

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: P557683

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-80-85-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: P557683
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-80-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

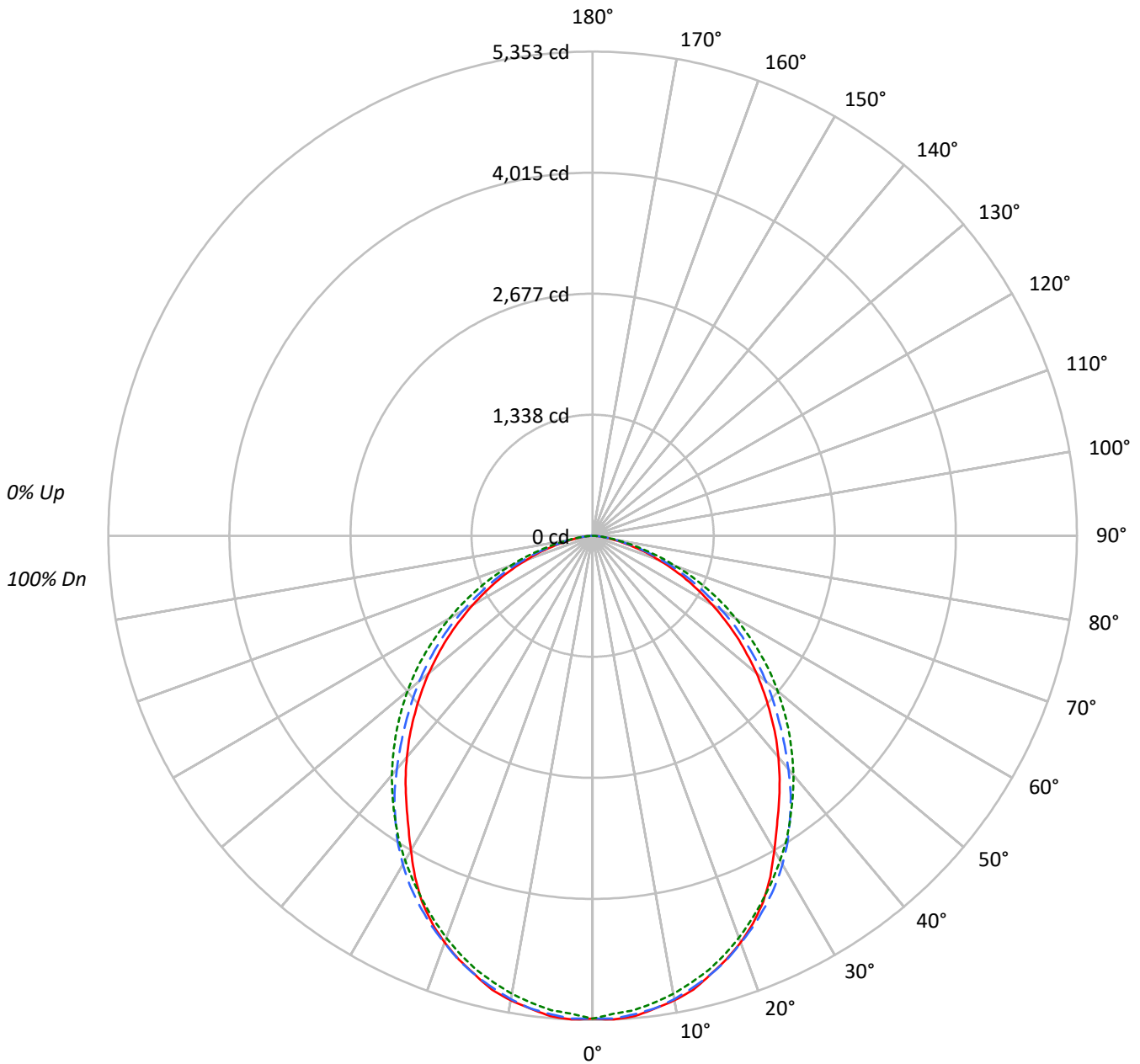
Lumens per Lamp: N/A
Luminaire Lumens: 12344.0 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
Input Voltage (V): NR
Input Current (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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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°	14366	14366	14366
5°	14404	14343	14221
10°	14251	14212	14049
15°	13998	13998	13838
20°	13702	13720	13543
25°	13250	13415	13202
30°	12478	13038	12879
35°	11790	12498	12518
40°	11217	11822	12132
45°	10576	11106	11676
50°	9900	10466	11179
55°	9131	9737	10574
60°	8223	8886	9834
65°	7261	7901	8946
70°	6051	6729	7600
75°	4755	5373	5949
80°	3400	3783	4195
85°	2217	2217	2090



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	502.6	4.1
10°-20°	1412.0	11.4
20°-30°	2063.4	16.7
30°-40°	2342.2	19.0
40°-50°	2261.1	18.3
50°-60°	1865.2	15.1
60°-70°	1242.1	10.1
70°-80°	555.8	4.5
80°-90°	99.4	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°	3978.1	32.2
0°-40°	6320.4	51.2
0°-60°	10446.6	84.6
0°-90°	12344.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12344.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5338	5338	5338	5338	5338	
5°	5332	5330	5310	5281	5265	505
15°	5025	5037	5025	5002	4967	1416
25°	4463	4498	4518	4485	4446	2044
35°	3589	3638	3804	3825	3810	2249
45°	2779	2826	2918	3052	3068	2144
55°	1946	1979	2076	2190	2254	1737
65°	1140	1171	1241	1329	1405	1131
75°	457	482	517	541	572	500
85°	72	72	72	68	68	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5338.5	5338.5	5338.5	5338.5	5338.5
2.5°	5352.8	5354.9	5342.6	5309.7	5289.2
5°	5332.3	5330.3	5309.7	5281.0	5264.6
7.5°	5272.8	5276.9	5270.8	5229.8	5207.2
10°	5215.4	5217.5	5201.1	5168.2	5141.6
12.5°	5141.6	5139.5	5117.0	5100.6	5057.5
15°	5024.7	5037.0	5024.7	5002.1	4967.3
17.5°	4911.9	4911.9	4920.1	4881.1	4854.5
20°	4784.7	4790.9	4790.9	4760.1	4729.3
22.5°	4637.1	4655.5	4661.7	4628.9	4591.9
25°	4462.7	4497.6	4518.1	4485.3	4446.3
27.5°	4251.5	4304.8	4366.3	4341.7	4298.7
30°	4015.6	4093.6	4196.1	4175.6	4144.8
32.5°	3792.1	3870.0	4011.5	4003.3	3986.9
35°	3589.1	3638.3	3804.4	3824.9	3810.5
37.5°	3396.3	3441.4	3597.3	3644.4	3632.1
40°	3193.2	3242.5	3365.5	3449.6	3453.7
42.5°	2992.2	3039.4	3139.9	3260.9	3260.9
45°	2779.0	2826.1	2918.4	3051.7	3068.1
47.5°	2569.8	2619.0	2709.2	2842.5	2869.2
50°	2364.7	2409.8	2500.0	2629.2	2670.3
52.5°	2151.4	2200.6	2288.8	2407.7	2467.2
55°	1946.3	1979.1	2075.5	2190.3	2253.9
57.5°	1733.0	1763.8	1872.5	1970.9	2036.5
60°	1527.9	1566.9	1651.0	1751.5	1827.3
62.5°	1331.0	1372.0	1443.8	1532.0	1618.2
65°	1140.3	1171.1	1240.8	1329.0	1404.9
67.5°	955.7	982.4	1052.1	1113.6	1193.6
70°	769.1	803.9	855.2	914.7	966.0
72.5°	619.4	633.7	676.8	719.9	773.2
75°	457.3	482.0	516.8	541.4	572.2
77.5°	328.1	342.5	363.0	383.5	412.2
80°	219.4	225.6	244.1	248.2	270.7
82.5°	133.3	137.4	141.5	143.6	151.8
85°	71.8	71.8	71.8	67.7	67.7
87.5°	41.0	41.0	34.9	28.7	20.5
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)