

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: P557963

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-81-94-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: P557963
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-81-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

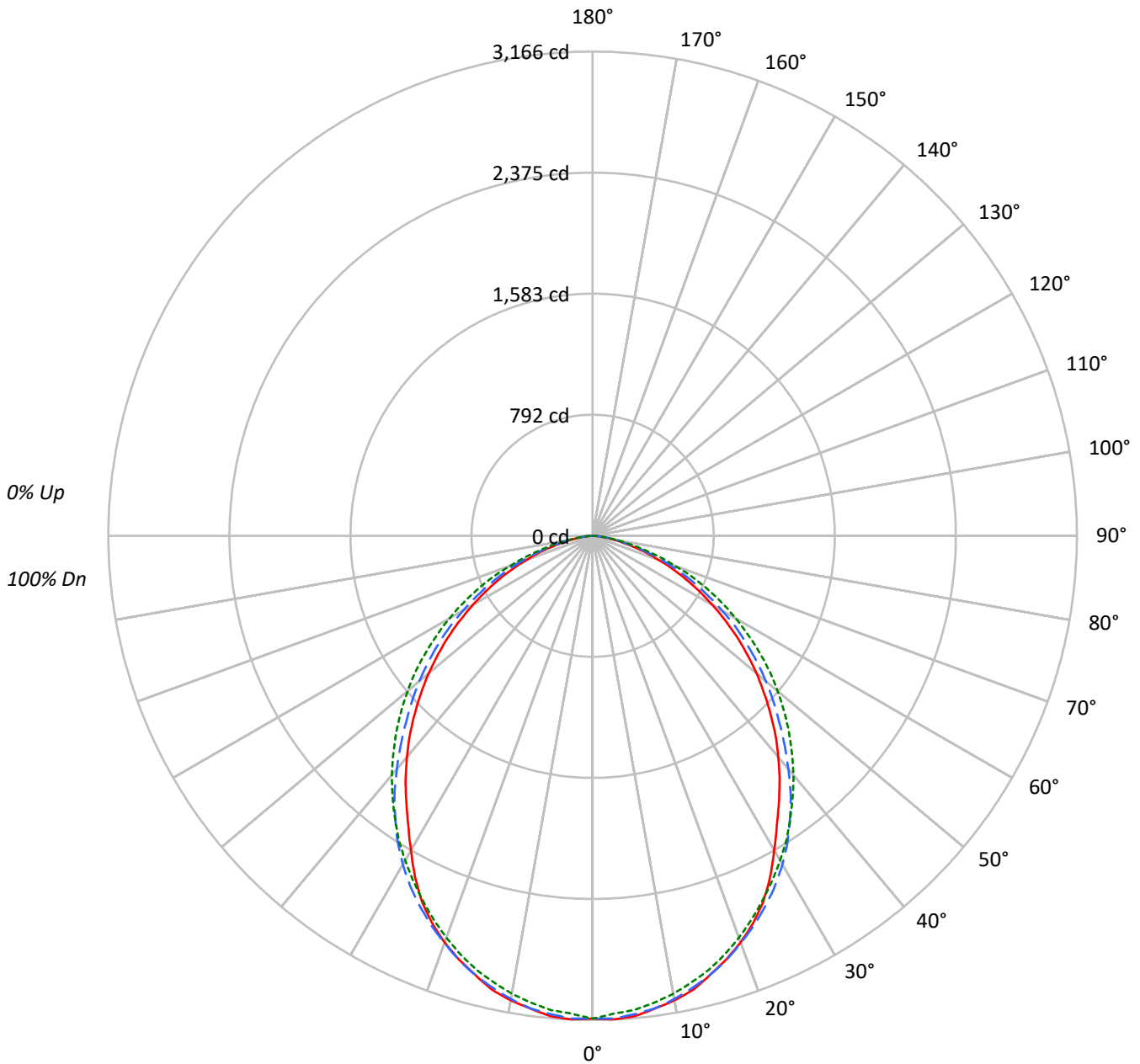
Lumens per Lamp: N/A
Luminaire Lumens: 7300.0 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8496	8496	8496
5°	8518	8482	8410
10°	8428	8405	8308
15°	8278	8278	8184
20°	8103	8113	8009
25°	7836	7933	7807
30°	7379	7711	7617
35°	6973	7391	7403
40°	6634	6992	7175
45°	6254	6568	6905
50°	5854	6190	6611
55°	5400	5758	6253
60°	4863	5254	5816
65°	4294	4672	5290
70°	3578	3980	4495
75°	2812	3177	3518
80°	2011	2236	2481
85°	1309	1309	1235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.2	4.1
10°-20°	835.0	11.4
20°-30°	1220.3	16.7
30°-40°	1385.2	19.0
40°-50°	1337.1	18.3
50°-60°	1103.1	15.1
60°-70°	734.5	10.1
70°-80°	328.7	4.5
80°-90°	58.8	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°	2352.6	32.2
0°-40°	3737.7	51.2
0°-60°	6177.9	84.6
0°-90°	7300.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7300.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3157	3157	3157	3157	3157	
5°	3153	3152	3140	3123	3113	298
15°	2972	2979	2972	2958	2938	838
25°	2639	2660	2672	2652	2630	1209
35°	2122	2152	2250	2262	2254	1330
45°	1643	1671	1726	1805	1814	1268
55°	1151	1170	1227	1295	1333	1027
65°	674	692	734	786	831	669
75°	270	285	306	320	338	296
85°	42	42	42	40	40	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3157.1	3157.1	3157.1	3157.1	3157.1
2.5°	3165.6	3166.8	3159.5	3140.1	3128.0
5°	3153.4	3152.2	3140.1	3123.1	3113.4
7.5°	3118.3	3120.7	3117.0	3092.8	3079.4
10°	3084.3	3085.5	3075.8	3056.4	3040.6
12.5°	3040.6	3039.4	3026.1	3016.4	2990.9
15°	2971.5	2978.8	2971.5	2958.2	2937.5
17.5°	2904.8	2904.8	2909.6	2886.6	2870.8
20°	2829.6	2833.2	2833.2	2815.0	2796.8
22.5°	2742.3	2753.2	2756.8	2737.4	2715.6
25°	2639.2	2659.8	2671.9	2652.5	2629.5
27.5°	2514.2	2545.8	2582.2	2567.6	2542.1
30°	2374.8	2420.9	2481.5	2469.4	2451.2
32.5°	2242.6	2288.7	2372.3	2367.5	2357.8
35°	2122.5	2151.6	2249.8	2262.0	2253.5
37.5°	2008.5	2035.2	2127.3	2155.2	2148.0
40°	1888.4	1917.5	1990.3	2040.0	2042.4
42.5°	1769.6	1797.5	1856.9	1928.4	1928.4
45°	1643.4	1671.3	1725.9	1804.7	1814.4
47.5°	1519.7	1548.8	1602.2	1681.0	1696.8
50°	1398.4	1425.1	1478.5	1554.9	1579.1
52.5°	1272.3	1301.4	1353.5	1423.9	1459.1
55°	1151.0	1170.4	1227.4	1295.3	1332.9
57.5°	1024.9	1043.1	1107.3	1165.6	1204.4
60°	903.6	926.6	976.3	1035.8	1080.7
62.5°	787.1	811.4	853.8	906.0	956.9
65°	674.3	692.5	733.8	785.9	830.8
67.5°	565.2	581.0	622.2	658.6	705.9
70°	454.8	475.4	505.8	540.9	571.3
72.5°	366.3	374.8	400.2	425.7	457.2
75°	270.5	285.0	305.6	320.2	338.4
77.5°	194.1	202.5	214.7	226.8	243.8
80°	129.8	133.4	144.3	146.8	160.1
82.5°	78.8	81.3	83.7	84.9	89.8
85°	42.4	42.4	42.4	40.0	40.0
87.5°	24.3	24.3	20.6	17.0	12.1
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)