

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: P400421

Luminaire Tested: **ARCH-L-PA3-280-727-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400421  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-280-727-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29955 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G5

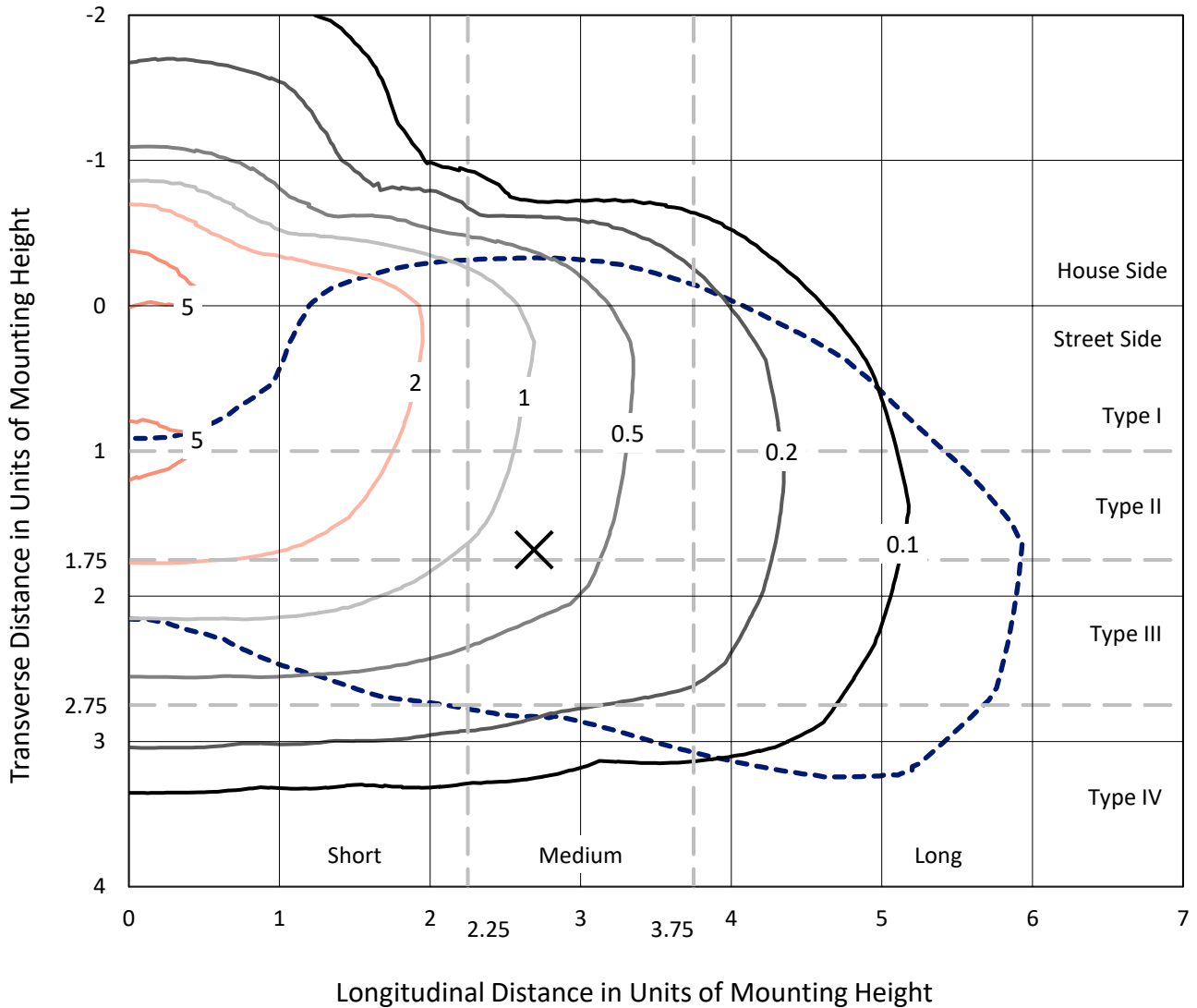
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

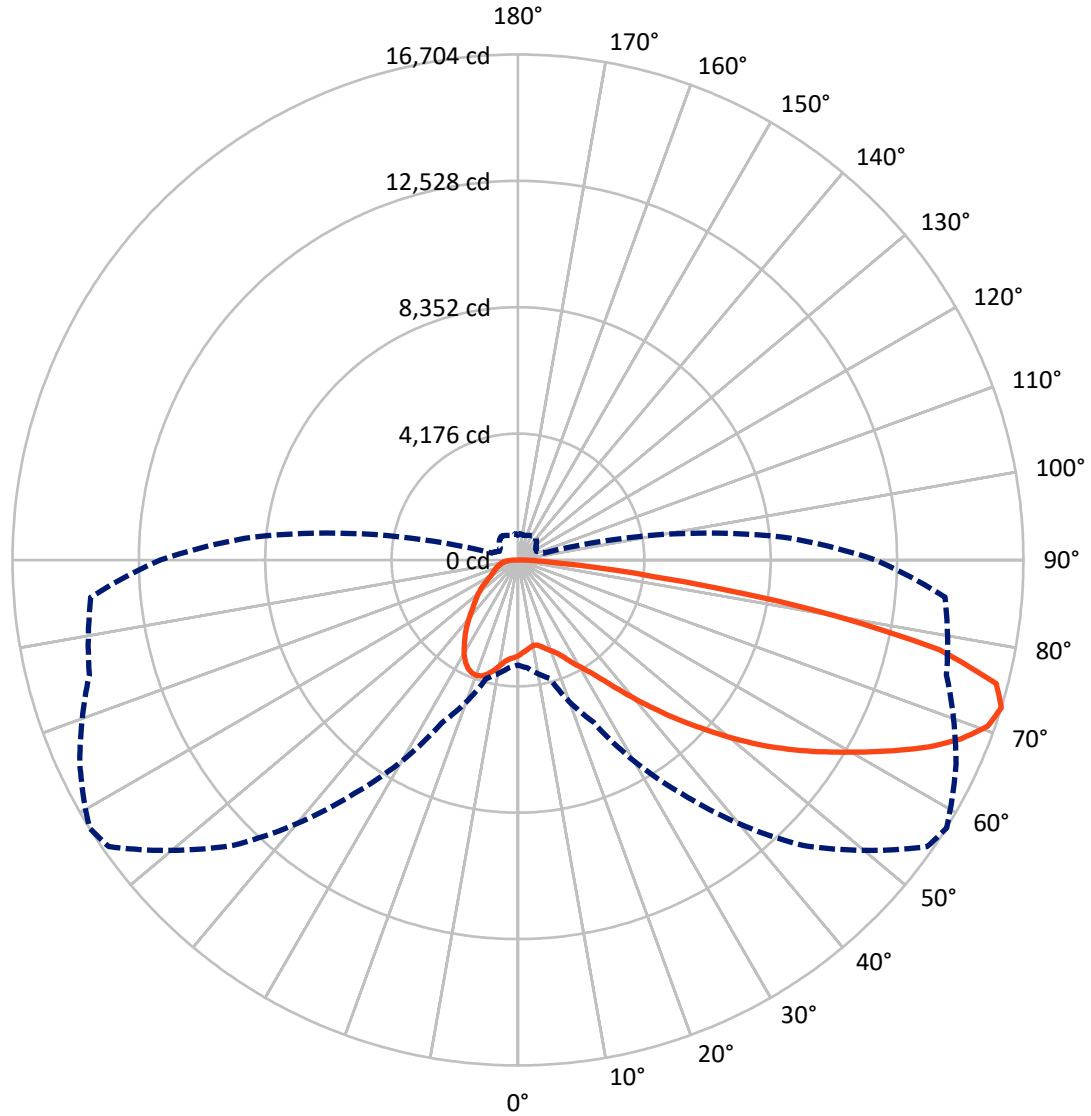
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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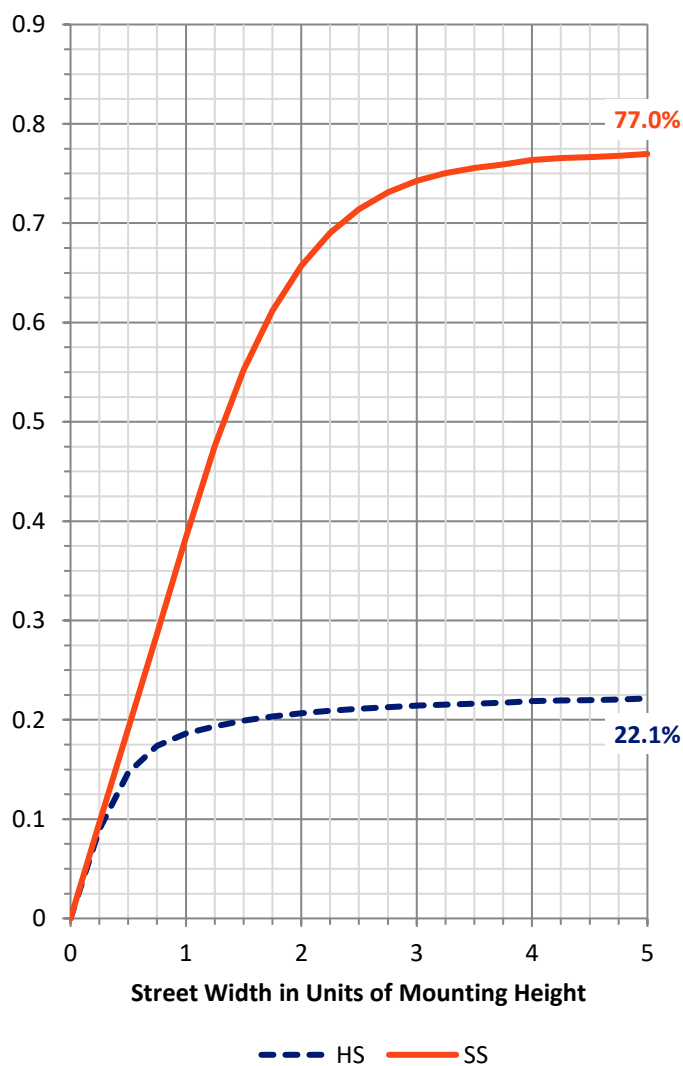
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6793.5	0.0	6793.5
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	23161.5	0.0	23161.5
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	29955.0	0.0	29955.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	304.4	1.0
10°-20°	966.6	3.2
20°-30°	1731.5	5.8
30°-40°	2604.7	8.7
40°-50°	4217.9	14.1
50°-60°	6349.3	21.2
60°-70°	7472.4	24.9
70°-80°	5298.6	17.7
80°-90°	1009.6	3.4
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°	29955.0	100.0
0°-180°	29955.0	100.0

**Coefficient of Utilization**



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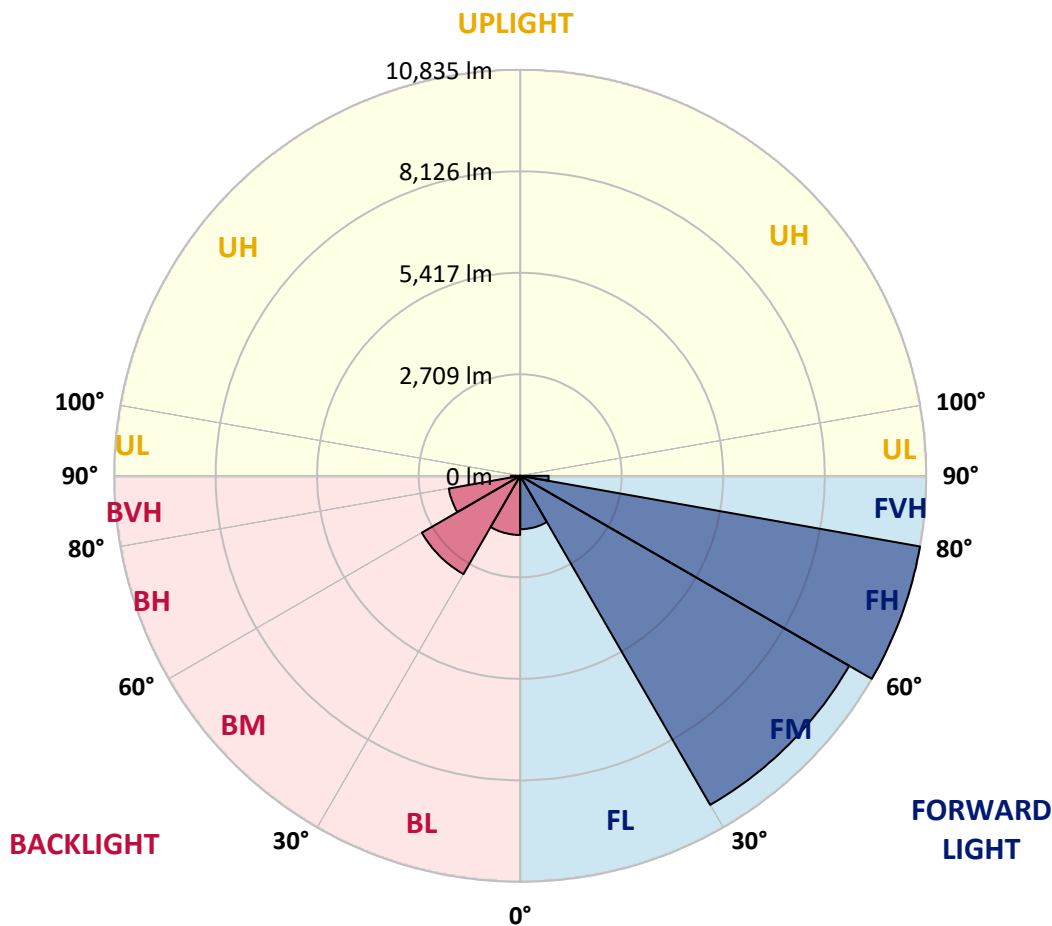
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1424.5	4.8			
FM (30°-60°)	10140.6	33.9			
FH (60°-80°)	10834.8	36.2			G4/12000
FVH (80°-90°)	761.6	2.5			G5
BL (0°-30°)	1578.0	5.3	B3/2500		
BM (30°-60°)	3031.2	10.1	B3/5000		
BH (60°-80°)	1936.2	6.5	B3/2500		G3/2500
BVH (80°-90°)	248.1	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	3159.6	3159.6	3159.6	3159.6	3159.6	3159.6	3159.6	3159.6	3159.6	3159.6	3159.6
2.5°	3041.0	3025.2	3029.1	3029.1	3044.9	3052.8	3056.8	3068.7	3076.6	3096.3	3124.0
5°	2898.6	2886.8	2890.7	2894.7	2922.3	2950.0	2973.8	2989.6	3013.3	3044.9	3084.5
7.5°	2795.8	2787.9	2791.9	2799.8	2823.5	2855.1	2894.7	2918.4	2954.0	3013.3	3080.5
10°	2720.7	2720.7	2724.6	2740.4	2764.2	2803.7	2835.3	2863.0	2934.2	3041.0	3143.8
12.5°	2661.4	2661.4	2673.2	2704.9	2744.4	2783.9	2859.1	2890.7	2985.6	3131.9	3254.5
15°	2657.4	2661.4	2665.3	2693.0	2736.5	2823.5	2934.2	2981.7	3096.3	3270.3	3412.7
17.5°	2720.7	2724.6	2708.8	2716.7	2768.1	2890.7	3037.0	3092.4	3238.7	3428.5	3574.8
20°	2914.4	2914.4	2867.0	2823.5	2859.1	2993.5	3159.6	3215.0	3377.1	3586.7	3733.0
22.5°	3309.9	3329.7	3218.9	3124.0	3068.7	3143.8	3294.1	3353.4	3535.3	3760.7	3907.0
25°	3788.4	3808.1	3657.9	3523.4	3420.6	3408.7	3507.6	3570.9	3721.1	3954.5	4077.1
27.5°	4251.0	4215.5	4077.1	3950.5	3820.0	3713.2	3788.4	3843.7	4017.7	4195.7	4270.8
30°	4614.9	4587.2	4452.7	4361.8	4239.2	4100.8	4057.3	4116.6	4259.0	4425.0	4464.6
32.5°	5018.2	4998.4	4864.0	4745.4	4642.5	4512.0	4417.1	4444.8	4523.9	4642.5	4666.3
35°	5532.3	5575.8	5433.4	5192.2	5077.5	4951.0	4883.8	4891.7	4951.0	5026.1	4986.6
37.5°	6074.1	6125.5	6133.4	5753.7	5599.5	5484.8	5413.7	5441.3	5512.5	5563.9	5441.3
40°	7078.5	7027.1	6821.4	6540.7	6303.4	6192.7	6093.8	6089.9	6141.3	6232.2	6010.8
42.5°	8411.1	8363.7	7948.5	7584.7	7209.0	7082.4	6888.7	6805.6	6829.4	6944.0	6635.6
45°	9688.4	9668.7	9336.5	8913.4	8462.6	8217.4	7774.5	7572.8	7553.0	7644.0	7276.2
47.5°	10823.4	10736.4	10495.1	10166.9	10119.5	9478.8	8664.2	8391.4	8296.5	8347.9	7936.6
50°	12037.4	11740.8	11408.6	11206.9	11551.0	10953.9	9561.9	9277.2	9043.9	9079.4	8652.4
52.5°	12682.0	12183.7	11966.2	12025.5	12488.2	12258.8	10538.6	10190.7	9815.0	9866.4	9364.2
55°	12128.3	12124.4	12219.3	12587.1	13231.6	12966.7	11467.9	11076.5	10665.2	10677.0	10182.7
57.5°	11369.1	11523.3	12013.7	12824.3	14153.0	13710.1	12381.4	11966.2	11590.5	11531.2	11112.0
60°	10677.0	10847.1	11558.9	12784.8	14473.3	14390.3	13251.4	12887.6	12583.1	12409.1	12088.8
62.5°	9625.2	9751.7	10760.1	12531.7	14204.4	14880.6	14133.2	13884.1	13654.8	13294.9	13140.7
65°	8387.4	8430.9	9494.7	11697.3	13868.3	15070.5	15011.1	14900.4	14679.0	14149.1	14180.7
67.5°	7046.9	7133.9	8067.1	10364.6	13132.8	14983.5	15691.3	15782.3	15521.3	14726.4	14845.1
70°	5619.3	5726.1	6433.9	8521.9	11883.2	14607.8	16320.1	16466.4	15964.2	14916.2	14967.6
72.5°	3476.0	3578.8	4053.3	5919.8	9419.5	13346.3	16513.8	16703.7	15976.0	14663.1	14168.8
75°	1202.2	1214.0	1585.7	2839.3	5591.6	10076.0	15881.1	16328.0	15473.8	13741.8	12330.0
77.5°	549.7	569.4	703.9	1170.5	2479.4	5437.4	13113.0	14232.1	13947.4	12302.3	9490.7
80°	379.6	387.5	486.4	699.9	1431.5	1914.0	8276.7	9735.9	10234.1	9526.3	6082.0
82.5°	284.7	292.6	375.7	474.5	1032.1	929.3	3151.7	4523.9	5623.2	5520.4	2542.7
85°	272.9	268.9	292.6	316.4	688.1	553.6	1020.3	1399.9	2194.7	1878.4	640.6
87.5°	118.6	130.5	300.5	178.0	359.9	257.0	442.9	518.0	668.3	581.3	229.4
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3159.6	3159.6	3159.6	3159.6	3159.6	3159.6	3159.6	3159.6	3159.6	3159.6	3159.6
2.5°	3135.9	3143.8	3167.5	3203.1	3222.9	3262.4	3290.1	3305.9	3317.8	3321.7	3321.7
5°	3108.2	3124.0	3175.4	3234.8	3290.1	3373.2	3448.3	3491.8	3523.4	3535.3	3539.2
7.5°	3116.1	3155.7	3230.8	3317.8	3389.0	3495.7	3586.7	3673.7	3744.9	3772.6	3772.6
10°	3191.3	3246.6	3349.4	3464.1	3555.1	3665.8	3760.7	3835.8	3918.9	3966.3	3974.2
12.5°	3305.9	3373.2	3507.6	3634.2	3737.0	3824.0	3911.0	3966.3	4005.9	4041.5	4049.4
15°	3468.1	3551.1	3685.6	3816.1	3907.0	3962.4	3986.1	3986.1	3982.1	3986.1	3994.0
17.5°	3630.2	3709.3	3843.7	3974.2	4017.7	3986.1	3958.4	3950.5	3946.6	3938.6	3942.6
20°	3788.4	3863.5	3978.2	4077.1	4041.5	3930.7	3895.1	3891.2	3879.3	3871.4	3863.5
22.5°	3946.6	4001.9	4096.8	4132.4	3990.1	3831.9	3788.4	3764.6	3748.8	3729.1	3709.3
25°	4128.5	4144.3	4215.5	4160.1	3863.5	3650.0	3586.7	3551.1	3535.3	3515.5	3499.7
27.5°	4298.5	4298.5	4310.4	4116.6	3677.7	3408.7	3313.8	3250.6	3246.6	3242.7	3238.7
30°	4452.7	4433.0	4393.4	3986.1	3436.4	3112.2	2969.8	2906.5	2930.3	2950.0	2954.0
32.5°	4634.6	4595.1	4484.4	3808.1	3147.8	2780.0	2606.0	2578.3	2606.0	2629.7	2613.9
35°	4919.4	4848.2	4579.3	3602.5	2870.9	2475.5	2309.4	2269.9	2262.0	2258.0	2226.4
37.5°	5326.7	5204.1	4654.4	3381.1	2598.1	2206.6	2084.0	2001.0	1925.8	1846.7	1834.9
40°	5824.9	5615.3	4705.8	3128.0	2309.4	1981.2	1850.7	1743.9	1617.4	1479.0	1463.2
42.5°	6370.6	6058.2	4729.5	2847.2	2056.3	1795.3	1633.2	1498.7	1356.4	1249.6	1229.8
45°	6959.9	6536.7	4709.8	2578.3	1850.7	1637.1	1455.2	1308.9	1194.2	1119.1	1103.3
47.5°	7533.3	7086.4	4654.4	2364.8	1692.5	1502.7	1316.8	1182.4	1095.4	1012.3	992.6
50°	8268.8	7612.3	4587.2	2198.7	1518.5	1368.2	1229.8	1087.5	988.6	949.1	941.2
52.5°	9083.4	8138.3	4508.1	1989.1	1348.5	1261.5	1174.5	1047.9	1016.3	941.2	929.3
55°	9965.2	8763.1	4492.3	1724.1	1198.2	1186.3	1119.1	1083.5	1091.4	941.2	921.4
57.5°	10894.5	9431.4	4527.9	1459.2	1075.6	1119.1	1142.8	1115.2	1103.3	960.9	921.4
60°	11863.4	10076.0	4421.1	1214.0	980.7	1063.8	1170.5	1099.3	1012.3	953.0	925.3
62.5°	12804.6	10617.7	3958.4	1040.0	909.5	1047.9	1154.7	1040.0	941.2	941.2	929.3
65°	13488.7	10859.0	3096.3	913.5	862.1	1028.2	1127.0	1000.5	921.4	949.1	933.3
67.5°	13567.8	10609.8	2080.0	814.6	822.5	992.6	1063.8	964.9	901.6	972.8	949.1
70°	13081.4	9961.3	1273.3	739.5	771.1	929.3	1008.4	929.3	873.9	953.0	917.4
72.5°	11819.9	8751.2	897.7	676.2	715.8	870.0	957.0	897.7	834.4	862.1	826.5
75°	9696.3	6781.9	711.8	616.9	660.4	814.6	913.5	850.2	786.9	775.1	751.3
77.5°	6868.9	4346.0	573.4	569.4	601.1	747.4	854.2	794.8	731.6	707.8	692.0
80°	3950.5	2131.5	494.3	514.1	545.7	680.2	783.0	731.6	672.3	636.7	612.9
82.5°	1510.6	743.4	435.0	446.9	482.4	609.0	711.8	668.3	609.0	640.6	537.8
85°	490.4	407.3	355.9	367.8	403.4	506.2	628.8	593.2	525.9	466.6	431.0
87.5°	217.5	221.4	189.8	209.6	253.1	336.1	458.7	435.0	383.6	320.3	308.4
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)