

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: P400180

Luminaire Tested: **ARCH-L-PA3-240-827-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400180  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-240-827-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24014 lumens  
Efficiency: N/A  
Efficacy: 99.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

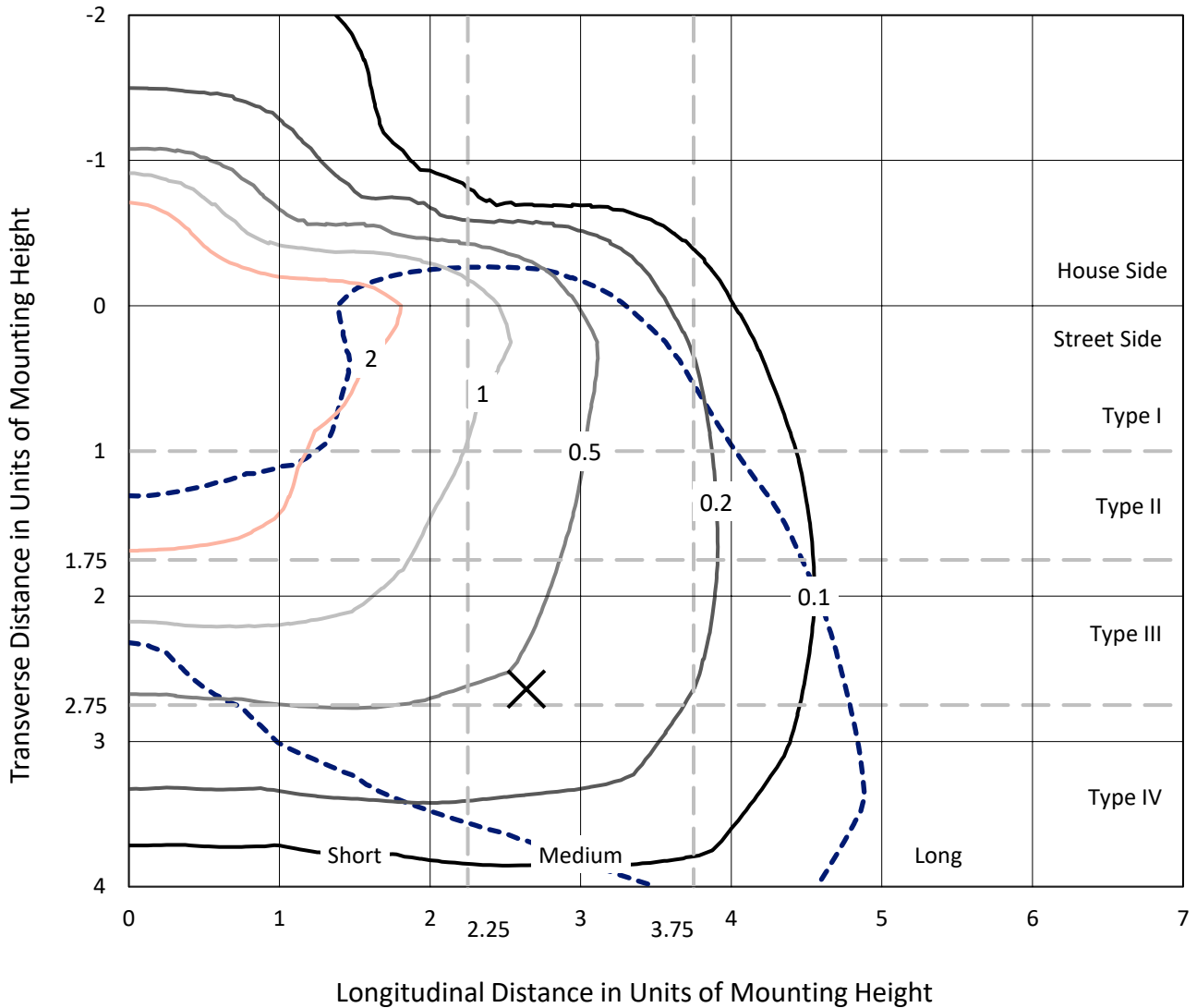
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

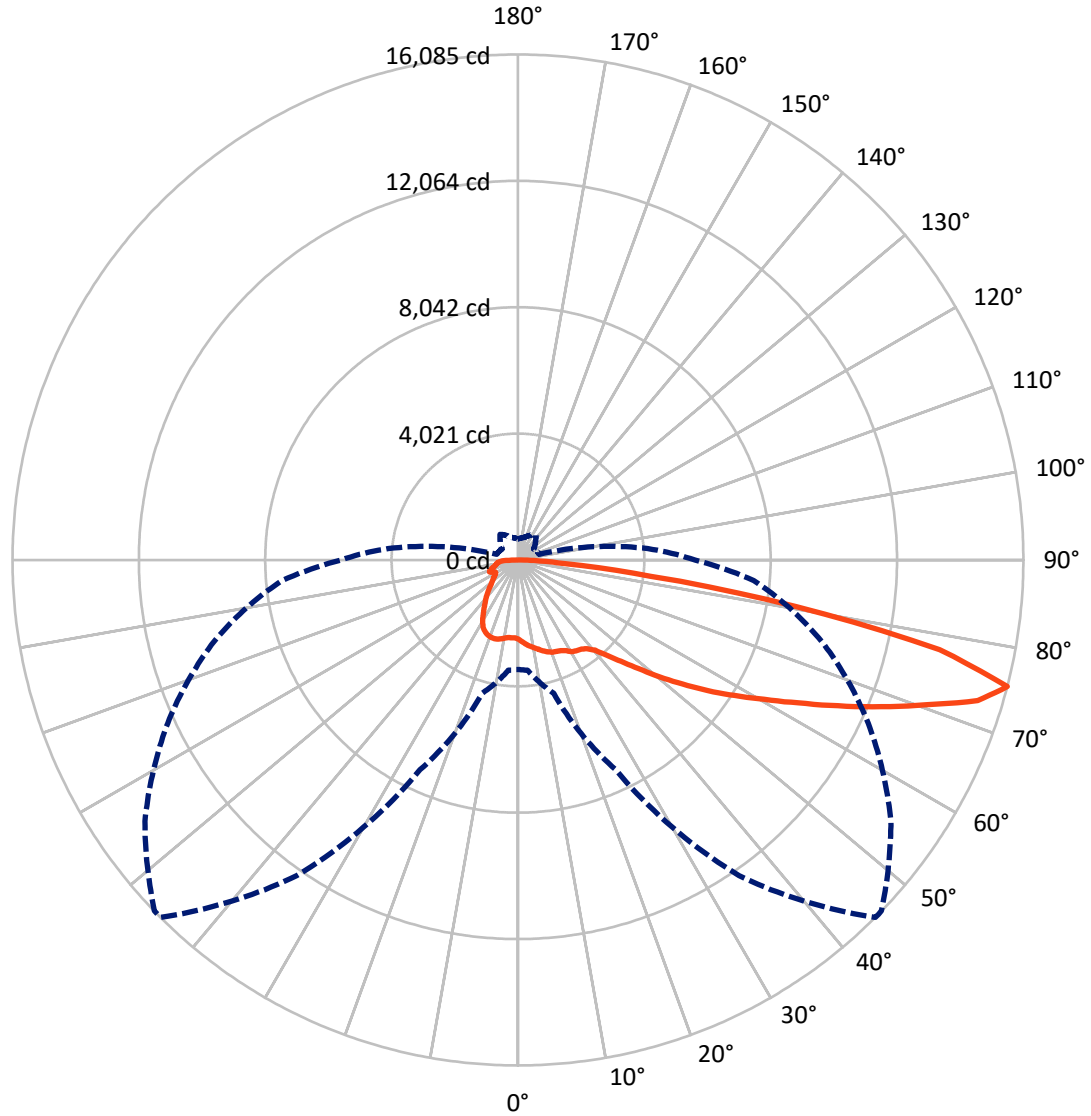
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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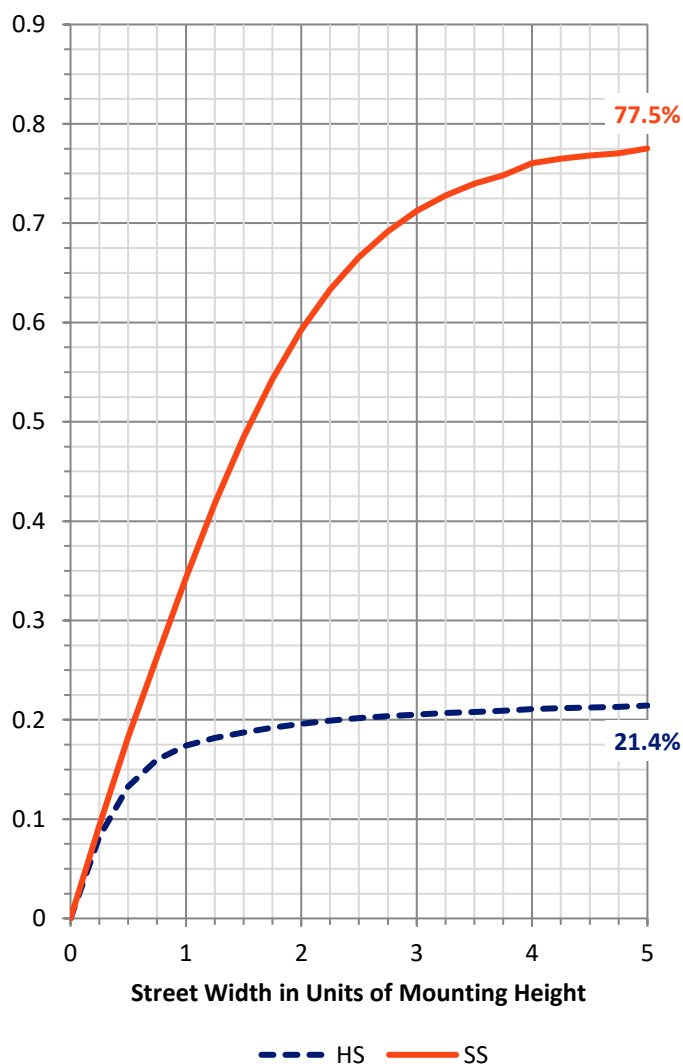
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5307.0	0.0	5307.0
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	18707.0	0.0	18707.0
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	24014.0	0.0	24014.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	249.5	1.0
10°-20°	793.7	3.3
20°-30°	1353.2	5.6
30°-40°	1896.0	7.9
40°-50°	2785.5	11.6
50°-60°	4433.2	18.5
60°-70°	6306.2	26.3
70°-80°	5280.2	22.0
80°-90°	916.4	3.8
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°	24014.0	100.0
0°-180°	24014.0	100.0

**Coefficient of Utilization**

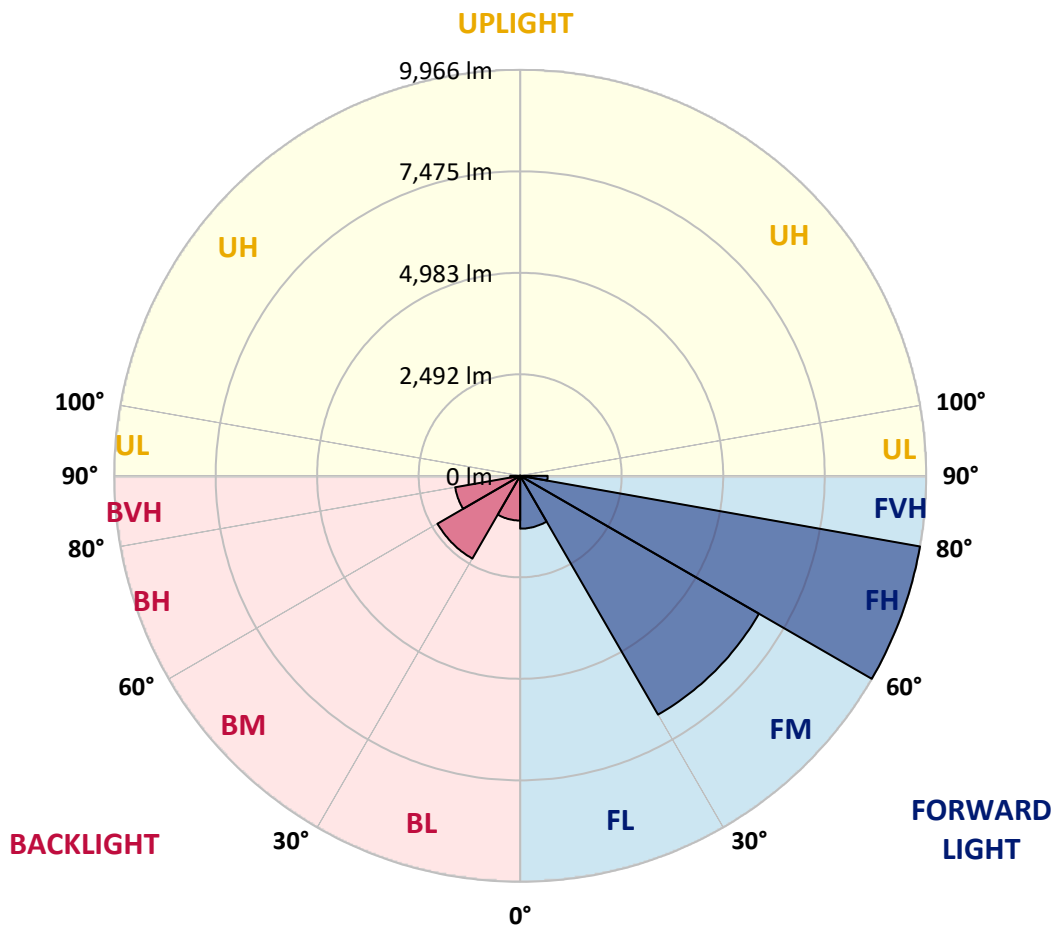


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1298.1	5.4			
FM (30°-60°)	6768.8	28.2			
FH (60°-80°)	9966.4	41.5			G4/12000
FVH (80°-90°)	673.7	2.8			G4/750
BL (0°-30°)	1098.3	4.6	B3/2500		
BM (30°-60°)	2345.9	9.8	B2/2500		
BH (60°-80°)	1620.0	6.7	B3/2500		G3/2500
BVH (80°-90°)	242.7	1.0			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2522.0	2522.0	2522.0	2522.0	2522.0	2522.0	2522.0	2522.0	2522.0	2522.0	2522.0
2.5°	2666.4	2653.5	2647.1	2647.1	2621.5	2605.4	2602.2	2579.8	2560.5	2541.2	2525.2
5°	2820.4	2810.8	2791.5	2775.5	2740.2	2695.3	2688.8	2640.7	2592.6	2547.7	2509.2
7.5°	2961.6	2942.3	2919.9	2887.8	2830.0	2769.1	2759.4	2692.1	2624.7	2557.3	2506.0
10°	3080.3	3061.0	3029.0	2984.0	2910.2	2836.4	2826.8	2756.2	2685.6	2605.4	2531.6
12.5°	3192.6	3176.6	3128.4	3067.5	2980.8	2913.5	2903.8	2842.9	2769.1	2679.2	2583.0
15°	3288.9	3272.8	3221.5	3150.9	3051.4	3000.1	2987.2	2929.5	2855.7	2759.4	2660.0
17.5°	3337.0	3337.0	3282.4	3205.4	3112.4	3073.9	3064.3	2993.7	2926.3	2833.2	2733.8
20°	3353.0	3359.5	3320.9	3227.9	3147.7	3131.6	3122.0	3064.3	2987.2	2897.4	2804.4
22.5°	3362.7	3375.5	3343.4	3237.5	3170.1	3160.5	3154.1	3115.6	3054.6	2968.0	2874.9
25°	3394.7	3394.7	3372.3	3253.6	3199.0	3195.8	3195.8	3173.4	3131.6	3057.8	2964.8
27.5°	3442.9	3439.7	3410.8	3288.9	3263.2	3272.8	3269.6	3266.4	3237.5	3163.7	3064.3
30°	3523.1	3523.1	3491.0	3359.5	3343.4	3385.1	3388.3	3394.7	3349.8	3234.3	3154.1
32.5°	3645.0	3632.2	3600.1	3430.0	3404.4	3442.9	3449.3	3446.1	3407.6	3298.5	3260.0
35°	4020.4	3991.6	3876.0	3587.3	3458.9	3481.4	3484.6	3500.6	3507.0	3420.4	3401.2
37.5°	4678.2	4639.7	4463.2	3959.5	3632.2	3577.6	3574.4	3616.1	3651.4	3574.4	3574.4
40°	5393.7	5361.6	5259.0	4601.2	3953.1	3773.4	3760.5	3799.0	3844.0	3789.4	3805.5
42.5°	6009.8	6035.5	6045.1	5281.4	4434.3	4139.2	4103.9	4049.3	4119.9	4071.8	4135.9
45°	6471.8	6459.0	6635.5	5977.7	5056.8	4598.0	4549.9	4402.3	4492.1	4488.9	4630.1
47.5°	6962.8	6940.3	7014.1	6632.3	5765.9	5159.5	5085.7	4867.5	5002.3	5095.3	5329.6
50°	7428.0	7434.4	7460.1	7148.9	6536.0	5842.9	5749.9	5457.9	5650.4	5846.2	6176.6
52.5°	8034.4	7989.5	7957.4	7752.1	7399.1	6555.3	6494.3	6160.6	6430.1	6661.1	7100.7
55°	8563.9	8535.0	8515.7	8506.1	8121.1	7341.4	7277.2	6930.7	7318.9	7482.6	8130.7
57.5°	9128.6	9112.6	9215.2	9378.9	9224.9	8140.3	8073.0	7739.3	8172.4	8287.9	9247.3
60°	9542.5	9552.1	9834.5	10251.6	10145.7	9006.7	8926.5	8631.3	9003.5	9106.1	10363.9
62.5°	9545.7	9642.0	10296.5	11044.2	11166.1	10004.6	9911.5	9590.6	9857.0	9857.0	11365.0
65°	8634.5	8743.6	10213.1	11239.9	12199.3	11191.8	11101.9	10598.2	10697.6	10562.9	12305.2
67.5°	7726.4	7854.8	9237.7	11255.9	12924.4	12462.4	12356.5	11605.7	11435.6	11095.5	12962.9
70°	7123.2	7213.0	8368.1	11047.4	13360.8	13790.8	13710.5	12561.8	12016.4	11541.5	12825.0
72.5°	5997.0	5964.9	7068.6	10055.9	13604.7	15298.8	15231.4	13601.4	12520.1	11329.7	10938.3
75°	3481.4	3519.9	4386.2	7367.1	12263.4	16084.9	16078.5	14490.2	12298.7	10007.8	7537.1
77.5°	1004.3	1033.2	1440.7	3237.5	7755.3	13720.2	14159.8	13251.7	10396.0	7132.8	3908.1
80°	439.6	462.0	625.7	1078.1	3340.2	8961.7	9346.8	8961.7	6269.7	3272.8	1533.7
82.5°	259.9	275.9	407.5	667.4	1601.1	4264.3	4784.1	4177.7	2704.9	1389.3	635.3
85°	147.6	154.0	234.2	423.5	1007.5	1492.0	1674.9	1569.0	1318.8	789.3	333.7
87.5°	67.4	70.6	115.5	198.9	564.7	503.8	523.0	693.1	763.7	481.3	166.8
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2522.0	2522.0	2522.0	2522.0	2522.0	2522.0	2522.0	2522.0	2522.0	2522.0	2522.0
2.5°	2518.8	2509.2	2489.9	2483.5	2473.9	2477.1	2480.3	2480.3	2483.5	2473.9	2473.9
5°	2493.1	2477.1	2457.8	2457.8	2457.8	2483.5	2506.0	2518.8	2525.2	2525.2	2518.8
7.5°	2483.5	2464.2	2441.8	2448.2	2454.6	2486.7	2528.4	2570.1	2583.0	2583.0	2576.5
10°	2502.7	2483.5	2467.4	2477.1	2493.1	2518.8	2550.9	2589.4	2621.5	2624.7	2621.5
12.5°	2547.7	2525.2	2509.2	2528.4	2547.7	2563.7	2579.8	2595.8	2637.5	2643.9	2643.9
15°	2621.5	2599.0	2579.8	2595.8	2602.2	2602.2	2602.2	2602.2	2643.9	2650.3	2650.3
17.5°	2695.3	2676.0	2656.8	2660.0	2640.7	2615.0	2605.4	2602.2	2624.7	2643.9	2647.1
20°	2765.9	2749.8	2730.6	2698.5	2650.3	2602.2	2586.2	2586.2	2599.0	2627.9	2627.9
22.5°	2842.9	2823.6	2791.5	2717.7	2637.5	2570.1	2554.1	2563.7	2579.8	2618.3	2615.0
25°	2929.5	2903.8	2849.3	2711.3	2595.8	2515.6	2518.8	2547.7	2576.5	2618.3	2618.3
27.5°	3025.8	2990.5	2881.4	2660.0	2502.7	2425.7	2454.6	2522.0	2563.7	2608.6	2615.0
30°	3131.6	3099.6	2907.0	2570.1	2351.9	2281.3	2351.9	2461.0	2525.2	2566.9	2576.5
32.5°	3260.0	3234.3	2929.5	2454.6	2156.2	2095.2	2197.9	2332.7	2435.4	2483.5	2493.1
35°	3420.4	3394.7	2958.4	2323.1	1973.3	1909.1	2002.2	2140.2	2274.9	2335.9	2355.1
37.5°	3629.0	3590.5	2984.0	2181.9	1819.3	1745.5	1790.4	1915.6	2037.5	2120.9	2143.4
40°	3895.3	3834.3	3006.5	2021.4	1684.5	1601.1	1617.2	1678.1	1748.7	1822.5	1851.4
42.5°	4270.7	4148.8	3009.7	1851.4	1546.6	1469.6	1463.1	1482.4	1482.4	1482.4	1492.0
45°	4793.7	4562.7	3016.1	1691.0	1405.4	1325.2	1305.9	1299.5	1251.4	1158.3	1151.9
47.5°	5454.7	5105.0	3045.0	1556.2	1257.8	1187.2	1161.5	1135.9	1046.0	949.8	930.5
50°	6301.8	5733.8	3102.8	1427.8	1132.7	1084.5	1052.4	991.5	892.0	818.2	799.0
52.5°	7277.2	6481.5	3157.3	1293.1	1039.6	1007.5	969.0	895.2	789.3	744.4	738.0
55°	8397.0	7315.7	3266.4	1174.4	959.4	936.9	901.6	831.0	750.8	718.7	715.5
57.5°	9542.5	8249.4	3420.4	1068.5	882.4	869.5	869.5	808.6	757.2	744.4	744.4
60°	10646.3	9051.6	3301.7	969.0	811.8	818.2	879.2	863.1	824.6	840.7	850.3
62.5°	11503.0	9523.3	2679.2	888.8	760.4	818.2	975.4	975.4	930.5	924.1	924.1
65°	11868.8	9516.8	1883.5	827.8	741.2	898.4	1087.7	1036.4	917.7	872.8	863.1
67.5°	11775.7	9099.7	1299.5	786.1	734.8	981.8	1139.1	994.7	859.9	821.4	792.5
70°	10957.5	8217.3	1001.1	747.6	725.2	946.6	1123.0	946.6	815.0	779.7	754.0
72.5°	8839.8	6590.6	831.0	709.1	686.7	876.0	1068.5	901.6	779.7	741.2	715.5
75°	5637.6	4145.6	702.7	657.8	612.9	786.1	994.7	856.7	741.2	689.9	670.6
77.5°	2711.3	1787.2	612.9	596.8	551.9	728.4	920.9	799.0	689.9	648.1	635.3
80°	1097.4	818.2	532.6	535.8	507.0	693.1	869.5	744.4	638.5	593.6	571.1
82.5°	571.1	474.9	449.2	462.0	462.0	661.0	831.0	699.5	593.6	574.3	500.5
85°	308.0	295.2	346.5	372.2	401.1	596.8	773.3	651.4	542.3	465.3	449.2
87.5°	150.8	192.5	195.7	224.6	279.2	478.1	651.4	545.5	452.4	375.4	369.0
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)