

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: P556355

Luminaire Tested: **FUSL-12-4-LD4-1HI-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: P556355
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-LD4-1HI-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

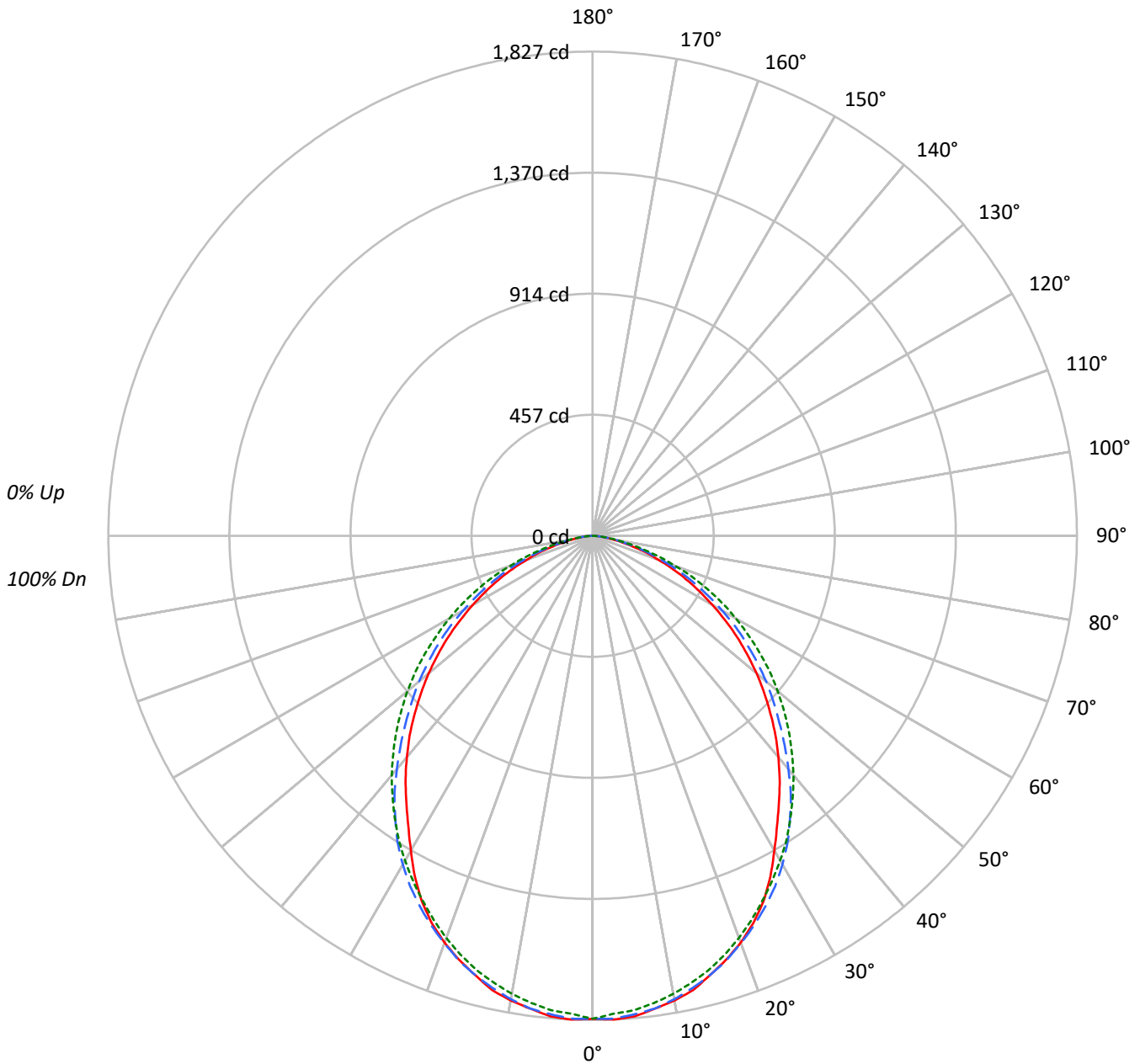
Lumens per Lamp: N/A
Luminaire Lumens: 4214.0 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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: P556355

CATALOG NUMBER: FUSL-12-4-LD4-1HI-50-UNV-81-85-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P556355

CATALOG NUMBER: FUSL-12-4-LD4-1HI-50-UNV-81-85-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°	4904	4904	4904
5°	4917	4896	4855
10°	4865	4852	4796
15°	4779	4779	4724
20°	4678	4684	4623
25°	4524	4580	4507
30°	4260	4451	4397
35°	4025	4266	4273
40°	3829	4036	4142
45°	3610	3792	3986
50°	3380	3573	3816
55°	3117	3324	3610
60°	2807	3033	3357
65°	2479	2697	3054
70°	2065	2297	2595
75°	1623	1834	2031
80°	1161	1291	1432
85°	756	756	713



TEST NUMBER: P556355

CATALOG NUMBER: FUSL-12-4-LD4-1HI-50-UNV-81-85-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.6	4.1
10°-20°	482.0	11.4
20°-30°	704.4	16.7
30°-40°	799.6	19.0
40°-50°	771.9	18.3
50°-60°	636.7	15.1
60°-70°	424.0	10.1
70°-80°	189.7	4.5
80°-90°	33.9	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°	1358.0	32.2
0°-40°	2157.6	51.2
0°-60°	3566.3	84.6
0°-90°	4214.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4214.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1822	1822	1822	1822	1822	
5°	1820	1820	1813	1803	1797	172
15°	1715	1720	1715	1708	1696	484
25°	1524	1535	1542	1531	1518	698
35°	1225	1242	1299	1306	1301	768
45°	949	965	996	1042	1047	732
55°	664	676	708	748	769	593
65°	389	400	424	454	480	386
75°	156	164	176	185	195	171
85°	24	24	24	23	23	33
90°	0	0	0	0	0	



TEST NUMBER: P556355

CATALOG NUMBER: FUSL-12-4-LD4-1HI-50-UNV-81-85-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1822.4	1822.4	1822.4	1822.4	1822.4
2.5°	1827.3	1828.0	1823.8	1812.6	1805.6
5°	1820.3	1819.6	1812.6	1802.8	1797.2
7.5°	1800.0	1801.4	1799.3	1785.3	1777.6
10°	1780.4	1781.1	1775.5	1764.3	1755.2
12.5°	1755.2	1754.5	1746.8	1741.2	1726.5
15°	1715.3	1719.5	1715.3	1707.6	1695.7
17.5°	1676.8	1676.8	1679.6	1666.3	1657.2
20°	1633.4	1635.5	1635.5	1625.0	1614.5
22.5°	1583.0	1589.3	1591.4	1580.2	1567.6
25°	1523.5	1535.4	1542.4	1531.2	1517.9
27.5°	1451.4	1469.6	1490.6	1482.2	1467.5
30°	1370.9	1397.5	1432.5	1425.5	1415.0
32.5°	1294.5	1321.2	1369.5	1366.7	1361.1
35°	1225.2	1242.0	1298.7	1305.7	1300.8
37.5°	1159.4	1174.8	1228.0	1244.1	1239.9
40°	1090.1	1106.9	1148.9	1177.6	1179.0
42.5°	1021.5	1037.6	1071.9	1113.2	1113.2
45°	948.7	964.8	996.3	1041.8	1047.4
47.5°	877.3	894.1	924.9	970.4	979.5
50°	807.3	822.7	853.5	897.6	911.6
52.5°	734.4	751.2	781.3	822.0	842.3
55°	664.4	675.6	708.5	747.7	769.4
57.5°	591.6	602.1	639.2	672.8	695.2
60°	521.6	534.9	563.6	597.9	623.8
62.5°	454.4	468.4	492.9	523.0	552.4
65°	389.3	399.8	423.6	453.7	479.6
67.5°	326.3	335.4	359.2	380.2	407.5
70°	262.5	274.5	292.0	312.3	329.8
72.5°	211.4	216.3	231.0	245.7	264.0
75°	156.1	164.5	176.4	184.8	195.3
77.5°	112.0	116.9	123.9	130.9	140.7
80°	74.9	77.0	83.3	84.7	92.4
82.5°	45.5	46.9	48.3	49.0	51.8
85°	24.5	24.5	24.5	23.1	23.1
87.5°	14.0	14.0	11.9	9.8	7.0
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)