

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: P399170

Luminaire Tested: **ARCH-L-PA3-100-827-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399170  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)  
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-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12299 lumens  
Efficiency: N/A  
Efficacy: 120.6 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

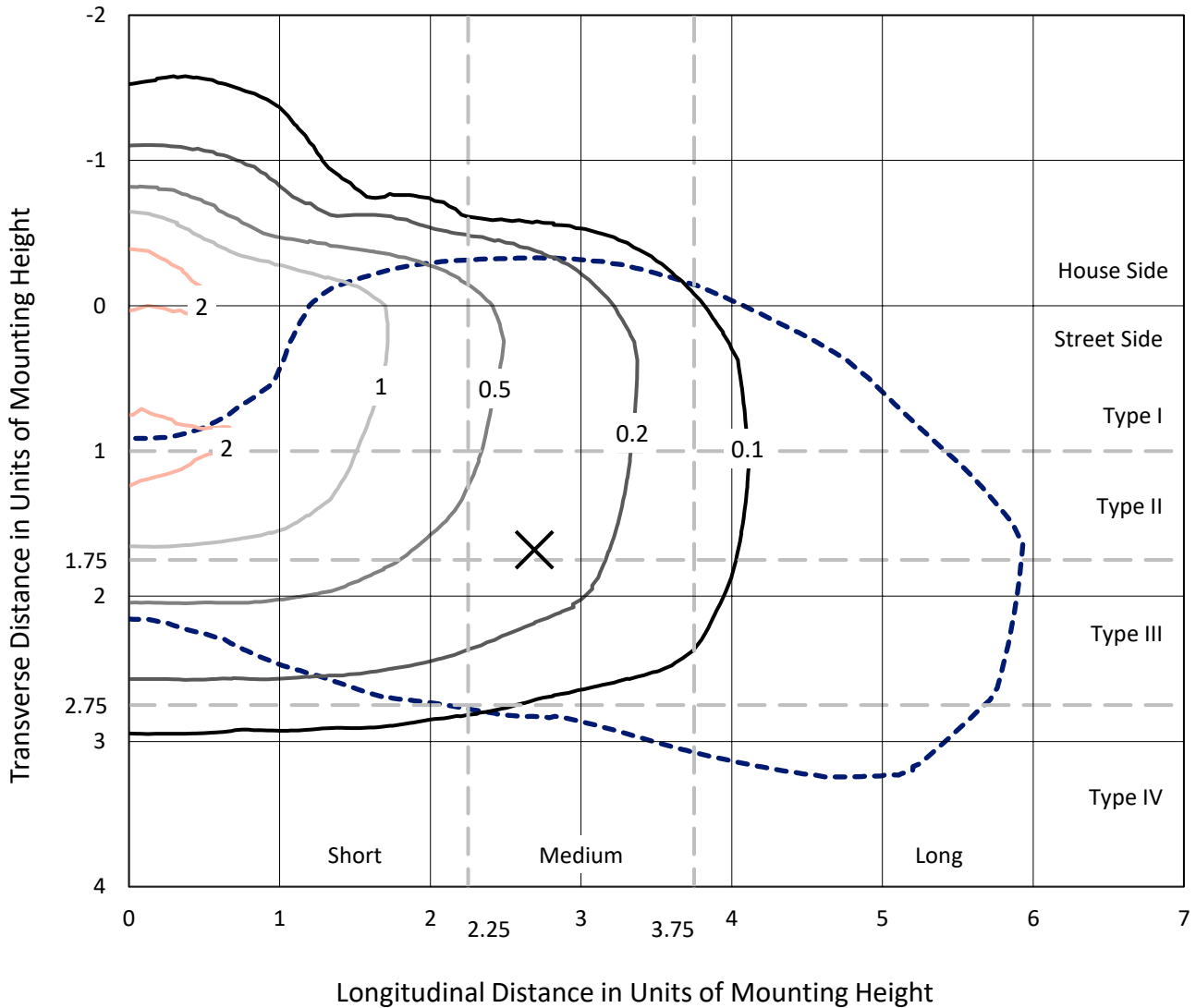
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

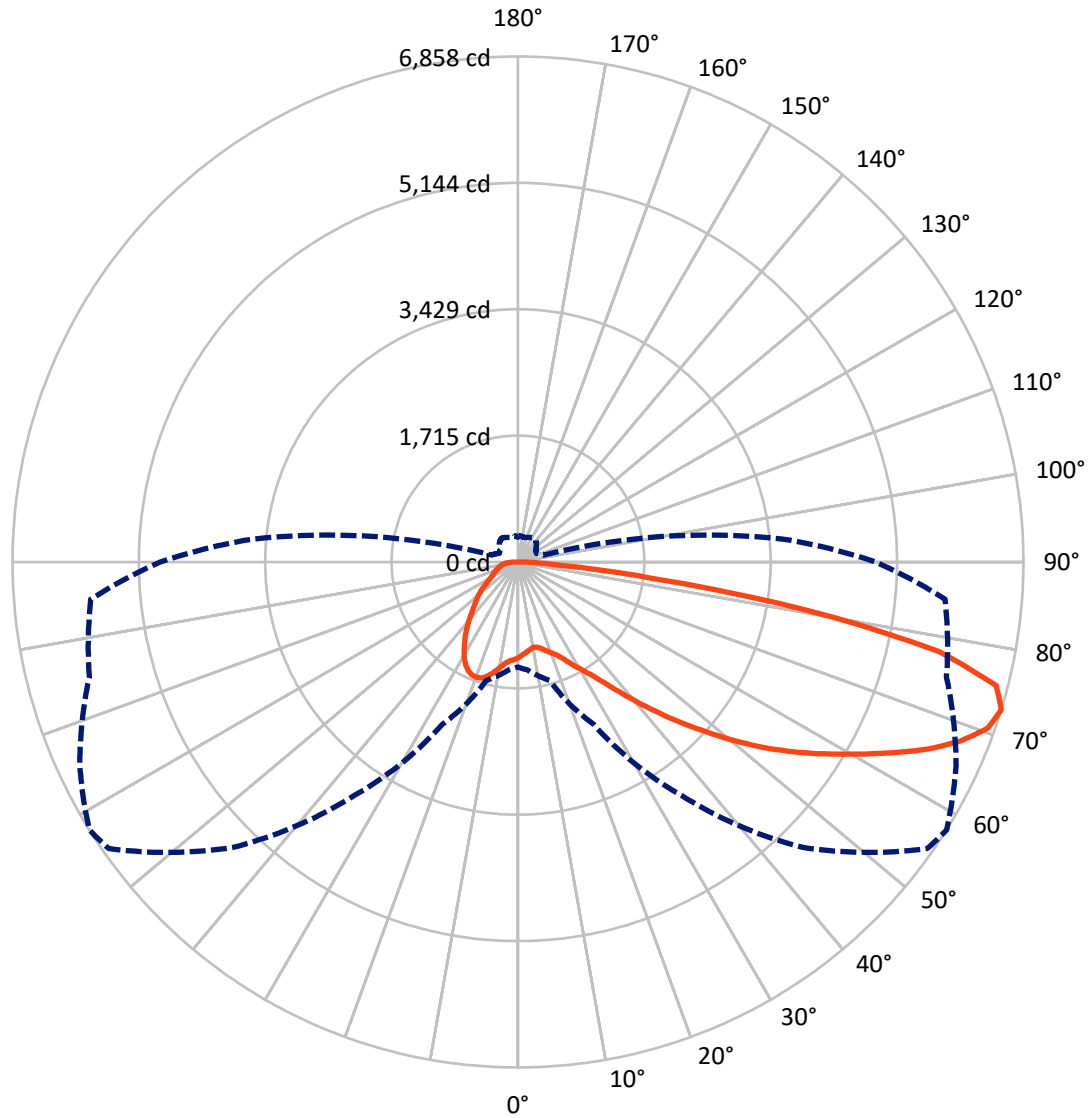
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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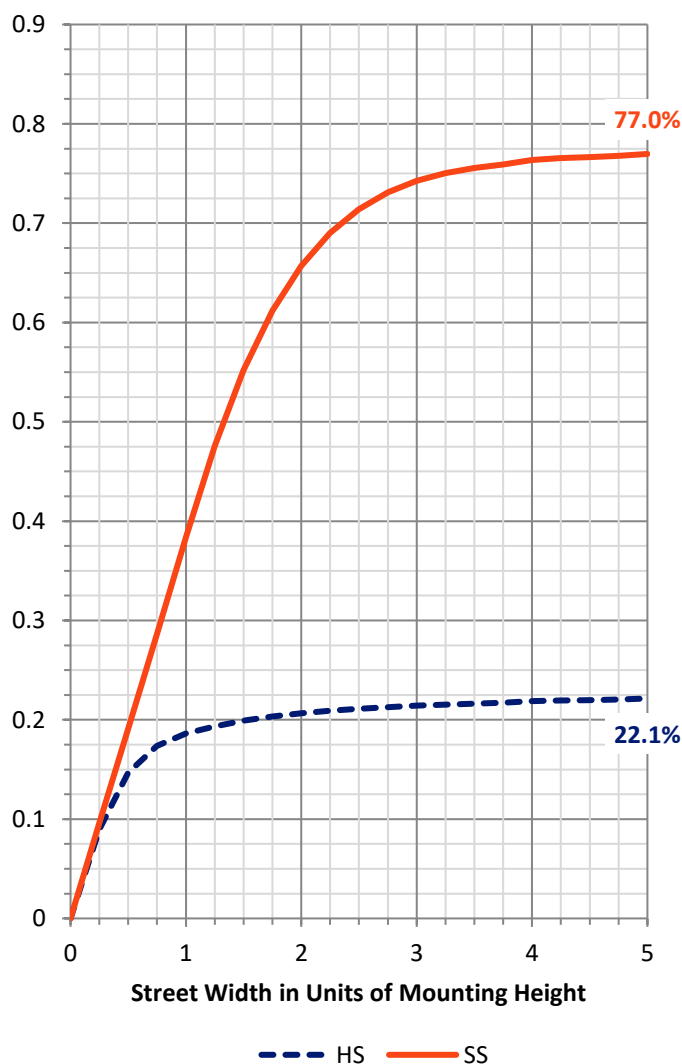
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2789.3	0.0	2789.3
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	9509.7	0.0	9509.7
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	12299.0	0.0	12299.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.0	1.0
10°-20°	396.9	3.2
20°-30°	710.9	5.8
30°-40°	1069.4	8.7
40°-50°	1731.8	14.1
50°-60°	2606.9	21.2
60°-70°	3068.0	24.9
70°-80°	2175.5	17.7
80°-90°	414.5	3.4
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°	12299.0	100.0
0°-180°	12299.0	100.0

**Coefficient of Utilization**

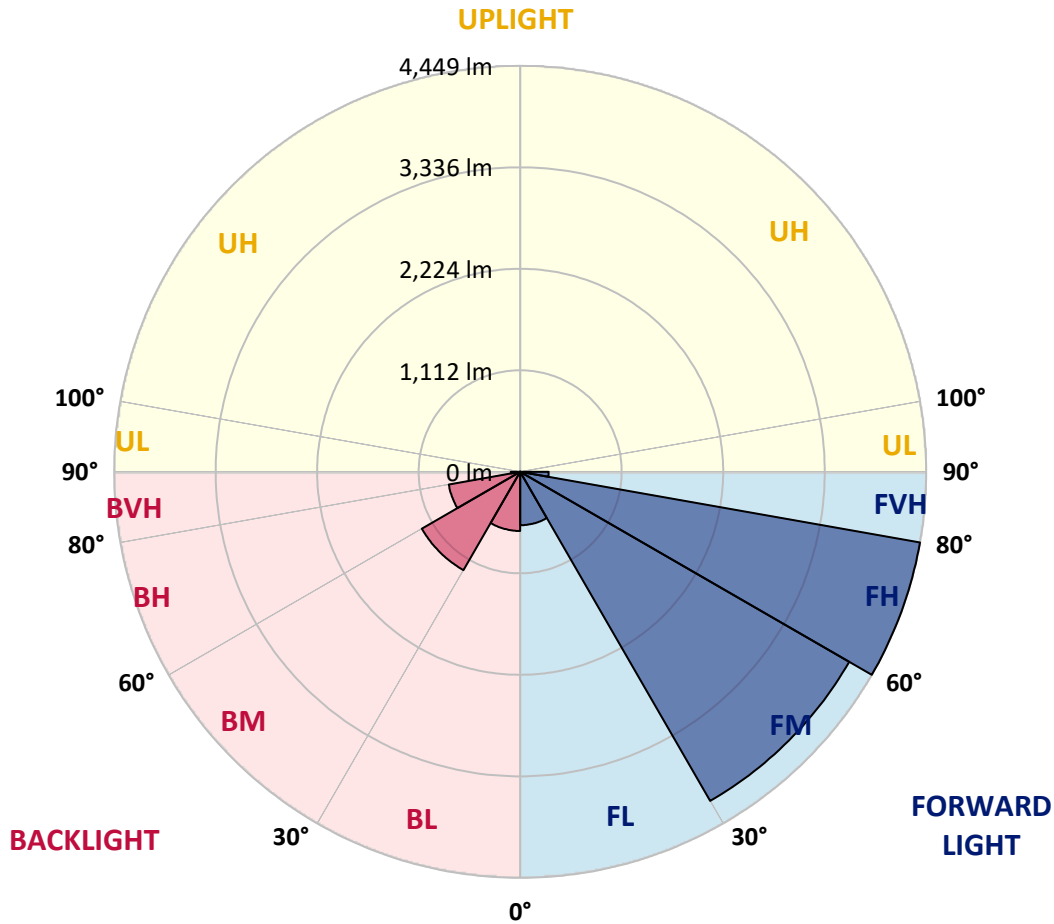


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	584.9	4.8			
FM (30°-60°)	4163.6	33.9			
FH (60°-80°)	4448.6	36.2			G2/5000
FVH (80°-90°)	312.7	2.5			G3/500
BL (0°-30°)	647.9	5.3	B2/1000		
BM (30°-60°)	1244.6	10.1	B2/2500		
BH (60°-80°)	795.0	6.5	B2/1000		G2/1000
BVH (80°-90°)	101.9	0.8			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°	55°	58°	65°	75°	85°
0°	1297.3	1297.3	1297.3	1297.3	1297.3	1297.3	1297.3	1297.3	1297.3	1297.3	1297.3
2.5°	1248.6	1242.1	1243.7	1243.7	1250.2	1253.4	1255.1	1259.9	1263.2	1271.3	1282.7
5°	1190.1	1185.3	1186.9	1188.5	1199.9	1211.2	1221.0	1227.5	1237.2	1250.2	1266.4
7.5°	1147.9	1144.7	1146.3	1149.5	1159.3	1172.3	1188.5	1198.2	1212.9	1237.2	1264.8
10°	1117.1	1117.1	1118.7	1125.2	1134.9	1151.2	1164.1	1175.5	1204.7	1248.6	1290.8
12.5°	1092.7	1092.7	1097.6	1110.6	1126.8	1143.0	1173.9	1186.9	1225.8	1285.9	1336.3
15°	1091.1	1092.7	1094.3	1105.7	1123.6	1159.3	1204.7	1224.2	1271.3	1342.7	1401.2
17.5°	1117.1	1118.7	1112.2	1115.4	1136.5	1186.9	1247.0	1269.7	1329.8	1407.7	1467.8
20°	1196.6	1196.6	1177.1	1159.3	1173.9	1229.1	1297.3	1320.0	1386.6	1472.6	1532.7
22.5°	1359.0	1367.1	1321.6	1282.7	1259.9	1290.8	1352.5	1376.8	1451.5	1544.1	1604.1
25°	1555.4	1563.6	1501.9	1446.7	1404.4	1399.6	1440.2	1466.1	1527.8	1623.6	1674.0
27.5°	1745.4	1730.8	1674.0	1622.0	1568.4	1524.6	1555.4	1578.2	1649.6	1722.7	1753.5
30°	1894.8	1883.4	1828.2	1790.9	1740.5	1683.7	1665.8	1690.2	1748.7	1816.8	1833.1
32.5°	2060.4	2052.3	1997.1	1948.4	1906.1	1852.6	1813.6	1825.0	1857.4	1906.1	1915.9
35°	2271.5	2289.3	2230.9	2131.8	2084.7	2032.8	2005.2	2008.4	2032.8	2063.6	2047.4
37.5°	2493.9	2515.0	2518.3	2362.4	2299.1	2252.0	2222.8	2234.1	2263.3	2284.5	2234.1
40°	2906.3	2885.2	2800.8	2685.5	2588.1	2542.6	2502.0	2500.4	2521.5	2558.8	2467.9
42.5°	3453.5	3434.0	3263.5	3114.1	2959.9	2907.9	2828.4	2794.3	2804.0	2851.1	2724.5
45°	3977.9	3969.8	3833.4	3659.7	3474.6	3373.9	3192.1	3109.3	3101.1	3138.5	2987.5
47.5°	4443.9	4408.2	4309.1	4174.4	4154.9	3891.8	3557.4	3445.3	3406.4	3427.5	3258.6
50°	4942.3	4820.6	4684.2	4601.4	4742.6	4497.5	3925.9	3809.0	3713.2	3727.9	3552.5
52.5°	5207.0	5002.4	4913.1	4937.5	5127.4	5033.3	4327.0	4184.1	4029.9	4051.0	3844.8
55°	4979.7	4978.1	5017.0	5168.0	5432.7	5323.9	4708.5	4547.8	4378.9	4383.8	4180.9
57.5°	4667.9	4731.3	4932.6	5265.4	5811.0	5629.1	5083.6	4913.1	4758.9	4734.5	4562.4
60°	4383.8	4453.6	4745.9	5249.2	5942.5	5908.4	5440.8	5291.4	5166.4	5095.0	4963.4
62.5°	3951.9	4003.9	4417.9	5145.3	5832.1	6109.7	5802.9	5700.6	5606.4	5458.7	5395.3
65°	3443.7	3461.6	3898.3	4802.7	5694.1	6187.7	6163.3	6117.9	6026.9	5809.4	5822.3
67.5°	2893.3	2929.0	3312.2	4255.5	5392.1	6151.9	6442.6	6479.9	6372.8	6046.4	6095.1
70°	2307.2	2351.0	2641.7	3498.9	4879.0	5997.7	6700.7	6760.8	6554.6	6124.3	6145.5
72.5°	1427.2	1469.4	1664.2	2430.6	3867.5	5479.8	6780.3	6858.2	6559.5	6020.4	5817.5
75°	493.6	498.5	651.1	1165.8	2295.8	4137.0	6520.5	6704.0	6353.3	5642.1	5062.5
77.5°	225.7	233.8	289.0	480.6	1018.0	2232.5	5384.0	5843.5	5726.6	5051.1	3896.7
80°	155.9	159.1	199.7	287.4	587.8	785.8	3398.3	3997.4	4202.0	3911.3	2497.1
82.5°	116.9	120.1	154.2	194.8	423.8	381.6	1294.0	1857.4	2308.8	2266.6	1044.0
85°	112.0	110.4	120.1	129.9	282.5	227.3	418.9	574.8	901.1	771.2	263.0
87.5°	48.7	53.6	123.4	73.1	147.8	105.5	181.8	212.7	274.4	238.7	94.2
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°	1297.3	1297.3	1297.3	1297.3	1297.3	1297.3	1297.3	1297.3	1297.3	1297.3	1297.3
2.5°	1287.5	1290.8	1300.5	1315.1	1323.3	1339.5	1350.9	1357.4	1362.2	1363.9	1363.9
5°	1276.2	1282.7	1303.8	1328.1	1350.9	1385.0	1415.8	1433.7	1446.7	1451.5	1453.2
7.5°	1279.4	1295.7	1326.5	1362.2	1391.5	1435.3	1472.6	1508.4	1537.6	1548.9	1548.9
10°	1310.3	1333.0	1375.2	1422.3	1459.6	1505.1	1544.1	1574.9	1609.0	1628.5	1631.8
12.5°	1357.4	1385.0	1440.2	1492.1	1534.3	1570.1	1605.8	1628.5	1644.7	1659.4	1662.6
15°	1423.9	1458.0	1513.2	1566.8	1604.1	1626.9	1636.6	1636.6	1635.0	1636.6	1639.9
17.5°	1490.5	1523.0	1578.2	1631.8	1649.6	1636.6	1625.3	1622.0	1620.4	1617.1	1618.8
20°	1555.4	1586.3	1633.4	1674.0	1659.4	1613.9	1599.3	1597.7	1592.8	1589.5	1586.3
22.5°	1620.4	1643.1	1682.1	1696.7	1638.2	1573.3	1555.4	1545.7	1539.2	1531.1	1523.0
25°	1695.1	1701.6	1730.8	1708.1	1586.3	1498.6	1472.6	1458.0	1451.5	1443.4	1436.9
27.5°	1764.9	1764.9	1769.8	1690.2	1510.0	1399.6	1360.6	1334.6	1333.0	1331.4	1329.8
30°	1828.2	1820.1	1803.9	1636.6	1410.9	1277.8	1219.3	1193.4	1203.1	1211.2	1212.9
32.5°	1902.9	1886.7	1841.2	1563.6	1292.4	1141.4	1070.0	1058.6	1070.0	1079.7	1073.2
35°	2019.8	1990.6	1880.2	1479.1	1178.8	1016.4	948.2	932.0	928.7	927.1	914.1
37.5°	2187.0	2136.7	1911.0	1388.2	1066.7	906.0	855.7	821.6	790.7	758.2	753.4
40°	2391.6	2305.6	1932.1	1284.3	948.2	813.4	759.9	716.0	664.1	607.2	600.7
42.5°	2615.7	2487.4	1941.9	1169.0	844.3	737.1	670.6	615.4	556.9	513.1	504.9
45°	2857.6	2683.9	1933.7	1058.6	759.9	672.2	597.5	537.4	490.3	459.5	453.0
47.5°	3093.0	2909.6	1911.0	970.9	694.9	617.0	540.7	485.5	449.7	415.7	407.5
50°	3395.0	3125.5	1883.4	902.7	623.5	561.8	504.9	446.5	405.9	389.7	386.4
52.5°	3729.5	3341.4	1850.9	816.7	553.7	517.9	482.2	430.3	417.3	386.4	381.6
55°	4091.6	3598.0	1844.4	707.9	492.0	487.1	459.5	444.9	448.1	386.4	378.3
57.5°	4473.1	3872.4	1859.1	599.1	441.6	459.5	469.2	457.9	453.0	394.5	378.3
60°	4870.9	4137.0	1815.2	498.5	402.7	436.8	480.6	451.4	415.7	391.3	379.9
62.5°	5257.3	4359.5	1625.3	427.0	373.4	430.3	474.1	427.0	386.4	386.4	381.6
65°	5538.2	4458.5	1271.3	375.1	354.0	422.1	462.7	410.8	378.3	389.7	383.2
67.5°	5570.7	4356.2	854.0	334.5	337.7	407.5	436.8	396.2	370.2	399.4	389.7
70°	5371.0	4089.9	522.8	303.6	316.6	381.6	414.0	381.6	358.8	391.3	376.7
72.5°	4853.0	3593.1	368.6	277.6	293.9	357.2	392.9	368.6	342.6	354.0	339.3
75°	3981.1	2784.5	292.3	253.3	271.1	334.5	375.1	349.1	323.1	318.2	308.5
77.5°	2820.3	1784.4	235.4	233.8	246.8	306.9	350.7	326.4	300.4	290.6	284.1
80°	1622.0	875.1	203.0	211.1	224.1	279.3	321.5	300.4	276.0	261.4	251.7
82.5°	620.2	305.2	178.6	183.5	198.1	250.0	292.3	274.4	250.0	263.0	220.8
85°	201.3	167.2	146.1	151.0	165.6	207.8	258.2	243.5	215.9	191.6	177.0
87.5°	89.3	90.9	77.9	86.1	103.9	138.0	188.3	178.6	157.5	131.5	126.6
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)