

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: P556359

Luminaire Tested: **FUSL-12-4-LD4-1HI-50-UNV-81-87-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: P556359
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-81-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

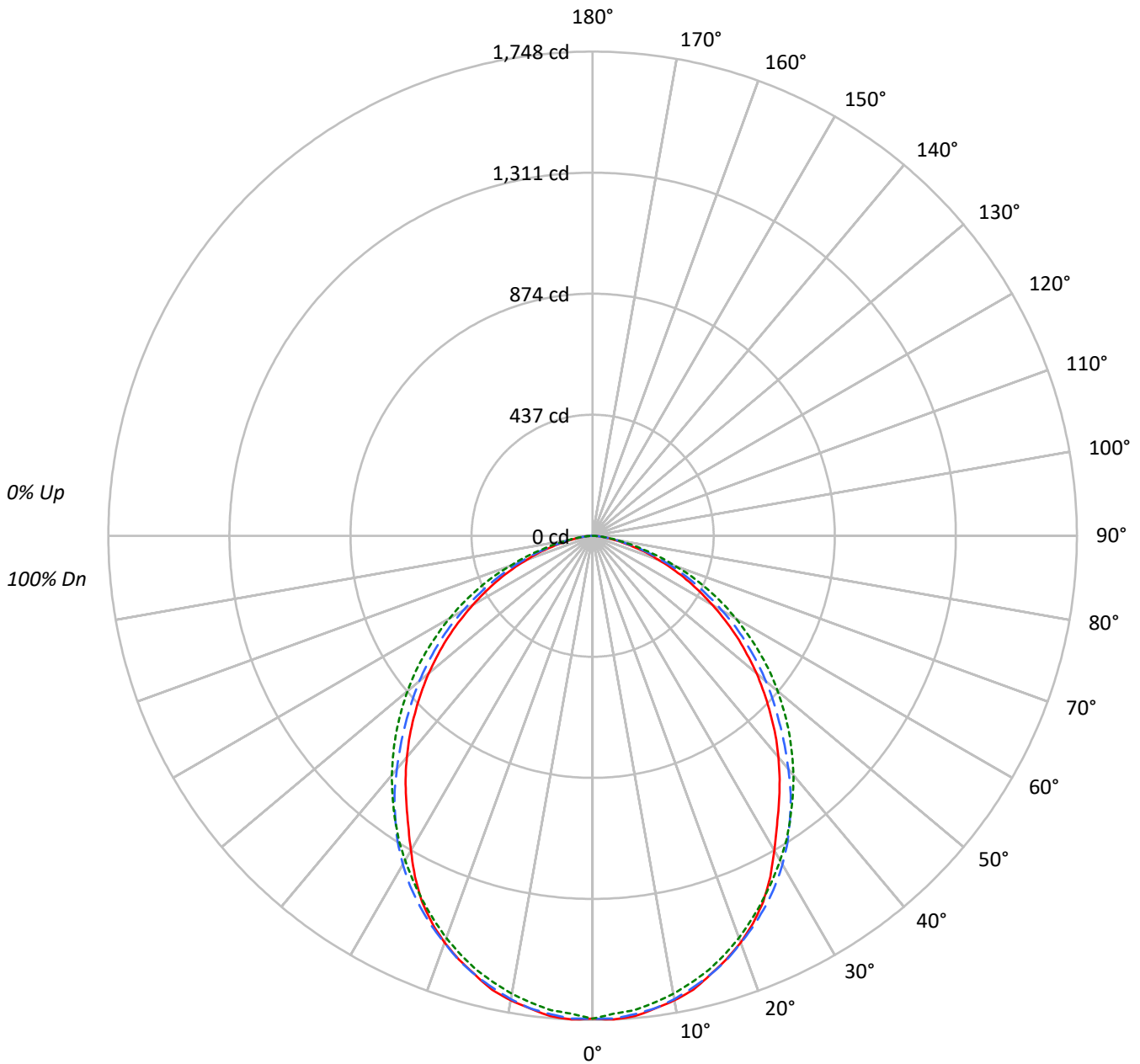
Lumens per Lamp: N/A
Luminaire Lumens: 4031.0 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (A_{in}): 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: P556359

CATALOG NUMBER: FUSL-12-4-LD4-1HI-50-UNV-81-87-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P556359

CATALOG NUMBER: FUSL-12-4-LD4-1HI-50-UNV-81-87-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°	4691	4691	4691
5°	4704	4684	4644
10°	4654	4641	4588
15°	4571	4571	4519
20°	4474	4480	4423
25°	4327	4381	4311
30°	4075	4258	4206
35°	3850	4081	4088
40°	3663	3861	3962
45°	3454	3627	3813
50°	3233	3418	3651
55°	2982	3180	3453
60°	2685	2901	3211
65°	2371	2580	2921
70°	1976	2198	2482
75°	1552	1755	1943
80°	1111	1235	1370
85°	722	722	682



TEST NUMBER: P556359

CATALOG NUMBER: FUSL-12-4-LD4-1HI-50-UNV-81-87-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.1	4.1
10°-20°	461.1	11.4
20°-30°	673.8	16.7
30°-40°	764.9	19.0
40°-50°	738.4	18.3
50°-60°	609.1	15.1
60°-70°	405.6	10.1
70°-80°	181.5	4.5
80°-90°	32.5	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°	1299.1	32.2
0°-40°	2063.9	51.2
0°-60°	3411.4	84.6
0°-90°	4031.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4031.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1743	1743	1743	1743	1743	
5°	1741	1741	1734	1725	1719	165
15°	1641	1645	1641	1634	1622	463
25°	1457	1469	1475	1465	1452	667
35°	1172	1188	1242	1249	1244	734
45°	908	923	953	997	1002	700
55°	636	646	678	715	736	567
65°	372	382	405	434	459	369
75°	149	157	169	177	187	163
85°	23	23	23	22	22	32
90°	0	0	0	0	0	



TEST NUMBER: P556359

CATALOG NUMBER: FUSL-12-4-LD4-1HI-50-UNV-81-87-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1743.3	1743.3	1743.3	1743.3	1743.3
2.5°	1748.0	1748.7	1744.6	1733.9	1727.2
5°	1741.3	1740.6	1733.9	1724.6	1719.2
7.5°	1721.9	1723.2	1721.2	1707.8	1700.4
10°	1703.1	1703.8	1698.4	1687.7	1679.0
12.5°	1679.0	1678.3	1671.0	1665.6	1651.6
15°	1640.8	1644.9	1640.8	1633.5	1622.1
17.5°	1604.0	1604.0	1606.7	1594.0	1585.2
20°	1562.5	1564.5	1564.5	1554.4	1544.4
22.5°	1514.3	1520.3	1522.3	1511.6	1499.5
25°	1457.3	1468.7	1475.4	1464.7	1452.0
27.5°	1388.3	1405.8	1425.9	1417.8	1403.8
30°	1311.3	1336.8	1370.3	1363.6	1353.5
32.5°	1238.3	1263.8	1310.0	1307.3	1302.0
35°	1172.0	1188.1	1242.3	1249.0	1244.4
37.5°	1109.1	1123.8	1174.7	1190.1	1186.1
40°	1042.8	1058.8	1099.0	1126.5	1127.8
42.5°	977.1	992.5	1025.4	1064.9	1064.9
45°	907.5	922.9	953.0	996.6	1001.9
47.5°	839.2	855.2	884.7	928.2	937.0
50°	772.2	786.9	816.4	858.6	872.0
52.5°	702.5	718.6	747.4	786.3	805.7
55°	635.6	646.3	677.8	715.3	736.0
57.5°	565.9	576.0	611.5	643.6	665.0
60°	498.9	511.7	539.1	571.9	596.7
62.5°	434.7	448.0	471.5	500.3	528.4
65°	372.4	382.4	405.2	434.0	458.8
67.5°	312.1	320.8	343.6	363.7	389.8
70°	251.1	262.5	279.3	298.7	315.4
72.5°	202.3	206.9	221.0	235.1	252.5
75°	149.3	157.4	168.8	176.8	186.9
77.5°	107.2	111.8	118.5	125.2	134.6
80°	71.7	73.7	79.7	81.0	88.4
82.5°	43.5	44.9	46.2	46.9	49.6
85°	23.4	23.4	23.4	22.1	22.1
87.5°	13.4	13.4	11.4	9.4	6.7
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)