

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: P556442

Luminaire Tested: **FUSL-12-4-LD4-1LO-30-UNV-82-94-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: P556442
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-30-UNV-82-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

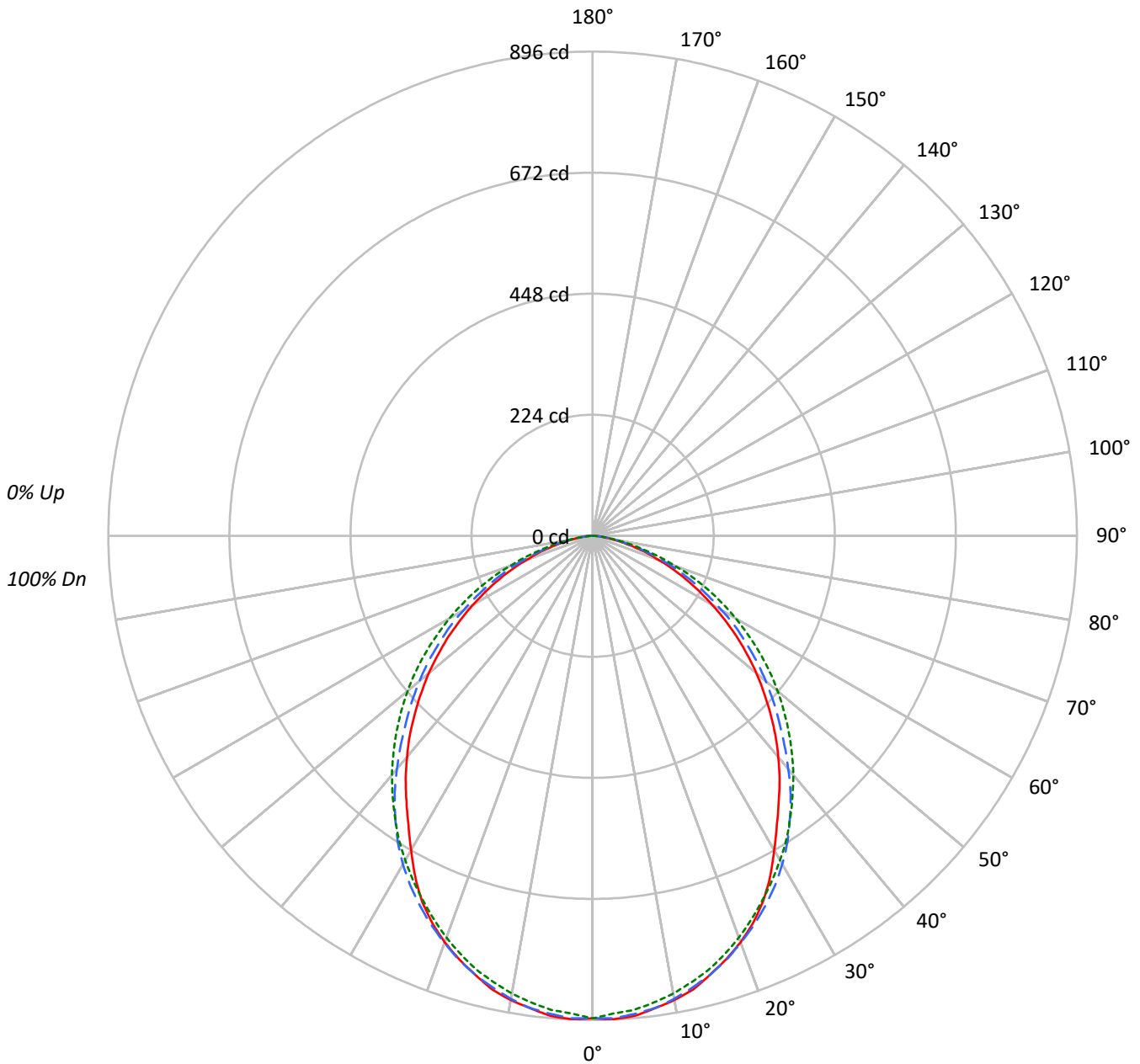
Lumens per Lamp: N/A
Luminaire Lumens: 2065.0 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	2403	2403	2403
5°	2410	2400	2379
10°	2384	2378	2350
15°	2342	2342	2315
20°	2292	2295	2266
25°	2217	2244	2208
30°	2087	2181	2155
35°	1972	2091	2094
40°	1877	1978	2030
45°	1769	1858	1953
50°	1656	1751	1870
55°	1528	1629	1769
60°	1376	1486	1645
65°	1215	1322	1496
70°	1013	1126	1271
75°	795	899	995
80°	569	632	702
85°	371	371	349



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.1	4.1
10°-20°	236.2	11.4
20°-30°	345.2	16.7
30°-40°	391.8	19.0
40°-50°	378.2	18.3
50°-60°	312.0	15.1
60°-70°	207.8	10.1
70°-80°	93.0	4.5
80°-90°	16.6	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°	665.5	32.2
0°-40°	1057.3	51.2
0°-60°	1747.6	84.6
0°-90°	2065.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2065.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	893	893	893	893	893	
5°	892	892	888	884	881	84
15°	841	843	841	837	831	237
25°	747	752	756	750	744	342
35°	600	609	636	640	638	376
45°	465	473	488	510	513	359
55°	326	331	347	366	377	291
65°	191	196	208	222	235	189
75°	76	81	86	91	96	84
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°	893.1	893.1	893.1	893.1	893.1
2.5°	895.5	895.8	893.7	888.3	884.8
5°	892.0	891.7	888.3	883.5	880.7
7.5°	882.1	882.8	881.7	874.9	871.1
10°	872.5	872.8	870.1	864.6	860.1
12.5°	860.1	859.8	856.0	853.3	846.1
15°	840.6	842.6	840.6	836.8	831.0
17.5°	821.7	821.7	823.1	816.6	812.1
20°	800.4	801.5	801.5	796.3	791.2
22.5°	775.7	778.8	779.8	774.4	768.2
25°	746.6	752.4	755.8	750.3	743.8
27.5°	711.2	720.1	730.4	726.3	719.1
30°	671.8	684.8	702.0	698.5	693.4
32.5°	634.4	647.4	671.1	669.7	667.0
35°	600.4	608.6	636.4	639.9	637.5
37.5°	568.2	575.7	601.8	609.7	607.6
40°	534.2	542.4	563.0	577.1	577.8
42.5°	500.6	508.5	525.3	545.5	545.5
45°	464.9	472.8	488.2	510.5	513.3
47.5°	429.9	438.1	453.2	475.5	480.0
50°	395.6	403.1	418.2	439.8	446.7
52.5°	359.9	368.1	382.9	402.8	412.7
55°	325.6	331.1	347.2	366.4	377.1
57.5°	289.9	295.1	313.2	329.7	340.7
60°	255.6	262.1	276.2	293.0	305.7
62.5°	222.7	229.5	241.5	256.3	270.7
65°	190.8	195.9	207.6	222.3	235.0
67.5°	159.9	164.3	176.0	186.3	199.7
70°	128.7	134.5	143.1	153.0	161.6
72.5°	103.6	106.0	113.2	120.4	129.3
75°	76.5	80.6	86.5	90.6	95.7
77.5°	54.9	57.3	60.7	64.2	69.0
80°	36.7	37.7	40.8	41.5	45.3
82.5°	22.3	23.0	23.7	24.0	25.4
85°	12.0	12.0	12.0	11.3	11.3
87.5°	6.9	6.9	5.8	4.8	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)