

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: P842455

Luminaire Tested: **ARCH4-50-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842455
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: ARCH4-50-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9032 lumens
Efficiency: N/A
Efficacy: 169.8 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

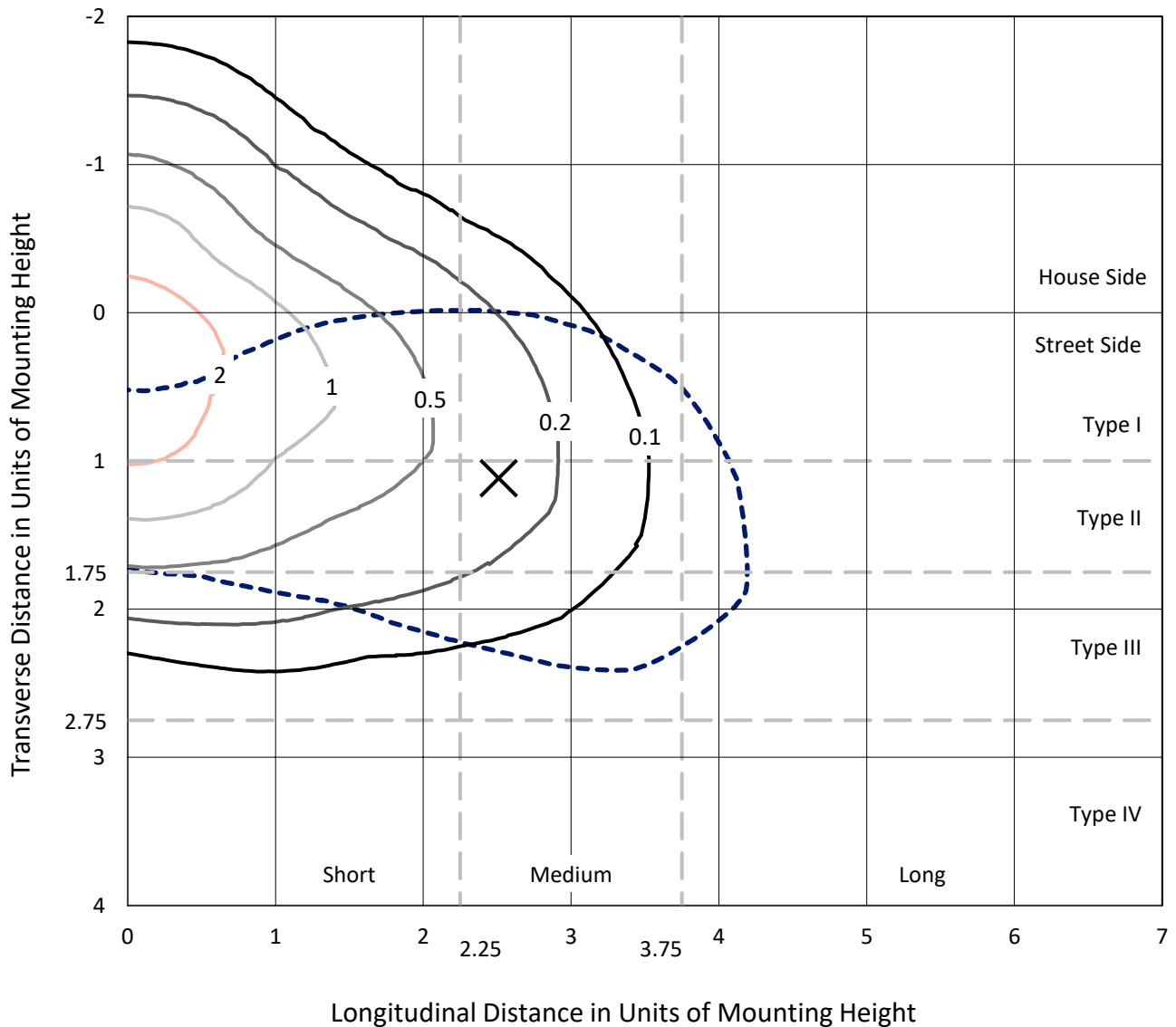
Input Watts (W): 53.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

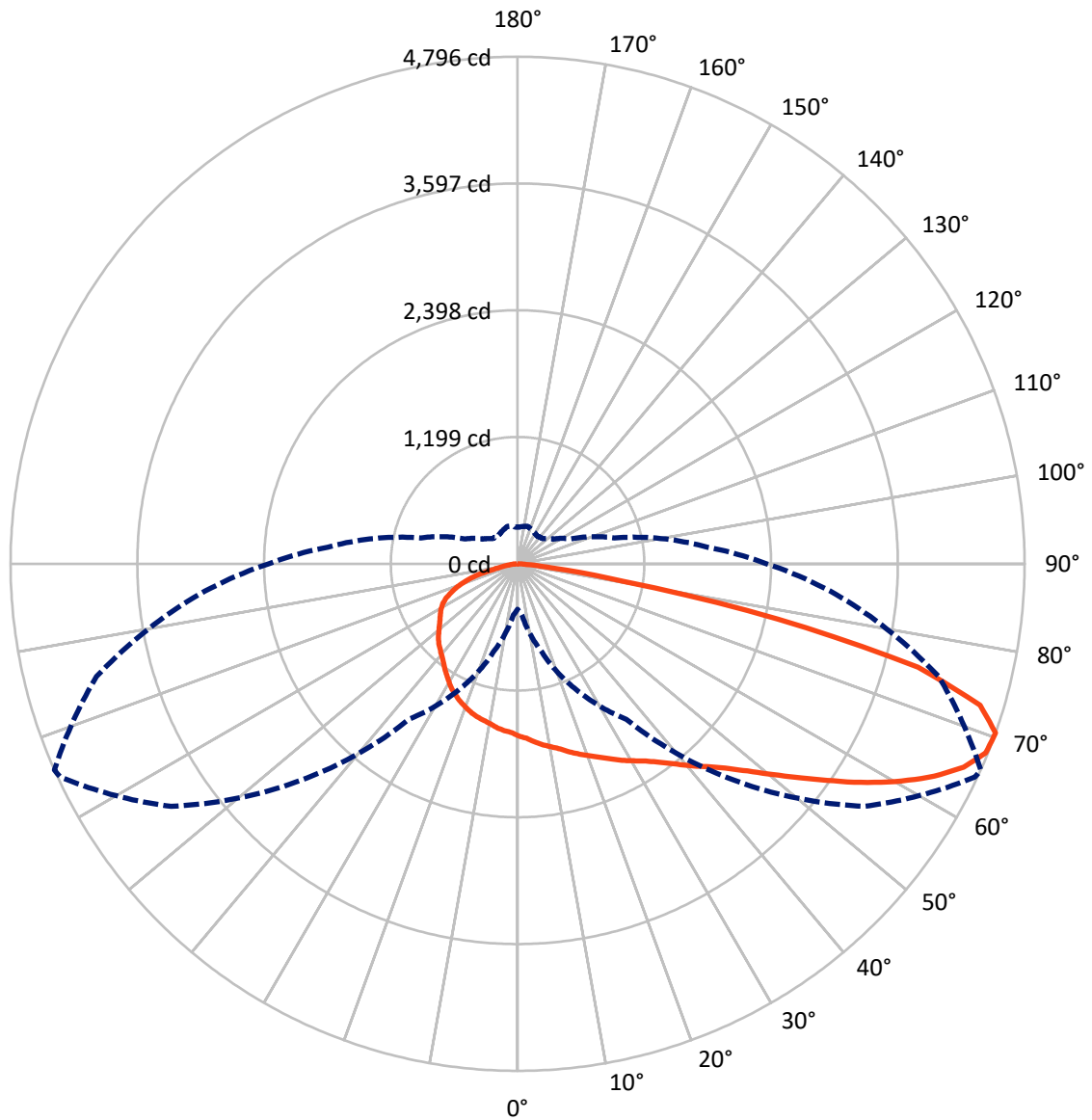
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type 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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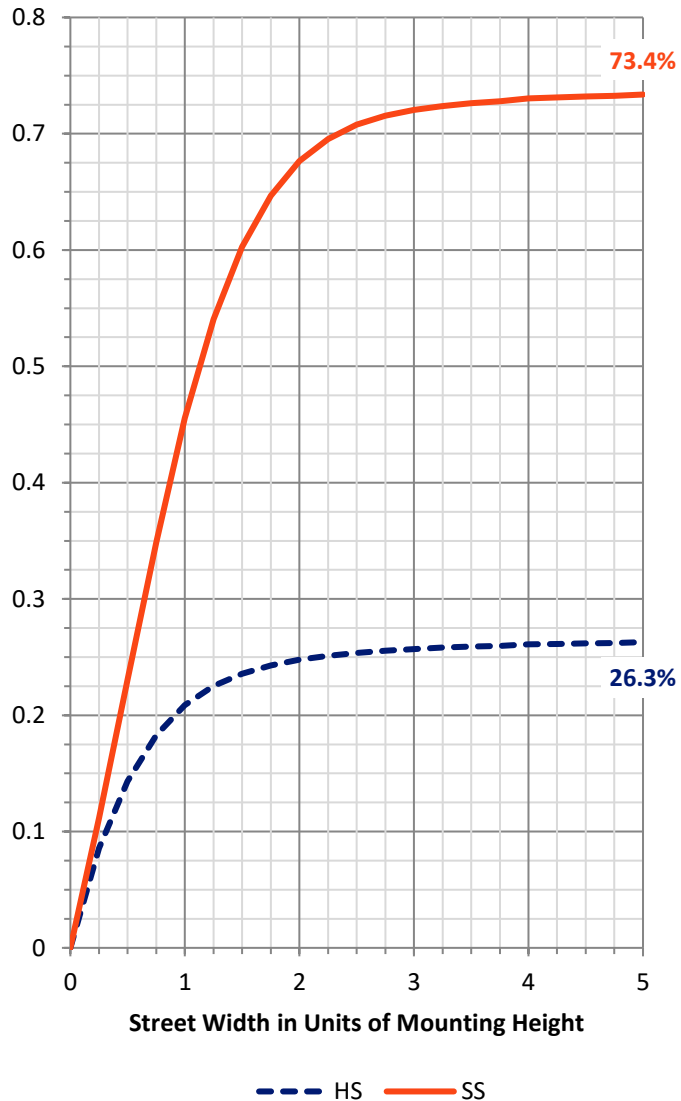
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2393.3	0.0	2393.3
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	6638.7	0.0	6638.7
	% Fixture	73.5	0.0	73.5
Total	Lumens	9032.0	0.0	9032.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.6	1.7
10°-20°	469.8	5.2
20°-30°	787.6	8.7
30°-40°	1179.3	13.1
40°-50°	1576.7	17.5
50°-60°	1840.9	20.4
60°-70°	1830.5	20.3
70°-80°	1083.7	12.0
80°-90°	106.8	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°	9032.0	100.0
0°-180°	9032.0	100.0

Coefficient of Utilization

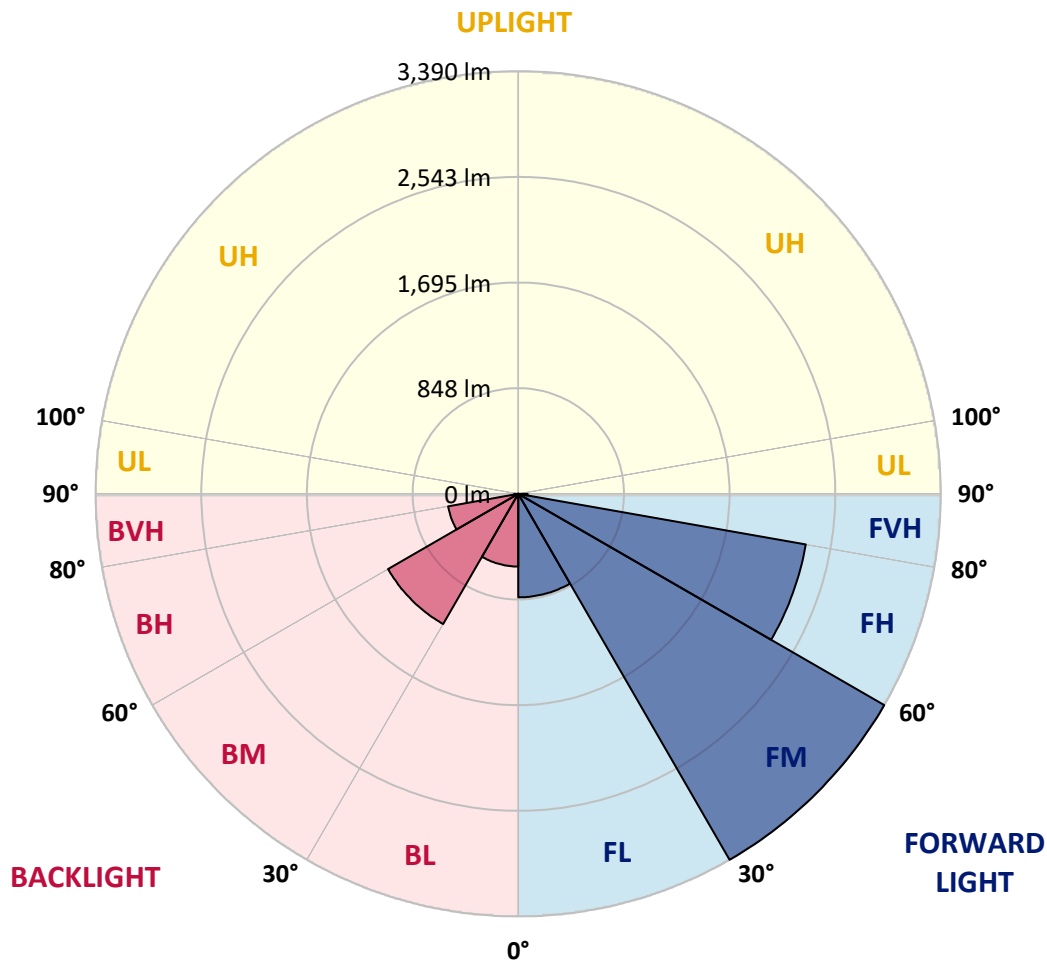


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	830.7	9.2			
FM (30°-60°)	3390.5	37.5			
FH (60°-80°)	2342.5	25.9			G2/5000
FVH (80°-90°)	75.1	0.8			G1/100
BL (0°-30°)	583.4	6.5	B2/1000		
BM (30°-60°)	1206.5	13.4	B2/2500		
BH (60°-80°)	571.7	6.3	B2/1000		G2/1000
BVH (80°-90°)	31.7	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°	1630.1	1630.1	1630.1	1630.1	1630.1	1630.1	1630.1	1630.1	1630.1	1630.1	1630.1
2.5°	1690.0	1687.3	1686.0	1680.7	1668.7	1674.0	1662.0	1654.0	1652.7	1634.1	1623.4
5°	1759.3	1757.9	1755.3	1747.3	1728.6	1731.3	1711.3	1696.7	1692.7	1663.4	1640.7
7.5°	1817.8	1815.2	1813.9	1803.2	1783.2	1781.9	1757.9	1736.6	1730.0	1690.0	1655.4
10°	1863.1	1859.1	1861.8	1851.1	1829.8	1825.8	1795.2	1767.2	1760.6	1710.0	1662.0
12.5°	1901.7	1899.1	1903.1	1893.8	1876.4	1872.5	1841.8	1805.9	1797.9	1739.3	1676.7
15°	1944.4	1935.0	1943.0	1939.0	1927.1	1925.7	1897.8	1857.8	1847.1	1776.6	1699.3
17.5°	1967.0	1961.7	1971.0	1972.3	1967.0	1976.3	1949.7	1901.7	1892.4	1811.2	1719.3
20°	1983.0	1975.0	1985.6	1993.6	1997.6	2016.3	1995.0	1948.4	1937.7	1844.5	1737.9
22.5°	2037.6	2020.3	2021.6	2026.9	2029.6	2056.2	2042.9	1997.6	1987.0	1885.8	1760.6
25°	2174.8	2140.1	2117.5	2101.5	2082.9	2105.5	2097.5	2053.6	2044.2	1935.0	1788.5
27.5°	2387.8	2343.9	2298.6	2252.0	2178.8	2169.4	2156.1	2116.2	2105.5	1984.3	1816.5
30°	2630.2	2586.3	2533.0	2458.4	2321.3	2249.3	2218.7	2174.8	2162.8	2028.3	1843.2
32.5°	2871.3	2832.6	2779.4	2688.8	2493.0	2346.6	2281.3	2236.0	2224.0	2076.2	1875.1
35°	3059.0	3035.1	3000.4	2887.2	2663.5	2461.1	2371.9	2317.3	2303.9	2152.1	1933.7
37.5°	3210.9	3193.6	3164.3	3045.7	2787.4	2575.6	2475.7	2413.1	2398.5	2234.7	1996.3
40°	3434.6	3389.3	3365.3	3193.6	2895.2	2679.5	2592.9	2527.7	2511.7	2322.6	2046.9
42.5°	3625.0	3591.7	3562.4	3325.4	2997.8	2768.7	2703.5	2643.5	2622.2	2409.1	2101.5
45°	3657.0	3670.3	3655.7	3390.7	3160.3	2856.6	2815.3	2776.7	2756.7	2526.3	2184.1
47.5°	3658.3	3658.3	3571.8	3427.9	3361.4	2955.2	2935.2	2948.5	2927.2	2675.5	2282.6
50°	3562.4	3579.8	3534.5	3437.3	3414.6	3053.7	3081.7	3153.6	3132.3	2834.0	2389.2
52.5°	3364.0	3421.3	3420.0	3422.6	3337.4	3137.6	3236.2	3400.0	3364.0	3012.4	2502.4
55°	3013.8	3128.3	3230.8	3318.7	3270.8	3188.2	3425.3	3662.3	3625.0	3212.2	2616.9
57.5°	2714.1	2787.4	2915.2	3164.3	3192.2	3232.2	3602.4	3936.7	3903.4	3433.3	2736.8
60°	2371.9	2473.1	2600.9	2955.2	3096.3	3289.4	3796.8	4204.4	4172.4	3657.0	2852.6
62.5°	1845.8	1976.3	2232.0	2634.2	2956.5	3325.4	3950.0	4440.1	4425.4	3868.8	2956.5
65°	1286.5	1402.3	1760.6	2240.0	2734.1	3309.4	4072.5	4650.5	4637.2	4041.9	3029.7
67.5°	751.1	885.6	1290.5	1803.2	2341.2	3198.9	4112.5	4774.3	4774.3	4147.1	3049.7
70°	428.8	491.4	851.0	1314.4	1795.2	2893.9	4000.6	4773.0	4795.7	4123.1	2967.2
72.5°	299.6	327.6	572.7	884.3	1217.2	2341.2	3707.6	4542.6	4573.3	3896.7	2684.8
75°	233.1	253.0	403.5	603.3	767.1	1590.1	3067.0	3830.1	3911.4	3321.4	2170.8
77.5°	177.1	191.8	235.7	376.9	491.4	913.6	2024.3	2511.7	2517.0	2033.6	1164.0
80°	129.2	143.8	157.1	230.4	261.0	427.5	764.4	1049.4	1020.1	984.2	629.9
82.5°	77.2	91.9	95.9	125.2	127.8	182.5	267.7	338.3	324.9	432.8	295.7
85°	33.3	46.6	49.3	57.3	54.6	74.6	106.5	89.2	79.9	91.9	63.9
87.5°	8.0	13.3	13.3	14.6	12.0	18.6	20.0	14.6	13.3	16.0	16.0
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°	1630.1	1630.1	1630.1	1630.1	1630.1	1630.1	1630.1	1630.1	1630.1	1630.1	1630.1
2.5°	1620.7	1616.8	1618.1	1595.4	1588.8	1582.1	1578.1	1575.5	1572.8	1576.8	1580.8
5°	1632.7	1623.4	1612.8	1579.5	1566.1	1551.5	1540.8	1531.5	1527.5	1527.5	1531.5
7.5°	1642.1	1626.1	1603.4	1559.5	1535.5	1515.5	1498.2	1486.2	1479.6	1479.6	1483.6
10°	1643.4	1620.7	1584.8	1531.5	1499.6	1470.3	1450.3	1437.0	1427.6	1427.6	1430.3
12.5°	1651.4	1620.7	1574.1	1510.2	1470.3	1434.3	1410.3	1390.4	1386.4	1386.4	1389.0
15°	1664.7	1627.4	1567.5	1491.6	1443.6	1402.3	1375.7	1354.4	1346.4	1351.7	1353.1
17.5°	1676.7	1631.4	1555.5	1467.6	1410.3	1365.1	1335.8	1317.1	1306.5	1318.4	1318.4
20°	1684.7	1631.4	1538.2	1437.0	1374.4	1323.8	1295.8	1273.2	1265.2	1279.8	1281.2
22.5°	1696.7	1630.1	1519.5	1406.3	1335.8	1282.5	1254.5	1237.2	1233.2	1249.2	1254.5
25°	1710.0	1632.7	1499.6	1371.7	1293.1	1241.2	1219.9	1211.9	1214.6	1234.5	1241.2
27.5°	1724.6	1638.1	1479.6	1333.1	1246.5	1199.9	1187.9	1191.9	1202.6	1227.9	1235.9
30°	1737.9	1639.4	1451.6	1287.8	1193.3	1149.3	1154.6	1171.9	1187.9	1213.2	1222.6
32.5°	1755.3	1640.7	1422.3	1238.5	1136.0	1104.0	1128.0	1156.0	1171.9	1195.9	1206.6
35°	1797.9	1663.4	1399.7	1190.6	1082.7	1065.4	1105.4	1141.3	1150.6	1171.9	1181.3
37.5°	1847.1	1700.7	1387.7	1141.3	1030.8	1026.8	1077.4	1113.3	1116.0	1129.3	1138.7
40°	1877.8	1716.6	1374.4	1100.0	984.2	986.8	1038.8	1066.7	1061.4	1070.7	1077.4
42.5°	1908.4	1722.0	1346.4	1065.4	940.2	942.9	982.8	1002.8	1005.5	1025.5	1034.8
45°	1960.3	1736.6	1315.8	1033.4	900.3	890.9	914.9	941.6	976.2	1014.8	1025.5
47.5°	2029.6	1767.2	1283.8	994.8	861.6	831.0	840.3	887.0	922.9	958.9	965.5
50°	2100.2	1797.9	1254.5	948.2	823.0	767.1	771.1	813.7	843.0	871.0	875.0
52.5°	2169.4	1824.5	1229.2	904.3	779.1	691.2	707.2	751.1	771.1	784.4	788.4
55°	2238.7	1847.1	1206.6	867.0	728.5	631.3	645.9	687.2	707.2	713.8	716.5
57.5°	2310.6	1873.8	1189.3	835.0	671.2	578.0	587.3	616.6	635.2	643.2	640.6
60°	2370.5	1896.4	1179.9	801.7	613.9	528.7	526.0	552.7	579.3	587.3	584.6
62.5°	2417.1	1911.1	1165.3	759.1	563.3	479.4	466.1	500.7	528.7	534.0	538.0
65°	2442.4	1912.4	1129.3	704.5	511.4	426.2	416.8	451.5	468.8	474.1	474.1
67.5°	2438.4	1891.1	1058.7	631.3	463.5	378.2	370.2	391.5	416.8	420.8	416.8
70°	2355.9	1803.2	945.5	554.0	406.2	335.6	321.0	342.3	366.2	351.6	344.9
72.5°	2121.5	1575.5	779.1	468.8	342.3	282.3	275.7	297.0	298.3	301.0	294.3
75°	1674.0	1173.3	583.3	364.9	277.0	237.1	235.7	231.7	237.1	247.7	239.7
77.5°	879.0	586.0	315.6	223.7	201.1	190.4	181.1	179.8	195.8	202.4	194.4
80°	476.8	328.9	181.1	134.5	122.5	123.9	135.8	133.2	150.5	154.5	147.8
82.5°	207.8	155.8	89.2	81.2	81.2	79.9	83.9	93.2	111.9	111.9	89.2
85°	45.3	38.6	34.6	40.0	45.3	45.3	45.3	45.3	32.0	17.3	12.0
87.5°	14.6	14.6	14.6	16.0	17.3	17.3	14.6	10.7	6.7	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)