

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: P1197147

Luminaire Tested: AWPS28S-BZ-MID-4000K-POSITION 0

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1197147
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: AWPS28S-BZ-MID-4000K-POSITION 0
Description: AWP Architectural Wall Pack Series - Wall Mount Luminaire
Light Source: 80 CRI, 4000K
Ballast/Driver: -

Summary

Lumens per Lamp: 3500 (1 lamp)
Luminaire Lumens: 3732.9 lumens
Efficiency: 106.7%
Efficacy: 145.8 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): 25.6
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

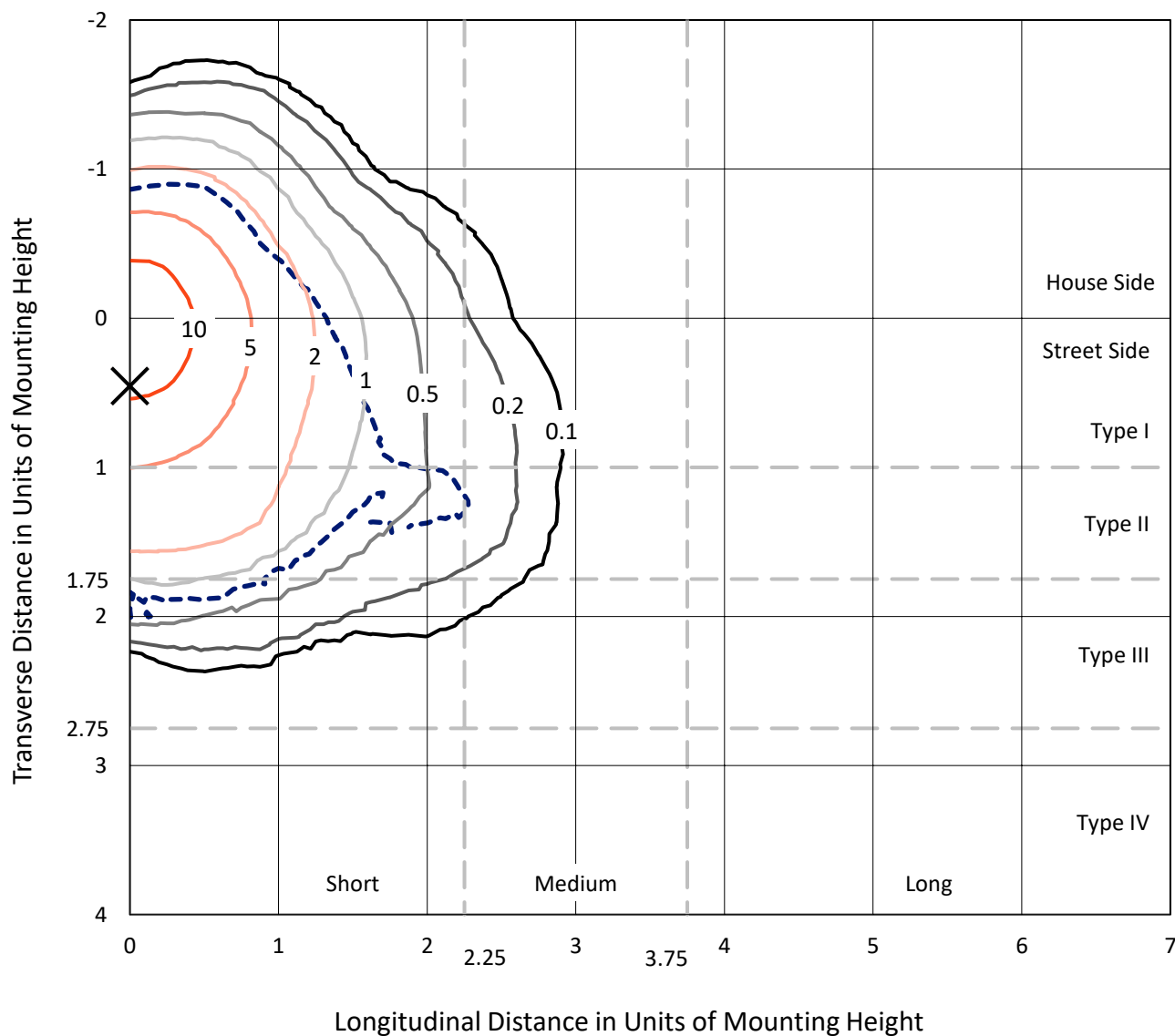
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

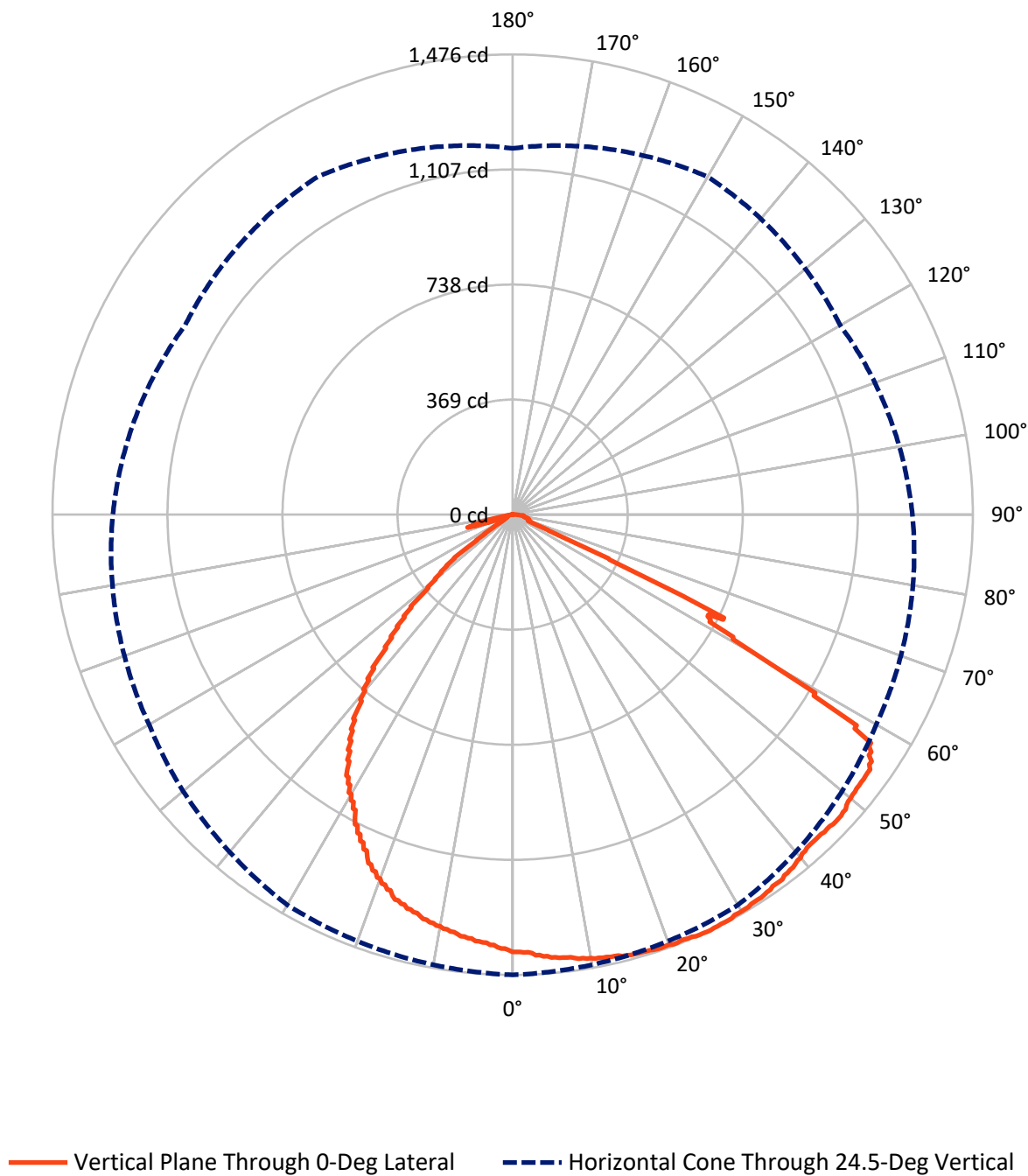


Based on 10 foot mounting height. Maximum calculated value = 14 fc
Type III - Short - Cutoff

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Luminous Intensity Polar Plot



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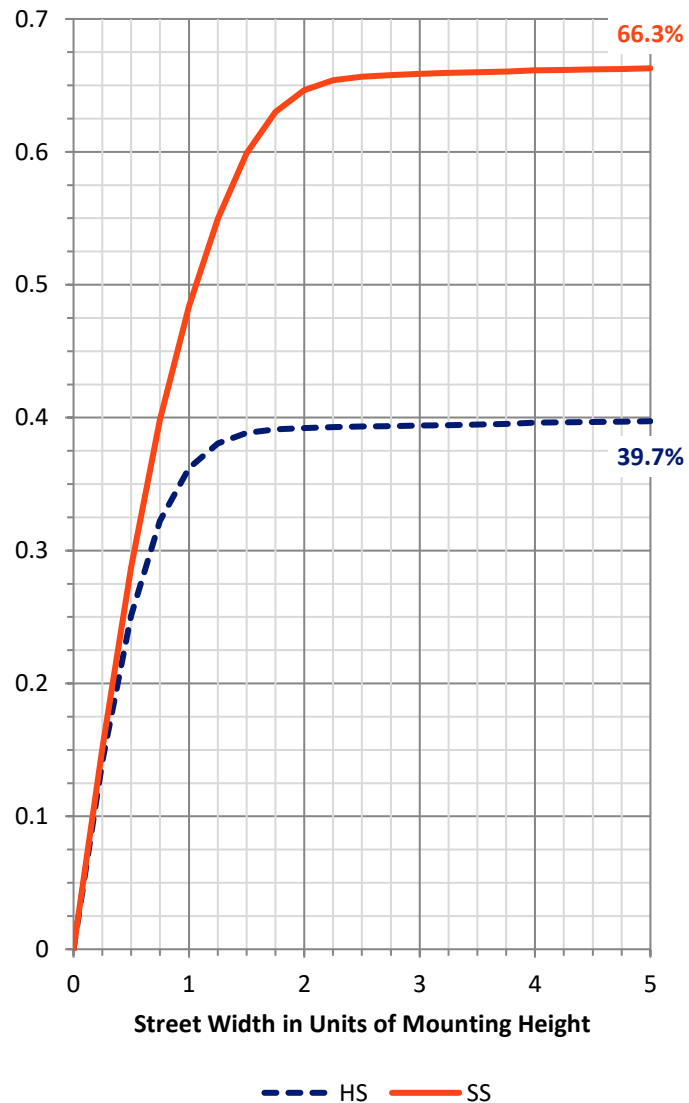
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1405.0	3.9	1408.8
	% Lamp	40.1	0.1	40.3
Street Side	Lumens	2321.2	2.9	2324.1
	% Lamp	66.3	0.1	66.4
Total	Lumens	3726.1	6.7	3732.9
	% Lamp	106.5	0.2	106.7

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	134.1	3.6	3.8
10°-20°	389.0	10.4	11.1
20°-30°	601.0	16.1	17.2
30°-40°	734.2	19.7	21.0
40°-50°	754.8	20.2	21.6
50°-60°	662.5	17.7	18.9
60°-70°	342.8	9.2	9.8
70°-80°	86.5	2.3	2.5
80°-90°	21.3	0.6	0.6
90°-100°	1.7	0.0	0.0
100°-110°	0.9	0.0	0.0
110°-120°	0.8	0.0	0.0
120°-130°	0.8	0.0	0.0
130°-140°	0.8	0.0	0.0
140°-150°	0.7	0.0	0.0
150°-160°	0.5	0.0	0.0
160°-170°	0.3	0.0	0.0
170°-180°	0.1	0.0	0.0
0°-90°	3726.1	99.8	106.5
0°-180°	3732.9	100.0	106.7

Coefficient of Utilization



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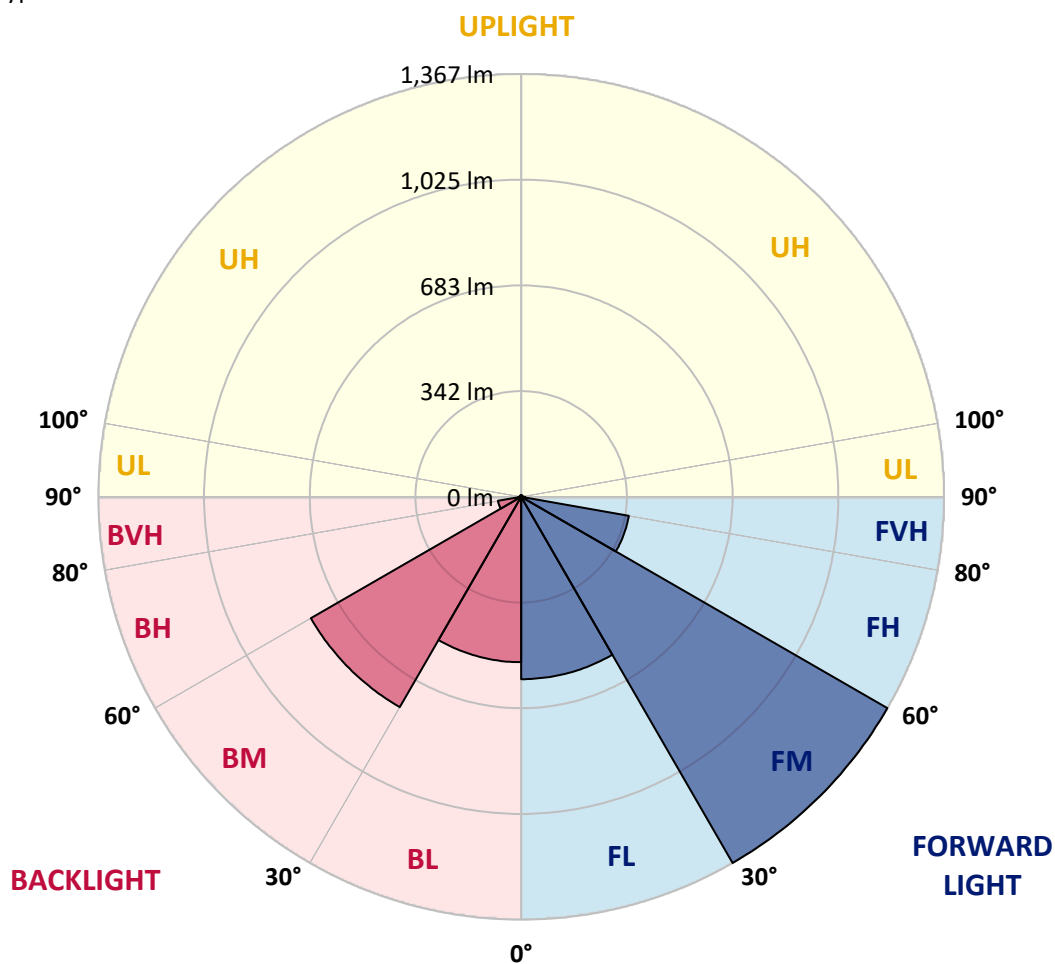
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	589.4	16.8			
FM	(30°-60°)	1366.7	39.0			
FH	(60°-80°)	353.2	10.1			G0/660
FVH	(80°-90°)	11.9	0.3			G1/100
BL	(0°-30°)	534.5	15.3	B2/1000		
BM	(30°-60°)	784.8	22.4	B1/1000		
BH	(60°-80°)	76.1	2.2	B0/110		G0/110
BVH	(80°-90°)	9.5	0.3			G0/10
UL	(90°-100°)	1.7	0.0		U1/10	
UH	(100°-180°)	5.0	0.1		U1/10	
Trapped Light		-232.9	-6.7			

BUG Rating: B2-U1-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	1402.1	1402.1	1402.1	1402.1	1402.1	1402.1	1402.1
0.5°	1402.1	1402.1	1402.1	1402.1	1402.1	1402.1	1402.1
1°	1404.2	1410.7	1421.6	1418.3	1409.0	1410.6	1396.3
1.5°	1404.2	1415.5	1421.6	1418.3	1404.1	1410.5	1391.9
2°	1407.1	1415.5	1422.3	1417.5	1404.1	1410.1	1391.9
2.5°	1414.3	1418.9	1422.4	1415.8	1401.7	1410.0	1387.3
3°	1414.4	1418.9	1423.6	1415.8	1401.7	1402.4	1381.2
3.5°	1420.0	1423.2	1423.7	1413.9	1396.4	1402.3	1381.2
4°	1420.0	1427.6	1423.9	1413.9	1396.4	1399.0	1375.1
4.5°	1425.3	1427.7	1423.9	1413.6	1389.9	1398.9	1375.1
5°	1425.4	1429.8	1424.1	1413.6	1389.9	1394.7	1372.3
5.5°	1428.8	1429.9	1424.0	1411.8	1382.9	1394.6	1372.3
6°	1428.8	1433.1	1424.1	1411.8	1382.9	1389.6	1365.2
6.5°	1430.9	1433.2	1423.7	1410.1	1381.6	1385.7	1365.1
7°	1430.9	1436.0	1423.8	1410.1	1375.4	1385.6	1361.6
7.5°	1435.4	1436.1	1423.3	1407.6	1375.4	1378.6	1361.5
8°	1439.8	1438.5	1423.4	1404.5	1372.6	1378.5	1356.5
8.5°	1439.9	1438.5	1421.1	1404.5	1372.6	1374.1	1351.4
9°	1443.7	1441.4	1421.2	1399.4	1364.7	1374.0	1351.4
9.5°	1443.7	1442.9	1419.8	1399.4	1364.7	1368.2	1346.2
10°	1447.4	1442.9	1417.9	1396.5	1357.7	1368.1	1346.2
10.5°	1447.5	1445.4	1418.0	1396.5	1357.7	1361.3	1339.7
11°	1450.0	1445.4	1415.2	1393.4	1351.0	1360.0	1339.7
11.5°	1450.0	1446.7	1415.2	1393.4	1342.0	1359.9	1333.7
12°	1452.3	1446.7	1412.2	1388.2	1341.9	1351.4	1333.5
12.5°	1452.3	1448.0	1412.3	1383.6	1337.9	1351.3	1327.9
13°	1454.1	1448.0	1408.4	1383.5	1337.9	1345.6	1327.8
13.5°	1458.9	1450.0	1408.5	1377.7	1325.6	1345.4	1319.9
14°	1458.9	1450.0	1405.3	1377.6	1325.6	1341.4	1313.4
14.5°	1462.1	1451.1	1405.3	1372.3	1318.9	1341.3	1313.4
15°	1462.2	1451.7	1402.7	1372.3	1318.9	1333.3	1307.3
15.5°	1462.9	1451.8	1398.5	1365.9	1311.0	1333.2	1307.3
16°	1462.9	1452.0	1398.5	1365.9	1311.0	1327.6	1297.9
16.5°	1464.6	1452.0	1393.3	1358.6	1300.8	1318.9	1297.7
17°	1464.6	1452.9	1393.3	1358.6	1293.3	1318.8	1290.4
17.5°	1466.6	1452.9	1389.8	1350.6	1293.2	1313.2	1290.3
18°	1468.3	1453.1	1389.8	1344.3	1284.4	1313.0	1280.4
18.5°	1468.3	1453.1	1384.2	1344.2	1284.4	1304.9	1266.9
19°	1467.7	1452.7	1384.2	1337.4	1271.8	1304.7	1266.9
19.5°	1467.6	1452.7	1378.6	1337.4	1271.8	1299.3	1255.1
20°	1470.8	1452.0	1373.2	1330.3	1264.5	1299.1	1255.1
20.5°	1470.8	1450.9	1373.2	1330.3	1264.5	1288.6	1242.0
21°	1468.4	1450.8	1367.3	1319.2	1254.2	1280.4	1241.8
21.5°	1468.4	1449.5	1367.3	1319.2	1254.2	1280.4	1226.2
22°	1470.5	1449.5	1359.6	1310.8	1243.1	1272.2	1226.0

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	1470.5	1447.7	1359.6	1310.8	1233.5	1272.0	1209.6
23°	1473.8	1447.8	1353.0	1302.6	1233.4	1263.1	1209.4
23.5°	1474.8	1446.9	1352.9	1292.8	1221.7	1262.9	1192.8
24°	1474.8	1446.9	1346.2	1292.7	1221.7	1250.9	1174.3
24.5°	1475.6	1444.9	1346.1	1281.8	1213.2	1250.7	1174.3
25°	1475.6	1443.9	1337.5	1281.6	1213.2	1239.4	1155.2
25.5°	1474.5	1443.8	1329.4	1271.1	1198.4	1239.2	1155.2
26°	1474.5	1441.5	1329.4	1271.1	1198.4	1225.8	1135.6
26.5°	1473.0	1441.4	1321.2	1259.3	1186.1	1208.1	1135.3
27°	1473.0	1438.9	1321.1	1259.3	1173.1	1207.9	1114.6
27.5°	1473.1	1438.9	1312.8	1247.6	1172.9	1190.5	1114.3
28°	1473.1	1436.5	1312.7	1234.4	1160.9	1190.3	1094.9
28.5°	1468.0	1436.4	1303.4	1234.3	1160.9	1175.3	1072.5
29°	1468.3	1433.9	1303.3	1234.3	1148.6	1175.1	1072.5
29.5°	1468.2	1433.9	1294.9	1217.7	1148.3	1152.1	1052.7
30°	1468.0	1431.2	1294.8	1217.7	1134.9	1151.9	1052.7
30.5°	1467.9	1427.0	1285.5	1204.7	1134.7	1134.1	1034.2
31°	1464.2	1427.0	1276.7	1204.5	1119.6	1133.8	1034.2
31.5°	1464.2	1422.5	1276.6	1191.7	1119.3	1115.9	1011.7
32°	1463.7	1422.5	1266.6	1191.5	1104.8	1092.9	1011.3
32.5°	1463.7	1418.2	1266.5	1176.8	1089.2	1092.6	992.7
33°	1462.2	1418.2	1257.3	1176.7	1089.2	1069.3	992.3
33.5°	1458.9	1414.4	1257.2	1162.8	1068.1	1068.9	972.4
34°	1458.9	1414.4	1245.7	1148.2	1067.9	1050.4	948.0
34.5°	1453.7	1409.6	1245.7	1148.2	1050.4	1050.1	948.0
35°	1453.7	1403.8	1236.4	1131.8	1050.1	1027.7	920.3
35.5°	1454.6	1403.8	1224.5	1131.6	1029.4	1027.3	920.3
36°	1454.4	1398.8	1224.4	1117.9	1029.1	1005.7	891.0
36.5°	1447.7	1398.6	1213.7	1117.8	1010.8	982.0	890.6
37°	1447.7	1393.6	1213.6	1102.8	1010.5	982.0	861.4
37.5°	1445.2	1393.5	1201.4	1102.6	985.6	960.2	861.0
38°	1445.2	1388.4	1201.3	1087.9	959.4	959.8	830.5
38.5°	1441.1	1388.4	1189.3	1070.9	959.1	935.6	830.1
39°	1436.9	1383.7	1189.2	1070.9	959.1	935.6	798.7
39.5°	1436.8	1379.2	1177.5	1054.8	932.8	915.7	768.6
40°	1429.6	1379.1	1177.5	1054.8	909.5	915.3	768.6
40.5°	1429.5	1372.9	1165.2	1037.0	909.2	892.4	736.8
41°	1424.5	1372.8	1151.9	1036.8	878.7	891.9	736.8
41.5°	1424.5	1365.4	1151.8	1018.5	878.4	865.5	702.2
42°	1424.6	1365.4	1139.3	1018.3	847.1	837.2	701.7
42.5°	1424.6	1356.9	1139.1	996.9	814.8	836.7	664.6
43°	1424.1	1356.9	1126.0	996.7	814.8	806.9	664.1
43.5°	1424.1	1349.3	1125.9	979.3	785.2	806.4	627.2
44°	1426.8	1349.4	1111.9	958.4	784.9	775.8	589.9
44.5°	1425.8	1343.5	1111.8	958.4	751.8	775.2	589.9

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	1425.7	1343.5	1098.3	936.8	751.5	745.0	552.1
45.5°	1429.2	1337.5	1098.2	936.8	719.4	744.4	552.1
46°	1429.2	1333.5	1083.0	914.0	719.1	713.6	515.2
46.5°	1428.7	1333.5	1067.8	913.7	687.7	713.0	515.2
47°	1428.7	1331.7	1067.8	891.4	687.3	681.1	478.5
47.5°	1425.7	1331.6	1050.9	891.1	660.1	647.7	477.9
48°	1425.7	1329.8	1050.8	869.2	628.3	647.2	440.6
48.5°	1419.2	1329.7	1031.2	868.9	628.3	611.6	440.0
49°	1415.0	1329.5	1031.2	844.9	598.5	611.1	396.3
49.5°	1415.0	1329.5	1012.9	821.0	598.1	574.9	358.0
50°	1412.2	1329.3	1012.9	821.0	568.7	574.4	358.0
50.5°	1412.2	1330.4	993.3	797.6	568.3	536.4	322.8
51°	1409.9	1330.4	973.3	797.2	537.7	535.9	322.8
51.5°	1409.9	1330.4	973.3	773.7	537.3	497.6	294.4
52°	1408.9	1330.3	953.9	773.3	503.8	460.5	293.8
52.5°	1408.9	1332.0	953.9	749.7	503.4	460.5	268.0
53°	1407.7	1332.0	935.6	749.3	467.1	427.7	267.4
53.5°	1407.3	1334.4	935.7	726.0	429.8	427.1	232.9
54°	1407.5	1334.4	914.0	702.0	429.4	394.7	232.4
54.5°	1396.2	1339.9	914.1	702.0	389.3	394.0	185.6
55°	1396.9	1339.9	895.4	678.6	389.0	363.0	141.6
55.5°	1378.4	1355.9	895.7	678.6	348.7	362.3	141.6
56°	1378.4	1386.9	876.8	654.2	348.3	323.2	108.2
56.5°	1362.7	1386.6	859.2	653.9	307.1	322.5	108.2
57°	1362.7	1417.5	859.8	629.8	306.7	288.8	71.2
57.5°	1293.3	1416.4	844.2	629.5	270.9	259.8	70.7
58°	1293.3	1446.4	844.7	605.1	240.2	259.3	39.2
58.5°	1126.6	1443.6	828.5	604.9	240.2	232.2	38.7
59°	1126.6	1402.1	827.8	580.1	216.7	231.8	30.8
59.5°	938.5	1399.0	812.8	557.5	216.3	192.8	30.2
60°	811.4	1260.3	810.5	557.5	194.0	192.4	28.6
60.5°	809.1	1260.3	796.4	533.4	193.6	143.3	27.1
61°	719.4	1074.5	793.3	533.4	159.9	142.7	27.1
61.5°	718.5	901.5	774.5	506.5	159.4	102.6	25.4
62°	705.3	901.2	762.8	506.3	109.7	101.7	25.4
62.5°	705.3	766.3	760.5	479.2	109.3	76.1	23.5
63°	754.4	767.1	753.2	479.1	76.6	54.2	23.1
63.5°	754.4	636.4	751.0	446.3	63.5	53.9	21.4
64°	599.2	633.8	752.3	409.7	62.9	40.9	21.2
64.5°	342.1	678.5	753.2	409.7	57.5	40.8	20.5
65°	338.4	678.5	770.2	367.7	56.7	35.7	20.5
65.5°	125.9	614.6	769.2	367.7	52.9	35.6	20.5
66°	123.1	614.6	790.2	320.2	52.1	33.2	20.6
66.5°	60.0	613.5	810.8	320.6	48.7	33.1	20.6
67°	58.9	406.1	807.3	275.4	48.0	31.6	20.3

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	52.6	406.0	803.6	275.3	45.7	30.4	20.2
68°	52.6	187.6	799.9	236.6	45.0	30.4	19.9
68.5°	56.5	187.7	772.0	236.2	42.8	29.3	19.9
69°	56.5	67.2	769.9	201.8	40.0	29.3	19.2
69.5°	59.9	67.3	716.4	166.1	39.4	27.9	19.2
70°	54.5	43.0	716.0	166.1	36.4	27.9	18.8
70.5°	54.5	43.0	640.9	135.1	35.9	26.5	19.8
71°	54.1	42.1	640.9	135.1	32.9	26.5	19.8
71.5°	54.1	46.5	537.4	114.5	32.6	25.3	35.4
72°	51.2	46.4	430.0	112.7	29.6	25.3	35.4
72.5°	51.2	45.3	430.0	100.4	29.4	24.3	82.3
73°	49.2	45.2	336.8	76.2	26.3	23.4	82.2
73.5°	49.2	44.2	336.8	76.2	23.7	23.4	128.5
74°	52.0	44.3	258.7	74.8	23.7	22.3	128.5
74.5°	52.0	39.5	258.6	66.2	21.7	22.2	150.2
75°	53.0	39.6	193.6	58.4	21.6	20.0	134.2
75.5°	51.5	39.4	193.6	58.4	20.1	19.9	134.2
76°	51.5	39.4	138.0	51.6	20.0	17.4	124.1
76.5°	46.0	41.5	138.0	51.6	18.4	17.3	124.1
77°	45.9	44.4	98.4	45.3	18.3	15.7	103.5
77.5°	40.8	44.3	77.4	44.9	16.3	15.7	103.5
78°	40.8	47.2	77.5	38.3	16.2	14.8	80.9
78.5°	37.4	47.2	71.0	38.2	14.0	14.7	80.9
79°	37.4	47.5	71.0	31.2	12.3	14.6	53.5
79.5°	36.3	47.5	68.2	23.8	12.2	14.1	53.5
80°	37.5	44.7	68.2	23.8	11.1	14.0	35.0
80.5°	37.5	44.7	65.5	19.8	11.0	13.8	25.0
81°	37.2	39.5	65.4	19.8	9.7	13.8	25.0
81.5°	37.1	34.2	62.0	16.1	9.6	21.6	17.7
82°	36.5	34.2	55.9	16.0	8.9	21.6	17.7
82.5°	36.4	29.3	55.8	13.6	8.9	44.5	12.6
83°	35.3	29.2	46.1	13.4	8.1	55.9	12.8
83.5°	35.3	24.0	46.1	11.6	8.1	55.9	9.6
84°	32.1	24.0	34.7	11.4	6.8	49.9	9.5
84.5°	32.1	18.2	34.6	9.9	5.1	49.9	7.6
85°	26.9	18.2	17.5	8.2	5.1	47.0	7.6
85.5°	22.2	13.2	17.5	8.2	3.5	47.0	6.1
86°	22.1	13.2	17.5	6.7	3.5	43.1	4.8
86.5°	18.5	10.1	17.4	6.7	2.8	43.1	4.8
87°	18.5	7.2	0.5	5.3	2.8	40.1	3.7
87.5°	14.9	7.1	0.5	5.3	1.9	40.1	3.7
88°	14.9	4.6	0.3	4.3	1.9	36.9	2.7
88.5°	11.1	4.6	0.3	4.3	1.0	32.8	2.6
89°	11.1	2.9	0.3	3.4	0.5	32.8	1.6
89.5°	6.9	2.8	0.3	3.4	0.5	27.1	1.5

REPORT NUMBER: P1197147

CATALOG NUMBER: AWPS28S-BZ-MID-4000K-POSITION 0

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	2.6	2.0	0.3	2.7	0.4	27.1	0.9
90.5°	2.6	2.0	0.3	2.3	0.4	19.5	0.7
91°	1.8	1.7	0.3	2.3	0.4	19.5	0.7
91.5°	1.8	1.7	0.3	1.6	0.4	8.8	0.6
92°	1.7	1.7	0.3	1.6	0.3	8.8	0.6
92.5°	1.7	1.6	0.1	1.5	0.3	2.7	0.5
93°	1.7	1.6	0.1	1.5	0.3	2.7	0.5
93.5°	1.7	1.6	0.1	1.5	0.3	1.9	0.6
94°	1.6	1.6	0.1	1.5	0.3	1.8	0.6
94.5°	1.6	1.5	0.3	1.5	0.3	1.8	0.9
95°	1.6	1.5	0.3	1.4	0.2	1.7	0.9
95.5°	1.5	1.5	0.1	1.4	0.2	1.7	0.7
96°	1.5	1.5	0.1	1.4	0.2	1.6	0.5
96.5°	1.5	1.4	0.1	1.4	0.4	1.6	0.5
97°	1.5	1.4	0.1	1.4	0.4	1.5	0.5
97.5°	1.4	1.4	0.1	1.4	0.4	1.5	0.5
98°	1.4	1.3	0.1	1.4	0.4	1.5	0.4
98.5°	1.4	1.3	0.1	1.4	0.4	1.5	0.4
99°	1.4	1.3	0.1	1.2	0.4	1.5	0.4
99.5°	1.2	1.3	0.1	1.2	0.4	1.4	0.4
100°	1.2	1.3	0.1	1.2	0.4	1.4	0.4
100.5°	1.2	1.3	0.1	1.2	0.4	1.4	0.4
101°	1.2	1.3	0.1	1.2	0.4	1.4	0.4
101.5°	1.2	1.3	0.1	1.2	0.4	1.4	0.4
102°	1.2	1.1	0.2	1.2	0.4	1.4	0.4
102.5°	1.2	1.1	0.2	1.1	0.4	1.4	0.5
103°	1.1	1.1	0.2	1.1	0.4	1.4	0.5
103.5°	1.1	1.1	0.2	1.1	0.4	1.4	0.5
104°	1.1	1.1	0.2	1.1	0.4	1.4	0.5
104.5°	1.1	1.1	0.2	1.1	0.5	1.4	0.5
105°	1.1	1.1	0.2	1.1	0.5	1.4	0.5
105.5°	1.1	1.0	0.2	1.1	0.5	1.4	0.5
106°	1.1	1.0	0.2	1.1	0.5	1.2	0.5
106.5°	1.0	1.0	0.2	1.1	0.5	1.2	0.5
107°	1.0	1.0	0.2	1.1	0.5	1.2	0.5
107.5°	1.0	1.0	0.2	1.1	0.5	1.2	0.5
108°	1.0	1.0	0.2	1.1	0.5	1.2	0.5
108.5°	1.0	1.0	0.2	1.1	0.5	1.2	0.5
109°	1.0	0.9	0.2	1.1	0.5	1.2	0.5
109.5°	1.0	0.9	0.2	1.1	0.5	1.2	0.5
110°	1.0	1.0	0.2	1.0	0.6	1.3	0.6
110.5°	1.0	1.0	0.2	1.0	0.6	1.3	0.6
111°	0.9	0.9	0.2	1.0	0.6	1.3	0.6
111.5°	0.9	0.9	0.2	1.0	0.6	1.3	0.6
112°	0.9	0.9	0.2	1.0	0.6	1.3	0.6

REPORT NUMBER: P1197147

CATALOG NUMBER: AWPS28S-BZ-MID-4000K-POSITION 0

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	0.9	0.9	0.2	1.0	0.6	1.3	0.6
113°	0.9	0.9	0.4	1.0	0.6	1.3	0.6
113.5°	0.9	0.9	0.4	1.0	0.6	1.3	0.7
114°	0.9	0.9	0.4	1.0	0.6	1.3	0.7
114.5°	0.9	0.9	0.4	1.0	0.6	1.3	0.7
115°	0.9	0.9	0.4	1.0	0.6	1.3	0.7
115.5°	0.9	0.9	0.4	1.0	0.7	1.3	0.7
116°	0.9	0.9	0.4	1.0	0.7	1.3	0.7
116.5°	0.9	0.9	0.4	1.0	0.7	1.3	0.7
117°	0.9	0.9	0.4	1.0	0.7	1.3	0.8
117.5°	0.8	0.9	0.4	1.0	0.7	1.3	0.8
118°	0.8	0.9	0.4	1.0	0.7	1.3	0.8
118.5°	0.9	0.9	0.4	1.0	0.7	1.3	0.8
119°	0.9	0.9	0.4	1.0	0.7	1.3	0.8
119.5°	0.8	0.9	0.4	1.0	0.7	1.3	0.8
120°	0.8	0.9	0.5	1.0	0.7	1.3	0.8
120.5°	0.8	0.9	0.5	1.0	0.7	1.4	0.8
121°	0.8	0.9	0.5	1.0	0.7	1.4	0.9
121.5°	0.8	0.9	0.5	1.1	0.7	1.4	0.9
122°	0.8	0.9	0.5	1.1	0.7	1.4	0.9
122.5°	0.8	0.9	0.5	1.0	0.7	1.4	0.9
123°	0.8	0.9	0.5	1.0	0.8	1.4	0.9
123.5°	0.8	0.9	0.5	1.1	0.8	1.4	0.9
124°	0.8	0.9	0.5	1.1	0.8	1.4	0.9
124.5°	0.8	0.9	0.5	1.1	0.8	1.4	0.9
125°	0.8	0.9	0.5	1.1	0.8	1.4	0.9
125.5°	0.8	0.9	0.5	1.1	0.8	1.4	1.0
126°	0.8	0.9	0.5	1.1	0.8	1.4	1.0
126.5°	0.8	0.9	0.6	1.1	0.8	1.4	1.0
127°	0.8	0.9	0.6	1.1	0.8	1.4	1.0
127.5°	0.8	0.9	0.6	1.1	0.8	1.4	1.0
128°	0.8	0.9	0.6	1.1	0.8	1.4	1.0
128.5°	0.8	0.9	0.6	1.1	0.8	1.4	1.0
129°	0.8	0.9	0.6	1.1	0.8	1.4	1.0
129.5°	0.8	0.9	0.6	1.1	0.9	1.4	1.0
130°	0.8	1.0	0.6	1.1	0.8	1.4	1.0
130.5°	0.9	1.0	0.6	1.1	0.8	1.4	1.0
131°	0.9	1.0	0.6	1.1	0.9	1.4	1.0
131.5°	0.9	1.0	0.6	1.1	0.9	1.4	1.0
132°	0.9	1.0	0.7	1.1	0.9	1.4	1.0
132.5°	0.9	1.0	0.7	1.1	0.9	1.4	1.0
133°	0.9	1.0	0.7	1.1	0.9	1.4	1.0
133.5°	0.9	1.0	0.7	1.1	0.9	1.4	1.1
134°	0.9	1.0	0.7	1.1	0.9	1.4	1.1
134.5°	0.9	1.0	0.7	1.1	0.9	1.4	1.1

REPORT NUMBER: P1197147

CATALOG NUMBER: AWPS28S-BZ-MID-4000K-POSITION 0

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	0.9	1.0	0.7	1.1	0.9	1.4	1.1
135.5°	0.9	1.0	0.7	1.1	0.9	1.4	1.1
136°	0.9	1.0	0.7	1.1	0.9	1.4	1.1
136.5°	0.9	1.0	0.7	1.1	0.9	1.4	1.1
137°	0.9	1.0	0.7	1.1	0.9	1.4	1.1
137.5°	0.9	1.0	0.7	1.1	0.9	1.4	1.1
138°	0.9	1.0	0.7	1.1	0.9	1.4	1.1
138.5°	0.9	1.0	0.8	1.1	0.9	1.4	1.1
139°	0.9	1.1	0.8	1.1	0.9	1.4	1.1
139.5°	0.9	1.1	0.8	1.1	0.9	1.4	1.1
140°	0.9	1.0	0.8	1.1	0.9	1.4	1.1
140.5°	0.9	1.0	0.8	1.3	0.9	1.4	1.1
141°	0.9	1.1	0.8	1.3	0.9	1.4	1.1
141.5°	1.0	1.1	0.8	1.3	0.9	1.4	1.1
142°	1.0	1.1	0.8	1.3	0.9	1.4	1.1
142.5°	1.0	1.1	0.8	1.3	0.9	1.4	1.1
143°	1.0	1.1	0.8	1.3	0.9	1.4	1.1
143.5°	1.0	1.1	0.8	1.3	0.9	1.4	1.1
144°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
144.5°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
145°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
145.5°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
146°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
146.5°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
147°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
147.5°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
148°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
148.5°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
149°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
149.5°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
150°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
150.5°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
151°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
151.5°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
152°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
152.5°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
153°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
153.5°	1.0	1.1	0.9	1.3	1.0	1.4	1.1
154°	1.1	1.1	1.0	1.3	1.0	1.4	1.1
154.5°	1.1	1.3	1.0	1.3	1.0	1.4	1.1
155°	1.0	1.3	1.0	1.3	1.0	1.4	1.1
155.5°	1.0	1.3	1.0	1.3	1.0	1.4	1.3
156°	1.1	1.3	1.0	1.3	1.0	1.4	1.3
156.5°	1.1	1.3	1.0	1.3	1.0	1.4	1.1
157°	1.1	1.3	1.0	1.3	1.0	1.4	1.1

REPORT NUMBER: P1197147

CATALOG NUMBER: AWPS28S-BZ-MID-4000K-POSITION 0

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1197147
CATALOG NUMBER: AWPS28S-BZ-MID-4000K-POSITION 0

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	1.2	1.2	1.2	1.2	1.2	1.2	1.2

(END OF REPORT)