

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: P1197009

Luminaire Tested: AWP28S-BZ-MID-3000K-POSITION 15

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1197009
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 15
Description: AWP Architectural Wall Pack Series - Wall Mount Luminaire
Light Source: 81 CRI, 3000K
Ballast/Driver: -

Summary

Lumens per Lamp: 3604 (1 lamp)
Luminaire Lumens: 3338.6 lumens
Efficiency: 92.6%
Efficacy: 125.0 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 - U2 - 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

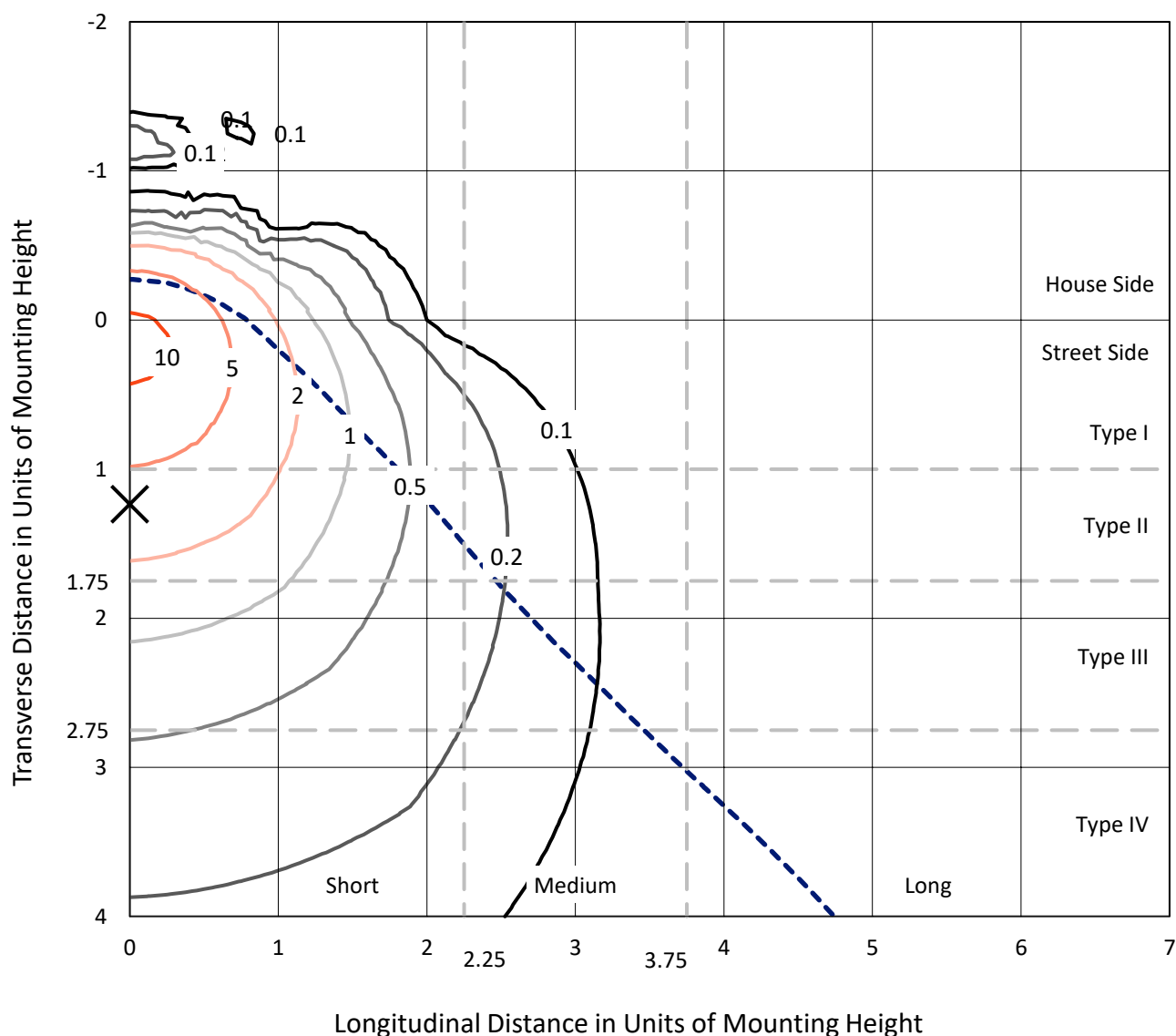
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

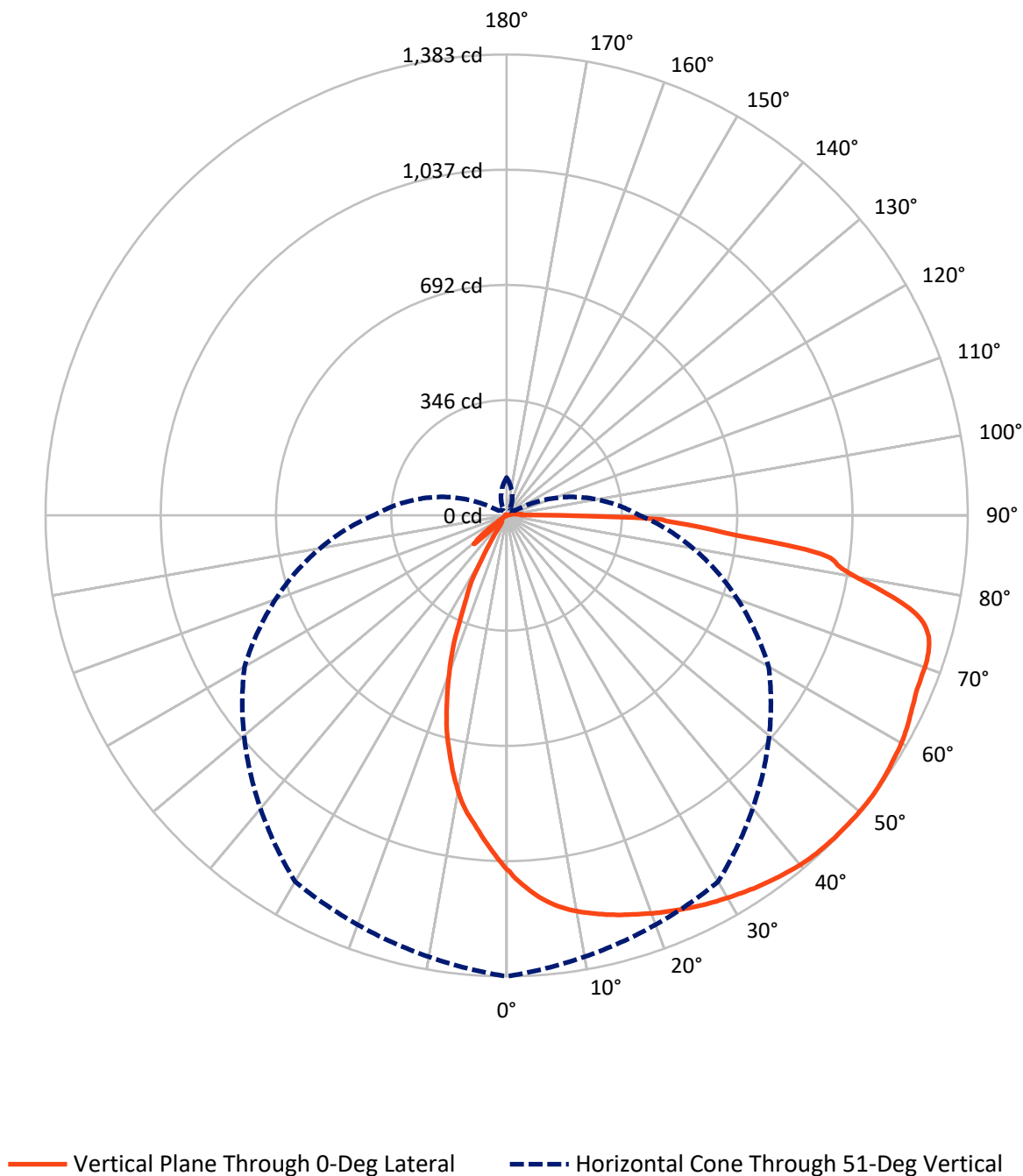


Based on 10 foot mounting height. Maximum calculated value = 11.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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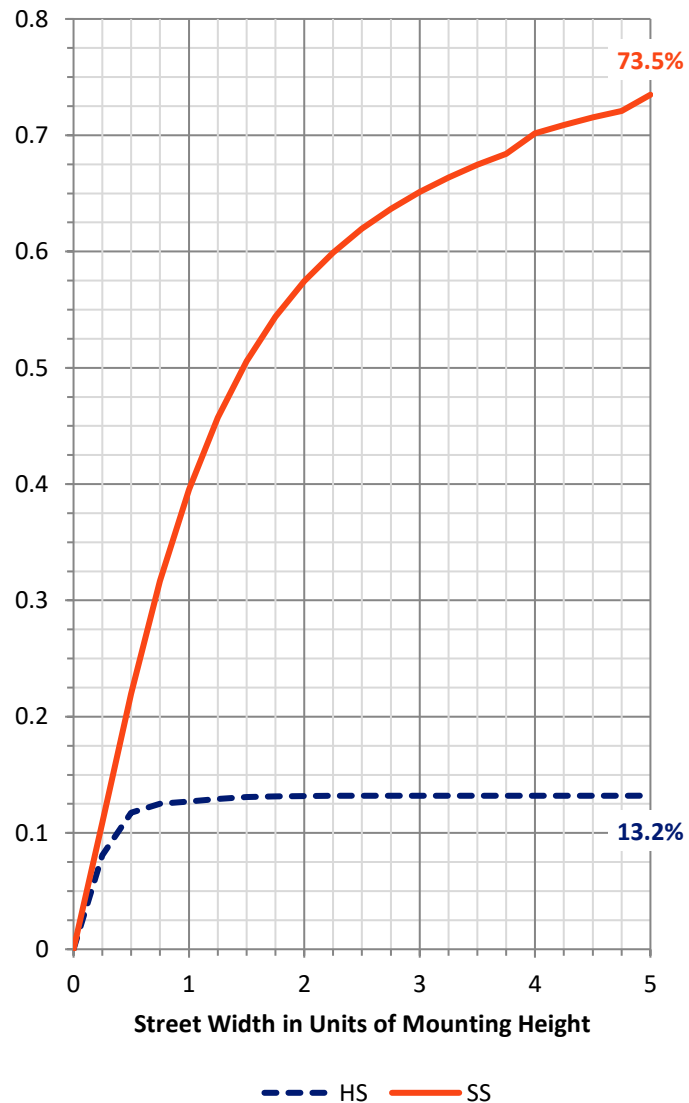
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	481.6	7.5	489.1
	% Lamp	13.4	0.2	13.6
Street Side	Lumens	2822.9	26.5	2849.5
	% Lamp	78.3	0.7	79.1
Total	Lumens	3304.6	34.0	3338.6
	% Lamp	91.7	0.9	92.6

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	100.5	3.0	2.8
10°-20°	280.0	8.4	7.8
20°-30°	397.2	11.9	11.0
30°-40°	444.4	13.3	12.3
40°-50°	466.5	14.0	12.9
50°-60°	476.0	14.3	13.2
60°-70°	446.8	13.4	12.4
70°-80°	419.3	12.6	11.6
80°-90°	274.0	8.2	7.6
90°-100°	23.6	0.7	0.7
100°-110°	3.1	0.1	0.1
110°-120°	1.3	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°	3304.6	99.0	91.7
0°-180°	3338.6	100.0	92.6



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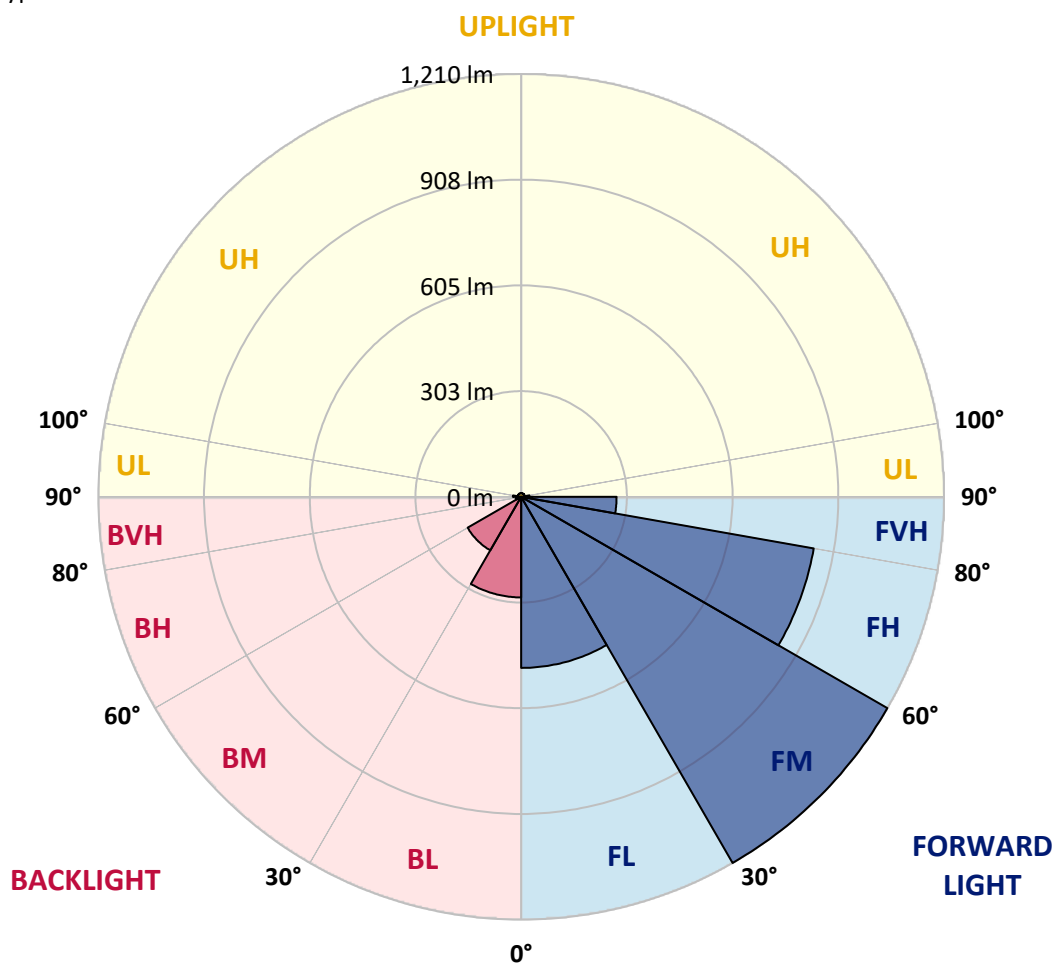
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	489.6	13.6			
FM	(30°-60°)	1210.1	33.6			
FH	(60°-80°)	850.2	23.6			G1/1800
FVH	(80°-90°)	273.1	7.6			G3/500
BL	(0°-30°)	288.0	8.0	B1/500		
BM	(30°-60°)	176.7	4.9	B0/220		
BH	(60°-80°)	16.0	0.4	B0/110		G0/110
BVH	(80°-90°)	0.9	0.0			G0/10
UL	(90°-100°)	23.6	0.7		U2/50	
UH	(100°-180°)	10.4	0.3		U2/50	
Trapped Light		265.4	7.4			

BUG Rating: B1-U2-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	1068.9	1068.9	1068.9	1068.9	1068.9	1068.9	1068.9
0.5°	1082.5	1083.4	1076.7	1069.2	1060.7	1050.6	1061.7
1°	1091.7	1091.1	1081.6	1069.1	1055.5	1041.3	1050.9
1.5°	1100.7	1098.8	1086.0	1068.7	1050.0	1031.8	1040.2
2°	1109.9	1106.7	1090.1	1068.5	1044.4	1022.1	1029.2
2.5°	1118.5	1114.2	1094.3	1068.1	1038.5	1012.8	1018.2
3°	1127.0	1121.2	1098.4	1067.6	1032.7	1002.9	1007.1
3.5°	1135.2	1128.3	1102.3	1066.7	1027.0	993.3	996.2
4°	1143.3	1135.1	1106.3	1066.0	1020.9	983.6	985.4
4.5°	1151.0	1141.8	1109.9	1064.8	1014.8	973.8	974.1
5°	1158.1	1148.1	1113.2	1063.6	1008.5	964.1	962.9
5.5°	1164.9	1154.0	1116.5	1062.4	1002.0	954.4	952.1
6°	1171.3	1159.8	1119.8	1061.1	995.6	944.7	941.3
6.5°	1177.1	1165.4	1123.0	1059.6	989.0	935.0	930.6
7°	1183.1	1170.7	1126.2	1058.1	982.4	925.3	920.5
7.5°	1188.1	1175.5	1129.2	1056.6	975.7	915.8	910.4
8°	1192.5	1180.1	1132.3	1055.0	969.3	906.8	901.0
8.5°	1197.6	1184.3	1135.4	1053.6	962.4	897.9	890.8
9°	1201.8	1188.0	1138.1	1051.7	955.3	889.1	879.9
9.5°	1205.8	1191.1	1140.6	1049.7	948.2	879.7	867.0
10°	1209.8	1194.8	1142.9	1047.9	940.9	869.0	854.1
10.5°	1213.6	1197.7	1145.4	1045.9	933.7	857.3	839.7
11°	1216.9	1200.4	1147.5	1043.6	926.5	845.5	824.9
11.5°	1220.4	1203.4	1149.4	1041.2	919.4	832.8	810.3
12°	1224.0	1206.2	1151.5	1038.5	912.1	818.8	795.6
12.5°	1227.6	1208.8	1153.2	1035.5	904.6	806.0	779.9
13°	1230.9	1211.4	1154.7	1032.4	897.4	792.8	764.2
13.5°	1234.5	1213.8	1155.8	1029.2	889.9	778.5	748.3
14°	1237.4	1216.3	1156.7	1026.0	882.6	764.3	733.0
14.5°	1240.7	1218.6	1157.7	1022.4	875.4	750.2	717.2
15°	1244.4	1220.9	1158.2	1018.7	867.9	736.0	702.4
15.5°	1247.3	1223.4	1158.5	1014.8	860.0	721.3	686.9
16°	1249.9	1225.3	1158.7	1011.0	851.8	707.5	670.5
16.5°	1252.6	1227.6	1158.4	1007.0	843.3	692.9	652.7
17°	1255.4	1229.9	1157.8	1003.0	834.0	678.9	634.0
17.5°	1258.6	1232.3	1157.0	999.1	824.3	664.6	615.5
18°	1261.6	1234.2	1156.3	994.8	814.5	648.8	597.1
18.5°	1264.5	1235.7	1155.7	990.3	804.4	632.6	578.3
19°	1267.7	1237.5	1154.9	985.7	794.0	615.8	560.0
19.5°	1271.2	1239.2	1153.6	980.8	782.8	598.3	540.8
20°	1274.1	1241.0	1152.4	975.9	771.8	580.6	521.9
20.5°	1277.0	1242.9	1151.3	970.8	760.8	563.0	503.5
21°	1279.8	1244.7	1150.1	966.0	749.6	544.9	485.3
21.5°	1282.6	1246.8	1148.9	960.7	737.8	526.5	467.4
22°	1285.2	1248.9	1147.4	954.8	726.1	509.1	448.6

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	1287.9	1250.9	1145.8	948.6	714.0	491.6	429.5
23°	1291.0	1252.4	1143.8	942.3	701.2	474.5	411.4
23.5°	1293.8	1254.3	1142.0	935.5	688.2	458.2	387.3
24°	1296.6	1256.0	1139.8	929.2	675.0	441.8	363.7
24.5°	1299.7	1257.6	1137.5	922.5	662.4	425.3	341.8
25°	1302.2	1259.1	1135.2	915.9	649.9	407.9	323.0
25.5°	1304.8	1260.8	1132.8	909.0	637.5	390.9	305.4
26°	1307.6	1262.1	1130.0	902.7	625.3	370.9	289.9
26.5°	1310.5	1263.5	1127.2	895.8	613.2	349.0	275.6
27°	1313.0	1265.1	1124.0	888.8	600.6	328.5	262.6
27.5°	1315.4	1266.8	1120.4	881.4	586.8	309.6	249.7
28°	1318.1	1267.7	1116.8	874.3	571.9	292.8	236.7
28.5°	1320.4	1269.0	1113.3	867.2	557.7	278.6	223.8
29°	1322.7	1270.2	1109.6	860.0	542.3	266.1	204.3
29.5°	1325.1	1271.3	1105.9	852.3	526.9	253.8	179.8
30°	1327.7	1272.0	1101.9	844.3	511.5	241.5	154.9
30.5°	1330.1	1272.9	1098.1	836.5	496.1	229.1	134.7
31°	1332.5	1274.0	1094.6	828.7	480.6	215.9	117.5
31.5°	1335.0	1275.0	1091.0	820.5	464.7	199.8	102.3
32°	1337.5	1276.0	1087.2	812.2	449.0	179.1	86.0
32.5°	1339.8	1276.3	1083.8	804.0	433.9	156.4	66.6
33°	1342.7	1277.2	1080.3	795.7	418.3	135.4	48.7
33.5°	1344.7	1277.9	1076.9	787.2	403.3	117.4	37.4
34°	1347.0	1278.5	1073.5	778.2	388.7	102.5	32.8
34.5°	1349.1	1279.0	1070.1	768.5	373.3	88.5	30.9
35°	1351.2	1279.5	1066.8	758.8	357.7	73.4	30.0
35.5°	1353.5	1280.4	1063.3	749.0	343.7	57.2	29.2
36°	1355.7	1280.8	1059.9	738.8	329.5	44.1	28.6
36.5°	1357.6	1280.9	1056.0	728.3	316.7	36.0	27.8
37°	1359.6	1281.1	1052.1	717.8	303.5	32.5	27.0
37.5°	1361.7	1281.4	1048.2	707.9	290.9	30.8	26.1
38°	1363.8	1281.9	1044.6	696.7	278.5	29.7	25.1
38.5°	1365.8	1282.3	1040.3	685.8	266.6	28.9	24.1
39°	1367.5	1282.6	1035.8	674.4	254.3	28.3	23.3
39.5°	1369.4	1282.6	1031.5	663.1	242.2	27.6	22.8
40°	1370.9	1282.5	1028.0	651.6	230.3	27.0	22.6
40.5°	1372.3	1282.4	1023.6	640.1	216.4	26.4	22.5
41°	1373.8	1282.2	1019.2	628.1	203.4	26.0	22.3
41.5°	1374.7	1282.0	1014.4	616.5	190.9	25.6	22.1
42°	1375.9	1281.3	1009.3	604.5	175.9	25.3	21.8
42.5°	1376.5	1280.7	1003.9	592.1	159.3	24.9	21.4
43°	1377.3	1280.2	999.4	580.4	141.1	24.4	20.9
43.5°	1378.1	1279.9	994.4	568.9	121.1	23.7	20.4
44°	1378.7	1279.4	989.5	557.0	100.7	22.8	20.0
44.5°	1379.2	1279.3	984.5	545.5	81.4	22.1	19.8

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	1379.9	1278.8	979.4	533.5	66.4	21.2	19.7
45.5°	1379.9	1278.2	974.4	521.9	56.1	20.3	20.1
46°	1380.2	1278.0	969.2	510.6	49.7	19.3	21.3
46.5°	1380.5	1277.5	963.7	499.2	45.2	18.5	24.9
47°	1381.1	1276.9	958.2	488.1	42.0	17.9	38.0
47.5°	1381.7	1276.0	952.3	476.6	39.2	17.2	61.2
48°	1382.0	1275.4	946.6	465.5	37.1	16.5	83.5
48.5°	1382.4	1274.6	940.4	453.8	35.4	16.0	98.8
49°	1382.9	1273.7	934.1	443.0	33.8	15.8	126.5
49.5°	1382.7	1272.5	927.7	431.9	32.5	15.6	131.1
50°	1383.0	1271.3	921.3	421.2	31.3	15.4	122.3
50.5°	1383.1	1270.2	914.5	410.0	29.6	15.2	118.0
51°	1383.3	1269.0	907.8	398.7	28.3	15.0	113.7
51.5°	1383.3	1268.0	901.4	387.4	27.4	14.9	107.4
52°	1382.9	1267.1	894.1	376.6	26.5	15.0	99.2
52.5°	1382.2	1266.0	886.8	365.0	25.8	15.6	87.7
53°	1381.9	1265.1	879.9	353.7	25.2	17.6	76.7
53.5°	1381.1	1264.1	872.6	341.7	24.5	24.6	65.2
54°	1380.2	1263.0	865.2	330.1	23.7	38.4	53.7
54.5°	1379.3	1262.2	858.0	317.5	22.8	50.0	44.1
55°	1378.2	1261.2	850.8	304.9	22.1	53.8	36.7
55.5°	1377.0	1259.9	843.6	292.3	21.4	65.9	31.1
56°	1375.9	1258.8	836.1	278.9	20.8	70.7	26.4
56.5°	1374.5	1257.5	828.7	264.8	20.2	64.9	22.4
57°	1373.1	1255.9	821.0	250.7	19.6	61.3	18.8
57.5°	1372.0	1254.1	813.7	236.5	19.0	58.6	15.7
58°	1371.0	1251.5	806.5	222.4	18.5	56.8	13.3
58.5°	1370.3	1248.6	798.9	208.3	17.9	55.2	11.5
59°	1369.0	1246.0	791.0	193.7	17.4	53.2	10.0
59.5°	1367.4	1243.3	783.2	179.6	16.9	50.8	8.8
60°	1365.7	1240.6	775.5	166.0	16.3	48.3	7.9
60.5°	1364.0	1237.4	767.7	154.1	15.8	45.3	7.2
61°	1361.7	1234.3	760.3	145.3	15.3	42.0	6.6
61.5°	1359.6	1231.5	752.6	137.6	14.7	38.8	6.0
62°	1357.6	1228.5	745.3	133.0	14.1	35.5	5.5
62.5°	1355.1	1225.3	737.8	130.6	13.4	32.0	5.0
63°	1352.5	1222.5	729.9	124.6	12.9	28.6	4.4
63.5°	1350.0	1219.8	721.9	109.7	12.3	25.2	3.8
64°	1347.4	1217.1	714.3	90.0	11.6	21.9	3.1
64.5°	1345.3	1214.5	707.1	74.9	10.9	18.8	2.6
65°	1343.2	1212.3	699.7	67.5	10.2	16.0	2.2
65.5°	1340.9	1210.0	692.2	64.3	9.6	13.1	2.1
66°	1339.2	1207.4	684.4	62.2	9.0	9.8	2.1
66.5°	1337.8	1204.5	676.6	60.5	8.5	5.8	2.0
67°	1337.1	1201.6	668.5	58.7	8.1	2.7	1.8

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	1336.5	1198.6	660.1	57.1	7.7	1.6	1.6
68°	1335.7	1196.2	651.4	55.7	7.3	1.3	1.3
68.5°	1335.0	1193.3	642.8	54.2	6.9	1.3	1.1
69°	1334.6	1190.7	634.1	52.8	6.5	1.3	1.1
69.5°	1334.8	1188.5	624.5	51.6	6.1	1.3	1.2
70°	1334.7	1185.8	615.5	50.5	5.7	1.2	1.2
70.5°	1333.9	1182.6	606.8	49.5	5.2	1.0	1.1
71°	1332.1	1179.1	598.4	48.5	4.7	0.8	1.0
71.5°	1330.8	1176.5	590.1	47.4	4.1	0.8	0.9
72°	1328.3	1175.0	580.9	46.3	3.4	0.7	0.8
72.5°	1325.5	1175.3	572.6	45.3	3.0	0.7	0.8
73°	1321.8	1175.9	563.9	44.0	2.7	0.7	0.8
73.5°	1317.1	1177.7	555.7	42.9	2.4	0.7	0.8
74°	1309.8	1179.5	546.8	42.1	2.1	0.7	0.8
74.5°	1302.2	1182.5	537.8	41.0	1.9	0.7	0.7
75°	1292.2	1185.7	530.2	38.7	1.7	0.7	0.7
75.5°	1278.9	1188.6	522.6	36.0	1.4	0.7	0.8
76°	1261.7	1190.2	515.0	33.1	1.1	0.7	0.8
76.5°	1241.1	1189.5	507.4	30.4	1.0	0.6	0.8
77°	1215.7	1187.6	499.8	26.7	0.8	0.6	0.8
77.5°	1187.7	1185.9	493.8	23.3	0.7	0.6	0.8
78°	1156.0	1182.9	487.6	20.9	0.7	0.6	0.8
78.5°	1125.1	1182.1	482.3	18.9	0.6	0.6	0.9
79°	1094.0	1181.1	477.0	17.2	0.5	0.6	0.9
79.5°	1064.9	1179.9	471.5	15.7	0.5	0.6	1.0
80°	1039.0	1173.7	465.8	14.3	0.5	0.6	1.0
80.5°	1019.0	1163.4	460.3	13.0	0.4	0.6	1.0
81°	1003.7	1144.4	455.8	12.1	0.4	0.6	1.1
81.5°	995.2	1112.5	452.7	10.8	0.4	0.6	1.1
82°	980.3	1062.7	452.1	9.6	0.4	0.6	1.1
82.5°	951.4	997.7	454.2	8.7	0.4	0.6	1.1
83°	901.2	920.8	459.3	7.9	0.4	0.6	1.2
83.5°	835.5	831.8	467.5	7.2	0.4	0.6	1.2
84°	764.3	746.1	476.6	6.6	0.4	0.6	1.2
84.5°	699.6	682.2	481.7	6.0	0.4	0.6	1.3
85°	652.0	637.5	485.1	5.5	0.4	0.7	1.3
85.5°	617.0	597.2	487.4	5.1	0.5	0.7	1.3
86°	582.0	551.4	484.8	4.7	0.5	0.7	1.4
86.5°	547.1	532.7	475.5	4.2	0.5	0.8	1.4
87°	512.2	553.8	461.2	3.8	0.5	0.8	1.5
87.5°	478.2	578.6	441.1	3.4	0.5	0.8	1.5
88°	467.3	578.8	413.2	3.0	0.5	0.9	1.6
88.5°	385.7	518.2	378.0	2.6	0.6	0.9	1.6
89°	250.9	399.3	335.3	2.2	0.6	0.9	1.7
89.5°	158.1	266.6	287.2	1.9	0.6	1.0	1.7

REPORT NUMBER: P1197009

CATALOG NUMBER: AWP28S-BZ-MID-3000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	90.2	207.0	238.8	1.5	0.6	1.0	1.8
90.5°	50.2	150.8	194.0	1.2	0.7	1.0	1.8
91°	42.4	94.7	157.3	1.1	0.7	1.1	1.9
91.5°	43.7	38.7	125.9	1.0	0.7	1.1	1.9
92°	43.9	34.4	100.2	0.9	0.8	1.2	2.0
92.5°	42.8	32.3	80.4	0.8	0.8	1.2	2.0
93°	42.5	31.1	65.9	0.7	0.8	1.3	2.1
93.5°	45.1	31.1	54.2	0.7	0.9	1.3	2.1
94°	46.0	32.7	43.7	0.7	0.9	1.3	2.2
94.5°	42.4	32.8	38.6	0.6	0.9	1.4	2.2
95°	37.4	30.6	38.8	0.6	0.9	1.4	2.2
95.5°	33.7	28.3	40.0	0.6	1.0	1.5	2.3
96°	32.9	27.2	41.6	0.6	1.0	1.5	2.3
96.5°	33.1	25.1	44.3	0.6	1.1	1.6	2.4
97°	31.3	22.6	44.0	0.6	1.1	1.6	2.4
97.5°	28.7	21.2	34.6	0.6	1.1	1.6	2.5
98°	27.7	21.0	24.3	0.6	1.2	1.7	2.5
98.5°	27.1	21.3	17.1	0.6	1.2	1.7	2.6
99°	26.3	21.5	14.4	0.5	1.2	1.8	2.6
99.5°	24.9	21.4	12.3	0.5	1.3	1.8	2.6
100°	22.7	20.6	10.5	0.5	1.3	1.9	2.6
100.5°	19.9	19.2	8.8	0.5	1.3	1.9	2.7
101°	16.9	17.2	7.7	0.5	1.4	1.9	2.7
101.5°	14.2	14.7	6.5	0.5	1.4	2.0	2.7
102°	12.0	11.7	5.2	0.5	1.4	2.0	2.8
102.5°	10.3	8.5	4.1	0.5	1.5	2.0	2.8
103°	9.4	5.8	3.3	0.6	1.5	2.1	2.8
103.5°	8.8	3.9	2.8	0.6	1.5	2.1	2.9
104°	7.8	2.5	2.5	0.6	1.6	2.2	2.9
104.5°	6.5	2.0	2.2	0.6	1.6	2.2	3.0
105°	4.7	1.6	1.9	0.6	1.6	2.3	3.0
105.5°	3.0	1.4	1.6	0.6	1.7	2.3	3.0
106°	1.6	1.1	1.4	0.7	1.7	2.3	3.0
106.5°	0.9	0.8	1.2	0.7	1.7	2.4	3.1
107°	0.6	0.6	1.0	0.7	1.7	2.4	3.1
107.5°	0.4	0.3	0.8	0.7	1.8	2.4	3.1
108°	0.2	0.2	0.7	0.7	1.8	2.5	3.1
108.5°	0.1	0.1	0.6	0.7	1.8	2.5	3.2
109°	0.0	0.0	0.5	0.8	1.9	2.5	3.2
109.5°	0.0	0.0	0.4	0.8	1.9	2.6	3.2
110°	0.0	0.0	0.4	0.8	1.9	2.6	3.2
110.5°	0.0	0.0	0.3	0.8	2.0	2.6	3.2
111°	0.0	0.0	0.3	0.8	2.0	2.6	3.3
111.5°	0.0	0.0	0.2	0.8	2.0	2.7	3.3
112°	0.0	0.0	0.2	0.8	2.0	2.7	3.3

REPORT NUMBER: P1197009

CATALOG NUMBER: AWP28S-BZ-MID-3000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	0.0	0.0	0.1	0.8	2.1	2.7	3.3
113°	0.0	0.0	0.1	0.9	2.1	2.7	3.3
113.5°	0.0	0.0	0.1	0.9	2.1	2.7	3.4
114°	0.0	0.0	0.1	0.9	2.1	2.8	3.4
114.5°	0.0	0.0	0.1	0.9	2.2	2.8	3.4
115°	0.0	0.0	0.2	0.9	2.2	2.8	3.4
115.5°	0.0	0.0	0.2	0.9	2.2	2.8	3.4
116°	0.0	0.0	0.2	1.0	2.2	2.8	3.4
116.5°	0.0	0.0	0.2	1.0	2.2	2.9	3.4
117°	0.0	0.0	0.2	1.0	2.3	2.9	3.4
117.5°	0.0	0.0	0.2	1.0	2.3	2.9	3.4
118°	0.0	0.0	0.2	1.0	2.3	2.9	3.4
118.5°	0.0	0.0	0.2	1.0	2.3	2.9	3.4
119°	0.0	0.0	0.2	1.1	2.4	3.0	3.4
119.5°	0.0	0.0	0.2	1.1	2.4	3.0	3.4
120°	0.0	0.0	0.2	1.1	2.4	3.0	3.4
120.5°	0.0	0.0	0.3	1.1	2.4	3.0	3.5
121°	0.0	0.0	0.3	1.2	2.4	3.1	3.5
121.5°	0.0	0.0	0.3	1.2	2.5	3.1	3.5
122°	0.0	0.0	0.3	1.2	2.5	3.1	3.5
122.5°	0.0	0.0	0.3	1.2	2.5	3.1	3.5
123°	0.0	0.0	0.4	1.2	2.5	3.1	3.5
123.5°	0.0	0.0	0.4	1.2	2.5	3.1	3.5
124°	0.0	0.0	0.4	1.2	2.5	3.1	3.5
124.5°	0.0	0.0	0.4	1.3	2.6	3.2	3.5
125°	0.0	0.0	0.4	1.3	2.6	3.2	3.5
125.5°	0.0	0.0	0.5	1.3	2.6	3.2	3.5
126°	0.0	0.0	0.5	1.3	2.6	3.2	3.5
126.5°	0.0	0.0	0.5	1.3	2.6	3.2	3.5
127°	0.0	0.0	0.5	1.4	2.6	3.2	3.5
127.5°	0.0	0.0	0.5	1.4	2.6	3.2	3.5
128°	0.0	0.0	0.6	1.4	2.6	3.3	3.5
128.5°	0.0	0.0	0.6	1.4	2.7	3.3	3.5
129°	0.0	0.0	0.6	1.4	2.7	3.3	3.5
129.5°	0.0	0.0	0.6	1.5	2.7	3.3	3.5
130°	0.0	0.0	0.6	1.5	2.7	3.3	3.5
130.5°	0.0	0.0	0.7	1.5	2.7	3.3	3.6
131°	0.0	0.0	0.7	1.5	2.7	3.3	3.6
131.5°	0.0	0.0	0.7	1.6	2.7	3.3	3.6
132°	0.0	0.0	0.7	1.6	2.7	3.4	3.6
132.5°	0.0	0.0	0.7	1.6	2.7	3.4	3.6
133°	0.0	0.1	0.8	1.6	2.7	3.4	3.6
133.5°	0.0	0.1	0.8	1.6	2.7	3.4	3.6
134°	0.0	0.1	0.8	1.6	2.7	3.4	3.6
134.5°	0.0	0.1	0.8	1.6	2.8	3.4	3.6

REPORT NUMBER: P1197009

CATALOG NUMBER: AWP28S-BZ-MID-3000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	0.1	0.1	0.9	1.7	2.7	3.4	3.6
135.5°	0.1	0.1	0.9	1.7	2.8	3.4	3.7
136°	0.1	0.2	0.9	1.7	2.8	3.4	3.7
136.5°	0.1	0.2	0.9	1.7	2.8	3.4	3.7
137°	0.1	0.2	0.9	1.7	2.8	3.4	3.7
137.5°	0.1	0.2	1.0	1.8	2.8	3.4	3.7
138°	0.1	0.2	1.0	1.8	2.8	3.4	3.7
138.5°	0.1	0.2	1.0	1.8	2.8	3.4	3.6
139°	0.1	0.3	1.0	1.8	2.8	3.4	3.6
139.5°	0.2	0.3	1.1	1.9	2.8	3.4	3.6
140°	0.2	0.3	1.1	1.9	2.9	3.4	3.6
140.5°	0.2	0.4	1.1	1.9	2.9	3.4	3.6
141°	0.2	0.4	1.1	1.9	2.9	3.4	3.6
141.5°	0.2	0.4	1.1	1.9	2.9	3.4	3.6
142°	0.2	0.4	1.2	1.9	2.9	3.4	3.6
142.5°	0.3	0.4	1.2	2.0	2.9	3.4	3.6
143°	0.3	0.5	1.2	2.0	2.9	3.4	3.6
143.5°	0.3	0.5	1.2	2.0	2.9	3.4	3.6
144°	0.3	0.5	1.3	2.0	2.9	3.4	3.6
144.5°	0.3	0.5	1.3	2.0	2.9	3.4	3.6
145°	0.3	0.5	1.3	2.0	2.9	3.4	3.6
145.5°	0.4	0.6	1.3	2.0	2.9	3.4	3.5
146°	0.4	0.6	1.4	2.1	2.9	3.4	3.5
146.5°	0.4	0.6	1.4	2.1	2.9	3.4	3.5
147°	0.4	0.6	1.4	2.1	2.9	3.4	3.5
147.5°	0.5	0.7	1.4	2.1	3.0	3.4	3.5
148°	0.5	0.7	1.4	2.1	3.0	3.4	3.5
148.5°	0.5	0.8	1.5	2.1	3.0	3.4	3.5
149°	0.5	0.8	1.5	2.2	3.0	3.4	3.5
149.5°	0.5	0.8	1.5	2.2	3.0	3.4	3.5
150°	0.6	0.8	1.5	2.2	3.0	3.4	3.5
150.5°	0.6	0.9	1.6	2.2	3.0	3.4	3.5
151°	0.6	0.9	1.6	2.2	3.0	3.4	3.5
151.5°	0.6	0.9	1.6	2.3	3.0	3.4	3.5
152°	0.7	0.9	1.6	2.3	3.0	3.4	3.4
152.5°	0.7	1.0	1.6	2.3	3.0	3.4	3.4
153°	0.7	1.0	1.7	2.3	3.0	3.4	3.4
153.5°	0.7	1.0	1.7	2.3	3.0	3.4	3.4
154°	0.8	1.0	1.7	2.3	3.0	3.4	3.4
154.5°	0.8	1.1	1.7	2.3	3.0	3.4	3.4
155°	0.8	1.1	1.8	2.4	3.0	3.4	3.4
155.5°	0.8	1.2	1.8	2.4	3.0	3.4	3.4
156°	0.9	1.2	1.8	2.4	3.0	3.4	3.4
156.5°	0.9	1.2	1.8	2.4	3.0	3.4	3.3
157°	0.9	1.2	1.9	2.4	3.0	3.4	3.3

REPORT NUMBER: P1197009

CATALOG NUMBER: AWP28S-BZ-MID-3000K-POSITION 15

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1197009
CATALOG NUMBER: AWPf28S-BZ-MID-3000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	2.4	2.4	2.4	2.4	2.4	2.4	2.4

(END OF REPORT)