

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: P554524

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-82-96-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: P554524
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-LD4-1STD-40-UNV-82-96-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

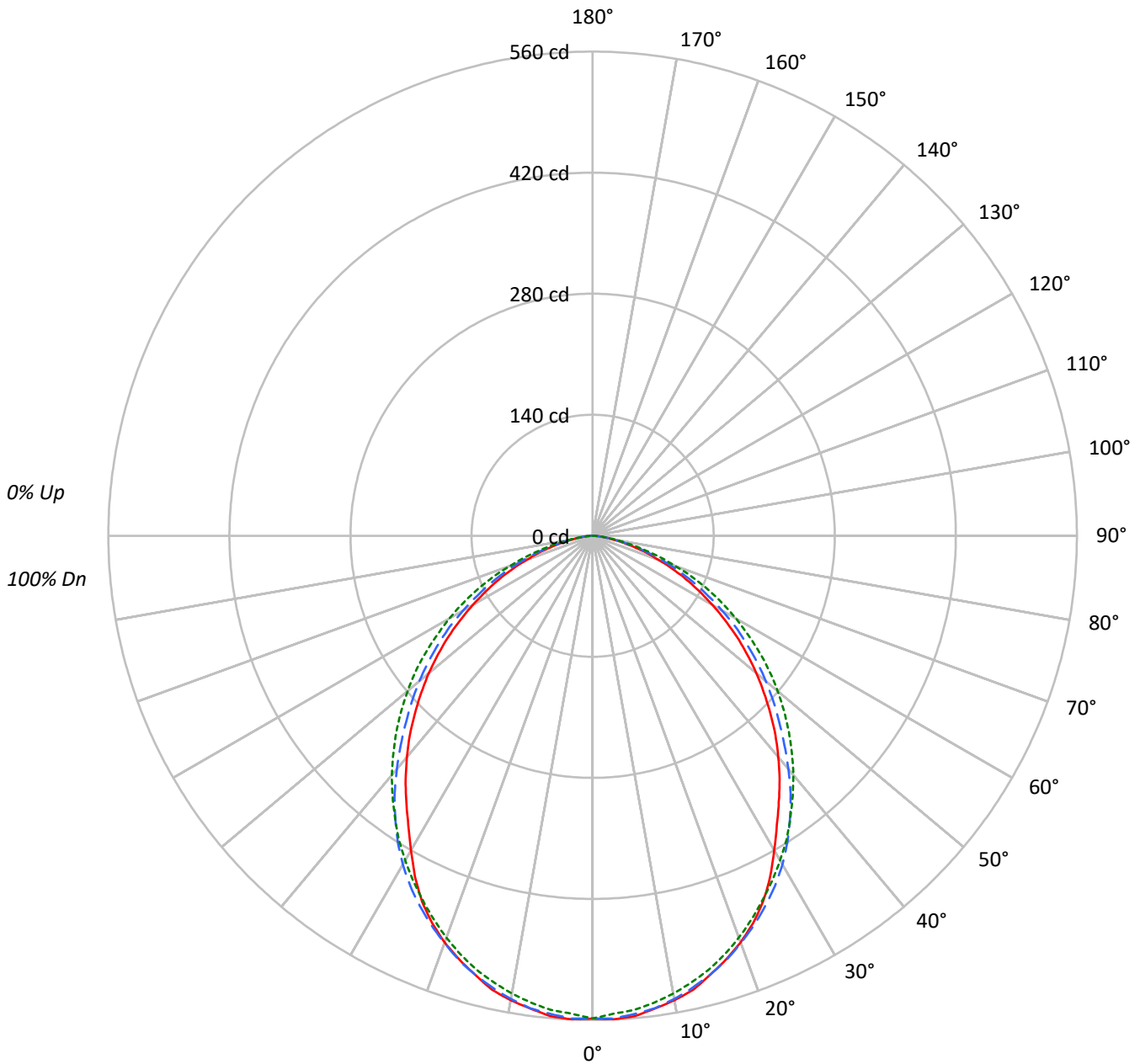
Lumens per Lamp: N/A
Luminaire Lumens: 1291.0 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
Input Voltage (V): NR
Input Current (A_{in}): 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°	3005	3005	3005
5°	3013	3000	2975
10°	2981	2973	2939
15°	2928	2928	2895
20°	2866	2870	2833
25°	2771	2806	2761
30°	2610	2728	2694
35°	2466	2614	2618
40°	2347	2473	2538
45°	2212	2323	2442
50°	2071	2189	2339
55°	1910	2037	2212
60°	1720	1859	2057
65°	1519	1653	1871
70°	1265	1407	1589
75°	994	1125	1243
80°	713	790	877
85°	463	463	438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.6	4.1
10°-20°	147.7	11.4
20°-30°	215.8	16.7
30°-40°	245.0	19.0
40°-50°	236.5	18.3
50°-60°	195.1	15.1
60°-70°	129.9	10.1
70°-80°	58.1	4.5
80°-90°	10.4	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°	416.1	32.2
0°-40°	661.0	51.2
0°-60°	1092.6	84.6
0°-90°	1291.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1291.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	558	558	555	552	551	53
15°	526	527	526	523	520	148
25°	467	470	472	469	465	214
35°	375	380	398	400	398	235
45°	291	296	305	319	321	224
55°	204	207	217	229	236	182
65°	119	122	130	139	147	118
75°	48	50	54	57	60	52
85°	8	8	8	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	558.3	558.3	558.3	558.3	558.3
2.5°	559.8	560.0	558.8	555.3	553.2
5°	557.7	557.5	555.3	552.3	550.6
7.5°	551.5	551.9	551.2	547.0	544.6
10°	545.5	545.7	544.0	540.5	537.7
12.5°	537.7	537.5	535.2	533.4	528.9
15°	525.5	526.8	525.5	523.1	519.5
17.5°	513.7	513.7	514.6	510.5	507.7
20°	500.4	501.1	501.1	497.8	494.6
22.5°	485.0	486.9	487.5	484.1	480.2
25°	466.7	470.4	472.5	469.1	465.0
27.5°	444.6	450.2	456.7	454.1	449.6
30°	420.0	428.1	438.9	436.7	433.5
32.5°	396.6	404.7	419.5	418.7	417.0
35°	375.4	380.5	397.9	400.0	398.5
37.5°	355.2	359.9	376.2	381.2	379.9
40°	334.0	339.1	352.0	360.8	361.2
42.5°	312.9	317.9	328.4	341.0	341.0
45°	290.6	295.6	305.2	319.2	320.9
47.5°	268.8	273.9	283.3	297.3	300.1
50°	247.3	252.0	261.5	275.0	279.3
52.5°	225.0	230.2	239.4	251.8	258.0
55°	203.6	207.0	217.1	229.1	235.7
57.5°	181.2	184.5	195.8	206.1	213.0
60°	159.8	163.9	172.7	183.2	191.1
62.5°	139.2	143.5	151.0	160.2	169.2
65°	119.3	122.5	129.8	139.0	146.9
67.5°	100.0	102.7	110.0	116.5	124.8
70°	80.4	84.1	89.4	95.7	101.0
72.5°	64.8	66.3	70.8	75.3	80.9
75°	47.8	50.4	54.1	56.6	59.8
77.5°	34.3	35.8	38.0	40.1	43.1
80°	23.0	23.6	25.5	26.0	28.3
82.5°	13.9	14.4	14.8	15.0	15.9
85°	7.5	7.5	7.5	7.1	7.1
87.5°	4.3	4.3	3.6	3.0	2.1
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)