

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: P556504

Luminaire Tested: **FUSL-12-4-LD4-1LO-35-UNV-82-88-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: P556504
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-35-UNV-82-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

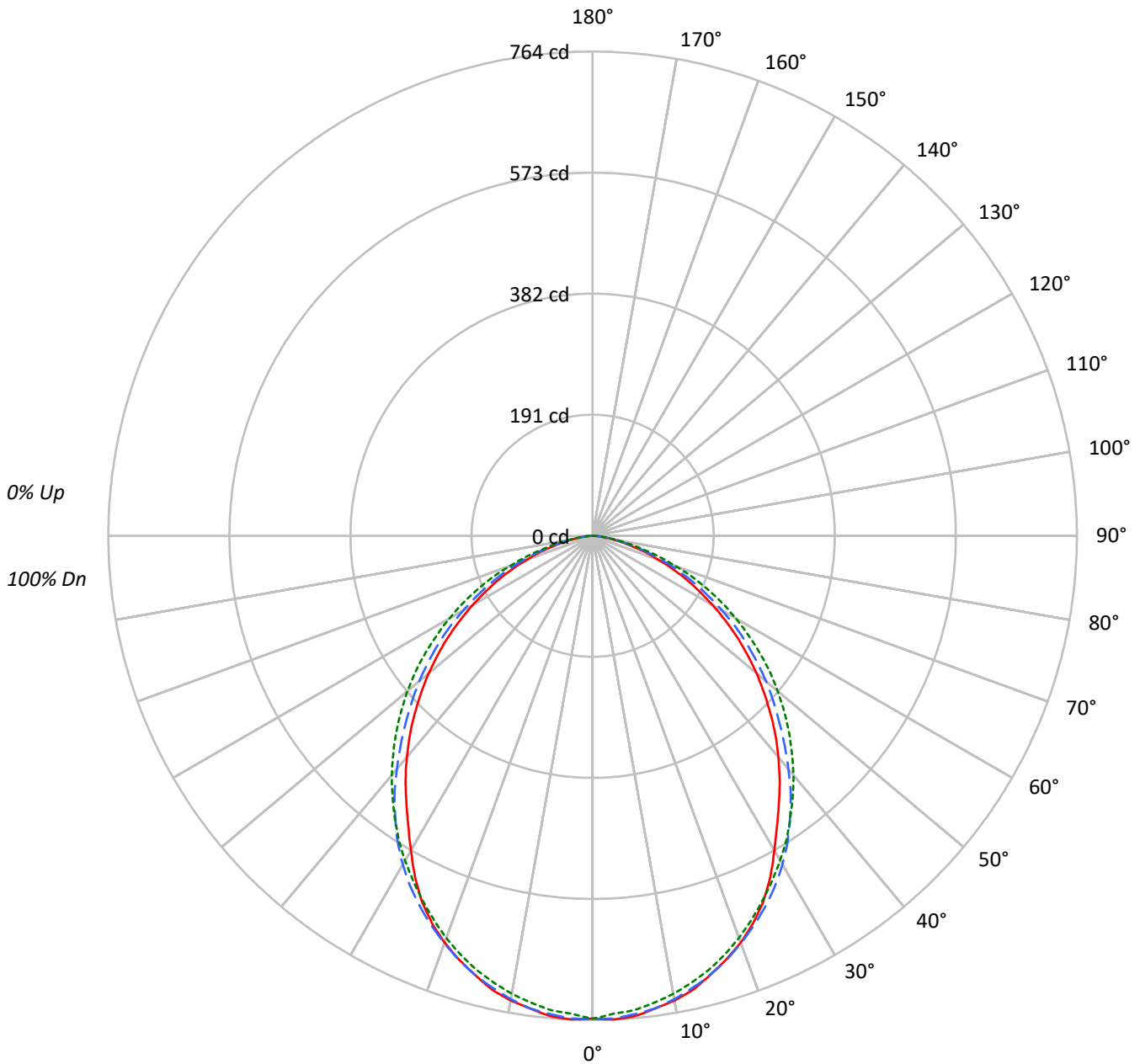
Lumens per Lamp: N/A
Luminaire Lumens: 1762.0 lumens
Efficiency: N/A
Efficacy: 75.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (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°	2051	2051	2051
5°	2056	2047	2030
10°	2034	2029	2005
15°	1998	1998	1975
20°	1956	1958	1933
25°	1891	1915	1885
30°	1781	1861	1838
35°	1683	1784	1787
40°	1601	1688	1732
45°	1510	1585	1666
50°	1413	1494	1596
55°	1303	1390	1509
60°	1174	1269	1404
65°	1037	1128	1277
70°	864	961	1085
75°	679	767	849
80°	485	539	598
85°	315	315	299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	4.1
10°-20°	201.6	11.4
20°-30°	294.5	16.7
30°-40°	334.3	19.0
40°-50°	322.7	18.3
50°-60°	266.3	15.1
60°-70°	177.3	10.1
70°-80°	79.3	4.5
80°-90°	14.2	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°	567.8	32.2
0°-40°	902.2	51.2
0°-60°	1491.2	84.6
0°-90°	1762.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1762.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	762	762	762	762	762	
5°	761	761	758	754	752	72
15°	717	719	717	714	709	202
25°	637	642	645	640	635	292
35°	512	519	543	546	544	321
45°	397	403	417	436	438	306
55°	278	282	296	313	322	248
65°	163	167	177	190	200	161
75°	65	69	74	77	82	71
85°	10	10	10	10	10	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	762.0	762.0	762.0	762.0	762.0
2.5°	764.1	764.4	762.6	757.9	755.0
5°	761.1	760.8	757.9	753.8	751.5
7.5°	752.7	753.2	752.4	746.5	743.3
10°	744.5	744.7	742.4	737.7	733.9
12.5°	733.9	733.6	730.4	728.1	721.9
15°	717.2	719.0	717.2	714.0	709.0
17.5°	701.1	701.1	702.3	696.7	692.9
20°	683.0	683.9	683.9	679.5	675.1
22.5°	661.9	664.5	665.4	660.7	655.5
25°	637.0	642.0	644.9	640.2	634.7
27.5°	606.9	614.5	623.3	619.7	613.6
30°	573.2	584.3	599.0	596.0	591.6
32.5°	541.3	552.4	572.6	571.4	569.1
35°	512.3	519.3	543.0	546.0	543.9
37.5°	484.8	491.2	513.5	520.2	518.5
40°	455.8	462.8	480.4	492.4	493.0
42.5°	427.1	433.9	448.2	465.5	465.5
45°	396.7	403.4	416.6	435.6	437.9
47.5°	366.8	373.8	386.7	405.7	409.6
50°	337.5	344.0	356.9	375.3	381.2
52.5°	307.1	314.1	326.7	343.7	352.2
55°	277.8	282.5	296.3	312.7	321.7
57.5°	247.4	251.8	267.3	281.3	290.7
60°	218.1	223.7	235.7	250.0	260.8
62.5°	190.0	195.8	206.1	218.7	231.0
65°	162.8	167.2	177.1	189.7	200.5
67.5°	136.4	140.2	150.2	159.0	170.4
70°	109.8	114.8	122.1	130.6	137.9
72.5°	88.4	90.5	96.6	102.8	110.4
75°	65.3	68.8	73.8	77.3	81.7
77.5°	46.8	48.9	51.8	54.7	58.8
80°	31.3	32.2	34.8	35.4	38.6
82.5°	19.0	19.6	20.2	20.5	21.7
85°	10.2	10.2	10.2	9.7	9.7
87.5°	5.9	5.9	5.0	4.1	2.9
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)