

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: P557265

Luminaire Tested: **FUSL-12-4-LD4-2LO-35-UNV-82-84-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: P557265
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-35-UNV-82-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

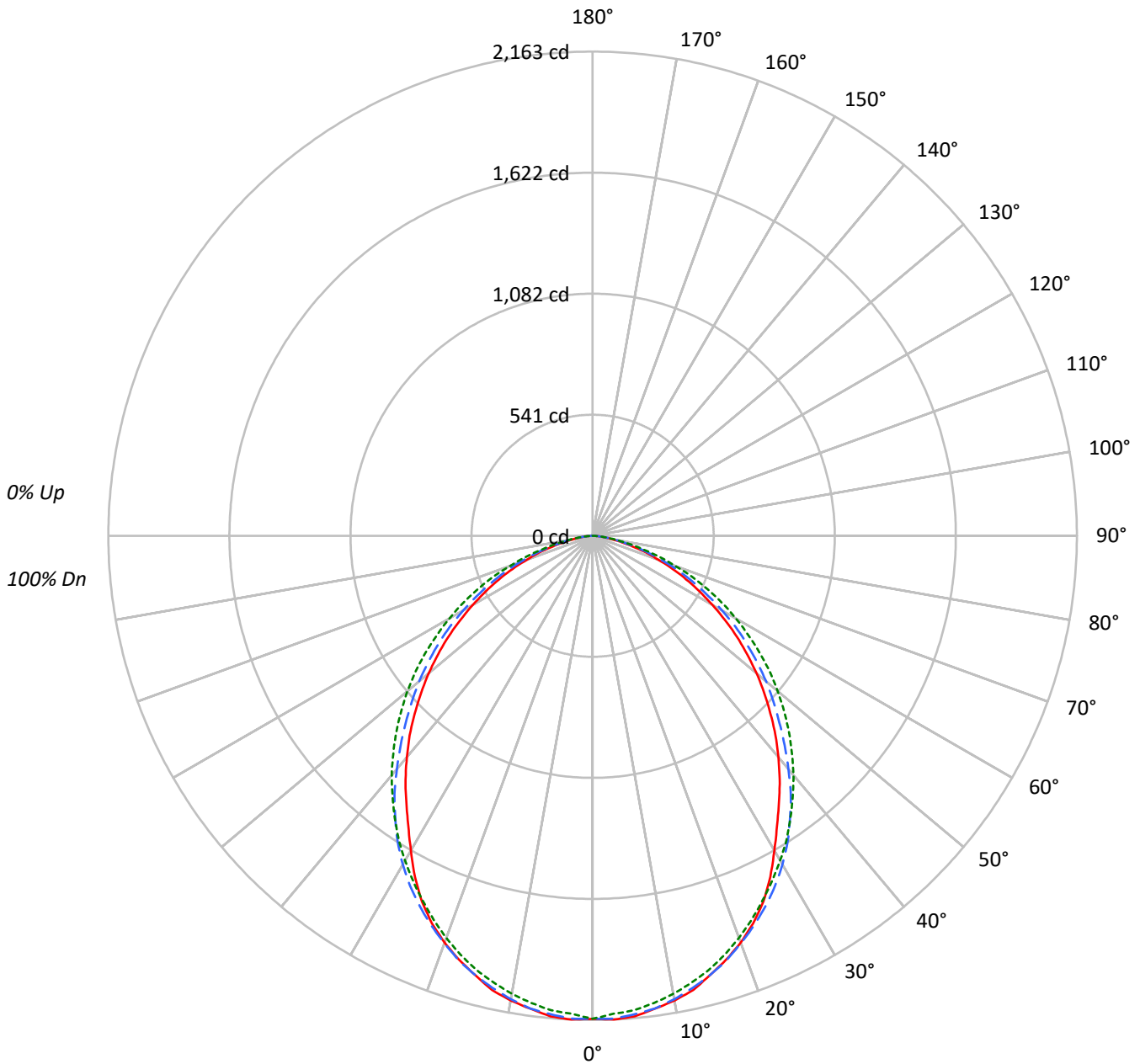
Lumens per Lamp: N/A
Luminaire Lumens: 4989.0 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P557265

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-82-84-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557265

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-82-84-EDD

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°	5806	5806	5806
5°	5821	5797	5748
10°	5760	5744	5678
15°	5658	5658	5593
20°	5538	5545	5474
25°	5355	5422	5336
30°	5043	5270	5205
35°	4765	5051	5059
40°	4534	4778	4904
45°	4274	4489	4719
50°	4001	4230	4518
55°	3690	3935	4274
60°	3323	3591	3975
65°	2935	3193	3615
70°	2445	2719	3072
75°	1921	2172	2405
80°	1375	1528	1695
85°	895	895	846



TEST NUMBER: P557265

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-82-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.1	4.1
10°-20°	570.7	11.4
20°-30°	834.0	16.7
30°-40°	946.7	19.0
40°-50°	913.8	18.3
50°-60°	753.9	15.1
60°-70°	502.0	10.1
70°-80°	224.6	4.5
80°-90°	40.2	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°	1607.8	32.2
0°-40°	2554.5	51.2
0°-60°	4222.2	84.6
0°-90°	4989.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4989.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2158	2158	2158	2158	2158	
5°	2155	2154	2146	2134	2128	204
15°	2031	2036	2031	2022	2008	572
25°	1804	1818	1826	1813	1797	826
35°	1451	1470	1538	1546	1540	909
45°	1123	1142	1180	1233	1240	867
55°	787	800	839	885	911	702
65°	461	473	502	537	568	457
75°	185	195	209	219	231	202
85°	29	29	29	27	27	39
90°	0	0	0	0	0	



TEST NUMBER: P557265

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-82-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2157.6	2157.6	2157.6	2157.6	2157.6
2.5°	2163.4	2164.2	2159.3	2146.0	2137.7
5°	2155.1	2154.3	2146.0	2134.4	2127.8
7.5°	2131.1	2132.7	2130.3	2113.7	2104.6
10°	2107.9	2108.7	2102.1	2088.8	2078.0
12.5°	2078.0	2077.2	2068.1	2061.5	2044.1
15°	2030.8	2035.8	2030.8	2021.7	2007.6
17.5°	1985.2	1985.2	1988.5	1972.8	1962.0
20°	1933.8	1936.3	1936.3	1923.9	1911.4
22.5°	1874.1	1881.6	1884.1	1870.8	1855.9
25°	1803.7	1817.8	1826.1	1812.8	1797.0
27.5°	1718.3	1739.9	1764.7	1754.8	1737.4
30°	1623.0	1654.5	1695.9	1687.6	1675.2
32.5°	1532.6	1564.1	1621.3	1618.0	1611.4
35°	1450.6	1470.5	1537.6	1545.9	1540.1
37.5°	1372.7	1390.9	1453.9	1472.9	1468.0
40°	1290.6	1310.5	1360.2	1394.2	1395.9
42.5°	1209.4	1228.4	1269.0	1317.9	1317.9
45°	1123.2	1142.2	1179.5	1233.4	1240.0
47.5°	1038.6	1058.5	1095.0	1148.8	1159.6
50°	955.7	974.0	1010.4	1062.6	1079.2
52.5°	869.5	889.4	925.0	973.1	997.2
55°	786.6	799.9	838.8	885.3	911.0
57.5°	700.4	712.8	756.8	796.6	823.1
60°	617.5	633.3	667.3	707.9	738.5
62.5°	538.0	554.5	583.5	619.2	654.0
65°	460.9	473.3	501.5	537.1	567.8
67.5°	386.3	397.0	425.2	450.1	482.4
70°	310.8	324.9	345.6	369.7	390.4
72.5°	250.3	256.1	273.5	290.9	312.5
75°	184.8	194.8	208.9	218.8	231.3
77.5°	132.6	138.4	146.7	155.0	166.6
80°	88.7	91.2	98.6	100.3	109.4
82.5°	53.9	55.5	57.2	58.0	61.3
85°	29.0	29.0	29.0	27.4	27.4
87.5°	16.6	16.6	14.1	11.6	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)