

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: P237093

Luminaire Tested: **ARCH-L-AF72-200-D-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237093  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-200-D-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24980.5 lumens  
Efficiency: N/A  
Efficacy: 124.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G4

Input Watts (W): 201  
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

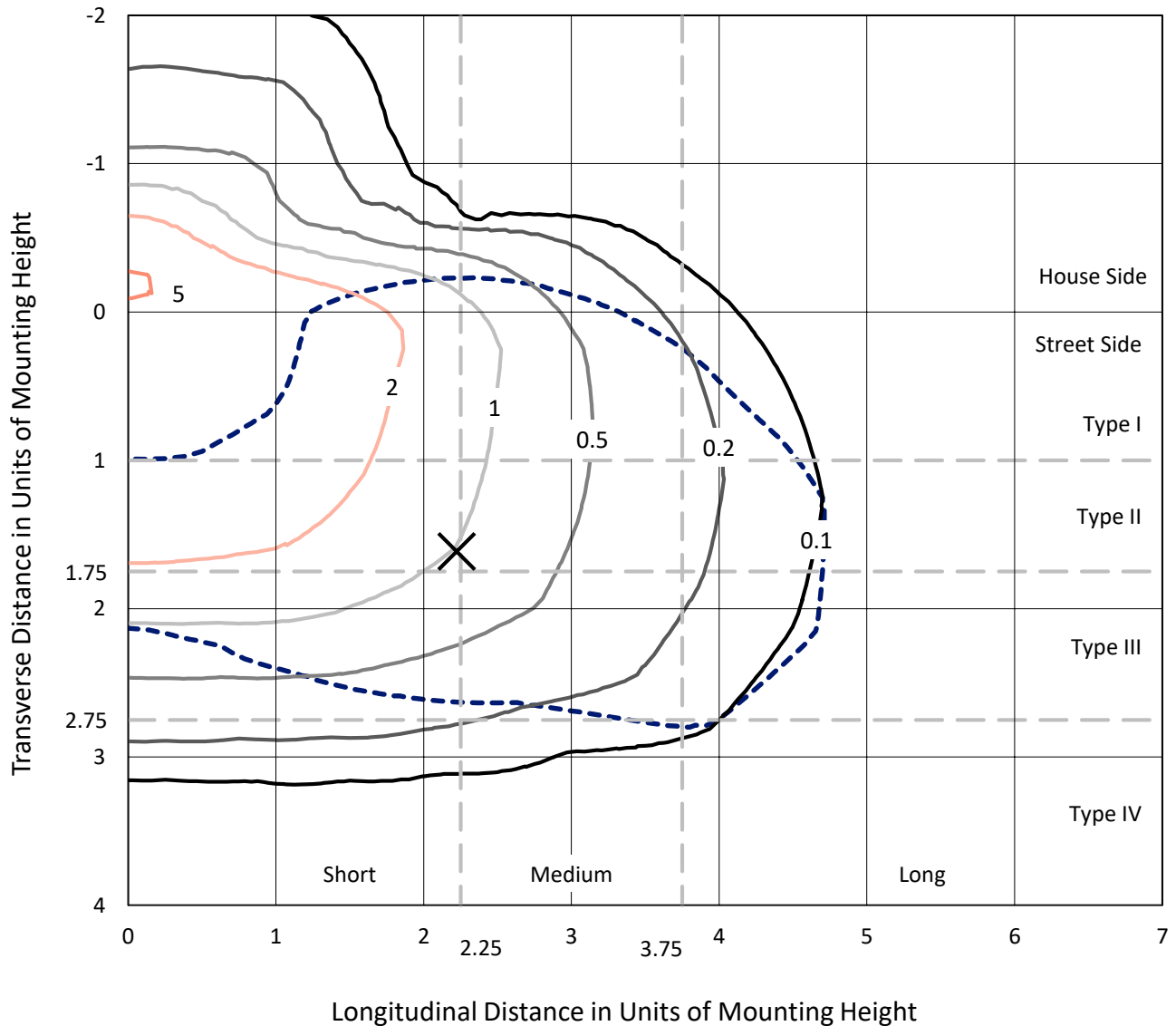


REPORT NUMBER: P237093

CATALOG NUMBER: ARCH-L-AF72-200-D-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

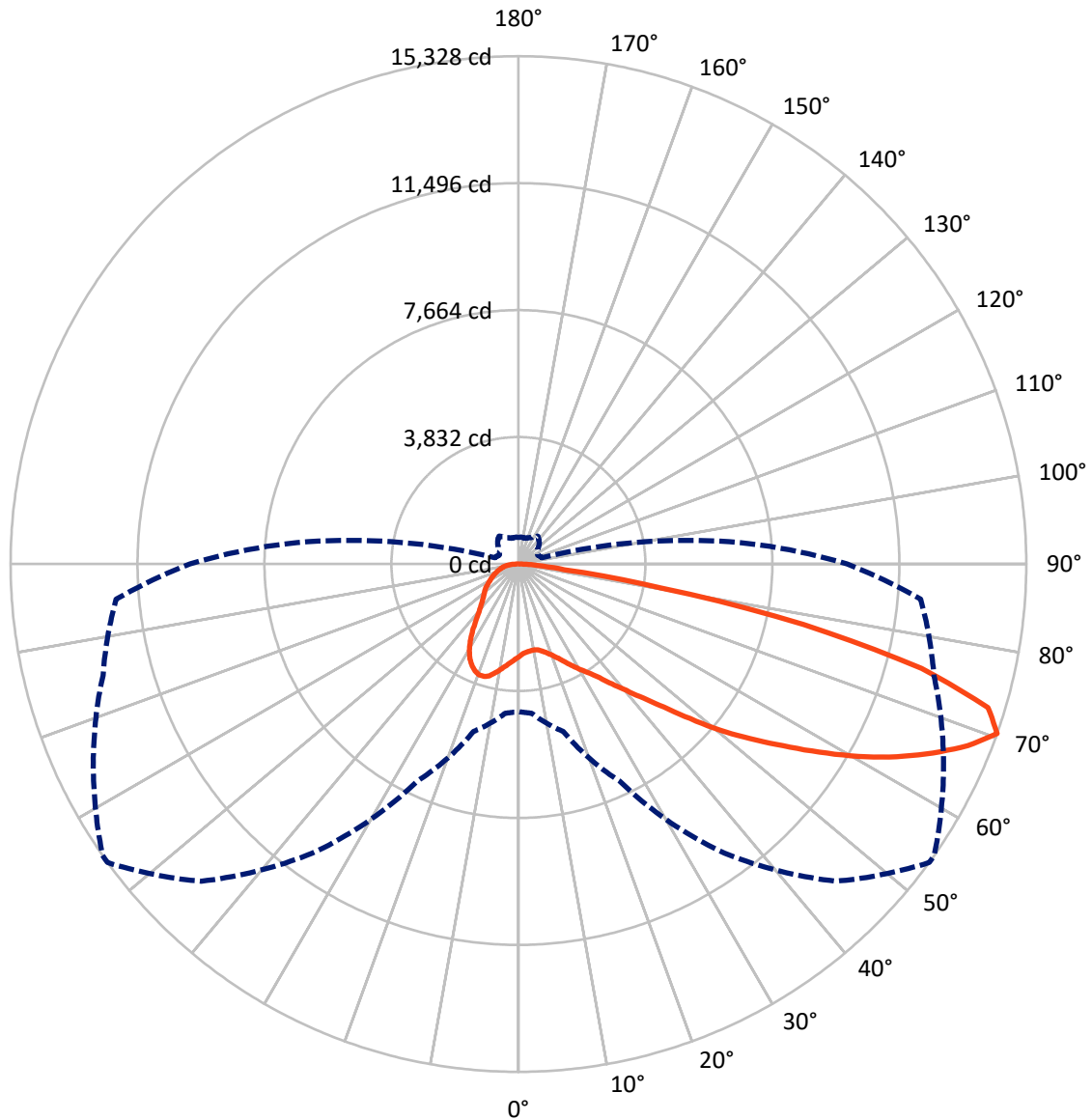


Based on 25 foot mounting height. Maximum calculated value = 5.2 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P237093

CATALOG NUMBER: ARCH-L-AF72-200-D-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical



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CATALOG NUMBER: ARCH-L-AF72-200-D-U-T3

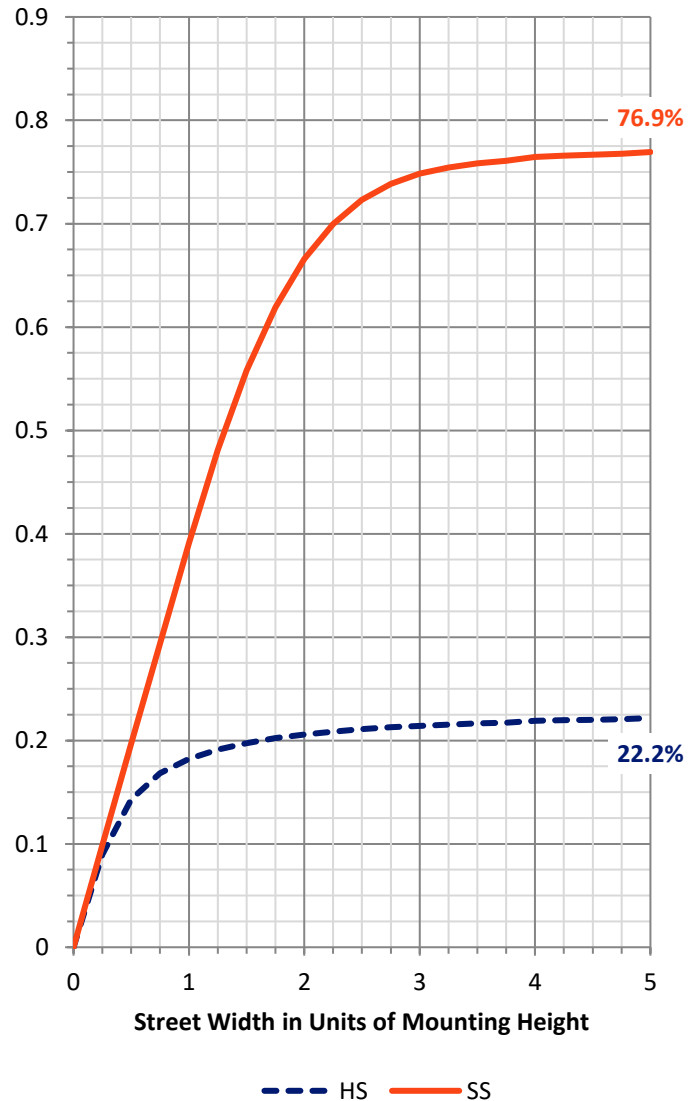
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5665.5	0.0	5665.5
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	19315.0	0.0	19315.0
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	24980.5	0.0	24980.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	274.3	1.1
10°-20°	876.4	3.5
20°-30°	1522.6	6.1
30°-40°	2225.1	8.9
40°-50°	3492.2	14.0
50°-60°	5370.2	21.5
60°-70°	6561.0	26.3
70°-80°	4067.8	16.3
80°-90°	591.0	2.4
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°	24980.5	100.0
0°-180°	24980.5	100.0

**Coefficient of Utilization**



REPORT NUMBER: P237093

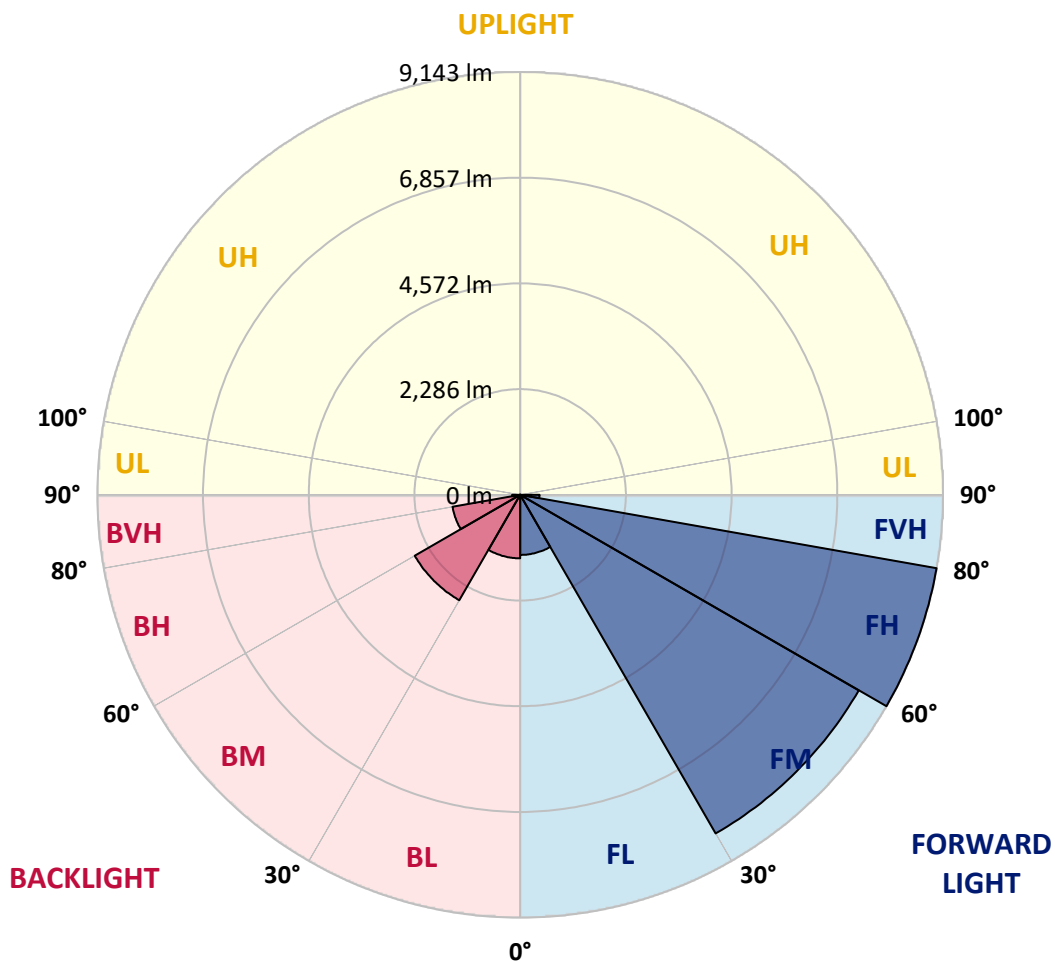
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1299.7	5.2			
FM	(30°-60°)	8454.7	33.8			
FH	(60°-80°)	9143.2	36.6			G4/12000
FVH	(80°-90°)	417.3	1.7			G3/500
BL	(0°-30°)	1373.5	5.5	B3/2500		
BM	(30°-60°)	2632.7	10.5	B3/5000		
BH	(60°-80°)	1485.6	5.9	B3/2500		G3/2500
BVH	(80°-90°)	173.7	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2794.8	2794.8	2794.8	2794.8	2794.8	2794.8	2794.8	2794.8	2794.8	2794.8	2794.8
2.5°	2685.0	2675.8	2675.8	2689.6	2694.1	2707.9	2707.9	2712.5	2726.2	2749.1	2776.5
5°	2602.7	2598.1	2602.7	2621.0	2630.1	2657.6	2666.7	2671.3	2698.7	2735.4	2776.5
7.5°	2520.3	2515.7	2524.9	2552.4	2579.8	2621.0	2643.8	2648.4	2689.6	2739.9	2794.8
10°	2492.9	2488.3	2502.0	2524.9	2552.4	2598.1	2634.7	2639.3	2698.7	2758.2	2835.9
12.5°	2529.6	2524.9	2538.7	2561.6	2589.0	2621.0	2662.1	2666.7	2744.5	2822.2	2904.6
15°	2621.0	2621.0	2625.6	2639.3	2666.7	2694.1	2730.8	2735.4	2817.7	2909.2	2991.5
17.5°	2762.8	2753.7	2753.7	2749.1	2767.4	2781.1	2826.8	2831.4	2918.3	3000.6	3083.0
20°	2936.6	2932.1	2913.8	2890.9	2886.3	2895.5	2941.2	2945.8	3032.6	3101.3	3179.0
22.5°	3147.0	3151.6	3110.4	3060.2	3037.2	3051.0	3092.2	3096.7	3160.7	3220.2	3288.8
25°	3426.1	3412.4	3352.8	3279.7	3234.0	3234.0	3275.1	3275.1	3334.5	3371.1	3416.9
27.5°	3691.3	3663.9	3609.0	3503.8	3430.6	3444.4	3485.5	3485.5	3540.4	3554.1	3577.0
30°	3979.5	3952.1	3883.4	3750.9	3654.8	3645.6	3695.9	3691.3	3764.6	3760.0	3741.6
32.5°	4331.7	4318.0	4203.6	4034.4	3906.3	3874.3	3920.0	3924.7	3970.4	3956.7	3897.1
35°	4825.8	4821.2	4715.9	4418.6	4249.4	4189.9	4217.4	4217.4	4249.4	4212.8	4112.2
37.5°	5447.8	5456.9	5365.5	4926.3	4688.5	4587.8	4592.4	4587.8	4597.0	4555.8	4450.7
40°	6069.9	6092.8	6088.2	5557.6	5255.7	5081.9	5017.9	5008.7	5031.6	5013.3	4912.6
42.5°	6888.7	6943.6	6815.5	6335.2	5996.7	5704.0	5530.2	5507.3	5557.6	5580.5	5484.4
45°	7739.4	7721.1	7519.9	7172.3	6865.8	6490.7	6161.4	6124.8	6161.4	6230.0	6129.4
47.5°	8183.2	8169.5	8119.2	7945.3	7899.5	7469.6	6971.0	6939.0	6870.3	6966.4	6847.5
50°	8915.0	8928.7	8722.9	8704.6	8896.7	8658.9	7885.8	7812.7	7689.1	7767.0	7666.3
52.5°	9445.6	9386.2	9258.1	9418.2	10017.5	9889.3	8745.8	8713.8	8599.4	8581.1	8535.4
55°	9660.6	9660.6	9683.5	10054.0	10909.4	10740.2	9679.0	9711.0	9555.4	9427.3	9486.8
57.5°	9724.7	9752.1	9948.8	10561.8	11956.9	11403.3	10708.1	10753.9	10529.7	10273.6	10461.1
60°	9409.0	9491.3	9962.5	10849.9	12546.9	12107.7	11792.2	11805.9	11481.1	11106.1	11435.4
62.5°	8599.4	8700.0	9541.7	10968.8	12450.8	12830.5	12816.8	12848.8	12405.1	11938.6	12350.2
65°	7606.9	7707.4	8603.9	10634.9	12377.7	13347.4	13754.5	13841.3	13269.6	12643.0	12922.0
67.5°	6147.6	6280.3	7131.1	9509.7	12020.9	13772.8	14632.7	14724.3	13937.5	13008.9	12871.7
70°	4455.3	4519.3	5232.8	7227.1	10566.3	13539.5	15328.0	15323.4	14157.0	12981.5	12185.6
72.5°	2145.2	2195.6	2813.1	4487.3	7556.5	11490.3	14824.8	14911.8	13855.2	12583.5	10616.6
75°	882.8	933.1	1139.0	1893.7	3965.8	7593.1	12565.2	12771.0	12583.5	11293.6	8306.7
77.5°	548.9	567.2	667.8	978.9	1811.3	3544.9	8796.1	9075.1	9971.6	9047.7	5484.4
80°	411.6	425.4	498.6	686.1	1143.6	1308.3	4368.3	4720.5	6042.5	5191.7	2483.7
82.5°	343.1	347.6	397.9	498.6	777.6	750.1	1399.7	1559.8	2817.7	1980.6	855.4
85°	320.2	329.4	356.8	356.8	494.0	471.2	580.9	608.3	818.8	677.0	297.3
87.5°	164.7	155.5	315.6	279.1	256.1	228.7	247.0	265.3	306.5	324.8	132.7
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: P237093

CATALOG NUMBER: ARCH-L-AF72-200-D-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2794.8	2794.8	2794.8	2794.8	2794.8	2794.8	2794.8	2794.8	2794.8	2794.8	2794.8
2.5°	2785.7	2799.4	2822.2	2845.1	2872.5	2904.6	2922.9	2945.8	2964.1	2954.9	2950.3
5°	2799.4	2822.2	2872.5	2918.3	2973.2	3037.2	3078.4	3124.2	3160.7	3169.9	3156.2
7.5°	2822.2	2863.4	2932.1	3014.3	3087.6	3169.9	3234.0	3298.0	3343.7	3352.8	3352.8
10°	2877.2	2922.9	3014.3	3124.2	3211.0	3298.0	3371.1	3421.5	3462.6	3480.9	3480.9
12.5°	2954.9	3009.8	3119.6	3252.3	3348.3	3430.6	3471.8	3494.6	3512.9	3531.2	3535.8
15°	3046.3	3105.9	3238.5	3380.3	3480.9	3522.1	3522.1	3517.5	3517.5	3526.6	3535.8
17.5°	3137.9	3201.9	3339.1	3490.1	3554.1	3531.2	3499.2	3485.5	3476.4	3471.8	3485.5
20°	3234.0	3298.0	3435.2	3577.0	3558.7	3462.6	3416.9	3384.8	3357.4	3343.7	3362.0
22.5°	3339.1	3398.5	3540.4	3636.5	3499.2	3352.8	3266.0	3215.6	3169.9	3142.4	3160.7
25°	3462.6	3522.1	3659.3	3654.8	3394.0	3188.2	3051.0	2968.6	2918.3	2890.9	2890.9
27.5°	3609.0	3659.3	3792.0	3609.0	3247.7	2968.6	2767.4	2689.6	2675.8	2653.0	2653.0
30°	3760.0	3801.1	3915.4	3503.8	3046.3	2680.4	2460.9	2424.3	2428.9	2406.0	2410.6
32.5°	3915.4	3956.7	3988.7	3348.3	2785.7	2355.7	2209.3	2181.9	2177.2	2159.0	2140.7
35°	4135.1	4194.5	3997.8	3137.9	2470.0	2085.8	1980.6	1953.1	1925.7	1861.7	1861.7
37.5°	4469.0	4533.0	3975.0	2877.2	2145.2	1875.4	1779.3	1742.8	1697.0	1632.9	1610.1
40°	4926.3	4926.3	3924.7	2584.4	1884.6	1706.2	1614.7	1568.9	1518.6	1454.5	1440.8
42.5°	5466.1	5338.1	3846.9	2287.1	1692.5	1591.8	1509.5	1459.1	1399.7	1326.5	1317.4
45°	6097.3	5749.7	3737.0	2021.8	1550.6	1523.2	1472.8	1386.0	1285.3	1207.6	1193.9
47.5°	6710.3	6120.2	3631.9	1834.3	1431.7	1495.8	1454.5	1308.3	1171.0	1061.2	1047.5
50°	7382.6	6449.6	3508.4	1678.8	1340.3	1477.4	1431.7	1193.9	1042.9	965.2	955.9
52.5°	8055.1	6783.5	3375.7	1514.1	1262.4	1440.8	1376.8	1111.5	1038.3	933.1	919.4
55°	8764.1	7172.3	3220.2	1331.1	1171.0	1367.7	1303.6	1106.9	1070.3	933.1	901.1
57.5°	9454.8	7602.3	2968.6	1152.7	1070.3	1257.9	1276.2	1079.5	1001.8	923.9	887.4
60°	10218.7	8059.6	2552.4	1001.8	983.5	1166.4	1239.6	1020.1	923.9	896.5	878.2
62.5°	10831.6	8471.4	1994.3	896.5	910.2	1093.2	1193.9	983.5	891.9	869.1	864.5
65°	11096.9	8480.5	1431.7	805.1	837.1	1024.6	1148.2	951.4	864.5	855.4	850.8
67.5°	10817.9	8013.9	1006.3	718.1	759.3	960.6	1088.6	919.4	837.1	841.7	832.5
70°	9916.8	7030.4	736.4	635.8	686.1	891.9	1024.6	878.2	805.1	814.2	800.5
72.5°	8297.6	5479.8	590.0	567.2	626.7	818.8	960.6	832.5	754.7	759.3	731.8
75°	6129.4	3631.9	494.0	507.7	558.0	750.1	878.2	773.0	699.8	681.6	663.3
77.5°	3645.6	1866.3	407.1	443.7	498.6	667.8	786.8	699.8	640.4	608.3	594.6
80°	1504.9	754.7	333.9	375.1	434.5	594.6	695.3	613.0	571.7	539.7	521.5
82.5°	599.2	370.5	265.3	306.5	365.9	516.9	608.3	539.7	498.6	475.7	425.4
85°	228.7	183.0	178.4	215.0	274.5	397.9	503.2	452.9	420.8	361.4	347.6
87.5°	91.5	82.3	82.3	105.2	155.5	251.5	361.4	315.6	329.4	260.8	265.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)