

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: P400504

Luminaire Tested: **ARCH-L-PA3-90-730-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400504  
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-PA3-90-730-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14090 lumens  
Efficiency: N/A  
Efficacy: 151.5 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

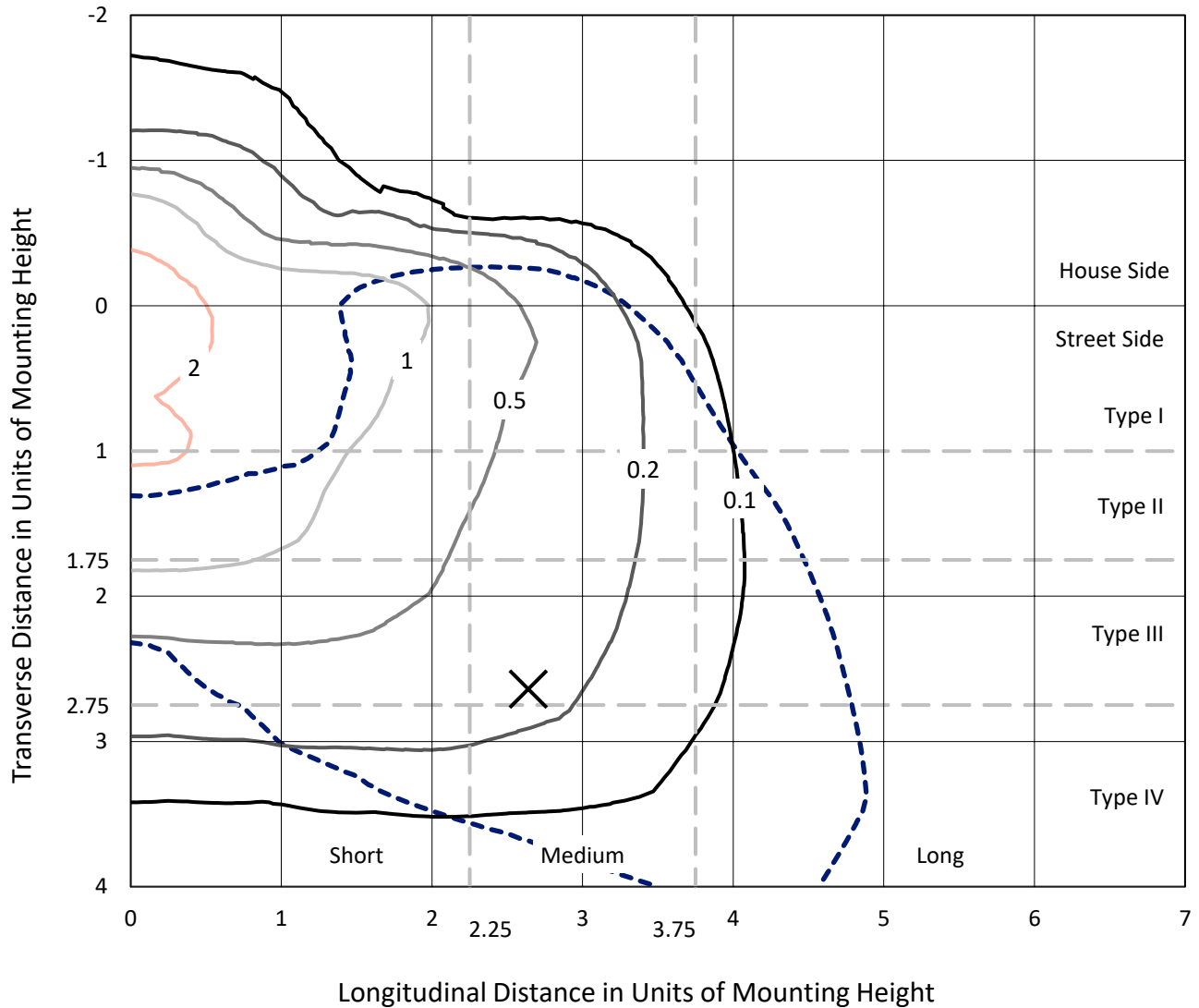
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

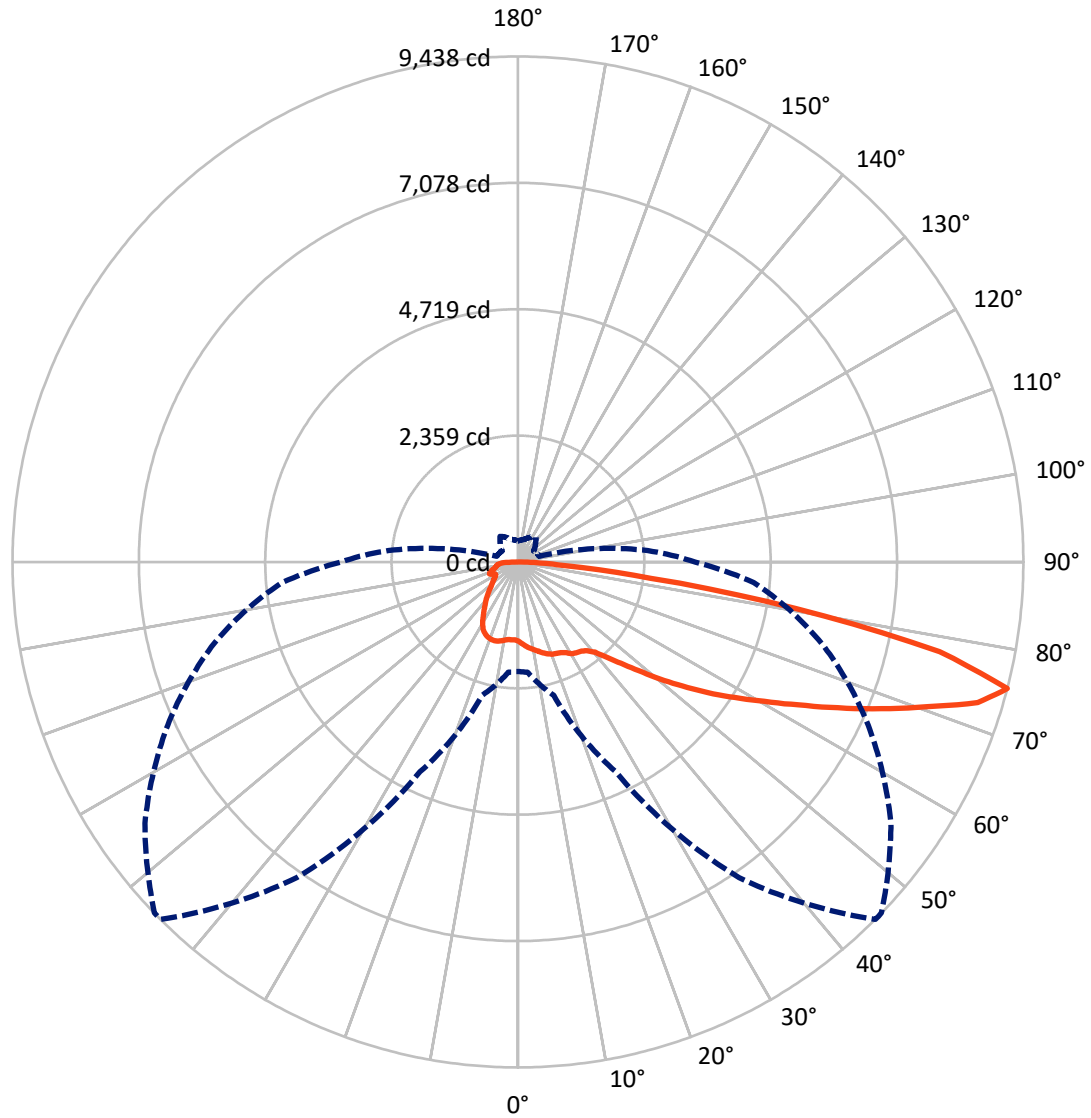
× Max cd  
 - - - 1/2 Max cd



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-PA3-90-730-U-T4W

### Luminous Intensity Polar Plot



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

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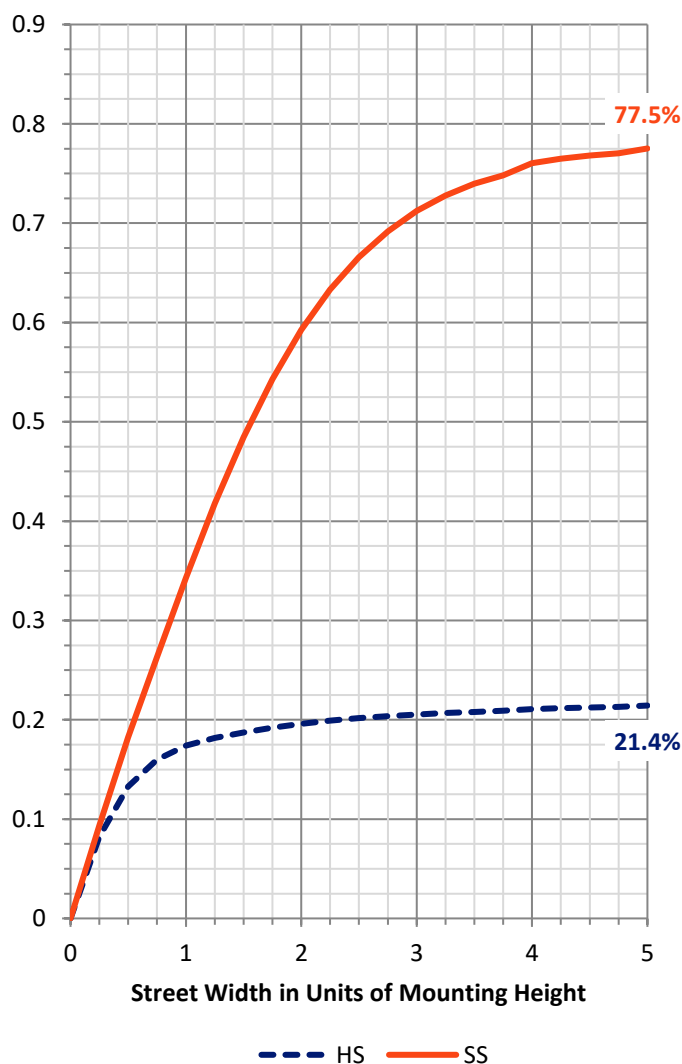
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3113.8	0.0	3113.8
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	10976.2	0.0	10976.2
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	14090.0	0.0	14090.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.4	1.0
10°-20°	465.7	3.3
20°-30°	794.0	5.6
30°-40°	1112.5	7.9
40°-50°	1634.4	11.6
50°-60°	2601.1	18.5
60°-70°	3700.1	26.3
70°-80°	3098.1	22.0
80°-90°	537.7	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°	14090.0	100.0
0°-180°	14090.0	100.0

**Coefficient of Utilization**



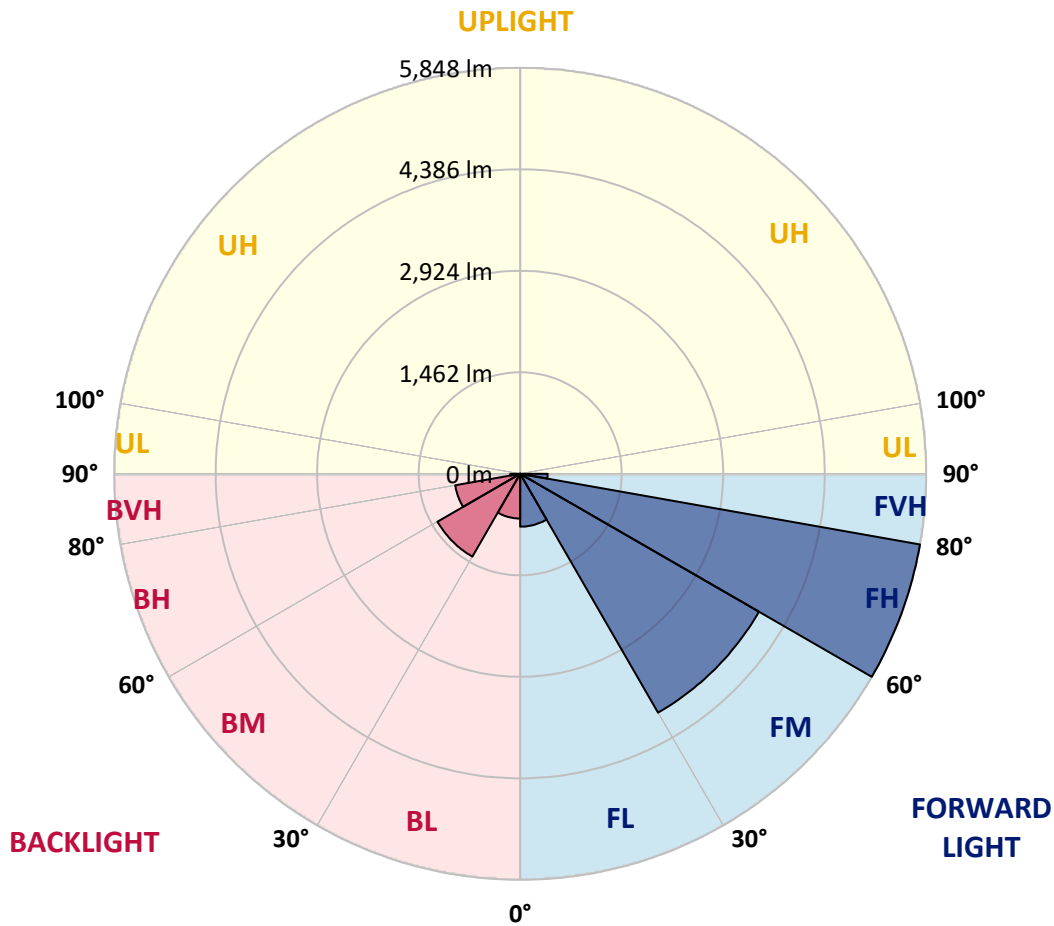
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 CATALOG NUMBER: ARCH-L-PA3-90-730-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	761.7	5.4			
FM (30°-60°)	3971.5	28.2			
FH (60°-80°)	5847.7	41.5			G3/7500
FVH (80°-90°)	395.3	2.8			G3/500
BL (0°-30°)	644.4	4.6	B2/1000		
BM (30°-60°)	1376.5	9.8	B2/2500		
BH (60°-80°)	950.5	6.7	B2/1000		G2/1000
BVH (80°-90°)	142.4	1.0			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: 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°	1479.8	1479.8	1479.8	1479.8	1479.8	1479.8	1479.8	1479.8	1479.8	1479.8	1479.8
2.5°	1564.5	1556.9	1553.2	1553.2	1538.1	1528.7	1526.8	1513.6	1502.4	1491.1	1481.6
5°	1654.8	1649.2	1637.9	1628.5	1607.8	1581.4	1577.7	1549.4	1521.2	1494.8	1472.2
7.5°	1737.7	1726.4	1713.2	1694.4	1660.5	1624.7	1619.1	1579.5	1540.0	1500.5	1470.3
10°	1807.3	1796.0	1777.2	1750.9	1707.6	1664.3	1658.6	1617.2	1575.8	1528.7	1485.4
12.5°	1873.2	1863.8	1835.6	1799.8	1749.0	1709.4	1703.8	1668.0	1624.7	1572.0	1515.5
15°	1929.7	1920.3	1890.2	1848.8	1790.4	1760.3	1752.7	1718.9	1675.6	1619.1	1560.7
17.5°	1957.9	1957.9	1925.9	1880.8	1826.2	1803.6	1797.9	1756.5	1717.0	1662.4	1604.0
20°	1967.4	1971.1	1948.5	1893.9	1846.9	1837.5	1831.8	1797.9	1752.7	1700.0	1645.4
22.5°	1973.0	1980.5	1961.7	1899.6	1860.1	1854.4	1850.6	1828.0	1792.3	1741.4	1686.8
25°	1991.8	1991.8	1978.7	1909.0	1877.0	1875.1	1875.1	1861.9	1837.5	1794.2	1739.6
27.5°	2020.1	2018.2	2001.3	1929.7	1914.6	1920.3	1918.4	1916.5	1899.6	1856.3	1797.9
30°	2067.1	2067.1	2048.3	1971.1	1961.7	1986.2	1988.1	1991.8	1965.5	1897.7	1850.6
32.5°	2138.7	2131.2	2112.3	2012.5	1997.5	2020.1	2023.8	2022.0	1999.4	1935.4	1912.8
35°	2359.0	2342.0	2274.2	2104.8	2029.5	2042.7	2044.6	2054.0	2057.7	2006.9	1995.6
37.5°	2744.9	2722.3	2618.8	2323.2	2131.2	2099.1	2097.3	2121.7	2142.4	2097.3	2097.3
40°	3164.7	3145.9	3085.7	2699.7	2319.4	2214.0	2206.5	2229.1	2255.4	2223.4	2232.8
42.5°	3526.2	3541.3	3546.9	3098.8	2601.8	2428.6	2407.9	2375.9	2417.3	2389.1	2426.7
45°	3797.3	3789.8	3893.3	3507.4	2967.0	2697.8	2669.6	2583.0	2635.7	2633.8	2716.7
47.5°	4085.3	4072.2	4115.5	3891.4	3383.1	3027.3	2984.0	2856.0	2935.0	2989.6	3127.1
50°	4358.3	4362.1	4377.1	4194.5	3834.9	3428.3	3373.7	3202.4	3315.3	3430.2	3624.1
52.5°	4714.1	4687.8	4669.0	4548.5	4341.4	3846.2	3810.5	3614.7	3772.8	3908.4	4166.3
55°	5024.8	5007.8	4996.5	4990.9	4765.0	4307.5	4269.8	4066.5	4294.3	4390.3	4770.6
57.5°	5356.1	5346.7	5407.0	5503.0	5412.6	4776.3	4736.7	4540.9	4795.1	4862.9	5425.8
60°	5599.0	5604.6	5770.3	6015.0	5952.9	5284.6	5237.5	5064.3	5282.7	5342.9	6080.9
62.5°	5600.9	5657.3	6041.4	6480.1	6551.6	5870.1	5815.5	5627.2	5783.5	5783.5	6668.3
65°	5066.2	5130.2	5992.5	6594.9	7157.8	6566.7	6513.9	6218.4	6276.7	6197.7	7219.9
67.5°	4533.4	4608.7	5420.1	6604.3	7583.3	7312.2	7250.1	6809.5	6709.7	6510.2	7605.9
70°	4179.5	4232.2	4909.9	6481.9	7839.3	8091.6	8044.5	7370.6	7050.5	6771.9	7524.9
72.5°	3518.7	3499.8	4147.5	5900.2	7982.4	8976.4	8936.9	7980.5	7346.1	6647.6	6417.9
75°	2042.7	2065.3	2573.6	4322.6	7195.5	9437.7	9433.9	8502.0	7216.2	5872.0	4422.3
77.5°	589.3	606.2	845.3	1899.6	4550.4	8050.2	8308.1	7775.3	6099.8	4185.1	2293.1
80°	257.9	271.1	367.1	632.6	1959.8	5258.2	5484.1	5258.2	3678.7	1920.3	899.9
82.5°	152.5	161.9	239.1	391.6	939.4	2502.0	2807.0	2451.2	1587.1	815.2	372.8
85°	86.6	90.4	137.4	248.5	591.2	875.4	982.7	920.6	773.8	463.1	195.8
87.5°	39.5	41.4	67.8	116.7	331.3	295.6	306.9	406.7	448.1	282.4	97.9
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°	1479.8	1479.8	1479.8	1479.8	1479.8	1479.8	1479.8	1479.8	1479.8	1479.8	1479.8
2.5°	1477.9	1472.2	1460.9	1457.2	1451.5	1453.4	1455.3	1455.3	1457.2	1451.5	1451.5
5°	1462.8	1453.4	1442.1	1442.1	1442.1	1457.2	1470.3	1477.9	1481.6	1481.6	1477.9
7.5°	1457.2	1445.9	1432.7	1436.5	1440.2	1459.0	1483.5	1508.0	1515.5	1515.5	1511.8
10°	1468.5	1457.2	1447.8	1453.4	1462.8	1477.9	1496.7	1519.3	1538.1	1540.0	1538.1
12.5°	1494.8	1481.6	1472.2	1483.5	1494.8	1504.2	1513.6	1523.1	1547.5	1551.3	1551.3
15°	1538.1	1524.9	1513.6	1523.1	1526.8	1526.8	1526.8	1526.8	1551.3	1555.1	1555.1
17.5°	1581.4	1570.1	1558.8	1560.7	1549.4	1534.4	1528.7	1526.8	1540.0	1551.3	1553.2
20°	1622.8	1613.4	1602.1	1583.3	1555.1	1526.8	1517.4	1517.4	1524.9	1541.9	1541.9
22.5°	1668.0	1656.7	1637.9	1594.6	1547.5	1508.0	1498.6	1504.2	1513.6	1536.2	1534.4
25°	1718.9	1703.8	1671.8	1590.8	1523.1	1476.0	1477.9	1494.8	1511.8	1536.2	1536.2
27.5°	1775.3	1754.6	1690.6	1560.7	1468.5	1423.3	1440.2	1479.8	1504.2	1530.6	1534.4
30°	1837.5	1818.6	1705.7	1508.0	1380.0	1338.6	1380.0	1444.0	1481.6	1506.1	1511.8
32.5°	1912.8	1897.7	1718.9	1440.2	1265.1	1229.4	1289.6	1368.7	1428.9	1457.2	1462.8
35°	2006.9	1991.8	1735.8	1363.0	1157.8	1120.2	1174.8	1255.7	1334.8	1370.6	1381.9
37.5°	2129.3	2106.7	1750.9	1280.2	1067.5	1024.2	1050.5	1123.9	1195.5	1244.4	1257.6
40°	2285.5	2249.8	1764.0	1186.1	988.4	939.4	948.9	984.6	1026.0	1069.3	1086.3
42.5°	2505.8	2434.3	1765.9	1086.3	907.4	862.3	858.5	869.8	869.8	869.8	875.4
45°	2812.7	2677.1	1769.7	992.2	824.6	777.5	766.2	762.5	734.2	679.6	675.9
47.5°	3200.5	2995.3	1786.6	913.1	738.0	696.6	681.5	666.5	613.7	557.3	546.0
50°	3697.5	3364.3	1820.5	837.8	664.6	636.3	617.5	581.7	523.4	480.1	468.8
52.5°	4269.8	3802.9	1852.5	758.7	610.0	591.2	568.6	525.3	463.1	436.8	433.0
55°	4926.9	4292.4	1916.5	689.0	562.9	549.7	529.0	487.6	440.5	421.7	419.8
57.5°	5599.0	4840.3	2006.9	626.9	517.7	510.2	510.2	474.4	444.3	436.8	436.8
60°	6246.6	5310.9	1937.2	568.6	476.3	480.1	515.8	506.4	483.8	493.3	498.9
62.5°	6749.3	5587.7	1572.0	521.5	446.2	480.1	572.3	572.3	546.0	542.2	542.2
65°	6963.9	5583.9	1105.1	485.7	434.9	527.1	638.2	608.1	538.4	512.1	506.4
67.5°	6909.3	5339.2	762.5	461.2	431.1	576.1	668.3	583.6	504.5	482.0	465.0
70°	6429.2	4821.5	587.4	438.7	425.5	555.4	658.9	555.4	478.2	457.5	442.4
72.5°	5186.7	3867.0	487.6	416.1	402.9	514.0	626.9	529.0	457.5	434.9	419.8
75°	3307.8	2432.4	412.3	385.9	359.6	461.2	583.6	502.7	434.9	404.8	393.5
77.5°	1590.8	1048.6	359.6	350.2	323.8	427.4	540.3	468.8	404.8	380.3	372.8
80°	643.9	480.1	312.5	314.4	297.5	406.7	510.2	436.8	374.6	348.3	335.1
82.5°	335.1	278.6	263.6	271.1	271.1	387.8	487.6	410.4	348.3	337.0	293.7
85°	180.7	173.2	203.3	218.4	235.3	350.2	453.7	382.2	318.2	273.0	263.6
87.5°	88.5	113.0	114.8	131.8	163.8	280.5	382.2	320.0	265.5	220.3	216.5
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)