

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: P842466

Luminaire Tested: **ARCH4-50-730-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842466
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-50-730-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9124 lumens
Efficiency: N/A
Efficacy: 171.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 53.2
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

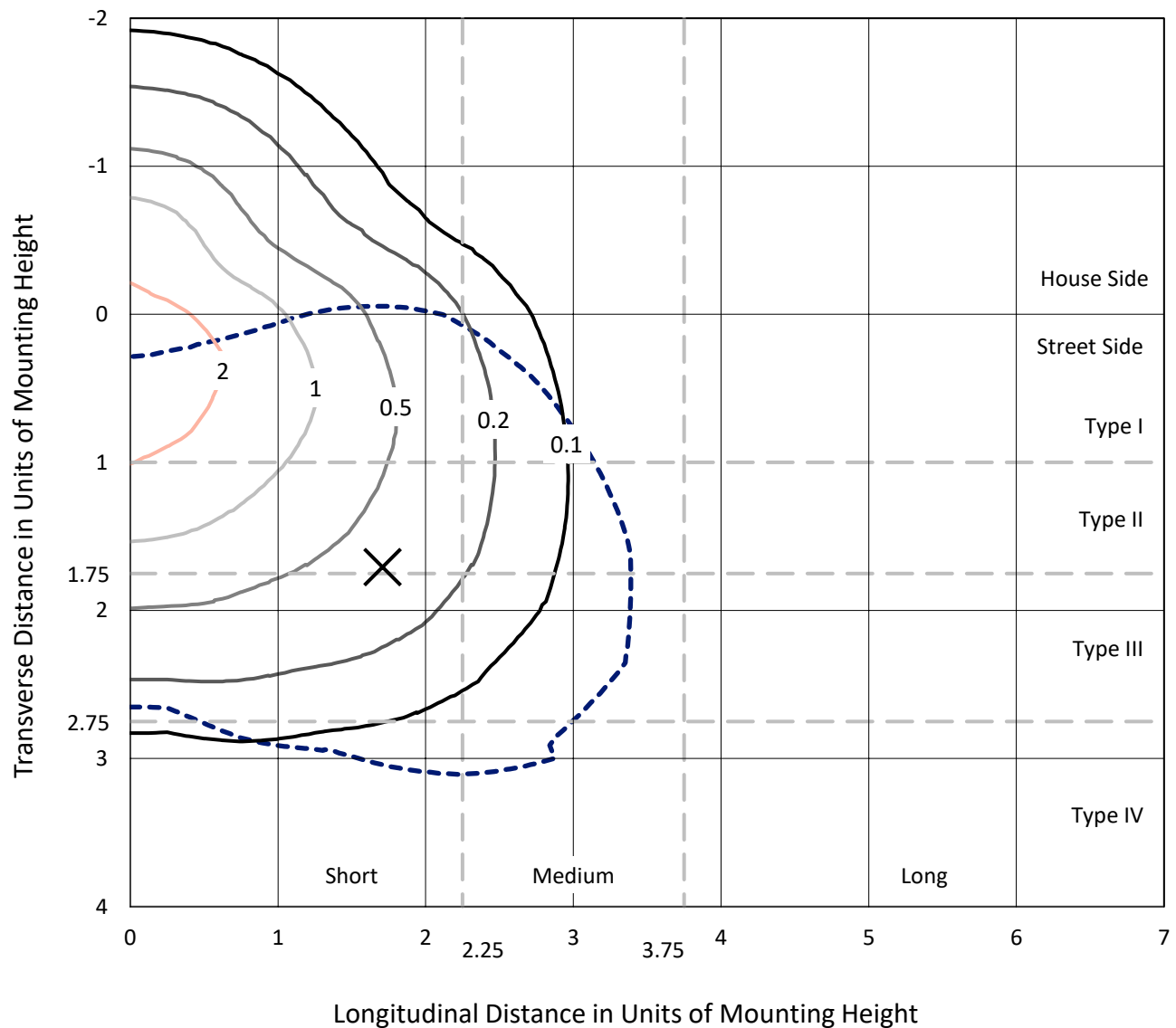


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Iso-Footcandle Lines of Horizontal Illumination

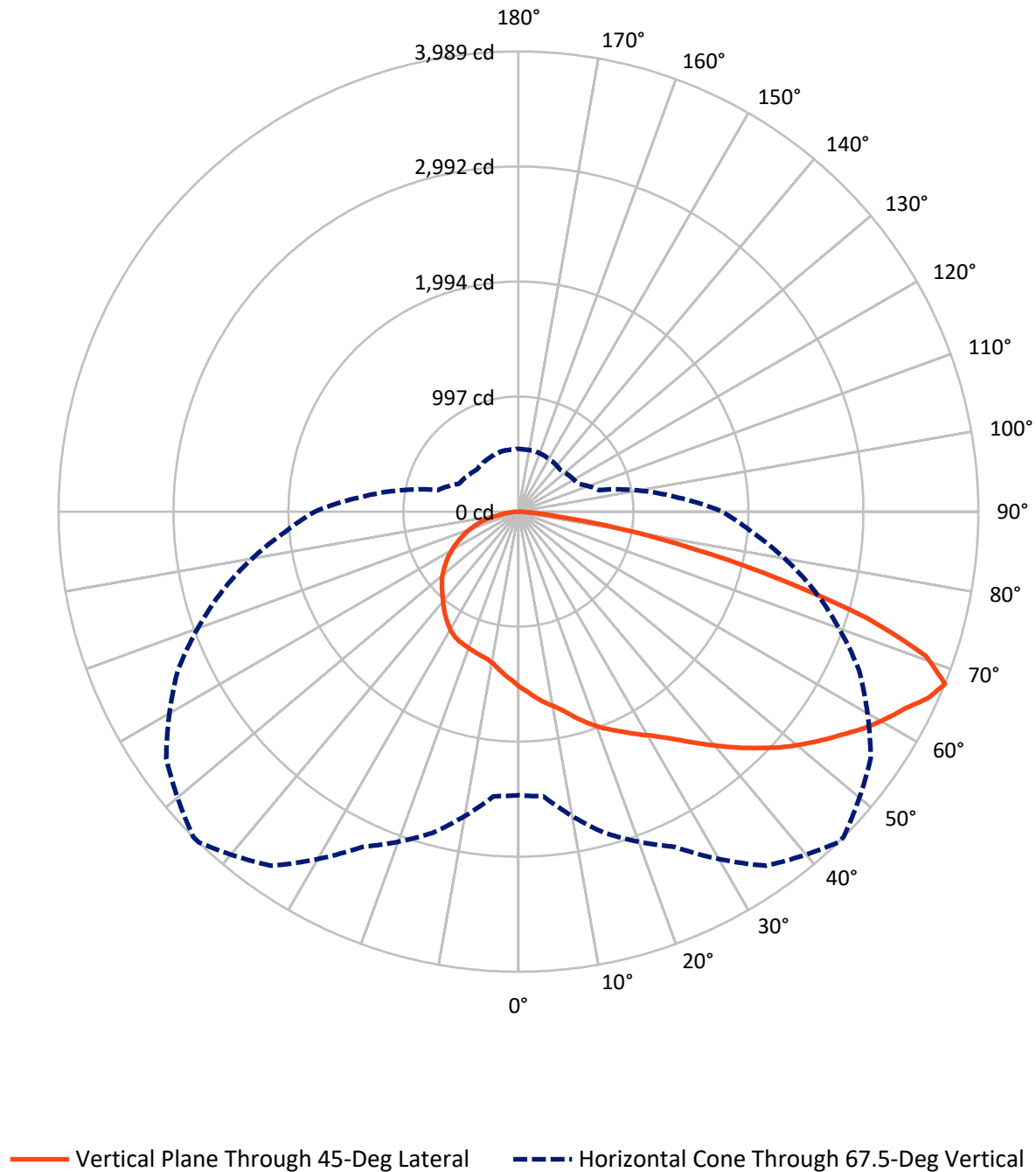
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2437.5	0.0	2437.5
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	6686.5	0.0	6686.5
	% Fixture	73.3	0.0	73.3
Total	Lumens	9124.0	0.0	9124.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.7	1.6
10°-20°	450.1	4.9
20°-30°	776.9	8.5
30°-40°	1145.6	12.6
40°-50°	1552.1	17.0
50°-60°	1897.0	20.8
60°-70°	1956.5	21.4
70°-80°	1071.6	11.7
80°-90°	128.4	1.4
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°	9124.0	100.0
0°-180°	9124.0	100.0

Coefficient of Utilization



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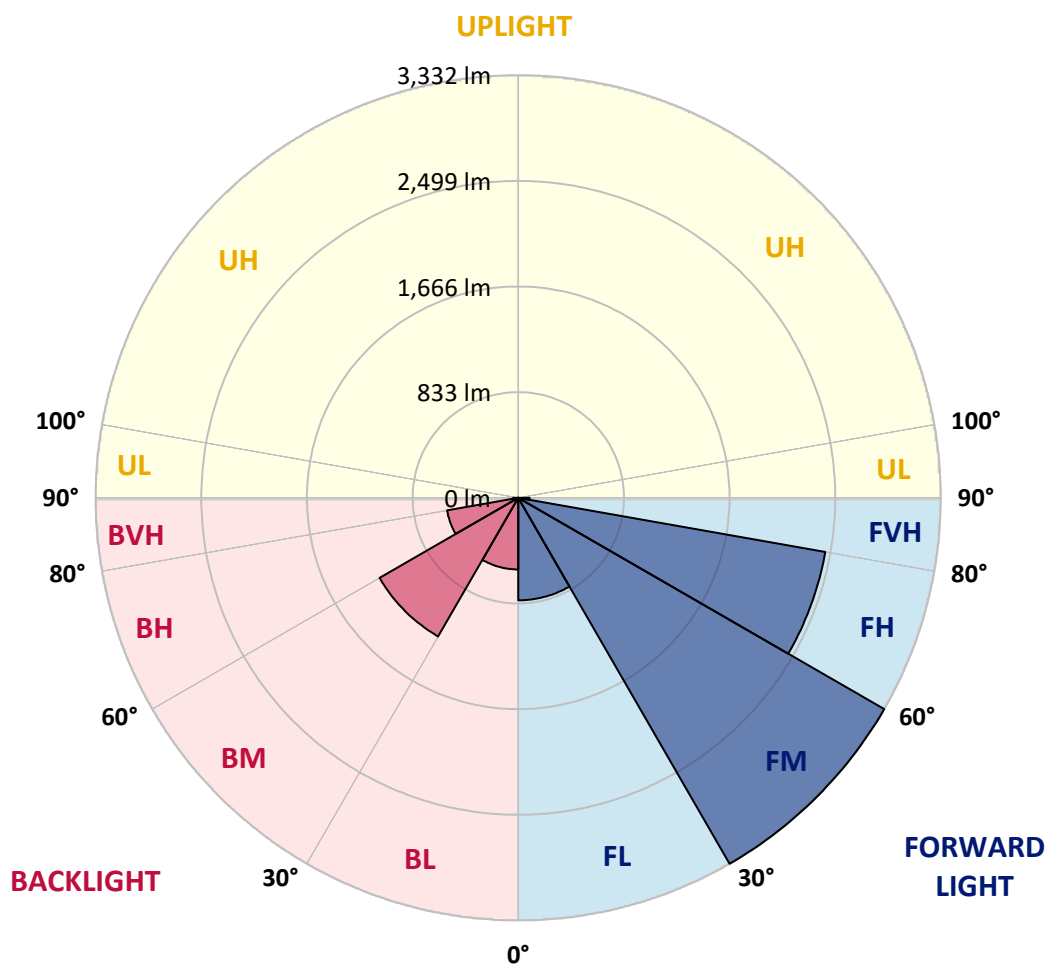
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	807.7	8.9			
FM	(30°-60°)	3332.2	36.5			
FH	(60°-80°)	2458.1	26.9			G2/5000
FVH	(80°-90°)	88.5	1.0			G1/100
BL	(0°-30°)	564.9	6.2	B2/1000		
BM	(30°-60°)	1262.6	13.8	B2/2500		
BH	(60°-80°)	570.0	6.2	B2/1000		G2/1000
BVH	(80°-90°)	40.0	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1521.7	1521.7	1521.7	1521.7	1521.7	1521.7	1521.7	1521.7	1521.7	1521.7	1521.7
2.5°	1588.4	1587.0	1589.7	1580.0	1567.5	1566.1	1566.1	1557.8	1548.1	1528.7	1513.4
5°	1663.3	1660.6	1661.9	1648.1	1631.4	1623.1	1621.7	1603.6	1581.4	1550.9	1523.1
7.5°	1732.8	1730.0	1728.6	1713.3	1688.3	1674.4	1673.0	1646.7	1620.3	1573.1	1532.8
10°	1798.0	1795.2	1792.5	1771.6	1741.1	1720.3	1717.5	1684.2	1650.8	1592.5	1541.1
12.5°	1881.3	1875.8	1873.0	1848.0	1803.6	1781.3	1777.2	1732.8	1691.1	1620.3	1557.8
15°	1968.8	1964.6	1960.5	1936.8	1886.9	1857.7	1850.8	1795.2	1738.3	1656.4	1582.8
17.5°	2034.0	2029.9	2029.9	2009.0	1963.2	1929.9	1924.4	1857.7	1786.9	1689.7	1602.2
20°	2074.3	2070.1	2074.3	2061.8	2027.1	1999.3	1993.8	1920.2	1835.5	1720.3	1618.9
22.5°	2103.5	2099.3	2106.2	2100.7	2075.7	2059.0	2054.9	1982.7	1885.5	1752.2	1635.6
25°	2154.8	2154.8	2154.8	2145.1	2121.5	2116.0	2116.0	2053.5	1949.3	1793.8	1660.6
27.5°	2257.6	2252.0	2245.1	2217.3	2177.0	2175.7	2184.0	2125.7	2022.9	1848.0	1691.1
30°	2408.9	2406.1	2379.8	2321.4	2253.4	2246.5	2252.0	2203.4	2102.1	1904.9	1725.8
32.5°	2604.7	2595.0	2540.8	2453.3	2356.2	2324.2	2335.3	2284.0	2185.4	1963.2	1759.1
35°	2743.5	2746.3	2707.4	2628.3	2513.0	2428.3	2436.7	2374.2	2275.6	2028.5	1800.8
37.5°	2903.2	2912.9	2854.6	2794.9	2688.0	2543.6	2551.9	2467.2	2365.9	2110.4	1845.2
40°	3123.9	3104.5	3005.9	2935.1	2817.1	2664.4	2671.3	2571.4	2470.0	2188.2	1896.6
42.5°	3308.6	3273.9	3154.5	3064.2	2922.6	2792.1	2799.1	2683.8	2575.5	2274.2	1953.5
45°	3573.8	3478.0	3305.8	3261.4	3030.9	2917.1	2924.0	2803.2	2686.6	2365.9	2014.6
47.5°	3727.9	3575.2	3465.5	3441.9	3150.3	3046.2	3054.5	2929.6	2806.0	2470.0	2078.5
50°	3718.2	3619.6	3587.7	3529.4	3255.8	3167.0	3175.3	3060.1	2926.8	2572.7	2139.6
52.5°	3654.3	3672.4	3655.7	3558.5	3361.4	3283.6	3293.3	3189.2	3050.4	2668.5	2196.5
55°	3752.9	3765.4	3733.5	3605.7	3478.0	3400.2	3411.4	3325.3	3172.5	2753.2	2245.1
57.5°	3870.9	3826.5	3794.6	3689.0	3598.8	3526.6	3539.1	3464.1	3278.1	2821.3	2282.6
60°	3865.4	3772.3	3804.3	3694.6	3680.7	3643.2	3654.3	3578.0	3358.6	2871.3	2297.8
62.5°	3580.7	3530.8	3691.8	3654.3	3747.4	3747.4	3761.2	3647.4	3407.2	2892.1	2289.5
65°	3086.5	3089.2	3372.5	3528.0	3826.5	3890.4	3901.5	3690.4	3379.4	2831.0	2211.8
67.5°	2458.9	2476.9	2883.8	3207.3	3747.4	3987.5	3988.9	3729.3	3260.0	2658.8	2031.3
70°	1799.4	1813.3	2293.7	2686.6	3373.9	3772.3	3750.1	3619.6	3000.4	2358.9	1749.4
72.5°	1216.3	1228.8	1723.0	2063.2	2768.5	3212.8	3164.2	3198.9	2557.5	1938.2	1406.5
75°	817.8	833.1	1226.0	1475.9	2036.8	2439.5	2331.2	2422.8	1978.5	1467.6	1026.0
77.5°	515.1	524.8	778.9	967.7	1391.2	1660.6	1552.3	1553.6	1139.9	790.0	551.2
80°	327.7	330.4	472.1	558.1	805.3	998.3	883.0	717.8	513.7	419.3	329.1
82.5°	190.2	186.0	281.8	315.2	383.2	379.0	313.8	297.1	224.9	209.7	168.0
85°	76.4	70.8	123.6	115.2	116.6	123.6	91.6	91.6	73.6	56.9	41.7
87.5°	15.3	15.3	16.7	15.3	15.3	16.7	12.5	12.5	11.1	11.1	11.1
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°	1521.7	1521.7	1521.7	1521.7	1521.7	1521.7	1521.7	1521.7	1521.7	1521.7	1521.7
2.5°	1510.6	1507.8	1500.9	1482.8	1473.1	1467.6	1459.2	1456.5	1455.1	1456.5	1460.6
5°	1514.8	1505.0	1485.6	1456.5	1437.0	1424.5	1410.6	1405.1	1400.9	1400.9	1405.1
7.5°	1517.5	1502.3	1469.0	1425.9	1398.1	1378.7	1362.0	1355.1	1353.7	1357.9	1359.3
10°	1518.9	1496.7	1449.5	1395.4	1359.3	1334.3	1317.6	1313.4	1317.6	1325.9	1327.3
12.5°	1528.7	1498.1	1438.4	1374.5	1331.5	1306.5	1294.0	1294.0	1305.1	1320.4	1321.8
15°	1545.3	1507.8	1432.9	1357.9	1313.4	1291.2	1287.1	1294.0	1310.7	1334.3	1337.1
17.5°	1557.8	1513.4	1420.4	1335.7	1289.8	1276.0	1282.9	1299.6	1323.2	1355.1	1357.9
20°	1566.1	1513.4	1402.3	1309.3	1266.2	1263.5	1282.9	1309.3	1334.3	1371.8	1375.9
22.5°	1574.5	1510.6	1381.5	1277.3	1239.9	1248.2	1284.3	1317.6	1342.6	1382.9	1389.8
25°	1589.7	1514.8	1360.7	1245.4	1212.1	1235.7	1282.9	1323.2	1349.5	1391.2	1402.3
27.5°	1610.6	1524.5	1345.4	1216.3	1184.3	1216.3	1273.2	1321.8	1349.5	1389.8	1402.3
30°	1632.8	1535.6	1327.3	1184.3	1152.4	1188.5	1252.4	1306.5	1338.4	1375.9	1391.2
32.5°	1656.4	1548.1	1312.1	1149.6	1113.5	1151.0	1221.8	1282.9	1317.6	1352.3	1369.0
35°	1688.3	1570.3	1303.7	1121.8	1078.8	1112.1	1182.9	1252.4	1289.8	1321.8	1341.2
37.5°	1727.2	1598.1	1299.6	1094.1	1041.3	1069.1	1141.3	1214.9	1255.1	1281.5	1299.6
40°	1771.6	1632.8	1298.2	1067.7	1003.8	1024.7	1098.2	1171.8	1210.7	1231.5	1246.8
42.5°	1821.6	1671.7	1295.4	1041.3	966.3	983.0	1056.6	1128.8	1162.1	1180.2	1194.0
45°	1874.4	1710.5	1289.8	1009.4	926.1	945.5	1013.5	1077.4	1112.1	1127.4	1142.7
47.5°	1927.1	1749.4	1278.7	973.3	890.0	908.0	967.7	1023.3	1051.0	1064.9	1080.2
50°	1978.5	1784.1	1252.4	931.6	852.5	869.2	915.0	952.5	973.3	984.4	999.7
52.5°	2024.3	1807.7	1214.9	883.0	815.0	823.3	853.9	885.8	902.5	903.9	917.7
55°	2063.2	1820.2	1160.7	833.1	774.7	776.1	792.8	817.8	824.7	819.2	828.9
57.5°	2085.4	1813.3	1101.0	781.7	733.1	727.5	740.0	752.5	753.9	740.0	749.7
60°	2091.0	1781.3	1023.3	730.3	691.4	676.2	680.3	677.5	674.8	669.2	677.5
62.5°	2063.2	1713.3	937.2	680.3	647.0	623.4	622.0	620.6	624.8	626.2	627.6
65°	1961.8	1585.6	834.4	629.0	599.8	567.9	566.5	583.1	588.7	580.4	583.1
67.5°	1766.1	1389.8	722.0	569.3	540.1	512.3	523.4	533.2	542.9	540.1	542.9
70°	1488.4	1141.3	619.2	502.6	474.8	459.6	472.1	480.4	481.8	479.0	481.8
72.5°	1170.4	891.4	523.4	434.6	409.6	402.6	417.9	424.9	437.4	442.9	444.3
75°	845.5	658.1	429.0	361.0	340.2	340.2	354.0	366.5	377.7	370.7	366.5
77.5°	472.1	392.9	308.2	248.5	252.7	272.1	277.7	291.6	302.7	301.3	298.5
80°	286.0	245.8	208.3	161.1	159.7	174.9	211.0	234.6	240.2	227.7	226.3
82.5°	148.6	129.1	111.1	90.2	100.0	116.6	122.2	147.2	162.4	156.9	163.8
85°	37.5	36.1	40.3	41.7	51.4	56.9	62.5	73.6	48.6	23.6	23.6
87.5°	11.1	11.1	13.9	13.9	18.0	22.2	20.8	20.8	11.1	1.4	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)