

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: P556669

Luminaire Tested: **FUSL-12-4-LD4-1STD-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: P556669
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-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

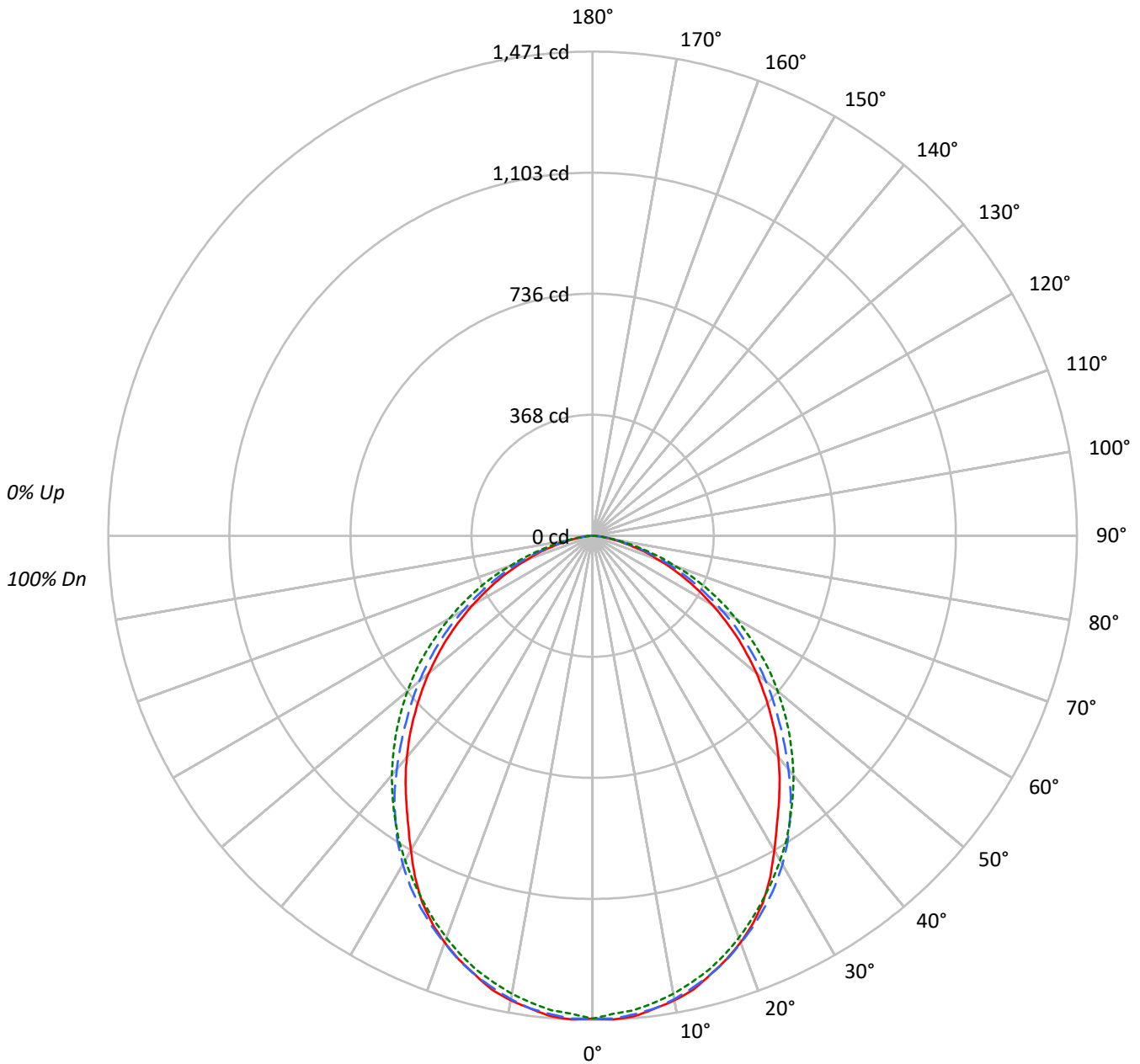
Lumens per Lamp: N/A
Luminaire Lumens: 3392.0 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (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°	3948	3948	3948
5°	3958	3941	3908
10°	3916	3905	3861
15°	3847	3847	3802
20°	3765	3770	3722
25°	3641	3686	3628
30°	3429	3583	3539
35°	3240	3434	3440
40°	3083	3249	3334
45°	2906	3052	3209
50°	2720	2876	3072
55°	2509	2676	2906
60°	2260	2442	2702
65°	1995	2171	2458
70°	1662	1849	2088
75°	1307	1476	1634
80°	934	1040	1153
85°	608	608	574



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.1	4.1
10°-20°	388.0	11.4
20°-30°	567.0	16.7
30°-40°	643.6	19.0
40°-50°	621.3	18.3
50°-60°	512.5	15.1
60°-70°	341.3	10.1
70°-80°	152.7	4.5
80°-90°	27.3	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°	1093.1	32.2
0°-40°	1736.8	51.2
0°-60°	2870.6	84.6
0°-90°	3392.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3392.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1467	1467	1467	1467	1467	
5°	1465	1465	1459	1451	1447	139
15°	1381	1384	1381	1374	1365	389
25°	1226	1236	1242	1232	1222	562
35°	986	1000	1045	1051	1047	618
45°	764	777	802	839	843	589
55°	535	544	570	602	619	477
65°	313	322	341	365	386	311
75°	126	132	142	149	157	137
85°	20	20	20	19	19	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1467.0	1467.0	1467.0	1467.0	1467.0
2.5°	1470.9	1471.5	1468.1	1459.1	1453.4
5°	1465.3	1464.7	1459.1	1451.2	1446.7
7.5°	1448.9	1450.0	1448.4	1437.1	1430.9
10°	1433.1	1433.7	1429.2	1420.2	1412.9
12.5°	1412.9	1412.3	1406.1	1401.6	1389.7
15°	1380.7	1384.1	1380.7	1374.5	1364.9
17.5°	1349.7	1349.7	1352.0	1341.3	1334.0
20°	1314.8	1316.5	1316.5	1308.0	1299.6
22.5°	1274.2	1279.3	1281.0	1272.0	1261.8
25°	1226.3	1235.9	1241.5	1232.5	1221.8
27.5°	1168.3	1182.9	1199.8	1193.1	1181.2
30°	1103.5	1124.9	1153.0	1147.4	1139.0
32.5°	1042.0	1063.4	1102.3	1100.1	1095.6
35°	986.2	999.8	1045.4	1051.0	1047.1
37.5°	933.3	945.7	988.5	1001.5	998.1
40°	877.5	891.0	924.8	947.9	949.0
42.5°	822.2	835.2	862.8	896.1	896.1
45°	763.6	776.6	801.9	838.6	843.1
47.5°	706.1	719.7	744.5	781.1	788.4
50°	649.8	662.2	687.0	722.5	733.8
52.5°	591.2	604.7	628.9	661.6	678.0
55°	534.8	543.8	570.3	601.9	619.4
57.5°	476.2	484.7	514.5	541.6	559.6
60°	419.9	430.6	453.7	481.3	502.1
62.5°	365.8	377.0	396.7	421.0	444.7
65°	313.3	321.8	341.0	365.2	386.0
67.5°	262.6	269.9	289.1	306.0	328.0
70°	211.3	220.9	235.0	251.3	265.4
72.5°	170.2	174.1	186.0	197.8	212.5
75°	125.7	132.4	142.0	148.8	157.2
77.5°	90.2	94.1	99.8	105.4	113.3
80°	60.3	62.0	67.1	68.2	74.4
82.5°	36.6	37.8	38.9	39.4	41.7
85°	19.7	19.7	19.7	18.6	18.6
87.5°	11.3	11.3	9.6	7.9	5.6
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)