

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: P1197031

Luminaire Tested: AWPf28S-BZ-HIGH-5000K-POSITION 45

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1197031
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-5000K-POSITION 45
Description: AWP Architectural Wall Pack Series - Wall Mount Luminaire
Light Source: 80 CRI, 5000K
Ballast/Driver: -

Summary

Lumens per Lamp: 3422 (1 lamp)
Luminaire Lumens: 3620.1 lumens
Efficiency: 105.8%
Efficacy: 124.4 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): 29.1
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

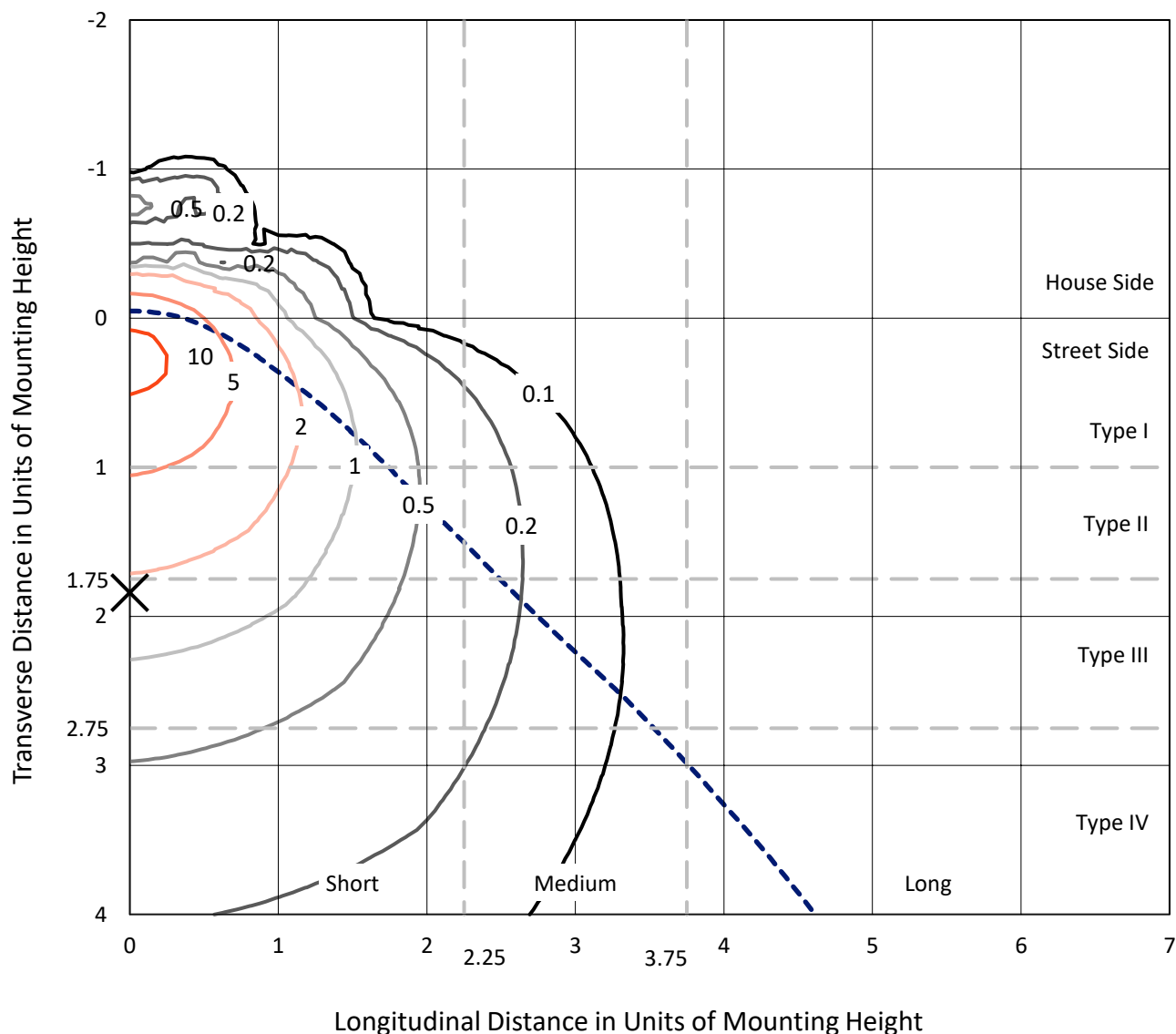
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

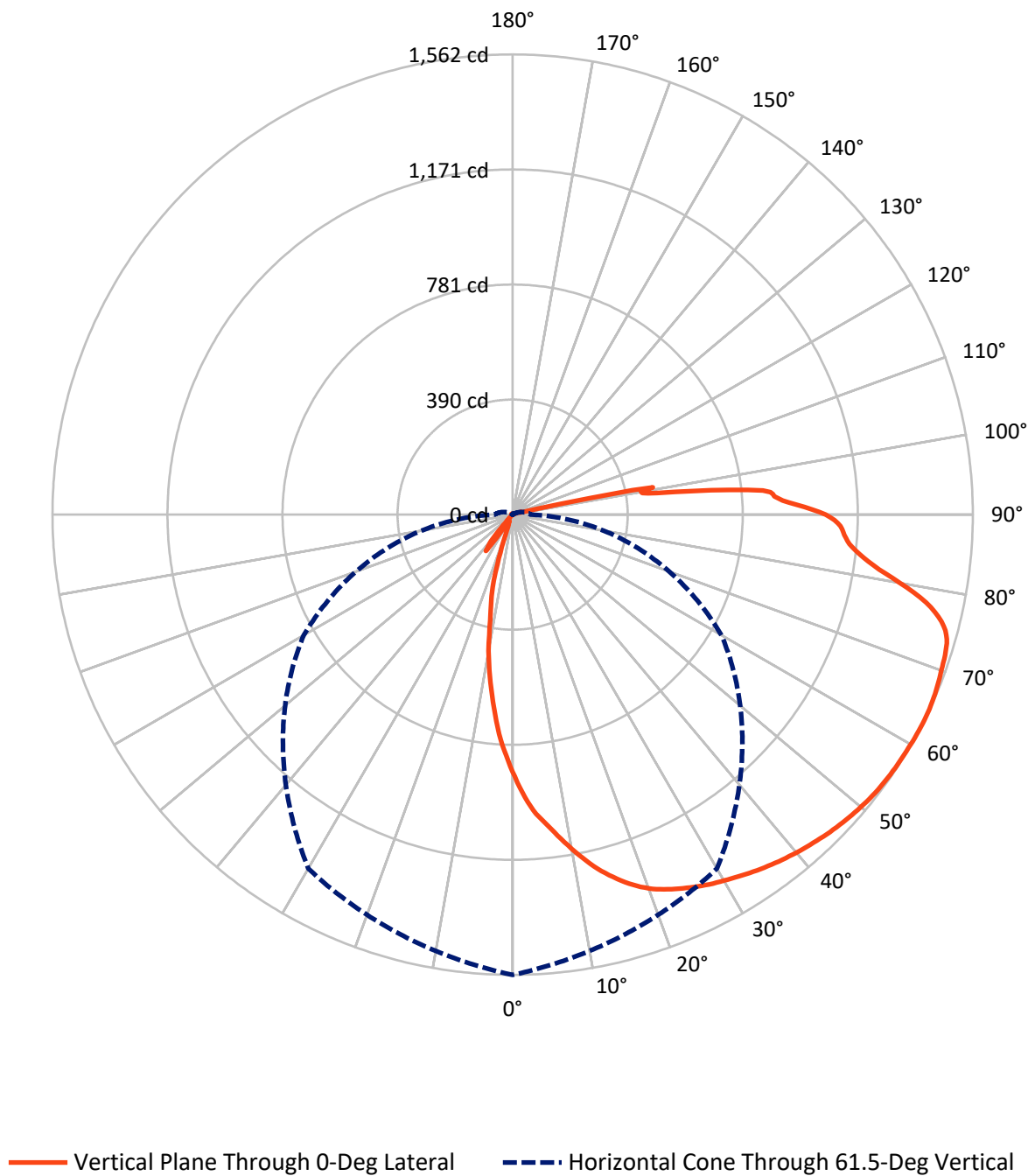


Based on 10 foot mounting height. Maximum calculated value = 11.5 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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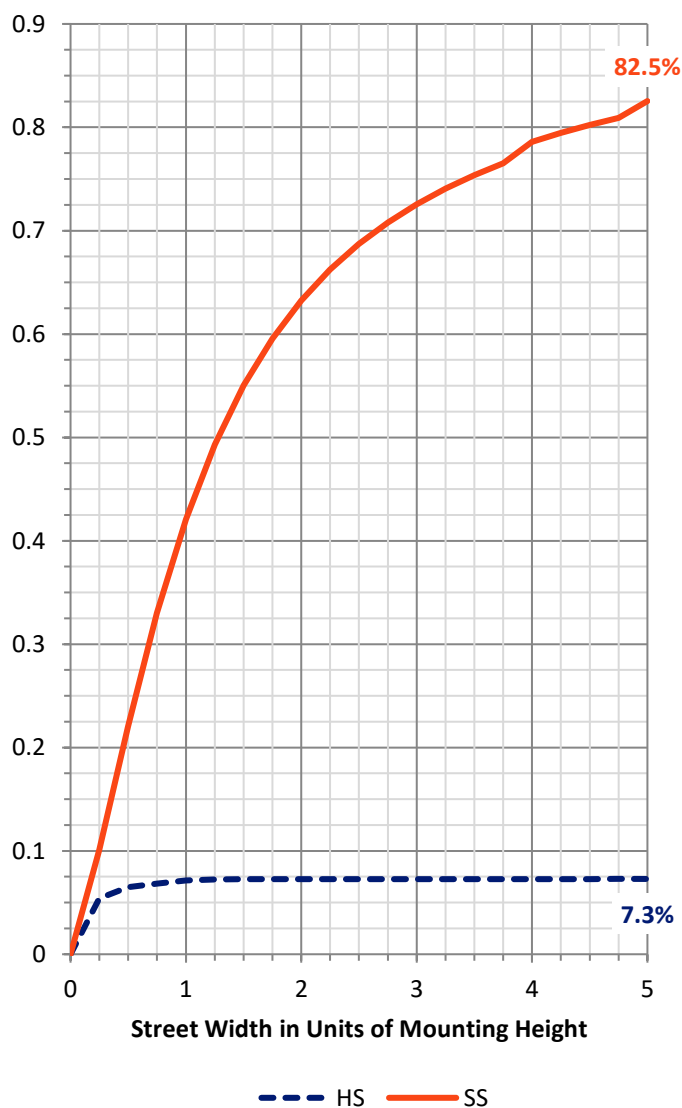
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	252.4	8.5	260.9
	% Lamp	7.4	0.2	7.6
Street Side	Lumens	3106.5	252.7	3359.2
	% Lamp	90.8	7.4	98.2
Total	Lumens	3359.0	261.1	3620.1
	% Lamp	98.2	7.6	105.8

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	82.4	2.3	2.4
10°-20°	223.8	6.2	6.5
20°-30°	324.6	9.0	9.5
30°-40°	407.6	11.3	11.9
40°-50°	470.3	13.0	13.7
50°-60°	487.2	13.5	14.2
60°-70°	493.2	13.6	14.4
70°-80°	479.0	13.2	14.0
80°-90°	390.9	10.8	11.4
90°-100°	233.3	6.4	6.8
100°-110°	19.8	0.5	0.6
110°-120°	2.2	0.1	0.1
120°-130°	1.5	0.0	0.0
130°-140°	1.4	0.0	0.0
140°-150°	1.2	0.0	0.0
150°-160°	1.0	0.0	0.0
160°-170°	0.6	0.0	0.0
170°-180°	0.2	0.0	0.0
0°-90°	3359.0	92.8	98.2
0°-180°	3620.1	100.0	105.8

Coefficient of Utilization



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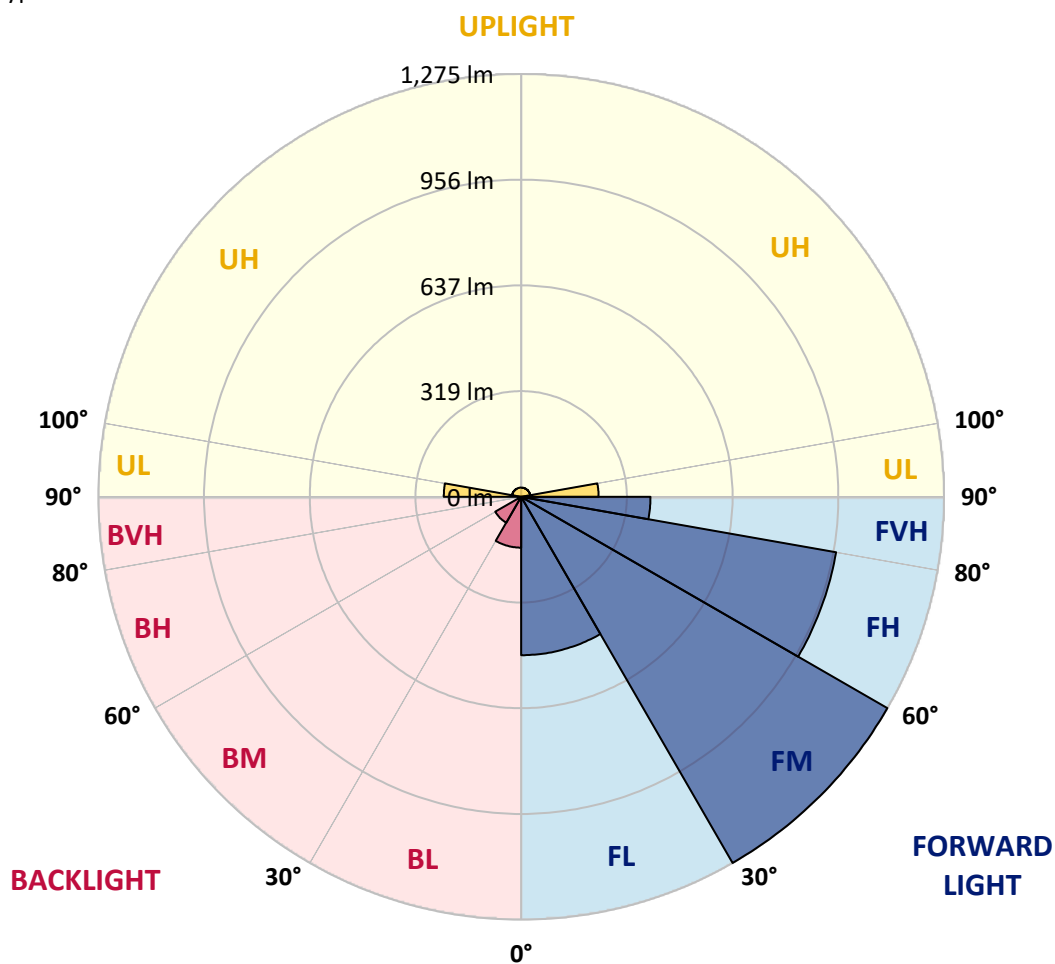
CATALOG NUMBER: AWPf28S-BZ-HIGH-5000K-POSITION 45

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	477.5	14.0			
FM	(30°-60°)	1274.9	37.3			
FH	(60°-80°)	964.3	28.2			G1/1800
FVH	(80°-90°)	389.9	11.4			G3/500
BL	(0°-30°)	153.3	4.5	B1/500		
BM	(30°-60°)	90.1	2.6	B0/220		
BH	(60°-80°)	7.9	0.2	B0/110		G0/110
BVH	(80°-90°)	1.1	0.0			G0/10
UL	(90°-100°)	233.3	6.8		U3/500	
UH	(100°-180°)	27.8	0.8		U2/50	
Trapped Light		-198.1	-5.8			

BUG Rating: B1-U3-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	887.8	887.8	887.8	887.8	887.8	887.8	887.8
0.5°	909.0	911.9	901.2	889.5	874.8	857.8	872.8
1°	926.0	926.3	910.2	889.3	866.0	842.6	855.1
1.5°	942.4	940.5	918.8	889.0	856.6	826.7	837.3
2°	959.0	955.0	926.1	888.4	847.5	811.3	819.3
2.5°	976.1	969.2	934.0	887.9	838.3	796.4	802.2
3°	990.7	982.4	942.0	887.1	828.6	781.2	784.4
3.5°	1005.4	995.5	949.9	886.3	819.1	765.0	765.4
4°	1018.2	1006.9	957.6	885.6	809.8	748.1	745.6
4.5°	1029.4	1017.4	965.4	884.7	800.4	730.2	724.3
5°	1040.4	1026.7	972.0	883.5	790.9	711.2	703.4
5.5°	1051.5	1035.8	978.5	882.4	781.5	693.0	681.8
6°	1063.1	1045.1	984.9	880.8	771.5	674.2	660.1
6.5°	1074.9	1055.0	991.1	879.3	761.2	655.0	639.2
7°	1087.3	1065.1	996.8	877.6	750.5	636.5	617.6
7.5°	1099.8	1074.8	1002.1	875.8	739.2	617.3	595.9
8°	1112.6	1085.1	1006.6	874.1	728.1	598.3	574.7
8.5°	1125.3	1095.6	1010.8	872.0	716.3	579.9	554.6
9°	1137.7	1106.1	1014.9	869.9	704.4	560.9	534.3
9.5°	1150.5	1117.0	1018.7	867.7	692.1	543.0	512.9
10°	1163.1	1127.2	1022.5	865.2	679.4	525.3	491.2
10.5°	1175.5	1137.7	1026.5	862.4	666.8	507.0	469.6
11°	1187.8	1148.1	1030.5	859.6	654.2	487.7	442.0
11.5°	1200.0	1158.2	1034.1	856.6	641.3	469.1	415.6
12°	1212.5	1168.2	1038.1	853.8	628.1	448.4	390.5
12.5°	1224.1	1178.2	1041.9	850.6	613.8	425.0	368.6
13°	1235.4	1188.2	1045.8	847.4	599.5	400.6	348.7
13.5°	1245.8	1197.8	1049.8	843.9	585.2	378.6	330.7
14°	1255.8	1207.6	1053.3	840.3	571.0	358.8	315.1
14.5°	1266.4	1216.7	1057.3	836.4	556.7	341.0	300.0
15°	1275.8	1225.4	1061.4	832.4	543.8	324.5	285.0
15.5°	1285.5	1234.0	1065.5	828.0	530.1	308.8	269.9
16°	1294.7	1242.3	1069.3	823.7	517.2	296.0	254.8
16.5°	1304.1	1250.8	1073.1	819.5	504.3	283.1	231.7
17°	1312.5	1258.9	1077.0	815.2	491.2	270.3	204.1
17.5°	1320.4	1266.2	1080.6	810.8	478.5	257.4	176.2
18°	1328.3	1273.6	1083.8	805.4	465.4	240.6	153.8
18.5°	1335.7	1280.8	1086.7	800.0	451.7	219.9	134.2
19°	1342.7	1287.8	1089.7	794.3	437.7	195.1	117.4
19.5°	1349.2	1294.3	1092.5	788.5	423.8	171.1	97.5
20°	1355.4	1300.7	1095.1	782.5	410.1	149.5	75.2
20.5°	1360.9	1306.3	1097.6	776.7	397.2	131.9	55.3
21°	1365.9	1312.0	1100.2	770.9	382.8	116.3	44.2
21.5°	1371.2	1317.2	1102.7	764.9	366.9	100.6	39.6
22°	1375.8	1321.9	1104.8	758.7	351.1	82.6	37.6

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	1380.3	1326.6	1107.2	753.0	336.0	63.8	36.3
23°	1385.0	1330.8	1109.3	746.8	321.6	48.5	35.2
23.5°	1389.2	1334.1	1111.5	740.4	308.6	39.9	34.1
24°	1393.4	1337.8	1113.2	734.0	297.0	36.3	33.2
24.5°	1397.3	1340.8	1114.9	727.4	285.5	34.7	32.2
25°	1401.8	1343.8	1116.3	720.8	274.5	33.7	31.1
25.5°	1405.6	1346.6	1117.3	714.0	263.9	33.0	29.9
26°	1409.6	1349.5	1118.4	707.4	253.1	32.4	28.6
26.5°	1413.1	1352.0	1119.3	700.9	242.2	32.0	27.6
27°	1416.8	1354.3	1120.0	693.9	232.3	31.5	26.9
27.5°	1420.6	1356.5	1120.2	686.8	221.6	31.1	26.5
28°	1424.4	1358.4	1120.4	679.3	209.0	30.6	26.3
28.5°	1427.5	1360.3	1120.6	671.9	193.3	30.0	26.0
29°	1430.6	1361.8	1120.6	664.0	175.1	29.3	25.6
29.5°	1434.0	1363.5	1120.7	655.8	155.1	28.4	25.1
30°	1437.2	1365.1	1120.7	648.0	135.5	27.5	24.4
30.5°	1440.6	1366.7	1120.0	639.7	117.4	26.7	23.9
31°	1444.2	1368.1	1119.5	631.3	101.3	25.8	23.3
31.5°	1447.5	1369.9	1119.2	622.7	87.8	24.9	22.7
32°	1451.1	1371.2	1118.6	613.9	76.3	24.1	22.2
32.5°	1454.5	1372.6	1117.9	605.3	67.8	23.4	21.9
33°	1457.9	1373.9	1117.4	596.7	60.5	22.8	21.9
33.5°	1461.0	1375.1	1116.9	588.1	55.1	22.3	22.7
34°	1464.4	1376.2	1116.3	579.0	50.6	21.9	26.3
34.5°	1467.8	1377.7	1115.2	569.6	46.4	21.6	43.3
35°	1471.1	1379.2	1113.9	560.0	41.9	21.2	71.5
35.5°	1473.9	1380.7	1112.1	550.3	38.3	20.8	95.4
36°	1477.2	1382.2	1110.3	540.5	35.8	20.4	115.2
36.5°	1480.1	1383.9	1108.4	530.4	34.2	20.3	150.5
37°	1483.3	1385.5	1106.3	520.4	32.8	20.0	152.8
37.5°	1485.8	1387.1	1104.1	510.1	31.9	19.5	141.9
38°	1488.8	1388.2	1101.6	499.9	30.9	19.2	137.8
38.5°	1491.7	1389.7	1099.0	489.4	30.0	19.0	133.7
39°	1494.8	1391.4	1096.3	479.0	29.1	19.0	127.2
39.5°	1497.5	1392.8	1093.0	468.4	28.2	19.5	117.4
40°	1500.0	1393.9	1089.5	457.4	27.4	22.8	104.1
40.5°	1502.8	1395.1	1085.8	446.5	26.9	33.6	91.3
41°	1505.2	1396.2	1082.3	435.1	26.5	51.1	75.9
41.5°	1507.7	1397.0	1078.6	424.1	26.1	64.0	60.8
42°	1510.4	1398.0	1074.5	412.4	25.7	69.2	48.4
42.5°	1512.9	1398.5	1070.2	400.1	25.2	86.4	40.4
43°	1515.3	1398.9	1065.9	388.7	24.7	97.6	34.6
43.5°	1518.1	1399.3	1061.2	377.1	23.9	87.7	29.6
44°	1520.6	1399.6	1056.1	366.0	23.2	82.4	25.1
44.5°	1522.9	1399.7	1051.2	354.6	22.5	79.3	20.9

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	1525.0	1400.1	1046.0	342.6	21.8	76.8	17.3
45.5°	1527.5	1400.2	1040.7	330.6	21.3	74.5	14.7
46°	1529.5	1400.4	1035.1	318.5	20.9	71.5	12.8
46.5°	1531.6	1400.8	1029.1	306.2	20.4	68.1	11.3
47°	1533.6	1400.6	1023.5	294.4	20.0	64.6	10.2
47.5°	1535.3	1401.0	1017.5	282.7	19.6	61.1	9.2
48°	1537.4	1401.0	1011.2	270.9	19.1	57.6	8.6
48.5°	1539.4	1401.4	1005.2	259.1	18.6	53.9	8.0
49°	1541.1	1401.5	999.2	248.6	18.0	49.2	7.4
49.5°	1542.7	1401.0	992.8	237.9	17.4	44.5	6.9
50°	1544.4	1401.0	986.9	227.9	16.8	39.8	6.3
50.5°	1546.4	1401.1	980.6	219.1	16.2	34.9	5.6
51°	1548.0	1400.8	974.4	211.1	15.7	30.8	4.9
51.5°	1549.1	1400.6	968.4	203.7	15.2	27.3	4.2
52°	1550.9	1400.3	961.9	197.3	14.7	24.2	3.6
52.5°	1551.9	1399.7	955.5	191.3	14.2	21.4	3.3
53°	1552.6	1398.9	949.4	185.0	13.6	18.7	3.1
53.5°	1553.6	1398.1	942.6	178.1	13.1	16.2	3.0
54°	1554.5	1397.3	936.0	171.5	12.6	14.0	2.9
54.5°	1555.3	1396.0	929.3	164.9	12.2	10.7	2.7
55°	1556.0	1395.1	922.6	156.7	11.7	6.1	2.4
55.5°	1556.2	1394.3	915.8	145.5	11.3	3.3	2.2
56°	1556.8	1393.3	908.5	130.9	10.9	2.4	2.0
56.5°	1557.3	1392.8	900.9	113.4	10.5	2.2	1.9
57°	1557.6	1392.1	892.9	96.2	10.0	2.1	1.6
57.5°	1558.2	1391.9	884.9	83.6	9.6	2.1	1.3
58°	1558.4	1391.7	876.7	75.9	9.1	2.0	1.1
58.5°	1558.8	1390.9	868.7	71.2	8.6	1.9	1.0
59°	1559.3	1390.6	860.7	68.3	8.1	1.7	0.9
59.5°	1560.1	1389.9	852.2	66.4	7.6	1.5	0.8
60°	1560.7	1389.2	843.8	65.3	7.2	1.3	0.7
60.5°	1560.9	1388.3	835.2	64.4	6.7	1.0	0.7
61°	1561.1	1387.6	826.7	63.3	6.3	0.8	0.7
61.5°	1561.6	1386.5	818.3	62.2	5.9	0.8	0.7
62°	1561.5	1385.6	810.3	61.1	5.5	0.7	0.6
62.5°	1561.6	1384.8	802.9	60.1	5.1	0.7	0.6
63°	1561.6	1384.4	794.9	58.9	4.6	0.7	0.6
63.5°	1561.5	1383.9	787.1	57.7	4.2	0.6	0.6
64°	1561.3	1383.1	779.0	56.2	3.8	0.6	0.7
64.5°	1560.7	1382.4	771.2	54.9	3.5	0.6	0.7
65°	1559.6	1381.7	763.6	53.4	3.2	0.6	0.7
65.5°	1559.0	1381.1	756.0	52.0	3.0	0.6	0.7
66°	1558.2	1380.7	748.8	50.1	2.7	0.6	0.7
66.5°	1557.0	1379.7	741.2	48.5	2.4	0.6	0.8
67°	1555.5	1378.8	734.3	47.0	2.2	0.6	0.8

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	1554.3	1377.8	727.2	45.5	1.9	0.6	0.9
68°	1552.7	1376.4	720.2	44.0	1.6	0.6	0.9
68.5°	1551.4	1375.0	713.2	42.9	1.4	0.6	0.9
69°	1549.9	1373.3	706.1	41.8	1.2	0.6	0.9
69.5°	1548.1	1371.0	699.1	41.2	1.2	0.6	0.9
70°	1546.8	1368.7	691.6	41.0	1.2	0.6	1.0
70.5°	1545.4	1366.2	683.8	41.1	1.1	0.6	1.0
71°	1544.5	1363.8	675.8	41.1	1.0	0.6	1.0
71.5°	1542.8	1360.7	667.6	41.0	0.9	0.6	1.0
72°	1541.0	1357.8	659.7	40.5	0.8	0.6	1.1
72.5°	1539.1	1355.6	652.3	39.7	0.7	0.6	1.2
73°	1536.7	1353.1	645.0	38.4	0.7	0.6	1.2
73.5°	1532.6	1350.4	637.6	36.3	0.7	0.6	1.2
74°	1526.9	1347.9	631.1	33.5	0.7	0.7	1.3
74.5°	1520.4	1345.2	624.2	30.8	0.7	0.7	1.3
75°	1511.4	1343.2	618.1	27.0	0.7	0.7	1.4
75.5°	1499.4	1339.5	612.7	23.8	0.6	0.8	1.4
76°	1485.8	1334.9	607.9	21.7	0.6	0.8	1.5
76.5°	1470.8	1328.2	602.9	19.9	0.6	0.9	1.5
77°	1454.0	1319.2	596.0	18.3	0.6	0.9	1.6
77.5°	1434.0	1308.0	589.0	16.9	0.6	0.9	1.7
78°	1411.3	1294.1	582.1	15.5	0.6	0.9	1.7
78.5°	1387.4	1279.8	575.2	14.1	0.7	1.0	1.8
79°	1361.4	1262.8	568.3	12.9	0.7	1.0	1.8
79.5°	1334.2	1243.5	563.2	11.9	0.7	1.1	1.9
80°	1307.8	1220.8	557.2	10.5	0.7	1.1	1.9
80.5°	1282.4	1196.5	551.2	9.4	0.7	1.2	2.0
81°	1257.3	1169.5	545.4	8.4	0.7	1.2	2.0
81.5°	1236.3	1141.8	540.0	7.6	0.8	1.2	2.1
82°	1216.8	1116.3	535.2	6.9	0.8	1.3	2.1
82.5°	1200.2	1092.9	531.0	6.2	0.8	1.3	2.2
83°	1184.7	1072.9	527.2	5.6	0.8	1.3	2.2
83.5°	1170.9	1055.3	523.7	5.0	0.9	1.4	2.3
84°	1158.4	1041.6	519.2	4.5	0.9	1.4	2.3
84.5°	1147.3	1030.7	513.8	4.0	0.9	1.5	2.4
85°	1139.8	1023.5	507.1	3.6	0.9	1.5	2.4
85.5°	1134.0	1017.1	498.5	3.1	1.0	1.6	2.5
86°	1128.2	1013.0	488.9	2.8	1.0	1.6	2.5
86.5°	1123.1	1012.6	479.0	2.4	1.0	1.7	2.6
87°	1118.7	1014.4	468.8	2.1	1.1	1.7	2.6
87.5°	1112.8	1018.1	459.4	1.8	1.1	1.7	2.6
88°	1103.8	1024.7	451.0	1.6	1.1	1.8	2.7
88.5°	1092.3	1033.1	445.3	1.3	1.2	1.8	2.7
89°	1078.3	1044.9	442.7	1.2	1.2	1.9	2.8
89.5°	1061.9	1058.9	439.6	1.0	1.2	1.9	2.8

REPORT NUMBER: P1197031

CATALOG NUMBER: AWP28S-BZ-HIGH-5000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	1041.0	1069.0	436.7	0.7	1.2	1.9	2.9
90.5°	1016.1	1073.5	437.5	0.6	1.3	2.0	2.9
91°	990.6	1069.4	433.2	0.6	1.3	2.0	2.9
91.5°	964.4	1046.4	425.5	0.6	1.3	2.1	3.0
92°	938.9	1007.3	417.5	0.6	1.3	2.1	3.0
92.5°	918.0	947.8	402.1	0.6	1.4	2.1	3.0
93°	903.3	869.2	373.1	0.6	1.4	2.2	3.1
93.5°	890.7	785.3	333.4	0.6	1.4	2.2	3.1
94°	886.1	694.8	286.7	0.6	1.5	2.3	3.1
94.5°	877.9	613.2	240.3	0.6	1.5	2.3	3.2
95°	853.2	551.0	200.1	0.6	1.5	2.3	3.2
95.5°	801.8	507.2	164.1	0.6	1.6	2.4	3.2
96°	740.0	463.0	136.5	0.6	1.6	2.4	3.3
96.5°	678.1	404.5	114.6	0.6	1.6	2.4	3.3
97°	616.8	398.2	94.4	0.6	1.6	2.5	3.4
97.5°	555.9	441.7	75.8	0.6	1.7	2.5	3.4
98°	496.6	491.9	64.9	0.6	1.7	2.6	3.4
98.5°	465.7	496.7	65.3	0.6	1.7	2.6	3.4
99°	446.1	423.4	68.5	0.6	1.8	2.6	3.5
99.5°	442.3	296.3	67.7	0.6	1.8	2.7	3.5
100°	464.4	227.5	69.8	0.6	1.8	2.7	3.5
100.5°	484.7	162.0	64.0	0.6	1.8	2.7	3.5
101°	415.1	96.5	51.3	0.6	1.9	2.8	3.6
101.5°	270.1	30.9	34.7	0.6	1.9	2.8	3.6
102°	166.4	22.4	26.0	0.6	1.9	2.8	3.6
102.5°	88.0	20.8	22.4	0.6	1.9	2.9	3.6
103°	40.0	20.5	19.3	0.6	1.9	2.9	3.6
103.5°	27.0	20.9	15.9	0.6	2.0	2.9	3.7
104°	26.2	22.8	12.8	0.6	2.0	3.0	3.7
104.5°	25.4	25.8	10.2	0.6	2.0	3.0	3.7
105°	25.6	25.1	8.2	0.6	2.0	3.0	3.7
105.5°	26.8	23.0	7.1	0.6	2.1	3.0	3.7
106°	29.7	22.0	6.1	0.6	2.1	3.1	3.7
106.5°	31.1	21.6	5.1	0.6	2.1	3.1	3.7
107°	28.9	20.1	4.2	0.6	2.2	3.1	3.8
107.5°	25.8	18.1	3.4	0.6	2.2	3.1	3.8
108°	24.4	15.4	2.9	0.7	2.2	3.1	3.8
108.5°	23.0	12.4	2.5	0.7	2.2	3.1	3.8
109°	20.2	9.8	2.2	0.7	2.2	3.2	3.8
109.5°	16.7	7.6	2.0	0.7	2.3	3.2	3.8
110°	13.7	5.9	1.7	0.7	2.3	3.2	3.9
110.5°	11.4	5.3	1.5	0.7	2.3	3.2	3.8
111°	10.1	5.0	1.2	0.7	2.3	3.3	3.9
111.5°	9.3	4.6	1.1	0.7	2.3	3.3	3.9
112°	8.3	4.2	0.9	0.8	2.4	3.3	3.9

REPORT NUMBER: P1197031

CATALOG NUMBER: AWP28S-BZ-HIGH-5000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	7.1	3.6	0.8	0.8	2.4	3.4	3.9
113°	6.0	2.9	0.7	0.8	2.4	3.4	3.9
113.5°	5.1	2.3	0.6	0.8	2.4	3.4	3.9
114°	4.6	1.8	0.5	0.8	2.4	3.4	3.9
114.5°	3.9	1.4	0.4	0.9	2.5	3.4	3.9
115°	3.0	1.2	0.3	0.9	2.5	3.4	4.0
115.5°	2.3	1.0	0.2	0.9	2.5	3.4	4.0
116°	1.8	0.8	0.2	0.9	2.5	3.5	4.0
116.5°	1.4	0.6	0.2	0.9	2.5	3.5	4.0
117°	1.2	0.4	0.1	0.9	2.5	3.5	4.0
117.5°	1.0	0.2	0.1	0.9	2.6	3.5	4.0
118°	0.8	0.1	0.1	1.0	2.6	3.5	4.0
118.5°	0.5	0.0	0.0	1.0	2.6	3.5	4.0
119°	0.3	0.0	0.0	1.0	2.6	3.5	4.0
119.5°	0.1	0.0	0.1	1.0	2.6	3.6	4.0
120°	0.0	0.0	0.0	1.0	2.6	3.6	4.0
120.5°	0.0	0.0	0.0	1.0	2.6	3.6	4.0
121°	0.0	0.0	0.1	1.1	2.6	3.6	4.0
121.5°	0.0	0.0	0.1	1.1	2.7	3.6	4.0
122°	0.0	0.0	0.1	1.1	2.7	3.6	4.0
122.5°	0.0	0.0	0.1	1.1	2.7	3.6	4.0
123°	0.0	0.0	0.1	1.1	2.7	3.6	4.0
123.5°	0.0	0.0	0.1	1.1	2.7	3.6	4.0
124°	0.0	0.0	0.1	1.2	2.7	3.6	4.0
124.5°	0.0	0.0	0.1	1.2	2.7	3.6	4.0
125°	0.0	0.0	0.2	1.2	2.7	3.6	4.0
125.5°	0.0	0.0	0.2	1.2	2.7	3.6	4.0
126°	0.0	0.0	0.2	1.2	2.7	3.6	4.0
126.5°	0.0	0.0	0.2	1.2	2.8	3.7	4.0
127°	0.0	0.0	0.2	1.3	2.8	3.7	4.0
127.5°	0.0	0.0	0.2	1.3	2.8	3.7	4.0
128°	0.0	0.0	0.3	1.3	2.8	3.7	4.0
128.5°	0.0	0.0	0.3	1.3	2.8	3.7	4.0
129°	0.0	0.0	0.3	1.4	2.8	3.7	4.0
129.5°	0.0	0.0	0.3	1.4	2.8	3.7	4.0
130°	0.0	0.0	0.3	1.4	2.8	3.7	4.0
130.5°	0.0	0.0	0.4	1.4	2.8	3.7	4.0
131°	0.0	0.0	0.4	1.4	2.8	3.7	4.0
131.5°	0.0	0.0	0.4	1.4	2.8	3.7	4.0
132°	0.0	0.0	0.4	1.4	2.8	3.7	4.0
132.5°	0.0	0.0	0.4	1.5	2.8	3.7	4.0
133°	0.0	0.0	0.5	1.5	2.9	3.7	4.0
133.5°	0.0	0.0	0.5	1.5	2.9	3.7	4.0
134°	0.0	0.0	0.5	1.5	2.9	3.7	4.0
134.5°	0.0	0.0	0.5	1.5	2.9	3.7	4.0

REPORT NUMBER: P1197031

CATALOG NUMBER: AWP28S-BZ-HIGH-5000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	0.0	0.0	0.5	1.5	2.9	3.7	4.0
135.5°	0.0	0.0	0.6	1.5	2.9	3.7	4.0
136°	0.0	0.0	0.6	1.6	2.9	3.7	4.0
136.5°	0.0	0.0	0.6	1.6	2.9	3.7	4.0
137°	0.0	0.0	0.6	1.6	2.9	3.7	4.0
137.5°	0.0	0.0	0.6	1.6	2.9	3.7	4.0
138°	0.0	0.0	0.6	1.7	2.9	3.7	4.0
138.5°	0.0	0.0	0.7	1.7	2.9	3.7	4.0
139°	0.0	0.0	0.7	1.7	2.9	3.7	4.0
139.5°	0.0	0.0	0.7	1.7	2.9	3.7	4.0
140°	0.0	0.0	0.7	1.7	2.9	3.7	4.0
140.5°	0.0	0.0	0.8	1.7	2.9	3.7	4.0
141°	0.0	0.0	0.8	1.7	2.9	3.7	3.9
141.5°	0.0	0.0	0.8	1.7	2.9	3.7	3.9
142°	0.0	0.0	0.9	1.8	2.9	3.7	3.9
142.5°	0.0	0.0	0.9	1.8	2.9	3.7	3.9
143°	0.0	0.0	0.9	1.8	2.9	3.7	3.9
143.5°	0.0	0.0	0.9	1.8	3.0	3.7	3.8
144°	0.0	0.0	0.9	1.8	3.0	3.7	3.8
144.5°	0.0	0.1	1.0	1.8	3.0	3.7	3.8
145°	0.0	0.1	1.0	1.9	3.0	3.6	3.8
145.5°	0.0	0.1	1.0	1.9	3.0	3.6	3.8
146°	0.0	0.1	1.0	1.9	3.0	3.6	3.7
146.5°	0.0	0.1	1.1	1.9	3.0	3.6	3.7
147°	0.0	0.2	1.1	1.9	3.0	3.6	3.7
147.5°	0.0	0.2	1.1	1.9	3.0	3.6	3.7
148°	0.1	0.2	1.1	2.0	3.0	3.6	3.7
148.5°	0.1	0.3	1.1	2.0	3.0	3.6	3.7
149°	0.1	0.3	1.2	2.0	3.0	3.6	3.7
149.5°	0.1	0.3	1.2	2.0	3.0	3.6	3.6
150°	0.1	0.3	1.2	2.0	3.0	3.6	3.6
150.5°	0.1	0.4	1.2	2.0	3.0	3.6	3.6
151°	0.1	0.4	1.3	2.0	3.0	3.6	3.6
151.5°	0.1	0.4	1.3	2.0	3.0	3.6	3.6
152°	0.2	0.4	1.3	2.0	3.0	3.5	3.5
152.5°	0.2	0.4	1.3	2.1	3.0	3.5	3.5
153°	0.2	0.4	1.4	2.1	3.0	3.5	3.5
153.5°	0.2	0.5	1.4	2.1	3.0	3.5	3.4
154°	0.2	0.5	1.4	2.1	3.0	3.5	3.4
154.5°	0.3	0.5	1.4	2.1	3.0	3.5	3.4
155°	0.3	0.6	1.5	2.2	3.0	3.5	3.4
155.5°	0.3	0.6	1.5	2.1	2.9	3.5	3.3
156°	0.3	0.6	1.5	2.2	3.0	3.5	3.3
156.5°	0.3	0.6	1.5	2.2	2.9	3.4	3.3
157°	0.4	0.7	1.5	2.2	3.0	3.4	3.3

REPORT NUMBER: P1197031

CATALOG NUMBER: AWP28S-BZ-HIGH-5000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
157.5°	0.4	0.7	1.6	2.2	2.9	3.4	3.3
158°	0.4	0.7	1.6	2.2	2.9	3.4	3.2
158.5°	0.4	0.7	1.6	2.2	2.9	3.4	3.2
159°	0.5	0.8	1.6	2.2	2.9	3.4	3.2
159.5°	0.5	0.8	1.6	2.2	2.9	3.3	3.2
160°	0.5	0.9	1.7	2.3	2.9	3.3	3.1
160.5°	0.5	0.9	1.7	2.3	2.9	3.3	3.1
161°	0.6	0.9	1.7	2.3	2.9	3.3	3.1
161.5°	0.6	0.9	1.7	2.3	2.9	3.3	3.1
162°	0.6	1.0	1.7	2.3	2.9	3.3	3.0
162.5°	0.6	1.0	1.8	2.3	2.9	3.2	3.0
163°	0.7	1.0	1.8	2.3	2.9	3.2	2.9
163.5°	0.7	1.0	1.8	2.3	2.9	3.2	2.9
164°	0.7	1.1	1.8	2.3	2.9	3.2	2.9
164.5°	0.7	1.1	1.8	2.3	2.9	3.2	2.8
165°	0.8	1.2	1.9	2.4	2.9	3.2	2.8
165.5°	0.8	1.2	1.9	2.4	2.9	3.2	2.8
166°	0.8	1.2	1.9	2.4	2.9	3.1	2.8
166.5°	0.9	1.2	1.9	2.4	2.9	3.1	2.7
167°	0.9	1.3	2.0	2.4	2.9	3.1	2.7
167.5°	0.9	1.3	2.0	2.5	2.9	3.1	2.7
168°	0.9	1.3	2.0	2.5	2.8	3.1	2.6
168.5°	1.0	1.3	2.0	2.5	2.8	3.1	2.6
169°	1.0	1.4	2.0	2.5	2.8	3.1	2.6
169.5°	1.0	1.4	2.1	2.5	2.8	3.1	2.5
170°	1.1	1.5	2.1	2.5	2.8	3.0	2.5
170.5°	1.1	1.5	2.1	2.5	2.8	3.0	2.5
171°	1.1	1.5	2.1	2.5	2.8	3.0	2.4
171.5°	1.1	1.5	2.1	2.5	2.8	3.0	2.4
172°	1.2	1.6	2.2	2.5	2.8	2.9	2.3
172.5°	1.2	1.6	2.2	2.5	2.8	2.9	2.3
173°	1.2	1.7	2.2	2.5	2.8	2.9	2.3
173.5°	1.3	1.7	2.2	2.5	2.8	2.9	2.2
174°	1.3	1.7	2.2	2.5	2.8	2.9	2.2
174.5°	1.3	1.7	2.3	2.5	2.8	2.8	2.1
175°	1.4	1.7	2.3	2.5	2.7	2.8	2.1
175.5°	1.4	1.8	2.3	2.5	2.7	2.8	2.0
176°	1.4	1.8	2.3	2.5	2.7	2.8	2.0
176.5°	1.5	1.8	2.3	2.5	2.7	2.7	2.0
177°	1.5	1.8	2.4	2.5	2.7	2.7	1.9
177.5°	1.5	1.9	2.4	2.5	2.7	2.7	1.9
178°	1.6	1.9	2.4	2.6	2.7	2.7	1.9
178.5°	1.6	2.0	2.4	2.6	2.6	2.6	1.8
179°	1.6	2.0	2.4	2.6	2.6	2.6	1.8
179.5°	1.7	2.0	2.4	2.6	2.6	2.6	1.7



REPORT NUMBER: P1197031
CATALOG NUMBER: AWPf28S-BZ-HIGH-5000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	1.7	1.7	1.7	1.7	1.7	1.7	1.7

(END OF REPORT)