

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: P799749

Luminaire Tested: **ARCH2-50-727-U-T2U**

Issue Date: 4/4/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P799749  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH2-50-727-U-T2U  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 410mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

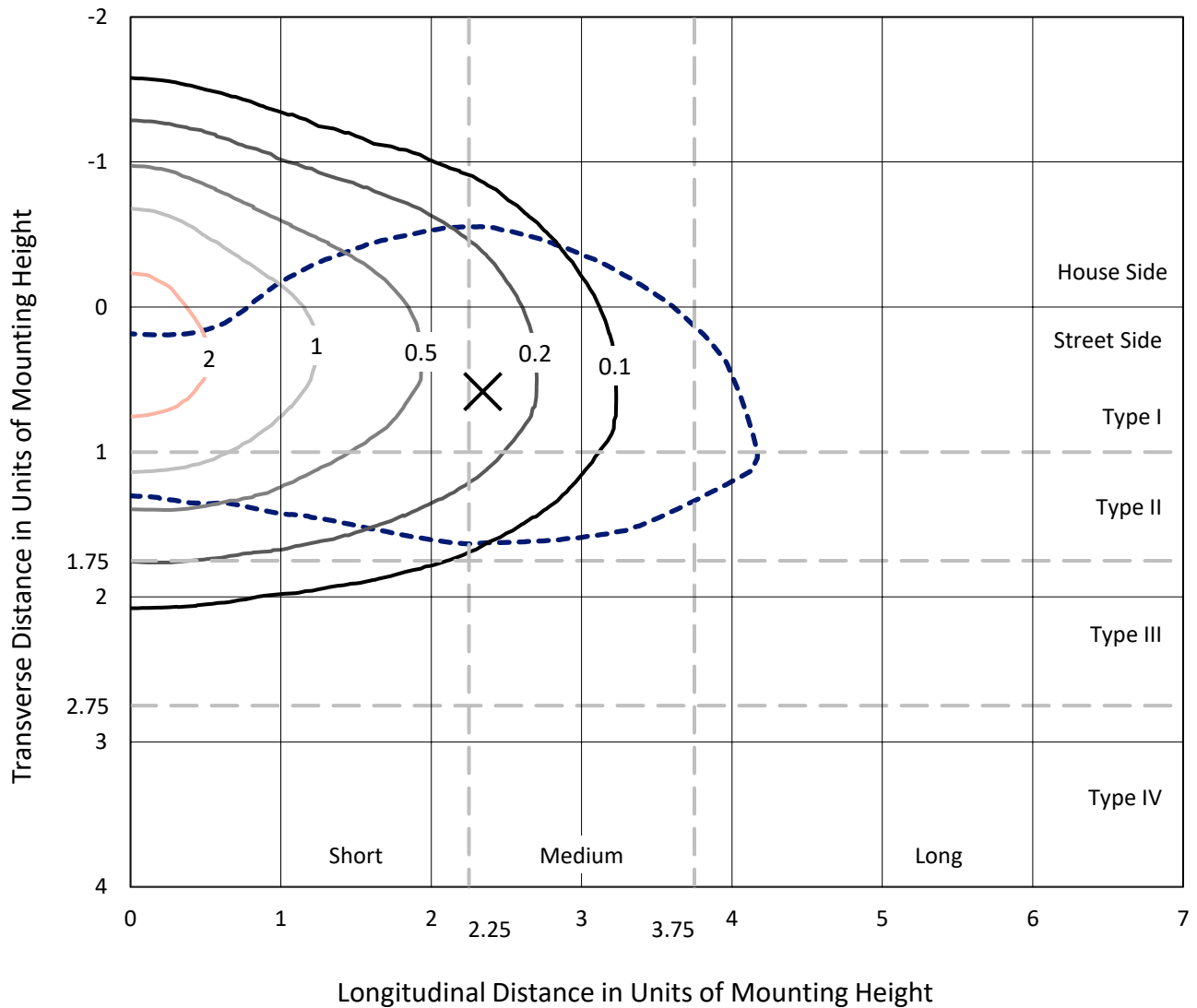
Lumens per Lamp: N/A  
Luminaire Lumens: 7468 lumens  
Efficiency: N/A  
Efficacy: 138.3 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 54  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

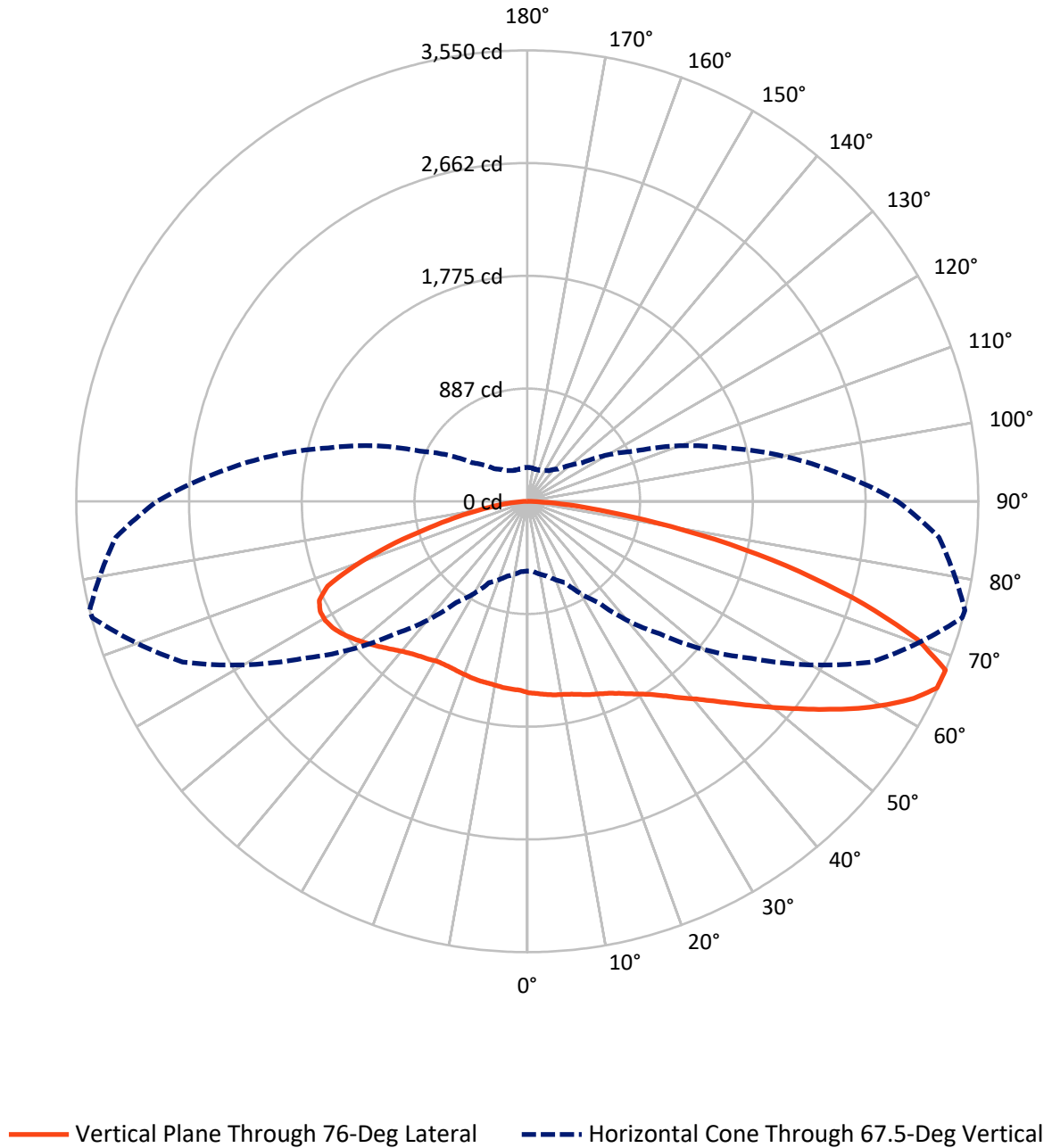
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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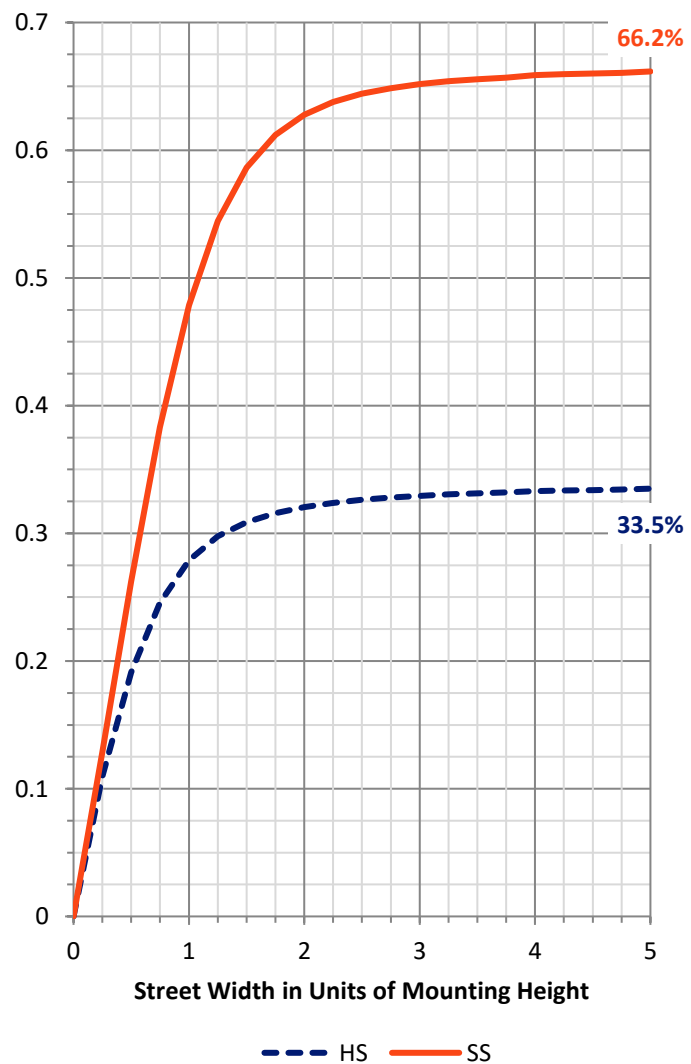
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2523.5	0.0	2523.5
	% Fixture	33.8	0.0	33.8
<b>Street Side</b>	Lumens	4944.5	0.0	4944.5
	% Fixture	66.2	0.0	66.2
<b>Total</b>	Lumens	7468.0	0.0	7468.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.5	1.9
10°-20°	444.7	6.0
20°-30°	755.6	10.1
30°-40°	1075.1	14.4
40°-50°	1357.8	18.2
50°-60°	1470.1	19.7
60°-70°	1367.3	18.3
70°-80°	734.4	9.8
80°-90°	117.7	1.6
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°	7468.0	100.0
0°-180°	7468.0	100.0

**Coefficient of Utilization**



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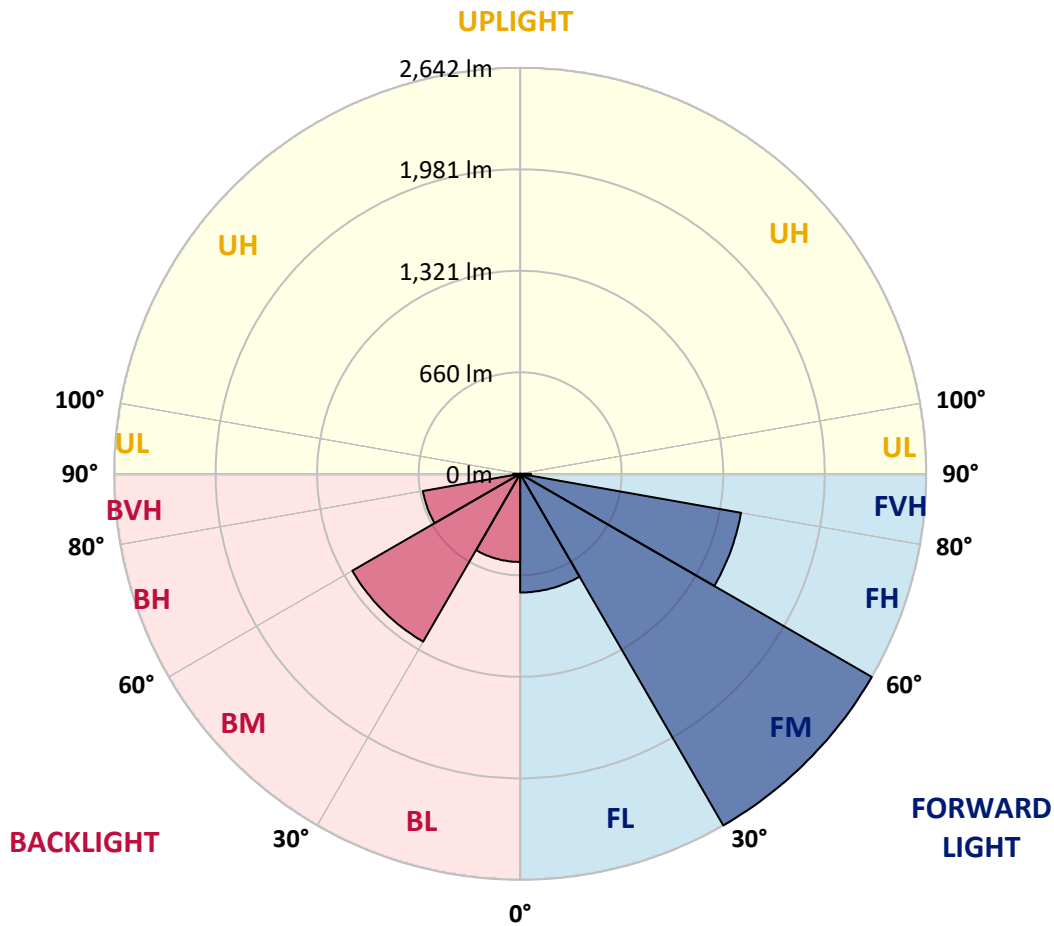
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	772.3	10.3			
FM (30°-60°)	2641.9	35.4			
FH (60°-80°)	1459.2	19.5			G1/1800
FVH (80°-90°)	71.2	1.0			G1/100
BL (0°-30°)	573.5	7.7	B2/1000		
BM (30°-60°)	1261.0	16.9	B2/2500		
BH (60°-80°)	642.5	8.6	B2/1000		G2/1000
BVH (80°-90°)	46.5	0.6			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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1508.5	1508.5	1508.5	1508.5	1508.5	1508.5	1508.5	1508.5	1508.5	1508.5	1508.5
2.5°	1554.3	1551.5	1540.4	1541.8	1541.8	1540.4	1523.8	1516.8	1516.8	1515.5	1500.2
5°	1609.7	1605.6	1593.1	1590.3	1584.8	1577.8	1551.5	1536.2	1529.3	1527.9	1507.1
7.5°	1674.9	1669.4	1654.1	1645.8	1631.9	1613.9	1580.6	1557.0	1540.4	1539.0	1509.9
10°	1740.1	1734.5	1716.5	1701.2	1681.8	1652.7	1609.7	1575.1	1548.7	1546.0	1511.3
12.5°	1817.7	1812.2	1790.0	1770.6	1741.5	1702.6	1645.8	1598.6	1562.6	1558.4	1515.5
15°	1899.5	1891.2	1869.0	1846.8	1810.8	1760.9	1692.9	1630.5	1584.8	1577.8	1527.9
17.5°	1967.5	1956.4	1938.3	1916.2	1875.9	1817.7	1740.1	1662.4	1605.6	1600.0	1540.4
20°	2025.7	2017.4	1998.0	1977.2	1934.2	1870.4	1784.4	1694.3	1625.0	1618.1	1550.1
22.5°	2081.1	2070.1	2059.0	2043.7	1996.6	1925.9	1835.7	1733.1	1649.9	1641.6	1562.6
25°	2144.9	2132.4	2128.3	2120.0	2064.5	1992.4	1898.1	1781.7	1684.6	1674.9	1584.8
27.5°	2224.0	2210.1	2201.8	2201.8	2135.2	2060.3	1964.7	1838.5	1724.8	1716.5	1612.5
30°	2307.1	2290.5	2278.0	2278.0	2203.2	2128.3	2029.8	1895.4	1770.6	1760.9	1648.6
32.5°	2380.6	2364.0	2350.1	2348.7	2271.1	2196.2	2097.8	1957.7	1826.0	1813.6	1692.9
35°	2437.5	2422.2	2409.7	2412.5	2339.0	2265.6	2174.0	2040.9	1895.4	1881.5	1751.2
37.5°	2472.1	2466.6	2459.7	2469.4	2401.4	2332.1	2253.1	2121.4	1974.4	1961.9	1823.3
40°	2490.2	2486.0	2513.7	2526.2	2454.1	2391.7	2332.1	2204.5	2060.3	2046.5	1906.4
42.5°	2516.5	2551.2	2562.3	2559.5	2492.9	2437.5	2404.2	2294.7	2161.6	2149.1	2006.3
45°	2422.2	2413.9	2474.9	2508.2	2495.7	2466.6	2472.1	2402.8	2279.4	2266.9	2121.4
47.5°	2296.1	2285.0	2319.6	2401.4	2450.0	2477.7	2533.1	2515.1	2415.3	2404.2	2255.8
50°	2029.8	2045.1	2174.0	2283.6	2379.2	2474.9	2584.4	2635.7	2565.0	2553.9	2400.0
52.5°	1734.5	1749.8	1884.3	2136.6	2293.3	2454.1	2621.9	2756.4	2727.3	2714.8	2553.9
55°	1519.6	1552.9	1705.4	1888.4	2171.3	2389.0	2644.1	2879.8	2902.0	2890.9	2721.7
57.5°	1306.1	1331.0	1446.1	1608.3	2004.9	2275.3	2642.7	2994.9	3085.0	3073.9	2892.3
60°	1055.1	1087.0	1178.5	1353.2	1783.0	2139.4	2603.9	3085.0	3261.1	3252.7	3057.2
62.5°	883.2	892.9	958.1	1109.2	1497.4	1967.5	2516.5	3133.5	3420.5	3415.0	3205.6
65°	711.3	712.7	772.3	898.5	1221.5	1753.9	2368.2	3115.5	3541.1	3543.9	3312.4
67.5°	549.1	556.0	610.1	705.7	970.6	1476.6	2156.0	2993.5	3542.5	3549.5	3251.4
70°	379.9	385.4	467.3	560.1	750.1	1177.1	1869.0	2670.4	3251.4	3256.9	2914.4
72.5°	267.6	270.4	357.7	447.8	586.5	887.4	1410.1	2208.7	2771.6	2775.8	2451.3
75°	199.7	202.4	252.3	339.7	449.2	614.2	963.6	1691.5	2214.3	2214.3	1935.6
77.5°	141.4	142.8	163.6	234.3	299.5	414.6	579.6	1107.8	1625.0	1627.8	1410.1
80°	95.7	97.1	106.8	158.1	187.2	224.6	314.7	580.9	1024.6	1028.8	895.7
82.5°	49.9	52.7	59.6	80.4	94.3	124.8	162.2	295.3	567.1	578.2	538.0
85°	19.4	19.4	22.2	26.3	34.7	48.5	74.9	112.3	256.5	264.8	237.1
87.5°	6.9	6.9	8.3	8.3	9.7	11.1	12.5	16.6	29.1	29.1	27.7
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°	1508.5	1508.5	1508.5	1508.5	1508.5	1508.5	1508.5	1508.5	1508.5	1508.5	1508.5
2.5°	1494.7	1494.7	1487.7	1490.5	1489.1	1486.3	1483.6	1487.7	1483.6	1473.9	1472.5
5°	1497.4	1494.7	1483.6	1482.2	1478.0	1472.5	1465.5	1468.3	1461.4	1453.1	1451.7
7.5°	1498.8	1493.3	1478.0	1472.5	1464.2	1453.1	1442.0	1442.0	1432.3	1423.9	1422.6
10°	1496.0	1489.1	1468.3	1457.2	1442.0	1425.3	1410.1	1405.9	1394.8	1385.1	1385.1
12.5°	1497.4	1487.7	1461.4	1443.4	1422.6	1401.8	1382.3	1376.8	1367.1	1357.4	1356.0
15°	1505.7	1491.9	1458.6	1435.0	1404.5	1381.0	1360.2	1356.0	1347.7	1340.8	1340.8
17.5°	1514.1	1496.0	1454.4	1421.2	1383.7	1357.4	1338.0	1338.0	1332.4	1328.3	1328.3
20°	1518.2	1497.4	1446.1	1401.8	1358.8	1331.0	1313.0	1315.8	1314.4	1313.0	1313.0
22.5°	1527.9	1500.2	1439.2	1383.7	1332.4	1303.3	1286.7	1290.8	1289.5	1289.5	1290.8
25°	1543.2	1507.1	1433.6	1367.1	1307.5	1275.6	1257.6	1260.3	1260.3	1260.3	1260.3
27.5°	1564.0	1521.0	1432.3	1351.8	1282.5	1246.5	1224.3	1224.3	1218.7	1220.1	1221.5
30°	1595.9	1547.3	1435.0	1338.0	1256.2	1210.4	1184.1	1179.9	1178.5	1181.3	1182.7
32.5°	1634.7	1583.4	1451.7	1328.3	1228.4	1170.2	1136.9	1135.5	1131.4	1131.4	1131.4
35°	1683.2	1618.1	1466.9	1326.9	1200.7	1127.2	1091.2	1087.0	1077.3	1073.2	1073.2
37.5°	1745.6	1672.1	1484.9	1317.2	1177.1	1085.6	1042.7	1028.8	1017.7	1016.3	1016.3
40°	1821.9	1733.1	1511.3	1306.1	1152.2	1042.7	985.8	962.2	963.6	969.2	969.2
42.5°	1912.0	1808.0	1544.6	1300.5	1116.1	998.3	919.3	891.5	901.2	906.8	908.2
45°	2017.4	1896.7	1582.0	1293.6	1082.9	948.4	848.5	813.9	818.0	819.4	820.8
47.5°	2139.4	1995.2	1620.8	1288.1	1045.4	886.0	770.9	725.1	723.8	715.4	718.2
50°	2266.9	2099.2	1661.0	1278.4	999.7	812.5	689.1	635.0	623.9	611.4	612.8
52.5°	2402.8	2205.9	1698.5	1263.1	942.8	737.6	611.4	553.2	531.0	517.2	519.9
55°	2552.6	2315.5	1734.5	1239.5	883.2	662.8	542.1	482.5	454.8	443.7	445.1
57.5°	2689.8	2420.8	1760.9	1210.4	818.0	594.8	481.1	422.9	404.9	403.5	404.9
60°	2822.9	2509.6	1772.0	1170.2	751.5	532.4	424.3	379.9	367.4	374.4	375.7
62.5°	2935.2	2566.4	1766.4	1116.1	683.5	472.8	378.5	346.6	338.3	352.2	353.6
65°	3000.4	2584.4	1727.6	1038.5	610.1	414.6	335.5	300.9	296.7	305.0	309.2
67.5°	2914.4	2472.1	1622.2	931.7	528.3	360.5	293.9	266.2	259.3	266.2	266.2
70°	2583.1	2142.2	1372.6	762.6	438.1	307.8	255.1	235.7	230.2	235.7	234.3
72.5°	2151.9	1781.7	1081.5	594.8	345.2	259.3	221.8	203.8	198.3	192.7	190.0
75°	1669.4	1353.2	784.8	436.7	260.7	208.0	185.8	169.2	155.3	160.8	158.1
77.5°	1222.9	949.8	556.0	302.3	187.2	160.8	145.6	133.1	123.4	134.5	133.1
80°	787.5	614.2	371.6	202.4	128.9	112.3	106.8	99.8	109.5	142.8	145.6
82.5°	481.1	389.6	221.8	131.7	84.6	74.9	69.3	69.3	112.3	123.4	124.8
85°	214.9	206.6	120.6	67.9	47.1	43.0	38.8	49.9	45.8	33.3	34.7
87.5°	34.7	36.0	26.3	23.6	18.0	18.0	13.9	9.7	6.9	4.2	4.2
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)