

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: P399168

Luminaire Tested: **ARCH-L-PA3-100-827-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399168  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-100-827-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12260 lumens  
Efficiency: N/A  
Efficacy: 120.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

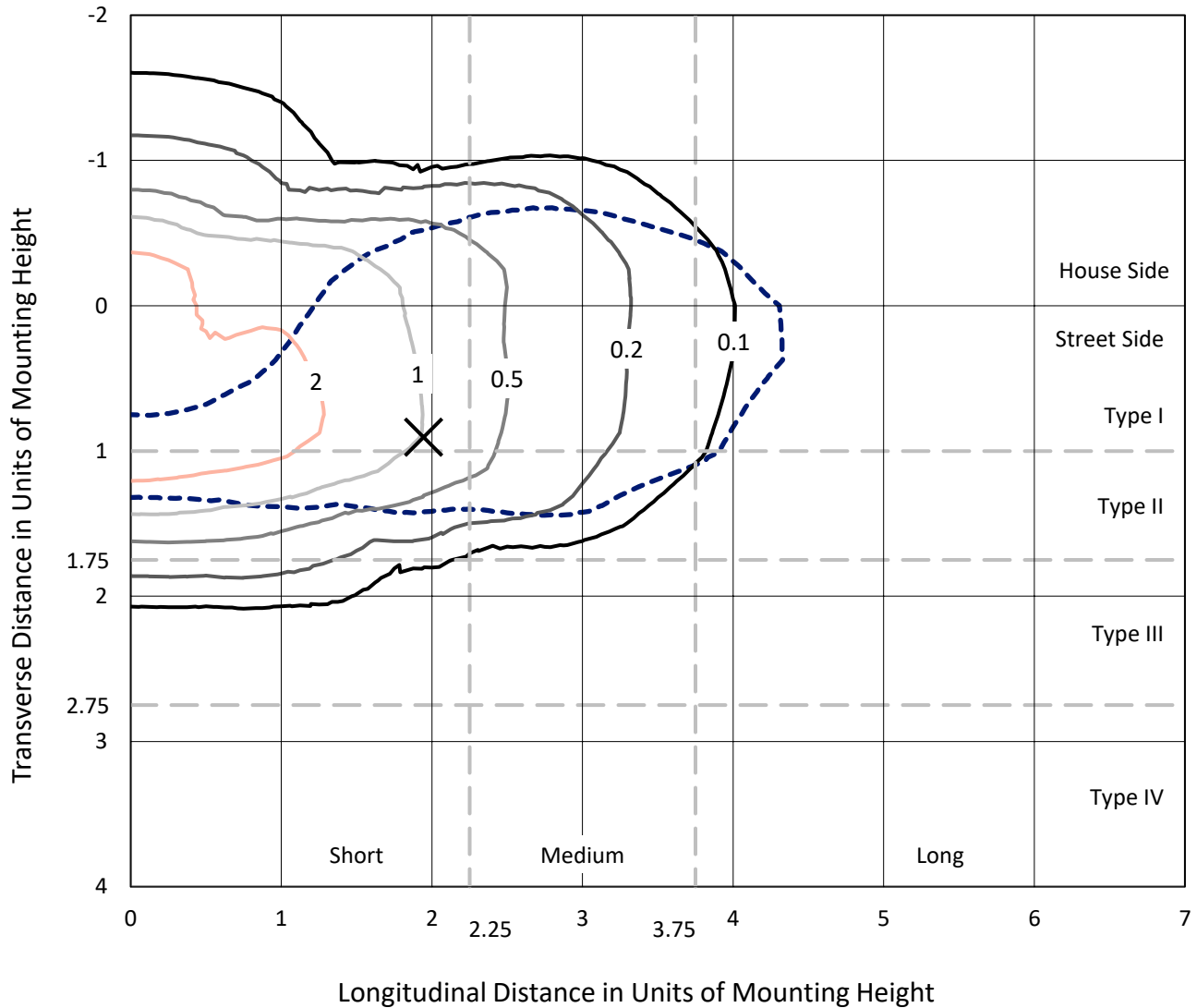
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

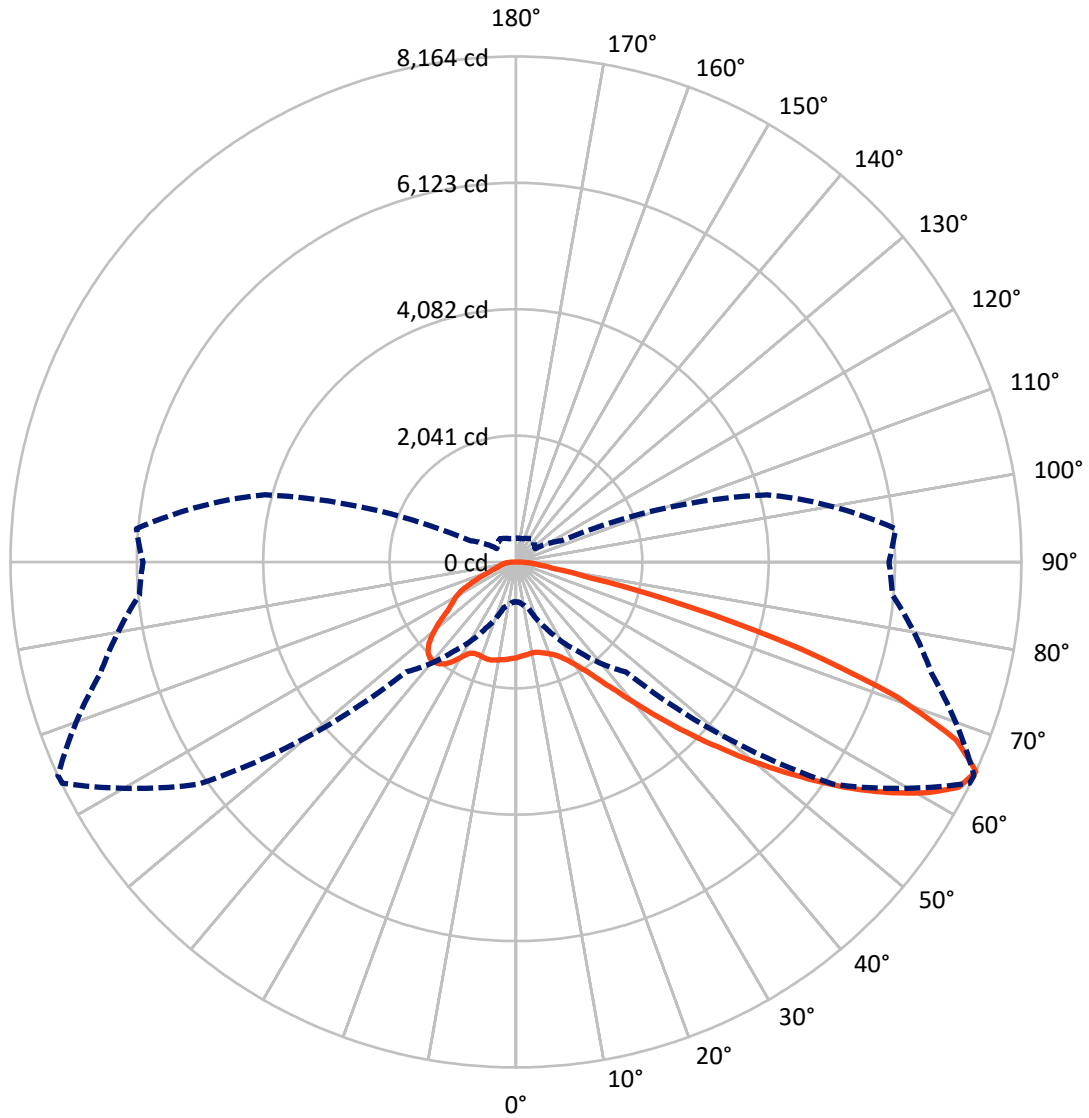
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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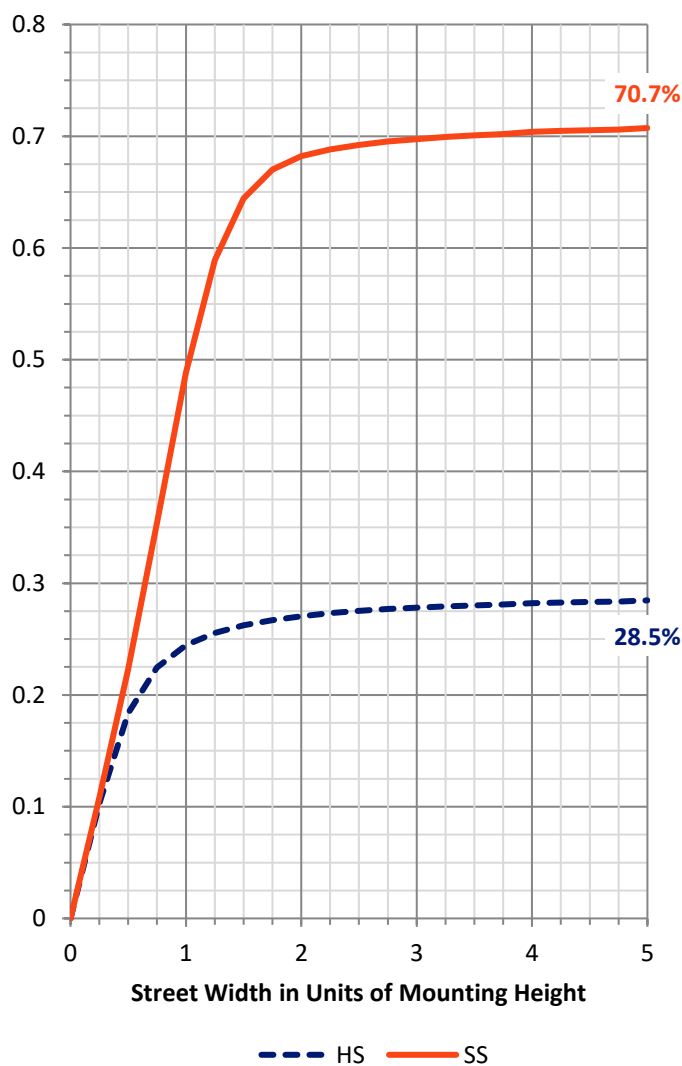
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3544.6	0.0	3544.6
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	8715.4	0.0	8715.4
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	12260.0	0.0	12260.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.6	1.2
10°-20°	440.6	3.6
20°-30°	782.7	6.4
30°-40°	1324.2	10.8
40°-50°	2305.1	18.8
50°-60°	2978.9	24.3
60°-70°	2606.7	21.3
70°-80°	1417.9	11.6
80°-90°	256.2	2.1
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°	12260.0	100.0
0°-180°	12260.0	100.0

**Coefficient of Utilization**



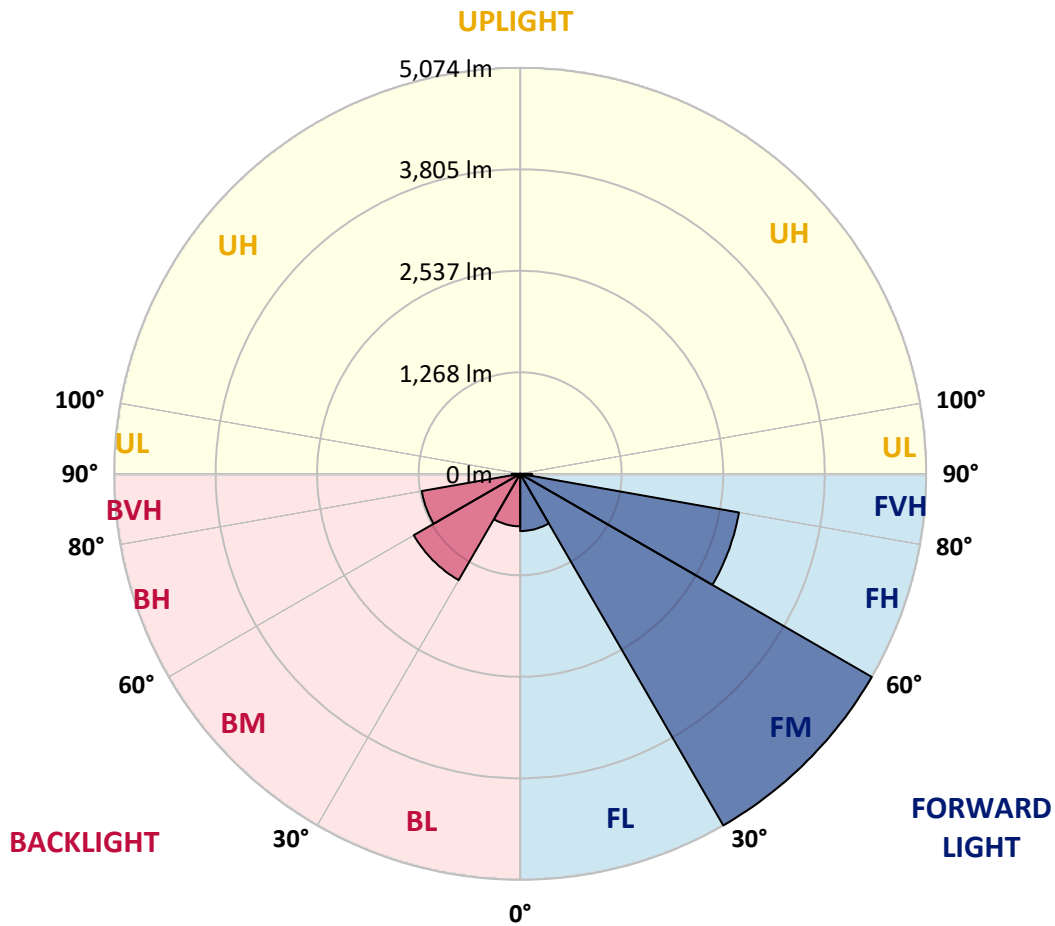
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	715.3	5.8			
FM (30°-60°)	5073.5	41.4			
FH (60°-80°)	2775.8	22.6			G2/5000
FVH (80°-90°)	150.8	1.2			G2/225
BL (0°-30°)	655.6	5.3	B2/1000		
BM (30°-60°)	1534.7	12.5	B2/2500		
BH (60°-80°)	1248.8	10.2	B3/2500		G3/2500
BVH (80°-90°)	105.4	0.9			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1549.2	1549.2	1549.2	1549.2	1549.2	1549.2	1549.2	1549.2	1549.2	1549.2	1549.2
2.5°	1521.7	1520.1	1516.9	1520.1	1521.7	1525.0	1523.3	1526.6	1525.0	1529.8	1537.9
5°	1483.0	1479.8	1478.2	1486.2	1491.1	1499.1	1502.4	1513.7	1512.1	1520.1	1533.0
7.5°	1439.4	1439.4	1437.8	1447.5	1454.0	1468.5	1479.8	1499.1	1500.8	1515.3	1529.8
10°	1405.5	1407.2	1405.5	1413.6	1423.3	1441.1	1460.4	1487.8	1489.5	1510.4	1525.0
12.5°	1392.6	1392.6	1392.6	1403.9	1416.8	1441.1	1463.6	1492.7	1495.9	1518.5	1531.4
15°	1410.4	1412.0	1408.8	1420.1	1434.6	1463.6	1484.6	1515.3	1518.5	1539.5	1547.6
17.5°	1473.3	1479.8	1471.7	1478.2	1474.9	1497.5	1516.9	1547.6	1549.2	1566.9	1570.1
20°	1597.6	1604.0	1591.1	1583.1	1554.0	1552.4	1560.5	1584.7	1584.7	1596.0	1587.9
22.5°	1789.6	1796.1	1773.5	1742.8	1673.4	1639.5	1621.8	1633.1	1631.5	1636.3	1615.3
25°	2044.6	2043.0	2015.5	1959.1	1847.7	1765.4	1721.8	1704.1	1704.1	1694.4	1668.6
27.5°	2360.9	2336.7	2288.3	2220.5	2065.6	1951.0	1857.4	1812.2	1804.1	1775.1	1726.7
30°	2698.1	2680.4	2611.0	2512.6	2333.4	2186.6	2031.7	1941.3	1936.5	1873.5	1800.9
32.5°	3095.1	3066.1	2988.6	2870.8	2656.2	2449.6	2256.0	2118.8	2110.7	2010.7	1910.6
35°	3605.0	3580.8	3430.8	3313.0	3037.0	2765.9	2536.8	2354.4	2348.0	2225.3	2097.8
37.5°	4216.6	4153.7	4008.5	3787.4	3496.9	3175.8	2885.3	2656.2	2648.1	2512.6	2351.2
40°	4762.1	4705.6	4576.5	4373.2	4061.7	3705.1	3311.3	3033.8	3025.7	2861.1	2657.8
42.5°	5165.5	5126.8	5042.9	4925.1	4702.4	4486.1	3855.2	3490.5	3475.9	3262.9	3009.6
45°	5399.5	5368.8	5320.4	5349.5	5346.2	5305.9	4503.9	4034.3	3987.5	3711.6	3401.7
47.5°	5343.0	5315.6	5335.0	5560.9	5872.3	6106.3	5259.1	4591.0	4528.1	4168.2	3819.7
50°	4934.7	4946.0	5047.7	5480.2	6178.9	6698.5	6096.6	5225.2	5141.3	4628.1	4216.6
52.5°	4190.8	4218.3	4465.2	5070.3	6145.0	7082.6	6853.5	5880.4	5769.0	5076.8	4578.1
55°	3329.1	3398.5	3718.0	4353.8	5702.9	7110.0	7424.7	6538.8	6416.1	5497.9	4892.8
57.5°	2462.5	2565.8	2935.4	3519.5	4855.7	6676.0	7710.3	7168.1	7019.7	5915.9	5225.2
60°	1562.1	1625.0	2051.0	2740.1	3716.4	5614.1	7673.2	7703.9	7574.8	6332.2	5572.2
62.5°	997.3	1027.9	1242.6	1954.2	2598.1	4156.9	7268.2	8108.9	8021.8	6711.5	5901.4
65°	640.6	653.6	763.3	1202.2	1768.6	2509.3	6259.6	8152.5	8163.8	6948.7	6104.7
67.5°	521.2	527.7	568.0	742.3	1250.6	1386.2	4360.3	7532.8	7670.0	6887.3	6035.3
70°	474.4	482.5	524.5	592.2	968.2	956.9	2110.7	6303.2	6527.5	6533.9	5727.1
72.5°	400.2	411.5	468.0	560.0	748.8	755.2	894.0	4489.4	4820.2	5840.0	5263.9
75°	334.0	340.5	388.9	493.8	634.2	603.5	627.7	2380.2	2857.9	4683.0	4771.8
77.5°	271.1	277.6	313.1	393.7	563.2	469.6	493.8	986.0	1218.4	3179.0	3900.4
80°	193.6	200.1	240.4	306.6	426.0	422.8	366.3	543.8	590.6	1718.6	2533.5
82.5°	138.8	143.6	182.4	219.5	295.3	424.4	275.9	369.5	387.3	761.7	1021.5
85°	93.6	93.6	125.9	145.2	190.4	267.9	222.7	250.1	261.4	361.5	275.9
87.5°	40.3	40.3	67.8	74.2	100.1	124.3	166.2	125.9	129.1	195.3	113.0
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°	1549.2	1549.2	1549.2	1549.2	1549.2	1549.2	1549.2	1549.2	1549.2	1549.2	1549.2
2.5°	1542.7	1544.3	1547.6	1557.2	1563.7	1573.4	1578.2	1584.7	1584.7	1581.4	1583.1
5°	1539.5	1544.3	1555.6	1573.4	1584.7	1602.4	1615.3	1625.0	1628.2	1625.0	1626.6
7.5°	1537.9	1545.9	1565.3	1591.1	1607.3	1629.9	1647.6	1658.9	1667.0	1663.7	1665.4
10°	1533.0	1545.9	1570.1	1602.4	1626.6	1649.2	1665.4	1670.2	1675.0	1671.8	1670.2
12.5°	1539.5	1554.0	1579.8	1618.6	1646.0	1663.7	1668.6	1660.5	1649.2	1642.8	1641.2
15°	1552.4	1566.9	1592.7	1633.1	1657.3	1663.7	1652.4	1626.6	1600.8	1586.3	1584.7
17.5°	1570.1	1579.8	1600.8	1636.3	1655.7	1647.6	1625.0	1594.4	1575.0	1563.7	1565.3
20°	1581.4	1581.4	1597.6	1625.0	1641.2	1634.7	1607.3	1573.4	1542.7	1528.2	1523.3
22.5°	1597.6	1589.5	1591.1	1615.3	1637.9	1628.2	1570.1	1510.4	1466.9	1450.7	1449.1
25°	1641.2	1618.6	1604.0	1618.6	1671.8	1592.7	1476.6	1407.2	1366.8	1352.3	1353.9
27.5°	1694.4	1663.7	1633.1	1657.3	1699.2	1512.1	1357.1	1278.1	1253.9	1242.6	1247.4
30°	1747.7	1707.3	1667.0	1754.1	1679.9	1386.2	1203.8	1126.4	1105.4	1097.3	1103.8
32.5°	1846.1	1779.9	1731.5	1883.2	1620.2	1242.6	1037.6	966.6	947.3	937.6	934.3
35°	2010.7	1926.8	1878.4	1996.2	1536.3	1082.8	885.9	835.9	814.9	793.9	790.7
37.5°	2247.9	2146.2	2102.7	2060.7	1418.5	924.7	769.7	735.9	705.2	672.9	671.3
40°	2531.9	2399.6	2367.3	2089.8	1255.5	776.2	689.1	656.8	618.1	587.4	589.0
42.5°	2859.5	2690.1	2620.7	2081.7	1053.8	697.1	631.0	595.5	561.6	534.1	532.5
45°	3209.7	3017.7	2857.9	2025.2	853.7	642.3	595.5	553.5	519.6	489.0	485.7
47.5°	3597.0	3382.4	3077.4	1915.5	705.2	603.5	574.5	514.8	484.1	464.8	464.8
50°	3987.5	3730.9	3279.1	1749.3	618.1	574.5	543.8	493.8	469.6	453.5	453.5
52.5°	4321.5	4094.0	3445.3	1550.8	563.2	550.3	522.8	484.1	458.3	443.8	442.2
55°	4645.9	4431.3	3593.7	1353.9	518.0	518.0	518.0	476.0	447.0	434.1	432.5
57.5°	4968.6	4786.3	3748.7	1224.8	477.7	490.6	508.3	466.4	437.3	426.0	424.4
60°	5333.3	5212.3	3927.8	1134.4	442.2	461.5	495.4	455.1	421.2	411.5	409.9
62.5°	5720.6	5720.6	4090.8	1007.0	409.9	437.3	476.0	440.5	406.7	398.6	397.0
65°	6024.0	6154.7	4195.7	816.5	377.6	413.1	453.5	421.2	387.3	385.7	382.5
67.5°	6059.5	6264.5	4129.5	616.4	348.6	387.3	430.9	400.2	367.9	367.9	363.1
70°	5804.5	6012.7	3922.9	461.5	327.6	361.5	401.8	374.4	343.7	346.9	338.9
72.5°	5378.5	5430.2	3409.8	364.7	303.4	334.0	366.3	345.3	317.9	317.9	306.6
75°	4816.9	4529.7	2477.1	305.0	274.3	301.8	330.8	313.1	288.9	280.8	274.3
77.5°	3834.2	3282.3	1439.4	263.0	250.1	271.1	290.5	277.6	256.6	238.8	238.8
80°	2336.7	1923.6	635.8	227.5	221.1	237.2	250.1	235.6	217.9	200.1	195.3
82.5°	889.2	742.3	308.2	195.3	193.6	203.3	213.0	198.5	185.6	177.5	153.3
85°	243.7	224.3	211.4	163.0	159.8	158.1	169.4	163.0	145.2	119.4	106.5
87.5°	92.0	104.9	114.6	100.1	106.5	98.4	113.0	103.3	92.0	59.7	53.3
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)