

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: P399271

Luminaire Tested: **ARCH-L-PA3-120-727-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399271  
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-PA3-120-727-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16414 lumens  
Efficiency: N/A  
Efficacy: 133.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G3

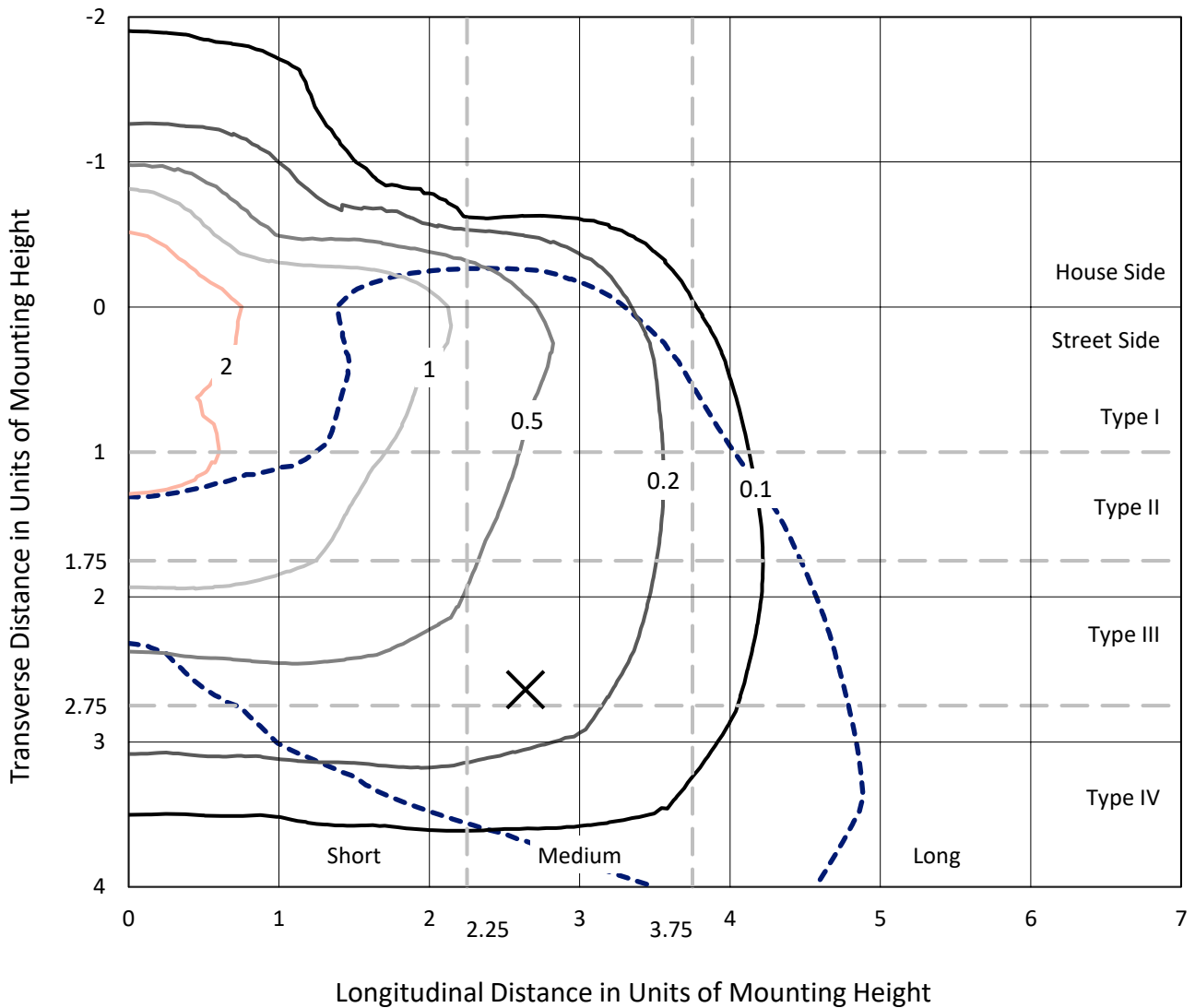
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

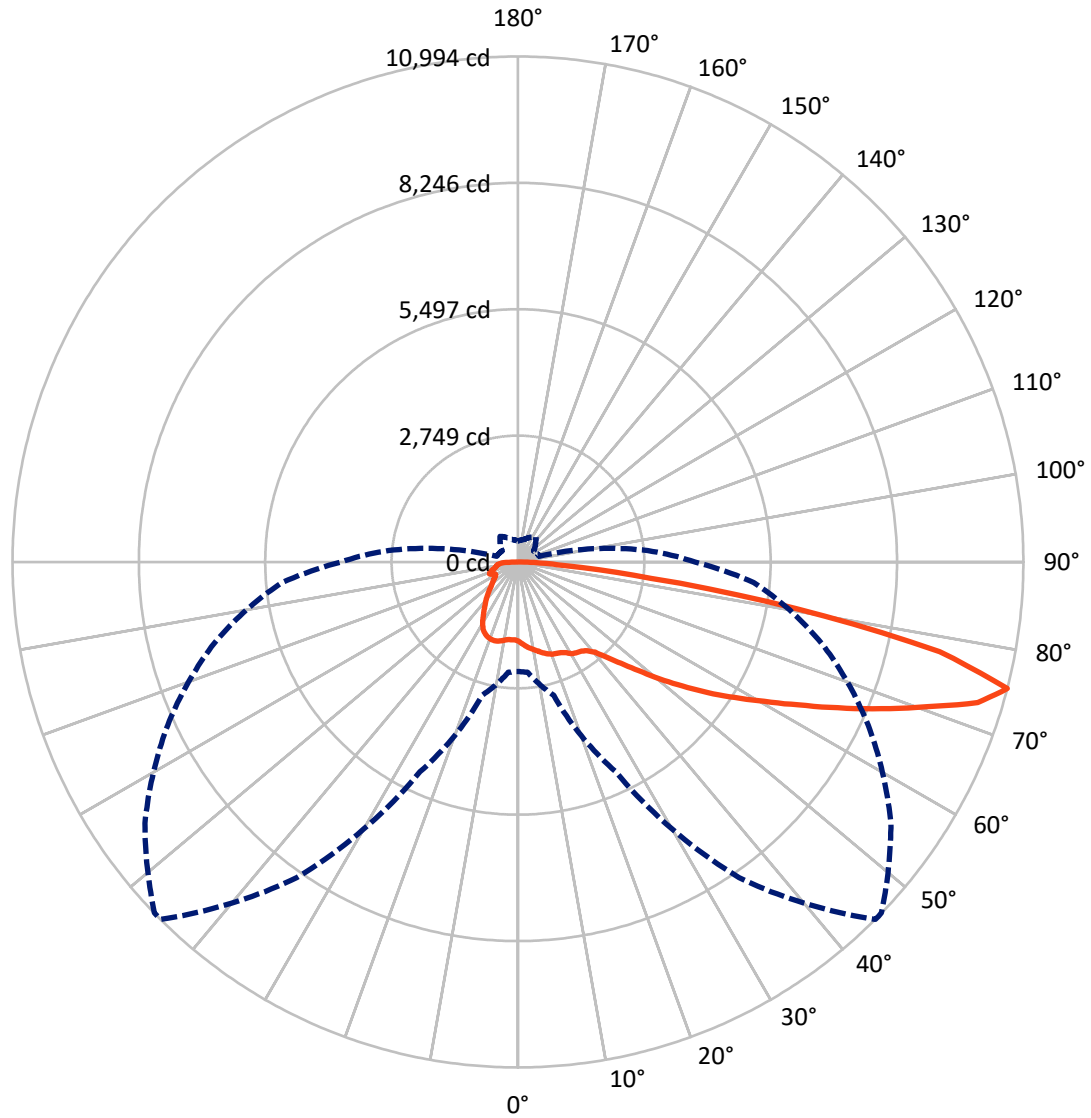
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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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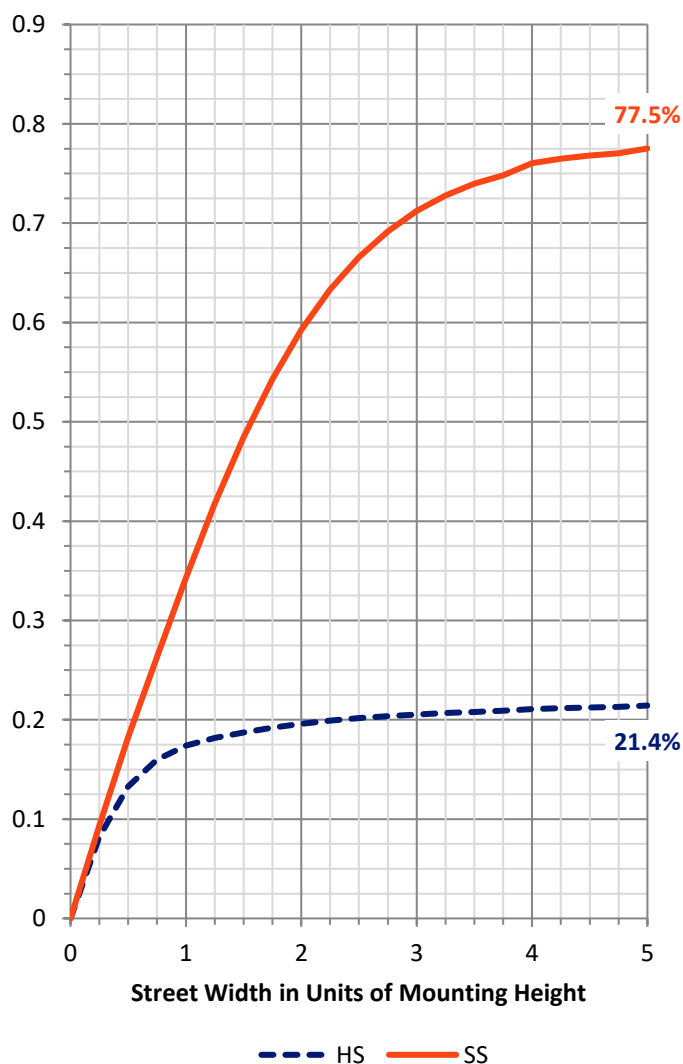
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3627.4	0.0	3627.4
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	12786.6	0.0	12786.6
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	16414.0	0.0	16414.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.5	1.0
10°-20°	542.5	3.3
20°-30°	924.9	5.6
30°-40°	1296.0	7.9
40°-50°	1904.0	11.6
50°-60°	3030.2	18.5
60°-70°	4310.4	26.3
70°-80°	3609.1	22.0
80°-90°	626.4	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°	16414.0	100.0
0°-180°	16414.0	100.0

**Coefficient of Utilization**



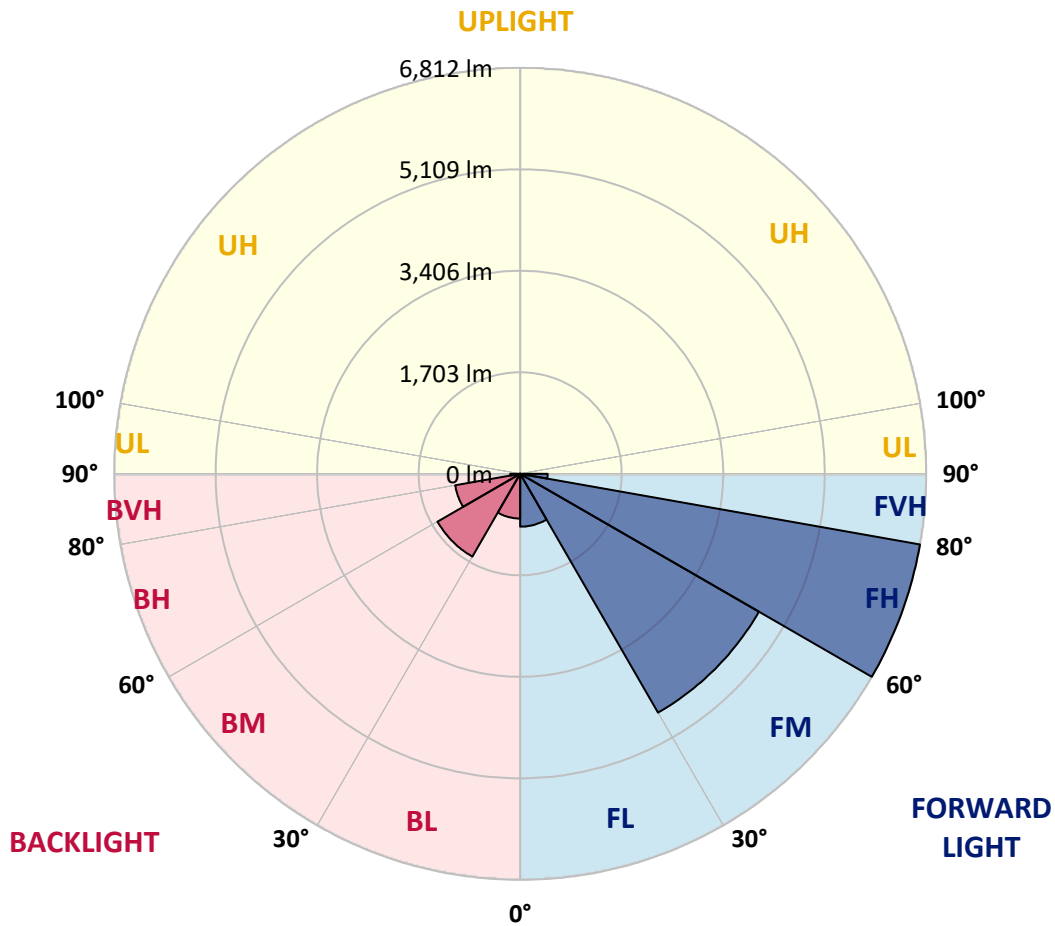
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	887.3	5.4			
FM (30°-60°)	4626.6	28.2			
FH (60°-80°)	6812.2	41.5			G3/7500
FVH (80°-90°)	460.5	2.8			G3/500
BL (0°-30°)	750.7	4.6	B2/1000		
BM (30°-60°)	1603.5	9.8	B2/2500		
BH (60°-80°)	1107.3	6.7	B3/2500		G3/2500
BVH (80°-90°)	165.9	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-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1723.8	1723.8	1723.8	1723.8	1723.8	1723.8	1723.8	1723.8	1723.8	1723.8	1723.8
2.5°	1822.5	1813.7	1809.4	1809.4	1791.8	1780.9	1778.7	1763.3	1750.1	1737.0	1726.0
5°	1927.8	1921.2	1908.1	1897.1	1873.0	1842.3	1837.9	1805.0	1772.1	1741.4	1715.1
7.5°	2024.3	2011.1	1995.8	1973.9	1934.4	1892.7	1886.1	1840.1	1794.0	1748.0	1712.9
10°	2105.4	2092.3	2070.3	2039.6	1989.2	1938.8	1932.2	1883.9	1835.7	1780.9	1730.4
12.5°	2182.2	2171.2	2138.3	2096.7	2037.5	1991.4	1984.8	1943.1	1892.7	1831.3	1765.5
15°	2248.0	2237.0	2201.9	2153.7	2085.7	2050.6	2041.8	2002.4	1951.9	1886.1	1818.1
17.5°	2280.9	2280.9	2243.6	2191.0	2127.4	2101.1	2094.5	2046.2	2000.2	1936.6	1868.6
20°	2291.9	2296.2	2269.9	2206.3	2151.5	2140.5	2134.0	2094.5	2041.8	1980.4	1916.8
22.5°	2298.4	2307.2	2285.3	2212.9	2166.8	2160.3	2155.9	2129.6	2087.9	2028.7	1965.1
25°	2320.4	2320.4	2305.0	2223.9	2186.6	2184.4	2184.4	2169.0	2140.5	2090.1	2026.5
27.5°	2353.3	2351.1	2331.3	2248.0	2230.5	2237.0	2234.8	2232.6	2212.9	2162.5	2094.5
30°	2408.1	2408.1	2386.2	2296.2	2285.3	2313.8	2316.0	2320.4	2289.7	2210.7	2155.9
32.5°	2491.4	2482.7	2460.7	2344.5	2327.0	2353.3	2357.7	2355.5	2329.1	2254.6	2228.3
35°	2748.0	2728.3	2649.3	2452.0	2364.2	2379.6	2381.8	2392.7	2397.1	2337.9	2324.8
37.5°	3197.6	3171.3	3050.7	2706.4	2482.7	2445.4	2443.2	2471.7	2495.8	2443.2	2443.2
40°	3686.7	3664.8	3594.6	3145.0	2702.0	2579.2	2570.4	2596.7	2627.4	2590.1	2601.1
42.5°	4107.8	4125.3	4131.9	3610.0	3031.0	2829.2	2805.1	2767.8	2816.0	2783.1	2827.0
45°	4423.6	4414.8	4535.5	4085.9	3456.4	3142.8	3109.9	3009.0	3070.4	3068.2	3164.7
47.5°	4759.2	4743.8	4794.3	4533.3	3941.1	3526.6	3476.2	3327.0	3419.1	3482.7	3642.9
50°	5077.2	5081.6	5099.1	4886.4	4467.5	3993.8	3930.2	3730.6	3862.2	3996.0	4221.8
52.5°	5491.7	5461.0	5439.1	5298.7	5057.4	4480.6	4439.0	4210.9	4395.1	4553.0	4853.5
55°	5853.6	5833.8	5820.7	5814.1	5550.9	5018.0	4974.1	4737.2	5002.6	5114.5	5557.5
57.5°	6239.6	6228.6	6298.8	6410.6	6305.4	5564.1	5518.0	5289.9	5586.0	5665.0	6320.7
60°	6522.5	6529.1	6722.1	7007.2	6934.8	6156.2	6101.4	5899.6	6154.0	6224.2	7083.9
62.5°	6524.7	6590.5	7037.9	7548.9	7632.2	6838.3	6774.7	6555.4	6737.4	6737.4	7768.2
65°	5901.8	5976.4	6980.9	7682.7	8338.4	7649.8	7588.4	7244.0	7312.0	7219.9	8410.8
67.5°	5281.1	5368.9	6314.1	7693.6	8834.1	8518.3	8445.9	7932.7	7816.4	7584.0	8860.4
70°	4868.8	4930.2	5719.8	7551.1	9132.3	9426.2	9371.4	8586.2	8213.4	7888.8	8766.1
72.5°	4099.0	4077.1	4831.5	6873.4	9299.0	10457.0	10411.0	9296.8	8557.7	7744.1	7476.5
75°	2379.6	2405.9	2998.1	5035.5	8382.3	10994.3	10990.0	9904.3	8406.4	6840.5	5151.7
77.5°	686.5	706.2	984.7	2212.9	5300.9	9378.0	9678.4	9057.8	7105.9	4875.4	2671.3
80°	300.5	315.8	427.7	736.9	2283.1	6125.5	6388.7	6125.5	4285.4	2237.0	1048.3
82.5°	177.6	188.6	278.5	456.2	1094.4	2914.7	3270.0	2855.5	1848.8	949.6	434.2
85°	100.9	105.3	160.1	289.5	688.7	1019.8	1144.8	1072.5	901.4	539.5	228.1
87.5°	46.1	48.2	79.0	136.0	386.0	344.3	357.5	473.7	522.0	329.0	114.0
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°	1723.8	1723.8	1723.8	1723.8	1723.8	1723.8	1723.8	1723.8	1723.8	1723.8	1723.8
2.5°	1721.6	1715.1	1701.9	1697.5	1690.9	1693.1	1695.3	1695.3	1697.5	1690.9	1690.9
5°	1704.1	1693.1	1680.0	1680.0	1680.0	1697.5	1712.9	1721.6	1726.0	1726.0	1721.6
7.5°	1697.5	1684.4	1669.0	1673.4	1677.8	1699.7	1728.2	1756.7	1765.5	1765.5	1761.1
10°	1710.7	1697.5	1686.5	1693.1	1704.1	1721.6	1743.6	1769.9	1791.8	1794.0	1791.8
12.5°	1741.4	1726.0	1715.1	1728.2	1741.4	1752.3	1763.3	1774.3	1802.8	1807.2	1807.2
15°	1791.8	1776.5	1763.3	1774.3	1778.7	1778.7	1778.7	1778.7	1807.2	1811.6	1811.6
17.5°	1842.3	1829.1	1815.9	1818.1	1805.0	1787.4	1780.9	1778.7	1794.0	1807.2	1809.4
20°	1890.5	1879.5	1866.4	1844.5	1811.6	1778.7	1767.7	1767.7	1776.5	1796.2	1796.2
22.5°	1943.1	1930.0	1908.1	1857.6	1802.8	1756.7	1745.8	1752.3	1763.3	1789.6	1787.4
25°	2002.4	1984.8	1947.5	1853.2	1774.3	1719.4	1721.6	1741.4	1761.1	1789.6	1789.6
27.5°	2068.2	2044.0	1969.5	1818.1	1710.7	1658.0	1677.8	1723.8	1752.3	1783.0	1787.4
30°	2140.5	2118.6	1987.0	1756.7	1607.6	1559.3	1607.6	1682.2	1726.0	1754.5	1761.1
32.5°	2228.3	2210.7	2002.4	1677.8	1473.8	1432.1	1502.3	1594.4	1664.6	1697.5	1704.1
35°	2337.9	2320.4	2022.1	1587.9	1348.8	1304.9	1368.5	1462.8	1555.0	1596.6	1609.8
37.5°	2480.5	2454.2	2039.6	1491.4	1243.5	1193.1	1223.8	1309.3	1392.7	1449.7	1465.0
40°	2662.5	2620.8	2055.0	1381.7	1151.4	1094.4	1105.4	1147.0	1195.3	1245.7	1265.5
42.5°	2919.1	2835.8	2057.2	1265.5	1057.1	1004.5	1000.1	1013.2	1013.2	1013.2	1019.8
45°	3276.6	3118.7	2061.6	1155.8	960.6	905.8	892.6	888.2	855.3	791.7	787.3
47.5°	3728.4	3489.3	2081.3	1063.7	859.7	811.5	793.9	776.4	715.0	649.2	636.0
50°	4307.4	3919.2	2120.8	976.0	774.2	741.3	719.4	677.7	609.7	559.3	546.1
52.5°	4974.1	4430.2	2158.1	883.8	710.6	688.7	662.3	611.9	539.5	508.8	504.4
55°	5739.5	5000.4	2232.6	802.7	655.8	640.4	616.3	568.0	513.2	491.3	489.1
57.5°	6522.5	5638.6	2337.9	730.3	603.1	594.3	594.3	552.7	517.6	508.8	508.8
60°	7276.9	6186.9	2256.8	662.3	554.9	559.3	600.9	590.0	563.6	574.6	581.2
62.5°	7862.5	6509.3	1831.3	607.5	519.8	559.3	666.7	666.7	636.0	631.6	631.6
65°	8112.5	6504.9	1287.4	565.8	506.6	614.1	743.5	708.4	627.2	596.5	590.0
67.5°	8048.9	6219.8	888.2	537.3	502.2	671.1	778.6	679.9	587.8	561.5	541.7
70°	7489.7	5616.7	684.3	511.0	495.7	647.0	767.6	647.0	557.1	532.9	515.4
72.5°	6042.2	4504.8	568.0	484.7	469.3	598.7	730.3	616.3	532.9	506.6	489.1
75°	3853.4	2833.6	480.3	449.6	418.9	537.3	679.9	585.6	506.6	471.5	458.4
77.5°	1853.2	1221.6	418.9	407.9	377.2	497.8	629.4	546.1	471.5	443.0	434.2
80°	750.1	559.3	364.1	366.3	346.5	473.7	594.3	508.8	436.4	405.7	390.4
82.5°	390.4	324.6	307.0	315.8	315.8	451.8	568.0	478.1	405.7	392.6	342.1
85°	210.5	201.8	236.9	254.4	274.1	407.9	528.6	445.2	370.6	318.0	307.0
87.5°	103.1	131.6	133.8	153.5	190.8	326.8	445.2	372.8	309.2	256.6	252.2
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)