

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: P557912

Luminaire Tested: **FUSL-12-4-LD4-3HI-50-UNV-82-88-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: P557912
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-50-UNV-82-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

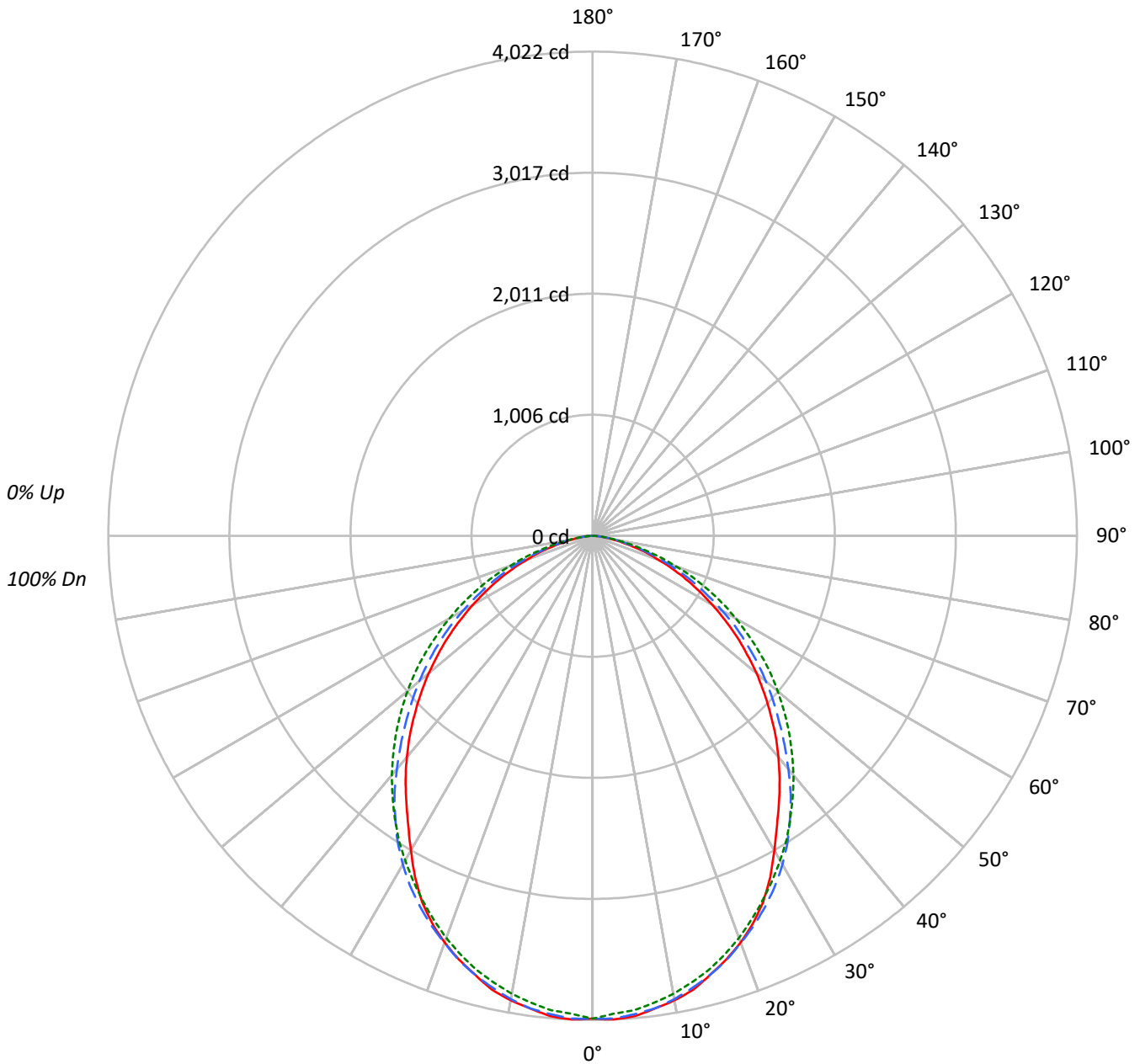
Lumens per Lamp: N/A
Luminaire Lumens: 9275.0 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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									
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°	10794	10794	10794
5°	10823	10777	10685
10°	10708	10679	10556
15°	10518	10518	10398
20°	10295	10309	10176
25°	9956	10080	9920
30°	9376	9797	9677
35°	8859	9390	9406
40°	8428	8883	9116
45°	7946	8345	8773
50°	7438	7864	8400
55°	6861	7317	7945
60°	6178	6676	7389
65°	5456	5936	6721
70°	4547	5056	5711
75°	3572	4037	4470
80°	2555	2842	3152
85°	1664	1664	1572



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	377.7	4.1
10°-20°	1061.0	11.4
20°-30°	1550.4	16.7
30°-40°	1759.9	19.0
40°-50°	1698.9	18.3
50°-60°	1401.5	15.1
60°-70°	933.3	10.1
70°-80°	417.6	4.5
80°-90°	74.7	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°	2989.1	32.2
0°-40°	4749.0	51.2
0°-60°	7849.4	84.6
0°-90°	9275.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9275.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4011	4011	4011	4011	4011	
5°	4007	4005	3990	3968	3956	379
15°	3775	3785	3775	3758	3732	1064
25°	3353	3379	3395	3370	3341	1536
35°	2697	2734	2858	2874	2863	1690
45°	2088	2124	2193	2293	2305	1611
55°	1462	1487	1560	1646	1694	1305
65°	857	880	932	999	1056	850
75°	344	362	388	407	430	376
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°	4011.2	4011.2	4011.2	4011.2	4011.2
2.5°	4022.0	4023.5	4014.3	3989.6	3974.2
5°	4006.6	4005.0	3989.6	3968.1	3955.7
7.5°	3961.9	3965.0	3960.3	3929.5	3912.6
10°	3918.7	3920.3	3908.0	3883.3	3863.3
12.5°	3863.3	3861.7	3844.8	3832.4	3800.1
15°	3775.4	3784.7	3775.4	3758.5	3732.3
17.5°	3690.7	3690.7	3696.8	3667.6	3647.5
20°	3595.1	3599.8	3599.8	3576.6	3553.5
22.5°	3484.2	3498.0	3502.7	3478.0	3450.3
25°	3353.2	3379.4	3394.8	3370.1	3340.9
27.5°	3194.5	3234.5	3280.8	3262.3	3229.9
30°	3017.3	3075.8	3152.9	3137.5	3114.3
32.5°	2849.3	2907.8	3014.2	3008.0	2995.7
35°	2696.7	2733.7	2858.5	2873.9	2863.2
37.5°	2551.9	2585.8	2702.9	2738.3	2729.1
40°	2399.3	2436.3	2528.8	2591.9	2595.0
42.5°	2248.3	2283.7	2359.3	2450.2	2450.2
45°	2088.0	2123.5	2192.8	2293.0	2305.3
47.5°	1930.9	1967.8	2035.6	2135.8	2155.8
50°	1776.8	1810.7	1878.5	1975.5	2006.4
52.5°	1616.5	1653.5	1719.7	1809.1	1853.8
55°	1462.4	1487.1	1559.5	1645.8	1693.5
57.5°	1302.1	1325.3	1406.9	1480.9	1530.2
60°	1148.0	1177.3	1240.5	1316.0	1373.0
62.5°	1000.1	1030.9	1084.9	1151.1	1215.8
65°	856.8	879.9	932.3	998.6	1055.6
67.5°	718.1	738.1	790.5	836.8	896.9
70°	577.9	604.1	642.6	687.3	725.8
72.5°	465.4	476.2	508.5	540.9	581.0
75°	343.6	362.1	388.3	406.8	429.9
77.5°	246.6	257.3	272.8	288.2	309.7
80°	164.9	169.5	183.4	186.5	203.4
82.5°	100.2	103.2	106.3	107.9	114.0
85°	53.9	53.9	53.9	50.9	50.9
87.5°	30.8	30.8	26.2	21.6	15.4
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)