

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: P556157

Luminaire Tested: **FUSL-12-4-LD4-1HI-30-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: P556157
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-30-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 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

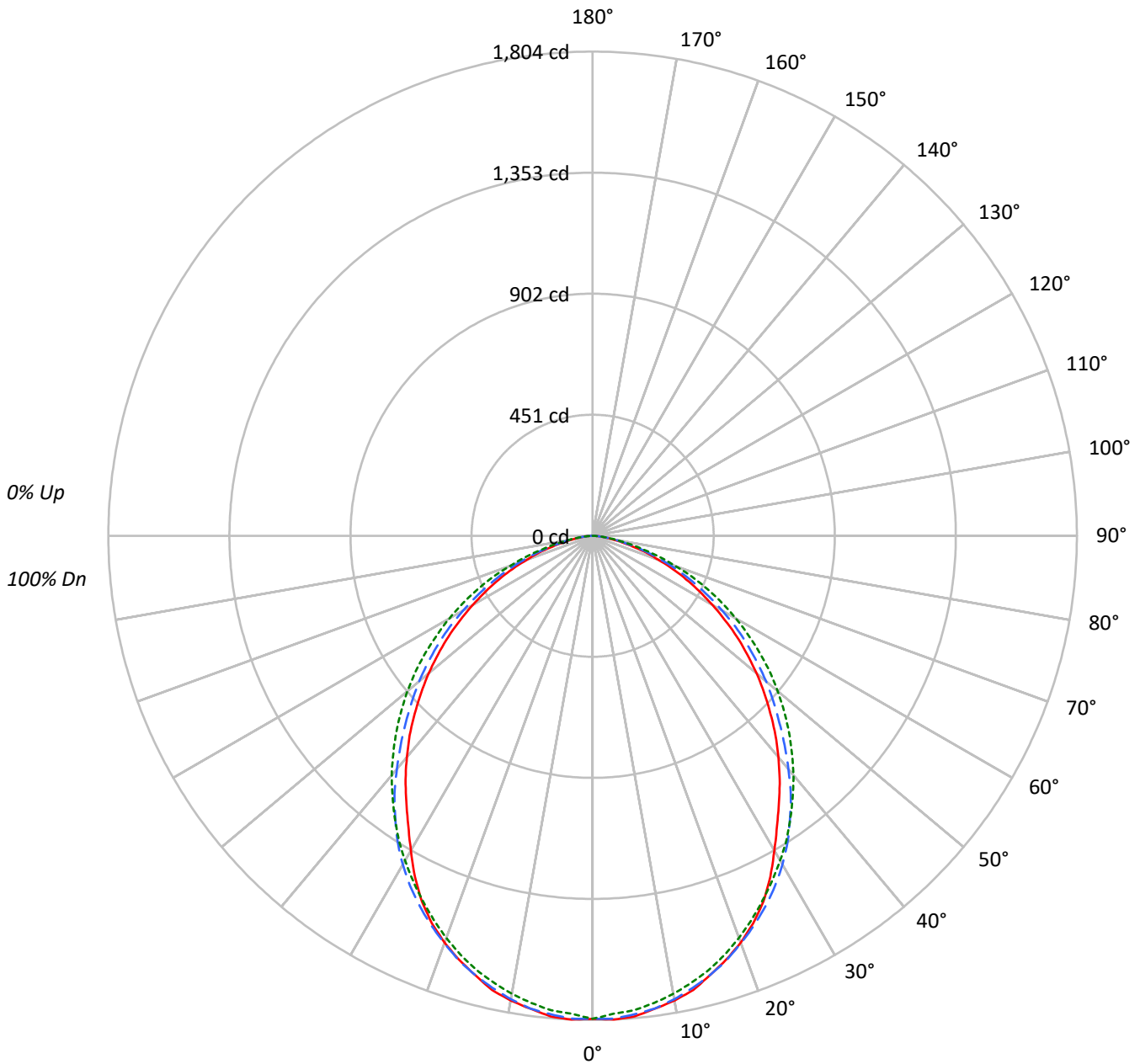
Lumens per Lamp: N/A
Luminaire Lumens: 4161.0 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	4842	4842	4842
5°	4856	4835	4794
10°	4804	4791	4736
15°	4719	4719	4665
20°	4619	4625	4565
25°	4467	4522	4450
30°	4206	4395	4341
35°	3974	4213	4220
40°	3781	3985	4090
45°	3565	3744	3936
50°	3337	3528	3768
55°	3078	3282	3565
60°	2772	2995	3315
65°	2448	2663	3016
70°	2039	2268	2562
75°	1603	1811	2006
80°	1147	1275	1415
85°	747	747	704



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.4	4.1
10°-20°	476.0	11.4
20°-30°	695.6	16.7
30°-40°	789.5	19.0
40°-50°	762.2	18.3
50°-60°	628.7	15.1
60°-70°	418.7	10.1
70°-80°	187.4	4.5
80°-90°	33.5	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°	1341.0	32.2
0°-40°	2130.5	51.2
0°-60°	3521.4	84.6
0°-90°	4161.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4161.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1800	1800	1800	1800	1800	
5°	1798	1797	1790	1780	1775	170
15°	1694	1698	1694	1686	1674	477
25°	1504	1516	1523	1512	1499	689
35°	1210	1226	1282	1289	1284	758
45°	937	953	984	1029	1034	723
55°	656	667	700	738	760	586
65°	384	395	418	448	474	381
75°	154	162	174	182	193	169
85°	24	24	24	23	23	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1799.5	1799.5	1799.5	1799.5	1799.5
2.5°	1804.4	1805.1	1800.9	1789.8	1782.9
5°	1797.5	1796.8	1789.8	1780.2	1774.6
7.5°	1777.4	1778.8	1776.7	1762.9	1755.3
10°	1758.0	1758.7	1753.2	1742.1	1733.2
12.5°	1733.2	1732.5	1724.9	1719.3	1704.8
15°	1693.8	1697.9	1693.8	1686.1	1674.4
17.5°	1655.7	1655.7	1658.5	1645.4	1636.4
20°	1612.9	1614.9	1614.9	1604.6	1594.2
22.5°	1563.1	1569.3	1571.4	1560.3	1547.9
25°	1504.3	1516.1	1523.0	1511.9	1498.8
27.5°	1433.1	1451.1	1471.8	1463.5	1449.0
30°	1353.6	1379.9	1414.5	1407.5	1397.2
32.5°	1278.3	1304.5	1352.2	1349.5	1343.9
35°	1209.8	1226.4	1282.4	1289.3	1284.5
37.5°	1144.8	1160.0	1212.6	1228.5	1224.3
40°	1076.4	1093.0	1134.5	1162.8	1164.2
42.5°	1008.6	1024.5	1058.4	1099.2	1099.2
45°	936.7	952.6	983.8	1028.7	1034.2
47.5°	866.2	882.8	913.2	958.2	967.2
50°	797.1	812.3	842.7	886.3	900.1
52.5°	725.2	741.8	771.5	811.6	831.7
55°	656.1	667.1	699.6	738.3	759.8
57.5°	584.2	594.5	631.2	664.4	686.5
60°	515.0	528.2	556.5	590.4	616.0
62.5°	448.7	462.5	486.7	516.4	545.5
65°	384.4	394.7	418.3	448.0	473.6
67.5°	322.2	331.1	354.7	375.4	402.4
70°	259.2	271.0	288.3	308.3	325.6
72.5°	208.8	213.6	228.1	242.7	260.6
75°	154.2	162.5	174.2	182.5	192.9
77.5°	110.6	115.5	122.4	129.3	139.0
80°	74.0	76.0	82.3	83.7	91.3
82.5°	44.9	46.3	47.7	48.4	51.2
85°	24.2	24.2	24.2	22.8	22.8
87.5°	13.8	13.8	11.8	9.7	6.9
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)