

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: P1197171

Luminaire Tested: AWPS28S-BZ-MID-3000K-POSITION 45

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1197171
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (LDS)
Test Lab: INNOVATION CENTER
Issue Date: 10/31/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: AWPS28S-BZ-MID-3000K-POSITION 45
Description: AWP Architectural Wall Pack Series - Wall Mount Luminaire
Light Source: 80 CRI, 3000K
Ballast/Driver: -

Summary

Lumens per Lamp: 3422 (1 lamp)
Luminaire Lumens: 3173.9 lumens
Efficiency: 92.7%
Efficacy: 118.9 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

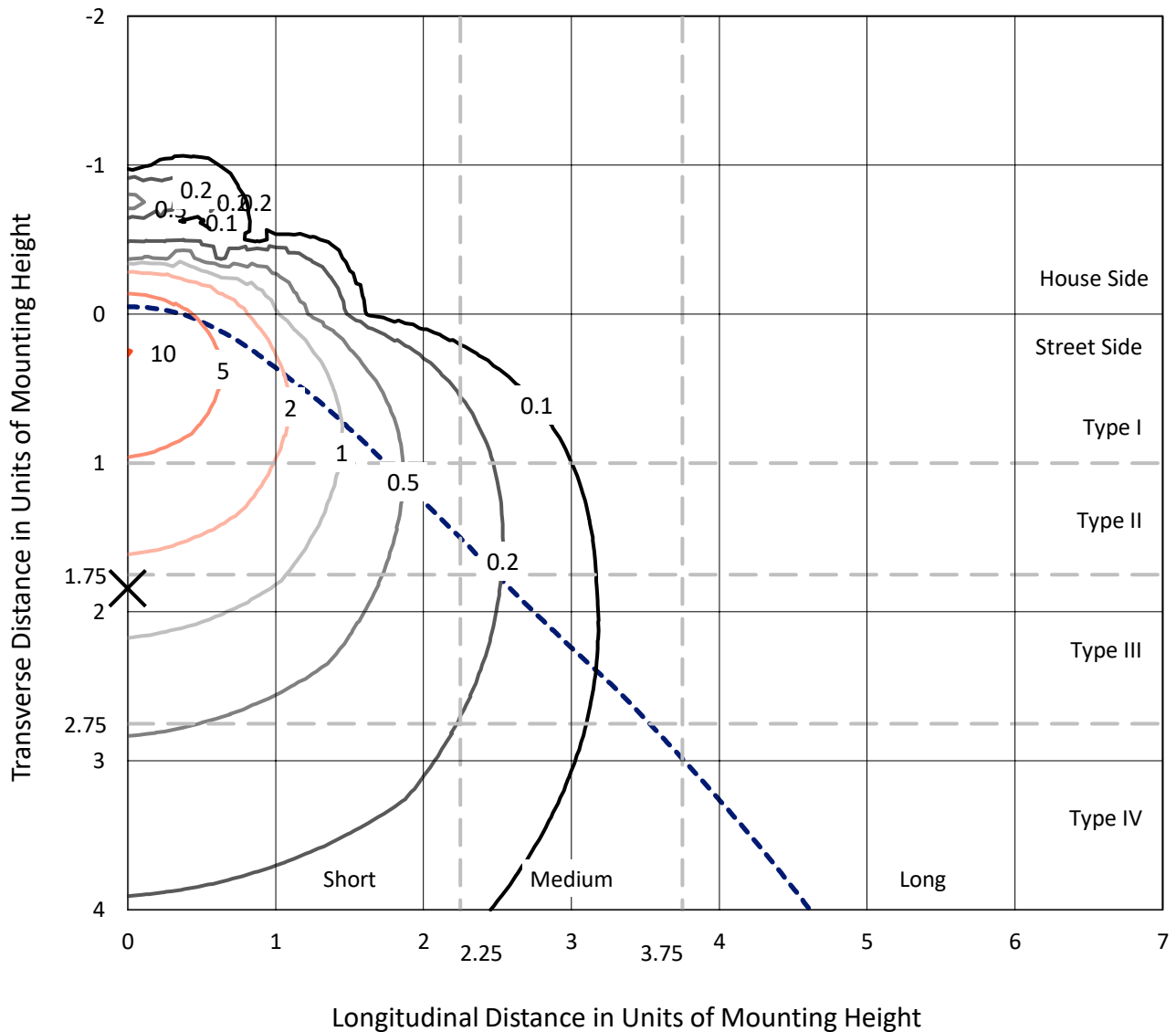
Input Watts (W): 26.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

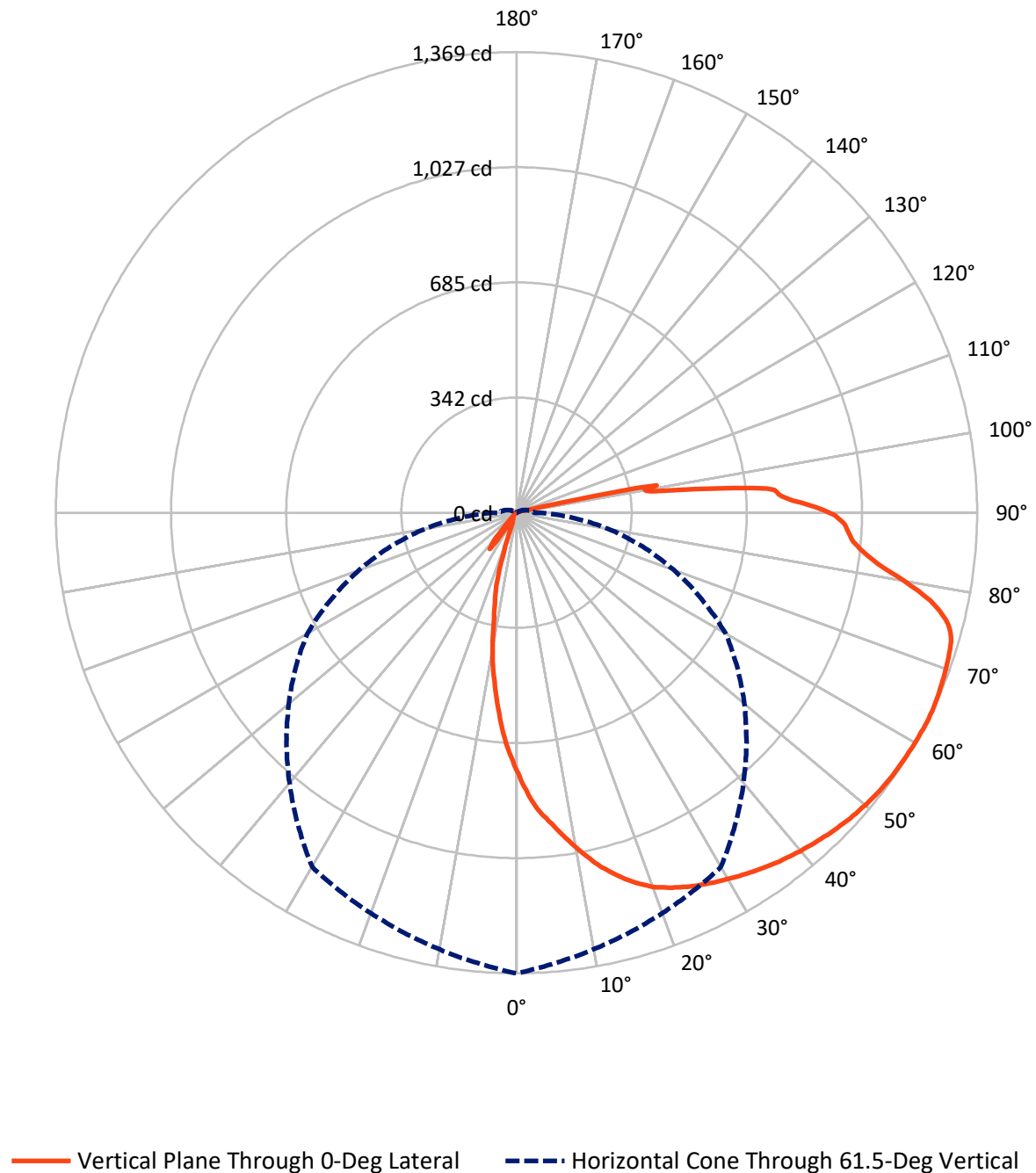


Based on 10 foot mounting height. Maximum calculated value = 10.1 fc
Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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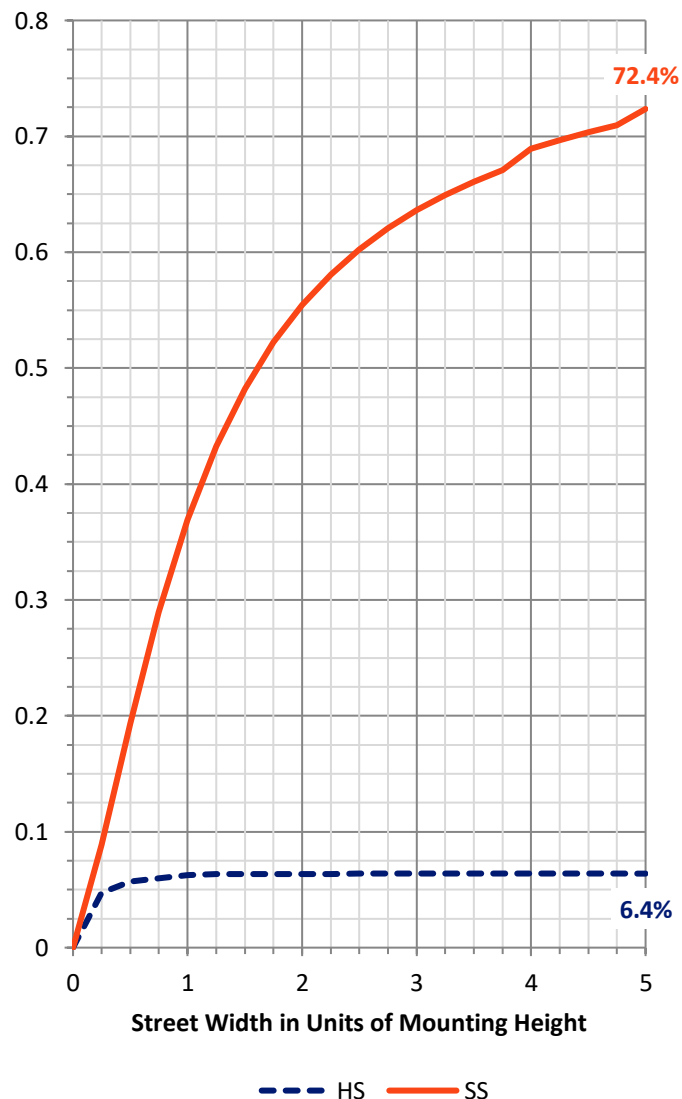
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	221.3	7.4	228.7
	% Lamp	6.5	0.2	6.7
Street Side	Lumens	2723.6	221.5	2945.1
	% Lamp	79.6	6.5	86.1
Total	Lumens	2944.9	229.0	3173.9
	% Lamp	86.1	6.7	92.7

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	72.3	2.3	2.1
10°-20°	196.2	6.2	5.7
20°-30°	284.6	9.0	8.3
30°-40°	357.4	11.3	10.4
40°-50°	412.3	13.0	12.0
50°-60°	427.1	13.5	12.5
60°-70°	432.4	13.6	12.6
70°-80°	420.0	13.2	12.3
80°-90°	342.7	10.8	10.0
90°-100°	204.6	6.4	6.0
100°-110°	17.3	0.5	0.5
110°-120°	1.9	0.1	0.1
120°-130°	1.3	0.0	0.0
130°-140°	1.2	0.0	0.0
140°-150°	1.0	0.0	0.0
150°-160°	0.8	0.0	0.0
160°-170°	0.5	0.0	0.0
170°-180°	0.2	0.0	0.0
0°-90°	2944.9	92.8	86.1
0°-180°	3173.9	100.0	92.7

Coefficient of Utilization



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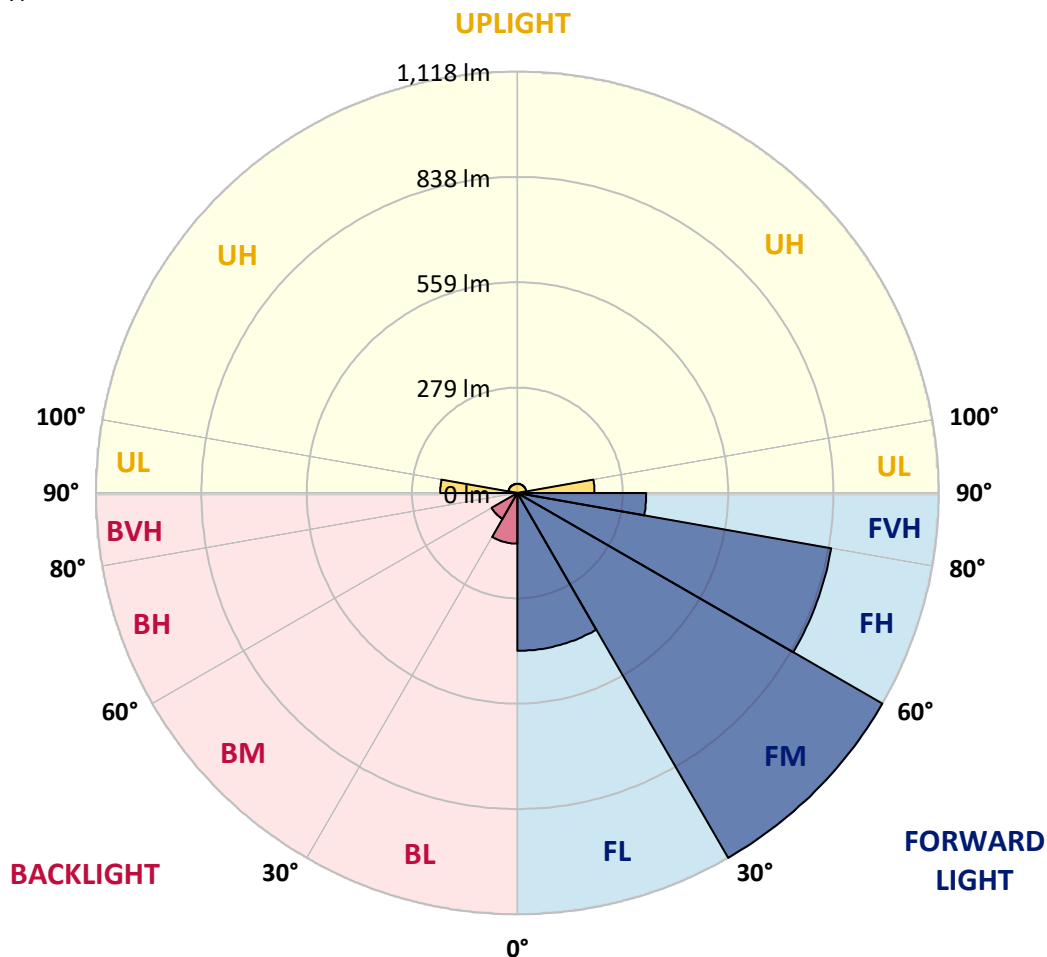
CATALOG NUMBER: AWPS28S-BZ-MID-3000K-POSITION 45

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	418.6	12.2			
FM	(30°-60°)	1117.7	32.7			
FH	(60°-80°)	845.4	24.7			G1/1800
FVH	(80°-90°)	341.8	10.0			G3/500
BL	(0°-30°)	134.4	3.9	B1/500		
BM	(30°-60°)	79.0	2.3	B0/220		
BH	(60°-80°)	6.9	0.2	B0/110		G0/110
BVH	(80°-90°)	0.9	0.0			G0/10
UL	(90°-100°)	204.6	6.0		U3/500	
UH	(100°-180°)	24.4	0.7		U2/50	
Trapped Light		248.1	7.3			

BUG Rating: B1-U3-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	778.4	778.4	778.4	778.4	778.4	778.4	778.4
0.5°	796.9	799.5	790.1	779.9	767.0	752.1	765.2
1°	811.9	812.1	798.0	779.7	759.3	738.7	749.7
1.5°	826.2	824.6	805.5	779.4	751.1	724.8	734.1
2°	840.8	837.3	812.0	778.9	743.0	711.3	718.4
2.5°	855.7	849.7	818.9	778.5	735.0	698.3	703.4
3°	868.6	861.3	825.9	777.7	726.5	684.9	687.7
3.5°	881.5	872.8	832.8	777.1	718.1	670.7	671.1
4°	892.7	882.8	839.5	776.4	710.0	655.9	653.7
4.5°	902.5	892.0	846.4	775.6	701.7	640.2	635.0
5°	912.2	900.2	852.2	774.6	693.5	623.5	616.7
5.5°	921.9	908.1	857.9	773.6	685.2	607.6	597.8
6°	932.0	916.3	863.5	772.2	676.4	591.1	578.7
6.5°	942.4	924.9	868.9	770.9	667.4	574.2	560.4
7°	953.3	933.8	873.9	769.4	658.0	558.0	541.5
7.5°	964.2	942.3	878.6	767.9	648.1	541.2	522.5
8°	975.4	951.4	882.5	766.3	638.4	524.6	503.9
8.5°	986.6	960.5	886.2	764.5	628.0	508.4	486.2
9°	997.4	969.8	889.8	762.7	617.6	491.8	468.5
9.5°	1008.7	979.3	893.2	760.8	606.8	476.1	449.7
10°	1019.7	988.2	896.5	758.5	595.6	460.6	430.6
10.5°	1030.6	997.5	900.0	756.1	584.6	444.5	411.7
11°	1041.4	1006.6	903.5	753.6	573.6	427.5	387.5
11.5°	1052.1	1015.5	906.6	751.0	562.2	411.3	364.4
12°	1063.0	1024.2	910.1	748.5	550.7	393.1	342.4
12.5°	1073.2	1032.9	913.5	745.8	538.1	372.6	323.1
13°	1083.2	1041.7	916.9	742.9	525.6	351.3	305.8
13.5°	1092.3	1050.1	920.4	739.8	513.1	331.9	289.9
14°	1101.0	1058.7	923.4	736.7	500.6	314.6	276.3
14.5°	1110.3	1066.8	927.0	733.3	488.1	299.0	263.1
15°	1118.5	1074.3	930.6	729.8	476.7	284.5	249.8
15.5°	1127.1	1081.9	934.2	725.9	464.8	270.7	236.6
16°	1135.2	1089.2	937.5	722.2	453.5	259.5	223.4
16.5°	1143.3	1096.6	940.8	718.5	442.1	248.2	203.1
17°	1150.8	1103.7	944.2	714.7	430.7	236.9	178.9
17.5°	1157.6	1110.1	947.4	710.8	419.6	225.7	154.5
18°	1164.6	1116.6	950.2	706.2	408.0	210.9	134.9
18.5°	1171.1	1122.9	952.7	701.4	396.0	192.8	117.6
19°	1177.2	1129.0	955.3	696.4	383.8	171.0	102.9
19.5°	1182.9	1134.8	957.9	691.3	371.5	150.0	85.5
20°	1188.3	1140.4	960.1	686.1	359.6	131.1	65.9
20.5°	1193.1	1145.3	962.3	681.0	348.2	115.7	48.5
21°	1197.5	1150.3	964.6	675.9	335.6	102.0	38.7
21.5°	1202.2	1154.8	966.8	670.6	321.7	88.2	34.7
22°	1206.2	1159.0	968.7	665.2	307.8	72.4	32.9

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	1210.1	1163.1	970.7	660.2	294.6	55.9	31.9
23°	1214.3	1166.8	972.6	654.7	282.0	42.5	30.9
23.5°	1217.9	1169.6	974.5	649.1	270.6	34.9	29.9
24°	1221.7	1172.9	976.0	643.5	260.4	31.8	29.1
24.5°	1225.1	1175.6	977.5	637.8	250.3	30.4	28.3
25°	1229.0	1178.1	978.7	632.0	240.7	29.5	27.3
25.5°	1232.3	1180.6	979.6	626.0	231.4	28.9	26.2
26°	1235.8	1183.1	980.5	620.2	221.9	28.4	25.1
26.5°	1238.9	1185.3	981.3	614.5	212.3	28.0	24.2
27°	1242.1	1187.4	982.0	608.4	203.7	27.7	23.6
27.5°	1245.5	1189.3	982.1	602.1	194.3	27.3	23.2
28°	1248.8	1191.0	982.3	595.6	183.2	26.8	23.0
28.5°	1251.6	1192.6	982.4	589.1	169.5	26.3	22.8
29°	1254.3	1193.9	982.5	582.2	153.6	25.7	22.4
29.5°	1257.2	1195.4	982.6	575.0	136.0	24.9	22.0
30°	1260.1	1196.9	982.6	568.1	118.8	24.1	21.4
30.5°	1263.0	1198.2	982.0	560.9	102.9	23.4	21.0
31°	1266.2	1199.4	981.5	553.5	88.8	22.6	20.5
31.5°	1269.0	1201.1	981.3	546.0	76.9	21.8	19.9
32°	1272.3	1202.2	980.7	538.2	66.9	21.2	19.5
32.5°	1275.2	1203.4	980.1	530.7	59.4	20.5	19.2
33°	1278.2	1204.6	979.7	523.1	53.0	20.0	19.2
33.5°	1281.0	1205.6	979.2	515.6	48.3	19.6	19.9
34°	1283.9	1206.6	978.7	507.7	44.3	19.2	23.1
34.5°	1286.9	1207.9	977.8	499.4	40.7	18.9	38.0
35°	1289.7	1209.2	976.6	491.0	36.7	18.6	62.7
35.5°	1292.2	1210.5	975.0	482.4	33.5	18.3	83.6
36°	1295.1	1211.9	973.5	473.8	31.4	17.9	101.0
36.5°	1297.7	1213.3	971.8	465.0	29.9	17.8	132.0
37°	1300.5	1214.7	970.0	456.3	28.7	17.5	134.0
37.5°	1302.7	1216.1	968.0	447.2	27.9	17.1	124.4
38°	1305.3	1217.1	965.8	438.3	27.1	16.8	120.8
38.5°	1307.9	1218.4	963.5	429.1	26.3	16.7	117.2
39°	1310.5	1219.9	961.1	420.0	25.5	16.7	111.5
39.5°	1312.9	1221.1	958.3	410.6	24.8	17.1	102.9
40°	1315.1	1222.1	955.2	401.0	24.1	20.0	91.3
40.5°	1317.6	1223.2	951.9	391.5	23.6	29.4	80.0
41°	1319.7	1224.1	948.9	381.4	23.2	44.8	66.6
41.5°	1321.8	1224.8	945.7	371.8	22.9	56.1	53.3
42°	1324.2	1225.6	942.1	361.5	22.5	60.7	42.4
42.5°	1326.4	1226.2	938.3	350.8	22.1	75.7	35.4
43°	1328.6	1226.5	934.5	340.8	21.6	85.6	30.3
43.5°	1330.9	1226.8	930.4	330.6	20.9	76.9	26.0
44°	1333.2	1227.0	925.9	320.9	20.3	72.2	22.0
44.5°	1335.2	1227.2	921.7	310.9	19.7	69.5	18.3

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	1337.0	1227.5	917.1	300.4	19.1	67.3	15.2
45.5°	1339.2	1227.6	912.4	289.8	18.7	65.3	12.9
46°	1341.0	1227.8	907.6	279.3	18.3	62.7	11.2
46.5°	1342.8	1228.1	902.2	268.5	17.9	59.7	9.9
47°	1344.6	1228.0	897.3	258.1	17.6	56.6	8.9
47.5°	1346.1	1228.3	892.1	247.8	17.2	53.6	8.1
48°	1347.9	1228.3	886.6	237.5	16.8	50.5	7.5
48.5°	1349.6	1228.6	881.3	227.2	16.3	47.2	7.0
49°	1351.1	1228.8	876.0	217.9	15.8	43.1	6.5
49.5°	1352.6	1228.3	870.4	208.6	15.3	39.0	6.0
50°	1354.1	1228.3	865.2	199.8	14.7	34.9	5.6
50.5°	1355.8	1228.4	859.7	192.1	14.2	30.6	4.9
51°	1357.2	1228.2	854.3	185.1	13.8	27.0	4.3
51.5°	1358.2	1227.9	849.0	178.6	13.3	23.9	3.7
52°	1359.8	1227.7	843.3	173.0	12.9	21.2	3.1
52.5°	1360.6	1227.2	837.8	167.7	12.5	18.7	2.9
53°	1361.2	1226.5	832.4	162.2	12.0	16.4	2.8
53.5°	1362.1	1225.8	826.4	156.1	11.5	14.2	2.7
54°	1362.9	1225.1	820.6	150.4	11.1	12.2	2.6
54.5°	1363.6	1223.9	814.8	144.6	10.7	9.4	2.4
55°	1364.2	1223.1	808.9	137.4	10.3	5.4	2.1
55.5°	1364.4	1222.4	802.9	127.6	9.9	2.9	1.9
56°	1364.9	1221.5	796.5	114.8	9.6	2.1	1.7
56.5°	1365.3	1221.1	789.8	99.5	9.2	1.9	1.7
57°	1365.6	1220.5	782.8	84.4	8.8	1.9	1.4
57.5°	1366.1	1220.3	775.9	73.3	8.4	1.8	1.1
58°	1366.3	1220.1	768.6	66.6	8.0	1.8	1.0
58.5°	1366.7	1219.4	761.6	62.5	7.6	1.6	0.9
59°	1367.1	1219.2	754.6	59.8	7.1	1.5	0.8
59.5°	1367.8	1218.6	747.2	58.2	6.7	1.3	0.7
60°	1368.3	1217.9	739.8	57.3	6.3	1.2	0.6
60.5°	1368.5	1217.2	732.3	56.4	5.9	0.9	0.6
61°	1368.7	1216.6	724.8	55.5	5.5	0.7	0.6
61.5°	1369.1	1215.6	717.4	54.5	5.2	0.7	0.6
62°	1369.0	1214.8	710.4	53.5	4.8	0.7	0.6
62.5°	1369.1	1214.1	703.9	52.7	4.4	0.6	0.6
63°	1369.1	1213.7	696.9	51.7	4.0	0.6	0.6
63.5°	1369.0	1213.3	690.0	50.6	3.7	0.6	0.6
64°	1368.8	1212.7	682.9	49.3	3.4	0.6	0.6
64.5°	1368.4	1212.0	676.2	48.1	3.1	0.5	0.6
65°	1367.3	1211.4	669.5	46.9	2.8	0.5	0.6
65.5°	1366.9	1210.9	662.9	45.6	2.6	0.5	0.6
66°	1366.1	1210.6	656.5	44.0	2.4	0.5	0.6
66.5°	1365.1	1209.7	649.8	42.5	2.1	0.5	0.7
67°	1363.7	1208.9	643.8	41.2	1.9	0.5	0.7

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	1362.7	1208.0	637.6	39.9	1.7	0.5	0.8
68°	1361.3	1206.7	631.5	38.6	1.4	0.5	0.8
68.5°	1360.2	1205.5	625.3	37.6	1.2	0.5	0.8
69°	1358.9	1204.0	619.1	36.7	1.1	0.5	0.8
69.5°	1357.3	1202.0	612.9	36.1	1.0	0.5	0.8
70°	1356.1	1200.0	606.4	35.9	1.0	0.5	0.8
70.5°	1354.9	1197.8	599.5	36.0	1.0	0.5	0.9
71°	1354.1	1195.7	592.5	36.0	0.9	0.5	0.9
71.5°	1352.6	1193.0	585.4	36.0	0.8	0.5	0.9
72°	1351.0	1190.4	578.4	35.5	0.7	0.5	1.0
72.5°	1349.4	1188.5	571.9	34.8	0.6	0.5	1.0
73°	1347.3	1186.4	565.5	33.7	0.6	0.5	1.0
73.5°	1343.7	1184.0	559.0	31.8	0.6	0.5	1.1
74°	1338.7	1181.7	553.3	29.4	0.6	0.6	1.1
74.5°	1333.0	1179.4	547.3	27.0	0.6	0.6	1.2
75°	1325.1	1177.7	541.9	23.7	0.6	0.6	1.2
75.5°	1314.5	1174.4	537.2	20.8	0.6	0.7	1.3
76°	1302.6	1170.4	533.0	19.0	0.6	0.7	1.3
76.5°	1289.5	1164.5	528.6	17.4	0.6	0.8	1.4
77°	1274.8	1156.6	522.5	16.1	0.6	0.8	1.4
77.5°	1257.2	1146.8	516.4	14.8	0.6	0.8	1.4
78°	1237.3	1134.6	510.4	13.6	0.6	0.8	1.5
78.5°	1216.4	1122.1	504.3	12.3	0.6	0.9	1.5
79°	1193.6	1107.1	498.3	11.3	0.6	0.9	1.6
79.5°	1169.7	1090.2	493.7	10.4	0.6	0.9	1.6
80°	1146.6	1070.3	488.5	9.2	0.6	1.0	1.7
80.5°	1124.3	1049.0	483.2	8.2	0.6	1.0	1.7
81°	1102.4	1025.3	478.2	7.3	0.6	1.0	1.8
81.5°	1083.9	1001.1	473.5	6.6	0.7	1.1	1.8
82°	1066.8	978.7	469.2	6.0	0.7	1.1	1.9
82.5°	1052.3	958.2	465.6	5.4	0.7	1.2	1.9
83°	1038.7	940.7	462.2	4.9	0.7	1.2	1.9
83.5°	1026.6	925.2	459.2	4.4	0.8	1.2	2.0
84°	1015.6	913.2	455.2	3.9	0.8	1.3	2.0
84.5°	1005.9	903.6	450.5	3.5	0.8	1.3	2.1
85°	999.3	897.3	444.6	3.1	0.8	1.3	2.1
85.5°	994.2	891.8	437.1	2.7	0.9	1.4	2.2
86°	989.1	888.1	428.6	2.4	0.9	1.4	2.2
86.5°	984.7	887.8	420.0	2.1	0.9	1.4	2.3
87°	980.8	889.4	411.1	1.9	0.9	1.5	2.3
87.5°	975.6	892.7	402.8	1.6	1.0	1.5	2.3
88°	967.8	898.4	395.4	1.4	1.0	1.6	2.4
88.5°	957.6	905.8	390.4	1.2	1.0	1.6	2.4
89°	945.4	916.1	388.1	1.0	1.0	1.6	2.4
89.5°	931.0	928.4	385.4	0.9	1.1	1.7	2.5

REPORT NUMBER: P1197171

CATALOG NUMBER: AWPS28S-BZ-MID-3000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	912.7	937.2	382.9	0.6	1.1	1.7	2.5
90.5°	890.9	941.2	383.6	0.6	1.1	1.7	2.6
91°	868.5	937.6	379.8	0.5	1.1	1.8	2.6
91.5°	845.6	917.4	373.0	0.5	1.2	1.8	2.6
92°	823.2	883.1	366.1	0.5	1.2	1.8	2.6
92.5°	804.8	831.0	352.5	0.5	1.2	1.9	2.7
93°	792.0	762.1	327.1	0.5	1.2	1.9	2.7
93.5°	780.9	688.5	292.3	0.5	1.3	1.9	2.7
94°	776.8	609.2	251.3	0.5	1.3	2.0	2.7
94.5°	769.7	537.6	210.7	0.5	1.3	2.0	2.8
95°	748.1	483.1	175.4	0.5	1.3	2.0	2.8
95.5°	702.9	444.7	143.9	0.5	1.4	2.1	2.8
96°	648.8	405.9	119.7	0.5	1.4	2.1	2.9
96.5°	594.6	354.7	100.4	0.5	1.4	2.1	2.9
97°	540.8	349.1	82.8	0.5	1.4	2.2	2.9
97.5°	487.4	387.2	66.5	0.5	1.5	2.2	3.0
98°	435.4	431.3	56.9	0.5	1.5	2.3	3.0
98.5°	408.3	435.4	57.2	0.5	1.5	2.3	3.0
99°	391.2	371.2	60.1	0.5	1.5	2.3	3.0
99.5°	387.8	259.8	59.3	0.5	1.6	2.3	3.1
100°	407.1	199.4	61.2	0.5	1.6	2.4	3.1
100.5°	424.9	142.0	56.1	0.5	1.6	2.4	3.1
101°	363.9	84.6	45.0	0.5	1.6	2.4	3.1
101.5°	236.8	27.1	30.4	0.5	1.6	2.5	3.1
102°	145.9	19.7	22.8	0.5	1.7	2.5	3.2
102.5°	77.2	18.3	19.7	0.5	1.7	2.5	3.2
103°	35.0	18.0	16.9	0.5	1.7	2.5	3.2
103.5°	23.6	18.3	14.0	0.5	1.7	2.6	3.2
104°	23.0	20.0	11.3	0.5	1.8	2.6	3.2
104.5°	22.3	22.6	8.9	0.5	1.8	2.6	3.2
105°	22.4	22.0	7.2	0.5	1.8	2.6	3.3
105.5°	23.5	20.1	6.2	0.5	1.8	2.6	3.3
106°	26.0	19.3	5.3	0.5	1.8	2.7	3.3
106.5°	27.2	18.9	4.5	0.5	1.9	2.7	3.3
107°	25.3	17.6	3.7	0.5	1.9	2.7	3.3
107.5°	22.6	15.8	3.0	0.6	1.9	2.7	3.3
108°	21.4	13.5	2.6	0.6	1.9	2.7	3.3
108.5°	20.2	10.9	2.2	0.6	1.9	2.8	3.3
109°	17.7	8.6	2.0	0.6	2.0	2.8	3.4
109.5°	14.7	6.6	1.7	0.6	2.0	2.8	3.4
110°	12.0	5.2	1.5	0.6	2.0	2.8	3.4
110.5°	10.0	4.6	1.3	0.6	2.0	2.8	3.4
111°	8.8	4.4	1.1	0.6	2.0	2.9	3.4
111.5°	8.1	4.1	0.9	0.7	2.1	2.9	3.4
112°	7.3	3.7	0.8	0.7	2.1	2.9	3.4

REPORT NUMBER: P1197171

CATALOG NUMBER: AWPS28S-BZ-MID-3000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	6.2	3.2	0.7	0.7	2.1	2.9	3.4
113°	5.2	2.5	0.6	0.7	2.1	3.0	3.4
113.5°	4.5	2.0	0.5	0.7	2.1	3.0	3.4
114°	4.0	1.6	0.5	0.7	2.1	3.0	3.4
114.5°	3.4	1.2	0.4	0.8	2.2	3.0	3.5
115°	2.6	1.0	0.3	0.8	2.2	3.0	3.5
115.5°	2.0	0.9	0.2	0.8	2.2	3.0	3.5
116°	1.6	0.7	0.2	0.8	2.2	3.0	3.5
116.5°	1.3	0.5	0.1	0.8	2.2	3.1	3.5
117°	1.0	0.4	0.1	0.8	2.2	3.1	3.5
117.5°	0.9	0.2	0.1	0.8	2.2	3.1	3.5
118°	0.7	0.1	0.1	0.8	2.3	3.1	3.5
118.5°	0.4	0.0	0.0	0.9	2.3	3.1	3.5
119°	0.3	0.0	0.0	0.9	2.3	3.1	3.5
119.5°	0.1	0.0	0.1	0.9	2.3	3.1	3.5
120°	0.0	0.0	0.0	0.9	2.3	3.1	3.5
120.5°	0.0	0.0	0.0	0.9	2.3	3.1	3.5
121°	0.0	0.0	0.1	0.9	2.3	3.2	3.5
121.5°	0.0	0.0	0.1	0.9	2.3	3.2	3.5
122°	0.0	0.0	0.1	1.0	2.3	3.2	3.5
122.5°	0.0	0.0	0.1	1.0	2.4	3.2	3.5
123°	0.0	0.0	0.1	1.0	2.4	3.2	3.5
123.5°	0.0	0.0	0.1	1.0	2.4	3.2	3.5
124°	0.0	0.0	0.1	1.0	2.4	3.2	3.5
124.5°	0.0	0.0	0.1	1.1	2.4	3.2	3.5
125°	0.0	0.0	0.1	1.1	2.4	3.2	3.5
125.5°	0.0	0.0	0.1	1.1	2.4	3.2	3.5
126°	0.0	0.0	0.2	1.1	2.4	3.2	3.5
126.5°	0.0	0.0	0.2	1.1	2.4	3.2	3.5
127°	0.0	0.0	0.2	1.1	2.4	3.2	3.5
127.5°	0.0	0.0	0.2	1.1	2.4	3.2	3.5
128°	0.0	0.0	0.2	1.1	2.4	3.2	3.5
128.5°	0.0	0.0	0.2	1.2	2.4	3.2	3.5
129°	0.0	0.0	0.3	1.2	2.4	3.2	3.5
129.5°	0.0	0.0	0.3	1.2	2.5	3.2	3.5
130°	0.0	0.0	0.3	1.2	2.5	3.2	3.5
130.5°	0.0	0.0	0.3	1.2	2.5	3.2	3.5
131°	0.0	0.0	0.3	1.2	2.5	3.2	3.5
131.5°	0.0	0.0	0.3	1.2	2.5	3.2	3.5
132°	0.0	0.0	0.4	1.2	2.5	3.2	3.5
132.5°	0.0	0.0	0.4	1.3	2.5	3.2	3.5
133°	0.0	0.0	0.4	1.3	2.5	3.2	3.5
133.5°	0.0	0.0	0.4	1.3	2.5	3.2	3.5
134°	0.0	0.0	0.4	1.3	2.5	3.2	3.5
134.5°	0.0	0.0	0.5	1.3	2.5	3.2	3.5

REPORT NUMBER: P1197171

CATALOG NUMBER: AWPS28S-BZ-MID-3000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	0.0	0.0	0.5	1.3	2.5	3.3	3.5
135.5°	0.0	0.0	0.5	1.4	2.5	3.3	3.5
136°	0.0	0.0	0.5	1.4	2.5	3.3	3.5
136.5°	0.0	0.0	0.5	1.4	2.5	3.3	3.5
137°	0.0	0.0	0.5	1.4	2.5	3.3	3.5
137.5°	0.0	0.0	0.6	1.4	2.5	3.3	3.5
138°	0.0	0.0	0.6	1.5	2.5	3.3	3.5
138.5°	0.0	0.0	0.6	1.5	2.6	3.3	3.5
139°	0.0	0.0	0.6	1.5	2.6	3.3	3.5
139.5°	0.0	0.0	0.6	1.5	2.6	3.3	3.5
140°	0.0	0.0	0.7	1.5	2.6	3.3	3.5
140.5°	0.0	0.0	0.7	1.5	2.6	3.3	3.5
141°	0.0	0.0	0.7	1.5	2.6	3.3	3.4
141.5°	0.0	0.0	0.7	1.5	2.6	3.2	3.4
142°	0.0	0.0	0.7	1.5	2.6	3.2	3.4
142.5°	0.0	0.0	0.8	1.6	2.6	3.2	3.4
143°	0.0	0.0	0.8	1.6	2.6	3.2	3.4
143.5°	0.0	0.0	0.8	1.6	2.6	3.2	3.4
144°	0.0	0.0	0.8	1.6	2.6	3.2	3.4
144.5°	0.0	0.1	0.9	1.6	2.6	3.2	3.3
145°	0.0	0.1	0.9	1.6	2.6	3.2	3.3
145.5°	0.0	0.1	0.9	1.6	2.6	3.2	3.3
146°	0.0	0.1	0.9	1.7	2.6	3.2	3.3
146.5°	0.0	0.1	0.9	1.7	2.6	3.2	3.3
147°	0.0	0.1	0.9	1.7	2.6	3.2	3.3
147.5°	0.0	0.2	1.0	1.7	2.6	3.2	3.3
148°	0.0	0.2	1.0	1.7	2.6	3.1	3.2
148.5°	0.0	0.2	1.0	1.7	2.6	3.1	3.2
149°	0.1	0.2	1.0	1.7	2.6	3.1	3.2
149.5°	0.1	0.2	1.0	1.7	2.6	3.1	3.2
150°	0.1	0.3	1.1	1.8	2.6	3.1	3.2
150.5°	0.1	0.3	1.1	1.8	2.6	3.1	3.1
151°	0.1	0.3	1.1	1.8	2.6	3.1	3.1
151.5°	0.1	0.4	1.1	1.8	2.6	3.1	3.1
152°	0.1	0.4	1.1	1.8	2.6	3.1	3.1
152.5°	0.2	0.4	1.2	1.8	2.6	3.1	3.1
153°	0.2	0.4	1.2	1.8	2.6	3.1	3.0
153.5°	0.2	0.4	1.2	1.9	2.6	3.1	3.0
154°	0.2	0.4	1.2	1.9	2.6	3.1	3.0
154.5°	0.2	0.5	1.3	1.9	2.6	3.1	3.0
155°	0.3	0.5	1.3	1.9	2.6	3.1	2.9
155.5°	0.3	0.5	1.3	1.9	2.6	3.0	2.9
156°	0.3	0.5	1.3	1.9	2.6	3.0	2.9
156.5°	0.3	0.5	1.3	1.9	2.6	3.0	2.9
157°	0.3	0.6	1.3	1.9	2.6	3.0	2.9

REPORT NUMBER: P1197171

CATALOG NUMBER: AWPS28S-BZ-MID-3000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
157.5°	0.3	0.6	1.4	1.9	2.6	3.0	2.9
158°	0.4	0.6	1.4	1.9	2.6	3.0	2.8
158.5°	0.4	0.7	1.4	1.9	2.6	3.0	2.8
159°	0.4	0.7	1.4	1.9	2.6	2.9	2.8
159.5°	0.4	0.7	1.4	2.0	2.6	2.9	2.8
160°	0.4	0.8	1.5	2.0	2.6	2.9	2.7
160.5°	0.5	0.8	1.5	2.0	2.5	2.9	2.7
161°	0.5	0.8	1.5	2.0	2.5	2.9	2.7
161.5°	0.5	0.8	1.5	2.0	2.5	2.9	2.7
162°	0.5	0.8	1.5	2.0	2.5	2.9	2.7
162.5°	0.6	0.9	1.5	2.0	2.5	2.8	2.6
163°	0.6	0.9	1.6	2.0	2.5	2.8	2.6
163.5°	0.6	0.9	1.6	2.0	2.5	2.8	2.5
164°	0.6	0.9	1.6	2.0	2.5	2.8	2.5
164.5°	0.7	1.0	1.6	2.1	2.5	2.8	2.5
165°	0.7	1.0	1.6	2.1	2.5	2.8	2.5
165.5°	0.7	1.1	1.7	2.1	2.5	2.8	2.4
166°	0.7	1.1	1.7	2.1	2.5	2.8	2.4
166.5°	0.8	1.1	1.7	2.1	2.5	2.7	2.4
167°	0.8	1.1	1.7	2.1	2.5	2.7	2.4
167.5°	0.8	1.1	1.7	2.1	2.5	2.7	2.3
168°	0.8	1.2	1.7	2.2	2.5	2.7	2.3
168.5°	0.9	1.2	1.8	2.2	2.5	2.7	2.3
169°	0.9	1.2	1.8	2.2	2.5	2.7	2.2
169.5°	0.9	1.2	1.8	2.2	2.5	2.7	2.2
170°	0.9	1.3	1.8	2.2	2.5	2.7	2.2
170.5°	0.9	1.3	1.8	2.2	2.5	2.6	2.2
171°	1.0	1.3	1.9	2.2	2.5	2.6	2.1
171.5°	1.0	1.3	1.9	2.2	2.4	2.6	2.1
172°	1.0	1.4	1.9	2.2	2.4	2.6	2.0
172.5°	1.1	1.4	1.9	2.2	2.4	2.6	2.0
173°	1.1	1.4	1.9	2.2	2.4	2.5	2.0
173.5°	1.1	1.5	2.0	2.2	2.4	2.5	1.9
174°	1.1	1.5	2.0	2.2	2.4	2.5	1.9
174.5°	1.2	1.5	2.0	2.2	2.4	2.5	1.9
175°	1.2	1.5	2.0	2.2	2.4	2.5	1.8
175.5°	1.2	1.6	2.0	2.2	2.4	2.5	1.8
176°	1.2	1.6	2.0	2.2	2.4	2.4	1.8
176.5°	1.3	1.6	2.1	2.2	2.4	2.4	1.7
177°	1.3	1.6	2.1	2.2	2.4	2.4	1.7
177.5°	1.3	1.7	2.1	2.2	2.3	2.4	1.7
178°	1.4	1.7	2.1	2.2	2.3	2.4	1.6
178.5°	1.4	1.7	2.1	2.3	2.3	2.3	1.6
179°	1.4	1.7	2.1	2.3	2.3	2.3	1.6
179.5°	1.5	1.8	2.1	2.3	2.3	2.3	1.5



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CATALOG NUMBER: AWPS28S-BZ-MID-3000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	1.5	1.5	1.5	1.5	1.5	1.5	1.5

(END OF REPORT)