

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: P557961

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-81-88-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: P557961
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-LD4-3LO-30-UNV-81-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

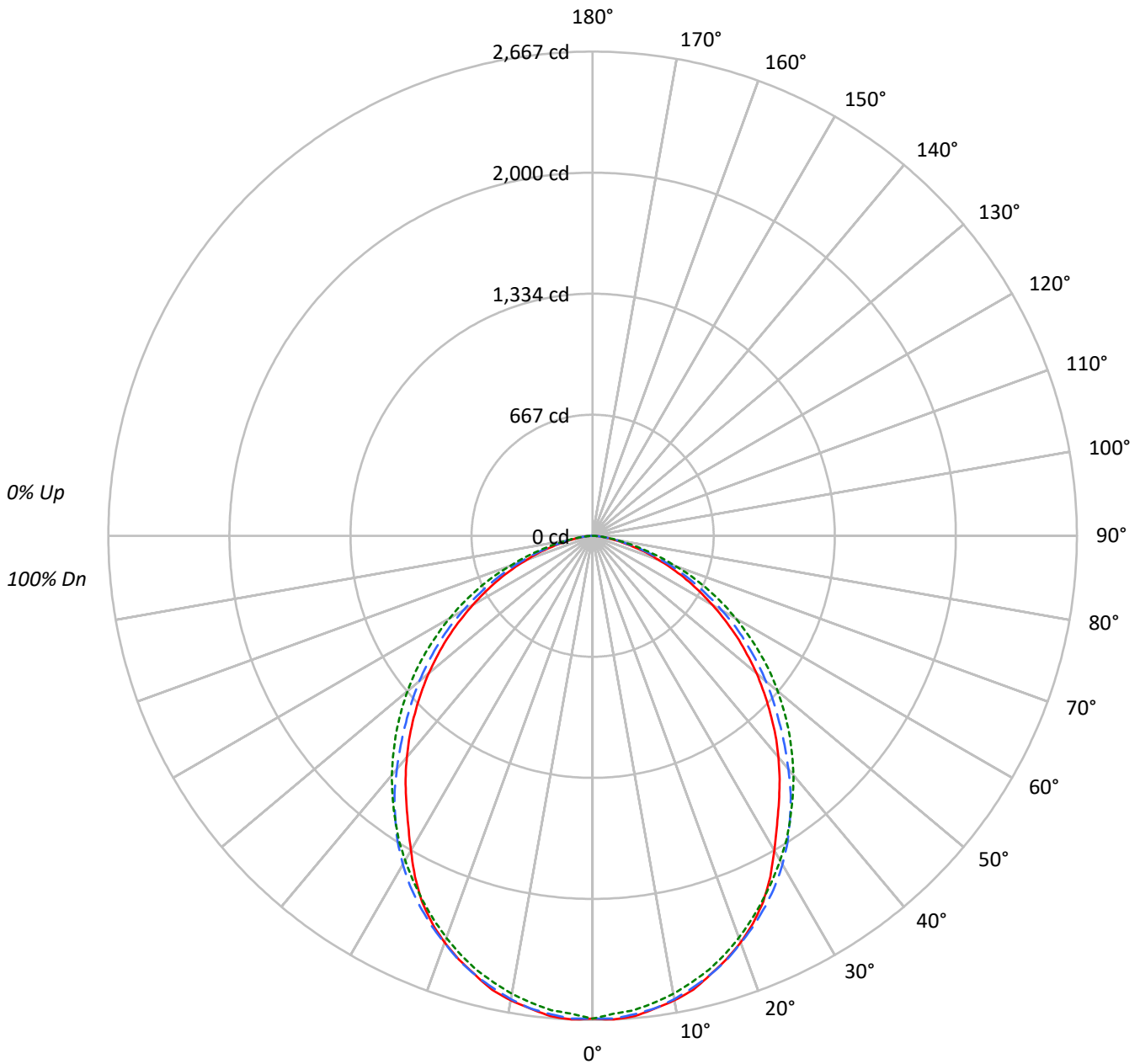
Lumens per Lamp: N/A
Luminaire Lumens: 6150.0 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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°	7157	7157	7157
5°	7176	7146	7085
10°	7100	7081	7000
15°	6974	6974	6895
20°	6826	6835	6747
25°	6602	6684	6577
30°	6217	6496	6417
35°	5874	6227	6237
40°	5589	5890	6045
45°	5269	5533	5817
50°	4932	5215	5570
55°	4549	4852	5268
60°	4097	4427	4900
65°	3617	3936	4457
70°	3015	3353	3787
75°	2370	2677	2964
80°	1694	1884	2091
85°	1105	1105	1041



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.4	4.1
10°-20°	703.5	11.4
20°-30°	1028.1	16.7
30°-40°	1166.9	19.0
40°-50°	1126.5	18.3
50°-60°	929.3	15.1
60°-70°	618.8	10.1
70°-80°	276.9	4.5
80°-90°	49.5	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°	1982.0	32.2
0°-40°	3148.9	51.2
0°-60°	5204.7	84.6
0°-90°	6150.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6150.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2660	2660	2660	2660	2660	
5°	2657	2656	2645	2631	2623	251
15°	2503	2510	2503	2492	2475	706
25°	2223	2241	2251	2235	2215	1018
35°	1788	1813	1895	1906	1898	1120
45°	1384	1408	1454	1520	1529	1068
55°	970	986	1034	1091	1123	865
65°	568	583	618	662	700	563
75°	228	240	258	270	285	249
85°	36	36	36	34	34	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2659.7	2659.7	2659.7	2659.7	2659.7
2.5°	2666.9	2667.9	2661.8	2645.4	2635.2
5°	2656.7	2655.6	2645.4	2631.1	2622.9
7.5°	2627.0	2629.1	2626.0	2605.6	2594.3
10°	2598.4	2599.4	2591.3	2574.9	2561.6
12.5°	2561.6	2560.6	2549.4	2541.2	2519.7
15°	2503.4	2509.5	2503.4	2492.1	2474.8
17.5°	2447.2	2447.2	2451.3	2431.9	2418.6
20°	2383.8	2386.9	2386.9	2371.6	2356.2
22.5°	2310.3	2319.5	2322.5	2306.2	2287.8
25°	2223.4	2240.8	2251.0	2234.7	2215.2
27.5°	2118.2	2144.7	2175.4	2163.1	2141.7
30°	2000.7	2039.5	2090.6	2080.4	2065.0
32.5°	1889.3	1928.1	1998.6	1994.5	1986.4
35°	1788.1	1812.7	1895.4	1905.6	1898.5
37.5°	1692.1	1714.6	1792.2	1815.7	1809.6
40°	1590.9	1615.4	1676.8	1718.6	1720.7
42.5°	1490.8	1514.3	1564.4	1624.6	1624.6
45°	1384.5	1408.0	1454.0	1520.4	1528.6
47.5°	1280.3	1304.8	1349.8	1416.2	1429.5
50°	1178.1	1200.6	1245.6	1309.9	1330.4
52.5°	1071.9	1096.4	1140.3	1199.6	1229.2
55°	969.7	986.0	1034.1	1091.3	1122.9
57.5°	863.4	878.7	932.9	981.9	1014.6
60°	761.2	780.6	822.5	872.6	910.4
62.5°	663.1	683.6	719.3	763.3	806.2
65°	568.1	583.4	618.2	662.1	699.9
67.5°	476.2	489.4	524.2	554.8	594.7
70°	383.2	400.5	426.1	455.7	481.3
72.5°	308.6	315.7	337.2	358.6	385.2
75°	227.9	240.1	257.5	269.8	285.1
77.5°	163.5	170.6	180.9	191.1	205.4
80°	109.3	112.4	121.6	123.6	134.9
82.5°	66.4	68.5	70.5	71.5	75.6
85°	35.8	35.8	35.8	33.7	33.7
87.5°	20.4	20.4	17.4	14.3	10.2
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)