

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: P557063

Luminaire Tested: **FUSL-12-4-LD4-2HI-40-UNV-81-87-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: P557063
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-81-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

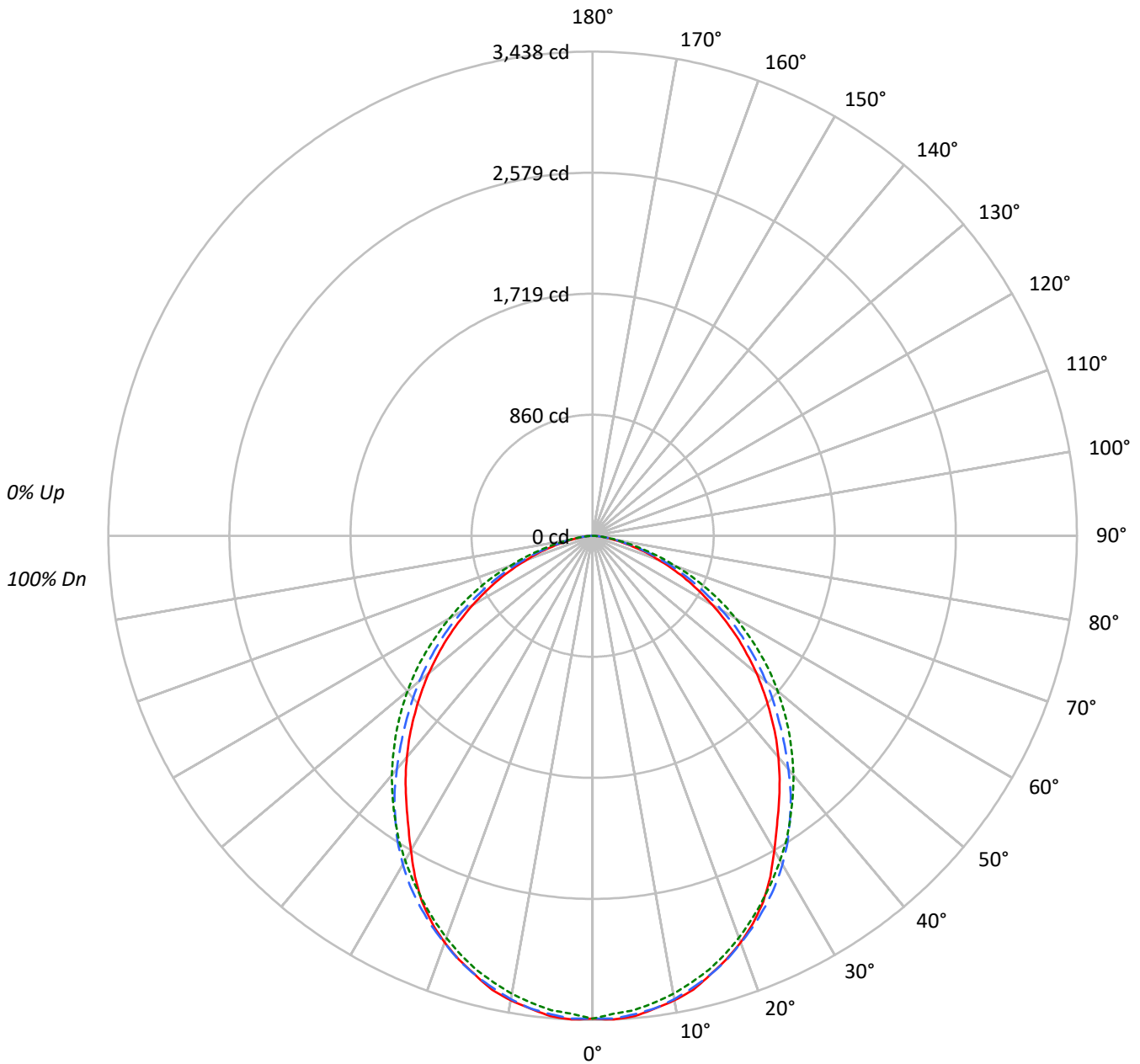
Lumens per Lamp: N/A
Luminaire Lumens: 7928.0 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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					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	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°	9227	9227	9227
5°	9251	9212	9133
10°	9153	9128	9023
15°	8990	8990	8888
20°	8800	8812	8698
25°	8510	8616	8479
30°	8014	8374	8272
35°	7572	8027	8040
40°	7204	7593	7792
45°	6792	7133	7499
50°	6358	6722	7180
55°	5864	6254	6792
60°	5281	5706	6316
65°	4663	5074	5745
70°	3886	4322	4881
75°	3054	3451	3821
80°	2183	2428	2695
85°	1423	1423	1343



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.8	4.1
10°-20°	906.9	11.4
20°-30°	1325.3	16.7
30°-40°	1504.3	19.0
40°-50°	1452.2	18.3
50°-60°	1197.9	15.1
60°-70°	797.7	10.1
70°-80°	357.0	4.5
80°-90°	63.9	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°	2555.0	32.2
0°-40°	4059.3	51.2
0°-60°	6709.4	84.6
0°-90°	7928.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7928.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3429	3429	3429	3429	3429	
5°	3425	3423	3410	3392	3381	324
15°	3227	3235	3227	3213	3190	910
25°	2866	2889	2902	2881	2856	1313
35°	2305	2337	2443	2457	2447	1444
45°	1785	1815	1874	1960	1970	1377
55°	1250	1271	1333	1407	1448	1116
65°	732	752	797	854	902	726
75°	294	310	332	348	368	321
85°	46	46	46	44	44	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3428.7	3428.7	3428.7	3428.7	3428.7
2.5°	3437.9	3439.2	3431.3	3410.2	3397.0
5°	3424.7	3423.4	3410.2	3391.8	3381.2
7.5°	3386.5	3389.1	3385.2	3358.8	3344.4
10°	3349.6	3350.9	3340.4	3319.3	3302.2
12.5°	3302.2	3300.9	3286.4	3275.9	3248.2
15°	3227.1	3235.0	3227.1	3212.6	3190.2
17.5°	3154.7	3154.7	3159.9	3134.9	3117.8
20°	3073.0	3077.0	3077.0	3057.2	3037.4
22.5°	2978.2	2990.0	2994.0	2972.9	2949.2
25°	2866.2	2888.6	2901.8	2880.7	2855.7
27.5°	2730.5	2764.8	2804.3	2788.5	2760.8
30°	2579.1	2629.1	2695.0	2681.8	2662.0
32.5°	2435.5	2485.5	2576.4	2571.2	2560.6
35°	2305.1	2336.7	2443.4	2456.6	2447.3
37.5°	2181.3	2210.3	2310.4	2340.7	2332.8
40°	2050.9	2082.5	2161.5	2215.5	2218.2
42.5°	1921.8	1952.1	2016.6	2094.3	2094.3
45°	1784.8	1815.1	1874.4	1960.0	1970.5
47.5°	1650.4	1682.1	1740.0	1825.6	1842.8
50°	1518.7	1547.7	1605.7	1688.6	1715.0
52.5°	1381.7	1413.3	1470.0	1546.4	1584.6
55°	1250.0	1271.1	1333.0	1406.8	1447.6
57.5°	1113.0	1132.8	1202.6	1265.8	1308.0
60°	981.3	1006.3	1060.3	1124.9	1173.6
62.5°	854.9	881.2	927.3	983.9	1039.3
65°	732.4	752.1	796.9	853.5	902.3
67.5°	613.8	630.9	675.7	715.2	766.6
70°	493.9	516.3	549.3	587.5	620.4
72.5°	397.8	407.0	434.7	462.3	496.6
75°	293.7	309.5	331.9	347.7	367.5
77.5°	210.8	220.0	233.1	246.3	264.8
80°	140.9	144.9	156.7	159.4	173.9
82.5°	85.6	88.3	90.9	92.2	97.5
85°	46.1	46.1	46.1	43.5	43.5
87.5°	26.3	26.3	22.4	18.4	13.2
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)