

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: P400417

Luminaire Tested: **ARCH-L-PA3-280-727-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400417  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
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-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30163 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4

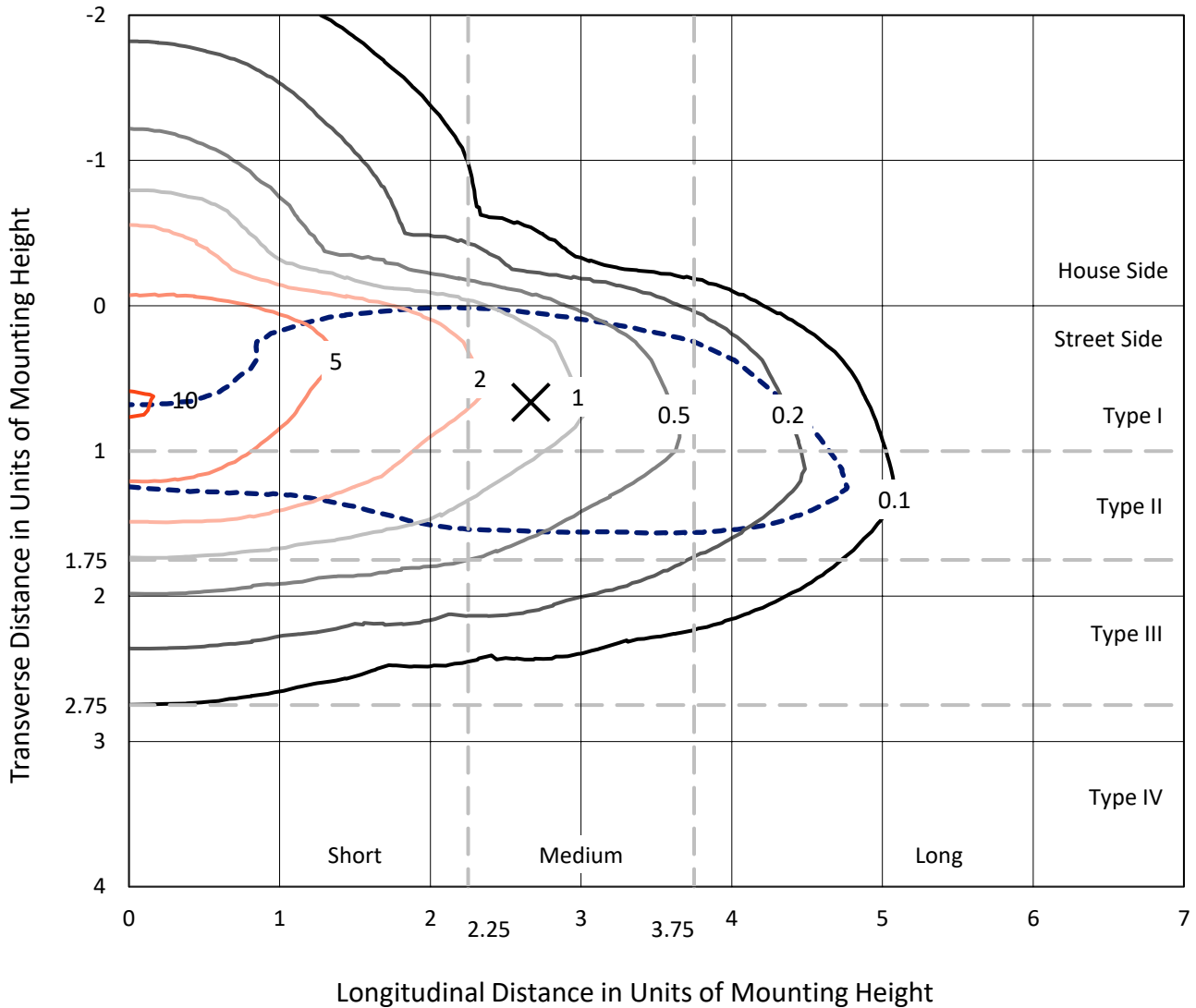
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

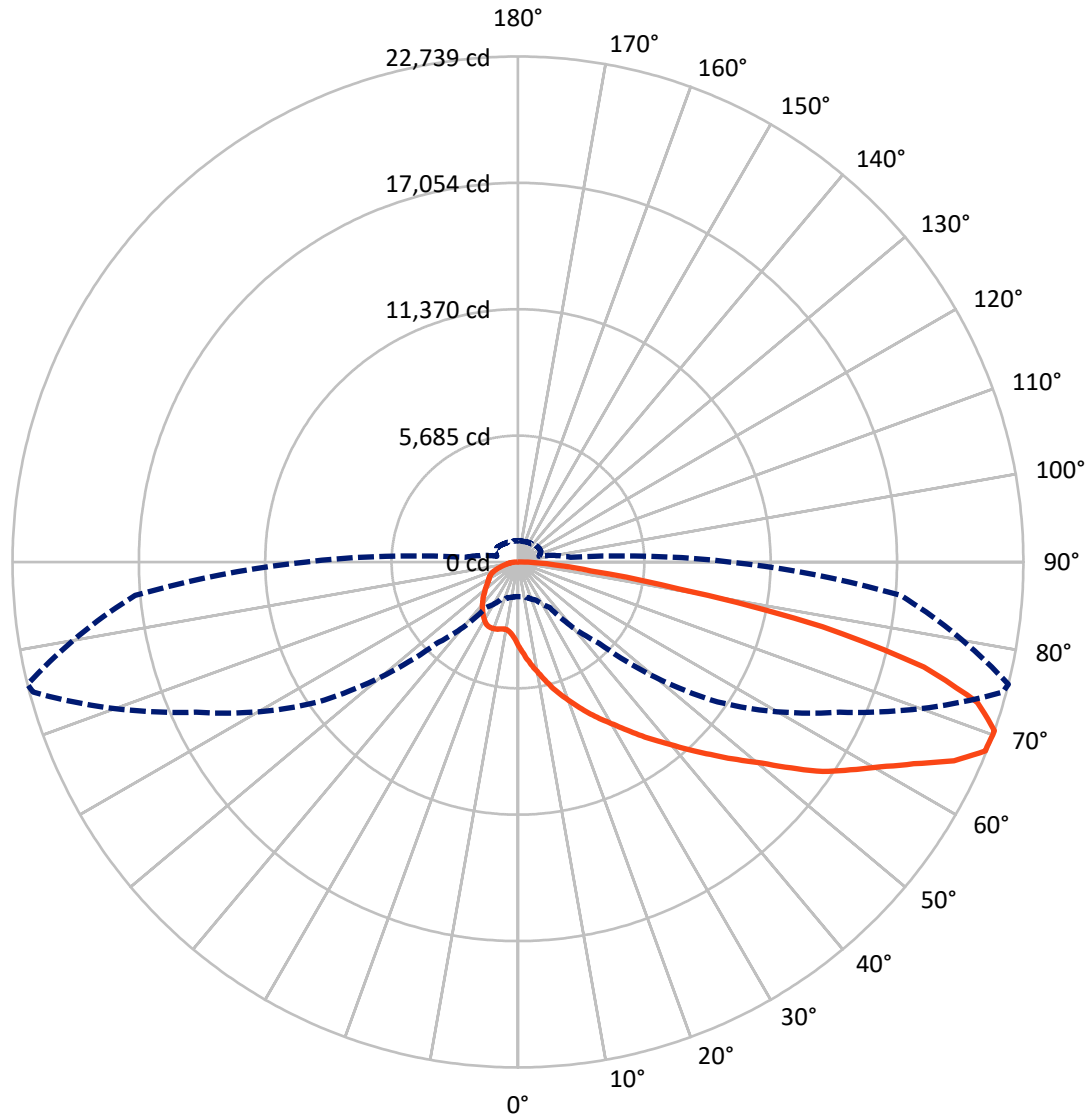
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.3 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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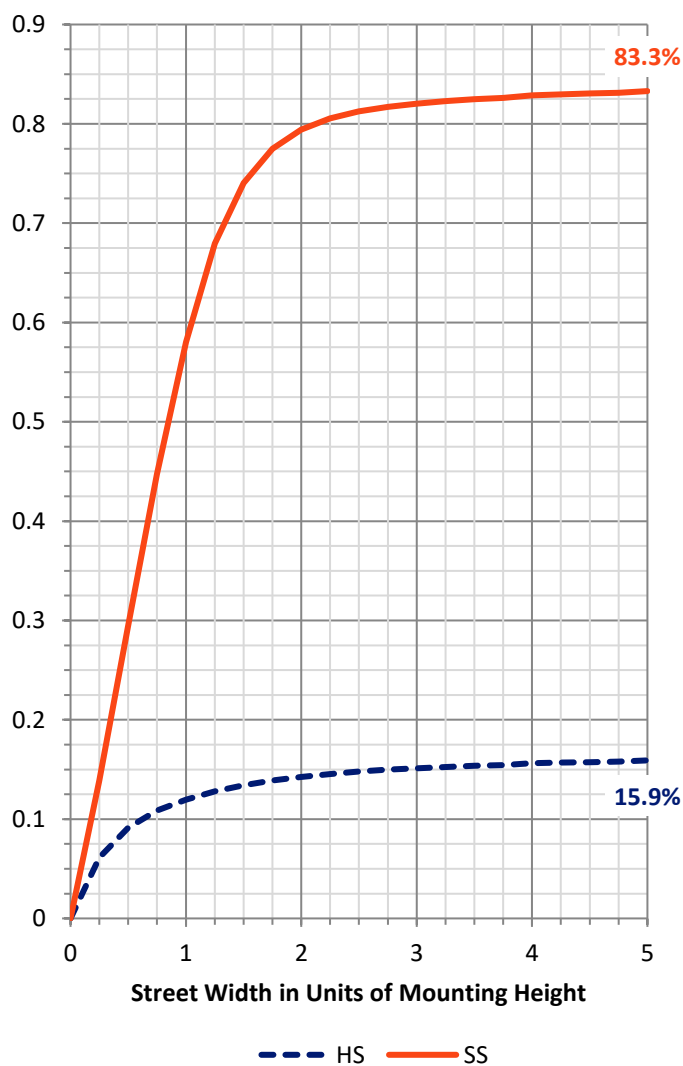
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4924.4	0.0	4924.4
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	25238.6	0.0	25238.6
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	30163.0	0.0	30163.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	391.9	1.3
10°-20°	1332.0	4.4
20°-30°	2383.2	7.9
30°-40°	3855.2	12.8
40°-50°	5577.1	18.5
50°-60°	6383.3	21.2
60°-70°	5871.9	19.5
70°-80°	3631.1	12.0
80°-90°	737.3	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°	30163.0	100.0
0°-180°	30163.0	100.0

**Coefficient of Utilization**



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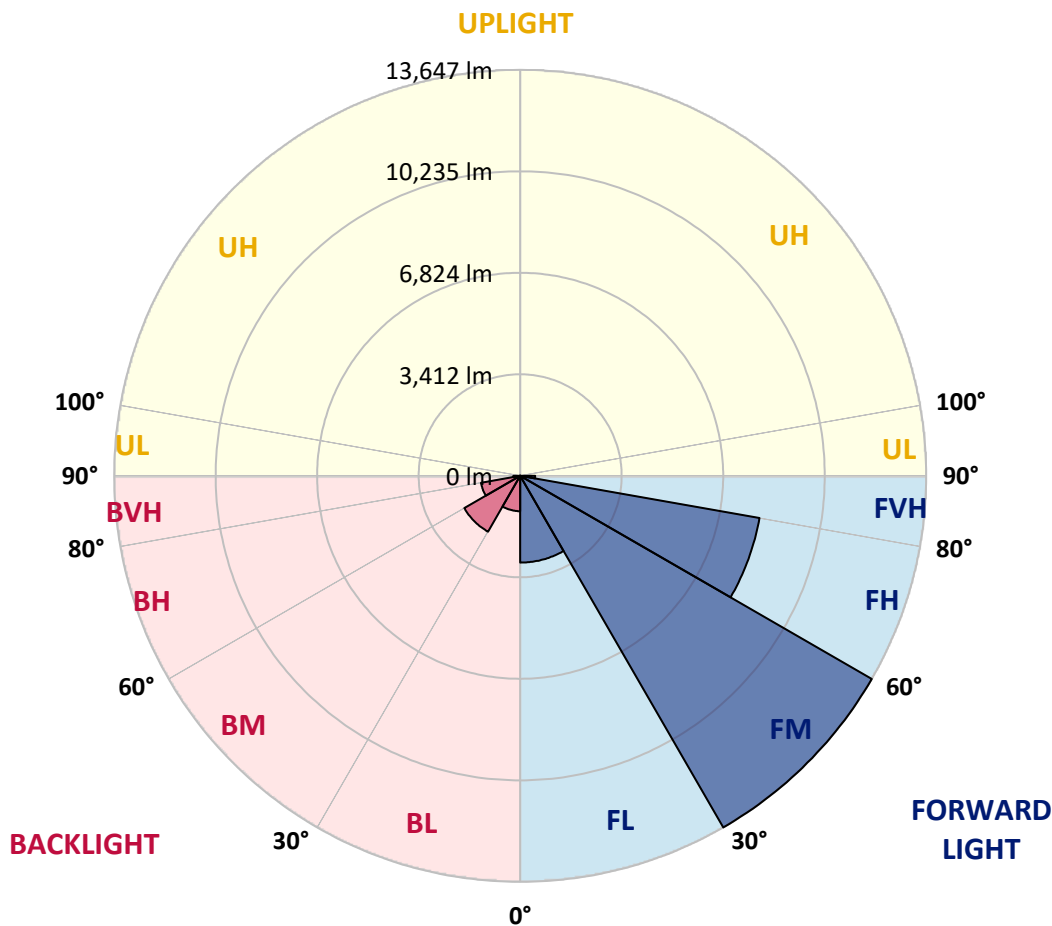
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2917.8	9.7			
FM (30°-60°)	13647.3	45.2			
FH (60°-80°)	8167.3	27.1			G4/12000
FVH (80°-90°)	506.2	1.7			G4/750
BL (0°-30°)	1189.4	3.9	B3/2500		
BM (30°-60°)	2168.2	7.2	B2/2500		
BH (60°-80°)	1335.7	4.4	B3/2500		G3/2500
BVH (80°-90°)	231.2	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-G4**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3772.0	3772.0	3772.0	3772.0	3772.0	3772.0	3772.0	3772.0	3772.0	3772.0	3772.0
2.5°	4807.2	4771.5	4767.6	4712.0	4660.5	4521.7	4422.5	4248.0	4073.5	4069.5	3895.0
5°	5556.9	5521.2	5501.3	5433.9	5346.7	5164.2	4985.7	4716.0	4418.5	4398.7	4069.5
7.5°	6064.6	6032.8	5993.2	5965.4	5882.1	5719.5	5501.3	5180.1	4771.5	4731.9	4271.8
10°	6405.7	6385.8	6377.9	6358.1	6306.5	6175.6	5965.4	5624.3	5124.5	5080.9	4486.0
12.5°	6552.4	6544.5	6580.2	6635.7	6655.6	6604.0	6401.7	6080.4	5513.2	5465.6	4743.8
15°	6381.9	6389.8	6481.0	6671.4	6873.7	6984.8	6865.8	6552.4	5953.5	5886.1	5045.2
17.5°	6302.6	6314.5	6377.9	6560.4	6845.9	7191.0	7246.5	7000.6	6377.9	6282.7	5362.5
20°	6441.4	6457.2	6504.8	6647.6	6845.9	7214.8	7504.4	7429.0	6794.4	6695.2	5667.9
22.5°	6794.4	6814.2	6810.2	6901.5	7036.3	7290.2	7647.1	7833.6	7230.7	7119.6	5985.2
25°	7548.0	7532.1	7397.3	7353.6	7389.3	7552.0	7837.5	8222.3	7686.8	7575.8	6318.4
27.5°	8571.3	8551.5	8305.6	8083.4	7885.1	7956.5	8107.2	8535.6	8150.9	8024.0	6635.7
30°	9666.0	9642.2	9356.7	8995.7	8555.4	8452.3	8432.5	8809.3	8618.9	8484.1	6972.9
32.5°	10733.0	10713.1	10407.7	9987.3	9380.5	9071.1	8880.7	9114.7	9150.4	9019.5	7341.7
35°	11704.7	11704.7	11443.0	10943.2	10257.0	9789.0	9475.6	9491.5	9761.2	9610.5	7762.2
37.5°	12569.4	12565.4	12279.9	11788.0	11129.6	10594.2	10205.5	9947.6	10344.3	10213.4	8202.4
40°	13255.6	13227.8	13017.6	12589.2	11926.9	11395.4	11002.7	10483.1	10994.8	10875.8	8670.5
42.5°	13755.4	13739.5	13596.7	13223.9	12593.2	12093.4	11823.7	11157.4	11732.5	11613.5	9217.8
45°	13949.7	13981.4	13981.4	13628.4	13128.7	12672.5	12553.5	11899.1	12529.7	12410.8	9804.9
47.5°	13636.4	13719.7	13890.2	13914.0	13473.7	13164.4	13204.0	12644.8	13350.8	13287.3	10447.4
50°	12656.7	12811.4	13184.2	13858.5	13612.6	13541.2	13759.3	13406.3	14231.3	14211.5	11228.8
52.5°	10130.1	10506.9	11669.0	12878.8	13517.4	13715.7	14310.6	14263.0	15365.7	15397.4	12248.1
55°	7770.1	7912.9	9257.5	11316.0	12934.3	13660.2	14679.5	15099.9	16595.3	16634.9	13184.2
57.5°	6282.7	6377.9	7111.7	9257.5	11605.6	13358.7	14969.1	15587.8	17539.3	17642.4	14017.1
60°	4977.8	5116.6	5608.4	7083.9	9745.4	12632.9	15171.3	16131.2	18554.7	18709.3	15012.7
62.5°	3700.6	3768.0	4232.1	5247.5	7714.6	11327.9	15064.3	16722.2	19800.1	19986.5	16210.5
65°	2633.7	2693.2	3022.4	3732.3	5703.6	9562.9	14441.5	17162.5	21362.8	21553.2	17416.3
67.5°	1971.3	1995.1	2181.5	2609.9	3843.4	7429.0	13180.2	17087.1	22505.1	22675.7	17900.2
70°	1558.8	1566.7	1657.9	1888.0	2498.8	5172.1	10971.0	15980.5	22588.4	22739.2	17289.4
72.5°	1293.0	1289.1	1340.6	1451.7	1741.2	3272.3	8127.1	13925.9	21517.5	21620.7	15583.8
75°	1067.0	1074.9	1110.6	1174.0	1328.7	2157.7	5267.3	11109.8	18983.0	18872.0	13077.1
77.5°	896.4	892.4	908.3	963.8	1074.9	1550.8	3085.8	8027.9	14068.7	14013.2	8583.2
80°	721.9	729.8	753.6	801.2	904.3	1182.0	1824.5	5009.5	7548.0	7345.7	4101.2
82.5°	483.9	559.3	606.9	662.4	781.4	872.6	1158.2	2546.4	3375.4	3323.8	1860.2
85°	230.0	305.4	452.2	515.6	634.6	547.4	785.3	1213.7	1689.7	1669.8	670.3
87.5°	47.6	47.6	241.9	289.5	392.7	234.0	436.3	527.5	817.1	765.5	273.7
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°	3772.0	3772.0	3772.0	3772.0	3772.0	3772.0	3772.0	3772.0	3772.0	3772.0	3772.0
2.5°	3791.8	3684.8	3470.6	3300.0	3125.5	3026.3	2903.4	2843.9	2832.0	2800.3	2824.1
5°	3859.3	3649.1	3244.5	2978.7	2800.3	2713.0	2669.4	2653.5	2649.5	2641.6	2641.6
7.5°	3950.5	3629.2	3101.7	2832.0	2717.0	2689.2	2701.1	2724.9	2728.9	2736.8	2732.8
10°	4061.6	3633.2	3022.4	2796.3	2740.8	2744.7	2784.4	2816.1	2832.0	2843.9	2839.9
12.5°	4216.2	3680.8	3010.5	2820.1	2796.3	2812.2	2851.8	2883.5	2899.4	2903.4	2903.4
15°	4418.5	3779.9	3038.2	2871.6	2851.8	2863.7	2887.5	2899.4	2903.4	2899.4	2899.4
17.5°	4640.6	3898.9	3077.9	2903.4	2871.6	2859.7	2851.8	2839.9	2816.1	2800.3	2800.3
20°	4854.8	4006.0	3097.7	2899.4	2843.9	2796.3	2748.7	2689.2	2649.5	2617.8	2617.8
22.5°	5069.0	4105.2	3097.7	2855.8	2768.5	2677.3	2578.1	2482.9	2423.4	2383.8	2383.8
25°	5295.1	4200.4	3073.9	2780.4	2649.5	2518.6	2383.8	2264.8	2205.3	2165.6	2157.7
27.5°	5485.5	4255.9	3010.5	2673.3	2502.8	2336.2	2181.5	2058.5	2014.9	1979.2	1979.2
30°	5687.8	4291.6	2891.5	2534.5	2336.2	2145.8	1987.1	1888.0	1840.4	1788.8	1784.9
32.5°	5913.8	4315.4	2756.6	2387.8	2165.6	1963.4	1828.5	1749.2	1646.0	1590.5	1582.6
35°	6175.6	4347.1	2613.8	2221.2	1995.1	1812.6	1733.3	1602.4	1503.3	1455.7	1451.7
37.5°	6453.3	4370.9	2459.1	2074.4	1840.4	1713.5	1634.1	1479.5	1392.2	1320.8	1312.9
40°	6746.8	4370.9	2300.5	1931.6	1717.4	1669.8	1519.1	1380.3	1233.5	1197.8	1189.9
42.5°	7072.0	4363.0	2141.8	1792.8	1602.4	1570.7	1451.7	1304.9	1229.6	1197.8	1189.9
45°	7417.1	4335.2	1991.1	1634.1	1483.4	1420.0	1328.7	1289.1	1257.3	1257.3	1257.3
47.5°	7809.8	4311.4	1820.6	1491.4	1396.2	1324.8	1257.3	1233.5	1229.6	1241.5	1253.4
50°	8313.5	4303.5	1677.8	1388.2	1328.7	1245.4	1237.5	1217.7	1221.6	1221.6	1221.6
52.5°	8924.3	4232.1	1542.9	1312.9	1261.3	1162.1	1185.9	1205.8	1213.7	1209.7	1205.8
55°	9372.5	4105.2	1427.9	1261.3	1213.7	1130.4	1162.1	1193.9	1201.8	1189.9	1189.9
57.5°	9777.1	3926.7	1336.7	1221.6	1182.0	1110.6	1146.3	1178.0	1170.1	1166.1	1162.1
60°	10241.2	3756.1	1265.3	1201.8	1150.2	1102.6	1134.4	1154.2	1142.3	1134.4	1130.4
62.5°	10744.9	3589.6	1213.7	1201.8	1126.4	1098.7	1122.5	1130.4	1106.6	1098.7	1098.7
65°	10978.9	3327.8	1158.2	1201.8	1114.5	1090.8	1098.7	1090.8	1067.0	1067.0	1063.0
67.5°	10594.2	2895.4	1086.8	1185.9	1130.4	1078.9	1063.0	1051.1	1023.3	1023.3	1015.4
70°	9531.2	2379.8	983.7	1134.4	1134.4	1074.9	1015.4	987.6	955.9	967.8	951.9
72.5°	8142.9	1888.0	856.7	1047.1	1110.6	1070.9	963.8	920.2	892.4	904.3	880.5
75°	6596.1	1463.6	706.0	908.3	1051.1	1051.1	912.3	852.8	821.0	821.0	793.3
77.5°	4204.3	1082.8	575.1	753.6	944.0	1023.3	868.6	777.4	729.8	717.9	698.1
80°	2082.3	761.5	472.0	598.9	805.2	959.9	836.9	690.1	622.7	598.9	563.2
82.5°	1106.6	527.5	376.8	468.0	642.6	864.7	797.2	595.0	511.7	476.0	436.3
85°	495.8	325.2	301.4	357.0	487.9	710.0	717.9	487.9	392.7	468.0	345.1
87.5°	182.5	146.8	146.8	182.5	281.6	297.5	507.7	313.3	249.9	170.6	134.9
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)