

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: P1197016

Luminaire Tested: AWPf28S-BZ-HIGH-3000K-POSITION 30

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1197016
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 30
Description: AWP Architectural Wall Pack Series - Wall Mount Luminaire
Light Source: 80 CRI, 3000K
Ballast/Driver: -

Summary

Lumens per Lamp: 3521 (1 lamp)
Luminaire Lumens: 3447.4 lumens
Efficiency: 97.9%
Efficacy: 117.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.4' x L: 0.56' x H: 0.69')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U3 - G3

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

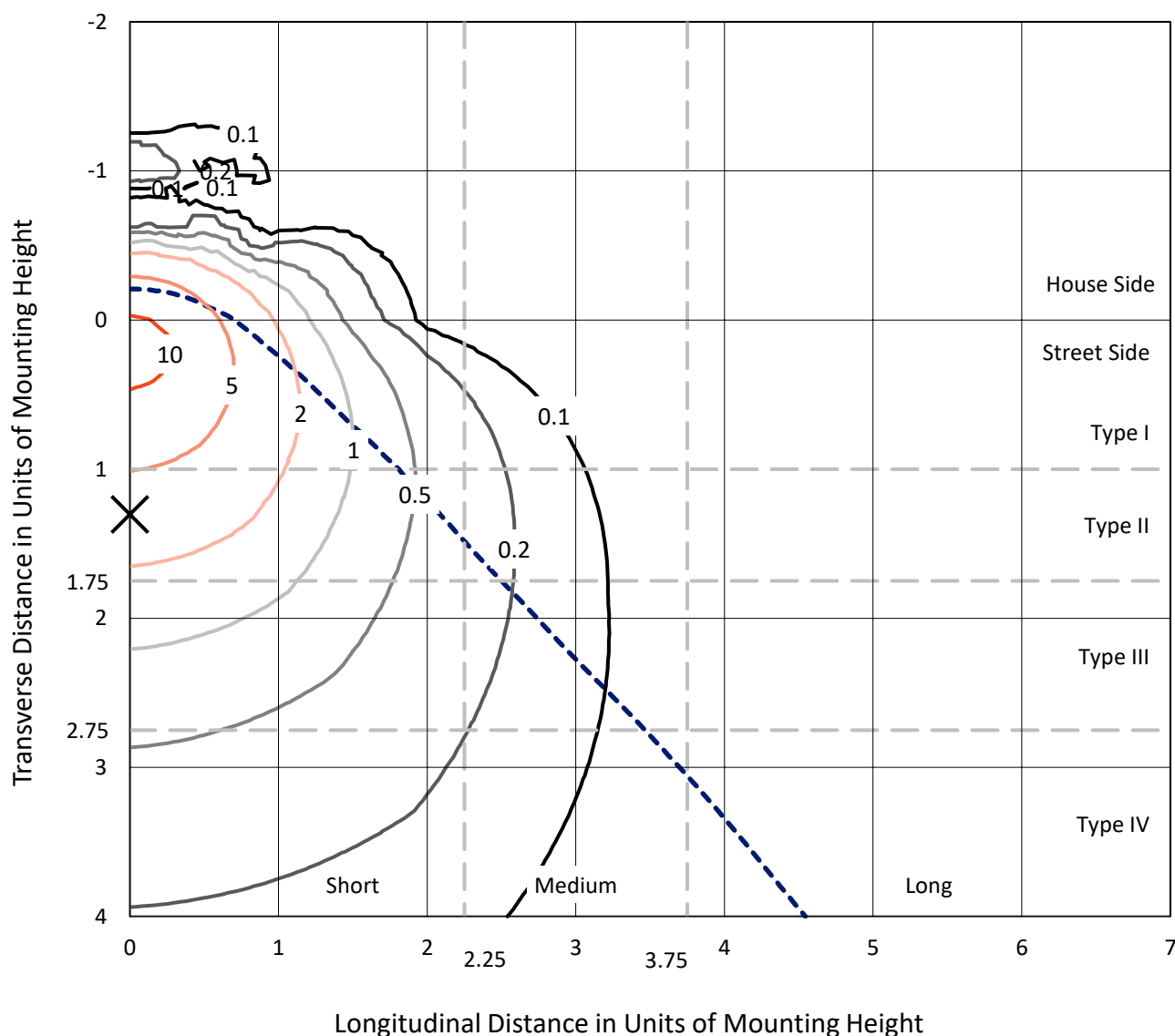
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

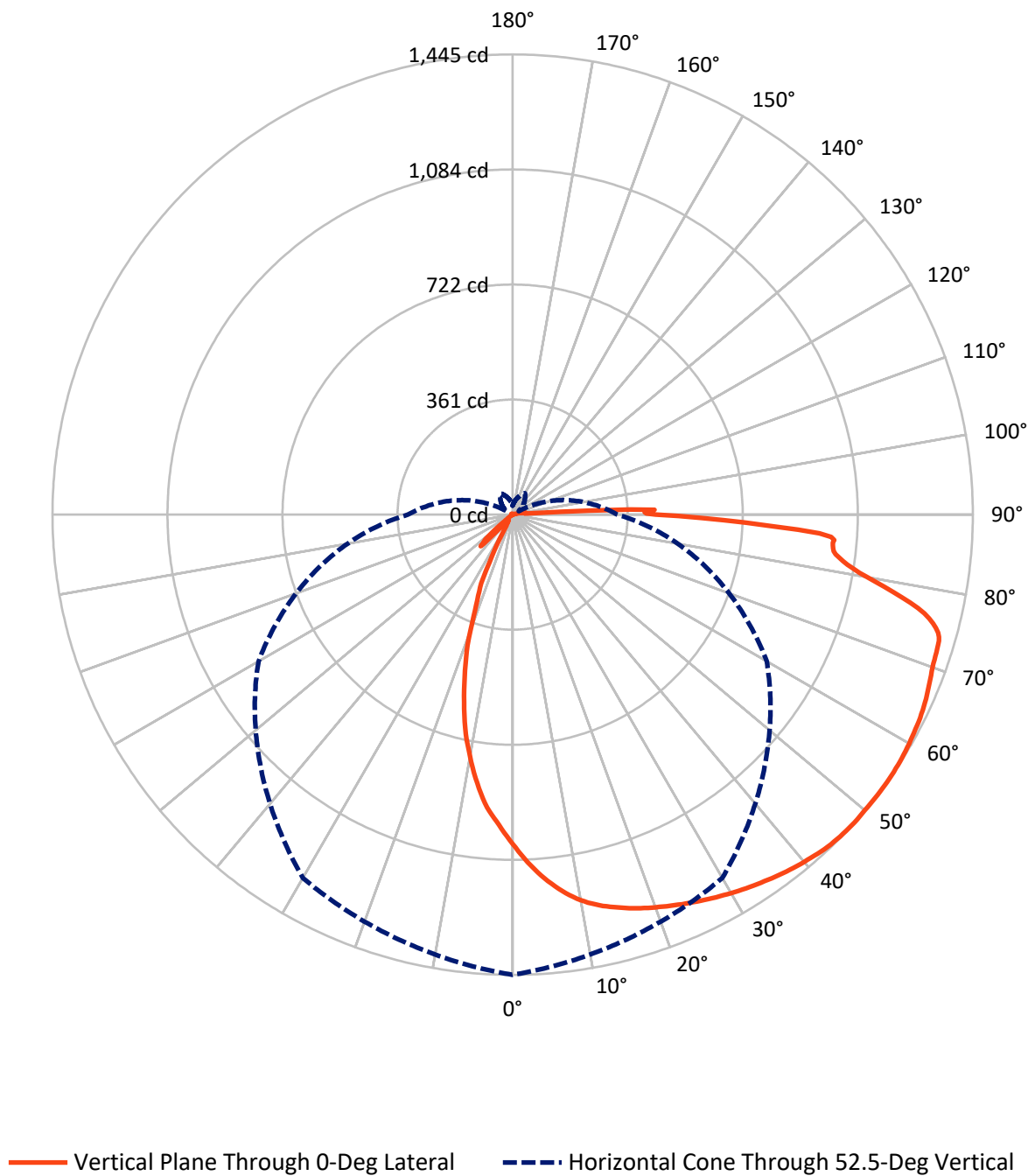


Based on 10 foot mounting height. Maximum calculated value = 11.7 fc
Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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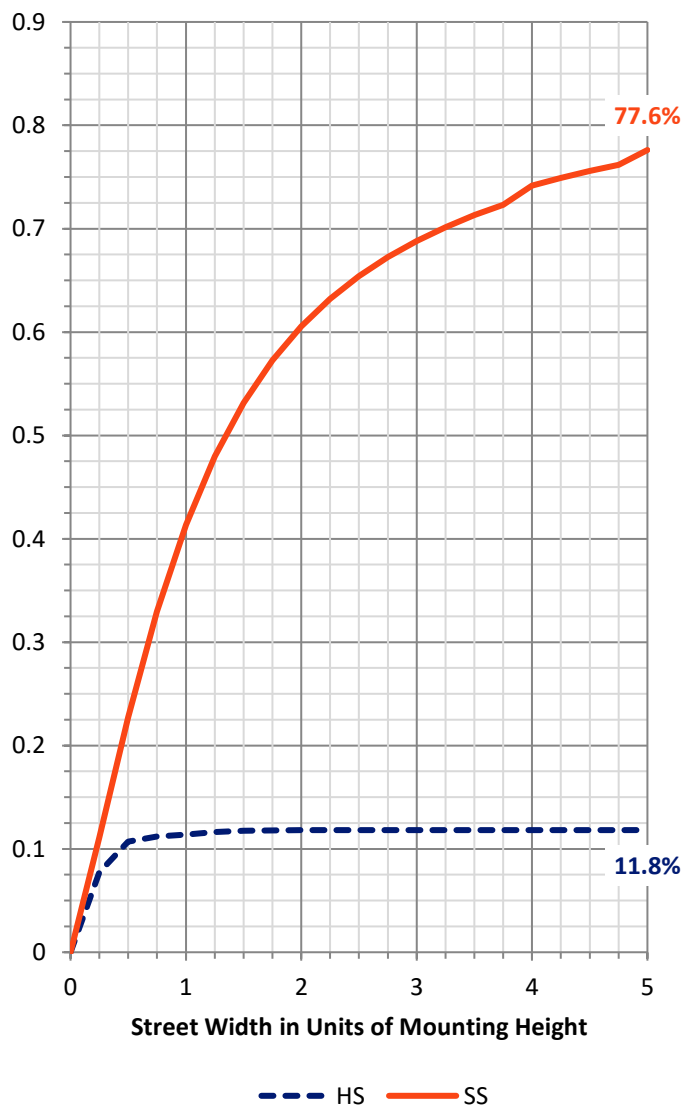
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	421.9	8.0	429.9
	% Lamp	12.0	0.2	12.2
Street Side	Lumens	2958.2	59.3	3017.5
	% Lamp	84.0	1.7	85.7
Total	Lumens	3380.1	67.3	3447.4
	% Lamp	96.0	1.9	97.9

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	98.8	2.9	2.8
10°-20°	273.4	7.9	7.8
20°-30°	383.3	11.1	10.9
30°-40°	436.8	12.7	12.4
40°-50°	473.0	13.7	13.4
50°-60°	486.8	14.1	13.8
60°-70°	464.4	13.5	13.2
70°-80°	436.7	12.7	12.4
80°-90°	327.0	9.5	9.3
90°-100°	55.4	1.6	1.6
100°-110°	4.4	0.1	0.1
110°-120°	1.4	0.0	0.0
120°-130°	1.4	0.0	0.0
130°-140°	1.4	0.0	0.0
140°-150°	1.3	0.0	0.0
150°-160°	1.1	0.0	0.0
160°-170°	0.7	0.0	0.0
170°-180°	0.3	0.0	0.0
0°-90°	3380.1	98.0	96.0
0°-180°	3447.4	100.0	97.9

Coefficient of Utilization



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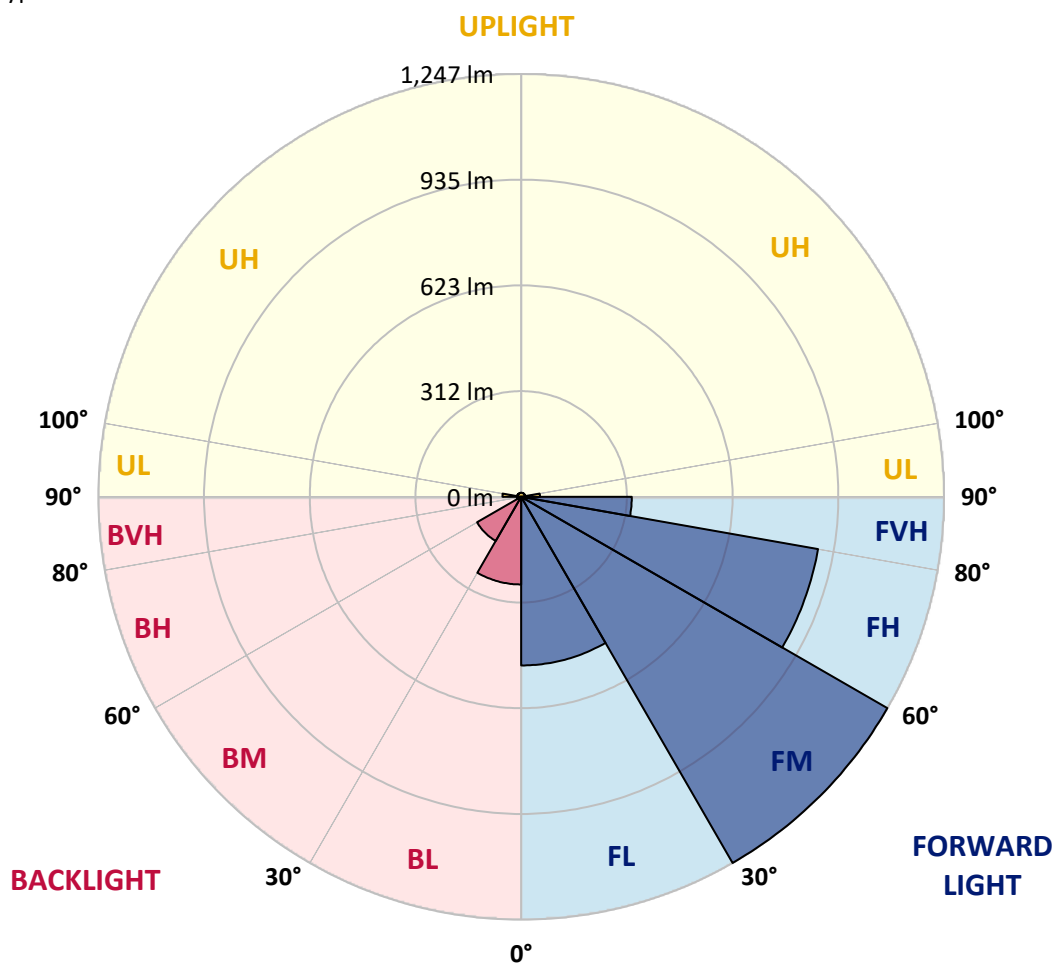
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	497.1	14.1			
FM	(30°-60°)	1246.5	35.4			
FH	(60°-80°)	888.6	25.2			G1/1800
FVH	(80°-90°)	326.0	9.3			G3/500
BL	(0°-30°)	258.4	7.3	B1/500		
BM	(30°-60°)	150.0	4.3	B0/220		
BH	(60°-80°)	12.5	0.4	B0/110		G0/110
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	55.4	1.6		U3/500	
UH	(100°-180°)	11.9	0.3		U2/50	
Trapped Light		73.6	2.1			

BUG Rating: B1-U3-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	1045.2	1045.2	1045.2	1045.2	1045.2	1045.2	1045.2
0.5°	1057.1	1055.5	1051.2	1045.0	1039.3	1034.9	1033.8
1°	1068.9	1065.5	1057.2	1045.0	1033.4	1024.6	1021.9
1.5°	1080.5	1075.5	1063.1	1044.7	1027.4	1014.5	1010.3
2°	1092.1	1085.3	1068.4	1044.3	1021.5	1004.4	998.4
2.5°	1103.8	1095.2	1073.8	1044.0	1015.5	994.1	987.2
3°	1114.7	1104.5	1079.2	1043.4	1009.2	984.1	975.6
3.5°	1126.0	1113.8	1084.8	1042.8	1002.6	974.0	964.7
4°	1136.2	1123.0	1089.9	1042.1	996.3	964.4	954.0
4.5°	1145.9	1131.5	1094.6	1041.2	990.0	955.4	943.8
5°	1155.4	1139.3	1099.6	1040.0	983.5	946.0	933.8
5.5°	1165.0	1147.5	1104.2	1038.8	976.8	936.9	922.5
6°	1174.1	1155.7	1108.9	1037.6	970.0	926.1	909.7
6.5°	1182.8	1162.9	1113.3	1036.2	963.5	914.8	896.3
7°	1191.4	1170.1	1117.6	1034.9	957.0	902.7	881.2
7.5°	1200.0	1177.1	1121.5	1033.2	950.3	889.2	865.8
8°	1207.4	1184.1	1125.2	1031.5	944.2	875.3	850.3
8.5°	1214.9	1190.8	1128.9	1029.5	937.8	861.7	835.5
9°	1222.1	1197.1	1132.5	1027.7	930.9	848.5	819.4
9.5°	1228.8	1203.2	1136.5	1025.5	924.3	833.8	802.7
10°	1234.7	1209.1	1140.2	1023.4	917.0	819.2	786.8
10.5°	1240.6	1214.9	1143.5	1021.1	909.3	804.2	770.0
11°	1245.8	1219.9	1146.9	1018.7	901.1	789.5	753.6
11.5°	1250.8	1224.6	1150.1	1016.1	892.9	774.4	737.7
12°	1255.8	1229.5	1153.3	1013.3	883.8	759.5	722.2
12.5°	1260.5	1233.7	1156.0	1010.4	874.6	744.5	704.7
13°	1264.6	1237.6	1158.6	1007.2	864.5	730.2	686.8
13.5°	1268.8	1241.0	1161.0	1004.0	854.3	714.9	667.4
14°	1273.0	1244.3	1163.3	1000.8	844.0	699.3	647.8
14.5°	1276.6	1247.4	1165.5	997.2	833.6	682.0	628.9
15°	1280.6	1250.6	1167.3	993.8	823.1	665.0	608.7
15.5°	1284.6	1253.8	1169.0	989.9	812.3	647.2	589.6
16°	1288.5	1257.1	1170.5	986.0	800.9	629.0	569.5
16.5°	1292.1	1259.6	1171.8	981.7	790.0	610.3	549.1
17°	1295.6	1262.4	1173.0	977.0	779.0	591.9	530.3
17.5°	1298.9	1265.1	1173.9	972.4	767.4	573.1	511.3
18°	1302.2	1267.5	1174.5	967.5	755.8	554.4	492.9
18.5°	1306.2	1269.7	1175.1	962.5	743.5	536.1	473.3
19°	1309.1	1272.0	1175.3	957.6	731.4	517.8	453.6
19.5°	1311.8	1274.4	1175.3	952.5	719.2	500.5	434.3
20°	1314.9	1276.3	1175.5	947.4	707.4	483.3	410.4
20.5°	1318.1	1278.2	1175.5	942.3	696.0	465.7	384.9
21°	1321.0	1280.4	1175.2	936.6	684.5	448.4	361.6
21.5°	1324.1	1282.5	1174.8	930.6	672.2	429.8	341.3
22°	1327.0	1283.9	1174.1	924.5	659.8	411.5	322.6

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CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 30

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	1330.3	1285.7	1173.2	918.1	646.4	389.1	305.6
23°	1333.6	1287.3	1172.3	911.5	632.1	366.5	290.5
23.5°	1336.6	1288.9	1170.8	905.0	617.2	345.1	277.0
24°	1339.5	1290.7	1169.3	898.3	603.3	326.1	263.6
24.5°	1342.2	1292.2	1167.7	891.7	589.0	309.1	250.2
25°	1345.3	1294.2	1166.4	885.3	573.2	294.0	236.9
25.5°	1348.4	1295.9	1164.4	878.4	557.4	281.3	217.3
26°	1351.4	1297.8	1162.1	871.4	541.6	268.5	192.6
26.5°	1354.4	1299.5	1159.6	864.3	525.7	255.8	165.7
27°	1357.5	1300.9	1156.9	857.5	510.0	243.1	143.8
27.5°	1360.2	1302.3	1154.0	850.4	495.0	229.2	125.7
28°	1363.3	1304.0	1150.8	843.5	479.4	212.3	109.1
28.5°	1366.0	1305.5	1147.5	836.6	463.9	189.7	92.4
29°	1368.9	1306.9	1144.1	829.0	448.7	165.8	72.5
29.5°	1372.0	1308.5	1141.0	821.0	433.5	143.8	53.1
30°	1375.1	1309.6	1137.4	812.9	418.8	125.2	40.0
30.5°	1377.8	1310.9	1134.0	805.2	404.1	109.7	34.6
31°	1380.3	1312.5	1130.6	797.2	389.7	94.7	32.5
31.5°	1383.2	1313.6	1127.2	789.4	375.3	78.4	31.4
32°	1385.7	1314.6	1123.8	781.2	361.3	61.1	30.6
32.5°	1388.5	1315.9	1120.2	772.6	348.1	46.9	29.8
33°	1391.0	1317.0	1116.9	763.5	335.2	38.1	29.1
33.5°	1393.7	1318.0	1113.5	754.4	321.5	34.2	28.2
34°	1396.2	1319.0	1109.9	745.5	308.4	32.5	27.3
34.5°	1399.0	1320.0	1106.1	736.1	295.7	31.3	26.2
35°	1401.8	1320.8	1102.2	725.9	283.5	30.4	25.1
35.5°	1404.2	1321.6	1098.7	716.1	270.2	29.7	24.2
36°	1406.9	1322.3	1095.1	706.0	256.2	29.1	23.7
36.5°	1409.6	1323.0	1091.2	695.8	242.0	28.4	23.3
37°	1412.0	1323.6	1087.2	685.3	228.9	27.8	23.2
37.5°	1414.4	1324.1	1083.0	674.9	216.4	27.3	22.9
38°	1416.6	1324.8	1078.7	663.9	204.0	26.8	22.6
38.5°	1418.7	1325.3	1074.6	652.9	191.1	26.4	22.2
39°	1421.1	1325.8	1070.3	642.0	175.7	26.0	21.7
39.5°	1423.5	1326.5	1066.1	631.1	157.3	25.4	21.3
40°	1425.5	1326.8	1061.4	619.7	136.3	24.6	20.8
40.5°	1427.3	1326.8	1056.7	608.4	114.4	23.7	20.3
41°	1429.4	1326.9	1051.9	597.0	93.8	23.0	20.0
41.5°	1431.9	1327.4	1047.4	585.7	77.3	22.1	19.9
42°	1433.8	1328.0	1043.3	574.4	65.1	21.2	20.0
42.5°	1435.4	1328.5	1038.4	563.1	56.4	20.2	21.0
43°	1437.3	1328.6	1033.5	551.9	50.7	19.6	23.8
43.5°	1438.7	1328.4	1028.9	541.0	46.6	19.0	34.3
44°	1439.5	1328.3	1023.7	529.7	43.2	18.4	58.2
44.5°	1440.5	1328.2	1018.5	518.6	40.6	17.6	80.1

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CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 30

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	1441.5	1327.8	1013.3	507.3	38.4	17.1	97.7
45.5°	1442.2	1327.1	1007.8	496.2	36.8	16.7	127.3
46°	1443.1	1326.5	1002.2	484.4	35.2	16.3	140.9
46.5°	1443.5	1326.3	996.6	472.8	33.2	16.1	131.4
47°	1444.0	1325.9	991.2	460.8	31.3	16.0	126.2
47.5°	1444.2	1325.6	985.4	449.4	30.0	15.8	123.2
48°	1444.1	1325.2	979.5	438.0	28.9	15.7	117.8
48.5°	1444.2	1324.5	973.6	426.3	28.0	15.8	110.3
49°	1443.8	1324.2	967.3	414.1	27.1	16.4	98.5
49.5°	1443.7	1323.8	961.1	402.0	26.3	18.0	86.6
50°	1443.8	1322.9	954.8	390.2	25.5	24.2	73.9
50.5°	1444.1	1322.1	948.2	378.1	24.8	36.5	59.9
51°	1444.2	1320.9	941.7	365.8	24.0	50.0	47.7
51.5°	1444.2	1319.7	935.1	353.5	23.2	55.0	39.1
52°	1444.7	1318.0	928.1	341.5	22.4	65.6	33.1
52.5°	1444.8	1316.8	921.2	328.8	21.8	77.7	28.3
53°	1444.7	1314.8	914.1	315.7	21.1	71.5	23.8
53.5°	1444.7	1313.1	906.9	302.9	20.5	66.4	19.9
54°	1444.8	1311.7	899.9	289.8	19.9	63.8	16.4
54.5°	1444.6	1310.4	892.8	276.1	19.4	61.6	13.7
55°	1444.4	1309.5	885.6	262.3	18.9	60.2	11.7
55.5°	1444.0	1308.4	878.1	248.6	18.3	58.4	10.2
56°	1443.2	1307.2	870.6	234.8	17.9	56.1	9.0
56.5°	1442.9	1306.3	863.4	220.6	17.5	53.7	8.1
57°	1442.3	1305.1	855.7	206.2	17.1	50.7	7.4
57.5°	1441.5	1304.2	848.0	192.6	16.6	47.6	6.8
58°	1440.5	1303.3	840.9	180.2	16.1	44.4	6.2
58.5°	1439.5	1302.0	833.1	168.9	15.6	40.9	5.8
59°	1438.6	1300.8	825.1	159.7	15.1	37.3	5.3
59.5°	1437.6	1299.4	817.4	151.9	14.5	33.7	4.7
60°	1436.2	1298.1	809.8	146.4	13.8	29.8	4.2
60.5°	1434.7	1296.3	802.6	142.9	13.2	26.1	3.5
61°	1433.8	1294.3	795.2	140.2	12.6	22.7	2.9
61.5°	1432.8	1292.0	788.0	131.8	12.0	19.6	2.5
62°	1432.2	1289.4	780.2	114.8	11.2	16.7	2.4
62.5°	1430.9	1287.1	772.2	94.9	10.5	13.5	2.4
63°	1429.5	1284.5	764.8	79.8	9.9	9.4	2.2
63.5°	1428.0	1281.4	757.1	72.0	9.3	4.9	2.1
64°	1426.5	1278.4	749.5	68.4	8.9	2.5	1.9
64.5°	1424.5	1275.4	741.3	66.1	8.4	1.7	1.7
65°	1422.6	1272.7	732.4	63.9	8.0	1.6	1.5
65.5°	1420.9	1269.7	724.2	61.9	7.6	1.5	1.3
66°	1418.6	1266.8	715.5	59.9	7.2	1.5	1.2
66.5°	1416.0	1264.0	707.1	58.2	6.8	1.5	1.2
67°	1413.5	1261.3	699.1	56.5	6.4	1.4	1.1

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	1411.1	1259.1	690.8	54.9	6.0	1.2	1.0
68°	1409.3	1257.4	682.5	53.5	5.5	1.0	0.9
68.5°	1407.1	1255.1	674.2	52.2	5.1	0.8	0.8
69°	1404.9	1252.8	665.7	51.1	4.5	0.8	0.7
69.5°	1403.2	1250.1	657.2	50.2	4.0	0.8	0.7
70°	1401.4	1247.5	649.2	49.3	3.4	0.8	0.7
70.5°	1400.5	1244.9	640.9	48.4	3.0	0.7	0.7
71°	1399.9	1242.8	632.4	47.5	2.8	0.7	0.7
71.5°	1399.0	1240.3	624.5	46.8	2.5	0.7	0.7
72°	1397.6	1238.1	617.1	46.0	2.2	0.7	0.7
72.5°	1397.0	1235.8	609.2	45.1	1.9	0.7	0.7
73°	1396.0	1233.1	601.9	44.0	1.7	0.7	0.7
73.5°	1392.2	1229.9	593.2	43.4	1.5	0.7	0.7
74°	1385.9	1226.8	584.3	42.0	1.2	0.6	0.7
74.5°	1376.1	1224.1	575.4	39.6	1.1	0.6	0.8
75°	1363.8	1223.1	566.8	36.9	0.9	0.6	0.8
75.5°	1348.0	1221.7	558.9	33.8	0.9	0.6	0.9
76°	1329.4	1219.0	551.7	31.0	0.8	0.6	0.9
76.5°	1306.0	1215.4	544.6	27.3	0.7	0.6	0.9
77°	1279.0	1209.1	537.5	24.1	0.6	0.6	1.0
77.5°	1249.9	1200.7	530.3	21.8	0.6	0.6	1.0
78°	1219.8	1190.3	523.3	19.8	0.5	0.6	1.0
78.5°	1188.8	1176.4	517.6	18.0	0.5	0.6	1.1
79°	1158.8	1158.6	512.2	16.4	0.5	0.6	1.1
79.5°	1130.0	1138.6	507.0	15.0	0.5	0.6	1.1
80°	1103.8	1116.3	502.6	13.6	0.5	0.6	1.1
80.5°	1082.8	1096.4	498.2	12.6	0.5	0.6	1.2
81°	1063.0	1080.1	493.4	11.3	0.5	0.6	1.2
81.5°	1047.6	1070.4	488.4	10.2	0.5	0.7	1.3
82°	1034.5	1067.8	484.0	9.2	0.5	0.7	1.4
82.5°	1021.6	1070.1	481.1	8.4	0.5	0.7	1.4
83°	1015.0	1073.7	479.8	7.6	0.5	0.7	1.4
83.5°	1011.5	1077.8	480.5	7.0	0.5	0.8	1.5
84°	1010.1	1069.7	482.5	6.3	0.5	0.8	1.5
84.5°	1009.6	1045.5	485.5	5.8	0.5	0.9	1.6
85°	1012.5	1007.1	489.2	5.3	0.6	0.9	1.6
85.5°	1002.2	953.5	491.9	4.9	0.6	0.9	1.7
86°	965.1	884.6	490.8	4.5	0.6	0.9	1.7
86.5°	897.6	804.2	489.0	4.1	0.6	1.0	1.8
87°	805.0	734.1	484.8	3.8	0.7	1.0	1.8
87.5°	733.7	671.7	472.4	3.4	0.7	1.1	1.9
88°	662.4	614.9	453.9	3.0	0.7	1.1	1.9
88.5°	591.1	556.6	429.6	2.7	0.7	1.2	2.0
89°	519.8	490.4	398.6	2.4	0.7	1.2	2.0
89.5°	449.3	463.3	361.4	2.2	0.8	1.2	2.1

REPORT NUMBER: P1197016

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 30

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	420.2	472.5	320.4	1.7	0.8	1.3	2.1
90.5°	414.9	486.2	275.7	1.5	0.8	1.3	2.2
91°	437.7	463.7	231.5	1.3	0.9	1.4	2.2
91.5°	445.7	389.5	189.8	1.2	0.9	1.4	2.3
92°	370.1	277.9	156.8	1.1	0.9	1.5	2.3
92.5°	240.3	217.9	130.6	1.0	1.0	1.5	2.4
93°	151.8	159.0	106.4	0.9	1.0	1.5	2.4
93.5°	84.0	100.3	83.2	0.8	1.0	1.6	2.5
94°	46.3	41.7	65.4	0.8	1.1	1.7	2.5
94.5°	38.6	33.6	53.5	0.7	1.1	1.7	2.6
95°	38.8	30.6	47.7	0.7	1.1	1.7	2.6
95.5°	38.1	28.5	46.8	0.7	1.2	1.8	2.6
96°	36.9	27.5	48.9	0.7	1.2	1.8	2.7
96.5°	37.6	27.9	51.5	0.7	1.3	1.9	2.7
97°	41.3	29.3	55.3	0.7	1.3	1.9	2.7
97.5°	42.1	28.2	52.5	0.7	1.3	2.0	2.8
98°	38.3	25.9	41.8	0.6	1.3	2.0	2.8
98.5°	33.0	24.8	30.3	0.6	1.4	2.0	2.8
99°	29.4	23.8	21.7	0.6	1.4	2.1	2.9
99.5°	28.5	21.8	18.4	0.6	1.5	2.1	2.9
100°	28.3	20.6	15.4	0.6	1.5	2.2	2.9
100.5°	26.7	20.1	12.9	0.6	1.5	2.2	3.0
101°	25.0	19.8	11.1	0.6	1.6	2.3	3.0
101.5°	23.3	19.2	9.7	0.6	1.6	2.3	3.1
102°	21.2	18.0	8.2	0.6	1.6	2.3	3.1
102.5°	18.7	15.9	6.5	0.6	1.6	2.4	3.1
103°	16.0	13.5	5.3	0.6	1.7	2.4	3.1
103.5°	13.5	10.9	4.5	0.6	1.7	2.4	3.2
104°	11.7	8.5	3.7	0.6	1.7	2.5	3.2
104.5°	10.5	6.5	3.0	0.6	1.8	2.6	3.2
105°	9.6	4.7	2.5	0.6	1.8	2.6	3.3
105.5°	8.6	3.4	2.2	0.7	1.8	2.6	3.3
106°	7.1	2.6	1.9	0.7	1.9	2.6	3.3
106.5°	5.3	2.1	1.6	0.7	1.9	2.6	3.4
107°	3.6	1.7	1.4	0.7	1.9	2.7	3.4
107.5°	2.3	1.4	1.1	0.7	1.9	2.7	3.4
108°	1.6	1.1	0.9	0.7	2.0	2.8	3.4
108.5°	1.3	0.9	0.8	0.7	2.0	2.8	3.4
109°	1.0	0.7	0.7	0.7	2.0	2.8	3.4
109.5°	0.8	0.5	0.6	0.8	2.1	2.8	3.4
110°	0.6	0.3	0.5	0.8	2.1	2.9	3.5
110.5°	0.3	0.2	0.5	0.8	2.1	2.9	3.5
111°	0.2	0.1	0.4	0.8	2.1	2.9	3.5
111.5°	0.0	0.0	0.4	0.8	2.1	2.9	3.5
112°	0.0	0.0	0.3	0.8	2.2	2.9	3.5

REPORT NUMBER: P1197016

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 30

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	0.0	0.0	0.2	0.9	2.2	3.0	3.5
113°	0.0	0.0	0.2	0.9	2.2	3.0	3.5
113.5°	0.0	0.0	0.1	0.9	2.3	3.0	3.6
114°	0.0	0.0	0.1	0.9	2.3	3.0	3.6
114.5°	0.0	0.0	0.1	0.9	2.3	3.1	3.6
115°	0.0	0.0	0.1	0.9	2.3	3.1	3.6
115.5°	0.0	0.0	0.1	0.9	2.3	3.1	3.6
116°	0.0	0.0	0.1	1.0	2.4	3.1	3.7
116.5°	0.0	0.0	0.1	1.0	2.4	3.2	3.7
117°	0.0	0.0	0.1	1.0	2.4	3.2	3.7
117.5°	0.0	0.0	0.1	1.0	2.4	3.2	3.7
118°	0.0	0.0	0.1	1.1	2.4	3.2	3.7
118.5°	0.0	0.0	0.1	1.1	2.5	3.2	3.7
119°	0.0	0.0	0.2	1.1	2.5	3.2	3.7
119.5°	0.0	0.0	0.2	1.1	2.5	3.2	3.7
120°	0.0	0.0	0.2	1.1	2.5	3.3	3.7
120.5°	0.0	0.0	0.2	1.1	2.5	3.3	3.7
121°	0.0	0.0	0.2	1.1	2.6	3.3	3.7
121.5°	0.0	0.0	0.2	1.2	2.6	3.3	3.7
122°	0.0	0.0	0.3	1.2	2.6	3.4	3.7
122.5°	0.0	0.0	0.3	1.2	2.6	3.4	3.7
123°	0.0	0.0	0.3	1.2	2.6	3.4	3.7
123.5°	0.0	0.0	0.3	1.2	2.6	3.4	3.7
124°	0.0	0.0	0.3	1.2	2.7	3.4	3.7
124.5°	0.0	0.0	0.3	1.3	2.7	3.4	3.7
125°	0.0	0.0	0.4	1.3	2.7	3.5	3.7
125.5°	0.0	0.0	0.4	1.3	2.7	3.5	3.7
126°	0.0	0.0	0.4	1.4	2.7	3.5	3.7
126.5°	0.0	0.0	0.4	1.4	2.7	3.5	3.7
127°	0.0	0.0	0.4	1.4	2.7	3.5	3.7
127.5°	0.0	0.0	0.4	1.4	2.7	3.5	3.7
128°	0.0	0.0	0.5	1.4	2.7	3.5	3.7
128.5°	0.0	0.0	0.5	1.4	2.7	3.5	3.7
129°	0.0	0.0	0.5	1.4	2.8	3.5	3.7
129.5°	0.0	0.0	0.5	1.5	2.8	3.5	3.8
130°	0.0	0.0	0.6	1.5	2.8	3.5	3.8
130.5°	0.0	0.0	0.6	1.5	2.8	3.5	3.8
131°	0.0	0.0	0.6	1.5	2.8	3.6	3.8
131.5°	0.0	0.0	0.6	1.5	2.8	3.6	3.8
132°	0.0	0.0	0.7	1.6	2.8	3.6	3.8
132.5°	0.0	0.0	0.7	1.6	2.8	3.6	3.8
133°	0.0	0.0	0.7	1.6	2.8	3.6	3.8
133.5°	0.0	0.0	0.7	1.7	2.9	3.6	3.8
134°	0.0	0.0	0.8	1.7	2.9	3.6	3.8
134.5°	0.0	0.0	0.8	1.7	2.9	3.6	3.8

REPORT NUMBER: P1197016

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 30

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	0.0	0.0	0.8	1.7	2.9	3.6	3.8
135.5°	0.0	0.1	0.8	1.7	2.9	3.6	3.8
136°	0.0	0.1	0.9	1.7	2.9	3.6	3.8
136.5°	0.0	0.1	0.9	1.7	2.9	3.6	3.8
137°	0.0	0.1	0.9	1.8	2.9	3.6	3.8
137.5°	0.0	0.1	0.9	1.8	2.9	3.6	3.8
138°	0.0	0.1	0.9	1.8	2.9	3.6	3.8
138.5°	0.1	0.1	1.0	1.8	2.9	3.6	3.8
139°	0.1	0.2	1.0	1.8	2.9	3.6	3.8
139.5°	0.1	0.2	1.0	1.8	2.9	3.6	3.8
140°	0.1	0.2	1.0	1.9	2.9	3.6	3.8
140.5°	0.1	0.3	1.0	1.9	3.0	3.6	3.8
141°	0.1	0.3	1.1	1.9	3.0	3.6	3.8
141.5°	0.1	0.3	1.1	2.0	3.0	3.6	3.8
142°	0.1	0.4	1.1	2.0	3.0	3.6	3.8
142.5°	0.1	0.4	1.1	2.0	3.0	3.6	3.8
143°	0.2	0.4	1.2	2.0	3.0	3.6	3.8
143.5°	0.2	0.4	1.2	2.0	3.0	3.6	3.7
144°	0.2	0.4	1.2	2.0	3.0	3.6	3.7
144.5°	0.2	0.4	1.2	2.0	3.0	3.6	3.7
145°	0.2	0.4	1.3	2.0	3.0	3.6	3.7
145.5°	0.2	0.5	1.3	2.0	3.0	3.6	3.7
146°	0.3	0.5	1.3	2.1	3.0	3.6	3.7
146.5°	0.3	0.5	1.3	2.1	3.0	3.6	3.6
147°	0.3	0.5	1.3	2.1	3.0	3.6	3.6
147.5°	0.3	0.6	1.4	2.1	3.0	3.6	3.6
148°	0.3	0.6	1.4	2.1	3.0	3.6	3.6
148.5°	0.4	0.6	1.4	2.1	3.0	3.6	3.6
149°	0.4	0.6	1.5	2.2	3.0	3.6	3.6
149.5°	0.4	0.7	1.5	2.2	3.0	3.6	3.6
150°	0.4	0.7	1.5	2.2	3.0	3.6	3.6
150.5°	0.4	0.7	1.5	2.3	3.1	3.6	3.6
151°	0.5	0.8	1.5	2.3	3.1	3.6	3.6
151.5°	0.5	0.8	1.6	2.3	3.1	3.6	3.6
152°	0.5	0.8	1.6	2.3	3.1	3.6	3.6
152.5°	0.6	0.8	1.6	2.3	3.1	3.6	3.5
153°	0.6	0.9	1.6	2.3	3.1	3.6	3.5
153.5°	0.6	0.9	1.6	2.3	3.1	3.6	3.5
154°	0.6	0.9	1.7	2.3	3.1	3.6	3.5
154.5°	0.7	1.0	1.7	2.4	3.1	3.6	3.5
155°	0.7	1.0	1.7	2.4	3.1	3.6	3.5
155.5°	0.7	1.0	1.7	2.4	3.1	3.6	3.4
156°	0.7	1.1	1.8	2.4	3.1	3.6	3.4
156.5°	0.8	1.1	1.8	2.4	3.1	3.6	3.4
157°	0.8	1.1	1.8	2.4	3.1	3.5	3.4

REPORT NUMBER: P1197016

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 30

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
157.5°	0.8	1.1	1.8	2.4	3.1	3.5	3.4
158°	0.9	1.2	1.8	2.4	3.1	3.5	3.4
158.5°	0.9	1.2	1.9	2.5	3.1	3.5	3.4
159°	0.9	1.2	1.9	2.5	3.1	3.5	3.3
159.5°	0.9	1.2	1.9	2.5	3.1	3.5	3.3
160°	1.0	1.3	1.9	2.5	3.1	3.5	3.3
160.5°	1.0	1.3	2.0	2.5	3.1	3.5	3.3
161°	1.0	1.4	2.0	2.5	3.1	3.5	3.3
161.5°	1.0	1.4	2.0	2.5	3.1	3.4	3.3
162°	1.1	1.4	2.0	2.6	3.1	3.4	3.2
162.5°	1.1	1.4	2.0	2.6	3.1	3.4	3.2
163°	1.1	1.4	2.1	2.6	3.1	3.4	3.2
163.5°	1.1	1.5	2.1	2.6	3.1	3.4	3.2
164°	1.2	1.5	2.1	2.6	3.1	3.4	3.2
164.5°	1.2	1.5	2.1	2.6	3.1	3.4	3.1
165°	1.2	1.6	2.2	2.6	3.1	3.4	3.1
165.5°	1.3	1.6	2.2	2.6	3.2	3.3	3.1
166°	1.3	1.7	2.2	2.7	3.1	3.3	3.1
166.5°	1.3	1.7	2.2	2.7	3.1	3.3	3.0
167°	1.3	1.7	2.3	2.7	3.1	3.3	3.0
167.5°	1.4	1.7	2.3	2.7	3.1	3.3	3.0
168°	1.4	1.7	2.3	2.7	3.1	3.3	3.0
168.5°	1.4	1.8	2.3	2.7	3.1	3.3	3.0
169°	1.5	1.8	2.3	2.7	3.1	3.3	3.0
169.5°	1.5	1.8	2.4	2.7	3.1	3.3	2.9
170°	1.6	1.8	2.4	2.7	3.1	3.3	2.9
170.5°	1.6	1.9	2.4	2.7	3.1	3.2	2.9
171°	1.6	2.0	2.4	2.7	3.0	3.2	2.8
171.5°	1.6	2.0	2.4	2.7	3.0	3.2	2.8
172°	1.7	2.0	2.5	2.7	3.0	3.2	2.8
172.5°	1.7	2.0	2.5	2.8	3.0	3.1	2.8
173°	1.8	2.0	2.5	2.8	3.0	3.1	2.7
173.5°	1.8	2.1	2.5	2.8	3.0	3.1	2.7
174°	1.8	2.1	2.6	2.8	3.0	3.1	2.7
174.5°	1.8	2.1	2.6	2.8	3.0	3.1	2.6
175°	1.9	2.2	2.6	2.8	3.0	3.0	2.6
175.5°	1.9	2.2	2.6	2.8	3.0	3.0	2.6
176°	2.0	2.2	2.6	2.8	3.0	3.0	2.5
176.5°	2.0	2.3	2.7	2.8	3.0	3.0	2.5
177°	2.0	2.3	2.7	2.8	3.0	3.0	2.4
177.5°	2.1	2.3	2.7	2.8	3.0	3.0	2.4
178°	2.1	2.4	2.7	2.8	3.0	3.0	2.4
178.5°	2.1	2.4	2.7	2.8	2.9	3.0	2.4
179°	2.2	2.4	2.7	2.9	2.9	2.9	2.3
179.5°	2.2	2.4	2.7	2.9	2.9	2.9	2.3



REPORT NUMBER: P1197016
CATALOG NUMBER: AWPf28S-BZ-HIGH-3000K-POSITION 30

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	2.9	2.9	2.9	2.9	2.9	2.9	2.9

(END OF REPORT)