

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: P557930

Luminaire Tested: **FUSL-12-4-LD4-3HI-50-UNV-93-94-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: P557930
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-93-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

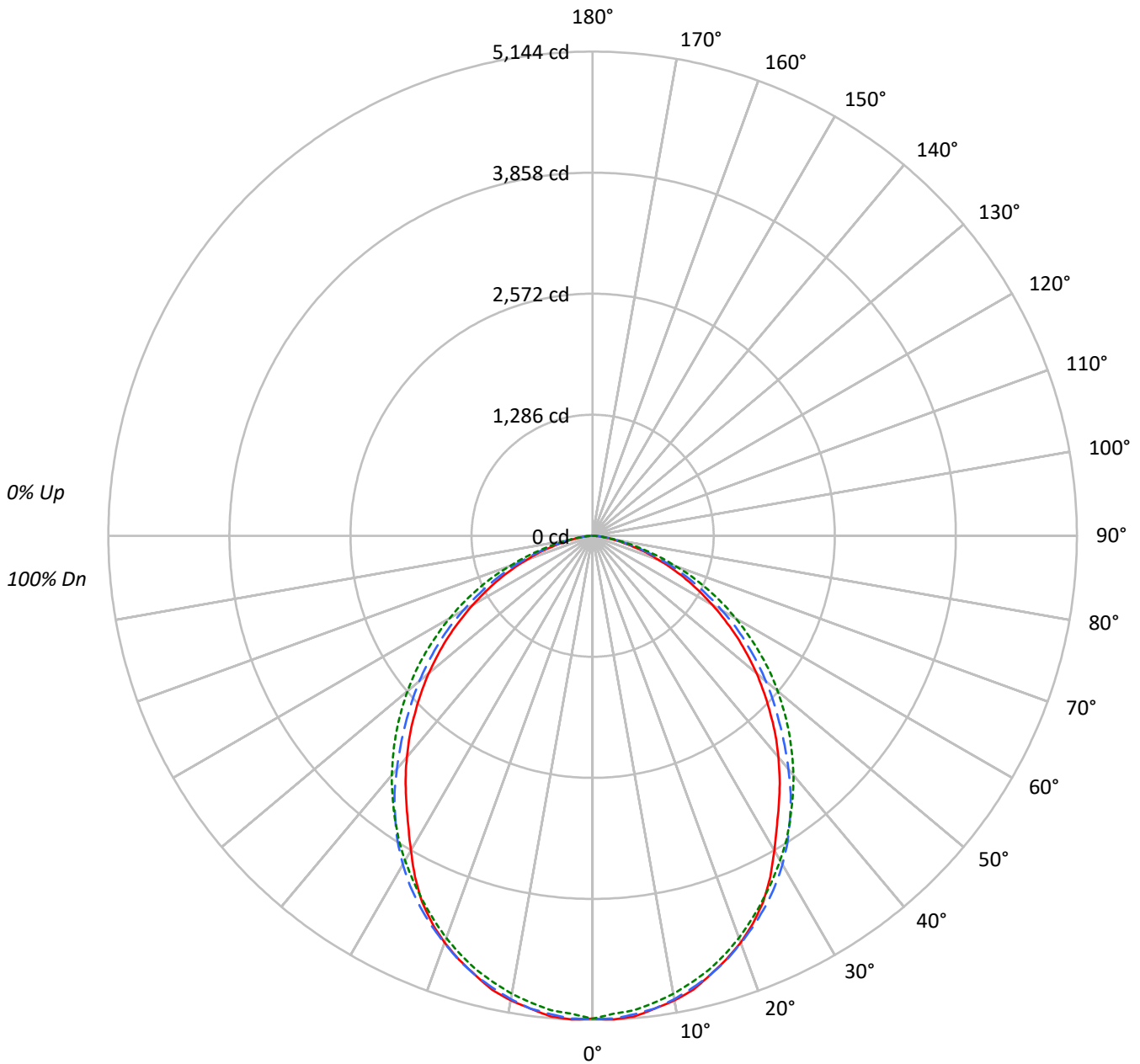
Lumens per Lamp: N/A
Luminaire Lumens: 11863.0 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	13806	13806	13806
5°	13843	13784	13667
10°	13696	13658	13502
15°	13453	13453	13299
20°	13168	13185	13016
25°	12734	12892	12688
30°	11992	12530	12377
35°	11331	12011	12030
40°	10780	11362	11659
45°	10164	10674	11221
50°	9514	10058	10743
55°	8776	9358	10162
60°	7903	8539	9451
65°	6978	7592	8597
70°	5815	6467	7304
75°	4570	5164	5717
80°	3268	3634	4032
85°	2130	2130	2007



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	483.0	4.1
10°-20°	1357.0	11.4
20°-30°	1983.0	16.7
30°-40°	2251.0	19.0
40°-50°	2173.0	18.3
50°-60°	1792.5	15.1
60°-70°	1193.7	10.1
70°-80°	534.2	4.5
80°-90°	95.6	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°	3823.1	32.2
0°-40°	6074.1	51.2
0°-60°	10039.6	84.6
0°-90°	11863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11863.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5130	5130	5130	5130	5130	
5°	5124	5123	5103	5075	5060	485
15°	4829	4841	4829	4807	4774	1361
25°	4289	4322	4342	4310	4273	1964
35°	3449	3496	3656	3676	3662	2161
45°	2671	2716	2805	2933	2949	2061
55°	1870	1902	1995	2105	2166	1669
65°	1096	1125	1192	1277	1350	1087
75°	440	463	497	520	550	481
85°	69	69	69	65	65	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5130.4	5130.4	5130.4	5130.4	5130.4
2.5°	5144.2	5146.2	5134.4	5102.8	5083.1
5°	5124.5	5122.6	5102.8	5075.3	5059.5
7.5°	5067.4	5071.3	5065.4	5026.0	5004.3
10°	5012.2	5014.2	4998.4	4966.9	4941.2
12.5°	4941.2	4939.3	4917.6	4901.8	4860.4
15°	4828.9	4840.7	4828.9	4807.2	4773.7
17.5°	4720.5	4720.5	4728.4	4690.9	4665.3
20°	4598.3	4604.2	4604.2	4574.6	4545.1
22.5°	4456.4	4474.1	4480.0	4448.5	4413.0
25°	4288.8	4322.3	4342.1	4310.5	4273.1
27.5°	4085.8	4137.1	4196.2	4172.5	4131.2
30°	3859.2	3934.1	4032.6	4012.9	3983.3
32.5°	3644.3	3719.2	3855.2	3847.3	3831.6
35°	3449.2	3496.5	3656.2	3675.9	3662.1
37.5°	3263.9	3307.3	3457.1	3502.4	3490.6
40°	3068.8	3116.1	3234.4	3315.2	3319.1
42.5°	2875.6	2921.0	3017.6	3133.8	3133.8
45°	2670.7	2716.0	2804.7	2932.8	2948.6
47.5°	2469.6	2516.9	2603.7	2731.8	2757.4
50°	2272.5	2315.9	2402.6	2526.8	2566.2
52.5°	2067.6	2114.9	2199.6	2313.9	2371.1
55°	1870.5	1902.0	1994.6	2105.0	2166.1
57.5°	1665.5	1695.0	1799.5	1894.1	1957.2
60°	1468.4	1505.8	1586.6	1683.2	1756.1
62.5°	1279.2	1318.6	1387.6	1472.3	1555.1
65°	1095.9	1125.4	1192.4	1277.2	1350.1
67.5°	918.5	944.1	1011.1	1070.2	1147.1
70°	739.1	772.6	821.9	879.1	928.3
72.5°	595.2	609.0	650.4	691.8	743.1
75°	439.5	463.2	496.7	520.3	549.9
77.5°	315.4	329.2	348.9	368.6	396.2
80°	210.9	216.8	234.5	238.5	260.2
82.5°	128.1	132.1	136.0	138.0	145.9
85°	69.0	69.0	69.0	65.0	65.0
87.5°	39.4	39.4	33.5	27.6	19.7
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)