

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: P398092

Luminaire Tested: **ARCH-S-PA1-80-827-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398092  
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-PA1-80-827-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 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: 7949 lumens  
Efficiency: N/A  
Efficacy: 95.8 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 - G2

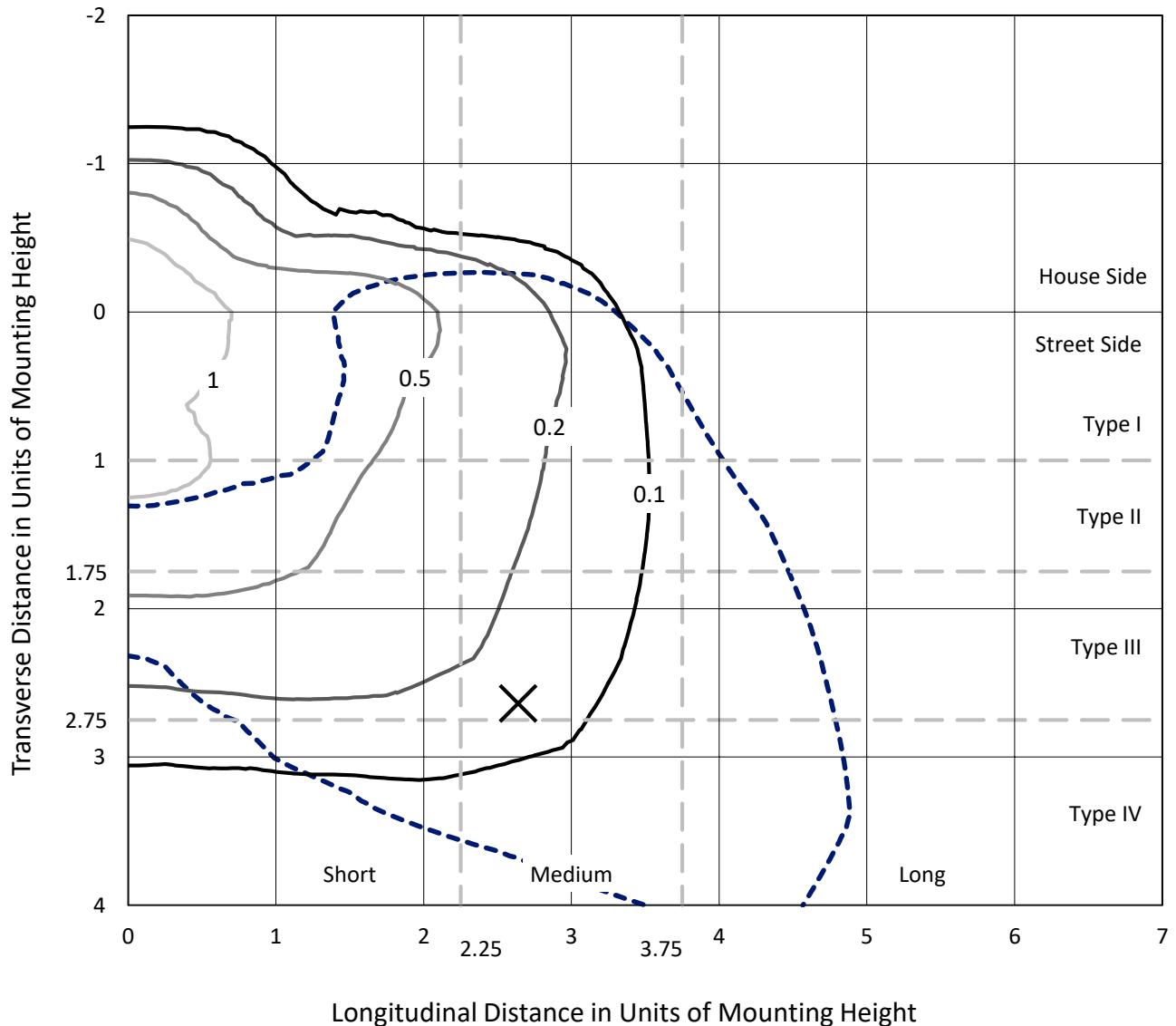
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

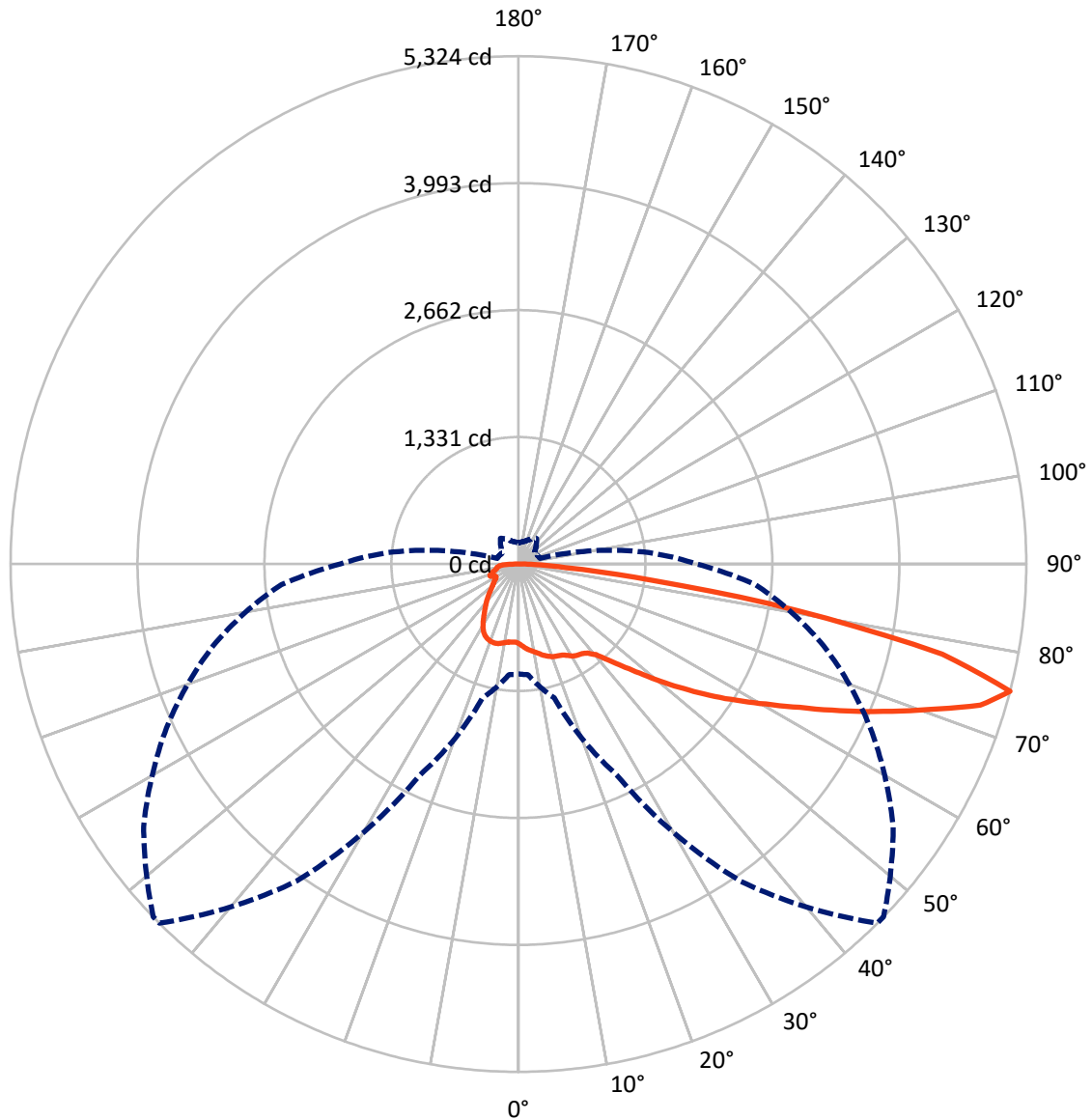


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc  
 Type IV - Medium - Non-Cutoff

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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	1756.7	0.0	1756.7
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	6192.3	0.0	6192.3
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	7949.0	0.0	7949.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.6	1.0
10°-20°	262.7	3.3
20°-30°	447.9	5.6
30°-40°	627.6	7.9
40°-50°	922.0	11.6
50°-60°	1467.5	18.5
60°-70°	2087.5	26.3
70°-80°	1747.8	22.0
80°-90°	303.3	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°	7949.0	100.0
0°-180°	7949.0	100.0



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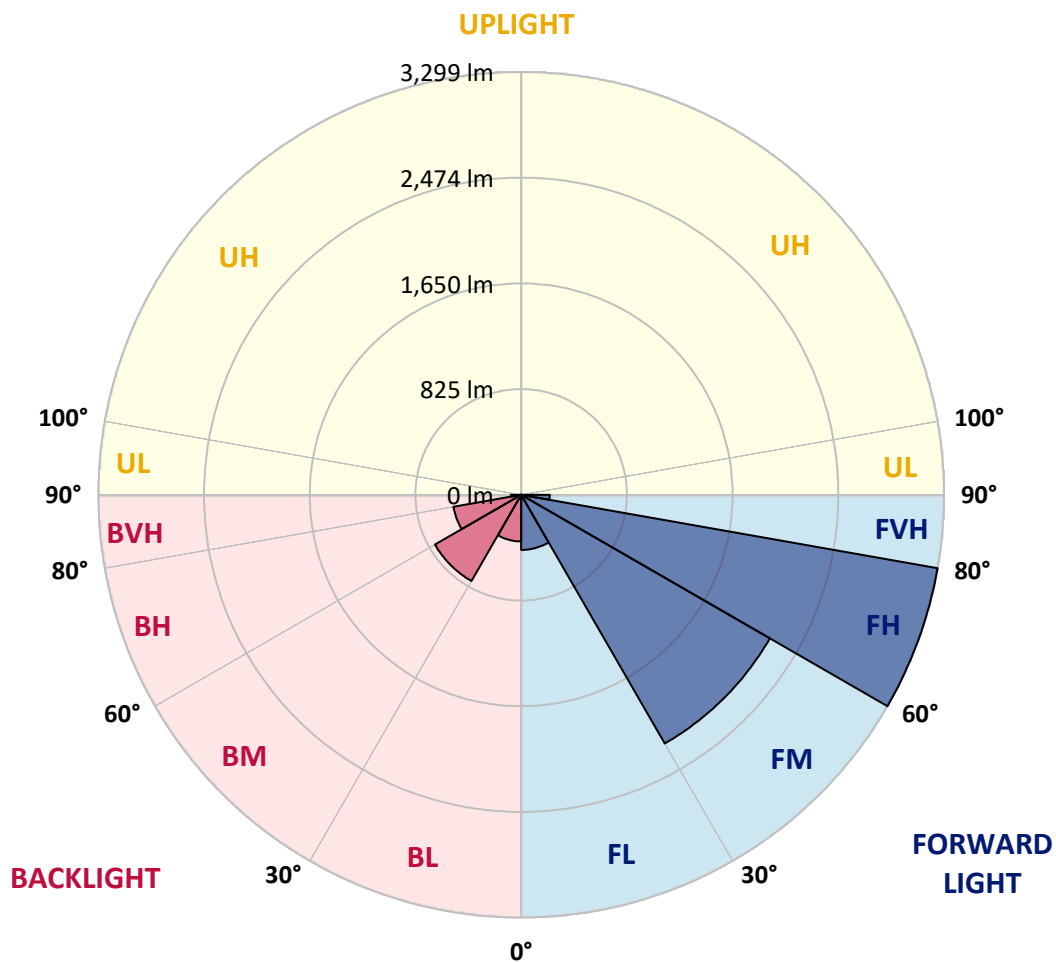
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	429.7	5.4			
FM (30°-60°)	2240.6	28.2			
FH (60°-80°)	3299.0	41.5			G2/5000
FVH (80°-90°)	223.0	2.8			G2/225
BL (0°-30°)	363.6	4.6	B1/500		
BM (30°-60°)	776.5	9.8	B1/1000		
BH (60°-80°)	536.3	6.7	B2/1000		G2/1000
BVH (80°-90°)	80.3	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-G2**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	834.8	834.8	834.8	834.8	834.8	834.8	834.8	834.8	834.8	834.8	834.8
2.5°	882.6	878.4	876.2	876.2	867.7	862.4	861.4	853.9	847.6	841.2	835.9
5°	933.6	930.4	924.0	918.7	907.0	892.2	890.0	874.1	858.2	843.3	830.6
7.5°	980.3	974.0	966.5	955.9	936.8	916.6	913.4	891.1	868.8	846.5	829.5
10°	1019.6	1013.3	1002.6	987.8	963.3	938.9	935.7	912.4	889.0	862.4	838.0
12.5°	1056.8	1051.5	1035.6	1015.4	986.7	964.4	961.2	941.0	916.6	886.9	855.0
15°	1088.7	1083.4	1066.4	1043.0	1010.1	993.1	988.8	969.7	945.3	913.4	880.5
17.5°	1104.6	1104.6	1086.5	1061.0	1030.2	1017.5	1014.3	990.9	968.6	937.8	904.9
20°	1109.9	1112.0	1099.3	1068.5	1041.9	1036.6	1033.4	1014.3	988.8	959.1	928.3
22.5°	1113.1	1117.3	1106.7	1071.7	1049.4	1046.2	1044.1	1031.3	1011.1	982.5	951.7
25°	1123.7	1123.7	1116.3	1077.0	1058.9	1057.9	1057.9	1050.4	1036.6	1012.2	981.4
27.5°	1139.6	1138.6	1129.0	1088.7	1080.2	1083.4	1082.3	1081.2	1071.7	1047.2	1014.3
30°	1166.2	1166.2	1155.6	1112.0	1106.7	1120.5	1121.6	1123.7	1108.8	1070.6	1044.1
32.5°	1206.6	1202.3	1191.7	1135.4	1126.9	1139.6	1141.8	1140.7	1128.0	1091.8	1079.1
35°	1330.8	1321.3	1283.0	1187.4	1145.0	1152.4	1153.5	1158.8	1160.9	1132.2	1125.8
37.5°	1548.6	1535.8	1477.4	1310.6	1202.3	1184.3	1183.2	1197.0	1208.7	1183.2	1183.2
40°	1785.4	1774.8	1740.8	1523.1	1308.5	1249.0	1244.8	1257.5	1272.4	1254.4	1259.7
42.5°	1989.3	1997.8	2001.0	1748.2	1467.8	1370.1	1358.4	1340.4	1363.8	1347.8	1369.1
45°	2142.3	2138.0	2196.4	1978.7	1673.9	1522.0	1506.1	1457.2	1487.0	1485.9	1532.6
47.5°	2304.8	2297.3	2321.8	2195.4	1908.6	1707.9	1683.4	1611.2	1655.8	1686.6	1764.2
50°	2458.8	2460.9	2469.4	2366.4	2163.5	1934.1	1903.3	1806.7	1870.4	1935.2	2044.6
52.5°	2659.5	2644.7	2634.0	2566.1	2449.2	2169.9	2149.7	2039.3	2128.5	2204.9	2350.5
55°	2834.8	2825.2	2818.8	2815.7	2688.2	2430.1	2408.9	2294.2	2422.7	2476.8	2691.4
57.5°	3021.7	3016.4	3050.4	3104.5	3053.6	2694.6	2672.3	2561.8	2705.2	2743.4	3061.0
60°	3158.7	3161.9	3255.4	3393.4	3358.4	2981.3	2954.8	2857.1	2980.3	3014.3	3430.6
62.5°	3159.8	3191.6	3408.3	3655.8	3696.1	3311.7	3280.9	3174.6	3262.8	3262.8	3762.0
65°	2858.1	2894.3	3380.7	3720.6	4038.1	3704.6	3674.9	3508.2	3541.1	3496.5	4073.2
67.5°	2557.6	2600.0	3057.8	3725.9	4278.2	4125.2	4090.2	3841.7	3785.4	3672.8	4290.9
70°	2357.9	2387.6	2770.0	3656.8	4422.6	4565.0	4538.4	4158.2	3977.6	3820.4	4245.3
72.5°	1985.1	1974.5	2339.8	3328.7	4503.3	5064.1	5041.8	4502.3	4144.4	3750.3	3620.7
75°	1152.4	1165.1	1451.9	2438.6	4059.4	5324.4	5322.2	4796.5	4071.1	3312.7	2494.9
77.5°	332.4	342.0	476.9	1071.7	2567.1	4541.6	4687.1	4386.5	3441.2	2361.1	1293.7
80°	145.5	152.9	207.1	356.9	1105.7	2966.5	3093.9	2966.5	2075.4	1083.4	507.7
82.5°	86.0	91.3	134.9	220.9	530.0	1411.5	1583.6	1382.9	895.4	459.9	210.3
85°	48.9	51.0	77.5	140.2	333.5	493.9	554.4	519.4	436.5	261.3	110.5
87.5°	22.3	23.4	38.2	65.9	186.9	166.8	173.1	229.4	252.8	159.3	55.2
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°	834.8	834.8	834.8	834.8	834.8	834.8	834.8	834.8	834.8	834.8	834.8
2.5°	833.8	830.6	824.2	822.1	818.9	819.9	821.0	821.0	822.1	818.9	818.9
5°	825.3	819.9	813.6	813.6	813.6	822.1	829.5	833.8	835.9	835.9	833.8
7.5°	822.1	815.7	808.3	810.4	812.5	823.1	836.9	850.8	855.0	855.0	852.9
10°	828.4	822.1	816.8	819.9	825.3	833.8	844.4	857.1	867.7	868.8	867.7
12.5°	843.3	835.9	830.6	836.9	843.3	848.6	853.9	859.2	873.1	875.2	875.2
15°	867.7	860.3	853.9	859.2	861.4	861.4	861.4	861.4	875.2	877.3	877.3
17.5°	892.2	885.8	879.4	880.5	874.1	865.6	862.4	861.4	868.8	875.2	876.2
20°	915.5	910.2	903.9	893.2	877.3	861.4	856.1	856.1	860.3	869.9	869.9
22.5°	941.0	934.7	924.0	899.6	873.1	850.8	845.4	848.6	853.9	866.7	865.6
25°	969.7	961.2	943.2	897.5	859.2	832.7	833.8	843.3	852.9	866.7	866.7
27.5°	1001.6	989.9	953.8	880.5	828.4	803.0	812.5	834.8	848.6	863.5	865.6
30°	1036.6	1026.0	962.3	850.8	778.5	755.2	778.5	814.6	835.9	849.7	852.9
32.5°	1079.1	1070.6	969.7	812.5	713.7	693.6	727.5	772.2	806.1	822.1	825.3
35°	1132.2	1123.7	979.3	769.0	653.2	632.0	662.8	708.4	753.0	773.2	779.6
37.5°	1201.2	1188.5	987.8	722.2	602.2	577.8	592.7	634.1	674.4	702.1	709.5
40°	1289.4	1269.2	995.2	669.1	557.6	530.0	535.3	555.5	578.9	603.3	612.8
42.5°	1413.7	1373.3	996.3	612.8	511.9	486.4	484.3	490.7	490.7	490.7	493.9
45°	1586.8	1510.3	998.4	559.7	465.2	438.7	432.3	430.2	414.2	383.4	381.3
47.5°	1805.6	1689.8	1007.9	515.1	416.3	393.0	384.5	376.0	346.2	314.4	308.0
50°	2086.0	1898.0	1027.1	472.6	374.9	359.0	348.4	328.2	295.3	270.8	264.5
52.5°	2408.9	2145.5	1045.1	428.0	344.1	333.5	320.8	296.3	261.3	246.4	244.3
55°	2779.5	2421.6	1081.2	388.7	317.6	310.1	298.5	275.1	248.5	237.9	236.9
57.5°	3158.7	2730.7	1132.2	353.7	292.1	287.8	287.8	267.7	250.7	246.4	246.4
60°	3524.1	2996.2	1092.9	320.8	268.7	270.8	291.0	285.7	273.0	278.3	281.5
62.5°	3807.7	3152.3	886.9	294.2	251.7	270.8	322.9	322.9	308.0	305.9	305.9
65°	3928.7	3150.2	623.5	274.0	245.3	297.4	360.1	343.1	303.8	288.9	285.7
67.5°	3897.9	3012.1	430.2	260.2	243.2	325.0	377.0	329.3	284.6	271.9	262.3
70°	3627.1	2720.1	331.4	247.5	240.0	313.3	371.7	313.3	269.8	258.1	249.6
72.5°	2926.1	2181.6	275.1	234.7	227.3	290.0	353.7	298.5	258.1	245.3	236.9
75°	1866.1	1372.2	232.6	217.7	202.9	260.2	329.3	283.6	245.3	228.4	222.0
77.5°	897.5	591.6	202.9	197.6	182.7	241.1	304.8	264.5	228.4	214.5	210.3
80°	363.2	270.8	176.3	177.4	167.8	229.4	287.8	246.4	211.4	196.5	189.1
82.5°	189.1	157.2	148.7	152.9	152.9	218.8	275.1	231.5	196.5	190.1	165.7
85°	102.0	97.7	114.7	123.2	132.8	197.6	256.0	215.6	179.5	154.0	148.7
87.5°	49.9	63.7	64.8	74.3	92.4	158.3	215.6	180.6	149.8	124.3	122.1
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)