

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: P1197025

Luminaire Tested: AWPf28S-BZ-HIGH-3000K-POSITION 45

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1197025
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-HIGH-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: 3426.7 lumens
Efficiency: 100.1%
Efficacy: 117.0 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 - U3 - G3

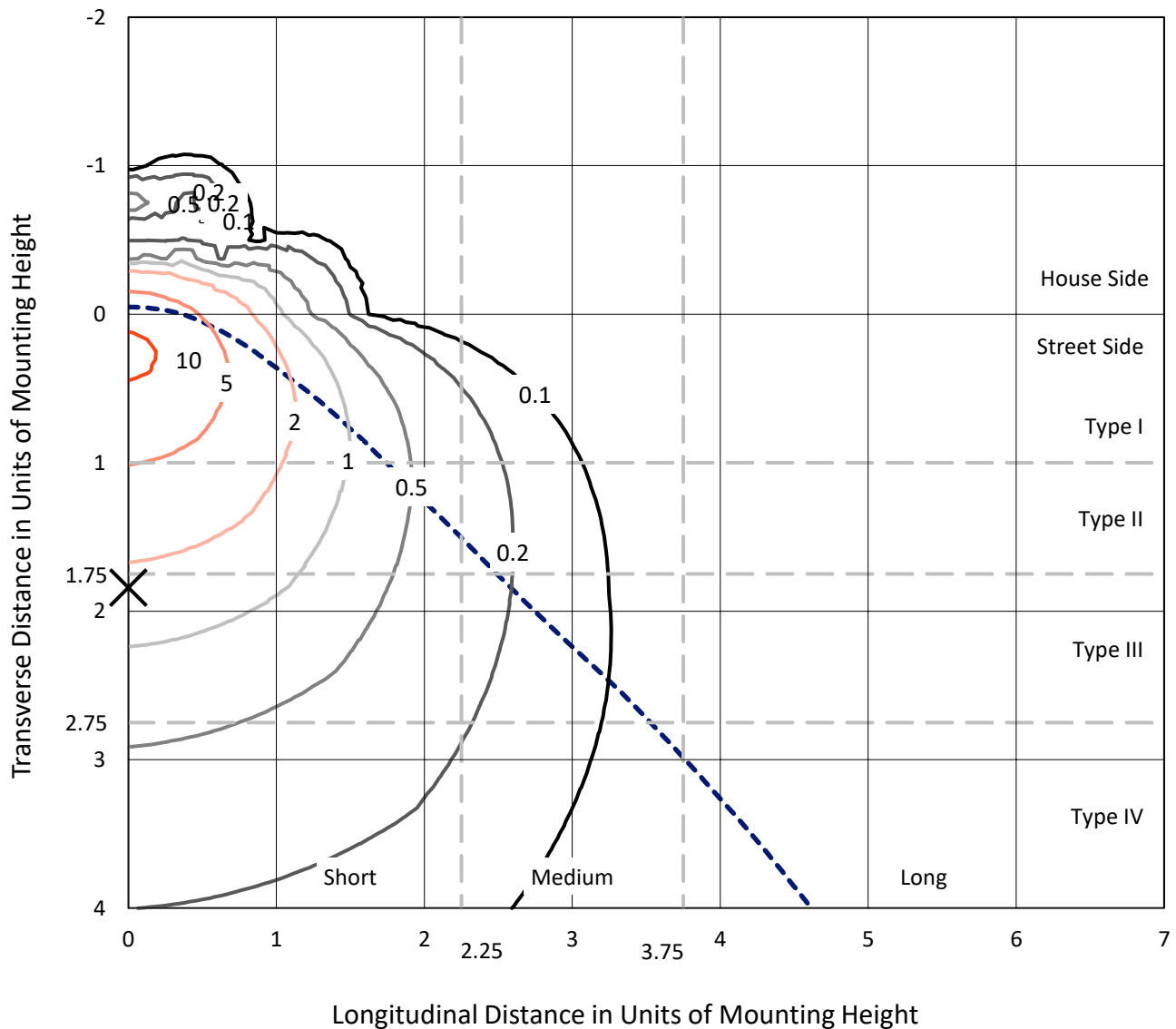
Input Watts (W): 29.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

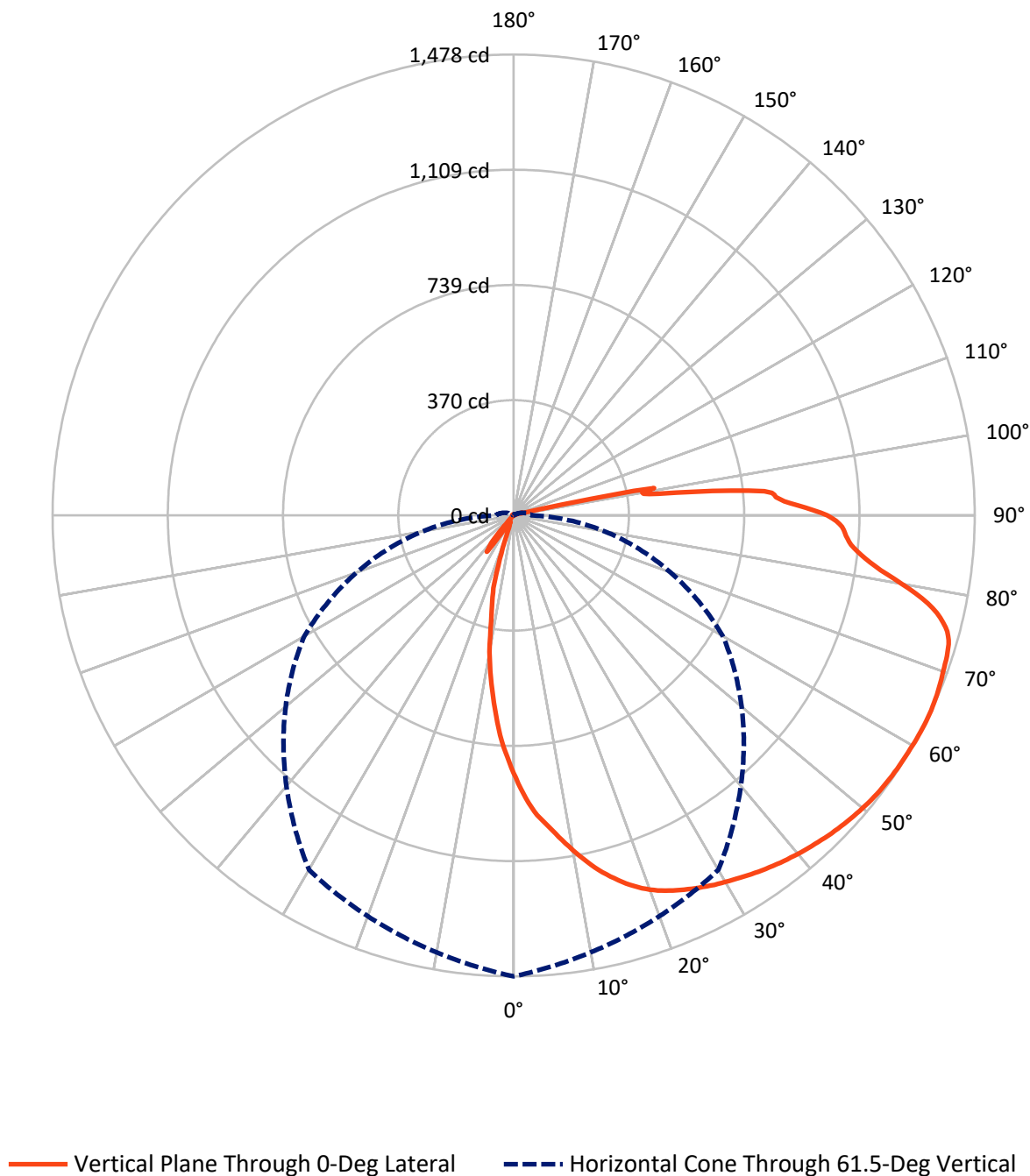


Based on 10 foot mounting height. Maximum calculated value = 10.9 fc
Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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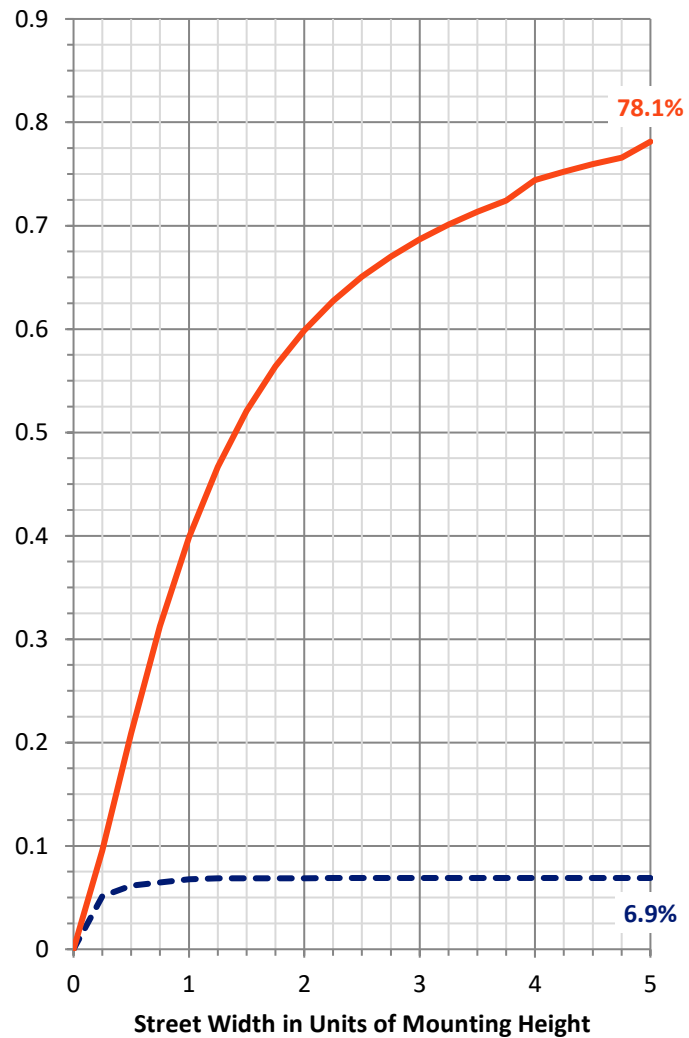
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	239.0	8.0	247.0
	% Lamp	7.0	0.2	7.2
Street Side	Lumens	2940.6	239.2	3179.7
	% Lamp	85.9	7.0	92.9
Total	Lumens	3179.5	247.2	3426.7
	% Lamp	92.9	7.2	100.1

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	78.0	2.3	2.3
10°-20°	211.9	6.2	6.2
20°-30°	307.2	9.0	9.0
30°-40°	385.8	11.3	11.3
40°-50°	445.1	13.0	13.0
50°-60°	461.1	13.5	13.5
60°-70°	466.8	13.6	13.6
70°-80°	453.4	13.2	13.2
80°-90°	370.0	10.8	10.8
90°-100°	220.9	6.4	6.5
100°-110°	18.7	0.5	0.5
110°-120°	2.1	0.1	0.1
120°-130°	1.4	0.0	0.0
130°-140°	1.3	0.0	0.0
140°-150°	1.1	0.0	0.0
150°-160°	0.9	0.0	0.0
160°-170°	0.6	0.0	0.0
170°-180°	0.2	0.0	0.0
0°-90°	3179.5	92.8	92.9
0°-180°	3426.7	100.0	100.1

Coefficient of Utilization



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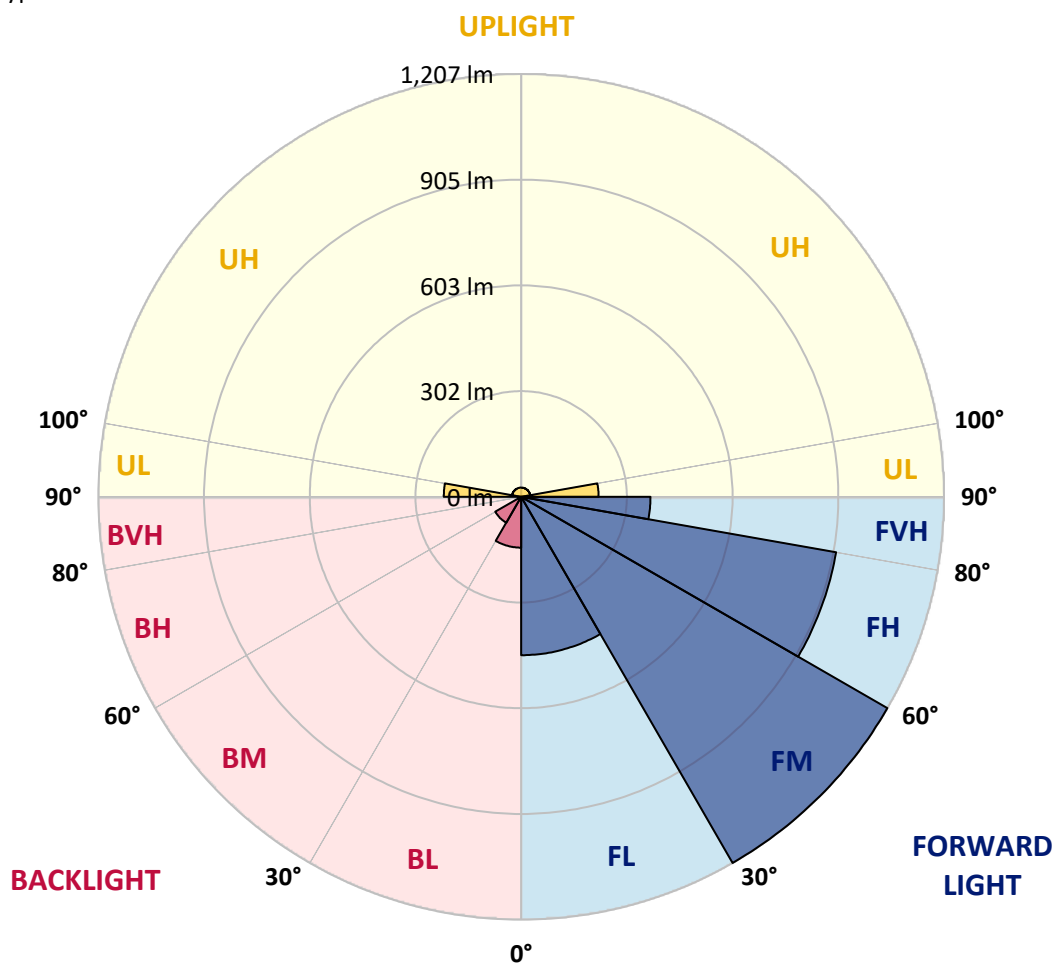
CATALOG NUMBER: AWPf28S-BZ-HIGH-3000K-POSITION 45

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	452.0	13.2			
FM	(30°-60°)	1206.8	35.3			
FH	(60°-80°)	912.7	26.7			G1/1800
FVH	(80°-90°)	369.0	10.8			G3/500
BL	(0°-30°)	145.2	4.2	B1/500		
BM	(30°-60°)	85.3	2.5	B0/220		
BH	(60°-80°)	7.5	0.2	B0/110		G0/110
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	220.9	6.5		U3/500	
UH	(100°-180°)	26.3	0.8		U2/50	
Trapped Light		-4.7	-0.1			

BUG Rating: B1-U3-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	840.4	840.4	840.4	840.4	840.4	840.4	840.4
0.5°	860.4	863.2	853.0	842.0	828.1	812.0	826.2
1°	876.5	876.8	861.5	841.8	819.8	797.5	809.5
1.5°	892.0	890.3	869.7	841.5	810.9	782.5	792.5
2°	907.8	904.0	876.6	840.9	802.2	768.0	775.6
2.5°	923.9	917.4	884.1	840.5	793.5	753.9	759.4
3°	937.8	929.9	891.6	839.7	784.3	739.5	742.5
3.5°	951.7	942.3	899.1	839.0	775.3	724.1	724.6
4°	963.8	953.1	906.4	838.3	766.5	708.1	705.8
4.5°	974.4	963.0	913.8	837.4	757.6	691.2	685.6
5°	984.8	971.9	920.1	836.3	748.7	673.2	665.8
5.5°	995.3	980.4	926.3	835.2	739.8	656.0	645.4
6°	1006.3	989.3	932.3	833.7	730.3	638.2	624.8
6.5°	1017.5	998.6	938.1	832.3	720.6	620.0	605.1
7°	1029.2	1008.2	943.5	830.7	710.4	602.5	584.6
7.5°	1041.0	1017.4	948.5	829.0	699.7	584.3	564.1
8°	1053.1	1027.2	952.8	827.4	689.2	566.3	544.0
8.5°	1065.2	1037.0	956.8	825.4	678.0	548.9	525.0
9°	1076.9	1047.0	960.6	823.4	666.8	530.9	505.8
9.5°	1089.0	1057.3	964.3	821.4	655.1	514.0	485.5
10°	1100.9	1067.0	967.9	818.9	643.1	497.2	464.9
10.5°	1112.7	1076.9	971.7	816.3	631.2	480.0	444.5
11°	1124.4	1086.8	975.4	813.6	619.3	461.6	418.3
11.5°	1135.9	1096.4	978.8	810.9	607.0	444.1	393.4
12°	1147.7	1105.7	982.6	808.1	594.5	424.4	369.7
12.5°	1158.7	1115.2	986.3	805.2	581.0	402.3	348.9
13°	1169.4	1124.7	989.9	802.1	567.5	379.2	330.1
13.5°	1179.3	1133.8	993.7	798.8	554.0	358.3	313.0
14°	1188.7	1143.0	997.0	795.4	540.5	339.6	298.3
14.5°	1198.7	1151.7	1000.8	791.8	527.0	322.8	284.0
15°	1207.6	1159.9	1004.7	787.9	514.7	307.2	269.7
15.5°	1216.9	1168.1	1008.6	783.7	501.8	292.3	255.5
16°	1225.6	1176.0	1012.1	779.7	489.6	280.2	241.2
16.5°	1234.4	1184.0	1015.8	775.7	477.3	268.0	219.3
17°	1242.4	1191.6	1019.4	771.6	465.0	255.8	193.2
17.5°	1249.8	1198.5	1022.8	767.4	453.0	243.6	166.8
18°	1257.4	1205.5	1025.9	762.4	440.5	227.7	145.6
18.5°	1264.4	1212.4	1028.6	757.2	427.6	208.2	127.0
19°	1271.0	1219.0	1031.4	751.9	414.3	184.6	111.1
19.5°	1277.1	1225.2	1034.2	746.4	401.1	162.0	92.3
20°	1282.9	1231.2	1036.6	740.7	388.2	141.5	71.2
20.5°	1288.2	1236.5	1038.9	735.2	376.0	124.9	52.4
21°	1292.9	1241.9	1041.4	729.7	362.4	110.1	41.8
21.5°	1297.9	1246.8	1043.8	724.0	347.3	95.2	37.4
22°	1302.3	1251.3	1045.8	718.2	332.3	78.2	35.6

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	1306.5	1255.7	1048.0	712.8	318.0	60.4	34.4
23°	1311.0	1259.7	1050.1	706.9	304.4	45.9	33.3
23.5°	1315.0	1262.8	1052.1	700.8	292.2	37.7	32.3
24°	1319.0	1266.3	1053.7	694.8	281.2	34.4	31.5
24.5°	1322.7	1269.2	1055.3	688.6	270.2	32.8	30.5
25°	1326.9	1272.0	1056.7	682.3	259.9	31.9	29.5
25.5°	1330.5	1274.7	1057.6	675.9	249.8	31.2	28.3
26°	1334.3	1277.4	1058.6	669.6	239.6	30.7	27.1
26.5°	1337.6	1279.8	1059.5	663.4	229.2	30.2	26.1
27°	1341.1	1282.0	1060.2	656.9	219.9	29.9	25.5
27.5°	1344.7	1284.0	1060.3	650.1	209.8	29.4	25.1
28°	1348.3	1285.8	1060.6	643.0	197.8	29.0	24.9
28.5°	1351.3	1287.6	1060.7	636.0	183.0	28.4	24.6
29°	1354.2	1289.0	1060.7	628.5	165.8	27.7	24.2
29.5°	1357.3	1290.6	1060.8	620.8	146.9	26.9	23.7
30°	1360.4	1292.2	1060.9	613.4	128.2	26.1	23.1
30.5°	1363.6	1293.7	1060.2	605.6	111.1	25.3	22.7
31°	1367.0	1295.0	1059.7	597.6	95.9	24.4	22.1
31.5°	1370.1	1296.8	1059.4	589.5	83.1	23.6	21.5
32°	1373.6	1297.9	1058.8	581.1	72.3	22.9	21.1
32.5°	1376.8	1299.2	1058.2	573.0	64.2	22.2	20.7
33°	1380.0	1300.5	1057.7	564.8	57.3	21.6	20.8
33.5°	1383.0	1301.6	1057.2	556.7	52.1	21.1	21.5
34°	1386.2	1302.7	1056.6	548.1	47.9	20.7	24.9
34.5°	1389.4	1304.1	1055.6	539.1	43.9	20.4	41.0
35°	1392.5	1305.5	1054.4	530.1	39.6	20.1	67.6
35.5°	1395.2	1306.9	1052.7	520.9	36.2	19.7	90.3
36°	1398.3	1308.4	1051.0	511.6	33.9	19.3	109.1
36.5°	1401.0	1310.0	1049.2	502.0	32.3	19.2	142.5
37°	1404.0	1311.4	1047.2	492.6	31.0	18.9	144.7
37.5°	1406.4	1313.0	1045.1	482.8	30.2	18.5	134.3
38°	1409.2	1314.1	1042.8	473.2	29.3	18.2	130.5
38.5°	1412.0	1315.4	1040.3	463.2	28.4	18.0	126.6
39°	1414.9	1317.1	1037.7	453.5	27.6	18.0	120.4
39.5°	1417.5	1318.4	1034.6	443.4	26.7	18.5	111.1
40°	1419.8	1319.4	1031.3	433.0	26.0	21.6	98.6
40.5°	1422.5	1320.6	1027.8	422.7	25.5	31.8	86.4
41°	1424.8	1321.6	1024.5	411.8	25.1	48.4	71.9
41.5°	1427.1	1322.4	1021.0	401.5	24.7	60.6	57.5
42°	1429.7	1323.3	1017.1	390.3	24.3	65.5	45.8
42.5°	1432.1	1323.8	1013.0	378.7	23.9	81.8	38.2
43°	1434.4	1324.2	1008.9	368.0	23.3	92.4	32.8
43.5°	1437.0	1324.5	1004.5	356.9	22.6	83.0	28.0
44°	1439.3	1324.8	999.7	346.5	21.9	78.0	23.8
44.5°	1441.5	1324.9	995.1	335.6	21.3	75.1	19.8

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	1443.5	1325.3	990.1	324.3	20.7	72.7	16.4
45.5°	1445.9	1325.4	985.1	312.9	20.2	70.5	13.9
46°	1447.8	1325.6	979.8	301.5	19.8	67.7	12.1
46.5°	1449.8	1325.9	974.1	289.9	19.3	64.5	10.7
47°	1451.7	1325.8	968.8	278.7	18.9	61.1	9.6
47.5°	1453.3	1326.1	963.2	267.6	18.5	57.8	8.7
48°	1455.3	1326.1	957.2	256.4	18.1	54.5	8.1
48.5°	1457.1	1326.5	951.5	245.3	17.6	51.0	7.6
49°	1458.7	1326.6	945.8	235.3	17.1	46.6	7.0
49.5°	1460.3	1326.2	939.8	225.2	16.5	42.1	6.5
50°	1461.9	1326.1	934.2	215.7	15.9	37.6	6.0
50.5°	1463.8	1326.3	928.2	207.4	15.3	33.0	5.3
51°	1465.3	1326.0	922.4	199.8	14.9	29.2	4.6
51.5°	1466.4	1325.7	916.7	192.8	14.4	25.8	4.0
52°	1468.1	1325.5	910.5	186.7	13.9	22.9	3.4
52.5°	1469.0	1324.9	904.5	181.1	13.4	20.2	3.1
53°	1469.6	1324.2	898.7	175.1	12.9	17.7	3.0
53.5°	1470.6	1323.4	892.3	168.5	12.4	15.4	2.9
54°	1471.4	1322.7	886.0	162.4	11.9	13.2	2.8
54.5°	1472.2	1321.4	879.7	156.1	11.5	10.2	2.6
55°	1472.9	1320.5	873.3	148.4	11.1	5.8	2.3
55.5°	1473.1	1319.8	866.8	137.7	10.7	3.1	2.1
56°	1473.7	1318.8	860.0	123.9	10.3	2.3	1.9
56.5°	1474.1	1318.4	852.7	107.4	9.9	2.1	1.8
57°	1474.4	1317.7	845.2	91.1	9.5	2.0	1.5
57.5°	1474.9	1317.5	837.7	79.1	9.1	2.0	1.2
58°	1475.1	1317.3	829.9	71.9	8.6	1.9	1.1
58.5°	1475.5	1316.6	822.3	67.4	8.2	1.8	0.9
59°	1476.0	1316.3	814.7	64.6	7.7	1.6	0.8
59.5°	1476.7	1315.6	806.7	62.8	7.2	1.4	0.7
60°	1477.3	1314.9	798.7	61.9	6.8	1.2	0.7
60.5°	1477.5	1314.2	790.6	60.9	6.4	0.9	0.6
61°	1477.7	1313.5	782.6	59.9	6.0	0.8	0.6
61.5°	1478.2	1312.4	774.6	58.8	5.6	0.7	0.6
62°	1478.1	1311.5	767.0	57.8	5.2	0.7	0.6
62.5°	1478.2	1310.8	760.0	56.8	4.8	0.6	0.6
63°	1478.2	1310.4	752.5	55.8	4.4	0.6	0.6
63.5°	1478.1	1309.9	745.0	54.6	4.0	0.6	0.6
64°	1477.9	1309.2	737.3	53.2	3.6	0.6	0.6
64.5°	1477.4	1308.6	730.0	51.9	3.3	0.6	0.6
65°	1476.3	1307.9	722.8	50.6	3.0	0.6	0.7
65.5°	1475.8	1307.3	715.7	49.2	2.8	0.6	0.7
66°	1475.0	1307.0	708.8	47.5	2.6	0.6	0.7
66.5°	1473.9	1306.0	701.6	45.9	2.3	0.6	0.7
67°	1472.4	1305.1	695.1	44.5	2.1	0.6	0.8

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	1471.3	1304.2	688.4	43.1	1.8	0.6	0.8
68°	1469.8	1302.8	681.7	41.7	1.6	0.6	0.8
68.5°	1468.5	1301.6	675.1	40.6	1.3	0.5	0.8
69°	1467.1	1299.9	668.4	39.6	1.2	0.5	0.9
69.5°	1465.4	1297.8	661.7	39.0	1.1	0.5	0.9
70°	1464.1	1295.6	654.7	38.8	1.1	0.6	0.9
70.5°	1462.8	1293.2	647.2	38.9	1.0	0.6	0.9
71°	1462.0	1291.0	639.7	38.9	0.9	0.6	1.0
71.5°	1460.4	1288.0	632.0	38.8	0.9	0.6	1.0
72°	1458.7	1285.3	624.4	38.4	0.7	0.6	1.0
72.5°	1456.8	1283.2	617.5	37.5	0.7	0.6	1.1
73°	1454.6	1280.9	610.6	36.4	0.7	0.6	1.1
73.5°	1450.7	1278.3	603.5	34.4	0.7	0.6	1.2
74°	1445.4	1275.9	597.4	31.7	0.6	0.6	1.2
74.5°	1439.2	1273.3	590.9	29.2	0.6	0.7	1.3
75°	1430.6	1271.5	585.1	25.6	0.6	0.7	1.3
75.5°	1419.2	1267.9	579.9	22.5	0.6	0.7	1.4
76°	1406.4	1263.6	575.4	20.5	0.6	0.8	1.4
76.5°	1392.2	1257.2	570.7	18.8	0.6	0.8	1.5
77°	1376.3	1248.7	564.1	17.4	0.6	0.8	1.5
77.5°	1357.4	1238.1	557.6	16.0	0.6	0.9	1.6
78°	1335.9	1224.9	551.0	14.7	0.6	0.9	1.6
78.5°	1313.3	1211.5	544.5	13.3	0.6	1.0	1.7
79°	1288.7	1195.3	537.9	12.2	0.6	1.0	1.7
79.5°	1262.9	1177.1	533.1	11.3	0.6	1.0	1.8
80°	1237.9	1155.6	527.4	9.9	0.7	1.1	1.8
80.5°	1213.9	1132.6	521.7	8.9	0.7	1.1	1.9
81°	1190.2	1107.0	516.3	7.9	0.7	1.1	1.9
81.5°	1170.2	1080.8	511.2	7.2	0.7	1.2	2.0
82°	1151.8	1056.6	506.6	6.5	0.8	1.2	2.0
82.5°	1136.1	1034.5	502.7	5.9	0.8	1.3	2.0
83°	1121.4	1015.6	499.1	5.3	0.8	1.3	2.1
83.5°	1108.3	998.9	495.7	4.7	0.8	1.3	2.1
84°	1096.5	985.9	491.5	4.2	0.8	1.4	2.2
84.5°	1086.0	975.6	486.4	3.8	0.9	1.4	2.2
85°	1078.9	968.8	480.0	3.4	0.9	1.4	2.3
85.5°	1073.4	962.8	471.9	2.9	0.9	1.5	2.3
86°	1067.9	958.8	462.8	2.6	1.0	1.5	2.4
86.5°	1063.1	958.5	453.5	2.3	1.0	1.6	2.4
87°	1059.0	960.2	443.8	2.0	1.0	1.6	2.5
87.5°	1053.3	963.8	434.9	1.7	1.0	1.6	2.5
88°	1044.9	969.9	426.9	1.5	1.1	1.7	2.6
88.5°	1033.9	977.9	421.5	1.3	1.1	1.7	2.6
89°	1020.7	989.1	419.0	1.1	1.1	1.8	2.6
89.5°	1005.2	1002.4	416.1	1.0	1.1	1.8	2.7

REPORT NUMBER: P1197025

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	985.4	1011.9	413.4	0.7	1.2	1.8	2.7
90.5°	961.8	1016.1	414.2	0.6	1.2	1.9	2.8
91°	937.6	1012.2	410.0	0.6	1.2	1.9	2.8
91.5°	912.9	990.5	402.7	0.6	1.2	1.9	2.8
92°	888.7	953.5	395.2	0.6	1.3	2.0	2.8
92.5°	868.9	897.2	380.6	0.6	1.3	2.0	2.9
93°	855.0	822.8	353.2	0.6	1.3	2.1	2.9
93.5°	843.1	743.3	315.6	0.6	1.4	2.1	2.9
94°	838.7	657.7	271.3	0.6	1.4	2.1	3.0
94.5°	831.0	580.4	227.5	0.6	1.4	2.2	3.0
95°	807.6	521.6	189.4	0.6	1.4	2.2	3.0
95.5°	758.9	480.1	155.4	0.6	1.5	2.2	3.1
96°	700.5	438.2	129.2	0.6	1.5	2.3	3.1
96.5°	641.9	382.9	108.4	0.6	1.5	2.3	3.1
97°	583.8	376.9	89.4	0.6	1.6	2.4	3.2
97.5°	526.2	418.1	71.8	0.6	1.6	2.4	3.2
98°	470.0	465.7	61.4	0.6	1.6	2.4	3.2
98.5°	440.8	470.1	61.8	0.6	1.6	2.5	3.3
99°	422.3	400.8	64.9	0.6	1.7	2.5	3.3
99.5°	418.6	280.5	64.0	0.6	1.7	2.5	3.3
100°	439.5	215.3	66.1	0.6	1.7	2.6	3.3
100.5°	458.8	153.4	60.6	0.6	1.7	2.6	3.3
101°	392.9	91.3	48.5	0.6	1.8	2.6	3.4
101.5°	255.6	29.2	32.8	0.6	1.8	2.7	3.4
102°	157.5	21.2	24.6	0.6	1.8	2.7	3.4
102.5°	83.3	19.7	21.2	0.6	1.8	2.7	3.4
103°	37.8	19.4	18.2	0.6	1.8	2.7	3.5
103.5°	25.5	19.8	15.1	0.6	1.9	2.8	3.5
104°	24.8	21.6	12.2	0.6	1.9	2.8	3.5
104.5°	24.0	24.4	9.6	0.6	1.9	2.8	3.5
105°	24.2	23.8	7.8	0.6	1.9	2.8	3.5
105.5°	25.4	21.7	6.7	0.6	2.0	2.8	3.5
106°	28.1	20.8	5.7	0.6	2.0	2.9	3.5
106.5°	29.4	20.4	4.9	0.6	2.0	2.9	3.5
107°	27.4	19.0	4.0	0.6	2.0	2.9	3.6
107.5°	24.4	17.1	3.2	0.6	2.0	2.9	3.6
108°	23.1	14.6	2.8	0.6	2.1	3.0	3.6
108.5°	21.8	11.7	2.4	0.6	2.1	3.0	3.6
109°	19.1	9.2	2.1	0.7	2.1	3.0	3.6
109.5°	15.8	7.2	1.9	0.7	2.1	3.0	3.6
110°	13.0	5.6	1.6	0.7	2.2	3.1	3.6
110.5°	10.7	5.0	1.4	0.7	2.2	3.1	3.6
111°	9.5	4.7	1.2	0.7	2.2	3.1	3.7
111.5°	8.8	4.4	1.0	0.7	2.2	3.1	3.7
112°	7.9	4.0	0.9	0.7	2.2	3.2	3.7

REPORT NUMBER: P1197025

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	6.7	3.4	0.8	0.7	2.3	3.2	3.7
113°	5.7	2.7	0.7	0.8	2.3	3.2	3.7
113.5°	4.8	2.1	0.6	0.8	2.3	3.2	3.7
114°	4.4	1.7	0.5	0.8	2.3	3.2	3.7
114.5°	3.7	1.3	0.4	0.8	2.3	3.2	3.7
115°	2.8	1.1	0.3	0.8	2.3	3.2	3.7
115.5°	2.1	0.9	0.2	0.8	2.4	3.3	3.8
116°	1.7	0.8	0.2	0.8	2.4	3.3	3.8
116.5°	1.4	0.6	0.1	0.9	2.4	3.3	3.8
117°	1.1	0.4	0.1	0.9	2.4	3.3	3.8
117.5°	0.9	0.2	0.1	0.9	2.4	3.3	3.8
118°	0.7	0.1	0.1	0.9	2.4	3.3	3.8
118.5°	0.5	0.0	0.0	0.9	2.4	3.4	3.8
119°	0.3	0.0	0.0	0.9	2.5	3.4	3.8
119.5°	0.1	0.0	0.1	1.0	2.5	3.4	3.8
120°	0.0	0.0	0.0	1.0	2.5	3.4	3.8
120.5°	0.0	0.0	0.0	1.0	2.5	3.4	3.8
121°	0.0	0.0	0.1	1.0	2.5	3.4	3.8
121.5°	0.0	0.0	0.1	1.0	2.5	3.4	3.8
122°	0.0	0.0	0.1	1.0	2.5	3.4	3.8
122.5°	0.0	0.0	0.1	1.1	2.5	3.4	3.8
123°	0.0	0.0	0.1	1.1	2.5	3.4	3.8
123.5°	0.0	0.0	0.1	1.1	2.6	3.4	3.8
124°	0.0	0.0	0.1	1.1	2.6	3.4	3.8
124.5°	0.0	0.0	0.1	1.1	2.6	3.4	3.8
125°	0.0	0.0	0.1	1.1	2.6	3.4	3.8
125.5°	0.0	0.0	0.2	1.2	2.6	3.4	3.8
126°	0.0	0.0	0.2	1.2	2.6	3.5	3.8
126.5°	0.0	0.0	0.2	1.2	2.6	3.5	3.8
127°	0.0	0.0	0.2	1.2	2.6	3.5	3.8
127.5°	0.0	0.0	0.2	1.2	2.6	3.5	3.8
128°	0.0	0.0	0.2	1.2	2.6	3.5	3.8
128.5°	0.0	0.0	0.3	1.3	2.6	3.5	3.8
129°	0.0	0.0	0.3	1.3	2.6	3.5	3.8
129.5°	0.0	0.0	0.3	1.3	2.7	3.5	3.8
130°	0.0	0.0	0.3	1.3	2.7	3.5	3.8
130.5°	0.0	0.0	0.3	1.3	2.7	3.5	3.8
131°	0.0	0.0	0.4	1.3	2.7	3.5	3.8
131.5°	0.0	0.0	0.4	1.3	2.7	3.5	3.8
132°	0.0	0.0	0.4	1.3	2.7	3.5	3.8
132.5°	0.0	0.0	0.4	1.4	2.7	3.5	3.8
133°	0.0	0.0	0.4	1.4	2.7	3.5	3.8
133.5°	0.0	0.0	0.4	1.4	2.7	3.5	3.8
134°	0.0	0.0	0.5	1.4	2.7	3.5	3.8
134.5°	0.0	0.0	0.5	1.4	2.7	3.5	3.8

REPORT NUMBER: P1197025

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	0.0	0.0	0.5	1.5	2.7	3.5	3.8
135.5°	0.0	0.0	0.5	1.5	2.7	3.5	3.8
136°	0.0	0.0	0.5	1.5	2.7	3.5	3.8
136.5°	0.0	0.0	0.6	1.5	2.7	3.5	3.8
137°	0.0	0.0	0.6	1.5	2.7	3.5	3.8
137.5°	0.0	0.0	0.6	1.5	2.7	3.5	3.8
138°	0.0	0.0	0.6	1.6	2.8	3.5	3.8
138.5°	0.0	0.0	0.6	1.6	2.8	3.5	3.8
139°	0.0	0.0	0.6	1.6	2.8	3.5	3.8
139.5°	0.0	0.0	0.7	1.6	2.8	3.5	3.8
140°	0.0	0.0	0.7	1.6	2.8	3.5	3.8
140.5°	0.0	0.0	0.7	1.6	2.8	3.5	3.7
141°	0.0	0.0	0.8	1.6	2.8	3.5	3.7
141.5°	0.0	0.0	0.8	1.7	2.8	3.5	3.7
142°	0.0	0.0	0.8	1.7	2.8	3.5	3.7
142.5°	0.0	0.0	0.8	1.7	2.8	3.5	3.7
143°	0.0	0.0	0.8	1.7	2.8	3.5	3.6
143.5°	0.0	0.0	0.9	1.7	2.8	3.5	3.6
144°	0.0	0.0	0.9	1.7	2.8	3.5	3.6
144.5°	0.0	0.1	0.9	1.7	2.8	3.5	3.6
145°	0.0	0.1	0.9	1.8	2.8	3.4	3.6
145.5°	0.0	0.1	1.0	1.8	2.8	3.4	3.6
146°	0.0	0.1	1.0	1.8	2.8	3.4	3.5
146.5°	0.0	0.1	1.0	1.8	2.8	3.4	3.5
147°	0.0	0.1	1.0	1.8	2.8	3.4	3.5
147.5°	0.0	0.2	1.0	1.8	2.8	3.4	3.5
148°	0.0	0.2	1.1	1.9	2.8	3.4	3.5
148.5°	0.0	0.2	1.1	1.9	2.8	3.4	3.5
149°	0.1	0.2	1.1	1.9	2.8	3.4	3.5
149.5°	0.1	0.3	1.1	1.9	2.8	3.4	3.4
150°	0.1	0.3	1.2	1.9	2.8	3.4	3.4
150.5°	0.1	0.4	1.2	1.9	2.8	3.4	3.4
151°	0.1	0.4	1.2	1.9	2.8	3.4	3.4
151.5°	0.1	0.4	1.2	1.9	2.8	3.4	3.4
152°	0.2	0.4	1.2	1.9	2.8	3.3	3.3
152.5°	0.2	0.4	1.3	2.0	2.8	3.3	3.3
153°	0.2	0.4	1.3	2.0	2.8	3.3	3.3
153.5°	0.2	0.4	1.3	2.0	2.8	3.3	3.3
154°	0.2	0.5	1.3	2.0	2.8	3.3	3.2
154.5°	0.2	0.5	1.4	2.0	2.8	3.3	3.2
155°	0.3	0.5	1.4	2.0	2.8	3.3	3.2
155.5°	0.3	0.5	1.4	2.0	2.8	3.3	3.2
156°	0.3	0.6	1.4	2.0	2.8	3.3	3.1
156.5°	0.3	0.6	1.4	2.0	2.8	3.2	3.1
157°	0.3	0.6	1.4	2.1	2.8	3.2	3.1

REPORT NUMBER: P1197025

CATALOG NUMBER: AWP28S-BZ-HIGH-3000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
157.5°	0.4	0.7	1.5	2.1	2.8	3.2	3.1
158°	0.4	0.7	1.5	2.1	2.8	3.2	3.1
158.5°	0.4	0.7	1.5	2.1	2.8	3.2	3.0
159°	0.4	0.7	1.5	2.1	2.8	3.2	3.0
159.5°	0.5	0.8	1.6	2.1	2.8	3.2	3.0
160°	0.5	0.8	1.6	2.2	2.8	3.1	2.9
160.5°	0.5	0.8	1.6	2.2	2.7	3.1	3.0
161°	0.5	0.9	1.6	2.2	2.7	3.1	2.9
161.5°	0.6	0.9	1.6	2.2	2.7	3.1	2.9
162°	0.6	0.9	1.7	2.2	2.7	3.1	2.9
162.5°	0.6	1.0	1.7	2.2	2.7	3.1	2.8
163°	0.6	1.0	1.7	2.2	2.7	3.0	2.8
163.5°	0.7	1.0	1.7	2.2	2.7	3.0	2.8
164°	0.7	1.0	1.7	2.2	2.7	3.0	2.7
164.5°	0.7	1.1	1.7	2.2	2.7	3.0	2.7
165°	0.7	1.1	1.8	2.2	2.7	3.0	2.7
165.5°	0.8	1.1	1.8	2.2	2.7	3.0	2.6
166°	0.8	1.1	1.8	2.2	2.7	3.0	2.6
166.5°	0.8	1.2	1.8	2.3	2.7	3.0	2.6
167°	0.8	1.2	1.8	2.3	2.7	3.0	2.5
167.5°	0.9	1.2	1.9	2.3	2.7	2.9	2.5
168°	0.9	1.3	1.9	2.3	2.7	2.9	2.5
168.5°	0.9	1.3	1.9	2.3	2.7	2.9	2.4
169°	0.9	1.3	1.9	2.3	2.7	2.9	2.4
169.5°	1.0	1.3	1.9	2.3	2.7	2.9	2.4
170°	1.0	1.4	2.0	2.3	2.7	2.9	2.4
170.5°	1.0	1.4	2.0	2.3	2.7	2.9	2.3
171°	1.1	1.4	2.0	2.3	2.7	2.8	2.3
171.5°	1.1	1.5	2.0	2.3	2.6	2.8	2.3
172°	1.1	1.5	2.0	2.3	2.6	2.8	2.2
172.5°	1.1	1.5	2.1	2.4	2.6	2.8	2.2
173°	1.2	1.6	2.1	2.4	2.6	2.7	2.1
173.5°	1.2	1.6	2.1	2.4	2.6	2.7	2.1
174°	1.2	1.6	2.1	2.4	2.6	2.7	2.1
174.5°	1.3	1.6	2.1	2.4	2.6	2.7	2.0
175°	1.3	1.6	2.2	2.4	2.6	2.7	2.0
175.5°	1.3	1.7	2.2	2.4	2.6	2.7	1.9
176°	1.3	1.7	2.2	2.4	2.6	2.6	1.9
176.5°	1.4	1.7	2.2	2.4	2.6	2.6	1.9
177°	1.4	1.7	2.2	2.4	2.5	2.6	1.8
177.5°	1.4	1.8	2.2	2.4	2.5	2.6	1.8
178°	1.5	1.8	2.2	2.4	2.5	2.5	1.8
178.5°	1.5	1.9	2.2	2.4	2.5	2.5	1.7
179°	1.5	1.9	2.2	2.4	2.5	2.5	1.7
179.5°	1.6	1.9	2.2	2.4	2.5	2.5	1.7



REPORT NUMBER: P1197025
CATALOG NUMBER: AWPf28S-BZ-HIGH-3000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	1.6	1.6	1.6	1.6	1.6	1.6	1.6

(END OF REPORT)