

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: P842419

Luminaire Tested: **ARCH4-40-750-U-T3**

Issue Date: 5/27/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P842419  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-40-750-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 355mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8035 lumens  
Efficiency: N/A  
Efficacy: 183.4 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G2

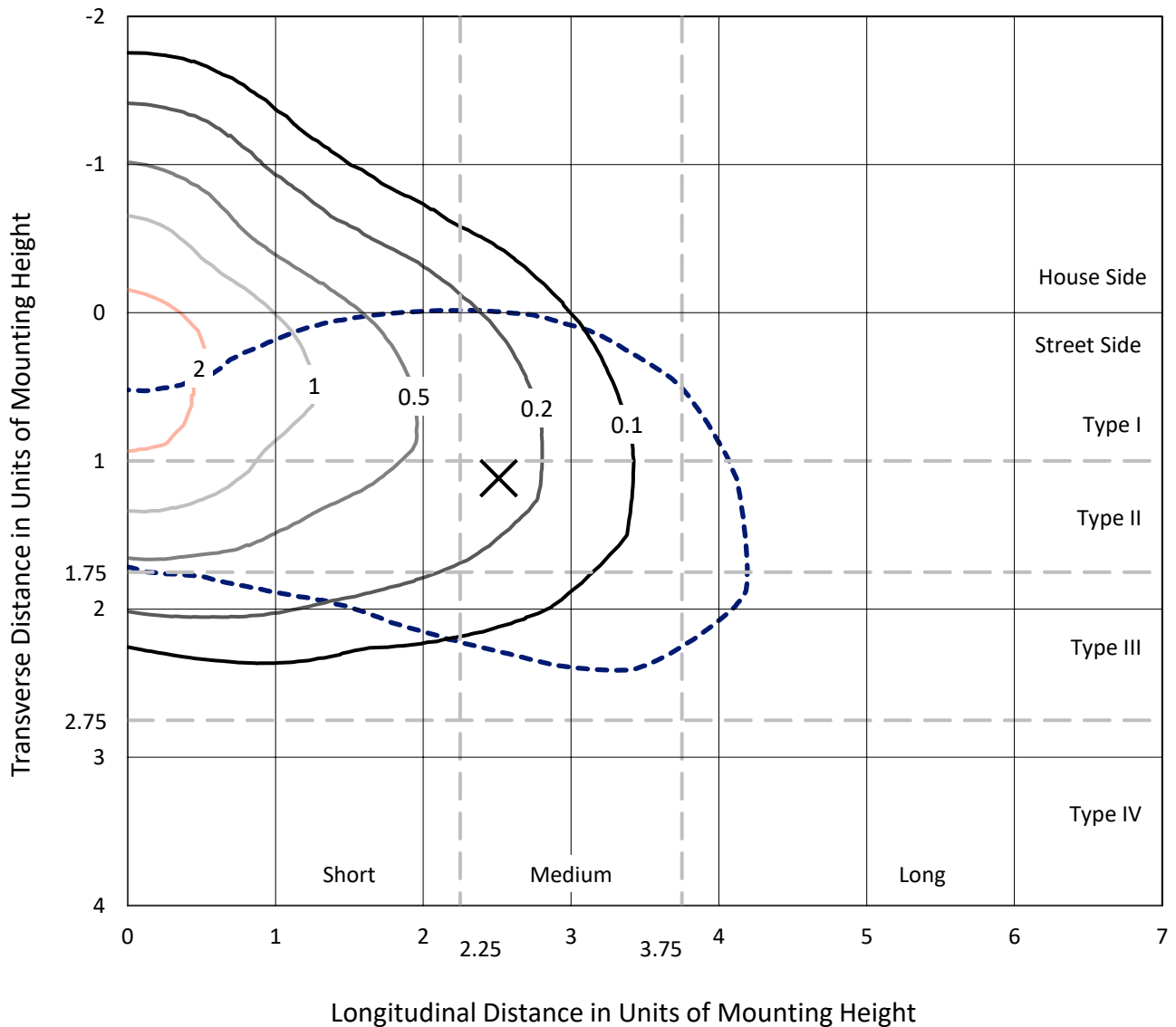
Input Watts (W): 43.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

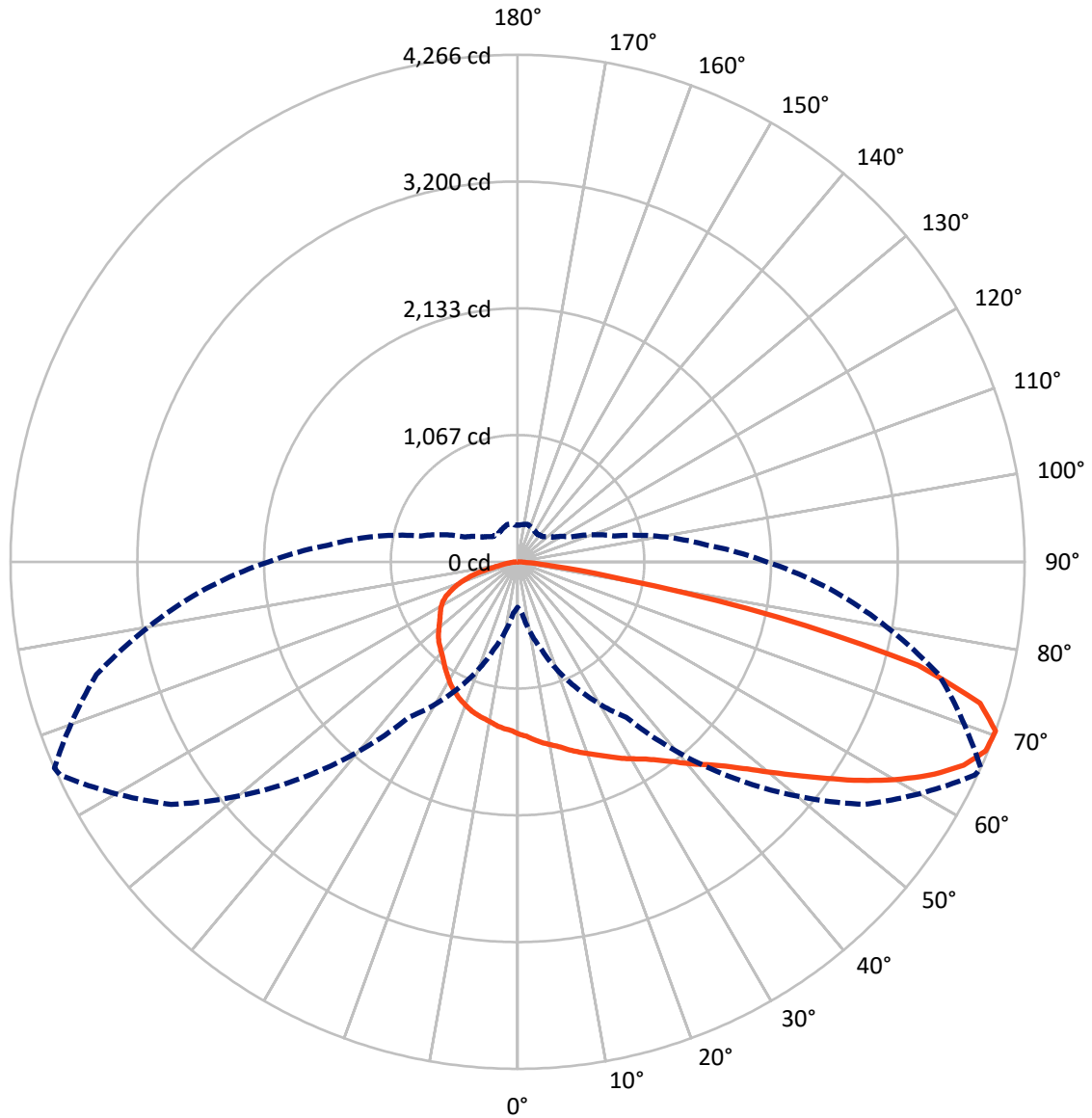
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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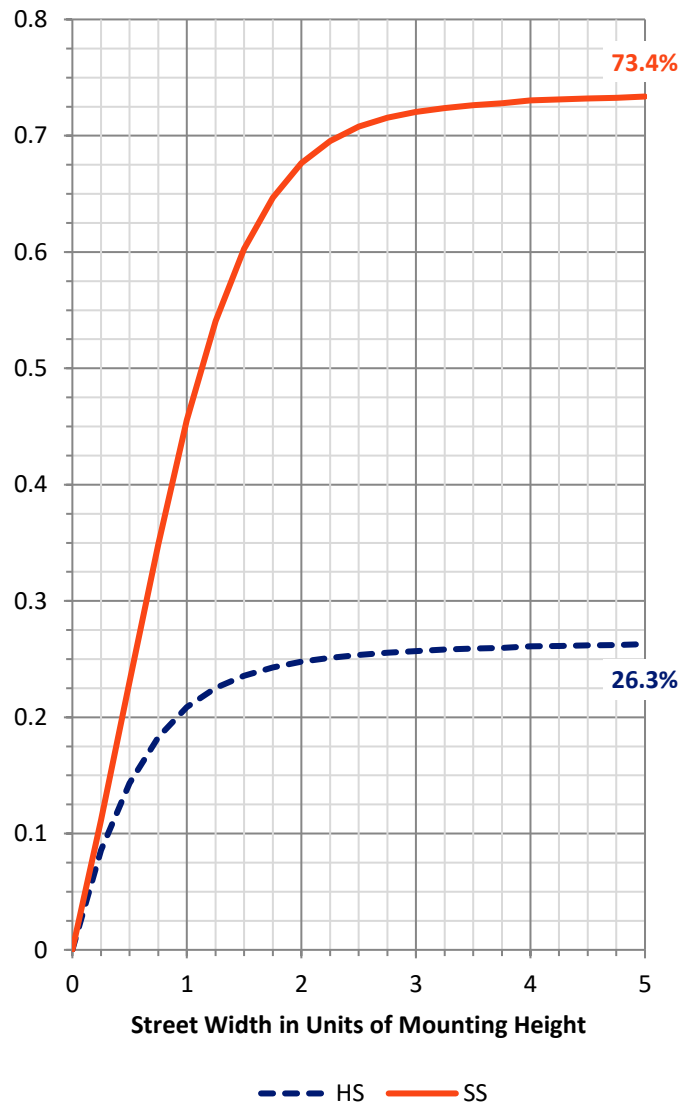
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2129.1	0.0	2129.1
	% Fixture	26.5	0.0	26.5
<b>Street Side</b>	Lumens	5905.9	0.0	5905.9
	% Fixture	73.5	0.0	73.5
<b>Total</b>	Lumens	8035.0	0.0	8035.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.3	1.7
10°-20°	418.0	5.2
20°-30°	700.7	8.7
30°-40°	1049.1	13.1
40°-50°	1402.7	17.5
50°-60°	1637.7	20.4
60°-70°	1628.4	20.3
70°-80°	964.1	12.0
80°-90°	95.0	1.2
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°	8035.0	100.0
0°-180°	8035.0	100.0

**Coefficient of Utilization**

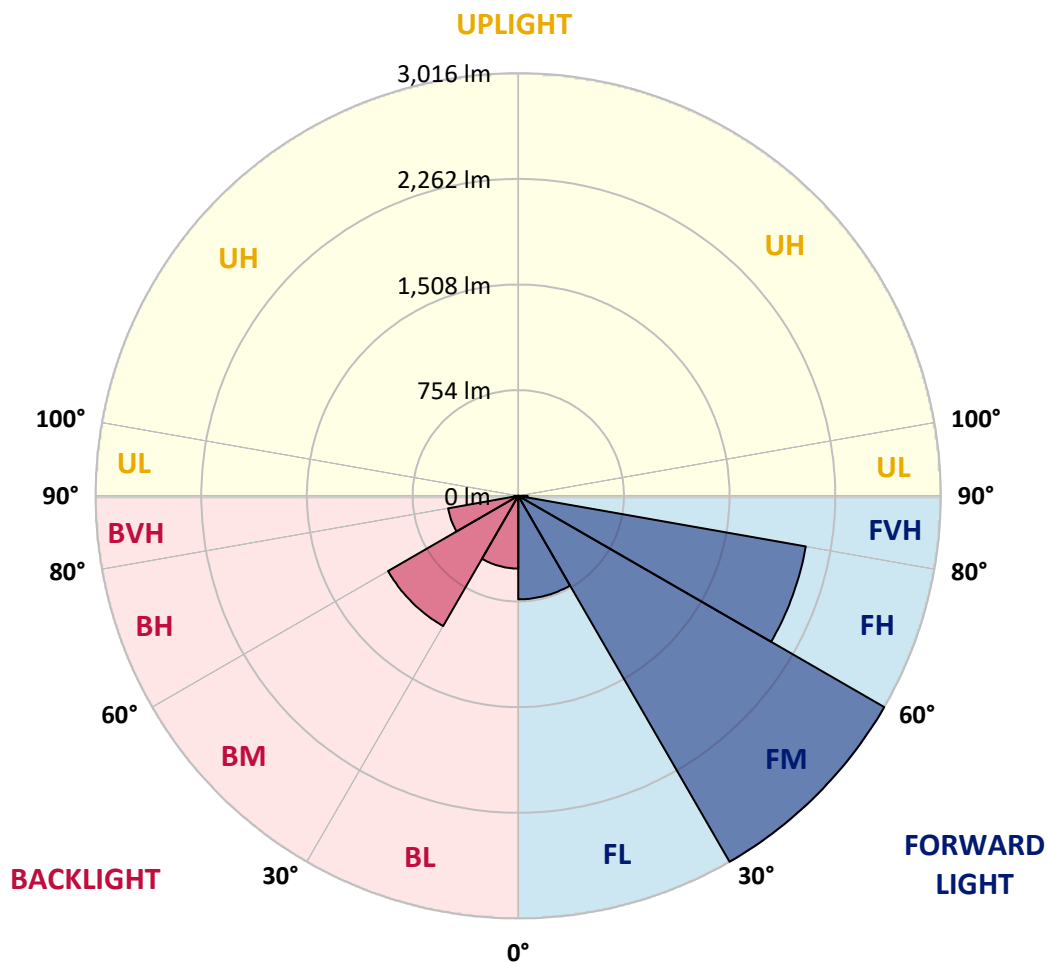


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	739.0	9.2			
FM (30°-60°)	3016.2	37.5			
FH (60°-80°)	2083.9	25.9			G2/5000
FVH (80°-90°)	66.8	0.8			G1/100
BL (0°-30°)	519.0	6.5	B2/1000		
BM (30°-60°)	1073.3	13.4	B2/2500		
BH (60°-80°)	508.6	6.3	B2/1000		G2/1000
BVH (80°-90°)	28.2	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1450.1	1450.1	1450.1	1450.1	1450.1	1450.1	1450.1	1450.1	1450.1	1450.1	1450.1
2.5°	1503.4	1501.1	1499.9	1495.2	1484.5	1489.2	1478.6	1471.5	1470.3	1453.7	1444.2
5°	1565.1	1563.9	1561.5	1554.4	1537.8	1540.2	1522.4	1509.4	1505.8	1479.8	1459.6
7.5°	1617.2	1614.8	1613.6	1604.2	1586.4	1585.2	1563.9	1544.9	1539.0	1503.4	1472.6
10°	1657.5	1653.9	1656.3	1646.8	1627.8	1624.3	1597.0	1572.2	1566.2	1521.2	1478.6
12.5°	1691.8	1689.5	1693.0	1684.7	1669.3	1665.8	1638.5	1606.5	1599.4	1547.3	1491.6
15°	1729.7	1721.4	1728.6	1725.0	1714.3	1713.1	1688.3	1652.7	1643.2	1580.5	1511.7
17.5°	1749.9	1745.1	1753.4	1754.6	1749.9	1758.2	1734.5	1691.8	1683.5	1611.3	1529.5
20°	1764.1	1757.0	1766.5	1773.6	1777.1	1793.7	1774.8	1733.3	1723.8	1640.9	1546.1
22.5°	1812.7	1797.3	1798.5	1803.2	1805.6	1829.3	1817.4	1777.1	1767.6	1677.6	1566.2
25°	1934.7	1903.9	1883.8	1869.5	1852.9	1873.1	1866.0	1826.9	1818.6	1721.4	1591.1
27.5°	2124.3	2085.2	2044.9	2003.4	1938.3	1930.0	1918.1	1882.6	1873.1	1765.3	1616.0
30°	2339.9	2300.8	2253.4	2187.0	2065.0	2001.0	1973.8	1934.7	1924.0	1804.4	1639.7
32.5°	2554.3	2520.0	2472.6	2392.0	2217.9	2087.5	2029.5	1989.2	1978.5	1847.0	1668.1
35°	2721.4	2700.0	2669.2	2568.5	2369.5	2189.4	2110.0	2061.5	2049.6	1914.6	1720.3
37.5°	2856.4	2841.0	2815.0	2709.5	2479.7	2291.3	2202.5	2146.8	2133.7	1988.0	1775.9
40°	3055.5	3015.2	2993.9	2841.0	2575.6	2383.7	2306.7	2248.7	2234.4	2066.2	1821.0
42.5°	3224.9	3195.3	3169.2	2958.3	2666.9	2463.1	2405.0	2351.7	2332.8	2143.2	1869.5
45°	3253.3	3265.2	3252.1	3016.4	2811.4	2541.3	2504.6	2470.2	2452.4	2247.5	1943.0
47.5°	3254.5	3254.5	3177.5	3049.5	2990.3	2629.0	2611.2	2623.0	2604.1	2380.2	2030.7
50°	3169.2	3184.6	3144.3	3057.8	3037.7	2716.6	2741.5	2805.5	2786.5	2521.1	2125.4
52.5°	2992.7	3043.6	3042.4	3044.8	2969.0	2791.3	2878.9	3024.7	2992.7	2679.9	2226.1
55°	2681.1	2783.0	2874.2	2952.4	2909.7	2836.3	3047.2	3258.1	3224.9	2857.6	2328.0
57.5°	2414.5	2479.7	2593.4	2815.0	2839.8	2875.4	3204.7	3502.1	3472.5	3054.3	2434.7
60°	2110.0	2200.1	2313.8	2629.0	2754.5	2926.3	3377.7	3740.3	3711.8	3253.3	2537.7
62.5°	1642.1	1758.2	1985.6	2343.4	2630.1	2958.3	3514.0	3950.0	3936.9	3441.7	2630.1
65°	1144.5	1247.5	1566.2	1992.8	2432.3	2944.1	3623.0	4137.1	4125.3	3595.7	2695.3
67.5°	668.2	787.9	1148.0	1604.2	2082.8	2845.8	3658.5	4247.3	4247.3	3689.3	2713.1
70°	381.5	437.2	757.1	1169.3	1597.0	2574.5	3559.0	4246.1	4266.3	3668.0	2639.6
72.5°	266.6	291.4	509.4	786.7	1082.9	2082.8	3298.3	4041.2	4068.4	3466.6	2388.5
75°	207.3	225.1	359.0	536.7	682.4	1414.6	2728.5	3407.3	3479.6	2954.8	1931.1
77.5°	157.6	170.6	209.7	335.3	437.2	812.7	1800.8	2234.4	2239.2	1809.1	1035.5
80°	114.9	128.0	139.8	205.0	232.2	380.3	680.0	933.6	907.5	875.5	560.4
82.5°	68.7	81.7	85.3	111.4	113.7	162.3	238.1	300.9	289.1	385.0	263.0
85°	29.6	41.5	43.8	50.9	48.6	66.3	94.8	79.4	71.1	81.7	56.9
87.5°	7.1	11.8	11.8	13.0	10.7	16.6	17.8	13.0	11.8	14.2	14.2
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°	1450.1	1450.1	1450.1	1450.1	1450.1	1450.1	1450.1	1450.1	1450.1	1450.1	1450.1
2.5°	1441.8	1438.3	1439.5	1419.3	1413.4	1407.5	1403.9	1401.6	1399.2	1402.7	1406.3
5°	1452.5	1444.2	1434.7	1405.1	1393.3	1380.2	1370.8	1362.5	1358.9	1358.9	1362.5
7.5°	1460.8	1446.6	1426.4	1387.3	1366.0	1348.2	1332.8	1322.2	1316.3	1316.3	1319.8
10°	1462.0	1441.8	1409.9	1362.5	1334.0	1308.0	1290.2	1278.3	1270.1	1270.1	1272.4
12.5°	1469.1	1441.8	1400.4	1343.5	1308.0	1276.0	1254.7	1236.9	1233.3	1233.3	1235.7
15°	1480.9	1447.8	1394.5	1326.9	1284.3	1247.5	1223.8	1204.9	1197.8	1202.5	1203.7
17.5°	1491.6	1451.3	1383.8	1305.6	1254.7	1214.4	1188.3	1171.7	1162.2	1172.9	1172.9
20°	1498.7	1451.3	1368.4	1278.3	1222.7	1177.6	1152.8	1132.6	1125.5	1138.5	1139.7
22.5°	1509.4	1450.1	1351.8	1251.1	1188.3	1140.9	1116.0	1100.6	1097.1	1111.3	1116.0
25°	1521.2	1452.5	1334.0	1220.3	1150.4	1104.2	1085.2	1078.1	1080.5	1098.3	1104.2
27.5°	1534.3	1457.2	1316.3	1185.9	1108.9	1067.5	1056.8	1060.4	1069.8	1092.3	1099.4
30°	1546.1	1458.4	1291.4	1145.7	1061.5	1022.4	1027.2	1042.6	1056.8	1079.3	1087.6
32.5°	1561.5	1459.6	1265.3	1101.8	1010.6	982.2	1003.5	1028.4	1042.6	1063.9	1073.4
35°	1599.4	1479.8	1245.2	1059.2	963.2	947.8	983.3	1015.3	1023.6	1042.6	1050.9
37.5°	1643.2	1512.9	1234.5	1015.3	917.0	913.4	958.5	990.5	992.8	1004.7	1013.0
40°	1670.5	1527.1	1222.7	978.6	875.5	877.9	924.1	949.0	944.2	952.5	958.5
42.5°	1697.7	1531.9	1197.8	947.8	836.4	838.8	874.3	892.1	894.5	912.3	920.6
45°	1744.0	1544.9	1170.5	919.4	800.9	792.6	813.9	837.6	868.4	902.8	912.3
47.5°	1805.6	1572.2	1142.1	885.0	766.5	739.3	747.6	789.0	821.0	853.0	858.9
50°	1868.4	1599.4	1116.0	843.5	732.2	682.4	686.0	723.9	749.9	774.8	778.4
52.5°	1930.0	1623.1	1093.5	804.4	693.1	614.9	629.1	668.2	686.0	697.8	701.4
55°	1991.6	1643.2	1073.4	771.3	648.1	561.6	574.6	611.3	629.1	635.0	637.4
57.5°	2055.5	1666.9	1058.0	742.8	597.1	514.2	522.5	548.5	565.1	572.2	569.9
60°	2108.9	1687.1	1049.7	713.2	546.2	470.3	468.0	491.7	515.4	522.5	520.1
62.5°	2150.3	1700.1	1036.7	675.3	501.1	426.5	414.7	445.5	470.3	475.1	478.6
65°	2172.8	1701.3	1004.7	626.7	454.9	379.1	370.8	401.6	417.0	421.8	421.8
67.5°	2169.3	1682.3	941.9	561.6	412.3	336.5	329.4	348.3	370.8	374.4	370.8
70°	2095.8	1604.2	841.2	492.9	361.3	298.6	285.5	304.5	325.8	312.8	306.9
72.5°	1887.3	1401.6	693.1	417.0	304.5	251.2	245.2	264.2	265.4	267.8	261.8
75°	1489.2	1043.8	518.9	324.6	246.4	210.9	209.7	206.1	210.9	220.4	213.3
77.5°	781.9	521.3	280.8	199.0	178.9	169.4	161.1	159.9	174.2	180.1	173.0
80°	424.1	292.6	161.1	119.7	109.0	110.2	120.8	118.5	133.9	137.4	131.5
82.5°	184.8	138.6	79.4	72.3	72.3	71.1	74.6	82.9	99.5	99.5	79.4
85°	40.3	34.4	30.8	35.5	40.3	40.3	40.3	40.3	28.4	15.4	10.7
87.5°	13.0	13.0	13.0	14.2	15.4	15.4	13.0	9.5	5.9	1.2	0.0
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)