

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: P237347

Luminaire Tested: **ARCH-L-AF72-140-D-U-T4W-7050**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237347  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-140-D-U-T4W-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18837 lumens  
Efficiency: N/A  
Efficacy: 131.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

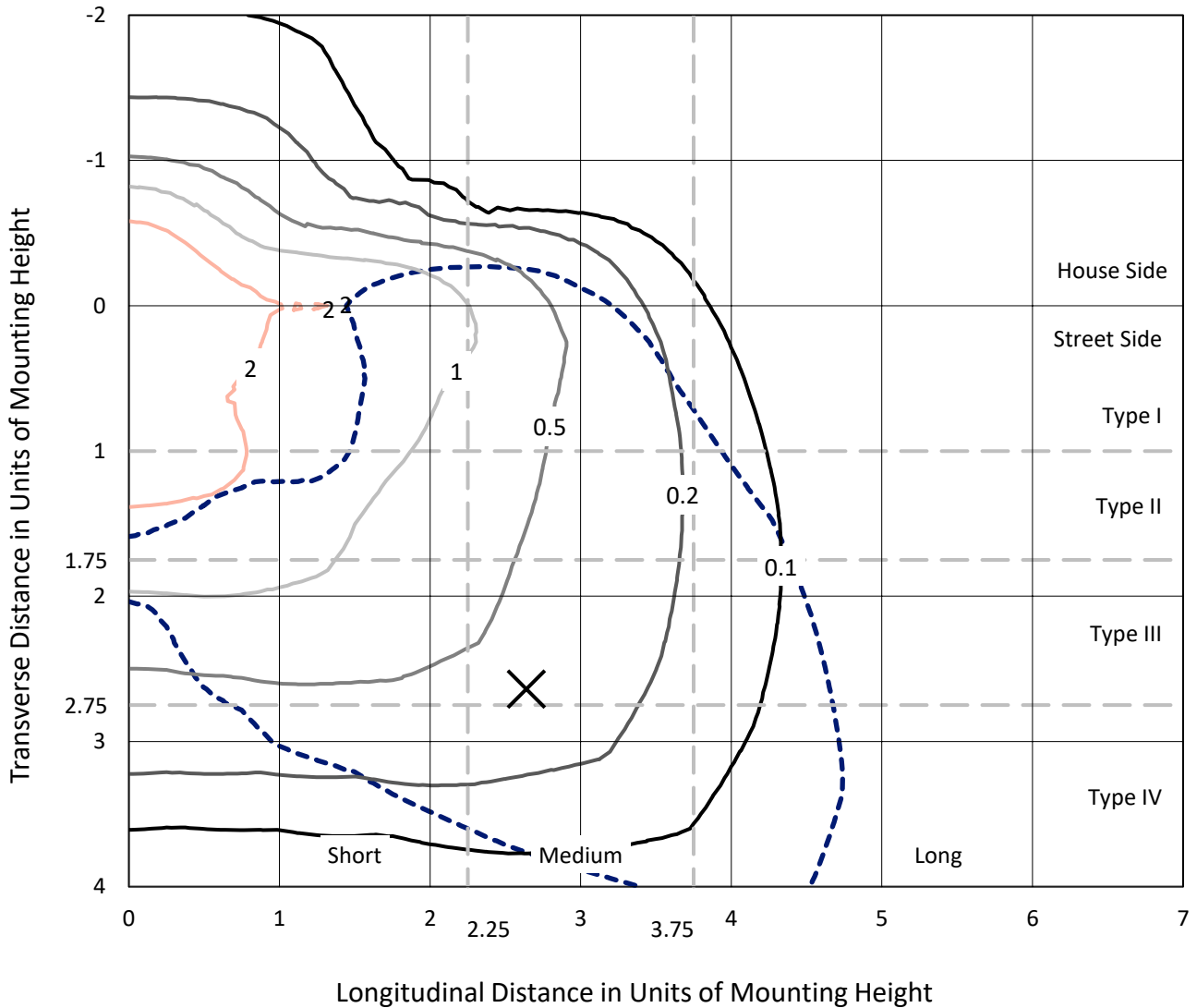
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P237347  
 CATALOG NUMBER: ARCH-L-AF72-140-D-U-T4W-7050

### Iso-Footcandle Lines of Horizontal Illumination

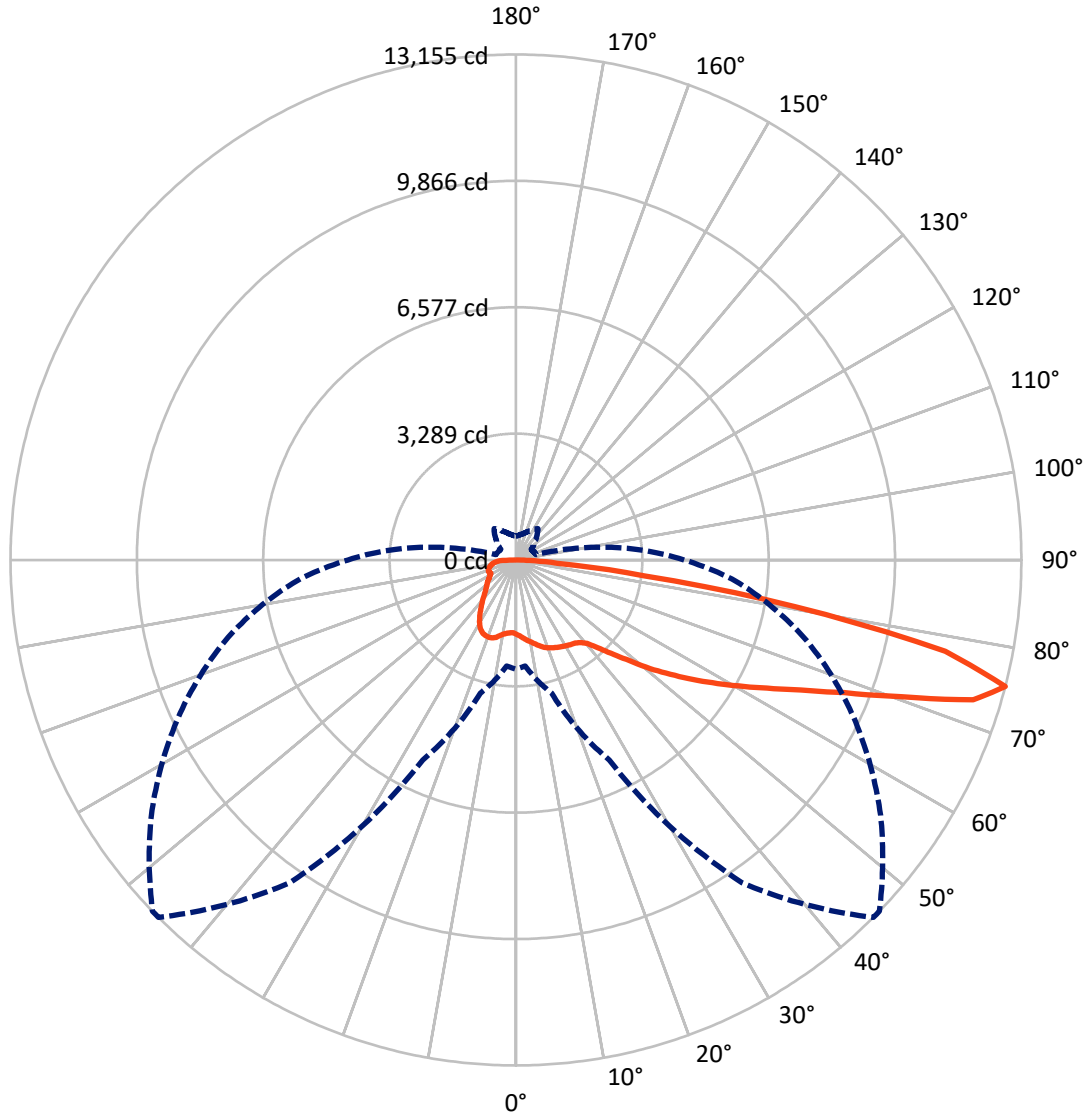
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P237347  
CATALOG NUMBER: ARCH-L-AF72-140-D-U-T4W-7050

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P237347  
 CATALOG NUMBER: ARCH-L-AF72-140-D-U-T4W-7050

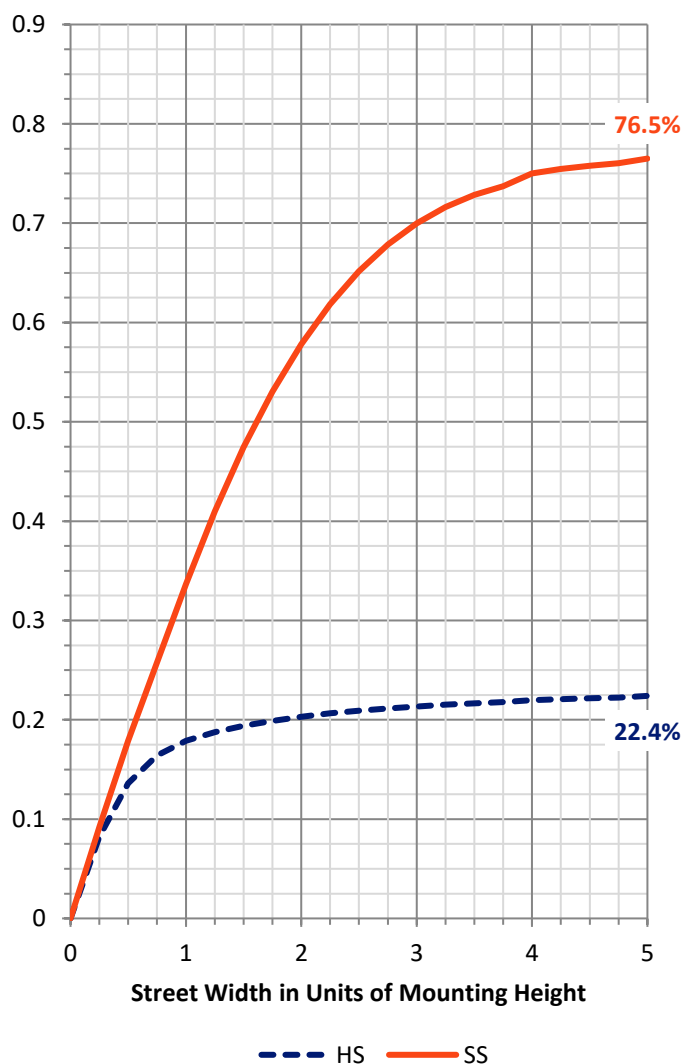
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4363.8	0.0	4363.8
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	14473.2	0.0	14473.2
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	18837.0	0.0	18837.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.4	1.0
10°-20°	620.1	3.3
20°-30°	1064.2	5.6
30°-40°	1488.3	7.9
40°-50°	2183.3	11.6
50°-60°	3401.0	18.1
60°-70°	4893.7	26.0
70°-80°	4263.0	22.6
80°-90°	732.1	3.9
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°	18837.0	100.0
0°-180°	18837.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P237347

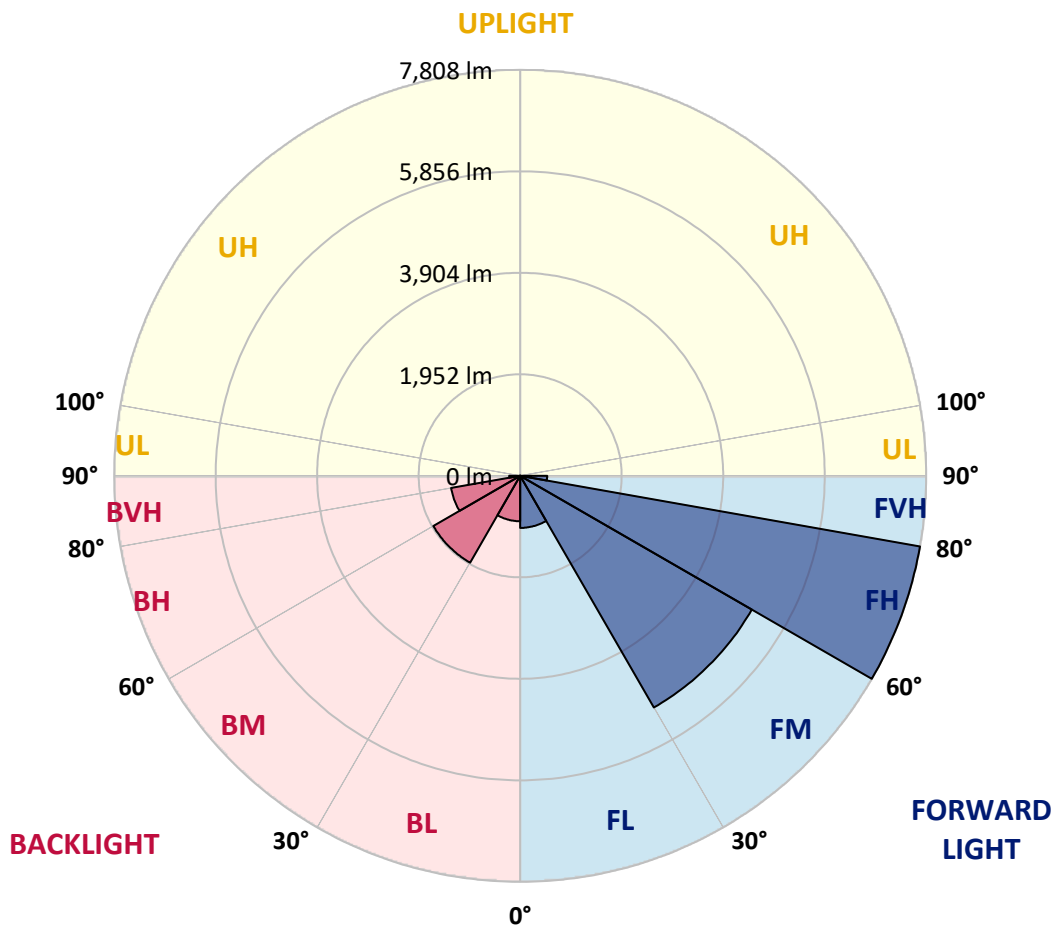
CATALOG NUMBER: ARCH-L-AF72-140-D-U-T4W-7050

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1001.7	5.3			
FM (30°-60°)	5144.0	27.3			
FH (60°-80°)	7808.1	41.5			G4/12000
FVH (80°-90°)	519.4	2.8			G4/750
BL (0°-30°)	874.0	4.6	B2/1000		
BM (30°-60°)	1928.5	10.2	B2/2500		
BH (60°-80°)	1348.5	7.2	B3/2500		G3/2500
BVH (80°-90°)	212.7	1.1			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type IV Medium





REPORT NUMBER: P237347

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T4W-7050

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1931.1	1931.1	1931.1	1931.1	1931.1	1931.1	1931.1	1931.1	1931.1	1931.1	1931.1
2.5°	2026.3	2011.7	2011.7	2000.7	2000.7	1982.4	1975.0	1971.4	1953.0	1942.1	1931.1
5°	2143.6	2125.3	2121.6	2096.0	2085.0	2044.7	2041.0	2015.3	1982.4	1949.4	1923.7
7.5°	2249.8	2238.9	2220.5	2194.9	2161.9	2110.6	2106.9	2066.6	2011.7	1967.7	1931.1
10°	2326.8	2319.5	2293.8	2260.8	2224.2	2172.9	2169.2	2125.3	2059.3	2008.0	1956.7
12.5°	2418.4	2407.4	2374.4	2330.5	2290.2	2242.5	2238.9	2202.2	2128.9	2063.0	1997.0
15°	2506.3	2491.7	2451.4	2407.4	2363.4	2323.1	2323.1	2282.8	2205.9	2128.9	2052.0
17.5°	2550.3	2543.0	2502.7	2455.0	2418.4	2389.1	2385.4	2348.8	2271.8	2191.2	2106.9
20°	2565.0	2568.6	2532.0	2480.7	2455.0	2440.4	2436.7	2411.1	2326.8	2249.8	2169.2
22.5°	2561.3	2572.3	2543.0	2488.0	2480.7	2480.7	2480.7	2451.4	2385.4	2308.5	2227.9
25°	2576.0	2590.6	2568.6	2502.7	2502.7	2517.3	2517.3	2502.7	2444.1	2378.1	2297.5
27.5°	2627.3	2638.3	2619.9	2528.3	2532.0	2554.0	2550.3	2554.0	2517.3	2455.0	2374.4
30°	2689.6	2704.2	2682.2	2568.6	2565.0	2587.0	2587.0	2605.3	2579.6	2513.7	2447.7
32.5°	2858.1	2854.5	2784.8	2612.6	2601.6	2623.6	2623.6	2641.9	2627.3	2576.0	2513.7
35°	3360.1	3305.2	3151.3	2755.5	2645.6	2656.6	2656.6	2689.6	2696.9	2656.6	2601.6
37.5°	3873.1	3854.8	3737.5	3136.6	2806.8	2726.2	2722.5	2770.2	2803.2	2770.2	2733.5
40°	4389.8	4375.1	4349.5	3645.9	3143.9	2850.8	2839.8	2880.1	2938.7	2916.7	2894.8
42.5°	4869.8	4862.5	4888.1	4147.9	3572.6	3118.3	3085.3	3037.7	3121.9	3114.6	3114.6
45°	5247.2	5265.5	5280.2	4617.0	4038.0	3462.7	3422.4	3261.2	3374.8	3404.1	3426.1
47.5°	5459.7	5474.4	5525.7	5075.0	4503.4	3862.1	3832.8	3569.0	3719.2	3807.2	3869.4
50°	5763.9	5723.6	5767.5	5522.0	5064.0	4382.4	4301.8	3983.0	4173.6	4327.5	4474.0
52.5°	6057.0	5991.0	6027.7	6038.7	5701.6	4891.8	4807.5	4470.4	4708.6	4950.4	5210.6
55°	6320.8	6317.2	6353.8	6540.7	6317.2	5437.7	5342.5	5009.0	5353.5	5613.6	6053.3
57.5°	6533.4	6570.0	6731.2	7123.3	7028.0	6031.4	5925.1	5635.6	6042.3	6302.5	7031.7
60°	6782.5	6841.2	7108.6	7618.0	7676.6	6654.3	6544.4	6335.5	6749.5	7013.4	8163.9
62.5°	6866.8	6951.1	7500.7	8138.3	8354.5	7335.8	7236.9	7097.7	7493.4	7731.6	9292.5
65°	6306.2	6467.4	7716.9	8405.8	9083.7	8156.6	8072.3	7951.4	8233.6	8391.1	10058.4
67.5°	6152.3	6225.6	7295.5	8790.5	9768.9	9211.9	9127.6	8918.8	8926.1	8860.2	10307.5
70°	5936.1	6016.7	6863.1	9080.0	10750.9	10655.6	10553.0	9937.4	9560.0	9160.6	9816.5
72.5°	5056.7	5031.0	5914.1	8299.5	11223.6	12443.8	12322.9	11033.1	10029.1	8900.5	8284.9
75°	2839.8	2766.5	3587.3	5741.9	10248.9	13154.7	13151.0	11586.4	9699.3	7753.6	5639.3
77.5°	824.5	802.5	1183.6	2407.4	6899.8	11428.8	11568.0	10450.4	8094.3	5569.7	3096.3
80°	388.4	395.7	509.3	795.1	2946.1	7376.1	7775.5	6881.5	4836.8	2568.6	1278.8
82.5°	245.5	249.2	348.1	513.0	1245.8	3349.1	3678.9	3096.3	1916.4	1110.3	564.3
85°	153.9	153.9	230.8	337.1	743.8	1070.0	1161.6	1055.3	820.8	604.6	307.8
87.5°	84.3	84.3	139.2	194.2	406.7	344.4	355.4	421.4	513.0	370.1	153.9
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: P237347

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T4W-7050

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1931.1	1931.1	1931.1	1931.1	1931.1	1931.1	1931.1	1931.1	1931.1	1931.1	1931.1
2.5°	1927.4	1920.1	1909.1	1905.4	1901.7	1898.1	1901.7	1909.1	1901.7	1901.7	1905.4
5°	1916.4	1909.1	1894.4	1894.4	1898.1	1901.7	1920.1	1931.1	1934.7	1934.7	1934.7
7.5°	1916.4	1905.4	1894.4	1898.1	1905.4	1920.1	1949.4	1967.7	1982.4	1986.0	1986.0
10°	1934.7	1920.1	1912.7	1920.1	1942.1	1953.0	1982.4	2011.7	2030.0	2037.3	2037.3
12.5°	1967.7	1953.0	1953.0	1967.7	1997.0	2011.7	2037.3	2059.3	2081.3	2092.3	2092.3
15°	2022.7	2004.3	2008.0	2033.7	2066.6	2081.3	2099.6	2106.9	2125.3	2139.9	2139.9
17.5°	2074.0	2055.6	2063.0	2092.3	2114.3	2121.6	2132.6	2128.9	2136.3	2147.3	2150.9
20°	2132.6	2114.3	2117.9	2136.3	2139.9	2132.6	2132.6	2121.6	2117.9	2136.3	2143.6
22.5°	2191.2	2172.9	2169.2	2158.2	2139.9	2121.6	2110.6	2099.6	2092.3	2110.6	2117.9
25°	2260.8	2235.2	2216.9	2169.2	2121.6	2088.6	2074.0	2066.6	2063.0	2081.3	2088.6
27.5°	2337.8	2312.1	2257.2	2154.6	2077.6	2022.7	2011.7	2011.7	2019.0	2030.0	2037.3
30°	2411.1	2385.4	2286.5	2121.6	2000.7	1920.1	1909.1	1920.1	1938.4	1949.4	1960.4
32.5°	2484.4	2458.7	2304.8	2070.3	1887.1	1784.5	1777.2	1795.5	1824.8	1832.1	1839.5
35°	2583.3	2557.6	2326.8	1997.0	1744.2	1634.3	1626.9	1637.9	1663.6	1674.6	1685.6
37.5°	2722.5	2707.9	2359.8	1916.4	1612.3	1491.3	1469.4	1462.0	1476.7	1473.0	1487.7
40°	2905.8	2916.7	2418.4	1810.1	1484.0	1359.4	1311.8	1289.8	1275.2	1245.8	1260.5
42.5°	3173.2	3180.6	2484.4	1689.2	1374.1	1234.9	1172.6	1132.3	1102.9	1055.3	1062.6
45°	3565.3	3503.0	2561.3	1561.0	1275.2	1135.9	1062.6	1015.0	974.7	934.4	938.0
47.5°	4085.6	3895.1	2645.6	1454.7	1176.2	1055.3	989.3	934.4	886.7	853.8	857.4
50°	4726.9	4382.4	2729.9	1355.8	1077.3	993.0	934.4	875.8	828.1	795.1	791.5
52.5°	5573.3	4968.7	2784.8	1245.8	978.4	938.0	886.7	831.8	773.2	732.9	729.2
55°	6452.7	5650.3	2832.5	1113.9	883.1	875.8	850.1	787.8	718.2	666.9	659.6
57.5°	7420.1	6379.5	2869.1	985.7	809.8	824.5	817.1	743.8	666.9	619.3	615.6
60°	8299.5	7134.3	2751.9	872.1	743.8	773.2	780.5	718.2	677.9	688.9	692.5
62.5°	9186.3	7716.9	2304.8	787.8	699.9	740.2	802.5	798.8	780.5	798.8	802.5
65°	9505.1	7837.8	1634.3	718.2	655.9	754.8	872.1	864.8	780.5	747.5	740.2
67.5°	9325.5	7478.7	1099.3	663.2	622.9	773.2	945.4	864.8	751.2	707.2	692.5
70°	8471.7	6595.7	806.1	608.3	593.6	769.5	985.7	861.1	736.5	688.9	670.6
72.5°	6756.9	5089.6	648.6	557.0	549.6	751.2	1007.7	853.8	721.9	670.6	648.6
75°	4375.1	3165.9	546.0	505.7	483.7	721.9	996.7	831.8	703.5	637.6	622.9
77.5°	2030.0	1363.1	465.4	447.0	421.4	677.9	963.7	787.8	663.2	600.9	582.6
80°	945.4	644.9	392.1	388.4	377.4	641.2	919.7	736.5	615.6	564.3	535.0
82.5°	505.7	388.4	318.8	318.8	329.8	597.3	864.8	674.2	553.3	527.7	450.7
85°	267.5	223.5	230.8	249.2	282.1	527.7	791.5	608.3	483.7	403.1	392.1
87.5°	135.6	142.9	142.9	168.6	216.2	428.7	652.2	502.0	410.4	329.8	322.5
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)