

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: P557795

Luminaire Tested: **FUSL-12-4-LD4-3HI-35-UNV-93-85-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: P557795
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-35-UNV-93-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

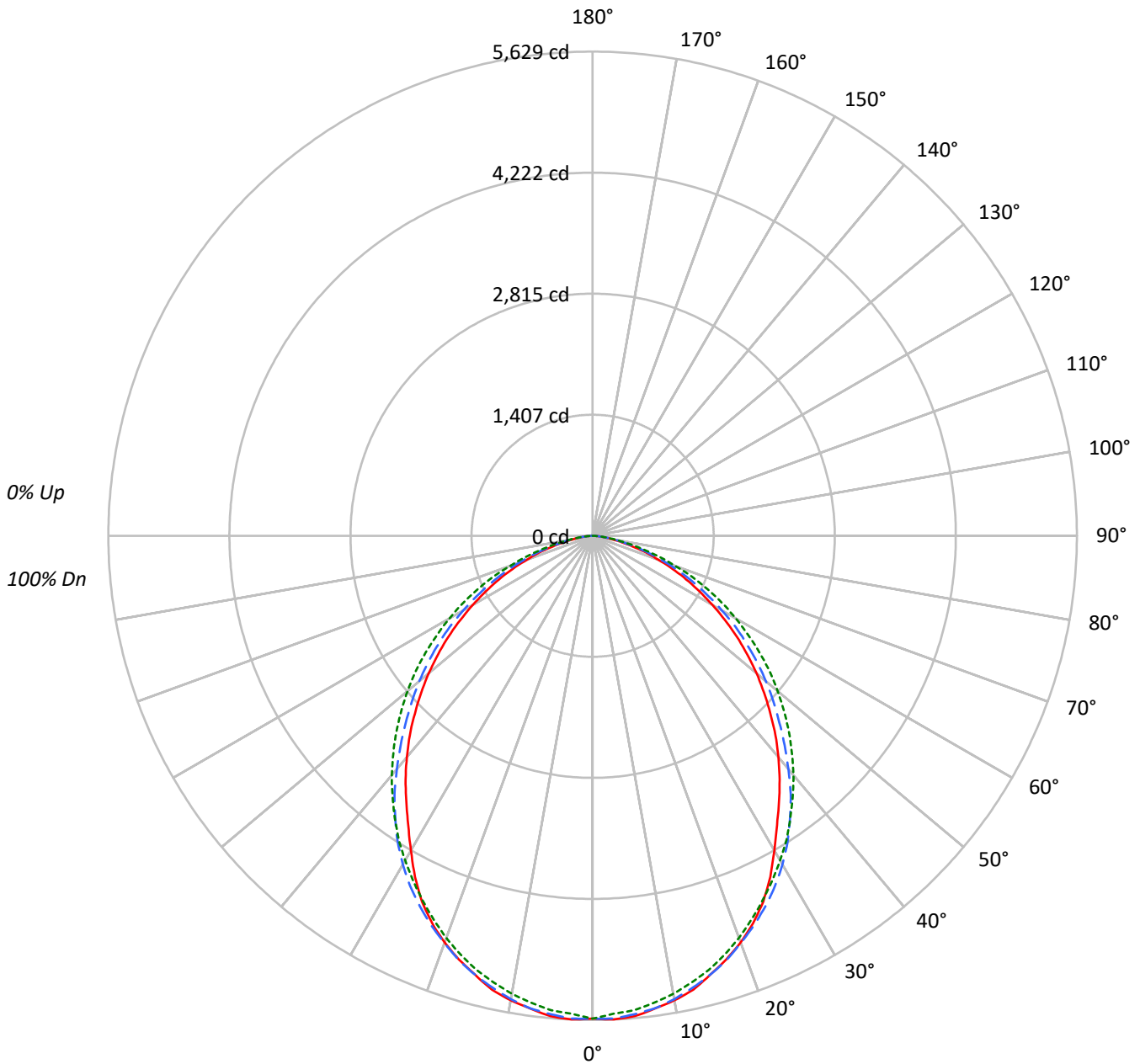
Lumens per Lamp: N/A
Luminaire Lumens: 12981.0 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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									
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°	15107	15107	15107
5°	15147	15083	14955
10°	14986	14945	14774
15°	14721	14721	14552
20°	14409	14428	14242
25°	13934	14107	13883
30°	13122	13711	13544
35°	12399	13143	13164
40°	11796	12433	12758
45°	11122	11679	12279
50°	10410	11006	11756
55°	9602	10240	11120
60°	8648	9344	10342
65°	7635	8308	9407
70°	6364	7076	7992
75°	5000	5651	6256
80°	3577	3976	4412
85°	2331	2331	2198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	528.6	4.1
10°-20°	1484.9	11.4
20°-30°	2169.9	16.7
30°-40°	2463.1	19.0
40°-50°	2377.7	18.3
50°-60°	1961.5	15.1
60°-70°	1306.2	10.1
70°-80°	584.5	4.5
80°-90°	104.6	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°	4183.4	32.2
0°-40°	6646.5	51.2
0°-60°	10985.7	84.6
0°-90°	12981.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12981.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5614	5614	5614	5614	5614	
5°	5608	5605	5584	5554	5536	531
15°	5284	5297	5284	5260	5224	1490
25°	4693	4730	4751	4717	4676	2149
35°	3774	3826	4001	4022	4007	2365
45°	2922	2972	3069	3209	3226	2255
55°	2047	2081	2183	2303	2370	1827
65°	1199	1232	1305	1398	1477	1189
75°	481	507	544	569	602	526
85°	76	76	76	71	71	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5613.9	5613.9	5613.9	5613.9	5613.9
2.5°	5629.0	5631.2	5618.3	5583.8	5562.2
5°	5607.5	5605.3	5583.8	5553.6	5536.3
7.5°	5544.9	5549.2	5542.8	5499.6	5475.9
10°	5484.5	5486.7	5469.4	5434.9	5406.9
12.5°	5406.9	5404.7	5381.0	5363.8	5318.5
15°	5284.0	5296.9	5284.0	5260.2	5223.6
17.5°	5165.3	5165.3	5174.0	5133.0	5105.0
20°	5031.6	5038.1	5038.1	5005.8	4973.4
22.5°	4876.3	4895.8	4902.2	4867.7	4828.9
25°	4693.0	4729.7	4751.3	4716.8	4675.8
27.5°	4470.9	4527.0	4591.7	4565.8	4520.5
30°	4222.9	4304.8	4412.7	4391.1	4358.7
32.5°	3987.8	4069.7	4218.5	4209.9	4192.7
35°	3774.3	3826.0	4000.7	4022.3	4007.2
37.5°	3571.5	3619.0	3782.9	3832.5	3819.6
40°	3358.0	3409.8	3539.2	3627.6	3631.9
42.5°	3146.7	3196.3	3301.9	3429.2	3429.2
45°	2922.4	2972.0	3069.0	3209.2	3226.5
47.5°	2702.4	2754.1	2849.0	2989.2	3017.3
50°	2486.7	2534.1	2629.0	2764.9	2808.1
52.5°	2262.4	2314.2	2406.9	2532.0	2594.5
55°	2046.7	2081.2	2182.6	2303.4	2370.2
57.5°	1822.4	1854.8	1969.1	2072.6	2141.6
60°	1606.8	1647.7	1736.2	1841.8	1921.6
62.5°	1399.7	1442.8	1518.3	1611.1	1701.7
65°	1199.1	1231.5	1304.8	1397.6	1477.4
67.5°	1005.0	1033.1	1106.4	1171.1	1255.2
70°	808.8	845.4	899.4	961.9	1015.8
72.5°	651.3	666.4	711.7	757.0	813.1
75°	480.9	506.8	543.5	569.4	601.7
77.5°	345.1	360.2	381.7	403.3	433.5
80°	230.8	237.2	256.6	261.0	284.7
82.5°	140.2	144.5	148.8	151.0	159.6
85°	75.5	75.5	75.5	71.2	71.2
87.5°	43.1	43.1	36.7	30.2	21.6
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)