

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: P557813

Luminaire Tested: **FUSL-12-4-LD4-3HI-40-UNV-80-86-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: P557813
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-40-UNV-80-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

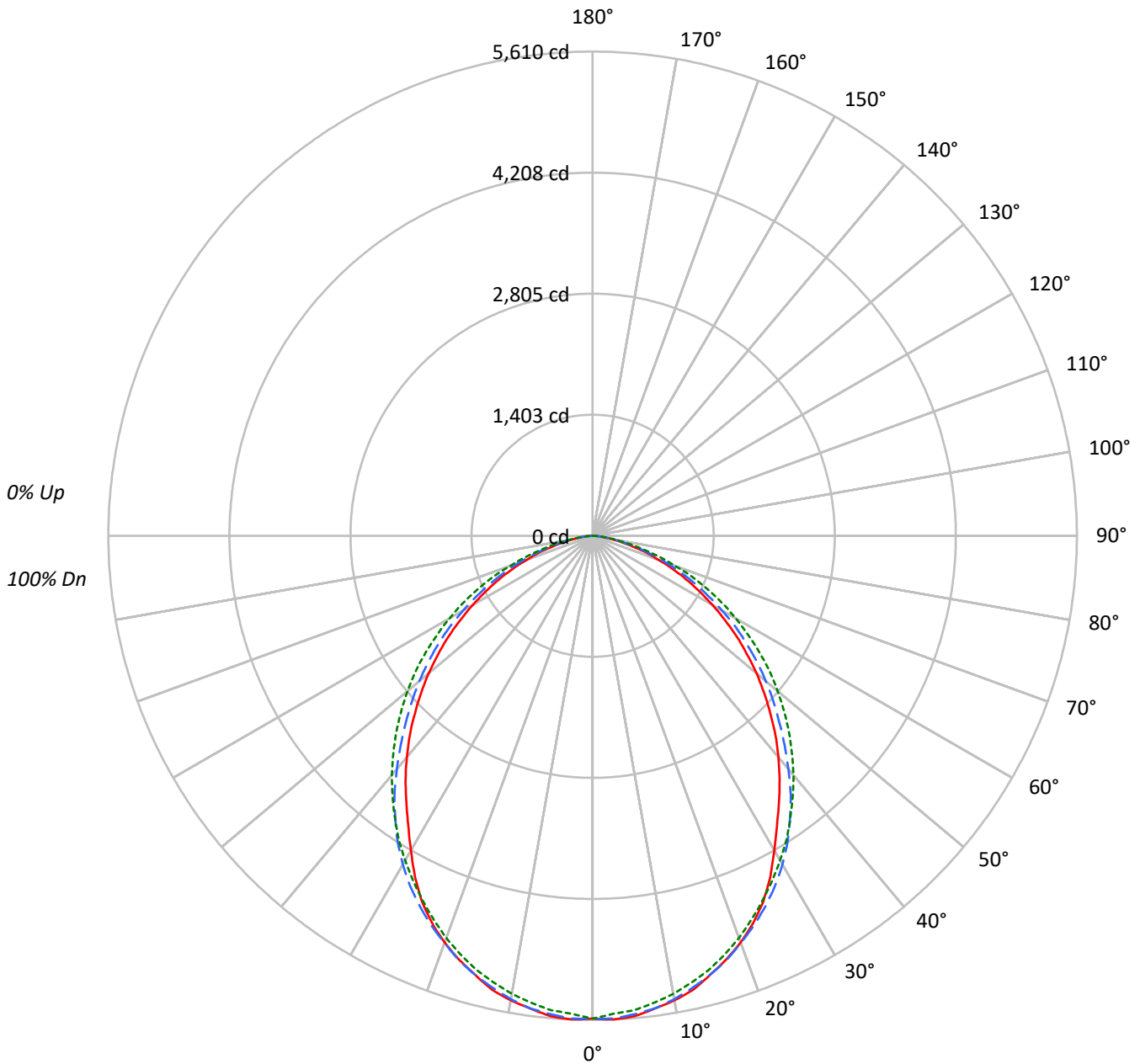
Lumens per Lamp: N/A
Luminaire Lumens: 12937.0 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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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CATALOG NUMBER: FUSL-12-4-LD4-3HI-40-UNV-80-86-EDD

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°	15056	15056	15056
5°	15096	15032	14904
10°	14936	14895	14724
15°	14671	14671	14503
20°	14360	14379	14194
25°	13887	14060	13836
30°	13077	13665	13498
35°	12357	13098	13119
40°	11756	12390	12715
45°	11084	11640	12237
50°	10375	10969	11716
55°	9570	10205	11082
60°	8618	9312	10307
65°	7610	8280	9375
70°	6342	7052	7965
75°	4983	5632	6235
80°	3564	3964	4396
85°	2322	2322	2189



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	526.8	4.1
10°-20°	1479.9	11.4
20°-30°	2162.6	16.7
30°-40°	2454.8	19.0
40°-50°	2369.7	18.3
50°-60°	1954.8	15.1
60°-70°	1301.8	10.1
70°-80°	582.5	4.5
80°-90°	104.2	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°	4169.2	32.2
0°-40°	6624.0	51.2
0°-60°	10948.5	84.6
0°-90°	12937.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12937.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5595	5595	5595	5595	5595	
5°	5588	5586	5565	5535	5518	529
15°	5266	5279	5266	5242	5206	1485
25°	4677	4714	4735	4701	4660	2142
35°	3762	3813	3987	4009	3994	2357
45°	2912	2962	3059	3198	3216	2247
55°	2040	2074	2175	2296	2362	1821
65°	1195	1227	1300	1393	1472	1185
75°	479	505	542	567	600	524
85°	75	75	75	71	71	101
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5594.9	5594.9	5594.9	5594.9	5594.9
2.5°	5610.0	5612.1	5599.2	5564.8	5543.3
5°	5588.5	5586.3	5564.8	5534.7	5517.5
7.5°	5526.1	5530.4	5524.0	5481.0	5457.4
10°	5466.0	5468.1	5450.9	5416.5	5388.6
12.5°	5388.6	5386.4	5362.8	5345.6	5300.4
15°	5266.1	5279.0	5266.1	5242.4	5205.9
17.5°	5147.8	5147.8	5156.4	5115.6	5087.7
20°	5014.6	5021.0	5021.0	4988.8	4956.5
22.5°	4859.8	4879.2	4885.6	4851.2	4812.5
25°	4677.1	4713.7	4735.2	4700.8	4659.9
27.5°	4455.7	4511.6	4576.1	4550.3	4505.2
30°	4208.5	4290.2	4397.7	4376.2	4344.0
32.5°	3974.3	4055.9	4204.2	4195.7	4178.5
35°	3761.5	3813.1	3987.2	4008.7	3993.6
37.5°	3559.4	3606.7	3770.1	3819.5	3806.6
40°	3346.6	3398.2	3527.2	3615.3	3619.6
42.5°	3136.0	3185.4	3290.7	3417.6	3417.6
45°	2912.5	2961.9	3058.6	3198.3	3215.5
47.5°	2693.2	2744.8	2839.4	2979.1	3007.0
50°	2478.3	2525.6	2620.1	2755.5	2798.5
52.5°	2254.7	2306.3	2398.7	2523.4	2585.7
55°	2039.8	2074.2	2175.2	2295.6	2362.2
57.5°	1816.3	1848.5	1962.4	2065.6	2134.4
60°	1601.3	1642.2	1730.3	1835.6	1915.1
62.5°	1395.0	1438.0	1513.2	1605.6	1695.9
65°	1195.1	1227.3	1300.4	1392.8	1472.3
67.5°	1001.6	1029.6	1102.6	1167.1	1251.0
70°	806.0	842.6	896.3	958.6	1012.4
72.5°	649.1	664.2	709.3	754.4	810.3
75°	479.3	505.1	541.7	567.4	599.7
77.5°	343.9	359.0	380.4	401.9	432.0
80°	230.0	236.4	255.8	260.1	283.7
82.5°	139.7	144.0	148.3	150.5	159.1
85°	75.2	75.2	75.2	70.9	70.9
87.5°	43.0	43.0	36.5	30.1	21.5
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)