

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: P257974

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2U-7050**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P257974
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 8/21/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T2U-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22438 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

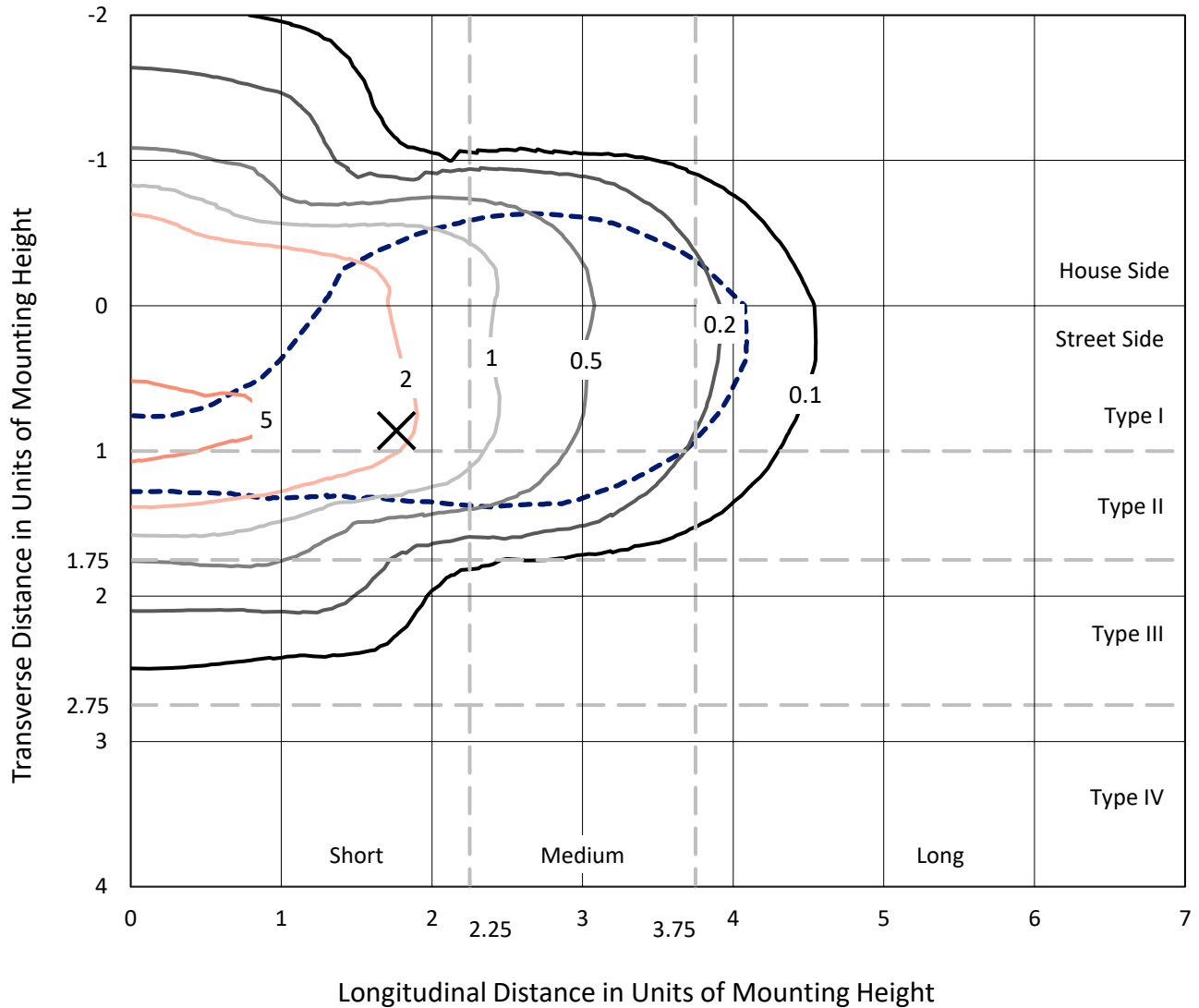
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

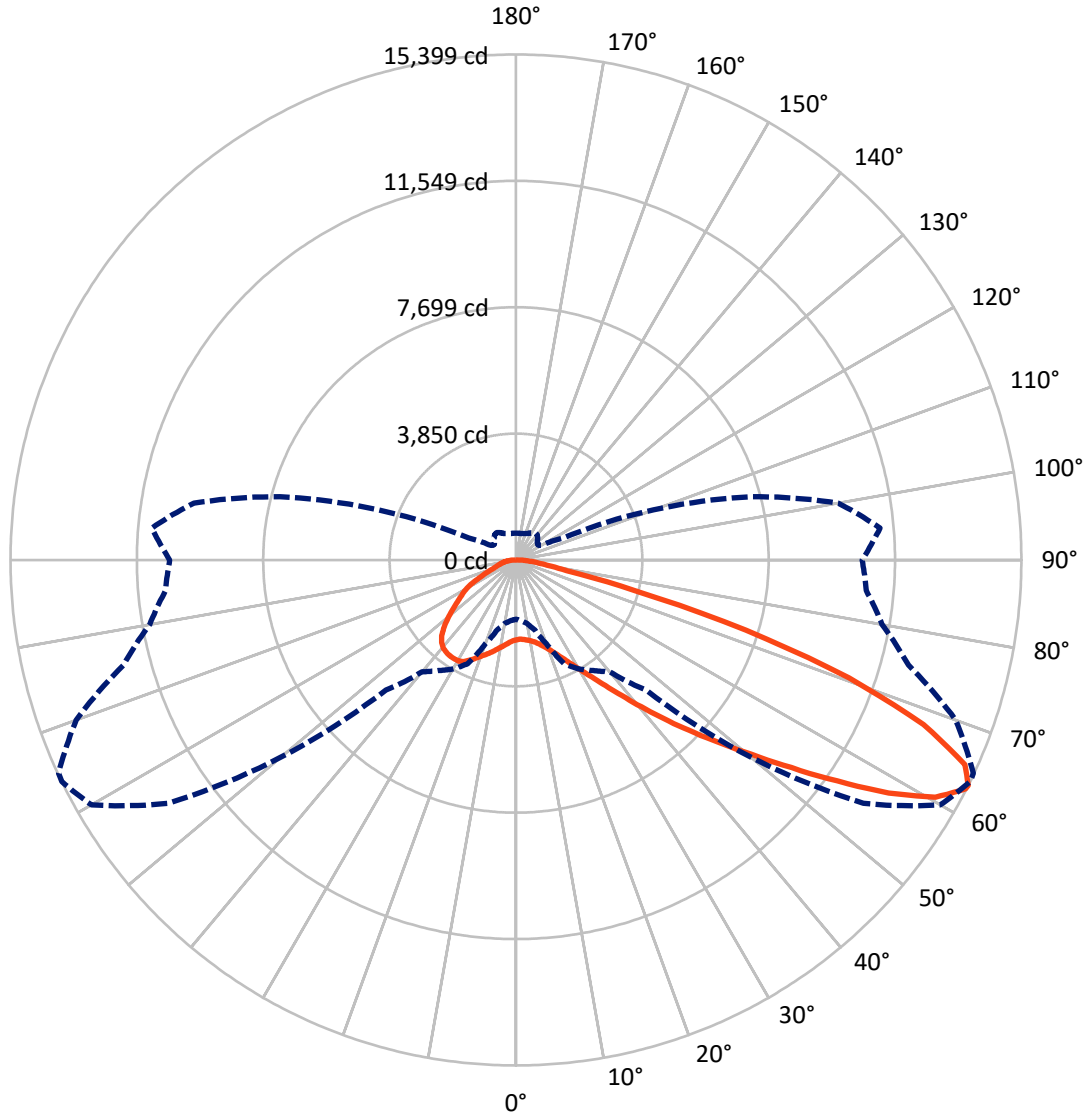
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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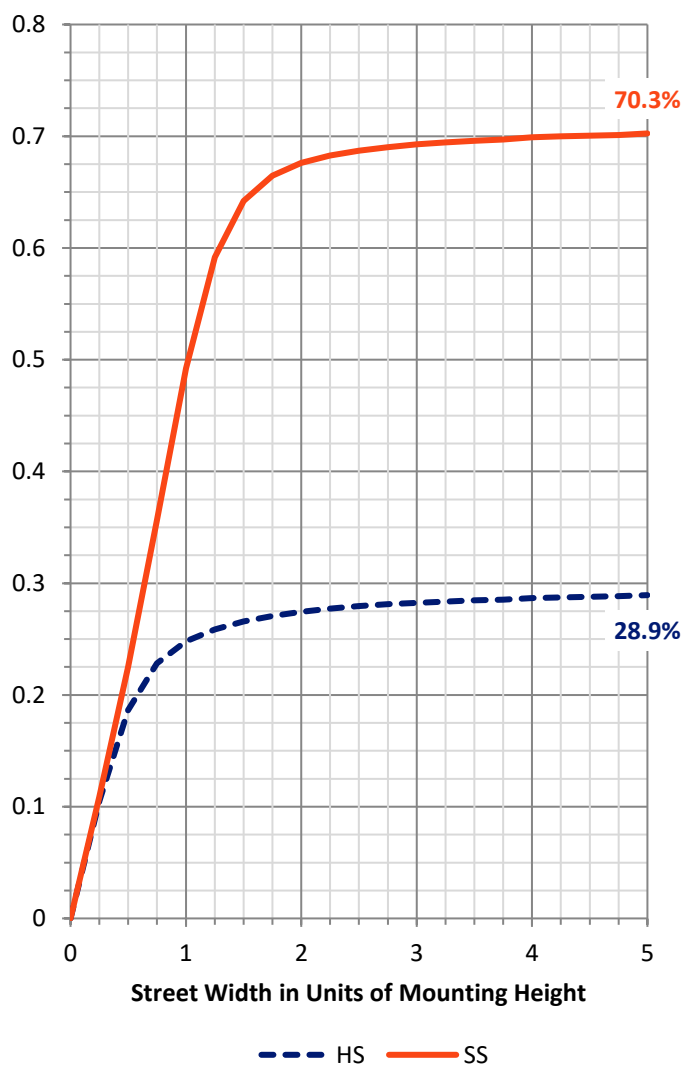
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6596.0	0.0	6596.0
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	15842.0	0.0	15842.0
	% Fixture	70.6	0.0	70.6
Total	Lumens	22438.0	0.0	22438.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.6	1.1
10°-20°	808.1	3.6
20°-30°	1516.9	6.8
30°-40°	2542.5	11.3
40°-50°	4265.8	19.0
50°-60°	5407.7	24.1
60°-70°	4770.4	21.3
70°-80°	2462.6	11.0
80°-90°	421.4	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°	22438.0	100.0
0°-180°	22438.0	100.0

Coefficient of Utilization



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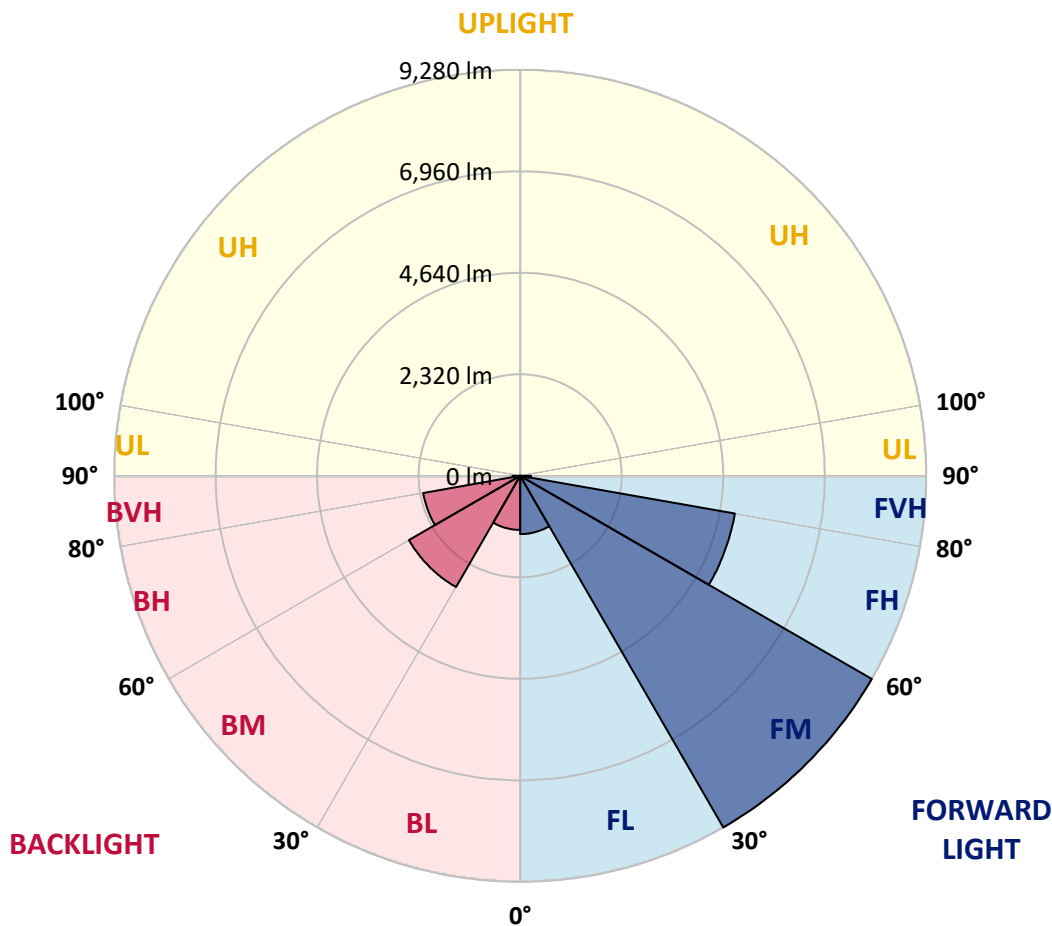
CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2U-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1331.8	5.9			
FM (30°-60°)	9279.8	41.4			
FH (60°-80°)	4982.5	22.2			G2/5000
FVH (80°-90°)	248.0	1.1			G3/500
BL (0°-30°)	1235.9	5.5	B3/2500		
BM (30°-60°)	2936.2	13.1	B3/5000		
BH (60°-80°)	2250.5	10.0	B3/2500		G3/2500
BVH (80°-90°)	173.4	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0
2.5°	2415.0	2411.2	2411.2	2411.2	2411.2	2407.5	2411.2	2418.8	2415.0	2411.2	2418.8
5°	2422.5	2418.8	2418.8	2418.8	2422.5	2418.8	2422.5	2433.8	2426.3	2426.3	2433.8
7.5°	2441.3	2437.5	2441.3	2437.5	2437.5	2437.5	2441.3	2452.6	2448.8	2452.6	2463.8
10°	2463.8	2463.8	2463.8	2463.8	2463.8	2463.8	2471.3	2478.9	2482.6	2486.4	2501.4
12.5°	2531.4	2531.4	2531.4	2527.7	2527.7	2516.4	2531.4	2538.9	2546.5	2554.0	2565.2
15°	2674.2	2674.2	2670.4	2655.4	2655.4	2632.8	2636.6	2640.4	2640.4	2647.9	2655.4
17.5°	2861.9	2858.2	2850.7	2839.4	2824.4	2798.1	2790.6	2783.1	2771.8	2768.1	2768.1
20°	3124.9	3121.1	3106.1	3076.0	3057.3	3015.9	2985.9	2955.8	2944.6	2925.8	2922.0
22.5°	3500.4	3500.4	3470.4	3425.3	3410.3	3323.9	3237.5	3173.7	3151.1	3124.9	3124.9
25°	3954.9	3951.1	3909.8	3857.2	3793.4	3703.3	3598.1	3511.7	3455.4	3395.3	3372.7
27.5°	4499.5	4488.2	4431.9	4368.0	4247.9	4135.2	4011.2	3921.1	3823.4	3748.3	3680.7
30°	5138.0	5126.7	5029.1	4908.9	4784.9	4672.3	4492.0	4383.1	4229.1	4138.9	4063.8
32.5°	5877.9	5866.6	5690.1	5573.7	5442.2	5303.2	5089.2	4916.4	4721.1	4593.4	4488.2
35°	6820.6	6775.5	6523.9	6362.4	6155.8	6016.8	5791.5	5558.6	5329.5	5149.3	4995.3
37.5°	7838.4	7785.8	7564.3	7323.9	7121.1	6952.1	6632.8	6339.9	6069.4	5821.5	5630.0
40°	8901.3	8762.4	8525.7	8349.2	8210.3	8048.8	7714.5	7406.5	6982.1	6704.2	6415.0
42.5°	9637.5	9502.3	9337.0	9220.6	9153.0	9029.0	8841.2	8574.6	8195.2	8202.7	7440.3
45°	10122.0	9922.9	9810.2	9817.8	9844.0	9844.0	9810.2	9768.9	9603.7	9716.3	9077.9
47.5°	9949.2	9817.8	9746.4	9896.6	10084.4	10272.2	10490.1	10726.7	10997.1	11316.3	10531.4
50°	8935.1	8984.0	9017.8	9337.0	9738.9	10167.0	10666.6	11312.6	12067.5	12214.0	11834.6
52.5°	7316.4	7421.5	7534.2	8022.5	8552.0	9291.9	10167.0	11233.7	12247.8	12845.0	12807.4
55°	5682.6	5814.0	6054.4	6418.7	6839.4	7538.0	8619.6	10264.7	11845.9	12796.1	13374.5
57.5°	4045.0	4236.6	4552.1	5059.1	5430.9	5825.3	6625.3	8450.6	10182.1	11951.1	13280.6
60°	2689.2	2779.3	2985.9	3616.9	4244.1	4657.2	5224.4	5885.4	7301.3	9738.9	12311.6
62.5°	1908.0	1968.1	2095.8	2381.2	2948.3	3695.7	4037.5	4341.7	4796.2	6264.7	9885.4
63°	1802.8	1855.4	1960.5	2200.9	2711.7	3485.4	3834.7	4112.6	4443.2	5603.7	9352.0
65°	1494.8	1517.4	1573.7	1690.1	1964.3	2606.6	3177.4	3346.5	3402.8	3601.8	5859.1
67.5°	1262.0	1277.0	1295.8	1329.6	1438.5	1735.2	2369.9	2584.0	2520.2	2385.0	2895.7
70°	1096.7	1108.0	1138.0	1179.3	1216.9	1292.0	1630.0	1949.3	1877.9	1693.9	1772.8
72.5°	875.1	893.9	927.7	999.1	1074.2	1171.8	1254.4	1453.5	1408.4	1231.9	1250.7
75°	691.1	702.3	732.4	785.0	856.3	969.0	1130.5	1198.1	1074.2	908.9	908.9
77.5°	548.4	559.6	585.9	627.2	672.3	751.2	863.8	1040.4	965.2	683.6	679.8
80°	413.1	424.4	450.7	488.3	533.3	589.7	657.3	736.1	886.4	638.5	510.8
82.5°	304.2	308.0	353.0	379.3	394.4	439.4	495.8	540.8	608.4	589.7	454.5
85°	229.1	225.4	255.4	274.2	277.9	289.2	323.0	368.1	398.1	383.1	353.0
87.5°	127.7	112.7	131.5	150.2	150.2	154.0	161.5	187.8	214.1	206.6	187.8
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0
2.5°	2418.8	2418.8	2415.0	2415.0	2418.8	2418.8	2415.0	2426.3	2433.8	2433.8	2437.5
5°	2430.0	2433.8	2430.0	2430.0	2433.8	2433.8	2437.5	2448.8	2460.1	2467.6	2478.9
7.5°	2463.8	2467.6	2463.8	2463.8	2467.6	2471.3	2478.9	2493.9	2501.4	2516.4	2535.2
10°	2501.4	2505.1	2501.4	2505.1	2508.9	2512.7	2523.9	2535.2	2546.5	2561.5	2591.5
12.5°	2569.0	2572.7	2565.2	2569.0	2580.3	2580.3	2587.8	2595.3	2614.1	2632.8	2662.9
15°	2662.9	2662.9	2655.4	2659.1	2670.4	2670.4	2674.2	2681.7	2704.2	2726.7	2756.8
17.5°	2771.8	2779.3	2775.6	2779.3	2786.8	2790.6	2790.6	2798.1	2813.1	2828.1	2858.2
20°	2918.3	2922.0	2914.5	2922.0	2929.6	2922.0	2914.5	2910.8	2918.3	2925.8	2959.6
22.5°	3117.3	3113.6	3094.8	3094.8	3094.8	3079.8	3061.0	3038.5	3038.5	3027.2	3053.5
25°	3354.0	3342.7	3316.4	3320.2	3293.9	3271.3	3237.5	3203.7	3173.7	3162.4	3166.2
27.5°	3631.9	3609.4	3583.1	3575.6	3549.3	3508.0	3451.6	3387.8	3338.9	3301.4	3293.9
30°	3981.2	3932.4	3887.3	3879.8	3838.5	3770.9	3680.7	3594.3	3511.7	3447.9	3425.3
32.5°	4394.3	4319.2	4247.9	4240.3	4172.7	4082.6	3973.7	3853.5	3733.3	3631.9	3583.1
35°	4878.8	4766.2	4698.6	4679.8	4582.1	4469.4	4349.3	4195.3	4026.3	3883.5	3793.4
37.5°	5468.5	5352.1	5235.6	5239.4	5104.2	4972.7	4811.2	4623.4	4409.4	4210.3	4082.6
40°	6197.1	6031.9	5881.6	5847.8	5731.4	5547.4	5370.8	5153.0	4890.1	4627.2	4443.2
42.5°	7079.8	6809.3	6602.8	6572.7	6418.7	6193.4	5979.3	5690.1	5423.4	5104.2	4882.6
45°	8082.6	7650.6	7402.8	7357.7	7109.8	6880.7	6621.5	6313.6	5986.8	5626.2	5363.3
47.5°	9329.5	8713.5	8292.9	8217.8	7876.0	7575.5	7305.1	6963.3	6572.7	6170.8	5881.6
50°	10783.0	9874.1	9307.0	9190.5	8732.3	8379.3	8033.7	7605.6	7188.7	6768.0	6433.7
52.5°	12240.3	11263.8	10508.8	10366.1	9690.1	9216.8	8762.4	8334.2	7842.2	7425.3	7045.9
55°	13412.1	12762.3	11887.2	11688.2	10719.2	10076.9	9479.7	8991.5	8503.2	8172.7	7725.8
57.5°	14118.2	14084.4	13393.3	13119.1	11793.3	10843.1	10178.3	9622.5	9149.2	9010.3	8416.8
60°	14099.4	14974.5	14677.8	14471.2	12878.8	11628.1	10764.2	10163.3	9772.7	9930.4	9111.7
62.5°	13239.3	15012.1	15368.9	15312.5	14035.6	12259.0	11245.0	10625.3	10418.7	10888.2	9832.8
63°	12927.6	14925.7	15398.9	15376.4	14257.2	12379.2	11327.6	10715.4	10546.4	11132.3	9964.2
65°	10925.7	14170.8	15034.6	15136.0	14734.1	12792.4	11519.1	10944.5	10925.7	11676.9	10276.0
67.5°	6659.1	11973.6	13393.3	13588.6	14061.9	12923.8	11410.2	10865.6	11136.1	11755.8	10182.1
70°	2846.9	7902.3	10764.2	11079.7	12236.5	12270.3	11098.5	10542.6	11087.2	11139.8	9513.5
72.5°	1686.4	3725.8	7327.6	8015.0	9682.5	10557.7	10384.9	9979.3	10445.0	9784.0	8101.3
75°	1194.4	1742.7	3722.0	4454.4	6741.7	8060.0	8724.8	8912.6	8893.8	7759.6	6080.7
77.5°	856.3	1119.2	1569.9	1851.6	3763.3	5175.5	5986.8	6535.2	6358.6	5194.3	3748.3
80°	597.2	773.7	961.5	1021.6	1746.5	2659.1	3154.9	3395.3	3290.1	2595.3	1678.9
82.5°	431.9	507.0	619.7	657.3	878.9	1228.2	1461.0	1288.3	1235.7	957.7	724.9
85°	334.3	326.8	386.9	401.9	514.5	642.2	657.3	510.8	446.9	398.1	405.6
87.5°	236.6	202.8	206.6	214.1	266.7	341.8	334.3	210.3	180.3	191.5	217.8
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°	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0	2430.0
2.5°	2445.0	2448.8	2456.3	2460.1	2467.6	2467.6	2475.1	2478.9	2486.4	2493.9	2497.6
5°	2490.1	2501.4	2516.4	2523.9	2538.9	2550.2	2565.2	2572.7	2587.8	2599.0	2614.1
7.5°	2557.7	2576.5	2595.3	2617.8	2640.4	2659.1	2674.2	2692.9	2719.2	2738.0	2749.3
10°	2621.6	2647.9	2681.7	2708.0	2741.8	2768.1	2790.6	2824.4	2854.4	2880.7	2895.7
12.5°	2704.2	2738.0	2771.8	2813.1	2858.2	2892.0	2925.8	2970.9	3012.2	3042.2	3057.3
15°	2801.9	2843.2	2880.7	2929.6	2982.1	3027.2	3076.0	3124.9	3154.9	3154.9	3147.4
17.5°	2903.3	2937.1	2982.1	3038.5	3109.8	3166.2	3192.5	3200.0	3188.7	3162.4	3143.6
20°	3004.7	3034.7	3083.5	3151.1	3226.3	3237.5	3211.2	3177.4	3143.6	3098.6	3068.5
22.5°	3087.3	3128.6	3203.7	3282.6	3286.4	3222.5	3151.1	3094.8	3042.2	2989.6	2933.3
25°	3184.9	3241.3	3342.7	3372.7	3275.1	3154.9	3053.5	2970.9	2884.5	2798.1	2734.2
27.5°	3305.1	3387.8	3489.2	3402.8	3211.2	3042.2	2903.3	2779.3	2666.6	2546.5	2475.1
30°	3432.8	3560.5	3583.1	3357.7	3102.3	2884.5	2696.7	2508.9	2366.2	2257.3	2215.9
32.5°	3586.8	3752.1	3616.9	3278.8	2955.8	2670.4	2418.8	2193.4	2073.2	2005.6	1986.8
35°	3819.7	3954.9	3635.6	3196.2	2786.8	2415.0	2099.5	1919.2	1844.1	1799.0	1776.5
37.5°	4154.0	4150.2	3631.9	3094.8	2591.5	2137.1	1844.1	1716.4	1656.3	1618.8	1577.5
40°	4544.6	4300.4	3609.4	2948.3	2328.6	1870.4	1667.6	1547.4	1491.1	1446.0	1397.2
42.5°	4931.4	4401.8	3545.5	2730.5	2001.9	1678.9	1539.9	1431.0	1370.9	1322.1	1254.4
45°	5265.7	4443.2	3421.6	2430.0	1708.9	1528.6	1457.3	1363.4	1292.0	1216.9	1164.3
47.5°	5528.6	4435.6	3222.5	2077.0	1513.6	1423.5	1389.7	1325.8	1239.4	1145.5	1077.9
50°	5750.2	4379.3	2952.1	1765.2	1382.1	1329.6	1318.3	1299.5	1160.6	1081.7	1040.4
52.5°	5953.0	4296.7	2662.9	1554.9	1269.5	1224.4	1246.9	1228.2	1130.5	1062.9	1021.6
55°	6230.9	4240.3	2377.4	1393.4	1138.0	1126.8	1145.5	1171.8	1111.7	1047.9	1002.8
57.5°	6557.7	4270.4	2159.6	1213.1	1014.1	1021.6	1085.4	1123.0	1092.9	1025.3	980.3
60°	6933.3	4360.5	1968.1	1040.4	912.7	931.4	1025.3	1077.9	1074.2	995.3	942.7
62.5°	7353.9	4454.4	1663.8	908.9	826.3	856.3	954.0	1021.6	1032.9	965.2	901.4
63°	7436.6	4461.9	1585.0	882.6	811.3	845.1	935.2	1006.6	1021.6	957.7	893.9
65°	7639.4	4394.3	1277.0	811.3	751.2	788.7	878.9	942.7	972.8	916.4	863.8
67.5°	7470.4	3842.2	961.5	724.9	702.3	728.6	807.5	867.6	893.9	867.6	815.0
70°	6831.9	2794.3	751.2	646.0	649.8	668.5	728.6	785.0	815.0	807.5	758.7
72.5°	5502.3	1585.0	627.2	578.4	589.7	612.2	653.5	706.1	732.4	728.6	694.8
75°	3624.4	811.3	529.6	518.3	525.8	544.6	574.6	616.0	646.0	642.2	627.2
77.5°	1795.3	563.4	454.5	458.2	462.0	477.0	499.5	537.1	555.9	559.6	555.9
80°	739.9	439.4	390.6	394.4	398.1	409.4	424.4	458.2	469.5	477.0	480.7
82.5°	443.2	334.3	311.7	319.2	323.0	334.3	345.5	375.6	386.9	398.1	398.1
85°	293.0	232.9	225.4	232.9	240.4	247.9	251.6	270.4	289.2	304.2	311.7
87.5°	157.7	139.0	135.2	139.0	139.0	146.5	154.0	172.8	195.3	210.3	217.8
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):

	160°	165°	170°	175°	180°
0°	2430.0	2430.0	2430.0	2430.0	2430.0
2.5°	2490.1	2493.9	2490.1	2493.9	2497.6
5°	2614.1	2621.6	2617.8	2617.8	2632.8
7.5°	2756.8	2771.8	2771.8	2779.3	2786.8
10°	2910.8	2925.8	2937.1	2937.1	2948.3
12.5°	3064.8	3072.3	3083.5	3083.5	3083.5
15°	3143.6	3139.9	3136.1	3132.4	3132.4
17.5°	3132.4	3117.3	3109.8	3102.3	3106.1
20°	3049.7	3023.4	3015.9	3004.7	3012.2
22.5°	2907.0	2869.5	2854.4	2835.7	2843.2
25°	2692.9	2647.9	2640.4	2617.8	2629.1
27.5°	2445.0	2422.5	2418.8	2415.0	2433.8
30°	2212.2	2219.7	2223.5	2231.0	2249.7
32.5°	1998.1	2013.1	2016.9	2020.6	2046.9
35°	1787.8	1769.0	1787.8	1780.3	1802.8
37.5°	1558.7	1543.6	1528.6	1509.8	1524.9
40°	1367.1	1340.8	1295.8	1273.2	1277.0
42.5°	1216.9	1183.1	1145.5	1123.0	1123.0
45°	1119.2	1077.9	1044.1	1029.1	1029.1
47.5°	1044.1	1025.3	1006.6	995.3	995.3
50°	1014.1	991.5	980.3	972.8	972.8
52.5°	991.5	969.0	957.7	950.2	942.7
55°	972.8	939.0	927.7	923.9	923.9
57.5°	946.5	916.4	901.4	897.6	897.6
60°	905.2	882.6	867.6	863.8	863.8
62.5°	863.8	841.3	826.3	826.3	826.3
63°	856.3	830.0	818.8	818.8	818.8
65°	822.5	796.2	785.0	785.0	781.2
67.5°	777.5	751.2	743.7	743.7	736.1
70°	724.9	702.3	694.8	698.6	683.6
72.5°	672.3	649.8	638.5	638.5	623.5
75°	612.2	589.7	574.6	570.9	555.9
77.5°	544.6	525.8	510.8	495.8	488.3
80°	473.2	458.2	439.4	428.2	416.9
82.5°	398.1	383.1	371.8	386.9	330.5
85°	311.7	296.7	281.7	304.2	236.6
87.5°	229.1	221.6	206.6	180.3	157.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)