

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: P257975

Luminaire Tested: **ARCH-L-AF72-190-D-U-T2U-7050**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P257975
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-AF72-190-D-U-T2U-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23220 lumens
Efficiency: N/A
Efficacy: 122.9 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

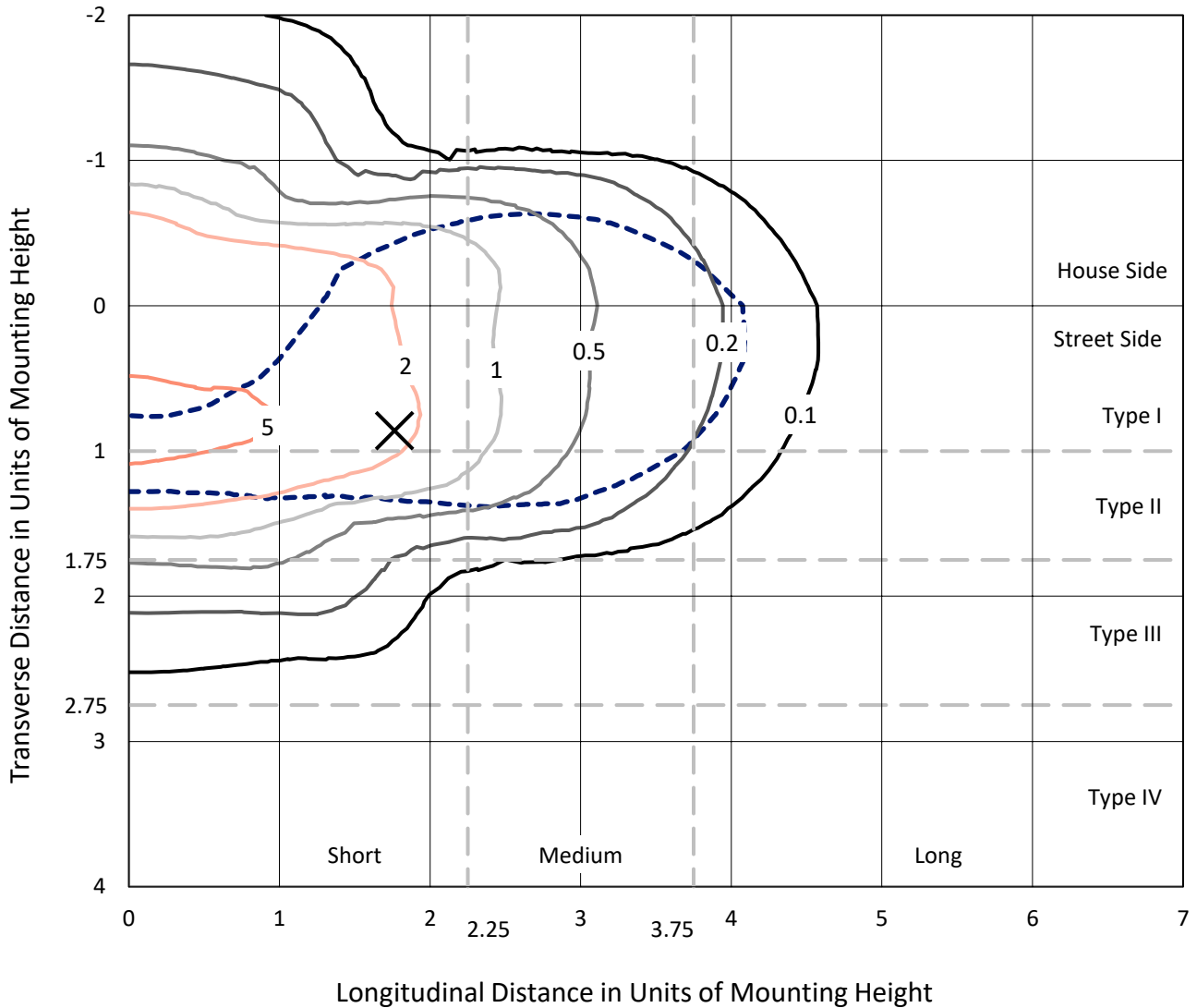
Input Watts (W): 189
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

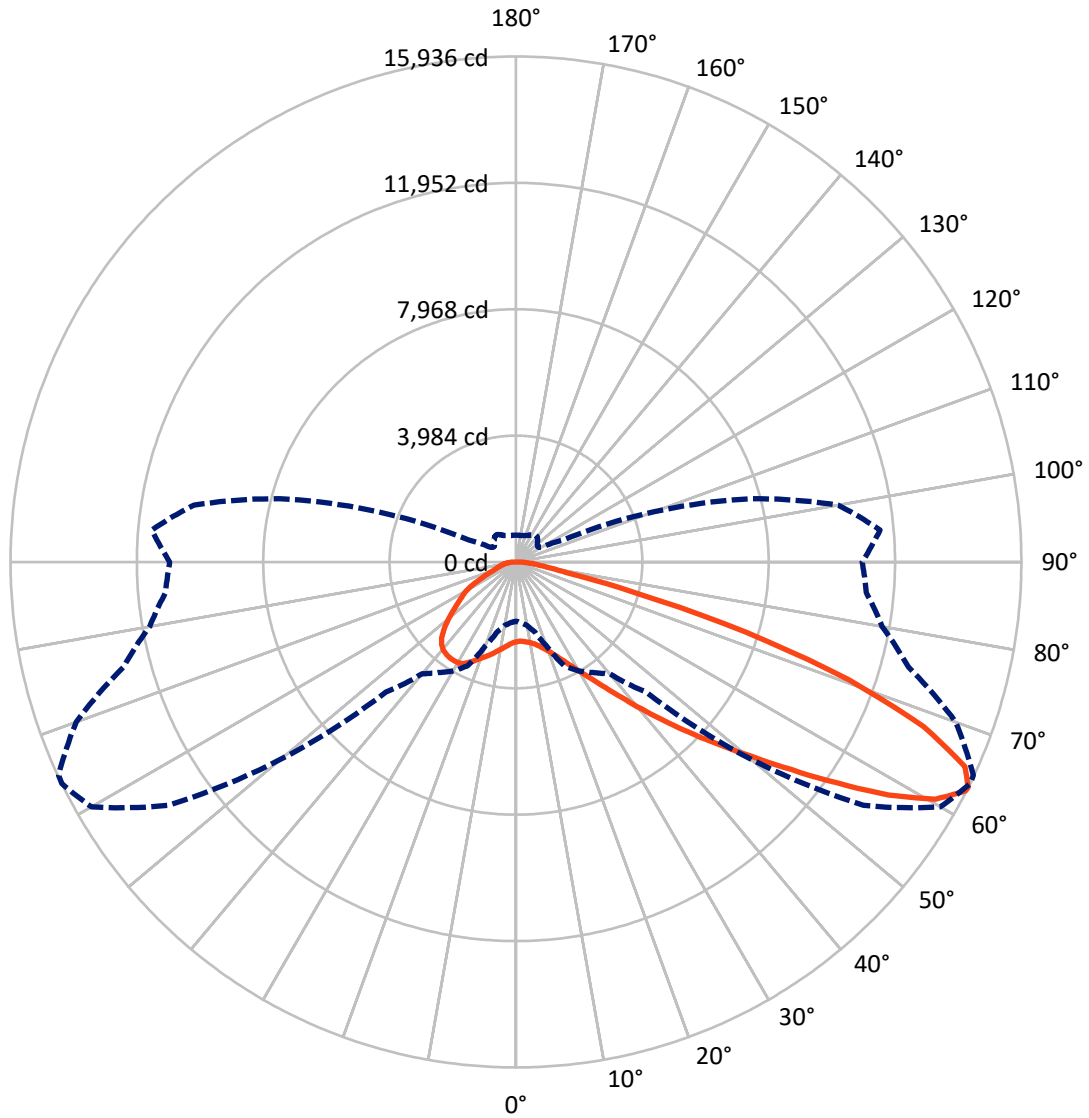
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 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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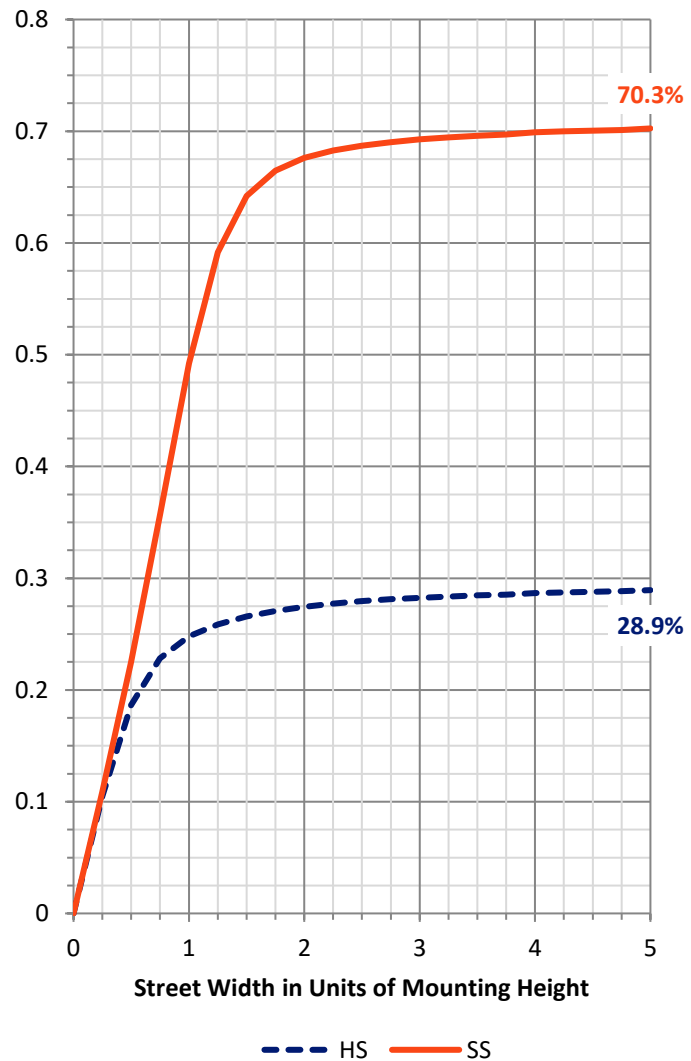
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6825.8	0.0	6825.8
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	16394.2	0.0	16394.2
	% Fixture	70.6	0.0	70.6
Total	Lumens	23220.0	0.0	23220.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.1	1.1
10°-20°	836.3	3.6
20°-30°	1569.8	6.8
30°-40°	2631.1	11.3
40°-50°	4414.4	19.0
50°-60°	5596.2	24.1
60°-70°	4936.7	21.3
70°-80°	2548.4	11.0
80°-90°	436.1	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°	23220.0	100.0
0°-180°	23220.0	100.0

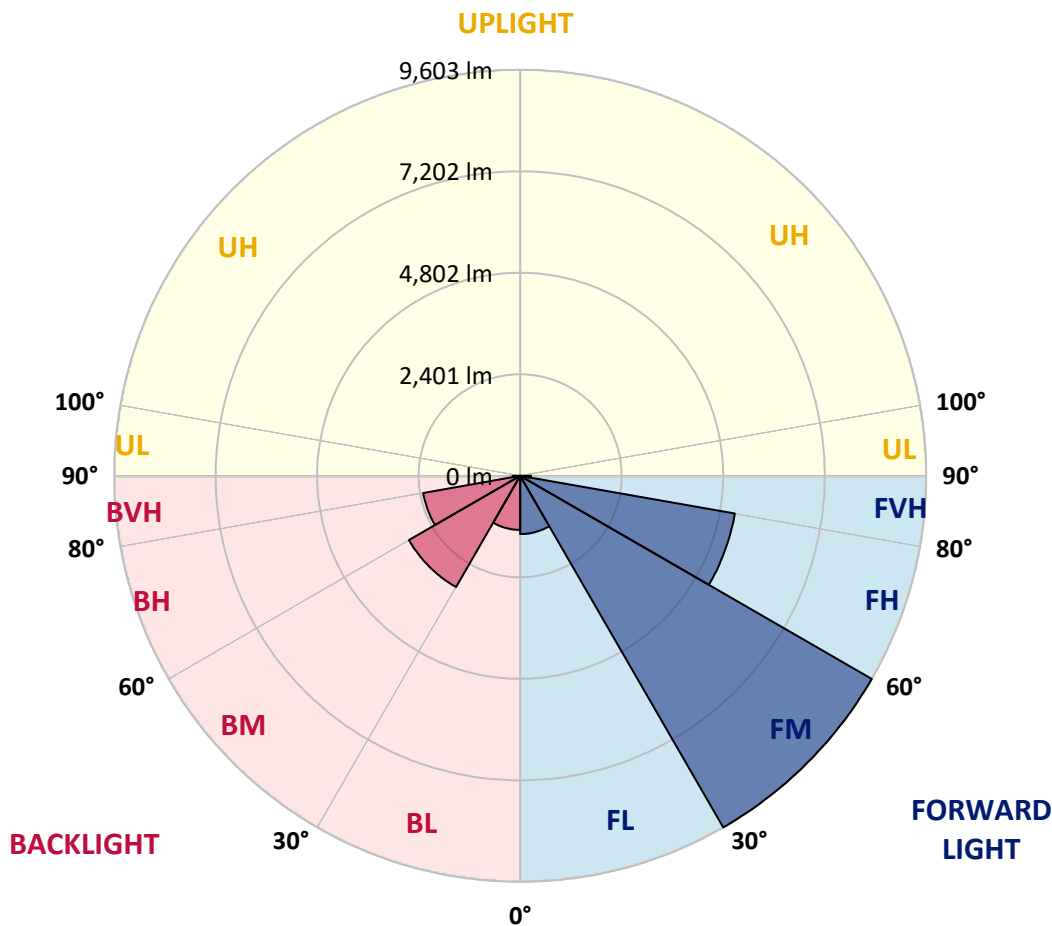


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1378.2	5.9			
FM (30°-60°)	9603.2	41.4			
FH (60°-80°)	5156.2	22.2			G3/7500
FVH (80°-90°)	256.6	1.1			G3/500
BL (0°-30°)	1278.9	5.5	B3/2500		
BM (30°-60°)	3038.5	13.1	B3/5000		
BH (60°-80°)	2328.9	10.0	B3/2500		G3/2500
BVH (80°-90°)	179.4	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°	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7
2.5°	2499.2	2495.3	2495.3	2495.3	2495.3	2491.4	2495.3	2503.1	2499.2	2495.3	2503.1
5°	2506.9	2503.1	2503.1	2503.1	2506.9	2503.1	2506.9	2518.6	2510.8	2510.8	2518.6
7.5°	2526.4	2522.5	2526.4	2522.5	2522.5	2522.5	2526.4	2538.0	2534.1	2538.0	2549.7
10°	2549.7	2549.7	2549.7	2549.7	2549.7	2549.7	2557.5	2565.2	2569.1	2573.0	2588.6
12.5°	2619.7	2619.7	2619.7	2615.8	2615.8	2604.1	2619.7	2627.4	2635.2	2643.0	2654.6
15°	2767.4	2767.4	2763.5	2747.9	2747.9	2724.6	2728.5	2732.4	2732.4	2740.1	2747.9
17.5°	2961.7	2957.8	2950.0	2938.4	2922.8	2895.6	2887.8	2880.1	2868.4	2864.5	2864.5
20°	3233.8	3229.9	3214.3	3183.2	3163.8	3121.0	3090.0	3058.9	3047.2	3027.8	3023.9
22.5°	3622.4	3622.4	3591.3	3544.7	3529.2	3439.8	3350.4	3284.3	3261.0	3233.8	3233.8
25°	4092.7	4088.8	4046.1	3991.7	3925.6	3832.3	3723.5	3634.1	3575.8	3513.6	3490.3
27.5°	4656.3	4644.6	4586.3	4520.3	4395.9	4279.3	4151.0	4057.7	3956.7	3879.0	3809.0
30°	5317.1	5305.4	5204.3	5080.0	4951.7	4835.1	4648.5	4535.8	4376.5	4283.2	4205.4
32.5°	6082.7	6071.1	5888.4	5767.9	5631.9	5488.1	5266.5	5087.7	4885.6	4753.5	4644.6
35°	7058.3	7011.7	6751.3	6584.1	6370.4	6226.5	5993.3	5752.4	5515.3	5328.7	5169.4
37.5°	8111.6	8057.2	7827.9	7579.1	7369.2	7194.3	6864.0	6560.8	6281.0	6024.4	5826.2
40°	9211.6	9067.7	8822.9	8640.2	8496.4	8329.3	7983.3	7664.6	7225.4	6937.8	6638.5
42.5°	9973.4	9833.4	9662.4	9541.9	9472.0	9343.7	9149.4	8873.4	8480.9	8488.6	7699.6
45°	10474.7	10268.7	10152.1	10159.9	10187.1	10187.1	10152.1	10109.4	9938.4	10055.0	9394.2
47.5°	10296.0	10159.9	10086.1	10241.5	10435.9	10630.2	10855.6	11100.5	11380.4	11710.7	10898.4
50°	9246.5	9297.1	9332.0	9662.4	10078.3	10521.4	11038.3	11706.8	12488.1	12639.7	12247.1
52.5°	7571.4	7680.2	7796.8	8302.1	8850.1	9615.8	10521.4	11625.2	12674.6	13292.6	13253.8
55°	5880.6	6016.7	6265.4	6642.4	7077.7	7800.7	8920.1	10622.4	12258.8	13242.1	13840.7
57.5°	4186.0	4384.2	4710.7	5235.4	5620.2	6028.3	6856.2	8745.1	10536.9	12367.6	13743.5
60°	2782.9	2876.2	3090.0	3742.9	4392.0	4819.5	5406.4	6090.5	7555.8	10078.3	12740.7
62.5°	1974.5	2036.6	2168.8	2464.2	3051.1	3824.5	4178.2	4493.1	4963.4	6483.1	10229.9
63°	1865.6	1920.0	2028.9	2277.6	2806.2	3606.9	3968.4	4256.0	4598.0	5799.0	9678.0
65°	1546.9	1570.2	1628.5	1749.0	2032.8	2697.4	3288.2	3463.1	3521.4	3727.4	6063.3
67.5°	1305.9	1321.5	1340.9	1375.9	1488.6	1795.7	2452.5	2674.1	2608.0	2468.1	2996.7
70°	1134.9	1146.6	1177.7	1220.4	1259.3	1337.0	1686.8	2017.2	1943.4	1752.9	1834.5
72.5°	905.6	925.0	960.0	1033.9	1111.6	1212.7	1298.2	1504.2	1457.5	1274.8	1294.3
75°	715.2	726.8	757.9	812.3	886.2	1002.8	1169.9	1239.9	1111.6	940.6	940.6
77.5°	567.5	579.1	606.3	649.1	695.7	777.3	893.9	1076.6	998.9	707.4	703.5
80°	427.5	439.2	466.4	505.3	551.9	610.2	680.2	761.8	917.3	660.7	528.6
82.5°	314.8	318.7	365.4	392.6	408.1	454.7	513.0	559.7	629.7	610.2	470.3
85°	237.1	233.2	264.3	283.7	287.6	299.3	334.3	380.9	412.0	396.4	365.4
87.5°	132.1	116.6	136.0	155.5	155.5	159.4	167.1	194.3	221.5	213.8	194.3
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°	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7
2.5°	2503.1	2503.1	2499.2	2499.2	2503.1	2503.1	2499.2	2510.8	2518.6	2518.6	2522.5
5°	2514.7	2518.6	2514.7	2514.7	2518.6	2518.6	2522.5	2534.1	2545.8	2553.6	2565.2
7.5°	2549.7	2553.6	2549.7	2549.7	2553.6	2557.5	2565.2	2580.8	2588.6	2604.1	2623.5
10°	2588.6	2592.5	2588.6	2592.5	2596.3	2600.2	2611.9	2623.5	2635.2	2650.8	2681.8
12.5°	2658.5	2662.4	2654.6	2658.5	2670.2	2670.2	2678.0	2685.7	2705.2	2724.6	2755.7
15°	2755.7	2755.7	2747.9	2751.8	2763.5	2763.5	2767.4	2775.1	2798.4	2821.8	2852.9
17.5°	2868.4	2876.2	2872.3	2876.2	2884.0	2887.8	2887.8	2895.6	2911.2	2926.7	2957.8
20°	3020.0	3023.9	3016.1	3023.9	3031.7	3023.9	3016.1	3012.2	3020.0	3027.8	3062.7
22.5°	3226.0	3222.1	3202.7	3202.7	3202.7	3187.1	3167.7	3144.4	3144.4	3132.7	3159.9
25°	3470.9	3459.2	3432.0	3435.9	3408.7	3385.3	3350.4	3315.4	3284.3	3272.6	3276.5
27.5°	3758.5	3735.2	3707.9	3700.2	3673.0	3630.2	3571.9	3505.8	3455.3	3416.4	3408.7
30°	4119.9	4069.4	4022.8	4015.0	3972.2	3902.3	3809.0	3719.6	3634.1	3568.0	3544.7
32.5°	4547.5	4469.7	4395.9	4388.1	4318.2	4224.9	4112.2	3987.8	3863.4	3758.5	3707.9
35°	5048.9	4932.3	4862.3	4842.9	4741.8	4625.2	4500.8	4341.5	4166.6	4018.9	3925.6
37.5°	5659.1	5538.6	5418.1	5422.0	5282.1	5146.0	4978.9	4784.6	4563.0	4357.0	4224.9
40°	6413.1	6242.1	6086.6	6051.6	5931.2	5740.7	5558.0	5332.6	5060.5	4788.5	4598.0
42.5°	7326.5	7046.6	6832.9	6801.8	6642.4	6409.2	6187.7	5888.4	5612.4	5282.1	5052.8
45°	8364.2	7917.3	7660.8	7614.1	7357.6	7120.5	6852.3	6533.6	6195.5	5822.3	5550.3
47.5°	9654.6	9017.2	8581.9	8504.2	8150.5	7839.5	7559.7	7206.0	6801.8	6385.9	6086.6
50°	11158.8	10218.2	9631.3	9510.8	9036.7	8671.3	8313.7	7870.6	7439.2	7003.9	6658.0
52.5°	12666.9	11656.3	10875.1	10727.4	10027.8	9538.0	9067.7	8624.7	8115.5	7684.1	7291.5
55°	13879.5	13207.1	12301.5	12095.5	11092.7	10428.1	9810.1	9304.8	8799.6	8457.5	7995.0
57.5°	14610.2	14575.2	13860.1	13576.4	12204.3	11221.0	10533.0	9957.8	9468.1	9324.3	8710.2
60°	14590.8	15496.4	15189.4	14975.6	13327.6	12033.3	11139.4	10517.5	10113.3	10276.5	9429.2
62.5°	13700.7	15535.3	15904.5	15846.2	14524.7	12686.3	11636.9	10995.6	10781.8	11267.6	10175.5
63°	13378.1	15445.9	15935.6	15912.3	14754.0	12810.7	11722.4	11088.8	10913.9	11520.3	10311.5
65°	11306.5	14664.6	15558.6	15663.5	15247.7	13238.2	11920.6	11325.9	11306.5	12083.9	10634.1
67.5°	6891.2	12390.9	13860.1	14062.2	14551.9	13374.2	11807.9	11244.3	11524.2	12165.5	10536.9
70°	2946.1	8177.7	11139.4	11465.9	12663.0	12698.0	11485.3	10910.1	11473.6	11528.1	9845.1
72.5°	1745.1	3855.6	7583.0	8294.3	10020.0	10925.6	10746.8	10327.0	10809.0	10124.9	8383.7
75°	1236.0	1803.4	3851.8	4609.7	6976.7	8340.9	9028.9	9223.2	9203.8	8030.0	6292.6
77.5°	886.2	1158.2	1624.7	1916.2	3894.5	5355.9	6195.5	6762.9	6580.2	5375.4	3879.0
80°	618.0	800.7	995.0	1057.2	1807.3	2751.8	3264.9	3513.6	3404.8	2685.7	1737.4
82.5°	447.0	524.7	641.3	680.2	909.5	1271.0	1511.9	1333.1	1278.7	991.1	750.1
85°	345.9	338.1	400.3	415.9	532.5	664.6	680.2	528.6	462.5	412.0	419.8
87.5°	244.9	209.9	213.8	221.5	276.0	353.7	345.9	217.7	186.6	198.2	225.4
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°	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7	2514.7
2.5°	2530.3	2534.1	2541.9	2545.8	2553.6	2553.6	2561.4	2565.2	2573.0	2580.8	2584.7
5°	2576.9	2588.6	2604.1	2611.9	2627.4	2639.1	2654.6	2662.4	2678.0	2689.6	2705.2
7.5°	2646.9	2666.3	2685.7	2709.1	2732.4	2751.8	2767.4	2786.8	2814.0	2833.4	2845.1
10°	2712.9	2740.1	2775.1	2802.3	2837.3	2864.5	2887.8	2922.8	2953.9	2981.1	2996.7
12.5°	2798.4	2833.4	2868.4	2911.2	2957.8	2992.8	3027.8	3074.4	3117.2	3148.3	3163.8
15°	2899.5	2942.3	2981.1	3031.7	3086.1	3132.7	3183.2	3233.8	3264.9	3264.9	3257.1
17.5°	3004.4	3039.4	3086.1	3144.4	3218.2	3276.5	3303.7	3311.5	3299.8	3272.6	3253.2
20°	3109.4	3140.5	3191.0	3261.0	3338.7	3350.4	3323.2	3288.2	3253.2	3206.6	3175.5
22.5°	3194.9	3237.6	3315.4	3397.0	3400.9	3334.8	3261.0	3202.7	3148.3	3093.8	3035.5
25°	3295.9	3354.3	3459.2	3490.3	3389.2	3264.9	3159.9	3074.4	2985.0	2895.6	2829.5
27.5°	3420.3	3505.8	3610.8	3521.4	3323.2	3148.3	3004.4	2876.2	2759.6	2635.2	2561.4
30°	3552.5	3684.6	3707.9	3474.7	3210.4	2985.0	2790.7	2596.3	2448.6	2335.9	2293.2
32.5°	3711.8	3882.8	3742.9	3393.1	3058.9	2763.5	2503.1	2269.9	2145.5	2075.5	2056.1
35°	3952.8	4092.7	3762.4	3307.6	2884.0	2499.2	2172.7	1986.1	1908.4	1861.7	1838.4
37.5°	4298.7	4294.8	3758.5	3202.7	2681.8	2211.6	1908.4	1776.2	1714.0	1675.2	1632.4
40°	4702.9	4450.3	3735.2	3051.1	2409.8	1935.6	1725.7	1601.3	1543.0	1496.4	1445.9
42.5°	5103.3	4555.3	3669.1	2825.7	2071.6	1737.4	1593.6	1480.8	1418.7	1368.1	1298.2
45°	5449.2	4598.0	3540.8	2514.7	1768.5	1581.9	1508.1	1410.9	1337.0	1259.3	1204.9
47.5°	5721.3	4590.2	3334.8	2149.4	1566.4	1473.1	1438.1	1372.0	1282.6	1185.5	1115.5
50°	5950.6	4531.9	3055.0	1826.8	1430.3	1375.9	1364.2	1344.8	1201.0	1119.4	1076.6
52.5°	6160.5	4446.4	2755.7	1609.1	1313.7	1267.1	1290.4	1271.0	1169.9	1099.9	1057.2
55°	6448.1	4388.1	2460.3	1442.0	1177.7	1166.0	1185.5	1212.7	1150.5	1084.4	1037.8
57.5°	6786.2	4419.2	2234.9	1255.4	1049.4	1057.2	1123.3	1162.1	1131.0	1061.1	1014.4
60°	7174.9	4512.5	2036.6	1076.6	944.5	963.9	1061.1	1115.5	1111.6	1030.0	975.6
62.5°	7610.2	4609.7	1721.8	940.6	855.1	886.2	987.2	1057.2	1068.9	998.9	932.8
63°	7695.7	4617.4	1640.2	913.4	839.5	874.5	967.8	1041.6	1057.2	991.1	925.0
65°	7905.6	4547.5	1321.5	839.5	777.3	816.2	909.5	975.6	1006.7	948.4	893.9
67.5°	7730.7	3976.1	995.0	750.1	726.8	754.0	835.6	897.8	925.0	897.8	843.4
70°	7070.0	2891.7	777.3	668.5	672.4	691.8	754.0	812.3	843.4	835.6	785.1
72.5°	5694.1	1640.2	649.1	598.6	610.2	633.5	676.3	730.7	757.9	754.0	719.0
75°	3750.7	839.5	548.0	536.4	544.1	563.6	594.7	637.4	668.5	664.6	649.1
77.5°	1857.9	583.0	470.3	474.2	478.1	493.6	516.9	555.8	575.2	579.1	575.2
80°	765.7	454.7	404.2	408.1	412.0	423.7	439.2	474.2	485.8	493.6	497.5
82.5°	458.6	345.9	322.6	330.4	334.3	345.9	357.6	388.7	400.3	412.0	412.0
85°	303.2	241.0	233.2	241.0	248.8	256.5	260.4	279.8	299.3	314.8	322.6
87.5°	163.2	143.8	139.9	143.8	143.8	151.6	159.4	178.8	202.1	217.7	225.4
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°	2514.7	2514.7	2514.7	2514.7	2514.7
2.5°	2576.9	2580.8	2576.9	2580.8	2584.7
5°	2705.2	2712.9	2709.1	2709.1	2724.6
7.5°	2852.9	2868.4	2868.4	2876.2	2884.0
10°	3012.2	3027.8	3039.4	3039.4	3051.1
12.5°	3171.6	3179.3	3191.0	3191.0	3191.0
15°	3253.2	3249.3	3245.4	3241.5	3241.5
17.5°	3241.5	3226.0	3218.2	3210.4	3214.3
20°	3156.0	3128.8	3121.0	3109.4	3117.2
22.5°	3008.3	2969.5	2953.9	2934.5	2942.3
25°	2786.8	2740.1	2732.4	2709.1	2720.7
27.5°	2530.3	2506.9	2503.1	2499.2	2518.6
30°	2289.3	2297.1	2300.9	2308.7	2328.2
32.5°	2067.7	2083.3	2087.2	2091.1	2118.3
35°	1850.1	1830.7	1850.1	1842.3	1865.6
37.5°	1613.0	1597.4	1581.9	1562.5	1578.0
40°	1414.8	1387.6	1340.9	1317.6	1321.5
42.5°	1259.3	1224.3	1185.5	1162.1	1162.1
45°	1158.2	1115.5	1080.5	1065.0	1065.0
47.5°	1080.5	1061.1	1041.6	1030.0	1030.0
50°	1049.4	1026.1	1014.4	1006.7	1006.7
52.5°	1026.1	1002.8	991.1	983.3	975.6
55°	1006.7	971.7	960.0	956.1	956.1
57.5°	979.5	948.4	932.8	928.9	928.9
60°	936.7	913.4	897.8	893.9	893.9
62.5°	893.9	870.6	855.1	855.1	855.1
63°	886.2	859.0	847.3	847.3	847.3
65°	851.2	824.0	812.3	812.3	808.4
67.5°	804.6	777.3	769.6	769.6	761.8
70°	750.1	726.8	719.0	722.9	707.4
72.5°	695.7	672.4	660.7	660.7	645.2
75°	633.5	610.2	594.7	590.8	575.2
77.5°	563.6	544.1	528.6	513.0	505.3
80°	489.7	474.2	454.7	443.1	431.4
82.5°	412.0	396.4	384.8	400.3	342.0
85°	322.6	307.1	291.5	314.8	244.9
87.5°	237.1	229.3	213.8	186.6	163.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)