

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: P557468

Luminaire Tested: **FUSL-12-4-LD4-2STD-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: P557468
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-LD4-2STD-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 LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

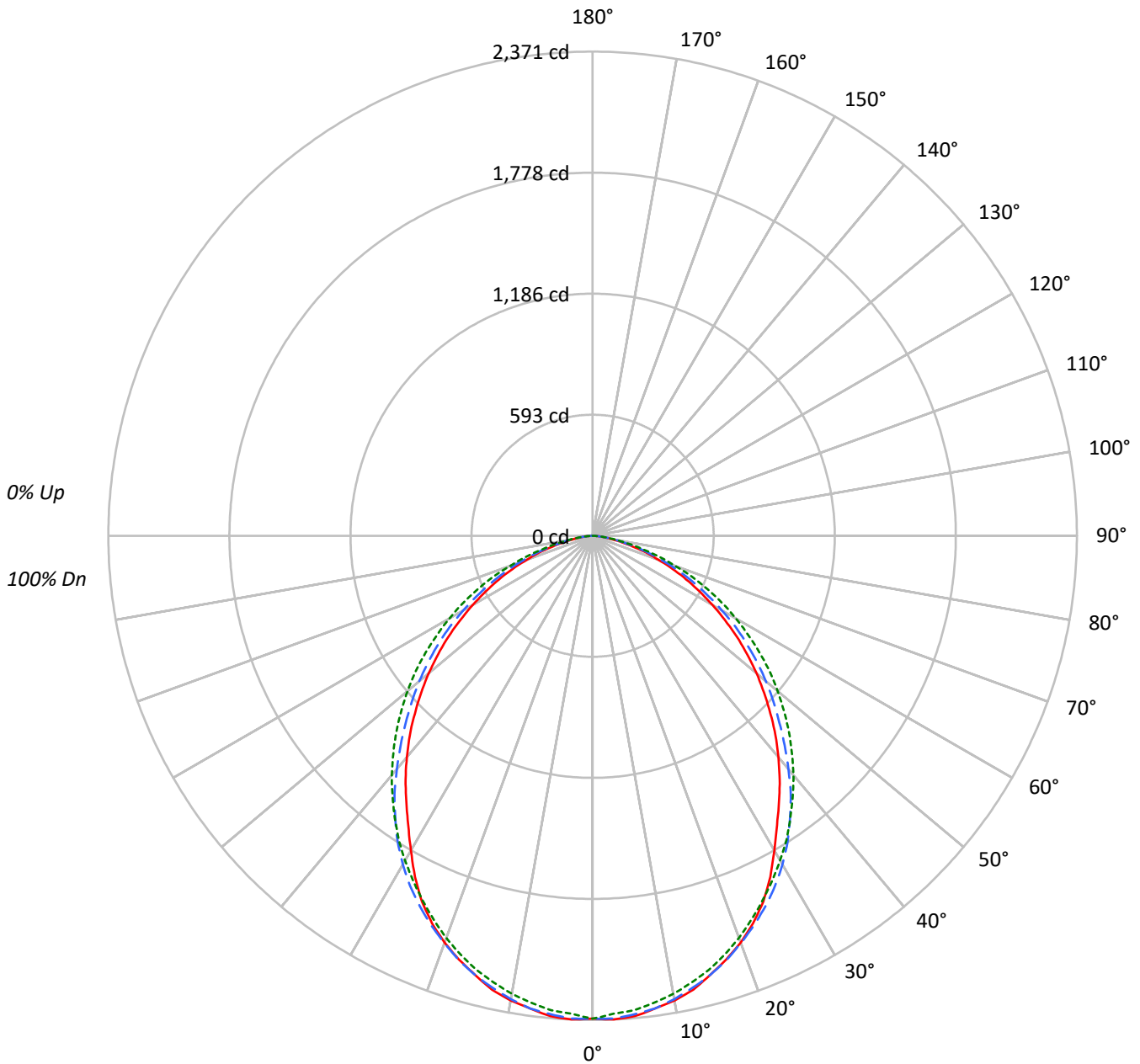
Lumens per Lamp: N/A
Luminaire Lumens: 5468.0 lumens
Efficiency: N/A
Efficacy: 82.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6364	6364	6364
5°	6380	6354	6300
10°	6313	6295	6224
15°	6201	6201	6130
20°	6070	6077	5999
25°	5869	5942	5848
30°	5527	5775	5705
35°	5223	5536	5545
40°	4969	5237	5374
45°	4685	4920	5172
50°	4385	4636	4952
55°	4045	4313	4684
60°	3643	3936	4357
65°	3216	3500	3962
70°	2681	2980	3367
75°	2106	2380	2636
80°	1506	1675	1858
85°	982	982	926



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.7	4.1
10°-20°	625.5	11.4
20°-30°	914.0	16.7
30°-40°	1037.5	19.0
40°-50°	1001.6	18.3
50°-60°	826.2	15.1
60°-70°	550.2	10.1
70°-80°	246.2	4.5
80°-90°	44.1	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°	1762.2	32.2
0°-40°	2799.7	51.2
0°-60°	4627.5	84.6
0°-90°	5468.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5468.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2365	2365	2365	2365	2365	
5°	2362	2361	2352	2339	2332	224
15°	2226	2231	2226	2216	2200	627
25°	1977	1992	2001	1987	1970	905
35°	1590	1612	1685	1694	1688	996
45°	1231	1252	1293	1352	1359	950
55°	862	877	919	970	998	769
65°	505	519	550	589	622	501
75°	203	214	229	240	254	222
85°	32	32	32	30	30	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2364.8	2364.8	2364.8	2364.8	2364.8
2.5°	2371.1	2372.0	2366.6	2352.1	2343.0
5°	2362.0	2361.1	2352.1	2339.3	2332.1
7.5°	2335.7	2337.5	2334.8	2316.6	2306.6
10°	2310.3	2311.2	2303.9	2289.4	2277.6
12.5°	2277.6	2276.6	2266.7	2259.4	2240.3
15°	2225.8	2231.2	2225.8	2215.8	2200.3
17.5°	2175.8	2175.8	2179.4	2162.2	2150.4
20°	2119.5	2122.2	2122.2	2108.6	2095.0
22.5°	2054.1	2062.2	2065.0	2050.4	2034.1
25°	1976.8	1992.3	2001.4	1986.8	1969.6
27.5°	1883.3	1906.9	1934.2	1923.2	1904.2
30°	1778.8	1813.3	1858.7	1849.7	1836.0
32.5°	1679.8	1714.3	1777.0	1773.3	1766.1
35°	1589.8	1611.6	1685.2	1694.3	1688.0
37.5°	1504.4	1524.4	1593.5	1614.4	1608.9
40°	1414.5	1436.3	1490.8	1528.1	1529.9
42.5°	1325.5	1346.4	1390.9	1444.5	1444.5
45°	1231.0	1251.9	1292.8	1351.8	1359.1
47.5°	1138.3	1160.1	1200.1	1259.2	1271.0
50°	1047.5	1067.5	1107.4	1164.7	1182.8
52.5°	953.0	974.8	1013.9	1066.6	1092.9
55°	862.1	876.7	919.4	970.3	998.4
57.5°	767.7	781.3	829.4	873.0	902.1
60°	676.8	694.1	731.3	775.8	809.5
62.5°	589.6	607.8	639.6	678.6	716.8
65°	505.1	518.7	549.6	588.7	622.3
67.5°	423.4	435.2	466.0	493.3	528.7
70°	340.7	356.1	378.8	405.2	427.9
72.5°	274.4	280.7	299.8	318.9	342.5
75°	202.6	213.5	228.9	239.8	253.5
77.5°	145.4	151.7	160.8	169.9	182.6
80°	97.2	99.9	108.1	109.9	119.9
82.5°	59.1	60.9	62.7	63.6	67.2
85°	31.8	31.8	31.8	30.0	30.0
87.5°	18.2	18.2	15.4	12.7	9.1
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)