

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: P556571

Luminaire Tested: **FUSL-12-4-LD4-1LO-40-UNV-82-94-EDD**

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: P556571
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-40-UNV-82-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

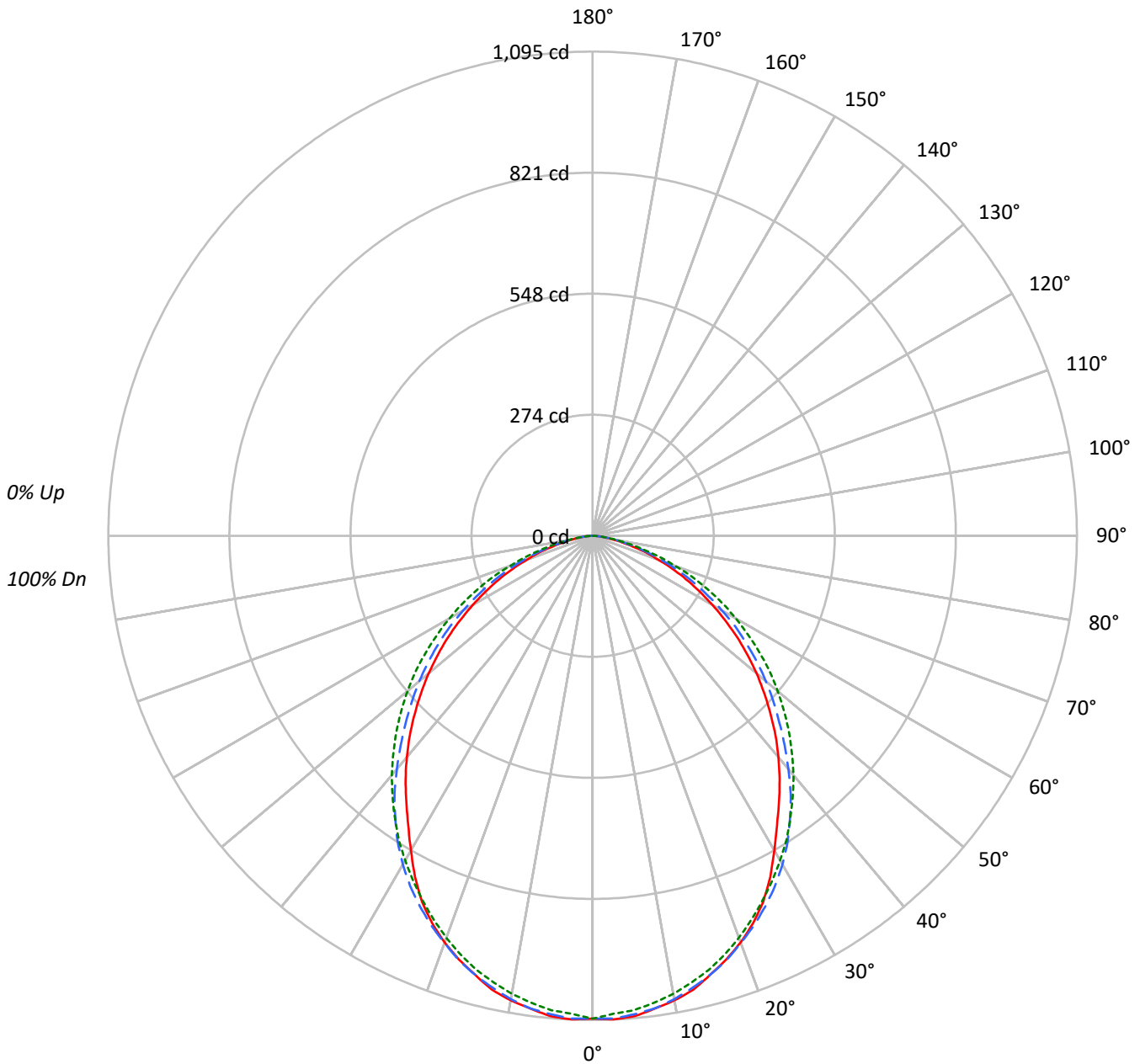
Lumens per Lamp: N/A
Luminaire Lumens: 2525.0 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	2939	2939	2939
5°	2946	2934	2909
10°	2915	2907	2874
15°	2863	2863	2831
20°	2803	2806	2770
25°	2711	2744	2700
30°	2552	2667	2634
35°	2412	2556	2561
40°	2295	2418	2482
45°	2163	2272	2388
50°	2025	2141	2287
55°	1868	1992	2163
60°	1682	1817	2012
65°	1486	1616	1830
70°	1238	1376	1555
75°	973	1099	1216
80°	696	773	859
85°	454	454	426



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.8	4.1
10°-20°	288.8	11.4
20°-30°	422.1	16.7
30°-40°	479.1	19.0
40°-50°	462.5	18.3
50°-60°	381.5	15.1
60°-70°	254.1	10.1
70°-80°	113.7	4.5
80°-90°	20.3	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°	813.7	32.2
0°-40°	1292.8	51.2
0°-60°	2136.9	84.6
0°-90°	2525.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2525.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1092	1092	1092	1092	1092	
5°	1091	1090	1086	1080	1077	103
15°	1028	1030	1028	1023	1016	290
25°	913	920	924	918	910	418
35°	734	744	778	782	780	460
45°	568	578	597	624	628	439
55°	398	405	424	448	461	355
65°	233	240	254	272	287	231
75°	94	99	106	111	117	102
85°	15	15	15	14	14	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1092.0	1092.0	1092.0	1092.0	1092.0
2.5°	1094.9	1095.4	1092.8	1086.1	1081.9
5°	1090.7	1090.3	1086.1	1080.3	1076.9
7.5°	1078.6	1079.4	1078.2	1069.8	1065.1
10°	1066.8	1067.2	1063.9	1057.2	1051.7
12.5°	1051.7	1051.3	1046.7	1043.3	1034.5
15°	1027.8	1030.3	1027.8	1023.2	1016.1
17.5°	1004.7	1004.7	1006.4	998.4	993.0
20°	978.7	980.0	980.0	973.7	967.4
22.5°	948.5	952.3	953.6	946.8	939.3
25°	912.9	920.0	924.2	917.5	909.5
27.5°	869.7	880.6	893.1	888.1	879.3
30°	821.4	837.4	858.3	854.1	847.8
32.5°	775.7	791.6	820.6	818.9	815.5
35°	734.2	744.2	778.2	782.4	779.5
37.5°	694.7	703.9	735.8	745.5	743.0
40°	653.2	663.3	688.4	705.6	706.5
42.5°	612.1	621.7	642.3	667.0	667.0
45°	568.4	578.1	597.0	624.2	627.6
47.5°	525.7	535.7	554.2	581.4	586.9
50°	483.7	492.9	511.4	537.8	546.2
52.5°	440.1	450.1	468.2	492.5	504.7
55°	398.1	404.8	424.5	448.0	461.0
57.5°	354.5	360.8	383.0	403.2	416.6
60°	312.5	320.5	337.7	358.3	373.8
62.5°	272.3	280.7	295.3	313.4	331.0
65°	233.3	239.5	253.8	271.8	287.4
67.5°	195.5	200.9	215.2	227.8	244.2
70°	157.3	164.4	174.9	187.1	197.6
72.5°	126.7	129.6	138.4	147.2	158.2
75°	93.6	98.6	105.7	110.8	117.0
77.5°	67.1	70.1	74.3	78.4	84.3
80°	44.9	46.1	49.9	50.8	55.4
82.5°	27.3	28.1	28.9	29.4	31.0
85°	14.7	14.7	14.7	13.8	13.8
87.5°	8.4	8.4	7.1	5.9	4.2
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)