

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: P237332

Luminaire Tested: **ARCH-L-AF72-190-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237332
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-190-D-U-T4W
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23727.3 lumens
Efficiency: N/A
Efficacy: 125.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 189
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

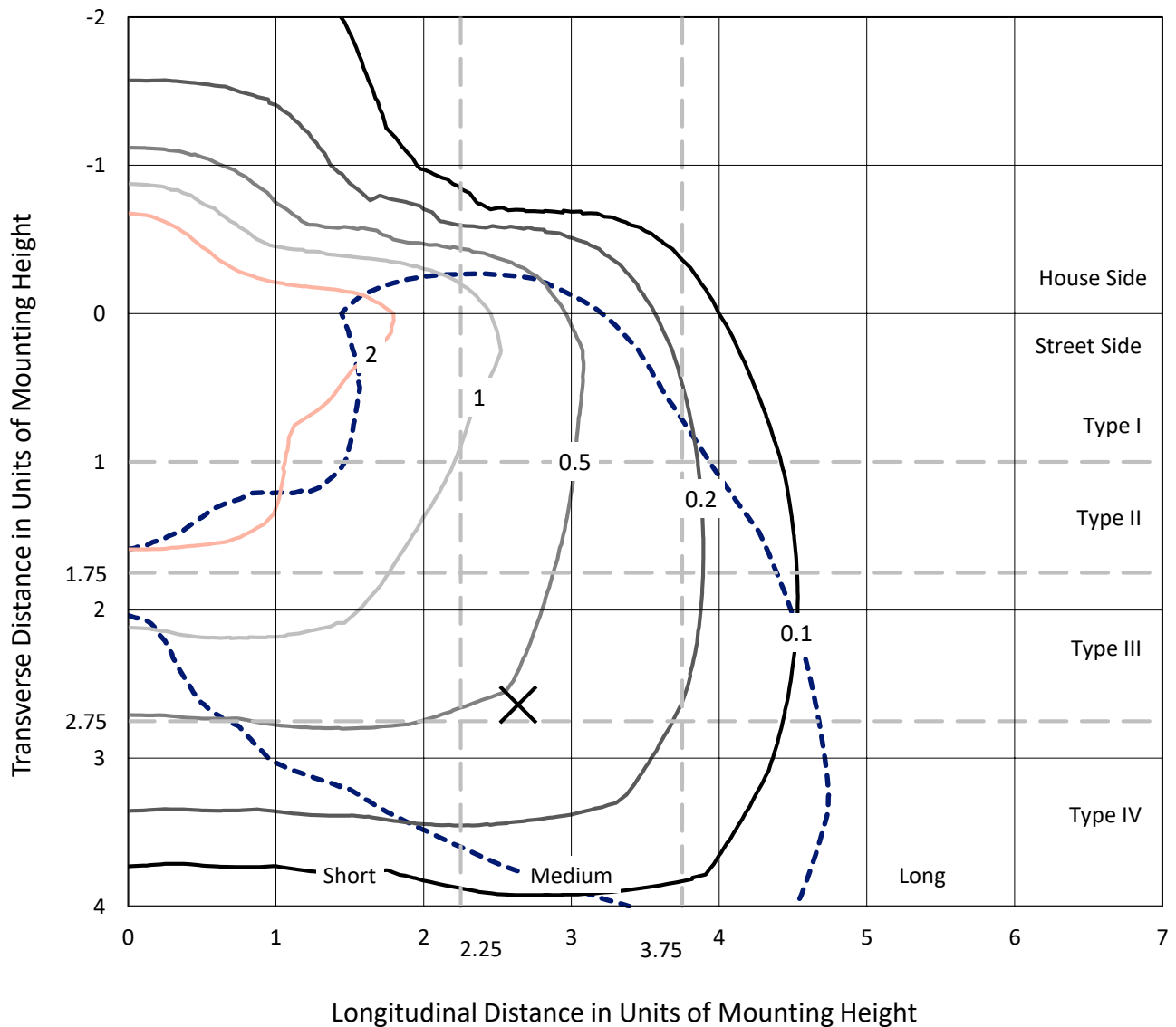


REPORT NUMBER: P237332

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

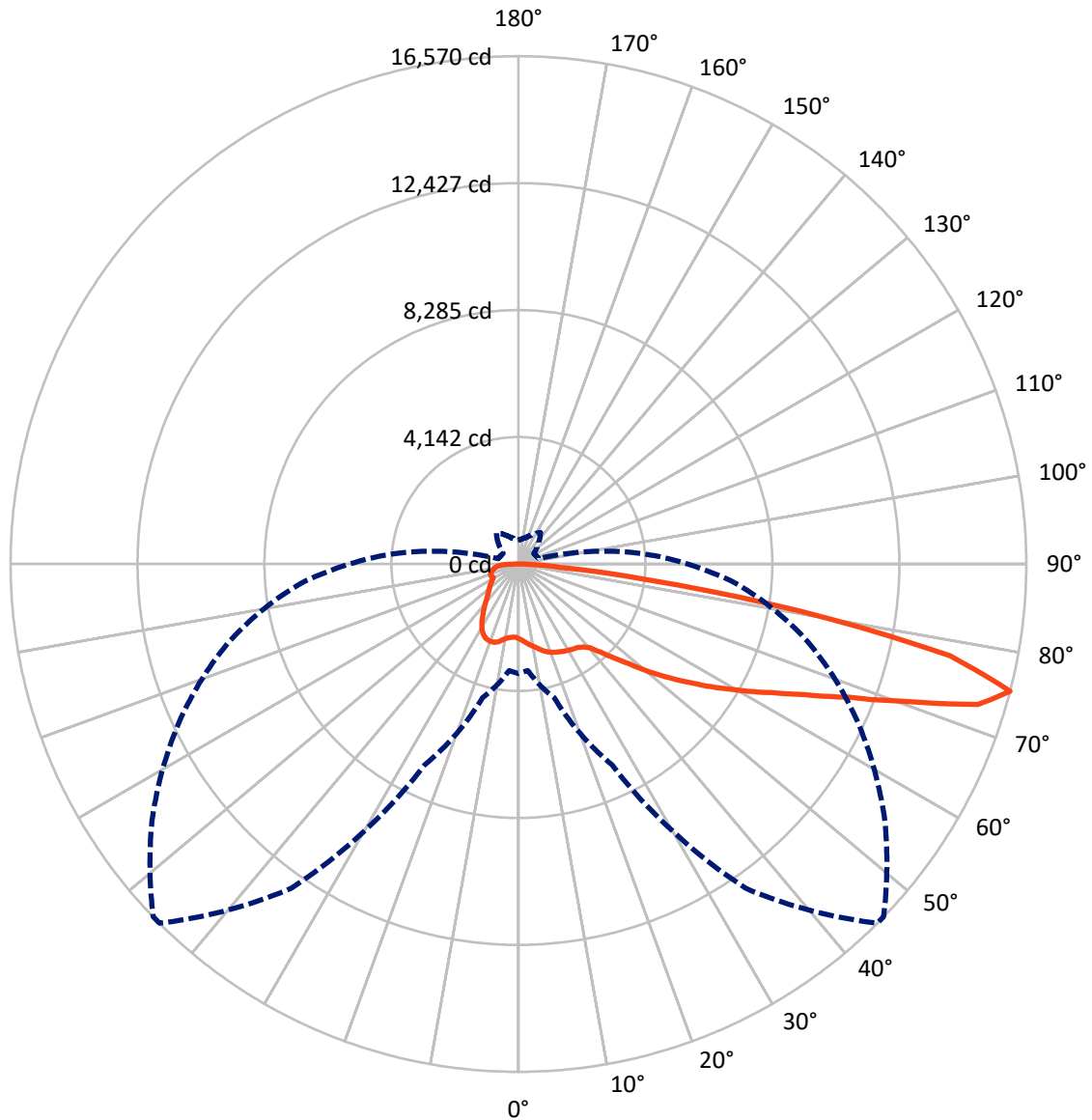


Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P237332

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T4W

Luminous Intensity Polar Plot



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

REPORT NUMBER: P237332

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5496.6	0.0	5496.6
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	18230.7	0.0	18230.7
	% Fixture	76.8	0.0	76.8
Total	Lumens	23727.3	0.0	23727.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.1	1.0
10°-20°	781.1	3.3
20°-30°	1340.4	5.6
30°-40°	1874.7	7.9
40°-50°	2750.1	11.6
50°-60°	4283.9	18.1
60°-70°	6164.2	26.0
70°-80°	5369.7	22.6
80°-90°	922.2	3.9
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°	23727.3	100.0
0°-180°	23727.3	100.0

Coefficient of Utilization



REPORT NUMBER: P237332

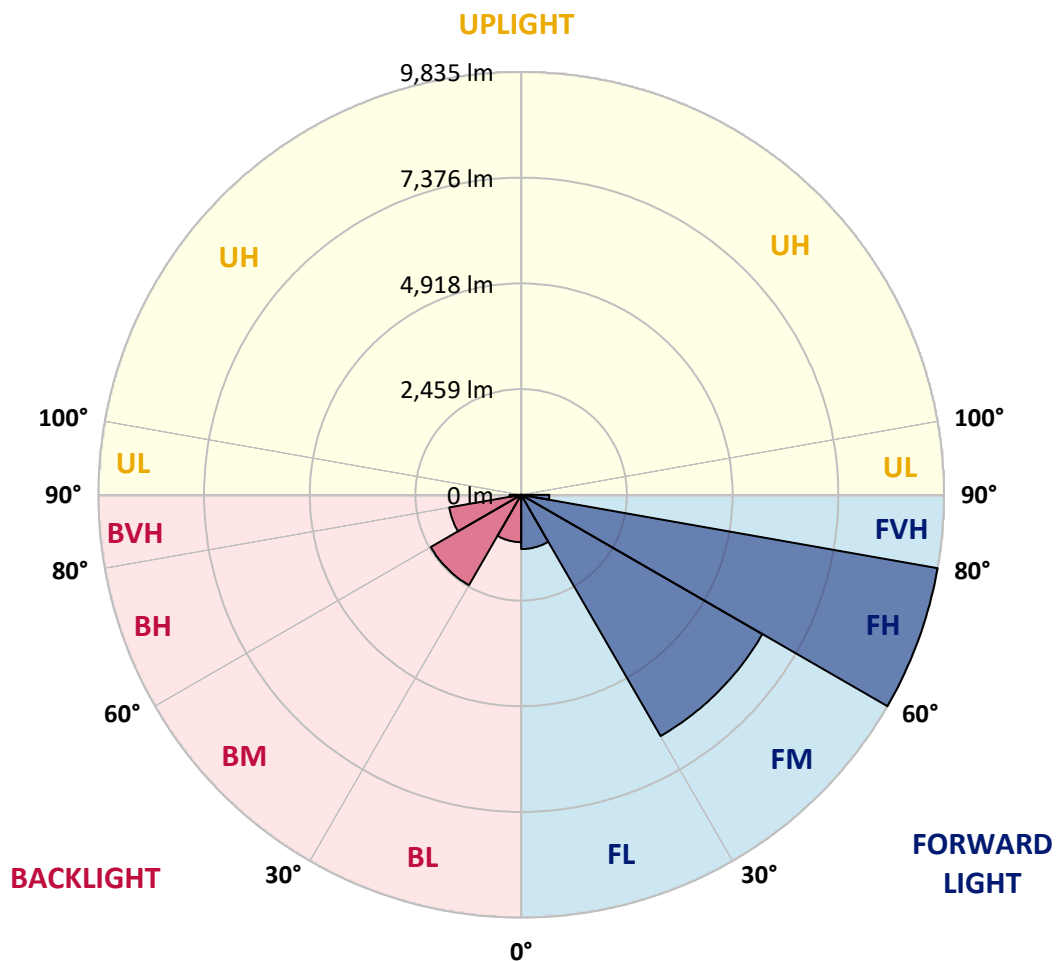
CATALOG NUMBER: ARCH-L-AF72-190-D-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1261.7	5.3			
FM	(30°-60°)	6479.5	27.3			
FH	(60°-80°)	9835.2	41.5			G4/12000
FVH	(80°-90°)	654.3	2.8			G4/750
BL	(0°-30°)	1100.9	4.6	B3/2500		
BM	(30°-60°)	2429.2	10.2	B2/2500		
BH	(60°-80°)	1698.6	7.2	B3/2500		G3/2500
BVH	(80°-90°)	267.9	1.1			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium





REPORT NUMBER: P237332

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2432.4	2432.4	2432.4	2432.4	2432.4	2432.4	2432.4	2432.4	2432.4	2432.4	2432.4
2.5°	2552.4	2534.0	2534.0	2520.0	2520.0	2497.0	2487.8	2483.1	2460.1	2446.3	2432.4
5°	2700.1	2677.1	2672.4	2640.1	2626.2	2575.5	2570.9	2538.6	2497.0	2455.5	2423.2
7.5°	2834.0	2820.1	2797.1	2764.7	2723.2	2658.5	2653.9	2603.2	2534.0	2478.5	2432.4
10°	2930.9	2921.6	2889.3	2847.8	2801.7	2737.0	2732.4	2677.1	2593.9	2529.3	2464.7
12.5°	3046.2	3032.4	2990.9	2935.5	2884.7	2824.7	2820.1	2773.9	2681.7	2598.5	2515.4
15°	3157.0	3138.6	3087.8	3032.4	2977.0	2926.3	2926.3	2875.5	2778.5	2681.7	2584.7
17.5°	3212.4	3203.2	3152.4	3092.4	3046.2	3009.3	3004.7	2958.6	2861.6	2760.1	2653.9
20°	3230.9	3235.5	3189.4	3124.7	3092.4	3074.0	3069.4	3037.0	2930.9	2834.0	2732.4
22.5°	3226.3	3240.1	3203.2	3133.9	3124.7	3124.7	3124.7	3087.8	3004.7	2907.8	2806.3
25°	3244.7	3263.2	3235.5	3152.4	3152.4	3170.8	3170.8	3152.4	3078.6	2995.5	2893.9
27.5°	3309.3	3323.2	3300.1	3184.8	3189.4	3217.1	3212.4	3217.1	3170.8	3092.4	2990.9
30°	3387.8	3406.2	3378.6	3235.5	3230.9	3258.6	3258.6	3281.6	3249.3	3166.2	3083.2
32.5°	3600.1	3595.5	3507.8	3290.8	3277.0	3304.7	3304.7	3327.8	3309.3	3244.7	3166.2
35°	4232.5	4163.2	3969.4	3470.9	3332.5	3346.3	3346.3	3387.8	3397.0	3346.3	3277.0
37.5°	4878.7	4855.5	4707.8	3950.9	3535.5	3433.9	3429.3	3489.4	3530.9	3489.4	3443.2
40°	5529.5	5510.9	5478.6	4592.4	3960.1	3590.9	3577.1	3627.8	3701.6	3673.9	3646.3
42.5°	6134.0	6124.8	6157.1	5224.8	4500.2	3927.8	3886.3	3826.2	3932.4	3923.2	3923.2
45°	6609.5	6632.5	6651.0	5815.6	5086.3	4361.7	4310.9	4107.9	4250.9	4287.8	4315.5
47.5°	6877.2	6895.6	6960.3	6392.5	5672.5	4864.7	4827.8	4495.6	4684.8	4795.6	4874.1
50°	7260.3	7209.5	7264.9	6955.7	6378.7	5520.1	5418.7	5017.1	5257.1	5451.0	5635.5
52.5°	7629.5	7546.4	7592.5	7606.5	7181.8	6161.7	6055.6	5630.9	5931.0	6235.6	6563.3
55°	7961.8	7957.2	8003.4	8238.7	7957.2	6849.5	6729.5	6309.5	6743.3	7071.0	7624.9
57.5°	8229.5	8275.7	8478.7	8972.6	8852.6	7597.1	7463.3	7098.7	7611.1	7938.7	8857.2
60°	8543.4	8617.2	8954.2	9595.7	9669.5	8381.9	8243.3	7980.2	8501.8	8834.1	10283.4
62.5°	8649.6	8755.6	9448.0	10251.1	10523.4	9240.3	9115.7	8940.3	9438.8	9738.8	11705.0
65°	7943.3	8146.5	9720.3	10588.1	11441.9	10274.2	10168.0	10015.7	10371.1	10569.5	12669.7
67.5°	7749.5	7841.8	9189.6	11072.7	12305.1	11603.4	11497.4	11234.3	11243.5	11160.4	12983.5
70°	7477.2	7578.7	8644.9	11437.3	13542.0	13422.0	13292.7	12517.3	12042.0	11538.9	12365.0
72.5°	6369.4	6337.2	7449.4	10454.1	14137.4	15674.4	15522.1	13897.4	12632.7	11211.1	10435.7
75°	3577.1	3484.7	4518.6	7232.6	12909.6	16569.8	16565.2	14594.3	12217.3	9766.5	7103.3
77.5°	1038.5	1010.8	1490.8	3032.4	8691.1	14395.9	14571.2	13163.5	10195.8	7015.6	3900.1
80°	489.3	498.5	641.6	1001.6	3710.9	9291.1	9794.1	8668.0	6092.5	3235.5	1610.8
82.5°	309.2	313.8	438.4	646.2	1569.3	4218.6	4634.0	3900.1	2414.0	1398.5	710.7
85°	193.8	193.8	290.8	424.6	936.9	1347.7	1463.1	1329.3	1033.9	761.6	387.7
87.5°	106.2	106.2	175.4	244.6	512.3	433.8	447.7	530.8	646.2	466.2	193.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P237332

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2432.4	2432.4	2432.4	2432.4	2432.4	2432.4	2432.4	2432.4	2432.4	2432.4	2432.4
2.5°	2427.8	2418.6	2404.7	2400.0	2395.4	2390.8	2395.4	2404.7	2395.4	2395.4	2400.0
5°	2414.0	2404.7	2386.2	2386.2	2390.8	2395.4	2418.6	2432.4	2437.0	2437.0	2437.0
7.5°	2414.0	2400.0	2386.2	2390.8	2400.0	2418.6	2455.5	2478.5	2497.0	2501.6	2501.6
10°	2437.0	2418.6	2409.4	2418.6	2446.3	2460.1	2497.0	2534.0	2557.0	2566.3	2566.3
12.5°	2478.5	2460.1	2460.1	2478.5	2515.4	2534.0	2566.3	2593.9	2621.6	2635.4	2635.4
15°	2547.8	2524.7	2529.3	2561.7	2603.2	2621.6	2644.7	2653.9	2677.1	2695.5	2695.5
17.5°	2612.4	2589.3	2598.5	2635.4	2663.2	2672.4	2686.3	2681.7	2690.9	2704.7	2709.3
20°	2686.3	2663.2	2667.8	2690.9	2695.5	2686.3	2686.3	2672.4	2667.8	2690.9	2700.1
22.5°	2760.1	2737.0	2732.4	2718.6	2695.5	2672.4	2658.5	2644.7	2635.4	2658.5	2667.8
25°	2847.8	2815.5	2792.5	2732.4	2672.4	2630.8	2612.4	2603.2	2598.5	2621.6	2630.8
27.5°	2944.7	2912.4	2843.2	2713.9	2617.0	2547.8	2534.0	2534.0	2543.2	2557.0	2566.3
30°	3037.0	3004.7	2880.1	2672.4	2520.0	2418.6	2404.7	2418.6	2441.6	2455.5	2469.3
32.5°	3129.3	3097.0	2903.1	2607.8	2377.0	2247.7	2238.5	2261.6	2298.6	2307.8	2317.0
35°	3254.0	3221.7	2930.9	2515.4	2197.0	2058.5	2049.3	2063.2	2095.4	2109.3	2123.1
37.5°	3429.3	3410.9	2972.4	2414.0	2030.9	1878.5	1850.8	1841.6	1860.0	1855.4	1873.9
40°	3660.1	3673.9	3046.2	2280.1	1869.3	1712.3	1652.4	1624.7	1606.2	1569.3	1587.7
42.5°	3997.1	4006.3	3129.3	2127.7	1730.8	1555.4	1476.9	1426.2	1389.3	1329.3	1338.5
45°	4491.0	4412.5	3226.3	1966.2	1606.2	1430.8	1338.5	1278.5	1227.7	1177.0	1181.6
47.5°	5146.4	4906.3	3332.5	1832.4	1481.5	1329.3	1246.2	1177.0	1117.0	1075.4	1080.0
50°	5954.1	5520.1	3438.5	1707.7	1356.9	1250.8	1177.0	1103.2	1043.1	1001.6	997.0
52.5°	7020.2	6258.7	3507.8	1569.3	1232.3	1181.6	1117.0	1047.7	973.8	923.1	918.5
55°	8128.0	7117.2	3567.8	1403.1	1112.4	1103.2	1070.8	992.4	904.6	840.0	830.8
57.5°	9346.5	8035.7	3614.0	1241.6	1020.0	1038.5	1029.3	936.9	840.0	780.0	775.4
60°	10454.1	8986.4	3466.3	1098.5	936.9	973.8	983.2	904.6	853.9	867.8	872.4
62.5°	11571.1	9720.3	2903.1	992.4	881.6	932.3	1010.8	1006.2	983.2	1006.2	1010.8
65°	11972.7	9872.6	2058.5	904.6	826.1	950.8	1098.5	1089.2	983.2	941.5	932.3
67.5°	11746.5	9420.4	1384.7	835.4	784.6	973.8	1190.8	1089.2	946.2	890.8	872.4
70°	10671.1	8308.0	1015.4	766.2	747.7	969.2	1241.6	1084.6	927.7	867.8	844.7
72.5°	8511.1	6410.9	816.9	701.5	692.3	946.2	1269.3	1075.4	909.3	844.7	816.9
75°	5510.9	3987.9	687.7	637.0	609.3	909.3	1255.5	1047.7	886.2	803.1	784.6
77.5°	2557.0	1717.0	586.2	563.1	530.8	853.9	1213.9	992.4	835.4	757.0	733.9
80°	1190.8	812.3	493.9	489.3	475.4	807.7	1158.5	927.7	775.4	710.7	673.8
82.5°	637.0	489.3	401.5	401.5	415.4	752.4	1089.2	849.3	696.9	664.6	567.7
85°	337.0	281.5	290.8	313.8	355.4	664.6	997.0	766.2	609.3	507.7	493.9
87.5°	170.7	180.0	180.0	212.4	272.3	540.0	821.5	632.3	516.9	415.4	406.2
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)