

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: P557999

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-93-97-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: P557999
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-93-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND
3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

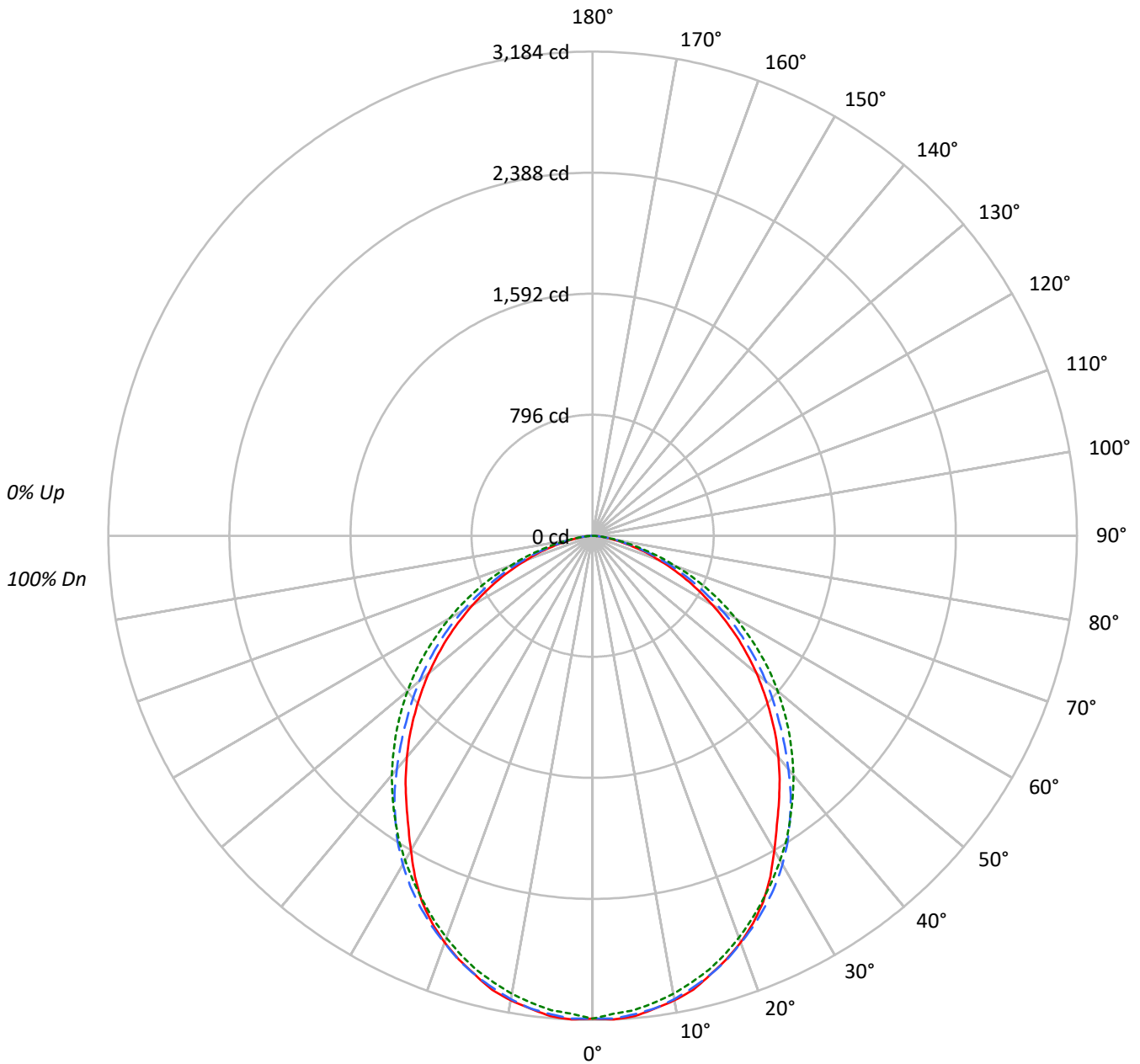
Lumens per Lamp: N/A
Luminaire Lumens: 7342.0 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8544	8544	8544
5°	8567	8531	8458
10°	8476	8453	8356
15°	8326	8326	8231
20°	8150	8160	8055
25°	7881	7979	7852
30°	7421	7755	7660
35°	7013	7433	7445
40°	6672	7032	7216
45°	6290	6606	6945
50°	5888	6225	6649
55°	5431	5792	6290
60°	4891	5285	5850
65°	4318	4699	5321
70°	3599	4002	4520
75°	2828	3196	3538
80°	2022	2250	2495
85°	1318	1318	1244



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.0	4.1
10°-20°	839.9	11.4
20°-30°	1227.3	16.7
30°-40°	1393.1	19.0
40°-50°	1344.8	18.3
50°-60°	1109.4	15.1
60°-70°	738.8	10.1
70°-80°	330.6	4.5
80°-90°	59.2	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°	2366.1	32.2
0°-40°	3759.2	51.2
0°-60°	6213.5	84.6
0°-90°	7342.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7342.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3175	3175	3175	3175	3175	
5°	3172	3170	3158	3141	3131	300
15°	2989	2996	2989	2975	2954	843
25°	2654	2675	2687	2668	2645	1216
35°	2135	2164	2263	2275	2266	1338
45°	1653	1681	1736	1815	1825	1275
55°	1158	1177	1234	1303	1341	1033
65°	678	696	738	790	836	672
75°	272	287	307	322	340	297
85°	43	43	43	40	40	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3175.2	3175.2	3175.2	3175.2	3175.2
2.5°	3183.8	3185.0	3177.7	3158.1	3145.9
5°	3171.6	3170.3	3158.1	3141.1	3131.3
7.5°	3136.2	3138.6	3135.0	3110.6	3097.2
10°	3102.0	3103.3	3093.5	3074.0	3058.1
12.5°	3058.1	3056.9	3043.5	3033.7	3008.1
15°	2988.6	2995.9	2988.6	2975.2	2954.4
17.5°	2921.5	2921.5	2926.4	2903.2	2887.3
20°	2845.9	2849.5	2849.5	2831.2	2812.9
22.5°	2758.0	2769.0	2772.7	2753.2	2731.2
25°	2654.4	2675.1	2687.3	2667.8	2644.6
27.5°	2528.7	2560.4	2597.0	2582.4	2556.8
30°	2388.4	2434.8	2495.8	2483.6	2465.3
32.5°	2255.5	2301.8	2386.0	2381.1	2371.4
35°	2134.7	2164.0	2262.8	2275.0	2266.4
37.5°	2020.0	2046.9	2139.6	2167.6	2160.3
40°	1899.3	1928.6	2001.7	2051.8	2054.2
42.5°	1779.7	1807.8	1867.6	1939.5	1939.5
45°	1652.9	1680.9	1735.8	1815.1	1824.9
47.5°	1528.5	1557.7	1611.4	1690.7	1706.5
50°	1406.5	1433.3	1487.0	1563.8	1588.2
52.5°	1279.6	1308.9	1361.3	1432.1	1467.5
55°	1157.6	1177.1	1234.5	1302.8	1340.6
57.5°	1030.8	1049.1	1113.7	1172.3	1211.3
60°	908.8	932.0	982.0	1041.7	1086.9
62.5°	791.7	816.1	858.8	911.2	962.4
65°	678.2	696.5	738.0	790.5	835.6
67.5°	568.4	584.3	625.8	662.4	709.9
70°	457.4	478.2	508.7	544.0	574.5
72.5°	368.4	376.9	402.5	428.2	459.9
75°	272.0	286.7	307.4	322.0	340.3
77.5°	195.2	203.7	215.9	228.1	245.2
80°	130.5	134.2	145.2	147.6	161.0
82.5°	79.3	81.7	84.2	85.4	90.3
85°	42.7	42.7	42.7	40.3	40.3
87.5°	24.4	24.4	20.7	17.1	12.2
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)