

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: P1197032

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

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1197032
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-LOW-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: 2724.9 lumens
Efficiency: 79.6%
Efficacy: 129.8 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): 21
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

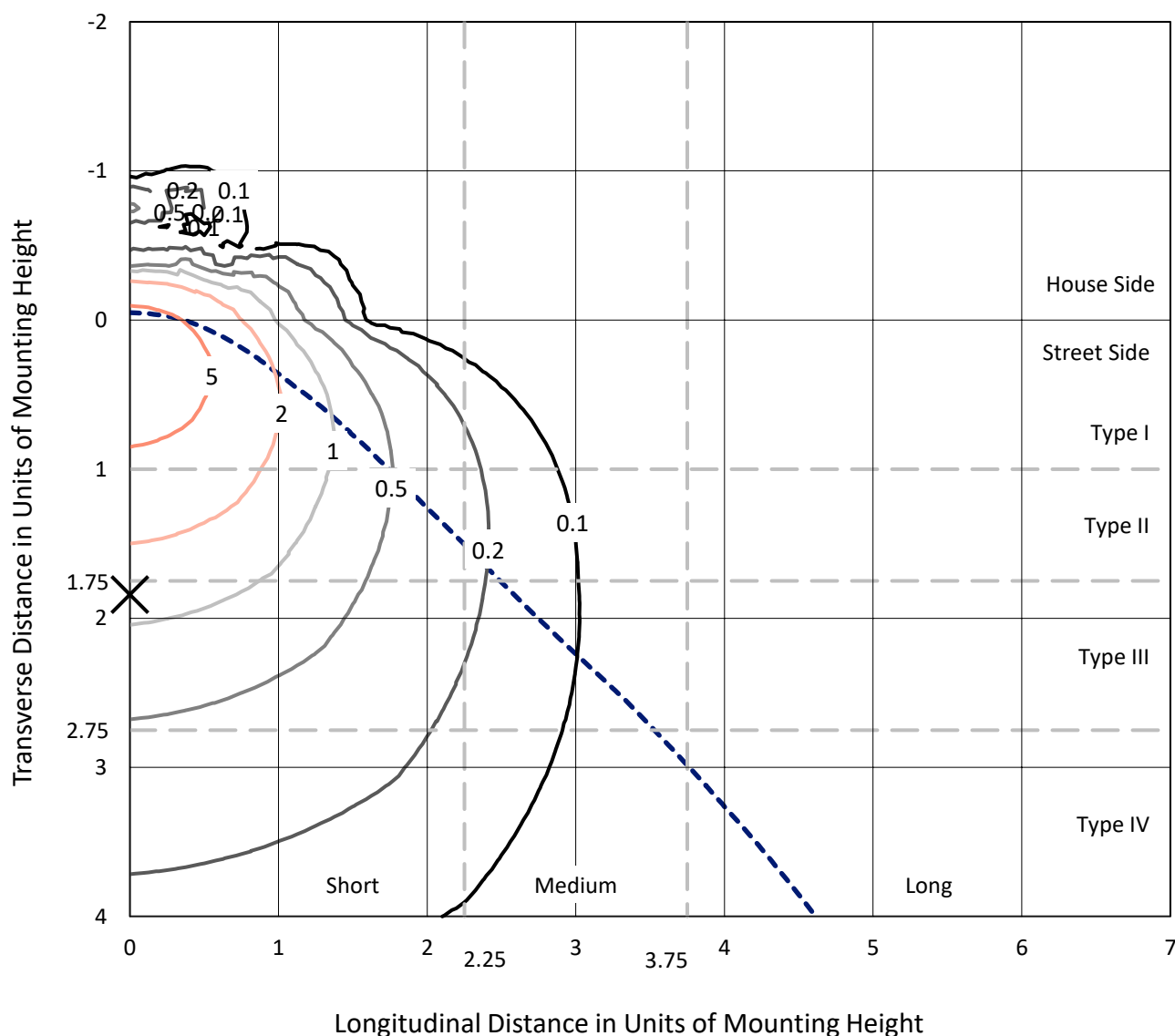
REPORT NUMBER: P1197032

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

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

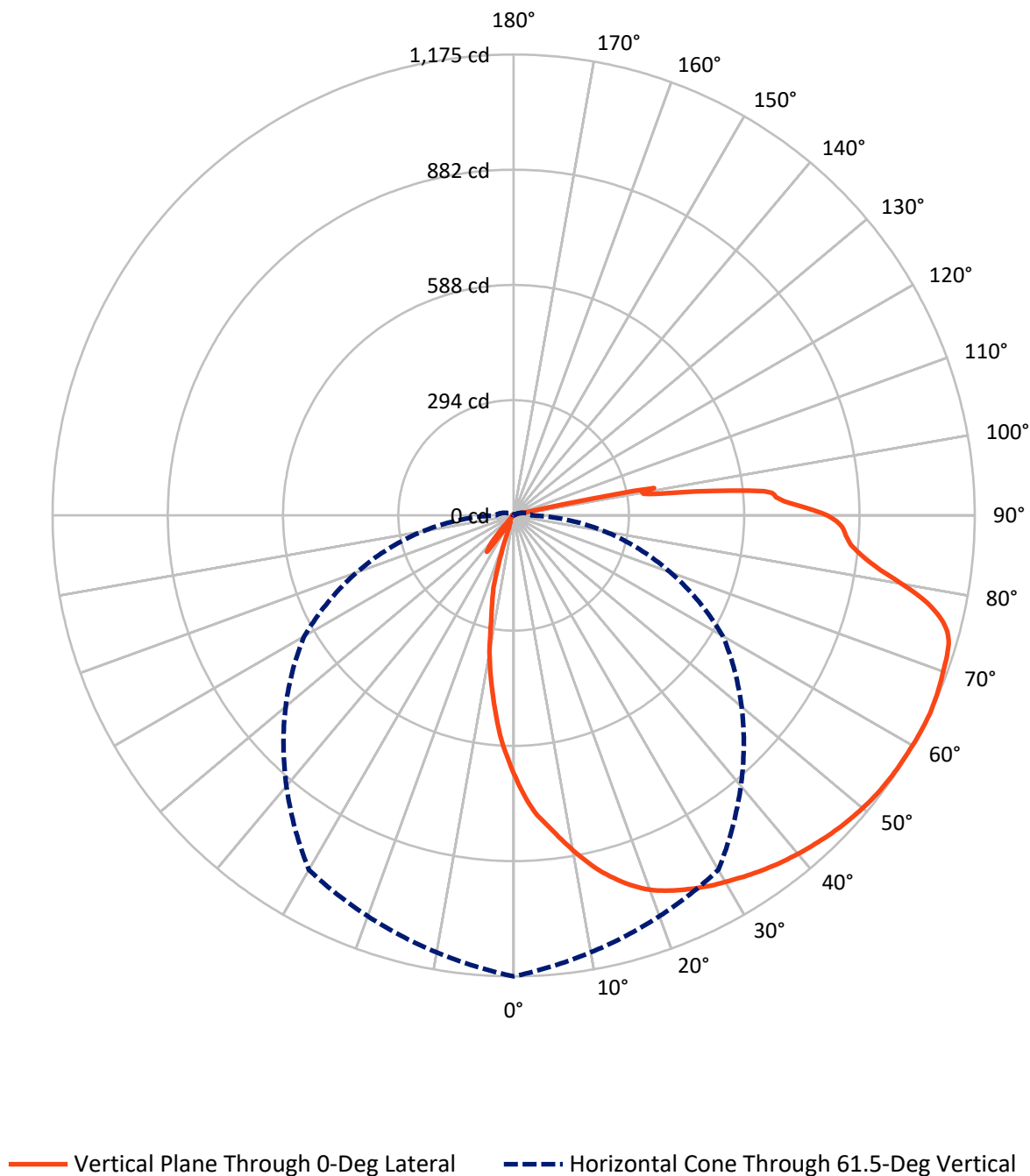


Based on 10 foot mounting height. Maximum calculated value = 8.6 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P1197032

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

Luminous Intensity Polar Plot



REPORT NUMBER: P1197032

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

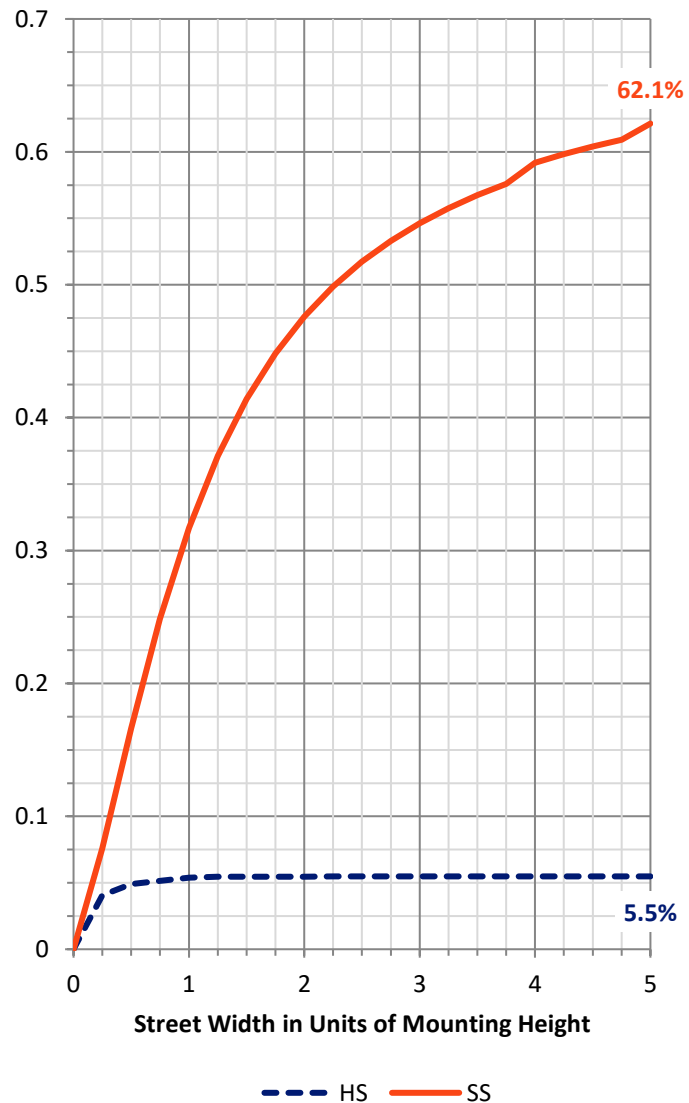
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	190.0	6.4	196.4
	% Lamp	5.6	0.2	5.7
Street Side	Lumens	2338.3	190.2	2528.5
	% Lamp	68.3	5.6	73.9
Total	Lumens	2528.3	196.6	2724.9
	% Lamp	73.9	5.7	79.6

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	62.1	2.3	1.8
10°-20°	168.5	6.2	4.9
20°-30°	244.3	9.0	7.1
30°-40°	306.8	11.3	9.0
40°-50°	354.0	13.0	10.3
50°-60°	366.7	13.5	10.7
60°-70°	371.2	13.6	10.8
70°-80°	360.5	13.2	10.5
80°-90°	294.2	10.8	8.6
90°-100°	175.6	6.4	5.1
100°-110°	14.9	0.5	0.4
110°-120°	1.7	0.1	0.0
120°-130°	1.1	0.0	0.0
130°-140°	1.0	0.0	0.0
140°-150°	0.9	0.0	0.0
150°-160°	0.7	0.0	0.0
160°-170°	0.5	0.0	0.0
170°-180°	0.2	0.0	0.0
0°-90°	2528.3	92.8	73.9
0°-180°	2724.9	100.0	79.6

Coefficient of Utilization



REPORT NUMBER: P1197032

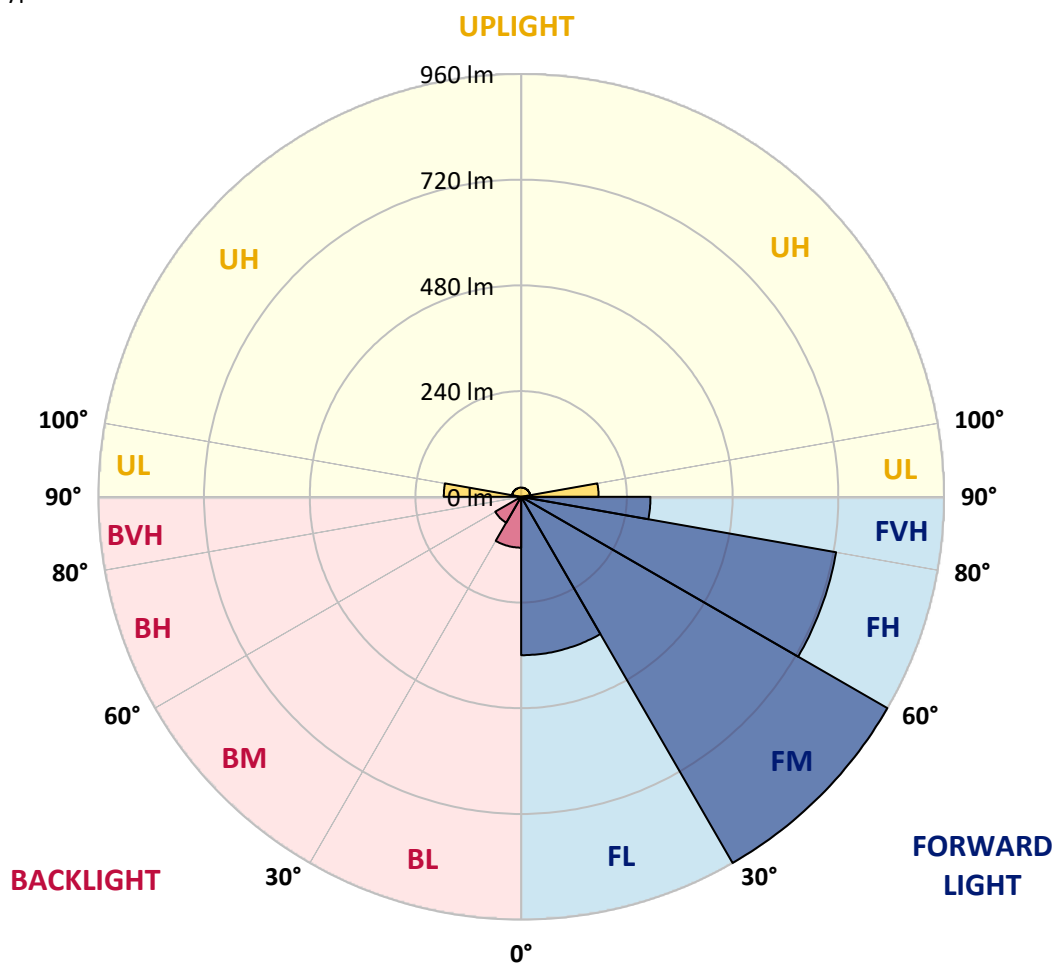
CATALOG NUMBER: AWPf28S-BZ-LOW-5000K-POSITION 45

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	359.4	10.5			
FM	(30°-60°)	959.6	28.0			
FH	(60°-80°)	725.8	21.2			G1/1800
FVH	(80°-90°)	293.5	8.6			G3/500
BL	(0°-30°)	115.4	3.4	B1/500		
BM	(30°-60°)	67.8	2.0	B0/220		
BH	(60°-80°)	6.0	0.2	B0/110		G0/110
BVH	(80°-90°)	0.8	0.0			G0/10
UL	(90°-100°)	175.6	5.1		U3/500	
UH	(100°-180°)	20.9	0.6		U2/50	
Trapped Light		697.1	20.4			

BUG Rating: B1-U3-G3

Type IV Short



REPORT NUMBER: P1197032

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

CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	668.3	668.3	668.3	668.3	668.3	668.3	668.3
0.5°	684.2	686.4	678.3	669.5	658.5	645.7	657.0
1°	697.0	697.2	685.1	669.4	651.9	634.2	643.7
1.5°	709.3	707.9	691.6	669.2	644.8	622.3	630.2
2°	721.9	718.9	697.1	668.7	637.9	610.7	616.7
2.5°	734.7	729.5	703.0	668.3	631.0	599.5	603.9
3°	745.7	739.5	709.0	667.7	623.7	588.0	590.4
3.5°	756.8	749.3	715.0	667.2	616.5	575.8	576.2
4°	766.4	757.9	720.8	666.6	609.5	563.1	561.3
4.5°	774.8	765.8	726.6	665.9	602.5	549.6	545.2
5°	783.1	772.8	731.6	665.0	595.4	535.3	529.4
5.5°	791.5	779.6	736.5	664.2	588.3	521.6	513.2
6°	800.2	786.7	741.4	663.0	580.7	507.5	496.9
6.5°	809.1	794.1	746.0	661.8	573.0	493.0	481.1
7°	818.4	801.7	750.3	660.6	564.9	479.1	464.9
7.5°	827.8	809.0	754.3	659.2	556.4	464.7	448.5
8°	837.4	816.8	757.7	657.9	548.1	450.3	432.6
8.5°	847.0	824.6	760.8	656.3	539.2	436.5	417.5
9°	856.3	832.6	763.9	654.8	530.2	422.2	402.2
9.5°	866.0	840.7	766.8	653.2	521.0	408.7	386.1
10°	875.4	848.4	769.6	651.2	511.4	395.4	369.7
10.5°	884.8	856.4	772.7	649.1	501.9	381.7	353.5
11°	894.1	864.2	775.6	647.0	492.5	367.1	332.7
11.5°	903.2	871.8	778.3	644.8	482.7	353.1	312.8
12°	912.6	879.3	781.4	642.6	472.8	337.5	294.0
12.5°	921.4	886.8	784.3	640.3	462.0	319.9	277.4
13°	929.9	894.3	787.2	637.8	451.2	301.6	262.5
13.5°	937.7	901.6	790.2	635.2	440.5	284.9	248.9
14°	945.2	908.9	792.8	632.5	429.8	270.1	237.2
14.5°	953.2	915.8	795.8	629.6	419.1	256.7	225.8
15°	960.3	922.3	798.9	626.5	409.3	244.2	214.5
15.5°	967.6	928.8	802.0	623.2	399.0	232.4	203.1
16°	974.6	935.1	804.8	620.0	389.3	222.8	191.8
16.5°	981.6	941.5	807.7	616.8	379.6	213.1	174.4
17°	988.0	947.6	810.6	613.6	369.7	203.4	153.6
17.5°	993.9	953.1	813.4	610.3	360.2	193.7	132.6
18°	999.8	958.6	815.8	606.2	350.3	181.1	115.8
18.5°	1005.4	964.1	817.9	602.1	340.0	165.5	101.0
19°	1010.7	969.3	820.2	597.9	329.5	146.8	88.4
19.5°	1015.6	974.2	822.4	593.5	319.0	128.8	73.4
20°	1020.2	979.1	824.3	589.0	308.7	112.5	56.6
20.5°	1024.3	983.3	826.1	584.6	299.0	99.3	41.7
21°	1028.1	987.6	828.1	580.3	288.2	87.6	33.2
21.5°	1032.1	991.5	830.0	575.7	276.2	75.7	29.8
22°	1035.6	995.0	831.6	571.1	264.3	62.1	28.3

REPORT NUMBER: P1197032

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	1038.9	998.5	833.4	566.8	252.9	48.0	27.4
23°	1042.5	1001.7	835.0	562.1	242.1	36.5	26.5
23.5°	1045.6	1004.2	836.6	557.3	232.3	30.0	25.7
24°	1048.8	1006.9	837.9	552.5	223.6	27.3	25.0
24.5°	1051.8	1009.2	839.2	547.5	214.9	26.1	24.3
25°	1055.1	1011.5	840.3	542.6	206.7	25.3	23.4
25.5°	1058.0	1013.6	841.0	537.5	198.7	24.8	22.5
26°	1061.0	1015.8	841.8	532.5	190.5	24.4	21.5
26.5°	1063.6	1017.7	842.5	527.6	182.3	24.1	20.8
27°	1066.4	1019.4	843.1	522.3	174.9	23.7	20.3
27.5°	1069.3	1021.1	843.2	516.9	166.8	23.4	19.9
28°	1072.1	1022.5	843.3	511.3	157.3	23.0	19.8
28.5°	1074.5	1023.9	843.4	505.7	145.5	22.6	19.6
29°	1076.8	1025.0	843.5	499.8	131.8	22.0	19.2
29.5°	1079.3	1026.3	843.6	493.6	116.8	21.4	18.9
30°	1081.8	1027.5	843.6	487.7	102.0	20.7	18.4
30.5°	1084.3	1028.7	843.0	481.5	88.4	20.1	18.0
31°	1087.0	1029.7	842.7	475.2	76.2	19.4	17.6
31.5°	1089.5	1031.2	842.4	468.7	66.1	18.7	17.1
32°	1092.3	1032.1	842.0	462.1	57.5	18.2	16.7
32.5°	1094.8	1033.1	841.4	455.6	51.0	17.6	16.5
33°	1097.4	1034.2	841.1	449.1	45.5	17.2	16.5
33.5°	1099.7	1035.0	840.7	442.7	41.5	16.8	17.1
34°	1102.3	1035.9	840.2	435.8	38.1	16.5	19.8
34.5°	1104.8	1037.0	839.4	428.7	34.9	16.3	32.6
35°	1107.3	1038.2	838.4	421.5	31.5	16.0	53.8
35.5°	1109.4	1039.3	837.1	414.2	28.8	15.7	71.8
36°	1111.9	1040.4	835.7	406.8	27.0	15.4	86.7
36.5°	1114.1	1041.7	834.3	399.2	25.7	15.3	113.3
37°	1116.5	1042.8	832.7	391.7	24.7	15.0	115.0
37.5°	1118.4	1044.1	831.1	383.9	24.0	14.7	106.8
38°	1120.6	1044.9	829.2	376.3	23.3	14.5	103.7
38.5°	1122.8	1046.0	827.2	368.4	22.6	14.3	100.7
39°	1125.1	1047.4	825.2	360.6	21.9	14.3	95.8
39.5°	1127.2	1048.4	822.7	352.6	21.3	14.7	88.3
40°	1129.0	1049.2	820.1	344.3	20.6	17.2	78.4
40.5°	1131.2	1050.1	817.3	336.1	20.2	25.3	68.7
41°	1133.0	1051.0	814.6	327.5	19.9	38.5	57.2
41.5°	1134.8	1051.6	811.9	319.2	19.7	48.2	45.7
42°	1136.9	1052.2	808.8	310.4	19.3	52.1	36.4
42.5°	1138.8	1052.7	805.5	301.2	19.0	65.0	30.4
43°	1140.6	1053.0	802.3	292.6	18.6	73.5	26.0
43.5°	1142.7	1053.3	798.8	283.8	18.0	66.0	22.3
44°	1144.6	1053.5	794.9	275.5	17.4	62.0	18.9
44.5°	1146.3	1053.6	791.3	266.9	16.9	59.7	15.7

REPORT NUMBER: P1197032

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	1147.9	1053.9	787.3	257.9	16.4	57.8	13.1
45.5°	1149.8	1054.0	783.3	248.8	16.1	56.1	11.1
46°	1151.3	1054.1	779.2	239.7	15.7	53.8	9.6
46.5°	1152.9	1054.4	774.6	230.5	15.4	51.3	8.5
47°	1154.4	1054.2	770.4	221.6	15.1	48.6	7.6
47.5°	1155.6	1054.5	765.9	212.8	14.7	46.0	6.9
48°	1157.2	1054.5	761.2	203.9	14.4	43.4	6.5
48.5°	1158.7	1054.8	756.6	195.0	14.0	40.6	6.0
49°	1160.0	1054.9	752.1	187.1	13.6	37.0	5.6
49.5°	1161.2	1054.6	747.3	179.1	13.1	33.5	5.2
50°	1162.5	1054.5	742.8	171.6	12.6	29.9	4.8
50.5°	1164.0	1054.6	738.1	164.9	12.2	26.2	4.2
51°	1165.2	1054.4	733.4	158.9	11.8	23.2	3.7
51.5°	1166.1	1054.2	728.9	153.3	11.5	20.5	3.2
52°	1167.4	1054.0	724.0	148.5	11.1	18.2	2.7
52.5°	1168.1	1053.6	719.2	144.0	10.7	16.1	2.4
53°	1168.6	1053.0	714.6	139.2	10.3	14.1	2.4
53.5°	1169.4	1052.4	709.5	134.0	9.9	12.2	2.3
54°	1170.1	1051.8	704.5	129.1	9.5	10.5	2.2
54.5°	1170.7	1050.8	699.5	124.1	9.2	8.1	2.1
55°	1171.2	1050.1	694.5	118.0	8.8	4.6	1.8
55.5°	1171.4	1049.5	689.3	109.5	8.5	2.5	1.6
56°	1171.8	1048.7	683.8	98.5	8.2	1.8	1.5
56.5°	1172.2	1048.3	678.1	85.4	7.9	1.6	1.4
57°	1172.4	1047.8	672.1	72.4	7.6	1.6	1.2
57.5°	1172.9	1047.7	666.1	62.9	7.2	1.6	1.0
58°	1173.0	1047.5	659.9	57.2	6.8	1.5	0.9
58.5°	1173.3	1046.9	653.9	53.6	6.5	1.4	0.7
59°	1173.7	1046.7	647.9	51.4	6.1	1.3	0.6
59.5°	1174.3	1046.2	641.5	50.0	5.8	1.1	0.6
60°	1174.7	1045.6	635.1	49.2	5.4	1.0	0.5
60.5°	1174.9	1045.0	628.7	48.5	5.1	0.7	0.5
61°	1175.0	1044.5	622.3	47.7	4.7	0.6	0.5
61.5°	1175.4	1043.6	615.9	46.8	4.4	0.6	0.5
62°	1175.3	1042.9	609.9	46.0	4.1	0.6	0.5
62.5°	1175.4	1042.3	604.3	45.2	3.8	0.5	0.5
63°	1175.4	1042.0	598.3	44.3	3.5	0.5	0.5
63.5°	1175.3	1041.6	592.4	43.4	3.1	0.5	0.5
64°	1175.2	1041.1	586.3	42.3	2.9	0.5	0.5
64.5°	1174.8	1040.6	580.5	41.3	2.6	0.5	0.5
65°	1173.9	1040.0	574.8	40.2	2.4	0.4	0.5
65.5°	1173.5	1039.6	569.1	39.1	2.2	0.5	0.5
66°	1172.9	1039.3	563.6	37.7	2.0	0.5	0.5
66.5°	1172.0	1038.5	557.9	36.5	1.8	0.4	0.6
67°	1170.8	1037.8	552.7	35.4	1.6	0.4	0.6

REPORT NUMBER: P1197032

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	1169.9	1037.1	547.4	34.3	1.4	0.4	0.7
68°	1168.7	1036.0	542.1	33.1	1.2	0.4	0.7
68.5°	1167.8	1035.0	536.8	32.3	1.1	0.4	0.7
69°	1166.7	1033.7	531.5	31.5	0.9	0.4	0.7
69.5°	1165.3	1032.0	526.2	31.0	0.9	0.4	0.7
70°	1164.3	1030.2	520.6	30.9	0.9	0.4	0.7
70.5°	1163.2	1028.4	514.7	30.9	0.8	0.4	0.7
71°	1162.6	1026.6	508.7	30.9	0.8	0.4	0.8
71.5°	1161.3	1024.2	502.5	30.9	0.7	0.4	0.8
72°	1159.9	1022.0	496.5	30.5	0.6	0.5	0.8
72.5°	1158.5	1020.4	491.0	29.9	0.5	0.5	0.9
73°	1156.7	1018.5	485.5	28.9	0.5	0.5	0.9
73.5°	1153.6	1016.5	479.9	27.3	0.5	0.5	0.9
74°	1149.3	1014.5	475.0	25.2	0.5	0.5	1.0
74.5°	1144.4	1012.5	469.9	23.2	0.5	0.5	1.0
75°	1137.6	1011.0	465.3	20.3	0.5	0.5	1.1
75.5°	1128.6	1008.2	461.2	17.9	0.5	0.6	1.1
76°	1118.3	1004.8	457.6	16.3	0.5	0.6	1.1
76.5°	1107.1	999.7	453.8	15.0	0.5	0.6	1.2
77°	1094.5	993.0	448.6	13.8	0.5	0.7	1.2
77.5°	1079.4	984.5	443.4	12.7	0.5	0.7	1.2
78°	1062.3	974.0	438.2	11.7	0.5	0.7	1.3
78.5°	1044.3	963.3	433.0	10.6	0.5	0.8	1.3
79°	1024.8	950.5	427.8	9.7	0.5	0.8	1.4
79.5°	1004.2	936.0	423.9	8.9	0.5	0.8	1.4
80°	984.4	918.9	419.4	7.9	0.5	0.8	1.4
80.5°	965.3	900.6	414.9	7.1	0.6	0.9	1.5
81°	946.4	880.3	410.5	6.3	0.6	0.9	1.5
81.5°	930.6	859.4	406.5	5.7	0.6	0.9	1.6
82°	915.9	840.2	402.8	5.2	0.6	0.9	1.6
82.5°	903.4	822.6	399.7	4.7	0.6	1.0	1.6
83°	891.7	807.6	396.8	4.2	0.6	1.0	1.7
83.5°	881.3	794.3	394.2	3.7	0.7	1.0	1.7
84°	871.9	784.0	390.8	3.4	0.7	1.1	1.7
84.5°	863.6	775.8	386.8	3.0	0.7	1.1	1.8
85°	857.9	770.4	381.7	2.7	0.7	1.1	1.8
85.5°	853.6	765.6	375.2	2.3	0.7	1.2	1.8
86°	849.2	762.5	368.0	2.1	0.8	1.2	1.9
86.5°	845.4	762.2	360.6	1.8	0.8	1.2	1.9
87°	842.1	763.6	352.9	1.6	0.8	1.3	2.0
87.5°	837.6	766.4	345.8	1.4	0.8	1.3	2.0
88°	830.9	771.3	339.5	1.2	0.8	1.3	2.0
88.5°	822.2	777.6	335.2	1.0	0.9	1.4	2.1
89°	811.7	786.5	333.2	0.9	0.9	1.4	2.1
89.5°	799.3	797.1	330.9	0.8	0.9	1.4	2.1

REPORT NUMBER: P1197032

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	783.6	804.6	328.7	0.5	0.9	1.5	2.2
90.5°	764.8	808.0	329.3	0.5	1.0	1.5	2.2
91°	745.6	804.9	326.1	0.5	1.0	1.5	2.2
91.5°	725.9	787.6	320.3	0.5	1.0	1.5	2.2
92°	706.7	758.2	314.3	0.5	1.0	1.6	2.2
92.5°	691.0	713.4	302.7	0.5	1.0	1.6	2.3
93°	679.9	654.2	280.8	0.5	1.1	1.6	2.3
93.5°	670.4	591.1	251.0	0.5	1.1	1.7	2.3
94°	666.9	523.0	215.8	0.4	1.1	1.7	2.4
94.5°	660.8	461.6	180.9	0.4	1.1	1.7	2.4
95°	642.2	414.8	150.6	0.4	1.1	1.8	2.4
95.5°	603.5	381.8	123.5	0.4	1.2	1.8	2.4
96°	557.0	348.5	102.8	0.4	1.2	1.8	2.5
96.5°	510.4	304.5	86.2	0.4	1.2	1.8	2.5
97°	464.3	299.7	71.1	0.4	1.2	1.9	2.5
97.5°	418.4	332.4	57.1	0.4	1.3	1.9	2.5
98°	373.8	370.3	48.8	0.4	1.3	1.9	2.6
98.5°	350.5	373.8	49.1	0.4	1.3	2.0	2.6
99°	335.8	318.7	51.6	0.4	1.3	2.0	2.6
99.5°	332.9	223.1	50.9	0.5	1.3	2.0	2.6
100°	349.5	171.2	52.6	0.5	1.4	2.0	2.6
100.5°	364.8	121.9	48.2	0.5	1.4	2.1	2.7
101°	312.4	72.6	38.6	0.5	1.4	2.1	2.7
101.5°	203.3	23.2	26.1	0.5	1.4	2.1	2.7
102°	125.2	16.9	19.5	0.5	1.4	2.1	2.7
102.5°	66.3	15.7	16.9	0.5	1.5	2.2	2.7
103°	30.1	15.4	14.5	0.5	1.5	2.2	2.7
103.5°	20.3	15.7	12.0	0.5	1.5	2.2	2.8
104°	19.7	17.2	9.7	0.5	1.5	2.2	2.8
104.5°	19.1	19.4	7.7	0.5	1.5	2.2	2.8
105°	19.3	18.9	6.2	0.5	1.5	2.3	2.8
105.5°	20.2	17.3	5.3	0.5	1.6	2.3	2.8
106°	22.3	16.5	4.6	0.5	1.6	2.3	2.8
106.5°	23.4	16.2	3.9	0.5	1.6	2.3	2.8
107°	21.8	15.1	3.2	0.5	1.6	2.3	2.8
107.5°	19.4	13.6	2.6	0.5	1.6	2.3	2.8
108°	18.4	11.6	2.2	0.5	1.6	2.3	2.9
108.5°	17.3	9.3	1.9	0.5	1.7	2.4	2.9
109°	15.2	7.3	1.7	0.5	1.7	2.4	2.9
109.5°	12.6	5.7	1.5	0.5	1.7	2.4	2.9
110°	10.3	4.5	1.3	0.5	1.7	2.4	2.9
110.5°	8.5	4.0	1.1	0.5	1.7	2.4	2.9
111°	7.6	3.7	0.9	0.6	1.7	2.5	2.9
111.5°	7.0	3.5	0.8	0.6	1.8	2.5	2.9
112°	6.2	3.2	0.7	0.6	1.8	2.5	2.9

REPORT NUMBER: P1197032

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	5.3	2.7	0.6	0.6	1.8	2.5	2.9
113°	4.5	2.2	0.5	0.6	1.8	2.6	2.9
113.5°	3.9	1.7	0.5	0.6	1.8	2.6	3.0
114°	3.5	1.3	0.4	0.6	1.8	2.6	3.0
114.5°	2.9	1.0	0.3	0.7	1.8	2.6	3.0
115°	2.2	0.9	0.2	0.7	1.9	2.6	3.0
115.5°	1.7	0.8	0.2	0.7	1.9	2.6	3.0
116°	1.3	0.6	0.1	0.7	1.9	2.6	3.0
116.5°	1.1	0.5	0.1	0.7	1.9	2.6	3.0
117°	0.9	0.3	0.1	0.7	1.9	2.6	3.0
117.5°	0.7	0.2	0.1	0.7	1.9	2.7	3.0
118°	0.6	0.1	0.1	0.7	1.9	2.7	3.0
118.5°	0.4	0.0	0.0	0.7	1.9	2.7	3.0
119°	0.2	0.0	0.0	0.7	2.0	2.7	3.0
119.5°	0.1	0.0	0.0	0.8	2.0	2.7	3.0
120°	0.0	0.0	0.0	0.8	2.0	2.7	3.0
120.5°	0.0	0.0	0.0	0.8	2.0	2.7	3.0
121°	0.0	0.0	0.1	0.8	2.0	2.7	3.0
121.5°	0.0	0.0	0.1	0.8	2.0	2.7	3.0
122°	0.0	0.0	0.1	0.8	2.0	2.7	3.0
122.5°	0.0	0.0	0.1	0.8	2.0	2.7	3.0
123°	0.0	0.0	0.1	0.9	2.0	2.7	3.0
123.5°	0.0	0.0	0.1	0.9	2.0	2.7	3.0
124°	0.0	0.0	0.1	0.9	2.0	2.7	3.0
124.5°	0.0	0.0	0.1	0.9	2.0	2.7	3.0
125°	0.0	0.0	0.1	0.9	2.1	2.7	3.0
125.5°	0.0	0.0	0.1	0.9	2.1	2.7	3.0
126°	0.0	0.0	0.1	0.9	2.1	2.7	3.0
126.5°	0.0	0.0	0.2	0.9	2.1	2.8	3.0
127°	0.0	0.0	0.2	1.0	2.1	2.8	3.0
127.5°	0.0	0.0	0.2	1.0	2.1	2.8	3.0
128°	0.0	0.0	0.2	1.0	2.1	2.8	3.0
128.5°	0.0	0.0	0.2	1.0	2.1	2.8	3.0
129°	0.0	0.0	0.2	1.0	2.1	2.8	3.0
129.5°	0.0	0.0	0.2	1.0	2.1	2.8	3.0
130°	0.0	0.0	0.3	1.0	2.1	2.8	3.0
130.5°	0.0	0.0	0.3	1.0	2.1	2.8	3.0
131°	0.0	0.0	0.3	1.1	2.1	2.8	3.0
131.5°	0.0	0.0	0.3	1.1	2.1	2.8	3.0
132°	0.0	0.0	0.3	1.1	2.1	2.8	3.0
132.5°	0.0	0.0	0.3	1.1	2.1	2.8	3.0
133°	0.0	0.0	0.3	1.1	2.1	2.8	3.0
133.5°	0.0	0.0	0.4	1.1	2.2	2.8	3.0
134°	0.0	0.0	0.4	1.2	2.2	2.8	3.0
134.5°	0.0	0.0	0.4	1.1	2.2	2.8	3.0

REPORT NUMBER: P1197032

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	0.0	0.0	0.4	1.2	2.2	2.8	3.0
135.5°	0.0	0.0	0.4	1.2	2.2	2.8	3.0
136°	0.0	0.0	0.4	1.2	2.2	2.8	3.0
136.5°	0.0	0.0	0.5	1.2	2.2	2.8	3.0
137°	0.0	0.0	0.5	1.2	2.2	2.8	3.0
137.5°	0.0	0.0	0.5	1.2	2.2	2.8	3.0
138°	0.0	0.0	0.5	1.2	2.2	2.8	3.0
138.5°	0.0	0.0	0.5	1.3	2.2	2.8	3.0
139°	0.0	0.0	0.5	1.3	2.2	2.8	3.0
139.5°	0.0	0.0	0.5	1.3	2.2	2.8	3.0
140°	0.0	0.0	0.6	1.3	2.2	2.8	3.0
140.5°	0.0	0.0	0.6	1.3	2.2	2.8	3.0
141°	0.0	0.0	0.6	1.3	2.2	2.8	3.0
141.5°	0.0	0.0	0.6	1.3	2.2	2.8	2.9
142°	0.0	0.0	0.6	1.3	2.2	2.8	2.9
142.5°	0.0	0.0	0.6	1.3	2.2	2.8	2.9
143°	0.0	0.0	0.7	1.4	2.2	2.8	2.9
143.5°	0.0	0.0	0.7	1.4	2.2	2.8	2.9
144°	0.0	0.0	0.7	1.4	2.2	2.8	2.9
144.5°	0.0	0.1	0.7	1.4	2.2	2.7	2.9
145°	0.0	0.1	0.7	1.4	2.2	2.7	2.9
145.5°	0.0	0.1	0.8	1.4	2.2	2.7	2.8
146°	0.0	0.1	0.8	1.4	2.2	2.7	2.8
146.5°	0.0	0.1	0.8	1.4	2.2	2.7	2.8
147°	0.0	0.1	0.8	1.4	2.2	2.7	2.8
147.5°	0.0	0.1	0.8	1.5	2.2	2.7	2.8
148°	0.0	0.2	0.8	1.5	2.2	2.7	2.8
148.5°	0.0	0.2	0.9	1.5	2.2	2.7	2.8
149°	0.1	0.2	0.9	1.5	2.2	2.7	2.8
149.5°	0.1	0.2	0.9	1.5	2.2	2.7	2.7
150°	0.1	0.2	0.9	1.5	2.2	2.7	2.7
150.5°	0.1	0.3	0.9	1.5	2.2	2.7	2.7
151°	0.1	0.3	0.9	1.5	2.2	2.7	2.7
151.5°	0.1	0.3	1.0	1.5	2.2	2.7	2.7
152°	0.1	0.3	1.0	1.5	2.2	2.7	2.6
152.5°	0.1	0.3	1.0	1.6	2.2	2.7	2.6
153°	0.1	0.3	1.0	1.6	2.2	2.7	2.6
153.5°	0.2	0.4	1.0	1.6	2.2	2.6	2.6
154°	0.2	0.4	1.1	1.6	2.2	2.6	2.6
154.5°	0.2	0.4	1.1	1.6	2.2	2.6	2.5
155°	0.2	0.4	1.1	1.6	2.2	2.6	2.5
155.5°	0.2	0.4	1.1	1.6	2.2	2.6	2.5
156°	0.2	0.4	1.1	1.6	2.2	2.6	2.5
156.5°	0.3	0.5	1.1	1.6	2.2	2.6	2.5
157°	0.3	0.5	1.1	1.6	2.2	2.6	2.5

REPORT NUMBER: P1197032

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

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1197032
CATALOG NUMBER: AWPf28S-BZ-LOW-5000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	1.3	1.3	1.3	1.3	1.3	1.3	1.3

(END OF REPORT)