

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: P236873

Luminaire Tested: **ARCH-L-AF72-200-D-U-T2R-7050**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236873  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-200-D-U-T2R-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24589 lumens  
Efficiency: N/A  
Efficacy: 122.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

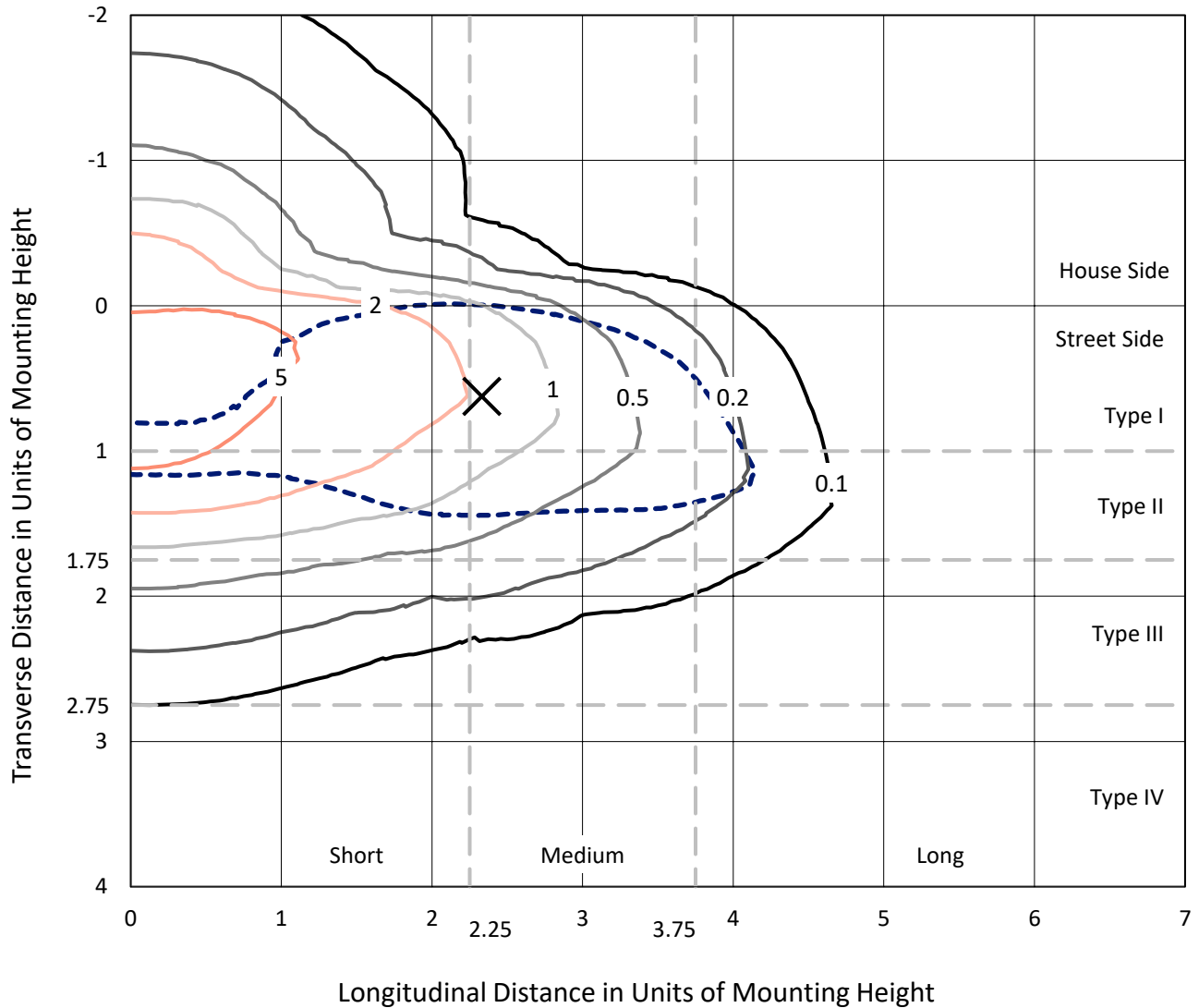
Input Watts (W): 201  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

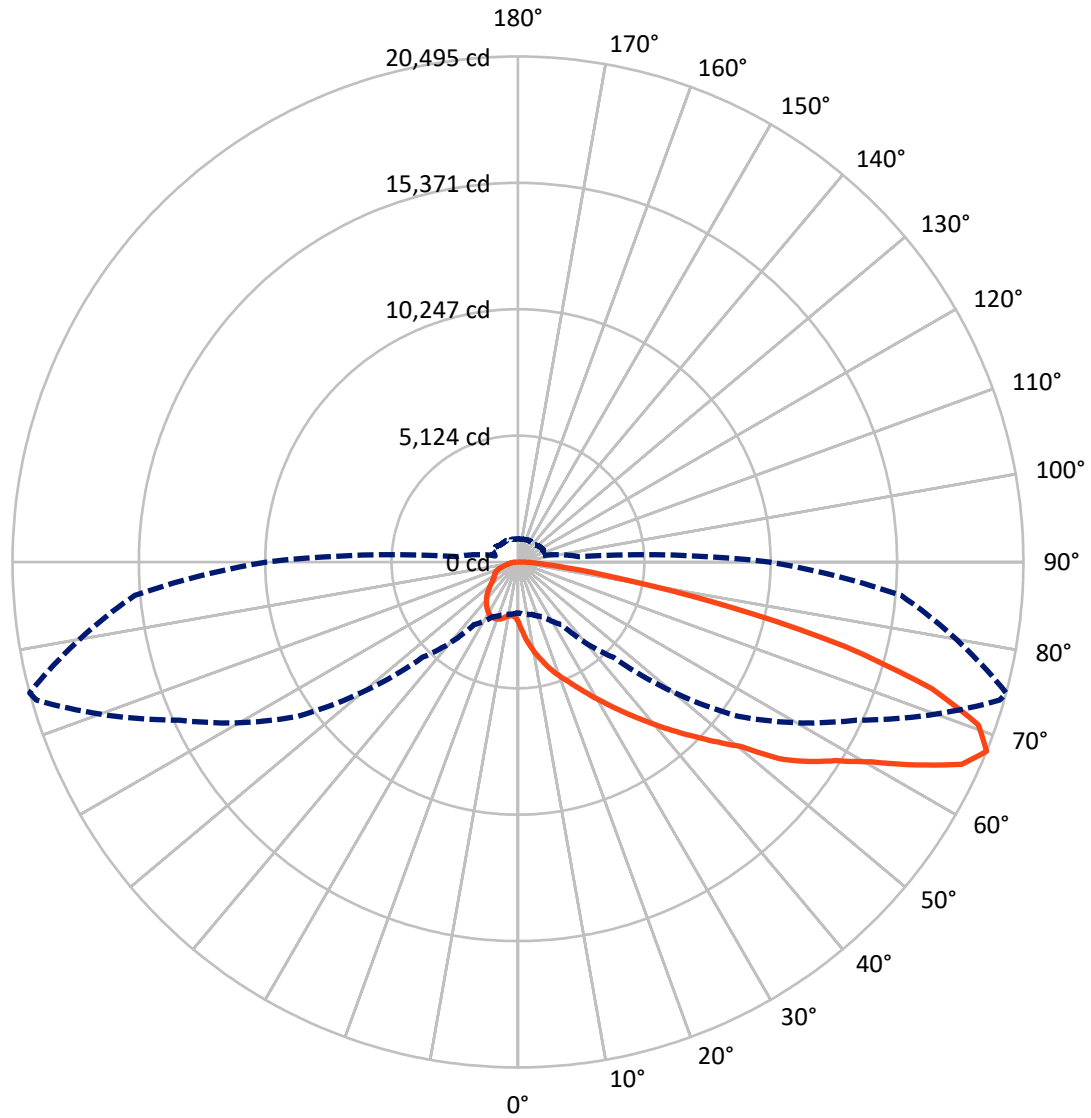
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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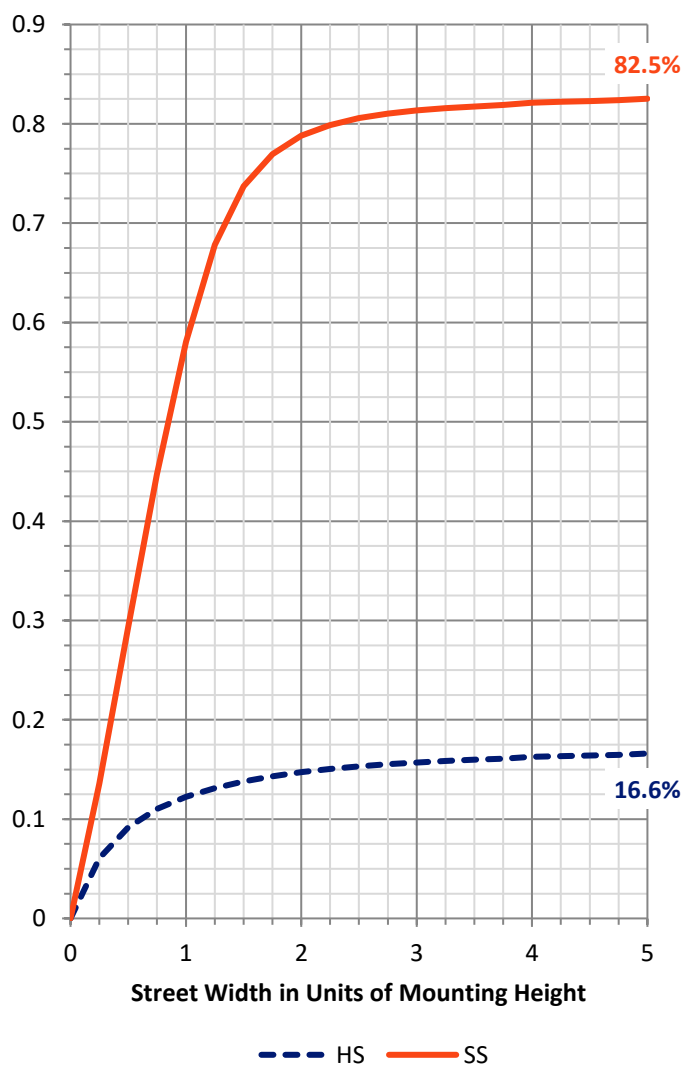
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4198.9	0.0	4198.9
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	20390.1	0.0	20390.1
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	24589.0	0.0	24589.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	286.2	1.2
10°-20°	1034.4	4.2
20°-30°	1886.7	7.7
30°-40°	3096.9	12.6
40°-50°	4478.6	18.2
50°-60°	5278.0	21.5
60°-70°	5128.9	20.9
70°-80°	2851.0	11.6
80°-90°	548.2	2.2
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°	24589.0	100.0
0°-180°	24589.0	100.0

**Coefficient of Utilization**



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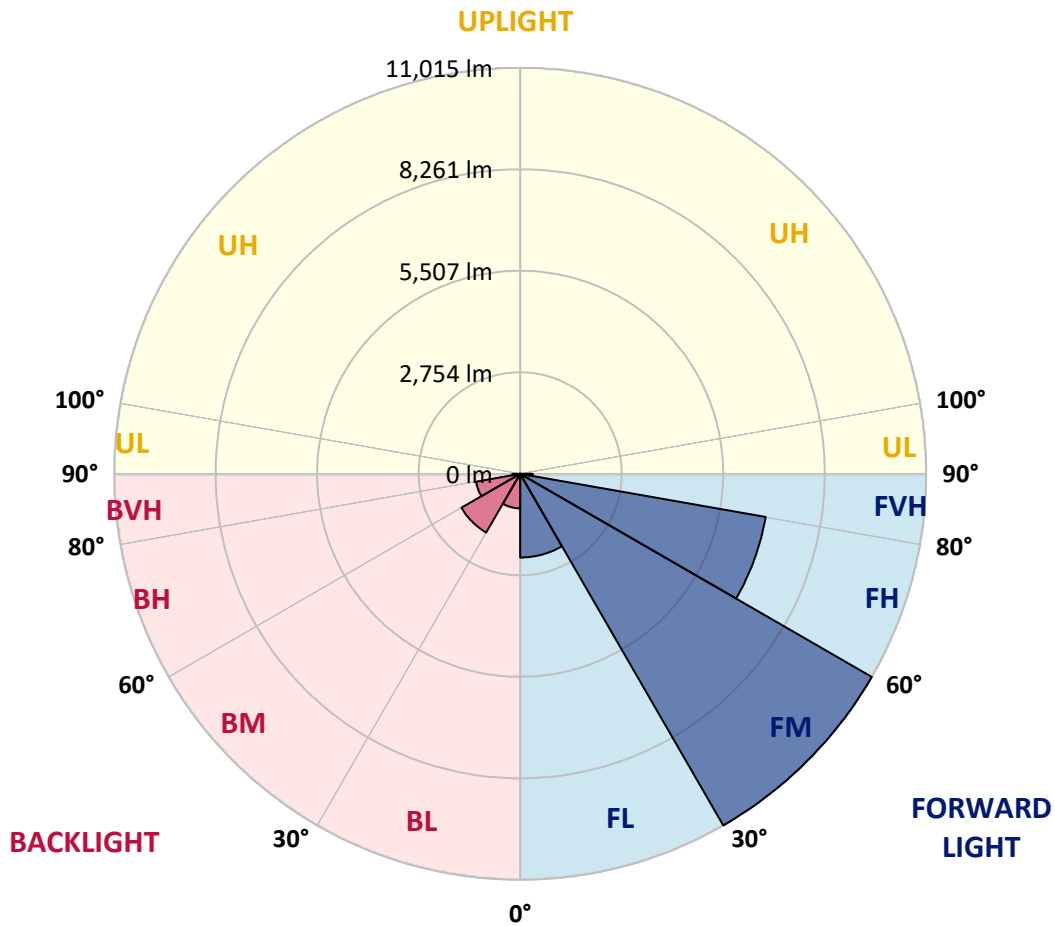
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2270.2	9.2			
FM (30°-60°)	11014.6	44.8			
FH (60°-80°)	6764.1	27.5			G3/7500
FVH (80°-90°)	341.2	1.4			G3/500
BL (0°-30°)	937.2	3.8	B2/1000		
BM (30°-60°)	1838.9	7.5	B2/2500		
BH (60°-80°)	1215.8	4.9	B3/2500		G3/2500
BVH (80°-90°)	207.0	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2436.5	2436.5	2436.5	2436.5	2436.5	2436.5	2436.5	2436.5	2436.5	2436.5	2436.5
2.5°	3454.3	3464.6	3444.0	3397.8	3331.0	3207.6	3099.6	2909.4	2739.8	2719.2	2539.3
5°	4060.9	4071.2	4045.5	3988.9	3917.0	3783.3	3634.2	3387.5	3115.1	3063.7	2683.3
7.5°	4477.3	4482.4	4451.5	4395.0	4338.5	4204.8	4055.7	3778.2	3444.0	3402.9	2868.3
10°	4831.9	4842.2	4801.1	4765.1	4703.4	4569.8	4415.6	4122.6	3778.2	3721.6	3058.5
12.5°	5160.9	5171.2	5145.5	5114.7	5094.1	4970.7	4801.1	4451.5	4081.4	4019.8	3284.7
15°	5382.0	5392.2	5397.4	5438.5	5464.2	5376.8	5207.2	4826.8	4410.4	4353.9	3552.0
17.5°	5320.3	5346.0	5423.1	5572.1	5731.5	5736.6	5597.8	5196.9	4734.3	4672.6	3824.4
20°	5140.4	5160.9	5253.4	5479.6	5793.2	5973.1	5962.8	5572.1	5037.5	4970.7	4076.3
22.5°	5289.4	5315.1	5315.1	5453.9	5762.3	6096.5	6230.1	5942.3	5340.8	5279.1	4328.2
25°	5926.8	5942.3	5834.3	5777.8	5890.8	6199.3	6451.1	6343.2	5710.9	5639.0	4600.6
27.5°	6816.1	6790.4	6656.8	6430.6	6307.2	6389.5	6646.5	6723.6	6137.6	6050.2	4883.3
30°	7700.3	7684.8	7530.6	7227.3	6949.8	6775.0	6862.4	7062.8	6600.2	6497.4	5155.8
32.5°	8527.9	8502.1	8332.5	7977.8	7664.3	7340.4	7170.8	7371.3	7093.7	6975.5	5459.1
35°	9288.6	9221.8	9052.2	8682.1	8358.2	8049.8	7633.4	7664.3	7628.3	7504.9	5793.2
37.5°	9905.5	9854.1	9669.0	9324.6	8980.2	8687.2	8250.3	7998.4	8204.0	8085.8	6178.7
40°	10450.3	10393.8	10203.6	9859.2	9540.5	9262.9	8918.5	8404.5	8851.7	8718.0	6610.5
42.5°	10861.6	10820.5	10666.2	10327.0	10018.6	9766.7	9597.0	8918.5	9525.1	9396.6	7083.4
45°	11082.6	11041.5	10959.2	10686.8	10404.1	10208.7	10224.2	9530.2	10229.3	10121.4	7643.7
47.5°	10810.2	10841.0	10913.0	10861.6	10686.8	10594.3	10784.5	10162.5	11015.8	10913.0	8250.3
50°	10080.2	10111.1	10398.9	10753.6	10815.3	10928.4	11288.2	10892.4	11848.5	11766.3	9000.8
52.5°	8286.3	8455.9	9252.6	10100.8	10681.7	11149.4	11848.5	11977.0	13251.8	13251.8	10327.0
55°	6261.0	6410.0	7319.9	8800.3	10162.5	11170.0	12259.7	12712.1	14264.5	14285.1	11020.9
57.5°	5073.5	5166.1	5613.3	7129.7	9072.7	10913.0	12748.1	13344.4	15107.5	15200.0	11915.3
60°	4117.4	4168.8	4461.8	5515.6	7566.6	10219.0	13097.6	14249.1	16310.4	16438.9	13056.5
62.5°	3310.4	3361.8	3557.1	4189.4	5937.1	8918.5	13035.9	15189.8	17914.1	18124.9	14552.3
65°	2642.1	2698.7	2827.2	3217.9	4400.1	7304.4	12403.7	15672.9	19574.5	19780.1	15544.4
67.5°	2061.3	2112.7	2200.1	2457.1	3099.6	5464.2	10907.8	15164.1	20319.8	20494.6	15595.8
70°	1557.5	1583.2	1655.2	1819.7	2215.5	3629.1	8538.1	13457.5	19651.6	19810.9	14567.8
72.5°	1208.0	1202.8	1244.0	1326.2	1547.2	2498.2	5659.5	10943.8	17374.4	17538.9	12429.4
75°	986.9	981.8	1007.5	1033.2	1120.6	1675.8	3341.2	8240.0	14022.9	13709.3	9324.6
77.5°	832.7	827.6	853.3	858.4	894.4	1156.6	1901.9	5423.1	9355.4	8815.7	5253.4
80°	704.2	699.1	729.9	740.2	765.9	848.2	1094.9	2935.1	4698.3	4451.5	2508.5
82.5°	529.5	550.0	606.6	632.3	663.1	627.1	678.5	1295.4	2179.5	2081.8	1089.8
85°	257.0	303.3	457.5	508.9	544.9	395.8	462.6	611.7	981.8	935.5	442.1
87.5°	87.4	77.1	272.4	323.8	354.7	179.9	257.0	339.3	406.1	370.1	138.8
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°	2436.5	2436.5	2436.5	2436.5	2436.5	2436.5	2436.5	2436.5	2436.5	2436.5	2436.5
2.5°	2462.2	2385.1	2272.0	2184.7	2128.1	2081.8	2061.3	2056.1	2045.9	2040.7	2040.7
5°	2513.6	2374.8	2200.1	2107.5	2081.8	2061.3	2071.6	2076.7	2076.7	2076.7	2076.7
7.5°	2590.7	2395.4	2184.7	2123.0	2117.8	2117.8	2148.7	2164.1	2174.4	2174.4	2174.4
10°	2693.5	2431.4	2210.4	2158.9	2174.4	2184.7	2220.6	2241.2	2251.5	2256.6	2261.8
12.5°	2832.3	2508.5	2261.8	2220.6	2241.2	2246.3	2272.0	2282.3	2292.6	2297.7	2297.7
15°	3017.4	2621.6	2344.0	2292.6	2297.7	2292.6	2292.6	2282.3	2277.2	2277.2	2287.5
17.5°	3207.6	2729.5	2416.0	2344.0	2323.4	2282.3	2251.5	2225.8	2210.4	2200.1	2205.2
20°	3397.8	2827.2	2457.1	2354.3	2297.7	2230.9	2174.4	2138.4	2117.8	2097.3	2107.5
22.5°	3588.0	2919.7	2472.5	2323.4	2241.2	2143.5	2081.8	2025.3	1979.0	1948.2	1953.3
25°	3798.7	3022.5	2472.5	2287.5	2164.1	2061.3	1984.2	1891.7	1824.8	1799.1	1809.4
27.5°	4009.5	3109.9	2446.8	2220.6	2076.7	1973.9	1860.8	1752.9	1711.7	1696.3	1701.5
30°	4220.2	3176.7	2390.3	2138.4	1984.2	1871.1	1722.0	1650.1	1598.7	1557.5	1562.7
32.5°	4431.0	3223.0	2313.2	2035.6	1886.5	1742.6	1619.2	1537.0	1444.4	1393.0	1398.2
35°	4672.6	3259.0	2220.6	1932.8	1778.6	1629.5	1537.0	1403.3	1305.7	1264.5	1254.2
37.5°	4924.5	3284.7	2123.0	1819.7	1670.6	1547.2	1454.7	1290.2	1197.7	1141.2	1136.0
40°	5196.9	3295.0	2004.7	1701.5	1567.8	1495.8	1346.8	1223.4	1064.1	1028.1	1028.1
42.5°	5520.7	3289.8	1886.5	1583.2	1454.7	1377.6	1269.7	1213.1	1074.3	1038.4	1017.8
45°	5890.8	3289.8	1758.0	1444.4	1341.6	1228.5	1182.3	1146.3	1053.8	1069.2	1079.5
47.5°	6312.4	3279.5	1603.8	1331.4	1249.1	1151.4	1125.7	1048.6	1012.7	1022.9	1033.2
50°	6893.2	3295.0	1465.0	1238.8	1182.3	1100.0	1069.2	1028.1	1012.7	1017.8	1012.7
52.5°	7700.3	3243.6	1331.4	1182.3	1130.9	1022.9	1022.9	1017.8	1022.9	1017.8	1017.8
55°	8142.3	3130.5	1233.7	1151.4	1094.9	986.9	1007.5	1017.8	1028.1	1022.9	1022.9
57.5°	8769.4	3053.4	1156.6	1130.9	1074.3	976.7	997.2	1017.8	1022.9	1017.8	1017.8
60°	9509.7	3002.0	1105.2	1136.0	1058.9	976.7	1002.4	1017.8	1012.7	1007.5	1007.5
62.5°	10368.1	2981.4	1069.2	1151.4	1043.5	981.8	1002.4	1017.8	997.2	992.1	992.1
65°	10691.9	2796.4	1022.9	1161.7	1053.8	981.8	997.2	1002.4	976.7	971.5	966.4
67.5°	10193.3	2477.7	956.1	1141.2	1084.6	981.8	981.8	976.7	945.8	940.7	930.4
70°	9077.9	2056.1	853.3	1074.3	1105.2	986.9	961.2	935.5	904.7	904.7	884.1
72.5°	7433.0	1619.2	719.6	956.1	1089.8	1002.4	920.1	884.1	848.2	848.2	827.6
75°	5356.3	1208.0	575.7	796.8	1022.9	997.2	868.7	822.5	781.3	776.2	750.5
77.5°	3053.4	848.2	467.8	622.0	909.8	971.5	822.5	750.5	704.2	688.8	673.4
80°	1567.8	570.6	380.4	488.3	755.6	899.6	786.5	668.2	616.8	591.1	565.4
82.5°	745.4	380.4	293.0	359.8	570.6	786.5	740.2	575.7	519.2	488.3	457.5
85°	334.1	226.2	195.3	231.3	406.1	611.7	652.8	472.9	406.1	508.9	375.2
87.5°	107.9	102.8	102.8	107.9	195.3	267.3	478.1	349.5	323.8	267.3	226.2
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)