

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: P558264

Luminaire Tested: **FUSL-12-4-LD4-3STD-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: P558264
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-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

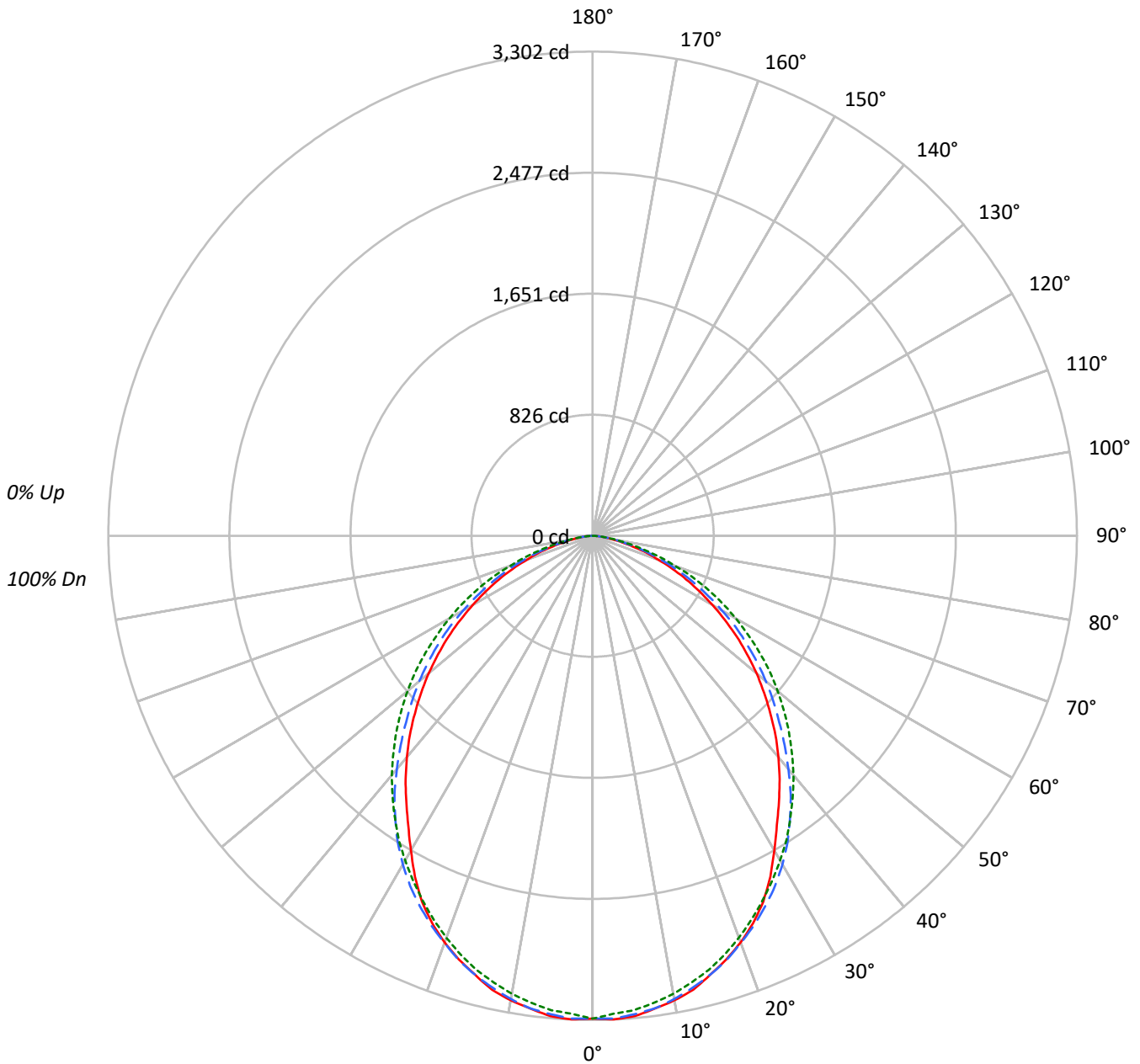
Lumens per Lamp: N/A
Luminaire Lumens: 7614.0 lumens
Efficiency: N/A
Efficacy: 76.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
Input Voltage (V): NR
Input Current (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°	8861	8861	8861
5°	8885	8847	8772
10°	8790	8766	8666
15°	8634	8634	8536
20°	8452	8462	8354
25°	8173	8274	8143
30°	7696	8042	7944
35°	7273	7709	7721
40°	6919	7292	7483
45°	6523	6850	7202
50°	6106	6456	6895
55°	5632	6006	6523
60°	5072	5480	6066
65°	4479	4873	5517
70°	3733	4150	4688
75°	2933	3315	3669
80°	2098	2332	2588
85°	1368	1368	1288



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.0	4.1
10°-20°	871.0	11.4
20°-30°	1272.8	16.7
30°-40°	1444.7	19.0
40°-50°	1394.7	18.3
50°-60°	1150.5	15.1
60°-70°	766.1	10.1
70°-80°	342.9	4.5
80°-90°	61.3	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°	2453.8	32.2
0°-40°	3898.5	51.2
0°-60°	6443.7	84.6
0°-90°	7614.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7614.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3293	3293	3293	3293	3293	
5°	3289	3288	3275	3257	3247	311
15°	3099	3107	3099	3085	3064	874
25°	2753	2774	2787	2767	2743	1261
35°	2214	2244	2347	2359	2350	1387
45°	1714	1743	1800	1882	1892	1323
55°	1200	1221	1280	1351	1390	1071
65°	703	722	765	820	866	697
75°	282	297	319	334	353	308
85°	44	44	44	42	42	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3292.9	3292.9	3292.9	3292.9	3292.9
2.5°	3301.7	3303.0	3295.4	3275.1	3262.5
5°	3289.1	3287.8	3275.1	3257.4	3247.3
7.5°	3252.4	3254.9	3251.1	3225.8	3211.9
10°	3217.0	3218.2	3208.1	3187.9	3171.4
12.5°	3171.4	3170.2	3156.2	3146.1	3119.6
15°	3099.3	3106.9	3099.3	3085.4	3063.9
17.5°	3029.7	3029.7	3034.8	3010.8	2994.3
20°	2951.3	2955.1	2955.1	2936.1	2917.1
22.5°	2860.2	2871.6	2875.4	2855.2	2832.4
25°	2752.7	2774.2	2786.8	2766.6	2742.6
27.5°	2622.4	2655.3	2693.2	2678.1	2651.5
30°	2476.9	2525.0	2588.2	2575.6	2556.6
32.5°	2339.0	2387.1	2474.4	2469.3	2459.2
35°	2213.8	2244.2	2346.6	2359.3	2350.4
37.5°	2094.9	2122.7	2218.9	2247.9	2240.4
40°	1969.6	2000.0	2075.9	2127.8	2130.3
42.5°	1845.7	1874.8	1936.8	2011.4	2011.4
45°	1714.1	1743.2	1800.1	1882.4	1892.5
47.5°	1585.1	1615.4	1671.1	1753.3	1769.8
50°	1458.6	1486.4	1542.1	1621.8	1647.1
52.5°	1327.0	1357.4	1411.8	1485.1	1521.8
55°	1200.5	1220.7	1280.2	1351.0	1390.3
57.5°	1068.9	1087.9	1155.0	1215.7	1256.2
60°	942.4	966.5	1018.3	1080.3	1127.1
62.5°	821.0	846.3	890.6	945.0	998.1
65°	703.4	722.3	765.3	819.7	866.5
67.5°	589.5	605.9	649.0	686.9	736.2
70°	474.4	495.9	527.5	564.2	595.8
72.5°	382.0	390.9	417.5	444.0	476.9
75°	282.1	297.3	318.8	334.0	352.9
77.5°	202.4	211.3	223.9	236.6	254.3
80°	135.4	139.2	150.5	153.1	167.0
82.5°	82.2	84.8	87.3	88.6	93.6
85°	44.3	44.3	44.3	41.7	41.7
87.5°	25.3	25.3	21.5	17.7	12.7
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)