

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: P257957

Luminaire Tested: **ARCH-L-AF72-210-D-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257957
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-AF72-210-D-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25666.9 lumens
Efficiency: N/A
Efficacy: 121.6 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

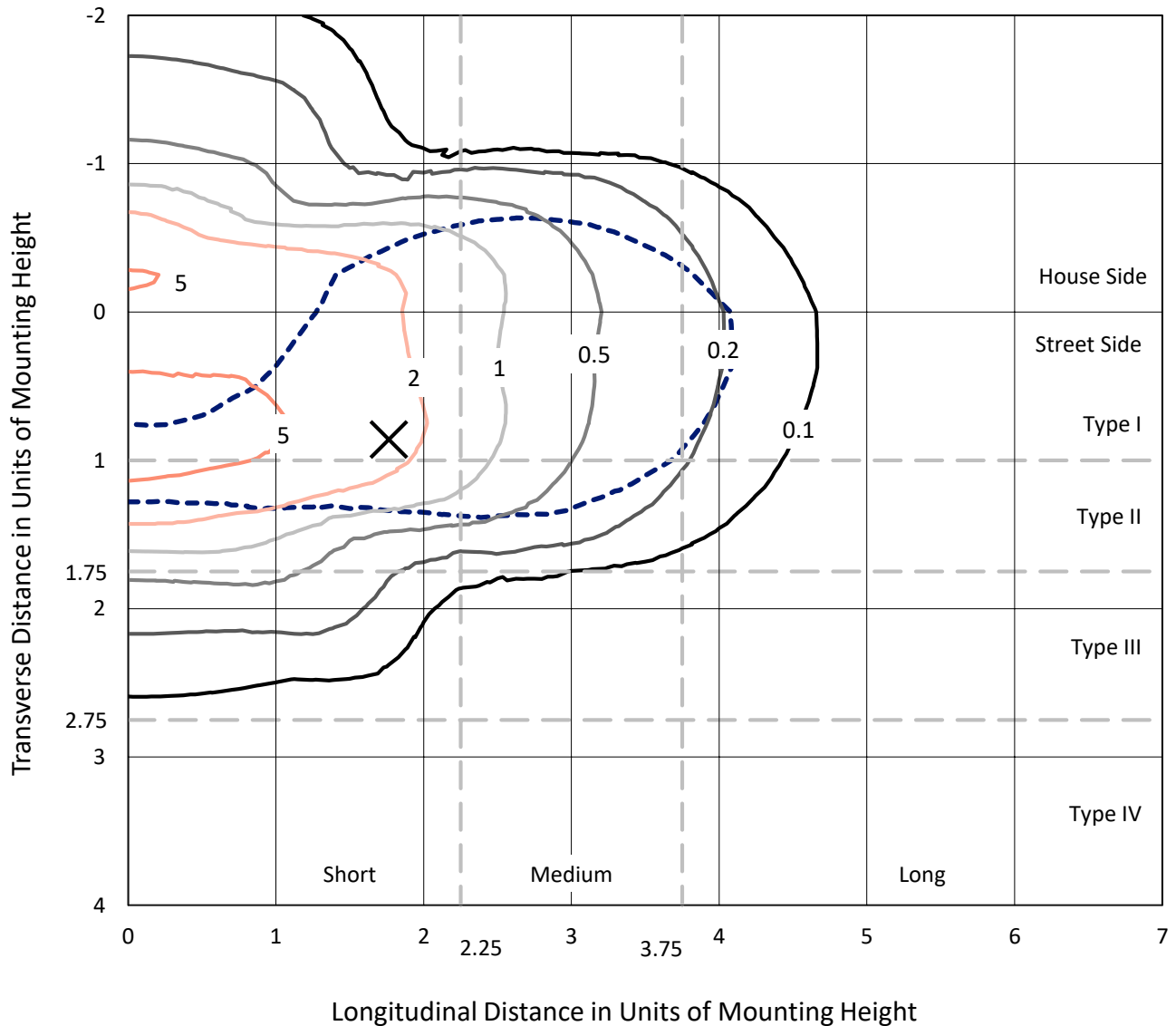
Input Watts (W): 211
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

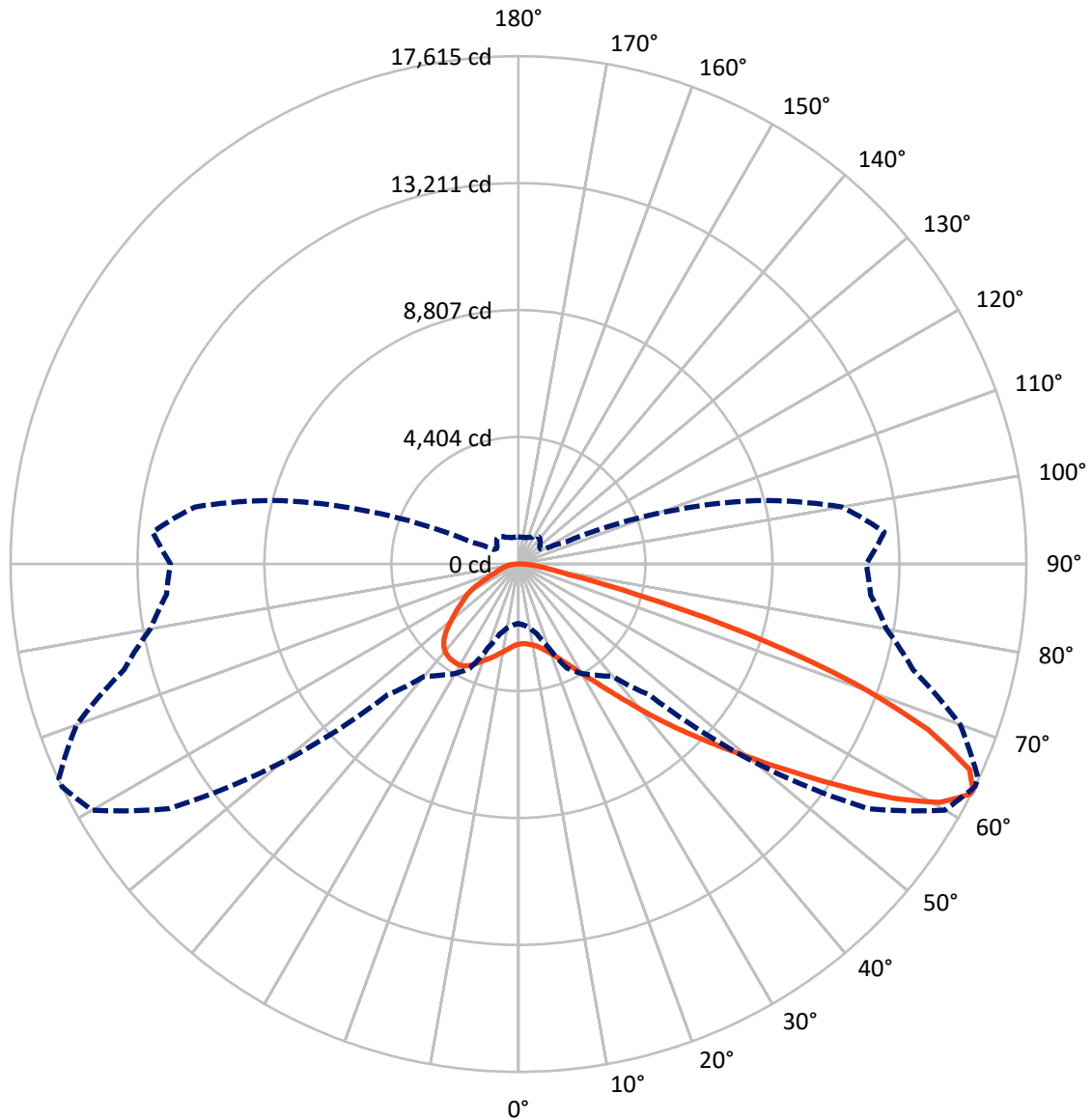


Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Short - Semi-Cutoff

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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	7545.1	0.0	7545.1
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	18121.7	0.0	18121.7
	% Fixture	70.6	0.0	70.6
Total	Lumens	25666.9	0.0	25666.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.5	1.1
10°-20°	924.4	3.6
20°-30°	1735.2	6.8
30°-40°	2908.4	11.3
40°-50°	4879.6	19.0
50°-60°	6185.9	24.1
60°-70°	5456.9	21.3
70°-80°	2817.0	11.0
80°-90°	482.0	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°	25666.9	100.0
0°-180°	25666.9	100.0



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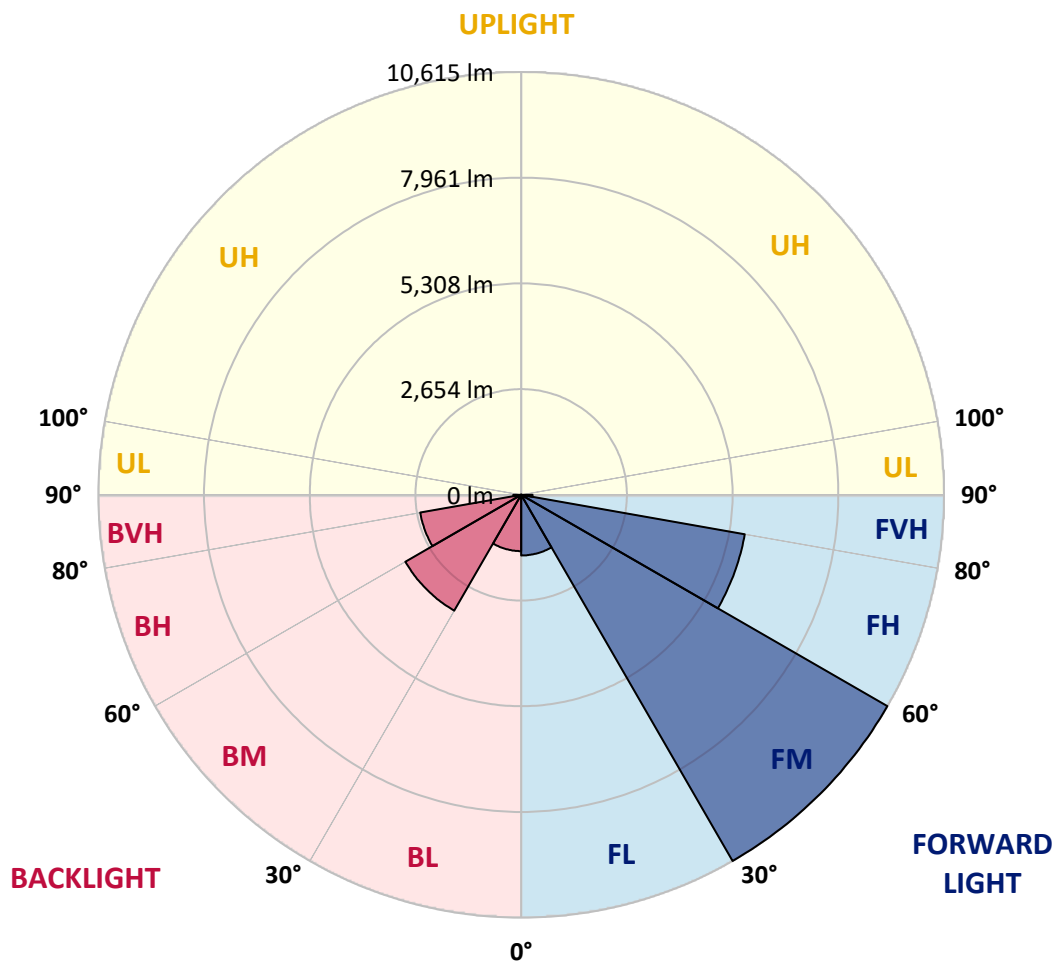
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1523.4	5.9			
FM	(30°-60°)	10615.1	41.4			
FH	(60°-80°)	5699.5	22.2			G3/7500
FVH	(80°-90°)	283.7	1.1			G3/500
BL	(0°-30°)	1413.7	5.5	B3/2500		
BM	(30°-60°)	3358.7	13.1	B3/5000		
BH	(60°-80°)	2574.4	10.0	B4/5000		G4/5000
BVH	(80°-90°)	198.4	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7
2.5°	2762.5	2758.2	2758.2	2758.2	2758.2	2753.9	2758.2	2766.8	2762.5	2758.2	2766.8
5°	2771.1	2766.8	2766.8	2766.8	2771.1	2766.8	2771.1	2784.0	2775.4	2775.4	2784.0
7.5°	2792.6	2788.3	2792.6	2788.3	2788.3	2788.3	2792.6	2805.4	2801.1	2805.4	2818.3
10°	2818.3	2818.3	2818.3	2818.3	2818.3	2818.3	2826.9	2835.5	2839.8	2844.1	2861.3
12.5°	2895.7	2895.7	2895.7	2891.4	2891.4	2878.5	2895.7	2904.3	2912.9	2921.4	2934.3
15°	3058.9	3058.9	3054.6	3037.4	3037.4	3011.7	3016.0	3020.3	3020.3	3028.9	3037.4
17.5°	3273.7	3269.5	3260.9	3248.0	3230.8	3200.7	3192.1	3183.5	3170.6	3166.3	3166.3
20°	3574.5	3570.2	3553.0	3518.6	3497.2	3449.9	3415.5	3381.2	3368.3	3346.8	3342.5
22.5°	4004.1	4004.1	3969.8	3918.2	3901.0	3802.2	3703.4	3630.4	3604.6	3574.5	3574.5
25°	4524.0	4519.7	4472.4	4412.3	4339.3	4236.1	4115.8	4017.0	3952.6	3883.8	3858.1
27.5°	5147.0	5134.1	5069.6	4996.6	4859.1	4730.2	4588.4	4485.3	4373.6	4287.7	4210.4
30°	5877.4	5864.5	5752.8	5615.3	5473.5	5344.6	5138.4	5013.8	4837.6	4734.5	4648.6
32.5°	6723.8	6710.9	6508.9	6375.7	6225.4	6066.4	5821.5	5623.9	5400.5	5254.4	5134.1
35°	7802.0	7750.5	7462.7	7278.0	7041.7	6882.7	6624.9	6358.6	6096.5	5890.3	5714.1
37.5°	8966.4	8906.2	8652.7	8377.8	8145.8	7952.4	7587.2	7252.2	6942.9	6659.3	6440.2
40°	10182.2	10023.3	9752.6	9550.7	9391.7	9207.0	8824.6	8472.3	7986.8	7668.9	7338.1
42.5°	11024.3	10869.7	10680.6	10547.4	10470.1	10328.3	10113.5	9808.5	9374.5	9383.1	8511.0
45°	11578.6	11350.9	11222.0	11230.6	11260.6	11260.6	11222.0	11174.7	10985.7	11114.6	10384.2
47.5°	11380.9	11230.6	11148.9	11320.8	11535.6	11750.4	11999.6	12270.3	12579.6	12944.7	12046.9
50°	10220.9	10276.8	10315.4	10680.6	11140.3	11630.1	12201.6	12940.4	13804.0	13971.6	13537.6
52.5°	8369.2	8489.5	8618.4	9176.9	9782.7	10629.1	11630.1	12850.2	14010.2	14693.4	14650.4
55°	6500.3	6650.7	6925.7	7342.4	7823.5	8622.7	9860.0	11741.8	13550.5	14637.5	15299.2
57.5°	4627.1	4846.2	5207.1	5787.1	6212.5	6663.6	7578.6	9666.7	11647.3	13670.8	15191.7
60°	3076.1	3179.2	3415.5	4137.3	4854.8	5327.4	5976.2	6732.3	8352.0	11140.3	14083.3
62.5°	2182.6	2251.3	2397.4	2723.8	3372.6	4227.5	4618.5	4966.5	5486.4	7166.3	11307.9
63°	2062.3	2122.4	2242.7	2517.6	3101.9	3987.0	4386.5	4704.4	5082.5	6410.1	10697.8
65°	1710.0	1735.7	1800.2	1933.4	2247.0	2981.6	3634.6	3828.0	3892.4	4120.1	6702.3
67.5°	1443.6	1460.8	1482.3	1520.9	1645.5	1984.9	2710.9	2955.8	2882.8	2728.1	3312.4
70°	1254.5	1267.4	1301.8	1349.1	1392.0	1478.0	1864.6	2229.8	2148.2	1937.7	2027.9
72.5°	1001.1	1022.5	1061.2	1142.8	1228.8	1340.5	1435.0	1662.7	1611.1	1409.2	1430.7
75°	790.5	803.4	837.8	897.9	979.6	1108.5	1293.2	1370.5	1228.8	1039.7	1039.7
77.5°	627.3	640.2	670.2	717.5	769.1	859.3	988.2	1190.1	1104.2	781.9	777.6
80°	472.6	485.5	515.6	558.5	610.1	674.5	751.9	842.1	1013.9	730.4	584.3
82.5°	348.0	352.3	403.9	433.9	451.1	502.7	567.1	618.7	696.0	674.5	519.9
85°	262.1	257.8	292.2	313.6	317.9	330.8	369.5	421.0	455.4	438.2	403.9
87.5°	146.1	128.9	150.4	171.9	171.9	176.2	184.7	214.8	244.9	236.3	214.8
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°	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7
2.5°	2766.8	2766.8	2762.5	2762.5	2766.8	2766.8	2762.5	2775.4	2784.0	2784.0	2788.3
5°	2779.7	2784.0	2779.7	2779.7	2784.0	2784.0	2788.3	2801.1	2814.0	2822.6	2835.5
7.5°	2818.3	2822.6	2818.3	2818.3	2822.6	2826.9	2835.5	2852.7	2861.3	2878.5	2900.0
10°	2861.3	2865.6	2861.3	2865.6	2869.9	2874.2	2887.1	2900.0	2912.9	2930.0	2964.4
12.5°	2938.6	2942.9	2934.3	2938.6	2951.5	2951.5	2960.1	2968.7	2990.2	3011.7	3046.0
15°	3046.0	3046.0	3037.4	3041.7	3054.6	3054.6	3058.9	3067.5	3093.3	3119.1	3153.5
17.5°	3170.6	3179.2	3174.9	3179.2	3187.8	3192.1	3192.1	3200.7	3217.9	3235.1	3269.5
20°	3338.2	3342.5	3333.9	3342.5	3351.1	3342.5	3333.9	3329.6	3338.2	3346.8	3385.5
22.5°	3565.9	3561.6	3540.1	3540.1	3540.1	3522.9	3501.5	3475.7	3475.7	3462.8	3492.9
25°	3836.6	3823.7	3793.6	3797.9	3767.8	3742.1	3703.4	3664.7	3630.4	3617.5	3621.8
27.5°	4154.5	4128.7	4098.7	4090.1	4060.0	4012.7	3948.3	3875.2	3819.4	3776.4	3767.8
30°	4554.1	4498.2	4446.7	4438.1	4390.8	4313.5	4210.4	4111.5	4017.0	3944.0	3918.2
32.5°	5026.7	4940.8	4859.1	4850.5	4773.2	4670.1	4545.5	4408.0	4270.5	4154.5	4098.7
35°	5580.9	5452.0	5374.7	5353.2	5241.5	5112.6	4975.1	4799.0	4605.6	4442.4	4339.3
37.5°	6255.4	6122.3	5989.1	5993.4	5838.7	5688.3	5503.6	5288.8	5043.9	4816.2	4670.1
40°	7088.9	6899.9	6728.0	6689.4	6556.2	6345.7	6143.7	5894.5	5593.8	5293.1	5082.5
42.5°	8098.5	7789.2	7552.9	7518.6	7342.4	7084.7	6839.8	6508.9	6203.9	5838.7	5585.2
45°	9245.6	8751.5	8468.0	8416.4	8132.9	7870.8	7574.3	7222.1	6848.3	6435.9	6135.1
47.5°	10672.0	9967.4	9486.2	9400.3	9009.3	8665.6	8356.3	7965.3	7518.6	7058.9	6728.0
50°	12334.7	11295.0	10646.3	10513.1	9988.9	9585.0	9189.8	8700.0	8223.1	7741.9	7359.6
52.5°	14001.6	12884.6	12021.1	11857.8	11084.5	10543.1	10023.3	9533.5	8970.7	8493.8	8059.8
55°	15342.1	14598.8	13597.8	13370.1	12261.7	11527.0	10843.9	10285.4	9726.8	9348.7	8837.5
57.5°	16149.8	16111.2	15320.6	15007.0	13490.4	12403.5	11643.0	11007.2	10465.8	10306.8	9628.0
60°	16128.4	17129.4	16790.0	16553.7	14732.0	13301.3	12313.3	11625.8	11179.0	11359.5	10422.8
62.5°	15144.5	17172.4	17580.5	17516.1	16055.3	14023.1	12863.1	12154.3	11918.0	12455.0	11247.8
63°	14787.9	17073.6	17614.9	17589.1	16308.8	14160.6	12957.6	12257.4	12064.1	12734.2	11398.1
65°	12498.0	16210.0	17198.2	17314.2	16854.4	14633.2	13176.7	12519.5	12498.0	13357.2	11754.7
67.5°	7617.3	13696.6	15320.6	15544.0	16085.4	14783.6	13052.1	12429.3	12738.5	13447.4	11647.3
70°	3256.6	9039.4	12313.3	12674.1	13997.3	14036.0	12695.5	12059.8	12682.6	12742.8	10882.6
72.5°	1929.1	4261.9	8382.1	9168.3	11075.9	12077.0	11879.3	11415.3	11948.1	11191.9	9267.1
75°	1366.3	1993.5	4257.6	5095.4	7711.8	9219.9	9980.3	10195.1	10173.7	8876.1	6955.8
77.5°	979.6	1280.3	1795.9	2118.1	4304.9	5920.3	6848.3	7475.6	7273.7	5941.8	4287.7
80°	683.1	885.1	1099.9	1168.6	1997.8	3041.7	3608.9	3883.8	3763.5	2968.7	1920.5
82.5°	494.1	580.0	708.9	751.9	1005.4	1404.9	1671.3	1473.7	1413.5	1095.6	829.2
85°	382.4	373.8	442.5	459.7	588.6	734.7	751.9	584.3	511.3	455.4	464.0
87.5°	270.7	232.0	236.3	244.9	305.0	391.0	382.4	240.6	206.2	219.1	249.2
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°	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7	2779.7
2.5°	2796.8	2801.1	2809.7	2814.0	2822.6	2822.6	2831.2	2835.5	2844.1	2852.7	2857.0
5°	2848.4	2861.3	2878.5	2887.1	2904.3	2917.1	2934.3	2942.9	2960.1	2973.0	2990.2
7.5°	2925.7	2947.2	2968.7	2994.5	3020.3	3041.7	3058.9	3080.4	3110.5	3132.0	3144.9
10°	2998.8	3028.9	3067.5	3097.6	3136.3	3166.3	3192.1	3230.8	3265.2	3295.2	3312.4
12.5°	3093.3	3132.0	3170.6	3217.9	3269.5	3308.1	3346.8	3398.3	3445.6	3480.0	3497.2
15°	3205.0	3252.3	3295.2	3351.1	3411.2	3462.8	3518.6	3574.5	3608.9	3608.9	3600.3
17.5°	3321.0	3359.7	3411.2	3475.7	3557.3	3621.8	3651.8	3660.4	3647.5	3617.5	3596.0
20°	3437.0	3471.4	3527.2	3604.6	3690.5	3703.4	3673.3	3634.6	3596.0	3544.4	3510.1
22.5°	3531.5	3578.8	3664.7	3754.9	3759.2	3686.2	3604.6	3540.1	3480.0	3419.8	3355.4
25°	3643.2	3707.7	3823.7	3858.1	3746.4	3608.9	3492.9	3398.3	3299.5	3200.7	3127.7
27.5°	3780.7	3875.2	3991.2	3892.4	3673.3	3480.0	3321.0	3179.2	3050.3	2912.9	2831.2
30°	3926.8	4072.9	4098.7	3840.9	3548.7	3299.5	3084.7	2869.9	2706.6	2582.0	2534.8
32.5°	4103.0	4292.0	4137.3	3750.6	3381.2	3054.6	2766.8	2509.1	2371.6	2294.3	2272.8
35°	4369.3	4524.0	4158.8	3656.1	3187.8	2762.5	2401.7	2195.5	2109.5	2058.0	2032.2
37.5°	4751.7	4747.4	4154.5	3540.1	2964.4	2444.6	2109.5	1963.5	1894.7	1851.7	1804.5
40°	5198.5	4919.3	4128.7	3372.6	2663.7	2139.6	1907.6	1770.1	1705.7	1654.1	1598.3
42.5°	5641.1	5035.3	4055.7	3123.4	2290.0	1920.5	1761.5	1636.9	1568.2	1512.3	1435.0
45°	6023.4	5082.5	3913.9	2779.7	1954.9	1748.6	1667.0	1559.6	1478.0	1392.0	1331.9
47.5°	6324.2	5073.9	3686.2	2375.9	1731.4	1628.3	1589.7	1516.6	1417.8	1310.4	1233.1
50°	6577.7	5009.5	3376.9	2019.3	1581.1	1520.9	1508.0	1486.6	1327.6	1237.4	1190.1
52.5°	6809.7	4915.0	3046.0	1778.7	1452.2	1400.6	1426.4	1404.9	1293.2	1215.9	1168.6
55°	7127.6	4850.5	2719.5	1594.0	1301.8	1288.9	1310.4	1340.5	1271.7	1198.7	1147.1
57.5°	7501.4	4884.9	2470.4	1387.7	1160.0	1168.6	1241.7	1284.6	1250.3	1172.9	1121.4
60°	7930.9	4988.0	2251.3	1190.1	1044.0	1065.5	1172.9	1233.1	1228.8	1138.5	1078.4
62.5°	8412.1	5095.4	1903.3	1039.7	945.2	979.6	1091.3	1168.6	1181.5	1104.2	1031.1
63°	8506.7	5104.0	1813.1	1009.7	928.0	966.7	1069.8	1151.4	1168.6	1095.6	1022.5
65°	8738.7	5026.7	1460.8	928.0	859.3	902.2	1005.4	1078.4	1112.8	1048.3	988.2
67.5°	8545.3	4395.1	1099.9	829.2	803.4	833.5	923.7	992.5	1022.5	992.5	932.3
70°	7814.9	3196.4	859.3	739.0	743.3	764.8	833.5	897.9	932.3	923.7	867.9
72.5°	6294.1	1813.1	717.5	661.6	674.5	700.3	747.6	807.7	837.8	833.5	794.8
75°	4145.9	928.0	605.8	592.9	601.5	623.0	657.3	704.6	739.0	734.7	717.5
77.5°	2053.7	644.5	519.9	524.2	528.5	545.6	571.4	614.4	635.9	640.2	635.9
80°	846.4	502.7	446.8	451.1	455.4	468.3	485.5	524.2	537.0	545.6	549.9
82.5°	507.0	382.4	356.6	365.2	369.5	382.4	395.3	429.6	442.5	455.4	455.4
85°	335.1	266.4	257.8	266.4	275.0	283.6	287.9	309.3	330.8	348.0	356.6
87.5°	180.4	159.0	154.7	159.0	159.0	167.6	176.2	197.6	223.4	240.6	249.2
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°	2779.7	2779.7	2779.7	2779.7	2779.7
2.5°	2848.4	2852.7	2848.4	2852.7	2857.0
5°	2990.2	2998.8	2994.5	2994.5	3011.7
7.5°	3153.5	3170.6	3170.6	3179.2	3187.8
10°	3329.6	3346.8	3359.7	3359.7	3372.6
12.5°	3505.8	3514.3	3527.2	3527.2	3527.2
15°	3596.0	3591.7	3587.4	3583.1	3583.1
17.5°	3583.1	3565.9	3557.3	3548.7	3553.0
20°	3488.6	3458.5	3449.9	3437.0	3445.6
22.5°	3325.3	3282.3	3265.2	3243.7	3252.3
25°	3080.4	3028.9	3020.3	2994.5	3007.4
27.5°	2796.8	2771.1	2766.8	2762.5	2784.0
30°	2530.5	2539.1	2543.4	2552.0	2573.4
32.5°	2285.7	2302.9	2307.2	2311.5	2341.5
35°	2045.1	2023.6	2045.1	2036.5	2062.3
37.5°	1783.0	1765.8	1748.6	1727.2	1744.3
40°	1563.9	1533.8	1482.3	1456.5	1460.8
42.5°	1392.0	1353.4	1310.4	1284.6	1284.6
45°	1280.3	1233.1	1194.4	1177.2	1177.2
47.5°	1194.4	1172.9	1151.4	1138.5	1138.5
50°	1160.0	1134.2	1121.4	1112.8	1112.8
52.5°	1134.2	1108.5	1095.6	1087.0	1078.4
55°	1112.8	1074.1	1061.2	1056.9	1056.9
57.5°	1082.7	1048.3	1031.1	1026.8	1026.8
60°	1035.4	1009.7	992.5	988.2	988.2
62.5°	988.2	962.4	945.2	945.2	945.2
63°	979.6	949.5	936.6	936.6	936.6
65°	940.9	910.8	897.9	897.9	893.6
67.5°	889.4	859.3	850.7	850.7	842.1
70°	829.2	803.4	794.8	799.1	781.9
72.5°	769.1	743.3	730.4	730.4	713.2
75°	700.3	674.5	657.3	653.1	635.9
77.5°	623.0	601.5	584.3	567.1	558.5
80°	541.3	524.2	502.7	489.8	476.9
82.5°	455.4	438.2	425.3	442.5	378.1
85°	356.6	339.4	322.2	348.0	270.7
87.5°	262.1	253.5	236.3	206.2	180.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)