

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: P556100

Luminaire Tested: **FUSL-12-2-LD4-3STD-50-UNV-81-86-EDD-90**

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: P556100
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-12-2-LD4-3STD-50-UNV-81-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

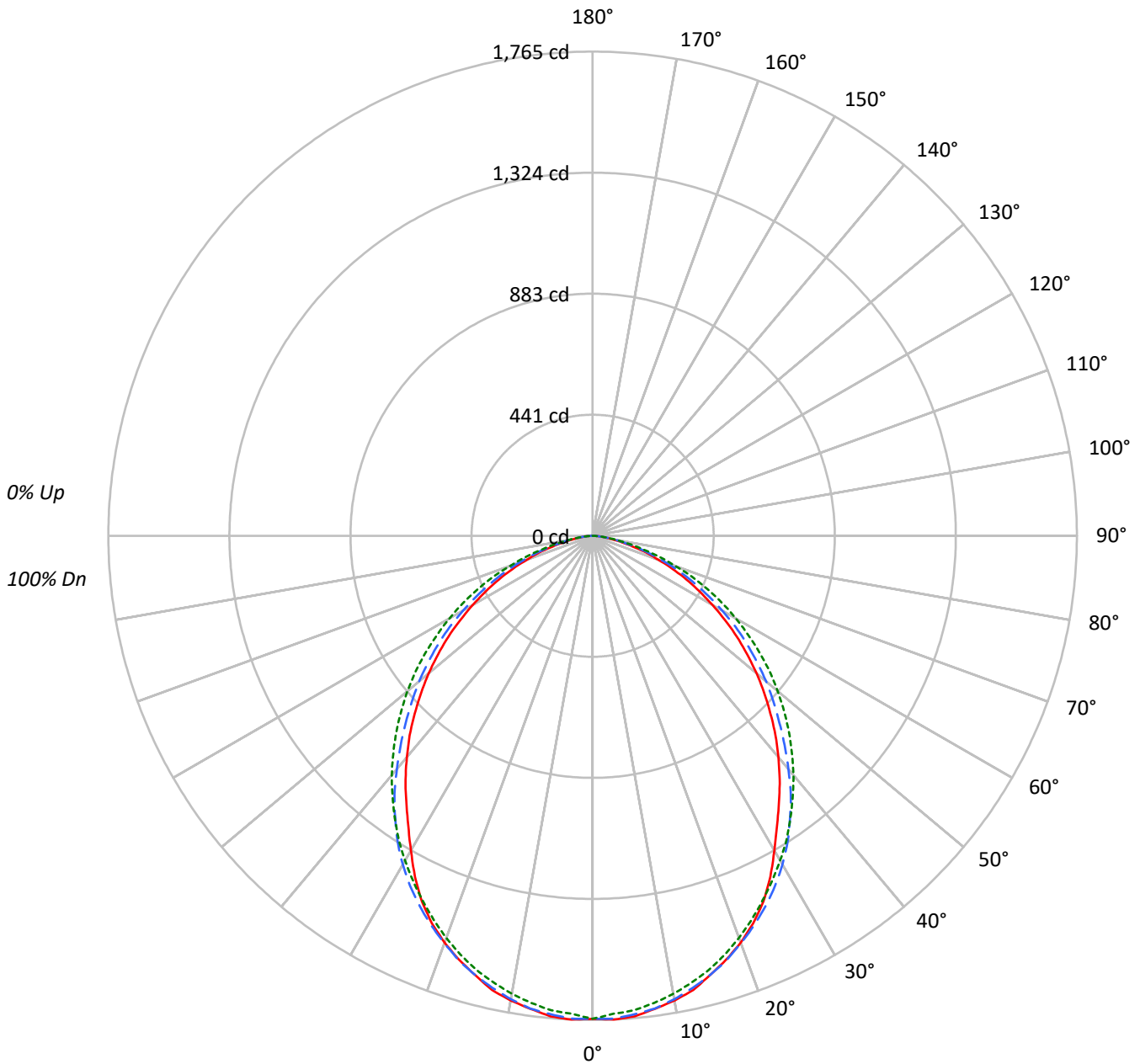
Lumens per Lamp: N/A
Luminaire Lumens: 4071.0 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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

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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°	9475	9475	9475
5°	9501	9460	9380
10°	9400	9374	9267
15°	9233	9233	9128
20°	9038	9049	8933
25°	8740	8849	8708
30°	8230	8600	8495
35°	7777	8244	8257
40°	7399	7798	8002
45°	6976	7326	7702
50°	6530	6903	7373
55°	6023	6423	6975
60°	5424	5861	6486
65°	4790	5211	5900
70°	3991	4437	5013
75°	3136	3543	3924
80°	2244	2495	2768
85°	1463	1463	1377



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.8	4.1
10°-20°	465.7	11.4
20°-30°	680.5	16.7
30°-40°	772.5	19.0
40°-50°	745.7	18.3
50°-60°	615.1	15.1
60°-70°	409.6	10.1
70°-80°	183.3	4.5
80°-90°	32.8	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°	1312.0	32.2
0°-40°	2084.4	51.2
0°-60°	3445.3	84.6
0°-90°	4071.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4071.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1761	1761	1761	1761	1761	
5°	1759	1758	1751	1742	1736	166
15°	1657	1661	1657	1650	1638	467
25°	1472	1483	1490	1479	1466	674
35°	1184	1200	1255	1261	1257	742
45°	916	932	962	1006	1012	707
55°	642	653	684	722	743	573
65°	376	386	409	438	463	373
75°	151	159	170	179	189	165
85°	24	24	24	22	22	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1760.6	1760.6	1760.6	1760.6	1760.6
2.5°	1765.3	1766.0	1762.0	1751.1	1744.4
5°	1758.6	1757.9	1751.1	1741.7	1736.3
7.5°	1739.0	1740.3	1738.3	1724.8	1717.3
10°	1720.0	1720.7	1715.3	1704.5	1695.7
12.5°	1695.7	1695.0	1687.6	1682.1	1667.9
15°	1657.1	1661.2	1657.1	1649.7	1638.2
17.5°	1619.9	1619.9	1622.6	1609.8	1601.0
20°	1578.0	1580.0	1580.0	1569.9	1559.7
22.5°	1529.3	1535.4	1537.4	1526.6	1514.4
25°	1471.8	1483.3	1490.1	1479.2	1466.4
27.5°	1402.1	1419.7	1440.0	1431.9	1417.7
30°	1324.3	1350.0	1383.9	1377.1	1367.0
32.5°	1250.6	1276.3	1323.0	1320.3	1314.9
35°	1183.7	1199.9	1254.7	1261.4	1256.7
37.5°	1120.1	1135.0	1186.4	1201.9	1197.9
40°	1053.1	1069.3	1109.9	1137.7	1139.0
42.5°	986.8	1002.4	1035.5	1075.4	1075.4
45°	916.5	932.0	962.5	1006.4	1011.9
47.5°	847.5	863.7	893.5	937.5	946.2
50°	779.9	794.7	824.5	867.1	880.6
52.5°	709.5	725.7	754.8	794.1	813.7
55°	641.9	652.7	684.5	722.4	743.3
57.5°	571.5	581.7	617.5	650.0	671.6
60°	503.9	516.7	544.5	577.6	602.6
62.5°	439.0	452.5	476.2	505.3	533.7
65°	376.1	386.2	409.2	438.3	463.3
67.5°	315.2	324.0	347.0	367.3	393.6
70°	253.6	265.1	282.0	301.7	318.6
72.5°	204.3	209.0	223.2	237.4	255.0
75°	150.8	158.9	170.4	178.6	188.7
77.5°	108.2	113.0	119.7	126.5	136.0
80°	72.4	74.4	80.5	81.8	89.3
82.5°	44.0	45.3	46.7	47.3	50.1
85°	23.7	23.7	23.7	22.3	22.3
87.5°	13.5	13.5	11.5	9.5	6.8
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)