

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: P400203

Luminaire Tested: **ARCH-L-PA3-250-727-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400203  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-250-727-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27978 lumens  
Efficiency: N/A  
Efficacy: 111.5 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

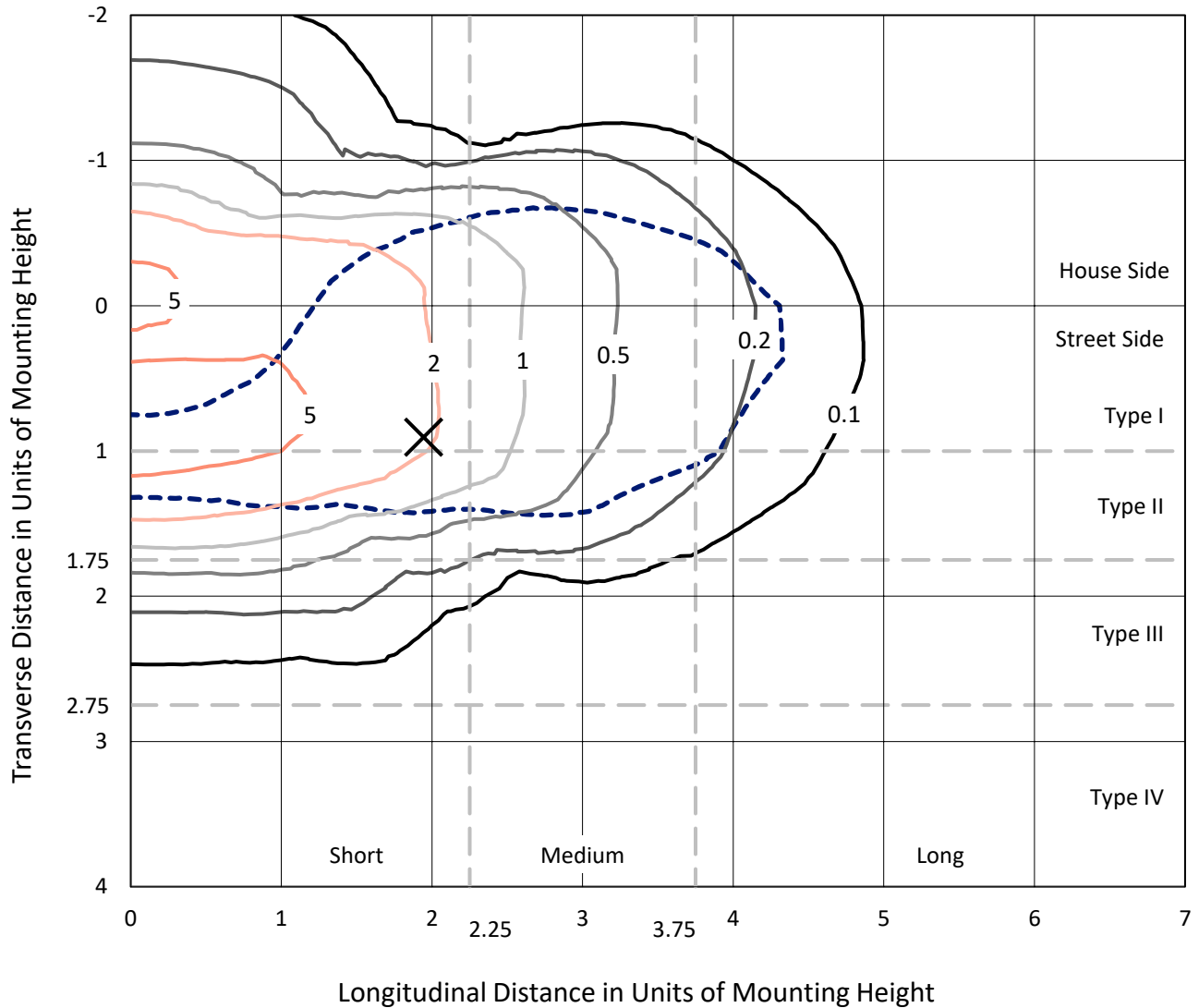
Input Watts (W): 251  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P400203  
 CATALOG NUMBER: ARCH-L-PA3-250-727-U-T2U

### Iso-Footcandle Lines of Horizontal Illumination

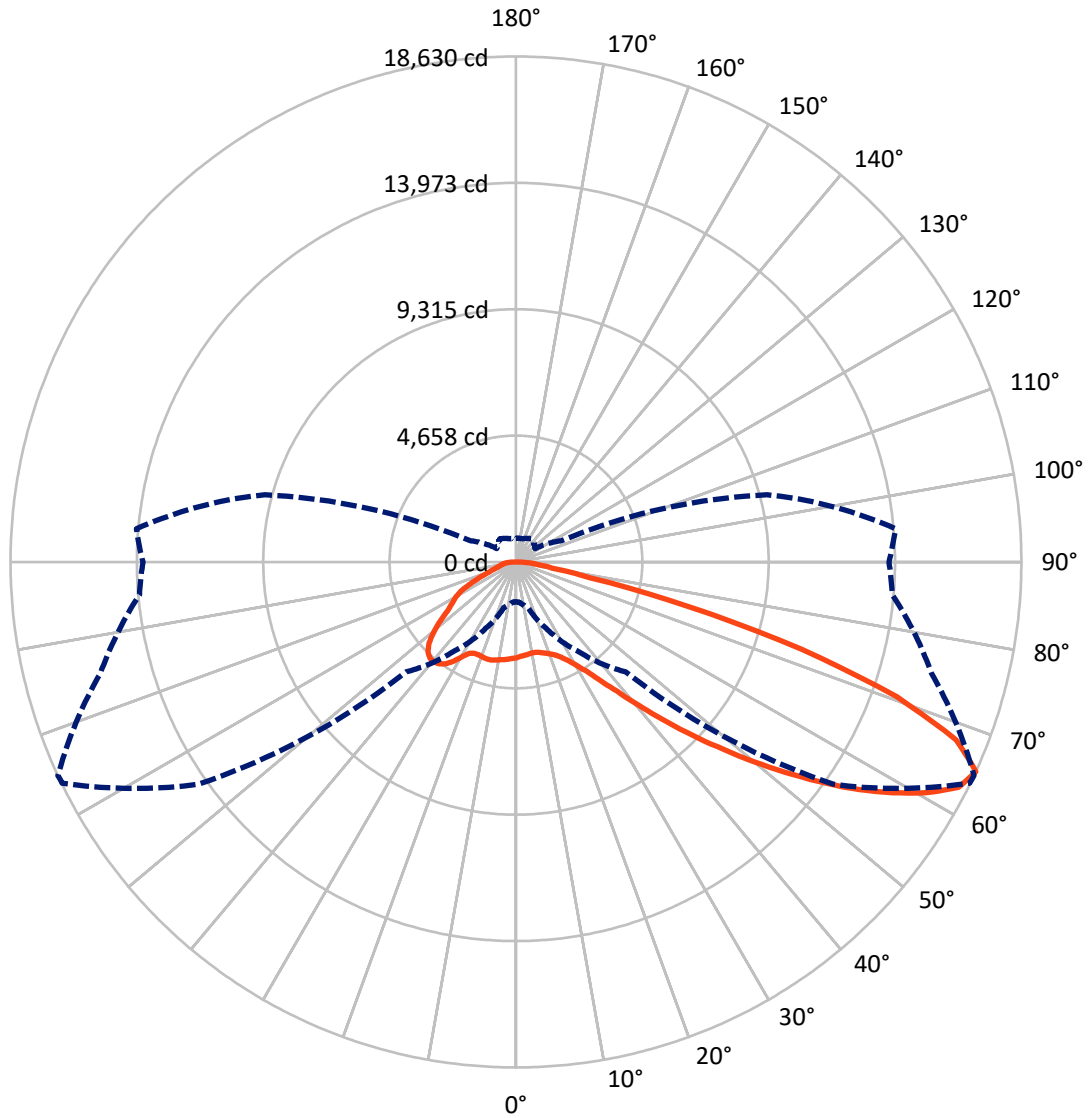
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
 Type II - Short - N/A

REPORT NUMBER: P400203  
CATALOG NUMBER: ARCH-L-PA3-250-727-U-T2U

### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P400203  
 CATALOG NUMBER: ARCH-L-PA3-250-727-U-T2U

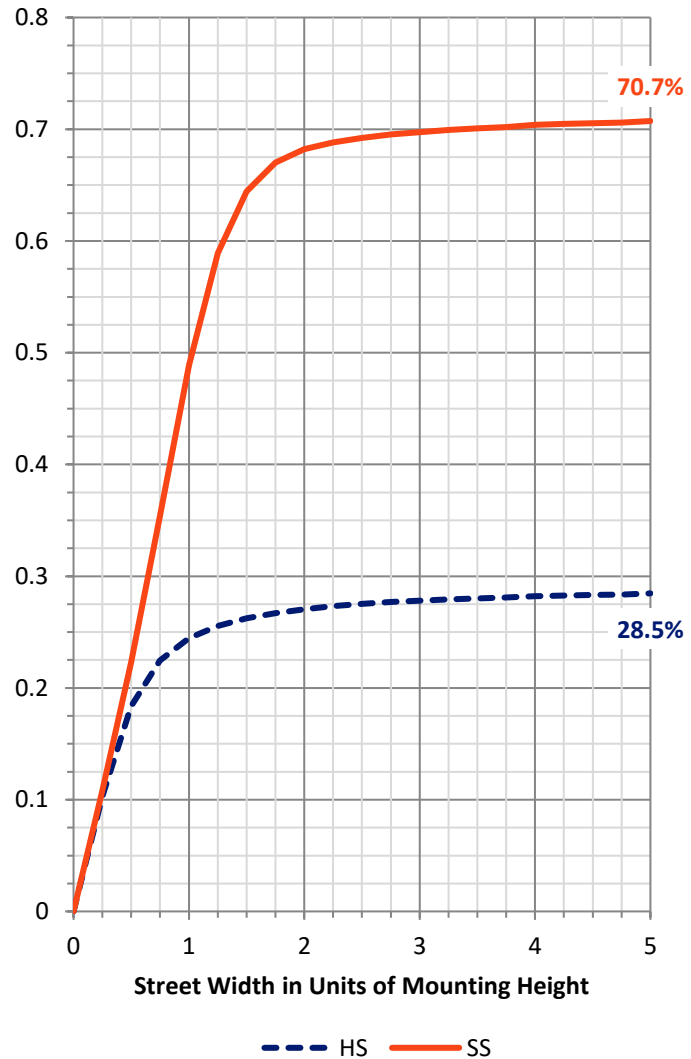
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8088.9	0.0	8088.9
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	19889.1	0.0	19889.1
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	27978.0	0.0	27978.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	336.8	1.2
10°-20°	1005.6	3.6
20°-30°	1786.2	6.4
30°-40°	3021.8	10.8
40°-50°	5260.4	18.8
50°-60°	6798.1	24.3
60°-70°	5948.7	21.3
70°-80°	3235.7	11.6
80°-90°	584.6	2.1
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°	27978.0	100.0
0°-180°	27978.0	100.0



REPORT NUMBER: P400203

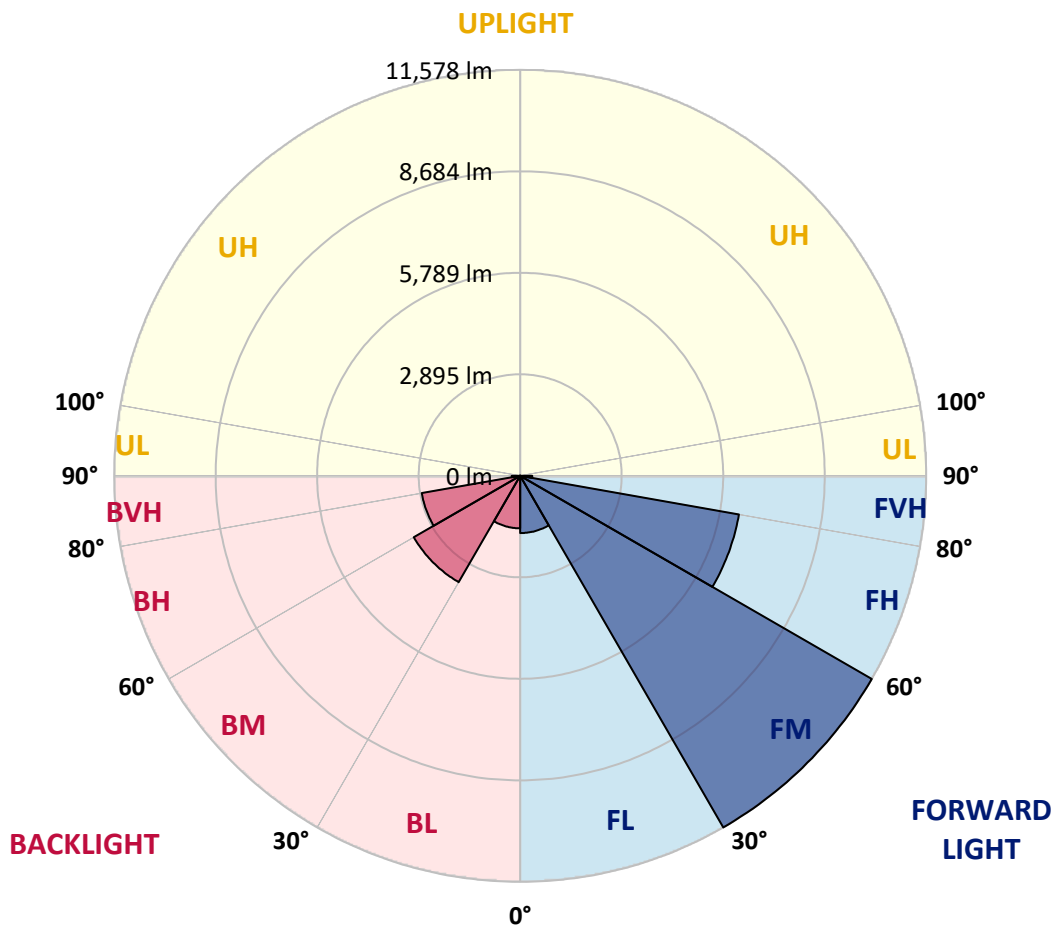
CATALOG NUMBER: ARCH-L-PA3-250-727-U-T2U

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1632.4	5.8			
FM (30°-60°)	11578.1	41.4			
FH (60°-80°)	6334.6	22.6			G3/7500
FVH (80°-90°)	344.0	1.2			G3/500
BL (0°-30°)	1496.2	5.3	B3/2500		
BM (30°-60°)	3502.3	12.5	B3/5000		
BH (60°-80°)	2849.8	10.2	B4/5000		G4/5000
BVH (80°-90°)	240.6	0.9			G3/500
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





REPORT NUMBER: P400203

CATALOG NUMBER: ARCH-L-PA3-250-727-U-T2U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3535.3	3535.3	3535.3	3535.3	3535.3	3535.3	3535.3	3535.3	3535.3	3535.3	3535.3
2.5°	3472.7	3469.0	3461.6	3469.0	3472.7	3480.1	3476.4	3483.7	3480.1	3491.1	3509.5
5°	3384.3	3376.9	3373.3	3391.7	3402.7	3421.1	3428.5	3454.3	3450.6	3469.0	3498.5
7.5°	3284.9	3284.9	3281.2	3303.3	3318.0	3351.2	3376.9	3421.1	3424.8	3458.0	3491.1
10°	3207.5	3211.2	3207.5	3226.0	3248.0	3288.6	3332.7	3395.4	3399.0	3446.9	3480.1
12.5°	3178.1	3178.1	3178.1	3203.9	3233.3	3288.6	3340.1	3406.4	3413.8	3465.3	3494.8
15°	3218.6	3222.3	3214.9	3240.7	3273.8	3340.1	3388.0	3458.0	3465.3	3513.2	3531.6
17.5°	3362.2	3376.9	3358.5	3373.3	3365.9	3417.4	3461.6	3531.6	3535.3	3575.8	3583.2
20°	3645.8	3660.5	3631.0	3612.6	3546.3	3542.7	3561.1	3616.3	3616.3	3642.1	3623.7
22.5°	4084.0	4098.7	4047.2	3977.2	3818.8	3741.5	3701.0	3726.8	3723.1	3734.1	3686.3
25°	4665.8	4662.2	4599.6	4470.7	4216.6	4028.8	3929.3	3888.8	3888.8	3866.7	3807.8
27.5°	5387.6	5332.4	5221.9	5067.2	4713.7	4452.3	4238.7	4135.6	4117.1	4050.9	3940.4
30°	6157.3	6116.8	5958.4	5733.8	5325.0	4989.9	4636.4	4430.2	4419.1	4275.5	4109.8
32.5°	7063.2	6996.9	6820.2	6551.3	6061.5	5590.2	5148.3	4835.2	4816.8	4588.5	4360.2
35°	8226.9	8171.7	7829.2	7560.4	6930.6	6312.0	5789.0	5372.9	5358.2	5078.3	4787.4
37.5°	9622.6	9479.0	9147.6	8643.0	7980.2	7247.3	6584.5	6061.5	6043.1	5733.8	5365.5
40°	10867.3	10738.4	10443.8	9979.8	9269.1	8455.2	7556.7	6923.3	6904.9	6529.2	6065.2
42.5°	11788.0	11699.6	11508.1	11239.3	10731.1	10237.6	8797.7	7965.4	7932.3	7446.2	6868.0
45°	12322.0	12252.0	12141.5	12207.8	12200.4	12108.4	10278.1	9206.5	9099.7	8470.0	7762.9
47.5°	12193.1	12130.5	12174.7	12690.2	13401.0	13934.9	12001.6	10477.0	10333.4	9512.1	8716.7
50°	11261.4	11287.1	11519.2	12506.1	14100.7	15286.4	13912.8	11924.2	11732.7	10561.7	9622.6
52.5°	9563.7	9626.3	10189.7	11570.7	14023.3	16162.9	15640.0	13419.4	13165.3	11585.4	10447.5
55°	7597.2	7755.5	8484.7	9935.6	13014.3	16225.5	16943.6	14921.9	14642.0	12546.6	11165.6
57.5°	5619.6	5855.3	6698.6	8031.7	11080.9	15234.9	17595.4	16358.1	16019.3	13500.4	11924.2
60°	3564.8	3708.4	4680.6	6253.0	8481.0	12811.7	17510.7	17580.7	17286.1	14450.5	12716.0
62.5°	2275.8	2345.8	2835.6	4459.6	5929.0	9486.4	16586.4	18505.0	18306.2	15315.9	13467.2
65°	1462.0	1491.5	1741.9	2743.5	4036.1	5726.4	14284.8	18604.5	18630.2	15857.2	13931.3
67.5°	1189.5	1204.2	1296.3	1694.0	2854.0	3163.3	9950.4	17190.3	17503.4	15717.3	13772.9
70°	1082.7	1101.1	1196.8	1351.5	2209.6	2183.8	4816.8	14384.2	14896.1	14910.8	13069.5
72.5°	913.3	939.1	1068.0	1277.9	1708.7	1723.5	2040.2	10245.0	10999.9	13327.3	12012.6
75°	762.3	777.0	887.5	1126.9	1447.3	1377.3	1432.5	5431.8	6521.9	10686.9	10889.4
77.5°	618.7	633.4	714.4	898.6	1285.2	1071.6	1126.9	2250.1	2780.4	7254.7	8900.8
80°	441.9	456.6	548.7	699.7	972.2	964.8	835.9	1241.0	1347.8	3922.0	5781.7
82.5°	316.7	327.8	416.1	500.8	673.9	968.5	629.7	843.3	883.8	1738.2	2331.1
85°	213.6	213.6	287.2	331.4	434.5	611.3	508.2	570.8	596.6	824.9	629.7
87.5°	92.1	92.1	154.7	169.4	228.3	283.6	379.3	287.2	294.6	445.6	257.8
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: P400203

CATALOG NUMBER: ARCH-L-PA3-250-727-U-T2U

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3535.3	3535.3	3535.3	3535.3	3535.3	3535.3	3535.3	3535.3	3535.3	3535.3	3535.3
2.5°	3520.6	3524.2	3531.6	3553.7	3568.4	3590.5	3601.6	3616.3	3616.3	3608.9	3612.6
5°	3513.2	3524.2	3550.0	3590.5	3616.3	3656.8	3686.3	3708.4	3715.7	3708.4	3712.1
7.5°	3509.5	3527.9	3572.1	3631.0	3667.9	3719.4	3759.9	3785.7	3804.1	3796.8	3800.4
10°	3498.5	3527.9	3583.2	3656.8	3712.1	3763.6	3800.4	3811.5	3822.5	3815.2	3811.5
12.5°	3513.2	3546.3	3605.3	3693.6	3756.2	3796.8	3807.8	3789.4	3763.6	3748.9	3745.2
15°	3542.7	3575.8	3634.7	3726.8	3782.0	3796.8	3771.0	3712.1	3653.1	3620.0	3616.3
17.5°	3583.2	3605.3	3653.1	3734.1	3778.3	3759.9	3708.4	3638.4	3594.2	3568.4	3572.1
20°	3608.9	3608.9	3645.8	3708.4	3745.2	3730.5	3667.9	3590.5	3520.6	3487.4	3476.4
22.5°	3645.8	3627.4	3631.0	3686.3	3737.8	3715.7	3583.2	3446.9	3347.5	3310.7	3307.0
25°	3745.2	3693.6	3660.5	3693.6	3815.2	3634.7	3369.6	3211.2	3119.2	3086.0	3089.7
27.5°	3866.7	3796.8	3726.8	3782.0	3877.8	3450.6	3097.1	2916.6	2861.4	2835.6	2846.6
30°	3988.2	3896.2	3804.1	4003.0	3833.6	3163.3	2747.2	2570.5	2522.6	2504.2	2518.9
32.5°	4212.9	4061.9	3951.4	4297.6	3697.3	2835.6	2367.9	2205.9	2161.7	2139.6	2132.2
35°	4588.5	4397.0	4286.5	4555.4	3505.8	2471.0	2021.7	1907.6	1859.7	1811.8	1804.5
37.5°	5129.9	4897.8	4798.4	4702.7	3237.0	2110.1	1756.6	1679.3	1609.3	1535.6	1532.0
40°	5778.0	5476.0	5402.4	4769.0	2865.1	1771.3	1572.5	1498.8	1410.4	1340.5	1344.1
42.5°	6525.6	6138.9	5980.5	4750.5	2404.7	1590.9	1439.9	1358.9	1281.5	1218.9	1215.3
45°	7324.7	6886.4	6521.9	4621.7	1948.1	1465.7	1358.9	1263.1	1185.8	1115.8	1108.5
47.5°	8208.5	7718.7	7022.7	4371.2	1609.3	1377.3	1311.0	1174.7	1104.8	1060.6	1060.6
50°	9099.7	8514.2	7483.0	3991.9	1410.4	1311.0	1241.0	1126.9	1071.6	1034.8	1034.8
52.5°	9862.0	9342.7	7862.3	3539.0	1285.2	1255.8	1193.2	1104.8	1045.9	1012.7	1009.0
55°	10602.2	10112.4	8201.1	3089.7	1182.1	1182.1	1182.1	1086.4	1020.1	990.6	986.9
57.5°	11338.7	10922.6	8554.7	2795.1	1090.0	1119.5	1160.0	1064.3	998.0	972.2	968.5
60°	12171.0	11894.8	8963.4	2588.9	1009.0	1053.2	1130.6	1038.5	961.2	939.1	935.4
62.5°	13054.8	13054.8	9335.4	2297.9	935.4	998.0	1086.4	1005.3	928.0	909.6	905.9
65°	13747.1	14045.4	9574.7	1863.4	861.7	942.7	1034.8	961.2	883.8	880.1	872.8
67.5°	13828.1	14295.8	9423.8	1406.8	795.4	883.8	983.3	913.3	839.6	839.6	828.6
70°	13246.3	13721.3	8952.4	1053.2	747.6	824.9	917.0	854.4	784.4	791.8	773.3
72.5°	12274.1	12391.9	7781.3	832.3	692.3	762.3	835.9	788.1	725.5	725.5	699.7
75°	10992.5	10337.0	5652.8	696.0	626.0	688.6	754.9	714.4	659.2	640.8	626.0
77.5°	8749.8	7490.4	3284.9	600.3	570.8	618.7	662.9	633.4	585.5	545.0	545.0
80°	5332.4	4389.7	1450.9	519.2	504.5	541.3	570.8	537.7	497.2	456.6	445.6
82.5°	2029.1	1694.0	703.4	445.6	441.9	464.0	486.1	453.0	423.5	405.1	349.8
85°	556.1	511.9	482.4	371.9	364.6	360.9	386.7	371.9	331.4	272.5	243.1
87.5°	209.9	239.4	261.5	228.3	243.1	224.6	257.8	235.7	209.9	136.3	121.5
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)