

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: P557118

Luminaire Tested: **FUSL-12-4-LD4-2HI-50-UNV-80-97-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: P557118
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-LD4-2HI-50-UNV-80-97-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

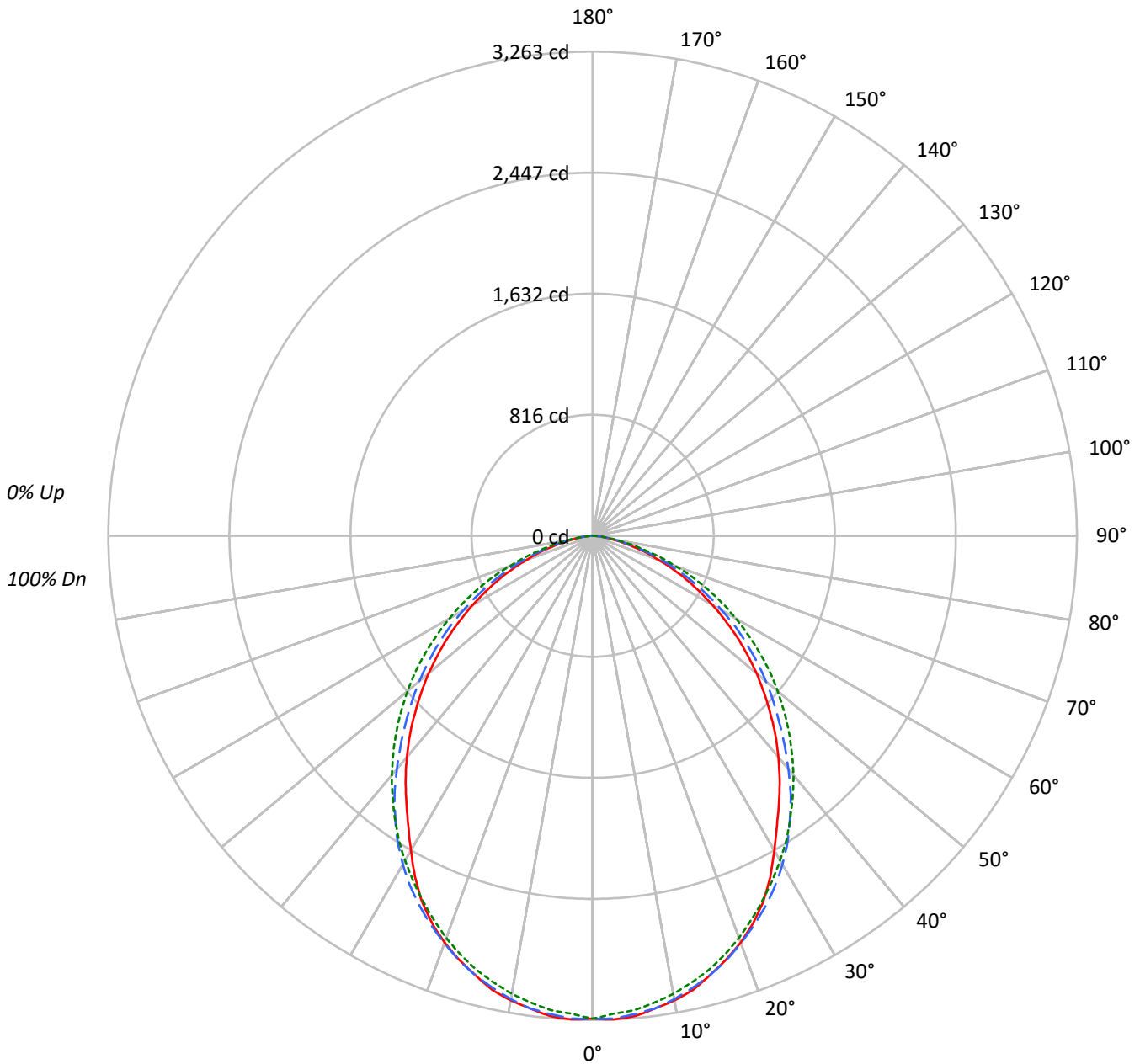
Lumens per Lamp: N/A
Luminaire Lumens: 7525.0 lumens
Efficiency: N/A
Efficacy: 87.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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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CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-80-97-EDD-90

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°	8758	8758	8758
5°	8781	8744	8669
10°	8688	8664	8564
15°	8534	8534	8436
20°	8353	8364	8256
25°	8078	8178	8048
30°	7607	7948	7851
35°	7187	7619	7631
40°	6838	7207	7396
45°	6447	6771	7118
50°	6035	6380	6815
55°	5567	5936	6446
60°	5013	5416	5996
65°	4426	4816	5453
70°	3688	4102	4633
75°	2899	3276	3627
80°	2073	2306	2557
85°	1352	1352	1275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	306.4	4.1
10°-20°	860.8	11.4
20°-30°	1257.9	16.7
30°-40°	1427.9	19.0
40°-50°	1378.4	18.3
50°-60°	1137.1	15.1
60°-70°	757.2	10.1
70°-80°	338.8	4.5
80°-90°	60.6	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°	2425.1	32.2
0°-40°	3852.9	51.2
0°-60°	6368.4	84.6
0°-90°	7525.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7525.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3254	3254	3254	3254	3254	
5°	3251	3249	3237	3219	3209	308
15°	3063	3071	3063	3049	3028	864
25°	2720	2742	2754	2734	2710	1246
35°	2188	2218	2319	2332	2323	1371
45°	1694	1723	1779	1860	1870	1307
55°	1186	1206	1265	1335	1374	1059
65°	695	714	756	810	856	689
75°	279	294	315	330	349	305
85°	44	44	44	41	41	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3254.4	3254.4	3254.4	3254.4	3254.4
2.5°	3263.1	3264.4	3256.9	3236.9	3224.4
5°	3250.6	3249.4	3236.9	3219.4	3209.4
7.5°	3214.4	3216.9	3213.1	3188.1	3174.4
10°	3179.4	3180.6	3170.6	3150.6	3134.3
12.5°	3134.3	3133.1	3119.3	3109.3	3083.1
15°	3063.1	3070.6	3063.1	3049.3	3028.1
17.5°	2994.3	2994.3	2999.3	2975.6	2959.3
20°	2916.8	2920.6	2920.6	2901.8	2883.0
22.5°	2826.8	2838.0	2841.8	2821.8	2799.3
25°	2720.5	2741.8	2754.3	2734.3	2710.5
27.5°	2591.7	2624.2	2661.8	2646.8	2620.5
30°	2448.0	2495.5	2558.0	2545.5	2526.7
32.5°	2311.7	2359.2	2445.5	2440.5	2430.5
35°	2187.9	2217.9	2319.2	2331.7	2322.9
37.5°	2070.4	2097.9	2192.9	2221.7	2214.2
40°	1946.6	1976.6	2051.6	2102.9	2105.4
42.5°	1824.1	1852.9	1914.1	1987.9	1987.9
45°	1694.1	1722.8	1779.1	1860.4	1870.4
47.5°	1566.5	1596.6	1651.6	1732.8	1749.1
50°	1441.5	1469.0	1524.0	1602.8	1627.8
52.5°	1311.5	1341.5	1395.3	1467.8	1504.0
55°	1186.5	1206.5	1265.2	1335.3	1374.0
57.5°	1056.5	1075.2	1141.5	1201.5	1241.5
60°	931.4	955.2	1006.4	1067.7	1114.0
62.5°	811.4	836.4	880.2	933.9	986.4
65°	695.1	713.9	756.4	810.2	856.4
67.5°	582.6	598.9	641.4	678.9	727.6
70°	468.8	490.1	521.3	557.6	588.9
72.5°	377.6	386.3	412.6	438.8	471.3
75°	278.8	293.8	315.1	330.1	348.8
77.5°	200.0	208.8	221.3	233.8	251.3
80°	133.8	137.5	148.8	151.3	165.0
82.5°	81.3	83.8	86.3	87.5	92.5
85°	43.8	43.8	43.8	41.3	41.3
87.5°	25.0	25.0	21.3	17.5	12.5
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)