

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: P557752

Luminaire Tested: **FUSL-12-4-LD4-3HI-35-UNV-80-88-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: P557752
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-LD4-3HI-35-UNV-80-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

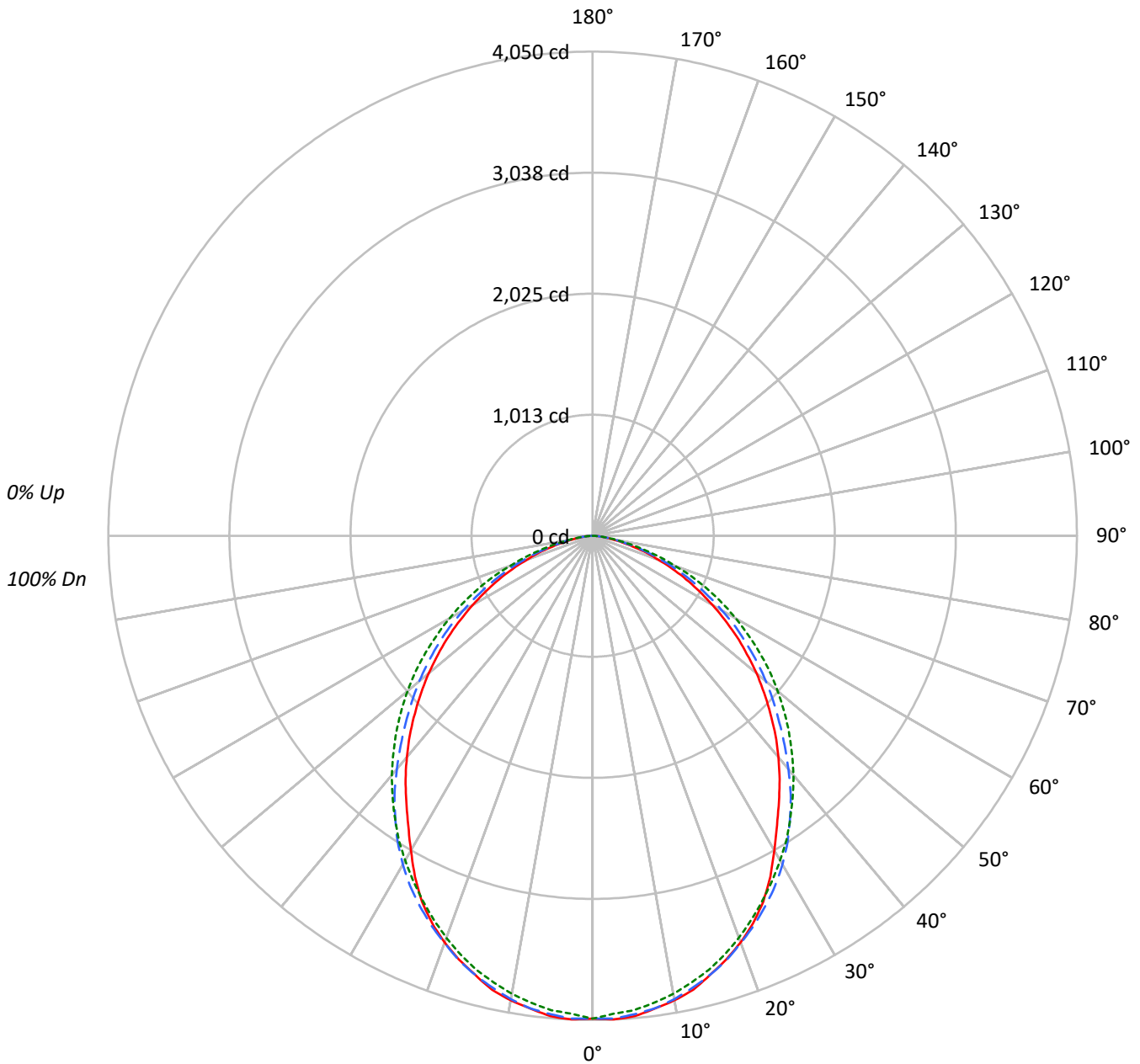
Lumens per Lamp: N/A
Luminaire Lumens: 9339.0 lumens
Efficiency: N/A
Efficacy: 72.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10869	10869	10869
5°	10897	10851	10759
10°	10782	10752	10629
15°	10591	10591	10469
20°	10366	10380	10246
25°	10025	10149	9988
30°	9440	9864	9744
35°	8920	9455	9471
40°	8487	8944	9179
45°	8001	8403	8834
50°	7490	7918	8457
55°	6908	7367	8000
60°	6222	6723	7441
65°	5493	5977	6768
70°	4578	5091	5750
75°	3597	4065	4501
80°	2572	2861	3174
85°	1677	1677	1581



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	380.3	4.1
10°-20°	1068.3	11.4
20°-30°	1561.1	16.7
30°-40°	1772.0	19.0
40°-50°	1710.6	18.3
50°-60°	1411.2	15.1
60°-70°	939.7	10.1
70°-80°	420.5	4.5
80°-90°	75.2	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°	3009.7	32.2
0°-40°	4781.7	51.2
0°-60°	7903.5	84.6
0°-90°	9339.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9339.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4039	4039	4039	4039	4039	
5°	4034	4033	4017	3995	3983	382
15°	3802	3811	3802	3784	3758	1072
25°	3376	3403	3418	3393	3364	1546
35°	2715	2753	2878	2894	2883	1701
45°	2102	2138	2208	2309	2321	1622
55°	1472	1497	1570	1657	1705	1314
65°	863	886	939	1006	1063	855
75°	346	365	391	410	433	378
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°	4038.9	4038.9	4038.9	4038.9	4038.9
2.5°	4049.7	4051.3	4042.0	4017.2	4001.6
5°	4034.2	4032.7	4017.2	3995.4	3983.0
7.5°	3989.2	3992.3	3987.7	3956.6	3939.6
10°	3945.8	3947.3	3934.9	3910.1	3889.9
12.5°	3889.9	3888.4	3871.3	3858.9	3826.3
15°	3801.5	3810.8	3801.5	3784.4	3758.0
17.5°	3716.1	3716.1	3722.3	3692.9	3672.7
20°	3619.9	3624.6	3624.6	3601.3	3578.0
22.5°	3508.2	3522.2	3526.8	3502.0	3474.1
25°	3376.3	3402.7	3418.2	3393.4	3363.9
27.5°	3216.5	3256.9	3303.4	3284.8	3252.2
30°	3038.1	3097.0	3174.6	3159.1	3135.8
32.5°	2869.0	2927.9	3035.0	3028.8	3016.4
35°	2715.3	2752.6	2878.3	2893.8	2882.9
37.5°	2569.5	2603.6	2721.5	2757.2	2747.9
40°	2415.9	2453.1	2546.2	2609.8	2612.9
42.5°	2263.8	2299.5	2375.5	2467.1	2467.1
45°	2102.5	2138.1	2208.0	2308.8	2321.2
47.5°	1944.2	1981.4	2049.7	2150.6	2170.7
50°	1789.0	1823.2	1891.4	1989.2	2020.2
52.5°	1627.7	1664.9	1731.6	1821.6	1866.6
55°	1472.5	1497.3	1570.2	1657.1	1705.2
57.5°	1311.1	1334.4	1416.6	1491.1	1540.8
60°	1156.0	1185.4	1249.1	1325.1	1382.5
62.5°	1007.0	1038.0	1092.3	1159.1	1224.2
65°	862.7	886.0	938.7	1005.5	1062.9
67.5°	723.1	743.2	796.0	842.5	903.0
70°	581.9	608.2	647.0	692.0	730.8
72.5°	468.6	479.5	512.0	544.6	585.0
75°	346.0	364.6	391.0	409.6	432.9
77.5°	248.3	259.1	274.6	290.2	311.9
80°	166.0	170.7	184.6	187.7	204.8
82.5°	100.9	104.0	107.1	108.6	114.8
85°	54.3	54.3	54.3	51.2	51.2
87.5°	31.0	31.0	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)