

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: P842383

Luminaire Tested: **ARCH4-40-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842383
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: ARCH4-40-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 355mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7385 lumens
Efficiency: N/A
Efficacy: 168.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

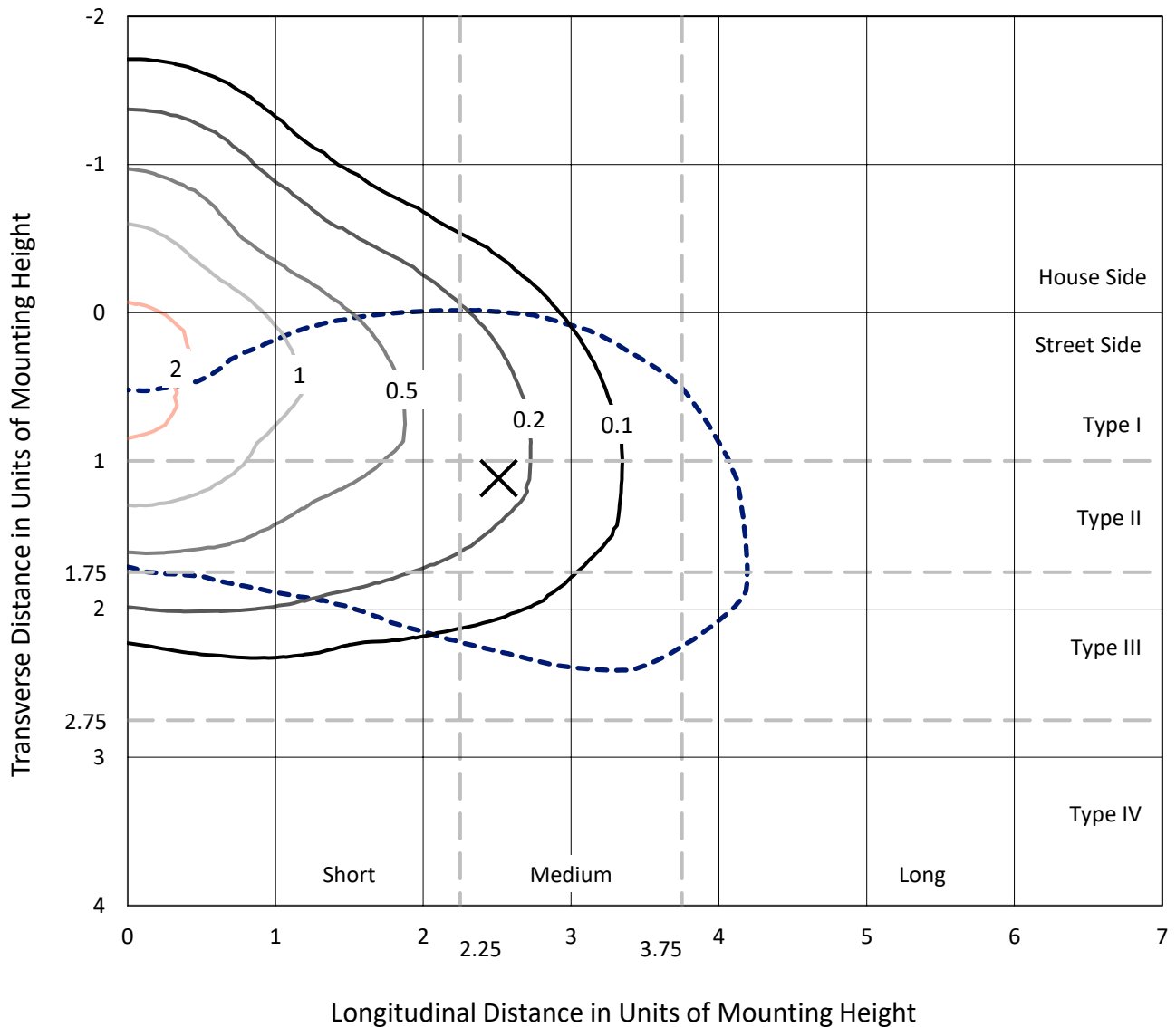
Input Watts (W): 43.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

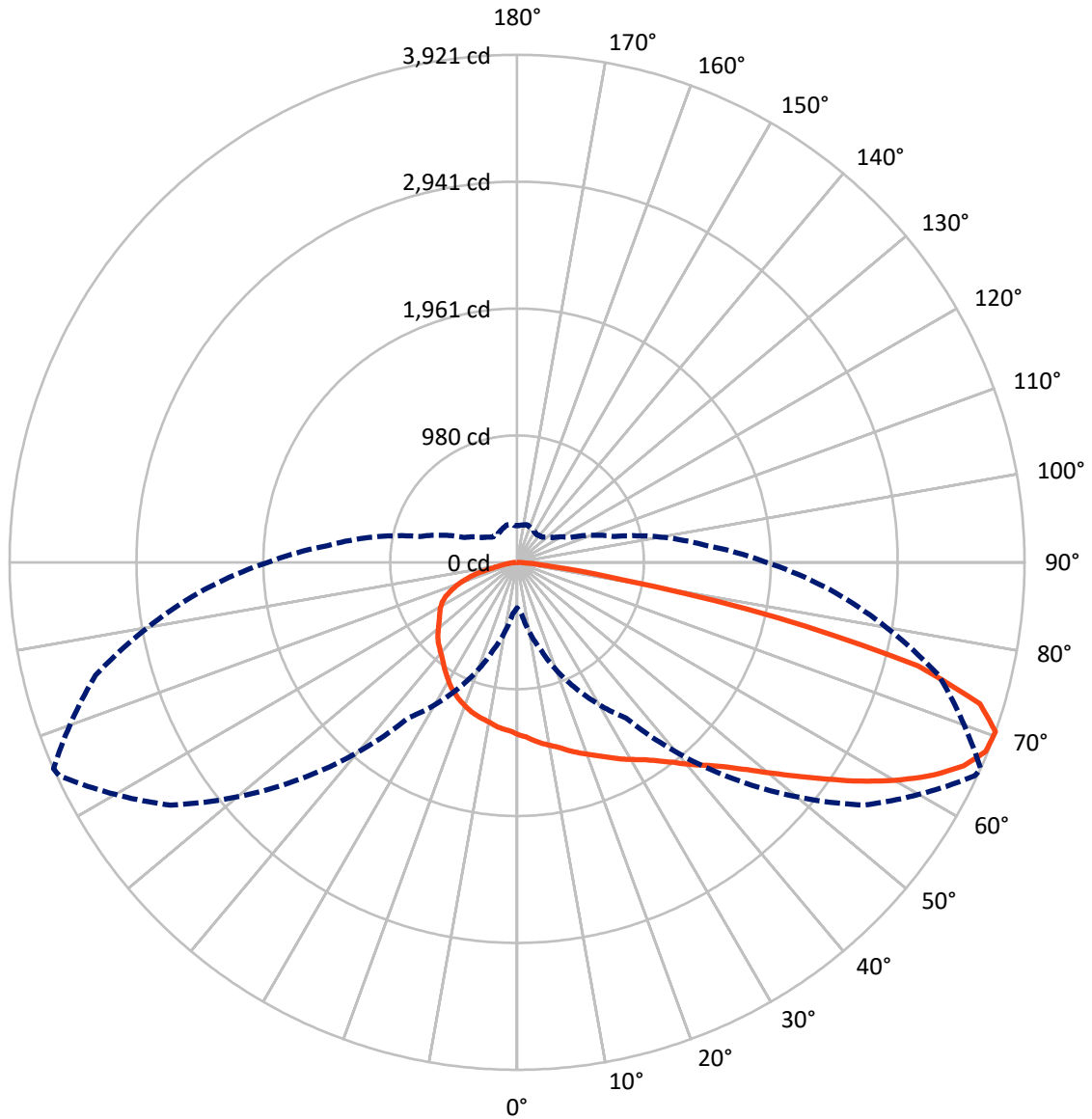
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 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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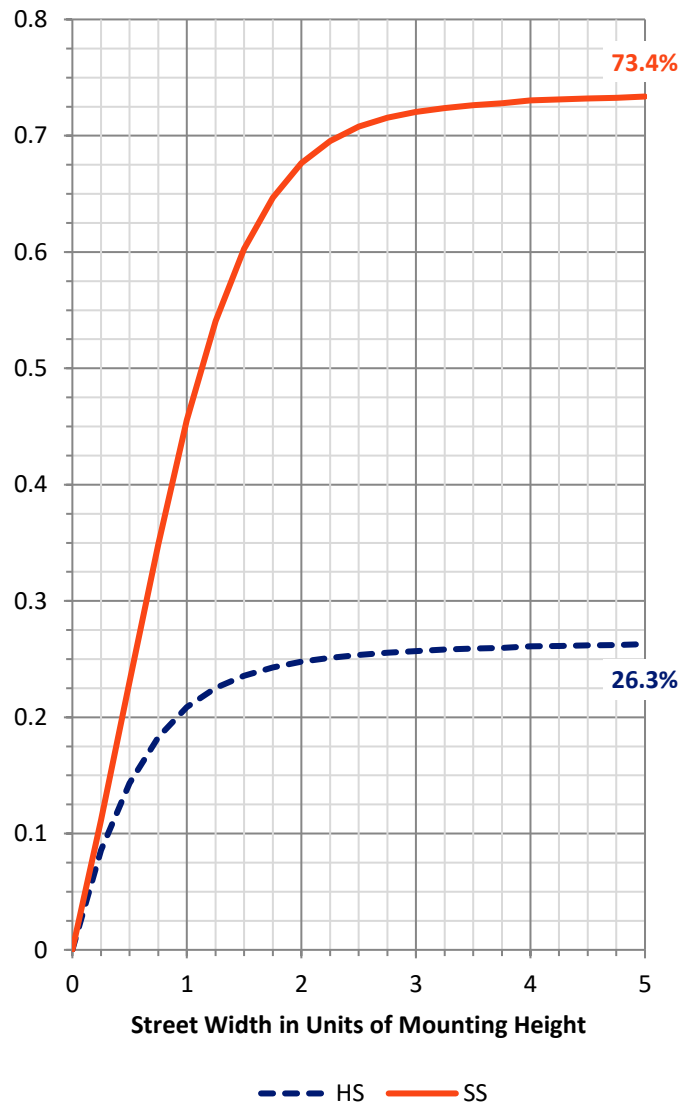
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1956.8	0.0	1956.8
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	5428.1	0.0	5428.1
	% Fixture	73.5	0.0	73.5
Total	Lumens	7385.0	0.0	7385.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.1	1.7
10°-20°	384.2	5.2
20°-30°	644.0	8.7
30°-40°	964.3	13.1
40°-50°	1289.2	17.5
50°-60°	1505.2	20.4
60°-70°	1496.7	20.3
70°-80°	886.1	12.0
80°-90°	87.3	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°	7385.0	100.0
0°-180°	7385.0	100.0

Coefficient of Utilization

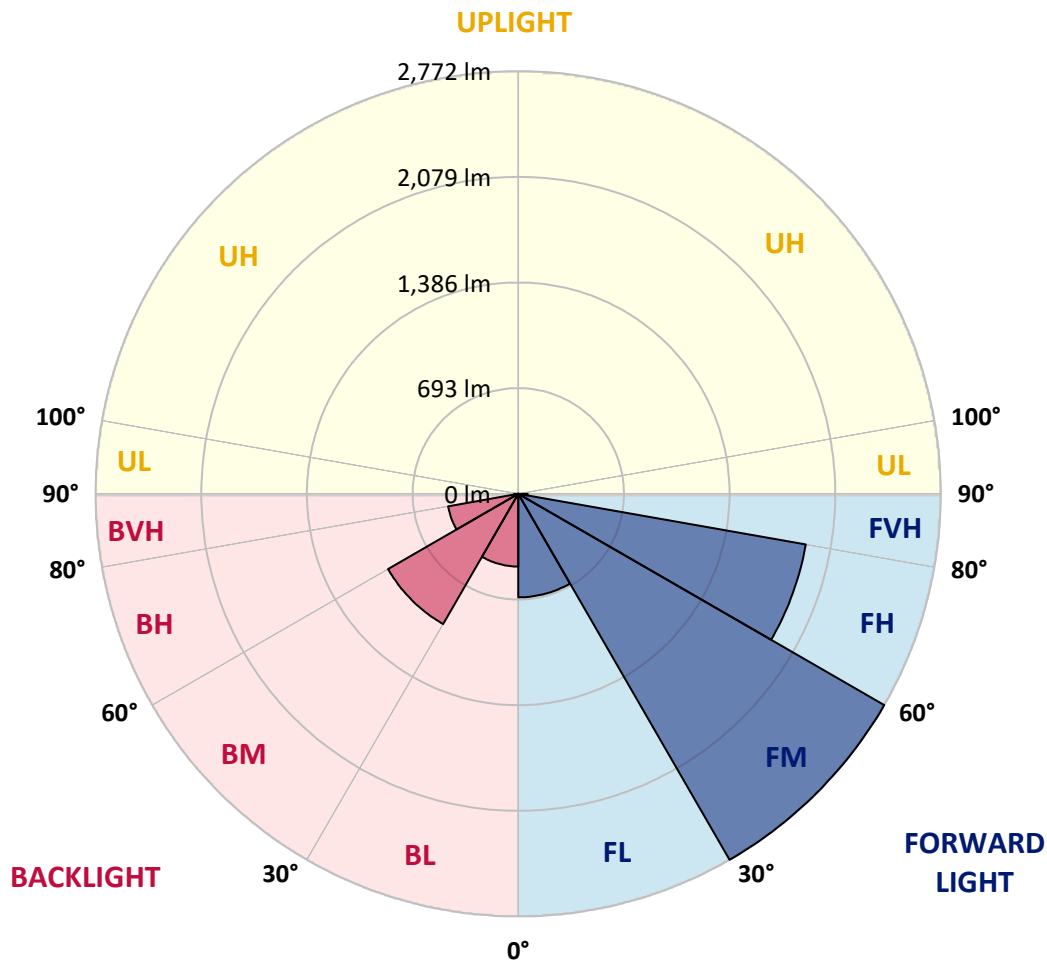


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	679.2	9.2			
FM (30°-60°)	2772.2	37.5			
FH (60°-80°)	1915.3	25.9			G2/5000
FVH (80°-90°)	61.4	0.8			G1/100
BL (0°-30°)	477.0	6.5	B1/500		
BM (30°-60°)	986.5	13.4	B1/1000		
BH (60°-80°)	467.4	6.3	B1/500		G1/500
BVH (80°-90°)	26.0	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8
2.5°	1381.8	1379.6	1378.6	1374.2	1364.4	1368.8	1359.0	1352.4	1351.3	1336.1	1327.4
5°	1438.4	1437.4	1435.2	1428.6	1413.4	1415.6	1399.2	1387.3	1384.0	1360.0	1341.5
7.5°	1486.4	1484.2	1483.1	1474.4	1458.0	1457.0	1437.4	1419.9	1414.5	1381.8	1353.5
10°	1523.4	1520.1	1522.3	1513.6	1496.2	1492.9	1467.8	1445.0	1439.5	1398.2	1359.0
12.5°	1555.0	1552.8	1556.1	1548.4	1534.3	1531.0	1506.0	1476.6	1470.0	1422.1	1370.9
15°	1589.8	1582.2	1588.7	1585.5	1575.7	1574.6	1551.7	1519.0	1510.3	1452.6	1389.4
17.5°	1608.3	1604.0	1611.6	1612.7	1608.3	1615.9	1594.2	1555.0	1547.3	1480.9	1405.8
20°	1621.4	1614.9	1623.6	1630.1	1633.4	1648.6	1631.2	1593.1	1584.4	1508.1	1421.0
22.5°	1666.0	1651.9	1653.0	1657.3	1659.5	1681.3	1670.4	1633.4	1624.7	1541.9	1439.5
25°	1778.2	1749.9	1731.4	1718.3	1703.1	1721.6	1715.0	1679.1	1671.5	1582.2	1462.4
27.5°	1952.4	1916.5	1879.5	1841.3	1781.5	1773.8	1762.9	1730.3	1721.6	1622.5	1485.3
30°	2150.6	2114.7	2071.1	2010.1	1898.0	1839.2	1814.1	1778.2	1768.4	1658.4	1507.0
32.5°	2347.7	2316.1	2272.6	2198.5	2038.4	1918.7	1865.3	1828.3	1818.5	1697.6	1533.2
35°	2501.2	2481.6	2453.3	2360.8	2177.8	2012.3	1939.3	1894.7	1883.8	1759.7	1581.1
37.5°	2625.4	2611.2	2587.2	2490.3	2279.1	2105.9	2024.3	1973.1	1961.1	1827.2	1632.3
40°	2808.3	2771.3	2751.7	2611.2	2367.3	2190.9	2120.1	2066.7	2053.7	1899.1	1673.7
42.5°	2964.0	2936.8	2912.8	2719.0	2451.1	2263.8	2210.5	2161.5	2144.1	1969.8	1718.3
45°	2990.1	3001.0	2989.1	2772.4	2584.0	2335.7	2302.0	2270.4	2254.0	2065.7	1785.8
47.5°	2991.2	2991.2	2920.5	2802.9	2748.4	2416.3	2400.0	2410.8	2393.4	2187.6	1866.4
50°	2912.8	2927.0	2890.0	2810.5	2792.0	2496.9	2519.7	2578.5	2561.1	2317.2	1953.5
52.5°	2750.6	2797.4	2796.3	2798.5	2728.8	2565.5	2646.0	2780.0	2750.6	2463.1	2046.1
55°	2464.2	2557.8	2641.7	2713.6	2674.4	2606.8	2800.7	2994.5	2964.0	2626.4	2139.7
57.5°	2219.2	2279.1	2383.6	2587.2	2610.1	2642.8	2945.5	3218.8	3191.6	2807.2	2237.7
60°	1939.3	2022.1	2126.6	2416.3	2531.7	2689.6	3104.5	3437.7	3411.6	2990.1	2332.4
62.5°	1509.2	1615.9	1825.0	2153.9	2417.4	2719.0	3229.7	3630.4	3618.4	3163.3	2417.4
65°	1051.9	1146.6	1439.5	1831.5	2235.5	2705.9	3329.9	3802.5	3791.6	3304.8	2477.3
67.5°	614.1	724.1	1055.2	1474.4	1914.3	2615.6	3362.6	3903.7	3903.7	3390.9	2493.6
70°	350.6	401.8	695.8	1074.8	1467.8	2366.2	3271.1	3902.6	3921.2	3371.3	2426.1
72.5°	245.0	267.9	468.2	723.0	995.3	1914.3	3031.5	3714.3	3739.3	3186.1	2195.2
75°	190.6	206.9	329.9	493.3	627.2	1300.2	2507.8	3131.7	3198.1	2715.7	1774.9
77.5°	144.8	156.8	192.7	308.2	401.8	747.0	1655.1	2053.7	2058.0	1662.8	951.7
80°	105.6	117.6	128.5	188.4	213.4	349.5	625.0	858.1	834.1	804.7	515.1
82.5°	63.2	75.1	78.4	102.4	104.5	149.2	218.9	276.6	265.7	353.9	241.7
85°	27.2	38.1	40.3	46.8	44.6	61.0	87.1	73.0	65.3	75.1	52.3
87.5°	6.5	10.9	10.9	12.0	9.8	15.2	16.3	12.0	10.9	13.1	13.1
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°	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8	1332.8
2.5°	1325.2	1321.9	1323.0	1304.5	1299.1	1293.6	1290.4	1288.2	1286.0	1289.3	1292.5
5°	1335.0	1327.4	1318.7	1291.4	1280.6	1268.6	1259.9	1252.2	1249.0	1249.0	1252.2
7.5°	1342.6	1329.6	1311.0	1275.1	1255.5	1239.2	1225.0	1215.2	1209.8	1209.8	1213.0
10°	1343.7	1325.2	1295.8	1252.2	1226.1	1202.2	1185.8	1174.9	1167.3	1167.3	1169.5
12.5°	1350.2	1325.2	1287.1	1234.8	1202.2	1172.8	1153.2	1136.8	1133.6	1133.6	1135.7
15°	1361.1	1330.6	1281.6	1219.6	1180.4	1146.6	1124.8	1107.4	1100.9	1105.2	1106.3
17.5°	1370.9	1333.9	1271.8	1200.0	1153.2	1116.1	1092.2	1076.9	1068.2	1078.0	1078.0
20°	1377.5	1333.9	1257.7	1174.9	1123.8	1082.4	1059.5	1041.0	1034.5	1046.4	1047.5
22.5°	1387.3	1332.8	1242.4	1149.9	1092.2	1048.6	1025.8	1011.6	1008.3	1021.4	1025.8
25°	1398.2	1335.0	1226.1	1121.6	1057.3	1014.9	997.4	990.9	993.1	1009.4	1014.9
27.5°	1410.1	1339.4	1209.8	1090.0	1019.2	981.1	971.3	974.6	983.3	1004.0	1010.5
30°	1421.0	1340.4	1186.9	1053.0	975.7	939.7	944.1	958.2	971.3	992.0	999.6
32.5°	1435.2	1341.5	1163.0	1012.7	928.8	902.7	922.3	945.2	958.2	977.8	986.6
35°	1470.0	1360.0	1144.4	973.5	885.3	871.1	903.8	933.2	940.8	958.2	965.9
37.5°	1510.3	1390.5	1134.6	933.2	842.8	839.5	880.9	910.3	912.5	923.4	931.0
40°	1535.4	1403.6	1123.8	899.4	804.7	806.9	849.3	872.2	867.9	875.5	880.9
42.5°	1560.4	1408.0	1100.9	871.1	768.8	770.9	803.6	819.9	822.1	838.5	846.1
45°	1602.9	1419.9	1075.8	845.0	736.1	728.5	748.1	769.9	798.2	829.7	838.5
47.5°	1659.5	1445.0	1049.7	813.4	704.5	679.5	687.1	725.2	754.6	784.0	789.5
50°	1717.2	1470.0	1025.8	775.3	672.9	627.2	630.5	665.3	689.3	712.1	715.4
52.5°	1773.8	1491.8	1005.1	739.4	637.0	565.1	578.2	614.1	630.5	641.4	644.6
55°	1830.5	1510.3	986.6	708.9	595.6	516.1	528.1	561.9	578.2	583.7	585.8
57.5°	1889.3	1532.1	972.4	682.7	548.8	472.6	480.2	504.2	519.4	525.9	523.8
60°	1938.3	1550.6	964.8	655.5	502.0	432.3	430.1	451.9	473.7	480.2	478.0
62.5°	1976.4	1562.6	952.8	620.7	460.6	392.0	381.1	409.4	432.3	436.7	439.9
65°	1997.1	1563.7	923.4	576.0	418.1	348.5	340.8	369.1	383.3	387.7	387.7
67.5°	1993.8	1546.3	865.7	516.1	378.9	309.3	302.7	320.1	340.8	344.1	340.8
70°	1926.3	1474.4	773.1	453.0	332.1	274.4	262.4	279.8	299.4	287.5	282.0
72.5°	1734.6	1288.2	637.0	383.3	279.8	230.8	225.4	242.8	243.9	246.1	240.6
75°	1368.8	959.3	476.9	298.4	226.5	193.8	192.7	189.5	193.8	202.5	196.0
77.5°	718.7	479.1	258.1	182.9	164.4	155.7	148.1	147.0	160.1	165.5	159.0
80°	389.8	269.0	148.1	110.0	100.2	101.3	111.1	108.9	123.0	126.3	120.9
82.5°	169.9	127.4	73.0	66.4	66.4	65.3	68.6	76.2	91.5	91.5	73.0
85°	37.0	31.6	28.3	32.7	37.0	37.0	37.0	37.0	26.1	14.2	9.8
87.5°	12.0	12.0	12.0	13.1	14.2	14.2	12.0	8.7	5.4	1.1	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)