

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: P257939

Luminaire Tested: **ARCH-L-AF72-230-D-U-T2U-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P257939  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-230-D-U-T2U-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25746.9 lumens  
Efficiency: N/A  
Efficacy: 112.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G4

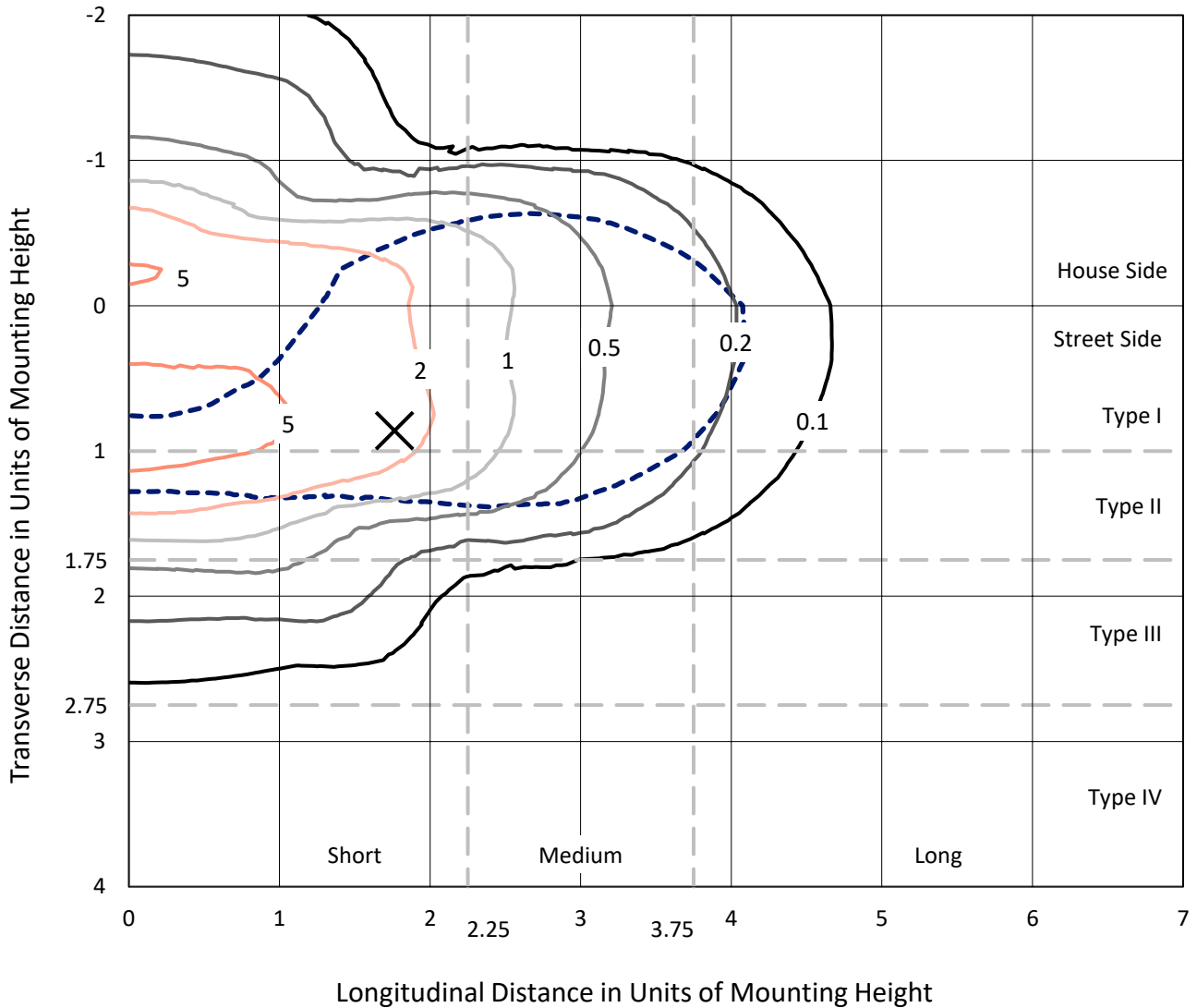
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

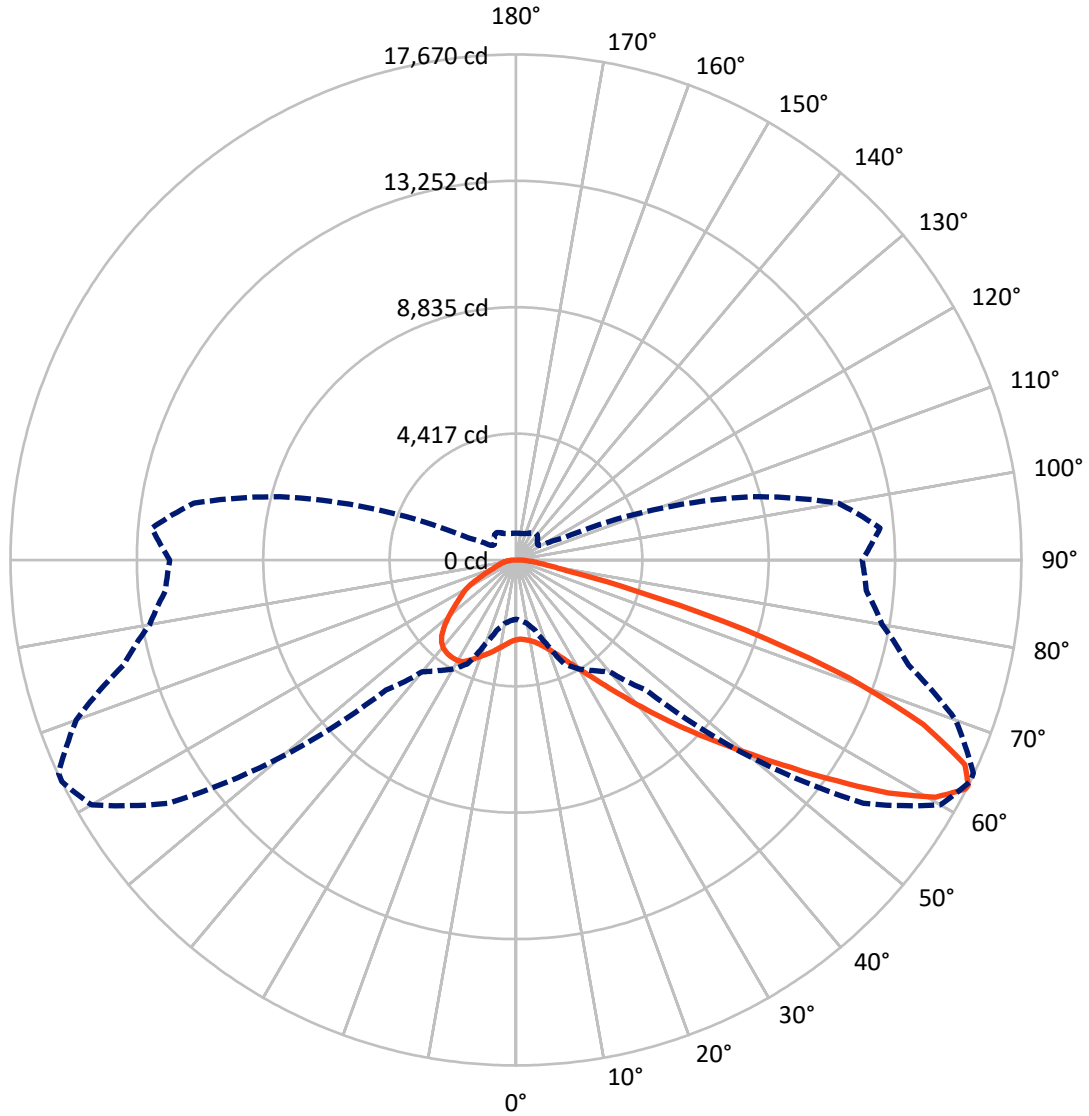
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 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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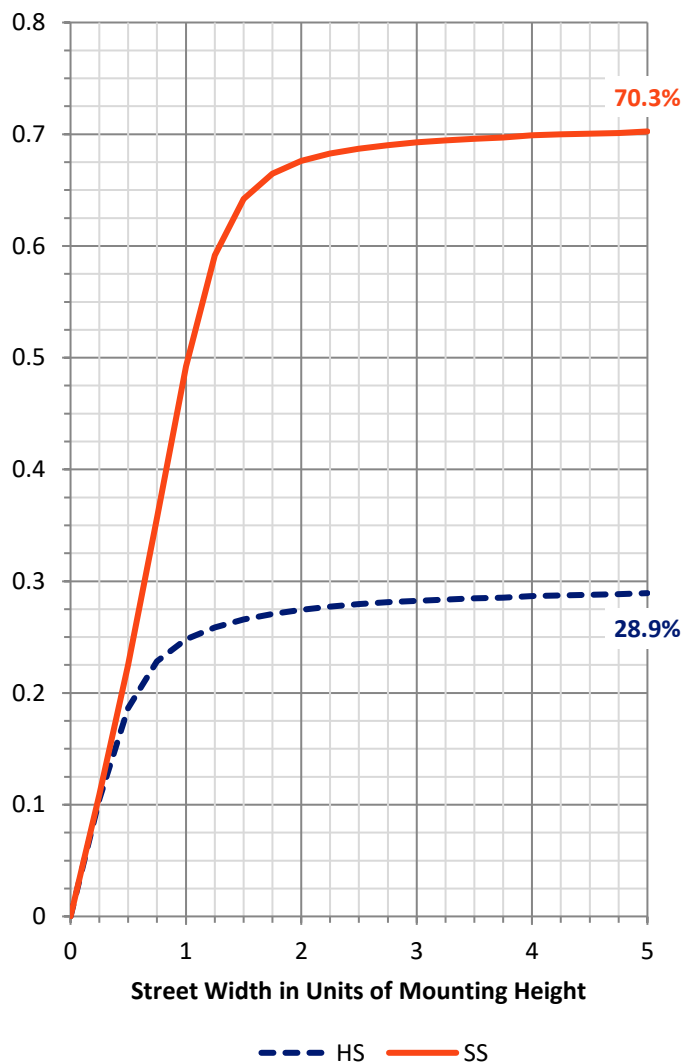
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7568.7	0.0	7568.7
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	18178.3	0.0	18178.3
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	25746.9	0.0	25746.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	278.4	1.1
10°-20°	927.3	3.6
20°-30°	1740.6	6.8
30°-40°	2917.5	11.3
40°-50°	4894.8	19.0
50°-60°	6205.2	24.1
60°-70°	5473.9	21.3
70°-80°	2825.7	11.0
80°-90°	483.5	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°	25746.9	100.0
0°-180°	25746.9	100.0

**Coefficient of Utilization**

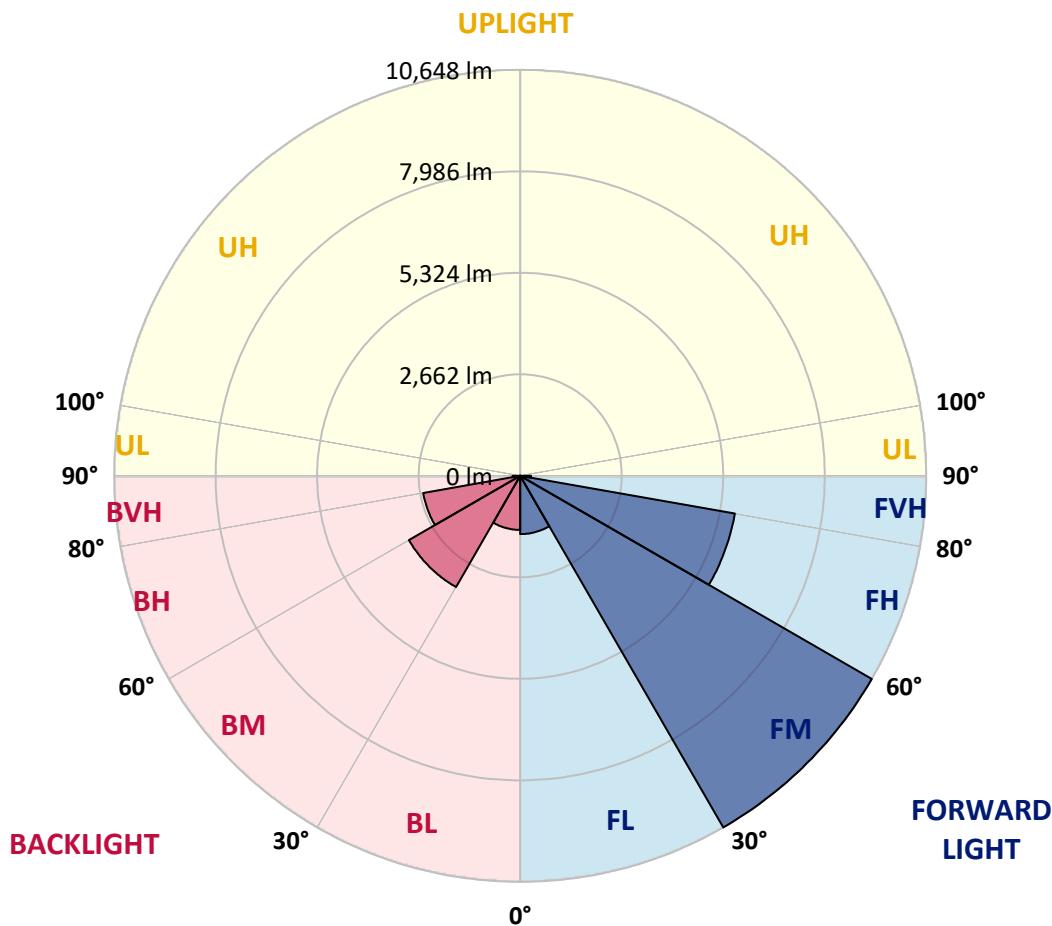


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1528.2	5.9			
FM (30°-60°)	10648.3	41.4			
FH (60°-80°)	5717.3	22.2			G3/7500
FVH (80°-90°)	284.6	1.1			G3/500
BL (0°-30°)	1418.1	5.5	B3/2500		
BM (30°-60°)	3369.2	13.1	B3/5000		
BH (60°-80°)	2582.4	10.0	B4/5000		G4/5000
BVH (80°-90°)	199.0	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°	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4
2.5°	2771.2	2766.9	2766.9	2766.9	2766.9	2762.5	2766.9	2775.4	2771.2	2766.9	2775.4
5°	2779.8	2775.4	2775.4	2775.4	2779.8	2775.4	2779.8	2792.6	2784.0	2784.0	2792.6
7.5°	2801.3	2797.0	2801.3	2797.0	2797.0	2797.0	2801.3	2814.2	2809.9	2814.2	2827.2
10°	2827.2	2827.2	2827.2	2827.2	2827.2	2827.2	2835.9	2844.4	2848.7	2853.0	2870.2
12.5°	2904.7	2904.7	2904.7	2900.4	2900.4	2887.5	2904.7	2913.4	2922.0	2930.6	2943.6
15°	3068.5	3068.5	3064.1	3046.9	3046.9	3021.1	3025.4	3029.8	3029.8	3038.4	3046.9
17.5°	3284.0	3279.8	3271.1	3258.1	3240.9	3210.7	3202.1	3193.5	3180.5	3176.2	3176.2
20°	3585.7	3581.4	3564.1	3529.6	3508.1	3460.7	3426.3	3391.7	3378.9	3357.3	3352.9
22.5°	4016.7	4016.7	3982.2	3930.5	3913.2	3814.1	3715.0	3641.7	3615.8	3585.7	3585.7
25°	4538.1	4533.8	4486.4	4426.1	4352.8	4249.4	4128.7	4029.6	3964.9	3895.9	3870.1
27.5°	5163.0	5150.2	5085.5	5012.2	4874.3	4745.0	4602.8	4499.3	4387.3	4301.1	4223.5
30°	5895.7	5882.7	5770.7	5632.8	5490.6	5361.3	5154.5	5029.4	4852.8	4749.3	4663.0
32.5°	6744.7	6731.8	6529.3	6395.6	6244.8	6085.3	5839.7	5641.4	5417.3	5270.7	5150.2
35°	7826.5	7774.7	7486.0	7300.7	7063.6	6904.2	6645.5	6378.3	6115.5	5908.6	5732.0
37.5°	8994.3	8934.0	8679.8	8403.9	8171.2	7977.2	7611.0	7274.8	6964.5	6680.0	6460.3
40°	10214.0	10054.6	9783.1	9580.5	9421.0	9235.6	8852.1	8498.7	8011.8	7692.8	7361.1
42.5°	11058.6	10903.5	10714.0	10580.3	10502.8	10360.5	10145.0	9839.2	9403.8	9412.3	8537.5
45°	11614.7	11386.2	11257.0	11265.6	11295.8	11295.8	11257.0	11209.6	11019.9	11149.3	10416.6
47.5°	11416.4	11265.6	11183.7	11356.1	11571.5	11787.1	12037.0	12308.5	12618.8	12985.1	12084.4
50°	10252.8	10308.8	10347.6	10714.0	11175.0	11666.3	12239.6	12980.9	13847.1	14015.2	13580.0
52.5°	8395.4	8516.0	8645.2	9205.5	9813.2	10662.2	11666.3	12890.3	14054.0	14739.2	14696.1
55°	6520.6	6671.5	6947.2	7365.2	7848.0	8649.6	9890.8	11778.4	13592.8	14683.2	15346.9
57.5°	4641.6	4861.4	5223.3	5805.2	6231.8	6684.4	7602.4	9696.9	11683.6	13713.4	15239.2
60°	3085.7	3189.2	3426.3	4150.2	4870.0	5344.1	5994.8	6753.4	8378.1	11175.0	14127.2
62.5°	2189.3	2258.3	2404.8	2732.3	3383.1	4240.8	4632.9	4982.0	5503.5	7188.6	11343.2
63°	2068.8	2129.0	2249.6	2525.5	3111.6	3999.4	4400.2	4719.1	5098.4	6430.1	10731.2
65°	1715.3	1741.1	1805.7	1939.4	2254.0	2991.0	3646.0	3839.9	3904.6	4133.1	6723.2
67.5°	1448.0	1465.2	1486.8	1525.6	1650.6	1991.1	2719.5	2965.1	2891.8	2736.6	3322.8
70°	1258.4	1271.3	1305.8	1353.2	1396.4	1482.5	1870.4	2236.7	2154.8	1943.7	2034.2
72.5°	1004.2	1025.7	1064.5	1146.3	1232.6	1344.7	1439.5	1667.9	1616.2	1413.6	1435.1
75°	793.0	805.9	840.4	900.8	982.6	1111.9	1297.2	1374.8	1232.6	1043.0	1043.0
77.5°	629.3	642.1	672.3	719.7	771.5	861.9	991.2	1193.7	1107.6	784.4	780.1
80°	474.0	487.0	517.2	560.3	612.0	676.7	754.2	844.7	1017.1	732.7	586.0
82.5°	349.1	353.4	405.2	435.3	452.6	504.2	568.9	620.6	698.1	676.7	521.5
85°	262.9	258.6	293.1	314.5	318.9	331.8	370.6	422.4	456.8	439.6	405.2
87.5°	146.5	129.3	150.9	172.4	172.4	176.7	185.3	215.5	245.7	237.0	215.5
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°	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4
2.5°	2775.4	2775.4	2771.2	2771.2	2775.4	2775.4	2771.2	2784.0	2792.6	2792.6	2797.0
5°	2788.4	2792.6	2788.4	2788.4	2792.6	2792.6	2797.0	2809.9	2822.8	2831.5	2844.4
7.5°	2827.2	2831.5	2827.2	2827.2	2831.5	2835.9	2844.4	2861.6	2870.2	2887.5	2909.0
10°	2870.2	2874.6	2870.2	2874.6	2878.9	2883.3	2896.1	2909.0	2922.0	2939.2	2973.7
12.5°	2947.9	2952.1	2943.6	2947.9	2960.8	2960.8	2969.3	2978.0	2999.6	3021.1	3055.6
15°	3055.6	3055.6	3046.9	3051.3	3064.1	3064.1	3068.5	3077.2	3103.0	3128.8	3163.3
17.5°	3180.5	3189.2	3184.9	3189.2	3197.8	3202.1	3202.1	3210.7	3227.9	3245.2	3279.8
20°	3348.7	3352.9	3344.3	3352.9	3361.6	3352.9	3344.3	3340.0	3348.7	3357.3	3396.1
22.5°	3577.0	3572.8	3551.3	3551.3	3551.3	3534.0	3512.4	3486.6	3486.6	3473.7	3503.8
25°	3848.5	3835.6	3805.5	3809.8	3779.6	3753.7	3715.0	3676.1	3641.7	3628.8	3633.1
27.5°	4167.4	4141.6	4111.4	4102.8	4072.6	4025.2	3960.6	3887.3	3831.2	3788.2	3779.6
30°	4568.3	4512.3	4460.5	4451.9	4404.6	4327.0	4223.5	4124.4	4029.6	3956.3	3930.5
32.5°	5042.4	4956.2	4874.3	4865.7	4788.1	4684.7	4559.7	4421.7	4283.8	4167.4	4111.4
35°	5598.3	5469.0	5391.4	5369.9	5257.9	5128.5	4990.6	4814.0	4620.0	4456.2	4352.8
37.5°	6275.0	6141.4	6007.7	6012.1	5857.0	5706.1	5520.8	5305.3	5059.6	4831.2	4684.7
40°	7111.0	6921.3	6749.1	6710.2	6576.7	6365.5	6162.9	5912.9	5611.2	5309.6	5098.4
42.5°	8123.8	7813.4	7576.5	7541.9	7365.2	7106.8	6861.1	6529.3	6223.2	5857.0	5602.6
45°	9274.5	8778.9	8494.5	8442.7	8158.3	7895.4	7598.0	7244.7	6869.6	6455.9	6154.2
47.5°	10705.3	9998.6	9515.8	9429.6	9037.5	8692.6	8382.4	7990.2	7541.9	7080.9	6749.1
50°	12373.2	11330.1	10679.4	10545.8	10020.0	9615.0	9218.4	8727.2	8248.7	7766.1	7382.5
52.5°	14045.4	12924.9	12058.6	11894.8	11119.1	10576.1	10054.6	9563.3	8998.7	8520.2	8084.9
55°	15389.9	14644.3	13640.3	13411.8	12300.0	11562.9	10877.8	10317.5	9757.2	9377.9	8865.1
57.5°	16200.2	16161.4	15368.4	15053.8	13532.6	12442.1	11679.3	11041.5	10498.5	10338.9	9658.1
60°	16178.7	17182.7	16842.4	16605.3	14778.0	13342.8	12351.6	11662.2	11213.9	11394.8	10455.3
62.5°	15191.7	17226.0	17635.3	17570.7	16105.4	14066.9	12903.3	12192.1	11955.1	12493.9	11282.8
63°	14834.0	17126.8	17669.9	17644.0	16359.7	14204.8	12998.1	12295.6	12101.7	12773.9	11433.7
65°	12537.0	16260.5	17251.8	17368.2	16907.0	14678.9	13217.8	12558.5	12537.0	13398.9	11791.4
67.5°	7641.1	13739.4	15368.4	15592.5	16135.5	14829.8	13092.9	12468.0	12778.3	13489.3	11683.6
70°	3266.8	9067.7	12351.6	12713.6	14041.0	14079.8	12735.1	12097.4	12722.2	12782.6	10916.5
72.5°	1935.1	4275.2	8408.3	9196.9	11110.5	12114.5	11916.4	11450.9	11985.3	11226.8	9296.0
75°	1370.4	1999.7	4271.0	5111.3	7735.9	9248.7	10011.4	10227.0	10205.4	8903.9	6977.4
77.5°	982.6	1284.4	1801.4	2124.6	4318.4	5938.8	6869.6	7498.9	7296.4	5960.3	4301.1
80°	685.3	887.8	1103.3	1172.3	2004.1	3051.3	3620.2	3895.9	3775.4	2978.0	1926.5
82.5°	495.6	581.8	711.1	754.2	1008.5	1409.2	1676.5	1478.3	1417.8	1098.9	831.8
85°	383.6	375.0	443.9	461.2	590.4	737.0	754.2	586.0	512.9	456.8	465.5
87.5°	271.5	232.7	237.0	245.7	306.0	392.1	383.6	241.4	206.8	219.8	249.9
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°	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4	2788.4
2.5°	2805.7	2809.9	2818.6	2822.8	2831.5	2831.5	2840.0	2844.4	2853.0	2861.6	2866.0
5°	2857.3	2870.2	2887.5	2896.1	2913.4	2926.3	2943.6	2952.1	2969.3	2982.3	2999.6
7.5°	2934.9	2956.4	2978.0	3003.9	3029.8	3051.3	3068.5	3090.1	3120.2	3141.7	3154.8
10°	3008.1	3038.4	3077.2	3107.4	3146.1	3176.2	3202.1	3240.9	3275.4	3305.5	3322.8
12.5°	3103.0	3141.7	3180.5	3227.9	3279.8	3318.5	3357.3	3409.0	3456.4	3490.9	3508.1
15°	3215.1	3262.5	3305.5	3361.6	3421.9	3473.7	3529.6	3585.7	3620.2	3620.2	3611.6
17.5°	3331.5	3370.2	3421.9	3486.6	3568.4	3633.1	3663.3	3671.8	3659.0	3628.8	3607.2
20°	3447.7	3482.2	3538.3	3615.8	3702.0	3715.0	3684.8	3646.0	3607.2	3555.6	3521.0
22.5°	3542.6	3590.0	3676.1	3766.7	3771.0	3697.8	3615.8	3551.3	3490.9	3430.5	3365.8
25°	3654.6	3719.3	3835.6	3870.1	3758.1	3620.2	3503.8	3409.0	3309.9	3210.7	3137.5
27.5°	3792.5	3887.3	4003.7	3904.6	3684.8	3490.9	3331.5	3189.2	3060.0	2922.0	2840.0
30°	3939.2	4085.6	4111.4	3852.9	3559.7	3309.9	3094.3	2878.9	2715.1	2590.1	2542.7
32.5°	4115.8	4305.4	4150.2	3762.4	3391.7	3064.1	2775.4	2516.9	2379.0	2301.4	2279.8
35°	4382.9	4538.1	4171.8	3667.7	3197.8	2771.2	2409.1	2202.2	2116.1	2064.4	2038.4
37.5°	4766.6	4762.3	4167.4	3551.3	2973.7	2452.3	2116.1	1969.5	1900.6	1857.5	1810.1
40°	5214.7	4934.5	4141.6	3383.1	2672.1	2146.3	1913.4	1775.6	1711.0	1659.2	1603.2
42.5°	5658.6	5050.9	4068.4	3133.1	2297.0	1926.5	1766.9	1641.9	1573.0	1517.1	1439.5
45°	6042.2	5098.4	3926.1	2788.4	1960.8	1754.0	1672.2	1564.4	1482.5	1396.4	1336.0
47.5°	6343.9	5089.8	3697.8	2383.3	1736.7	1633.4	1594.6	1521.3	1422.2	1314.5	1237.0
50°	6598.1	5025.2	3387.5	2025.5	1586.0	1525.6	1512.7	1491.2	1331.7	1241.1	1193.7
52.5°	6830.9	4930.4	3055.6	1784.2	1456.7	1405.0	1430.9	1409.2	1297.2	1219.7	1172.3
55°	7149.8	4865.7	2728.1	1598.9	1305.8	1292.9	1314.5	1344.7	1275.7	1202.4	1150.7
57.5°	7524.8	4900.2	2478.1	1392.1	1163.6	1172.3	1245.5	1288.6	1254.1	1176.5	1124.9
60°	7955.7	5003.5	2258.3	1193.7	1047.2	1068.8	1176.5	1237.0	1232.6	1142.1	1081.7
62.5°	8438.4	5111.3	1909.2	1043.0	948.2	982.6	1094.7	1172.3	1185.1	1107.6	1034.3
63°	8533.2	5119.9	1818.7	1012.9	930.9	969.6	1073.2	1155.0	1172.3	1098.9	1025.7
65°	8766.0	5042.4	1465.2	930.9	861.9	905.0	1008.5	1081.7	1116.2	1051.6	991.2
67.5°	8572.1	4408.8	1103.3	831.8	805.9	836.1	926.6	995.6	1025.7	995.6	935.3
70°	7839.4	3206.4	861.9	741.4	745.5	767.1	836.1	900.8	935.3	926.6	870.6
72.5°	6313.8	1818.7	719.7	663.8	676.7	702.5	749.8	810.2	840.4	836.1	797.3
75°	4158.9	930.9	607.7	594.7	603.3	624.9	659.4	706.8	741.4	737.0	719.7
77.5°	2060.1	646.5	521.5	525.7	530.1	547.3	573.2	616.3	637.8	642.1	637.8
80°	849.1	504.2	448.2	452.6	456.8	469.7	487.0	525.7	538.7	547.3	551.6
82.5°	508.5	383.6	357.8	366.3	370.6	383.6	396.5	430.9	443.9	456.8	456.8
85°	336.2	267.2	258.6	267.2	275.8	284.4	288.8	310.3	331.8	349.1	357.8
87.5°	181.1	159.4	155.1	159.4	159.4	168.0	176.7	198.2	224.1	241.4	249.9
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°	2788.4	2788.4	2788.4	2788.4	2788.4
2.5°	2857.3	2861.6	2857.3	2861.6	2866.0
5°	2999.6	3008.1	3003.9	3003.9	3021.1
7.5°	3163.3	3180.5	3180.5	3189.2	3197.8
10°	3340.0	3357.3	3370.2	3370.2	3383.1
12.5°	3516.7	3525.4	3538.3	3538.3	3538.3
15°	3607.2	3603.0	3598.6	3594.3	3594.3
17.5°	3594.3	3577.0	3568.4	3559.7	3564.1
20°	3499.5	3469.3	3460.7	3447.7	3456.4
22.5°	3335.6	3292.6	3275.4	3253.8	3262.5
25°	3090.1	3038.4	3029.8	3003.9	3016.7
27.5°	2805.7	2779.8	2775.4	2771.2	2792.6
30°	2538.4	2547.1	2551.3	2560.0	2581.5
32.5°	2292.8	2310.0	2314.3	2318.6	2348.7
35°	2051.5	2029.9	2051.5	2042.8	2068.8
37.5°	1788.6	1771.3	1754.0	1732.6	1749.8
40°	1568.8	1538.6	1486.8	1461.1	1465.2
42.5°	1396.4	1357.5	1314.5	1288.6	1288.6
45°	1284.4	1237.0	1198.1	1180.9	1180.9
47.5°	1198.1	1176.5	1155.0	1142.1	1142.1
50°	1163.6	1137.7	1124.9	1116.2	1116.2
52.5°	1137.7	1111.9	1098.9	1090.4	1081.7
55°	1116.2	1077.4	1064.5	1060.2	1060.2
57.5°	1086.0	1051.6	1034.3	1030.0	1030.0
60°	1038.6	1012.9	995.6	991.2	991.2
62.5°	991.2	965.5	948.2	948.2	948.2
63°	982.6	952.4	939.5	939.5	939.5
65°	943.8	913.6	900.8	900.8	896.5
67.5°	892.1	861.9	853.4	853.4	844.7
70°	831.8	805.9	797.3	801.6	784.4
72.5°	771.5	745.5	732.7	732.7	715.4
75°	702.5	676.7	659.4	655.1	637.8
77.5°	624.9	603.3	586.0	568.9	560.3
80°	543.0	525.7	504.2	491.3	478.3
82.5°	456.8	439.6	426.6	443.9	379.2
85°	357.8	340.5	323.2	349.1	271.5
87.5°	262.9	254.2	237.0	206.8	181.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)