

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: P557980

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-82-96-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: P557980
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-LD4-3LO-30-UNV-82-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

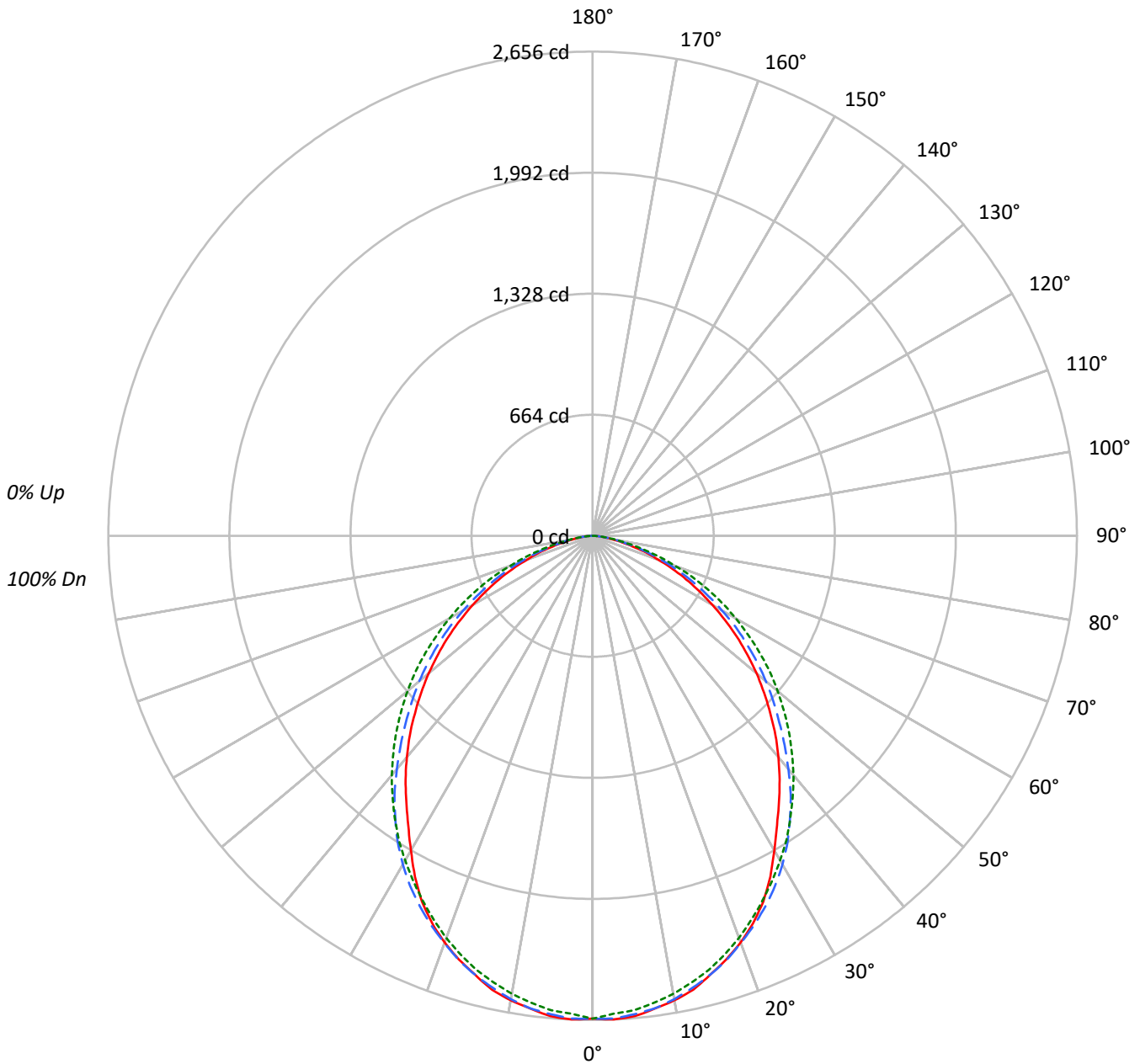
Lumens per Lamp: N/A
Luminaire Lumens: 6125.0 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
Input Voltage (V): NR
Input Current (A_{in}): 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°	7128	7128	7128
5°	7147	7117	7056
10°	7071	7052	6971
15°	6946	6946	6866
20°	6799	6808	6720
25°	6575	6657	6551
30°	6191	6470	6390
35°	5850	6201	6211
40°	5566	5866	6020
45°	5248	5511	5794
50°	4912	5193	5547
55°	4531	4831	5247
60°	4080	4409	4880
65°	3603	3920	4439
70°	3002	3339	3771
75°	2359	2666	2952
80°	1688	1877	2081
85°	1099	1099	1037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.4	4.1
10°-20°	700.6	11.4
20°-30°	1023.9	16.7
30°-40°	1162.2	19.0
40°-50°	1121.9	18.3
50°-60°	925.5	15.1
60°-70°	616.3	10.1
70°-80°	275.8	4.5
80°-90°	49.3	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°	1973.9	32.2
0°-40°	3136.1	51.2
0°-60°	5183.5	84.6
0°-90°	6125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6125.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2649	2649	2649	2649	2649	
5°	2646	2645	2635	2620	2612	250
15°	2493	2499	2493	2482	2465	703
25°	2214	2232	2242	2226	2206	1014
35°	1781	1805	1888	1898	1891	1116
45°	1379	1402	1448	1514	1522	1064
55°	966	982	1030	1087	1118	862
65°	566	581	616	659	697	561
75°	227	239	256	269	284	248
85°	36	36	36	34	34	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2648.9	2648.9	2648.9	2648.9	2648.9
2.5°	2656.0	2657.0	2650.9	2634.7	2624.5
5°	2645.9	2644.8	2634.7	2620.4	2612.3
7.5°	2616.3	2618.4	2615.3	2595.0	2583.8
10°	2587.8	2588.9	2580.7	2564.4	2551.2
12.5°	2551.2	2550.2	2539.0	2530.9	2509.5
15°	2493.2	2499.3	2493.2	2482.0	2464.7
17.5°	2437.2	2437.2	2441.3	2422.0	2408.7
20°	2374.1	2377.2	2377.2	2361.9	2346.7
22.5°	2300.9	2310.0	2313.1	2296.8	2278.5
25°	2214.4	2231.7	2241.9	2225.6	2206.2
27.5°	2109.6	2136.0	2166.5	2154.3	2133.0
30°	1992.5	2031.2	2082.1	2071.9	2056.6
32.5°	1881.6	1920.3	1990.5	1986.4	1978.3
35°	1780.9	1805.3	1887.7	1897.9	1890.8
37.5°	1685.2	1707.6	1784.9	1808.3	1802.2
40°	1584.5	1608.9	1669.9	1711.7	1713.7
42.5°	1484.7	1508.1	1558.0	1618.0	1618.0
45°	1378.9	1402.3	1448.1	1514.2	1522.4
47.5°	1275.1	1299.5	1344.3	1410.4	1423.7
50°	1173.3	1195.7	1240.5	1304.6	1325.0
52.5°	1067.5	1091.9	1135.7	1194.7	1224.2
55°	965.7	982.0	1029.8	1086.8	1118.4
57.5°	859.9	875.2	929.1	977.9	1010.5
60°	758.1	777.5	819.2	869.1	906.7
62.5°	660.4	680.8	716.4	760.2	802.9
65°	565.8	581.1	615.7	659.4	697.1
67.5°	474.2	487.4	522.0	552.6	592.3
70°	381.6	398.9	424.4	453.9	479.3
72.5°	307.3	314.4	335.8	357.2	383.6
75°	226.9	239.1	256.4	268.7	283.9
77.5°	162.8	169.9	180.1	190.3	204.5
80°	108.9	111.9	121.1	123.1	134.3
82.5°	66.1	68.2	70.2	71.2	75.3
85°	35.6	35.6	35.6	33.6	33.6
87.5°	20.4	20.4	17.3	14.2	10.2
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)