

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: P1197137

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

Issue Date: 10/29/2025

Test Information

Test Method: LM-79-2019
Report Number: P1197137
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-LOW-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: 14043.9 lumens
Efficiency: 75.0%
Efficacy: 144.2 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 - U5 - G5

Input Watts (W): 97.4
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

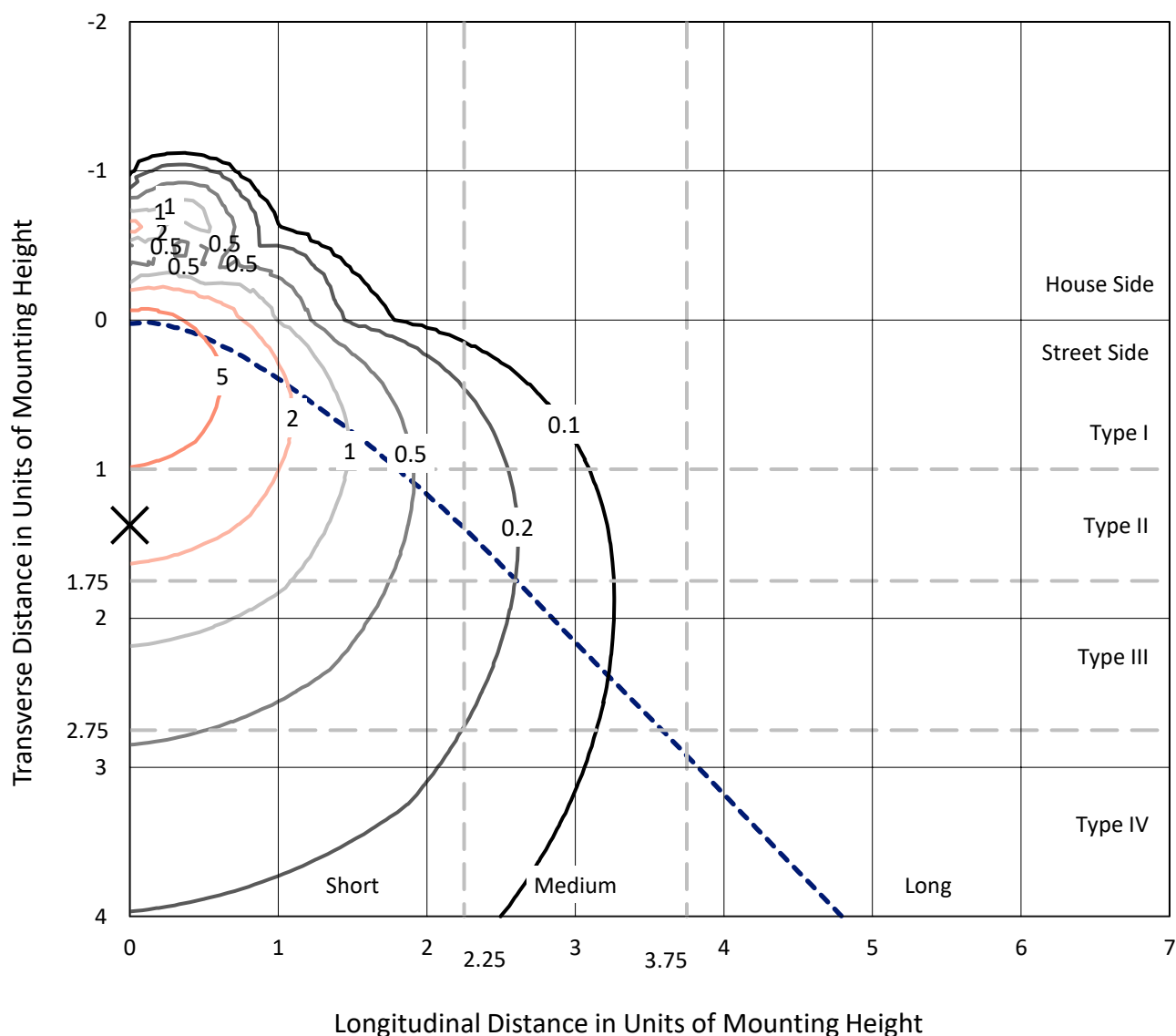
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

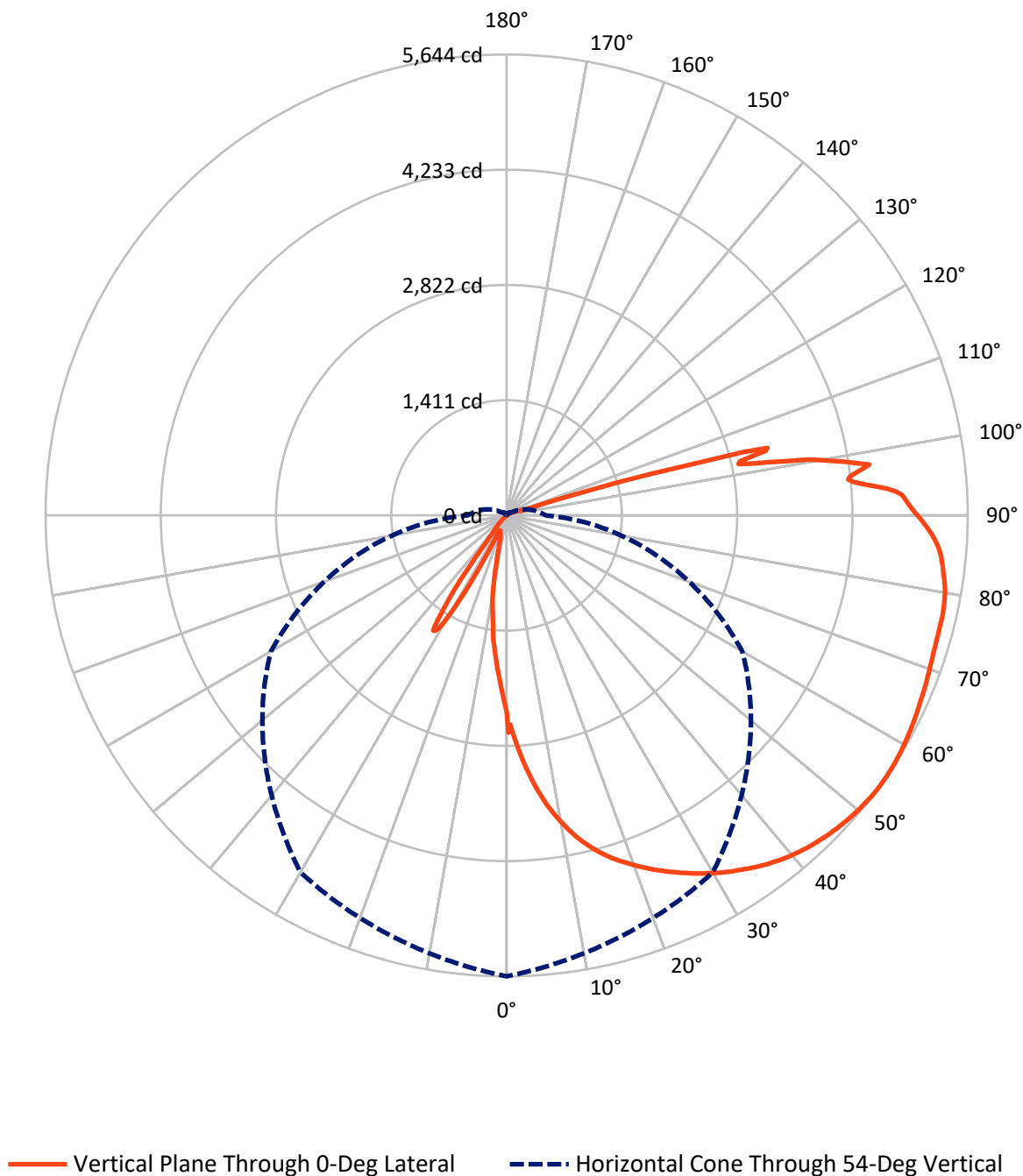


Based on 20 foot mounting height. Maximum calculated value = 9.6 fc
Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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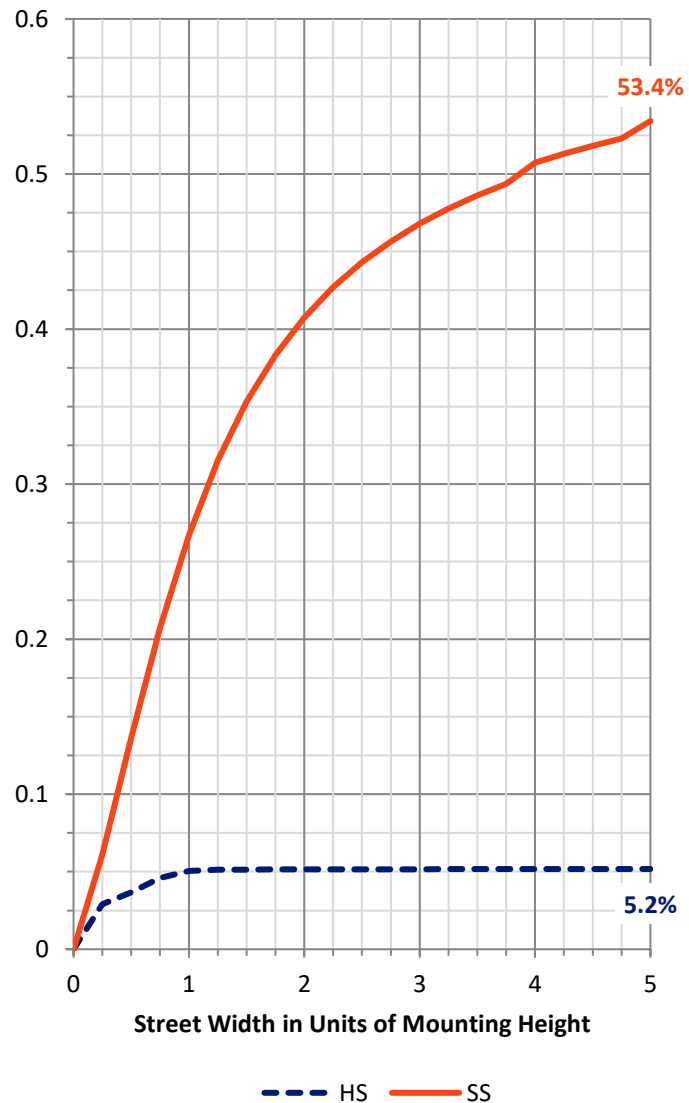
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	976.3	35.5	1011.7
	% Lamp	5.2	0.2	5.4
Street Side	Lumens	11215.7	1816.4	13032.1
	% Lamp	59.9	9.7	69.6
Total	Lumens	12192.0	1851.8	14043.9
	% Lamp	65.1	9.9	75.0

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	250.9	1.8	1.3
10°-20°	697.6	5.0	3.7
20°-30°	1083.5	7.7	5.8
30°-40°	1508.0	10.7	8.1
40°-50°	1735.9	12.4	9.3
50°-60°	1756.1	12.5	9.4
60°-70°	1797.4	12.8	9.6
70°-80°	1753.3	12.5	9.4
80°-90°	1609.2	11.5	8.6
90°-100°	1342.7	9.6	7.2
100°-110°	457.2	3.3	2.4
110°-120°	26.9	0.2	0.1
120°-130°	7.0	0.0	0.0
130°-140°	5.8	0.0	0.0
140°-150°	5.0	0.0	0.0
150°-160°	3.9	0.0	0.0
160°-170°	2.5	0.0	0.0
170°-180°	0.9	0.0	0.0
0°-90°	12192.0	86.8	65.1
0°-180°	14043.9	100.0	75.0

Coefficient of Utilization



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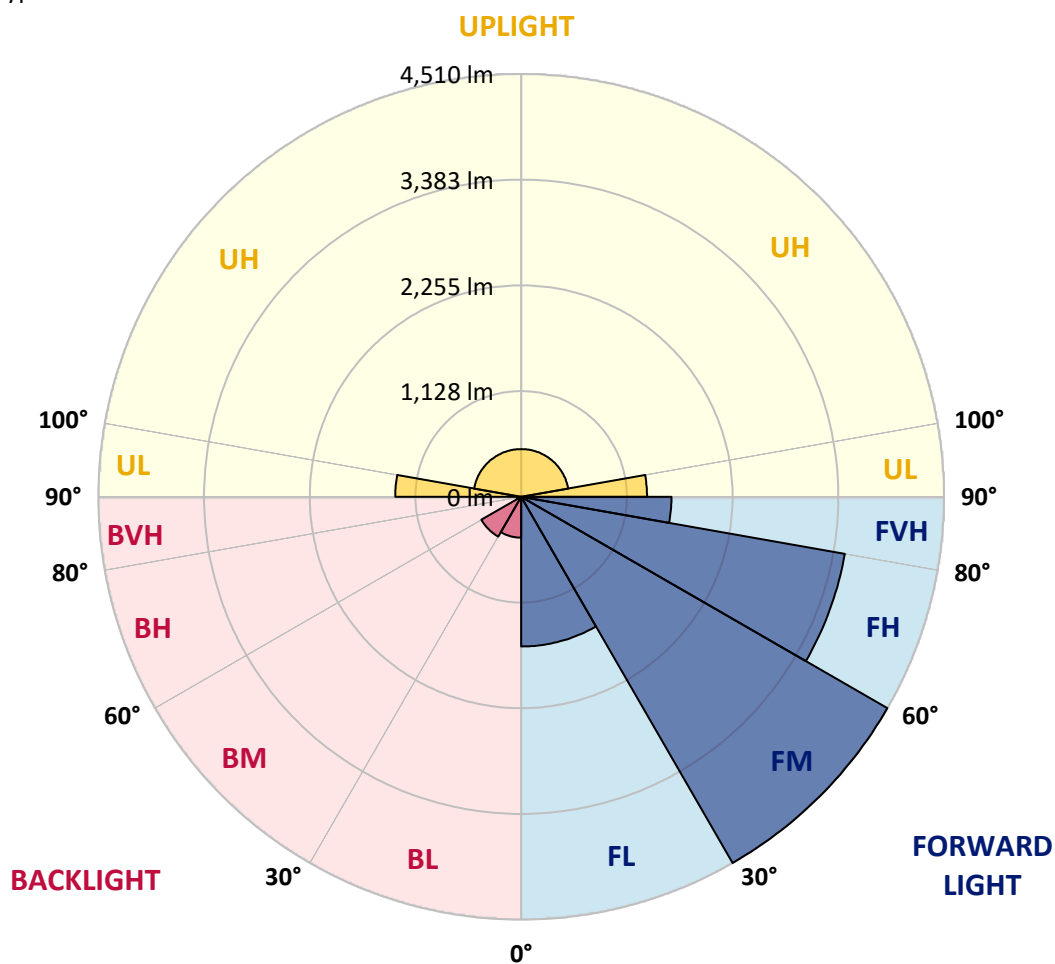
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1596.5	8.5			
FM	(30°-60°)	4510.4	24.1			
FH	(60°-80°)	3505.8	18.7			G2/5000
FVH	(80°-90°)	1603.0	8.6			G5
BL	(0°-30°)	435.6	2.3	B1/500		
BM	(30°-60°)	489.6	2.6	B1/1000		
BH	(60°-80°)	44.9	0.2	B0/110		G0/110
BVH	(80°-90°)	6.2	0.0			G0/10
UL	(90°-100°)	1342.7	7.2		U5	
UH	(100°-180°)	509.1	2.7		U4/1000	
Trapped Light		4676.1	25.0			

BUG Rating: B1-U5-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°
0°	2660.5	2660.5	2660.5	2660.5	2660.5	2660.5	2660.5
0.5°	2560.1	2666.3	2747.8	2764.9	2711.0	2601.1	2395.1
1°	2642.3	2737.2	2787.2	2764.4	2671.0	2528.4	2314.8
1.5°	2724.4	2805.3	2826.1	2762.3	2630.6	2455.3	2234.4
2°	2803.1	2872.2	2865.1	2761.3	2587.0	2388.6	2154.7
2.5°	2881.1	2940.0	2903.7	2760.3	2545.0	2316.4	2078.5
3°	2960.1	3005.1	2939.3	2757.6	2502.1	2245.9	2006.4
3.5°	3037.4	3069.3	2974.8	2753.3	2458.2	2177.1	1937.6
4°	3108.9	3135.4	3011.8	2750.0	2414.6	2112.6	1868.8
4.5°	3184.4	3197.7	3046.3	2746.4	2371.5	2045.7	1800.1
5°	3253.9	3256.7	3078.6	2741.6	2327.1	1972.5	1731.4
5.5°	3325.6	3316.3	3112.8	2736.7	2284.3	1913.6	1662.8
6°	3393.9	3374.6	3145.3	2731.1	2239.8	1854.9	1599.8
6.5°	3458.2	3428.6	3177.4	2724.2	2196.8	1796.2	1542.5
7°	3520.4	3484.0	3208.4	2718.1	2152.4	1737.3	1465.6
7.5°	3582.9	3535.3	3239.4	2711.5	2109.7	1678.8	1370.5
8°	3642.4	3585.0	3267.1	2703.7	2066.0	1622.8	1288.0
8.5°	3698.3	3633.9	3295.7	2695.5	2023.4	1569.8	1216.0
9°	3753.3	3681.2	3322.6	2687.4	1980.2	1518.2	1154.6
9.5°	3805.1	3727.1	3349.8	2678.3	1935.5	1467.0	1098.3
10°	3854.8	3771.4	3374.5	2669.1	1892.6	1398.5	1039.0
10.5°	3907.5	3813.6	3400.1	2659.0	1849.3	1317.7	972.0
11°	3956.3	3855.3	3424.4	2648.6	1805.6	1244.6	892.1
11.5°	4003.3	3896.4	3447.4	2638.1	1764.5	1180.7	797.5
12°	4047.9	3936.1	3469.2	2626.7	1723.4	1126.4	703.4
12.5°	4091.0	3972.3	3491.5	2614.7	1681.9	1074.7	617.7
13°	4131.3	4009.1	3512.8	2601.5	1641.3	1022.1	545.6
13.5°	4171.5	4043.5	3532.7	2588.4	1603.4	966.1	484.8
14°	4210.3	4076.9	3551.5	2574.4	1563.4	900.4	435.7
14.5°	4246.9	4109.2	3570.0	2560.1	1524.5	822.3	392.3
15°	4281.8	4139.6	3587.5	2545.3	1486.9	739.9	356.4
15.5°	4317.7	4169.6	3605.2	2529.5	1448.8	658.2	326.0
16°	4351.3	4199.0	3621.2	2513.9	1411.8	583.4	302.6
16.5°	4381.6	4226.3	3637.4	2499.2	1375.6	517.0	284.0
17°	4413.7	4252.9	3652.1	2482.6	1340.5	463.2	270.9
17.5°	4444.4	4278.3	3666.0	2465.7	1300.6	419.2	261.3
18°	4471.0	4302.5	3679.3	2449.7	1249.5	379.7	254.5
18.5°	4499.7	4325.5	3691.3	2432.0	1196.2	347.3	250.5
19°	4528.6	4344.7	3703.0	2412.0	1147.3	320.0	248.2
19.5°	4557.0	4363.8	3714.1	2393.1	1101.6	296.8	246.4
20°	4583.8	4383.0	3724.8	2374.0	1057.1	278.6	242.4
20.5°	4611.9	4402.1	3734.2	2355.4	1017.3	264.5	234.6
21°	4638.9	4421.1	3743.4	2335.8	980.0	254.8	224.2
21.5°	4665.4	4440.4	3752.1	2316.6	942.8	248.2	214.4
22°	4692.3	4456.8	3760.1	2296.3	902.9	244.9	210.7

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
22.5°	4718.3	4476.0	3767.6	2275.1	861.5	244.2	207.1
23°	4744.7	4494.7	3774.7	2255.1	816.6	246.1	203.6
23.5°	4770.6	4512.3	3780.7	2233.3	767.7	249.5	200.0
24°	4795.4	4530.6	3786.4	2211.7	717.2	254.3	206.8
24.5°	4819.0	4548.4	3790.7	2189.6	661.8	260.3	216.0
25°	4843.8	4565.9	3795.0	2167.4	608.1	267.4	224.9
25.5°	4868.1	4583.9	3798.7	2144.3	558.9	272.7	229.8
26°	4892.0	4602.7	3802.1	2121.5	515.4	273.9	230.7
26.5°	4916.4	4618.3	3804.6	2098.3	478.5	272.4	245.0
27°	4941.7	4634.6	3806.5	2073.2	451.6	269.9	402.5
27.5°	4964.8	4650.6	3807.0	2050.2	433.7	262.9	563.0
28°	4988.9	4666.5	3808.3	2026.1	421.7	254.1	723.6
28.5°	5011.7	4683.2	3808.8	1998.3	409.9	247.7	884.1
29°	5034.4	4698.3	3808.0	1974.4	398.0	242.9	1044.7
29.5°	5056.5	4714.6	3807.3	1951.2	386.2	240.0	1167.6
30°	5078.9	4729.7	3805.3	1924.7	374.5	238.6	1301.4
30.5°	5102.3	4745.3	3803.3	1897.1	366.8	238.9	1431.6
31°	5122.8	4759.1	3800.5	1872.6	361.1	237.0	1531.9
31.5°	5143.6	4774.1	3797.8	1847.5	356.2	235.0	1607.7
32°	5163.6	4787.7	3794.1	1819.7	346.8	232.3	1646.1
32.5°	5183.9	4799.8	3790.1	1795.2	333.9	229.4	1668.3
33°	5204.6	4813.7	3786.0	1769.8	321.2	226.1	1672.1
33.5°	5223.7	4827.6	3781.9	1742.7	312.5	229.3	1615.4
34°	5243.1	4840.6	3776.7	1716.8	306.1	237.0	1493.5
34.5°	5263.5	4853.8	3771.2	1693.1	300.8	253.9	1385.4
35°	5282.5	4866.6	3765.8	1668.5	298.3	393.7	1270.4
35.5°	5301.4	4878.7	3760.4	1644.2	296.1	538.6	1131.1
36°	5319.7	4889.8	3754.5	1623.6	294.1	683.3	973.9
36.5°	5336.9	4902.4	3748.5	1604.1	292.3	827.9	808.2
37°	5353.9	4914.7	3742.1	1584.6	290.5	972.3	634.3
37.5°	5370.9	4925.3	3735.7	1566.1	288.2	1087.7	499.8
38°	5387.0	4936.3	3728.5	1547.5	285.0	1166.7	409.0
38.5°	5402.3	4948.4	3721.1	1524.1	281.8	1213.6	349.8
39°	5417.3	4957.4	3713.1	1495.5	278.4	1235.2	305.5
39.5°	5431.8	4966.4	3704.6	1460.2	275.2	1244.8	268.6
40°	5445.7	4976.7	3695.1	1421.4	272.1	1257.5	239.1
40.5°	5458.0	4985.2	3686.2	1382.9	268.8	1250.1	221.1
41°	5470.5	4993.6	3676.6	1347.2	264.9	1209.2	203.5
41.5°	5483.1	5002.3	3666.5	1310.8	260.2	1134.0	185.9
42°	5493.0	5009.8	3657.1	1276.6	255.2	1061.7	168.5
42.5°	5504.5	5017.4	3647.7	1244.5	249.8	988.5	151.0
43°	5514.6	5024.3	3637.8	1214.2	244.2	921.1	137.6
43.5°	5523.9	5030.0	3627.4	1184.0	238.4	857.0	123.1
44°	5534.4	5035.6	3617.7	1153.5	232.6	798.1	108.0
44.5°	5543.6	5040.7	3606.1	1124.8	226.5	741.9	95.0

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
45°	5552.8	5045.8	3595.1	1097.0	220.6	685.1	81.7
45.5°	5560.2	5049.9	3583.7	1071.2	214.7	622.2	67.8
46°	5569.0	5052.9	3572.2	1046.5	208.5	557.0	53.5
46.5°	5577.0	5056.7	3559.2	1022.3	202.2	495.1	41.5
47°	5584.1	5058.5	3546.1	997.6	196.3	441.2	32.2
47.5°	5591.3	5060.3	3533.0	973.5	190.5	394.3	26.4
48°	5598.2	5062.6	3519.1	948.8	184.8	352.1	24.0
48.5°	5604.3	5063.2	3505.0	922.9	174.4	313.2	22.2
49°	5609.9	5064.2	3490.6	893.8	161.4	276.9	20.3
49.5°	5615.8	5064.6	3476.2	862.2	152.2	243.8	18.3
50°	5621.0	5063.8	3461.7	828.6	144.9	210.2	16.3
50.5°	5625.9	5063.5	3446.1	789.7	136.0	176.3	14.5
51°	5630.3	5063.9	3430.2	747.9	129.5	142.3	13.0
51.5°	5634.4	5061.8	3414.4	701.9	123.9	108.4	11.2
52°	5637.6	5058.9	3398.2	653.0	116.2	74.4	9.3
52.5°	5639.6	5057.2	3381.7	605.5	102.8	47.3	8.3
53°	5642.1	5053.6	3365.5	558.9	91.4	19.8	7.6
53.5°	5642.7	5050.2	3348.8	515.0	84.3	14.5	6.9
54°	5644.0	5046.5	3331.3	478.8	80.0	13.8	6.4
54.5°	5643.2	5042.4	3314.1	450.2	76.9	13.5	5.9
55°	5643.1	5036.8	3296.6	426.3	74.2	13.2	5.6
55.5°	5642.4	5031.7	3277.7	406.1	71.9	12.9	5.5
56°	5640.9	5026.1	3258.9	390.1	69.7	12.5	5.3
56.5°	5638.2	5019.9	3239.5	377.0	67.3	12.1	5.2
57°	5636.5	5014.6	3219.2	367.1	64.2	11.4	5.1
57.5°	5632.5	5008.3	3199.0	359.4	61.5	10.3	5.0
58°	5629.3	5001.3	3179.0	354.0	58.8	9.6	5.0
58.5°	5626.0	4996.1	3158.8	350.2	56.1	9.1	4.9
59°	5622.3	4989.4	3138.6	347.5	53.0	8.6	4.8
59.5°	5617.7	4981.7	3118.3	345.5	49.4	8.0	4.8
60°	5613.5	4975.9	3098.2	342.9	45.5	7.6	4.8
60.5°	5608.7	4969.6	3076.2	339.9	42.9	7.2	4.8
61°	5603.3	4961.4	3054.4	337.2	40.7	6.8	4.9
61.5°	5598.0	4953.7	3032.9	334.4	38.6	6.5	5.0
62°	5592.1	4946.8	3009.5	331.4	36.5	6.1	5.1
62.5°	5587.0	4938.4	2985.5	328.6	34.2	5.8	5.2
63°	5581.3	4930.1	2964.2	324.4	31.6	5.6	5.3
63.5°	5575.6	4922.4	2940.9	319.3	28.6	5.3	5.5
64°	5570.1	4912.3	2918.3	313.7	25.3	5.1	5.6
64.5°	5564.1	4903.6	2896.8	307.0	22.0	4.9	5.7
65°	5557.5	4893.7	2876.3	299.9	18.5	4.7	5.9
65.5°	5552.6	4883.2	2855.6	292.7	15.3	4.6	6.0
66°	5546.5	4873.0	2835.4	286.4	12.3	4.4	6.2
66.5°	5542.4	4862.3	2815.5	279.5	9.5	4.3	6.3
67°	5536.7	4849.8	2795.3	272.5	7.1	4.3	6.5

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
67.5°	5532.5	4837.0	2774.8	264.8	6.0	4.3	6.6
68°	5527.1	4825.3	2754.1	256.7	5.7	4.3	6.7
68.5°	5521.1	4811.7	2732.1	249.3	5.6	4.3	6.9
69°	5516.8	4798.5	2711.2	243.1	5.5	4.3	7.1
69.5°	5510.6	4785.9	2687.8	236.4	5.5	4.4	7.3
70°	5505.2	4772.3	2662.3	228.7	5.3	4.4	7.5
70.5°	5500.3	4759.8	2637.4	220.6	4.9	4.5	7.7
71°	5496.9	4746.9	2611.7	212.9	4.8	4.6	7.8
71.5°	5491.9	4734.4	2584.7	205.5	4.7	4.8	8.0
72°	5487.2	4723.8	2557.1	198.0	4.7	4.9	8.2
72.5°	5484.4	4712.9	2529.7	190.5	4.7	5.1	8.4
73°	5482.3	4702.0	2499.7	183.1	4.7	5.2	8.5
73.5°	5480.1	4691.7	2469.8	175.6	4.7	5.4	8.7
74°	5478.0	4683.2	2437.9	167.6	4.7	5.6	8.9
74.5°	5476.6	4674.5	2405.2	159.6	4.7	5.7	9.1
75°	5477.1	4667.0	2372.9	150.9	4.7	5.9	9.3
75.5°	5475.7	4661.6	2341.8	141.9	4.7	6.0	9.5
76°	5475.0	4656.6	2310.0	132.8	4.8	6.2	9.7
76.5°	5474.2	4651.9	2279.5	124.2	4.8	6.3	9.8
77°	5472.1	4647.4	2248.8	115.2	4.8	6.5	10.0
77.5°	5470.0	4643.7	2216.3	106.4	4.9	6.6	10.1
78°	5467.1	4639.1	2178.6	97.8	4.9	6.8	10.3
78.5°	5461.2	4635.2	2142.1	89.7	4.9	6.9	10.4
79°	5455.3	4629.8	2102.0	82.1	5.0	7.1	10.6
79.5°	5449.1	4621.6	2063.3	74.8	5.0	7.2	10.8
80°	5440.2	4613.5	2023.3	67.2	5.1	7.4	10.9
80.5°	5430.5	4605.6	1986.0	60.3	5.1	7.5	11.1
81°	5418.0	4595.1	1946.5	53.8	5.2	7.7	11.3
81.5°	5405.7	4584.3	1910.5	48.0	5.3	7.8	11.4
82°	5393.5	4574.0	1871.9	42.9	5.4	7.9	11.6
82.5°	5382.1	4561.7	1829.7	38.6	5.4	8.1	11.7
83°	5368.6	4547.4	1785.7	34.8	5.5	8.3	11.9
83.5°	5356.0	4531.7	1743.1	31.1	5.6	8.4	12.0
84°	5344.9	4518.3	1702.0	27.8	5.6	8.6	12.2
84.5°	5328.1	4507.8	1663.7	24.9	5.7	8.7	12.3
85°	5309.0	4499.5	1627.8	22.2	5.8	8.9	12.5
85.5°	5288.8	4489.4	1592.7	19.8	5.9	9.0	12.6
86°	5263.3	4481.1	1560.7	17.7	6.0	9.1	12.7
86.5°	5234.8	4474.0	1528.9	15.7	6.1	9.3	12.9
87°	5206.1	4468.2	1502.0	13.7	6.2	9.4	13.0
87.5°	5173.5	4462.5	1477.1	12.0	6.3	9.6	13.1
88°	5138.3	4457.7	1452.6	10.3	6.4	9.7	13.2
88.5°	5104.1	4452.6	1428.4	8.8	6.5	9.8	13.3
89°	5066.9	4445.5	1408.1	7.6	6.6	10.0	13.4
89.5°	5028.7	4438.8	1396.2	6.6	6.7	10.1	13.5

REPORT NUMBER: P1197137

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
90°	4992.4	4437.2	1390.8	5.7	6.7	10.2	13.6
90.5°	4960.0	4445.4	1395.0	5.1	6.8	10.3	13.7
91°	4927.4	4467.4	1411.9	5.0	6.9	10.4	13.8
91.5°	4898.5	4504.3	1439.9	4.9	6.9	10.5	13.9
92°	4874.0	4547.0	1482.3	4.8	7.0	10.7	14.0
92.5°	4842.3	4570.7	1537.8	4.8	7.1	10.8	14.1
93°	4773.7	4574.1	1587.1	4.7	7.2	10.9	14.2
93.5°	4669.3	4537.0	1615.4	4.6	7.3	11.0	14.3
94°	4537.0	4471.4	1592.9	4.6	7.3	11.1	14.4
94.5°	4387.9	4373.6	1526.9	4.6	7.4	11.2	14.5
95°	4267.1	4264.8	1425.8	4.5	7.5	11.3	14.6
95.5°	4203.9	4155.7	1302.7	4.5	7.6	11.4	14.7
96°	4231.7	4020.7	1192.9	4.4	7.7	11.6	14.7
96.5°	4314.7	3818.3	1087.4	4.4	7.8	11.7	14.8
97°	4402.9	3569.8	970.8	4.3	7.9	11.8	14.9
97.5°	4481.4	3324.9	837.8	4.3	8.0	12.0	14.9
98°	4334.4	3074.9	705.5	4.3	8.0	12.1	15.0
98.5°	4188.2	2881.7	597.8	4.2	8.1	12.2	15.0
99°	4043.4	2765.4	523.8	4.2	8.2	12.3	15.1
99.5°	3898.9	2671.4	449.9	4.1	8.2	12.4	15.1
100°	3749.0	2654.7	375.9	4.1	8.3	12.5	15.2
100.5°	3483.6	2782.5	301.9	4.0	8.4	12.5	15.2
101°	3252.4	3014.0	229.9	4.0	8.4	12.6	15.3
101.5°	3044.7	3208.2	209.0	4.0	8.5	12.7	15.3
102°	2907.1	3177.3	214.4	3.9	8.6	12.8	15.4
102.5°	2929.6	2836.1	230.2	3.9	8.6	12.9	15.4
103°	3075.5	2205.0	223.7	3.9	8.7	13.0	15.5
103.5°	3269.0	1968.9	217.2	3.9	8.8	13.1	15.5
104°	3297.7	1741.6	209.3	3.9	8.8	13.2	15.5
104.5°	2987.7	1514.3	200.7	3.9	8.9	13.3	15.6
105°	2277.4	1286.4	164.7	3.9	9.0	13.4	15.6
105.5°	1857.7	1058.1	100.6	3.9	9.1	13.4	15.6
106°	1438.0	830.5	78.5	3.9	9.1	13.5	15.7
106.5°	1018.3	603.2	67.8	3.9	9.2	13.6	15.7
107°	598.6	375.8	57.1	3.9	9.2	13.6	15.7
107.5°	184.7	148.5	48.6	4.0	9.3	13.7	15.7
108°	176.8	145.8	41.1	4.0	9.4	13.7	15.7
108.5°	176.1	140.8	34.3	4.0	9.4	13.8	15.8
109°	182.2	128.6	27.9	4.0	9.5	13.8	15.8
109.5°	188.1	115.3	22.7	4.1	9.5	13.9	15.8
110°	193.3	102.9	18.5	4.1	9.6	13.9	15.8
110.5°	187.4	90.1	15.2	4.2	9.6	13.9	15.9
111°	165.3	80.8	12.6	4.2	9.7	14.0	15.9
111.5°	147.1	75.1	10.4	4.3	9.7	14.0	15.9
112°	137.4	72.2	8.9	4.3	9.8	14.1	15.9

REPORT NUMBER: P1197137

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
112.5°	127.3	71.5	7.9	4.4	9.8	14.1	15.9
113°	115.9	71.8	7.0	4.4	9.9	14.2	15.9
113.5°	110.3	74.0	6.2	4.5	9.9	14.2	16.0
114°	108.6	77.7	5.5	4.5	10.0	14.2	16.0
114.5°	109.0	81.0	4.9	4.6	10.0	14.3	16.0
115°	109.2	83.1	4.5	4.6	10.1	14.3	16.0
115.5°	107.7	83.3	4.2	4.7	10.1	14.3	16.0
116°	107.4	80.1	4.0	4.8	10.1	14.3	16.0
116.5°	107.2	69.5	3.7	4.8	10.2	14.4	16.0
117°	106.5	56.6	3.4	4.9	10.2	14.4	16.0
117.5°	103.9	39.3	3.2	4.9	10.3	14.4	16.0
118°	99.2	22.5	3.0	5.0	10.3	14.4	16.0
118.5°	91.6	14.6	2.8	5.0	10.4	14.5	16.0
119°	81.3	12.0	2.6	5.1	10.4	14.5	16.0
119.5°	67.8	9.9	2.4	5.2	10.4	14.5	16.0
120°	49.6	8.0	2.3	5.2	10.5	14.5	16.0
120.5°	30.5	6.1	2.2	5.3	10.5	14.6	16.0
121°	17.4	4.4	2.1	5.3	10.5	14.6	16.0
121.5°	12.1	3.2	2.0	5.4	10.6	14.6	16.0
122°	9.5	2.4	1.9	5.4	10.6	14.6	16.0
122.5°	7.2	1.9	1.9	5.5	10.6	14.6	16.0
123°	5.4	1.5	1.8	5.5	10.7	14.6	16.0
123.5°	4.0	1.4	1.8	5.6	10.7	14.6	16.0
124°	3.0	1.3	1.8	5.7	10.7	14.6	16.0
124.5°	2.3	1.2	1.8	5.7	10.8	14.6	16.0
125°	1.7	1.2	1.8	5.8	10.8	14.6	15.9
125.5°	1.4	1.2	1.9	5.8	10.8	14.7	15.9
126°	1.4	1.1	1.9	5.9	10.9	14.7	15.9
126.5°	1.3	1.1	1.9	6.0	10.9	14.7	15.9
127°	1.3	1.1	2.0	6.0	10.9	14.7	15.8
127.5°	1.2	1.1	2.0	6.1	11.0	14.6	15.8
128°	1.2	1.1	2.1	6.1	11.0	14.6	15.8
128.5°	1.2	1.1	2.1	6.2	11.0	14.6	15.8
129°	1.2	1.1	2.2	6.3	11.1	14.6	15.8
129.5°	1.2	1.1	2.2	6.3	11.1	14.6	15.7
130°	1.2	1.1	2.3	6.4	11.1	14.6	15.7
130.5°	1.2	1.1	2.4	6.4	11.1	14.6	15.7
131°	1.2	1.0	2.4	6.5	11.2	14.6	15.6
131.5°	1.2	1.0	2.5	6.6	11.2	14.6	15.6
132°	1.2	1.0	2.6	6.6	11.2	14.6	15.6
132.5°	1.1	1.0	2.6	6.7	11.3	14.6	15.5
133°	1.1	1.0	2.7	6.7	11.3	14.6	15.5
133.5°	1.0	1.0	2.8	6.8	11.3	14.6	15.5
134°	1.0	1.0	2.8	6.8	11.3	14.6	15.4
134.5°	0.9	1.0	2.9	6.9	11.4	14.6	15.4

REPORT NUMBER: P1197137

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
135°	0.9	1.0	3.0	7.0	11.4	14.6	15.4
135.5°	0.9	1.0	3.1	7.0	11.4	14.6	15.4
136°	0.9	1.0	3.1	7.1	11.4	14.6	15.4
136.5°	0.9	1.0	3.2	7.1	11.5	14.6	15.3
137°	0.9	1.0	3.3	7.2	11.5	14.5	15.3
137.5°	0.9	1.1	3.4	7.2	11.5	14.5	15.3
138°	0.9	1.1	3.4	7.3	11.5	14.5	15.3
138.5°	0.9	1.1	3.5	7.3	11.5	14.5	15.2
139°	0.9	1.1	3.6	7.4	11.5	14.5	15.2
139.5°	0.9	1.2	3.7	7.5	11.6	14.5	15.1
140°	0.9	1.2	3.7	7.5	11.6	14.4	15.1
140.5°	0.9	1.2	3.8	7.6	11.6	14.4	15.0
141°	1.0	1.3	3.9	7.6	11.6	14.4	14.9
141.5°	1.0	1.3	4.0	7.7	11.6	14.4	14.9
142°	1.0	1.4	4.0	7.7	11.6	14.3	14.8
142.5°	1.0	1.4	4.1	7.8	11.6	14.3	14.7
143°	1.1	1.5	4.2	7.8	11.6	14.3	14.6
143.5°	1.1	1.5	4.3	7.9	11.6	14.2	14.5
144°	1.1	1.5	4.3	7.9	11.6	14.2	14.5
144.5°	1.2	1.6	4.4	8.0	11.7	14.2	14.4
145°	1.2	1.7	4.5	8.0	11.7	14.1	14.3
145.5°	1.2	1.7	4.6	8.1	11.7	14.1	14.2
146°	1.3	1.8	4.6	8.1	11.7	14.1	14.1
146.5°	1.3	1.8	4.7	8.2	11.7	14.0	14.0
147°	1.3	1.9	4.8	8.2	11.7	14.0	13.9
147.5°	1.4	1.9	4.8	8.3	11.7	13.9	13.8
148°	1.4	2.0	4.9	8.3	11.7	13.9	13.8
148.5°	1.5	2.1	5.0	8.4	11.7	13.9	13.7
149°	1.5	2.1	5.1	8.4	11.7	13.8	13.6
149.5°	1.5	2.2	5.1	8.5	11.7	13.8	13.5
150°	1.6	2.3	5.2	8.5	11.7	13.8	13.4
150.5°	1.6	2.3	5.3	8.6	11.7	13.7	13.3
151°	1.6	2.4	5.4	8.6	11.7	13.7	13.2
151.5°	1.6	2.5	5.5	8.7	11.7	13.7	13.1
152°	1.7	2.6	5.5	8.7	11.7	13.7	13.0
152.5°	1.7	2.6	5.6	8.8	11.7	13.6	12.9
153°	1.8	2.7	5.7	8.8	11.7	13.6	12.8
153.5°	1.8	2.8	5.8	8.9	11.7	13.6	12.7
154°	1.8	2.9	5.8	8.9	11.7	13.6	12.6
154.5°	1.9	3.0	5.9	8.9	11.7	13.5	12.5
155°	1.9	3.1	6.0	9.0	11.7	13.5	12.4
155.5°	2.0	3.1	6.1	9.0	11.7	13.4	12.2
156°	2.1	3.2	6.2	9.0	11.7	13.4	12.1
156.5°	2.1	3.3	6.2	9.1	11.7	13.3	12.0
157°	2.2	3.4	6.3	9.1	11.7	13.2	11.9

REPORT NUMBER: P1197137

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

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
157.5°	2.3	3.5	6.4	9.2	11.7	13.2	11.8
158°	2.3	3.6	6.5	9.2	11.7	13.1	11.7
158.5°	2.4	3.7	6.6	9.2	11.7	13.1	11.6
159°	2.5	3.8	6.6	9.3	11.7	13.0	11.5
159.5°	2.6	3.9	6.7	9.3	11.7	12.9	11.4
160°	2.7	4.0	6.8	9.4	11.7	12.9	11.2
160.5°	2.8	4.1	6.9	9.4	11.6	12.8	11.1
161°	2.9	4.2	7.0	9.4	11.6	12.7	11.0
161.5°	3.0	4.3	7.0	9.5	11.6	12.7	10.9
162°	3.1	4.4	7.1	9.5	11.6	12.6	10.7
162.5°	3.2	4.5	7.2	9.5	11.6	12.5	10.6
163°	3.3	4.6	7.3	9.6	11.5	12.5	10.5
163.5°	3.4	4.7	7.3	9.6	11.6	12.4	10.3
164°	3.5	4.9	7.4	9.6	11.6	12.4	10.2
164.5°	3.6	5.0	7.5	9.7	11.5	12.3	10.0
165°	3.7	5.1	7.6	9.7	11.5	12.2	9.9
165.5°	3.8	5.2	7.6	9.7	11.5	12.2	9.8
166°	3.9	5.3	7.7	9.8	11.5	12.1	9.6
166.5°	4.0	5.5	7.8	9.8	11.4	12.1	9.5
167°	4.0	5.6	7.8	9.8	11.4	12.0	9.4
167.5°	4.1	5.7	7.9	9.9	11.4	11.9	9.3
168°	4.2	5.8	8.0	9.9	11.4	11.9	9.2
168.5°	4.3	5.9	8.1	9.9	11.4	11.8	9.1
169°	4.4	6.0	8.1	10.0	11.4	11.8	9.0
169.5°	4.5	6.1	8.2	10.0	11.3	11.7	8.8
170°	4.6	6.2	8.3	10.0	11.3	11.6	8.7
170.5°	4.7	6.3	8.4	10.1	11.3	11.5	8.6
171°	4.7	6.4	8.4	10.1	11.3	11.5	8.5
171.5°	4.8	6.5	8.5	10.1	11.2	11.4	8.3
172°	4.9	6.6	8.6	10.1	11.2	11.3	8.2
172.5°	5.0	6.7	8.6	10.1	11.1	11.2	8.0
173°	5.1	6.8	8.7	10.2	11.1	11.1	7.9
173.5°	5.2	6.9	8.8	10.2	11.1	11.0	7.8
174°	5.2	7.0	8.9	10.2	11.0	11.0	7.7
174.5°	5.3	7.1	8.9	10.2	11.0	10.9	7.5
175°	5.4	7.2	9.0	10.3	11.0	10.8	7.4
175.5°	5.5	7.3	9.0	10.3	10.9	10.7	7.3
176°	5.6	7.4	9.1	10.3	10.9	10.7	7.2
176.5°	5.7	7.5	9.2	10.3	10.9	10.6	7.1
177°	5.8	7.6	9.2	10.3	10.8	10.5	7.0
177.5°	5.9	7.7	9.3	10.3	10.8	10.5	6.9
178°	6.0	7.8	9.4	10.4	10.7	10.4	6.8
178.5°	6.1	7.9	9.4	10.4	10.7	10.3	6.7
179°	6.2	8.0	9.5	10.4	10.7	10.2	6.6
179.5°	6.3	8.0	9.5	10.4	10.6	10.1	6.5



REPORT NUMBER: P1197137
CATALOG NUMBER: AWPf150S-BZ-BZ-LOW-4000K-POSITION 45

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°
180°	6.3	6.3	6.3	6.3	6.3	6.3	6.3

(END OF REPORT)