

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: P399314

Luminaire Tested: **ARCH-L-PA3-120-827-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399314  
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-PA3-120-827-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14489 lumens  
Efficiency: N/A  
Efficacy: 117.8 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

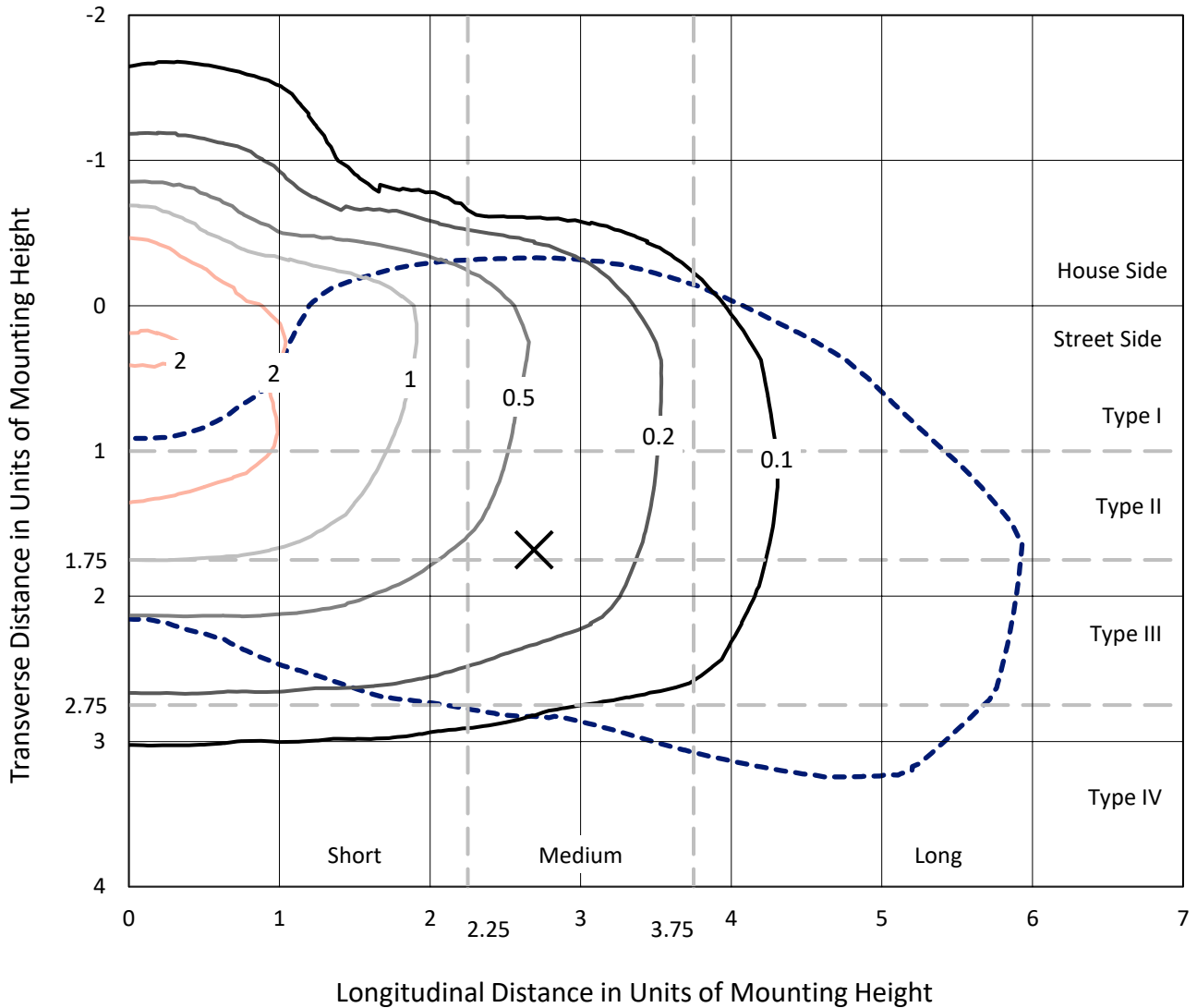
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

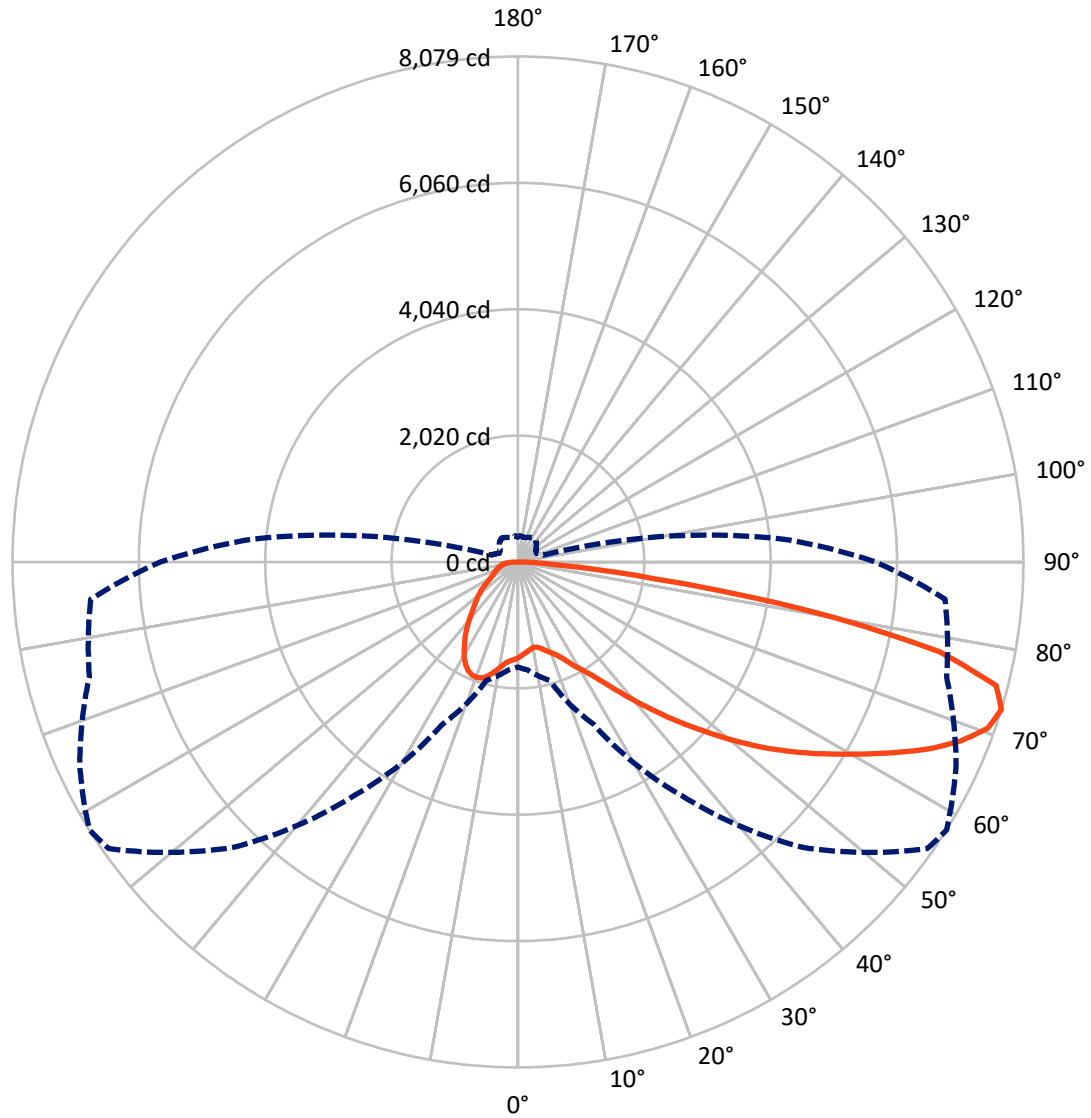
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



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

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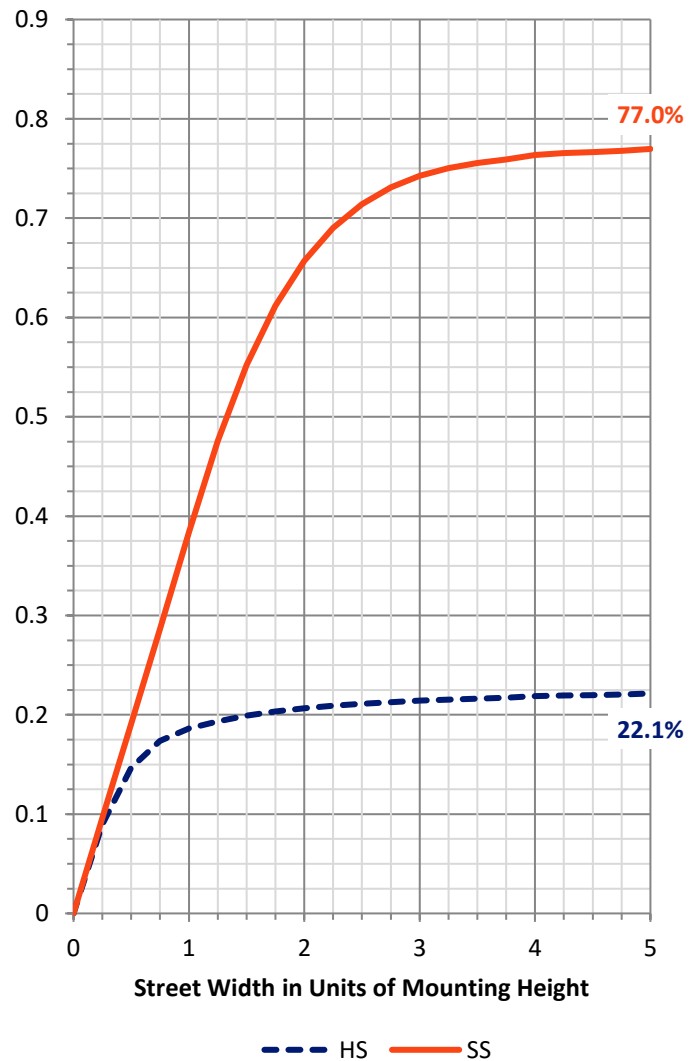
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3285.9	0.0	3285.9
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	11203.1	0.0	11203.1
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	14489.0	0.0	14489.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.2	1.0
10°-20°	467.5	3.2
20°-30°	837.5	5.8
30°-40°	1259.9	8.7
40°-50°	2040.2	14.1
50°-60°	3071.1	21.2
60°-70°	3614.4	24.9
70°-80°	2562.9	17.7
80°-90°	488.4	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°	14489.0	100.0
0°-180°	14489.0	100.0



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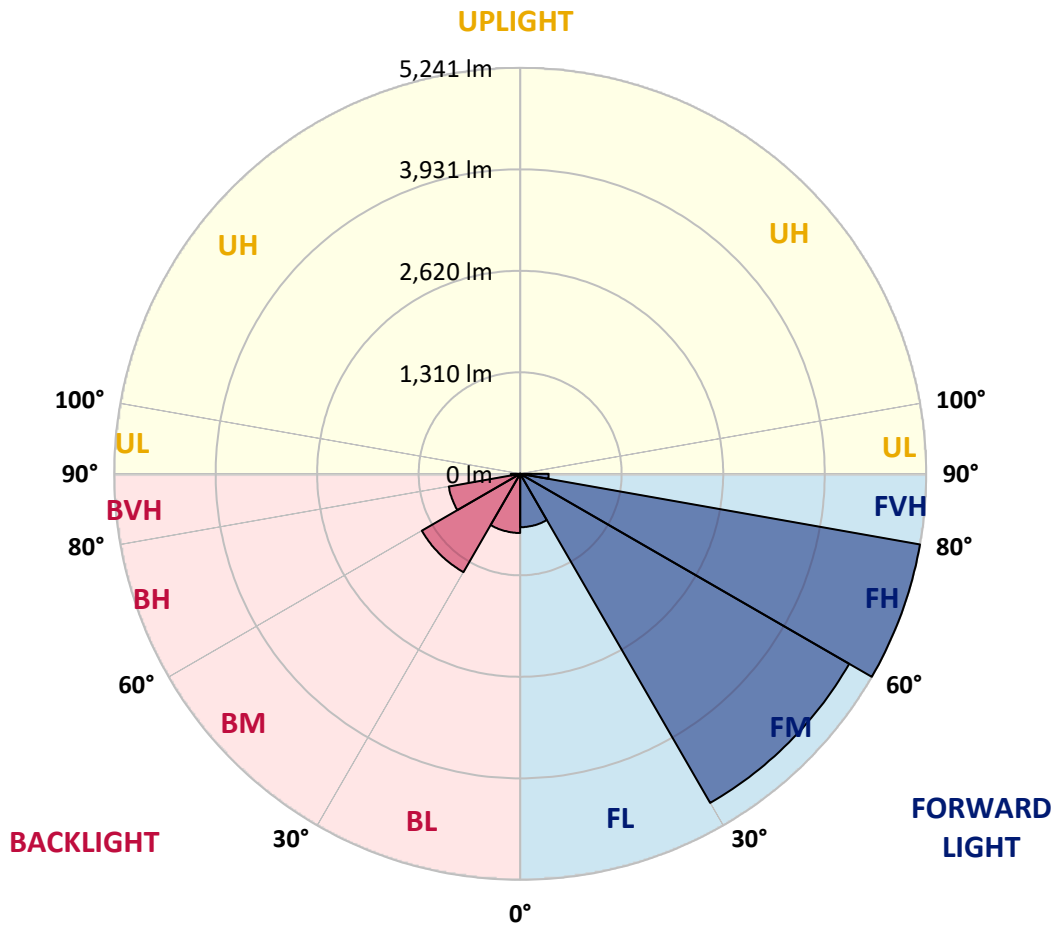
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	689.0	4.8			
FM (30°-60°)	4904.9	33.9			
FH (60°-80°)	5240.7	36.2			G3/7500
FVH (80°-90°)	368.4	2.5			G3/500
BL (0°-30°)	763.3	5.3	B2/1000		
BM (30°-60°)	1466.2	10.1	B2/2500		
BH (60°-80°)	936.5	6.5	B2/1000		G2/1000
BVH (80°-90°)	120.0	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°	1528.3	1528.3	1528.3	1528.3	1528.3	1528.3	1528.3	1528.3	1528.3	1528.3	1528.3
2.5°	1470.9	1463.2	1465.2	1465.2	1472.8	1476.6	1478.6	1484.3	1488.1	1497.7	1511.1
5°	1402.0	1396.3	1398.2	1400.1	1413.5	1426.9	1438.4	1446.0	1457.5	1472.8	1491.9
7.5°	1352.3	1348.5	1350.4	1354.2	1365.7	1381.0	1400.1	1411.6	1428.8	1457.5	1490.0
10°	1316.0	1316.0	1317.9	1325.5	1337.0	1356.1	1371.4	1384.8	1419.3	1470.9	1520.6
12.5°	1287.3	1287.3	1293.0	1308.3	1327.4	1346.6	1382.9	1398.2	1444.1	1514.9	1574.2
15°	1285.4	1287.3	1289.2	1302.6	1323.6	1365.7	1419.3	1442.2	1497.7	1581.8	1650.7
17.5°	1316.0	1317.9	1310.2	1314.1	1338.9	1398.2	1469.0	1495.8	1566.5	1658.3	1729.1
20°	1409.7	1409.7	1386.7	1365.7	1382.9	1447.9	1528.3	1555.1	1633.5	1734.9	1805.6
22.5°	1601.0	1610.5	1557.0	1511.1	1484.3	1520.6	1593.3	1622.0	1710.0	1819.0	1889.8
25°	1832.4	1842.0	1769.3	1704.3	1654.5	1648.8	1696.6	1727.2	1799.9	1912.7	1972.0
27.5°	2056.2	2039.0	1972.0	1910.8	1847.7	1796.1	1832.4	1859.2	1943.3	2029.4	2065.8
30°	2232.2	2218.8	2153.7	2109.8	2050.5	1983.5	1962.5	1991.2	2060.0	2140.4	2159.5
32.5°	2427.3	2417.7	2352.7	2295.3	2245.6	2182.4	2136.5	2149.9	2188.2	2245.6	2257.0
35°	2675.9	2697.0	2628.1	2511.4	2456.0	2394.8	2362.2	2366.1	2394.8	2431.1	2412.0
37.5°	2938.0	2962.8	2966.7	2783.0	2708.4	2653.0	2618.5	2631.9	2666.4	2691.2	2631.9
40°	3423.8	3398.9	3299.5	3163.7	3048.9	2995.4	2947.5	2945.6	2970.5	3014.5	2907.4
42.5°	4068.4	4045.5	3844.6	3668.6	3486.9	3425.7	3332.0	3291.8	3303.3	3358.8	3209.6
45°	4686.2	4676.7	4516.0	4311.3	4093.3	3974.7	3760.5	3662.9	3653.3	3697.3	3519.4
47.5°	5235.2	5193.1	5076.4	4917.7	4894.7	4584.8	4190.8	4058.8	4012.9	4037.8	3838.9
50°	5822.4	5678.9	5518.3	5420.7	5587.1	5298.3	4625.0	4487.3	4374.4	4391.7	4185.1
52.5°	6134.2	5893.2	5788.0	5816.7	6040.4	5929.5	5097.5	4929.1	4747.4	4772.3	4529.4
55°	5866.4	5864.5	5910.4	6088.3	6400.0	6271.9	5547.0	5357.6	5158.7	5164.4	4925.3
57.5°	5499.1	5573.7	5810.9	6203.0	6845.7	6631.5	5988.8	5788.0	5606.2	5577.6	5374.8
60°	5164.4	5246.7	5590.9	6183.9	7000.6	6960.5	6409.6	6233.6	6086.3	6002.2	5847.3
62.5°	4655.6	4716.8	5204.6	6061.5	6870.6	7197.7	6836.1	6715.6	6604.7	6430.6	6356.0
65°	4056.9	4078.0	4592.5	5657.9	6708.0	7289.5	7260.8	7207.2	7100.1	6843.8	6859.1
67.5°	3408.5	3450.6	3902.0	5013.3	6352.2	7247.4	7589.8	7633.8	7507.5	7123.1	7180.4
70°	2718.0	2769.7	3112.0	4122.0	5747.8	7065.7	7893.9	7964.7	7721.7	7214.9	7239.7
72.5°	1681.3	1731.0	1960.6	2863.4	4556.2	6455.5	7987.6	8079.4	7727.5	7092.5	6853.4
75°	581.5	587.2	767.0	1373.3	2704.6	4873.7	7681.6	7897.7	7484.6	6646.8	5963.9
77.5°	265.9	275.4	340.5	566.2	1199.3	2630.0	6342.7	6884.0	6746.2	5950.5	4590.6
80°	183.6	187.4	235.3	338.6	692.4	925.8	4003.4	4709.2	4950.2	4607.8	2941.8
82.5°	137.7	141.5	181.7	229.5	499.2	449.5	1524.5	2188.2	2719.9	2670.2	1229.9
85°	132.0	130.1	141.5	153.0	332.8	267.8	493.5	677.1	1061.6	908.6	309.9
87.5°	57.4	63.1	145.4	86.1	174.1	124.3	214.2	250.6	323.3	281.2	110.9
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°	1528.3	1528.3	1528.3	1528.3	1528.3	1528.3	1528.3	1528.3	1528.3	1528.3	1528.3
2.5°	1516.8	1520.6	1532.1	1549.3	1558.9	1578.0	1591.4	1599.1	1604.8	1606.7	1606.7
5°	1503.4	1511.1	1535.9	1564.6	1591.4	1631.6	1667.9	1689.0	1704.3	1710.0	1711.9
7.5°	1507.2	1526.4	1562.7	1604.8	1639.2	1690.9	1734.9	1776.9	1811.4	1824.8	1824.8
10°	1543.6	1570.4	1620.1	1675.6	1719.6	1773.1	1819.0	1855.4	1895.5	1918.5	1922.3
12.5°	1599.1	1631.6	1696.6	1757.8	1807.5	1849.6	1891.7	1918.5	1937.6	1954.8	1958.6
15°	1677.5	1717.6	1782.7	1845.8	1889.8	1916.6	1928.0	1928.0	1926.1	1928.0	1931.9
17.5°	1755.9	1794.2	1859.2	1922.3	1943.3	1928.0	1914.7	1910.8	1908.9	1905.1	1907.0
20°	1832.4	1868.7	1924.2	1972.0	1954.8	1901.3	1884.1	1882.1	1876.4	1872.6	1868.7
22.5°	1908.9	1935.7	1981.6	1998.8	1930.0	1853.4	1832.4	1820.9	1813.3	1803.7	1794.2
25°	1996.9	2004.6	2039.0	2012.2	1868.7	1765.5	1734.9	1717.6	1710.0	1700.4	1692.8
27.5°	2079.2	2079.2	2084.9	1991.2	1778.9	1648.8	1602.9	1572.3	1570.4	1568.4	1566.5
30°	2153.7	2144.2	2125.1	1928.0	1662.2	1505.3	1436.5	1405.9	1417.3	1426.9	1428.8
32.5°	2241.7	2222.6	2169.1	1842.0	1522.5	1344.7	1260.5	1247.1	1260.5	1272.0	1264.3
35°	2379.5	2345.0	2215.0	1742.5	1388.7	1197.4	1117.0	1097.9	1094.1	1092.2	1076.9
37.5°	2576.5	2517.2	2251.3	1635.4	1256.7	1067.3	1008.0	967.8	931.5	893.3	887.5
40°	2817.5	2716.1	2276.2	1513.0	1117.0	958.3	895.2	843.5	782.3	715.4	707.7
42.5°	3081.4	2930.3	2287.6	1377.2	994.6	868.4	790.0	724.9	656.1	604.4	594.9
45°	3366.4	3161.8	2278.1	1247.1	895.2	791.9	703.9	633.1	577.6	541.3	533.7
47.5°	3643.8	3427.6	2251.3	1143.8	818.7	726.8	636.9	571.9	529.8	489.7	480.1
50°	3999.5	3682.0	2218.8	1063.5	734.5	661.8	594.9	526.0	478.2	459.1	455.2
52.5°	4393.6	3936.4	2180.5	962.1	652.2	610.2	568.1	506.9	491.6	455.2	449.5
55°	4820.1	4238.6	2172.9	834.0	579.6	573.8	541.3	524.1	527.9	455.2	445.7
57.5°	5269.6	4561.9	2190.1	705.8	520.3	541.3	552.8	539.4	533.7	464.8	445.7
60°	5738.2	4873.7	2138.4	587.2	474.4	514.5	566.2	531.7	489.7	461.0	447.6
62.5°	6193.5	5135.7	1914.7	503.1	439.9	506.9	558.5	503.1	455.2	455.2	449.5
65°	6524.4	5252.4	1497.7	441.8	417.0	497.3	545.1	483.9	445.7	459.1	451.4
67.5°	6562.6	5131.9	1006.1	394.0	397.9	480.1	514.5	466.7	436.1	470.5	459.1
70°	6327.4	4818.2	615.9	357.7	373.0	449.5	487.7	449.5	422.7	461.0	443.8
72.5°	5717.2	4232.9	434.2	327.1	346.2	420.8	462.9	434.2	403.6	417.0	399.8
75°	4690.0	3280.4	344.3	298.4	319.4	394.0	441.8	411.2	380.6	374.9	363.4
77.5°	3322.4	2102.1	277.3	275.4	290.7	361.5	413.2	384.5	353.9	342.4	334.7
80°	1910.8	1031.0	239.1	248.7	264.0	329.0	378.7	353.9	325.2	308.0	296.5
82.5°	730.7	359.6	210.4	216.1	233.4	294.6	344.3	323.3	294.6	309.9	260.1
85°	237.2	197.0	172.1	177.9	195.1	244.8	304.1	286.9	254.4	225.7	208.5
87.5°	105.2	107.1	91.8	101.4	122.4	162.6	221.9	210.4	185.5	154.9	149.2
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)