652.7	652.4	649.6	647.5	642.0
15°	637.9	639.4	637.9	635.0	630.6
17.5°	623.5	623.5	624.6	619.6	616.2
20°	607.4	608.2	608.2	604.3	600.4
22.5°	588.6	591.0	591.8	587.6	582.9
25°	566.5	570.9	573.5	569.4	564.4
27.5°	539.7	546.5	554.3	551.2	545.7
30°	509.8	519.7	532.7	530.1	526.2
32.5°	481.4	491.3	509.2	508.2	506.1
35°	455.6	461.9	482.9	485.5	483.7
37.5°	431.1	436.9	456.7	462.6	461.1
40°	405.4	411.6	427.2	437.9	438.4
42.5°	379.8	385.8	398.6	414.0	414.0
45°	352.8	358.8	370.5	387.4	389.5
47.5°	326.2	332.5	343.9	360.8	364.2
50°	300.2	305.9	317.4	333.8	339.0
52.5°	273.1	279.4	290.5	305.6	313.2
55°	247.1	251.2	263.5	278.1	286.1
57.5°	220.0	223.9	237.7	250.2	258.5
60°	194.0	198.9	209.6	222.3	232.0
62.5°	169.0	174.2	183.3	194.5	205.4
65°	144.8	148.7	157.5	168.7	178.3
67.5°	121.3	124.7	133.6	141.4	151.5
70°	97.6	102.1	108.6	116.1	122.6
72.5°	78.6	80.4	85.9	91.4	98.2
75°	58.1	61.2	65.6	68.7	72.6
77.5°	41.7	43.5	46.1	48.7	52.3
80°	27.9	28.6	31.0	31.5	34.4
82.5°	16.9	17.4	18.0	18.2	19.3
85°	9.1	9.1	9.1	8.6	8.6
87.5°	5.2	5.2	4.4	3.6	2.6
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)