

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: P399442

Luminaire Tested: **ARCH-L-PA3-140-750-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399442  
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-L-PA3-140-750-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22383 lumens  
Efficiency: N/A  
Efficacy: 156.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

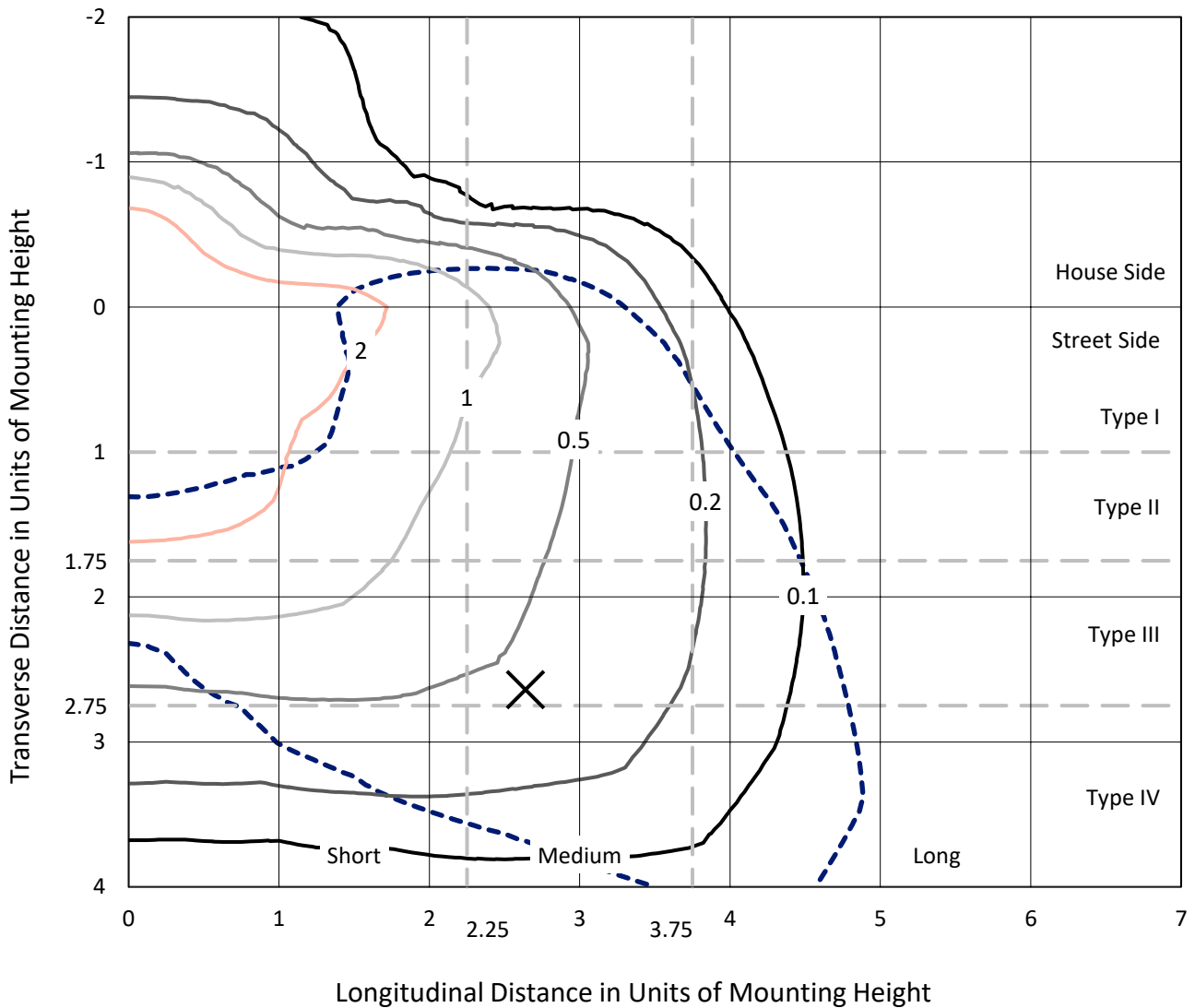
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399442  
 CATALOG NUMBER: ARCH-L-PA3-140-750-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

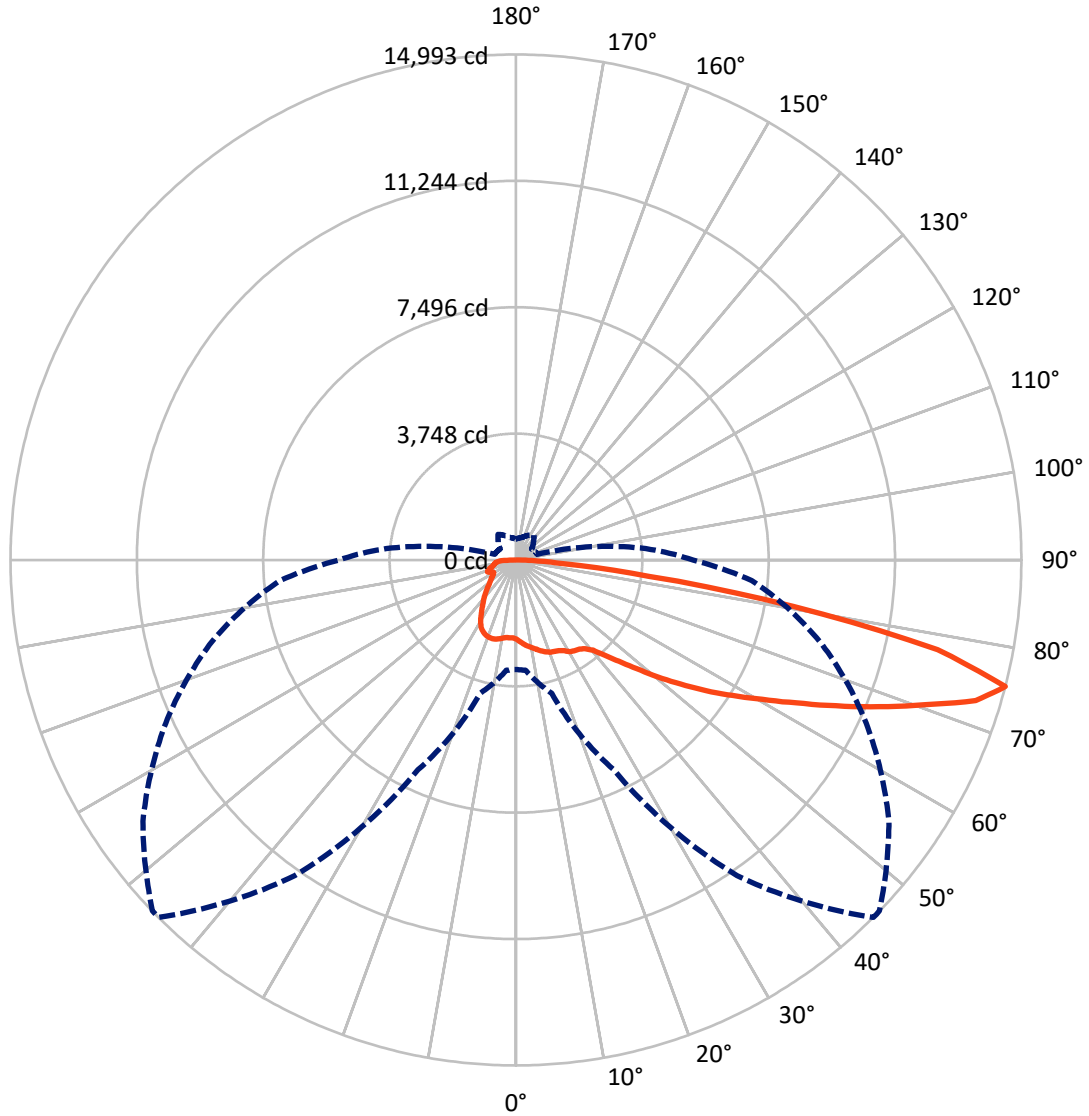
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P399442  
CATALOG NUMBER: ARCH-L-PA3-140-750-U-T4W

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P399442  
 CATALOG NUMBER: ARCH-L-PA3-140-750-U-T4W

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4946.5	0.0	4946.5
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	17436.5	0.0	17436.5
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	22383.0	0.0	22383.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.5	1.0
10°-20°	739.8	3.3
20°-30°	1261.3	5.6
30°-40°	1767.3	7.9
40°-50°	2596.3	11.6
50°-60°	4132.1	18.5
60°-70°	5877.9	26.3
70°-80°	4921.6	22.0
80°-90°	854.1	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°	22383.0	100.0
0°-180°	22383.0	100.0

**Coefficient of Utilization**

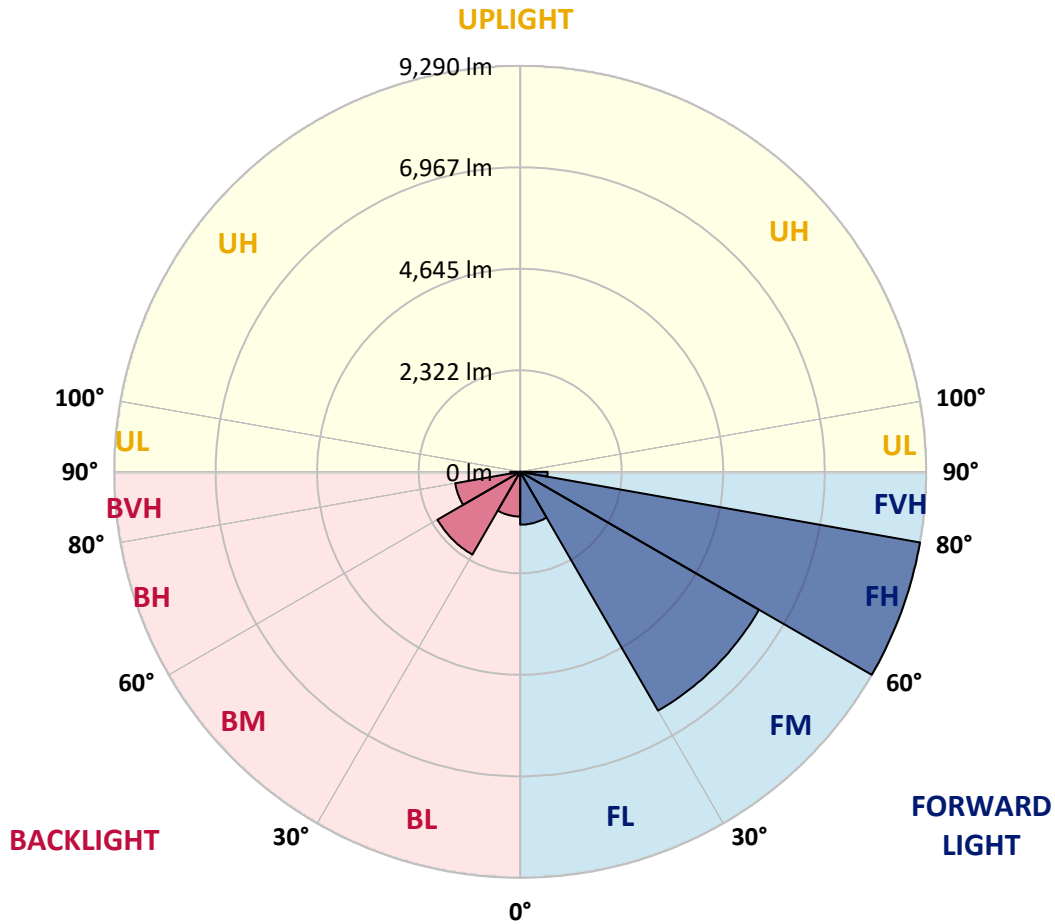


REPORT NUMBER: P399442  
 CATALOG NUMBER: ARCH-L-PA3-140-750-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1209.9	5.4			
FM (30°-60°)	6309.1	28.2			
FH (60°-80°)	9289.5	41.5			G4/12000
FVH (80°-90°)	627.9	2.8			G4/750
BL (0°-30°)	1023.7	4.6	B3/2500		
BM (30°-60°)	2186.6	9.8	B2/2500		
BH (60°-80°)	1510.0	6.7	B3/2500		G3/2500
BVH (80°-90°)	226.2	1.0			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: P399442

CATALOG NUMBER: ARCH-L-PA3-140-750-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2350.7	2350.7	2350.7	2350.7	2350.7	2350.7	2350.7	2350.7	2350.7	2350.7	2350.7
2.5°	2485.3	2473.3	2467.3	2467.3	2443.4	2428.5	2425.5	2404.5	2386.6	2368.6	2353.7
5°	2628.8	2619.9	2601.9	2587.0	2554.1	2512.2	2506.2	2461.4	2416.5	2374.6	2338.7
7.5°	2760.4	2742.5	2721.6	2691.6	2637.8	2581.0	2572.0	2509.2	2446.4	2383.6	2335.8
10°	2871.1	2853.1	2823.2	2781.4	2712.6	2643.8	2634.8	2569.0	2503.2	2428.5	2359.7
12.5°	2975.8	2960.8	2916.0	2859.1	2778.4	2715.6	2706.6	2649.8	2581.0	2497.2	2407.5
15°	3065.5	3050.5	3002.7	2936.9	2844.2	2796.3	2784.4	2730.5	2661.7	2572.0	2479.3
17.5°	3110.3	3110.3	3059.5	2987.7	2901.0	2865.1	2856.1	2790.3	2727.5	2640.8	2548.1
20°	3125.3	3131.3	3095.4	3008.7	2933.9	2918.9	2910.0	2856.1	2784.4	2700.6	2613.9
22.5°	3134.3	3146.2	3116.3	3017.6	2954.8	2945.9	2939.9	2904.0	2847.2	2766.4	2679.7
25°	3164.2	3164.2	3143.2	3032.6	2981.7	2978.8	2978.8	2957.8	2918.9	2850.2	2763.4
27.5°	3209.0	3206.1	3179.1	3065.5	3041.6	3050.5	3047.5	3044.6	3017.6	2948.8	2856.1
30°	3283.8	3283.8	3253.9	3131.3	3116.3	3155.2	3158.2	3164.2	3122.3	3014.6	2939.9
32.5°	3397.5	3385.5	3355.6	3197.1	3173.2	3209.0	3215.0	3212.0	3176.1	3074.5	3038.6
35°	3747.4	3720.5	3612.8	3343.6	3224.0	3244.9	3247.9	3262.9	3268.9	3188.1	3170.2
37.5°	4360.5	4324.6	4160.1	3690.5	3385.5	3334.7	3331.7	3370.5	3403.4	3331.7	3331.7
40°	5027.4	4997.5	4901.8	4288.7	3684.6	3517.1	3505.1	3541.0	3582.9	3532.0	3547.0
42.5°	5601.6	5625.5	5634.5	4922.7	4133.2	3858.0	3825.1	3774.3	3840.1	3795.2	3855.0
45°	6032.3	6020.3	6184.8	5571.7	4713.4	4285.7	4240.8	4103.3	4187.0	4184.0	4315.6
47.5°	6489.9	6468.9	6537.7	6181.8	5374.3	4809.1	4740.3	4536.9	4662.5	4749.3	4967.6
50°	6923.5	6929.5	6953.4	6663.3	6092.1	5446.1	5359.4	5087.2	5266.7	5449.1	5757.1
52.5°	7488.8	7446.9	7417.0	7225.6	6896.6	6110.0	6053.2	5742.2	5993.4	6208.7	6618.5
55°	7982.2	7955.3	7937.4	7928.4	7569.5	6842.8	6782.9	6460.0	6821.8	6974.4	7578.5
57.5°	8508.6	8493.6	8589.3	8741.9	8598.3	7587.5	7524.6	7213.6	7617.4	7725.0	8619.3
60°	8894.4	8903.4	9166.6	9555.3	9456.7	8394.9	8320.2	8045.0	8392.0	8487.7	9660.0
62.5°	8897.4	8987.1	9597.2	10294.1	10407.7	9325.1	9238.3	8939.3	9187.5	9187.5	10593.1
65°	8048.0	8149.7	9519.5	10476.5	11370.7	10431.6	10347.9	9878.3	9971.1	9845.4	11469.4
67.5°	7201.7	7321.3	8610.3	10491.4	12046.6	11616.0	11517.3	10817.4	10658.9	10341.9	12082.5
70°	6639.4	6723.1	7799.8	10297.0	12453.4	12854.1	12779.3	11708.7	11200.2	10757.6	11953.9
72.5°	5589.7	5559.7	6588.6	9372.9	12680.6	14259.7	14196.9	12677.7	11669.8	10560.2	10195.4
75°	3244.9	3280.8	4088.3	6866.7	11430.5	14992.5	14986.5	13506.1	11463.4	9328.1	7025.2
77.5°	936.1	963.0	1342.8	3017.6	7228.6	12788.3	13198.0	12351.7	9689.9	6648.4	3642.7
80°	409.7	430.7	583.2	1004.9	3113.3	8353.1	8712.0	8353.1	5843.9	3050.5	1429.6
82.5°	242.2	257.2	379.8	622.1	1492.4	3974.7	4459.2	3893.9	2521.2	1295.0	592.2
85°	137.6	143.6	218.3	394.8	939.1	1390.7	1561.2	1462.5	1229.2	735.7	311.0
87.5°	62.8	65.8	107.7	185.4	526.4	469.5	487.5	646.0	711.8	448.6	155.5
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: P399442

CATALOG NUMBER: ARCH-L-PA3-140-750-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2350.7	2350.7	2350.7	2350.7	2350.7	2350.7	2350.7	2350.7	2350.7	2350.7	2350.7
2.5°	2347.7	2338.7	2320.8	2314.8	2305.8	2308.8	2311.8	2311.8	2314.8	2305.8	2305.8
5°	2323.8	2308.8	2290.9	2290.9	2290.9	2314.8	2335.8	2347.7	2353.7	2353.7	2347.7
7.5°	2314.8	2296.9	2275.9	2281.9	2287.9	2317.8	2356.7	2395.6	2407.5	2407.5	2401.5
10°	2332.8	2314.8	2299.9	2308.8	2323.8	2347.7	2377.6	2413.5	2443.4	2446.4	2443.4
12.5°	2374.6	2353.7	2338.7	2356.7	2374.6	2389.6	2404.5	2419.5	2458.4	2464.4	2464.4
15°	2443.4	2422.5	2404.5	2419.5	2425.5	2425.5	2425.5	2425.5	2464.4	2470.3	2470.3
17.5°	2512.2	2494.3	2476.3	2479.3	2461.4	2437.4	2428.5	2425.5	2446.4	2464.4	2467.3
20°	2578.0	2563.0	2545.1	2515.2	2470.3	2425.5	2410.5	2410.5	2422.5	2449.4	2449.4
22.5°	2649.8	2631.8	2601.9	2533.1	2458.4	2395.6	2380.6	2389.6	2404.5	2440.4	2437.4
25°	2730.5	2706.6	2655.8	2527.2	2419.5	2344.7	2347.7	2374.6	2401.5	2440.4	2440.4
27.5°	2820.2	2787.3	2685.7	2479.3	2332.8	2261.0	2287.9	2350.7	2389.6	2431.5	2437.4
30°	2918.9	2889.0	2709.6	2395.6	2192.2	2126.4	2192.2	2293.9	2353.7	2392.6	2401.5
32.5°	3038.6	3014.6	2730.5	2287.9	2009.8	1952.9	2048.6	2174.3	2270.0	2314.8	2323.8
35°	3188.1	3164.2	2757.4	2165.3	1839.3	1779.5	1866.2	1994.8	2120.4	2177.2	2195.2
37.5°	3382.5	3346.6	2781.4	2033.7	1695.7	1627.0	1668.8	1785.5	1899.1	1976.9	1997.8
40°	3630.7	3573.9	2802.3	1884.2	1570.1	1492.4	1507.3	1564.1	1629.9	1698.7	1725.6
42.5°	3980.6	3867.0	2805.3	1725.6	1441.5	1369.7	1363.8	1381.7	1381.7	1381.7	1390.7
45°	4468.1	4252.8	2811.3	1576.1	1309.9	1235.2	1217.2	1211.2	1166.4	1079.6	1073.7
47.5°	5084.2	4758.2	2838.2	1450.5	1172.4	1106.6	1082.6	1058.7	975.0	885.3	867.3
50°	5873.8	5344.4	2892.0	1330.9	1055.7	1010.9	981.0	924.1	831.4	762.6	744.7
52.5°	6782.9	6041.3	2942.9	1205.3	969.0	939.1	903.2	834.4	735.7	693.8	687.9
55°	7826.7	6818.8	3044.6	1094.6	894.2	873.3	840.4	774.6	699.8	669.9	666.9
57.5°	8894.4	7689.1	3188.1	995.9	822.4	810.5	810.5	753.7	705.8	693.8	693.8
60°	9923.2	8436.8	3077.4	903.2	756.7	762.6	819.5	804.5	768.6	783.6	792.5
62.5°	10721.7	8876.5	2497.2	828.4	708.8	762.6	909.2	909.2	867.3	861.3	861.3
65°	11062.7	8870.5	1755.6	771.6	690.9	837.4	1013.9	966.0	855.3	813.5	804.5
67.5°	10975.9	8481.7	1211.2	732.7	684.9	915.2	1061.7	927.1	801.5	765.6	738.7
70°	10213.3	7659.2	933.1	696.8	675.9	882.3	1046.8	882.3	759.6	726.7	702.8
72.5°	8239.4	6142.9	774.6	660.9	640.0	816.5	995.9	840.4	726.7	690.9	666.9
75°	5254.7	3864.0	655.0	613.1	571.2	732.7	927.1	798.5	690.9	643.0	625.1
77.5°	2527.2	1665.8	571.2	556.3	514.4	678.9	858.3	744.7	643.0	604.1	592.2
80°	1022.8	762.6	496.5	499.4	472.5	646.0	810.5	693.8	595.2	553.3	532.3
82.5°	532.3	442.6	418.7	430.7	430.7	616.1	774.6	652.0	553.3	535.3	466.6
85°	287.1	275.1	323.0	346.9	373.8	556.3	720.8	607.1	505.4	433.7	418.7
87.5°	140.6	179.4	182.4	209.4	260.2	445.6	607.1	508.4	421.7	349.9	343.9
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)