

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: P398047

Luminaire Tested: **ARCH-S-PA1-80-727-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398047  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-80-727-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9043 lumens  
Efficiency: N/A  
Efficacy: 109.0 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

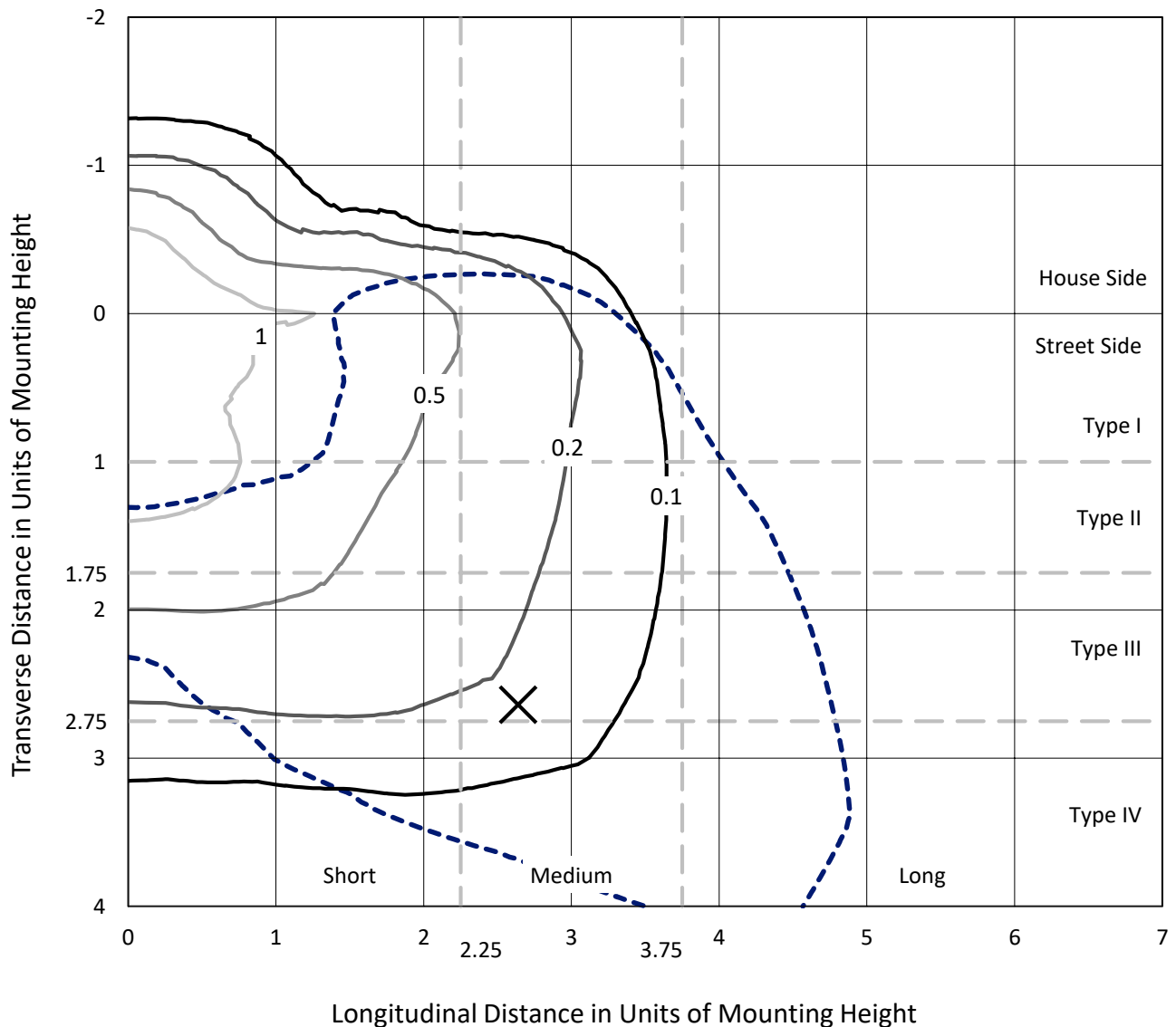
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

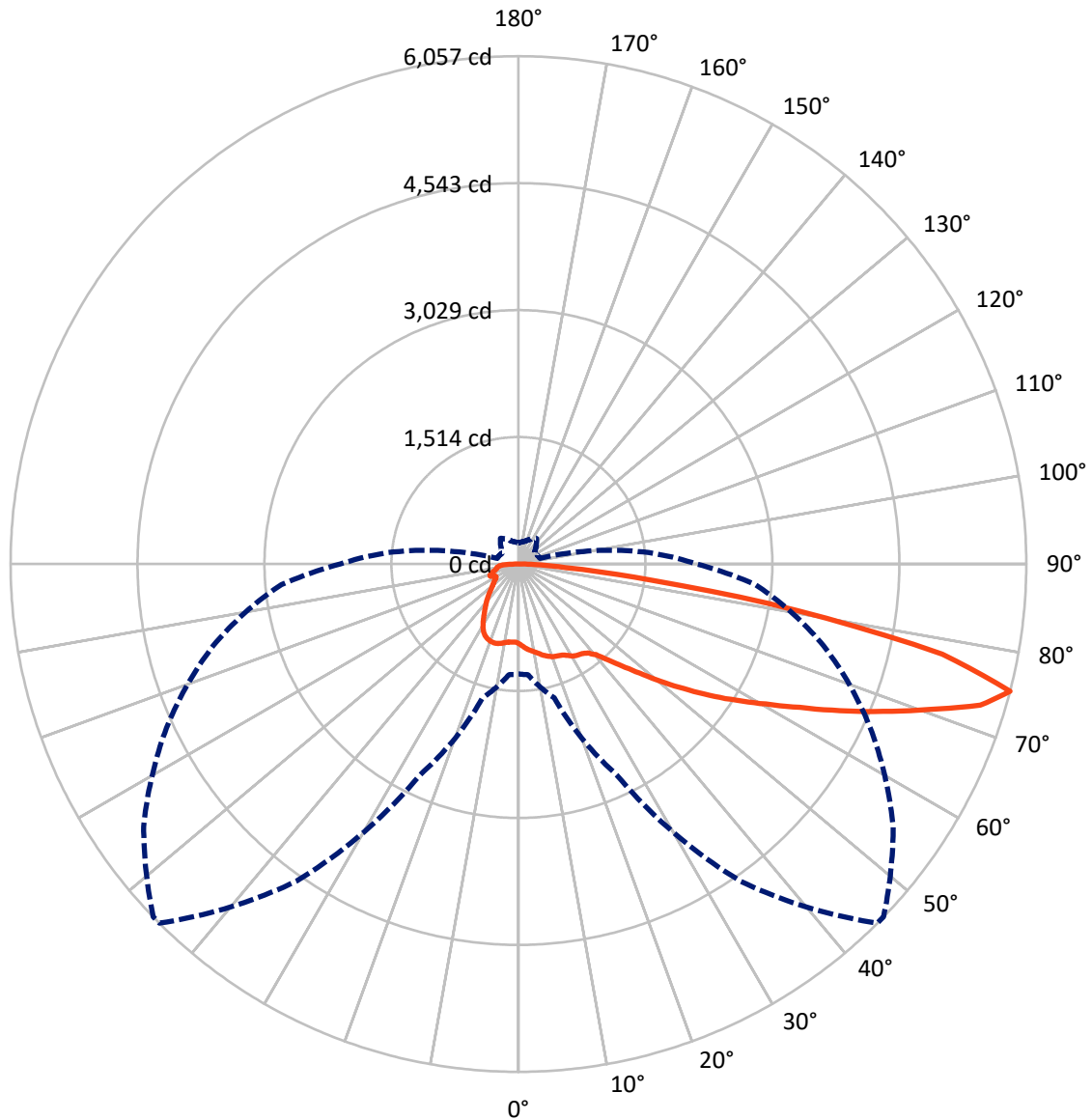


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1998.5	0.0	1998.5
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	7044.5	0.0	7044.5
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	9043.0	0.0	9043.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.0	1.0
10°-20°	298.9	3.3
20°-30°	509.6	5.6
30°-40°	714.0	7.9
40°-50°	1049.0	11.6
50°-60°	1669.4	18.5
60°-70°	2374.8	26.3
70°-80°	1988.4	22.0
80°-90°	345.1	3.8
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°	9043.0	100.0
0°-180°	9043.0	100.0



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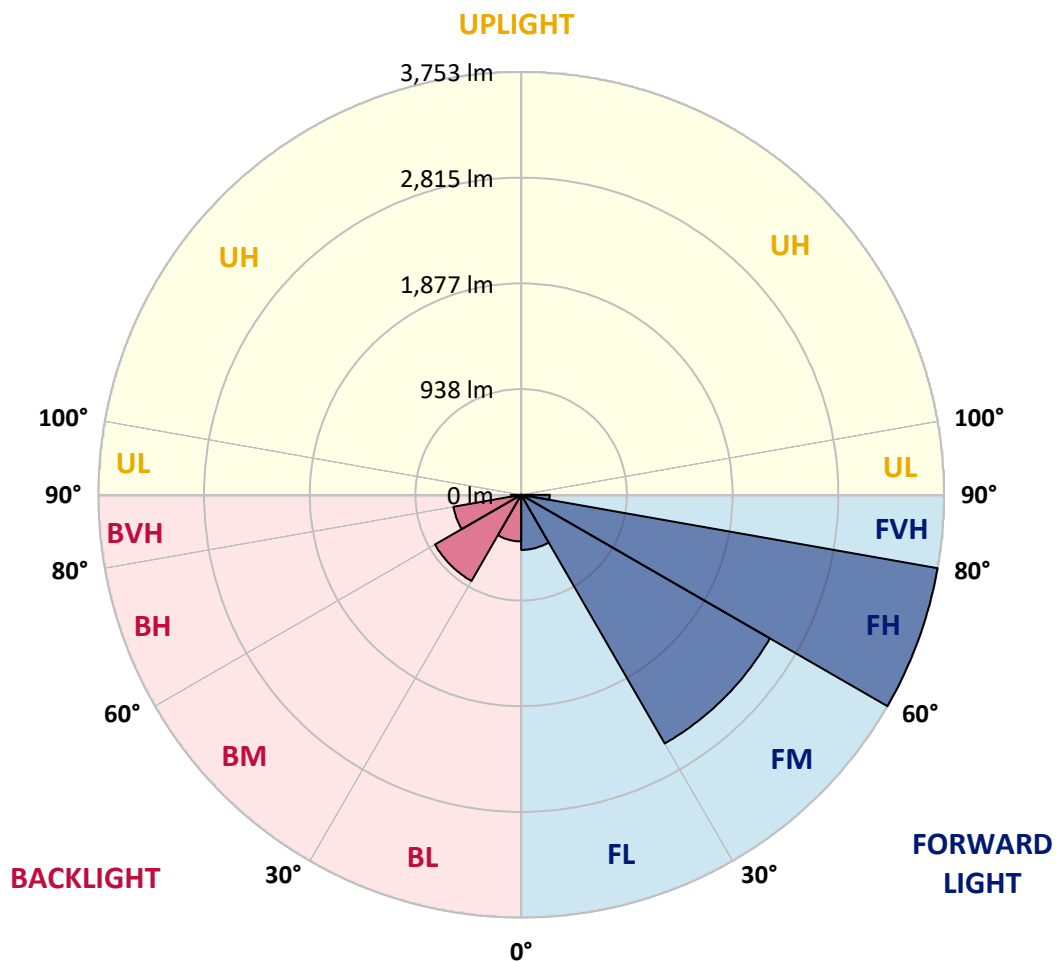
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	488.8	5.4			
FM	(30°-60°)	2548.9	28.2			
FH	(60°-80°)	3753.1	41.5			G2/5000
FVH	(80°-90°)	253.7	2.8			G3/500
BL	(0°-30°)	413.6	4.6	B1/500		
BM	(30°-60°)	883.4	9.8	B1/1000		
BH	(60°-80°)	610.1	6.7	B2/1000		G2/1000
BVH	(80°-90°)	91.4	1.0			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°	46°	55°	65°	75°	85°
0°	949.7	949.7	949.7	949.7	949.7	949.7	949.7	949.7	949.7	949.7	949.7
2.5°	1004.1	999.3	996.8	996.8	987.2	981.1	979.9	971.5	964.2	957.0	950.9
5°	1062.1	1058.5	1051.2	1045.2	1031.9	1015.0	1012.5	994.4	976.3	959.4	944.9
7.5°	1115.2	1108.0	1099.5	1087.5	1065.7	1042.8	1039.1	1013.8	988.4	963.0	943.7
10°	1160.0	1152.7	1140.6	1123.7	1095.9	1068.1	1064.5	1037.9	1011.3	981.1	953.3
12.5°	1202.2	1196.2	1178.1	1155.1	1122.5	1097.1	1093.5	1070.5	1042.8	1008.9	972.7
15°	1238.5	1232.5	1213.1	1186.5	1149.1	1129.7	1124.9	1103.2	1075.4	1039.1	1001.7
17.5°	1256.6	1256.6	1236.1	1207.1	1172.0	1157.5	1153.9	1127.3	1102.0	1066.9	1029.5
20°	1262.7	1265.1	1250.6	1215.5	1185.3	1179.3	1175.7	1153.9	1124.9	1091.1	1056.0
22.5°	1266.3	1271.1	1259.0	1219.2	1193.8	1190.2	1187.7	1173.2	1150.3	1117.7	1082.6
25°	1278.4	1278.4	1269.9	1225.2	1204.7	1203.5	1203.5	1195.0	1179.3	1151.5	1116.5
27.5°	1296.5	1295.3	1284.4	1238.5	1228.8	1232.5	1231.2	1230.0	1219.2	1191.4	1153.9
30°	1326.7	1326.7	1314.6	1265.1	1259.0	1274.7	1276.0	1278.4	1261.5	1218.0	1187.7
32.5°	1372.6	1367.8	1355.7	1291.7	1282.0	1296.5	1298.9	1297.7	1283.2	1242.1	1227.6
35°	1514.0	1503.1	1459.6	1350.9	1302.5	1311.0	1312.2	1318.2	1320.7	1288.0	1280.8
37.5°	1761.7	1747.2	1680.7	1491.0	1367.8	1347.2	1346.0	1361.7	1375.0	1346.0	1346.0
40°	2031.1	2019.0	1980.4	1732.7	1488.6	1420.9	1416.1	1430.6	1447.5	1427.0	1433.0
42.5°	2263.1	2272.8	2276.4	1988.8	1669.9	1558.7	1545.4	1524.9	1551.4	1533.3	1557.5
45°	2437.1	2432.3	2498.7	2251.0	1904.3	1731.5	1713.3	1657.8	1691.6	1690.4	1743.6
47.5°	2622.0	2613.5	2641.3	2497.5	2171.3	1942.9	1915.1	1833.0	1883.7	1918.8	2007.0
50°	2797.2	2799.6	2809.3	2692.1	2461.3	2200.3	2165.2	2055.3	2127.8	2201.5	2326.0
52.5°	3025.5	3008.6	2996.5	2919.2	2786.3	2468.5	2445.6	2319.9	2421.4	2508.4	2673.9
55°	3224.9	3214.0	3206.8	3203.2	3058.2	2764.6	2740.4	2609.9	2756.1	2817.7	3061.8
57.5°	3437.6	3431.5	3470.2	3531.8	3473.8	3065.4	3040.0	2914.4	3077.5	3121.0	3482.3
60°	3593.4	3597.1	3703.4	3860.5	3820.6	3391.7	3361.5	3250.3	3390.5	3429.1	3902.8
62.5°	3594.7	3630.9	3877.4	4158.9	4204.8	3767.4	3732.4	3611.6	3711.9	3711.9	4279.7
65°	3251.5	3292.6	3846.0	4232.6	4593.9	4214.5	4180.7	3991.0	4028.4	3977.7	4633.8
67.5°	2909.6	2957.9	3478.7	4238.7	4867.0	4693.0	4653.1	4370.4	4306.3	4178.3	4881.5
70°	2682.4	2716.2	3151.2	4160.1	5031.3	5193.2	5163.0	4730.4	4525.0	4346.2	4829.5
72.5°	2258.3	2246.2	2661.9	3786.8	5123.1	5761.1	5735.7	5121.9	4714.7	4266.5	4119.0
75°	1311.0	1325.5	1651.7	2774.2	4618.1	6057.1	6054.7	5456.6	4631.4	3768.6	2838.3
77.5°	378.2	389.1	542.5	1219.2	2920.4	5166.6	5332.2	4990.2	3914.8	2686.0	1471.7
80°	165.5	174.0	235.6	406.0	1257.8	3374.7	3519.7	3374.7	2361.0	1232.5	577.6
82.5°	97.9	103.9	153.5	251.3	602.9	1605.8	1801.6	1573.2	1018.6	523.2	239.2
85°	55.6	58.0	88.2	159.5	379.4	561.9	630.7	590.9	496.6	297.2	125.7
87.5°	25.4	26.6	43.5	74.9	212.7	189.7	197.0	261.0	287.6	181.2	62.8
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°	949.7	949.7	949.7	949.7	949.7	949.7	949.7	949.7	949.7	949.7	949.7
2.5°	948.5	944.9	937.6	935.2	931.6	932.8	934.0	934.0	935.2	931.6	931.6
5°	938.8	932.8	925.5	925.5	925.5	935.2	943.7	948.5	950.9	950.9	948.5
7.5°	935.2	928.0	919.5	921.9	924.3	936.4	952.1	967.8	972.7	972.7	970.3
10°	942.5	935.2	929.2	932.8	938.8	948.5	960.6	975.1	987.2	988.4	987.2
12.5°	959.4	950.9	944.9	952.1	959.4	965.4	971.5	977.5	993.2	995.6	995.6
15°	987.2	978.7	971.5	977.5	979.9	979.9	979.9	979.9	995.6	998.0	998.0
17.5°	1015.0	1007.7	1000.5	1001.7	994.4	984.8	981.1	979.9	988.4	995.6	996.8
20°	1041.5	1035.5	1028.3	1016.2	998.0	979.9	973.9	973.9	978.7	989.6	989.6
22.5°	1070.5	1063.3	1051.2	1023.4	993.2	967.8	961.8	965.4	971.5	986.0	984.8
25°	1103.2	1093.5	1073.0	1021.0	977.5	947.3	948.5	959.4	970.3	986.0	986.0
27.5°	1139.4	1126.1	1085.0	1001.7	942.5	913.5	924.3	949.7	965.4	982.3	984.8
30°	1179.3	1167.2	1094.7	967.8	885.7	859.1	885.7	926.8	950.9	966.6	970.3
32.5°	1227.6	1218.0	1103.2	924.3	812.0	789.0	827.7	878.4	917.1	935.2	938.8
35°	1288.0	1278.4	1114.0	874.8	743.1	718.9	754.0	805.9	856.7	879.6	886.9
37.5°	1366.6	1352.1	1123.7	821.6	685.1	657.3	674.2	721.3	767.3	798.7	807.1
40°	1466.9	1443.9	1132.2	761.2	634.4	602.9	609.0	631.9	658.5	686.3	697.2
42.5°	1608.2	1562.3	1133.4	697.2	582.4	553.4	551.0	558.2	558.2	558.2	561.9
45°	1805.2	1718.2	1135.8	636.8	529.2	499.0	491.8	489.4	471.2	436.2	433.8
47.5°	2054.1	1922.4	1146.7	586.0	473.6	447.1	437.4	427.7	393.9	357.7	350.4
50°	2373.1	2159.2	1168.4	537.7	426.5	408.4	396.3	373.4	335.9	308.1	300.9
52.5°	2740.4	2440.7	1189.0	486.9	391.5	379.4	364.9	337.1	297.2	280.3	277.9
55°	3162.1	2754.9	1230.0	442.2	361.3	352.8	339.5	312.9	282.7	270.7	269.4
57.5°	3593.4	3106.5	1288.0	402.4	332.3	327.4	327.4	304.5	285.2	280.3	280.3
60°	4009.1	3408.6	1243.3	364.9	305.7	308.1	331.1	325.0	310.5	316.6	320.2
62.5°	4331.7	3586.2	1008.9	334.7	286.4	308.1	367.3	367.3	350.4	348.0	348.0
65°	4469.5	3583.8	709.3	311.7	279.1	338.3	409.6	390.3	345.6	328.7	325.0
67.5°	4434.4	3426.7	489.4	296.0	276.7	369.7	428.9	374.6	323.8	309.3	298.4
70°	4126.3	3094.4	377.0	281.5	273.1	356.4	422.9	356.4	306.9	293.6	283.9
72.5°	3328.8	2481.8	312.9	267.0	258.6	329.9	402.4	339.5	293.6	279.1	269.4
75°	2123.0	1561.1	264.6	247.7	230.8	296.0	374.6	322.6	279.1	259.8	252.5
77.5°	1021.0	673.0	230.8	224.7	207.8	274.3	346.8	300.9	259.8	244.1	239.2
80°	413.2	308.1	200.6	201.8	190.9	261.0	327.4	280.3	240.4	223.5	215.1
82.5°	215.1	178.8	169.2	174.0	174.0	248.9	312.9	263.4	223.5	216.3	188.5
85°	116.0	111.2	130.5	140.2	151.0	224.7	291.2	245.3	204.2	175.2	169.2
87.5°	56.8	72.5	73.7	84.6	105.1	180.0	245.3	205.4	170.4	141.4	139.0
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)