

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: P558379

Luminaire Tested: **FUSL-12-4-LD4-3STD-40-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: P558379
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-LD4-3STD-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

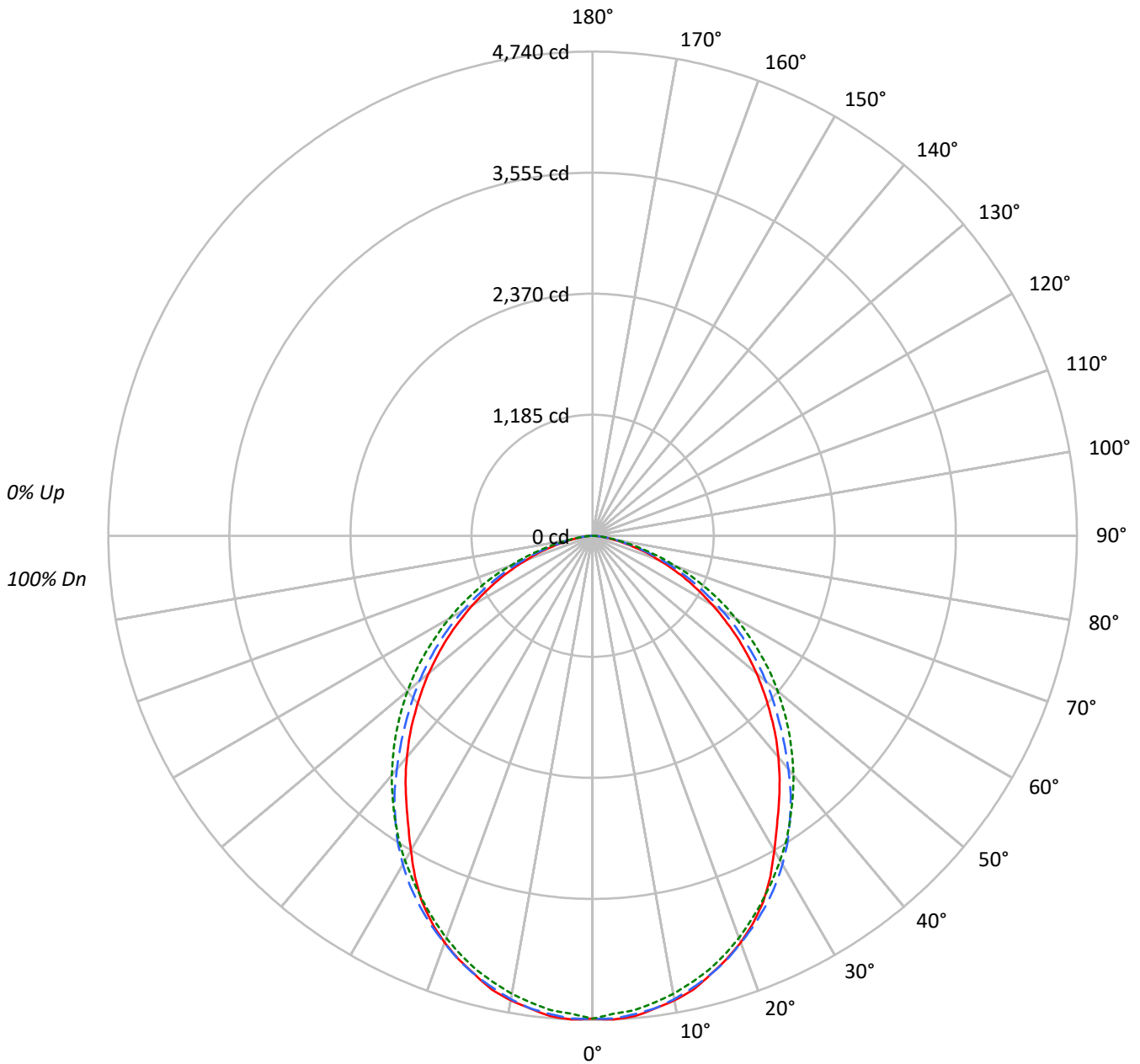
Lumens per Lamp: N/A
Luminaire Lumens: 10931.0 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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°	12721	12721	12721
5°	12755	12701	12593
10°	12620	12585	12441
15°	12396	12396	12254
20°	12133	12149	11993
25°	11734	11879	11691
30°	11049	11546	11405
35°	10441	11067	11085
40°	9933	10469	10744
45°	9365	9835	10339
50°	8766	9268	9899
55°	8086	8623	9364
60°	7282	7868	8709
65°	6430	6996	7921
70°	5358	5958	6730
75°	4211	4759	5268
80°	3011	3349	3715
85°	1964	1964	1849



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	445.1	4.1
10°-20°	1250.4	11.4
20°-30°	1827.2	16.7
30°-40°	2074.1	19.0
40°-50°	2002.2	18.3
50°-60°	1651.7	15.1
60°-70°	1099.9	10.1
70°-80°	492.2	4.5
80°-90°	88.1	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°	3522.7	32.2
0°-40°	5596.9	51.2
0°-60°	9250.8	84.6
0°-90°	10931.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10931.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4727	4727	4727	4727	4727	
5°	4722	4720	4702	4676	4662	447
15°	4450	4460	4450	4430	4399	1254
25°	3952	3983	4001	3972	3937	1810
35°	3178	3222	3369	3387	3374	1991
45°	2461	2503	2584	2702	2717	1899
55°	1724	1753	1838	1940	1996	1538
65°	1010	1037	1099	1177	1244	1001
75°	405	427	458	480	507	443
85°	64	64	64	60	60	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4727.4	4727.4	4727.4	4727.4	4727.4
2.5°	4740.1	4741.9	4731.0	4701.9	4683.8
5°	4721.9	4720.1	4701.9	4676.5	4662.0
7.5°	4669.3	4672.9	4667.4	4631.1	4611.1
10°	4618.4	4620.2	4605.7	4576.6	4553.0
12.5°	4553.0	4551.2	4531.2	4516.7	4478.6
15°	4449.5	4460.4	4449.5	4429.5	4398.7
17.5°	4349.6	4349.6	4356.9	4322.4	4298.8
20°	4237.0	4242.5	4242.5	4215.2	4188.0
22.5°	4106.3	4122.6	4128.1	4099.0	4066.3
25°	3951.9	3982.8	4000.9	3971.9	3937.4
27.5°	3764.8	3812.0	3866.5	3844.7	3806.6
30°	3556.0	3625.0	3715.8	3697.6	3670.4
32.5°	3358.0	3427.0	3552.3	3545.1	3530.5
35°	3178.2	3221.8	3368.9	3387.1	3374.4
37.5°	3007.5	3047.5	3185.5	3227.3	3216.4
40°	2827.7	2871.3	2980.3	3054.7	3058.4
42.5°	2649.7	2691.5	2780.5	2887.6	2887.6
45°	2460.9	2502.6	2584.3	2702.4	2716.9
47.5°	2275.6	2319.2	2399.1	2517.2	2540.8
50°	2094.0	2133.9	2213.9	2328.3	2364.6
52.5°	1905.1	1948.7	2026.8	2132.1	2184.8
55°	1723.5	1752.6	1837.9	1939.6	1995.9
57.5°	1534.6	1561.9	1658.1	1745.3	1803.4
60°	1353.0	1387.5	1462.0	1551.0	1618.2
62.5°	1178.7	1215.0	1278.6	1356.6	1432.9
65°	1009.8	1037.0	1098.8	1176.8	1244.0
67.5°	846.3	869.9	931.7	986.2	1057.0
70°	681.0	711.9	757.3	810.0	855.4
72.5°	548.5	561.2	599.3	637.5	684.7
75°	405.0	426.8	457.7	479.5	506.7
77.5°	290.6	303.3	321.5	339.6	365.0
80°	194.3	199.8	216.1	219.8	239.7
82.5°	118.0	121.7	125.3	127.1	134.4
85°	63.6	63.6	63.6	59.9	59.9
87.5°	36.3	36.3	30.9	25.4	18.2
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)