

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: P558393

Luminaire Tested: **FUSL-12-4-LD4-3STD-50-UNV-80-88-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: P558393
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-LD4-3STD-50-UNV-80-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

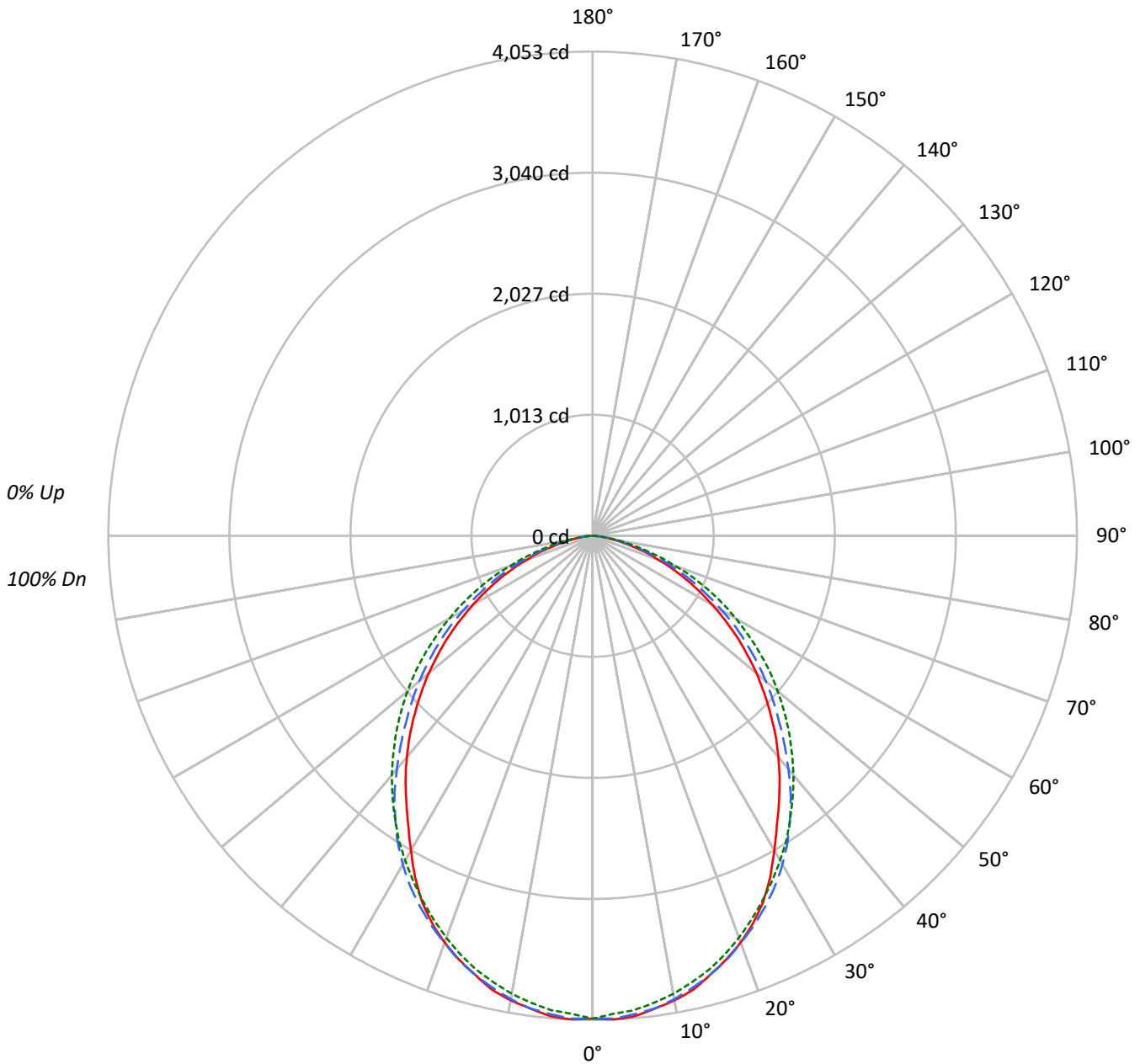
Lumens per Lamp: N/A
Luminaire Lumens: 9345.9 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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°	10877	10877	10877
5°	10906	10860	10767
10°	10790	10760	10637
15°	10598	10598	10477
20°	10374	10387	10254
25°	10033	10157	9995
30°	9447	9872	9751
35°	8927	9462	9478
40°	8493	8951	9186
45°	8007	8409	8840
50°	7495	7924	8464
55°	6914	7372	8006
60°	6226	6727	7446
65°	5497	5982	6773
70°	4581	5094	5755
75°	3601	4068	4504
80°	2574	2864	3177
85°	1677	1677	1581



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	380.6	4.1
10°-20°	1069.1	11.4
20°-30°	1562.3	16.7
30°-40°	1773.4	19.0
40°-50°	1711.9	18.3
50°-60°	1412.2	15.1
60°-70°	940.4	10.1
70°-80°	420.8	4.5
80°-90°	75.3	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°	3011.9	32.2
0°-40°	4785.3	51.2
0°-60°	7909.4	84.6
0°-90°	9345.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9345.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4042	4042	4042	4042	4042	
5°	4037	4036	4020	3998	3986	382
15°	3804	3814	3804	3787	3761	1072
25°	3379	3405	3421	3396	3366	1547
35°	2717	2755	2880	2896	2885	1703
45°	2104	2140	2210	2310	2323	1623
55°	1474	1498	1571	1658	1706	1315
65°	863	887	939	1006	1064	856
75°	346	365	391	410	433	379
85°	54	54	54	51	51	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4041.9	4041.9	4041.9	4041.9	4041.9
2.5°	4052.8	4054.3	4045.0	4020.2	4004.6
5°	4037.2	4035.7	4020.2	3998.4	3986.0
7.5°	3992.2	3995.3	3990.7	3959.6	3942.5
10°	3948.7	3950.3	3937.9	3913.0	3892.8
12.5°	3892.8	3891.3	3874.2	3861.8	3829.2
15°	3804.3	3813.6	3804.3	3787.2	3760.8
17.5°	3718.9	3718.9	3725.1	3695.6	3675.4
20°	3622.7	3627.3	3627.3	3604.0	3580.7
22.5°	3510.9	3524.8	3529.5	3504.6	3476.7
25°	3378.9	3405.3	3420.8	3395.9	3366.4
27.5°	3218.9	3259.3	3305.9	3287.2	3254.6
30°	3040.4	3099.4	3177.0	3161.5	3138.2
32.5°	2871.1	2930.1	3037.3	3031.0	3018.6
35°	2717.4	2754.6	2880.4	2895.9	2885.1
37.5°	2571.4	2605.6	2723.6	2759.3	2750.0
40°	2417.7	2455.0	2548.1	2611.8	2614.9
42.5°	2265.5	2301.2	2377.3	2468.9	2468.9
45°	2104.0	2139.7	2209.6	2310.5	2323.0
47.5°	1945.6	1982.9	2051.2	2152.2	2172.3
50°	1790.4	1824.5	1892.8	1990.7	2021.7
52.5°	1628.9	1666.1	1732.9	1823.0	1868.0
55°	1473.6	1498.4	1571.4	1658.4	1706.5
57.5°	1312.1	1335.4	1417.7	1492.2	1541.9
60°	1156.8	1186.3	1250.0	1326.1	1383.5
62.5°	1007.8	1038.8	1093.2	1159.9	1225.1
65°	863.3	886.6	939.4	1006.2	1063.7
67.5°	723.6	743.8	796.6	843.2	903.7
70°	582.3	608.7	647.5	692.5	731.4
72.5°	468.9	479.8	512.4	545.0	585.4
75°	346.3	364.9	391.3	409.9	433.2
77.5°	248.4	259.3	274.8	290.4	312.1
80°	166.1	170.8	184.8	187.9	205.0
82.5°	100.9	104.0	107.1	108.7	114.9
85°	54.3	54.3	54.3	51.2	51.2
87.5°	31.1	31.1	26.4	21.7	15.5
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)