

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: P557891

Luminaire Tested: **FUSL-12-4-LD4-3HI-50-UNV-81-85-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: P557891
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-LD4-3HI-50-UNV-81-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

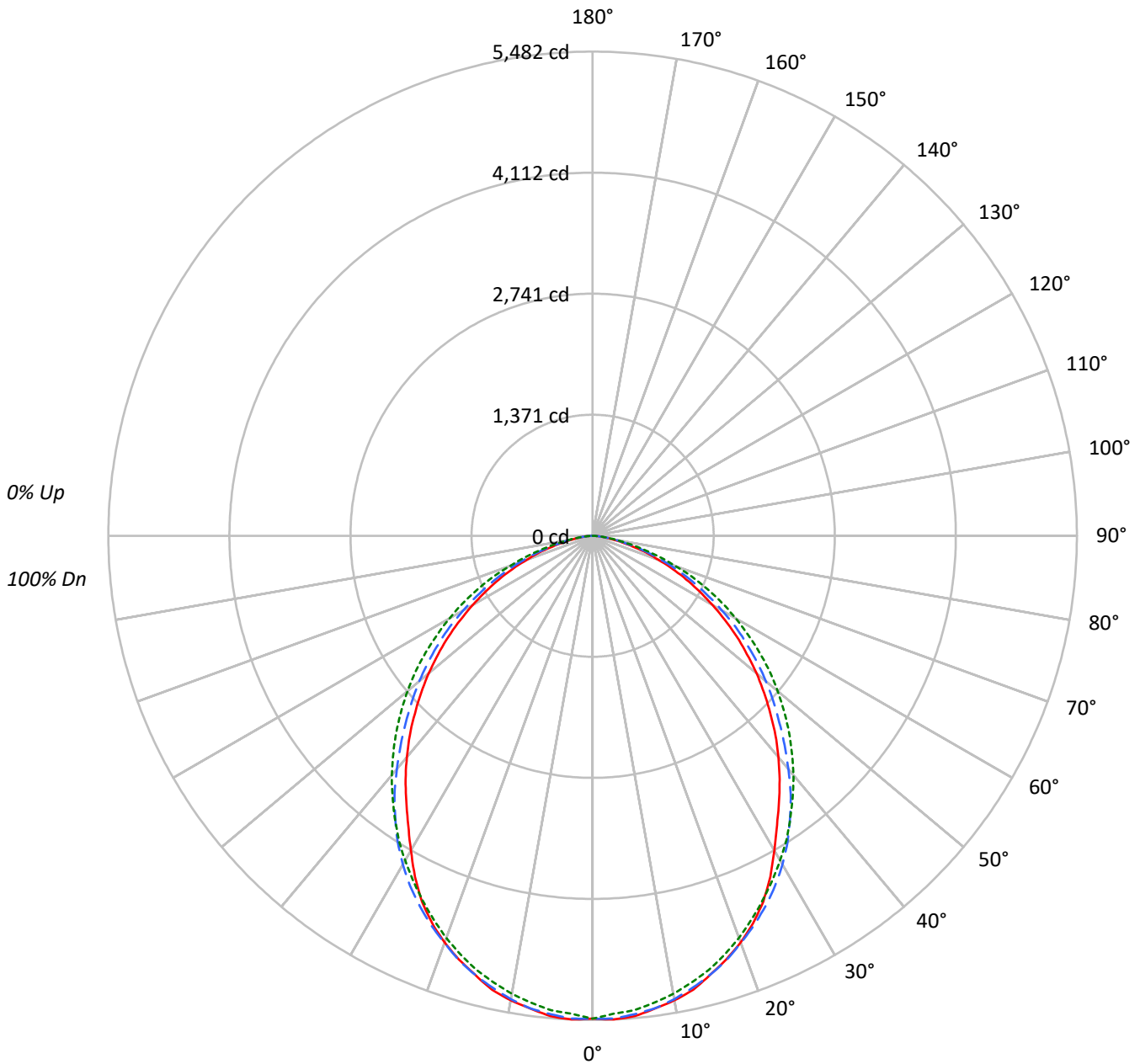
Lumens per Lamp: N/A
Luminaire Lumens: 12642.0 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
Input Voltage (V): NR
Input Current (Ain): 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

TEST NUMBER: P557891

CATALOG NUMBER: FUSL-12-4-LD4-3HI-50-UNV-81-85-EDD

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°	14712	14712	14712
5°	14752	14689	14564
10°	14595	14555	14388
15°	14336	14336	14172
20°	14033	14051	13870
25°	13571	13739	13521
30°	12779	13353	13190
35°	12075	12799	12820
40°	11488	12108	12425
45°	10831	11375	11958
50°	10139	10719	11449
55°	9352	9972	10830
60°	8422	9100	10072
65°	7436	8091	9161
70°	6197	6891	7784
75°	4870	5503	6093
80°	3482	3873	4297
85°	2269	2269	2140



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	514.8	4.1
10°-20°	1446.1	11.4
20°-30°	2113.3	16.7
30°-40°	2398.8	19.0
40°-50°	2315.7	18.3
50°-60°	1910.3	15.1
60°-70°	1272.1	10.1
70°-80°	569.2	4.5
80°-90°	101.8	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°	4074.1	32.2
0°-40°	6472.9	51.2
0°-60°	10698.8	84.6
0°-90°	12642.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12642.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5467	5467	5467	5467	5467	
5°	5461	5459	5438	5408	5392	517
15°	5146	5159	5146	5123	5087	1451
25°	4570	4606	4627	4594	4554	2093
35°	3676	3726	3896	3917	3902	2303
45°	2846	2894	2989	3125	3142	2196
55°	1993	2027	2126	2243	2308	1779
65°	1168	1199	1271	1361	1439	1158
75°	468	494	529	554	586	512
85°	74	74	74	69	69	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5467.3	5467.3	5467.3	5467.3	5467.3
2.5°	5482.0	5484.1	5471.5	5437.9	5416.9
5°	5461.0	5458.9	5437.9	5408.5	5391.7
7.5°	5400.1	5404.3	5398.0	5356.0	5332.9
10°	5341.3	5343.4	5326.6	5293.0	5265.7
12.5°	5265.7	5263.6	5240.5	5223.7	5179.6
15°	5146.0	5158.6	5146.0	5122.9	5087.2
17.5°	5030.5	5030.5	5038.9	4998.9	4971.6
20°	4900.2	4906.5	4906.5	4875.0	4843.5
22.5°	4749.0	4767.9	4774.2	4740.6	4702.8
25°	4570.5	4606.2	4627.2	4593.6	4553.7
27.5°	4354.1	4408.7	4471.7	4446.5	4402.4
30°	4112.6	4192.4	4297.4	4276.4	4244.9
32.5°	3883.6	3963.5	4108.4	4100.0	4083.2
35°	3675.7	3726.1	3896.2	3917.2	3902.5
37.5°	3478.3	3524.5	3684.1	3732.4	3719.8
40°	3270.3	3320.7	3446.8	3532.9	3537.1
42.5°	3064.5	3112.8	3215.7	3339.6	3339.6
45°	2846.0	2894.3	2988.9	3125.4	3142.2
47.5°	2631.8	2682.2	2774.6	2911.2	2938.5
50°	2421.8	2468.0	2560.4	2692.7	2734.7
52.5°	2203.3	2253.7	2344.0	2465.9	2526.8
55°	1993.3	2026.9	2125.6	2243.2	2308.3
57.5°	1774.8	1806.3	1917.7	2018.5	2085.7
60°	1564.8	1604.7	1690.8	1793.7	1871.5
62.5°	1363.2	1405.2	1478.7	1569.0	1657.2
65°	1167.8	1199.3	1270.7	1361.1	1438.8
67.5°	978.8	1006.1	1077.5	1140.5	1222.4
70°	787.6	823.4	875.9	936.8	989.3
72.5°	634.3	649.0	693.1	737.2	791.9
75°	468.4	493.6	529.3	554.5	586.0
77.5°	336.1	350.8	371.8	392.8	422.2
80°	224.7	231.0	249.9	254.1	277.3
82.5°	136.5	140.7	144.9	147.0	155.4
85°	73.5	73.5	73.5	69.3	69.3
87.5°	42.0	42.0	35.7	29.4	21.0
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)