

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: P556400

Luminaire Tested: **FUSL-12-4-LD4-1LO-30-UNV-80-84-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: P556400
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-80-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

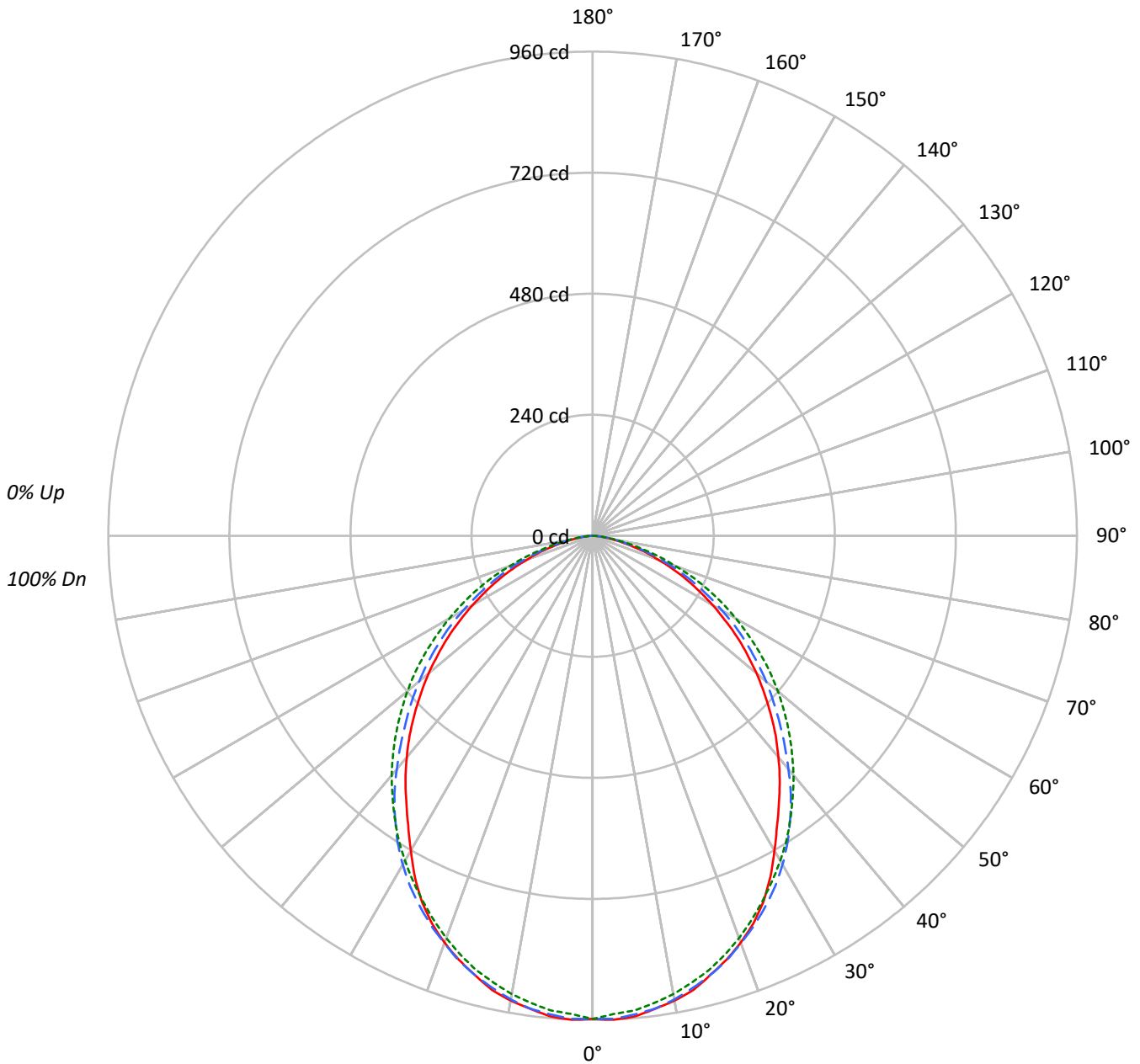
Lumens per Lamp: N/A
Luminaire Lumens: 2215.0 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	2578	2578	2578
5°	2585	2574	2552
10°	2557	2550	2521
15°	2512	2512	2483
20°	2459	2462	2430
25°	2378	2407	2369
30°	2239	2339	2311
35°	2116	2243	2246
40°	2013	2121	2177
45°	1898	1993	2095
50°	1776	1878	2006
55°	1638	1747	1897
60°	1476	1594	1765
65°	1303	1417	1605
70°	1086	1208	1364
75°	854	964	1068
80°	611	679	753
85°	398	398	374



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.2	4.1
10°-20°	253.4	11.4
20°-30°	370.3	16.7
30°-40°	420.3	19.0
40°-50°	405.7	18.3
50°-60°	334.7	15.1
60°-70°	222.9	10.1
70°-80°	99.7	4.5
80°-90°	17.9	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°	713.8	32.2
0°-40°	1134.1	51.2
0°-60°	1874.5	84.6
0°-90°	2215.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2215.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	958	958	958	958	958	
5°	957	956	953	948	945	91
15°	902	904	902	898	891	254
25°	801	807	811	805	798	367
35°	644	653	683	686	684	404
45°	499	507	524	548	550	385
55°	349	355	372	393	404	312
65°	205	210	223	238	252	203
75°	82	86	93	97	103	90
85°	13	13	13	12	12	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	957.9	957.9	957.9	957.9	957.9
2.5°	960.5	960.9	958.7	952.8	949.1
5°	956.8	956.5	952.8	947.6	944.7
7.5°	946.2	946.9	945.8	938.4	934.4
10°	935.8	936.2	933.3	927.4	922.6
12.5°	922.6	922.2	918.2	915.2	907.5
15°	901.6	903.8	901.6	897.6	891.3
17.5°	881.4	881.4	882.9	875.9	871.1
20°	858.6	859.7	859.7	854.2	848.6
22.5°	832.1	835.4	836.5	830.6	824.0
25°	800.8	807.0	810.7	804.8	797.8
27.5°	762.9	772.5	783.5	779.1	771.3
30°	720.6	734.5	752.9	749.3	743.7
32.5°	680.5	694.4	719.8	718.4	715.4
35°	644.0	652.8	682.7	686.3	683.8
37.5°	609.4	617.5	645.5	654.0	651.7
40°	573.0	581.8	603.9	619.0	619.7
42.5°	536.9	545.4	563.4	585.1	585.1
45°	498.7	507.1	523.7	547.6	550.5
47.5°	461.1	469.9	486.1	510.1	514.8
50°	424.3	432.4	448.6	471.8	479.1
52.5°	386.0	394.9	410.7	432.0	442.7
55°	349.2	355.1	372.4	393.0	404.4
57.5°	311.0	316.5	336.0	353.7	365.4
60°	274.2	281.2	296.2	314.3	327.9
62.5°	238.8	246.2	259.1	274.9	290.4
65°	204.6	210.1	222.6	238.5	252.1
67.5°	171.5	176.3	188.8	199.8	214.2
70°	138.0	144.3	153.5	164.1	173.3
72.5°	111.1	113.7	121.4	129.2	138.7
75°	82.1	86.5	92.7	97.2	102.7
77.5°	58.9	61.5	65.1	68.8	74.0
80°	39.4	40.5	43.8	44.5	48.6
82.5°	23.9	24.7	25.4	25.8	27.2
85°	12.9	12.9	12.9	12.1	12.1
87.5°	7.4	7.4	6.3	5.2	3.7
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)