

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: P1197011

Luminaire Tested: AWPf28S-BZ-LOW-4000K-POSITION 15

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1197011
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-4000K-POSITION 15
Description: AWP Architectural Wall Pack Series - Wall Mount Luminaire
Light Source: 85 CRI, 4000K
Ballast/Driver: -

Summary

Lumens per Lamp: 3604 (1 lamp)
Luminaire Lumens: 2859.5 lumens
Efficiency: 79.3%
Efficacy: 140.2 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

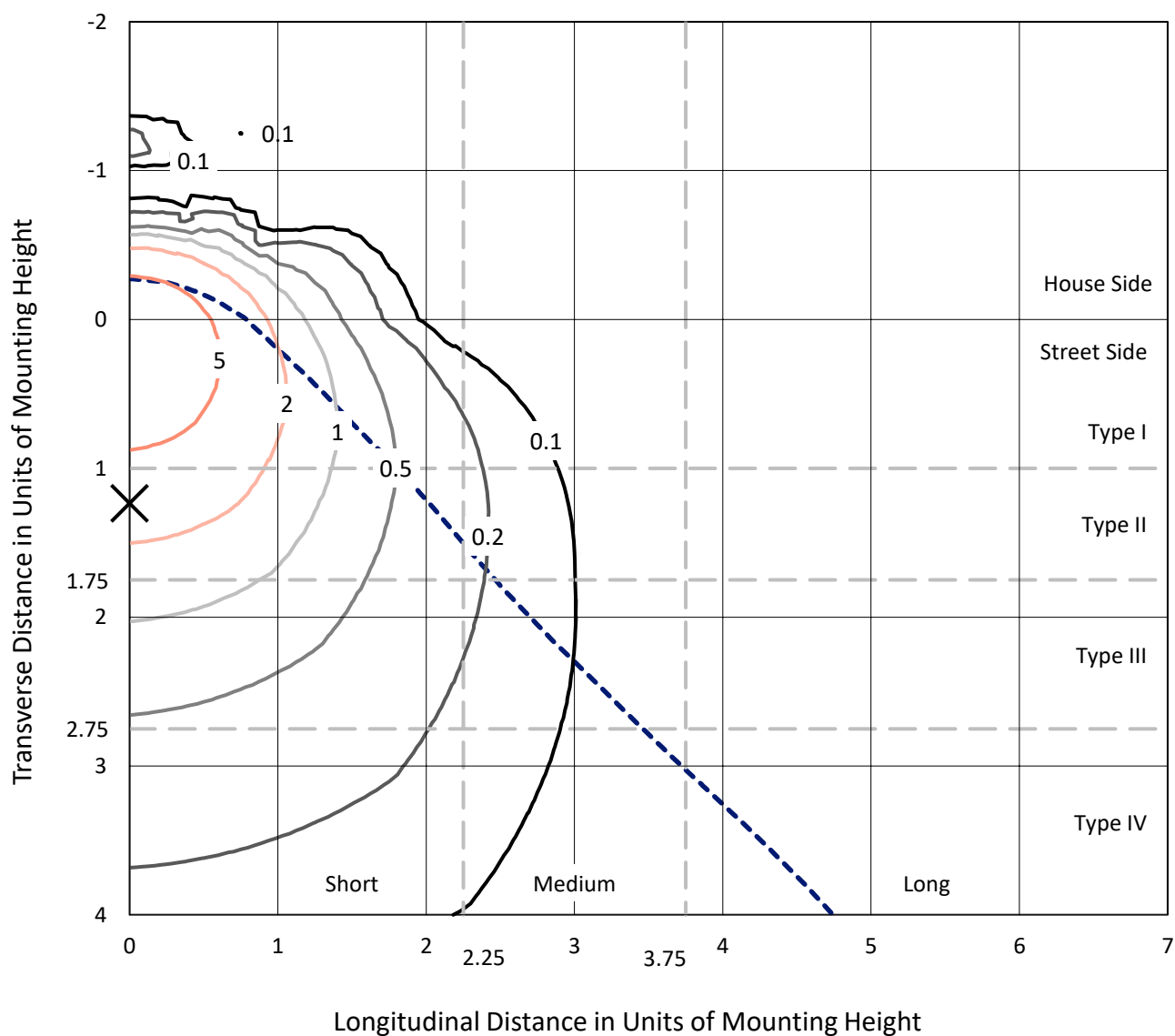
Input Watts (W): 20.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

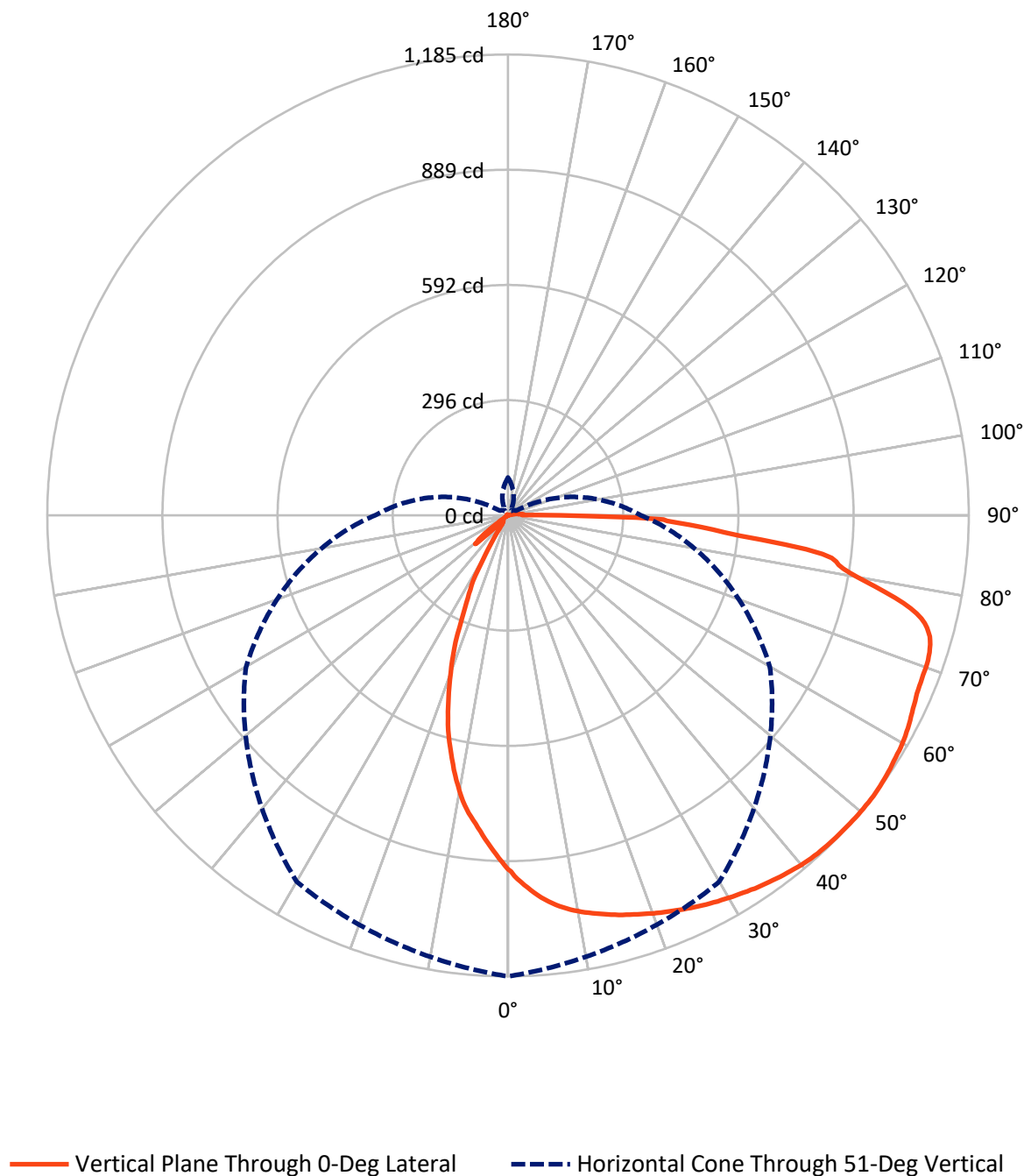


Based on 10 foot mounting height. Maximum calculated value = 9.9 fc
Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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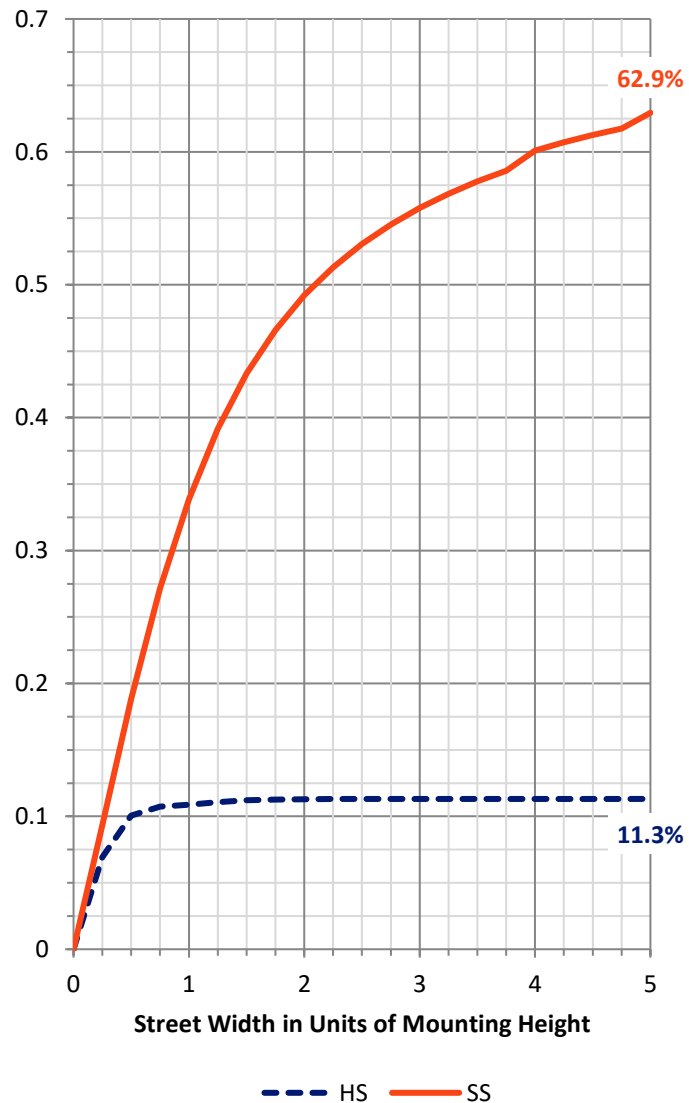
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	412.5	6.4	418.9
	% Lamp	11.4	0.2	11.6
Street Side	Lumens	2417.8	22.7	2440.6
	% Lamp	67.1	0.6	67.7
Total	Lumens	2830.4	29.1	2859.5
	% Lamp	78.5	0.8	79.3

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	86.1	3.0	2.4
10°-20°	239.8	8.4	6.7
20°-30°	340.2	11.9	9.4
30°-40°	380.6	13.3	10.6
40°-50°	399.5	14.0	11.1
50°-60°	407.7	14.3	11.3
60°-70°	382.7	13.4	10.6
70°-80°	359.1	12.6	10.0
80°-90°	234.7	8.2	6.5
90°-100°	20.2	0.7	0.6
100°-110°	2.6	0.1	0.1
110°-120°	1.1	0.0	0.0
120°-130°	1.2	0.0	0.0
130°-140°	1.2	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°	2830.4	99.0	78.5
0°-180°	2859.5	100.0	79.3

Coefficient of Utilization



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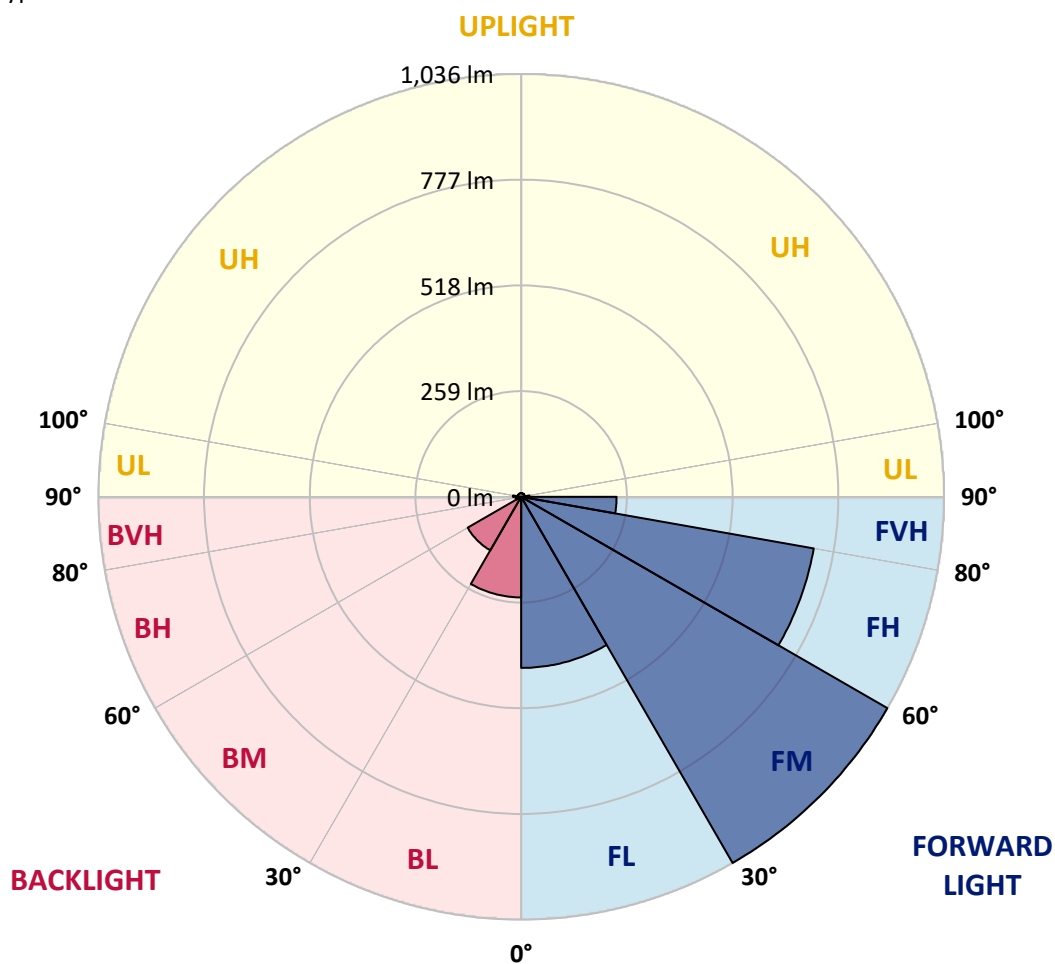
CATALOG NUMBER: AWP28S-BZ-LOW-4000K-POSITION 15

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	419.4	11.6			
FM	(30°-60°)	1036.4	28.8			
FH	(60°-80°)	728.2	20.2			G1/1800
FVH	(80°-90°)	233.9	6.5			G3/500
BL	(0°-30°)	246.7	6.8	B1/500		
BM	(30°-60°)	151.4	4.2	B0/220		
BH	(60°-80°)	13.7	0.4	B0/110		G0/110
BVH	(80°-90°)	0.8	0.0			G0/10
UL	(90°-100°)	20.2	0.6		U2/50	
UH	(100°-180°)	8.9	0.2		U1/10	
Trapped Light		744.5	20.7			

BUG Rating: B1-U2-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	915.5	915.5	915.5	915.5	915.5	915.5	915.5
0.5°	927.2	927.9	922.2	915.8	908.5	899.9	909.3
1°	935.1	934.5	926.4	915.7	904.0	891.9	900.1
1.5°	942.8	941.2	930.2	915.4	899.3	883.7	890.9
2°	950.6	947.9	933.7	915.1	894.5	875.4	881.5
2.5°	958.0	954.3	937.2	914.8	889.5	867.4	872.1
3°	965.3	960.3	940.7	914.4	884.5	859.0	862.6
3.5°	972.3	966.4	944.2	913.7	879.6	850.7	853.2
4°	979.2	972.2	947.6	913.0	874.4	842.5	844.0
4.5°	985.9	978.0	950.7	912.0	869.2	834.1	834.3
5°	991.9	983.3	953.5	911.0	863.8	825.8	824.7
5.5°	997.8	988.4	956.3	909.9	858.2	817.5	815.4
6°	1003.2	993.3	959.1	908.8	852.7	809.2	806.2
6.5°	1008.2	998.2	961.9	907.6	847.1	800.8	797.0
7°	1013.3	1002.7	964.6	906.2	841.4	792.5	788.4
7.5°	1017.6	1006.8	967.2	905.0	835.7	784.4	779.8
8°	1021.4	1010.8	969.8	903.6	830.2	776.7	771.7
8.5°	1025.7	1014.3	972.4	902.4	824.3	769.0	763.0
9°	1029.4	1017.5	974.7	900.8	818.2	761.5	753.6
9.5°	1032.8	1020.2	976.9	899.1	812.1	753.4	742.6
10°	1036.2	1023.3	978.9	897.5	805.9	744.3	731.6
10.5°	1039.4	1025.8	981.0	895.8	799.7	734.2	719.2
11°	1042.3	1028.1	982.8	893.8	793.6	724.2	706.5
11.5°	1045.3	1030.7	984.5	891.8	787.5	713.3	694.0
12°	1048.3	1033.1	986.2	889.5	781.2	701.3	681.4
12.5°	1051.4	1035.4	987.8	886.9	774.8	690.4	668.0
13°	1054.3	1037.6	989.0	884.3	768.6	679.0	654.5
13.5°	1057.3	1039.7	990.0	881.5	762.2	666.7	640.9
14°	1059.8	1041.7	990.7	878.7	755.9	654.6	627.8
14.5°	1062.6	1043.7	991.6	875.7	749.8	642.5	614.3
15°	1065.8	1045.7	992.0	872.5	743.4	630.4	601.6
15.5°	1068.3	1047.8	992.2	869.2	736.6	617.8	588.3
16°	1070.6	1049.5	992.4	865.9	729.6	605.9	574.3
16.5°	1072.9	1051.5	992.2	862.5	722.3	593.5	559.1
17°	1075.2	1053.4	991.7	859.1	714.3	581.4	543.0
17.5°	1078.0	1055.4	991.0	855.7	706.0	569.2	527.2
18°	1080.5	1057.1	990.4	852.0	697.6	555.7	511.4
18.5°	1083.1	1058.4	989.9	848.2	689.0	541.8	495.3
19°	1085.8	1059.9	989.2	844.2	680.1	527.4	479.6
19.5°	1088.8	1061.4	988.1	840.0	670.5	512.4	463.2
20°	1091.3	1062.9	987.1	835.8	661.1	497.3	447.0
20.5°	1093.8	1064.5	986.1	831.5	651.6	482.2	431.2
21°	1096.1	1066.1	985.1	827.4	642.0	466.7	415.7
21.5°	1098.6	1067.9	984.0	822.9	632.0	450.9	400.3
22°	1100.8	1069.7	982.7	817.8	621.9	436.0	384.2

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CATALOG NUMBER: AWP28S-BZ-LOW-4000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	1103.1	1071.4	981.4	812.5	611.6	421.0	367.9
23°	1105.7	1072.7	979.7	807.0	600.6	406.4	352.4
23.5°	1108.2	1074.3	978.1	801.3	589.4	392.4	331.7
24°	1110.5	1075.8	976.2	795.8	578.2	378.4	311.5
24.5°	1113.2	1077.1	974.3	790.1	567.4	364.3	292.8
25°	1115.4	1078.4	972.3	784.4	556.6	349.4	276.7
25.5°	1117.6	1079.9	970.2	778.6	546.0	334.8	261.5
26°	1119.9	1081.0	967.8	773.1	535.5	317.7	248.3
26.5°	1122.5	1082.2	965.5	767.2	525.2	298.9	236.1
27°	1124.6	1083.6	962.7	761.2	514.4	281.4	224.9
27.5°	1126.7	1085.0	959.6	754.9	502.6	265.2	213.8
28°	1129.0	1085.8	956.6	748.9	489.9	250.8	202.7
28.5°	1130.9	1086.9	953.6	742.8	477.7	238.6	191.7
29°	1132.9	1087.9	950.4	736.5	464.5	227.9	175.0
29.5°	1135.0	1088.9	947.2	730.0	451.3	217.4	154.0
30°	1137.2	1089.5	943.8	723.1	438.1	206.8	132.6
30.5°	1139.2	1090.3	940.5	716.5	424.9	196.2	115.4
31°	1141.3	1091.2	937.5	709.8	411.7	184.9	100.6
31.5°	1143.4	1092.0	934.5	702.8	398.0	171.1	87.6
32°	1145.6	1092.9	931.2	695.6	384.6	153.4	73.6
32.5°	1147.5	1093.1	928.3	688.6	371.7	133.9	57.0
33°	1150.0	1093.9	925.3	681.5	358.3	116.0	41.7
33.5°	1151.7	1094.5	922.4	674.2	345.5	100.6	32.0
34°	1153.7	1095.0	919.5	666.5	332.9	87.8	28.1
34.5°	1155.5	1095.4	916.5	658.2	319.7	75.8	26.5
35°	1157.3	1095.9	913.7	649.9	306.4	62.9	25.7
35.5°	1159.2	1096.6	910.7	641.5	294.4	49.0	25.0
36°	1161.1	1097.0	907.8	632.8	282.2	37.8	24.5
36.5°	1162.8	1097.1	904.5	623.8	271.2	30.8	23.8
37°	1164.5	1097.3	901.1	614.8	259.9	27.8	23.1
37.5°	1166.3	1097.5	897.7	606.3	249.2	26.4	22.3
38°	1168.1	1097.9	894.7	596.7	238.6	25.4	21.5
38.5°	1169.8	1098.3	891.0	587.4	228.3	24.8	20.6
39°	1171.3	1098.6	887.2	577.6	217.8	24.2	20.0
39.5°	1172.9	1098.5	883.4	568.0	207.4	23.7	19.6
40°	1174.2	1098.4	880.5	558.1	197.2	23.1	19.3
40.5°	1175.4	1098.4	876.7	548.3	185.3	22.6	19.3
41°	1176.6	1098.2	872.9	538.0	174.2	22.2	19.1
41.5°	1177.4	1098.0	868.8	528.0	163.5	21.9	18.9
42°	1178.4	1097.4	864.5	517.8	150.7	21.6	18.7
42.5°	1179.0	1096.9	859.8	507.1	136.4	21.3	18.3
43°	1179.6	1096.5	856.0	497.1	120.9	20.9	17.9
43.5°	1180.3	1096.2	851.7	487.3	103.7	20.3	17.5
44°	1180.8	1095.8	847.5	477.1	86.2	19.6	17.1
44.5°	1181.3	1095.7	843.2	467.2	69.7	18.9	16.9

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	1181.8	1095.3	838.9	457.0	56.9	18.2	16.9
45.5°	1181.8	1094.7	834.6	447.0	48.1	17.4	17.2
46°	1182.2	1094.6	830.1	437.3	42.5	16.6	18.2
46.5°	1182.4	1094.2	825.4	427.6	38.7	15.9	21.4
47°	1183.0	1093.6	820.7	418.0	35.9	15.3	32.5
47.5°	1183.4	1092.9	815.6	408.2	33.6	14.7	52.4
48°	1183.7	1092.4	810.7	398.7	31.8	14.1	71.5
48.5°	1184.1	1091.7	805.4	388.7	30.3	13.7	84.6
49°	1184.4	1091.0	800.1	379.4	28.9	13.6	108.3
49.5°	1184.3	1089.9	794.5	369.9	27.9	13.4	112.3
50°	1184.5	1088.8	789.1	360.7	26.8	13.2	104.8
50.5°	1184.6	1088.0	783.3	351.2	25.3	13.0	101.1
51°	1184.8	1086.9	777.6	341.5	24.3	12.8	97.4
51.5°	1184.8	1086.1	772.0	331.8	23.5	12.7	92.0
52°	1184.4	1085.3	765.8	322.6	22.7	12.8	84.9
52.5°	1183.9	1084.3	759.5	312.6	22.1	13.3	75.2
53°	1183.6	1083.5	753.6	302.9	21.6	15.0	65.7
53.5°	1182.9	1082.7	747.4	292.6	21.0	21.1	55.9
54°	1182.1	1081.8	741.1	282.7	20.3	32.9	46.0
54.5°	1181.3	1081.1	734.9	272.0	19.6	42.8	37.8
55°	1180.4	1080.2	728.7	261.2	18.9	46.1	31.5
55.5°	1179.4	1079.1	722.6	250.4	18.3	56.5	26.6
56°	1178.5	1078.1	716.2	238.9	17.8	60.5	22.6
56.5°	1177.3	1077.0	709.8	226.8	17.3	55.6	19.2
57°	1176.1	1075.7	703.2	214.7	16.8	52.5	16.1
57.5°	1175.1	1074.1	696.9	202.6	16.3	50.2	13.4
58°	1174.3	1071.9	690.8	190.5	15.8	48.7	11.4
58.5°	1173.6	1069.4	684.3	178.4	15.4	47.2	9.8
59°	1172.5	1067.2	677.5	165.9	14.9	45.5	8.6
59.5°	1171.2	1064.8	670.8	153.8	14.4	43.5	7.6
60°	1169.7	1062.5	664.3	142.2	14.0	41.4	6.8
60.5°	1168.3	1059.9	657.5	132.0	13.6	38.8	6.1
61°	1166.3	1057.2	651.2	124.5	13.1	36.0	5.7
61.5°	1164.5	1054.8	644.6	117.8	12.6	33.2	5.1
62°	1162.8	1052.2	638.4	114.0	12.1	30.4	4.7
62.5°	1160.7	1049.5	631.9	111.9	11.5	27.4	4.3
63°	1158.4	1047.1	625.2	106.7	11.0	24.5	3.7
63.5°	1156.2	1044.7	618.3	93.9	10.5	21.6	3.3
64°	1154.0	1042.4	611.8	77.0	10.0	18.7	2.7
64.5°	1152.3	1040.2	605.6	64.1	9.4	16.1	2.2
65°	1150.5	1038.3	599.3	57.8	8.7	13.7	1.9
65.5°	1148.5	1036.3	592.8	55.1	8.2	11.2	1.8
66°	1147.0	1034.1	586.2	53.3	7.7	8.4	1.8
66.5°	1145.9	1031.7	579.5	51.8	7.3	5.0	1.7
67°	1145.2	1029.2	572.6	50.3	7.0	2.3	1.5

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	1144.7	1026.6	565.4	48.9	6.6	1.4	1.3
68°	1144.0	1024.5	557.9	47.7	6.2	1.2	1.1
68.5°	1143.5	1022.1	550.6	46.4	5.9	1.1	1.0
69°	1143.1	1019.9	543.1	45.2	5.6	1.1	1.0
69.5°	1143.3	1018.0	534.9	44.2	5.2	1.1	1.0
70°	1143.1	1015.6	527.2	43.3	4.9	1.0	1.0
70.5°	1142.5	1012.9	519.7	42.4	4.4	0.8	0.9
71°	1141.0	1009.9	512.6	41.5	4.0	0.7	0.8
71.5°	1139.8	1007.7	505.4	40.6	3.5	0.7	0.8
72°	1137.7	1006.4	497.5	39.7	2.9	0.6	0.7
72.5°	1135.3	1006.7	490.4	38.8	2.6	0.6	0.7
73°	1132.1	1007.1	483.0	37.7	2.3	0.6	0.7
73.5°	1128.1	1008.7	476.0	36.7	2.1	0.6	0.7
74°	1121.8	1010.2	468.3	36.1	1.8	0.6	0.7
74.5°	1115.3	1012.8	460.6	35.1	1.6	0.6	0.6
75°	1106.8	1015.6	454.1	33.1	1.4	0.6	0.6
75.5°	1095.4	1018.1	447.6	30.9	1.2	0.6	0.6
76°	1080.6	1019.4	441.1	28.4	1.0	0.6	0.6
76.5°	1063.0	1018.8	434.6	26.0	0.8	0.5	0.7
77°	1041.3	1017.2	428.1	22.9	0.7	0.5	0.7
77.5°	1017.2	1015.7	422.9	20.0	0.6	0.5	0.7
78°	990.1	1013.1	417.7	17.9	0.6	0.5	0.7
78.5°	963.6	1012.5	413.1	16.2	0.5	0.5	0.8
79°	937.0	1011.6	408.5	14.7	0.4	0.5	0.8
79.5°	912.1	1010.6	403.8	13.5	0.4	0.5	0.8
80°	889.9	1005.3	399.0	12.2	0.4	0.5	0.9
80.5°	872.8	996.5	394.3	11.2	0.4	0.5	0.9
81°	859.7	980.2	390.4	10.3	0.4	0.5	0.9
81.5°	852.4	952.9	387.7	9.2	0.4	0.5	0.9
82°	839.6	910.2	387.2	8.3	0.4	0.5	0.9
82.5°	814.9	854.5	389.0	7.5	0.4	0.5	1.0
83°	771.9	788.7	393.4	6.8	0.4	0.5	1.0
83.5°	715.6	712.4	400.4	6.2	0.4	0.5	1.0
84°	654.6	639.1	408.2	5.7	0.4	0.5	1.0
84.5°	599.2	584.3	412.6	5.2	0.4	0.5	1.1
85°	558.5	546.0	415.5	4.8	0.4	0.6	1.1
85.5°	528.5	511.5	417.4	4.4	0.4	0.6	1.2
86°	498.5	472.2	415.2	4.0	0.4	0.6	1.2
86.5°	468.6	456.3	407.2	3.6	0.4	0.6	1.2
87°	438.7	474.3	395.0	3.2	0.4	0.7	1.3
87.5°	409.6	495.6	377.8	2.9	0.4	0.7	1.3
88°	400.3	495.7	353.9	2.6	0.5	0.7	1.4
88.5°	330.3	443.9	323.8	2.2	0.5	0.8	1.4
89°	214.9	342.0	287.2	1.9	0.5	0.8	1.4
89.5°	135.4	228.4	246.0	1.6	0.5	0.8	1.5

REPORT NUMBER: P1197011

CATALOG NUMBER: AWP28S-BZ-LOW-4000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	77.3	177.3	204.5	1.3	0.5	0.9	1.5
90.5°	43.0	129.2	166.2	1.0	0.6	0.9	1.6
91°	36.4	81.1	134.7	0.9	0.6	0.9	1.6
91.5°	37.4	33.2	107.9	0.8	0.6	1.0	1.7
92°	37.6	29.4	85.8	0.7	0.7	1.0	1.7
92.5°	36.6	27.7	68.8	0.7	0.7	1.0	1.7
93°	36.4	26.6	56.5	0.6	0.7	1.1	1.8
93.5°	38.6	26.6	46.4	0.6	0.7	1.1	1.8
94°	39.4	28.0	37.4	0.6	0.8	1.1	1.8
94.5°	36.3	28.1	33.0	0.5	0.8	1.2	1.9
95°	32.0	26.2	33.2	0.5	0.8	1.2	1.9
95.5°	28.8	24.3	34.3	0.5	0.8	1.2	2.0
96°	28.2	23.3	35.7	0.5	0.9	1.3	2.0
96.5°	28.4	21.5	37.9	0.6	0.9	1.3	2.0
97°	26.8	19.4	37.7	0.6	0.9	1.4	2.1
97.5°	24.6	18.2	29.6	0.5	1.0	1.4	2.1
98°	23.7	18.0	20.8	0.5	1.0	1.4	2.1
98.5°	23.2	18.2	14.7	0.5	1.0	1.5	2.2
99°	22.5	18.4	12.3	0.5	1.1	1.5	2.2
99.5°	21.3	18.3	10.6	0.5	1.1	1.5	2.2
100°	19.5	17.7	9.0	0.5	1.1	1.6	2.3
100.5°	17.0	16.4	7.5	0.5	1.1	1.6	2.3
101°	14.4	14.7	6.6	0.5	1.2	1.7	2.3
101.5°	12.1	12.6	5.6	0.5	1.2	1.7	2.3
102°	10.3	10.1	4.4	0.5	1.2	1.7	2.4
102.5°	8.8	7.3	3.5	0.5	1.3	1.8	2.4
103°	8.0	4.9	2.8	0.5	1.3	1.8	2.4
103.5°	7.5	3.3	2.4	0.5	1.3	1.8	2.5
104°	6.7	2.2	2.1	0.5	1.3	1.9	2.5
104.5°	5.6	1.7	1.8	0.5	1.4	1.9	2.5
105°	4.1	1.4	1.6	0.6	1.4	1.9	2.6
105.5°	2.6	1.2	1.4	0.6	1.4	2.0	2.6
106°	1.3	0.9	1.2	0.6	1.4	2.0	2.6
106.5°	0.7	0.7	1.0	0.6	1.5	2.0	2.6
107°	0.5	0.5	0.8	0.6	1.5	2.0	2.6
107.5°	0.3	0.3	0.7	0.6	1.5	2.1	2.7
108°	0.2	0.2	0.6	0.6	1.5	2.1	2.7
108.5°	0.1	0.1	0.5	0.6	1.6	2.1	2.7
109°	0.0	0.0	0.4	0.6	1.6	2.2	2.7
109.5°	0.0	0.0	0.4	0.7	1.6	2.2	2.8
110°	0.0	0.0	0.3	0.7	1.7	2.2	2.8
110.5°	0.0	0.0	0.3	0.7	1.7	2.2	2.8
111°	0.0	0.0	0.2	0.7	1.7	2.2	2.8
111.5°	0.0	0.0	0.2	0.7	1.7	2.3	2.8
112°	0.0	0.0	0.1	0.7	1.7	2.3	2.8

REPORT NUMBER: P1197011

CATALOG NUMBER: AWP28S-BZ-LOW-4000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	0.0	0.0	0.1	0.7	1.8	2.3	2.8
113°	0.0	0.0	0.1	0.7	1.8	2.3	2.9
113.5°	0.0	0.0	0.1	0.8	1.8	2.3	2.9
114°	0.0	0.0	0.1	0.8	1.8	2.4	2.9
114.5°	0.0	0.0	0.1	0.8	1.8	2.4	2.9
115°	0.0	0.0	0.1	0.8	1.9	2.4	2.9
115.5°	0.0	0.0	0.1	0.8	1.9	2.4	2.9
116°	0.0	0.0	0.1	0.8	1.9	2.4	2.9
116.5°	0.0	0.0	0.1	0.8	1.9	2.5	2.9
117°	0.0	0.0	0.1	0.9	2.0	2.5	2.9
117.5°	0.0	0.0	0.1	0.9	2.0	2.5	2.9
118°	0.0	0.0	0.2	0.9	2.0	2.5	2.9
118.5°	0.0	0.0	0.2	0.9	2.0	2.5	2.9
119°	0.0	0.0	0.2	0.9	2.0	2.5	2.9
119.5°	0.0	0.0	0.2	0.9	2.0	2.6	2.9
120°	0.0	0.0	0.2	0.9	2.1	2.6	2.9
120.5°	0.0	0.0	0.2	1.0	2.1	2.6	3.0
121°	0.0	0.0	0.2	1.0	2.1	2.6	3.0
121.5°	0.0	0.0	0.3	1.0	2.1	2.6	3.0
122°	0.0	0.0	0.3	1.0	2.1	2.6	3.0
122.5°	0.0	0.0	0.3	1.0	2.1	2.6	3.0
123°	0.0	0.0	0.3	1.0	2.1	2.7	3.0
123.5°	0.0	0.0	0.3	1.1	2.2	2.7	3.0
124°	0.0	0.0	0.3	1.1	2.2	2.7	3.0
124.5°	0.0	0.0	0.4	1.1	2.2	2.7	3.0
125°	0.0	0.0	0.4	1.1	2.2	2.7	3.0
125.5°	0.0	0.0	0.4	1.1	2.2	2.8	3.0
126°	0.0	0.0	0.4	1.1	2.2	2.8	3.0
126.5°	0.0	0.0	0.4	1.1	2.2	2.8	3.0
127°	0.0	0.0	0.4	1.2	2.3	2.8	3.0
127.5°	0.0	0.0	0.4	1.2	2.3	2.8	3.0
128°	0.0	0.0	0.5	1.2	2.3	2.8	3.0
128.5°	0.0	0.0	0.5	1.2	2.3	2.8	3.0
129°	0.0	0.0	0.5	1.2	2.3	2.8	3.0
129.5°	0.0	0.0	0.5	1.2	2.3	2.8	3.0
130°	0.0	0.0	0.5	1.3	2.3	2.8	3.0
130.5°	0.0	0.0	0.6	1.3	2.3	2.8	3.0
131°	0.0	0.0	0.6	1.3	2.3	2.9	3.1
131.5°	0.0	0.0	0.6	1.3	2.3	2.9	3.1
132°	0.0	0.0	0.6	1.4	2.3	2.9	3.1
132.5°	0.0	0.0	0.6	1.4	2.3	2.9	3.1
133°	0.0	0.1	0.7	1.4	2.3	2.9	3.1
133.5°	0.0	0.1	0.7	1.4	2.3	2.9	3.1
134°	0.0	0.1	0.7	1.4	2.3	2.9	3.1
134.5°	0.0	0.1	0.7	1.4	2.4	2.9	3.1

REPORT NUMBER: P1197011

CATALOG NUMBER: AWP28S-BZ-LOW-4000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	0.0	0.1	0.7	1.4	2.4	2.9	3.1
135.5°	0.1	0.1	0.8	1.5	2.4	2.9	3.1
136°	0.1	0.1	0.8	1.5	2.4	2.9	3.1
136.5°	0.1	0.2	0.8	1.5	2.4	2.9	3.1
137°	0.1	0.2	0.8	1.5	2.4	2.9	3.1
137.5°	0.1	0.2	0.8	1.5	2.4	2.9	3.1
138°	0.1	0.2	0.9	1.5	2.4	2.9	3.1
138.5°	0.1	0.2	0.9	1.5	2.4	2.9	3.1
139°	0.1	0.2	0.9	1.6	2.4	2.9	3.1
139.5°	0.1	0.3	0.9	1.6	2.4	2.9	3.1
140°	0.2	0.3	0.9	1.6	2.4	2.9	3.1
140.5°	0.2	0.3	0.9	1.6	2.4	2.9	3.1
141°	0.2	0.3	1.0	1.6	2.4	2.9	3.1
141.5°	0.2	0.3	1.0	1.6	2.5	2.9	3.1
142°	0.2	0.3	1.0	1.7	2.5	2.9	3.1
142.5°	0.2	0.4	1.0	1.7	2.5	2.9	3.1
143°	0.2	0.4	1.0	1.7	2.5	2.9	3.1
143.5°	0.3	0.4	1.1	1.7	2.5	2.9	3.1
144°	0.3	0.4	1.1	1.7	2.5	2.9	3.1
144.5°	0.3	0.4	1.1	1.7	2.5	2.9	3.1
145°	0.3	0.5	1.1	1.7	2.5	2.9	3.1
145.5°	0.3	0.5	1.1	1.8	2.5	2.9	3.0
146°	0.3	0.5	1.2	1.8	2.5	2.9	3.0
146.5°	0.3	0.5	1.2	1.8	2.5	2.9	3.0
147°	0.4	0.6	1.2	1.8	2.5	2.9	3.0
147.5°	0.4	0.6	1.2	1.8	2.5	2.9	3.0
148°	0.4	0.6	1.2	1.8	2.5	2.9	3.0
148.5°	0.4	0.6	1.2	1.8	2.5	2.9	3.0
149°	0.4	0.7	1.3	1.8	2.5	2.9	3.0
149.5°	0.5	0.7	1.3	1.9	2.6	2.9	3.0
150°	0.5	0.7	1.3	1.9	2.6	2.9	3.0
150.5°	0.5	0.7	1.3	1.9	2.6	2.9	3.0
151°	0.5	0.8	1.4	1.9	2.6	2.9	3.0
151.5°	0.6	0.8	1.4	1.9	2.6	2.9	3.0
152°	0.6	0.8	1.4	1.9	2.6	2.9	2.9
152.5°	0.6	0.8	1.4	2.0	2.6	2.9	2.9
153°	0.6	0.9	1.4	2.0	2.6	2.9	2.9
153.5°	0.6	0.9	1.4	2.0	2.6	2.9	2.9
154°	0.7	0.9	1.5	2.0	2.6	2.9	2.9
154.5°	0.7	0.9	1.5	2.0	2.6	2.9	2.9
155°	0.7	0.9	1.5	2.0	2.6	2.9	2.9
155.5°	0.7	1.0	1.5	2.1	2.6	2.9	2.9
156°	0.7	1.0	1.6	2.1	2.6	2.9	2.9
156.5°	0.8	1.0	1.6	2.1	2.6	2.9	2.9
157°	0.8	1.0	1.6	2.1	2.6	2.9	2.9

REPORT NUMBER: P1197011

CATALOG NUMBER: AWP28S-BZ-LOW-4000K-POSITION 15

CANDELA DISTRIBUTION (continued):

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



REPORT NUMBER: P1197011
CATALOG NUMBER: AWPf28S-BZ-LOW-4000K-POSITION 15

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	2.0	2.0	2.0	2.0	2.0	2.0	2.0

(END OF REPORT)