

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: P400471

Luminaire Tested: **ARCH-L-PA3-280-830-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400471  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-280-830-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28660 lumens  
Efficiency: N/A  
Efficacy: 102.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4

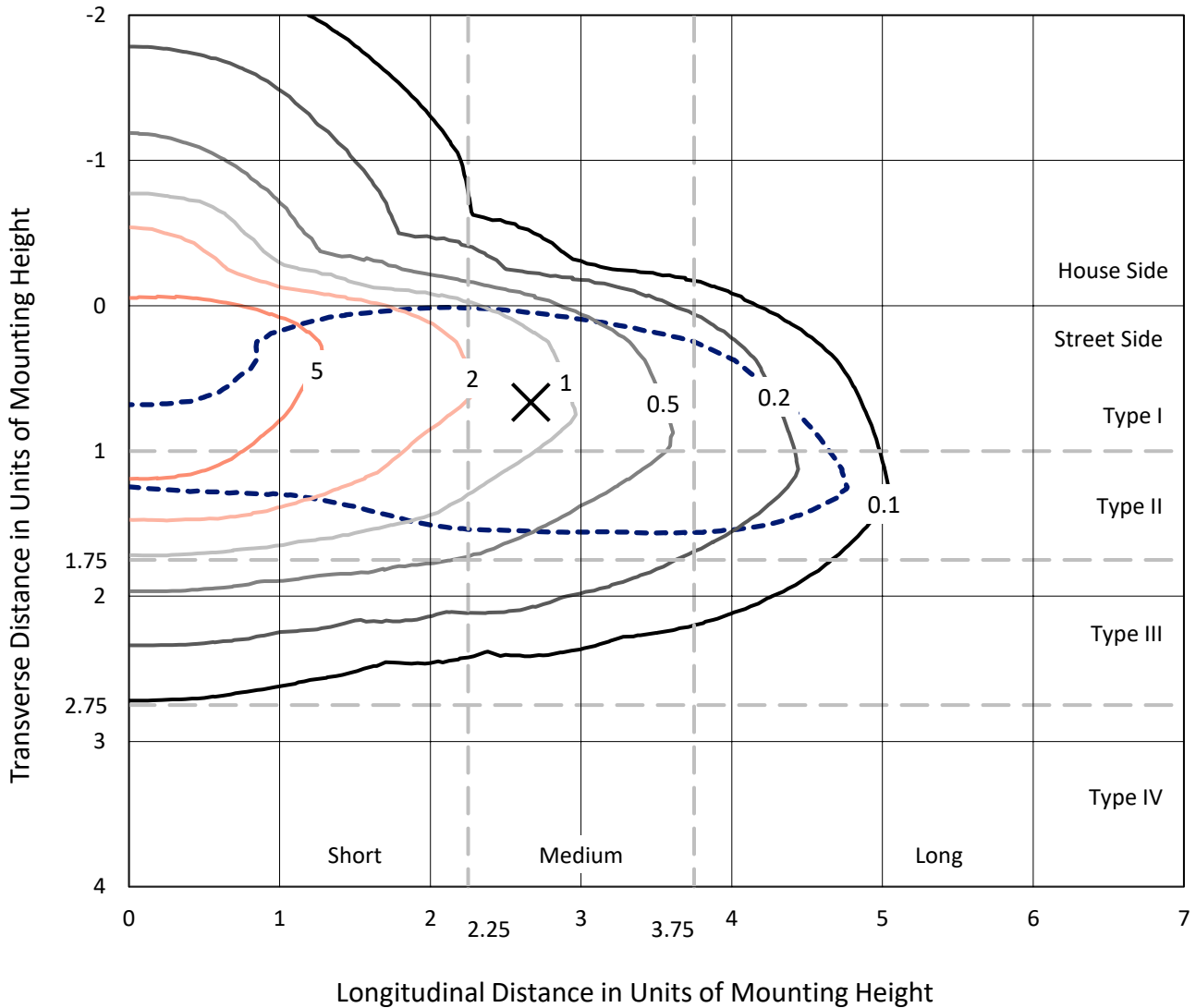
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

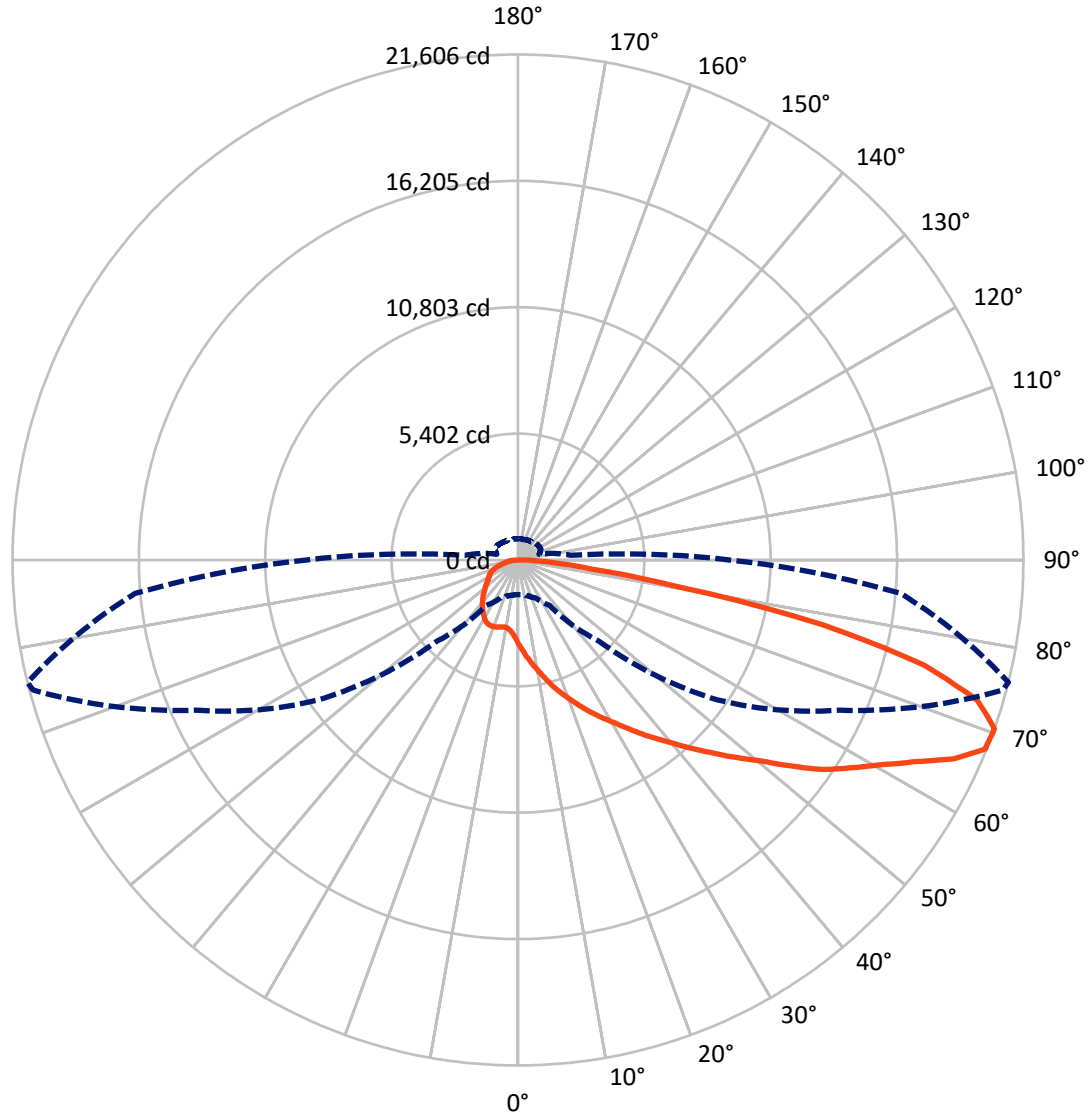
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4679.0	0.0	4679.0
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	23981.0	0.0	23981.0
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	28660.0	0.0	28660.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	372.4	1.3
10°-20°	1265.7	4.4
20°-30°	2264.4	7.9
30°-40°	3663.1	12.8
40°-50°	5299.2	18.5
50°-60°	6065.2	21.2
60°-70°	5579.3	19.5
70°-80°	3450.2	12.0
80°-90°	700.6	2.4
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°	28660.0	100.0
0°-180°	28660.0	100.0

**Coefficient of Utilization**



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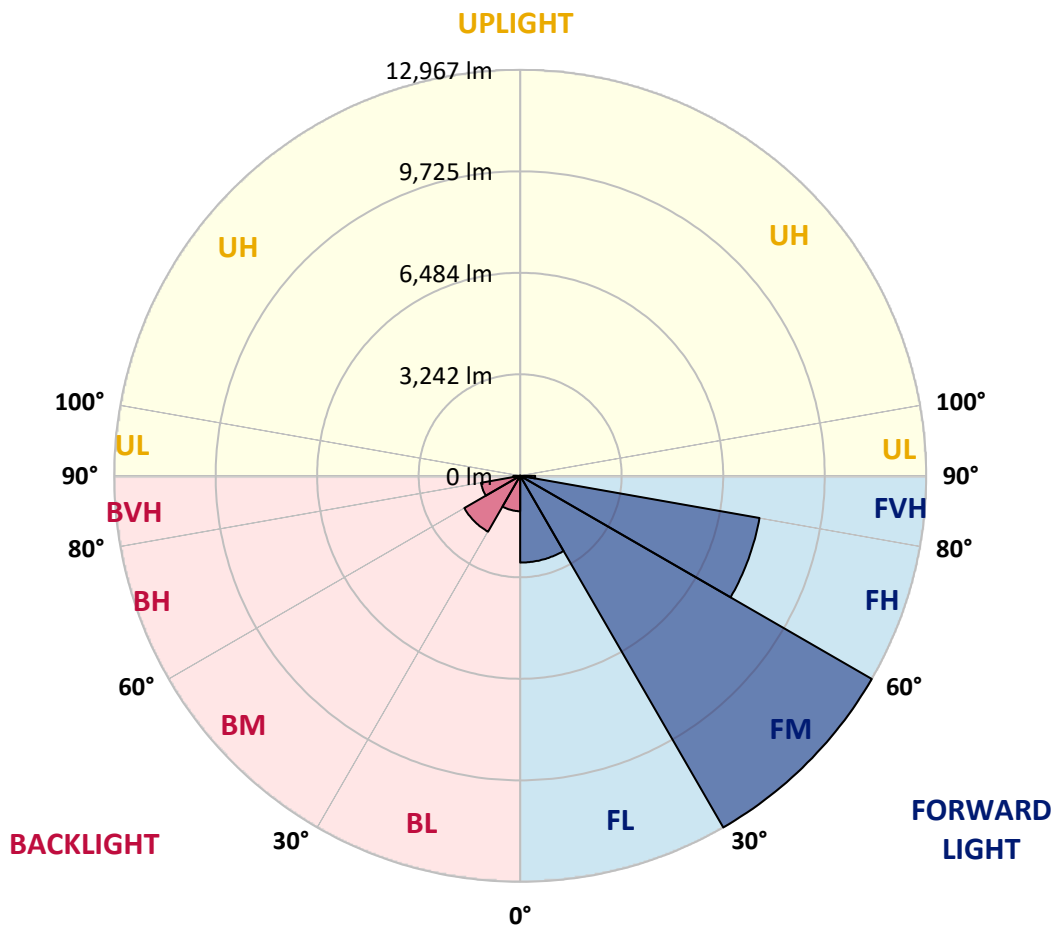
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2772.4	9.7			
FM (30°-60°)	12967.3	45.2			
FH (60°-80°)	7760.4	27.1			G4/12000
FVH (80°-90°)	481.0	1.7			G3/500
BL (0°-30°)	1130.1	3.9	B3/2500		
BM (30°-60°)	2060.1	7.2	B2/2500		
BH (60°-80°)	1269.1	4.4	B3/2500		G3/2500
BVH (80°-90°)	219.6	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3584.1	3584.1	3584.1	3584.1	3584.1	3584.1	3584.1	3584.1	3584.1	3584.1	3584.1
2.5°	4567.7	4533.8	4530.0	4477.2	4428.2	4296.3	4202.1	4036.3	3870.5	3866.7	3700.9
5°	5280.0	5246.1	5227.2	5163.2	5080.2	4906.9	4737.3	4481.0	4198.4	4179.5	3866.7
7.5°	5762.4	5732.2	5694.5	5668.2	5589.0	5434.5	5227.2	4922.0	4533.8	4496.1	4058.9
10°	6086.5	6067.6	6060.1	6041.3	5992.3	5867.9	5668.2	5344.0	4869.2	4827.7	4262.4
12.5°	6225.9	6218.4	6252.3	6305.1	6323.9	6274.9	6082.7	5777.5	5238.5	5193.3	4507.4
15°	6063.9	6071.4	6158.1	6339.0	6531.2	6636.7	6523.7	6225.9	5656.9	5592.8	4793.8
17.5°	5988.5	5999.8	6060.1	6233.5	6504.8	6832.7	6885.5	6651.8	6060.1	5969.7	5095.3
20°	6120.4	6135.5	6180.7	6316.4	6504.8	6855.3	7130.4	7058.8	6455.8	6361.6	5385.5
22.5°	6455.8	6474.7	6470.9	6557.6	6685.7	6926.9	7266.1	7443.2	6870.4	6764.9	5687.0
25°	7171.9	7156.8	7028.7	6987.2	7021.1	7175.6	7447.0	7812.6	7303.8	7198.3	6003.6
27.5°	8144.2	8125.4	7891.7	7680.7	7492.2	7560.1	7703.3	8110.3	7744.7	7624.1	6305.1
30°	9184.4	9161.8	8890.4	8547.5	8129.1	8031.1	8012.3	8370.3	8189.4	8061.3	6625.4
32.5°	10198.2	10179.3	9889.1	9489.6	8913.0	8619.1	8438.2	8660.5	8694.4	8570.1	6975.9
35°	11121.5	11121.5	10872.8	10397.9	9745.9	9301.2	9003.5	9018.6	9274.8	9131.6	7375.4
37.5°	11943.1	11939.3	11668.0	11200.6	10575.0	10066.3	9696.9	9452.0	9828.8	9704.5	7793.7
40°	12595.1	12568.7	12368.9	11961.9	11332.6	10827.5	10454.4	9960.7	10446.9	10333.8	8238.4
42.5°	13069.9	13054.9	12919.2	12564.9	11965.7	11490.8	11234.6	10601.4	11147.9	11034.8	8758.5
45°	13254.6	13284.7	13284.7	12949.3	12474.5	12041.1	11928.0	11306.2	11905.4	11792.3	9316.3
47.5°	12956.9	13036.0	13198.1	13220.7	12802.4	12508.4	12546.1	12014.7	12685.5	12625.2	9926.8
50°	12026.0	12173.0	12527.2	13167.9	12934.3	12866.4	13073.7	12738.3	13522.2	13503.3	10669.3
52.5°	9625.3	9983.3	11087.6	12237.0	12843.8	13032.2	13597.6	13552.3	14600.0	14630.2	11637.8
55°	7382.9	7518.6	8796.2	10752.2	12289.8	12979.5	13948.0	14347.5	15768.3	15806.0	12527.2
57.5°	5969.7	6060.1	6757.3	8796.2	11027.3	12693.1	14223.2	14811.1	16665.3	16763.3	13318.7
60°	4729.7	4861.7	5329.0	6730.9	9259.8	12003.4	14415.4	15327.4	17630.1	17777.1	14264.6
62.5°	3516.2	3580.3	4021.2	4986.0	7330.2	10763.5	14313.6	15888.9	18813.5	18990.6	15402.8
65°	2502.4	2559.0	2871.8	3546.4	5419.4	9086.4	13721.9	16307.3	20298.3	20479.2	16548.5
67.5°	1873.1	1895.7	2072.8	2479.8	3651.9	7058.8	12523.5	16235.7	21383.7	21545.8	17008.2
70°	1481.1	1488.6	1575.3	1793.9	2374.3	4914.4	10424.3	15184.2	21462.9	21606.1	16427.9
72.5°	1228.6	1224.8	1273.8	1379.4	1654.5	3109.2	7722.1	13232.0	20445.3	20543.3	14807.3
75°	1013.8	1021.3	1055.2	1115.5	1262.5	2050.2	5004.9	10556.2	18037.1	17931.6	12425.5
77.5°	851.7	848.0	863.0	915.8	1021.3	1473.6	2932.1	7627.9	13367.7	13314.9	8155.5
80°	685.9	693.4	716.1	761.3	859.3	1123.1	1733.6	4759.9	7171.9	6979.7	3896.9
82.5°	459.8	531.4	576.6	629.4	742.4	829.1	1100.5	2419.5	3207.2	3158.2	1767.5
85°	218.6	290.2	429.6	489.9	603.0	520.1	746.2	1153.2	1605.5	1586.6	636.9
87.5°	45.2	45.2	229.9	275.1	373.1	222.4	414.6	501.2	776.4	727.4	260.0
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°	3584.1	3584.1	3584.1	3584.1	3584.1	3584.1	3584.1	3584.1	3584.1	3584.1	3584.1
2.5°	3602.9	3501.1	3297.6	3135.6	2969.8	2875.5	2758.7	2702.2	2690.9	2660.7	2683.3
5°	3667.0	3467.2	3082.8	2830.3	2660.7	2577.8	2536.4	2521.3	2517.5	2510.0	2510.0
7.5°	3753.6	3448.4	2947.1	2690.9	2581.6	2555.2	2566.5	2589.1	2592.9	2600.4	2596.7
10°	3859.2	3452.2	2871.8	2656.9	2604.2	2608.0	2645.6	2675.8	2690.9	2702.2	2698.4
12.5°	4006.2	3497.4	2860.5	2679.6	2656.9	2672.0	2709.7	2739.9	2754.9	2758.7	2758.7
15°	4198.4	3591.6	2886.8	2728.6	2709.7	2721.0	2743.6	2754.9	2758.7	2754.9	2754.9
17.5°	4409.4	3704.7	2924.5	2758.7	2728.6	2717.2	2709.7	2698.4	2675.8	2660.7	2660.7
20°	4612.9	3806.4	2943.4	2754.9	2702.2	2656.9	2611.7	2555.2	2517.5	2487.4	2487.4
22.5°	4816.4	3900.6	2943.4	2713.5	2630.6	2543.9	2449.7	2359.2	2302.7	2265.0	2265.0
25°	5031.2	3991.1	2920.8	2641.9	2517.5	2393.1	2265.0	2151.9	2095.4	2057.7	2050.2
27.5°	5212.1	4043.8	2860.5	2540.1	2378.1	2219.8	2072.8	1956.0	1914.5	1880.6	1880.6
30°	5404.3	4077.8	2747.4	2408.2	2219.8	2038.9	1888.1	1793.9	1748.7	1699.7	1695.9
32.5°	5619.2	4100.4	2619.3	2268.8	2057.7	1865.5	1737.4	1662.0	1564.0	1511.3	1503.7
35°	5867.9	4130.5	2483.6	2110.5	1895.7	1722.3	1646.9	1522.6	1428.3	1383.1	1379.4
37.5°	6131.7	4153.1	2336.6	1971.0	1748.7	1628.1	1552.7	1405.7	1322.8	1255.0	1247.4
40°	6410.6	4153.1	2185.9	1835.4	1631.9	1586.6	1443.4	1311.5	1172.1	1138.2	1130.6
42.5°	6719.6	4145.6	2035.1	1703.5	1522.6	1492.4	1379.4	1239.9	1168.3	1138.2	1130.6
45°	7047.5	4119.2	1891.9	1552.7	1409.5	1349.2	1262.5	1224.8	1194.7	1194.7	1194.7
47.5°	7420.6	4096.6	1729.8	1417.0	1326.6	1258.8	1194.7	1172.1	1168.3	1179.6	1190.9
50°	7899.2	4089.1	1594.2	1319.1	1262.5	1183.4	1175.8	1157.0	1160.8	1160.8	1160.8
52.5°	8479.6	4021.2	1466.0	1247.4	1198.5	1104.2	1126.8	1145.7	1153.2	1149.5	1145.7
55°	8905.5	3900.6	1356.7	1198.5	1153.2	1074.1	1104.2	1134.4	1141.9	1130.6	1130.6
57.5°	9289.9	3731.0	1270.1	1160.8	1123.1	1055.2	1089.2	1119.3	1111.8	1108.0	1104.2
60°	9730.8	3569.0	1202.2	1141.9	1092.9	1047.7	1077.9	1096.7	1085.4	1077.9	1074.1
62.5°	10209.5	3410.7	1153.2	1141.9	1070.3	1043.9	1066.5	1074.1	1051.5	1043.9	1043.9
65°	10431.8	3162.0	1100.5	1141.9	1059.0	1036.4	1043.9	1036.4	1013.8	1013.8	1010.0
67.5°	10066.3	2751.2	1032.6	1126.8	1074.1	1025.1	1010.0	998.7	972.3	972.3	964.8
70°	9056.2	2261.2	934.6	1077.9	1077.9	1021.3	964.8	938.4	908.3	919.6	904.5
72.5°	7737.2	1793.9	814.0	994.9	1055.2	1017.6	915.8	874.3	848.0	859.3	836.7
75°	6267.4	1390.7	670.8	863.0	998.7	998.7	866.8	810.3	780.1	780.1	753.7
77.5°	3994.8	1028.9	546.5	716.1	897.0	972.3	825.4	738.7	693.4	682.1	663.3
80°	1978.6	723.6	448.5	569.1	765.1	912.0	795.2	655.8	591.7	569.1	535.2
82.5°	1051.5	501.2	358.0	444.7	610.5	821.6	757.5	565.3	486.2	452.2	414.6
85°	471.1	309.0	286.4	339.2	463.6	674.6	682.1	463.6	373.1	444.7	327.9
87.5°	173.4	139.4	139.4	173.4	267.6	282.7	482.4	297.7	237.4	162.1	128.1
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)