

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: P398124

Luminaire Tested: **ARCH-S-PA1-90-730-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398124  
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-PA1-90-730-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10644 lumens  
Efficiency: N/A  
Efficacy: 113.2 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

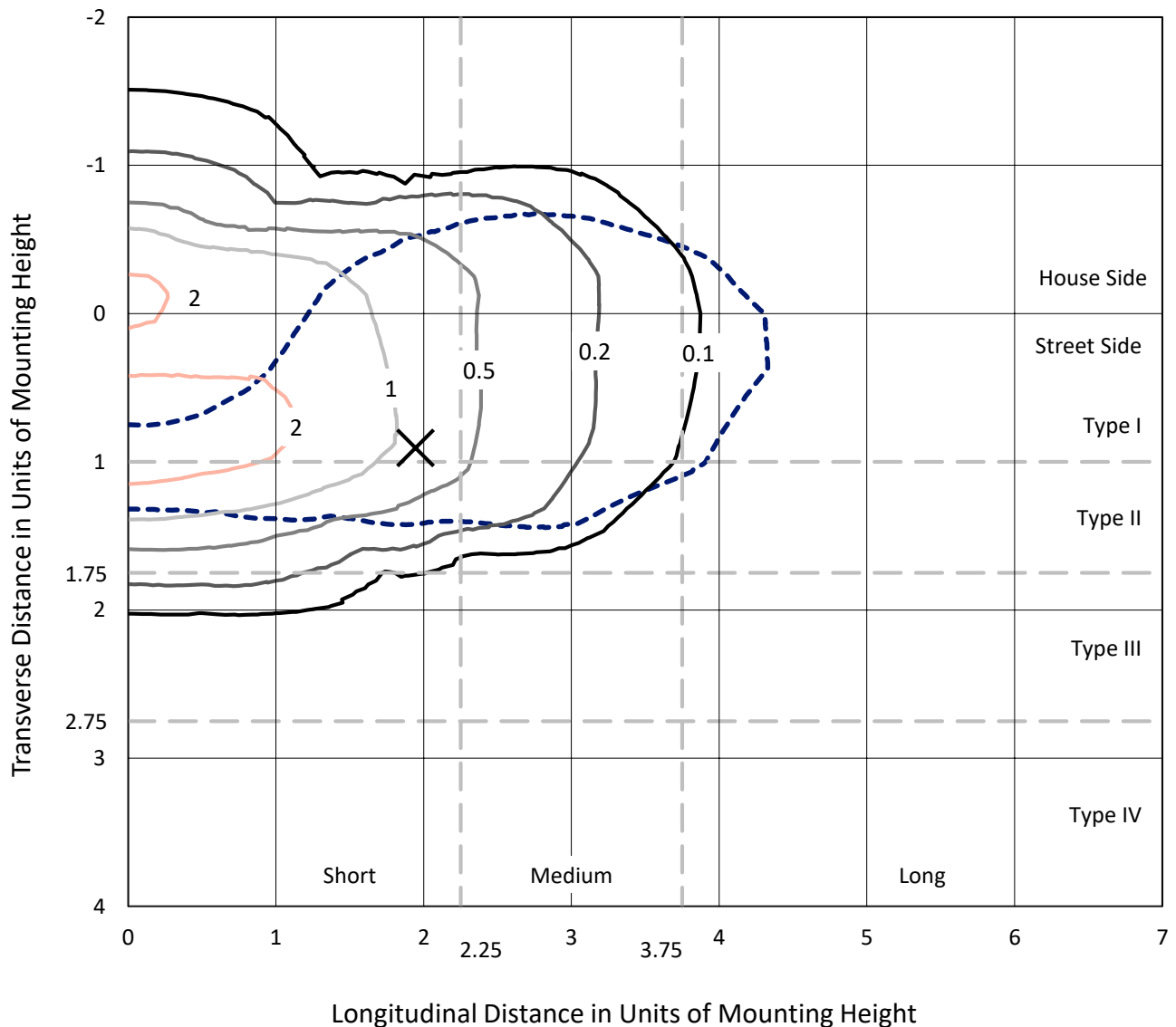
Input Watts (W): 94  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

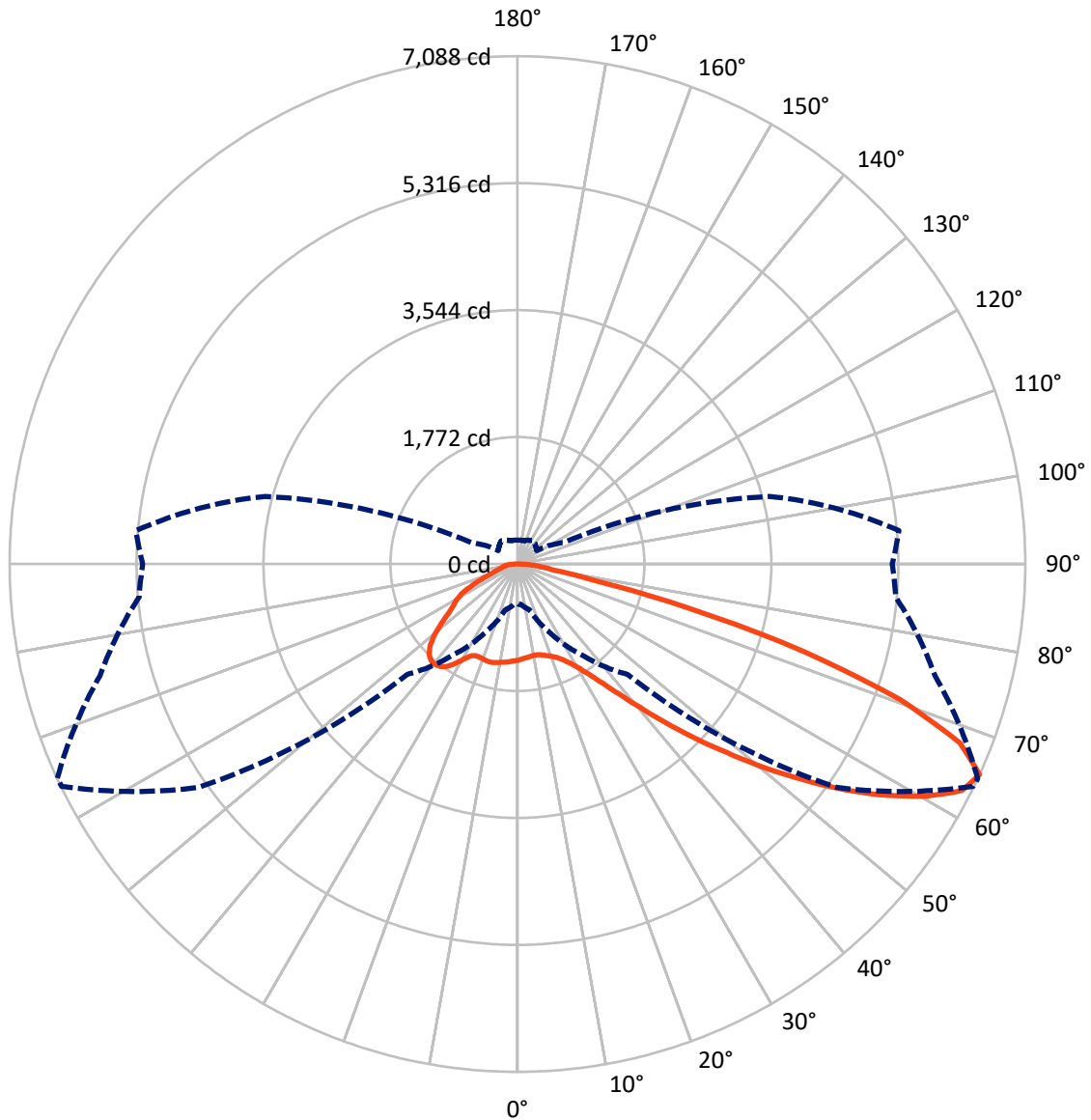


Based on 25 foot mounting height. Maximum calculated value = 2.9 fc  
 Type II - Short - Non-Cutoff

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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	3077.3	0.0	3077.3
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	7566.7	0.0	7566.7
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	10644.0	0.0	10644.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.1	1.2
10°-20°	382.6	3.6
20°-30°	679.5	6.4
30°-40°	1149.6	10.8
40°-50°	2001.3	18.8
50°-60°	2586.3	24.3
60°-70°	2263.1	21.3
70°-80°	1231.0	11.6
80°-90°	222.4	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°	10644.0	100.0
0°-180°	10644.0	100.0



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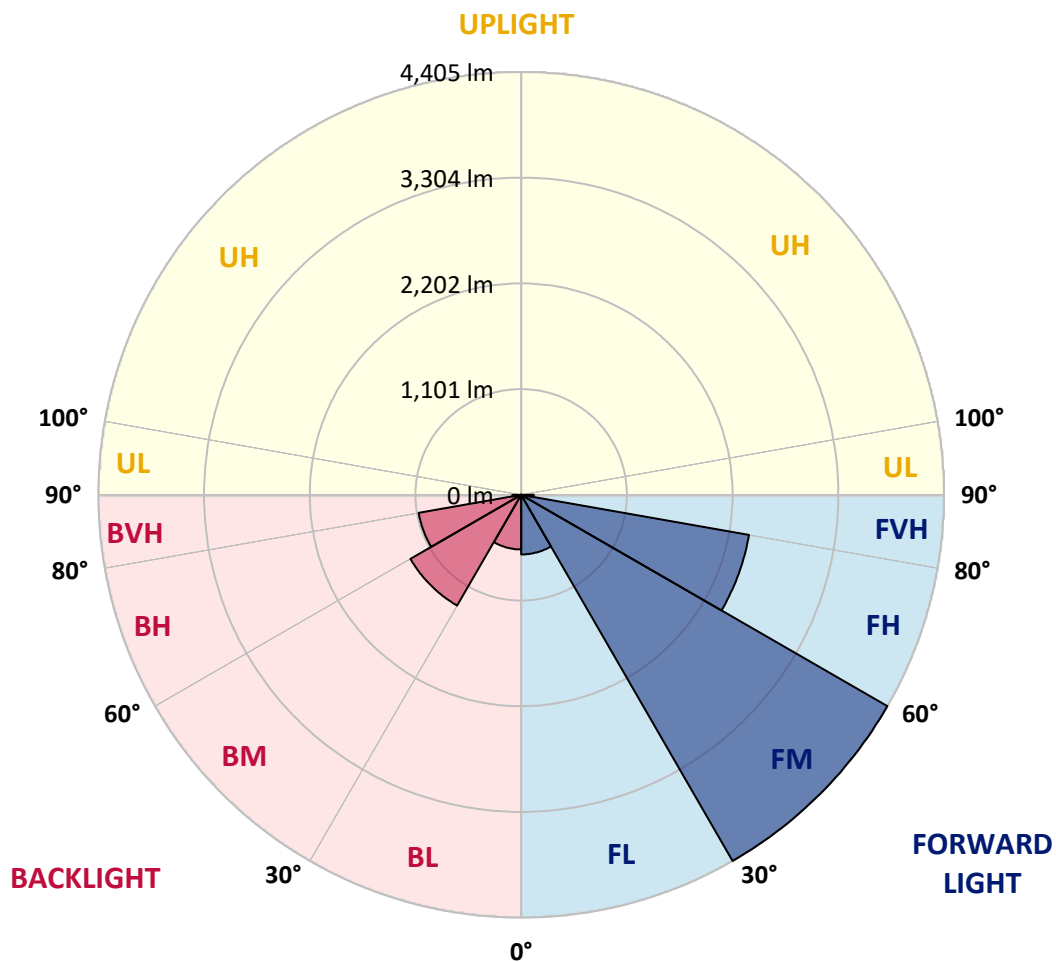
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	621.0	5.8			
FM (30°-60°)	4404.8	41.4			
FH (60°-80°)	2410.0	22.6			G2/5000
FVH (80°-90°)	130.9	1.2			G2/225
BL (0°-30°)	569.2	5.3	B2/1000		
BM (30°-60°)	1332.4	12.5	B2/2500		
BH (60°-80°)	1084.2	10.2	B3/2500		G3/2500
BVH (80°-90°)	91.5	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°	1345.0	1345.0	1345.0	1345.0	1345.0	1345.0	1345.0	1345.0	1345.0	1345.0	1345.0
2.5°	1321.2	1319.8	1317.0	1319.8	1321.2	1324.0	1322.6	1325.4	1324.0	1328.2	1335.2
5°	1287.5	1284.7	1283.3	1290.3	1294.5	1301.5	1304.3	1314.1	1312.7	1319.8	1331.0
7.5°	1249.7	1249.7	1248.3	1256.7	1262.3	1274.9	1284.7	1301.5	1302.9	1315.6	1328.2
10°	1220.3	1221.7	1220.3	1227.3	1235.7	1251.1	1267.9	1291.7	1293.1	1311.3	1324.0
12.5°	1209.1	1209.1	1209.1	1218.9	1230.1	1251.1	1270.7	1295.9	1298.7	1318.4	1329.6
15°	1224.5	1225.9	1223.1	1232.9	1245.5	1270.7	1288.9	1315.6	1318.4	1336.6	1343.6
17.5°	1279.1	1284.7	1277.7	1283.3	1280.5	1300.1	1317.0	1343.6	1345.0	1360.4	1363.2
20°	1387.0	1392.6	1381.4	1374.4	1349.2	1347.8	1354.8	1375.8	1375.8	1385.6	1378.6
22.5°	1553.7	1559.3	1539.7	1513.1	1452.8	1423.4	1408.0	1417.8	1416.4	1420.6	1402.4
25°	1775.1	1773.7	1749.9	1700.8	1604.2	1532.7	1494.9	1479.5	1479.5	1471.1	1448.6
27.5°	2049.7	2028.7	1986.6	1927.8	1793.3	1693.8	1612.6	1573.3	1566.3	1541.1	1499.1
30°	2342.5	2327.1	2266.8	2181.4	2025.9	1898.4	1763.9	1685.4	1681.2	1626.6	1563.5
32.5°	2687.1	2661.9	2594.7	2492.4	2306.1	2126.7	1958.6	1839.5	1832.5	1745.7	1658.8
35°	3129.9	3108.8	2978.6	2876.3	2636.7	2401.3	2202.4	2044.1	2038.5	1932.0	1821.3
37.5°	3660.8	3606.2	3480.1	3288.2	3036.0	2757.2	2505.0	2306.1	2299.1	2181.4	2041.3
40°	4134.4	4085.4	3973.3	3796.7	3526.3	3216.7	2874.9	2633.9	2626.9	2484.0	2307.5
42.5°	4484.6	4451.0	4378.2	4275.9	4082.6	3894.8	3347.0	3030.4	3017.8	2832.8	2612.9
45°	4687.8	4661.2	4619.1	4644.4	4641.6	4606.5	3910.2	3502.5	3461.9	3222.3	2953.3
47.5°	4638.8	4614.9	4631.7	4827.9	5098.3	5301.4	4565.9	3985.9	3931.2	3618.8	3316.2
50°	4284.3	4294.1	4382.4	4757.8	5364.5	5815.6	5293.0	4536.5	4463.6	4018.1	3660.8
52.5°	3638.4	3662.2	3876.6	4402.0	5335.1	6149.0	5950.1	5105.3	5008.6	4407.6	3974.7
55°	2890.3	2950.5	3227.9	3779.9	4951.2	6172.9	6446.1	5676.9	5570.4	4773.2	4247.9
57.5°	2137.9	2227.6	2548.4	3055.6	4215.6	5796.0	6694.0	6223.3	6094.4	5136.1	4536.5
60°	1356.2	1410.8	1780.7	2378.9	3226.5	4874.1	6661.8	6688.4	6576.4	5497.6	4837.7
62.5°	865.8	892.4	1078.8	1696.6	2255.6	3609.0	6310.2	7040.1	6964.4	5826.8	5123.5
65°	556.2	567.4	662.7	1043.8	1535.5	2178.6	5434.5	7077.9	7087.7	6032.8	5300.0
67.5°	452.5	458.1	493.2	644.5	1085.8	1203.5	3785.5	6539.9	6659.0	5979.5	5239.8
70°	411.9	418.9	455.3	514.2	840.6	830.8	1832.5	5472.4	5667.1	5672.7	4972.2
72.5°	347.5	357.3	406.3	486.2	650.1	655.7	776.2	3897.6	4184.8	5070.3	4570.1
75°	290.0	295.6	337.6	428.7	550.6	524.0	545.0	2066.5	2481.2	4065.7	4142.8
77.5°	235.4	241.0	271.8	341.8	489.0	407.7	428.7	856.0	1057.8	2760.0	3386.2
80°	168.1	173.7	208.8	266.2	369.9	367.1	318.0	472.1	512.8	1492.1	2199.6
82.5°	120.5	124.7	158.3	190.5	256.4	368.5	239.6	320.8	336.2	661.3	886.8
85°	81.3	81.3	109.3	126.1	165.3	232.6	193.3	217.2	227.0	313.8	239.6
87.5°	35.0	35.0	58.8	64.4	86.9	107.9	144.3	109.3	112.1	169.5	98.1
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°	1345.0	1345.0	1345.0	1345.0	1345.0	1345.0	1345.0	1345.0	1345.0	1345.0	1345.0
2.5°	1339.4	1340.8	1343.6	1352.0	1357.6	1366.0	1370.2	1375.8	1375.8	1373.0	1374.4
5°	1336.6	1340.8	1350.6	1366.0	1375.8	1391.2	1402.4	1410.8	1413.6	1410.8	1412.2
7.5°	1335.2	1342.2	1359.0	1381.4	1395.4	1415.0	1430.4	1440.2	1447.2	1444.4	1445.8
10°	1331.0	1342.2	1363.2	1391.2	1412.2	1431.8	1445.8	1450.0	1454.3	1451.4	1450.0
12.5°	1336.6	1349.2	1371.6	1405.2	1429.0	1444.4	1448.6	1441.6	1431.8	1426.2	1424.8
15°	1347.8	1360.4	1382.8	1417.8	1438.8	1444.4	1434.6	1412.2	1389.8	1377.2	1375.8
17.5°	1363.2	1371.6	1389.8	1420.6	1437.4	1430.4	1410.8	1384.2	1367.4	1357.6	1359.0
20°	1373.0	1373.0	1387.0	1410.8	1424.8	1419.2	1395.4	1366.0	1339.4	1326.8	1322.6
22.5°	1387.0	1380.0	1381.4	1402.4	1422.0	1413.6	1363.2	1311.3	1273.5	1259.5	1258.1
25°	1424.8	1405.2	1392.6	1405.2	1451.4	1382.8	1281.9	1221.7	1186.7	1174.0	1175.4
27.5°	1471.1	1444.4	1417.8	1438.8	1475.3	1312.7	1178.3	1109.6	1088.6	1078.8	1083.0
30°	1517.3	1482.3	1447.2	1522.9	1458.5	1203.5	1045.2	977.9	959.7	952.7	958.3
32.5°	1602.8	1545.3	1503.3	1635.0	1406.6	1078.8	900.9	839.2	822.4	814.0	811.2
35°	1745.7	1672.8	1630.8	1733.1	1333.8	940.1	769.2	725.7	707.5	689.3	686.5
37.5°	1951.6	1863.3	1825.5	1789.1	1231.5	802.8	668.3	638.9	612.2	584.2	582.8
40°	2198.2	2083.3	2055.3	1814.3	1090.0	673.9	598.2	570.2	536.6	510.0	511.4
42.5°	2482.6	2335.5	2275.2	1807.3	914.9	605.2	547.8	517.0	487.6	463.7	462.3
45°	2786.6	2619.9	2481.2	1758.3	741.1	557.6	517.0	480.5	451.1	424.5	421.7
47.5°	3122.9	2936.5	2671.7	1663.0	612.2	524.0	498.8	446.9	420.3	403.5	403.5
50°	3461.9	3239.1	2846.9	1518.7	536.6	498.8	472.1	428.7	407.7	393.7	393.7
52.5°	3751.9	3554.4	2991.2	1346.4	489.0	477.7	453.9	420.3	397.9	385.3	383.9
55°	4033.5	3847.2	3120.1	1175.4	449.7	449.7	449.7	413.3	388.1	376.9	375.5
57.5°	4313.7	4155.4	3254.6	1063.4	414.7	425.9	441.3	404.9	379.7	369.9	368.5
60°	4630.3	4525.3	3410.1	984.9	383.9	400.7	430.1	395.1	365.7	357.3	355.9
62.5°	4966.6	4966.6	3551.6	874.2	355.9	379.7	413.3	382.5	353.1	346.1	344.6
65°	5230.0	5343.5	3642.6	708.9	327.8	358.7	393.7	365.7	336.2	334.8	332.0
67.5°	5260.8	5438.7	3585.2	535.2	302.6	336.2	374.1	347.5	319.4	319.4	315.2
70°	5039.4	5220.2	3405.9	400.7	284.4	313.8	348.9	325.0	298.4	301.2	294.2
72.5°	4669.6	4714.4	2960.3	316.6	263.4	290.0	318.0	299.8	276.0	276.0	266.2
75°	4182.0	3932.6	2150.6	264.8	238.2	262.0	287.2	271.8	250.8	243.8	238.2
77.5°	3328.8	2849.7	1249.7	228.4	217.2	235.4	252.2	241.0	222.8	207.3	207.3
80°	2028.7	1670.0	552.0	197.5	191.9	205.9	217.2	204.5	189.1	173.7	169.5
82.5°	772.0	644.5	267.6	169.5	168.1	176.5	184.9	172.3	161.1	154.1	133.1
85°	211.6	194.7	183.5	141.5	138.7	137.3	147.1	141.5	126.1	103.7	92.5
87.5°	79.9	91.1	99.5	86.9	92.5	85.5	98.1	89.7	79.9	51.8	46.2
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)