

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: P557995

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-93-94-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: P557995
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-93-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

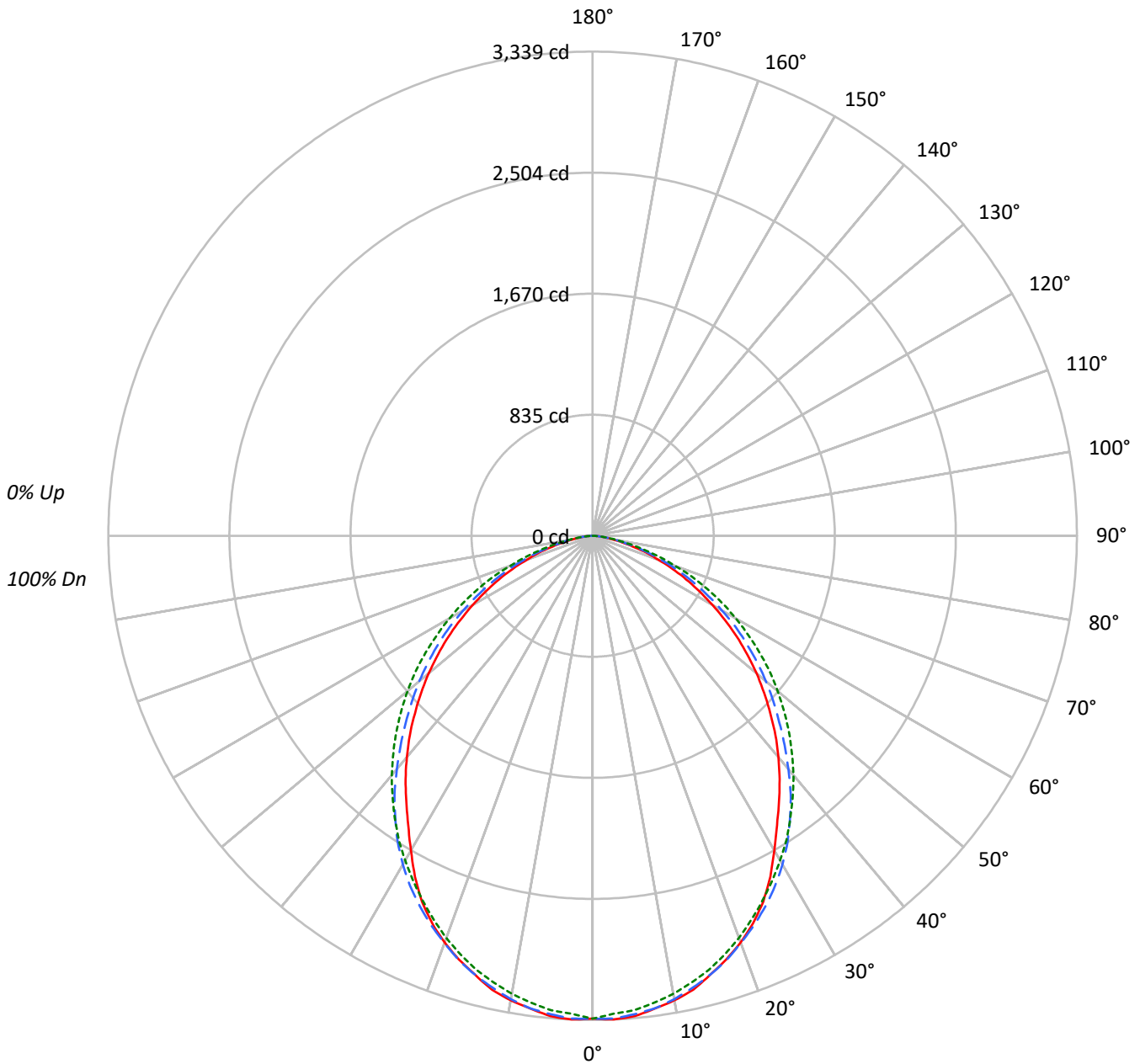
Lumens per Lamp: N/A
Luminaire Lumens: 7700.0 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8961	8961	8961
5°	8985	8947	8871
10°	8890	8865	8764
15°	8732	8732	8632
20°	8547	8558	8448
25°	8266	8368	8235
30°	7783	8133	8034
35°	7355	7796	7809
40°	6997	7375	7568
45°	6597	6928	7284
50°	6175	6529	6973
55°	5696	6074	6596
60°	5130	5542	6135
65°	4529	4928	5580
70°	3774	4198	4741
75°	2966	3352	3711
80°	2122	2359	2617
85°	1383	1383	1303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.5	4.1
10°-20°	880.8	11.4
20°-30°	1287.2	16.7
30°-40°	1461.1	19.0
40°-50°	1410.4	18.3
50°-60°	1163.5	15.1
60°-70°	774.8	10.1
70°-80°	346.7	4.5
80°-90°	62.0	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°	2481.5	32.2
0°-40°	3942.5	51.2
0°-60°	6516.5	84.6
0°-90°	7700.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7700.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3330	3330	3330	3330	3330	
5°	3326	3325	3312	3294	3284	315
15°	3134	3142	3134	3120	3098	884
25°	2784	2806	2818	2798	2774	1275
35°	2239	2270	2373	2386	2377	1403
45°	1734	1763	1820	1904	1914	1337
55°	1214	1234	1295	1366	1406	1084
65°	711	730	774	829	876	705
75°	285	301	322	338	357	312
85°	45	45	45	42	42	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3330.1	3330.1	3330.1	3330.1	3330.1
2.5°	3339.0	3340.3	3332.6	3312.1	3299.3
5°	3326.2	3324.9	3312.1	3294.2	3284.0
7.5°	3289.1	3291.7	3287.8	3262.2	3248.2
10°	3253.3	3254.6	3244.3	3223.9	3207.2
12.5°	3207.2	3206.0	3191.9	3181.7	3154.8
15°	3134.3	3142.0	3134.3	3120.2	3098.5
17.5°	3064.0	3064.0	3069.1	3044.8	3028.1
20°	2984.6	2988.5	2988.5	2969.3	2950.1
22.5°	2892.5	2904.0	2907.9	2887.4	2864.4
25°	2783.8	2805.5	2818.3	2797.9	2773.6
27.5°	2652.0	2685.3	2723.7	2708.3	2681.4
30°	2504.9	2553.5	2617.5	2604.7	2585.5
32.5°	2365.4	2414.1	2502.3	2497.2	2487.0
35°	2238.8	2269.5	2373.1	2385.9	2377.0
37.5°	2118.5	2146.7	2243.9	2273.3	2265.7
40°	1991.9	2022.6	2099.4	2151.8	2154.4
42.5°	1866.5	1895.9	1958.6	2034.1	2034.1
45°	1733.5	1762.9	1820.5	1903.6	1913.9
47.5°	1603.0	1633.7	1690.0	1773.1	1789.8
50°	1475.0	1503.2	1559.5	1640.1	1665.7
52.5°	1342.0	1372.7	1427.7	1501.9	1539.0
55°	1214.1	1234.5	1294.7	1366.3	1406.0
57.5°	1081.0	1100.2	1168.0	1229.4	1270.4
60°	953.1	977.4	1029.8	1092.5	1139.9
62.5°	830.3	855.9	900.6	955.6	1009.4
65°	711.3	730.5	774.0	829.0	876.3
67.5°	596.2	612.8	656.3	694.7	744.6
70°	479.7	501.5	533.5	570.6	602.6
72.5°	386.4	395.3	422.2	449.0	482.3
75°	285.3	300.6	322.4	337.7	356.9
77.5°	204.7	213.6	226.4	239.2	257.1
80°	136.9	140.7	152.2	154.8	168.9
82.5°	83.2	85.7	88.3	89.6	94.7
85°	44.8	44.8	44.8	42.2	42.2
87.5°	25.6	25.6	21.7	17.9	12.8
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)