

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: P556861

Luminaire Tested: **FUSL-12-4-LD4-1STD-50-UNV-80-96-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: P556861
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-LD4-1STD-50-UNV-80-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

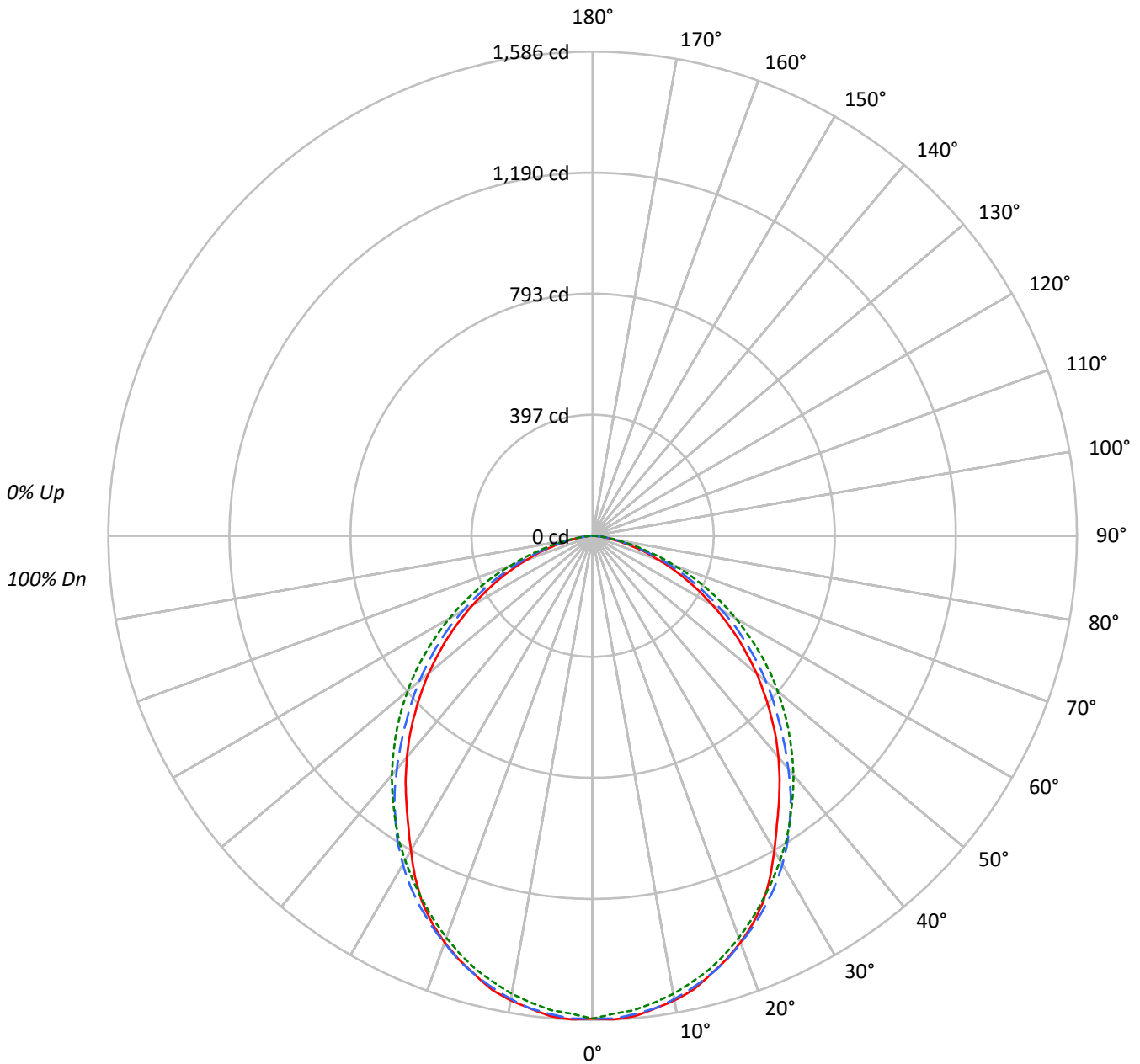
Lumens per Lamp: N/A
Luminaire Lumens: 3657.0 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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°	4256	4256	4256
5°	4267	4249	4213
10°	4222	4210	4162
15°	4147	4147	4100
20°	4059	4064	4012
25°	3926	3974	3911
30°	3697	3863	3815
35°	3493	3703	3709
40°	3323	3503	3594
45°	3133	3290	3459
50°	2933	3101	3312
55°	2705	2885	3133
60°	2436	2632	2914
65°	2151	2341	2650
70°	1792	1994	2252
75°	1409	1592	1762
80°	1007	1120	1243
85°	658	658	621



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.9	4.1
10°-20°	418.3	11.4
20°-30°	611.3	16.7
30°-40°	693.9	19.0
40°-50°	669.9	18.3
50°-60°	552.6	15.1
60°-70°	368.0	10.1
70°-80°	164.7	4.5
80°-90°	29.5	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°	1178.5	32.2
0°-40°	1872.5	51.2
0°-60°	3094.9	84.6
0°-90°	3657.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3657.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1582	1582	1582	1582	1582	
5°	1580	1579	1573	1564	1560	150
15°	1489	1492	1489	1482	1472	420
25°	1322	1332	1338	1329	1317	605
35°	1063	1078	1127	1133	1129	666
45°	823	837	865	904	909	635
55°	577	586	615	649	668	515
65°	338	347	368	394	416	335
75°	136	143	153	160	170	148
85°	21	21	21	20	20	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1581.6	1581.6	1581.6	1581.6	1581.6
2.5°	1585.8	1586.4	1582.8	1573.1	1567.0
5°	1579.7	1579.1	1573.1	1564.5	1559.7
7.5°	1562.1	1563.3	1561.5	1549.4	1542.7
10°	1545.1	1545.7	1540.8	1531.1	1523.2
12.5°	1523.2	1522.6	1515.9	1511.1	1498.3
15°	1488.6	1492.2	1488.6	1481.9	1471.6
17.5°	1455.2	1455.2	1457.6	1446.1	1438.2
20°	1417.5	1419.3	1419.3	1410.2	1401.1
22.5°	1373.8	1379.2	1381.1	1371.3	1360.4
25°	1322.1	1332.4	1338.5	1328.8	1317.3
27.5°	1259.5	1275.3	1293.6	1286.3	1273.5
30°	1189.7	1212.8	1243.1	1237.1	1227.9
32.5°	1123.4	1146.5	1188.4	1186.0	1181.2
35°	1063.3	1077.9	1127.1	1133.2	1128.9
37.5°	1006.2	1019.5	1065.7	1079.7	1076.0
40°	946.0	960.6	997.1	1022.0	1023.2
42.5°	886.5	900.4	930.2	966.1	966.1
45°	823.3	837.3	864.6	904.1	909.0
47.5°	761.3	775.9	802.6	842.1	850.0
50°	700.6	713.9	740.7	778.9	791.1
52.5°	637.4	651.9	678.1	713.3	730.9
55°	576.6	586.3	614.9	648.9	667.7
57.5°	513.4	522.5	554.7	583.9	603.3
60°	452.7	464.2	489.1	518.9	541.4
62.5°	394.3	406.5	427.7	453.9	479.4
65°	337.8	346.9	367.6	393.7	416.2
67.5°	283.1	291.0	311.7	329.9	353.6
70°	227.8	238.2	253.4	271.0	286.2
72.5°	183.5	187.7	200.5	213.3	229.1
75°	135.5	142.8	153.1	160.4	169.5
77.5°	97.2	101.5	107.5	113.6	122.1
80°	65.0	66.8	72.3	73.5	80.2
82.5°	39.5	40.7	41.9	42.5	45.0
85°	21.3	21.3	21.3	20.1	20.1
87.5°	12.2	12.2	10.3	8.5	6.1
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)