

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: P556618

Luminaire Tested: **FUSL-12-4-LD4-1LO-50-UNV-81-94-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: P556618
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-12-4-LD4-1LO-50-UNV-81-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

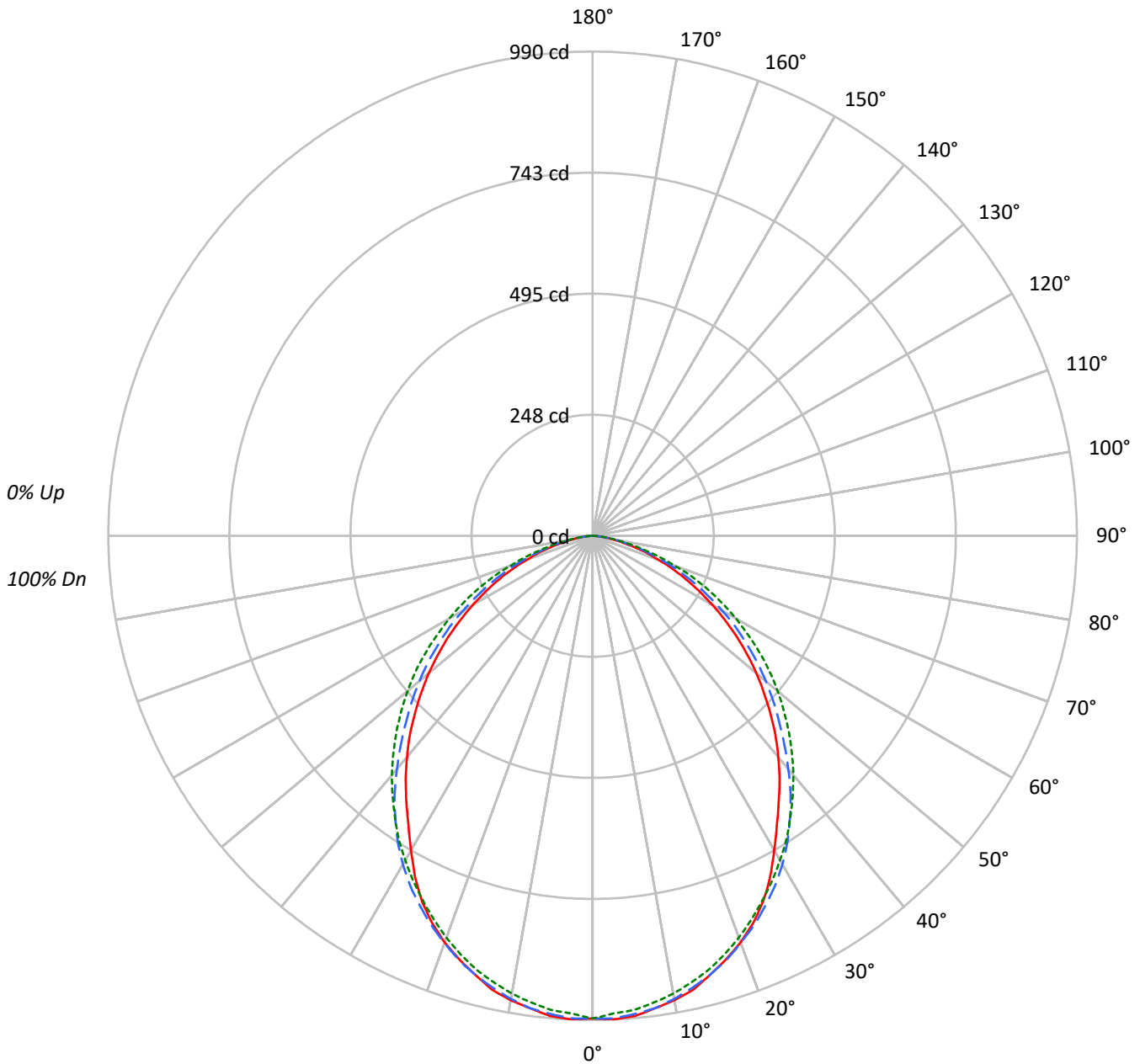
Lumens per Lamp: N/A
Luminaire Lumens: 2282.0 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	2656	2656	2656
5°	2663	2652	2629
10°	2635	2627	2597
15°	2588	2588	2558
20°	2533	2536	2504
25°	2450	2480	2441
30°	2307	2410	2381
35°	2180	2310	2314
40°	2074	2186	2243
45°	1955	2053	2159
50°	1830	1935	2066
55°	1688	1800	1955
60°	1520	1643	1818
65°	1342	1461	1654
70°	1119	1244	1405
75°	879	993	1100
80°	629	699	775
85°	411	411	386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.9	4.1
10°-20°	261.0	11.4
20°-30°	381.5	16.7
30°-40°	433.0	19.0
40°-50°	418.0	18.3
50°-60°	344.8	15.1
60°-70°	229.6	10.1
70°-80°	102.8	4.5
80°-90°	18.4	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°	735.4	32.2
0°-40°	1168.4	51.2
0°-60°	1931.3	84.6
0°-90°	2282.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2282.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	987	987	987	987	987	
5°	986	985	982	976	973	93
15°	929	931	929	925	918	262
25°	825	832	835	829	822	378
35°	664	673	703	707	704	416
45°	514	522	540	564	567	396
55°	360	366	384	405	417	321
65°	211	216	229	246	260	209
75°	84	89	96	100	106	92
85°	13	13	13	12	12	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	986.9	986.9	986.9	986.9	986.9
2.5°	989.6	989.9	987.7	981.6	977.8
5°	985.8	985.4	981.6	976.3	973.3
7.5°	974.8	975.5	974.4	966.8	962.6
10°	964.2	964.5	961.5	955.4	950.5
12.5°	950.5	950.1	946.0	942.9	935.0
15°	928.9	931.2	928.9	924.7	918.3
17.5°	908.0	908.0	909.6	902.4	897.4
20°	884.5	885.7	885.7	880.0	874.3
22.5°	857.2	860.7	861.8	855.7	848.9
25°	825.0	831.5	835.2	829.2	822.0
27.5°	786.0	795.8	807.2	802.6	794.7
30°	742.4	756.8	775.7	771.9	766.2
32.5°	701.0	715.4	741.6	740.1	737.1
35°	663.5	672.6	703.3	707.1	704.4
37.5°	627.9	636.2	665.0	673.7	671.5
40°	590.3	599.4	622.2	637.7	638.5
42.5°	553.2	561.9	580.5	602.8	602.8
45°	513.7	522.5	539.5	564.2	567.2
47.5°	475.1	484.2	500.8	525.5	530.4
50°	437.2	445.5	462.2	486.1	493.6
52.5°	397.7	406.8	423.1	445.1	456.1
55°	359.8	365.9	383.7	404.9	416.7
57.5°	320.4	326.1	346.2	364.4	376.5
60°	282.5	289.7	305.2	323.8	337.8
62.5°	246.1	253.6	266.9	283.2	299.1
65°	210.8	216.5	229.4	245.7	259.7
67.5°	176.7	181.6	194.5	205.9	220.7
70°	142.2	148.6	158.1	169.1	178.6
72.5°	114.5	117.2	125.1	133.1	142.9
75°	84.5	89.1	95.5	100.1	105.8
77.5°	60.7	63.3	67.1	70.9	76.2
80°	40.6	41.7	45.1	45.9	50.0
82.5°	24.6	25.4	26.2	26.5	28.1
85°	13.3	13.3	13.3	12.5	12.5
87.5°	7.6	7.6	6.4	5.3	3.8
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)