

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: LUMARK

Report Number: P1196998

Luminaire Tested: AWP28S-BZ-HIGH-3000K-POSITION 0

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1196998
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (LDS)
Test Lab: INNOVATION CENTER
Issue Date: 10/30/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: AWP28S-BZ-HIGH-3000K-POSITION 0
Description: AWP Architectural Wall Pack Series - Wall Mount Luminaire
Light Source: 80 CRI, 3000K
Ballast/Driver: -

Summary

Lumens per Lamp: 3640 (1 lamp)
Luminaire Lumens: 3779.1 lumens
Efficiency: 103.8%
Efficacy: 129.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.4' x L: 0.56' x H: 0.69')
IES Classification: Type III - Short - Cutoff
BUG Rating: B2 - U1 - G1

Input Watts (W): 29.3
Input Voltage (V): 120
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: 28.75 FT

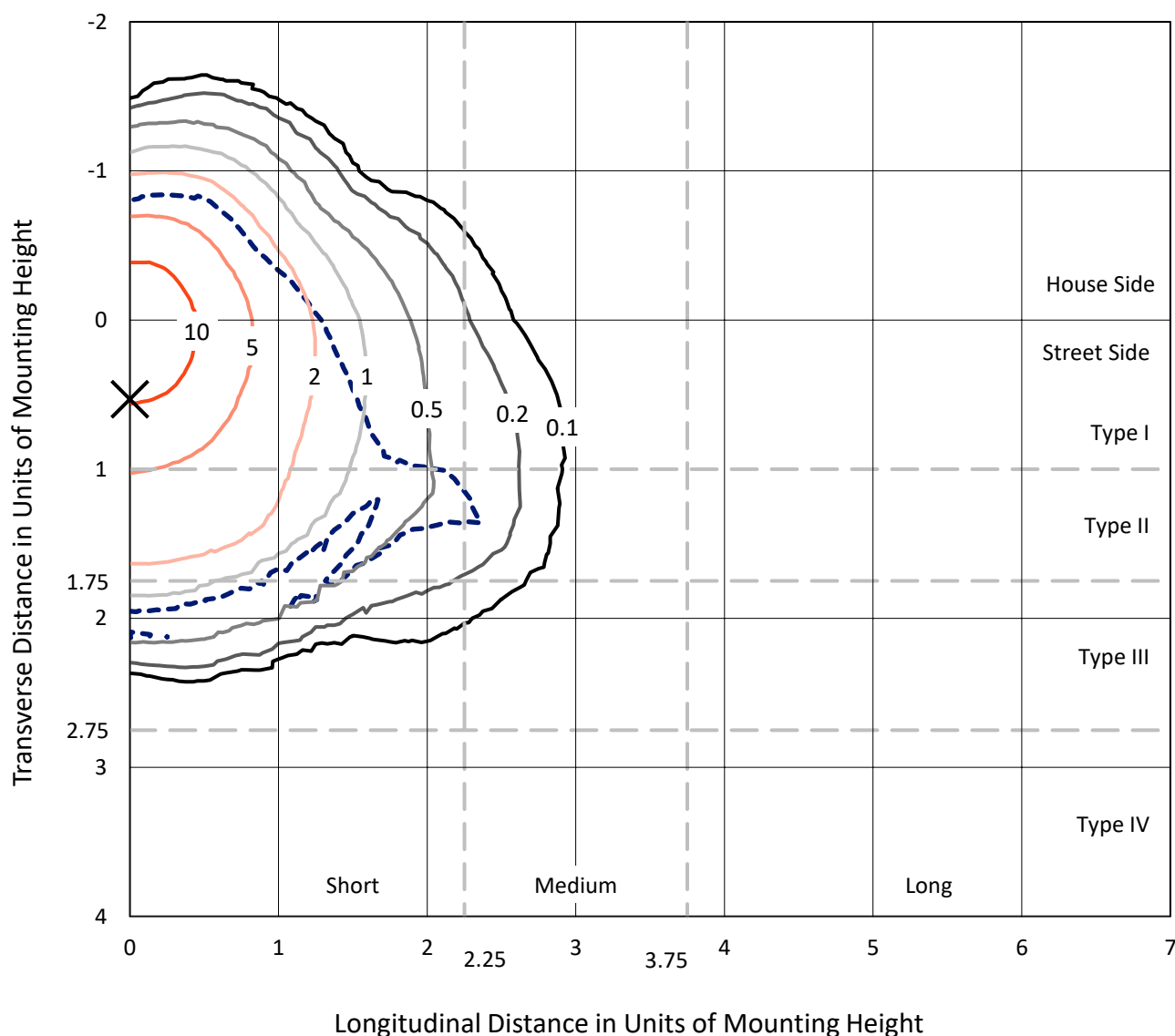
REPORT NUMBER: P1196998

CATALOG NUMBER: AWPf28S-BZ-HIGH-3000K-POSITION 0

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

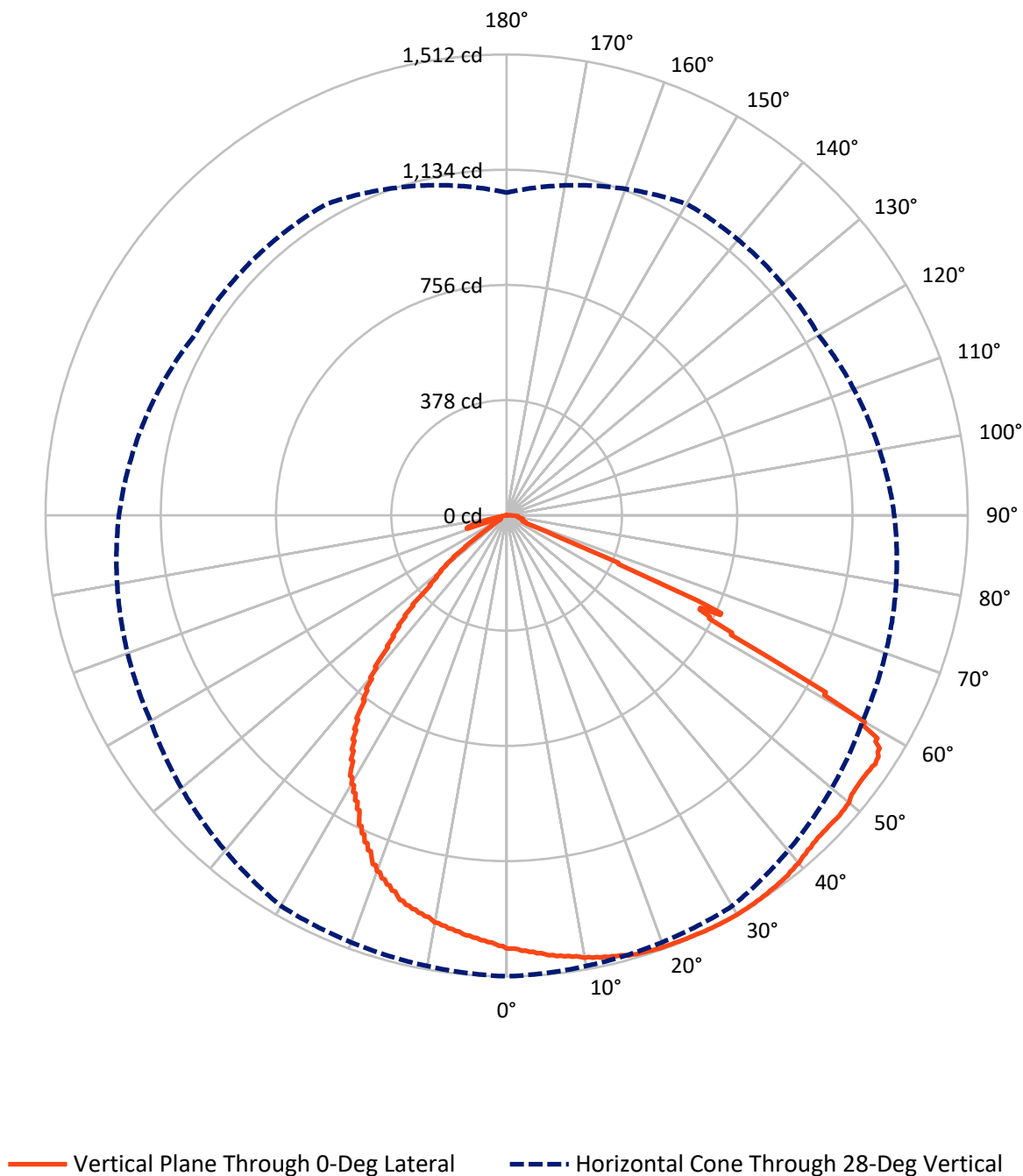


Based on 10 foot mounting height. Maximum calculated value = 14.3 fc
 Type III - Short - Cutoff

REPORT NUMBER: P1196998

CATALOG NUMBER: AWPf28S-BZ-HIGH-3000K-POSITION 0

Luminous Intensity Polar Plot



REPORT NUMBER: P1196998

CATALOG NUMBER: AWPf28S-BZ-HIGH-3000K-POSITION 0

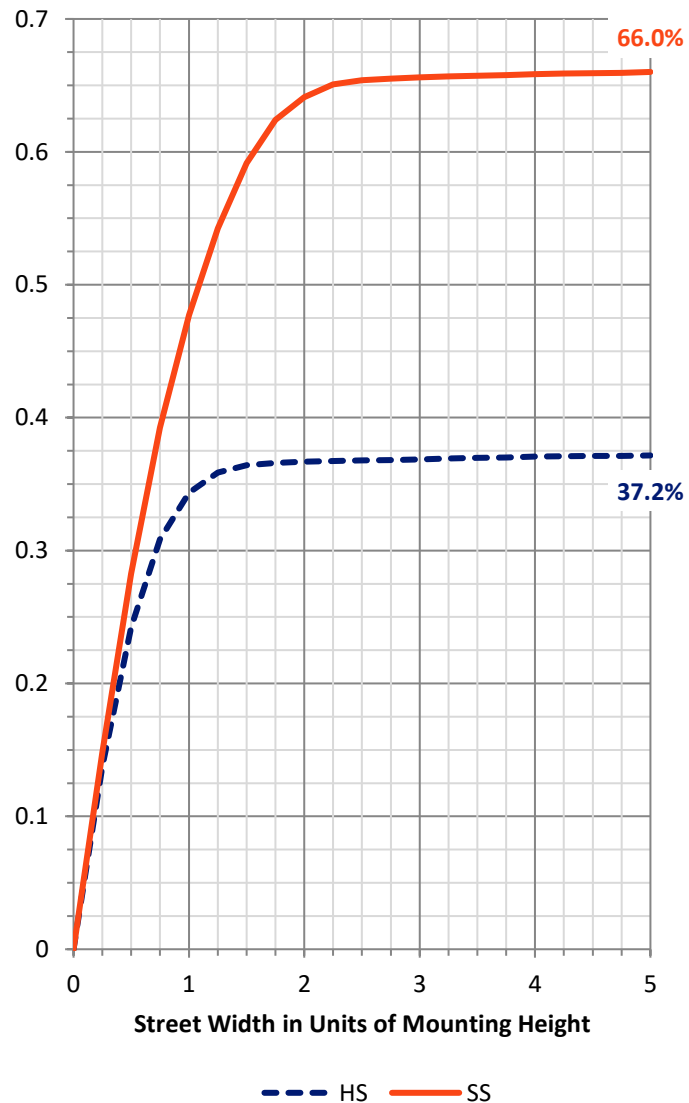
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1366.6	3.7	1370.4
	% Lamp	37.5	0.1	37.6
Street Side	Lumens	2405.3	3.4	2408.8
	% Lamp	66.1	0.1	66.2
Total	Lumens	3772.0	7.2	3779.1
	% Lamp	103.6	0.2	103.8

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	136.5	3.6	3.7
10°-20°	397.6	10.5	10.9
20°-30°	612.6	16.2	16.8
30°-40°	743.0	19.7	20.4
40°-50°	754.8	20.0	20.7
50°-60°	660.6	17.5	18.1
60°-70°	358.3	9.5	9.8
70°-80°	86.2	2.3	2.4
80°-90°	22.4	0.6	0.6
90°-100°	1.6	0.0	0.0
100°-110°	1.0	0.0	0.0
110°-120°	0.9	0.0	0.0
120°-130°	0.9	0.0	0.0
130°-140°	0.9	0.0	0.0
140°-150°	0.8	0.0	0.0
150°-160°	0.6	0.0	0.0
160°-170°	0.4	0.0	0.0
170°-180°	0.1	0.0	0.0
0°-90°	3772.0	99.8	103.6
0°-180°	3779.1	100.0	103.8

Coefficient of Utilization



REPORT NUMBER: P1196998

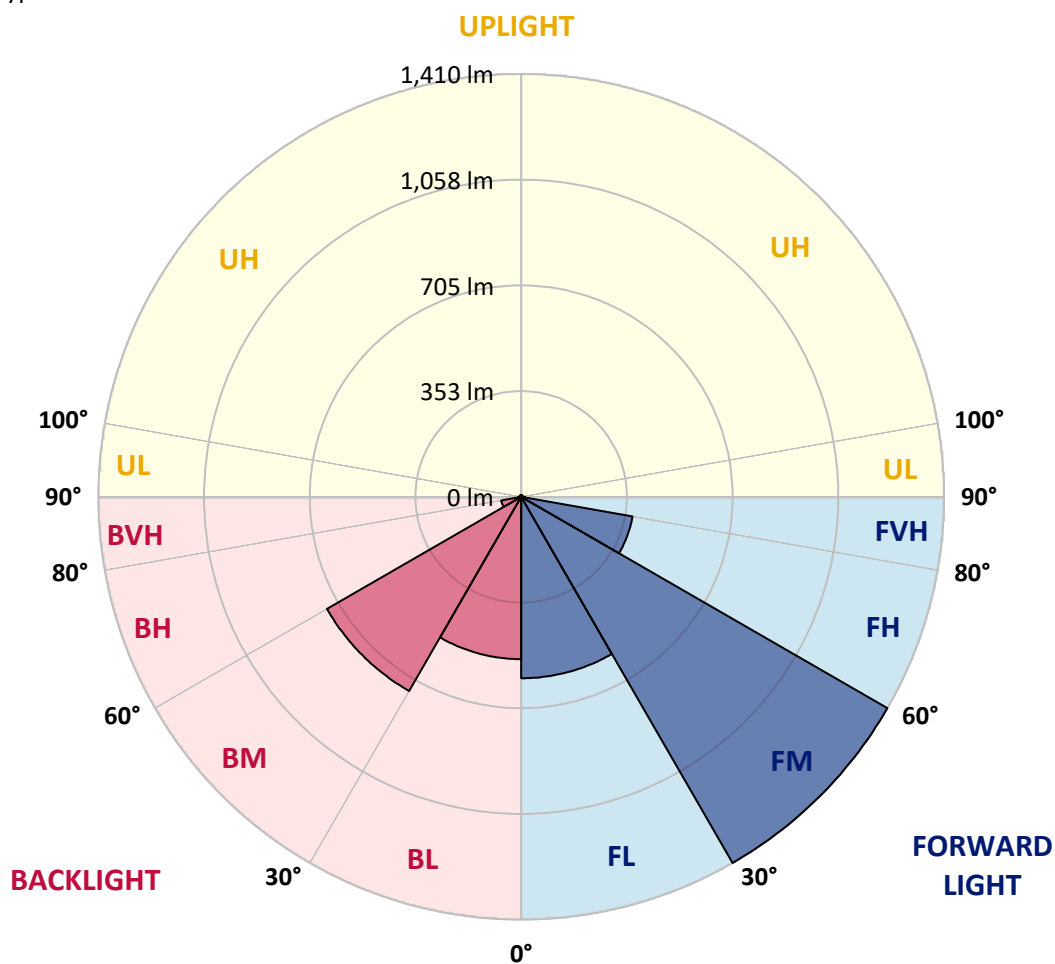
CATALOG NUMBER: AWPf28S-BZ-HIGH-3000K-POSITION 0

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	605.2	16.6			
FM	(30°-60°)	1410.3	38.7			
FH	(60°-80°)	377.1	10.4			G0/660
FVH	(80°-90°)	12.8	0.4			G1/100
BL	(0°-30°)	541.4	14.9	B2/1000		
BM	(30°-60°)	748.0	20.6	B1/1000		
BH	(60°-80°)	67.5	1.9	B0/110		G0/110
BVH	(80°-90°)	9.6	0.3			G0/10
UL	(90°-100°)	1.6	0.0		U1/10	
UH	(100°-180°)	5.6	0.2		U1/10	
Trapped Light		-139.1	-3.8			

BUG Rating: B2-U1-G1

Type III Short



REPORT NUMBER: P1196998

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 0

CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6
0.5°	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6	1421.6
1°	1424.0	1438.4	1449.4	1442.0	1429.6	1431.7	1412.6
1.5°	1429.4	1444.0	1449.4	1441.9	1425.1	1431.7	1412.6
2°	1429.4	1444.1	1451.7	1441.6	1425.1	1430.5	1406.8
2.5°	1434.3	1447.7	1451.7	1441.5	1423.2	1425.5	1401.5
3°	1434.3	1447.7	1453.9	1440.4	1423.2	1425.5	1401.5
3.5°	1440.0	1452.2	1453.9	1439.6	1419.5	1421.3	1396.2
4°	1440.0	1452.3	1455.5	1439.6	1419.5	1421.3	1396.2
4.5°	1444.9	1454.9	1455.6	1441.1	1414.0	1415.2	1389.9
5°	1450.0	1459.7	1455.6	1441.1	1414.0	1415.2	1389.9
5.5°	1450.0	1459.8	1457.7	1439.5	1409.8	1412.4	1384.6
6°	1455.0	1463.7	1457.7	1439.5	1407.3	1412.4	1384.5
6.5°	1455.0	1463.8	1458.1	1438.1	1407.2	1406.4	1379.8
7°	1459.5	1467.2	1458.1	1437.9	1398.1	1406.3	1373.9
7.5°	1459.5	1467.2	1456.0	1430.4	1398.0	1399.7	1373.9
8°	1464.4	1472.3	1456.0	1430.3	1393.5	1393.2	1368.3
8.5°	1464.4	1472.3	1456.0	1430.3	1393.5	1393.2	1368.3
9°	1469.1	1474.3	1456.0	1428.6	1389.6	1388.4	1361.8
9.5°	1473.7	1474.3	1456.8	1428.6	1389.6	1388.4	1361.8
10°	1473.8	1479.1	1454.0	1426.0	1383.3	1382.9	1356.0
10.5°	1478.5	1480.2	1454.0	1425.9	1377.6	1382.9	1356.0
11°	1478.5	1480.2	1454.9	1425.8	1377.5	1377.1	1349.3
11.5°	1482.8	1482.6	1454.9	1425.6	1370.2	1376.9	1342.2
12°	1482.8	1482.6	1452.5	1421.5	1370.1	1371.3	1342.2
12.5°	1487.1	1485.5	1452.5	1421.5	1365.9	1368.1	1335.1
13°	1487.1	1485.6	1452.6	1415.6	1365.9	1368.1	1335.1
13.5°	1490.6	1488.2	1452.5	1410.9	1357.3	1361.9	1327.5
14°	1490.6	1488.1	1448.1	1410.9	1357.3	1361.9	1327.5
14.5°	1494.5	1489.3	1448.1	1409.1	1351.7	1353.9	1319.3
15°	1498.6	1490.0	1444.7	1409.1	1351.7	1353.9	1319.3
15.5°	1498.6	1489.9	1441.9	1401.4	1339.3	1347.4	1309.8
16°	1501.5	1492.1	1441.9	1401.2	1332.6	1347.4	1309.8
16.5°	1501.5	1492.0	1437.6	1396.0	1332.5	1340.5	1299.0
17°	1502.9	1492.8	1437.6	1395.8	1324.1	1340.2	1286.8
17.5°	1502.9	1492.8	1433.2	1387.4	1324.0	1334.4	1286.8
18°	1504.8	1492.5	1433.2	1387.2	1314.1	1324.9	1273.1
18.5°	1504.8	1492.4	1428.3	1382.2	1314.1	1324.9	1273.1
19°	1506.8	1492.5	1428.0	1369.1	1304.6	1315.1	1258.6
19.5°	1506.8	1492.4	1422.5	1369.1	1304.6	1315.1	1258.6
20°	1506.9	1490.3	1415.6	1365.1	1294.5	1309.1	1242.6
20.5°	1507.1	1490.0	1415.6	1365.1	1294.5	1309.1	1242.6
21°	1507.1	1489.9	1407.5	1353.0	1284.8	1301.8	1225.5
21.5°	1508.2	1488.8	1407.5	1352.8	1273.5	1301.8	1225.3
22°	1508.2	1488.7	1401.8	1347.3	1273.2	1289.4	1207.2

REPORT NUMBER: P1196998

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 0

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	1508.6	1487.7	1401.8	1347.1	1262.9	1289.1	1188.5
23°	1508.6	1487.5	1393.3	1336.5	1262.7	1277.6	1188.5
23.5°	1509.0	1486.2	1393.0	1323.7	1253.8	1265.6	1168.2
24°	1509.0	1486.1	1387.5	1323.7	1253.8	1265.6	1168.2
24.5°	1510.3	1486.5	1387.4	1315.8	1239.8	1249.3	1146.3
25°	1511.1	1486.3	1375.9	1315.8	1239.8	1249.3	1146.3
25.5°	1511.1	1483.1	1367.8	1299.7	1225.1	1234.5	1125.0
26°	1511.6	1483.1	1367.8	1299.4	1210.9	1234.5	1125.0
26.5°	1511.6	1483.0	1359.5	1288.9	1210.5	1215.0	1103.0
27°	1511.8	1482.1	1359.5	1288.7	1198.8	1214.6	1081.0
27.5°	1511.8	1481.9	1348.4	1271.9	1198.5	1199.8	1081.0
28°	1512.3	1479.9	1348.4	1271.5	1182.1	1180.3	1059.1
28.5°	1512.3	1479.7	1339.0	1262.3	1182.1	1180.3	1059.1
29°	1512.1	1479.1	1338.7	1248.2	1165.2	1159.2	1037.6
29.5°	1512.1	1478.8	1327.3	1248.2	1165.2	1159.2	1037.6
30°	1511.9	1477.2	1327.0	1233.5	1148.3	1139.8	1017.1
30.5°	1511.0	1473.9	1318.9	1233.5	1148.3	1139.8	1017.1
31°	1511.0	1473.7	1308.7	1219.6	1133.5	1116.4	996.9
31.5°	1510.1	1469.8	1308.7	1219.2	1114.7	1116.4	996.9
32°	1510.1	1469.6	1300.4	1208.0	1114.2	1093.1	975.2
32.5°	1508.6	1466.0	1300.4	1207.6	1096.0	1092.6	950.2
33°	1508.6	1465.8	1289.8	1191.0	1095.5	1070.9	950.2
33.5°	1506.4	1461.5	1289.5	1175.9	1072.4	1046.9	920.9
34°	1506.4	1461.4	1280.3	1175.9	1072.4	1046.9	920.9
34.5°	1504.6	1457.4	1280.1	1164.5	1051.4	1024.6	891.6
35°	1503.5	1457.1	1267.3	1164.5	1051.4	1024.6	891.6
35.5°	1503.4	1450.8	1257.7	1145.3	1028.5	998.5	860.6
36°	1501.3	1445.0	1257.7	1144.8	1003.7	998.5	860.6
36.5°	1501.3	1444.7	1245.1	1128.5	1003.3	976.1	828.7
37°	1498.7	1440.2	1245.1	1127.9	974.5	976.1	828.3
37.5°	1498.7	1440.0	1234.6	1111.6	974.1	954.9	796.8
38°	1493.9	1435.2	1234.6	1111.1	950.6	930.8	765.7
38.5°	1493.9	1434.9	1221.4	1094.8	950.6	930.8	765.7
39°	1489.9	1430.1	1221.0	1073.0	919.7	905.5	733.0
39.5°	1489.9	1429.8	1208.7	1073.0	919.7	905.5	733.0
40°	1486.3	1424.7	1208.4	1056.5	890.3	877.8	695.2
40.5°	1481.6	1418.7	1195.9	1056.5	890.3	877.8	695.2
41°	1481.6	1418.5	1183.2	1038.2	856.9	849.2	657.5
41.5°	1476.8	1411.1	1183.2	1037.5	824.8	849.2	657.5
42°	1476.8	1410.9	1169.8	1018.0	824.1	817.2	619.3
42.5°	1472.3	1403.0	1169.8	1017.3	791.9	816.4	580.8
43°	1472.3	1402.8	1156.7	998.0	791.2	783.4	580.8
43.5°	1469.7	1394.9	1156.7	997.4	760.8	749.1	542.9
44°	1469.7	1394.7	1143.3	974.4	760.8	749.1	542.9
44.5°	1469.2	1388.8	1142.8	952.9	726.8	718.6	507.0

REPORT NUMBER: P1196998

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 0

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	1469.2	1388.5	1129.4	952.9	726.8	718.6	507.0
45.5°	1468.1	1382.4	1128.9	929.0	693.4	685.1	468.6
46°	1468.6	1379.2	1115.1	929.0	693.4	685.1	468.6
46.5°	1468.6	1378.8	1097.6	905.2	661.5	648.1	425.2
47°	1470.2	1376.8	1097.6	904.6	630.8	648.1	425.2
47.5°	1470.2	1376.8	1097.1	881.7	630.1	610.6	378.1
48°	1468.2	1374.2	1078.0	881.0	599.2	609.8	339.0
48.5°	1468.2	1373.8	1059.0	856.0	598.4	569.5	339.0
49°	1466.2	1374.7	1059.0	855.4	568.6	529.8	306.5
49.5°	1466.2	1374.3	1040.0	830.7	568.6	529.8	306.5
50°	1460.7	1374.4	1039.5	804.4	534.7	491.2	282.1
50.5°	1455.5	1374.0	1019.3	804.4	534.7	491.2	282.1
51°	1455.5	1376.2	997.9	778.3	500.3	454.6	256.5
51.5°	1453.0	1377.6	997.9	777.5	463.6	454.6	256.5
52°	1453.0	1377.2	977.2	753.3	462.8	418.9	220.9
52.5°	1452.4	1380.3	977.2	752.5	426.1	418.9	220.3
53°	1452.4	1379.9	956.6	728.5	425.4	383.6	171.2
53.5°	1452.7	1384.0	956.6	727.7	385.3	348.1	170.6
54°	1452.9	1391.9	935.7	703.5	385.3	347.3	131.7
54.5°	1454.9	1391.9	935.2	678.2	343.5	305.9	101.2
55°	1454.9	1391.5	913.0	678.2	343.5	305.9	101.2
55.5°	1458.9	1413.1	912.5	653.7	301.1	272.5	64.5
56°	1454.6	1448.0	894.7	653.7	301.1	272.5	64.5
56.5°	1454.6	1447.6	874.8	630.0	261.6	243.2	36.4
57°	1442.9	1478.2	874.8	629.3	229.5	243.2	36.4
57.5°	1442.9	1477.9	859.4	605.3	228.9	216.6	29.9
58°	1419.3	1501.3	859.4	604.8	204.8	216.6	27.9
58.5°	1419.3	1500.9	841.4	581.8	204.0	177.7	27.9
59°	1356.2	1450.0	841.4	581.4	184.0	129.1	26.1
59.5°	1356.2	1449.7	825.3	558.4	184.0	129.1	26.1
60°	1197.0	1295.9	824.8	537.4	154.6	92.3	24.8
60.5°	1197.0	1295.6	811.0	537.4	154.6	92.3	24.8
61°	987.6	1092.0	796.6	512.0	109.6	67.3	22.9
61.5°	833.6	906.6	796.6	512.0	109.6	67.3	22.9
62°	833.6	906.4	784.6	486.3	70.2	45.2	21.1
62.5°	745.0	771.0	784.6	486.0	55.2	45.2	21.0
63°	745.0	770.9	778.1	455.4	55.0	34.3	20.5
63.5°	704.0	642.1	778.1	455.3	49.3	30.3	20.9
64°	704.0	642.2	781.7	421.4	49.3	30.3	20.9
64.5°	773.2	695.7	781.7	421.3	45.6	28.4	20.7
65°	773.2	696.1	801.5	379.3	45.6	28.4	20.7
65.5°	686.1	775.7	800.5	328.8	42.7	27.3	20.3
66°	399.9	776.1	820.2	328.8	42.7	27.3	20.3
66.5°	397.4	650.5	839.8	281.7	40.5	26.4	19.9
67°	156.0	420.9	839.8	281.7	38.4	26.4	19.9

REPORT NUMBER: P1196998

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 0

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	156.0	420.8	833.7	242.6	38.3	25.6	19.1
68°	69.5	191.5	833.7	242.5	36.0	25.6	19.1
68.5°	69.5	191.0	806.4	209.8	36.0	24.5	18.8
69°	55.7	74.2	806.4	209.8	33.6	23.4	20.6
69.5°	55.7	73.2	753.6	176.8	33.6	23.4	20.6
70°	55.5	53.4	752.9	143.5	31.1	23.1	44.9
70.5°	55.5	51.7	670.4	143.5	31.1	23.1	44.9
71°	62.1	51.0	669.8	116.1	28.3	22.6	44.9
71.5°	56.9	54.2	558.2	116.1	28.3	23.5	92.4
72°	56.9	51.8	440.6	102.1	25.9	23.8	137.2
72.5°	54.7	50.5	440.6	102.0	23.5	23.8	137.2
73°	54.7	48.4	337.4	79.5	23.4	22.6	136.2
73.5°	54.0	47.7	337.4	79.5	21.3	22.4	129.6
74°	54.0	46.0	253.1	63.6	21.3	19.9	129.6
74.5°	50.1	41.4	253.1	63.6	19.4	17.6	117.9
75°	50.1	40.0	188.0	55.0	19.4	17.6	117.9
75.5°	53.0	40.4	187.9	48.5	17.5	15.9	94.8
76°	53.0	39.3	135.4	48.5	17.5	15.9	94.8
76.5°	54.9	41.3	96.1	43.4	16.2	14.9	70.3
77°	54.1	45.0	96.1	43.4	16.2	14.9	70.3
77.5°	54.1	44.7	78.8	40.0	15.0	14.6	45.6
78°	48.2	48.3	78.8	40.0	13.8	14.6	45.6
78.5°	48.2	48.1	72.6	34.8	13.8	13.6	31.7
79°	42.0	48.9	72.6	34.7	12.7	13.4	23.7
79.5°	42.0	48.8	67.5	27.1	12.7	13.5	23.7
80°	38.2	45.4	67.5	27.1	11.4	29.1	17.0
80.5°	38.2	45.4	65.8	21.1	11.4	29.1	17.0
81°	37.4	39.8	65.7	17.4	10.9	44.5	12.1
81.5°	38.6	39.8	65.6	17.4	10.9	44.5	12.1
82°	38.5	34.4	65.5	14.0	10.5	47.2	9.5
82.5°	38.5	29.1	58.5	14.0	9.9	50.1	9.5
83°	38.5	28.9	48.2	11.9	9.9	50.0	7.6
83.5°	37.8	23.5	48.2	11.8	7.0	50.0	7.5
84°	37.8	23.3	36.9	10.1	6.9	47.7	6.0
84.5°	37.3	18.0	36.9	10.1	6.9	46.3	4.5
85°	37.3	17.8	24.6	8.6	6.9	46.3	4.5
85.5°	34.7	13.4	24.5	7.0	4.6	43.2	3.5
86°	34.7	13.2	12.5	7.0	3.6	43.2	3.5
86.5°	29.9	10.1	12.4	5.8	3.6	39.9	2.4
87°	24.7	7.3	3.9	5.8	2.6	39.9	2.4
87.5°	24.7	7.2	0.5	4.8	2.4	34.5	1.3
88°	20.7	4.2	0.5	4.7	1.7	34.5	1.3
88.5°	20.7	4.2	0.3	3.7	1.1	28.3	0.8
89°	16.7	2.9	0.3	3.7	1.1	28.3	0.6
89.5°	16.7	2.9	0.3	3.1	0.8	19.9	0.6

REPORT NUMBER: P1196998

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 0

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	13.4	2.1	0.3	3.1	0.6	8.8	0.5
90.5°	13.4	2.1	0.3	2.6	0.6	8.8	0.5
91°	9.3	2.0	0.3	2.0	0.4	3.0	0.5
91.5°	9.3	2.0	0.3	2.0	0.4	3.0	0.5
92°	3.6	1.9	0.3	1.8	0.4	2.1	0.8
92.5°	2.2	1.7	0.3	1.8	0.4	2.1	0.8
93°	2.2	1.7	0.3	1.8	0.4	2.0	0.9
93.5°	2.0	1.7	0.3	1.8	0.4	2.0	0.9
94°	2.0	1.7	0.3	1.6	0.4	2.0	0.6
94.5°	2.0	1.6	0.3	1.6	0.4	2.0	0.5
95°	2.0	1.6	0.3	1.6	0.4	1.9	0.5
95.5°	1.9	1.6	0.3	1.6	0.4	1.8	0.5
96°	1.9	1.6	0.3	1.5	0.4	1.8	0.5
96.5°	1.8	1.6	0.3	1.5	0.4	1.6	0.5
97°	1.8	1.6	0.3	1.5	0.4	1.6	0.5
97.5°	1.8	1.5	0.3	1.5	0.4	1.6	0.5
98°	1.6	1.5	0.3	1.5	0.4	1.6	0.5
98.5°	1.6	1.5	0.3	1.5	0.4	1.6	0.5
99°	1.6	1.4	0.3	1.4	0.4	1.6	0.5
99.5°	1.6	1.4	0.3	1.4	0.4	1.5	0.5
100°	1.6	1.4	0.3	1.4	0.4	1.5	0.5
100.5°	1.6	1.4	0.3	1.4	0.4	1.5	0.5
101°	1.5	1.4	0.3	1.4	0.4	1.5	0.5
101.5°	1.5	1.4	0.3	1.4	0.5	1.5	0.5
102°	1.5	1.2	0.3	1.4	0.5	1.5	0.5
102.5°	1.4	1.2	0.3	1.4	0.5	1.5	0.5
103°	1.4	1.2	0.3	1.3	0.5	1.5	0.5
103.5°	1.4	1.2	0.3	1.3	0.5	1.5	0.5
104°	1.4	1.2	0.3	1.4	0.5	1.5	0.5
104.5°	1.4	1.2	0.3	1.4	0.5	1.5	0.5
105°	1.4	1.2	0.3	1.3	0.5	1.5	0.5
105.5°	1.4	1.2	0.3	1.3	0.5	1.4	0.5
106°	1.4	1.1	0.3	1.3	0.5	1.4	0.5
106.5°	1.3	1.1	0.3	1.3	0.5	1.4	0.5
107°	1.3	1.1	0.3	1.3	0.5	1.4	0.5
107.5°	1.3	1.1	0.3	1.3	0.5	1.4	0.6
108°	1.3	1.1	0.3	1.3	0.5	1.4	0.6
108.5°	1.3	1.1	0.3	1.3	0.7	1.4	0.6
109°	1.3	1.1	0.3	1.3	0.7	1.4	0.6
109.5°	1.3	1.1	0.3	1.3	0.7	1.4	0.6
110°	1.1	1.1	0.3	1.3	0.7	1.4	0.6
110.5°	1.1	1.1	0.3	1.3	0.7	1.4	0.6
111°	1.1	1.1	0.3	1.3	0.7	1.4	0.6
111.5°	1.1	1.1	0.4	1.3	0.7	1.4	0.6
112°	1.1	1.0	0.4	1.3	0.7	1.4	0.8

REPORT NUMBER: P1196998

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 0

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	1.1	1.0	0.4	1.3	0.7	1.4	0.8
113°	1.1	1.0	0.4	1.3	0.7	1.4	0.8
113.5°	1.1	1.0	0.4	1.3	0.7	1.4	0.8
114°	1.1	1.0	0.4	1.1	0.8	1.5	0.8
114.5°	1.1	1.0	0.4	1.1	0.8	1.5	0.8
115°	1.1	1.0	0.4	1.3	0.7	1.4	0.8
115.5°	1.0	1.0	0.4	1.3	0.7	1.5	0.9
116°	1.0	1.0	0.4	1.1	0.8	1.5	0.9
116.5°	1.0	1.0	0.4	1.1	0.8	1.4	0.9
117°	1.0	1.0	0.4	1.1	0.8	1.4	0.9
117.5°	1.0	1.0	0.4	1.1	0.8	1.5	0.9
118°	1.0	1.0	0.4	1.1	0.8	1.5	0.9
118.5°	1.0	1.0	0.5	1.1	0.8	1.4	0.9
119°	1.0	1.0	0.5	1.1	0.8	1.4	0.9
119.5°	1.0	1.0	0.5	1.1	0.8	1.5	0.9
120°	1.0	1.0	0.5	1.1	0.8	1.5	0.9
120.5°	1.0	1.0	0.5	1.1	0.8	1.5	0.9
121°	1.0	1.0	0.5	1.1	0.8	1.5	1.0
121.5°	1.0	1.0	0.5	1.3	0.8	1.5	1.0
122°	1.0	1.0	0.5	1.3	0.8	1.5	1.0
122.5°	1.0	1.0	0.5	1.3	0.9	1.5	1.0
123°	1.0	1.0	0.5	1.1	0.9	1.5	1.0
123.5°	1.0	1.0	0.5	1.1	0.9	1.5	1.0
124°	1.0	1.0	0.5	1.1	0.9	1.5	1.0
124.5°	1.0	1.0	0.5	1.1	0.9	1.5	1.0
125°	1.0	1.0	0.5	1.1	0.9	1.5	1.0
125.5°	1.0	1.0	0.5	1.1	0.9	1.5	1.0
126°	1.0	1.0	0.6	1.3	0.9	1.5	1.0
126.5°	1.0	1.0	0.6	1.1	0.9	1.5	1.1
127°	1.0	1.0	0.6	1.1	0.9	1.5	1.1
127.5°	1.0	1.0	0.6	1.1	0.9	1.5	1.1
128°	1.0	1.0	0.6	1.1	0.9	1.5	1.1
128.5°	1.0	1.0	0.6	1.3	0.9	1.5	1.1
129°	1.0	1.0	0.6	1.3	1.0	1.5	1.1
129.5°	1.0	1.0	0.6	1.3	0.9	1.5	1.1
130°	1.0	1.0	0.6	1.3	0.9	1.5	1.1
130.5°	1.0	1.0	0.6	1.3	1.0	1.5	1.1
131°	1.0	1.0	0.6	1.3	1.0	1.5	1.1
131.5°	1.0	1.0	0.8	1.3	0.9	1.5	1.1
132°	1.0	1.1	0.8	1.3	0.9	1.5	1.1
132.5°	1.0	1.1	0.8	1.3	1.0	1.5	1.1
133°	1.0	1.1	0.8	1.3	1.0	1.5	1.1
133.5°	1.0	1.1	0.8	1.3	1.0	1.5	1.3
134°	1.0	1.1	0.8	1.3	1.0	1.5	1.3
134.5°	1.0	1.1	0.8	1.3	1.0	1.5	1.3

REPORT NUMBER: P1196998

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 0

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	1.0	1.1	0.8	1.3	1.0	1.5	1.3
135.5°	1.0	1.1	0.8	1.3	1.0	1.5	1.3
136°	1.0	1.1	0.8	1.3	1.0	1.5	1.3
136.5°	1.0	1.1	0.8	1.3	1.0	1.5	1.3
137°	1.0	1.1	0.8	1.3	1.0	1.5	1.3
137.5°	1.0	1.1	0.8	1.3	1.0	1.5	1.3
138°	1.0	1.1	0.8	1.3	1.0	1.5	1.3
138.5°	1.0	1.1	0.9	1.3	1.0	1.5	1.3
139°	1.0	1.1	0.9	1.3	1.0	1.5	1.3
139.5°	1.0	1.1	0.8	1.3	1.0	1.5	1.3
140°	1.0	1.1	0.8	1.3	1.0	1.5	1.3
140.5°	1.0	1.1	0.9	1.3	1.0	1.5	1.3
141°	1.0	1.1	0.9	1.3	1.0	1.5	1.3
141.5°	1.0	1.1	0.9	1.3	1.0	1.5	1.3
142°	1.1	1.1	0.9	1.3	1.0	1.5	1.3
142.5°	1.1	1.1	0.9	1.3	1.0	1.5	1.3
143°	1.0	1.3	0.9	1.3	1.0	1.5	1.3
143.5°	1.1	1.1	0.9	1.3	1.2	1.5	1.3
144°	1.1	1.1	0.9	1.4	1.2	1.5	1.3
144.5°	1.1	1.3	0.9	1.4	1.0	1.5	1.3
145°	1.1	1.3	0.9	1.3	1.2	1.5	1.3
145.5°	1.1	1.3	0.9	1.3	1.2	1.5	1.3
146°	1.1	1.3	1.0	1.3	1.0	1.5	1.3
146.5°	1.1	1.3	1.0	1.3	1.0	1.5	1.3
147°	1.1	1.3	0.9	1.4	1.2	1.5	1.3
147.5°	1.1	1.3	0.9	1.4	1.2	1.5	1.3
148°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
148.5°	1.1	1.3	0.9	1.3	1.2	1.5	1.3
149°	1.1	1.3	0.9	1.3	1.2	1.5	1.3
149.5°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
150°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
150.5°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
151°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
151.5°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
152°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
152.5°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
153°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
153.5°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
154°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
154.5°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
155°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
155.5°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
156°	1.1	1.3	1.0	1.4	1.2	1.5	1.3
156.5°	1.3	1.3	1.0	1.4	1.2	1.5	1.3
157°	1.3	1.3	1.0	1.4	1.2	1.5	1.3

REPORT NUMBER: P1196998

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 0

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
157.5°	1.3	1.3	1.0	1.4	1.2	1.5	1.3
158°	1.3	1.3	1.0	1.4	1.2	1.5	1.3
158.5°	1.3	1.3	1.0	1.3	1.1	1.4	1.3
159°	1.3	1.3	1.0	1.3	1.1	1.4	1.3
159.5°	1.3	1.3	1.1	1.4	1.2	1.5	1.3
160°	1.3	1.3	1.1	1.4	1.2	1.5	1.3
160.5°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
161°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
161.5°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
162°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
162.5°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
163°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
163.5°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
164°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
164.5°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
165°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
165.5°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
166°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
166.5°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
167°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
167.5°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
168°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
168.5°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
169°	1.4	1.3	1.1	1.4	1.3	1.4	1.3
169.5°	1.4	1.3	1.1	1.4	1.3	1.4	1.3
170°	1.3	1.3	1.1	1.4	1.1	1.4	1.3
170.5°	1.3	1.3	1.1	1.4	1.3	1.4	1.3
171°	1.4	1.3	1.1	1.4	1.3	1.4	1.3
171.5°	1.4	1.4	1.1	1.4	1.1	1.4	1.3
172°	1.4	1.4	1.1	1.4	1.1	1.4	1.3
172.5°	1.4	1.3	1.1	1.4	1.1	1.4	1.3
173°	1.4	1.3	1.1	1.4	1.1	1.4	1.3
173.5°	1.4	1.4	1.3	1.4	1.1	1.4	1.3
174°	1.4	1.4	1.3	1.4	1.1	1.4	1.3
174.5°	1.4	1.3	1.1	1.4	1.3	1.4	1.3
175°	1.4	1.3	1.1	1.4	1.1	1.4	1.3
175.5°	1.4	1.3	1.1	1.4	1.1	1.4	1.3
176°	1.4	1.3	1.1	1.4	1.3	1.4	1.3
176.5°	1.4	1.3	1.1	1.4	1.3	1.4	1.3
177°	1.4	1.4	1.3	1.4	1.1	1.4	1.3
177.5°	1.4	1.4	1.3	1.4	1.1	1.4	1.3
178°	1.4	1.4	1.1	1.4	1.3	1.4	1.3
178.5°	1.4	1.4	1.1	1.4	1.3	1.3	1.3
179°	1.4	1.3	1.3	1.4	1.1	1.3	1.3
179.5°	1.4	1.3	1.3	1.4	1.1	1.4	1.3



REPORT NUMBER: P1196998
CATALOG NUMBER: AWPf28S-BZ-HIGH-3000K-POSITION 0

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	1.3	1.3	1.3	1.3	1.3	1.3	1.3

(END OF REPORT)