

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: P397930

Luminaire Tested: **ARCH-S-PA1-60-750-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397930  
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-PA1-60-750-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8976 lumens  
Efficiency: N/A  
Efficacy: 140.3 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): 64  
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

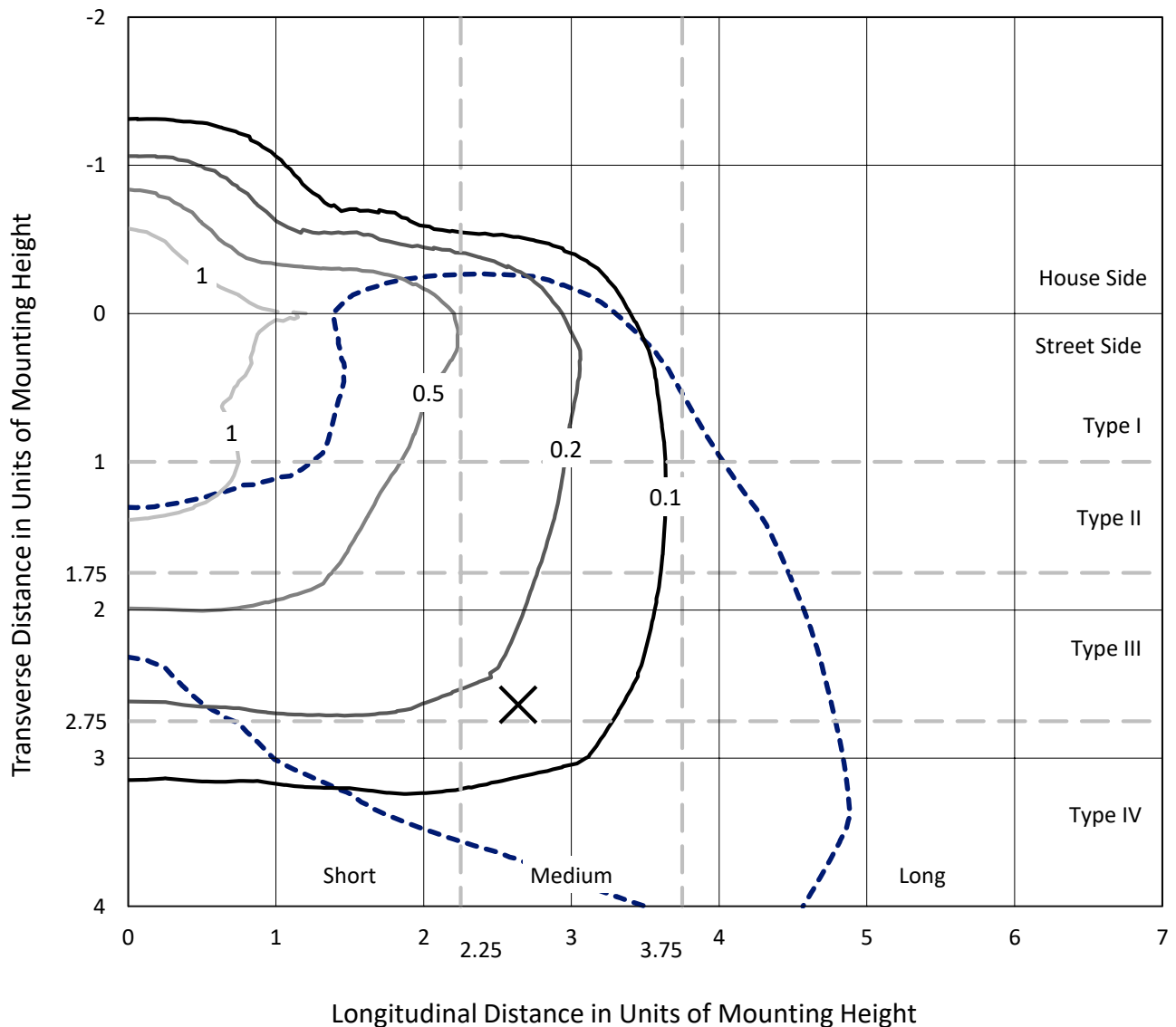


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### Iso-Footcandle Lines of Horizontal Illumination

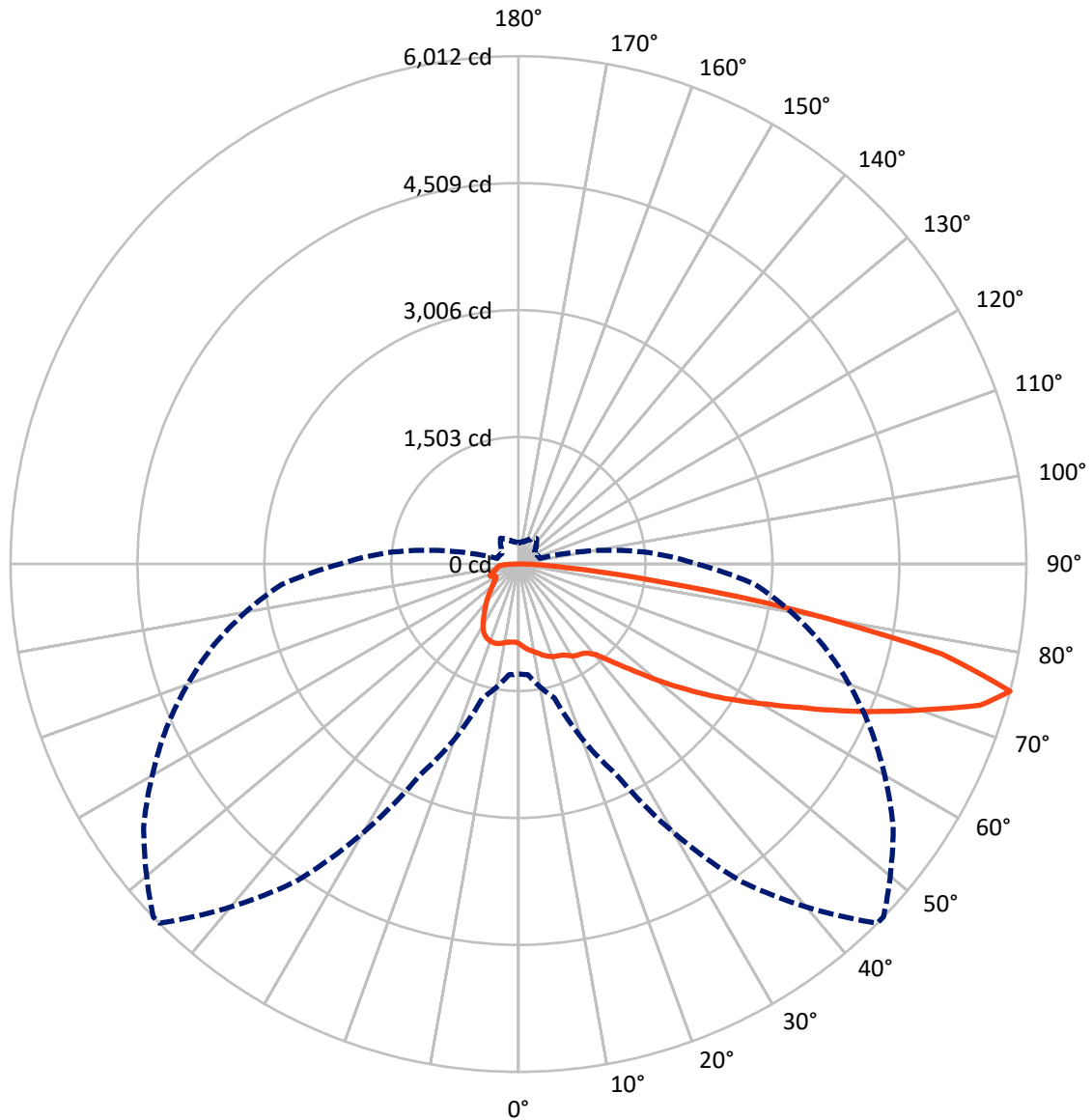
× Max cd  
 - - - 1/2 Max cd



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	1983.7	0.0	1983.7
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	6992.3	0.0	6992.3
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	8976.0	0.0	8976.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.3	1.0
10°-20°	296.7	3.3
20°-30°	505.8	5.6
30°-40°	708.7	7.9
40°-50°	1041.2	11.6
50°-60°	1657.0	18.5
60°-70°	2357.1	26.3
70°-80°	1973.6	22.0
80°-90°	342.5	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°	8976.0	100.0
0°-180°	8976.0	100.0



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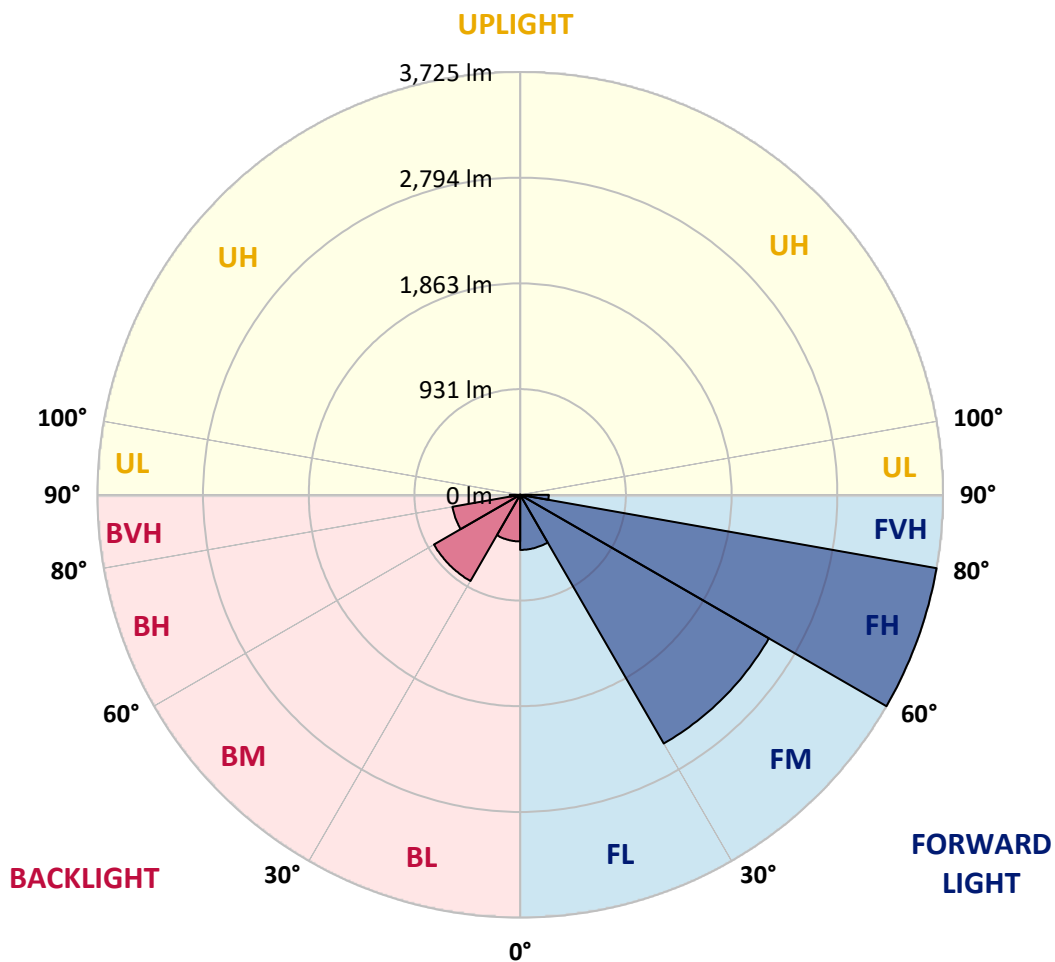
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	485.2	5.4			
FM	(30°-60°)	2530.1	28.2			
FH	(60°-80°)	3725.3	41.5			G2/5000
FVH	(80°-90°)	251.8	2.8			G3/500
BL	(0°-30°)	410.5	4.6	B1/500		
BM	(30°-60°)	876.9	9.8	B1/1000		
BH	(60°-80°)	605.5	6.7	B2/1000		G2/1000
BVH	(80°-90°)	90.7	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°	942.7	942.7	942.7	942.7	942.7	942.7	942.7	942.7	942.7	942.7	942.7
2.5°	996.6	991.8	989.5	989.5	979.9	973.9	972.7	964.3	957.1	949.9	943.9
5°	1054.2	1050.6	1043.4	1037.4	1024.2	1007.4	1005.0	987.1	969.1	952.3	937.9
7.5°	1107.0	1099.8	1091.4	1079.4	1057.8	1035.0	1031.4	1006.2	981.1	955.9	936.7
10°	1151.4	1144.2	1132.2	1115.4	1087.8	1060.2	1056.6	1030.2	1003.8	973.9	946.3
12.5°	1193.3	1187.3	1169.4	1146.6	1114.2	1089.0	1085.4	1062.6	1035.0	1001.4	965.5
15°	1229.3	1223.3	1204.1	1177.7	1140.6	1121.4	1116.6	1095.0	1067.4	1031.4	994.2
17.5°	1247.3	1247.3	1226.9	1198.1	1163.4	1149.0	1145.4	1119.0	1093.8	1059.0	1021.8
20°	1253.3	1255.7	1241.3	1206.5	1176.5	1170.5	1167.0	1145.4	1116.6	1083.0	1048.2
22.5°	1256.9	1261.7	1249.7	1210.1	1184.9	1181.3	1178.9	1164.6	1141.8	1109.4	1074.6
25°	1268.9	1268.9	1260.5	1216.1	1195.7	1194.5	1194.5	1186.1	1170.5	1143.0	1108.2
27.5°	1286.9	1285.7	1274.9	1229.3	1219.7	1223.3	1222.1	1220.9	1210.1	1182.5	1145.4
30°	1316.9	1316.9	1304.9	1255.7	1249.7	1265.3	1266.5	1268.9	1252.1	1208.9	1178.9
32.5°	1362.4	1357.6	1345.7	1282.1	1272.5	1286.9	1289.3	1288.1	1273.7	1232.9	1218.5
35°	1502.8	1492.0	1448.8	1340.9	1292.9	1301.3	1302.5	1308.5	1310.9	1278.5	1271.3
37.5°	1748.6	1734.2	1668.3	1480.0	1357.6	1337.3	1336.1	1351.6	1364.8	1336.1	1336.1
40°	2016.1	2004.1	1965.7	1719.8	1477.6	1410.4	1405.6	1420.0	1436.8	1416.4	1422.4
42.5°	2246.4	2255.9	2259.5	1974.1	1657.5	1547.1	1533.9	1513.6	1539.9	1522.0	1545.9
45°	2419.1	2414.3	2480.2	2234.4	1890.2	1718.6	1700.7	1645.5	1679.1	1677.9	1730.6
47.5°	2602.6	2594.2	2621.7	2479.0	2155.2	1928.5	1900.9	1819.4	1869.8	1904.5	1992.1
50°	2776.5	2778.9	2788.5	2672.1	2443.0	2184.0	2149.2	2040.1	2112.0	2185.2	2308.7
52.5°	3003.1	2986.3	2974.3	2897.6	2765.7	2450.2	2427.5	2302.7	2403.5	2489.8	2654.1
55°	3201.0	3190.2	3183.0	3179.4	3035.5	2744.1	2720.1	2590.6	2735.7	2796.8	3039.1
57.5°	3412.1	3406.1	3444.5	3505.7	3448.1	3042.7	3017.5	2892.8	3054.7	3097.9	3456.5
60°	3566.8	3570.4	3676.0	3831.9	3792.3	3366.5	3336.5	3226.2	3365.3	3403.7	3873.8
62.5°	3568.0	3604.0	3848.7	4128.1	4173.7	3739.5	3704.7	3584.8	3684.4	3684.4	4248.0
65°	3227.4	3268.2	3817.5	4201.3	4559.9	4183.3	4149.7	3961.4	3998.6	3948.2	4599.4
67.5°	2888.0	2936.0	3452.9	4207.3	4830.9	4658.2	4618.6	4338.0	4274.4	4147.3	4845.3
70°	2662.5	2696.1	3127.9	4129.3	4994.0	5154.7	5124.8	4695.4	4491.5	4314.0	4793.7
72.5°	2241.6	2229.6	2642.1	3758.7	5085.2	5718.4	5693.2	5084.0	4679.8	4234.8	4088.5
75°	1301.3	1315.7	1639.5	2753.7	4583.9	6012.3	6009.9	5416.2	4597.0	3740.7	2817.2
77.5°	375.4	386.2	538.5	1210.1	2898.8	5128.4	5292.7	4953.2	3885.8	2666.1	1460.8
80°	164.3	172.7	233.9	403.0	1248.5	3349.7	3493.7	3349.7	2343.5	1223.3	573.3
82.5°	97.1	103.1	152.3	249.5	598.5	1593.9	1788.2	1561.5	1011.0	519.3	237.5
85°	55.2	57.6	87.6	158.3	376.6	557.7	626.1	586.5	492.9	295.0	124.7
87.5°	25.2	26.4	43.2	74.4	211.1	188.3	195.5	259.1	285.4	179.9	62.4
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°	942.7	942.7	942.7	942.7	942.7	942.7	942.7	942.7	942.7	942.7	942.7
2.5°	941.5	937.9	930.7	928.3	924.7	925.9	927.1	927.1	928.3	924.7	924.7
5°	931.9	925.9	918.7	918.7	918.7	928.3	936.7	941.5	943.9	943.9	941.5
7.5°	928.3	921.1	912.7	915.1	917.5	929.5	945.1	960.7	965.5	965.5	963.1
10°	935.5	928.3	922.3	925.9	931.9	941.5	953.5	967.9	979.9	981.1	979.9
12.5°	952.3	943.9	937.9	945.1	952.3	958.3	964.3	970.3	985.9	988.3	988.3
15°	979.9	971.5	964.3	970.3	972.7	972.7	972.7	972.7	988.3	990.6	990.6
17.5°	1007.4	1000.2	993.0	994.2	987.1	977.5	973.9	972.7	981.1	988.3	989.5
20°	1033.8	1027.8	1020.6	1008.6	990.6	972.7	966.7	966.7	971.5	982.3	982.3
22.5°	1062.6	1055.4	1043.4	1015.8	985.9	960.7	954.7	958.3	964.3	978.7	977.5
25°	1095.0	1085.4	1065.0	1013.4	970.3	940.3	941.5	952.3	963.1	978.7	978.7
27.5°	1131.0	1117.8	1077.0	994.2	935.5	906.7	917.5	942.7	958.3	975.1	977.5
30°	1170.5	1158.6	1086.6	960.7	879.1	852.7	879.1	919.9	943.9	959.5	963.1
32.5°	1218.5	1208.9	1095.0	917.5	806.0	783.2	821.5	871.9	910.3	928.3	931.9
35°	1278.5	1268.9	1105.8	868.3	737.6	713.6	748.4	800.0	850.3	873.1	880.3
37.5°	1356.4	1342.1	1115.4	815.5	680.0	652.4	669.2	716.0	761.6	792.8	801.2
40°	1456.0	1433.2	1123.8	755.6	629.7	598.5	604.5	627.3	653.6	681.2	692.0
42.5°	1596.3	1550.7	1125.0	692.0	578.1	549.3	546.9	554.1	554.1	554.1	557.7
45°	1791.8	1705.5	1127.4	632.0	525.3	495.3	488.1	485.7	467.7	433.0	430.6
47.5°	2038.9	1908.1	1138.2	581.7	470.1	443.8	434.2	424.6	391.0	355.0	347.8
50°	2355.5	2143.2	1159.8	533.7	423.4	405.4	393.4	370.6	333.4	305.8	298.6
52.5°	2720.1	2422.7	1180.1	483.3	388.6	376.6	362.2	334.6	295.0	278.2	275.8
55°	3138.7	2734.5	1220.9	439.0	358.6	350.2	337.0	310.6	280.6	268.7	267.5
57.5°	3566.8	3083.5	1278.5	399.4	329.8	325.0	325.0	302.2	283.0	278.2	278.2
60°	3979.4	3383.3	1234.1	362.2	303.4	305.8	328.6	322.6	308.2	314.2	317.8
62.5°	4299.6	3559.6	1001.4	332.2	284.2	305.8	364.6	364.6	347.8	345.4	345.4
65°	4436.3	3557.2	704.0	309.4	277.0	335.8	406.6	387.4	343.0	326.2	322.6
67.5°	4401.6	3401.3	485.7	293.8	274.6	367.0	425.8	371.8	321.4	307.0	296.2
70°	4095.7	3071.5	374.2	279.4	271.0	353.8	419.8	353.8	304.6	291.4	281.8
72.5°	3304.2	2463.4	310.6	265.1	256.7	327.4	399.4	337.0	291.4	277.0	267.5
75°	2107.2	1549.5	262.7	245.9	229.1	293.8	371.8	320.2	277.0	257.9	250.7
77.5°	1013.4	668.0	229.1	223.1	206.3	272.2	344.2	298.6	257.9	242.3	237.5
80°	410.2	305.8	199.1	200.3	189.5	259.1	325.0	278.2	238.7	221.9	213.5
82.5°	213.5	177.5	167.9	172.7	172.7	247.1	310.6	261.5	221.9	214.7	187.1
85°	115.1	110.3	129.5	139.1	149.9	223.1	289.0	243.5	202.7	173.9	167.9
87.5°	56.4	72.0	73.2	84.0	104.3	178.7	243.5	203.9	169.1	140.3	137.9
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)