

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: P572703

Luminaire Tested: **ARCH-S-PA2-100-827-U-T3**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572703  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-100-827-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 1010mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10224 lumens  
Efficiency: N/A  
Efficacy: 99.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

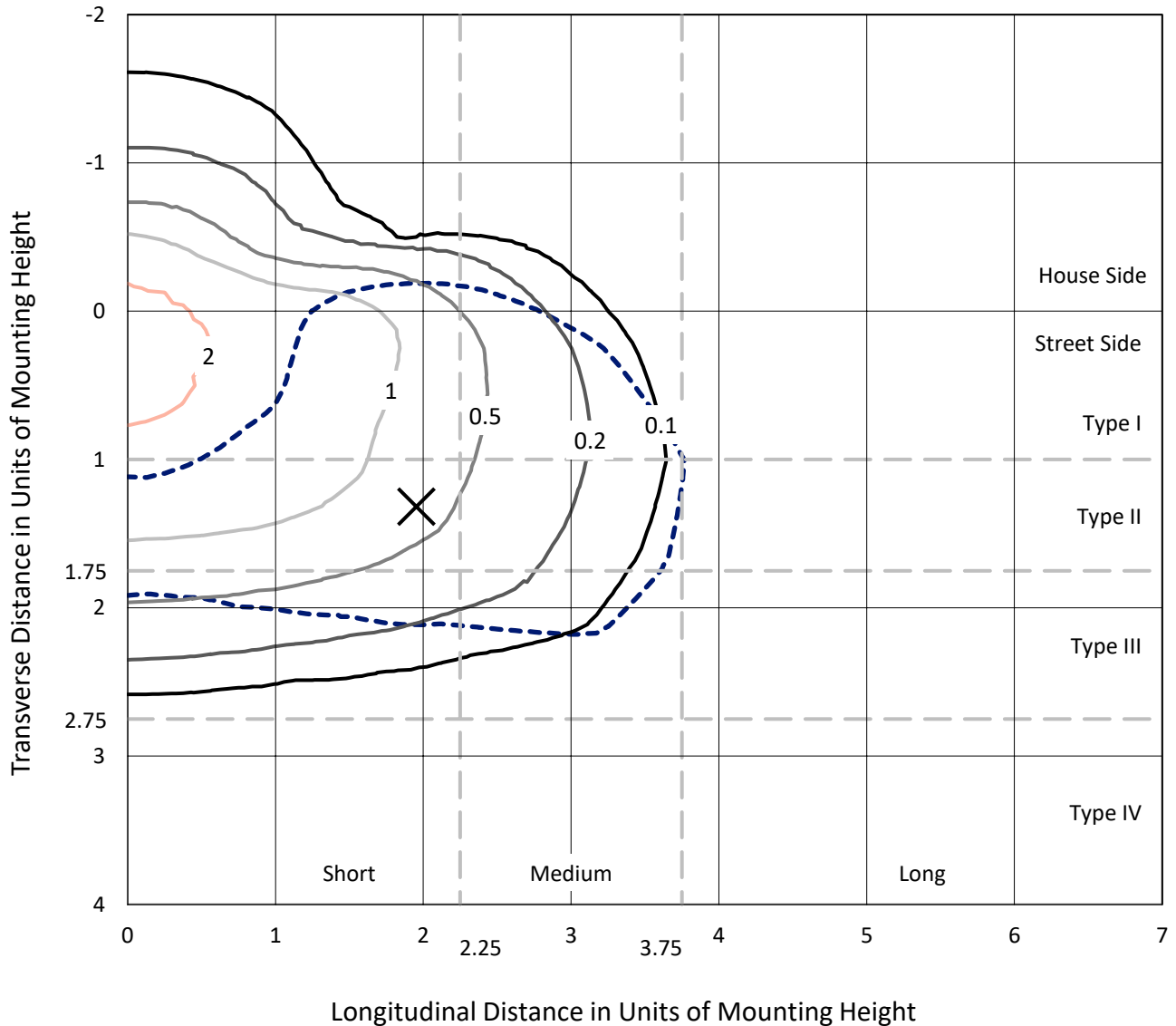
Input Watts (W): 103.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

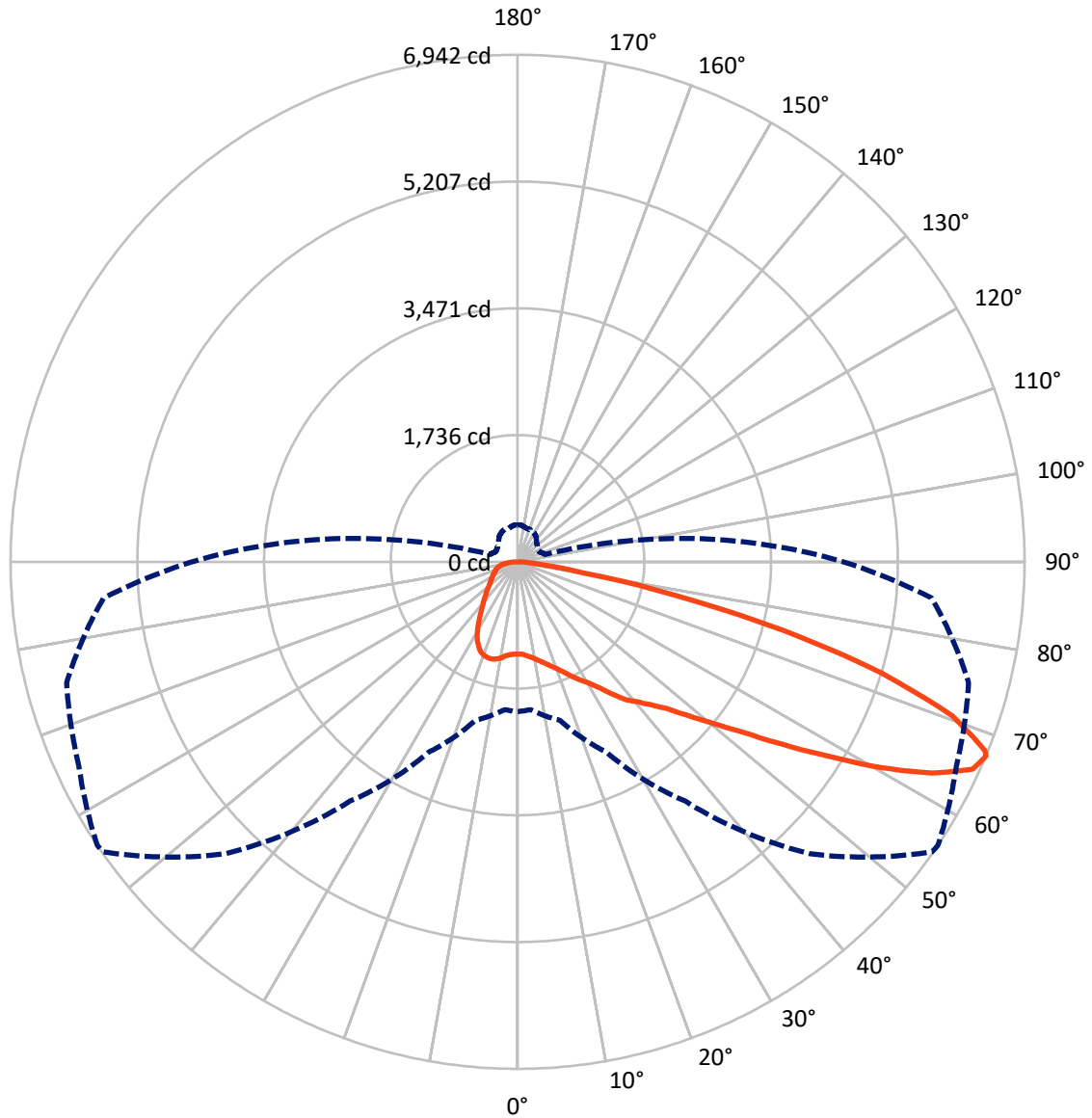
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 67-Deg Vertical

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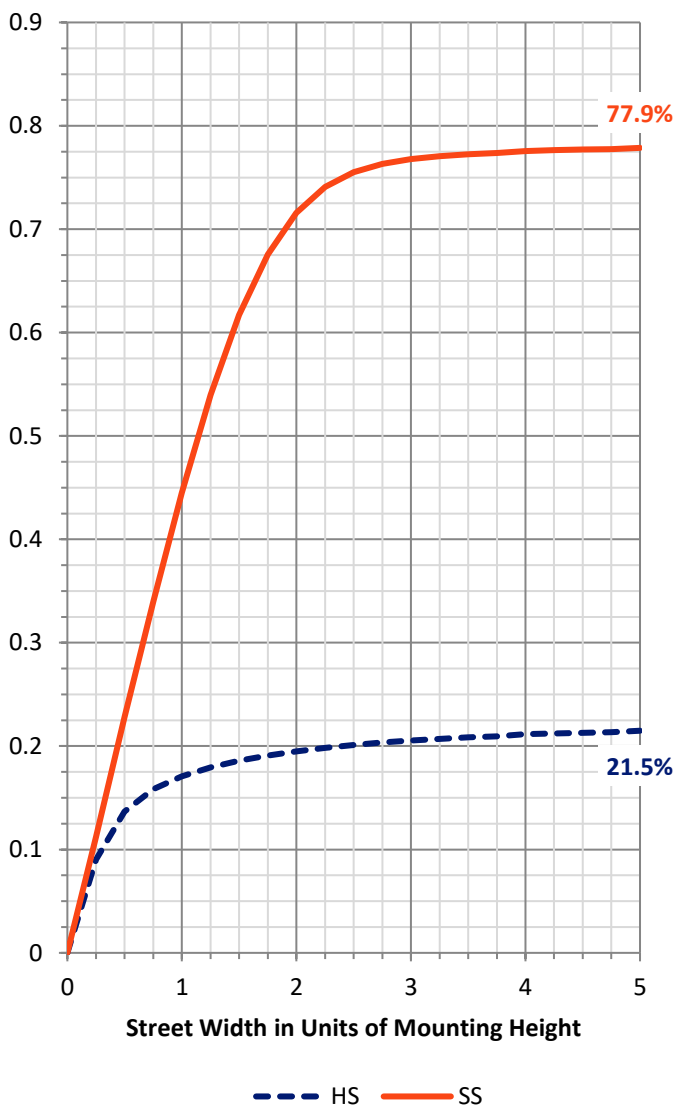
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2236.8	0.0	2236.8
	% Fixture	21.9	0.0	21.9
<b>Street Side</b>	Lumens	7987.2	0.0	7987.2
	% Fixture	78.1	0.0	78.1
<b>Total</b>	Lumens	10224.0	0.0	10224.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.2	1.2
10°-20°	398.3	3.9
20°-30°	693.1	6.8
30°-40°	1016.3	9.9
40°-50°	1487.0	14.5
50°-60°	2323.9	22.7
60°-70°	2762.1	27.0
70°-80°	1257.9	12.3
80°-90°	161.3	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°	10224.0	100.0
0°-180°	10224.0	100.0

**Coefficient of Utilization**



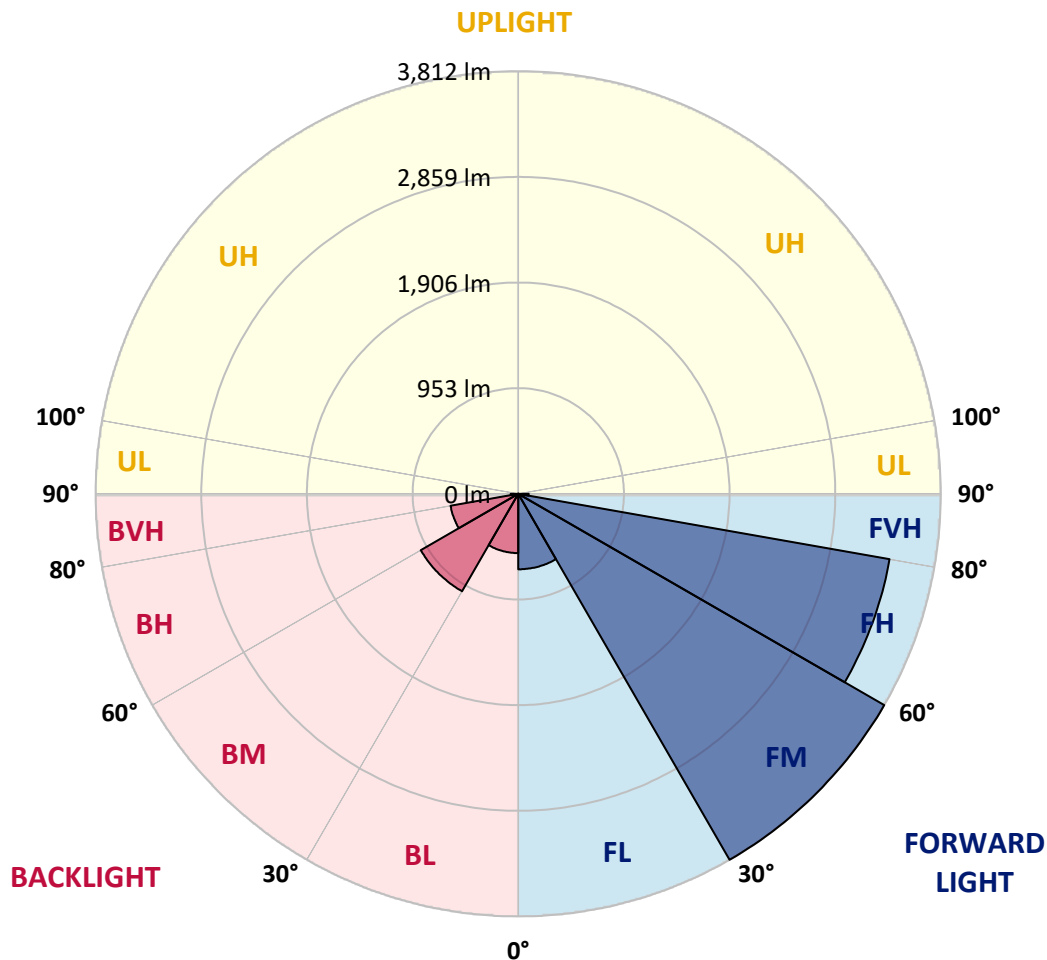
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	681.0	6.7			
FM (30°-60°)	3811.8	37.3			
FH (60°-80°)	3400.3	33.3			G2/5000
FVH (80°-90°)	94.1	0.9			G1/100
BL (0°-30°)	534.6	5.2	B2/1000		
BM (30°-60°)	1015.3	9.9	B2/2500		
BH (60°-80°)	619.7	6.1	B2/1000		G2/1000
BVH (80°-90°)	67.2	0.7			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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3
2.5°	1281.6	1276.1	1273.3	1276.1	1273.3	1267.8	1270.6	1267.8	1265.0	1262.3	1262.3
5°	1298.2	1292.7	1289.9	1292.7	1295.5	1289.9	1289.9	1289.9	1281.6	1278.9	1273.3
7.5°	1309.3	1301.0	1301.0	1306.6	1312.1	1314.9	1320.4	1317.6	1309.3	1303.8	1292.7
10°	1345.3	1334.2	1334.2	1334.2	1339.8	1345.3	1350.8	1353.6	1350.8	1348.1	1339.8
12.5°	1400.7	1389.6	1389.6	1389.6	1389.6	1386.8	1395.1	1397.9	1403.4	1403.4	1389.6
15°	1475.4	1461.6	1456.0	1445.0	1442.2	1436.7	1447.7	1447.7	1456.0	1458.8	1445.0
17.5°	1547.4	1530.8	1525.2	1514.2	1503.1	1489.2	1500.3	1503.1	1519.7	1522.5	1500.3
20°	1622.1	1616.6	1608.3	1591.7	1572.3	1558.5	1569.5	1566.8	1580.6	1586.1	1558.5
22.5°	1719.0	1705.2	1699.6	1677.5	1655.3	1641.5	1641.5	1647.0	1660.9	1660.9	1619.4
25°	1835.3	1815.9	1802.0	1777.1	1749.5	1732.8	1735.6	1741.1	1760.5	1746.7	1683.0
27.5°	1979.2	1959.8	1940.5	1890.6	1862.9	1829.7	1827.0	1832.5	1862.9	1827.0	1743.9
30°	2114.8	2106.5	2089.9	2051.2	2006.9	1951.5	1926.6	1929.4	1951.5	1901.7	1796.5
32.5°	2231.1	2220.0	2211.7	2184.0	2153.6	2087.2	2053.9	2056.7	2053.9	1993.0	1860.2
35°	2369.5	2352.9	2347.4	2322.5	2283.7	2239.4	2225.6	2220.0	2203.4	2120.4	1943.2
37.5°	2502.4	2485.8	2477.5	2463.6	2433.2	2394.4	2394.4	2391.7	2358.4	2242.2	2026.3
40°	2660.2	2640.8	2615.9	2607.6	2582.7	2555.0	2532.8	2519.0	2460.9	2355.7	2186.8
42.5°	2851.2	2840.1	2826.3	2790.3	2751.5	2746.0	2682.3	2676.8	2635.3	2574.4	2413.8
45°	3125.2	3103.1	3083.7	3072.6	3025.6	2975.7	2887.2	2865.0	2865.0	2851.2	2679.5
47.5°	3402.0	3363.3	3390.9	3382.6	3371.6	3316.2	3144.6	3147.4	3141.8	3177.8	3069.8
50°	3587.5	3565.3	3642.8	3678.8	3756.3	3756.3	3510.0	3479.5	3501.7	3606.9	3468.5
52.5°	3731.4	3717.6	3806.2	3947.3	4177.1	4199.2	3944.6	3880.9	3911.4	4060.8	4005.5
55°	3847.7	3833.8	3936.3	4182.6	4550.8	4686.4	4445.6	4417.9	4357.0	4517.6	4534.2
57.5°	3916.9	3886.4	4041.5	4370.9	4855.3	5168.1	5032.4	5024.1	4883.0	5032.4	5107.2
60°	3811.7	3792.3	4005.5	4448.4	5101.6	5622.1	5721.7	5721.7	5469.8	5550.1	5641.4
62.5°	3471.2	3446.3	3670.5	4268.4	5132.1	5993.0	6405.4	6372.2	6034.5	6031.7	5951.5
65°	2823.5	2793.0	3044.9	3676.1	4747.3	6037.3	6867.7	6848.3	6458.0	6347.3	5970.8
67°	2051.2	2031.8	2247.7	2873.3	3999.9	5652.5	6925.8	6942.4	6626.9	6391.6	5691.3
67.5°	1840.8	1838.0	2018.0	2638.0	3781.3	5511.3	6887.1	6903.7	6624.1	6355.6	5580.5
70°	858.1	896.9	1065.7	1511.4	2549.4	4340.4	6250.4	6314.1	6269.8	5940.4	4700.3
72.5°	398.6	415.2	490.0	730.8	1370.2	2798.6	5065.7	5217.9	5411.7	5096.1	3723.1
75°	246.4	251.9	293.4	379.2	645.0	1345.3	3606.9	3772.9	4066.4	3833.8	2380.6
77.5°	193.8	196.5	224.2	271.3	376.5	578.5	1979.2	2186.8	2568.8	2267.1	1198.6
80°	143.9	149.5	171.6	210.4	265.7	296.2	841.5	919.0	1240.1	949.5	498.3
82.5°	105.2	110.7	132.9	152.2	185.5	188.2	343.2	362.6	531.5	384.8	215.9
85°	88.6	88.6	102.4	113.5	124.6	105.2	168.9	166.1	204.8	174.4	85.8
87.5°	41.5	44.3	96.9	72.0	60.9	44.3	49.8	52.6	63.7	69.2	33.2
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°	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3
2.5°	1259.5	1259.5	1259.5	1262.3	1265.0	1265.0	1267.8	1267.8	1270.6	1273.3	1278.9
5°	1270.6	1270.6	1267.8	1270.6	1276.1	1278.9	1284.4	1289.9	1295.5	1301.0	1303.8
7.5°	1292.7	1289.9	1289.9	1289.9	1295.5	1301.0	1309.3	1314.9	1323.2	1325.9	1331.5
10°	1334.2	1328.7	1328.7	1331.5	1334.2	1325.9	1323.2	1320.4	1328.7	1334.2	1339.8
12.5°	1384.1	1378.5	1375.8	1367.5	1356.4	1339.8	1325.9	1314.9	1317.6	1323.2	1331.5
15°	1436.7	1425.6	1420.0	1400.7	1373.0	1337.0	1314.9	1301.0	1301.0	1301.0	1309.3
17.5°	1492.0	1480.9	1458.8	1422.8	1370.2	1320.4	1292.7	1267.8	1256.7	1254.0	1259.5
20°	1544.6	1528.0	1492.0	1436.7	1353.6	1287.2	1251.2	1209.7	1193.1	1182.0	1187.5
22.5°	1594.4	1572.3	1522.5	1436.7	1325.9	1237.4	1173.7	1118.3	1090.6	1085.1	1087.9
25°	1647.0	1619.4	1552.9	1420.0	1265.0	1162.6	1074.0	1015.9	979.9	974.4	982.7
27.5°	1699.6	1658.1	1577.8	1375.8	1195.8	1060.2	966.1	910.7	891.3	880.3	883.0
30°	1743.9	1705.2	1602.7	1314.9	1101.7	941.2	855.3	830.4	816.6	811.1	811.1
32.5°	1802.0	1766.1	1619.4	1242.9	991.0	833.2	777.8	758.5	747.4	733.6	736.3
35°	1874.0	1840.8	1611.0	1151.5	885.8	761.2	716.9	689.3	664.3	645.0	642.2
37.5°	1970.9	1946.0	1569.5	1040.8	788.9	708.6	664.3	628.4	592.4	561.9	556.4
40°	2131.5	2073.3	1508.6	919.0	722.5	667.1	614.5	570.2	525.9	492.7	484.4
42.5°	2336.3	2214.5	1425.6	794.5	667.1	622.8	570.2	512.1	470.6	440.1	440.1
45°	2574.4	2366.7	1325.9	700.3	609.0	578.5	514.9	465.0	440.1	420.8	418.0
47.5°	2856.7	2519.0	1198.6	625.6	561.9	539.8	476.1	445.7	429.1	412.5	409.7
50°	3235.9	2723.8	1104.5	561.9	514.9	495.5	465.0	440.1	423.5	412.5	409.7
52.5°	3670.5	2986.8	1038.0	512.1	476.1	467.8	462.3	442.9	426.3	418.0	415.2
55°	4141.1	3310.7	974.4	470.6	445.7	456.7	467.8	448.4	437.4	426.3	420.8
57.5°	4584.0	3584.7	872.0	434.6	423.5	442.9	465.0	451.2	437.4	429.1	426.3
60°	4885.7	3723.1	730.8	401.4	401.4	423.5	456.7	437.4	423.5	426.3	426.3
62.5°	4982.6	3670.5	578.5	370.9	379.2	401.4	431.8	420.8	415.2	429.1	429.1
65°	4838.7	3457.4	462.3	346.0	357.1	373.7	418.0	429.1	445.7	476.1	478.9
67°	4462.2	3114.1	390.3	326.6	337.7	365.4	434.6	473.3	473.3	506.6	506.6
67.5°	4351.5	2997.9	379.2	321.1	334.9	365.4	442.9	484.4	473.3	512.1	512.1
70°	3537.7	2358.4	321.1	304.5	323.9	384.8	478.9	487.2	462.3	498.3	495.5
72.5°	2624.2	1705.2	293.4	287.9	301.7	362.6	476.1	467.8	431.8	442.9	434.6
75°	1622.1	988.2	271.3	265.7	274.0	321.1	440.1	426.3	384.8	376.5	368.2
77.5°	783.4	501.0	232.5	240.8	249.1	279.6	387.5	373.7	337.7	318.3	315.6
80°	340.5	257.4	199.3	213.1	215.9	238.1	321.1	304.5	271.3	240.8	240.8
82.5°	168.9	143.9	157.8	177.2	171.6	191.0	251.9	224.2	199.3	166.1	160.6
85°	77.5	83.0	116.3	132.9	116.3	119.0	171.6	157.8	124.6	94.1	96.9
87.5°	27.7	38.8	66.4	80.3	58.1	55.4	91.3	66.4	38.8	11.1	13.8
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)