

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: P398144

Luminaire Tested: **ARCH-S-PA1-90-750-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398144  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-90-750-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11664 lumens  
Efficiency: N/A  
Efficacy: 124.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 94  
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: 28.75 FT

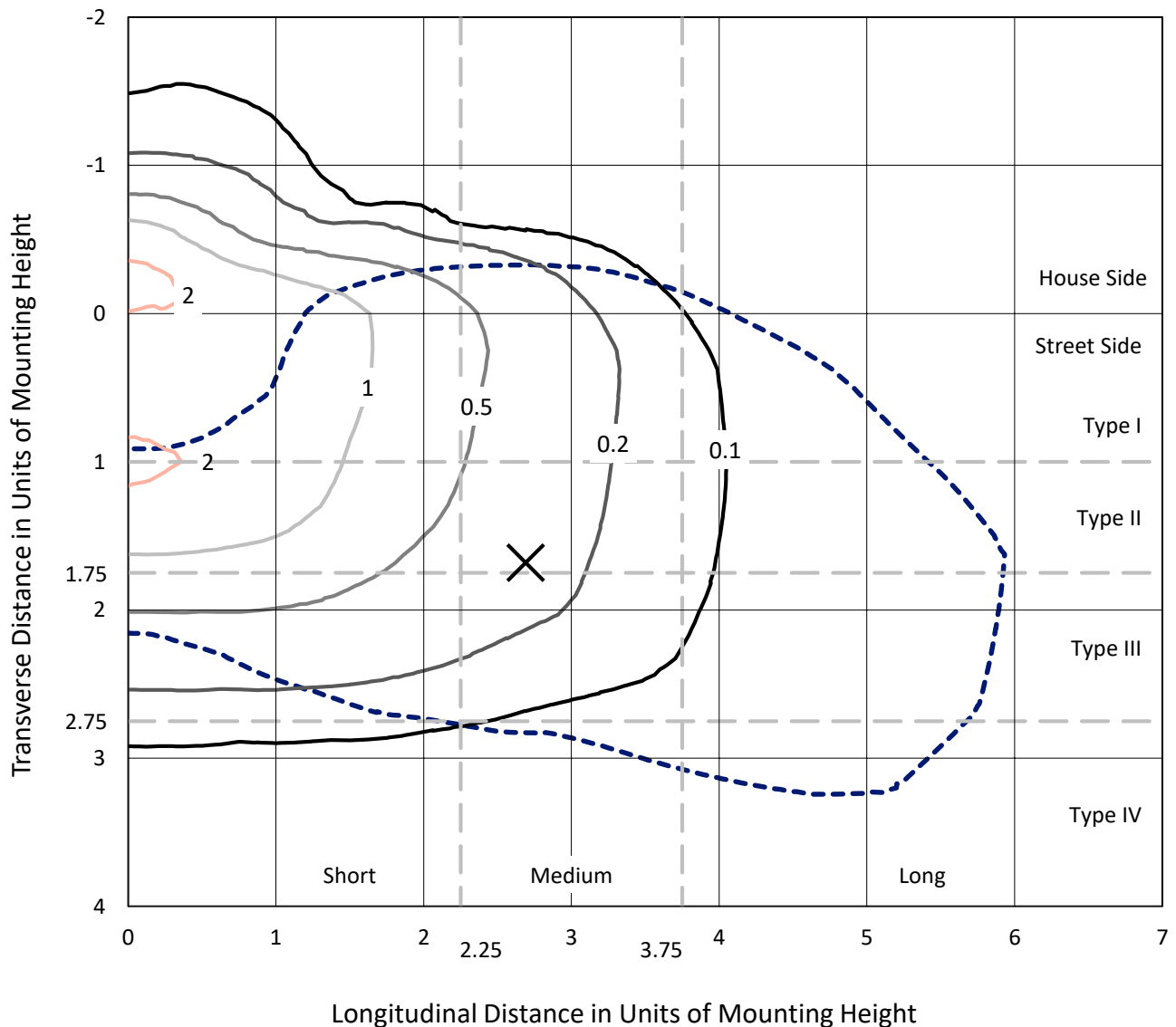


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

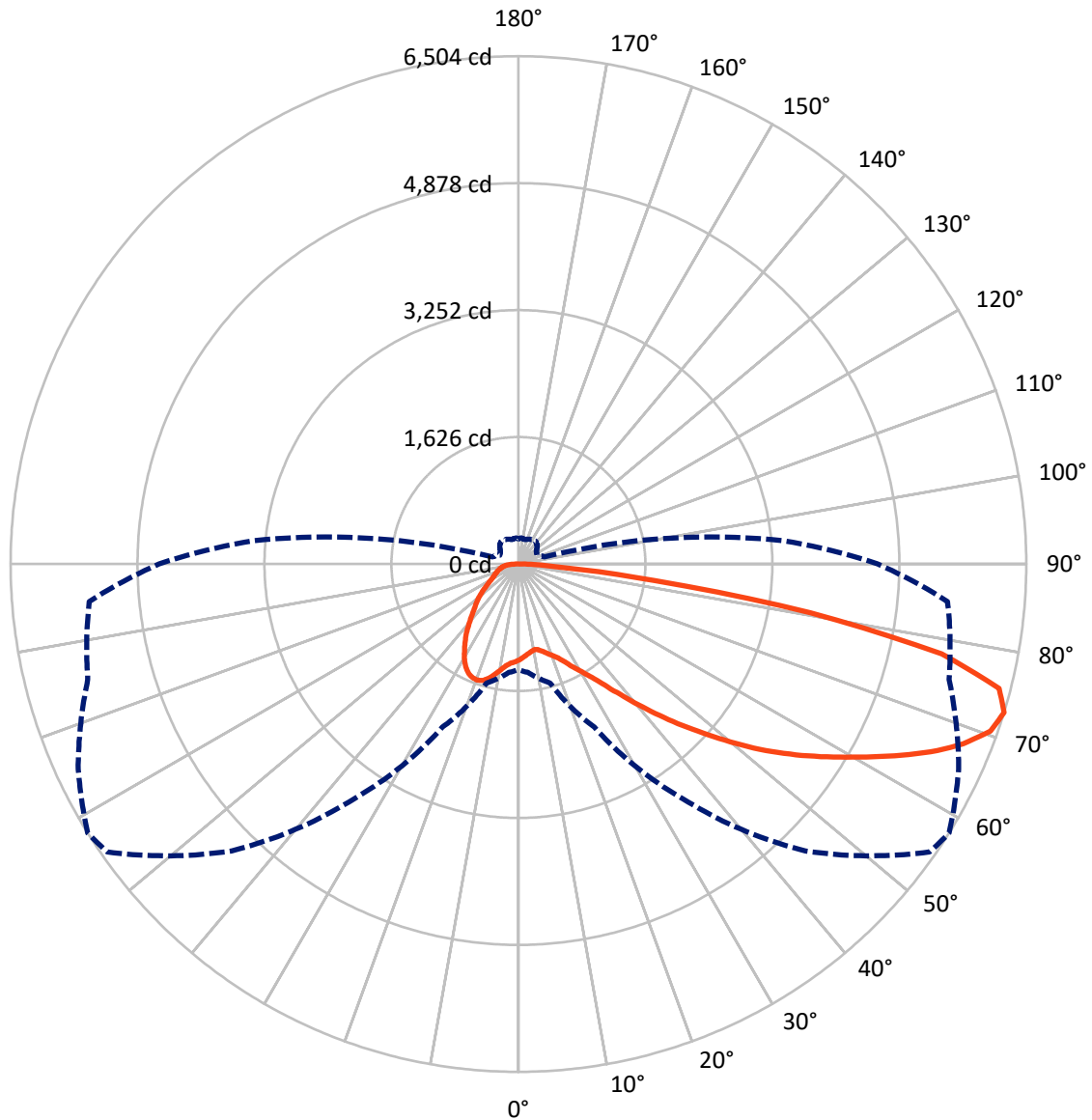


Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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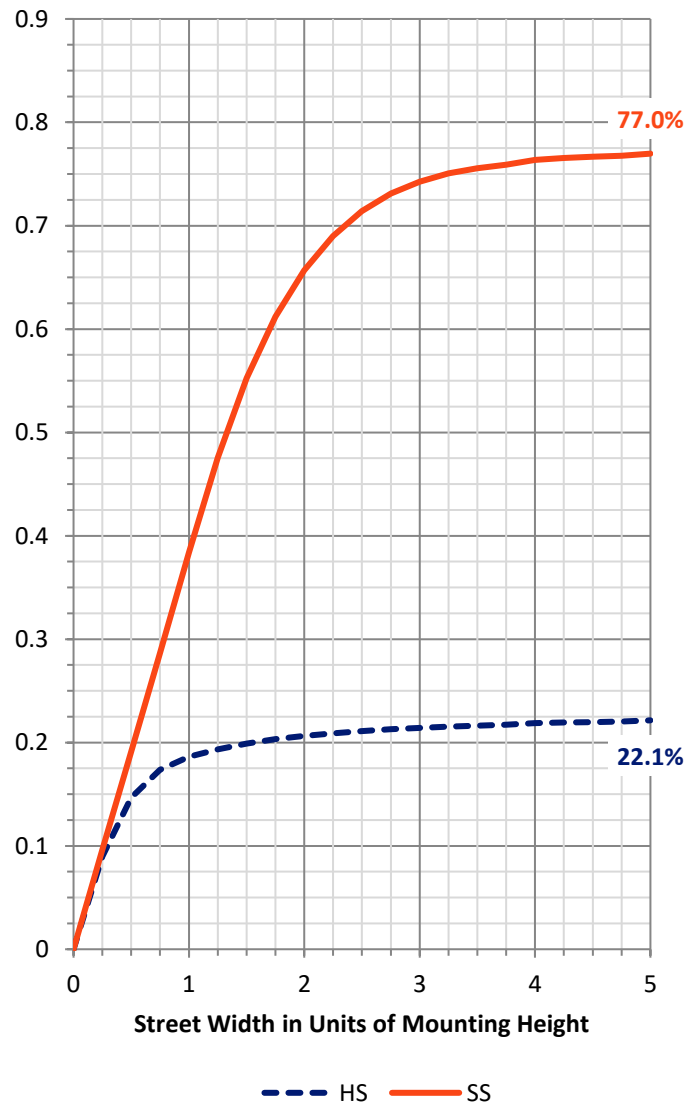
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2645.3	0.0	2645.3
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	9018.7	0.0	9018.7
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	11664.0	0.0	11664.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.5	1.0
10°-20°	376.4	3.2
20°-30°	674.2	5.8
30°-40°	1014.2	8.7
40°-50°	1642.4	14.1
50°-60°	2472.3	21.2
60°-70°	2909.6	24.9
70°-80°	2063.2	17.7
80°-90°	393.1	3.4
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°	11664.0	100.0
0°-180°	11664.0	100.0



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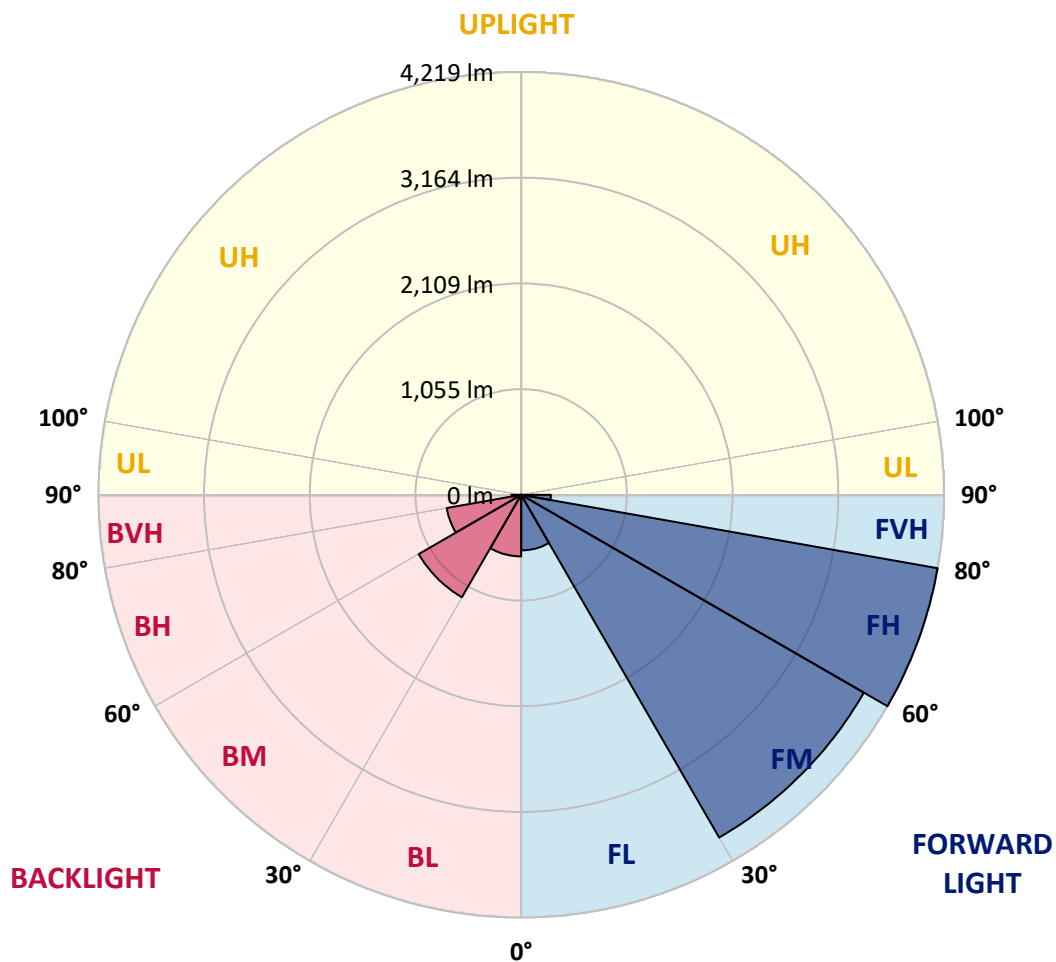
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	554.7	4.8			
FM	(30°-60°)	3948.6	33.9			
FH	(60°-80°)	4218.9	36.2			G2/5000
FVH	(80°-90°)	296.5	2.5			G3/500
BL	(0°-30°)	614.4	5.3	B2/1000		
BM	(30°-60°)	1180.3	10.1	B2/2500		
BH	(60°-80°)	753.9	6.5	B2/1000		G2/1000
BVH	(80°-90°)	96.6	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1230.3	1230.3	1230.3	1230.3	1230.3	1230.3	1230.3	1230.3	1230.3	1230.3	1230.3
2.5°	1184.1	1178.0	1179.5	1179.5	1185.6	1188.7	1190.3	1194.9	1198.0	1205.7	1216.4
5°	1128.7	1124.1	1125.6	1127.1	1137.9	1148.7	1157.9	1164.1	1173.3	1185.6	1201.0
7.5°	1088.6	1085.6	1087.1	1090.2	1099.4	1111.7	1127.1	1136.4	1150.2	1173.3	1199.5
10°	1059.4	1059.4	1060.9	1067.1	1076.3	1091.7	1104.0	1114.8	1142.5	1184.1	1224.1
12.5°	1036.3	1036.3	1040.9	1053.2	1068.6	1084.0	1113.3	1125.6	1162.6	1219.5	1267.3
15°	1034.7	1036.3	1037.8	1048.6	1065.5	1099.4	1142.5	1161.0	1205.7	1273.4	1328.9
17.5°	1059.4	1060.9	1054.8	1057.8	1077.9	1125.6	1182.6	1204.1	1261.1	1335.0	1392.0
20°	1134.8	1134.8	1116.4	1099.4	1113.3	1165.6	1230.3	1251.9	1315.0	1396.6	1453.6
22.5°	1288.8	1296.5	1253.4	1216.4	1194.9	1224.1	1282.7	1305.8	1376.6	1464.4	1521.3
25°	1475.1	1482.8	1424.3	1372.0	1331.9	1327.3	1365.8	1390.4	1449.0	1539.8	1587.5
27.5°	1655.3	1641.4	1587.5	1538.3	1487.5	1445.9	1475.1	1496.7	1564.4	1633.7	1663.0
30°	1797.0	1786.2	1733.8	1698.4	1650.7	1596.8	1579.8	1602.9	1658.4	1723.0	1738.4
32.5°	1954.0	1946.3	1894.0	1847.8	1807.7	1756.9	1720.0	1730.7	1761.5	1807.7	1817.0
35°	2154.2	2171.1	2115.7	2021.8	1977.1	1927.8	1901.7	1904.7	1927.8	1957.1	1941.7
37.5°	2365.1	2385.2	2388.2	2240.4	2180.4	2135.7	2108.0	2118.8	2146.5	2166.5	2118.8
40°	2756.3	2736.2	2656.2	2546.8	2454.4	2411.3	2372.8	2371.3	2391.3	2426.7	2340.5
42.5°	3275.2	3256.7	3095.0	2953.3	2807.1	2757.8	2682.3	2650.0	2659.2	2703.9	2583.8
45°	3772.5	3764.8	3635.5	3470.7	3295.2	3199.7	3027.3	2948.7	2941.0	2976.4	2833.2
47.5°	4214.4	4180.6	4086.6	3958.8	3940.4	3690.9	3373.7	3267.5	3230.5	3250.5	3090.4
50°	4687.2	4571.7	4442.3	4363.8	4497.8	4265.3	3723.2	3612.4	3521.5	3535.4	3369.1
52.5°	4938.2	4744.1	4659.4	4682.5	4862.7	4773.4	4103.6	3968.1	3821.8	3841.8	3646.3
55°	4722.6	4721.0	4758.0	4901.2	5152.2	5049.0	4465.4	4313.0	4152.9	4157.5	3965.0
57.5°	4426.9	4487.0	4677.9	4993.6	5511.0	5338.5	4821.1	4659.4	4513.2	4490.1	4326.9
60°	4157.5	4223.7	4500.8	4978.2	5635.7	5603.3	5159.9	5018.2	4899.7	4831.9	4707.2
62.5°	3747.9	3797.2	4189.8	4879.6	5531.0	5794.3	5503.3	5406.3	5316.9	5176.8	5116.8
65°	3265.9	3282.9	3697.1	4554.7	5400.1	5868.2	5845.1	5802.0	5715.8	5509.4	5521.7
67.5°	2743.9	2777.8	3141.2	4035.8	5113.7	5834.3	6109.9	6145.4	6043.7	5734.2	5780.4
70°	2188.1	2229.6	2505.3	3318.3	4627.1	5688.0	6354.8	6411.7	6216.2	5808.1	5828.2
72.5°	1353.5	1393.5	1578.3	2305.1	3667.8	5196.8	6430.2	6504.1	6220.8	5709.6	5517.1
75°	468.1	472.7	617.5	1105.6	2177.3	3923.4	6183.9	6357.9	6025.3	5350.8	4801.1
77.5°	214.0	221.7	274.1	455.8	965.5	2117.2	5106.0	5541.8	5430.9	4790.3	3695.5
80°	147.8	150.9	189.4	272.5	557.4	745.3	3222.8	3791.0	3985.0	3709.4	2368.2
82.5°	110.9	113.9	146.3	184.8	401.9	361.9	1227.2	1761.5	2189.6	2149.6	990.1
85°	106.2	104.7	113.9	123.2	267.9	215.6	397.3	545.1	854.6	731.4	249.4
87.5°	46.2	50.8	117.0	69.3	140.1	100.1	172.5	201.7	260.2	226.4	89.3
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°	1230.3	1230.3	1230.3	1230.3	1230.3	1230.3	1230.3	1230.3	1230.3	1230.3	1230.3
2.5°	1221.1	1224.1	1233.4	1247.2	1254.9	1270.3	1281.1	1287.3	1291.9	1293.4	1293.4
5°	1210.3	1216.4	1236.5	1259.6	1281.1	1313.5	1342.7	1359.6	1372.0	1376.6	1378.1
7.5°	1213.4	1228.8	1258.0	1291.9	1319.6	1361.2	1396.6	1430.5	1458.2	1469.0	1469.0
10°	1242.6	1264.2	1304.2	1348.9	1384.3	1427.4	1464.4	1493.6	1525.9	1544.4	1547.5
12.5°	1287.3	1313.5	1365.8	1415.1	1455.1	1489.0	1522.9	1544.4	1559.8	1573.7	1576.8
15°	1350.4	1382.7	1435.1	1485.9	1521.3	1542.9	1552.1	1552.1	1550.6	1552.1	1555.2
17.5°	1413.5	1444.3	1496.7	1547.5	1564.4	1552.1	1541.3	1538.3	1536.7	1533.6	1535.2
20°	1475.1	1504.4	1549.0	1587.5	1573.7	1530.6	1516.7	1515.2	1510.5	1507.5	1504.4
22.5°	1536.7	1558.3	1595.2	1609.1	1553.7	1492.1	1475.1	1465.9	1459.7	1452.0	1444.3
25°	1607.6	1613.7	1641.4	1619.9	1504.4	1421.2	1396.6	1382.7	1376.6	1368.9	1362.7
27.5°	1673.8	1673.8	1678.4	1602.9	1432.0	1327.3	1290.4	1265.7	1264.2	1262.6	1261.1
30°	1733.8	1726.1	1710.7	1552.1	1338.1	1211.8	1156.4	1131.8	1141.0	1148.7	1150.2
32.5°	1804.7	1789.3	1746.1	1482.8	1225.7	1082.5	1014.7	1004.0	1014.7	1024.0	1017.8
35°	1915.5	1887.8	1783.1	1402.8	1117.9	963.9	899.2	883.8	880.8	879.2	866.9
37.5°	2074.1	2026.4	1812.4	1316.5	1011.7	859.2	811.5	779.1	749.9	719.1	714.5
40°	2268.1	2186.5	1832.4	1218.0	899.2	771.4	720.6	679.1	629.8	575.9	569.7
42.5°	2480.6	2359.0	1841.6	1108.7	800.7	699.1	635.9	583.6	528.2	486.6	478.9
45°	2710.1	2545.3	1833.9	1004.0	720.6	637.5	566.6	509.7	465.0	435.8	429.6
47.5°	2933.3	2759.3	1812.4	920.8	659.0	585.1	512.8	460.4	426.5	394.2	386.5
50°	3219.7	2964.1	1786.2	856.1	591.3	532.8	478.9	423.4	385.0	369.6	366.5
52.5°	3536.9	3168.9	1755.4	774.5	525.1	491.2	457.3	408.0	395.7	366.5	361.9
55°	3880.3	3412.2	1749.2	671.4	466.6	461.9	435.8	421.9	425.0	366.5	358.8
57.5°	4242.2	3672.4	1763.1	568.2	418.8	435.8	445.0	434.2	429.6	374.2	358.8
60°	4619.4	3923.4	1721.5	472.7	381.9	414.2	455.8	428.1	394.2	371.1	360.3
62.5°	4985.9	4134.4	1541.3	405.0	354.2	408.0	449.6	405.0	366.5	366.5	361.9
65°	5252.3	4228.3	1205.7	355.7	335.7	400.3	438.8	389.6	358.8	369.6	363.4
67.5°	5283.1	4131.3	809.9	317.2	320.3	386.5	414.2	375.7	351.1	378.8	369.6
70°	5093.7	3878.8	495.8	287.9	300.3	361.9	392.7	361.9	340.3	371.1	357.2
72.5°	4602.5	3407.6	349.5	263.3	278.7	338.8	372.6	349.5	324.9	335.7	321.8
75°	3775.6	2640.8	277.2	240.2	257.1	317.2	355.7	331.1	306.4	301.8	292.6
77.5°	2674.6	1692.2	223.3	221.7	234.1	291.0	332.6	309.5	284.9	275.6	269.5
80°	1538.3	830.0	192.5	200.2	212.5	264.8	304.9	284.9	261.8	247.9	238.7
82.5°	588.2	289.5	169.4	174.0	187.9	237.1	277.2	260.2	237.1	249.4	209.4
85°	190.9	158.6	138.6	143.2	157.1	197.1	244.8	231.0	204.8	181.7	167.8
87.5°	84.7	86.2	73.9	81.6	98.5	130.9	178.6	169.4	149.4	124.7	120.1
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)