

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: P554029

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-93-96-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: P554029  
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-40-UNV-93-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

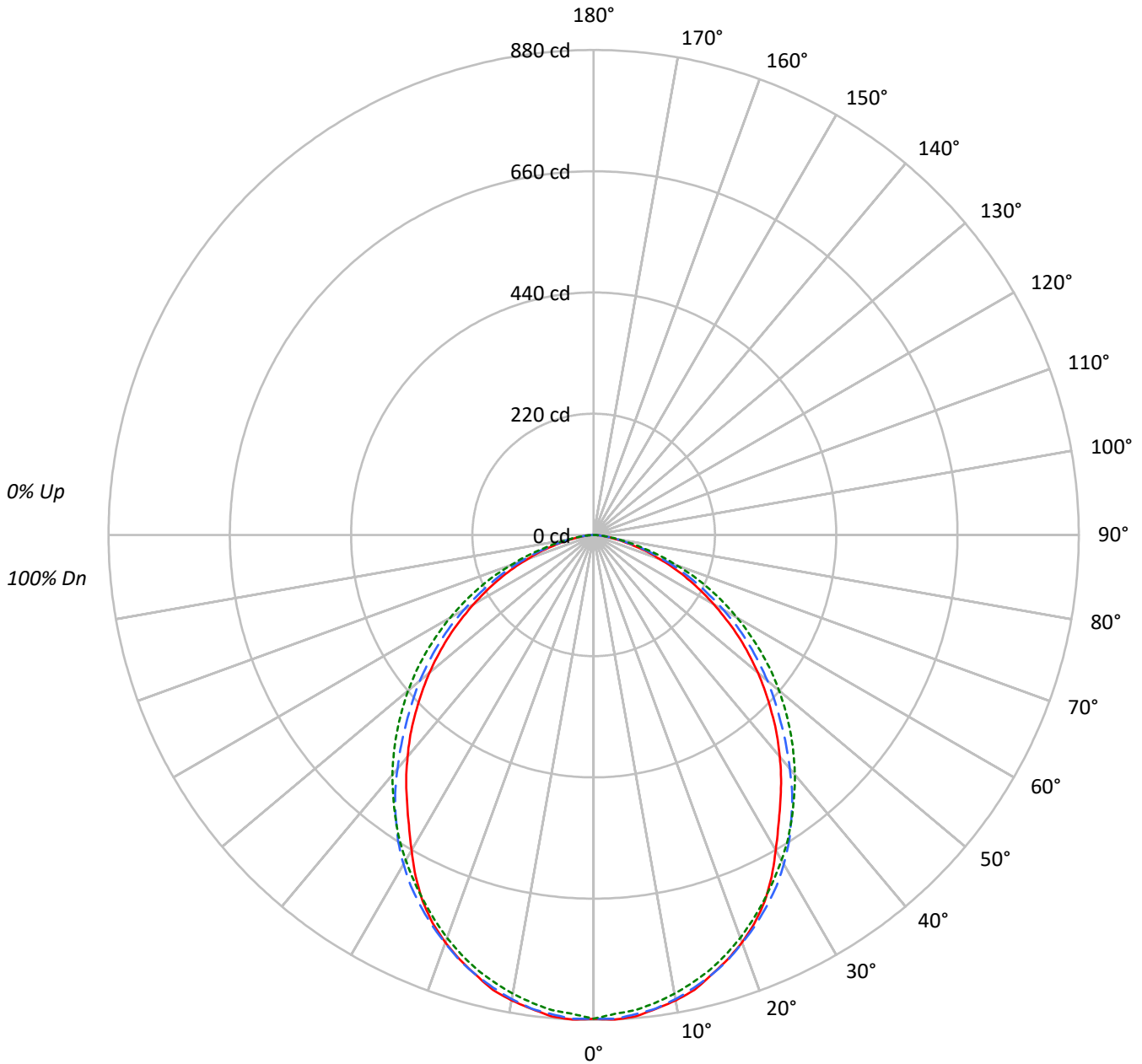
Lumens per Lamp: N/A  
Luminaire Lumens: 2030.0 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
Input Voltage (V): NR  
Input Current (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°	4725	4725	4725
5°	4737	4717	4677
10°	4687	4674	4621
15°	4604	4604	4552
20°	4507	4513	4455
25°	4358	4412	4342
30°	4104	4289	4236
35°	3878	4110	4118
40°	3689	3889	3991
45°	3478	3653	3841
50°	3256	3442	3677
55°	3004	3202	3478
60°	2705	2922	3235
65°	2388	2599	2942
70°	1991	2212	2500
75°	1564	1768	1957
80°	1119	1243	1379
85°	729	729	685



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.7	4.1
10°-20°	232.2	11.4
20°-30°	339.3	16.7
30°-40°	385.2	19.0
40°-50°	371.8	18.3
50°-60°	306.7	15.1
60°-70°	204.3	10.1
70°-80°	91.4	4.5
80°-90°	16.3	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°	654.2	32.2
0°-40°	1039.4	51.2
0°-60°	1718.0	84.6
0°-90°	2030.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2030.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	878	878	878	878	878	
5°	877	877	873	868	866	83
15°	826	828	826	823	817	233
25°	734	740	743	738	731	336
35°	590	598	626	629	627	370
45°	457	465	480	502	505	353
55°	320	326	341	360	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°	877.9	877.9	877.9	877.9	877.9
2.5°	880.3	880.6	878.6	873.2	869.8
5°	876.9	876.6	873.2	868.5	865.8
7.5°	867.1	867.8	866.8	860.0	856.3
10°	857.7	858.0	855.3	849.9	845.5
12.5°	845.5	845.2	841.5	838.8	831.7
15°	826.3	828.3	826.3	822.6	816.9
17.5°	807.8	807.8	809.1	802.7	798.3
20°	786.9	787.9	787.9	782.8	777.8
22.5°	762.6	765.6	766.6	761.2	755.2
25°	733.9	739.6	743.0	737.6	731.2
27.5°	699.2	707.9	718.1	714.0	706.9
30°	660.4	673.2	690.1	686.7	681.6
32.5°	623.6	636.4	659.7	658.4	655.7
35°	590.2	598.3	625.6	629.0	626.7
37.5°	558.5	565.9	591.6	599.3	597.3
40°	525.1	533.2	553.5	567.3	568.0
42.5°	492.1	499.8	516.4	536.3	536.3
45°	457.0	464.8	479.9	501.9	504.6
47.5°	422.6	430.7	445.5	467.5	471.8
50°	388.9	396.3	411.1	432.4	439.1
52.5°	353.8	361.9	376.4	396.0	405.7
55°	320.1	325.5	341.3	360.2	370.7
57.5°	285.0	290.1	307.9	324.1	334.9
60°	251.3	257.7	271.5	288.0	300.5
62.5°	218.9	225.6	237.4	251.9	266.1
65°	187.5	192.6	204.1	218.6	231.0
67.5°	157.2	161.6	173.0	183.1	196.3
70°	126.5	132.2	140.6	150.4	158.9
72.5°	101.9	104.2	111.3	118.4	127.2
75°	75.2	79.3	85.0	89.0	94.1
77.5°	54.0	56.3	59.7	63.1	67.8
80°	36.1	37.1	40.1	40.8	44.5
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°	6.7	6.7	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)