

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: P399127

Luminaire Tested: **ARCH-L-PA3-100-727-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399127  
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-PA3-100-727-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13932 lumens  
Efficiency: N/A  
Efficacy: 136.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G3

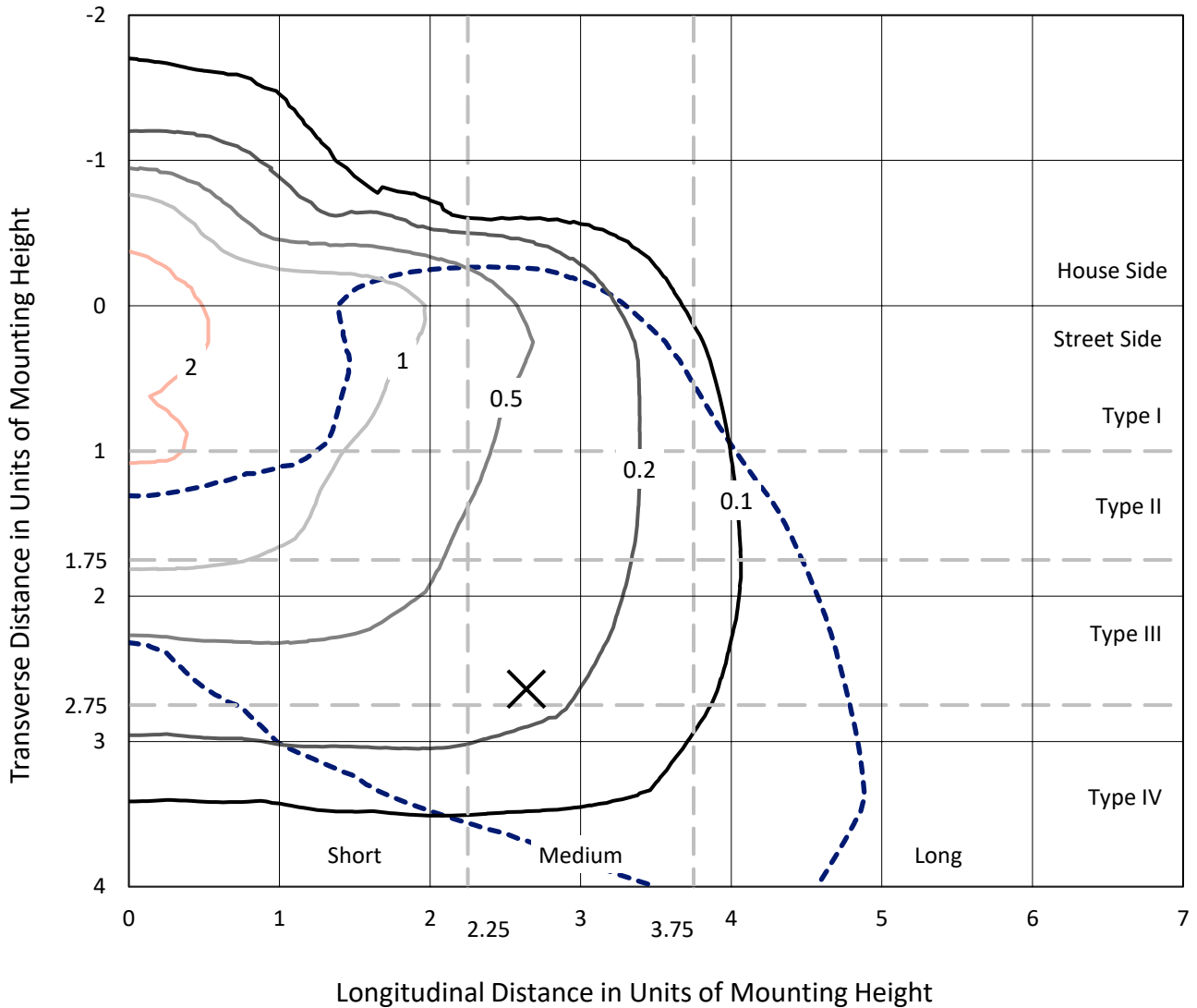
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

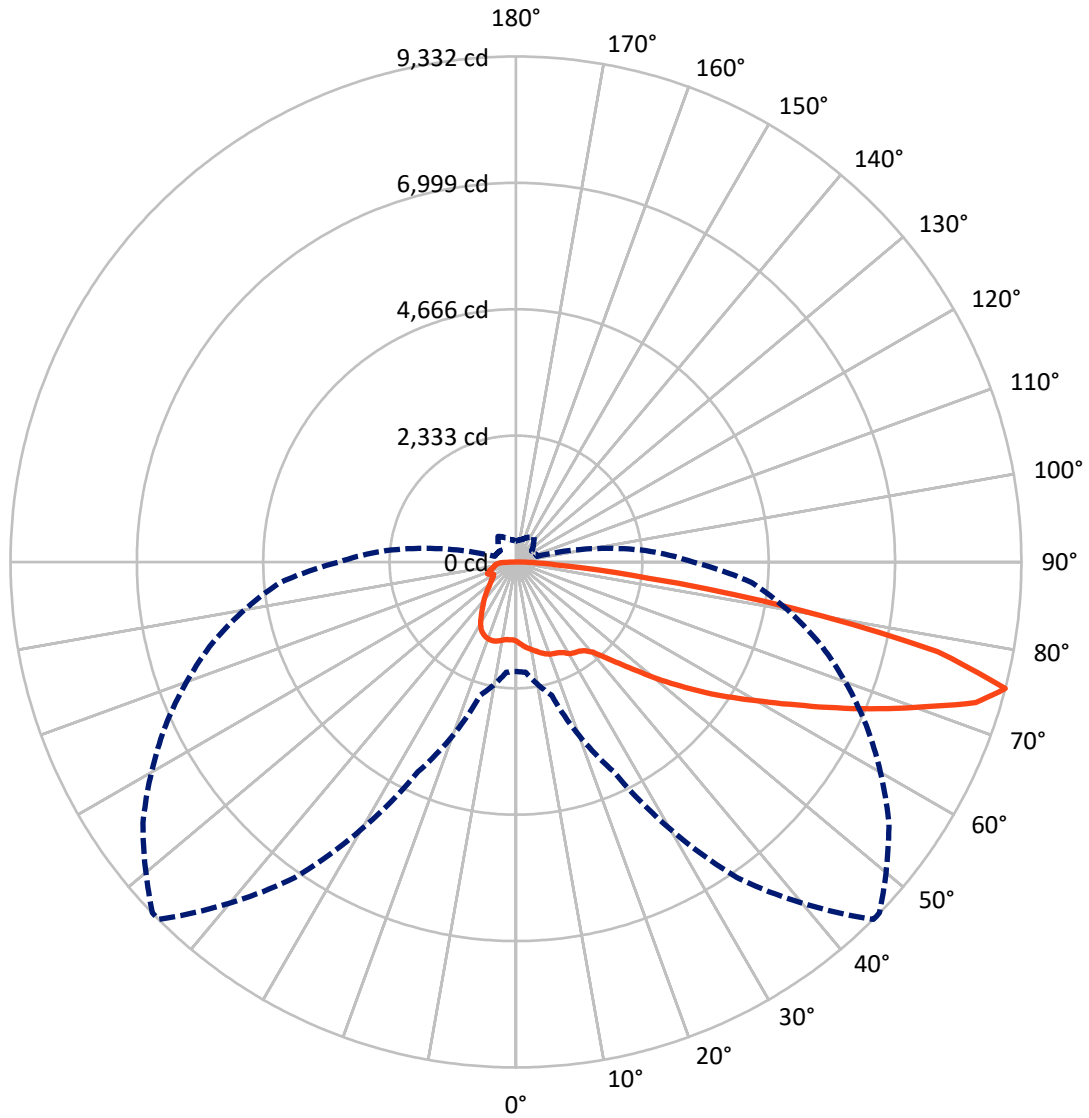
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc  
 Type IV - Medium - N/A

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CATALOG NUMBER: ARCH-L-PA3-100-727-U-T4W

### Luminous Intensity Polar Plot



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

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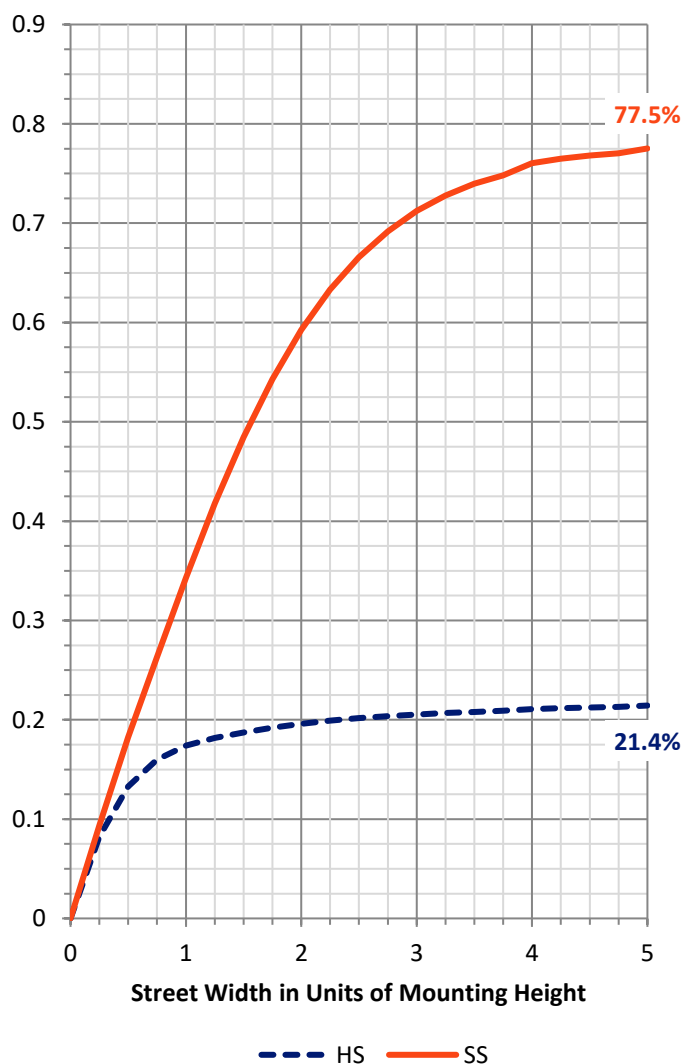
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3078.9	0.0	3078.9
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	10853.1	0.0	10853.1
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	13932.0	0.0	13932.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.7	1.0
10°-20°	460.5	3.3
20°-30°	785.1	5.6
30°-40°	1100.0	7.9
40°-50°	1616.1	11.6
50°-60°	2572.0	18.5
60°-70°	3658.6	26.3
70°-80°	3063.4	22.0
80°-90°	531.6	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°	13932.0	100.0
0°-180°	13932.0	100.0

**Coefficient of Utilization**



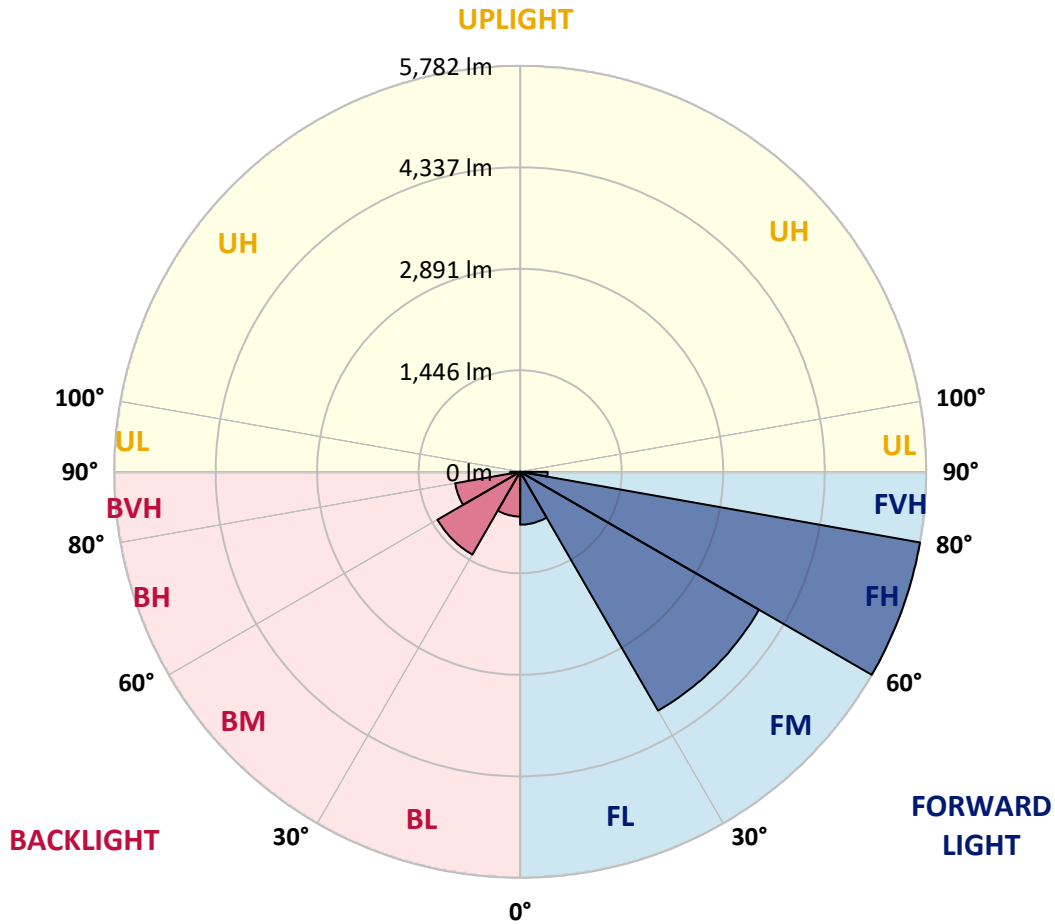
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 CATALOG NUMBER: ARCH-L-PA3-100-727-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	753.1	5.4			
FM (30°-60°)	3927.0	28.2			
FH (60°-80°)	5782.1	41.5			G3/7500
FVH (80°-90°)	390.8	2.8			G3/500
BL (0°-30°)	637.2	4.6	B2/1000		
BM (30°-60°)	1361.0	9.8	B2/2500		
BH (60°-80°)	939.9	6.7	B2/1000		G2/1000
BVH (80°-90°)	140.8	1.0			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1463.2	1463.2	1463.2	1463.2	1463.2	1463.2	1463.2	1463.2	1463.2	1463.2	1463.2
2.5°	1546.9	1539.5	1535.8	1535.8	1520.9	1511.6	1509.7	1496.7	1485.5	1474.3	1465.0
5°	1636.3	1630.7	1619.5	1610.2	1589.7	1563.7	1560.0	1532.0	1504.1	1478.1	1455.7
7.5°	1718.2	1707.0	1694.0	1675.4	1641.9	1606.5	1600.9	1561.8	1522.7	1483.6	1453.9
10°	1787.1	1775.9	1757.3	1731.2	1688.4	1645.6	1640.0	1599.1	1558.1	1511.6	1468.7
12.5°	1852.2	1842.9	1815.0	1779.6	1729.4	1690.3	1684.7	1649.3	1606.5	1554.4	1498.5
15°	1908.1	1898.8	1869.0	1828.0	1770.3	1740.5	1733.1	1699.6	1656.8	1600.9	1543.2
17.5°	1936.0	1936.0	1904.3	1859.7	1805.7	1783.3	1777.8	1736.8	1697.7	1643.7	1586.0
20°	1945.3	1949.0	1926.7	1872.7	1826.2	1816.9	1811.3	1777.8	1733.1	1681.0	1627.0
22.5°	1950.9	1958.3	1939.7	1878.3	1839.2	1833.6	1829.9	1807.5	1772.2	1721.9	1667.9
25°	1969.5	1969.5	1956.5	1887.6	1855.9	1854.1	1854.1	1841.1	1816.9	1774.0	1720.1
27.5°	1997.4	1995.6	1978.8	1908.1	1893.2	1898.8	1896.9	1895.0	1878.3	1835.5	1777.8
30°	2044.0	2044.0	2025.3	1949.0	1939.7	1963.9	1965.8	1969.5	1943.4	1876.4	1829.9
32.5°	2114.7	2107.3	2088.6	1990.0	1975.1	1997.4	2001.1	1999.3	1976.9	1913.7	1891.3
35°	2332.5	2315.7	2248.7	2081.2	2006.7	2019.8	2021.6	2030.9	2034.7	1984.4	1973.2
37.5°	2714.1	2691.8	2589.4	2297.1	2107.3	2075.6	2073.7	2097.9	2118.4	2073.7	2073.7
40°	3129.2	3110.6	3051.1	2669.4	2293.4	2189.2	2181.7	2204.1	2230.1	2198.5	2207.8
42.5°	3486.7	3501.5	3507.1	3064.1	2572.6	2401.4	2380.9	2349.3	2390.2	2362.3	2399.5
45°	3754.7	3747.3	3849.7	3468.0	2933.8	2667.6	2639.7	2554.0	2606.1	2604.3	2686.2
47.5°	4039.5	4026.5	4069.3	3847.8	3345.2	2993.3	2950.5	2823.9	2902.1	2956.1	3092.0
50°	4309.4	4313.2	4328.1	4147.5	3791.9	3389.9	3335.9	3166.5	3278.2	3391.7	3583.5
52.5°	4661.3	4635.2	4616.6	4497.5	4292.7	3803.1	3767.7	3574.1	3730.5	3864.5	4119.6
55°	4968.4	4951.7	4940.5	4934.9	4711.5	4259.2	4222.0	4020.9	4246.2	4341.1	4717.1
57.5°	5296.1	5286.8	5346.3	5441.3	5351.9	4722.7	4683.6	4490.0	4741.3	4808.3	5364.9
60°	5536.2	5541.8	5705.6	5947.6	5886.2	5225.3	5178.8	5007.5	5223.5	5283.0	6012.8
62.5°	5538.1	5593.9	5973.7	6407.4	6478.1	5804.3	5750.3	5564.1	5718.6	5718.6	6593.5
65°	5009.4	5072.7	5925.3	6520.9	7077.5	6493.0	6440.9	6148.6	6206.4	6128.2	7139.0
67.5°	4482.6	4557.0	5359.4	6530.3	7498.3	7230.2	7168.8	6733.2	6634.5	6437.2	7520.6
70°	4132.6	4184.7	4854.9	6409.3	7751.4	8000.9	7954.3	7287.9	6971.4	6695.9	7440.5
72.5°	3479.2	3460.6	4101.0	5834.0	7892.9	8875.8	8836.7	7891.0	7263.7	6573.1	6346.0
75°	2019.8	2042.1	2544.7	4274.1	7114.8	9331.9	9328.1	8406.7	7135.3	5806.1	4372.7
77.5°	582.7	599.4	835.8	1878.3	4499.3	7959.9	8214.9	7688.1	6031.4	4138.2	2267.3
80°	255.0	268.1	363.0	625.5	1937.9	5199.3	5422.6	5199.3	3637.4	1898.8	889.8
82.5°	150.8	160.1	236.4	387.2	928.9	2474.0	2775.5	2423.7	1569.3	806.0	368.6
85°	85.6	89.4	135.9	245.7	584.5	865.6	971.7	910.3	765.1	457.9	193.6
87.5°	39.1	41.0	67.0	115.4	327.6	292.3	303.4	402.1	443.0	279.2	96.8
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: P399127

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1463.2	1463.2	1463.2	1463.2	1463.2	1463.2	1463.2	1463.2	1463.2	1463.2	1463.2
2.5°	1461.3	1455.7	1444.5	1440.8	1435.2	1437.1	1439.0	1439.0	1440.8	1435.2	1435.2
5°	1446.4	1437.1	1425.9	1425.9	1425.9	1440.8	1453.9	1461.3	1465.0	1465.0	1461.3
7.5°	1440.8	1429.7	1416.6	1420.3	1424.1	1442.7	1466.9	1491.1	1498.5	1498.5	1494.8
10°	1452.0	1440.8	1431.5	1437.1	1446.4	1461.3	1479.9	1502.3	1520.9	1522.7	1520.9
12.5°	1478.1	1465.0	1455.7	1466.9	1478.1	1487.4	1496.7	1506.0	1530.2	1533.9	1533.9
15°	1520.9	1507.8	1496.7	1506.0	1509.7	1509.7	1509.7	1509.7	1533.9	1537.6	1537.6
17.5°	1563.7	1552.5	1541.3	1543.2	1532.0	1517.1	1511.6	1509.7	1522.7	1533.9	1535.8
20°	1604.6	1595.3	1584.2	1565.5	1537.6	1509.7	1500.4	1500.4	1507.8	1524.6	1524.6
22.5°	1649.3	1638.1	1619.5	1576.7	1530.2	1491.1	1481.8	1487.4	1496.7	1519.0	1517.1
25°	1699.6	1684.7	1653.0	1573.0	1506.0	1459.4	1461.3	1478.1	1494.8	1519.0	1519.0
27.5°	1755.4	1734.9	1671.7	1543.2	1452.0	1407.3	1424.1	1463.2	1487.4	1513.4	1517.1
30°	1816.9	1798.2	1686.5	1491.1	1364.5	1323.5	1364.5	1427.8	1465.0	1489.2	1494.8
32.5°	1891.3	1876.4	1699.6	1424.1	1251.0	1215.6	1275.2	1353.3	1412.9	1440.8	1446.4
35°	1984.4	1969.5	1716.3	1347.7	1144.8	1107.6	1161.6	1241.6	1319.8	1355.2	1366.4
37.5°	2105.4	2083.1	1731.2	1265.8	1055.5	1012.7	1038.7	1111.3	1182.1	1230.5	1243.5
40°	2259.9	2224.5	1744.3	1172.8	977.3	928.9	938.2	973.6	1014.5	1057.4	1074.1
42.5°	2477.7	2407.0	1746.1	1074.1	897.3	852.6	848.9	860.0	860.0	860.0	865.6
45°	2781.1	2647.1	1749.8	981.0	815.4	768.8	757.6	753.9	726.0	672.0	668.3
47.5°	3164.6	2961.7	1766.6	902.8	729.7	688.8	673.9	659.0	606.9	551.0	539.8
50°	3656.1	3326.6	1800.1	828.4	657.1	629.2	610.6	575.2	517.5	474.7	463.5
52.5°	4222.0	3760.3	1831.7	750.2	603.1	584.5	562.2	519.4	457.9	431.9	428.2
55°	4871.6	4244.3	1895.0	681.3	556.6	543.6	523.1	482.1	435.6	417.0	415.1
57.5°	5536.2	4786.0	1984.4	619.9	511.9	504.5	504.5	469.1	439.3	431.9	431.9
60°	6176.6	5251.4	1915.5	562.2	471.0	474.7	510.1	500.8	478.4	487.7	493.3
62.5°	6673.6	5525.0	1554.4	515.6	441.2	474.7	565.9	565.9	539.8	536.1	536.1
65°	6885.8	5521.3	1092.7	480.3	430.0	521.2	631.1	601.3	532.4	506.3	500.8
67.5°	6831.8	5279.3	753.9	456.1	426.3	569.6	660.8	577.1	498.9	476.6	459.8
70°	6357.1	4767.4	580.8	433.7	420.7	549.2	651.5	549.2	472.8	452.4	437.5
72.5°	5128.5	3823.6	482.1	411.4	398.4	508.2	619.9	523.1	452.4	430.0	415.1
75°	3270.7	2405.1	407.7	381.6	355.6	456.1	577.1	497.0	430.0	400.2	389.1
77.5°	1573.0	1036.9	355.6	346.2	320.2	422.6	534.3	463.5	400.2	376.0	368.6
80°	636.6	474.7	309.0	310.9	294.1	402.1	504.5	431.9	370.4	344.4	331.4
82.5°	331.4	275.5	260.6	268.1	268.1	383.5	482.1	405.8	344.4	333.2	290.4
85°	178.7	171.3	201.0	215.9	232.7	346.2	448.6	377.9	314.6	269.9	260.6
87.5°	87.5	111.7	113.6	130.3	162.0	277.4	377.9	316.5	262.5	217.8	214.1
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)