

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: P836608

Luminaire Tested: **ARCH3-50-727-U-T3**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836608
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-50-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 425mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8574 lumens
Efficiency: N/A
Efficacy: 160.0 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

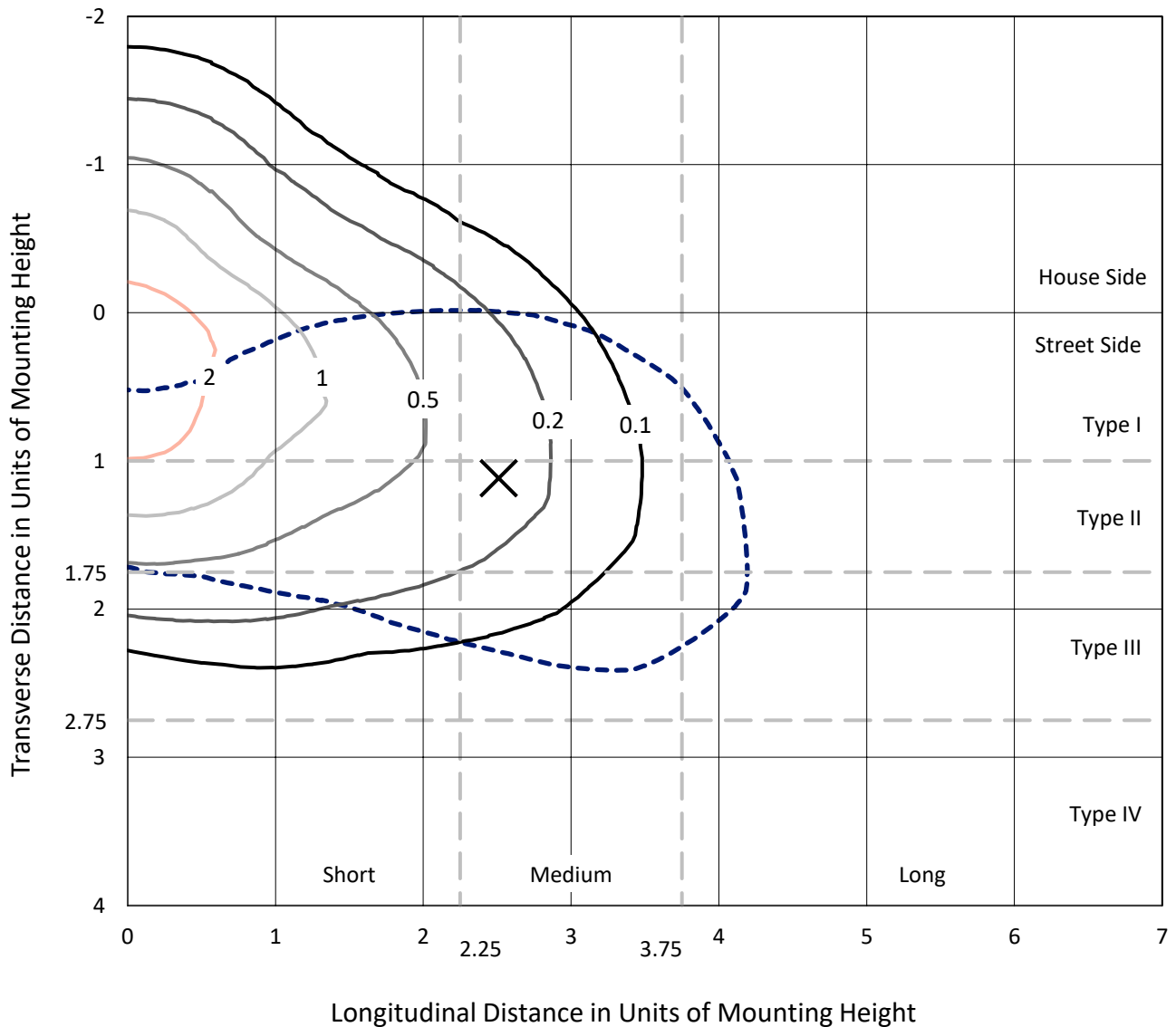
Input Watts (W): 53.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

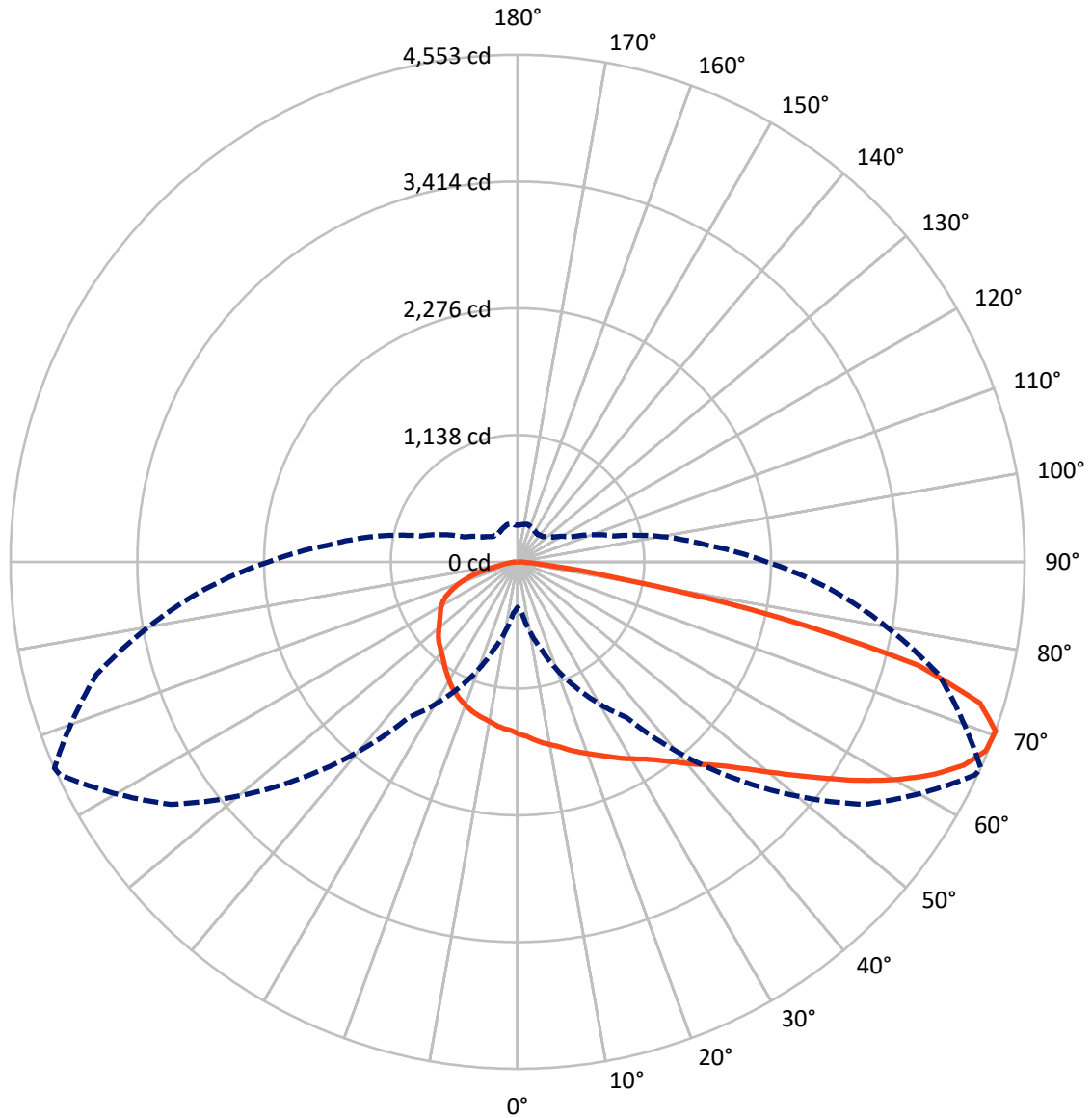
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 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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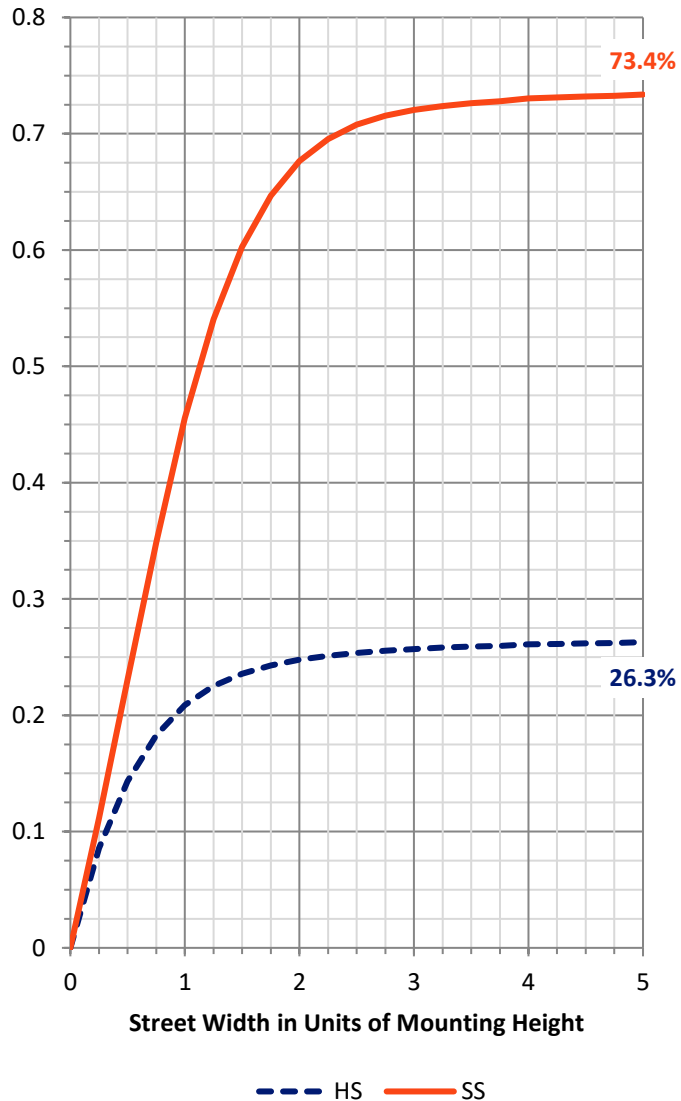
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2271.9	0.0	2271.9
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	6302.1	0.0	6302.1
	% Fixture	73.5	0.0	73.5
Total	Lumens	8574.0	0.0	8574.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.7	1.7
10°-20°	446.0	5.2
20°-30°	747.7	8.7
30°-40°	1119.5	13.1
40°-50°	1496.8	17.5
50°-60°	1747.5	20.4
60°-70°	1737.7	20.3
70°-80°	1028.7	12.0
80°-90°	101.4	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°	8574.0	100.0
0°-180°	8574.0	100.0

Coefficient of Utilization

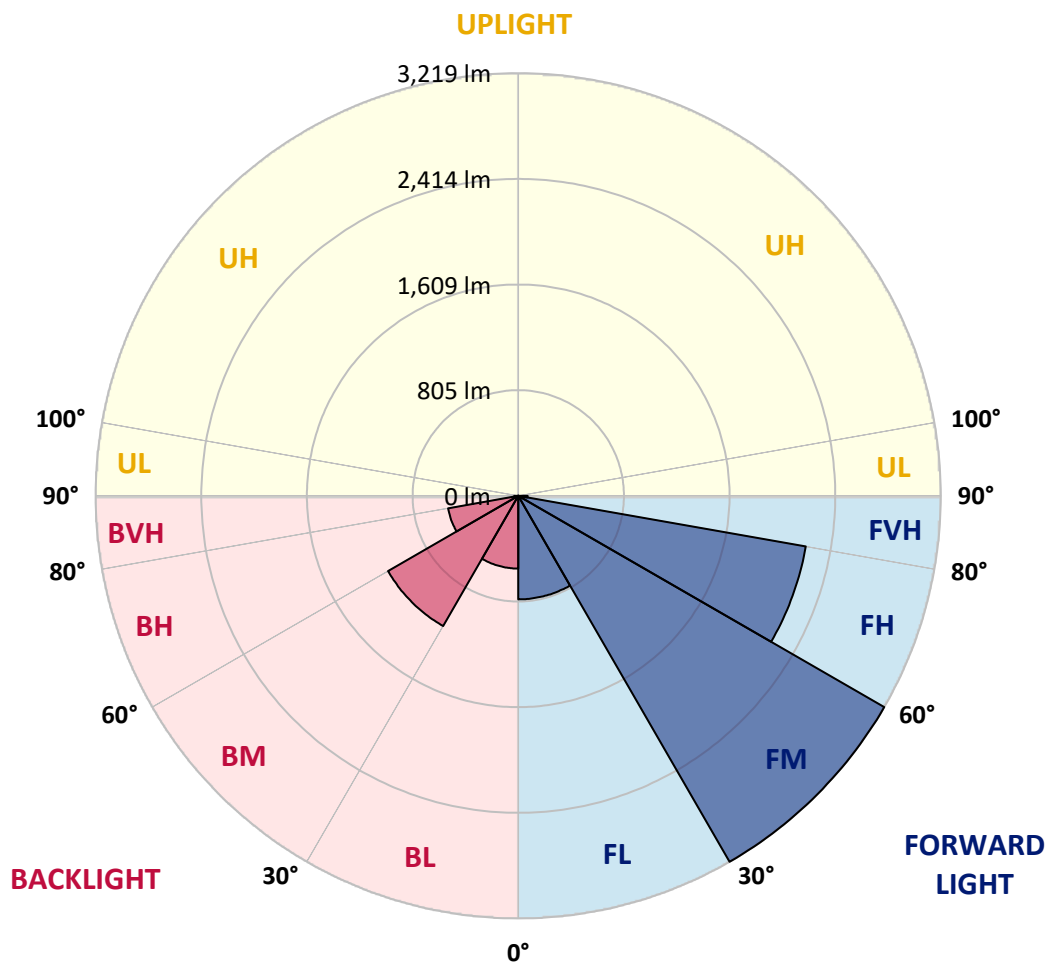


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	788.6	9.2			
FM (30°-60°)	3218.6	37.5			
FH (60°-80°)	2223.7	25.9			G2/5000
FVH (80°-90°)	71.3	0.8			G1/100
BL (0°-30°)	553.8	6.5	B2/1000		
BM (30°-60°)	1145.3	13.4	B2/2500		
BH (60°-80°)	542.7	6.3	B2/1000		G2/1000
BVH (80°-90°)	30.1	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°	1547.4	1547.4	1547.4	1547.4	1547.4	1547.4	1547.4	1547.4	1547.4	1547.4	1547.4
2.5°	1604.3	1601.8	1600.5	1595.5	1584.1	1589.1	1577.8	1570.2	1568.9	1551.2	1541.1
5°	1670.0	1668.8	1666.2	1658.7	1641.0	1643.5	1624.5	1610.6	1606.8	1579.0	1557.5
7.5°	1725.7	1723.1	1721.9	1711.8	1692.8	1691.5	1668.8	1648.5	1642.2	1604.3	1571.4
10°	1768.7	1764.9	1767.4	1757.3	1737.0	1733.3	1704.2	1677.6	1671.3	1623.3	1577.8
12.5°	1805.3	1802.8	1806.6	1797.7	1781.3	1777.5	1748.4	1714.3	1706.7	1651.1	1591.7
15°	1845.8	1836.9	1844.5	1840.7	1829.3	1828.1	1801.5	1763.6	1753.5	1686.5	1613.2
17.5°	1867.3	1862.2	1871.1	1872.3	1867.3	1876.1	1850.8	1805.3	1796.5	1719.3	1632.1
20°	1882.4	1874.8	1885.0	1892.5	1896.3	1914.0	1893.8	1849.6	1839.4	1751.0	1649.8
22.5°	1934.3	1917.8	1919.1	1924.2	1926.7	1952.0	1939.3	1896.3	1886.2	1790.1	1671.3
25°	2064.5	2031.6	2010.1	1994.9	1977.2	1998.7	1991.2	1949.4	1940.6	1836.9	1697.9
27.5°	2266.8	2225.0	2182.1	2137.8	2068.3	2059.4	2046.8	2008.9	1998.7	1883.7	1724.4
30°	2496.8	2455.1	2404.6	2333.8	2203.5	2135.3	2106.2	2064.5	2053.1	1925.4	1749.7
32.5°	2725.7	2689.0	2638.4	2552.5	2366.6	2227.6	2165.6	2122.6	2111.3	1970.9	1780.0
35°	2903.9	2881.2	2848.3	2740.8	2528.5	2336.3	2251.6	2199.8	2187.1	2043.0	1835.7
37.5°	3048.0	3031.6	3003.8	2891.3	2646.0	2445.0	2350.2	2290.8	2276.9	2121.4	1895.1
40°	3260.4	3217.5	3194.7	3031.6	2748.4	2543.6	2461.4	2399.5	2384.3	2204.8	1943.1
42.5°	3441.2	3409.6	3381.8	3156.8	2845.8	2628.3	2566.4	2509.5	2489.3	2287.0	1994.9
45°	3471.6	3484.2	3470.3	3218.7	3000.0	2711.8	2672.6	2635.9	2616.9	2398.2	2073.3
47.5°	3472.8	3472.8	3390.7	3254.1	3190.9	2805.3	2786.4	2799.0	2778.8	2539.8	2166.9
50°	3381.8	3398.2	3355.3	3263.0	3241.5	2898.9	2925.4	2993.7	2973.5	2690.3	2268.0
52.5°	3193.4	3247.8	3246.5	3249.1	3168.1	2978.5	3072.1	3227.6	3193.4	2859.7	2375.5
55°	2860.9	2969.7	3067.0	3150.4	3104.9	3026.6	3251.6	3476.6	3441.2	3049.3	2484.2
57.5°	2576.5	2646.0	2767.4	3003.8	3030.3	3068.3	3419.7	3737.0	3705.4	3259.2	2598.0
60°	2251.6	2347.7	2469.0	2805.3	2939.3	3122.6	3604.3	3991.2	3960.8	3471.6	2708.0
62.5°	1752.2	1876.1	2118.8	2500.6	2806.6	3156.8	3749.7	4214.9	4201.0	3672.6	2806.6
65°	1221.2	1331.2	1671.3	2126.4	2595.5	3141.6	3866.0	4414.7	4402.0	3836.9	2876.1
67.5°	713.0	840.7	1225.0	1711.8	2222.5	3036.7	3903.9	4532.2	4532.2	3936.8	2895.1
70°	407.1	466.5	807.8	1247.8	1704.2	2747.2	3797.7	4531.0	4552.5	3914.0	2816.7
72.5°	284.5	311.0	543.6	839.4	1155.5	2222.5	3519.6	4312.3	4341.3	3699.1	2548.7
75°	221.2	240.2	383.1	572.7	728.2	1509.5	2911.5	3635.9	3713.0	3153.0	2060.7
77.5°	168.1	182.0	223.8	357.8	466.5	867.3	1921.6	2384.3	2389.4	1930.5	1104.9
80°	122.6	136.5	149.2	218.7	247.8	405.8	725.7	996.2	968.4	934.3	598.0
82.5°	73.3	87.2	91.0	118.8	121.4	173.2	254.1	321.1	308.5	410.9	280.7
85°	31.6	44.2	46.8	54.4	51.8	70.8	101.1	84.7	75.9	87.2	60.7
87.5°	7.6	12.6	12.6	13.9	11.4	17.7	19.0	13.9	12.6	15.2	15.2
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°	1547.4	1547.4	1547.4	1547.4	1547.4	1547.4	1547.4	1547.4	1547.4	1547.4	1547.4
2.5°	1538.6	1534.8	1536.0	1514.5	1508.2	1501.9	1498.1	1495.6	1493.1	1496.8	1500.6
5°	1549.9	1541.1	1531.0	1499.4	1486.7	1472.8	1462.7	1453.9	1450.1	1450.1	1453.9
7.5°	1558.8	1543.6	1522.1	1480.4	1457.7	1438.7	1422.3	1410.9	1404.6	1404.6	1408.3
10°	1560.1	1538.6	1504.4	1453.9	1423.5	1395.7	1376.7	1364.1	1355.2	1355.2	1357.8
12.5°	1567.6	1538.6	1494.3	1433.6	1395.7	1361.6	1338.8	1319.9	1316.1	1316.1	1318.6
15°	1580.3	1544.9	1488.0	1415.9	1370.4	1331.2	1305.9	1285.7	1278.1	1283.2	1284.5
17.5°	1591.7	1548.7	1476.6	1393.2	1338.8	1295.8	1268.0	1250.3	1240.2	1251.6	1251.6
20°	1599.2	1548.7	1460.2	1364.1	1304.7	1256.6	1230.1	1208.6	1201.0	1214.9	1216.2
22.5°	1610.6	1547.4	1442.5	1335.0	1268.0	1217.4	1190.9	1174.5	1170.7	1185.8	1190.9
25°	1623.3	1549.9	1423.5	1302.2	1227.6	1178.3	1158.0	1150.4	1153.0	1171.9	1178.3
27.5°	1637.2	1555.0	1404.6	1265.5	1183.3	1139.1	1127.7	1131.5	1141.6	1165.6	1173.2
30°	1649.8	1556.3	1378.0	1222.5	1132.7	1091.0	1096.1	1112.5	1127.7	1151.7	1160.6
32.5°	1666.2	1557.5	1350.2	1175.7	1078.4	1048.0	1070.8	1097.3	1112.5	1135.3	1145.4
35°	1706.7	1579.0	1328.7	1130.2	1027.8	1011.4	1049.3	1083.4	1092.3	1112.5	1121.4
37.5°	1753.5	1614.4	1317.3	1083.4	978.5	974.7	1022.8	1056.9	1059.4	1072.1	1080.9
40°	1782.6	1629.6	1304.7	1044.3	934.3	936.8	986.1	1012.6	1007.6	1016.4	1022.8
42.5°	1811.6	1634.6	1278.1	1011.4	892.5	895.1	933.0	952.0	954.5	973.5	982.3
45°	1860.9	1648.5	1249.1	981.0	854.6	845.8	868.5	893.8	926.7	963.3	973.5
47.5°	1926.7	1677.6	1218.7	944.4	818.0	788.9	797.7	842.0	876.1	910.2	916.6
50°	1993.7	1706.7	1190.9	900.1	781.3	728.2	732.0	772.4	800.3	826.8	830.6
52.5°	2059.4	1732.0	1166.9	858.4	739.6	656.1	671.3	713.0	732.0	744.6	748.4
55°	2125.2	1753.5	1145.4	823.0	691.5	599.2	613.1	652.3	671.3	677.6	680.2
57.5°	2193.4	1778.8	1129.0	792.7	637.2	548.7	557.5	585.3	603.0	610.6	608.1
60°	2250.3	1800.3	1120.1	761.1	582.8	501.9	499.4	524.7	549.9	557.5	555.0
62.5°	2294.6	1814.2	1106.2	720.6	534.8	455.1	442.5	475.3	501.9	507.0	510.7
65°	2318.6	1815.4	1072.1	668.8	485.5	404.6	395.7	428.6	445.0	450.1	450.1
67.5°	2314.8	1795.2	1005.1	599.2	440.0	359.0	351.5	371.7	395.7	399.5	395.7
70°	2236.4	1711.8	897.6	525.9	385.6	318.6	304.7	324.9	347.7	333.8	327.4
72.5°	2013.9	1495.6	739.6	445.0	324.9	268.0	261.7	281.9	283.2	285.7	279.4
75°	1589.1	1113.8	553.7	346.4	263.0	225.0	223.8	220.0	225.0	235.1	227.6
77.5°	834.4	556.3	299.6	212.4	190.9	180.8	171.9	170.7	185.8	192.2	184.6
80°	452.6	312.3	171.9	127.7	116.3	117.6	129.0	126.4	142.9	146.7	140.3
82.5°	197.2	147.9	84.7	77.1	77.1	75.9	79.6	88.5	106.2	106.2	84.7
85°	43.0	36.7	32.9	37.9	43.0	43.0	43.0	43.0	30.3	16.4	11.4
87.5°	13.9	13.9	13.9	15.2	16.4	16.4	13.9	10.1	6.3	1.3	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)