

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: P557249

Luminaire Tested: **FUSL-12-4-LD4-2LO-35-UNV-81-84-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: P557249
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-81-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 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

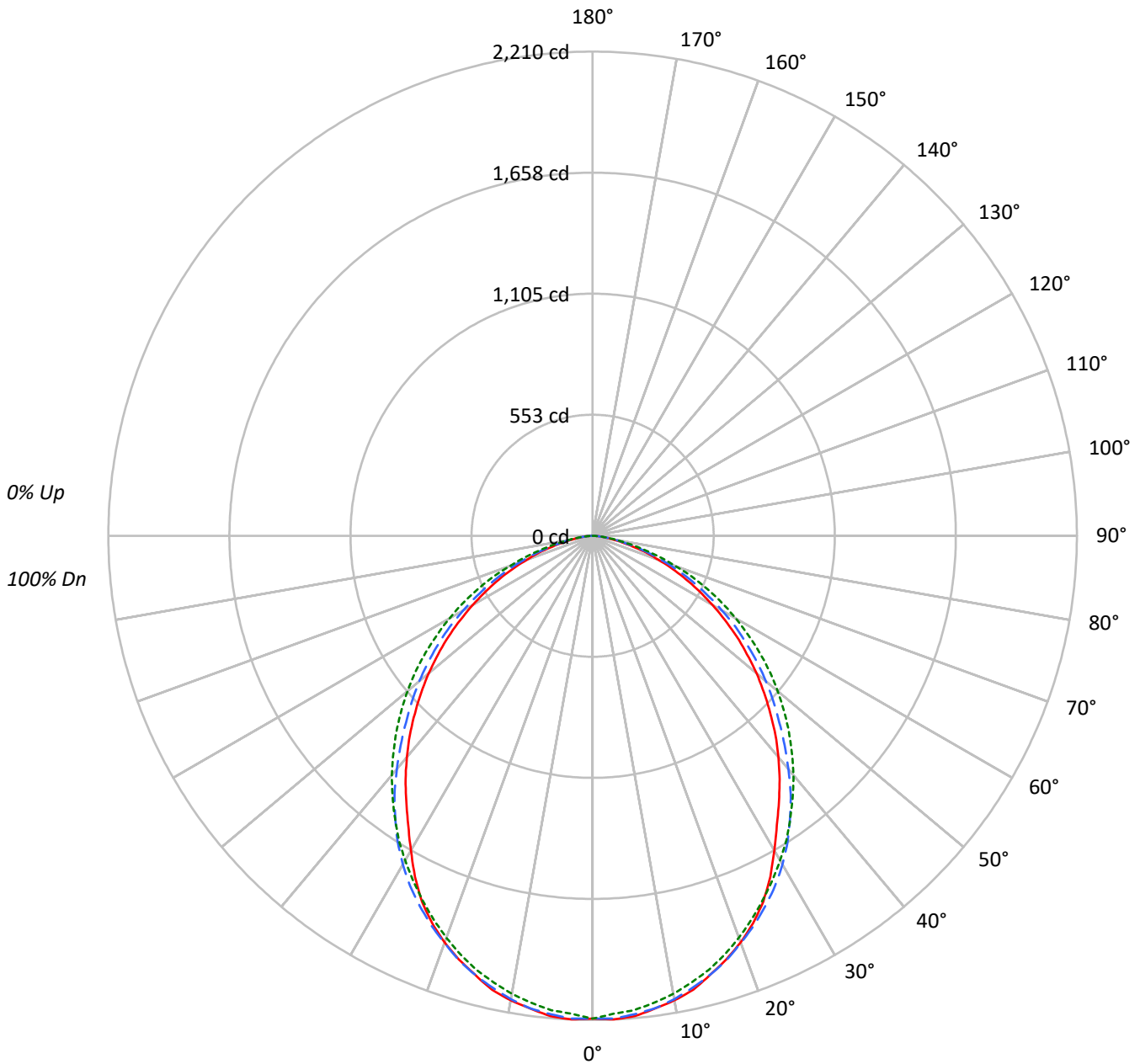
Lumens per Lamp: N/A
Luminaire Lumens: 5096.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P557249

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-81-84-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557249

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-81-84-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°	5931	5931	5931
5°	5946	5921	5871
10°	5883	5867	5800
15°	5779	5779	5713
20°	5657	5664	5591
25°	5470	5538	5450
30°	5151	5383	5317
35°	4868	5160	5168
40°	4631	4881	5009
45°	4366	4585	4820
50°	4087	4321	4615
55°	3770	4020	4366
60°	3395	3668	4060
65°	2997	3261	3693
70°	2498	2778	3138
75°	1963	2219	2456
80°	1404	1562	1733
85°	914	914	861



TEST NUMBER: P557249

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-81-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.5	4.1
10°-20°	582.9	11.4
20°-30°	851.9	16.7
30°-40°	967.0	19.0
40°-50°	933.4	18.3
50°-60°	770.0	15.1
60°-70°	512.8	10.1
70°-80°	229.5	4.5
80°-90°	41.0	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°	1642.3	32.2
0°-40°	2609.2	51.2
0°-60°	4312.7	84.6
0°-90°	5096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5096.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2204	2204	2204	2204	2204	
5°	2201	2200	2192	2180	2173	208
15°	2074	2079	2074	2065	2051	585
25°	1842	1857	1865	1852	1836	844
35°	1482	1502	1571	1579	1573	928
45°	1147	1167	1205	1260	1267	885
55°	804	817	857	904	930	717
65°	471	483	512	549	580	467
75°	189	199	213	224	236	206
85°	30	30	30	28	28	40
90°	0	0	0	0	0	



TEST NUMBER: P557249

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-81-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2203.9	2203.9	2203.9	2203.9	2203.9
2.5°	2209.8	2210.7	2205.6	2192.0	2183.6
5°	2201.3	2200.5	2192.0	2180.2	2173.4
7.5°	2176.8	2178.5	2175.9	2159.0	2149.7
10°	2153.1	2153.9	2147.2	2133.6	2122.6
12.5°	2122.6	2121.8	2112.4	2105.7	2087.9
15°	2074.3	2079.4	2074.3	2065.0	2050.6
17.5°	2027.8	2027.8	2031.2	2015.1	2004.1
20°	1975.3	1977.8	1977.8	1965.1	1952.4
22.5°	1914.3	1921.9	1924.5	1910.9	1895.7
25°	1842.4	1856.8	1865.2	1851.7	1835.6
27.5°	1755.2	1777.2	1802.6	1792.4	1774.6
30°	1657.8	1690.0	1732.3	1723.8	1711.1
32.5°	1565.5	1597.7	1656.1	1652.7	1645.9
35°	1481.7	1502.0	1570.6	1579.0	1573.1
37.5°	1402.1	1420.7	1485.1	1504.5	1499.5
40°	1318.3	1338.6	1389.4	1424.1	1425.8
42.5°	1235.3	1254.8	1296.3	1346.2	1346.2
45°	1147.2	1166.7	1204.8	1259.8	1266.6
47.5°	1060.9	1081.2	1118.5	1173.5	1184.5
50°	976.2	994.8	1032.1	1085.4	1102.4
52.5°	888.2	908.5	944.9	994.0	1018.5
55°	803.5	817.0	856.8	904.2	930.5
57.5°	715.4	728.1	773.0	813.7	840.7
60°	630.8	646.9	681.6	723.1	754.4
62.5°	549.5	566.4	596.1	632.5	668.0
65°	470.7	483.4	512.2	548.6	580.0
67.5°	394.5	405.6	434.3	459.7	492.8
70°	317.5	331.9	353.1	377.6	398.8
72.5°	255.7	261.6	279.4	297.2	319.2
75°	188.8	199.0	213.4	223.5	236.2
77.5°	135.5	141.4	149.9	158.3	170.2
80°	90.6	93.1	100.8	102.4	111.8
82.5°	55.0	56.7	58.4	59.3	62.7
85°	29.6	29.6	29.6	27.9	27.9
87.5°	16.9	16.9	14.4	11.9	8.5
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)