

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: P397989

Luminaire Tested: **ARCH-S-PA1-70-740-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397989  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-70-740-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10091 lumens  
Efficiency: N/A  
Efficacy: 136.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G3

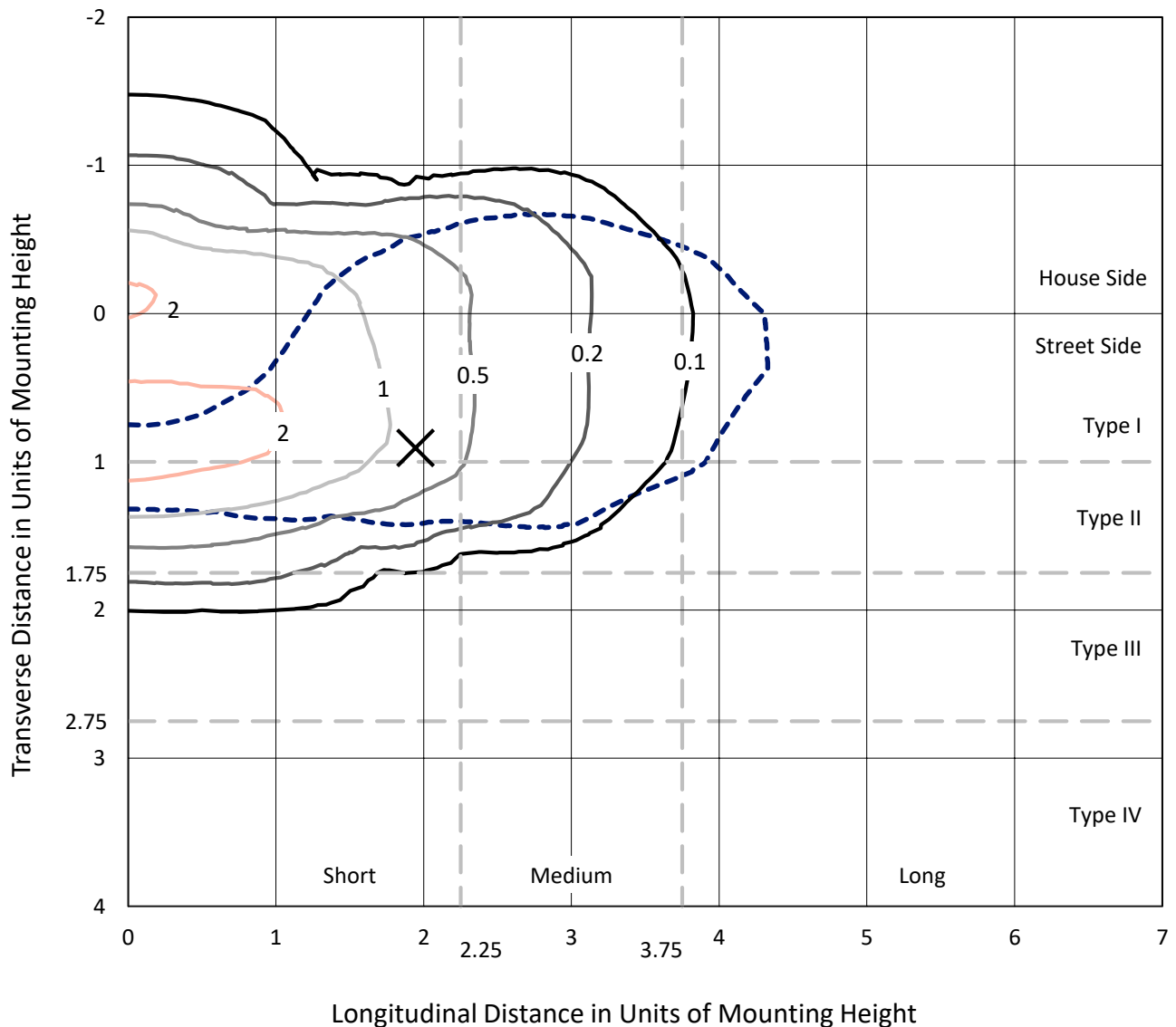
Input Watts (W): 74  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

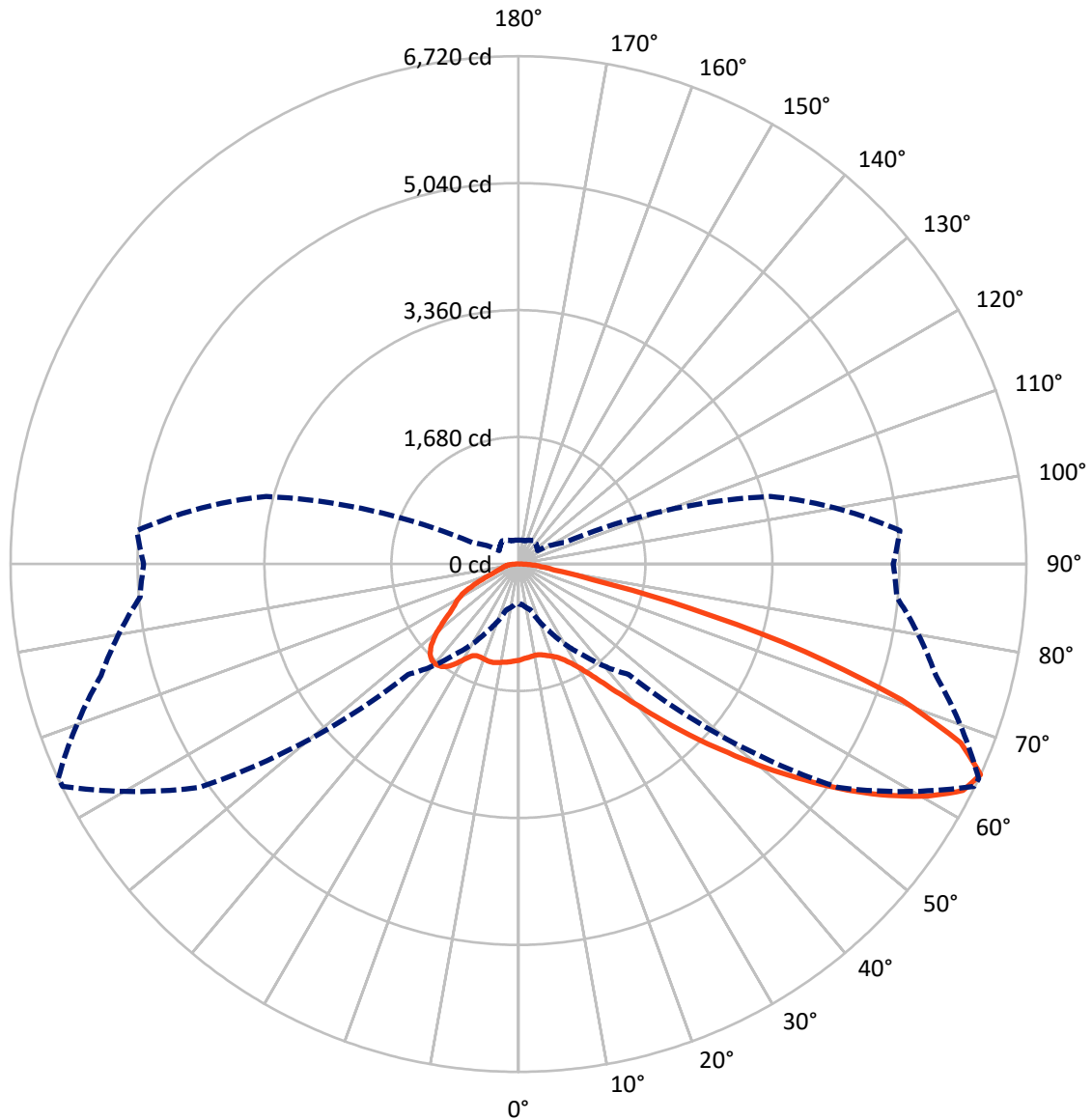


Based on 25 foot mounting height. Maximum calculated value = 2.8 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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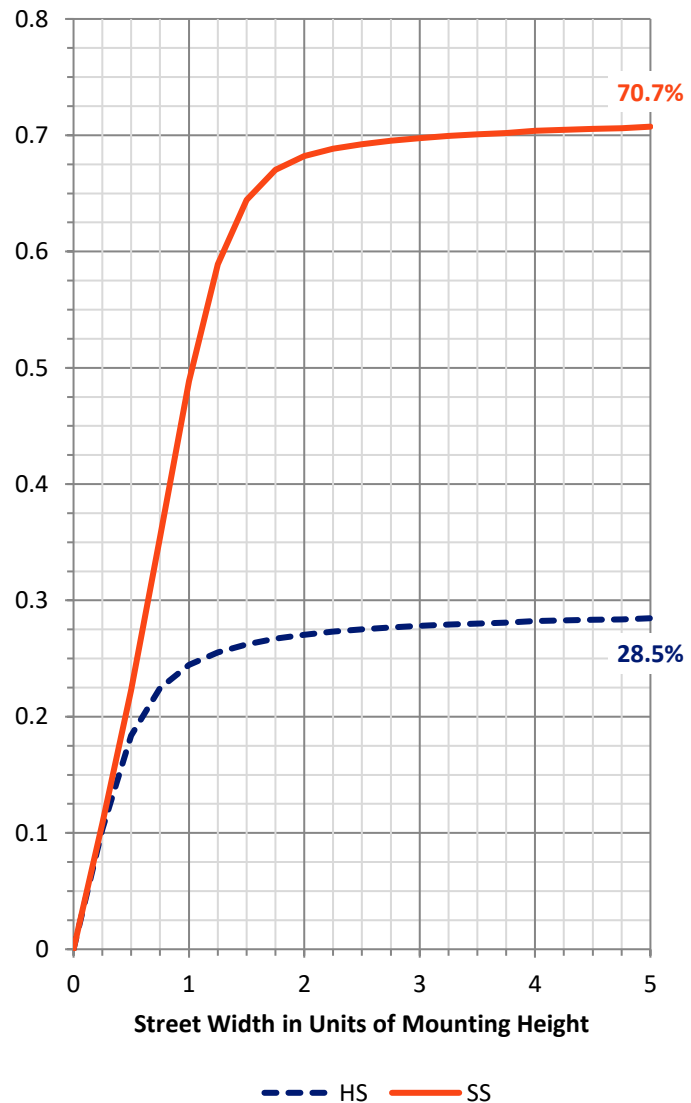
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2917.5	0.0	2917.5
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	7173.5	0.0	7173.5
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	10091.0	0.0	10091.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.5	1.2
10°-20°	362.7	3.6
20°-30°	644.2	6.4
30°-40°	1089.9	10.8
40°-50°	1897.3	18.8
50°-60°	2451.9	24.3
60°-70°	2145.6	21.3
70°-80°	1167.0	11.6
80°-90°	210.9	2.1
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°	10091.0	100.0
0°-180°	10091.0	100.0



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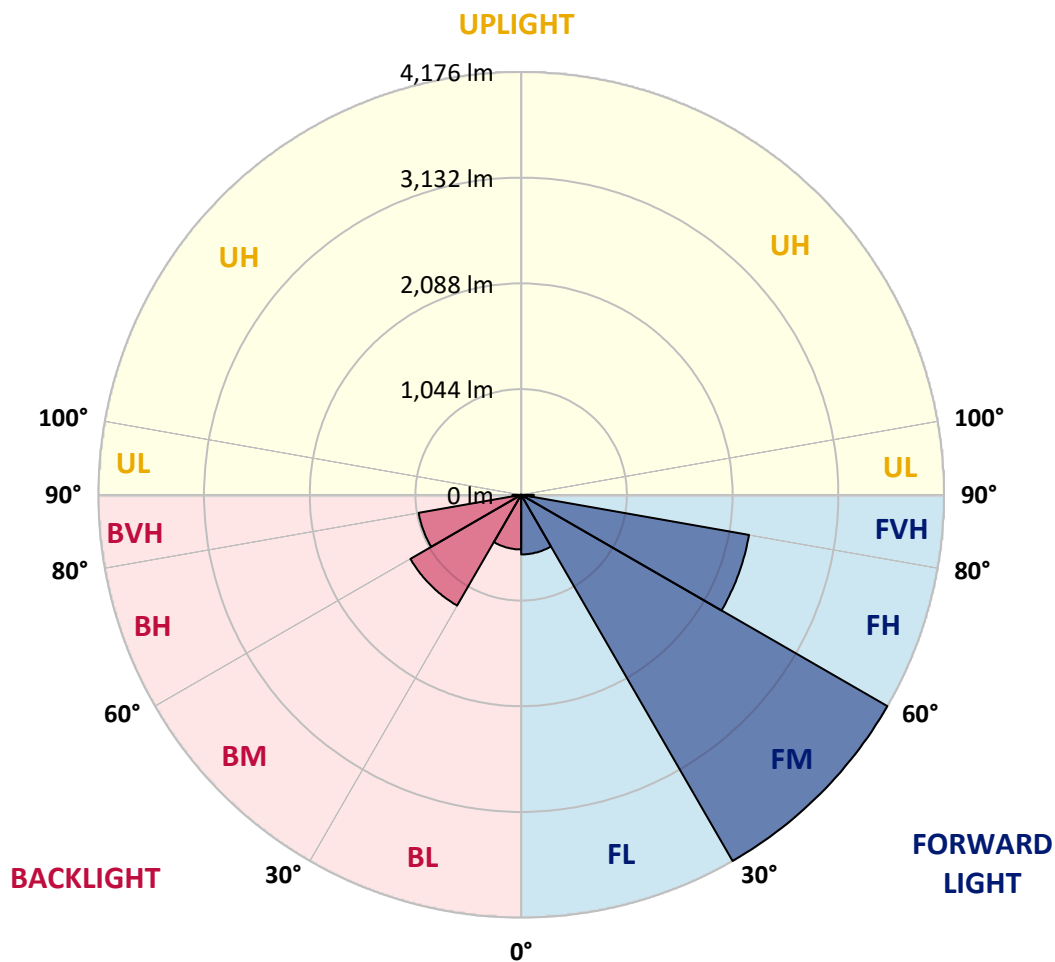
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	588.8	5.8			
FM	(30°-60°)	4175.9	41.4			
FH	(60°-80°)	2284.7	22.6			G2/5000
FVH	(80°-90°)	124.1	1.2			G2/225
BL	(0°-30°)	539.6	5.3	B2/1000		
BM	(30°-60°)	1263.2	12.5	B2/2500		
BH	(60°-80°)	1027.9	10.2	B3/2500		G3/2500
BVH	(80°-90°)	86.8	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1275.1	1275.1	1275.1	1275.1	1275.1	1275.1	1275.1	1275.1	1275.1	1275.1	1275.1
2.5°	1252.5	1251.2	1248.5	1251.2	1252.5	1255.2	1253.8	1256.5	1255.2	1259.2	1265.8
5°	1220.6	1218.0	1216.7	1223.3	1227.3	1233.9	1236.6	1245.9	1244.5	1251.2	1261.8
7.5°	1184.8	1184.8	1183.4	1191.4	1196.7	1208.7	1218.0	1233.9	1235.2	1247.2	1259.2
10°	1156.9	1158.2	1156.9	1163.5	1171.5	1186.1	1202.0	1224.6	1226.0	1243.2	1255.2
12.5°	1146.3	1146.3	1146.3	1155.6	1166.2	1186.1	1204.7	1228.6	1231.3	1249.9	1260.5
15°	1160.9	1162.2	1159.5	1168.8	1180.8	1204.7	1222.0	1247.2	1249.9	1267.1	1273.8
17.5°	1212.7	1218.0	1211.3	1216.7	1214.0	1232.6	1248.5	1273.8	1275.1	1289.7	1292.4
20°	1314.9	1320.3	1309.6	1303.0	1279.1	1277.8	1284.4	1304.3	1304.3	1313.6	1307.0
22.5°	1473.0	1478.3	1459.7	1434.5	1377.4	1349.5	1334.9	1344.2	1342.8	1346.8	1329.6
25°	1682.9	1681.5	1659.0	1612.5	1520.8	1453.1	1417.2	1402.6	1402.6	1394.6	1373.4
27.5°	1943.2	1923.3	1883.4	1827.6	1700.1	1605.8	1528.8	1491.6	1485.0	1461.0	1421.2
30°	2220.8	2206.2	2149.1	2068.0	1920.6	1799.7	1672.2	1597.9	1593.9	1542.1	1482.3
32.5°	2547.5	2523.6	2459.9	2362.9	2186.3	2016.2	1856.9	1744.0	1737.3	1655.0	1572.6
35°	2967.3	2947.3	2823.8	2726.8	2499.7	2276.6	2088.0	1937.9	1932.6	1831.6	1726.7
37.5°	3470.6	3418.8	3299.3	3117.3	2878.3	2613.9	2374.9	2186.3	2179.6	2068.0	1935.2
40°	3919.6	3873.1	3766.8	3599.5	3343.1	3049.6	2725.5	2497.1	2490.4	2354.9	2187.6
42.5°	4251.6	4219.8	4150.7	4053.7	3870.4	3692.5	3173.1	2872.9	2861.0	2685.7	2477.1
45°	4444.2	4419.0	4379.2	4403.1	4400.4	4367.2	3707.1	3320.6	3282.0	3054.9	2799.9
47.5°	4397.7	4375.2	4391.1	4577.1	4833.4	5026.0	4328.7	3778.8	3727.0	3430.8	3143.9
50°	4061.7	4071.0	4154.7	4510.6	5085.8	5513.5	5018.0	4300.8	4231.7	3809.3	3470.6
52.5°	3449.4	3472.0	3675.2	4173.3	5057.9	5829.6	5641.0	4840.0	4748.4	4178.6	3768.2
55°	2740.1	2797.2	3060.2	3583.5	4693.9	5852.2	6111.2	5382.0	5281.0	4525.3	4027.2
57.5°	2026.9	2111.9	2416.0	2896.9	3996.6	5494.9	6346.3	5900.0	5777.8	4869.3	4300.8
60°	1285.7	1337.5	1688.2	2255.3	3058.9	4620.9	6315.7	6340.9	6234.7	5212.0	4586.4
62.5°	820.8	846.1	1022.7	1608.5	2138.4	3421.5	5982.3	6674.3	6602.6	5524.1	4857.3
65°	527.3	537.9	628.2	989.5	1455.7	2065.4	5152.2	6710.2	6719.5	5719.3	5024.7
67.5°	429.0	434.3	467.5	611.0	1029.4	1140.9	3588.9	6200.1	6313.0	5668.9	4967.6
70°	390.5	397.1	431.7	487.5	796.9	787.6	1737.3	5188.0	5372.7	5378.0	4713.9
72.5°	329.4	338.7	385.2	460.9	616.3	621.6	735.8	3695.1	3967.4	4806.8	4332.7
75°	274.9	280.3	320.1	406.4	522.0	496.8	516.7	1959.1	2352.3	3854.5	3927.6
77.5°	223.1	228.5	257.7	324.1	463.6	386.5	406.4	811.5	1002.8	2616.6	3210.3
80°	159.4	164.7	197.9	252.4	350.7	348.0	301.5	447.6	486.1	1414.6	2085.3
82.5°	114.2	118.2	150.1	180.6	243.1	349.3	227.1	304.2	318.8	626.9	840.8
85°	77.0	77.0	103.6	119.5	156.7	220.5	183.3	205.9	215.2	297.5	227.1
87.5°	33.2	33.2	55.8	61.1	82.3	102.3	136.8	103.6	106.3	160.7	93.0
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°	1275.1	1275.1	1275.1	1275.1	1275.1	1275.1	1275.1	1275.1	1275.1	1275.1	1275.1
2.5°	1269.8	1271.1	1273.8	1281.7	1287.0	1295.0	1299.0	1304.3	1304.3	1301.7	1303.0
5°	1267.1	1271.1	1280.4	1295.0	1304.3	1318.9	1329.6	1337.5	1340.2	1337.5	1338.8
7.5°	1265.8	1272.4	1288.4	1309.6	1322.9	1341.5	1356.1	1365.4	1372.1	1369.4	1370.7
10°	1261.8	1272.4	1292.4	1318.9	1338.8	1357.4	1370.7	1374.7	1378.7	1376.0	1374.7
12.5°	1267.1	1279.1	1300.3	1332.2	1354.8	1369.4	1373.4	1366.7	1357.4	1352.1	1350.8
15°	1277.8	1289.7	1311.0	1344.2	1364.1	1369.4	1360.1	1338.8	1317.6	1305.6	1304.3
17.5°	1292.4	1300.3	1317.6	1346.8	1362.8	1356.1	1337.5	1312.3	1296.3	1287.0	1288.4
20°	1301.7	1301.7	1314.9	1337.5	1350.8	1345.5	1322.9	1295.0	1269.8	1257.8	1253.8
22.5°	1314.9	1308.3	1309.6	1329.6	1348.1	1340.2	1292.4	1243.2	1207.4	1194.1	1192.7
25°	1350.8	1332.2	1320.3	1332.2	1376.0	1311.0	1215.3	1158.2	1125.0	1113.1	1114.4
27.5°	1394.6	1369.4	1344.2	1364.1	1398.6	1244.5	1117.0	1052.0	1032.0	1022.7	1026.7
30°	1438.5	1405.3	1372.1	1443.8	1382.7	1140.9	990.9	927.1	909.8	903.2	908.5
32.5°	1519.5	1465.0	1425.2	1550.0	1333.5	1022.7	854.0	795.6	779.7	771.7	769.0
35°	1655.0	1585.9	1546.1	1643.0	1264.5	891.2	729.2	688.0	670.8	653.5	650.8
37.5°	1850.2	1766.5	1730.7	1696.1	1167.5	761.1	633.6	605.7	580.4	553.9	552.5
40°	2084.0	1975.1	1948.5	1720.1	1033.4	638.9	567.2	540.6	508.7	483.5	484.8
42.5°	2353.6	2214.1	2157.0	1713.4	867.3	573.8	519.3	490.1	462.2	439.6	438.3
45°	2641.8	2483.8	2352.3	1666.9	702.6	528.6	490.1	455.6	427.7	402.5	399.8
47.5°	2960.6	2784.0	2532.9	1576.6	580.4	496.8	472.8	423.7	398.5	382.5	382.5
50°	3282.0	3070.9	2699.0	1439.8	508.7	472.8	447.6	406.4	386.5	373.2	373.2
52.5°	3557.0	3369.7	2835.8	1276.4	463.6	452.9	430.3	398.5	377.2	365.3	363.9
55°	3824.0	3647.3	2958.0	1114.4	426.4	426.4	426.4	391.8	367.9	357.3	356.0
57.5°	4089.6	3939.5	3085.5	1008.1	393.2	403.8	418.4	383.9	359.9	350.7	349.3
60°	4389.8	4290.2	3232.9	933.7	363.9	379.9	407.8	374.6	346.7	338.7	337.4
62.5°	4708.6	4708.6	3367.0	828.8	337.4	359.9	391.8	362.6	334.7	328.1	326.7
65°	4958.3	5065.8	3453.4	672.1	310.8	340.0	373.2	346.7	318.8	317.4	314.8
67.5°	4987.5	5156.2	3398.9	507.4	286.9	318.8	354.6	329.4	302.8	302.8	298.9
70°	4777.6	4949.0	3228.9	379.9	269.6	297.5	330.7	308.1	282.9	285.6	278.9
72.5°	4427.0	4469.5	2806.5	300.2	249.7	274.9	301.5	284.2	261.7	261.7	252.4
75°	3964.7	3728.3	2038.8	251.0	225.8	248.4	272.3	257.7	237.8	231.1	225.8
77.5°	3155.9	2701.6	1184.8	216.5	205.9	223.1	239.1	228.5	211.2	196.6	196.6
80°	1923.3	1583.2	523.3	187.3	182.0	195.2	205.9	193.9	179.3	164.7	160.7
82.5°	731.9	611.0	253.7	160.7	159.4	167.4	175.3	163.4	152.7	146.1	126.2
85°	200.6	184.6	174.0	134.2	131.5	130.2	139.5	134.2	119.5	98.3	87.7
87.5°	75.7	86.3	94.3	82.3	87.7	81.0	93.0	85.0	75.7	49.1	43.8
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)