

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: P556794

Luminaire Tested: **FUSL-12-4-LD4-1STD-40-UNV-80-94-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: P556794
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-40-UNV-80-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

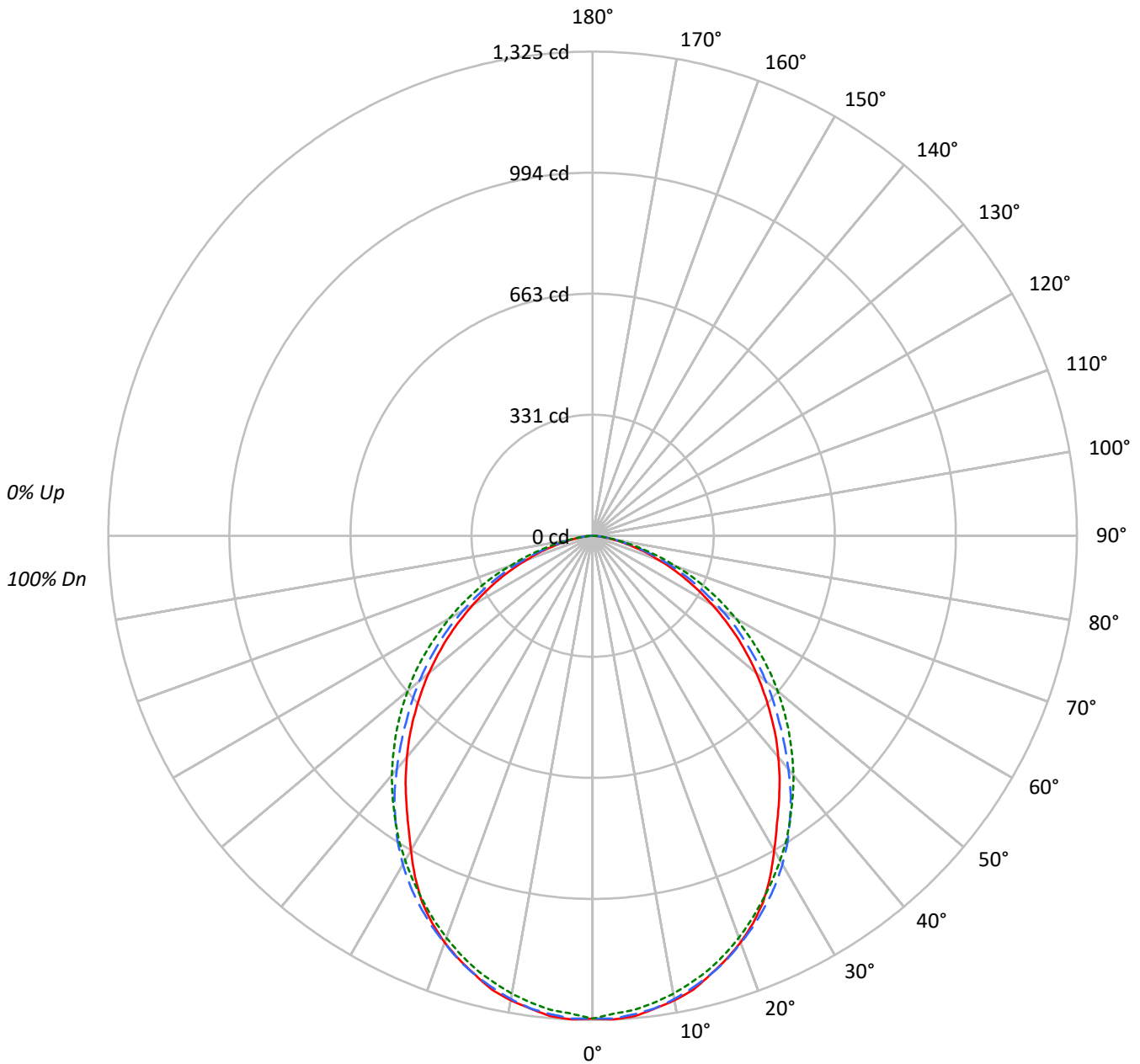
Lumens per Lamp: N/A
Luminaire Lumens: 3055.0 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	3555	3555	3555
5°	3565	3550	3519
10°	3527	3517	3477
15°	3465	3465	3425
20°	3391	3395	3352
25°	3279	3320	3267
30°	3088	3227	3187
35°	2918	3093	3098
40°	2776	2926	3003
45°	2618	2749	2890
50°	2450	2590	2767
55°	2260	2410	2617
60°	2035	2199	2434
65°	1797	1955	2214
70°	1497	1666	1881
75°	1177	1330	1472
80°	841	936	1038
85°	550	550	516



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.4	4.1
10°-20°	349.5	11.4
20°-30°	510.7	16.7
30°-40°	579.7	19.0
40°-50°	559.6	18.3
50°-60°	461.6	15.1
60°-70°	307.4	10.1
70°-80°	137.6	4.5
80°-90°	24.6	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°	984.5	32.2
0°-40°	1564.2	51.2
0°-60°	2585.4	84.6
0°-90°	3055.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3055.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1321	1321	1321	1321	1321	
5°	1320	1319	1314	1307	1303	125
15°	1244	1247	1244	1238	1229	351
25°	1104	1113	1118	1110	1100	506
35°	888	900	942	947	943	557
45°	688	699	722	755	759	531
55°	482	490	514	542	558	430
65°	282	290	307	329	348	280
75°	113	119	128	134	142	124
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1321.2	1321.2	1321.2	1321.2	1321.2
2.5°	1324.8	1325.3	1322.2	1314.1	1309.0
5°	1319.7	1319.2	1314.1	1307.0	1302.9
7.5°	1305.0	1306.0	1304.5	1294.3	1288.7
10°	1290.8	1291.3	1287.2	1279.1	1272.5
12.5°	1272.5	1272.0	1266.4	1262.3	1251.7
15°	1243.6	1246.6	1243.6	1238.0	1229.3
17.5°	1215.6	1215.6	1217.7	1208.0	1201.4
20°	1184.2	1185.7	1185.7	1178.1	1170.5
22.5°	1147.6	1152.2	1153.7	1145.6	1136.5
25°	1104.5	1113.1	1118.2	1110.1	1100.4
27.5°	1052.2	1065.4	1080.6	1074.5	1063.9
30°	993.8	1013.1	1038.5	1033.4	1025.8
32.5°	938.5	957.8	992.8	990.8	986.7
35°	888.3	900.4	941.5	946.6	943.1
37.5°	840.5	851.7	890.3	902.0	898.9
40°	790.3	802.5	832.9	853.7	854.8
42.5°	740.5	752.2	777.1	807.0	807.0
45°	687.8	699.4	722.3	755.3	759.3
47.5°	636.0	648.2	670.5	703.5	710.1
50°	585.2	596.4	618.7	650.7	660.9
52.5°	532.4	544.6	566.4	595.9	610.6
55°	481.7	489.8	513.7	542.1	557.8
57.5°	428.9	436.5	463.4	487.8	504.0
60°	378.1	387.8	408.6	433.5	452.2
62.5°	329.4	339.6	357.3	379.2	400.5
65°	282.2	289.8	307.1	328.9	347.7
67.5°	236.5	243.1	260.4	275.6	295.4
70°	190.3	199.0	211.7	226.4	239.1
72.5°	153.3	156.8	167.5	178.2	191.4
75°	113.2	119.3	127.9	134.0	141.6
77.5°	81.2	84.8	89.8	94.9	102.0
80°	54.3	55.8	60.4	61.4	67.0
82.5°	33.0	34.0	35.0	35.5	37.6
85°	17.8	17.8	17.8	16.7	16.7
87.5°	10.2	10.2	8.6	7.1	5.1
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)