

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: P861187

Luminaire Tested: **4APVTLD-SL3C3 HI POWER 5000K 120V**

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: P861187
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2210-820-19)
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 5000K 120V
Description: HI POWER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

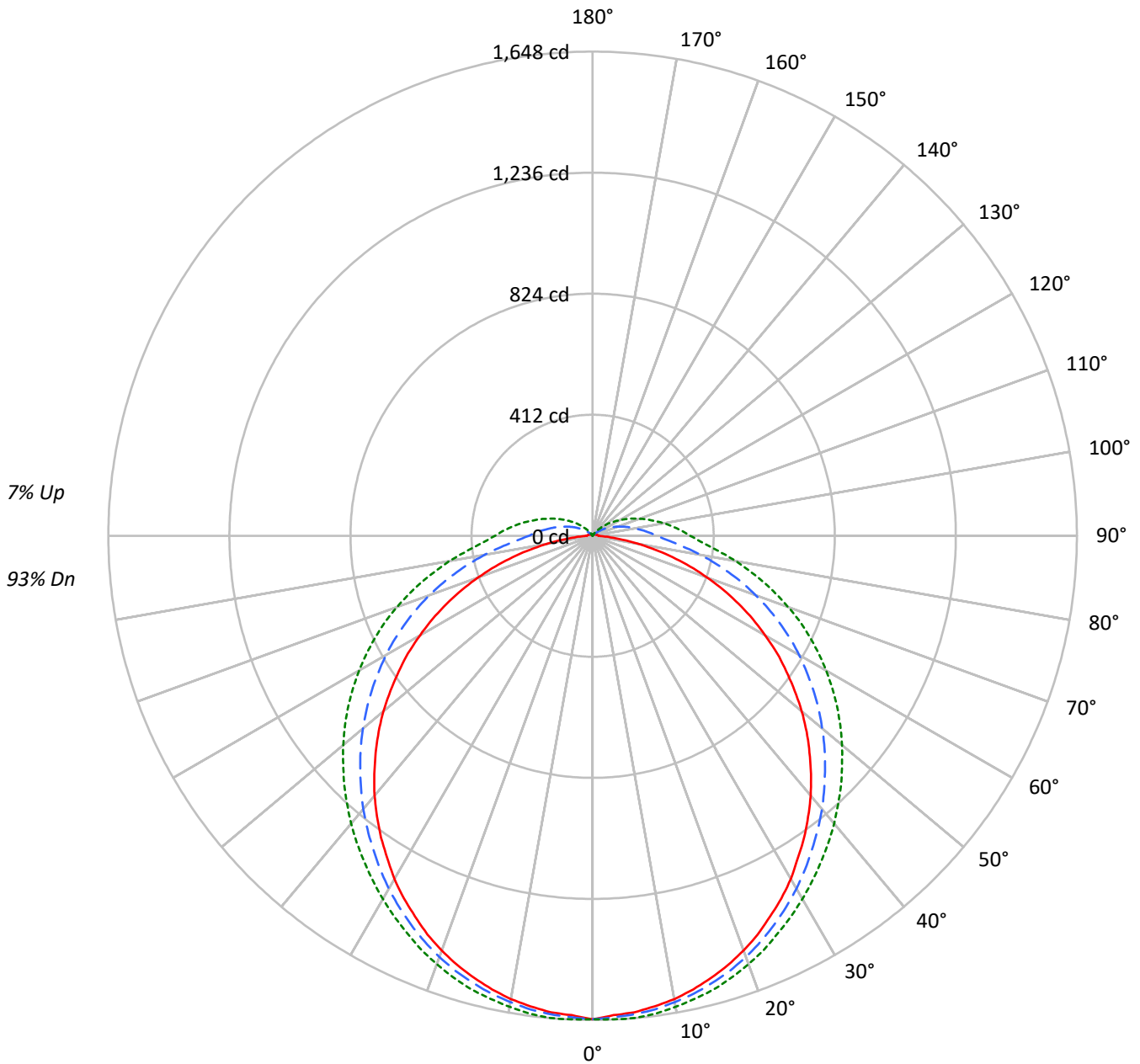
Lumens per Lamp: N/A
Luminaire Lumens: 5667.4 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.29 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: Direct

Input Watts (W): 47.2
Input Voltage (V): 120
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

TEST NUMBER: P861187

CATALOG NUMBER: 4APVTLD-SL3C3 HI POWER 5000K 120V

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				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	95	95	95	93
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	76	76	76	76	74
2	95	86	79	72	92	83	77	71	79	73	68	74	70	65	70	66	63	63	63	63	60
3	86	75	66	59	83	73	65	58	69	62	56	65	59	54	61	57	53	53	53	53	50
4	79	66	57	50	76	64	56	49	61	53	48	58	51	46	55	49	45	45	45	45	42
5	72	59	50	43	70	57	49	42	54	47	41	52	45	40	49	43	39	39	39	39	36
6	67	53	44	37	64	52	43	37	49	41	36	47	40	35	44	38	34	34	34	34	32
7	62	48	39	33	60	47	38	32	44	37	31	42	36	31	40	34	30	30	30	30	28
8	57	44	35	29	55	43	34	29	41	33	28	39	32	27	37	31	27	27	27	27	25
9	54	40	32	26	52	39	31	26	37	30	25	36	29	25	34	28	24	24	24	24	22
10	50	37	29	23	49	36	28	23	35	28	23	33	27	22	32	26	22	22	22	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13286	13286	13286
5°	13170	13034	13068
10°	13078	12779	12783
15°	12947	12523	12518
20°	12806	12253	12218
25°	12611	11952	11907
30°	12424	11643	11628
35°	12188	11317	11364
40°	11957	11026	11137
45°	11673	10714	10921
50°	11384	10429	10719
55°	10999	10140	10536
60°	10573	9845	10338
65°	10024	9496	10136
70°	9236	9119	9900
75°	8141	8711	9664
80°	6494	8299	9506
85°	4564	8113	9514



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.7	2.7
10°-20°	445.7	7.9
20°-30°	675.0	11.9
30°-40°	817.8	14.4
40°-50°	865.8	15.3
50°-60°	819.1	14.5
60°-70°	686.9	12.1
70°-80°	490.1	8.6
80°-90°	289.2	5.1
90°-100°	183.2	3.2
100°-110°	118.8	2.1
110°-120°	68.7	1.2
120°-130°	33.9	0.6
130°-140°	12.2	0.2
140°-150°	3.3	0.1
150°-160°	1.6	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1276.4	22.5
0°-40°	2094.2	37.0
0°-60°	3779.1	66.7
0°-90°	5245.4	92.6
90°-120°	370.8	6.5
90°-150°	420.3	7.4
90°-180°	422.0	7.4
0°-180°	5667.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1646	1646	1646	1646	1646	
5°	1628	1647	1635	1635	1648	155
15°	1558	1580	1575	1585	1598	440
25°	1430	1454	1462	1477	1493	659
35°	1255	1282	1302	1335	1355	785
45°	1044	1079	1118	1169	1196	805
55°	805	850	918	985	1016	720
65°	548	607	701	783	815	542
75°	281	365	479	569	599	298
85°	61	158	279	367	396	70
90°	21	104	217	303	332	13
95°	18	76	180	260	288	14
105°	14	39	117	181	205	15
115°	11	16	68	117	136	11
125°	7	8	31	65	81	6
135°	4	5	7	26	36	4
145°	4	3	4	6	6	2
155°	3	3	3	4	4	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



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CATALOG NUMBER: 4APVTLD-SL3C3 HI POWER 5000K 120V

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1645.7	1645.7	1645.7	1645.7	1645.7
2.5°	1633.3	1654.0	1640.5	1641.5	1647.8
5°	1628.1	1646.7	1635.3	1635.3	1647.8
7.5°	1615.7	1637.4	1626.0	1627.1	1640.5
10°	1601.2	1621.9	1611.5	1615.7	1628.1
12.5°	1581.6	1603.3	1596.0	1600.2	1613.6
15°	1557.8	1579.5	1575.3	1584.7	1598.1
17.5°	1531.9	1553.6	1552.6	1564.0	1576.4
20°	1501.9	1524.7	1525.7	1538.1	1551.6
22.5°	1468.8	1490.5	1494.7	1508.1	1524.7
25°	1429.5	1454.3	1461.6	1477.1	1492.6
27.5°	1391.2	1416.1	1425.4	1447.1	1461.6
30°	1348.8	1372.6	1387.1	1410.9	1427.4
32.5°	1300.2	1328.1	1345.7	1374.7	1392.3
35°	1254.7	1281.6	1302.3	1335.4	1355.0
37.5°	1205.0	1234.0	1258.8	1296.1	1317.8
40°	1154.4	1182.3	1214.4	1254.7	1278.5
42.5°	1099.5	1131.6	1166.8	1213.3	1237.1
45°	1043.7	1078.8	1118.2	1168.8	1195.7
47.5°	987.8	1023.0	1070.6	1124.4	1151.3
50°	928.9	967.1	1019.9	1079.9	1107.8
52.5°	866.8	909.2	969.2	1033.3	1062.3
55°	804.7	850.3	917.5	984.7	1015.8
57.5°	744.7	790.3	863.7	937.1	967.1
60°	678.5	730.3	812.0	885.4	917.5
62.5°	614.4	671.3	758.2	836.8	866.8
65°	548.2	607.2	701.3	783.0	815.1
67.5°	482.0	547.2	646.5	730.3	763.4
70°	413.7	485.1	589.6	676.5	707.5
72.5°	347.5	426.2	533.7	622.7	652.7
75°	281.3	365.1	478.9	568.9	598.9
77.5°	216.2	309.3	424.1	514.1	544.1
80°	156.2	253.4	372.4	462.4	494.4
82.5°	104.5	202.7	322.7	412.7	441.7
85°	61.0	158.3	279.3	367.2	396.2
87.5°	31.0	125.2	243.1	328.9	360.0
90°	20.7	104.5	217.2	303.1	332.0
92.5°	19.7	90.0	198.6	281.3	310.3
95°	17.6	76.5	180.0	259.6	287.6
97.5°	16.5	65.2	162.4	237.9	266.9
100°	15.5	55.9	145.8	217.2	245.1
102.5°	14.5	46.5	131.4	198.6	225.5
105°	14.5	39.3	116.9	181.0	204.8



TEST NUMBER: P861187

CATALOG NUMBER: 4APVTLTD-SL3C3 HI POWER 5000K 120V

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	11.4	19.7	78.6	131.4	152.1
115°	11.4	15.5	68.3	116.9	136.5
117.5°	10.3	11.4	57.9	102.4	121.0
120°	9.3	10.3	48.6	90.0	106.5
122.5°	8.3	9.3	39.3	77.6	93.1
125°	7.2	8.3	31.0	65.2	80.7
127.5°	5.2	7.2	23.8	54.8	68.3
130°	5.2	7.2	16.5	44.5	56.9
132.5°	5.2	6.2	11.4	35.2	45.5
135°	4.1	5.2	7.2	25.9	36.2
137.5°	4.1	5.2	6.2	18.6	26.9
140°	4.1	4.1	6.2	11.4	18.6
142.5°	4.1	4.1	5.2	7.2	10.3
145°	4.1	3.1	4.1	6.2	6.2
147.5°	3.1	3.1	4.1	5.2	6.2
150°	3.1	3.1	4.1	5.2	5.2
152.5°	3.1	3.1	3.1	4.1	5.2
155°	3.1	3.1	3.1	4.1	4.1
157.5°	3.1	3.1	3.1	3.1	4.1
160°	3.1	3.1	3.1	3.1	3.1
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	13.4	32.1	103.4	163.4	187.2
110°	12.4	25.9	91.0	146.9	169.6



(END OF REPORT)