

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: P558425

Luminaire Tested: **FUSL-12-4-LD4-3STD-50-UNV-82-88-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: P558425
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-82-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC 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

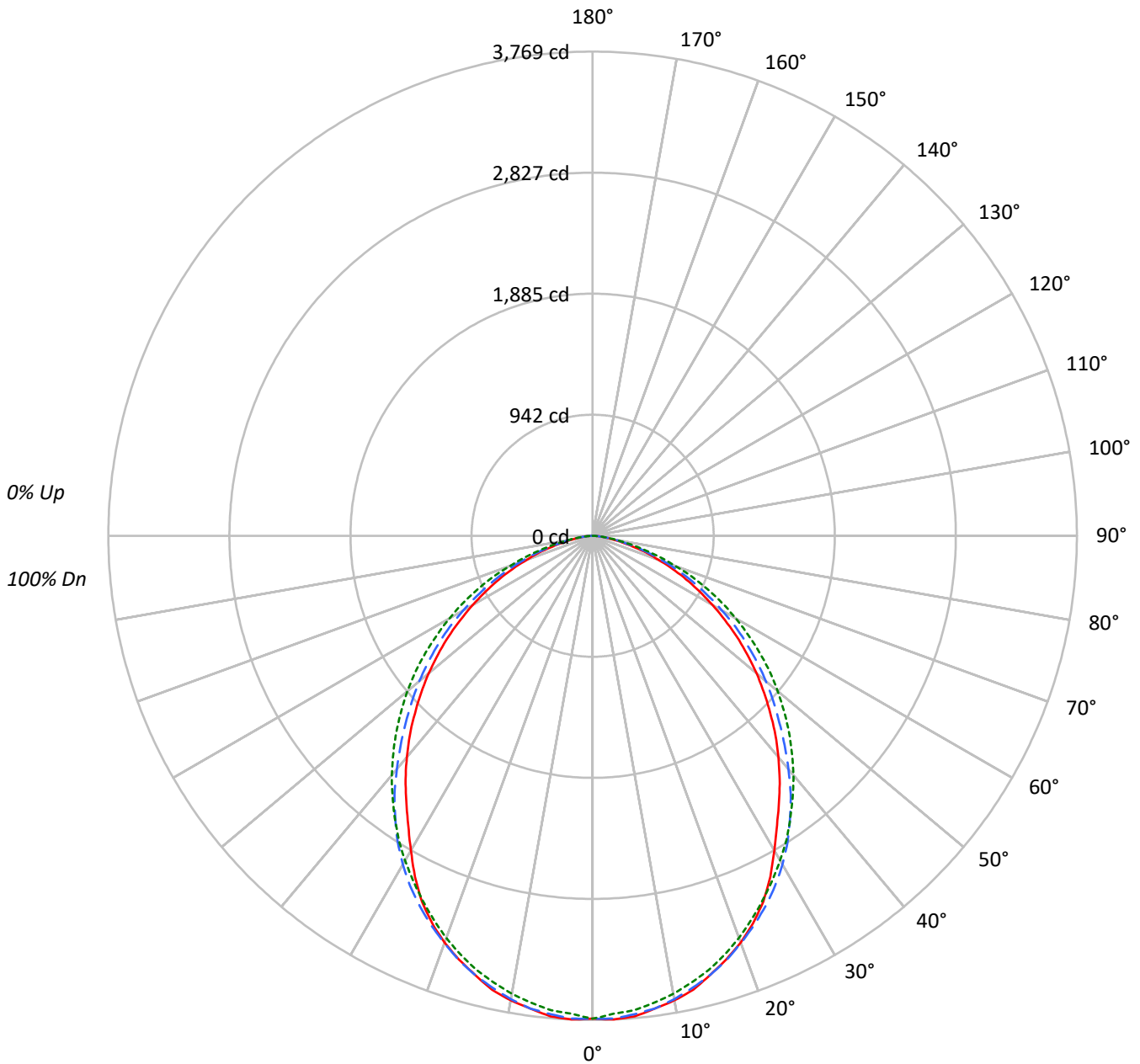
Lumens per Lamp: N/A
Luminaire Lumens: 8692.0 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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									
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°	10116	10116	10116
5°	10142	10099	10014
10°	10035	10007	9893
15°	9857	9857	9744
20°	9648	9661	9537
25°	9330	9446	9296
30°	8786	9181	9069
35°	8302	8800	8815
40°	7899	8325	8543
45°	7447	7821	8222
50°	6971	7370	7872
55°	6430	6857	7446
60°	5790	6257	6925
65°	5112	5563	6299
70°	4260	4738	5352
75°	3348	3784	4189
80°	2394	2664	2954
85°	1559	1559	1473



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.9	4.1
10°-20°	994.3	11.4
20°-30°	1453.0	16.7
30°-40°	1649.3	19.0
40°-50°	1592.1	18.3
50°-60°	1313.4	15.1
60°-70°	874.6	10.1
70°-80°	391.4	4.5
80°-90°	70.0	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°	2801.2	32.2
0°-40°	4450.5	51.2
0°-60°	7356.0	84.6
0°-90°	8692.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8692.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3759	3759	3759	3759	3759	
5°	3755	3753	3739	3719	3707	355
15°	3538	3547	3538	3522	3498	997
25°	3142	3167	3181	3158	3131	1439
35°	2527	2562	2679	2693	2683	1583
45°	1957	1990	2055	2149	2160	1510
55°	1370	1394	1462	1542	1587	1223
65°	803	825	874	936	989	796
75°	322	339	364	381	403	352
85°	50	50	50	48	48	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3759.1	3759.1	3759.1	3759.1	3759.1
2.5°	3769.2	3770.6	3762.0	3738.8	3724.4
5°	3754.7	3753.3	3738.8	3718.6	3707.1
7.5°	3712.9	3715.7	3711.4	3682.5	3666.6
10°	3672.4	3673.9	3662.3	3639.2	3620.4
12.5°	3620.4	3619.0	3603.1	3591.5	3561.2
15°	3538.1	3546.8	3538.1	3522.2	3497.7
17.5°	3458.7	3458.7	3464.5	3437.0	3418.3
20°	3369.2	3373.5	3373.5	3351.8	3330.2
22.5°	3265.2	3278.2	3282.5	3259.4	3233.4
25°	3142.4	3167.0	3181.4	3158.3	3130.9
27.5°	2993.7	3031.2	3074.5	3057.2	3026.9
30°	2827.6	2882.5	2954.7	2940.2	2918.6
32.5°	2670.2	2725.1	2824.7	2818.9	2807.4
35°	2527.2	2561.9	2678.9	2693.3	2683.2
37.5°	2391.5	2423.2	2533.0	2566.2	2557.6
40°	2248.5	2283.2	2369.8	2429.0	2431.9
42.5°	2107.0	2140.2	2211.0	2296.2	2296.2
45°	1956.8	1990.0	2055.0	2148.9	2160.4
47.5°	1809.5	1844.2	1907.7	2001.6	2020.3
50°	1665.1	1696.9	1760.4	1851.4	1880.3
52.5°	1514.9	1549.5	1611.6	1695.4	1737.3
55°	1370.5	1393.6	1461.5	1542.3	1587.1
57.5°	1220.3	1242.0	1318.5	1387.8	1434.0
60°	1075.9	1103.3	1162.5	1233.3	1286.7
62.5°	937.2	966.1	1016.7	1078.8	1139.4
65°	802.9	824.6	873.7	935.8	989.2
67.5°	673.0	691.7	740.8	784.2	840.5
70°	541.5	566.1	602.2	644.1	680.2
72.5°	436.1	446.2	476.6	506.9	544.4
75°	322.0	339.4	363.9	381.2	402.9
77.5°	231.1	241.2	255.6	270.1	290.3
80°	154.5	158.9	171.9	174.7	190.6
82.5°	93.9	96.8	99.6	101.1	106.9
85°	50.5	50.5	50.5	47.7	47.7
87.5°	28.9	28.9	24.6	20.2	14.4
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)