

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: P1197138

Luminaire Tested: AWPf150S-BZ-BZ-MID-4000K-POSITION 45

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1197138
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: AWP150S-BZ-BZ-MID-4000K-POSITION 45
Description: AWP Architectural Wall Pack Series - Wall Mount Luminaire
Light Source: 80 CRI, 4000K
Ballast/Driver: -

Summary

Lumens per Lamp: 18720 (1 lamp)
Luminaire Lumens: 17249.5 lumens
Efficiency: 92.1%
Efficacy: 142.7 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: B2 - U5 - G5

Input Watts (W): 120.9
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

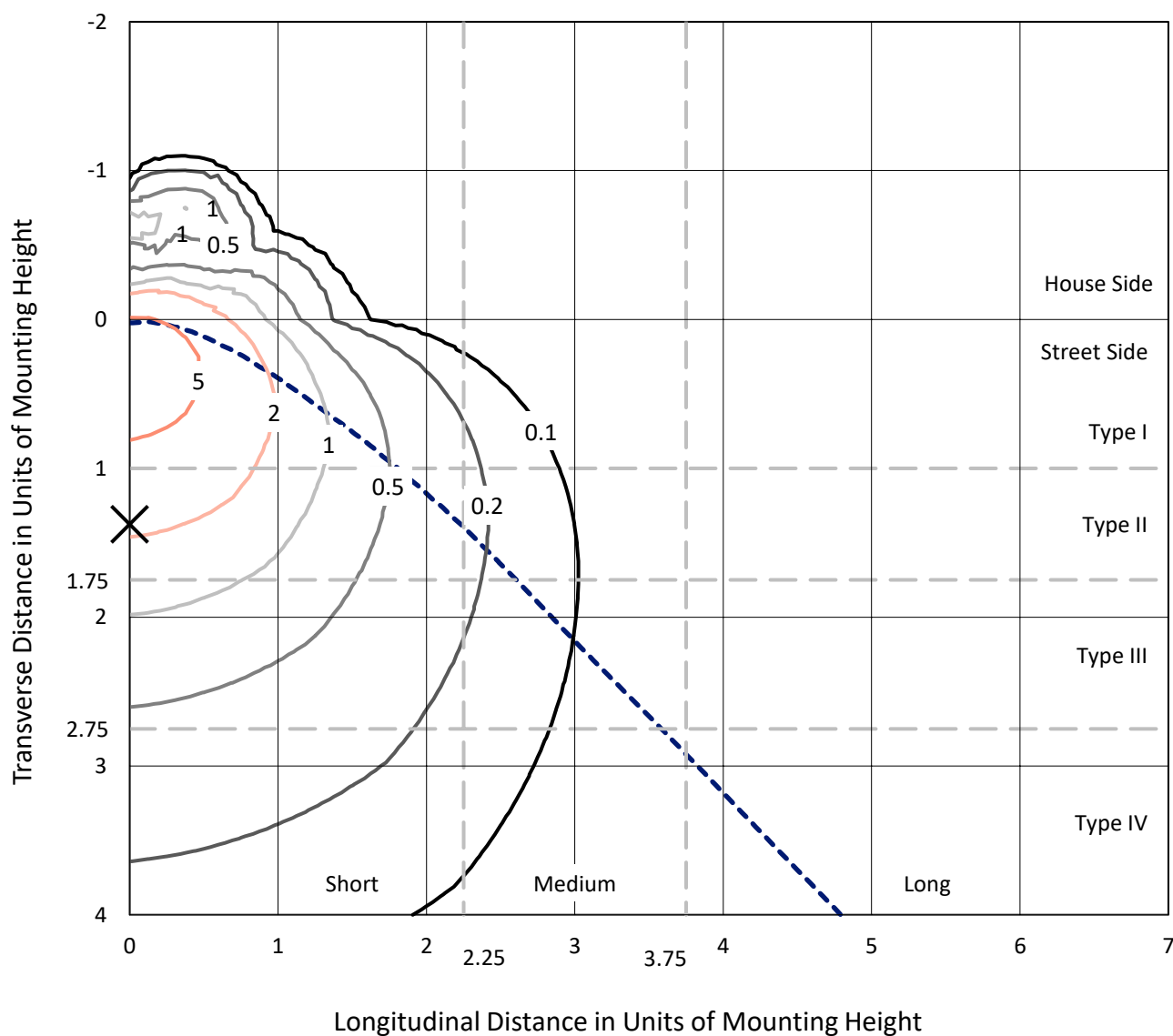
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

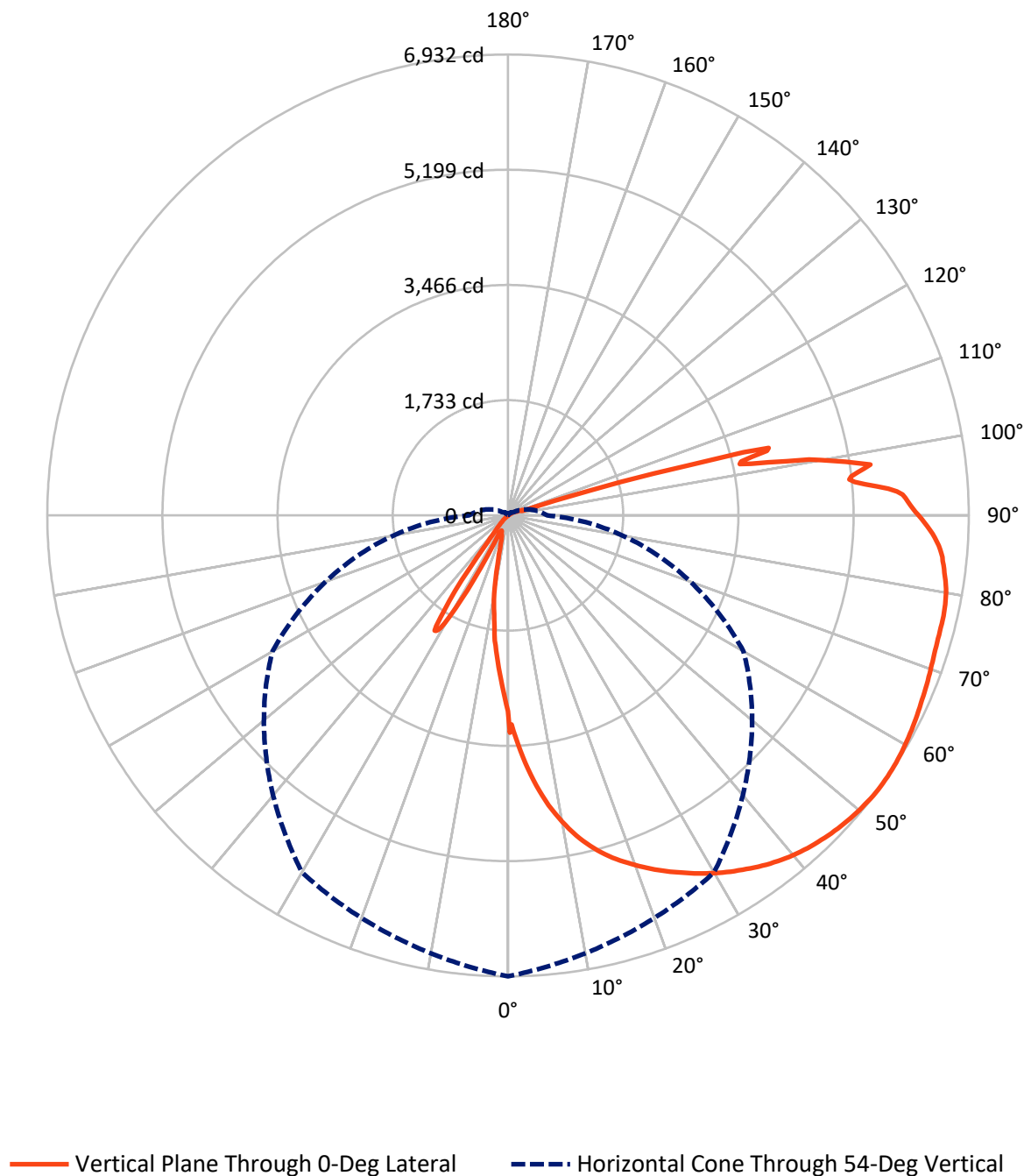


Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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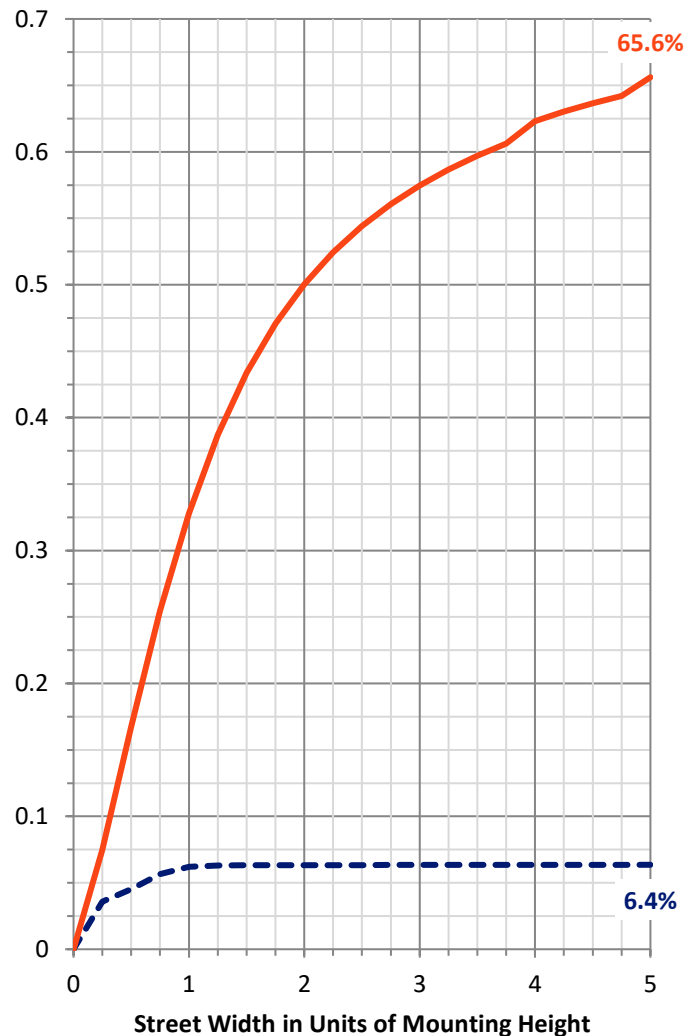
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1199.1	43.6	1242.7
	% Lamp	6.4	0.2	6.6
Street Side	Lumens	13775.9	2231.0	16006.9
	% Lamp	73.6	11.9	85.5
Total	Lumens	14975.0	2274.6	17249.5
	% Lamp	80.0	12.2	92.1

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	308.2	1.8	1.6
10°-20°	856.9	5.0	4.6
20°-30°	1330.9	7.7	7.1
30°-40°	1852.2	10.7	9.9
40°-50°	2132.2	12.4	11.4
50°-60°	2157.0	12.5	11.5
60°-70°	2207.6	12.8	11.8
70°-80°	2153.5	12.5	11.5
80°-90°	1976.6	11.5	10.6
90°-100°	1649.2	9.6	8.8
100°-110°	561.6	3.3	3.0
110°-120°	33.1	0.2	0.2
120°-130°	8.5	0.0	0.0
130°-140°	7.2	0.0	0.0
140°-150°	6.1	0.0	0.0
150°-160°	4.8	0.0	0.0
160°-170°	3.1	0.0	0.0
170°-180°	1.1	0.0	0.0
0°-90°	14975.0	86.8	80.0
0°-180°	17249.5	100.0	92.1

Coefficient of Utilization



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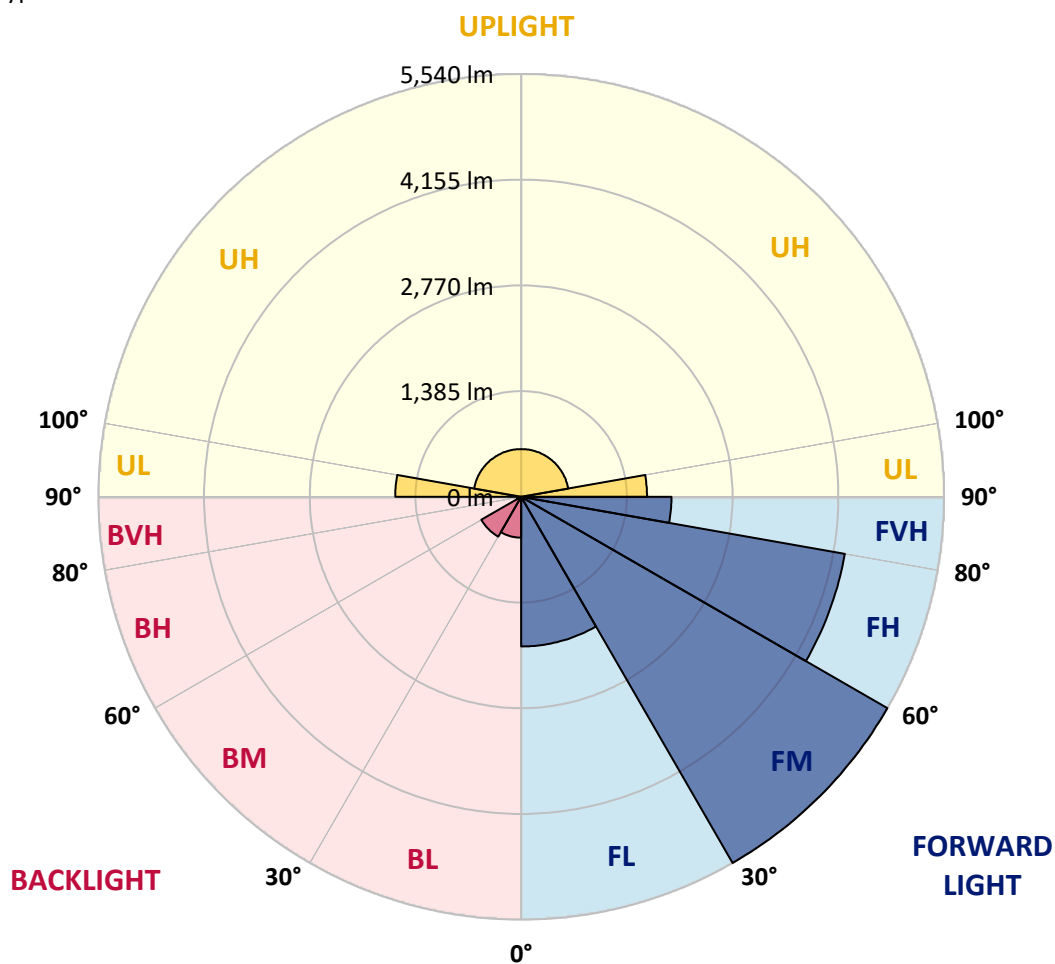
CATALOG NUMBER: AWP150S-BZ-BZ-MID-4000K-POSITION 45

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1960.9	10.5			
FM	(30°-60°)	5540.0	29.6			
FH	(60°-80°)	4306.1	23.0			G2/5000
FVH	(80°-90°)	1968.9	10.5			G5
BL	(0°-30°)	535.1	2.9	B2/1000		
BM	(30°-60°)	601.3	3.2	B1/1000		
BH	(60°-80°)	55.1	0.3	B0/110		G0/110
BVH	(80°-90°)	7.6	0.0			G0/10
UL	(90°-100°)	1649.2	8.8		U5	
UH	(100°-180°)	625.4	3.3		U4/1000	
Trapped Light		1470.5	7.9			

BUG Rating: B2-U5-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	3267.8	3267.8	3267.8	3267.8	3267.8	3267.8	3267.8
0.5°	3144.4	3274.9	3375.0	3396.0	3329.8	3194.8	2941.8
1°	3245.5	3362.0	3423.4	3395.5	3280.6	3105.6	2843.2
1.5°	3346.3	3445.7	3471.2	3392.8	3231.0	3015.7	2744.5
2°	3442.9	3527.8	3519.1	3391.6	3177.6	2933.9	2646.6
2.5°	3538.7	3611.1	3566.5	3390.4	3126.0	2845.1	2552.9
3°	3635.7	3691.1	3610.2	3387.1	3073.3	2758.5	2464.3
3.5°	3730.8	3770.0	3653.8	3381.8	3019.3	2674.1	2379.8
4°	3818.5	3851.1	3699.3	3377.7	2965.8	2594.8	2295.4
4.5°	3911.2	3927.6	3741.7	3373.3	2912.8	2512.6	2211.0
5°	3996.6	4000.1	3781.3	3367.4	2858.3	2422.7	2126.6
5.5°	4084.7	4073.3	3823.3	3361.4	2805.7	2350.4	2042.3
6°	4168.6	4144.8	3863.3	3354.5	2751.0	2278.3	1965.0
6.5°	4247.6	4211.2	3902.6	3346.0	2698.2	2206.3	1894.6
7°	4323.9	4279.3	3940.7	3338.5	2643.7	2133.9	1800.2
7.5°	4400.8	4342.3	3978.8	3330.4	2591.2	2062.0	1683.3
8°	4473.8	4403.3	4012.9	3320.8	2537.5	1993.2	1582.0
8.5°	4542.5	4463.3	4048.0	3310.8	2485.3	1928.2	1493.5
9°	4610.0	4521.4	4081.0	3300.8	2432.2	1864.7	1418.1
9.5°	4673.6	4577.8	4114.4	3289.6	2377.3	1801.9	1348.9
10°	4734.6	4632.3	4144.8	3278.4	2324.6	1717.8	1276.2
10.5°	4799.5	4684.1	4176.2	3266.0	2271.4	1618.4	1193.9
11°	4859.4	4735.3	4206.0	3253.2	2217.8	1528.7	1095.7
11.5°	4917.1	4785.8	4234.3	3240.2	2167.3	1450.3	979.5
12°	4971.9	4834.5	4261.1	3226.3	2116.8	1383.5	863.9
12.5°	5024.9	4879.0	4288.4	3211.5	2065.8	1320.0	758.6
13°	5074.3	4924.3	4314.6	3195.3	2016.0	1255.4	670.1
13.5°	5123.7	4966.5	4339.1	3179.2	1969.4	1186.7	595.4
14°	5171.3	5007.5	4362.2	3162.0	1920.2	1105.9	535.1
14.5°	5216.3	5047.2	4384.9	3144.4	1872.4	1009.9	481.9
15°	5259.2	5084.6	4406.3	3126.3	1826.3	908.8	437.7
15.5°	5303.3	5121.4	4428.1	3106.9	1779.5	808.5	400.4
16°	5344.5	5157.4	4447.8	3087.7	1734.0	716.5	371.7
16.5°	5381.7	5191.0	4467.7	3069.6	1689.6	635.0	348.9
17°	5421.2	5223.6	4485.8	3049.3	1646.5	568.9	332.8
17.5°	5458.9	5254.8	4502.8	3028.6	1597.5	514.9	320.9
18°	5491.6	5284.6	4519.2	3008.9	1534.7	466.4	312.6
18.5°	5526.8	5312.8	4533.9	2987.2	1469.2	426.6	307.7
19°	5562.3	5336.5	4548.2	2962.6	1409.2	393.0	304.9
19.5°	5597.2	5359.9	4561.9	2939.3	1353.1	364.5	302.6
20°	5630.0	5383.5	4575.1	2915.9	1298.4	342.2	297.7
20.5°	5664.6	5406.9	4586.6	2893.1	1249.5	324.9	288.2
21°	5697.8	5430.3	4597.9	2868.9	1203.7	313.0	275.4
21.5°	5730.3	5454.0	4608.6	2845.4	1157.9	304.9	263.4
22°	5763.3	5474.1	4618.4	2820.5	1109.0	300.8	258.8

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CATALOG NUMBER: AWP150S-BZ-BZ-MID-4000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	5795.3	5497.7	4627.5	2794.4	1058.2	300.0	254.4
23°	5827.7	5520.7	4636.3	2769.9	1003.0	302.3	250.0
23.5°	5859.5	5542.3	4643.7	2743.1	942.9	306.4	245.7
24°	5890.0	5564.8	4650.6	2716.6	880.9	312.3	254.0
24.5°	5918.9	5586.6	4656.0	2689.4	812.9	319.7	265.2
25°	5949.4	5608.1	4661.3	2662.2	746.9	328.5	276.3
25.5°	5979.2	5630.3	4665.8	2633.8	686.5	334.9	282.3
26°	6008.7	5653.4	4669.9	2605.8	633.1	336.4	283.3
26.5°	6038.6	5672.4	4673.1	2577.3	587.7	334.6	300.9
27°	6069.6	5692.5	4675.3	2546.4	554.6	331.5	494.4
27.5°	6098.1	5712.1	4676.0	2518.1	532.7	322.9	691.5
28°	6127.7	5731.7	4677.5	2488.5	518.0	312.1	888.7
28.5°	6155.7	5752.2	4678.2	2454.4	503.4	304.2	1085.9
29°	6183.5	5770.7	4677.2	2425.1	488.8	298.3	1283.2
29.5°	6210.7	5790.7	4676.3	2396.6	474.3	294.8	1434.2
30°	6238.2	5809.3	4673.9	2364.1	460.0	293.0	1598.4
30.5°	6266.9	5828.5	4671.4	2330.1	450.5	293.4	1758.3
31°	6292.2	5845.4	4668.0	2300.1	443.6	291.1	1881.6
31.5°	6317.7	5863.8	4664.6	2269.2	437.5	288.6	1974.7
32°	6342.3	5880.5	4660.1	2235.1	426.0	285.3	2021.8
32.5°	6367.2	5895.4	4655.2	2205.0	410.1	281.7	2049.1
33°	6392.6	5912.5	4650.2	2173.7	394.6	277.7	2053.7
33.5°	6416.1	5929.5	4645.2	2140.4	383.8	281.6	1984.1
34°	6439.9	5945.6	4638.8	2108.7	375.9	291.1	1834.4
34.5°	6464.9	5961.7	4632.0	2079.6	369.5	311.8	1701.6
35°	6488.3	5977.4	4625.4	2049.3	366.4	483.5	1560.3
35.5°	6511.5	5992.4	4618.7	2019.6	363.6	661.6	1389.3
36°	6534.0	6006.0	4611.6	1994.2	361.2	839.3	1196.2
36.5°	6555.1	6021.5	4604.1	1970.2	359.0	1016.8	992.7
37°	6576.0	6036.5	4596.3	1946.3	356.8	1194.3	779.0
37.5°	6596.8	6049.5	4588.5	1923.5	353.9	1336.0	613.9
38°	6616.6	6063.1	4579.6	1900.8	350.0	1433.0	502.3
38.5°	6635.4	6078.0	4570.4	1871.9	346.1	1490.6	429.6
39°	6653.8	6089.0	4560.6	1836.8	342.0	1517.1	375.2
39.5°	6671.6	6100.0	4550.3	1793.5	338.0	1529.0	329.9
40°	6688.7	6112.7	4538.6	1745.8	334.2	1544.5	293.6
40.5°	6703.8	6123.1	4527.6	1698.6	330.2	1535.5	271.6
41°	6719.2	6133.4	4515.9	1654.7	325.4	1485.2	249.9
41.5°	6734.7	6144.2	4503.4	1610.0	319.6	1392.9	228.4
42°	6746.8	6153.4	4491.9	1568.0	313.4	1304.0	206.9
42.5°	6760.9	6162.7	4480.3	1528.6	306.8	1214.1	185.5
43°	6773.4	6171.1	4468.2	1491.4	299.9	1131.4	169.0
43.5°	6784.8	6178.2	4455.4	1454.2	292.8	1052.6	151.1
44°	6797.7	6185.1	4443.5	1416.8	285.7	980.3	132.6
44.5°	6809.0	6191.3	4429.2	1381.6	278.2	911.2	116.7

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	6820.3	6197.5	4415.7	1347.5	271.0	841.5	100.4
45.5°	6829.3	6202.5	4401.8	1315.7	263.7	764.2	83.3
46°	6840.2	6206.3	4387.6	1285.4	256.1	684.2	65.7
46.5°	6850.0	6210.9	4371.7	1255.7	248.4	608.1	51.0
47°	6858.8	6213.2	4355.6	1225.4	241.1	541.9	39.5
47.5°	6867.6	6215.4	4339.4	1195.7	234.0	484.3	32.5
48°	6876.0	6218.2	4322.3	1165.4	227.0	432.5	29.5
48.5°	6883.5	6218.9	4305.1	1133.5	214.2	384.7	27.3
49°	6890.4	6220.2	4287.4	1097.9	198.2	340.1	24.9
49.5°	6897.7	6220.7	4269.6	1059.0	187.0	299.5	22.4
50°	6904.1	6219.6	4251.9	1017.7	177.9	258.2	20.0
50.5°	6910.1	6219.3	4232.7	969.9	167.0	216.5	17.8
51°	6915.5	6219.8	4213.2	918.6	159.0	174.8	15.9
51.5°	6920.6	6217.2	4193.8	862.1	152.2	133.1	13.8
52°	6924.4	6213.6	4173.9	802.0	142.8	91.4	11.4
52.5°	6926.9	6211.5	4153.6	743.7	126.3	58.1	10.2
53°	6929.9	6207.2	4133.7	686.5	112.3	24.3	9.3
53.5°	6930.8	6203.0	4113.2	632.5	103.5	17.8	8.5
54°	6932.3	6198.5	4091.7	588.2	98.3	16.9	7.8
54.5°	6931.3	6193.4	4070.6	553.0	94.4	16.6	7.3
55°	6931.2	6186.4	4049.0	523.6	91.1	16.2	6.9
55.5°	6930.3	6180.3	4025.8	498.8	88.4	15.8	6.7
56°	6928.4	6173.4	4002.7	479.2	85.6	15.4	6.5
56.5°	6925.2	6165.7	3978.9	463.0	82.7	14.8	6.4
57°	6923.1	6159.2	3954.0	450.9	78.8	14.1	6.3
57.5°	6918.2	6151.5	3929.2	441.4	75.5	12.7	6.2
58°	6914.2	6142.9	3904.6	434.8	72.2	11.8	6.1
58.5°	6910.2	6136.5	3879.8	430.1	68.9	11.1	6.0
59°	6905.6	6128.3	3855.0	426.9	65.2	10.5	5.9
59.5°	6900.0	6118.8	3830.1	424.4	60.6	9.9	5.9
60°	6894.9	6111.7	3805.4	421.2	55.9	9.3	5.9
60.5°	6889.0	6103.9	3778.3	417.5	52.6	8.8	5.9
61°	6882.3	6093.8	3751.6	414.2	49.9	8.4	6.0
61.5°	6875.8	6084.5	3725.1	410.8	47.4	8.0	6.1
62°	6868.5	6075.9	3696.4	407.1	44.9	7.5	6.3
62.5°	6862.3	6065.7	3666.9	403.6	42.1	7.2	6.4
63°	6855.2	6055.4	3640.8	398.5	38.9	6.9	6.6
63.5°	6848.3	6045.9	3612.2	392.2	35.1	6.6	6.7
64°	6841.5	6033.6	3584.5	385.3	31.1	6.3	6.9
64.5°	6834.1	6022.9	3558.1	377.1	27.0	6.0	7.0
65°	6826.1	6010.7	3532.9	368.4	22.7	5.8	7.2
65.5°	6820.1	5997.8	3507.4	359.5	18.8	5.6	7.4
66°	6812.6	5985.3	3482.6	351.8	15.2	5.4	7.6
66.5°	6807.5	5972.2	3458.2	343.3	11.6	5.3	7.8
67°	6800.6	5956.8	3433.3	334.7	8.8	5.3	7.9

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	6795.4	5941.1	3408.2	325.2	7.3	5.3	8.1
68°	6788.8	5926.7	3382.8	315.3	7.0	5.3	8.3
68.5°	6781.3	5910.0	3355.7	306.2	6.9	5.3	8.5
69°	6776.0	5893.8	3330.1	298.5	6.8	5.3	8.7
69.5°	6768.5	5878.3	3301.3	290.4	6.7	5.4	8.9
70°	6761.8	5861.6	3270.0	280.9	6.5	5.4	9.2
70.5°	6755.8	5846.2	3239.4	271.0	6.1	5.6	9.4
71°	6751.6	5830.4	3207.9	261.5	5.8	5.7	9.6
71.5°	6745.5	5815.1	3174.7	252.4	5.7	5.9	9.9
72°	6739.8	5802.0	3140.8	243.2	5.7	6.0	10.1
72.5°	6736.3	5788.6	3107.1	234.0	5.7	6.2	10.3
73°	6733.7	5775.3	3070.3	224.8	5.7	6.4	10.5
73.5°	6731.0	5762.6	3033.6	215.7	5.7	6.6	10.7
74°	6728.4	5752.1	2994.4	205.9	5.7	6.8	10.9
74.5°	6726.7	5741.6	2954.2	196.0	5.7	7.0	11.2
75°	6727.3	5732.3	2914.5	185.3	5.8	7.2	11.4
75.5°	6725.6	5725.7	2876.4	174.3	5.8	7.4	11.6
76°	6724.7	5719.5	2837.3	163.2	5.8	7.6	11.9
76.5°	6723.7	5713.7	2799.8	152.5	5.9	7.8	12.1
77°	6721.2	5708.3	2762.1	141.5	5.9	7.9	12.3
77.5°	6718.6	5703.7	2722.2	130.7	6.0	8.1	12.5
78°	6715.0	5698.1	2675.9	120.1	6.0	8.3	12.6
78.5°	6707.8	5693.3	2631.1	110.2	6.1	8.5	12.8
79°	6700.6	5686.6	2581.8	100.8	6.1	8.7	13.0
79.5°	6693.0	5676.5	2534.3	91.8	6.2	8.9	13.2
80°	6682.0	5666.6	2485.2	82.6	6.3	9.1	13.4
80.5°	6670.1	5656.9	2439.3	74.0	6.3	9.2	13.6
81°	6654.7	5643.9	2390.8	66.0	6.4	9.4	13.8
81.5°	6639.6	5630.8	2346.6	59.0	6.5	9.6	14.0
82°	6624.6	5618.1	2299.2	52.7	6.6	9.8	14.2
82.5°	6610.6	5603.0	2247.4	47.4	6.7	10.0	14.4
83°	6594.1	5585.4	2193.3	42.7	6.8	10.1	14.6
83.5°	6578.5	5566.1	2141.0	38.3	6.8	10.3	14.7
84°	6564.9	5549.7	2090.5	34.2	6.9	10.5	14.9
84.5°	6544.4	5536.7	2043.5	30.6	7.0	10.7	15.1
85°	6520.8	5526.6	1999.3	27.2	7.1	10.9	15.3
85.5°	6496.1	5514.2	1956.3	24.3	7.3	11.1	15.5
86°	6464.7	5504.0	1917.0	21.7	7.4	11.2	15.6
86.5°	6429.7	5495.3	1877.9	19.2	7.5	11.4	15.8
87°	6394.5	5488.1	1844.8	16.8	7.6	11.6	16.0
87.5°	6354.4	5481.1	1814.3	14.8	7.8	11.8	16.1
88°	6311.2	5475.2	1784.2	12.7	7.9	11.9	16.3
88.5°	6269.1	5468.9	1754.5	10.8	8.0	12.1	16.4
89°	6223.5	5460.3	1729.6	9.4	8.1	12.2	16.5
89.5°	6176.5	5452.0	1714.9	8.2	8.2	12.4	16.6

REPORT NUMBER: P1197138

CATALOG NUMBER: AWP150S-BZ-BZ-MID-4000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	6132.0	5450.1	1708.2	7.0	8.3	12.5	16.7
90.5°	6092.2	5460.2	1713.4	6.2	8.4	12.7	16.8
91°	6052.2	5487.2	1734.2	6.1	8.4	12.8	16.9
91.5°	6016.7	5532.4	1768.6	6.0	8.5	13.0	17.0
92°	5986.5	5584.9	1820.7	5.9	8.6	13.1	17.2
92.5°	5947.6	5614.1	1888.8	5.8	8.7	13.2	17.3
93°	5863.4	5618.2	1949.4	5.8	8.8	13.4	17.4
93.5°	5735.2	5572.6	1984.1	5.7	8.9	13.5	17.6
94°	5572.6	5492.1	1956.6	5.6	9.0	13.6	17.7
94.5°	5389.5	5371.9	1875.4	5.6	9.1	13.8	17.8
95°	5241.1	5238.2	1751.2	5.5	9.3	13.9	17.9
95.5°	5163.5	5104.3	1600.0	5.5	9.4	14.1	18.0
96°	5197.7	4938.5	1465.1	5.4	9.5	14.2	18.1
96.5°	5299.6	4689.9	1335.6	5.3	9.6	14.4	18.2
97°	5407.9	4384.7	1192.4	5.3	9.7	14.5	18.3
97.5°	5504.3	4083.8	1029.1	5.3	9.8	14.7	18.3
98°	5323.7	3776.8	866.6	5.2	9.9	14.8	18.4
98.5°	5144.2	3539.5	734.3	5.2	10.0	15.0	18.5
99°	4966.4	3396.7	643.4	5.1	10.1	15.1	18.5
99.5°	4788.9	3281.2	552.6	5.1	10.1	15.2	18.6
100°	4604.7	3260.6	461.7	5.0	10.2	15.3	18.7
100.5°	4278.7	3417.6	370.8	5.0	10.3	15.4	18.7
101°	3994.9	3702.0	282.4	4.9	10.4	15.5	18.8
101.5°	3739.7	3940.6	256.8	4.9	10.4	15.6	18.8
102°	3570.7	3902.6	263.3	4.8	10.5	15.7	18.9
102.5°	3598.4	3483.5	282.7	4.8	10.6	15.8	18.9
103°	3777.5	2708.3	274.8	4.8	10.7	15.9	19.0
103.5°	4015.1	2418.3	266.7	4.8	10.8	16.1	19.0
104°	4050.4	2139.2	257.1	4.8	10.9	16.2	19.1
104.5°	3669.7	1859.9	246.5	4.8	10.9	16.3	19.1
105°	2797.2	1580.1	202.2	4.8	11.0	16.4	19.2
105.5°	2281.7	1299.7	123.5	4.8	11.1	16.5	19.2
106°	1766.2	1020.1	96.4	4.8	11.2	16.6	19.2
106.5°	1250.8	740.9	83.3	4.8	11.3	16.7	19.3
107°	735.3	461.6	70.1	4.8	11.3	16.7	19.3
107.5°	226.8	182.3	59.7	4.9	11.4	16.8	19.3
108°	217.2	179.1	50.5	4.9	11.5	16.9	19.3
108.5°	216.3	173.0	42.1	4.9	11.6	16.9	19.4
109°	223.8	157.9	34.3	4.9	11.6	17.0	19.4
109.5°	231.0	141.7	27.9	5.0	11.7	17.0	19.4
110°	237.4	126.4	22.8	5.1	11.7	17.1	19.5
110.5°	230.1	110.6	18.6	5.1	11.8	17.1	19.5
111°	203.0	99.3	15.5	5.2	11.9	17.2	19.5
111.5°	180.6	92.2	12.8	5.2	11.9	17.3	19.5
112°	168.8	88.7	10.9	5.3	12.0	17.3	19.6

REPORT NUMBER: P1197138

CATALOG NUMBER: AWP150S-BZ-BZ-MID-4000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	156.3	87.8	9.7	5.4	12.0	17.3	19.6
113°	142.3	88.1	8.6	5.4	12.1	17.4	19.6
113.5°	135.4	90.9	7.6	5.5	12.2	17.4	19.6
114°	133.3	95.4	6.7	5.6	12.2	17.5	19.6
114.5°	133.8	99.5	6.0	5.6	12.3	17.5	19.6
115°	134.1	102.1	5.5	5.7	12.3	17.5	19.6
115.5°	132.3	102.3	5.2	5.8	12.4	17.6	19.6
116°	131.9	98.4	4.9	5.8	12.5	17.6	19.6
116.5°	131.7	85.4	4.5	5.9	12.5	17.6	19.6
117°	130.8	69.5	4.2	6.0	12.6	17.7	19.6
117.5°	127.6	48.3	3.9	6.0	12.6	17.7	19.7
118°	121.8	27.7	3.7	6.1	12.7	17.7	19.7
118.5°	112.5	17.9	3.4	6.2	12.7	17.8	19.7
119°	99.8	14.7	3.2	6.2	12.8	17.8	19.6
119.5°	83.3	12.2	3.0	6.3	12.8	17.8	19.6
120°	60.9	9.8	2.8	6.4	12.9	17.9	19.6
120.5°	37.4	7.5	2.7	6.5	12.9	17.9	19.6
121°	21.4	5.4	2.6	6.5	12.9	17.9	19.6
121.5°	14.9	3.9	2.5	6.6	13.0	17.9	19.6
122°	11.7	3.0	2.4	6.7	13.0	17.9	19.6
122.5°	8.8	2.3	2.3	6.8	13.1	17.9	19.6
123°	6.6	1.9	2.2	6.8	13.1	17.9	19.6
123.5°	4.9	1.7	2.2	6.9	13.2	18.0	19.6
124°	3.7	1.6	2.2	7.0	13.2	18.0	19.6
124.5°	2.8	1.5	2.2	7.0	13.2	18.0	19.6
125°	2.1	1.5	2.2	7.1	13.3	18.0	19.6
125.5°	1.8	1.4	2.3	7.2	13.3	18.0	19.5
126°	1.7	1.4	2.3	7.2	13.3	18.0	19.5
126.5°	1.6	1.4	2.4	7.3	13.4	18.0	19.5
127°	1.6	1.4	2.4	7.4	13.4	18.0	19.5
127.5°	1.5	1.4	2.5	7.5	13.5	18.0	19.5
128°	1.5	1.4	2.6	7.5	13.5	18.0	19.4
128.5°	1.5	1.4	2.6	7.6	13.5	18.0	19.4
129°	1.5	1.4	2.7	7.7	13.6	18.0	19.4
129.5°	1.5	1.4	2.8	7.7	13.6	18.0	19.3
130°	1.5	1.4	2.8	7.8	13.7	18.0	19.3
130.5°	1.5	1.3	2.9	7.9	13.7	18.0	19.2
131°	1.4	1.3	3.0	8.0	13.7	18.0	19.2
131.5°	1.4	1.3	3.1	8.1	13.8	18.0	19.2
132°	1.4	1.2	3.2	8.1	13.8	18.0	19.1
132.5°	1.4	1.3	3.2	8.2	13.8	18.0	19.1
133°	1.3	1.3	3.3	8.3	13.8	18.0	19.0
133.5°	1.3	1.3	3.4	8.3	13.9	18.0	19.0
134°	1.2	1.2	3.5	8.4	13.9	17.9	18.9
134.5°	1.1	1.2	3.6	8.5	13.9	17.9	18.9

REPORT NUMBER: P1197138

CATALOG NUMBER: AWP150S-BZ-BZ-MID-4000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	1.1	1.2	3.7	8.5	14.0	17.9	18.9
135.5°	1.1	1.3	3.8	8.6	14.0	17.9	18.9
136°	1.1	1.3	3.9	8.7	14.0	17.9	18.9
136.5°	1.1	1.3	3.9	8.7	14.1	17.9	18.8
137°	1.1	1.3	4.0	8.8	14.1	17.9	18.8
137.5°	1.1	1.3	4.1	8.9	14.1	17.8	18.8
138°	1.1	1.3	4.2	9.0	14.1	17.8	18.7
138.5°	1.1	1.4	4.3	9.0	14.2	17.8	18.7
139°	1.1	1.4	4.4	9.1	14.2	17.8	18.6
139.5°	1.1	1.4	4.5	9.2	14.2	17.8	18.6
140°	1.1	1.5	4.6	9.2	14.2	17.7	18.5
140.5°	1.1	1.5	4.7	9.3	14.2	17.7	18.4
141°	1.2	1.6	4.8	9.4	14.3	17.7	18.3
141.5°	1.2	1.6	4.9	9.4	14.3	17.7	18.2
142°	1.2	1.7	5.0	9.5	14.3	17.6	18.1
142.5°	1.3	1.7	5.0	9.5	14.3	17.6	18.1
143°	1.3	1.8	5.1	9.6	14.3	17.6	18.0
143.5°	1.3	1.8	5.2	9.7	14.3	17.5	17.9
144°	1.4	1.9	5.3	9.7	14.3	17.4	17.8
144.5°	1.4	2.0	5.4	9.8	14.3	17.4	17.7
145°	1.5	2.0	5.5	9.9	14.3	17.4	17.6
145.5°	1.5	2.1	5.6	9.9	14.3	17.3	17.4
146°	1.6	2.2	5.7	10.0	14.3	17.3	17.3
146.5°	1.6	2.2	5.8	10.1	14.3	17.2	17.2
147°	1.6	2.3	5.9	10.1	14.3	17.2	17.1
147.5°	1.7	2.4	6.0	10.2	14.3	17.1	17.0
148°	1.7	2.5	6.1	10.2	14.3	17.1	16.9
148.5°	1.8	2.5	6.1	10.3	14.3	17.0	16.8
149°	1.8	2.6	6.2	10.4	14.3	17.0	16.7
149.5°	1.9	2.7	6.3	10.4	14.3	16.9	16.6
150°	1.9	2.8	6.4	10.5	14.4	16.9	16.5
150.5°	1.9	2.9	6.5	10.5	14.4	16.9	16.4
151°	2.0	3.0	6.6	10.6	14.4	16.8	16.3
151.5°	2.0	3.1	6.7	10.7	14.4	16.8	16.1
152°	2.1	3.2	6.8	10.7	14.4	16.8	16.0
152.5°	2.1	3.2	6.9	10.8	14.4	16.7	15.9
153°	2.2	3.3	7.0	10.8	14.4	16.7	15.7
153.5°	2.2	3.5	7.1	10.9	14.4	16.7	15.6
154°	2.3	3.6	7.2	10.9	14.4	16.7	15.5
154.5°	2.3	3.7	7.3	11.0	14.4	16.6	15.3
155°	2.4	3.8	7.4	11.0	14.4	16.5	15.2
155.5°	2.5	3.9	7.5	11.1	14.4	16.5	15.0
156°	2.5	4.0	7.6	11.1	14.4	16.4	14.9
156.5°	2.6	4.1	7.7	11.2	14.4	16.3	14.7
157°	2.7	4.2	7.8	11.2	14.4	16.3	14.6

REPORT NUMBER: P1197138

CATALOG NUMBER: AWP150S-BZ-BZ-MID-4000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
157.5°	2.8	4.3	7.9	11.3	14.4	16.2	14.5
158°	2.9	4.4	8.0	11.3	14.3	16.1	14.4
158.5°	3.0	4.5	8.1	11.4	14.3	16.0	14.3
159°	3.1	4.6	8.2	11.4	14.3	16.0	14.1
159.5°	3.2	4.7	8.3	11.4	14.3	15.9	14.0
160°	3.3	4.9	8.4	11.5	14.3	15.8	13.8
160.5°	3.4	5.0	8.5	11.6	14.3	15.7	13.7
161°	3.5	5.1	8.5	11.6	14.3	15.6	13.5
161.5°	3.6	5.3	8.6	11.6	14.2	15.5	13.4
162°	3.8	5.4	8.7	11.7	14.2	15.5	13.2
162.5°	3.9	5.5	8.8	11.7	14.2	15.4	13.0
163°	4.0	5.7	8.9	11.7	14.2	15.3	12.8
163.5°	4.1	5.8	9.0	11.8	14.2	15.2	12.7
164°	4.3	6.0	9.1	11.8	14.2	15.2	12.5
164.5°	4.4	6.1	9.2	11.9	14.2	15.1	12.3
165°	4.5	6.3	9.3	11.9	14.1	15.0	12.1
165.5°	4.6	6.4	9.4	12.0	14.1	15.0	12.0
166°	4.7	6.6	9.4	12.0	14.1	14.9	11.9
166.5°	4.9	6.7	9.5	12.0	14.1	14.8	11.7
167°	5.0	6.8	9.6	12.1	14.0	14.7	11.6
167.5°	5.1	7.0	9.7	12.1	14.0	14.7	11.5
168°	5.2	7.1	9.8	12.2	14.0	14.6	11.3
168.5°	5.3	7.3	9.9	12.2	14.0	14.5	11.1
169°	5.4	7.4	10.0	12.2	13.9	14.4	11.0
169.5°	5.5	7.5	10.1	12.3	13.9	14.4	10.9
170°	5.6	7.6	10.2	12.3	13.9	14.3	10.7
170.5°	5.7	7.8	10.3	12.3	13.9	14.2	10.6
171°	5.8	7.9	10.3	12.4	13.8	14.1	10.4
171.5°	5.9	8.0	10.4	12.4	13.8	14.0	10.2
172°	6.0	8.1	10.5	12.4	13.7	13.8	10.1
172.5°	6.1	8.3	10.6	12.5	13.7	13.7	9.9
173°	6.2	8.4	10.7	12.5	13.6	13.6	9.7
173.5°	6.3	8.5	10.8	12.5	13.6	13.5	9.6
174°	6.4	8.6	10.9	12.5	13.6	13.5	9.4
174.5°	6.6	8.8	11.0	12.6	13.5	13.4	9.3
175°	6.7	8.9	11.1	12.6	13.5	13.3	9.1
175.5°	6.8	9.0	11.1	12.6	13.4	13.2	9.0
176°	6.9	9.1	11.2	12.6	13.4	13.1	8.8
176.5°	7.0	9.2	11.3	12.6	13.4	13.0	8.7
177°	7.1	9.3	11.4	12.7	13.3	12.9	8.6
177.5°	7.2	9.4	11.4	12.7	13.3	12.8	8.4
178°	7.3	9.5	11.5	12.7	13.2	12.7	8.3
178.5°	7.5	9.7	11.6	12.7	13.1	12.6	8.2
179°	7.6	9.8	11.7	12.7	13.1	12.5	8.1
179.5°	7.7	9.9	11.7	12.7	13.0	12.4	7.9



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	7.8	7.8	7.8	7.8	7.8	7.8	7.8

(END OF REPORT)