

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: P557395

Luminaire Tested: **FUSL-12-4-LD4-2LO-50-UNV-82-85-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: P557395
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-LD4-2LO-50-UNV-82-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 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

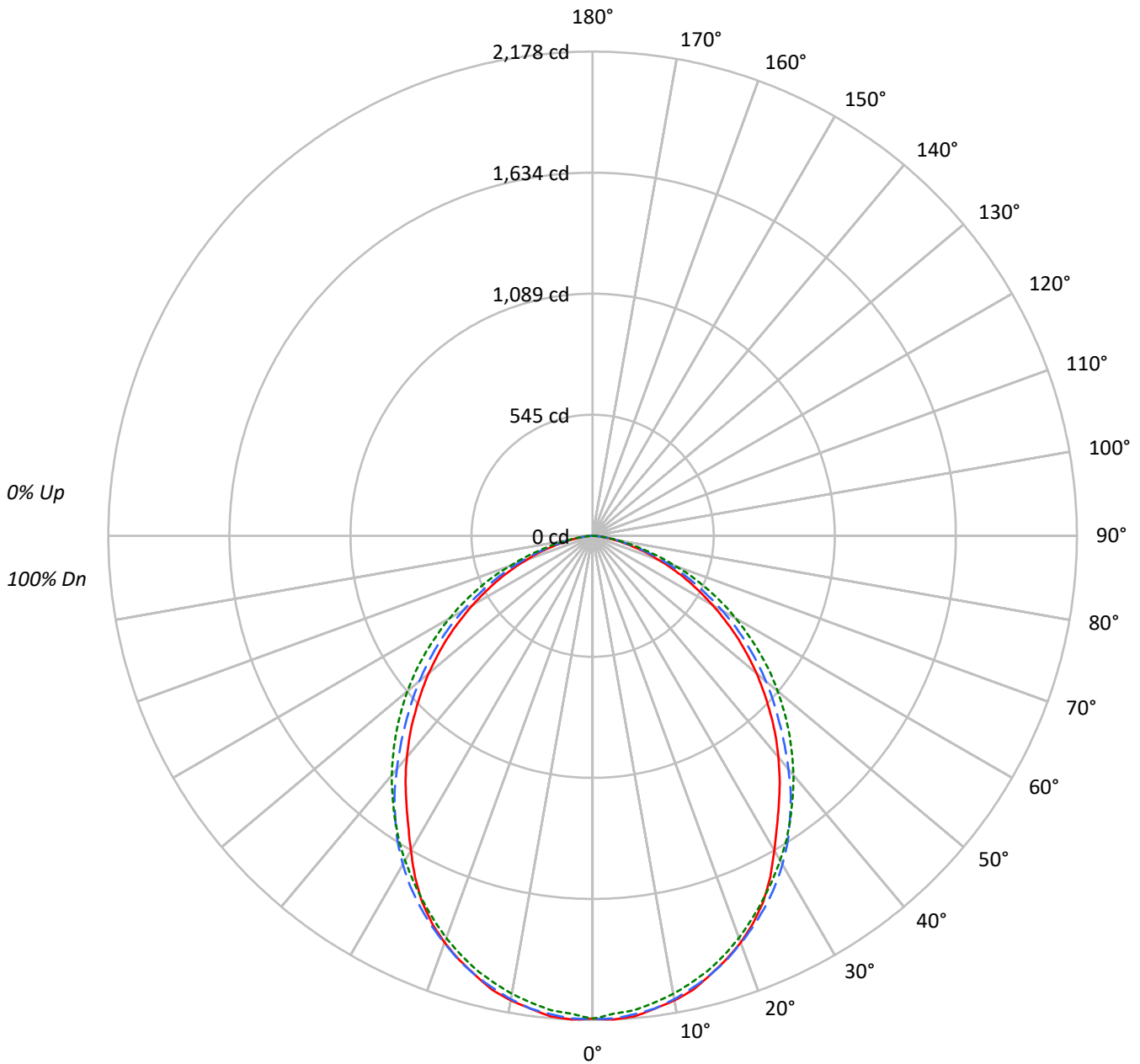
Lumens per Lamp: N/A
Luminaire Lumens: 5023.0 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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: P557395

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-82-85-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°	5846	5846	5846
5°	5861	5836	5787
10°	5799	5783	5717
15°	5696	5696	5631
20°	5576	5583	5511
25°	5392	5459	5372
30°	5077	5306	5241
35°	4798	5086	5094
40°	4565	4811	4937
45°	4303	4520	4751
50°	4028	4259	4549
55°	3716	3963	4303
60°	3346	3616	4002
65°	2954	3215	3640
70°	2463	2738	3093
75°	1935	2187	2420
80°	1384	1539	1708
85°	902	902	849



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.5	4.1
10°-20°	574.6	11.4
20°-30°	839.7	16.7
30°-40°	953.1	19.0
40°-50°	920.1	18.3
50°-60°	759.0	15.1
60°-70°	505.4	10.1
70°-80°	226.2	4.5
80°-90°	40.5	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°	1618.8	32.2
0°-40°	2571.9	51.2
0°-60°	4250.9	84.6
0°-90°	5023.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5023.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2172	2172	2172	2172	2172	
5°	2170	2169	2161	2149	2142	205
15°	2045	2050	2045	2036	2021	576
25°	1816	1830	1838	1825	1809	832
35°	1460	1480	1548	1556	1551	915
45°	1131	1150	1188	1242	1248	872
55°	792	805	845	891	917	707
65°	464	476	505	541	572	460
75°	186	196	210	220	233	203
85°	29	29	29	28	28	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2172.3	2172.3	2172.3	2172.3	2172.3
2.5°	2178.2	2179.0	2174.0	2160.6	2152.3
5°	2169.8	2169.0	2160.6	2149.0	2142.3
7.5°	2145.6	2147.3	2144.8	2128.1	2118.9
10°	2122.2	2123.1	2116.4	2103.1	2092.2
12.5°	2092.2	2091.4	2082.2	2075.5	2058.0
15°	2044.6	2049.6	2044.6	2035.5	2021.3
17.5°	1998.7	1998.7	2002.1	1986.2	1975.4
20°	1947.0	1949.5	1949.5	1937.0	1924.5
22.5°	1886.9	1894.4	1896.9	1883.6	1868.5
25°	1816.0	1830.2	1838.5	1825.1	1809.3
27.5°	1730.0	1751.7	1776.7	1766.7	1749.2
30°	1634.0	1665.7	1707.5	1699.1	1686.6
32.5°	1543.1	1574.8	1632.4	1629.0	1622.4
35°	1460.5	1480.5	1548.1	1556.4	1550.6
37.5°	1382.0	1400.4	1463.8	1483.0	1478.0
40°	1299.4	1319.4	1369.5	1403.7	1405.4
42.5°	1217.6	1236.8	1277.7	1326.9	1326.9
45°	1130.8	1150.0	1187.6	1241.8	1248.5
47.5°	1045.7	1065.7	1102.4	1156.7	1167.5
50°	962.2	980.6	1017.3	1069.9	1086.6
52.5°	875.4	895.5	931.4	979.8	1004.0
55°	792.0	805.3	844.6	891.3	917.2
57.5°	705.2	717.7	761.9	802.0	828.7
60°	621.7	637.6	671.8	712.7	743.6
62.5°	541.6	558.3	587.5	623.4	658.5
65°	464.0	476.5	504.9	540.8	571.7
67.5°	388.9	399.7	428.1	453.2	485.7
70°	313.0	327.1	348.0	372.2	393.1
72.5°	252.0	257.9	275.4	292.9	314.6
75°	186.1	196.1	210.3	220.3	232.8
77.5°	133.5	139.4	147.7	156.1	167.7
80°	89.3	91.8	99.3	101.0	110.2
82.5°	54.2	55.9	57.6	58.4	61.8
85°	29.2	29.2	29.2	27.5	27.5
87.5°	16.7	16.7	14.2	11.7	8.3
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)