

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: P1197159

Luminaire Tested: AWPS28S-BZ-MID-5000K-POSITION 15

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1197159
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-5000K-POSITION 15
Description: AWP Architectural Wall Pack Series - Wall Mount Luminaire
Light Source: 87 CRI, 5000K
Ballast/Driver: -

Summary

Lumens per Lamp: 3604 (1 lamp)
Luminaire Lumens: 3528.7 lumens
Efficiency: 97.9%
Efficacy: 132.7 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 - U2 - G3

Input Watts (W): 26.6
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

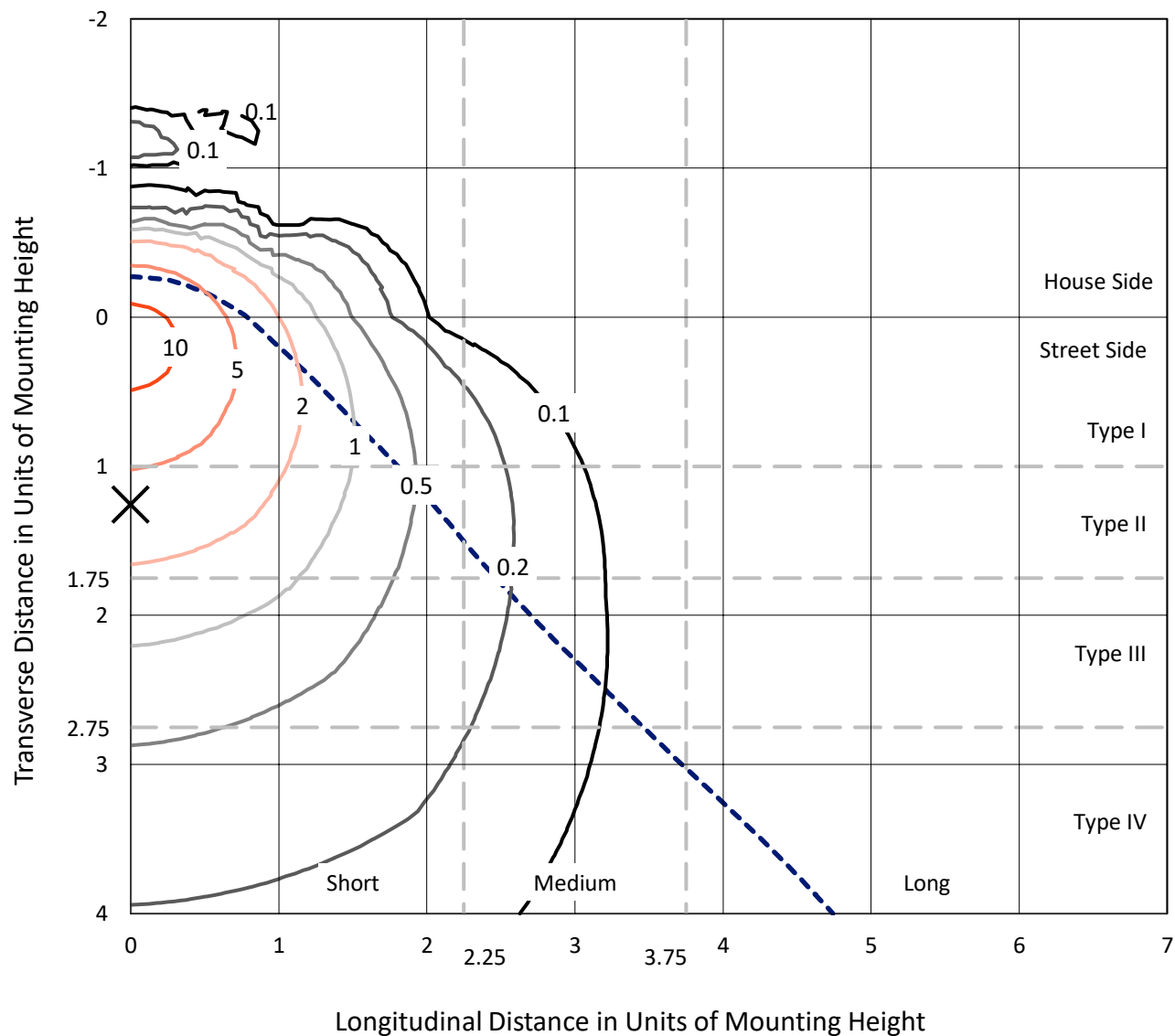
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

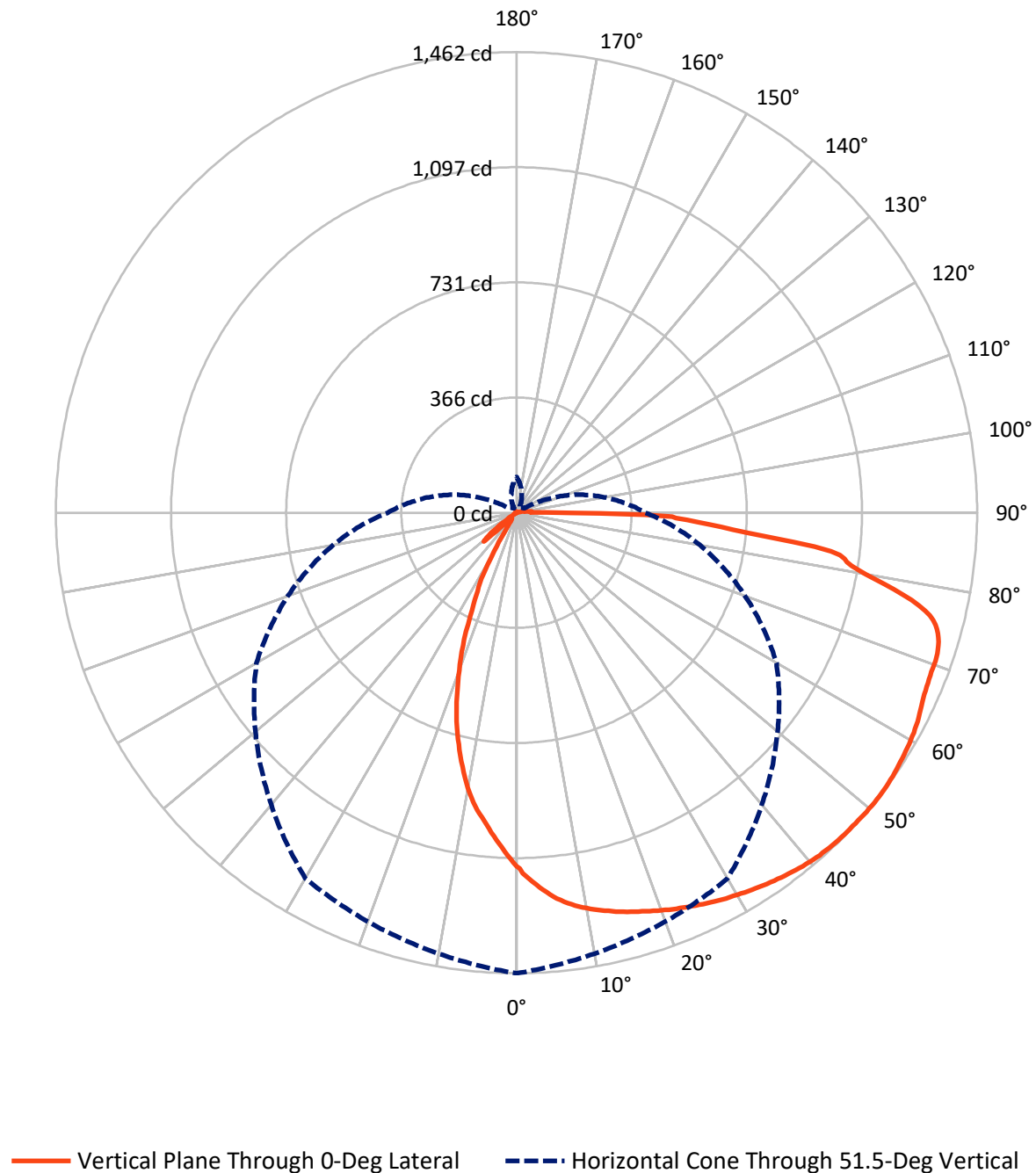


Based on 10 foot mounting height. Maximum calculated value = 12.2 fc
Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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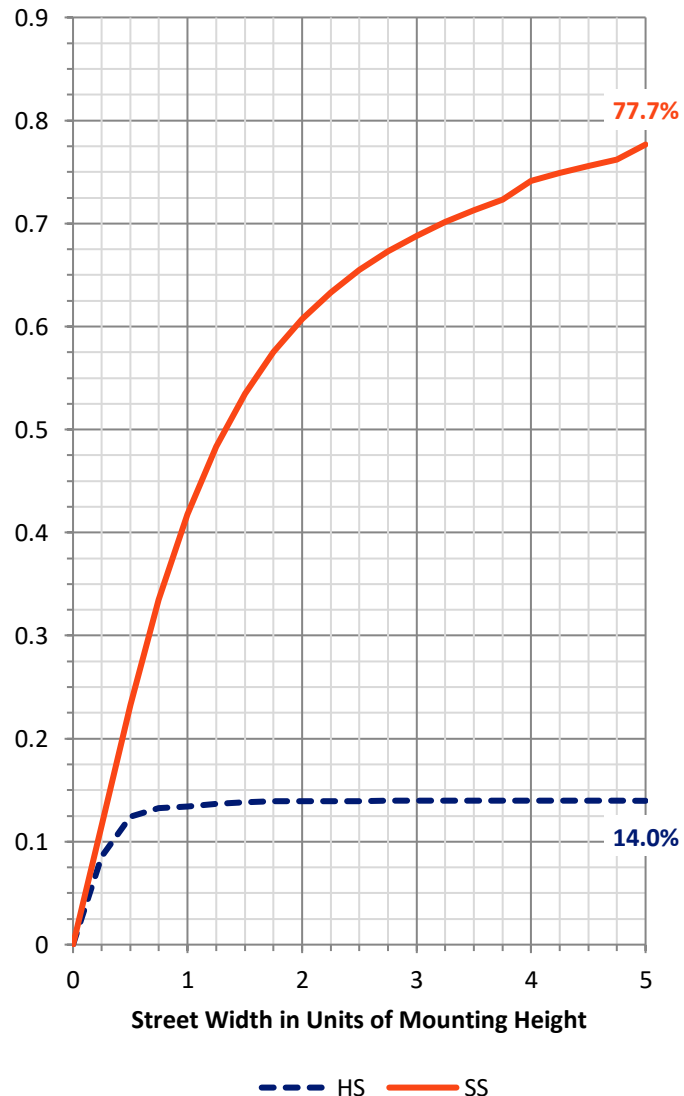
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	509.1	7.9	517.0
	% Lamp	14.1	0.2	14.3
Street Side	Lumens	2983.7	28.1	3011.7
	% Lamp	82.8	0.8	83.6
Total	Lumens	3492.7	35.9	3528.7
	% Lamp	96.9	1.0	97.9

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	106.2	3.0	2.9
10°-20°	295.9	8.4	8.2
20°-30°	419.8	11.9	11.6
30°-40°	469.7	13.3	13.0
40°-50°	493.0	14.0	13.7
50°-60°	503.1	14.3	14.0
60°-70°	472.3	13.4	13.1
70°-80°	443.2	12.6	12.3
80°-90°	289.6	8.2	8.0
90°-100°	25.0	0.7	0.7
100°-110°	3.2	0.1	0.1
110°-120°	1.4	0.0	0.0
120°-130°	1.5	0.0	0.0
130°-140°	1.5	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°	3492.7	99.0	96.9
0°-180°	3528.7	100.0	97.9

Coefficient of Utilization



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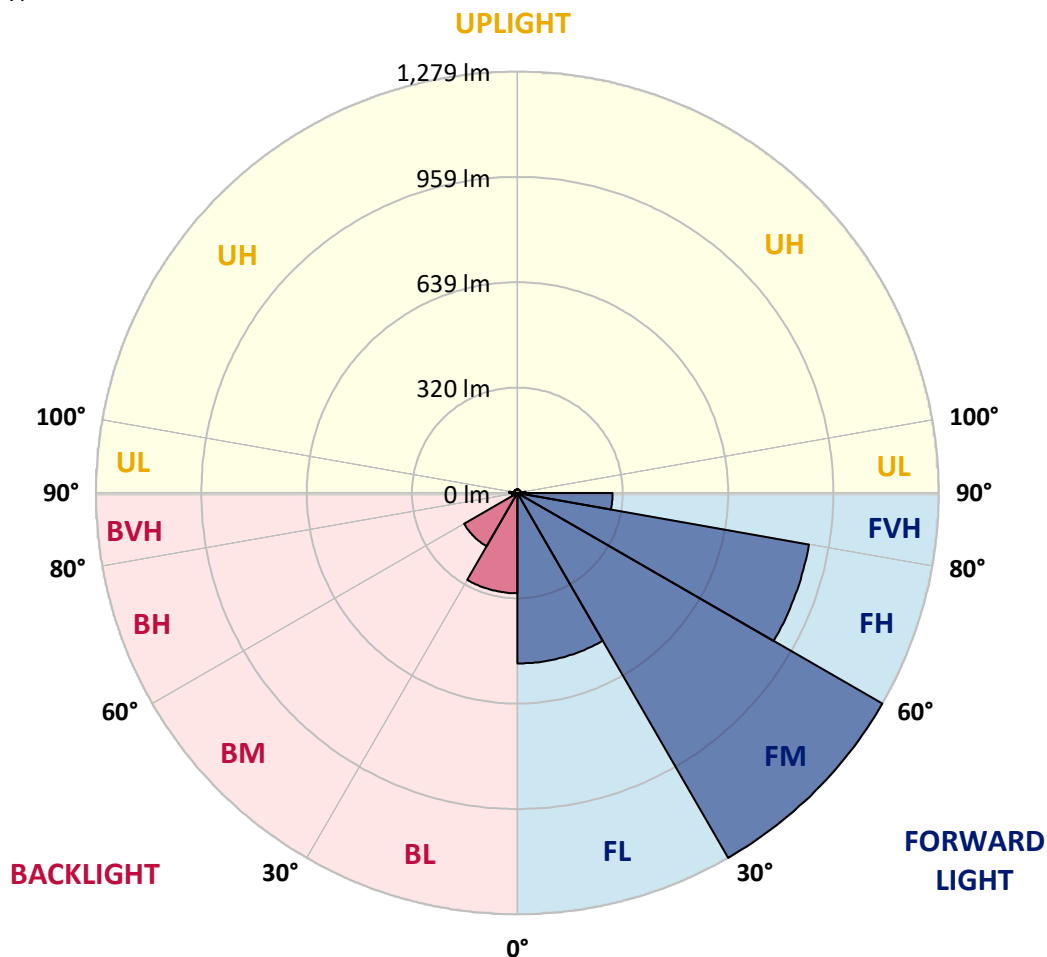
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	517.5	14.4			
FM	(30°-60°)	1279.0	35.5			
FH	(60°-80°)	898.6	24.9			G1/1800
FVH	(80°-90°)	288.6	8.0			G3/500
BL	(0°-30°)	304.4	8.4	B1/500		
BM	(30°-60°)	186.8	5.2	B0/220		
BH	(60°-80°)	16.9	0.5	B0/110		G0/110
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	25.0	0.7		U2/50	
UH	(100°-180°)	11.0	0.3		U2/50	
Trapped Light		75.3	2.1			

BUG Rating: B1-U2-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	1129.8	1129.8	1129.8	1129.8	1129.8	1129.8	1129.8
0.5°	1144.1	1145.1	1138.0	1130.1	1121.1	1110.5	1122.1
1°	1153.9	1153.2	1143.2	1129.9	1115.6	1100.6	1110.7
1.5°	1163.4	1161.4	1147.8	1129.6	1109.8	1090.5	1099.4
2°	1173.1	1169.7	1152.2	1129.3	1103.9	1080.3	1087.8
2.5°	1182.2	1177.6	1156.6	1128.9	1097.6	1070.4	1076.2
3°	1191.2	1185.1	1160.9	1128.3	1091.5	1060.0	1064.4
3.5°	1199.9	1192.5	1165.1	1127.5	1085.4	1049.8	1052.9
4°	1208.4	1199.8	1169.3	1126.7	1079.0	1039.6	1041.5
4.5°	1216.6	1206.8	1173.1	1125.5	1072.6	1029.3	1029.5
5°	1224.0	1213.5	1176.6	1124.2	1065.9	1019.0	1017.7
5.5°	1231.3	1219.7	1180.1	1122.8	1059.1	1008.8	1006.3
6°	1238.0	1225.8	1183.5	1121.5	1052.3	998.5	994.9
6.5°	1244.2	1231.8	1187.0	1119.9	1045.3	988.3	983.6
7°	1250.4	1237.3	1190.3	1118.3	1038.3	978.0	972.9
7.5°	1255.7	1242.4	1193.5	1116.8	1031.3	968.0	962.2
8°	1260.4	1247.3	1196.8	1115.1	1024.5	958.4	952.3
8.5°	1265.8	1251.7	1200.0	1113.6	1017.2	949.0	941.6
9°	1270.3	1255.6	1202.8	1111.6	1009.7	939.7	930.0
9.5°	1274.5	1259.0	1205.5	1109.5	1002.2	929.7	916.4
10°	1278.7	1262.8	1207.9	1107.5	994.5	918.5	902.8
10.5°	1282.7	1265.9	1210.6	1105.4	986.9	906.1	887.6
11°	1286.2	1268.8	1212.8	1103.0	979.3	893.6	871.8
11.5°	1289.9	1271.9	1214.9	1100.4	971.8	880.2	856.4
12°	1293.6	1274.9	1217.1	1097.6	964.0	865.4	840.9
12.5°	1297.5	1277.7	1218.9	1094.5	956.1	851.9	824.3
13°	1301.0	1280.4	1220.5	1091.2	948.5	838.0	807.7
13.5°	1304.8	1283.0	1221.7	1087.8	940.6	822.8	790.9
14°	1307.8	1285.5	1222.5	1084.4	932.9	807.8	774.7
14.5°	1311.3	1288.0	1223.6	1080.6	925.3	792.9	758.1
15°	1315.2	1290.4	1224.1	1076.7	917.3	778.0	742.4
15.5°	1318.4	1293.0	1224.4	1072.6	909.0	762.4	726.0
16°	1321.1	1295.1	1224.6	1068.6	900.3	747.7	708.7
16.5°	1323.9	1297.5	1224.3	1064.3	891.4	732.4	689.9
17°	1326.9	1299.9	1223.8	1060.1	881.5	717.5	670.1
17.5°	1330.3	1302.4	1222.9	1056.0	871.2	702.4	650.5
18°	1333.4	1304.5	1222.1	1051.4	860.8	685.7	631.1
18.5°	1336.5	1306.1	1221.5	1046.7	850.2	668.6	611.2
19°	1339.9	1307.9	1220.7	1041.8	839.2	650.8	591.9
19.5°	1343.6	1309.8	1219.3	1036.6	827.4	632.3	571.5
20°	1346.7	1311.7	1218.0	1031.4	815.8	613.7	551.6
20.5°	1349.7	1313.6	1216.9	1026.1	804.1	595.0	532.1
21°	1352.6	1315.6	1215.6	1021.0	792.3	575.9	513.0
21.5°	1355.7	1317.8	1214.3	1015.4	779.8	556.5	494.0
22°	1358.4	1320.0	1212.7	1009.2	767.5	538.0	474.1

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	1361.2	1322.1	1211.1	1002.6	754.7	519.5	454.0
23°	1364.5	1323.7	1208.9	995.9	741.1	501.5	434.8
23.5°	1367.5	1325.7	1207.0	988.8	727.4	484.2	409.4
24°	1370.4	1327.5	1204.6	982.1	713.5	466.9	384.4
24.5°	1373.7	1329.2	1202.3	975.1	700.1	449.5	361.3
25°	1376.4	1330.8	1199.9	968.0	686.9	431.1	341.4
25.5°	1379.1	1332.6	1197.3	960.8	673.8	413.2	322.7
26°	1382.0	1334.0	1194.3	954.1	660.9	392.1	306.4
26.5°	1385.2	1335.5	1191.4	946.8	648.1	368.9	291.3
27°	1387.8	1337.1	1188.0	939.4	634.8	347.3	277.6
27.5°	1390.3	1338.9	1184.2	931.6	620.3	327.2	263.9
28°	1393.2	1339.9	1180.4	924.1	604.5	309.5	250.2
28.5°	1395.6	1341.3	1176.7	916.6	589.5	294.4	236.5
29°	1398.0	1342.5	1172.8	908.9	573.2	281.3	216.0
29.5°	1400.6	1343.7	1168.8	900.8	556.9	268.2	190.1
30°	1403.3	1344.4	1164.6	892.4	540.6	255.2	163.7
30.5°	1405.8	1345.4	1160.6	884.1	524.3	242.2	142.4
31°	1408.4	1346.6	1156.9	875.9	508.0	228.2	124.2
31.5°	1411.0	1347.6	1153.1	867.2	491.2	211.2	108.1
32°	1413.6	1348.6	1149.1	858.4	474.6	189.3	90.9
32.5°	1416.1	1348.9	1145.5	849.8	458.6	165.3	70.4
33°	1419.1	1349.9	1141.8	841.0	442.1	143.1	51.5
33.5°	1421.3	1350.6	1138.2	832.0	426.3	124.1	39.5
34°	1423.7	1351.3	1134.6	822.5	410.8	108.3	34.6
34.5°	1425.9	1351.8	1131.0	812.2	394.5	93.6	32.7
35°	1428.2	1352.4	1127.5	802.0	378.1	77.6	31.7
35.5°	1430.5	1353.3	1123.8	791.6	363.3	60.5	30.9
36°	1432.9	1353.8	1120.2	780.9	348.2	46.7	30.2
36.5°	1434.9	1353.9	1116.1	769.8	334.7	38.0	29.4
37°	1437.0	1354.1	1112.0	758.7	320.8	34.3	28.5
37.5°	1439.2	1354.4	1107.8	748.2	307.5	32.6	27.5
38°	1441.5	1354.9	1104.0	736.4	294.4	31.4	26.5
38.5°	1443.6	1355.3	1099.5	724.8	281.8	30.6	25.5
39°	1445.4	1355.7	1094.8	712.8	268.7	29.9	24.6
39.5°	1447.4	1355.6	1090.2	700.9	256.0	29.2	24.1
40°	1449.0	1355.5	1086.6	688.7	243.4	28.5	23.9
40.5°	1450.4	1355.4	1081.9	676.6	228.7	27.9	23.8
41°	1452.0	1355.2	1077.2	663.9	214.9	27.4	23.6
41.5°	1453.0	1355.0	1072.2	651.6	201.7	27.0	23.4
42°	1454.2	1354.2	1066.8	638.9	186.0	26.7	23.1
42.5°	1454.9	1353.7	1061.0	625.8	168.3	26.3	22.6
43°	1455.7	1353.1	1056.4	613.4	149.1	25.8	22.1
43.5°	1456.6	1352.8	1051.0	601.3	128.0	25.1	21.6
44°	1457.2	1352.3	1045.8	588.8	106.4	24.2	21.1
44.5°	1457.7	1352.1	1040.6	576.6	86.0	23.3	20.9

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	1458.4	1351.6	1035.2	563.9	70.2	22.4	20.9
45.5°	1458.4	1350.9	1029.9	551.6	59.3	21.5	21.2
46°	1458.8	1350.7	1024.4	539.6	52.5	20.4	22.5
46.5°	1459.1	1350.3	1018.6	527.7	47.8	19.6	26.4
47°	1459.8	1349.6	1012.8	515.8	44.3	18.9	40.1
47.5°	1460.4	1348.7	1006.5	503.8	41.4	18.1	64.6
48°	1460.7	1348.0	1000.5	492.0	39.2	17.4	88.3
48.5°	1461.1	1347.1	993.9	479.7	37.4	16.9	104.4
49°	1461.6	1346.3	987.3	468.2	35.7	16.7	133.7
49.5°	1461.4	1345.0	980.5	456.5	34.4	16.5	138.5
50°	1461.7	1343.6	973.8	445.2	33.1	16.3	129.3
50.5°	1461.8	1342.6	966.6	433.4	31.3	16.0	124.8
51°	1462.0	1341.3	959.5	421.4	29.9	15.8	120.2
51.5°	1462.1	1340.2	952.7	409.4	29.0	15.7	113.5
52°	1461.6	1339.2	945.0	398.0	28.0	15.8	104.8
52.5°	1460.9	1338.1	937.3	385.8	27.3	16.4	92.7
53°	1460.5	1337.1	930.0	373.8	26.6	18.6	81.1
53.5°	1459.8	1336.1	922.3	361.1	25.9	26.0	68.9
54°	1458.8	1334.9	914.5	348.9	25.1	40.6	56.7
54.5°	1457.8	1334.1	906.9	335.6	24.1	52.8	46.7
55°	1456.6	1333.0	899.3	322.3	23.4	56.9	38.8
55.5°	1455.4	1331.6	891.7	309.0	22.6	69.7	32.9
56°	1454.3	1330.4	883.8	294.8	21.9	74.7	27.9
56.5°	1452.8	1329.1	875.9	279.9	21.3	68.6	23.7
57°	1451.3	1327.4	867.8	264.9	20.7	64.8	19.9
57.5°	1450.2	1325.5	860.0	250.0	20.1	62.0	16.6
58°	1449.1	1322.7	852.4	235.1	19.6	60.1	14.1
58.5°	1448.3	1319.7	844.4	220.1	19.0	58.3	12.1
59°	1446.9	1317.0	836.1	204.8	18.4	56.2	10.6
59.5°	1445.2	1314.0	827.8	189.8	17.8	53.7	9.3
60°	1443.5	1311.2	819.7	175.5	17.3	51.0	8.4
60.5°	1441.7	1307.9	811.4	162.9	16.7	47.9	7.6
61°	1439.3	1304.6	803.6	153.6	16.2	44.4	7.0
61.5°	1437.0	1301.6	795.5	145.4	15.6	41.0	6.3
62°	1434.9	1298.4	787.7	140.6	14.9	37.6	5.8
62.5°	1432.3	1295.1	779.8	138.0	14.2	33.9	5.3
63°	1429.5	1292.1	771.5	131.7	13.6	30.3	4.6
63.5°	1426.8	1289.2	763.0	115.9	13.0	26.7	4.0
64°	1424.1	1286.4	755.0	95.1	12.3	23.1	3.3
64.5°	1421.9	1283.6	747.3	79.1	11.6	19.9	2.7
65°	1419.7	1281.3	739.6	71.3	10.8	16.9	2.4
65.5°	1417.2	1278.8	731.6	68.0	10.2	13.8	2.3
66°	1415.5	1276.1	723.4	65.8	9.5	10.3	2.2
66.5°	1414.0	1273.1	715.1	63.9	9.0	6.1	2.1
67°	1413.2	1270.1	706.6	62.0	8.6	2.9	1.9

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	1412.6	1266.8	697.7	60.4	8.1	1.7	1.7
68°	1411.8	1264.3	688.5	58.8	7.7	1.4	1.3
68.5°	1411.1	1261.3	679.5	57.3	7.3	1.4	1.2
69°	1410.6	1258.5	670.2	55.8	6.9	1.4	1.2
69.5°	1410.8	1256.2	660.1	54.5	6.5	1.4	1.3
70°	1410.6	1253.3	650.6	53.4	6.0	1.2	1.3
70.5°	1409.9	1250.0	641.3	52.3	5.5	1.0	1.1
71°	1408.0	1246.3	632.5	51.2	4.9	0.9	1.0
71.5°	1406.5	1243.5	623.7	50.1	4.4	0.8	0.9
72°	1403.9	1242.0	613.9	48.9	3.6	0.8	0.9
72.5°	1401.0	1242.2	605.2	47.8	3.2	0.8	0.8
73°	1397.1	1242.8	596.0	46.5	2.8	0.8	0.8
73.5°	1392.1	1244.7	587.4	45.3	2.5	0.8	0.8
74°	1384.4	1246.7	577.9	44.5	2.3	0.7	0.8
74.5°	1376.3	1249.9	568.4	43.3	2.0	0.7	0.8
75°	1365.8	1253.2	560.4	40.9	1.7	0.7	0.8
75.5°	1351.8	1256.3	552.4	38.1	1.5	0.7	0.8
76°	1333.5	1258.0	544.3	35.0	1.2	0.7	0.8
76.5°	1311.8	1257.2	536.3	32.1	1.0	0.7	0.8
77°	1285.0	1255.2	528.3	28.2	0.8	0.7	0.8
77.5°	1255.3	1253.4	521.9	24.6	0.7	0.7	0.8
78°	1221.8	1250.2	515.4	22.1	0.7	0.7	0.9
78.5°	1189.1	1249.4	509.8	20.0	0.6	0.6	0.9
79°	1156.3	1248.3	504.2	18.2	0.5	0.6	1.0
79.5°	1125.5	1247.1	498.3	16.6	0.5	0.6	1.0
80°	1098.1	1240.5	492.3	15.1	0.5	0.6	1.1
80.5°	1077.1	1229.6	486.5	13.8	0.5	0.6	1.1
81°	1060.8	1209.6	481.7	12.7	0.5	0.6	1.1
81.5°	1051.8	1175.8	478.5	11.4	0.5	0.6	1.1
82°	1036.1	1123.2	477.8	10.2	0.5	0.6	1.2
82.5°	1005.6	1054.5	480.1	9.2	0.5	0.6	1.2
83°	952.5	973.2	485.5	8.3	0.5	0.6	1.2
83.5°	883.1	879.2	494.2	7.6	0.5	0.6	1.2
84°	807.8	788.6	503.8	7.0	0.5	0.6	1.3
84.5°	739.4	721.1	509.1	6.4	0.5	0.7	1.3
85°	689.1	673.8	512.7	5.9	0.5	0.7	1.4
85.5°	652.2	631.2	515.1	5.4	0.5	0.7	1.4
86°	615.2	582.8	512.4	4.9	0.5	0.8	1.5
86.5°	578.2	563.1	502.5	4.4	0.5	0.8	1.5
87°	541.4	585.3	487.5	4.0	0.5	0.8	1.6
87.5°	505.5	611.6	466.3	3.6	0.5	0.9	1.6
88°	493.9	611.7	436.8	3.2	0.6	0.9	1.7
88.5°	407.6	547.7	399.6	2.7	0.6	0.9	1.7
89°	265.2	422.0	354.4	2.4	0.6	1.0	1.8
89.5°	167.1	281.8	303.6	2.0	0.6	1.0	1.8

REPORT NUMBER: P1197159

CATALOG NUMBER: AWPS28S-BZ-MID-5000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	95.3	218.8	252.4	1.5	0.7	1.1	1.9
90.5°	53.1	159.4	205.1	1.3	0.7	1.1	1.9
91°	44.9	100.1	166.2	1.1	0.7	1.1	2.0
91.5°	46.2	40.9	133.1	1.0	0.8	1.2	2.0
92°	46.4	36.3	105.9	0.9	0.8	1.2	2.1
92.5°	45.2	34.2	85.0	0.8	0.8	1.3	2.1
93°	45.0	32.8	69.7	0.8	0.9	1.3	2.2
93.5°	47.6	32.9	57.3	0.7	0.9	1.4	2.2
94°	48.6	34.5	46.2	0.7	0.9	1.4	2.3
94.5°	44.8	34.7	40.8	0.7	1.0	1.5	2.3
95°	39.5	32.3	41.0	0.7	1.0	1.5	2.4
95.5°	35.6	30.0	42.3	0.7	1.0	1.5	2.4
96°	34.7	28.8	44.0	0.7	1.1	1.6	2.5
96.5°	35.0	26.6	46.8	0.7	1.1	1.6	2.5
97°	33.1	23.9	46.5	0.7	1.1	1.7	2.6
97.5°	30.3	22.4	36.6	0.6	1.2	1.7	2.6
98°	29.3	22.2	25.7	0.6	1.2	1.8	2.7
98.5°	28.6	22.5	18.1	0.6	1.3	1.8	2.7
99°	27.8	22.8	15.2	0.6	1.3	1.9	2.7
99.5°	26.3	22.6	13.0	0.6	1.3	1.9	2.8
100°	24.0	21.8	11.1	0.6	1.4	2.0	2.8
100.5°	21.0	20.3	9.3	0.6	1.4	2.0	2.8
101°	17.8	18.2	8.1	0.6	1.4	2.0	2.9
101.5°	15.0	15.6	6.8	0.6	1.5	2.1	2.9
102°	12.7	12.4	5.4	0.6	1.5	2.1	2.9
102.5°	10.9	9.0	4.3	0.6	1.6	2.2	3.0
103°	9.9	6.1	3.5	0.6	1.6	2.2	3.0
103.5°	9.3	4.1	2.9	0.6	1.6	2.3	3.1
104°	8.3	2.7	2.6	0.6	1.7	2.3	3.1
104.5°	6.9	2.1	2.3	0.6	1.7	2.3	3.1
105°	5.0	1.7	2.0	0.7	1.7	2.4	3.1
105.5°	3.2	1.5	1.7	0.7	1.8	2.4	3.2
106°	1.6	1.2	1.5	0.7	1.8	2.5	3.2
106.5°	0.9	0.9	1.2	0.7	1.8	2.5	3.3
107°	0.6	0.6	1.0	0.7	1.8	2.5	3.3
107.5°	0.4	0.4	0.8	0.7	1.9	2.6	3.3
108°	0.3	0.2	0.7	0.7	1.9	2.6	3.3
108.5°	0.1	0.1	0.6	0.8	1.9	2.6	3.3
109°	0.0	0.0	0.5	0.8	2.0	2.7	3.4
109.5°	0.0	0.0	0.5	0.8	2.0	2.7	3.4
110°	0.0	0.0	0.4	0.8	2.0	2.7	3.4
110.5°	0.0	0.0	0.4	0.8	2.1	2.8	3.4
111°	0.0	0.0	0.3	0.9	2.1	2.8	3.4
111.5°	0.0	0.0	0.2	0.9	2.1	2.8	3.5
112°	0.0	0.0	0.2	0.9	2.1	2.8	3.5

REPORT NUMBER: P1197159

CATALOG NUMBER: AWPS28S-BZ-MID-5000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	0.0	0.0	0.2	0.9	2.2	2.8	3.5
113°	0.0	0.0	0.2	0.9	2.2	2.9	3.5
113.5°	0.0	0.0	0.2	0.9	2.2	2.9	3.5
114°	0.0	0.0	0.2	1.0	2.2	2.9	3.6
114.5°	0.0	0.0	0.2	1.0	2.3	3.0	3.6
115°	0.0	0.0	0.2	1.0	2.3	3.0	3.6
115.5°	0.0	0.0	0.2	1.0	2.3	3.0	3.6
116°	0.0	0.0	0.2	1.0	2.4	3.0	3.6
116.5°	0.0	0.0	0.2	1.0	2.4	3.0	3.6
117°	0.0	0.0	0.2	1.1	2.4	3.0	3.6
117.5°	0.0	0.0	0.2	1.1	2.4	3.1	3.6
118°	0.0	0.0	0.2	1.1	2.4	3.1	3.6
118.5°	0.0	0.0	0.2	1.1	2.5	3.1	3.6
119°	0.0	0.0	0.2	1.1	2.5	3.1	3.6
119.5°	0.0	0.0	0.2	1.1	2.5	3.1	3.6
120°	0.0	0.0	0.2	1.2	2.5	3.2	3.6
120.5°	0.0	0.0	0.3	1.2	2.6	3.2	3.7
121°	0.0	0.0	0.3	1.2	2.6	3.2	3.7
121.5°	0.0	0.0	0.3	1.2	2.6	3.2	3.7
122°	0.0	0.0	0.3	1.2	2.6	3.3	3.7
122.5°	0.0	0.0	0.3	1.3	2.6	3.3	3.7
123°	0.0	0.0	0.4	1.3	2.7	3.3	3.7
123.5°	0.0	0.0	0.4	1.3	2.7	3.3	3.7
124°	0.0	0.0	0.4	1.3	2.7	3.3	3.7
124.5°	0.0	0.0	0.4	1.4	2.7	3.3	3.7
125°	0.0	0.0	0.4	1.4	2.7	3.4	3.7
125.5°	0.0	0.0	0.5	1.4	2.7	3.4	3.7
126°	0.0	0.0	0.5	1.4	2.7	3.4	3.7
126.5°	0.0	0.0	0.5	1.4	2.8	3.4	3.7
127°	0.0	0.0	0.5	1.4	2.8	3.4	3.7
127.5°	0.0	0.0	0.5	1.5	2.8	3.4	3.7
128°	0.0	0.0	0.6	1.5	2.8	3.4	3.7
128.5°	0.0	0.0	0.6	1.5	2.8	3.5	3.7
129°	0.0	0.0	0.6	1.5	2.8	3.5	3.7
129.5°	0.0	0.0	0.6	1.5	2.8	3.5	3.7
130°	0.0	0.0	0.7	1.6	2.9	3.5	3.8
130.5°	0.0	0.0	0.7	1.6	2.9	3.5	3.8
131°	0.0	0.0	0.7	1.6	2.9	3.5	3.8
131.5°	0.0	0.0	0.7	1.6	2.9	3.5	3.8
132°	0.0	0.0	0.8	1.7	2.9	3.5	3.8
132.5°	0.0	0.0	0.8	1.7	2.9	3.6	3.8
133°	0.0	0.1	0.8	1.7	2.9	3.6	3.8
133.5°	0.0	0.1	0.8	1.7	2.9	3.6	3.9
134°	0.0	0.1	0.9	1.7	2.9	3.6	3.9
134.5°	0.0	0.1	0.9	1.7	2.9	3.6	3.9

REPORT NUMBER: P1197159

CATALOG NUMBER: AWPS28S-BZ-MID-5000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	0.1	0.1	0.9	1.8	2.9	3.6	3.9
135.5°	0.1	0.1	0.9	1.8	2.9	3.6	3.9
136°	0.1	0.2	0.9	1.8	2.9	3.6	3.9
136.5°	0.1	0.2	1.0	1.8	2.9	3.6	3.9
137°	0.1	0.2	1.0	1.8	3.0	3.6	3.9
137.5°	0.1	0.2	1.0	1.9	3.0	3.6	3.9
138°	0.1	0.2	1.1	1.9	3.0	3.6	3.9
138.5°	0.1	0.3	1.1	1.9	3.0	3.6	3.9
139°	0.2	0.3	1.1	1.9	3.0	3.6	3.9
139.5°	0.2	0.3	1.1	2.0	3.0	3.6	3.8
140°	0.2	0.4	1.1	2.0	3.0	3.6	3.8
140.5°	0.2	0.4	1.2	2.0	3.0	3.6	3.8
141°	0.2	0.4	1.2	2.0	3.0	3.6	3.8
141.5°	0.2	0.4	1.2	2.0	3.0	3.6	3.8
142°	0.3	0.4	1.2	2.0	3.0	3.6	3.8
142.5°	0.3	0.4	1.3	2.1	3.0	3.6	3.8
143°	0.3	0.5	1.3	2.1	3.1	3.6	3.8
143.5°	0.3	0.5	1.3	2.1	3.1	3.6	3.8
144°	0.3	0.5	1.3	2.1	3.1	3.6	3.8
144.5°	0.3	0.5	1.4	2.1	3.1	3.6	3.8
145°	0.4	0.6	1.4	2.1	3.1	3.6	3.8
145.5°	0.4	0.6	1.4	2.2	3.1	3.6	3.7
146°	0.4	0.6	1.4	2.2	3.1	3.6	3.7
146.5°	0.4	0.7	1.5	2.2	3.1	3.6	3.7
147°	0.5	0.7	1.5	2.2	3.1	3.6	3.7
147.5°	0.5	0.7	1.5	2.2	3.1	3.6	3.7
148°	0.5	0.8	1.5	2.2	3.1	3.6	3.7
148.5°	0.5	0.8	1.5	2.3	3.1	3.6	3.7
149°	0.5	0.8	1.6	2.3	3.1	3.6	3.7
149.5°	0.6	0.8	1.6	2.3	3.2	3.6	3.7
150°	0.6	0.9	1.6	2.3	3.2	3.6	3.7
150.5°	0.6	0.9	1.7	2.3	3.2	3.6	3.7
151°	0.7	0.9	1.7	2.4	3.2	3.6	3.7
151.5°	0.7	1.0	1.7	2.4	3.2	3.6	3.6
152°	0.7	1.0	1.7	2.4	3.2	3.6	3.6
152.5°	0.7	1.0	1.7	2.4	3.2	3.6	3.6
153°	0.8	1.1	1.8	2.4	3.2	3.6	3.6
153.5°	0.8	1.1	1.8	2.4	3.2	3.6	3.6
154°	0.8	1.1	1.8	2.5	3.2	3.6	3.6
154.5°	0.8	1.1	1.8	2.5	3.2	3.6	3.6
155°	0.9	1.2	1.9	2.5	3.2	3.6	3.6
155.5°	0.9	1.2	1.9	2.6	3.2	3.6	3.6
156°	0.9	1.2	1.9	2.5	3.2	3.6	3.5
156.5°	1.0	1.3	1.9	2.6	3.2	3.6	3.5
157°	1.0	1.3	2.0	2.6	3.2	3.6	3.5

REPORT NUMBER: P1197159

CATALOG NUMBER: AWPS28S-BZ-MID-5000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
157.5°	1.0	1.3	2.0	2.6	3.2	3.6	3.5
158°	1.0	1.4	2.0	2.6	3.2	3.6	3.5
158.5°	1.1	1.4	2.0	2.6	3.2	3.6	3.5
159°	1.1	1.4	2.1	2.6	3.2	3.6	3.5
159.5°	1.1	1.4	2.1	2.6	3.2	3.5	3.5
160°	1.2	1.5	2.1	2.6	3.2	3.5	3.5
160.5°	1.2	1.5	2.1	2.6	3.2	3.5	3.5
161°	1.2	1.5	2.1	2.7	3.2	3.5	3.4
161.5°	1.2	1.5	2.2	2.7	3.2	3.5	3.4
162°	1.3	1.6	2.2	2.7	3.2	3.5	3.4
162.5°	1.3	1.6	2.2	2.7	3.2	3.5	3.4
163°	1.3	1.6	2.2	2.7	3.2	3.5	3.3
163.5°	1.3	1.7	2.3	2.7	3.2	3.5	3.3
164°	1.4	1.7	2.3	2.8	3.2	3.5	3.3
164.5°	1.4	1.7	2.3	2.8	3.2	3.5	3.3
165°	1.4	1.7	2.3	2.8	3.2	3.5	3.3
165.5°	1.5	1.8	2.3	2.8	3.2	3.4	3.3
166°	1.5	1.8	2.4	2.8	3.2	3.4	3.3
166.5°	1.5	1.8	2.4	2.8	3.2	3.4	3.2
167°	1.6	1.9	2.4	2.8	3.2	3.4	3.2
167.5°	1.6	1.9	2.5	2.8	3.2	3.4	3.2
168°	1.6	2.0	2.5	2.8	3.2	3.4	3.2
168.5°	1.7	2.0	2.5	2.8	3.2	3.4	3.2
169°	1.7	2.0	2.5	2.9	3.2	3.4	3.2
169.5°	1.8	2.0	2.6	2.9	3.2	3.4	3.1
170°	1.8	2.1	2.6	2.9	3.2	3.4	3.1
170.5°	1.8	2.1	2.6	2.9	3.2	3.3	3.1
171°	1.9	2.1	2.6	2.9	3.2	3.3	3.0
171.5°	1.9	2.1	2.6	2.9	3.2	3.3	3.0
172°	1.9	2.2	2.7	2.9	3.1	3.3	3.0
172.5°	2.0	2.2	2.7	2.9	3.1	3.3	3.0
173°	2.0	2.3	2.7	2.9	3.1	3.3	2.9
173.5°	2.0	2.3	2.7	3.0	3.1	3.2	2.9
174°	2.1	2.3	2.8	3.0	3.1	3.2	2.9
174.5°	2.1	2.3	2.8	3.0	3.1	3.2	2.9
175°	2.1	2.4	2.8	3.0	3.1	3.2	2.8
175.5°	2.2	2.4	2.8	3.0	3.1	3.2	2.8
176°	2.2	2.4	2.8	3.0	3.1	3.2	2.8
176.5°	2.3	2.4	2.8	3.0	3.1	3.1	2.7
177°	2.3	2.5	2.8	3.0	3.1	3.1	2.7
177.5°	2.3	2.6	2.8	3.0	3.1	3.1	2.7
178°	2.4	2.6	2.9	3.0	3.1	3.1	2.6
178.5°	2.4	2.6	2.9	3.0	3.1	3.1	2.6
179°	2.4	2.6	2.9	3.0	3.0	3.1	2.6
179.5°	2.4	2.6	2.9	3.0	3.0	3.0	2.5



REPORT NUMBER: P1197159
CATALOG NUMBER: AWPS28S-BZ-MID-5000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	2.5	2.5	2.5	2.5	2.5	2.5	2.5

(END OF REPORT)