

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P257961

Luminaire Tested: **ARCH-L-AF72-250-D-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257961
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28800.2 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G4

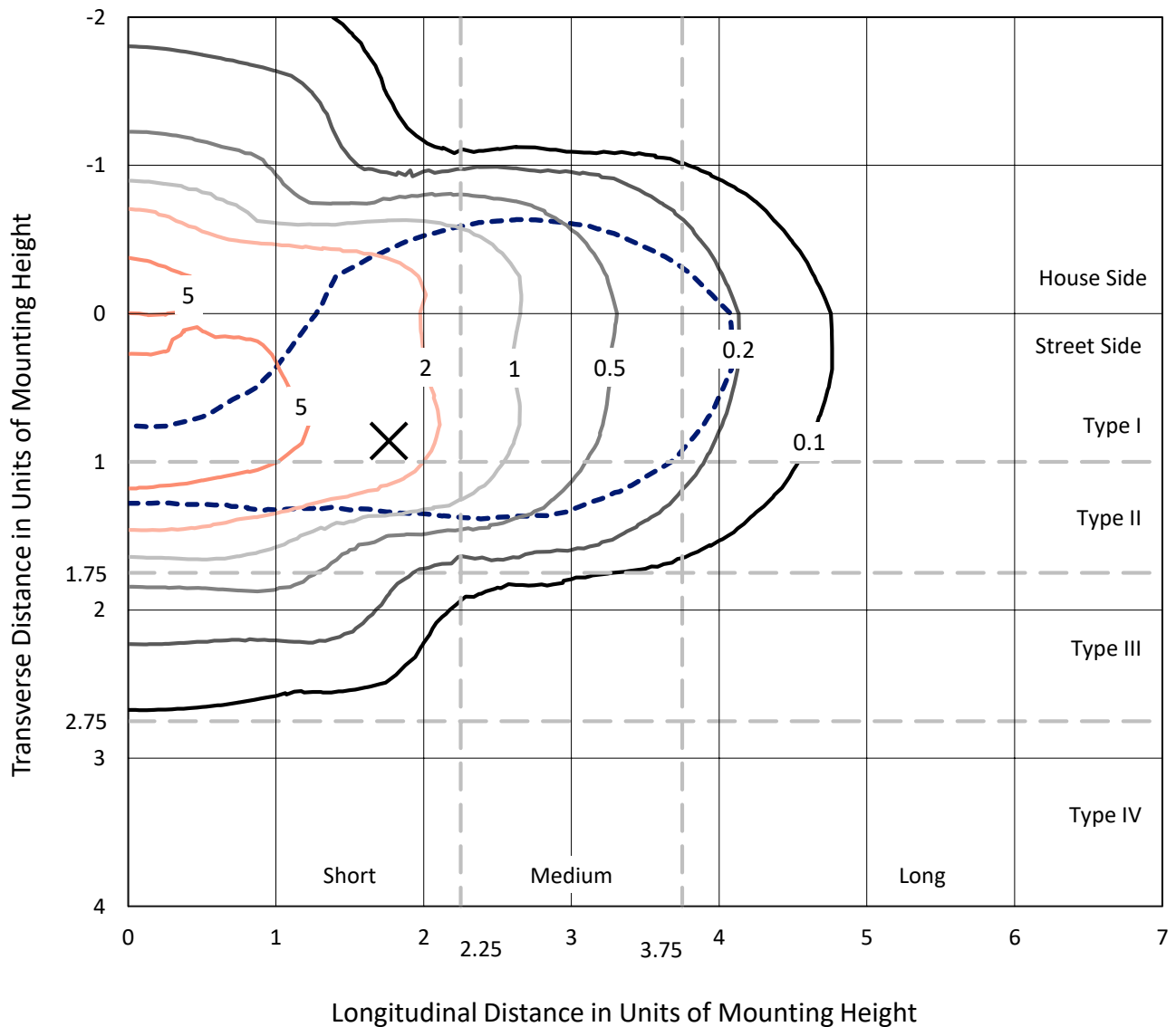
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

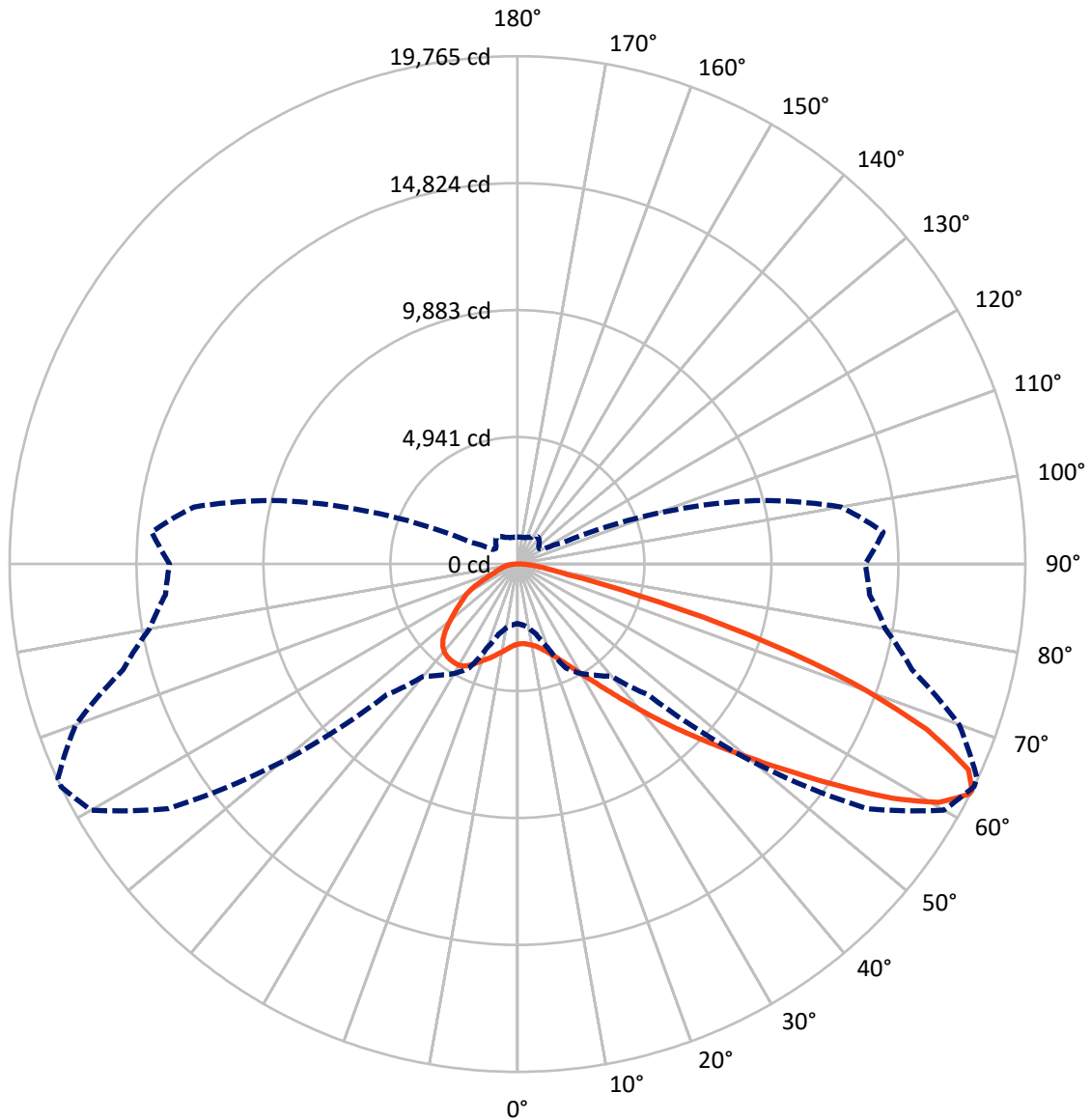


Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P257961

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2U

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P257961

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8466.2	0.0	8466.2
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	20334.0	0.0	20334.0
	% Fixture	70.6	0.0	70.6
Total	Lumens	28800.2	0.0	28800.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.4	1.1
10°-20°	1037.2	3.6
20°-30°	1947.0	6.8
30°-40°	3263.4	11.3
40°-50°	5475.3	19.0
50°-60°	6941.0	24.1
60°-70°	6123.0	21.3
70°-80°	3160.8	11.0
80°-90°	540.9	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	28800.2	100.0
0°-180°	28800.2	100.0



REPORT NUMBER: P257961

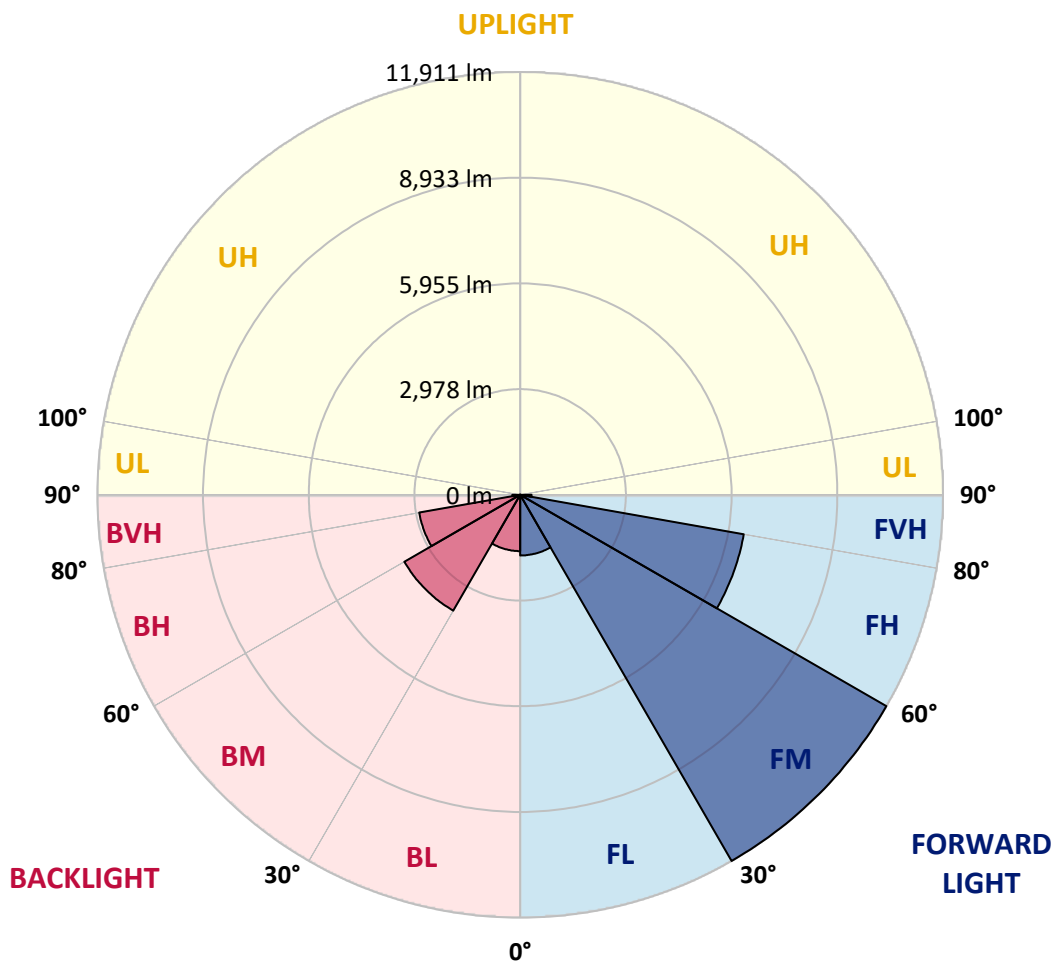
CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1709.4	5.9			
FM	(30°-60°)	11911.0	41.4			
FH	(60°-80°)	6395.3	22.2			G3/7500
FVH	(80°-90°)	318.3	1.1			G3/500
BL	(0°-30°)	1586.3	5.5	B3/2500		
BM	(30°-60°)	3768.7	13.1	B3/5000		
BH	(60°-80°)	2888.6	10.0	B4/5000		G4/5000
BVH	(80°-90°)	222.6	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short





REPORT NUMBER: P257961

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1
2.5°	3099.7	3094.9	3094.9	3094.9	3094.9	3090.1	3094.9	3104.6	3099.7	3094.9	3104.6
5°	3109.4	3104.6	3104.6	3104.6	3109.4	3104.6	3109.4	3123.9	3114.3	3114.3	3123.9
7.5°	3133.5	3128.7	3133.5	3128.7	3128.7	3128.7	3133.5	3147.9	3143.1	3147.9	3162.5
10°	3162.5	3162.5	3162.5	3162.5	3162.5	3162.5	3172.1	3181.7	3186.5	3191.4	3210.6
12.5°	3249.2	3249.2	3249.2	3244.4	3244.4	3230.0	3249.2	3258.8	3268.5	3278.1	3292.6
15°	3432.4	3432.4	3427.6	3408.3	3408.3	3379.3	3384.2	3389.0	3389.0	3398.7	3408.3
17.5°	3673.4	3668.6	3659.0	3644.5	3625.2	3591.5	3581.9	3572.2	3557.7	3552.9	3552.9
20°	4010.9	4006.1	3986.7	3948.2	3924.1	3871.1	3832.5	3793.9	3779.5	3755.4	3750.5
22.5°	4493.0	4493.0	4454.4	4396.5	4377.3	4266.4	4155.5	4073.6	4044.6	4010.9	4010.9
25°	5076.3	5071.5	5018.4	4951.0	4868.9	4753.2	4618.3	4507.4	4435.1	4358.0	4329.0
27.5°	5775.3	5760.8	5688.5	5606.6	5452.3	5307.7	5148.6	5032.9	4907.5	4811.1	4724.4
30°	6594.9	6580.3	6455.0	6300.8	6141.7	5997.0	5765.7	5625.8	5428.2	5312.5	5216.1
32.5°	7544.6	7530.0	7303.5	7154.0	6985.3	6806.9	6532.2	6310.4	6059.8	5895.8	5760.8
35°	8754.5	8696.7	8373.7	8166.4	7901.3	7722.9	7433.7	7134.8	6840.7	6609.3	6411.7
37.5°	10060.9	9993.5	9709.0	9400.5	9140.2	8923.3	8513.5	8137.5	7790.4	7472.2	7226.3
40°	11425.2	11246.8	10943.2	10716.6	10538.2	10330.9	9901.9	9506.6	8961.9	8605.1	8233.9
42.5°	12370.1	12196.5	11984.5	11835.0	11748.3	11589.1	11348.1	11005.8	10518.9	10528.6	9550.0
45°	12992.0	12736.5	12591.9	12601.5	12635.3	12635.3	12591.9	12538.8	12326.8	12471.4	11651.8
47.5°	12770.2	12601.5	12510.0	12702.8	12943.8	13184.8	13464.5	13768.1	14115.3	14525.0	13517.5
50°	11468.6	11531.3	11574.7	11984.5	12500.3	13049.9	13691.0	14520.2	15489.2	15677.1	15190.3
52.5°	9390.9	9525.8	9670.5	10297.2	10976.9	11926.6	13049.9	14419.0	15720.6	16487.1	16438.8
55°	7293.8	7462.5	7771.1	8238.7	8778.7	9675.3	11063.7	13175.2	15204.7	16424.4	17166.8
57.5°	5192.0	5437.8	5842.8	6493.6	6970.9	7477.1	8503.9	10846.8	13069.1	15339.8	17046.2
60°	3451.6	3567.3	3832.5	4642.5	5447.5	5977.8	6705.7	7554.2	9371.6	12500.3	15802.5
62.5°	2448.9	2526.1	2690.0	3056.4	3784.3	4743.6	5182.4	5572.8	6156.1	8041.1	12688.3
63°	2314.0	2381.4	2516.5	2825.0	3480.6	4473.7	4922.0	5278.7	5703.0	7192.6	12003.7
65°	1918.6	1947.6	2019.9	2169.4	2521.3	3345.7	4078.4	4295.3	4367.6	4623.1	7520.4
67.5°	1619.7	1639.1	1663.2	1706.6	1846.3	2227.2	3041.9	3316.7	3234.8	3061.2	3716.8
70°	1407.7	1422.1	1460.7	1513.8	1561.9	1658.3	2092.2	2502.0	2410.4	2174.2	2275.5
72.5°	1123.2	1147.3	1190.7	1282.4	1378.7	1504.0	1610.1	1865.7	1807.8	1581.2	1605.3
75°	887.0	901.5	940.1	1007.5	1099.2	1243.8	1451.1	1537.8	1378.7	1166.7	1166.7
77.5°	703.8	718.3	752.1	805.1	863.0	964.1	1108.8	1335.4	1238.9	877.4	872.6
80°	530.3	544.7	578.5	626.7	684.6	756.9	843.6	944.9	1137.7	819.5	655.6
82.5°	390.5	395.3	453.2	486.9	506.2	564.1	636.4	694.2	780.9	756.9	583.3
85°	294.1	289.3	327.9	351.9	356.7	371.2	414.6	472.4	511.0	491.7	453.2
87.5°	163.9	144.6	168.7	192.8	192.8	197.6	207.2	241.0	274.8	265.1	241.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P257961

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2U

CANDELA DISTRIBUTION (continued):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1
2.5°	3104.6	3104.6	3099.7	3099.7	3104.6	3104.6	3099.7	3114.3	3123.9	3123.9	3128.7
5°	3119.1	3123.9	3119.1	3119.1	3123.9	3123.9	3128.7	3143.1	3157.6	3167.3	3181.7
7.5°	3162.5	3167.3	3162.5	3162.5	3167.3	3172.1	3181.7	3201.0	3210.6	3230.0	3254.0
10°	3210.6	3215.4	3210.6	3215.4	3220.2	3225.1	3239.6	3254.0	3268.5	3287.8	3326.3
12.5°	3297.4	3302.2	3292.6	3297.4	3311.9	3311.9	3321.5	3331.1	3355.3	3379.3	3417.9
15°	3417.9	3417.9	3408.3	3413.1	3427.6	3427.6	3432.4	3442.0	3471.0	3499.9	3538.5
17.5°	3557.7	3567.3	3562.5	3567.3	3577.1	3581.9	3581.9	3591.5	3610.8	3630.0	3668.6
20°	3745.7	3750.5	3740.9	3750.5	3760.2	3750.5	3740.9	3736.1	3745.7	3755.4	3798.7
22.5°	4001.3	3996.5	3972.3	3972.3	3972.3	3953.1	3928.9	3900.0	3900.0	3885.6	3919.3
25°	4305.0	4290.5	4256.7	4261.6	4227.9	4198.9	4155.5	4112.2	4073.6	4059.1	4063.9
27.5°	4661.7	4632.7	4599.0	4589.4	4555.6	4502.6	4430.3	4348.4	4285.7	4237.5	4227.9
30°	5110.0	5047.3	4989.5	4979.8	4926.8	4840.1	4724.4	4613.5	4507.4	4425.5	4396.5
32.5°	5640.3	5543.9	5452.3	5442.7	5355.9	5240.2	5100.4	4946.2	4791.8	4661.7	4599.0
35°	6262.2	6117.6	6030.8	6006.7	5881.4	5736.7	5582.4	5384.8	5167.8	4984.7	4868.9
37.5°	7019.1	6869.6	6720.2	6725.0	6551.5	6382.7	6175.5	5934.3	5659.6	5404.0	5240.2
40°	7954.3	7742.2	7549.4	7506.0	7356.6	7120.2	6893.7	6614.1	6276.6	5939.3	5703.0
42.5°	9087.2	8740.1	8474.9	8436.4	8238.7	7949.5	7674.7	7303.5	6961.2	6551.5	6267.0
45°	10374.4	9819.9	9501.8	9443.9	9125.7	8831.6	8499.1	8103.7	7684.3	7221.5	6884.0
47.5°	11974.9	11184.2	10644.3	10547.9	10109.2	9723.6	9376.4	8937.7	8436.4	7920.5	7549.4
50°	13840.4	12673.8	11945.9	11796.5	11208.3	10755.2	10311.7	9762.1	9227.0	8687.0	8258.0
52.5°	15710.9	14457.6	13488.5	13305.3	12437.6	11830.2	11246.8	10697.3	10065.8	9530.7	9043.8
55°	17215.0	16381.0	15257.7	15002.3	13758.5	12934.2	12167.7	11540.9	10914.3	10490.1	9916.4
57.5°	18121.3	18077.9	17190.9	16839.0	15137.2	13917.6	13064.3	12350.8	11743.4	11565.1	10803.4
60°	18097.2	19220.4	18839.6	18574.4	16530.5	14925.2	13816.4	13045.1	12543.6	12746.2	11695.2
62.5°	16993.3	19268.6	19726.6	19654.4	18015.3	15735.0	14433.4	13638.0	13372.8	13975.5	12620.8
63°	16593.1	19157.8	19765.3	19736.3	18299.7	15889.3	14539.5	13753.7	13536.7	14288.8	12789.5
65°	14023.6	18188.8	19297.6	19427.8	18911.9	16419.6	14785.3	14047.8	14023.6	14987.8	13189.6
67.5°	8547.3	15368.6	17190.9	17441.6	18049.0	16588.3	14645.5	13946.5	14293.6	15089.0	13069.1
70°	3654.2	10143.0	13816.4	14221.3	15706.1	15749.5	14245.4	13531.9	14231.0	14298.4	12211.1
72.5°	2164.6	4782.2	9405.3	10287.5	12427.9	13551.2	13329.5	12808.8	13406.6	12558.2	10398.4
75°	1533.0	2236.9	4777.4	5717.5	8653.3	10345.4	11198.7	11439.8	11415.6	9959.8	7804.8
77.5°	1099.2	1436.6	2015.1	2376.6	4830.4	6643.0	7684.3	8388.2	8161.6	6667.2	4811.1
80°	766.5	993.1	1234.1	1311.2	2241.7	3413.1	4049.5	4358.0	4223.0	3331.1	2154.8
82.5°	554.4	650.8	795.4	843.6	1128.1	1576.4	1875.3	1653.5	1586.1	1229.3	930.4
85°	429.0	419.4	496.5	515.9	660.4	824.4	843.6	655.6	573.7	511.0	520.7
87.5°	303.7	260.3	265.1	274.8	342.3	438.6	429.0	270.0	231.4	245.8	279.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1	3119.1
2.5°	3138.3	3143.1	3152.8	3157.6	3167.3	3167.3	3176.9	3181.7	3191.4	3201.0	3205.8
5°	3196.2	3210.6	3230.0	3239.6	3258.8	3273.3	3292.6	3302.2	3321.5	3335.9	3355.3
7.5°	3283.0	3307.1	3331.1	3360.1	3389.0	3413.1	3432.4	3456.4	3490.2	3514.3	3528.8
10°	3364.9	3398.7	3442.0	3475.8	3519.2	3552.9	3581.9	3625.2	3663.8	3697.6	3716.8
12.5°	3471.0	3514.3	3557.7	3610.8	3668.6	3712.0	3755.4	3813.3	3866.2	3904.8	3924.1
15°	3596.3	3649.4	3697.6	3760.2	3827.7	3885.6	3948.2	4010.9	4049.5	4049.5	4039.8
17.5°	3726.5	3769.9	3827.7	3900.0	3991.7	4063.9	4097.6	4107.4	4092.8	4059.1	4035.0
20°	3856.6	3895.2	3957.9	4044.6	4141.0	4155.5	4121.8	4078.4	4035.0	3977.1	3938.6
22.5°	3962.7	4015.7	4112.2	4213.3	4218.1	4136.2	4044.6	3972.3	3904.8	3837.3	3765.1
25°	4088.0	4160.3	4290.5	4329.0	4203.7	4049.5	3919.3	3813.3	3702.4	3591.5	3509.5
27.5°	4242.3	4348.4	4478.5	4367.6	4121.8	3904.8	3726.5	3567.3	3422.8	3268.5	3176.9
30°	4406.2	4570.1	4599.0	4309.8	3981.9	3702.4	3461.4	3220.2	3037.1	2897.3	2844.2
32.5°	4603.9	4816.0	4642.5	4208.5	3793.9	3427.6	3104.6	2815.4	2661.1	2574.3	2550.2
35°	4902.7	5076.3	4666.5	4102.4	3577.1	3099.7	2694.9	2463.4	2367.0	2309.1	2280.3
37.5°	5331.8	5326.9	4661.7	3972.3	3326.3	2743.0	2367.0	2203.1	2126.0	2077.7	2024.7
40°	5833.2	5519.8	4632.7	3784.3	2988.9	2400.8	2140.4	1986.2	1913.8	1856.0	1793.3
42.5°	6329.7	5650.0	4550.8	3504.7	2569.4	2154.8	1976.5	1836.7	1759.6	1696.9	1610.1
45°	6758.7	5703.0	4391.7	3119.1	2193.4	1962.0	1870.5	1750.0	1658.3	1561.9	1494.4
47.5°	7096.2	5693.3	4136.2	2665.9	1942.8	1827.1	1783.7	1701.8	1590.9	1470.3	1383.5
50°	7380.6	5621.0	3789.1	2265.7	1774.0	1706.6	1692.1	1668.0	1489.6	1388.3	1335.4
52.5°	7640.9	5514.9	3417.9	1995.8	1629.5	1571.6	1600.5	1576.4	1451.1	1364.3	1311.2
55°	7997.6	5442.7	3051.6	1788.5	1460.7	1446.2	1470.3	1504.0	1426.9	1345.0	1287.2
57.5°	8417.0	5481.3	2772.0	1557.1	1301.6	1311.2	1393.2	1441.4	1402.9	1316.0	1258.2
60°	8899.2	5597.0	2526.1	1335.4	1171.5	1195.5	1316.0	1383.5	1378.7	1277.5	1210.0
62.5°	9439.1	5717.5	2135.6	1166.7	1060.6	1099.2	1224.5	1311.2	1325.7	1238.9	1157.0
63°	9545.2	5727.1	2034.3	1132.9	1041.3	1084.6	1200.3	1292.0	1311.2	1229.3	1147.3
65°	9805.5	5640.3	1639.1	1041.3	964.1	1012.4	1128.1	1210.0	1248.6	1176.3	1108.8
67.5°	9588.5	4931.6	1234.1	930.4	901.5	935.2	1036.5	1113.6	1147.3	1113.6	1046.1
70°	8769.0	3586.7	964.1	829.2	834.0	858.1	935.2	1007.5	1046.1	1036.5	973.7
72.5°	7062.5	2034.3	805.1	742.4	756.9	785.8	838.8	906.3	940.1	935.2	891.8
75°	4652.1	1041.3	679.8	665.2	674.9	699.0	737.5	790.6	829.2	824.4	805.1
77.5°	2304.3	723.1	583.3	588.1	593.0	612.2	641.2	689.4	713.5	718.3	713.5
80°	949.7	564.1	501.3	506.2	511.0	525.5	544.7	588.1	602.6	612.2	617.0
82.5°	568.9	429.0	400.1	409.8	414.6	429.0	443.6	482.1	496.5	511.0	511.0
85°	376.0	298.9	289.3	298.9	308.5	318.1	322.9	347.1	371.2	390.5	400.1
87.5°	202.4	178.4	173.6	178.4	178.4	188.0	197.6	221.8	250.7	270.0	279.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P257961

CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2U

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	3119.1	3119.1	3119.1	3119.1	3119.1
2.5°	3196.2	3201.0	3196.2	3201.0	3205.8
5°	3355.3	3364.9	3360.1	3360.1	3379.3
7.5°	3538.5	3557.7	3557.7	3567.3	3577.1
10°	3736.1	3755.4	3769.9	3769.9	3784.3
12.5°	3933.8	3943.4	3957.9	3957.9	3957.9
15°	4035.0	4030.2	4025.3	4020.5	4020.5
17.5°	4020.5	4001.3	3991.7	3981.9	3986.7
20°	3914.4	3880.8	3871.1	3856.6	3866.2
22.5°	3731.3	3683.0	3663.8	3639.7	3649.4
25°	3456.4	3398.7	3389.0	3360.1	3374.5
27.5°	3138.3	3109.4	3104.6	3099.7	3123.9
30°	2839.4	2849.1	2853.9	2863.5	2887.7
32.5°	2564.6	2584.0	2588.8	2593.6	2627.3
35°	2294.7	2270.5	2294.7	2285.1	2314.0
37.5°	2000.6	1981.4	1962.0	1938.0	1957.2
40°	1754.8	1721.0	1663.2	1634.3	1639.1
42.5°	1561.9	1518.6	1470.3	1441.4	1441.4
45°	1436.6	1383.5	1340.2	1320.9	1320.9
47.5°	1340.2	1316.0	1292.0	1277.5	1277.5
50°	1301.6	1272.7	1258.2	1248.6	1248.6
52.5°	1272.7	1243.8	1229.3	1219.7	1210.0
55°	1248.6	1205.2	1190.7	1185.9	1185.9
57.5°	1214.9	1176.3	1157.0	1152.1	1152.1
60°	1161.8	1132.9	1113.6	1108.8	1108.8
62.5°	1108.8	1079.8	1060.6	1060.6	1060.6
63°	1099.2	1065.4	1051.0	1051.0	1051.0
65°	1055.8	1022.0	1007.5	1007.5	1002.7
67.5°	997.9	964.1	954.5	954.5	944.9
70°	930.4	901.5	891.8	896.6	877.4
72.5°	863.0	834.0	819.5	819.5	800.3
75°	785.8	756.9	737.5	732.7	713.5
77.5°	699.0	674.9	655.6	636.4	626.7
80°	607.4	588.1	564.1	549.5	535.1
82.5°	511.0	491.7	477.2	496.5	424.2
85°	400.1	380.8	361.5	390.5	303.7
87.5°	294.1	284.4	265.1	231.4	202.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)