

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: P556406

Luminaire Tested: **FUSL-12-4-LD4-1LO-30-UNV-80-87-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: P556406
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-80-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

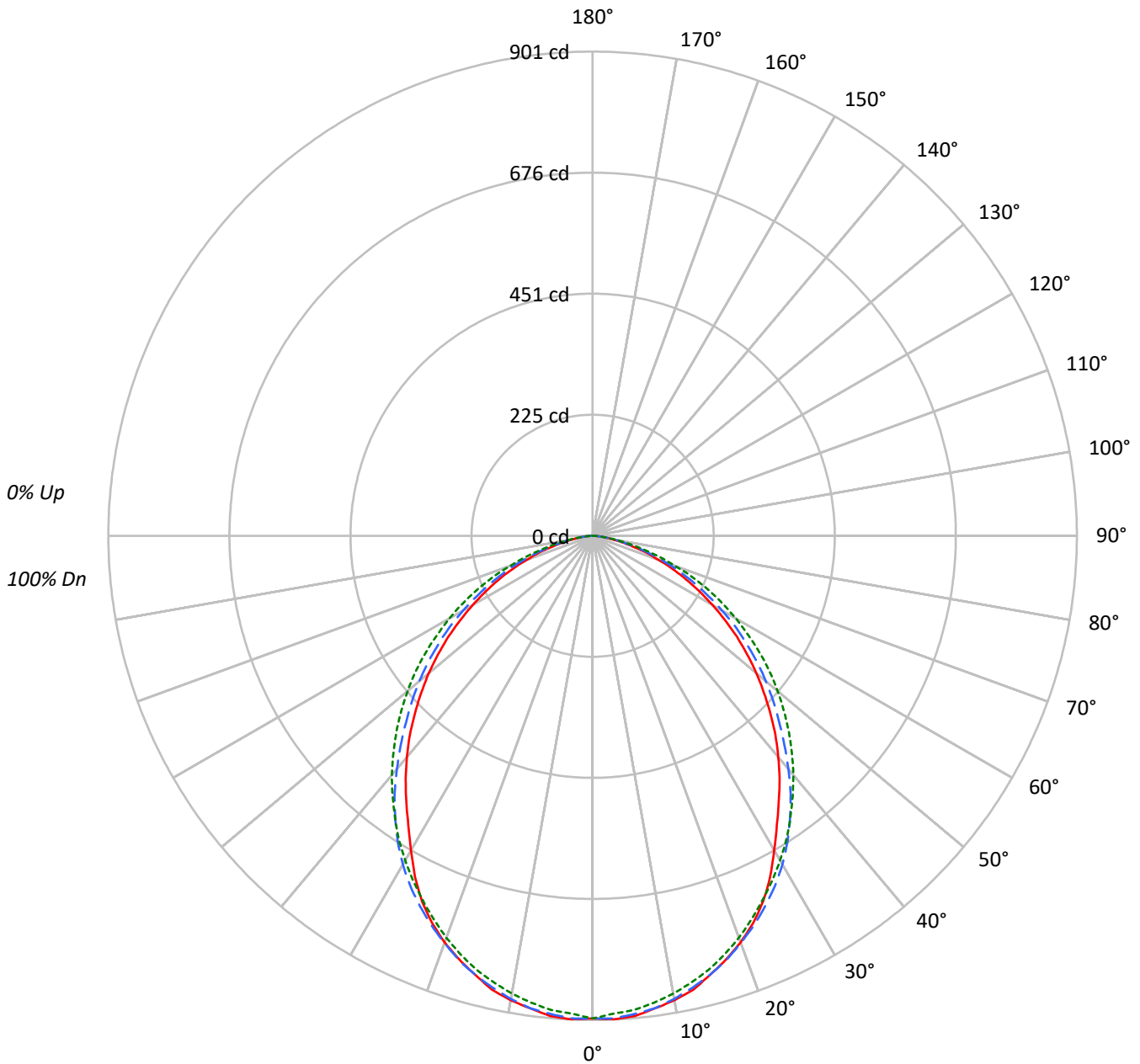
Lumens per Lamp: N/A
Luminaire Lumens: 2077.0 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	2417	2417	2417
5°	2424	2413	2393
10°	2398	2391	2364
15°	2355	2355	2328
20°	2306	2308	2279
25°	2230	2257	2221
30°	2100	2194	2167
35°	1984	2103	2106
40°	1887	1989	2041
45°	1780	1869	1964
50°	1666	1761	1881
55°	1536	1638	1779
60°	1384	1495	1655
65°	1222	1330	1505
70°	1018	1132	1279
75°	801	905	1001
80°	572	637	707
85°	374	374	352



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	4.1
10°-20°	237.6	11.4
20°-30°	347.2	16.7
30°-40°	394.1	19.0
40°-50°	380.5	18.3
50°-60°	313.8	15.1
60°-70°	209.0	10.1
70°-80°	93.5	4.5
80°-90°	16.7	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°	669.4	32.2
0°-40°	1063.5	51.2
0°-60°	1757.8	84.6
0°-90°	2077.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2077.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	898	898	898	898	898	
5°	897	897	893	889	886	85
15°	846	848	846	842	836	238
25°	751	757	760	755	748	344
35°	604	612	640	644	641	378
45°	468	476	491	514	516	361
55°	328	333	349	368	379	292
65°	192	197	209	224	236	190
75°	77	81	87	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°	898.2	898.2	898.2	898.2	898.2
2.5°	900.7	901.0	898.9	893.4	890.0
5°	897.2	896.9	893.4	888.6	885.8
7.5°	887.2	887.9	886.9	880.0	876.2
10°	877.5	877.9	875.1	869.6	865.1
12.5°	865.1	864.8	861.0	858.2	851.0
15°	845.5	847.5	845.5	841.7	835.8
17.5°	826.5	826.5	827.9	821.3	816.8
20°	805.1	806.1	806.1	800.9	795.8
22.5°	780.2	783.3	784.4	778.9	772.6
25°	750.9	756.8	760.2	754.7	748.1
27.5°	715.4	724.3	734.7	730.5	723.3
30°	675.7	688.8	706.0	702.6	697.4
32.5°	638.1	651.2	675.0	673.6	670.8
35°	603.9	612.2	640.1	643.6	641.2
37.5°	571.5	579.0	605.3	613.2	611.1
40°	537.3	545.6	566.3	580.4	581.1
42.5°	503.5	511.4	528.3	548.7	548.7
45°	467.6	475.5	491.1	513.5	516.2
47.5°	432.4	440.7	455.9	478.3	482.8
50°	397.9	405.5	420.7	442.4	449.3
52.5°	362.0	370.3	385.1	405.1	415.1
55°	327.5	333.0	349.2	368.5	379.2
57.5°	291.6	296.8	315.1	331.6	342.7
60°	257.1	263.6	277.8	294.7	307.5
62.5°	224.0	230.9	242.9	257.8	272.3
65°	191.9	197.0	208.8	223.6	236.4
67.5°	160.8	165.3	177.0	187.4	200.8
70°	129.4	135.3	143.9	153.9	162.5
72.5°	104.2	106.6	113.9	121.1	130.1
75°	77.0	81.1	87.0	91.1	96.3
77.5°	55.2	57.6	61.1	64.5	69.4
80°	36.9	38.0	41.1	41.8	45.6
82.5°	22.4	23.1	23.8	24.2	25.5
85°	12.1	12.1	12.1	11.4	11.4
87.5°	6.9	6.9	5.9	4.8	3.5
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)