

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: P1197018

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

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1197018
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-MID-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: 3193.1 lumens
Efficiency: 90.7%
Efficacy: 119.6 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

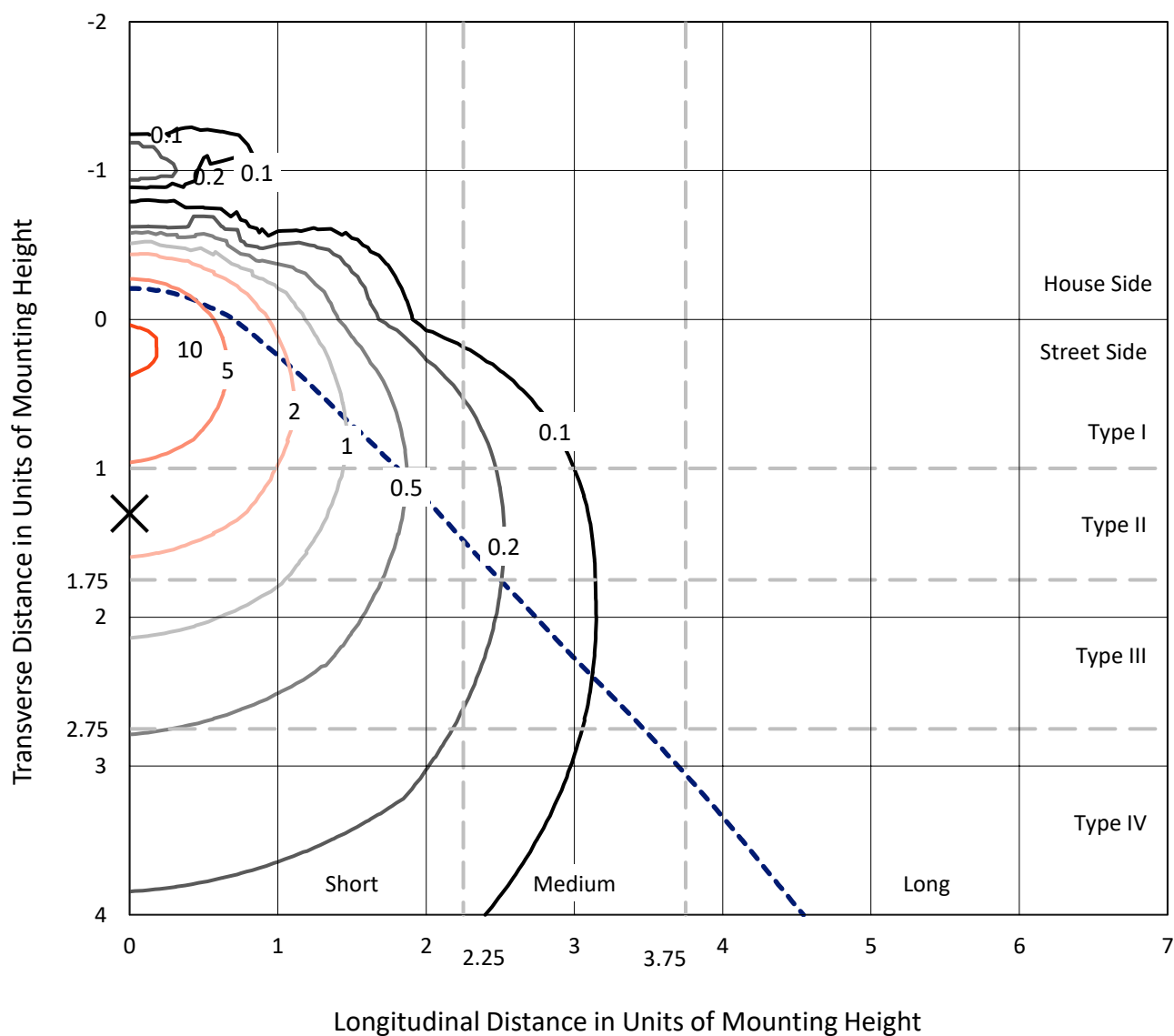
Input Watts (W): 26.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

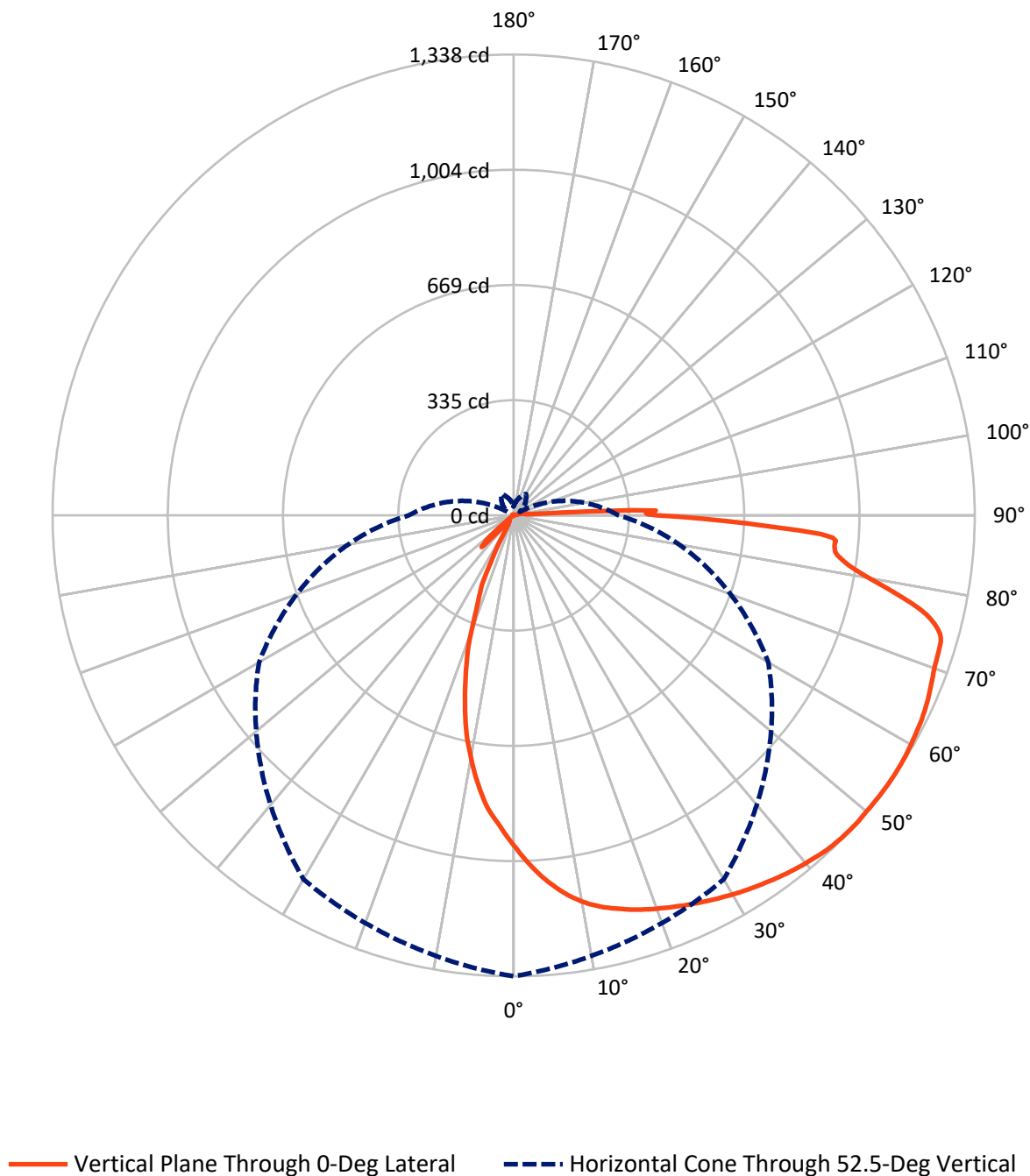


Based on 10 foot mounting height. Maximum calculated value = 10.8 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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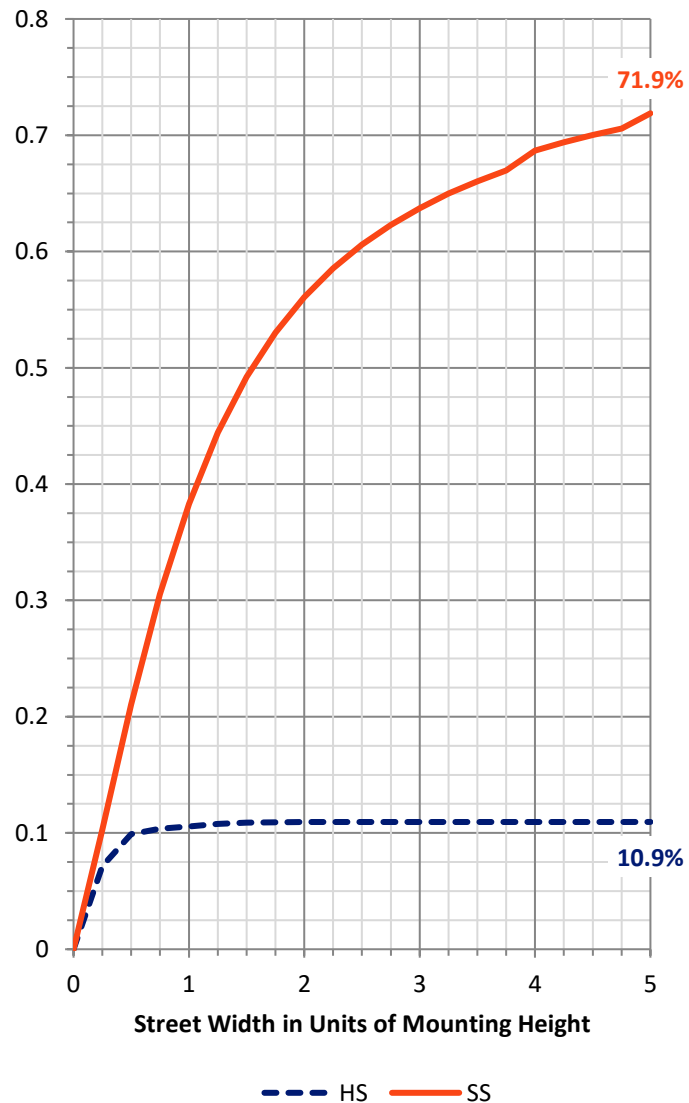
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	390.8	7.4	398.2
	% Lamp	11.1	0.2	11.3
Street Side	Lumens	2740.0	54.9	2794.9
	% Lamp	77.8	1.6	79.4
Total	Lumens	3130.8	62.3	3193.1
	% Lamp	88.9	1.8	90.7

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	91.5	2.9	2.6
10°-20°	253.3	7.9	7.2
20°-30°	355.0	11.1	10.1
30°-40°	404.6	12.7	11.5
40°-50°	438.1	13.7	12.4
50°-60°	450.9	14.1	12.8
60°-70°	430.2	13.5	12.2
70°-80°	404.5	12.7	11.5
80°-90°	302.8	9.5	8.6
90°-100°	51.3	1.6	1.5
100°-110°	4.0	0.1	0.1
110°-120°	1.3	0.0	0.0
120°-130°	1.3	0.0	0.0
130°-140°	1.3	0.0	0.0
140°-150°	1.2	0.0	0.0
150°-160°	1.0	0.0	0.0
160°-170°	0.7	0.0	0.0
170°-180°	0.2	0.0	0.0
0°-90°	3130.8	98.0	88.9
0°-180°	3193.1	100.0	90.7

Coefficient of Utilization



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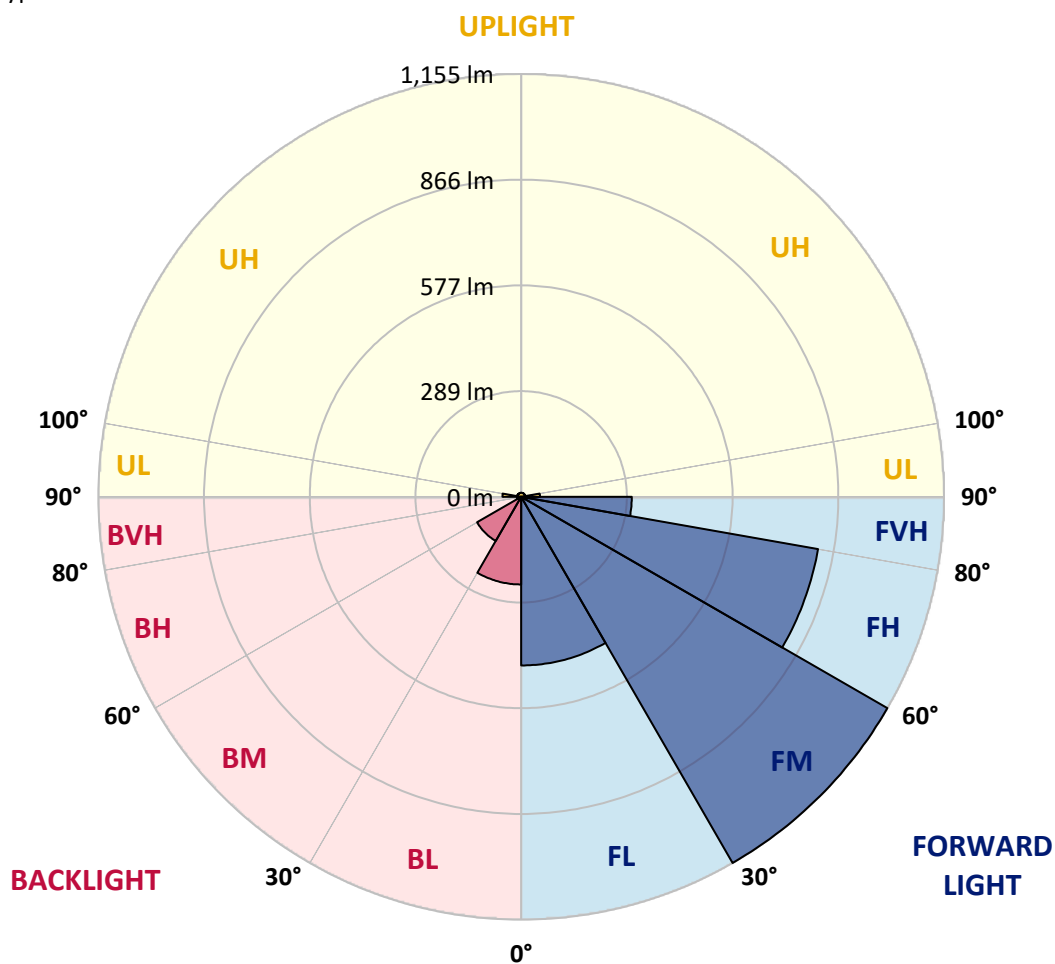
CATALOG NUMBER: AWPf28S-BZ-MID-3000K-POSITION 30

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	460.4	13.1			
FM	(30°-60°)	1154.6	32.8			
FH	(60°-80°)	823.0	23.4			G1/1800
FVH	(80°-90°)	301.9	8.6			G3/500
BL	(0°-30°)	239.4	6.8	B1/500		
BM	(30°-60°)	138.9	3.9	B0/220		
BH	(60°-80°)	11.6	0.3	B0/110		G0/110
BVH	(80°-90°)	0.9	0.0			G0/10
UL	(90°-100°)	51.3	1.5		U3/500	
UH	(100°-180°)	11.0	0.3		U2/50	
Trapped Light		327.9	9.3			

BUG Rating: B1-U3-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	968.1	968.1	968.1	968.1	968.1	968.1	968.1
0.5°	979.1	977.7	973.6	967.9	962.6	958.5	957.6
1°	990.1	986.9	979.2	967.9	957.2	949.0	946.6
1.5°	1000.8	996.2	984.7	967.6	951.6	939.7	935.8
2°	1011.5	1005.2	989.6	967.3	946.2	930.3	924.8
2.5°	1022.4	1014.4	994.6	966.9	940.6	920.8	914.4
3°	1032.5	1023.0	999.6	966.4	934.8	911.5	903.6
3.5°	1042.9	1031.7	1004.8	965.9	928.7	902.2	893.6
4°	1052.4	1040.2	1009.5	965.2	922.8	893.2	883.6
4.5°	1061.3	1048.0	1013.8	964.4	916.9	885.0	874.1
5°	1070.2	1055.2	1018.5	963.3	910.9	876.2	864.9
5.5°	1079.0	1062.8	1022.7	962.2	904.7	867.7	854.4
6°	1087.5	1070.4	1027.1	961.0	898.5	857.8	842.6
6.5°	1095.5	1077.1	1031.1	959.8	892.4	847.3	830.2
7°	1103.5	1083.8	1035.1	958.6	886.4	836.1	816.2
7.5°	1111.4	1090.3	1038.8	957.0	880.2	823.6	801.9
8°	1118.3	1096.8	1042.2	955.4	874.6	810.7	787.6
8.5°	1125.3	1102.9	1045.6	953.5	868.6	798.1	773.9
9°	1131.9	1108.8	1049.0	951.8	862.2	785.9	758.9
9.5°	1138.2	1114.4	1052.6	949.9	856.1	772.3	743.5
10°	1143.6	1119.9	1056.1	947.9	849.3	758.7	728.8
10.5°	1149.1	1125.2	1059.1	945.8	842.3	744.9	713.2
11°	1153.9	1129.9	1062.3	943.6	834.6	731.2	698.0
11.5°	1158.6	1134.3	1065.3	941.2	827.0	717.3	683.2
12°	1163.2	1138.8	1068.2	938.6	818.6	703.4	668.9
12.5°	1167.5	1142.7	1070.7	935.8	810.0	689.6	652.7
13°	1171.4	1146.3	1073.1	932.9	800.7	676.4	636.1
13.5°	1175.2	1149.4	1075.4	930.0	791.3	662.2	618.1
14°	1179.1	1152.5	1077.5	926.9	781.7	647.7	600.0
14.5°	1182.4	1155.4	1079.5	923.6	772.1	631.7	582.5
15°	1186.2	1158.4	1081.2	920.4	762.4	615.9	563.8
15.5°	1189.8	1161.3	1082.7	916.9	752.4	599.4	546.1
16°	1193.4	1164.3	1084.1	913.2	741.8	582.6	527.5
16.5°	1196.7	1166.7	1085.3	909.2	731.7	565.3	508.6
17°	1200.0	1169.3	1086.5	904.9	721.5	548.2	491.2
17.5°	1203.0	1171.8	1087.3	900.7	710.8	530.8	473.6
18°	1206.1	1174.0	1087.8	896.1	700.1	513.5	456.6
18.5°	1209.8	1176.0	1088.4	891.5	688.6	496.6	438.4
19°	1212.5	1178.1	1088.6	886.9	677.5	479.6	420.1
19.5°	1215.0	1180.4	1088.6	882.3	666.2	463.6	402.2
20°	1217.9	1182.2	1088.7	877.5	655.2	447.6	380.1
20.5°	1220.8	1183.9	1088.7	872.8	644.6	431.4	356.5
21°	1223.6	1185.9	1088.5	867.5	634.0	415.3	335.0
21.5°	1226.4	1187.9	1088.1	861.9	622.7	398.0	316.1
22°	1229.1	1189.2	1087.5	856.3	611.1	381.1	298.8

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	1232.2	1190.9	1086.7	850.4	598.8	360.4	283.0
23°	1235.3	1192.3	1085.8	844.3	585.4	339.5	269.0
23.5°	1238.0	1193.8	1084.4	838.2	571.6	319.6	256.6
24°	1240.7	1195.5	1083.0	832.0	558.7	302.1	244.2
24.5°	1243.2	1196.9	1081.5	825.9	545.6	286.3	231.8
25°	1246.0	1198.7	1080.3	819.9	530.9	272.3	219.4
25.5°	1248.9	1200.3	1078.5	813.6	516.3	260.5	201.2
26°	1251.7	1202.0	1076.4	807.1	501.6	248.7	178.4
26.5°	1254.5	1203.6	1074.1	800.5	487.0	237.0	153.4
27°	1257.4	1204.9	1071.6	794.2	472.3	225.2	133.2
27.5°	1259.8	1206.2	1068.9	787.6	458.5	212.3	116.4
28°	1262.7	1207.8	1065.9	781.3	444.0	196.6	101.1
28.5°	1265.2	1209.2	1062.8	774.8	429.7	175.7	85.6
29°	1267.9	1210.5	1059.7	767.8	415.6	153.5	67.1
29.5°	1270.7	1212.0	1056.8	760.5	401.5	133.2	49.2
30°	1273.7	1213.0	1053.5	752.9	387.9	115.9	37.0
30.5°	1276.2	1214.2	1050.4	745.8	374.3	101.6	32.0
31°	1278.5	1215.7	1047.2	738.4	361.0	87.8	30.1
31.5°	1281.1	1216.7	1044.0	731.2	347.6	72.7	29.1
32°	1283.5	1217.6	1040.9	723.6	334.6	56.6	28.3
32.5°	1286.1	1218.8	1037.5	715.6	322.4	43.5	27.6
33°	1288.4	1219.9	1034.5	707.2	310.5	35.3	26.9
33.5°	1290.9	1220.8	1031.3	698.8	297.8	31.7	26.1
34°	1293.2	1221.7	1028.0	690.5	285.7	30.1	25.3
34.5°	1295.8	1222.6	1024.5	681.8	273.9	29.0	24.3
35°	1298.4	1223.3	1020.9	672.4	262.6	28.1	23.2
35.5°	1300.6	1224.1	1017.7	663.2	250.3	27.5	22.4
36°	1303.1	1224.8	1014.3	653.9	237.3	27.0	21.9
36.5°	1305.6	1225.4	1010.7	644.5	224.1	26.3	21.6
37°	1307.8	1225.9	1007.0	634.7	212.0	25.8	21.5
37.5°	1310.0	1226.4	1003.1	625.1	200.4	25.3	21.2
38°	1312.1	1227.0	999.2	615.0	189.0	24.8	20.9
38.5°	1314.0	1227.5	995.3	604.7	177.0	24.5	20.6
39°	1316.3	1228.0	991.4	594.7	162.7	24.1	20.1
39.5°	1318.5	1228.6	987.5	584.6	145.7	23.5	19.7
40°	1320.3	1229.0	983.1	573.9	126.3	22.8	19.3
40.5°	1322.0	1229.0	978.8	563.5	105.9	22.0	18.8
41°	1324.0	1229.1	974.3	553.0	86.9	21.3	18.5
41.5°	1326.2	1229.5	970.2	542.5	71.6	20.5	18.4
42°	1328.1	1230.0	966.4	532.0	60.3	19.6	18.6
42.5°	1329.5	1230.5	961.8	521.5	52.2	18.7	19.5
43°	1331.3	1230.6	957.2	511.2	46.9	18.1	22.1
43.5°	1332.6	1230.4	953.0	501.1	43.2	17.6	31.8
44°	1333.3	1230.3	948.2	490.6	40.0	17.1	53.9
44.5°	1334.2	1230.2	943.3	480.4	37.6	16.3	74.2

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	1335.2	1229.8	938.5	469.9	35.6	15.9	90.5
45.5°	1335.8	1229.2	933.5	459.6	34.0	15.5	117.9
46°	1336.6	1228.7	928.3	448.7	32.6	15.1	130.5
46.5°	1337.0	1228.5	923.1	437.9	30.8	14.9	121.7
47°	1337.5	1228.1	918.0	426.8	29.0	14.8	116.9
47.5°	1337.6	1227.8	912.7	416.2	27.8	14.6	114.1
48°	1337.6	1227.4	907.2	405.7	26.8	14.5	109.1
48.5°	1337.6	1226.8	901.8	394.8	25.9	14.6	102.1
49°	1337.3	1226.5	895.9	383.5	25.1	15.2	91.2
49.5°	1337.2	1226.2	890.2	372.4	24.4	16.7	80.2
50°	1337.3	1225.3	884.4	361.4	23.6	22.4	68.5
50.5°	1337.6	1224.6	878.3	350.2	23.0	33.8	55.5
51°	1337.6	1223.5	872.2	338.8	22.2	46.3	44.2
51.5°	1337.7	1222.3	866.1	327.4	21.5	50.9	36.2
52°	1338.1	1220.8	859.7	316.3	20.8	60.8	30.7
52.5°	1338.2	1219.7	853.2	304.6	20.2	71.9	26.2
53°	1338.2	1217.8	846.6	292.4	19.5	66.3	22.0
53.5°	1338.2	1216.2	840.0	280.6	19.0	61.5	18.5
54°	1338.2	1214.9	833.5	268.4	18.4	59.1	15.2
54.5°	1338.0	1213.7	827.0	255.7	17.9	57.1	12.7
55°	1337.9	1212.9	820.2	243.0	17.5	55.7	10.8
55.5°	1337.5	1211.8	813.4	230.2	17.0	54.1	9.5
56°	1336.8	1210.8	806.3	217.5	16.6	52.0	8.3
56.5°	1336.5	1209.9	799.7	204.4	16.2	49.7	7.5
57°	1335.9	1208.8	792.5	190.9	15.8	47.0	6.8
57.5°	1335.1	1208.0	785.5	178.4	15.4	44.1	6.3
58°	1334.3	1207.2	778.8	166.9	14.9	41.1	5.8
58.5°	1333.3	1205.9	771.7	156.5	14.5	37.9	5.3
59°	1332.4	1204.9	764.2	147.9	14.0	34.6	4.9
59.5°	1331.5	1203.5	757.1	140.7	13.4	31.2	4.4
60°	1330.3	1202.3	750.0	135.6	12.8	27.6	3.9
60.5°	1328.8	1200.7	743.4	132.3	12.2	24.2	3.2
61°	1328.1	1198.8	736.5	129.8	11.7	21.0	2.7
61.5°	1327.1	1196.7	729.8	122.1	11.2	18.1	2.4
62°	1326.5	1194.3	722.6	106.4	10.4	15.5	2.3
62.5°	1325.3	1192.2	715.2	87.9	9.7	12.5	2.2
63°	1324.0	1189.7	708.4	73.9	9.2	8.7	2.1
63.5°	1322.6	1186.9	701.2	66.7	8.6	4.6	2.0
64°	1321.2	1184.1	694.2	63.3	8.2	2.3	1.8
64.5°	1319.4	1181.3	686.6	61.2	7.8	1.6	1.6
65°	1317.6	1178.9	678.4	59.2	7.4	1.4	1.4
65.5°	1316.1	1176.0	670.7	57.3	7.0	1.4	1.2
66°	1313.9	1173.3	662.7	55.5	6.7	1.4	1.2
66.5°	1311.6	1170.8	654.9	53.9	6.3	1.4	1.1
67°	1309.2	1168.3	647.5	52.3	5.9	1.3	1.0

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	1307.0	1166.2	639.8	50.9	5.6	1.1	0.9
68°	1305.3	1164.6	632.1	49.6	5.1	0.9	0.8
68.5°	1303.3	1162.5	624.4	48.3	4.7	0.8	0.7
69°	1301.2	1160.3	616.6	47.4	4.2	0.7	0.7
69.5°	1299.7	1157.9	608.7	46.5	3.7	0.7	0.7
70°	1298.0	1155.4	601.3	45.7	3.2	0.7	0.7
70.5°	1297.2	1153.1	593.6	44.8	2.8	0.7	0.7
71°	1296.6	1151.1	585.8	44.0	2.6	0.7	0.7
71.5°	1295.8	1148.8	578.4	43.3	2.3	0.7	0.6
72°	1294.5	1146.7	571.6	42.6	2.0	0.6	0.6
72.5°	1293.9	1144.7	564.3	41.7	1.8	0.6	0.6
73°	1293.0	1142.1	557.5	40.8	1.6	0.6	0.7
73.5°	1289.5	1139.2	549.4	40.2	1.4	0.6	0.7
74°	1283.7	1136.3	541.2	38.9	1.2	0.6	0.7
74.5°	1274.6	1133.8	532.9	36.7	1.0	0.6	0.7
75°	1263.2	1132.8	525.0	34.2	0.9	0.6	0.8
75.5°	1248.6	1131.5	517.6	31.3	0.8	0.6	0.8
76°	1231.3	1129.1	511.0	28.7	0.8	0.6	0.9
76.5°	1209.7	1125.7	504.4	25.3	0.7	0.6	0.9
77°	1184.6	1119.9	497.8	22.3	0.6	0.6	0.9
77.5°	1157.6	1112.1	491.2	20.2	0.5	0.6	0.9
78°	1129.8	1102.5	484.7	18.3	0.5	0.6	0.9
78.5°	1101.1	1089.7	479.4	16.6	0.5	0.5	1.0
79°	1073.3	1073.1	474.4	15.2	0.5	0.5	1.0
79.5°	1046.7	1054.6	469.6	13.8	0.5	0.5	1.0
80°	1022.3	1033.9	465.6	12.6	0.5	0.6	1.1
80.5°	1002.9	1015.5	461.5	11.7	0.4	0.5	1.1
81°	984.6	1000.4	457.0	10.5	0.5	0.6	1.1
81.5°	970.3	991.4	452.4	9.4	0.4	0.6	1.2
82°	958.2	989.0	448.3	8.5	0.4	0.6	1.3
82.5°	946.3	991.1	445.6	7.7	0.4	0.7	1.3
83°	940.1	994.5	444.4	7.1	0.4	0.7	1.3
83.5°	936.9	998.2	445.0	6.5	0.5	0.7	1.4
84°	935.6	990.8	446.9	5.9	0.5	0.8	1.4
84.5°	935.2	968.4	449.7	5.4	0.5	0.8	1.4
85°	937.8	932.8	453.1	4.9	0.5	0.8	1.5
85.5°	928.2	883.2	455.6	4.5	0.5	0.9	1.6
86°	893.9	819.3	454.6	4.1	0.6	0.9	1.6
86.5°	831.4	744.8	452.9	3.8	0.6	0.9	1.6
87°	745.6	679.9	449.0	3.5	0.6	1.0	1.7
87.5°	679.5	622.1	437.5	3.1	0.6	1.0	1.7
88°	613.5	569.5	420.4	2.8	0.6	1.0	1.8
88.5°	547.5	515.5	397.9	2.5	0.7	1.1	1.8
89°	481.4	454.2	369.2	2.2	0.7	1.1	1.9
89.5°	416.1	429.1	334.7	2.0	0.7	1.1	1.9

REPORT NUMBER: P1197018

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	389.2	437.6	296.7	1.6	0.7	1.2	2.0
90.5°	384.3	450.3	255.4	1.4	0.8	1.2	2.0
91°	405.4	429.5	214.4	1.2	0.8	1.3	2.1
91.5°	412.9	360.8	175.8	1.1	0.8	1.3	2.1
92°	342.8	257.4	145.2	1.0	0.9	1.4	2.1
92.5°	222.6	201.8	121.0	0.9	0.9	1.4	2.2
93°	140.6	147.3	98.6	0.8	0.9	1.4	2.2
93.5°	77.8	92.9	77.1	0.8	1.0	1.5	2.3
94°	42.9	38.6	60.6	0.7	1.0	1.5	2.3
94.5°	35.8	31.1	49.5	0.7	1.0	1.6	2.4
95°	35.9	28.3	44.1	0.6	1.1	1.6	2.4
95.5°	35.3	26.4	43.3	0.6	1.1	1.6	2.4
96°	34.2	25.5	45.3	0.6	1.1	1.7	2.5
96.5°	34.8	25.8	47.7	0.6	1.2	1.7	2.5
97°	38.2	27.1	51.2	0.6	1.2	1.8	2.5
97.5°	39.0	26.2	48.7	0.6	1.2	1.8	2.6
98°	35.5	24.0	38.7	0.6	1.2	1.9	2.6
98.5°	30.6	22.9	28.1	0.6	1.3	1.9	2.6
99°	27.2	22.1	20.1	0.5	1.3	1.9	2.6
99.5°	26.4	20.2	17.0	0.5	1.3	2.0	2.7
100°	26.2	19.0	14.3	0.5	1.4	2.0	2.7
100.5°	24.7	18.6	11.9	0.5	1.4	2.0	2.8
101°	23.2	18.4	10.3	0.5	1.4	2.1	2.8
101.5°	21.6	17.8	9.0	0.5	1.5	2.1	2.8
102°	19.7	16.6	7.6	0.5	1.5	2.1	2.9
102.5°	17.3	14.8	6.0	0.5	1.5	2.2	2.9
103°	14.8	12.5	4.9	0.5	1.6	2.2	2.9
103.5°	12.5	10.1	4.1	0.6	1.6	2.2	2.9
104°	10.9	7.9	3.4	0.5	1.6	2.3	3.0
104.5°	9.7	6.0	2.8	0.6	1.6	2.4	3.0
105°	8.9	4.4	2.3	0.6	1.7	2.4	3.0
105.5°	8.0	3.2	2.0	0.6	1.7	2.4	3.1
106°	6.5	2.4	1.7	0.6	1.7	2.4	3.1
106.5°	4.9	2.0	1.5	0.6	1.7	2.4	3.1
107°	3.3	1.6	1.3	0.6	1.8	2.5	3.2
107.5°	2.1	1.3	1.0	0.6	1.8	2.5	3.2
108°	1.5	1.1	0.9	0.6	1.8	2.5	3.2
108.5°	1.2	0.9	0.8	0.7	1.9	2.5	3.2
109°	0.9	0.7	0.6	0.7	1.9	2.6	3.2
109.5°	0.7	0.5	0.6	0.7	1.9	2.6	3.2
110°	0.5	0.3	0.5	0.7	1.9	2.7	3.2
110.5°	0.3	0.2	0.5	0.8	1.9	2.7	3.2
111°	0.1	0.1	0.4	0.8	2.0	2.7	3.3
111.5°	0.0	0.0	0.3	0.8	2.0	2.7	3.2
112°	0.0	0.0	0.2	0.8	2.0	2.7	3.3

REPORT NUMBER: P1197018

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	0.0	0.0	0.2	0.8	2.0	2.8	3.3
113°	0.0	0.0	0.2	0.8	2.1	2.8	3.3
113.5°	0.0	0.0	0.1	0.8	2.1	2.8	3.3
114°	0.0	0.0	0.1	0.8	2.1	2.8	3.3
114.5°	0.0	0.0	0.1	0.8	2.1	2.9	3.3
115°	0.0	0.0	0.1	0.9	2.1	2.9	3.3
115.5°	0.0	0.0	0.1	0.9	2.2	2.9	3.4
116°	0.0	0.0	0.1	0.9	2.2	2.9	3.4
116.5°	0.0	0.0	0.1	0.9	2.2	2.9	3.4
117°	0.0	0.0	0.1	0.9	2.2	2.9	3.4
117.5°	0.0	0.0	0.1	0.9	2.2	2.9	3.4
118°	0.0	0.0	0.1	1.0	2.3	3.0	3.4
118.5°	0.0	0.0	0.1	1.0	2.3	3.0	3.4
119°	0.0	0.0	0.1	1.0	2.3	3.0	3.4
119.5°	0.0	0.0	0.2	1.0	2.3	3.0	3.4
120°	0.0	0.0	0.2	1.0	2.3	3.0	3.4
120.5°	0.0	0.0	0.2	1.1	2.3	3.0	3.4
121°	0.0	0.0	0.2	1.1	2.4	3.1	3.4
121.5°	0.0	0.0	0.2	1.1	2.4	3.1	3.4
122°	0.0	0.0	0.2	1.1	2.4	3.1	3.4
122.5°	0.0	0.0	0.2	1.1	2.4	3.2	3.4
123°	0.0	0.0	0.3	1.1	2.4	3.2	3.4
123.5°	0.0	0.0	0.3	1.1	2.4	3.2	3.4
124°	0.0	0.0	0.3	1.2	2.5	3.2	3.4
124.5°	0.0	0.0	0.3	1.2	2.5	3.2	3.4
125°	0.0	0.0	0.3	1.2	2.5	3.2	3.4
125.5°	0.0	0.0	0.3	1.2	2.5	3.2	3.4
126°	0.0	0.0	0.4	1.3	2.5	3.2	3.4
126.5°	0.0	0.0	0.4	1.3	2.5	3.2	3.5
127°	0.0	0.0	0.4	1.3	2.5	3.2	3.4
127.5°	0.0	0.0	0.4	1.3	2.5	3.2	3.5
128°	0.0	0.0	0.4	1.3	2.5	3.2	3.5
128.5°	0.0	0.0	0.5	1.3	2.5	3.2	3.5
129°	0.0	0.0	0.5	1.3	2.6	3.2	3.5
129.5°	0.0	0.0	0.5	1.4	2.6	3.3	3.5
130°	0.0	0.0	0.5	1.4	2.6	3.3	3.5
130.5°	0.0	0.0	0.6	1.4	2.6	3.3	3.5
131°	0.0	0.0	0.6	1.4	2.6	3.3	3.5
131.5°	0.0	0.0	0.6	1.4	2.6	3.3	3.5
132°	0.0	0.0	0.6	1.4	2.6	3.3	3.5
132.5°	0.0	0.0	0.6	1.5	2.6	3.3	3.5
133°	0.0	0.0	0.7	1.5	2.6	3.3	3.5
133.5°	0.0	0.0	0.7	1.5	2.7	3.3	3.5
134°	0.0	0.0	0.7	1.6	2.7	3.3	3.5
134.5°	0.0	0.0	0.7	1.6	2.6	3.3	3.5

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	0.0	0.0	0.7	1.6	2.7	3.3	3.5
135.5°	0.0	0.1	0.8	1.6	2.7	3.3	3.5
136°	0.0	0.1	0.8	1.6	2.7	3.3	3.5
136.5°	0.0	0.1	0.8	1.6	2.7	3.3	3.5
137°	0.0	0.1	0.8	1.6	2.7	3.3	3.5
137.5°	0.0	0.1	0.8	1.7	2.7	3.3	3.5
138°	0.0	0.1	0.9	1.7	2.7	3.3	3.5
138.5°	0.1	0.1	0.9	1.7	2.7	3.3	3.5
139°	0.1	0.2	0.9	1.7	2.7	3.3	3.5
139.5°	0.1	0.2	0.9	1.7	2.7	3.3	3.5
140°	0.1	0.2	0.9	1.7	2.7	3.3	3.5
140.5°	0.1	0.2	1.0	1.8	2.7	3.3	3.5
141°	0.1	0.3	1.0	1.8	2.7	3.3	3.5
141.5°	0.1	0.3	1.0	1.8	2.7	3.3	3.5
142°	0.1	0.3	1.0	1.8	2.8	3.3	3.5
142.5°	0.1	0.4	1.1	1.8	2.8	3.3	3.5
143°	0.1	0.4	1.1	1.8	2.8	3.3	3.5
143.5°	0.2	0.4	1.1	1.8	2.8	3.3	3.5
144°	0.2	0.4	1.1	1.9	2.8	3.3	3.5
144.5°	0.2	0.4	1.1	1.9	2.8	3.3	3.5
145°	0.2	0.4	1.2	1.9	2.8	3.3	3.4
145.5°	0.2	0.4	1.2	1.9	2.8	3.3	3.4
146°	0.3	0.5	1.2	1.9	2.8	3.3	3.4
146.5°	0.3	0.5	1.2	1.9	2.8	3.3	3.4
147°	0.3	0.5	1.2	1.9	2.8	3.3	3.4
147.5°	0.3	0.5	1.3	2.0	2.8	3.3	3.4
148°	0.3	0.5	1.3	2.0	2.8	3.3	3.4
148.5°	0.3	0.6	1.3	2.0	2.8	3.3	3.3
149°	0.4	0.6	1.3	2.0	2.8	3.3	3.3
149.5°	0.4	0.6	1.4	2.1	2.8	3.3	3.3
150°	0.4	0.6	1.4	2.1	2.8	3.3	3.3
150.5°	0.4	0.7	1.4	2.1	2.8	3.3	3.3
151°	0.4	0.7	1.4	2.1	2.9	3.3	3.3
151.5°	0.5	0.8	1.4	2.1	2.9	3.3	3.3
152°	0.5	0.8	1.5	2.1	2.9	3.3	3.3
152.5°	0.5	0.8	1.5	2.1	2.9	3.3	3.3
153°	0.5	0.8	1.5	2.1	2.9	3.3	3.3
153.5°	0.6	0.8	1.5	2.1	2.9	3.3	3.2
154°	0.6	0.9	1.5	2.1	2.9	3.3	3.2
154.5°	0.6	0.9	1.6	2.2	2.9	3.3	3.2
155°	0.6	0.9	1.6	2.2	2.9	3.3	3.2
155.5°	0.7	1.0	1.6	2.2	2.9	3.3	3.2
156°	0.7	1.0	1.6	2.2	2.9	3.3	3.2
156.5°	0.7	1.0	1.7	2.2	2.9	3.3	3.2
157°	0.7	1.0	1.7	2.2	2.9	3.3	3.2

REPORT NUMBER: P1197018

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1197018
CATALOG NUMBER: AWPf28S-BZ-MID-3000K-POSITION 30

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	2.7	2.7	2.7	2.7	2.7	2.7	2.7

(END OF REPORT)