

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: P800329

Luminaire Tested: **ARCH2-90-750-U-T4W**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P800329
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-90-750-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 695mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12013 lumens
Efficiency: N/A
Efficacy: 128.2 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 93.7
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

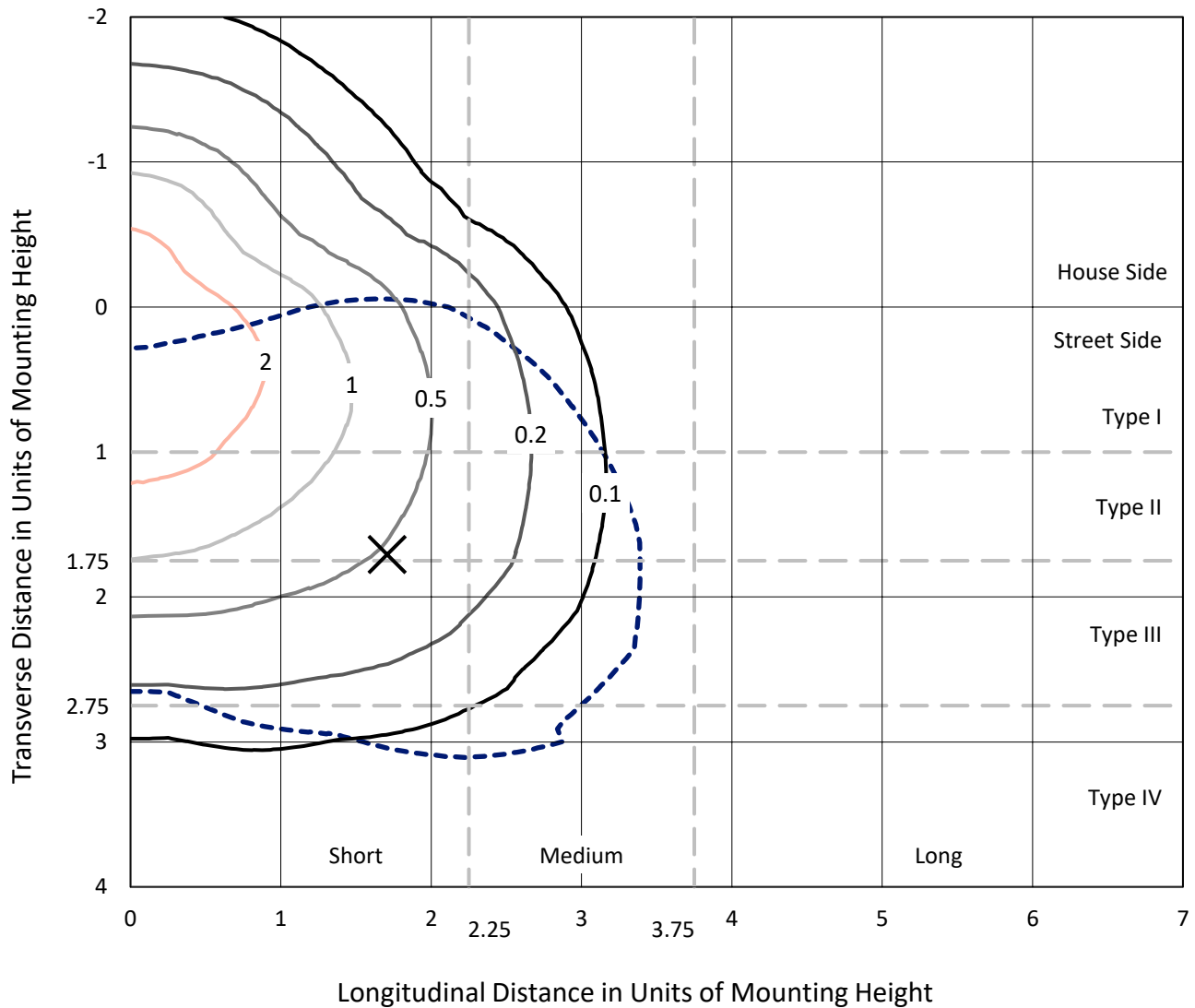


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Iso-Footcandle Lines of Horizontal Illumination

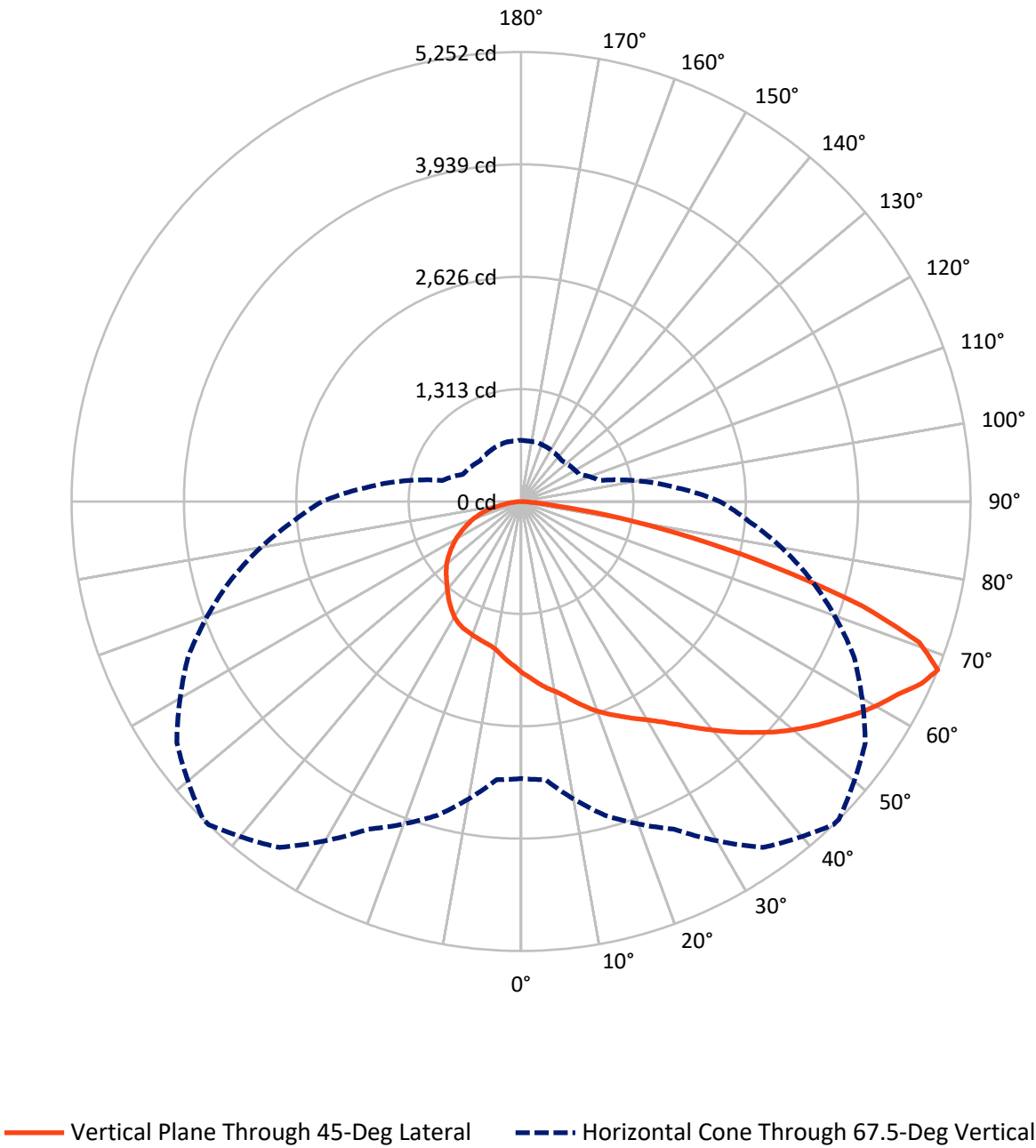
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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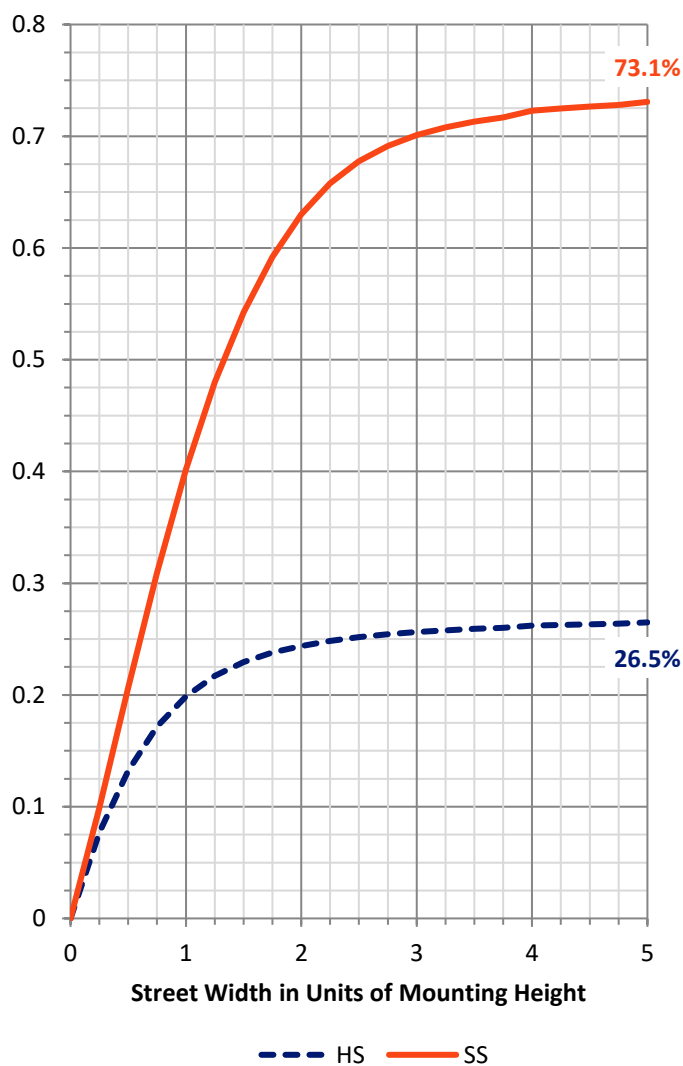
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3209.3	0.0	3209.3
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	8803.7	0.0	8803.7
	% Fixture	73.3	0.0	73.3
Total	Lumens	12013.0	0.0	12013.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.8	1.6
10°-20°	592.6	4.9
20°-30°	1022.9	8.5
30°-40°	1508.4	12.6
40°-50°	2043.5	17.0
50°-60°	2497.7	20.8
60°-70°	2576.0	21.4
70°-80°	1411.0	11.7
80°-90°	169.1	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°	12013.0	100.0
0°-180°	12013.0	100.0

Coefficient of Utilization



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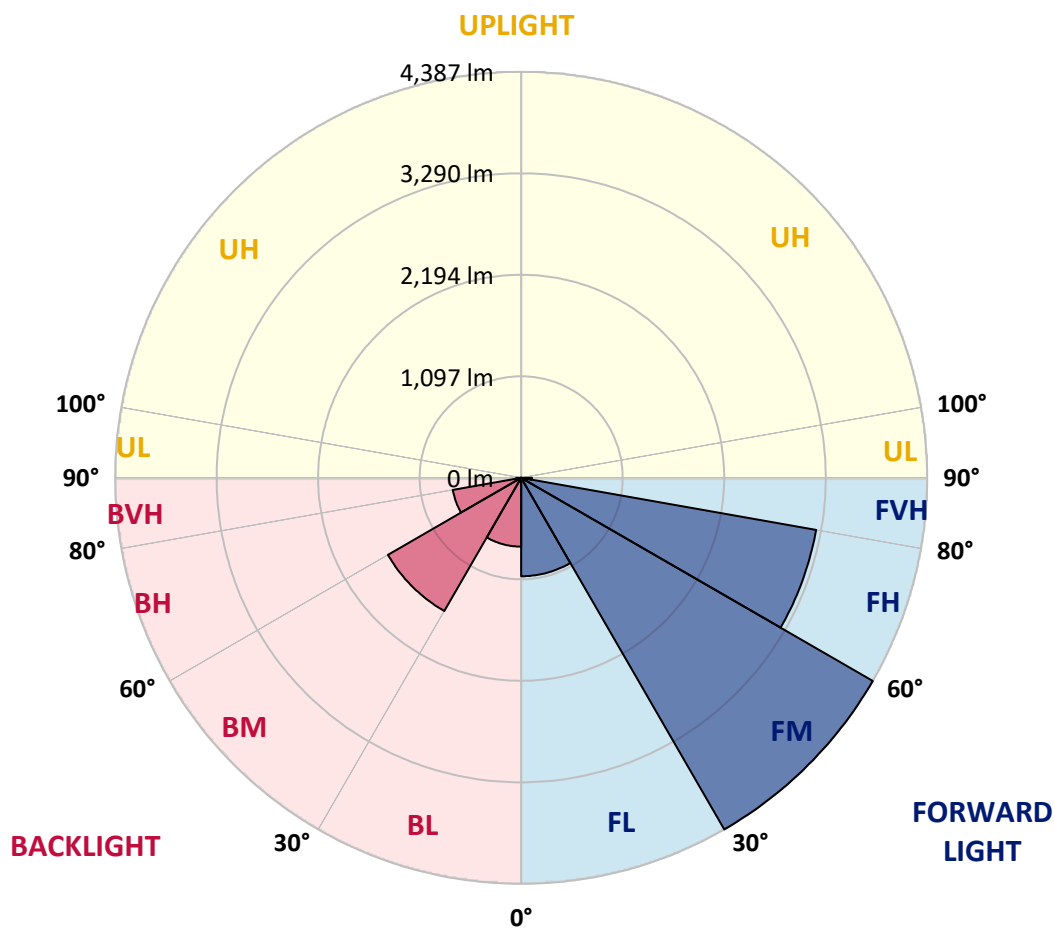
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1063.5	8.9			
FM	(30°-60°)	4387.3	36.5			
FH	(60°-80°)	3236.5	26.9			G2/5000
FVH	(80°-90°)	116.5	1.0			G2/225
BL	(0°-30°)	743.8	6.2	B2/1000		
BM	(30°-60°)	1662.4	13.8	B2/2500		
BH	(60°-80°)	750.5	6.2	B2/1000		G2/1000
BVH	(80°-90°)	52.6	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°	2003.5	2003.5	2003.5	2003.5	2003.5	2003.5	2003.5	2003.5	2003.5	2003.5	2003.5
2.5°	2091.3	2089.5	2093.1	2080.3	2063.9	2062.0	2062.0	2051.1	2038.3	2012.7	1992.6
5°	2190.0	2186.3	2188.2	2169.9	2148.0	2137.0	2135.2	2111.4	2082.1	2041.9	2005.4
7.5°	2281.4	2277.7	2275.9	2255.8	2222.9	2204.6	2202.8	2168.1	2133.3	2071.2	2018.2
10°	2367.3	2363.7	2360.0	2332.6	2292.4	2265.0	2261.3	2217.4	2173.5	2096.8	2029.1
12.5°	2477.0	2469.7	2466.0	2433.1	2374.6	2345.4	2339.9	2281.4	2226.6	2133.3	2051.1
15°	2592.2	2586.7	2581.2	2550.1	2484.3	2445.9	2436.8	2363.7	2288.7	2180.9	2084.0
17.5°	2678.1	2672.6	2672.6	2645.2	2584.9	2541.0	2533.7	2445.9	2352.7	2224.7	2109.6
20°	2731.1	2725.6	2731.1	2714.7	2669.0	2632.4	2625.1	2528.2	2416.7	2265.0	2131.5
22.5°	2769.5	2764.0	2773.1	2765.8	2732.9	2711.0	2705.5	2610.5	2482.5	2307.0	2153.4
25°	2837.1	2837.1	2837.1	2824.3	2793.3	2785.9	2785.9	2703.7	2566.6	2361.8	2186.3
27.5°	2972.4	2965.1	2956.0	2919.4	2866.4	2864.6	2875.5	2798.7	2663.5	2433.1	2226.6
30°	3171.7	3168.0	3133.3	3056.5	2966.9	2957.8	2965.1	2901.1	2767.7	2508.1	2272.3
32.5°	3429.4	3416.6	3345.3	3230.2	3102.2	3060.2	3074.8	3007.1	2877.3	2584.9	2316.1
35°	3612.2	3615.9	3564.7	3460.5	3308.8	3197.3	3208.2	3126.0	2996.2	2670.8	2371.0
37.5°	3822.4	3835.2	3758.5	3679.9	3539.1	3349.0	3360.0	3248.4	3115.0	2778.6	2429.5
40°	4113.1	4087.5	3957.7	3864.5	3709.1	3508.0	3517.2	3385.5	3252.1	2881.0	2497.1
42.5°	4356.2	4310.5	4153.3	4034.5	3848.0	3676.2	3685.3	3533.6	3391.0	2994.3	2572.1
45°	4705.4	4579.3	4352.6	4294.1	3990.6	3840.7	3849.9	3690.8	3537.3	3115.0	2652.5
47.5°	4908.3	4707.2	4562.8	4531.7	4147.8	4010.7	4021.7	3857.2	3694.5	3252.1	2736.6
50°	4895.5	4765.7	4723.7	4646.9	4286.8	4169.8	4180.7	4029.0	3853.5	3387.4	2817.0
52.5°	4811.4	4835.2	4813.3	4685.3	4425.7	4323.3	4336.1	4199.0	4016.2	3513.5	2892.0
55°	4941.2	4957.7	4915.6	4747.4	4579.3	4476.9	4491.5	4378.2	4177.1	3625.0	2956.0
57.5°	5096.6	5038.1	4996.1	4857.1	4738.3	4643.2	4659.7	4561.0	4316.0	3714.6	3005.3
60°	5089.3	4966.8	5008.9	4864.4	4846.2	4796.8	4811.4	4710.9	4422.0	3780.4	3025.4
62.5°	4714.5	4648.7	4860.8	4811.4	4933.9	4933.9	4952.2	4802.3	4486.0	3807.8	3014.5
65°	4063.8	4067.4	4440.3	4645.1	5038.1	5122.2	5136.8	4859.0	4449.5	3727.4	2912.1
67.5°	3237.5	3261.2	3796.9	4222.8	4933.9	5250.2	5252.0	4910.1	4292.3	3500.7	2674.4
70°	2369.2	2387.4	3019.9	3537.3	4442.2	4966.8	4937.6	4765.7	3950.4	3105.9	2303.3
72.5°	1601.4	1617.8	2268.6	2716.5	3645.1	4230.1	4166.1	4211.8	3367.3	2552.0	1851.8
75°	1076.7	1096.8	1614.2	1943.2	2681.7	3211.9	3069.3	3189.9	2605.0	1932.2	1350.9
77.5°	678.2	691.0	1025.5	1274.1	1831.7	2186.3	2043.8	2045.6	1500.8	1040.2	725.7
80°	431.4	435.1	621.5	734.9	1060.3	1314.4	1162.6	945.1	676.4	552.1	433.2
82.5°	250.4	245.0	371.1	415.0	504.5	499.1	413.1	391.2	296.1	276.0	221.2
85°	100.5	93.2	162.7	151.7	153.6	162.7	120.7	120.7	96.9	74.9	54.8
87.5°	20.1	20.1	21.9	20.1	20.1	21.9	16.5	16.5	14.6	14.6	14.6
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°	2003.5	2003.5	2003.5	2003.5	2003.5	2003.5	2003.5	2003.5	2003.5	2003.5	2003.5
2.5°	1988.9	1985.3	1976.1	1952.4	1939.6	1932.2	1921.3	1917.6	1915.8	1917.6	1923.1
5°	1994.4	1981.6	1956.0	1917.6	1892.0	1875.6	1857.3	1850.0	1844.5	1844.5	1850.0
7.5°	1998.1	1977.9	1934.1	1877.4	1840.8	1815.3	1793.3	1784.2	1782.3	1787.8	1789.7
10°	1999.9	1970.6	1908.5	1837.2	1789.7	1756.8	1734.8	1729.3	1734.8	1745.8	1747.6
12.5°	2012.7	1972.5	1893.9	1809.8	1753.1	1720.2	1703.7	1703.7	1718.4	1738.5	1740.3
15°	2034.6	1985.3	1886.5	1787.8	1729.3	1700.1	1694.6	1703.7	1725.7	1756.8	1760.4
17.5°	2051.1	1992.6	1870.1	1758.6	1698.3	1680.0	1689.1	1711.1	1742.1	1784.2	1787.8
20°	2062.0	1992.6	1846.3	1723.8	1667.2	1663.5	1689.1	1723.8	1756.8	1806.1	1811.6
22.5°	2073.0	1988.9	1818.9	1681.8	1632.4	1643.4	1690.9	1734.8	1767.7	1820.7	1829.9
25°	2093.1	1994.4	1791.5	1639.8	1595.9	1627.0	1689.1	1742.1	1776.9	1831.7	1846.3
27.5°	2120.5	2007.2	1771.4	1601.4	1559.3	1601.4	1676.3	1740.3	1776.9	1829.9	1846.3
30°	2149.8	2021.8	1747.6	1559.3	1517.3	1564.8	1648.9	1720.2	1762.2	1811.6	1831.7
32.5°	2180.9	2038.3	1727.5	1513.6	1466.1	1515.5	1608.7	1689.1	1734.8	1780.5	1802.5
35°	2222.9	2067.5	1716.5	1477.1	1420.4	1464.3	1557.5	1648.9	1698.3	1740.3	1765.9
37.5°	2274.1	2104.1	1711.1	1440.5	1371.0	1407.6	1502.7	1599.5	1652.6	1687.3	1711.1
40°	2332.6	2149.8	1709.2	1405.8	1321.7	1349.1	1446.0	1542.9	1594.1	1621.5	1641.6
42.5°	2398.4	2201.0	1705.6	1371.0	1272.3	1294.3	1391.1	1486.2	1530.1	1553.8	1572.1
45°	2467.9	2252.2	1698.3	1329.0	1219.3	1244.9	1334.5	1418.6	1464.3	1484.4	1504.5
47.5°	2537.3	2303.3	1683.6	1281.5	1171.8	1195.5	1274.1	1347.3	1383.8	1402.1	1422.2
50°	2605.0	2349.0	1648.9	1226.6	1122.4	1144.4	1204.7	1254.0	1281.5	1296.1	1316.2
52.5°	2665.3	2380.1	1599.5	1162.6	1073.1	1084.0	1124.2	1166.3	1188.2	1190.1	1208.3
55°	2716.5	2396.6	1528.2	1096.8	1020.1	1021.9	1043.8	1076.7	1085.9	1078.5	1091.3
57.5°	2745.7	2387.4	1449.6	1029.2	965.2	957.9	974.3	990.8	992.6	974.3	987.1
60°	2753.0	2345.4	1347.3	961.6	910.4	890.3	895.7	892.1	888.4	881.1	892.1
62.5°	2716.5	2255.8	1233.9	895.7	851.9	820.8	819.0	817.1	822.6	824.4	826.3
65°	2583.0	2087.6	1098.7	828.1	789.7	747.7	745.8	767.8	775.1	764.1	767.8
67.5°	2325.3	1829.9	950.6	749.5	711.1	674.5	689.2	702.0	714.8	711.1	714.8
70°	1959.7	1502.7	815.3	661.8	625.2	605.1	621.5	632.5	634.3	630.7	634.3
72.5°	1541.0	1173.6	689.2	572.2	539.3	530.1	550.2	559.4	575.8	583.1	585.0
75°	1113.3	866.5	564.9	475.3	447.9	447.9	466.2	482.6	497.2	488.1	482.6
77.5°	621.5	517.3	405.8	327.2	332.7	358.3	365.6	383.9	398.5	396.7	393.0
80°	376.6	323.6	274.2	212.1	210.2	230.3	277.9	308.9	316.3	299.8	298.0
82.5°	195.6	170.0	146.2	118.8	131.6	153.6	160.9	193.8	213.9	206.6	215.7
85°	49.4	47.5	53.0	54.8	67.6	74.9	82.3	96.9	64.0	31.1	31.1
87.5°	14.6	14.6	18.3	18.3	23.8	29.2	27.4	27.4	14.6	1.8	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)