

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: P557713

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-82-84-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: P557713
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-30-UNV-82-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

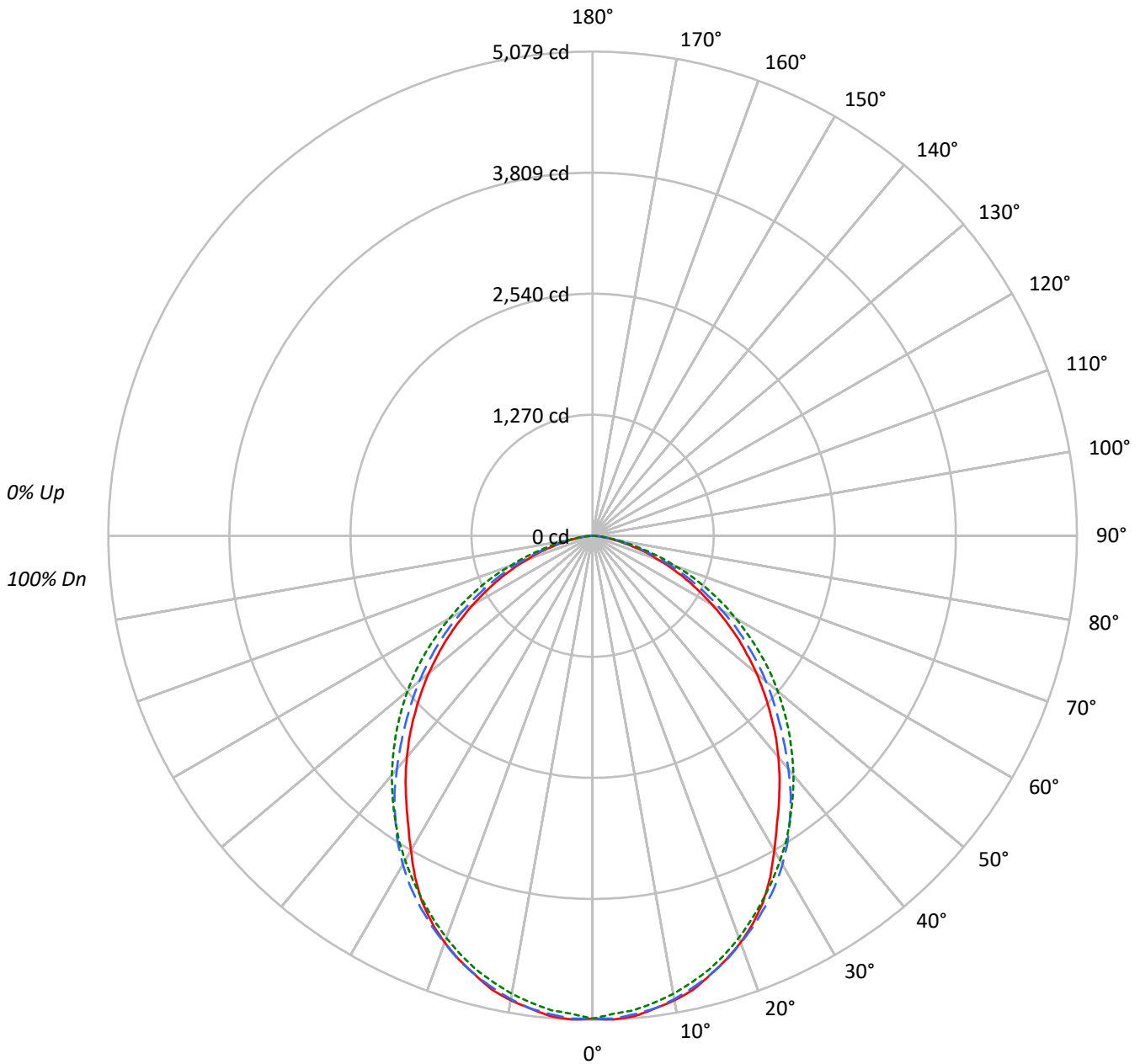
Lumens per Lamp: N/A
Luminaire Lumens: 11712.0 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P557713

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-82-84-EDD

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°	13630	13630	13630
5°	13666	13609	13493
10°	13521	13484	13330
15°	13282	13282	13130
20°	13000	13017	12850
25°	12572	12728	12526
30°	11839	12371	12220
35°	11187	11858	11877
40°	10643	11217	11511
45°	10034	10538	11078
50°	9393	9930	10606
55°	8663	9239	10033
60°	7802	8430	9331
65°	6889	7496	8487
70°	5741	6384	7211
75°	4511	5099	5645
80°	3226	3589	3981
85°	2103	2103	1982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	476.9	4.1
10°-20°	1339.7	11.4
20°-30°	1957.8	16.7
30°-40°	2222.3	19.0
40°-50°	2145.3	18.3
50°-60°	1769.7	15.1
60°-70°	1178.5	10.1
70°-80°	527.4	4.5
80°-90°	94.3	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°	3774.4	32.2
0°-40°	5996.8	51.2
0°-60°	9911.8	84.6
0°-90°	11712.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11712.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5065	5065	5065	5065	5065	
5°	5059	5057	5038	5011	4995	479
15°	4767	4779	4767	4746	4713	1344
25°	4234	4267	4287	4256	4219	1939
35°	3405	3452	3610	3629	3616	2134
45°	2637	2681	2769	2896	2911	2034
55°	1847	1878	1969	2078	2138	1648
65°	1082	1111	1177	1261	1333	1073
75°	434	457	490	514	543	474
85°	68	68	68	64	64	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5065.1	5065.1	5065.1	5065.1	5065.1
2.5°	5078.8	5080.7	5069.0	5037.9	5018.4
5°	5059.3	5057.4	5037.9	5010.7	4995.1
7.5°	5002.9	5006.8	5000.9	4962.0	4940.6
10°	4948.4	4950.3	4934.8	4903.6	4878.3
12.5°	4878.3	4876.4	4855.0	4839.4	4798.6
15°	4767.4	4779.1	4767.4	4746.0	4712.9
17.5°	4660.4	4660.4	4668.2	4631.2	4605.9
20°	4539.7	4545.6	4545.6	4516.4	4487.2
22.5°	4399.6	4417.2	4423.0	4391.9	4356.8
25°	4234.2	4267.3	4286.8	4255.6	4218.7
27.5°	4033.8	4084.4	4142.8	4119.4	4078.6
30°	3810.0	3884.0	3981.3	3961.8	3932.6
32.5°	3597.9	3671.9	3806.2	3798.4	3782.8
35°	3405.3	3452.0	3609.6	3629.1	3615.5
37.5°	3222.4	3265.2	3413.1	3457.8	3446.2
40°	3029.7	3076.4	3193.2	3273.0	3276.9
42.5°	2839.0	2883.8	2979.1	3094.0	3094.0
45°	2636.7	2681.4	2769.0	2895.5	2911.0
47.5°	2438.2	2484.9	2570.5	2697.0	2722.3
50°	2243.6	2286.4	2372.0	2494.6	2533.5
52.5°	2041.2	2087.9	2171.6	2284.5	2340.9
55°	1846.6	1877.8	1969.2	2078.2	2138.5
57.5°	1644.3	1673.5	1776.6	1870.0	1932.3
60°	1449.7	1486.7	1566.4	1661.8	1733.8
62.5°	1262.9	1301.8	1369.9	1453.6	1535.3
65°	1081.9	1111.1	1177.3	1260.9	1332.9
67.5°	906.8	932.1	998.2	1056.6	1132.5
70°	729.7	762.8	811.4	867.9	916.5
72.5°	587.7	601.3	642.1	683.0	733.6
75°	433.9	457.3	490.4	513.7	542.9
77.5°	311.3	325.0	344.4	363.9	391.1
80°	208.2	214.0	231.6	235.5	256.9
82.5°	126.5	130.4	134.3	136.2	144.0
85°	68.1	68.1	68.1	64.2	64.2
87.5°	38.9	38.9	33.1	27.2	19.5
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)