

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: P556465

Luminaire Tested: **FUSL-12-4-LD4-1LO-35-UNV-80-84-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: P556465
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-LD4-1LO-35-UNV-80-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

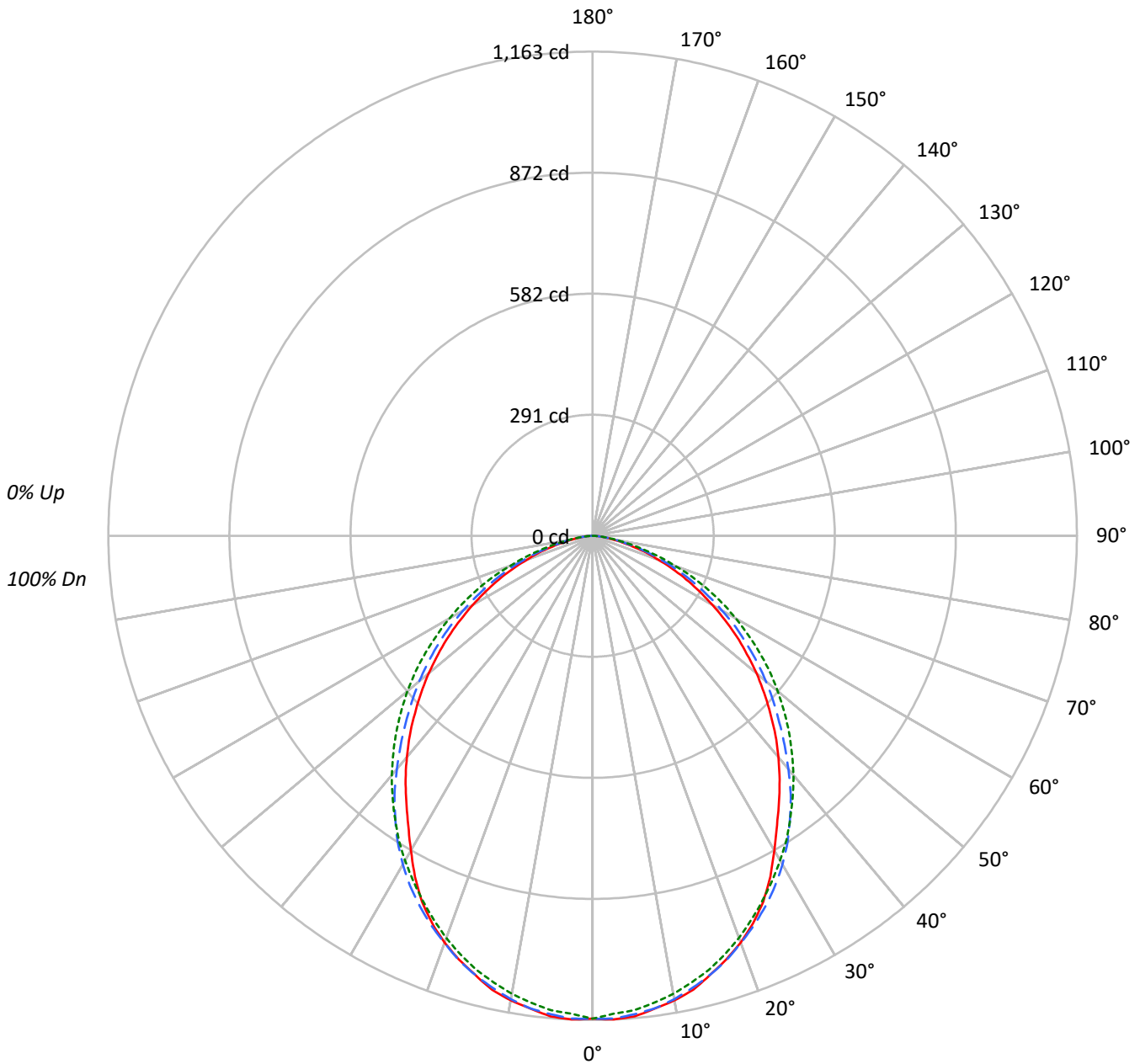
Lumens per Lamp: N/A
Luminaire Lumens: 2682.0 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	3121	3121	3121
5°	3130	3116	3090
10°	3096	3088	3052
15°	3041	3041	3007
20°	2977	2981	2943
25°	2879	2915	2869
30°	2711	2833	2798
35°	2562	2715	2720
40°	2437	2569	2636
45°	2298	2413	2537
50°	2151	2274	2429
55°	1984	2115	2297
60°	1787	1931	2137
65°	1578	1717	1943
70°	1315	1462	1651
75°	1033	1168	1292
80°	739	821	911
85°	482	482	454



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.2	4.1
10°-20°	306.8	11.4
20°-30°	448.3	16.7
30°-40°	508.9	19.0
40°-50°	491.3	18.3
50°-60°	405.3	15.1
60°-70°	269.9	10.1
70°-80°	120.8	4.5
80°-90°	21.6	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°	864.3	32.2
0°-40°	1373.2	51.2
0°-60°	2269.7	84.6
0°-90°	2682.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2682.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1160	1160	1160	1160	1160	
5°	1159	1158	1154	1147	1144	110
15°	1092	1094	1092	1087	1079	308
25°	970	977	982	974	966	444
35°	780	790	827	831	828	489
45°	604	614	634	663	667	466
55°	423	430	451	476	490	377
65°	248	254	270	289	305	246
75°	99	105	112	118	124	109
85°	16	16	16	15	15	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1159.9	1159.9	1159.9	1159.9	1159.9
2.5°	1163.0	1163.5	1160.8	1153.7	1149.2
5°	1158.6	1158.1	1153.7	1147.4	1143.9
7.5°	1145.6	1146.5	1145.2	1136.3	1131.4
10°	1133.2	1133.6	1130.0	1122.9	1117.1
12.5°	1117.1	1116.7	1111.8	1108.2	1098.8
15°	1091.7	1094.4	1091.7	1086.8	1079.2
17.5°	1067.2	1067.2	1069.0	1060.5	1054.7
20°	1039.6	1040.9	1040.9	1034.2	1027.6
22.5°	1007.5	1011.5	1012.8	1005.7	997.7
25°	969.6	977.2	981.7	974.5	966.1
27.5°	923.7	935.3	948.7	943.3	934.0
30°	872.5	889.4	911.7	907.2	900.6
32.5°	823.9	840.8	871.6	869.8	866.2
35°	779.8	790.5	826.6	831.0	827.9
37.5°	737.9	747.7	781.6	791.8	789.2
40°	693.8	704.5	731.2	749.5	750.4
42.5°	650.1	660.4	682.2	708.5	708.5
45°	603.8	614.0	634.1	663.1	666.6
47.5°	558.3	569.0	588.6	617.6	623.4
50°	513.8	523.6	543.2	571.3	580.2
52.5°	467.4	478.1	497.3	523.1	536.1
55°	422.9	430.0	450.9	475.9	489.7
57.5°	376.5	383.2	406.8	428.2	442.5
60°	332.0	340.4	358.7	380.5	397.0
62.5°	289.2	298.1	313.7	332.9	351.6
65°	247.8	254.4	269.6	288.7	305.2
67.5°	207.6	213.4	228.6	242.0	259.3
70°	167.1	174.7	185.8	198.7	209.9
72.5°	134.6	137.7	147.0	156.4	168.0
75°	99.4	104.7	112.3	117.6	124.3
77.5°	71.3	74.4	78.9	83.3	89.6
80°	47.7	49.0	53.0	53.9	58.8
82.5°	29.0	29.9	30.7	31.2	33.0
85°	15.6	15.6	15.6	14.7	14.7
87.5°	8.9	8.9	7.6	6.2	4.5
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)