

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: P861184

Luminaire Tested: **4APVTLD-SL3C3 HI POWER 3500K 277V**

Issue Date: 1/31/2023

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: P861184
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2210-820-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/31/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 4APVTLTD-SL3C3 HI POWER 3500K 277V
Description: HI POWER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

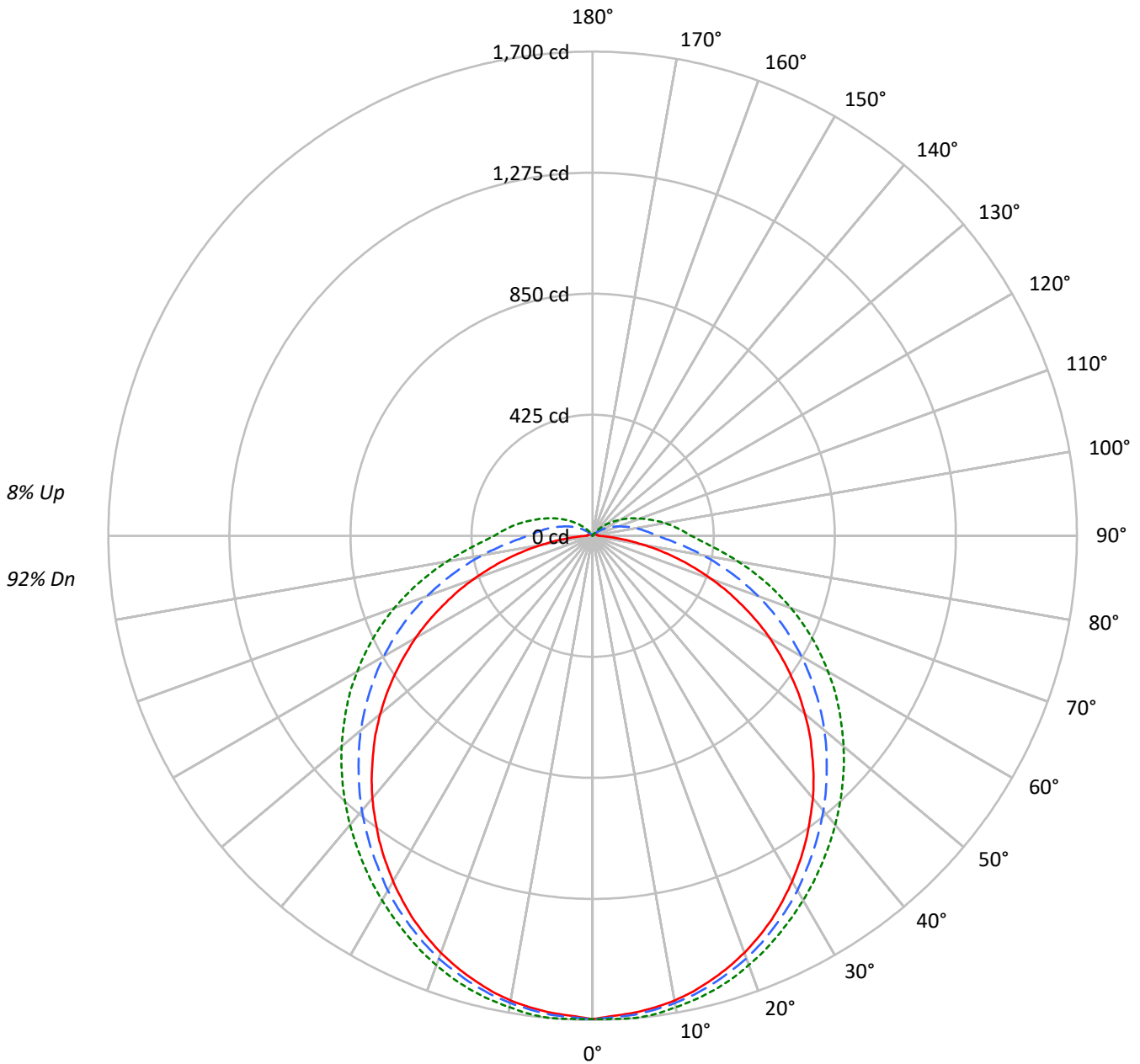
Lumens per Lamp: N/A
Luminaire Lumens: 5910.6 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.3 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: Direct

Input Watts (W): 45.9
Input Voltage (V): 277
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

TEST NUMBER: P861184

CATALOG NUMBER: 4APVTLD-SL3C3 HI POWER 3500K 277V

Luminous Intensity Polar Plot





TEST NUMBER: P861184

CATALOG NUMBER: 4APVTLD-SL3C3 HI POWER 3500K 277V

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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	92																			
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	76	74																			
2	95	86	78	72	92	83	76	71	79	73	68	74	69	65	70	66	63	60																			
3	86	75	66	59	83	73	65	58	69	62	56	65	59	54	61	56	52	50																			
4	79	66	57	50	76	64	56	49	61	53	47	57	51	46	54	49	45	42																			
5	72	59	49	42	69	57	48	42	54	47	41	51	45	40	49	43	38	36																			
6	67	53	44	37	64	51	43	36	49	41	35	46	40	35	44	38	34	31																			
7	62	48	39	32	59	47	38	32	44	37	31	42	36	31	40	34	30	28																			
8	57	43	35	29	55	42	34	28	40	33	28	39	32	27	37	31	27	25																			
9	54	40	31	26	52	39	31	26	37	30	25	36	29	24	34	28	24	22																			
10	50	37	29	23	48	36	28	23	34	27	23	33	27	22	32	26	22	20																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13700	13700	13700
5°	13598	13454	13482
10°	13534	13211	13198
15°	13414	12950	12932
20°	13284	12681	12631
25°	13118	12372	12325
30°	12905	12070	12040
35°	12686	11740	11775
40°	12460	11440	11542
45°	12190	11134	11326
50°	11924	10859	11128
55°	11577	10555	10942
60°	11189	10257	10749
65°	10624	9926	10570
70°	9890	9558	10355
75°	8914	9132	10134
80°	7359	8758	9960
85°	5386	8598	10037



TEST NUMBER: P861184

CATALOG NUMBER: 4APVTLD-SL3C3 HI POWER 3500K 277V

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.8	2.7
10°-20°	461.0	7.8
20°-30°	699.2	11.8
30°-40°	848.4	14.4
40°-50°	900.1	15.2
50°-60°	854.0	14.4
60°-70°	718.8	12.2
70°-80°	517.1	8.7
80°-90°	306.8	5.2
90°-100°	191.4	3.2
100°-110°	124.6	2.1
110°-120°	72.8	1.2
120°-130°	36.4	0.6
130°-140°	13.5	0.2
140°-150°	3.8	0.1
150°-160°	1.8	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1321.0	22.3
0°-40°	2169.4	36.7
0°-60°	3923.5	66.4
0°-90°	5466.2	92.5
90°-120°	388.7	6.6
90°-150°	442.5	7.5
90°-180°	444.0	7.5
0°-180°	5910.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1697	1697	1697	1697	1697	
5°	1681	1701	1688	1688	1700	160
15°	1614	1635	1629	1637	1651	455
25°	1487	1508	1513	1530	1545	685
35°	1306	1332	1351	1383	1404	817
45°	1090	1123	1162	1214	1240	842
55°	847	890	955	1023	1055	757
65°	581	641	733	816	850	575
75°	308	390	502	593	628	326
85°	72	173	296	387	418	82
90°	22	110	227	315	346	14
95°	19	81	187	270	300	15
105°	15	42	122	189	214	16
115°	11	17	72	123	144	11
125°	8	9	34	70	86	7
135°	5	6	8	29	40	4
145°	4	4	5	7	8	3
155°	4	3	4	4	5	2
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P861184

CATALOG NUMBER: 4APVTLD-SL3C3 HI POWER 3500K 277V

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1697	1697	1697	1697	1697
2.5°	1687	1706	1692	1693	1698
5°	1681	1701	1688	1688	1700
7.5°	1671	1691	1678	1680	1694
10°	1657	1676	1666	1668	1681
12.5°	1638	1657	1650	1653	1668
15°	1614	1635	1629	1637	1651
17.5°	1588	1609	1605	1617	1630
20°	1558	1579	1579	1589	1604
22.5°	1524	1545	1548	1560	1577
25°	1487	1508	1513	1530	1545
27.5°	1445	1469	1477	1496	1512
30°	1401	1425	1438	1460	1478
32.5°	1354	1380	1394	1422	1442
35°	1306	1332	1351	1383	1404
37.5°	1254	1282	1306	1343	1365
40°	1203	1230	1260	1300	1325
42.5°	1148	1177	1212	1258	1283
45°	1090	1123	1162	1214	1240
47.5°	1034	1065	1113	1168	1196
50°	973	1007	1062	1121	1150
52.5°	911	949	1009	1074	1102
55°	847	890	955	1023	1055
57.5°	782	828	901	973	1007
60°	718	764	846	922	954
62.5°	651	703	790	868	903
65°	581	641	733	816	850
67.5°	513	578	675	761	795
70°	443	514	618	705	740
72.5°	375	453	560	650	684
75°	308	390	502	593	628
77.5°	243	331	446	540	573
80°	177	274	393	486	518
82.5°	121	220	342	434	466
85°	72	173	296	387	418
87.5°	37	135	257	345	377
90°	22	110	227	315	346
92.5°	20	95	206	293	322
95°	19	81	187	270	300
97.5°	17	69	170	250	278
100°	16	59	153	228	257
102.5°	16	50	137	208	236
105°	15	42	122	189	214



TEST NUMBER: P861184

CATALOG NUMBER: 4APVTLD-SL3C3 HI POWER 3500K 277V

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	12	22	84	138	160
115°	11	17	72	123	144
117.5°	11	13	62	109	128
120°	10	11	52	95	113
122.5°	9	10	43	82	99
125°	8	9	34	70	86
127.5°	6	8	26	59	73
130°	5	7	19	48	61
132.5°	5	7	13	39	50
135°	5	6	8	29	40
137.5°	5	5	7	21	30
140°	4	5	6	14	21
142.5°	4	4	6	8	13
145°	4	4	5	7	8
147.5°	4	4	5	6	6
150°	4	3	4	6	6
152.5°	4	3	4	5	5
155°	4	3	4	4	5
157.5°	4	3	3	4	4
160°	4	3	3	3	4
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	14	34	108	171	196
110°	13	28	96	154	177



(END OF REPORT)