

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: P400441

Luminaire Tested: **ARCH-L-PA3-280-740-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400441  
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-PA3-280-740-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35670 lumens  
Efficiency: N/A  
Efficacy: 127.8 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

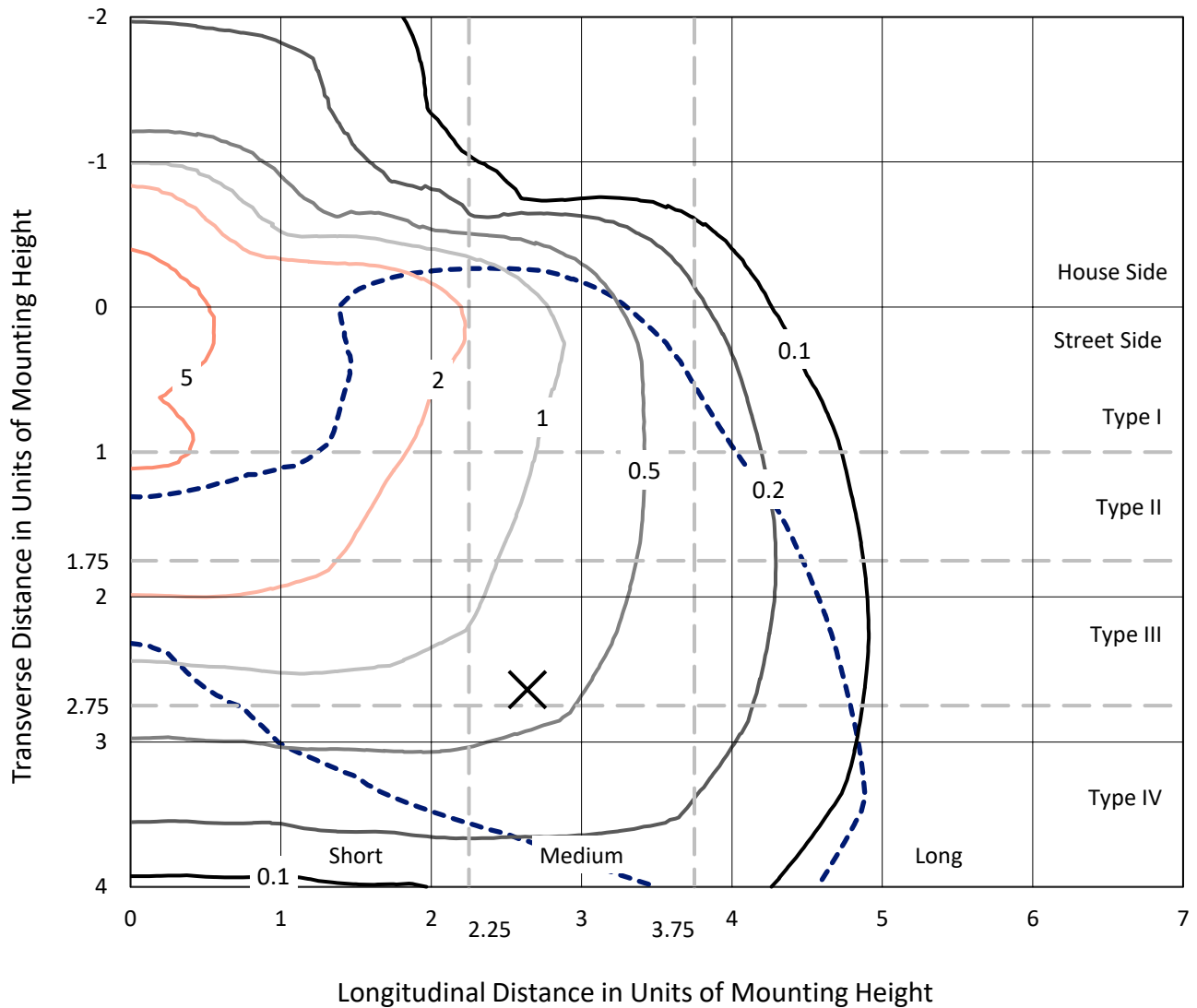
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

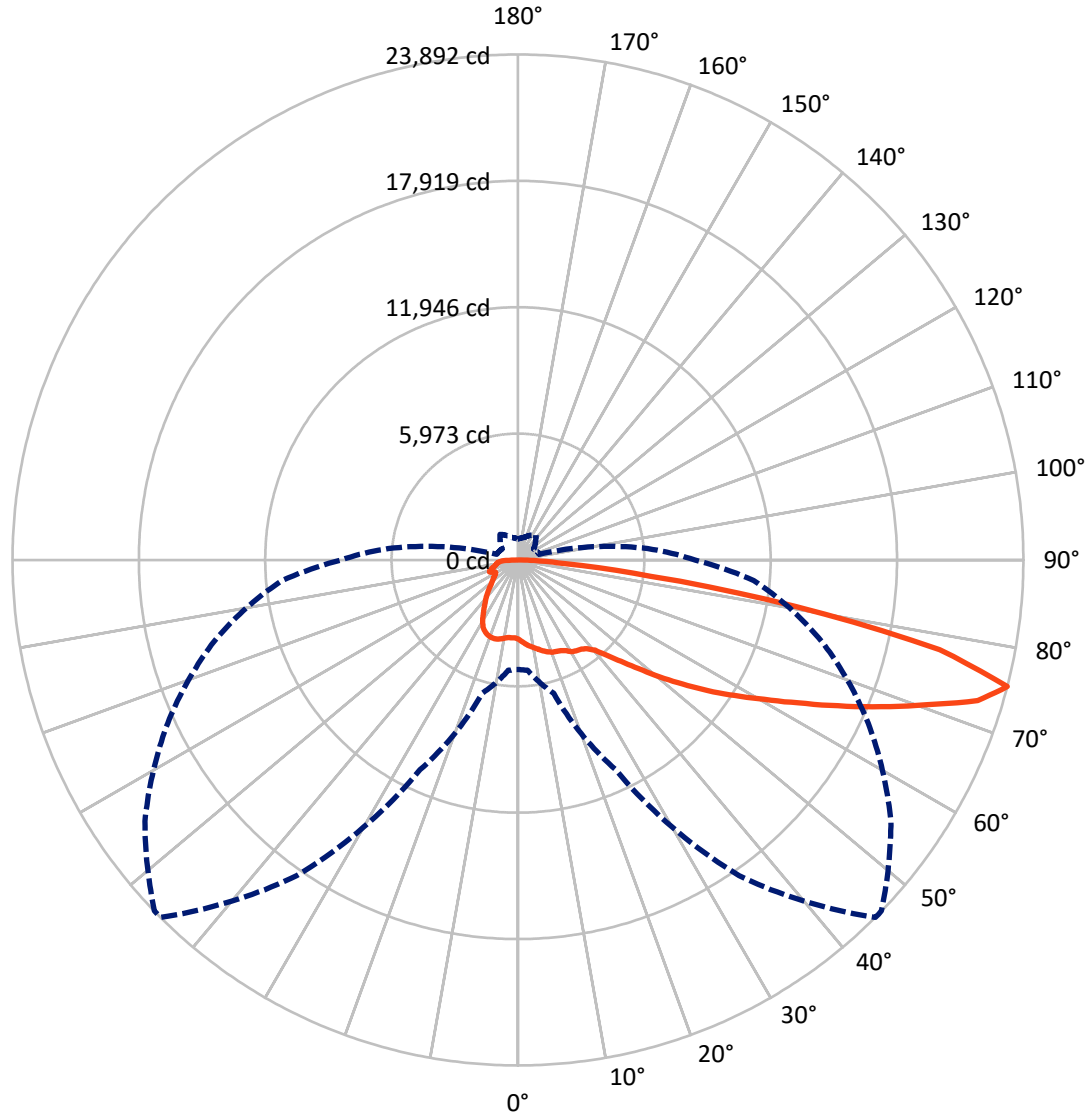
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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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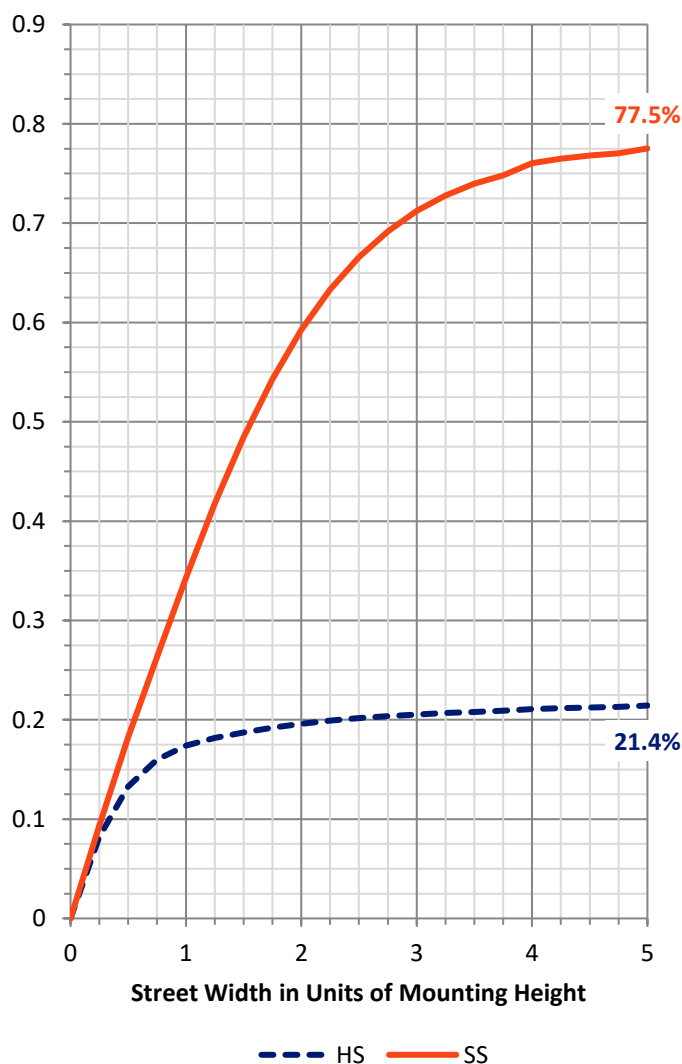
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7882.9	0.0	7882.9
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	27787.1	0.0	27787.1
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	35670.0	0.0	35670.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	370.6	1.0
10°-20°	1179.0	3.3
20°-30°	2010.0	5.6
30°-40°	2816.3	7.9
40°-50°	4137.6	11.6
50°-60°	6585.0	18.5
60°-70°	9367.2	26.3
70°-80°	7843.1	22.0
80°-90°	1361.2	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°	35670.0	100.0
0°-180°	35670.0	100.0

**Coefficient of Utilization**

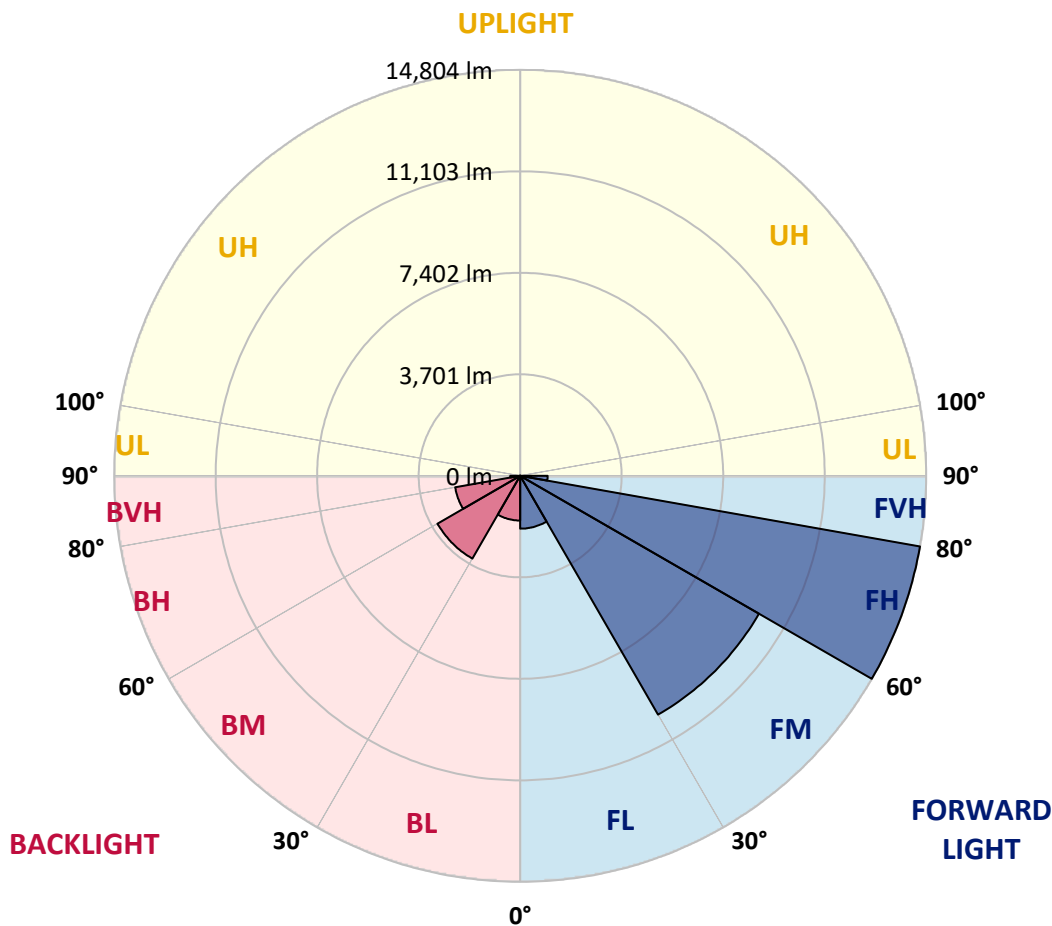


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1928.2	5.4			
FM (30°-60°)	10054.3	28.2			
FH (60°-80°)	14803.9	41.5			G5
FVH (80°-90°)	1000.7	2.8			G5
BL (0°-30°)	1631.5	4.6	B3/2500		
BM (30°-60°)	3484.6	9.8	B3/5000		
BH (60°-80°)	2406.4	6.7	B3/2500		G3/2500
BVH (80°-90°)	360.5	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-G5**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3746.1	3746.1	3746.1	3746.1	3746.1	3746.1	3746.1	3746.1	3746.1	3746.1	3746.1
2.5°	3960.6	3941.5	3932.0	3932.0	3893.9	3870.0	3865.3	3831.9	3803.3	3774.7	3750.9
5°	4189.4	4175.1	4146.5	4122.7	4070.2	4003.5	3994.0	3922.5	3851.0	3784.3	3727.1
7.5°	4399.1	4370.5	4337.1	4289.5	4203.7	4113.1	4098.8	3998.7	3898.6	3798.6	3722.3
10°	4575.4	4546.8	4499.2	4432.4	4322.8	4213.2	4198.9	4094.1	3989.2	3870.0	3760.4
12.5°	4742.2	4718.4	4646.9	4556.4	4427.7	4327.6	4313.3	4222.7	4113.1	3979.7	3836.7
15°	4885.2	4861.4	4785.1	4680.3	4532.5	4456.3	4437.2	4351.4	4241.8	4098.8	3951.1
17.5°	4956.7	4956.7	4875.7	4761.3	4623.1	4565.9	4551.6	4446.7	4346.7	4208.4	4060.7
20°	4980.5	4990.1	4932.9	4794.7	4675.5	4651.7	4637.4	4551.6	4437.2	4303.8	4165.5
22.5°	4994.8	5013.9	4966.2	4809.0	4708.9	4694.6	4685.0	4627.9	4537.3	4408.6	4270.4
25°	5042.5	5042.5	5009.1	4832.8	4751.8	4747.0	4747.0	4713.6	4651.7	4542.1	4403.8
27.5°	5114.0	5109.2	5066.3	4885.2	4847.1	4861.4	4856.6	4851.9	4809.0	4699.3	4551.6
30°	5233.1	5233.1	5185.5	4990.1	4966.2	5028.2	5033.0	5042.5	4975.8	4804.2	4685.0
32.5°	5414.3	5395.2	5347.5	5094.9	5056.8	5114.0	5123.5	5118.8	5061.6	4899.5	4842.3
35°	5971.9	5929.0	5757.4	5328.5	5137.8	5171.2	5176.0	5199.8	5209.3	5080.6	5052.0
37.5°	6948.9	6891.7	6629.6	5881.3	5395.2	5314.2	5309.4	5371.4	5423.8	5309.4	5309.4
40°	8011.8	7964.1	7811.6	6834.5	5871.8	5604.9	5585.8	5643.0	5709.8	5628.7	5652.6
42.5°	8926.8	8965.0	8979.3	7845.0	6586.7	6148.2	6095.8	6014.8	6119.6	6048.1	6143.5
45°	9613.2	9594.1	9856.2	8879.2	7511.3	6829.8	6758.3	6539.0	6672.5	6667.7	6877.4
47.5°	10342.4	10309.0	10418.6	9851.5	8564.6	7663.8	7554.2	7230.1	7430.3	7568.5	7916.4
50°	11033.5	11043.0	11081.1	10618.8	9708.5	8679.0	8540.8	8107.1	8393.0	8683.8	9174.7
52.5°	11934.2	11867.5	11819.9	11514.8	10990.6	9737.1	9646.5	9150.9	9551.2	9894.4	10547.3
55°	12720.6	12677.7	12649.1	12634.8	12062.9	10904.8	10809.4	10294.7	10871.4	11114.5	12077.2
57.5°	13559.5	13535.6	13688.2	13931.2	13702.4	12091.5	11991.4	11495.8	12139.2	12310.8	13735.8
60°	14174.3	14188.6	14608.0	15227.6	15070.3	13378.4	13259.2	12820.7	13373.6	13526.1	15394.4
62.5°	14179.1	14322.0	15294.3	16404.8	16585.9	14860.6	14722.4	14245.8	14641.4	14641.4	16881.4
65°	12825.5	12987.5	15170.4	16695.5	18120.6	16624.0	16490.6	15742.3	15890.1	15689.9	18277.9
67.5°	11476.7	11667.3	13721.5	16719.4	19197.7	18511.4	18354.1	17238.9	16986.3	16481.1	19254.9
70°	10580.7	10714.1	12429.9	16409.6	19845.9	20484.6	20365.4	18659.2	17848.9	17143.6	19050.0
72.5°	8907.8	8860.1	10499.7	14936.9	20208.1	22724.6	22624.5	20203.4	18597.2	16829.0	16247.5
75°	5171.2	5228.4	6515.2	10942.9	18215.9	23892.3	23882.8	21523.6	18268.3	14865.4	11195.5
77.5°	1491.8	1534.7	2140.0	4809.0	11519.6	20379.7	21032.7	19683.9	15442.1	10595.0	5805.1
80°	653.0	686.3	929.4	1601.4	4961.5	13311.6	13883.6	13311.6	9312.9	4861.4	2278.2
82.5°	386.1	409.9	605.3	991.3	2378.3	6334.1	7106.2	6205.4	4017.8	2063.7	943.7
85°	219.2	228.8	347.9	629.1	1496.5	2216.2	2487.9	2330.6	1958.9	1172.5	495.7
87.5°	100.1	104.9	171.6	295.5	838.8	748.3	776.9	1029.5	1134.3	714.9	247.8
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°	3746.1	3746.1	3746.1	3746.1	3746.1	3746.1	3746.1	3746.1	3746.1	3746.1	3746.1
2.5°	3741.4	3727.1	3698.5	3688.9	3674.6	3679.4	3684.2	3684.2	3688.9	3674.6	3674.6
5°	3703.2	3679.4	3650.8	3650.8	3650.8	3688.9	3722.3	3741.4	3750.9	3750.9	3741.4
7.5°	3688.9	3660.3	3627.0	3636.5	3646.0	3693.7	3755.7	3817.6	3836.7	3836.7	3827.2
10°	3717.5	3688.9	3665.1	3679.4	3703.2	3741.4	3789.0	3846.2	3893.9	3898.6	3893.9
12.5°	3784.3	3750.9	3727.1	3755.7	3784.3	3808.1	3831.9	3855.8	3917.7	3927.2	3927.2
15°	3893.9	3860.5	3831.9	3855.8	3865.3	3865.3	3865.3	3865.3	3927.2	3936.8	3936.8
17.5°	4003.5	3974.9	3946.3	3951.1	3922.5	3884.3	3870.0	3865.3	3898.6	3927.2	3932.0
20°	4108.4	4084.5	4055.9	4008.3	3936.8	3865.3	3841.5	3841.5	3860.5	3903.4	3903.4
22.5°	4222.7	4194.1	4146.5	4036.9	3917.7	3817.6	3793.8	3808.1	3831.9	3889.1	3884.3
25°	4351.4	4313.3	4232.3	4027.3	3855.8	3736.6	3741.4	3784.3	3827.2	3889.1	3889.1
27.5°	4494.4	4442.0	4279.9	3951.1	3717.5	3603.1	3646.0	3746.1	3808.1	3874.8	3884.3
30°	4651.7	4604.0	4318.1	3817.6	3493.5	3388.7	3493.5	3655.6	3750.9	3812.9	3827.2
32.5°	4842.3	4804.2	4351.4	3646.0	3202.8	3112.2	3264.8	3464.9	3617.4	3688.9	3703.2
35°	5080.6	5042.5	4394.3	3450.6	2931.1	2835.8	2974.0	3179.0	3379.1	3469.7	3498.3
37.5°	5390.4	5333.2	4432.4	3240.9	2702.4	2592.7	2659.5	2845.3	3026.5	3150.4	3183.7
40°	5786.0	5695.5	4465.8	3002.6	2502.2	2378.3	2402.1	2492.7	2597.5	2707.1	2750.0
42.5°	6343.6	6162.5	4470.6	2750.0	2297.2	2182.9	2173.3	2201.9	2201.9	2201.9	2216.2
45°	7120.5	6777.4	4480.1	2511.7	2087.5	1968.4	1939.8	1930.3	1858.8	1720.6	1711.0
47.5°	8102.3	7582.8	4523.0	2311.5	1868.3	1763.4	1725.3	1687.2	1553.7	1410.8	1382.2
50°	9360.6	8517.0	4608.8	2120.9	1682.4	1610.9	1563.3	1472.7	1325.0	1215.3	1186.8
52.5°	10809.4	9627.5	4689.8	1920.7	1544.2	1496.5	1439.4	1329.7	1172.5	1105.7	1096.2
55°	12472.8	10866.6	4851.9	1744.4	1425.1	1391.7	1339.3	1234.4	1115.3	1067.6	1062.8
57.5°	14174.3	12253.6	5080.6	1587.1	1310.7	1291.6	1291.6	1201.0	1124.8	1105.7	1105.7
60°	15813.8	13445.1	4904.3	1439.4	1205.8	1215.3	1305.9	1282.1	1224.9	1248.7	1263.0
62.5°	17086.4	14145.7	3979.7	1320.2	1129.6	1129.6	1448.9	1448.9	1382.2	1372.6	1372.6
65°	17629.7	14136.2	2797.7	1229.6	1101.0	1334.5	1615.7	1539.4	1363.1	1296.4	1282.1
67.5°	17491.5	13516.6	1930.3	1167.7	1091.4	1458.4	1692.0	1477.5	1277.3	1220.1	1177.2
70°	16276.1	12205.9	1487.0	1110.5	1077.1	1406.0	1668.1	1406.0	1210.6	1158.2	1120.0
72.5°	13130.5	9789.5	1234.4	1053.3	1019.9	1301.1	1587.1	1339.3	1158.2	1101.0	1062.8
75°	8374.0	6157.8	1043.8	977.0	910.3	1167.7	1477.5	1272.5	1101.0	1024.7	996.1
77.5°	4027.3	2654.7	910.3	886.5	819.8	1081.9	1367.9	1186.8	1024.7	962.7	943.7
80°	1630.0	1215.3	791.2	795.9	753.0	1029.5	1291.6	1105.7	948.4	881.7	848.4
82.5°	848.4	705.4	667.2	686.3	686.3	981.8	1234.4	1039.0	881.7	853.1	743.5
85°	457.5	438.5	514.7	552.9	595.8	886.5	1148.6	967.5	805.5	691.1	667.2
87.5°	224.0	286.0	290.7	333.6	414.6	710.1	967.5	810.2	672.0	557.6	548.1
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)