

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: P557884

Luminaire Tested: **FUSL-12-4-LD4-3HI-50-UNV-80-96-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: P557884
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-50-UNV-80-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

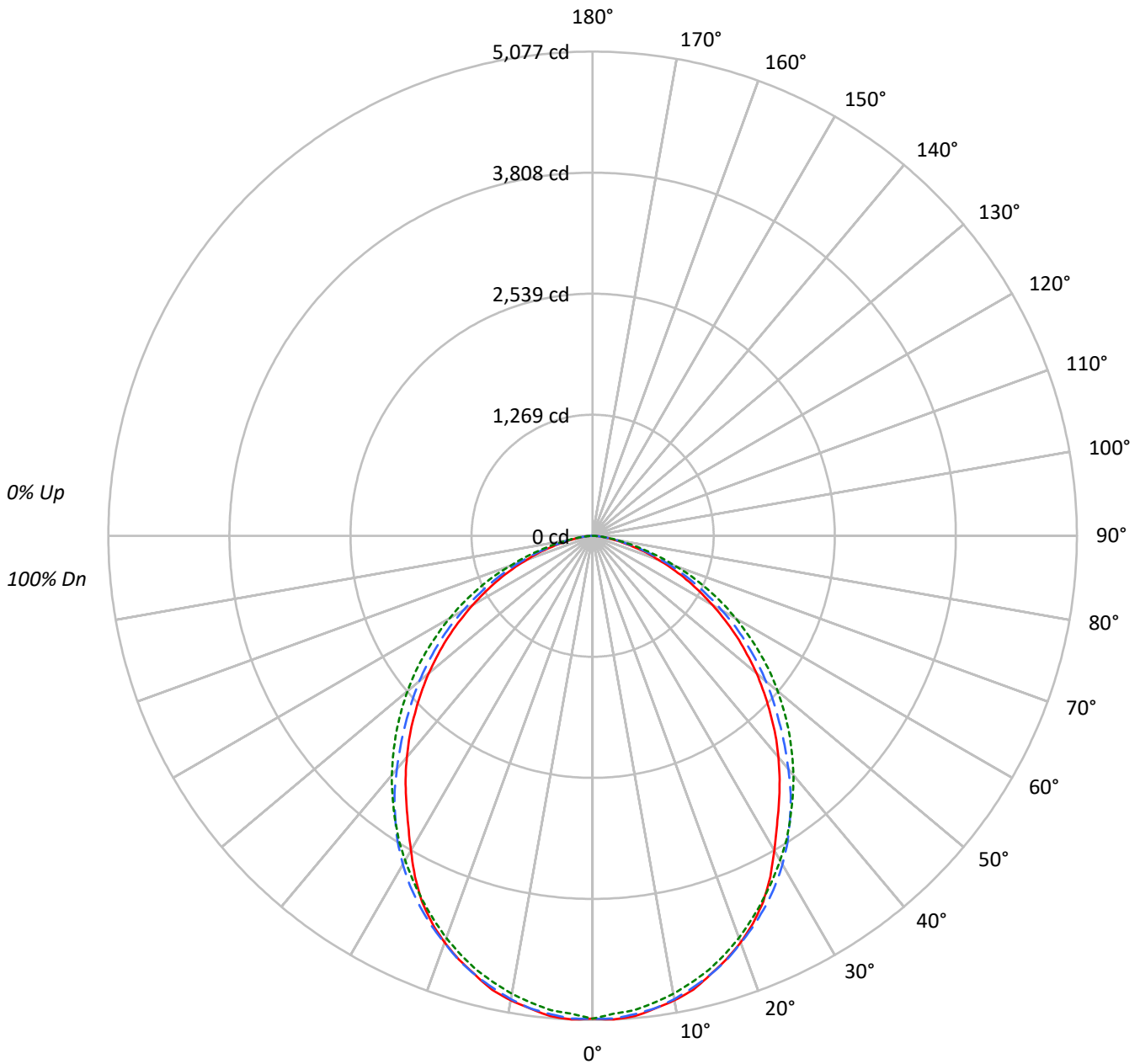
Lumens per Lamp: N/A
Luminaire Lumens: 11708.0 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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					
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	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°	13626	13626	13626
5°	13662	13604	13488
10°	13517	13480	13326
15°	13277	13277	13125
20°	12996	13013	12846
25°	12568	12724	12522
30°	11835	12367	12216
35°	11183	11854	11873
40°	10639	11213	11507
45°	10031	10534	11074
50°	9389	9927	10603
55°	8661	9236	10030
60°	7800	8428	9328
65°	6886	7494	8485
70°	5740	6382	7209
75°	4510	5097	5643
80°	3225	3587	3980
85°	2103	2103	1982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	476.7	4.1
10°-20°	1339.3	11.4
20°-30°	1957.1	16.7
30°-40°	2221.6	19.0
40°-50°	2144.6	18.3
50°-60°	1769.1	15.1
60°-70°	1178.1	10.1
70°-80°	527.2	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°	3773.2	32.2
0°-40°	5994.7	51.2
0°-60°	9908.4	84.6
0°-90°	11708.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11708.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5063	5063	5063	5063	5063	
5°	5058	5056	5036	5009	4993	479
15°	4766	4778	4766	4744	4711	1344
25°	4233	4266	4285	4254	4217	1938
35°	3404	3451	3608	3628	3614	2133
45°	2636	2680	2768	2894	2910	2034
55°	1846	1877	1969	2078	2138	1648
65°	1082	1111	1177	1260	1332	1072
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°	5063.4	5063.4	5063.4	5063.4	5063.4
2.5°	5077.0	5079.0	5067.3	5036.2	5016.7
5°	5057.6	5055.6	5036.2	5008.9	4993.4
7.5°	5001.2	5005.1	4999.2	4960.3	4938.9
10°	4946.7	4948.6	4933.1	4902.0	4876.7
12.5°	4876.7	4874.7	4853.3	4837.8	4796.9
15°	4765.8	4777.5	4765.8	4744.4	4711.3
17.5°	4658.8	4658.8	4666.6	4629.6	4604.3
20°	4538.2	4544.0	4544.0	4514.9	4485.7
22.5°	4398.1	4415.6	4421.5	4390.4	4355.3
25°	4232.8	4265.9	4285.3	4254.2	4217.2
27.5°	4032.4	4083.0	4141.4	4118.0	4077.2
30°	3808.7	3882.7	3979.9	3960.5	3931.3
32.5°	3596.7	3670.6	3804.9	3797.1	3781.5
35°	3404.1	3450.8	3608.4	3627.8	3614.2
37.5°	3221.3	3264.1	3411.9	3456.7	3445.0
40°	3028.7	3075.4	3192.1	3271.9	3275.8
42.5°	2838.1	2882.8	2978.1	3092.9	3092.9
45°	2635.8	2680.5	2768.0	2894.5	2910.0
47.5°	2437.4	2484.0	2569.6	2696.1	2721.4
50°	2242.8	2285.6	2371.2	2493.8	2532.7
52.5°	2040.5	2087.2	2170.9	2283.7	2340.1
55°	1846.0	1877.1	1968.6	2077.5	2137.8
57.5°	1643.7	1672.9	1776.0	1869.4	1931.6
60°	1449.2	1486.1	1565.9	1661.2	1733.2
62.5°	1262.4	1301.4	1369.4	1453.1	1534.8
65°	1081.5	1110.7	1176.9	1260.5	1332.5
67.5°	906.5	931.8	997.9	1056.3	1132.1
70°	729.5	762.5	811.2	867.6	916.2
72.5°	587.5	601.1	641.9	682.8	733.3
75°	433.8	457.1	490.2	513.5	542.7
77.5°	311.2	324.9	344.3	363.8	391.0
80°	208.1	214.0	231.5	235.4	256.8
82.5°	126.4	130.3	134.2	136.2	143.9
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)