

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: P399550

Luminaire Tested: **ARCH-L-PA3-160-722-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399550  
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-PA3-160-722-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2200K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18246 lumens  
Efficiency: N/A  
Efficacy: 112.6 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

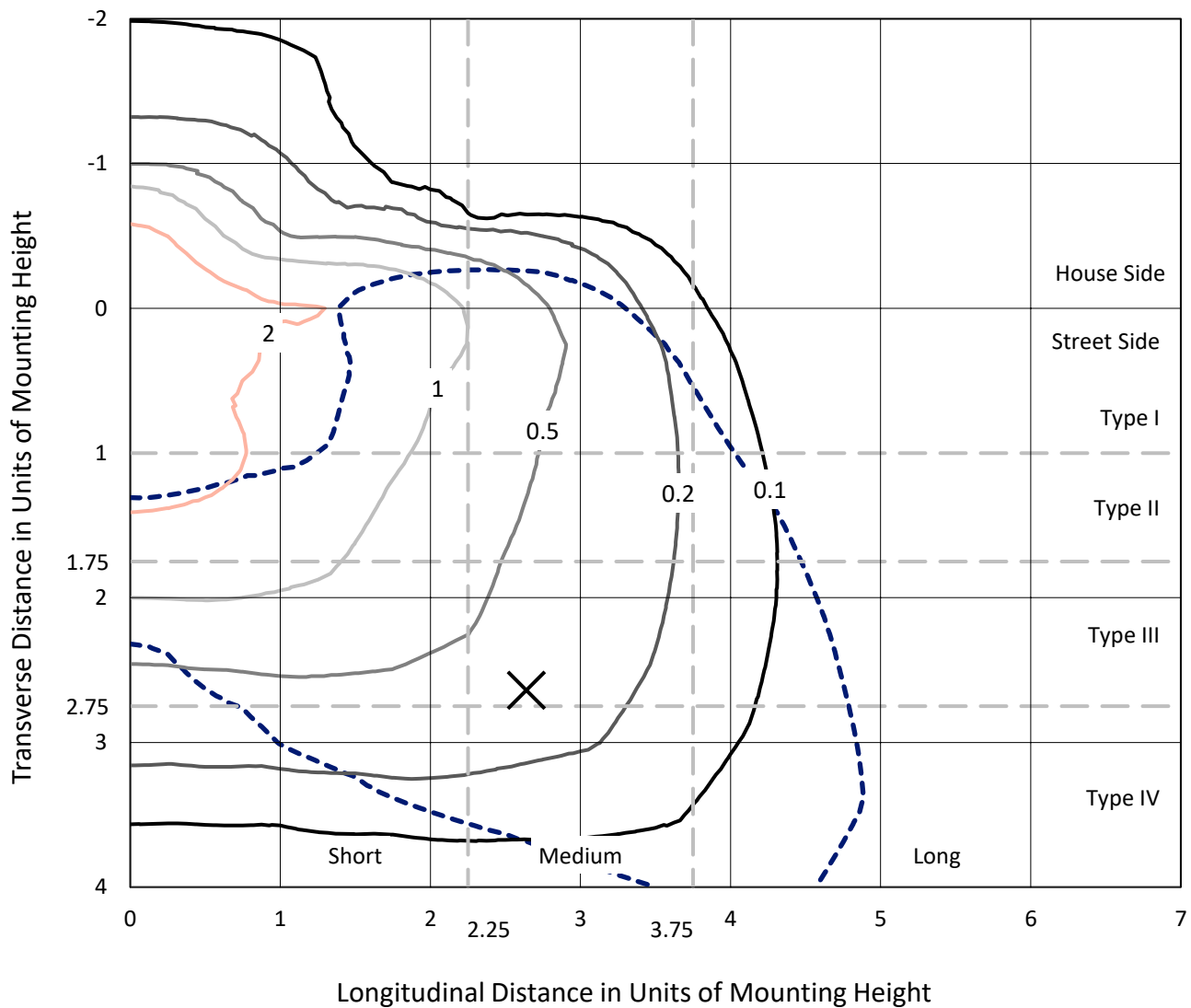
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

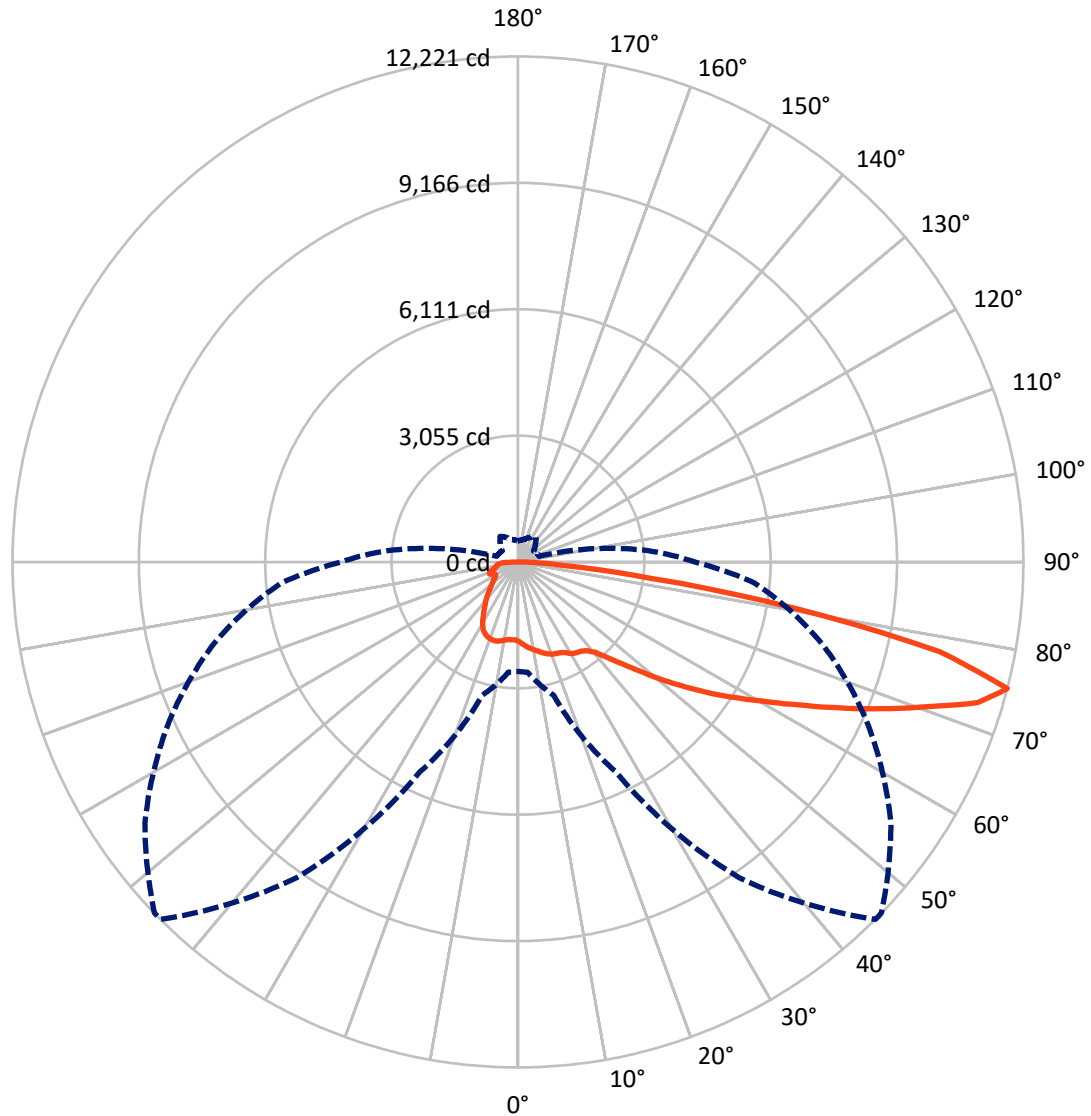
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 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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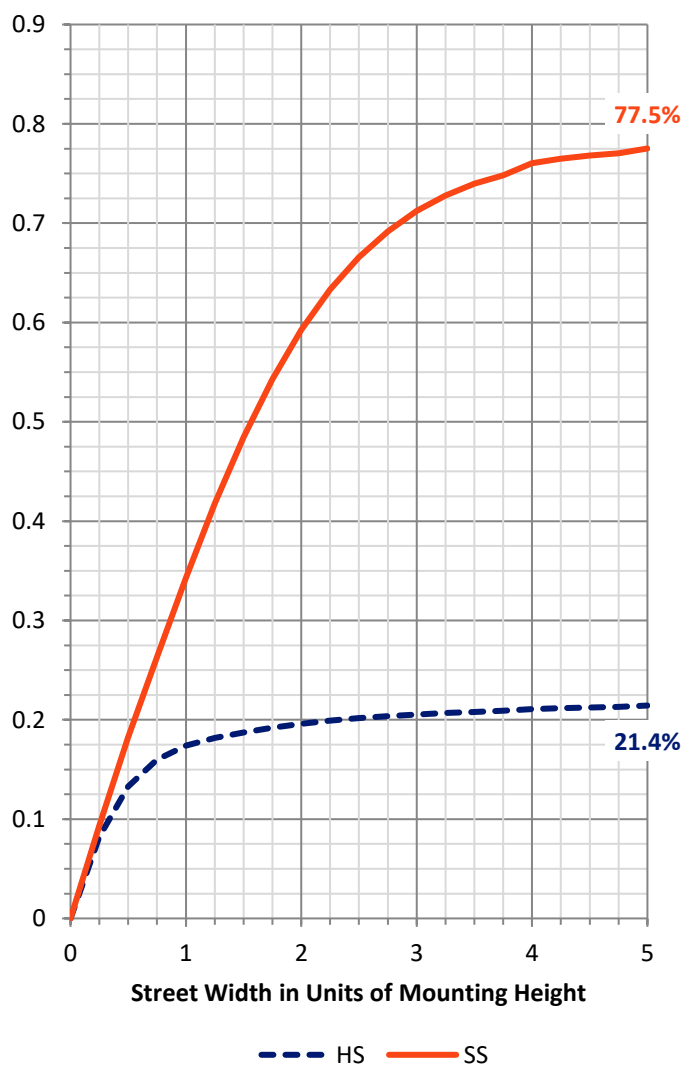
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4032.3	0.0	4032.3
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	14213.7	0.0	14213.7
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	18246.0	0.0	18246.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.6	1.0
10°-20°	603.1	3.3
20°-30°	1028.2	5.6
30°-40°	1440.6	7.9
40°-50°	2116.5	11.6
50°-60°	3368.4	18.5
60°-70°	4791.5	26.3
70°-80°	4011.9	22.0
80°-90°	696.3	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°	18246.0	100.0
0°-180°	18246.0	100.0

**Coefficient of Utilization**



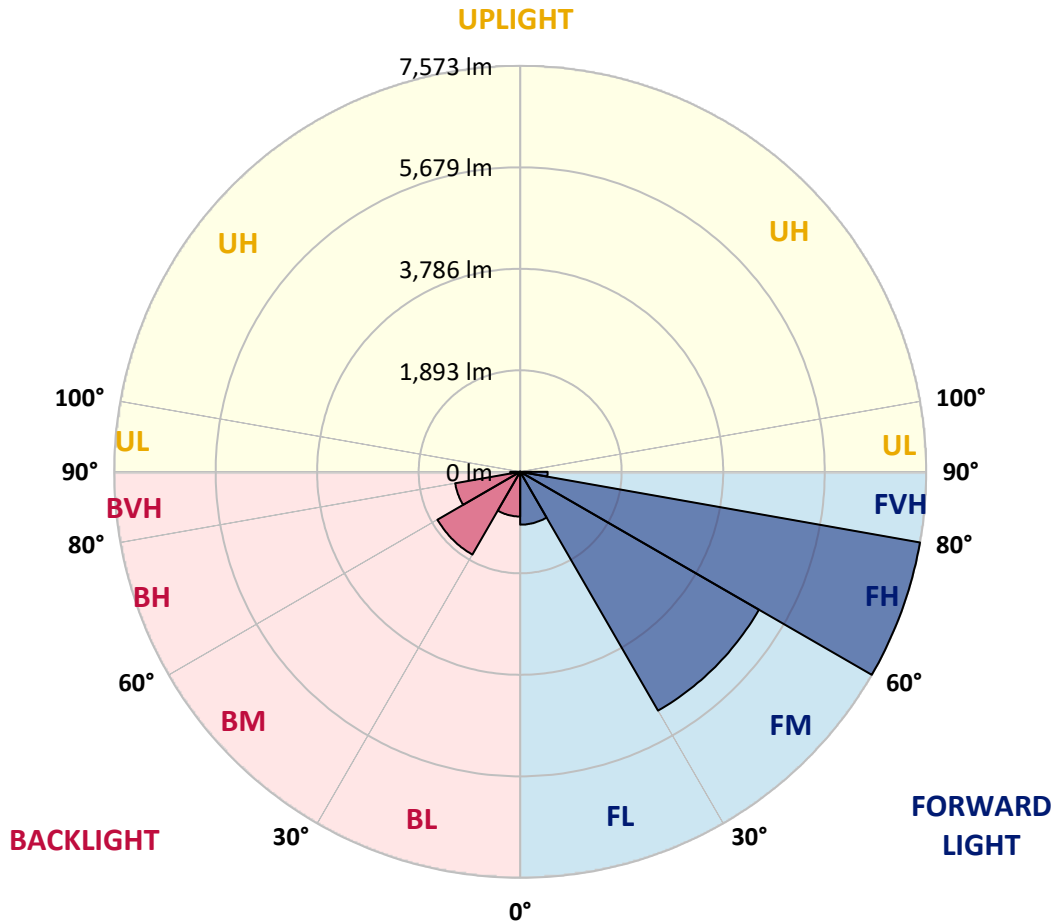
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	986.3	5.4			
FM (30°-60°)	5143.0	28.2			
FH (60°-80°)	7572.5	41.5			G4/12000
FVH (80°-90°)	511.9	2.8			G4/750
BL (0°-30°)	834.5	4.6	B2/1000		
BM (30°-60°)	1782.5	9.8	B2/2500		
BH (60°-80°)	1230.9	6.7	B3/2500		G3/2500
BVH (80°-90°)	184.4	1.0			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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1916.2	1916.2	1916.2	1916.2	1916.2	1916.2	1916.2	1916.2	1916.2	1916.2	1916.2
2.5°	2025.9	2016.2	2011.3	2011.3	1991.8	1979.6	1977.2	1960.1	1945.5	1930.9	1918.7
5°	2143.0	2135.6	2121.0	2108.8	2082.0	2047.9	2043.0	2006.4	1969.9	1935.7	1906.5
7.5°	2250.2	2235.6	2218.5	2194.2	2150.3	2104.0	2096.6	2045.4	1994.2	1943.0	1904.0
10°	2340.4	2325.8	2301.4	2267.3	2211.2	2155.1	2147.8	2094.2	2040.6	1979.6	1923.5
12.5°	2425.8	2413.6	2377.0	2330.7	2264.9	2213.7	2206.3	2160.0	2104.0	2035.7	1962.6
15°	2498.9	2486.7	2447.7	2394.1	2318.5	2279.5	2269.7	2225.8	2169.8	2096.6	2021.1
17.5°	2535.5	2535.5	2494.0	2435.5	2364.8	2335.6	2328.2	2274.6	2223.4	2152.7	2077.1
20°	2547.7	2552.5	2523.3	2452.6	2391.6	2379.4	2372.1	2328.2	2269.7	2201.5	2130.8
22.5°	2555.0	2564.7	2540.3	2459.9	2408.7	2401.4	2396.5	2367.3	2320.9	2255.1	2184.4
25°	2579.4	2579.4	2562.3	2472.1	2430.6	2428.2	2428.2	2411.1	2379.4	2323.4	2252.7
27.5°	2615.9	2613.5	2591.5	2498.9	2479.4	2486.7	2484.3	2481.8	2459.9	2403.8	2328.2
30°	2676.9	2676.9	2652.5	2552.5	2540.3	2572.0	2574.5	2579.4	2545.2	2457.5	2396.5
32.5°	2769.5	2759.8	2735.4	2606.2	2586.7	2615.9	2620.8	2618.4	2589.1	2506.2	2477.0
35°	3054.8	3032.8	2945.0	2725.6	2628.1	2645.2	2647.6	2659.8	2664.7	2598.9	2584.2
37.5°	3554.5	3525.3	3391.2	3008.4	2759.8	2718.3	2715.9	2747.6	2774.4	2715.9	2715.9
40°	4098.2	4073.8	3995.8	3496.0	3003.6	2867.0	2857.3	2886.5	2920.7	2879.2	2891.4
42.5°	4566.3	4585.8	4593.1	4012.9	3369.2	3145.0	3118.1	3076.7	3130.3	3093.8	3142.5
45°	4917.3	4907.6	5041.7	4541.9	3842.2	3493.6	3457.0	3344.9	3413.1	3410.7	3518.0
47.5°	5290.4	5273.3	5329.4	5039.2	4381.0	3920.2	3864.2	3698.4	3800.8	3871.5	4049.4
50°	5643.9	5648.7	5668.2	5431.8	4966.1	4439.5	4368.8	4147.0	4293.2	4441.9	4693.1
52.5°	6104.6	6070.5	6046.1	5890.1	5621.9	4980.7	4934.4	4680.9	4885.7	5061.2	5395.2
55°	6506.9	6484.9	6470.3	6463.0	6170.5	5578.0	5529.3	5266.0	5561.0	5685.3	6177.8
57.5°	6936.0	6923.8	7001.8	7126.1	7009.1	6185.1	6133.9	5880.3	6209.5	6297.2	7026.2
60°	7250.5	7257.8	7472.3	7789.3	7708.8	6843.3	6782.4	6558.1	6840.9	6918.9	7874.6
62.5°	7252.9	7326.0	7823.4	8391.4	8484.1	7601.5	7530.8	7287.0	7489.4	7489.4	8635.2
65°	6560.5	6643.4	7760.0	8540.1	9269.1	8503.6	8435.3	8052.6	8128.1	8025.7	9349.5
67.5°	5870.6	5968.1	7018.9	8552.3	9820.1	9469.0	9388.5	8818.1	8688.9	8430.4	9849.3
70°	5412.3	5480.5	6358.2	8393.9	10151.6	10478.3	10417.4	9544.6	9130.1	8769.3	9744.5
72.5°	4556.5	4532.2	5370.8	7640.5	10336.9	11624.1	11573.0	10334.5	9512.9	8608.4	8311.0
75°	2645.2	2674.4	3332.7	5597.5	9317.8	12221.4	12216.6	11009.8	9344.7	7604.0	5726.7
77.5°	763.1	785.0	1094.6	2459.9	5892.5	10424.7	10758.7	10068.7	7899.0	5419.6	2969.4
80°	334.0	351.1	475.4	819.2	2537.9	6809.2	7101.8	6809.2	4763.8	2486.7	1165.3
82.5°	197.5	209.7	309.6	507.1	1216.5	3240.0	3635.0	3174.2	2055.2	1055.6	482.7
85°	112.1	117.0	178.0	321.8	765.5	1133.6	1272.6	1192.2	1002.0	599.7	253.5
87.5°	51.2	53.6	87.8	151.2	429.1	382.8	397.4	526.6	580.2	365.7	126.8
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°	1916.2	1916.2	1916.2	1916.2	1916.2	1916.2	1916.2	1916.2	1916.2	1916.2	1916.2
2.5°	1913.8	1906.5	1891.8	1887.0	1879.7	1882.1	1884.5	1884.5	1887.0	1879.7	1879.7
5°	1894.3	1882.1	1867.5	1867.5	1867.5	1887.0	1904.0	1913.8	1918.7	1918.7	1913.8
7.5°	1887.0	1872.3	1855.3	1860.2	1865.0	1889.4	1921.1	1952.8	1962.6	1962.6	1957.7
10°	1901.6	1887.0	1874.8	1882.1	1894.3	1913.8	1938.2	1967.4	1991.8	1994.2	1991.8
12.5°	1935.7	1918.7	1906.5	1921.1	1935.7	1947.9	1960.1	1972.3	2004.0	2008.9	2008.9
15°	1991.8	1974.7	1960.1	1972.3	1977.2	1977.2	1977.2	1977.2	2008.9	2013.7	2013.7
17.5°	2047.9	2033.3	2018.6	2021.1	2006.4	1986.9	1979.6	1977.2	1994.2	2008.9	2011.3
20°	2101.5	2089.3	2074.7	2050.3	2013.7	1977.2	1965.0	1965.0	1974.7	1996.7	1996.7
22.5°	2160.0	2145.4	2121.0	2064.9	2004.0	1952.8	1940.6	1947.9	1960.1	1989.4	1986.9
25°	2225.8	2206.3	2164.9	2060.1	1972.3	1911.4	1913.8	1935.7	1957.7	1989.4	1989.4
27.5°	2299.0	2272.2	2189.3	2021.1	1901.6	1843.1	1865.0	1916.2	1947.9	1982.1	1986.9
30°	2379.4	2355.1	2208.8	1952.8	1787.0	1733.4	1787.0	1869.9	1918.7	1950.4	1957.7
32.5°	2477.0	2457.5	2225.8	1865.0	1638.3	1592.0	1670.0	1772.4	1850.4	1887.0	1894.3
35°	2598.9	2579.4	2247.8	1765.1	1499.3	1450.6	1521.3	1626.1	1728.5	1774.8	1789.5
37.5°	2757.3	2728.1	2267.3	1657.8	1382.3	1326.2	1360.4	1455.5	1548.1	1611.5	1628.6
40°	2959.7	2913.4	2284.4	1535.9	1279.9	1216.5	1228.7	1275.0	1328.7	1384.8	1406.7
42.5°	3244.9	3152.3	2286.8	1406.7	1175.1	1116.6	1111.7	1126.3	1126.3	1126.3	1133.6
45°	3642.3	3466.8	2291.7	1284.8	1067.8	1006.9	992.2	987.4	950.8	880.1	875.2
47.5°	4144.5	3878.8	2313.6	1182.4	955.7	902.0	882.5	863.0	794.8	721.6	707.0
50°	4788.1	4356.6	2357.5	1084.9	860.6	824.0	799.6	753.3	677.8	621.7	607.0
52.5°	5529.3	4924.7	2398.9	982.5	789.9	765.5	736.3	680.2	599.7	565.6	560.7
55°	6380.1	5558.5	2481.8	892.3	728.9	711.9	685.1	631.4	570.5	546.1	543.7
57.5°	7250.5	6268.0	2598.9	811.8	670.4	660.7	660.7	614.4	575.4	565.6	565.6
60°	8089.1	6877.5	2508.7	736.3	616.8	621.7	668.0	655.8	626.6	638.7	646.1
62.5°	8740.1	7235.8	2035.7	675.3	577.8	621.7	741.1	741.1	707.0	702.1	702.1
65°	9018.0	7231.0	1431.1	629.0	563.2	682.6	826.5	787.5	697.3	663.1	655.8
67.5°	8947.3	6914.0	987.4	597.3	558.3	746.0	865.5	755.8	653.4	624.1	602.2
70°	8325.6	6243.6	760.6	568.0	551.0	719.2	853.3	719.2	619.2	592.4	572.9
72.5°	6716.6	5007.6	631.4	538.8	521.7	665.6	811.8	685.1	592.4	563.2	543.7
75°	4283.5	3149.8	533.9	499.8	465.6	597.3	755.8	650.9	563.2	524.2	509.5
77.5°	2060.1	1357.9	465.6	453.5	419.3	553.4	699.7	607.0	524.2	492.5	482.7
80°	833.8	621.7	404.7	407.1	385.2	526.6	660.7	565.6	485.2	451.0	434.0
82.5°	434.0	360.8	341.3	351.1	351.1	502.2	631.4	531.5	451.0	436.4	380.3
85°	234.0	224.3	263.3	282.8	304.7	453.5	587.5	494.9	412.0	353.5	341.3
87.5°	114.6	146.3	148.7	170.7	212.1	363.3	494.9	414.5	343.8	285.2	280.4
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)