

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: P557073

Luminaire Tested: **FUSL-12-4-LD4-2HI-40-UNV-82-84-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: P557073
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-LD4-2HI-40-UNV-82-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

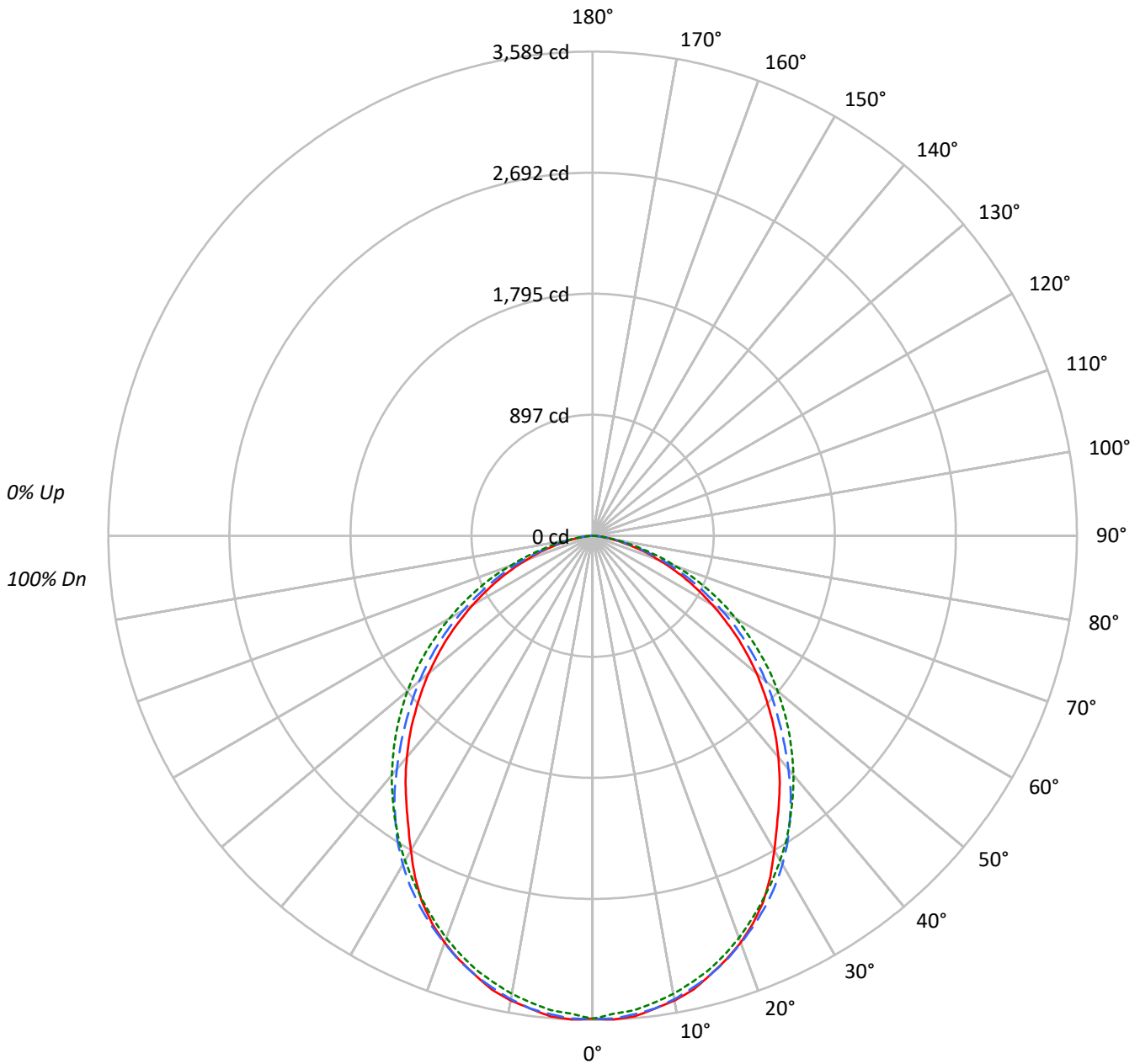
Lumens per Lamp: N/A
Luminaire Lumens: 8277.0 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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°	9633	9633	9633
5°	9658	9617	9536
10°	9556	9530	9421
15°	9386	9386	9279
20°	9188	9199	9081
25°	8885	8995	8852
30°	8367	8743	8636
35°	7906	8380	8394
40°	7522	7927	8135
45°	7091	7447	7829
50°	6638	7018	7496
55°	6123	6529	7090
60°	5514	5958	6595
65°	4869	5298	5998
70°	4057	4511	5096
75°	3189	3603	3989
80°	2280	2535	2813
85°	1485	1485	1402



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	337.0	4.1
10°-20°	946.8	11.4
20°-30°	1383.6	16.7
30°-40°	1570.5	19.0
40°-50°	1516.1	18.3
50°-60°	1250.7	15.1
60°-70°	832.9	10.1
70°-80°	372.7	4.5
80°-90°	66.7	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°	2667.4	32.2
0°-40°	4238.0	51.2
0°-60°	7004.8	84.6
0°-90°	8277.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8277.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3580	3580	3580	3580	3580	
5°	3576	3574	3560	3541	3530	338
15°	3369	3377	3369	3354	3331	950
25°	2992	3016	3030	3008	2981	1370
35°	2407	2440	2551	2565	2555	1508
45°	1863	1895	1957	2046	2057	1438
55°	1305	1327	1392	1469	1511	1165
65°	765	785	832	891	942	758
75°	307	323	346	363	384	335
85°	48	48	48	45	45	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3579.6	3579.6	3579.6	3579.6	3579.6
2.5°	3589.2	3590.6	3582.3	3560.3	3546.6
5°	3575.5	3574.1	3560.3	3541.1	3530.1
7.5°	3535.6	3538.3	3534.2	3506.7	3491.6
10°	3497.1	3498.5	3487.5	3465.4	3447.6
12.5°	3447.6	3446.2	3431.1	3420.1	3391.2
15°	3369.2	3377.4	3369.2	3354.1	3330.7
17.5°	3293.6	3293.6	3299.1	3272.9	3255.0
20°	3208.3	3212.4	3212.4	3191.8	3171.2
22.5°	3109.3	3121.7	3125.8	3103.8	3079.0
25°	2992.4	3015.8	3029.5	3007.5	2981.4
27.5°	2850.7	2886.5	2927.8	2911.3	2882.4
30°	2692.6	2744.9	2813.6	2799.9	2779.2
32.5°	2542.7	2595.0	2689.8	2684.3	2673.3
35°	2406.6	2439.6	2551.0	2564.7	2555.1
37.5°	2277.3	2307.5	2412.1	2443.7	2435.4
40°	2141.2	2174.2	2256.7	2313.0	2315.8
42.5°	2006.4	2038.0	2105.4	2186.5	2186.5
45°	1863.4	1895.0	1956.9	2046.3	2057.3
47.5°	1723.1	1756.1	1816.6	1906.0	1923.9
50°	1585.6	1615.8	1676.3	1763.0	1790.5
52.5°	1442.6	1475.6	1534.7	1614.5	1654.3
55°	1305.0	1327.0	1391.7	1468.7	1511.3
57.5°	1162.0	1182.7	1255.5	1321.5	1365.6
60°	1024.5	1050.6	1107.0	1174.4	1225.3
62.5°	892.5	920.0	968.1	1027.3	1085.0
65°	764.6	785.2	832.0	891.1	942.0
67.5°	640.8	658.7	705.5	746.7	800.4
70°	515.7	539.1	573.4	613.3	647.7
72.5°	415.3	424.9	453.8	482.7	518.4
75°	306.7	323.2	346.5	363.0	383.7
77.5°	220.0	229.7	243.4	257.2	276.4
80°	147.1	151.3	163.6	166.4	181.5
82.5°	89.4	92.1	94.9	96.3	101.8
85°	48.1	48.1	48.1	45.4	45.4
87.5°	27.5	27.5	23.4	19.3	13.8
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)