

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: P553963

Luminaire Tested: **FUSL-12-2-LD4-1HI-35-UNV-93-94-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: P553963  
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-93-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

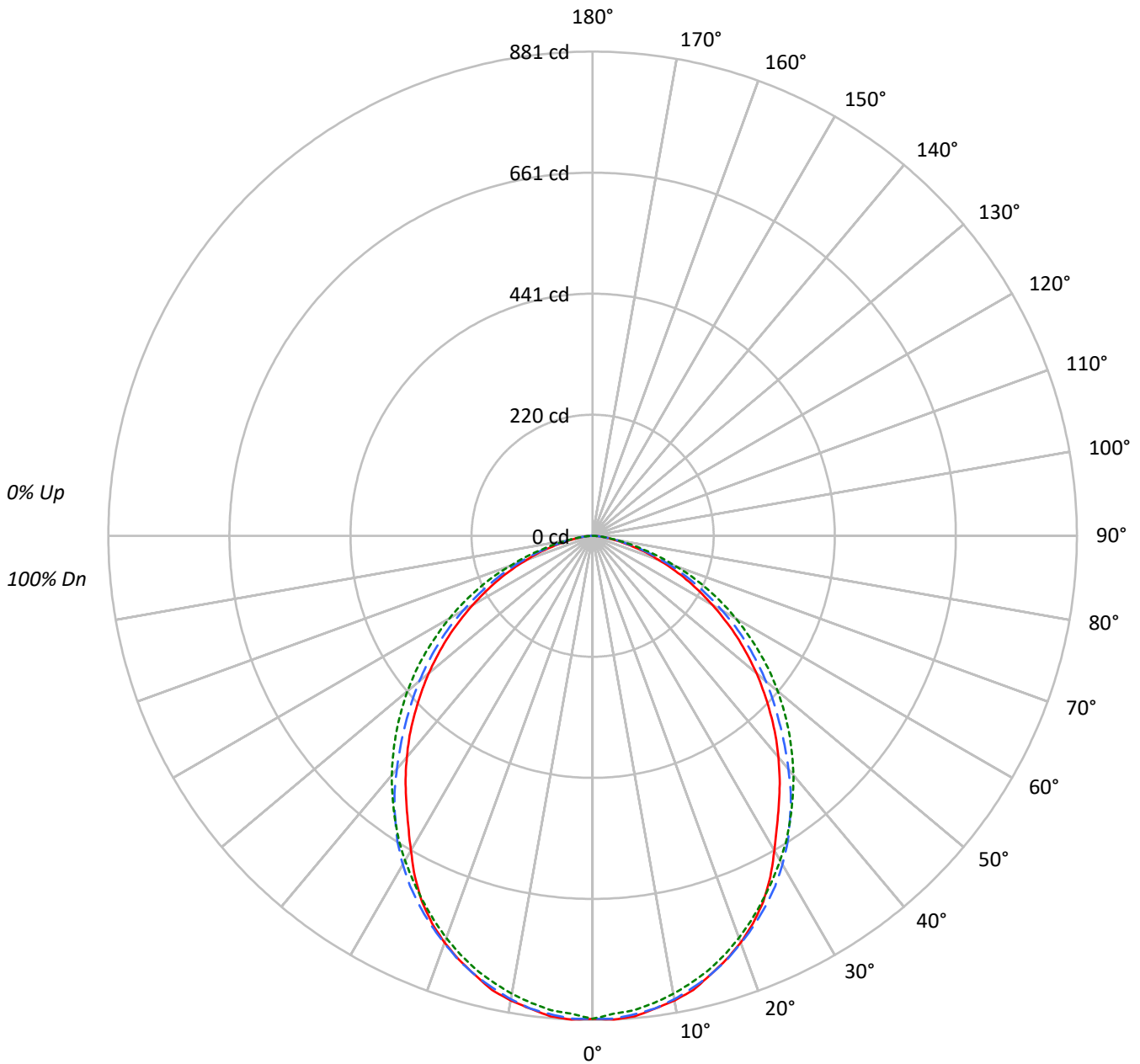
Lumens per Lamp: N/A  
Luminaire Lumens: 2032.0 lumens  
Efficiency: N/A  
Efficacy: 94.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4730	4730	4730
5°	4742	4722	4682
10°	4692	4679	4626
15°	4608	4608	4556
20°	4511	4517	4459
25°	4362	4416	4346
30°	4108	4292	4240
35°	3882	4115	4121
40°	3693	3892	3994
45°	3482	3656	3844
50°	3260	3445	3681
55°	3006	3206	3481
60°	2707	2926	3238
65°	2390	2602	2946
70°	1992	2216	2502
75°	1566	1770	1959
80°	1119	1246	1382
85°	729	729	685



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.7	4.1
10°-20°	232.4	11.4
20°-30°	339.7	16.7
30°-40°	385.6	19.0
40°-50°	372.2	18.3
50°-60°	307.0	15.1
60°-70°	204.5	10.1
70°-80°	91.5	4.5
80°-90°	16.4	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°	654.9	32.2
0°-40°	1040.4	51.2
0°-60°	1719.7	84.6
0°-90°	2032.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2032.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	879	879	879	879	879	
5°	878	877	874	869	867	83
15°	827	829	827	823	818	233
25°	735	740	744	738	732	336
35°	591	599	626	630	627	370
45°	458	465	480	502	505	353
55°	320	326	342	361	371	286
65°	188	193	204	219	231	186
75°	75	79	85	89	94	82
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°	878.8	878.8	878.8	878.8	878.8
2.5°	881.2	881.5	879.5	874.1	870.7
5°	877.8	877.4	874.1	869.3	866.6
7.5°	868.0	868.7	867.6	860.9	857.2
10°	858.5	858.9	856.2	850.8	846.4
12.5°	846.4	846.0	842.3	839.6	832.5
15°	827.1	829.2	827.1	823.4	817.7
17.5°	808.6	808.6	809.9	803.5	799.1
20°	787.6	788.6	788.6	783.6	778.5
22.5°	763.3	766.4	767.4	762.0	755.9
25°	734.6	740.4	743.7	738.3	731.9
27.5°	699.9	708.6	718.8	714.7	707.6
30°	661.0	673.9	690.7	687.4	682.3
32.5°	624.2	637.1	660.4	659.0	656.3
35°	590.8	598.9	626.3	629.6	627.3
37.5°	559.1	566.5	592.2	599.9	597.9
40°	525.7	533.8	554.0	567.9	568.5
42.5°	492.6	500.3	516.9	536.8	536.8
45°	457.5	465.2	480.4	502.4	505.1
47.5°	423.0	431.1	446.0	467.9	472.3
50°	389.3	396.7	411.5	432.8	439.6
52.5°	354.1	362.3	376.8	396.3	406.1
55°	320.4	325.8	341.7	360.6	371.0
57.5°	285.3	290.3	308.2	324.4	335.2
60°	251.5	257.9	271.8	288.3	300.8
62.5°	219.1	225.9	237.7	252.2	266.4
65°	187.7	192.8	204.3	218.8	231.3
67.5°	157.3	161.7	173.2	183.3	196.5
70°	126.6	132.3	140.8	150.6	159.0
72.5°	102.0	104.3	111.4	118.5	127.3
75°	75.3	79.3	85.1	89.1	94.2
77.5°	54.0	56.4	59.8	63.1	67.9
80°	36.1	37.1	40.2	40.9	44.6
82.5°	21.9	22.6	23.3	23.6	25.0
85°	11.8	11.8	11.8	11.1	11.1
87.5°	6.8	6.8	5.7	4.7	3.4
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)