

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: P399964

Luminaire Tested: **ARCH-L-PA3-210-827-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399964  
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-PA3-210-827-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21893 lumens  
Efficiency: N/A  
Efficacy: 103.8 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

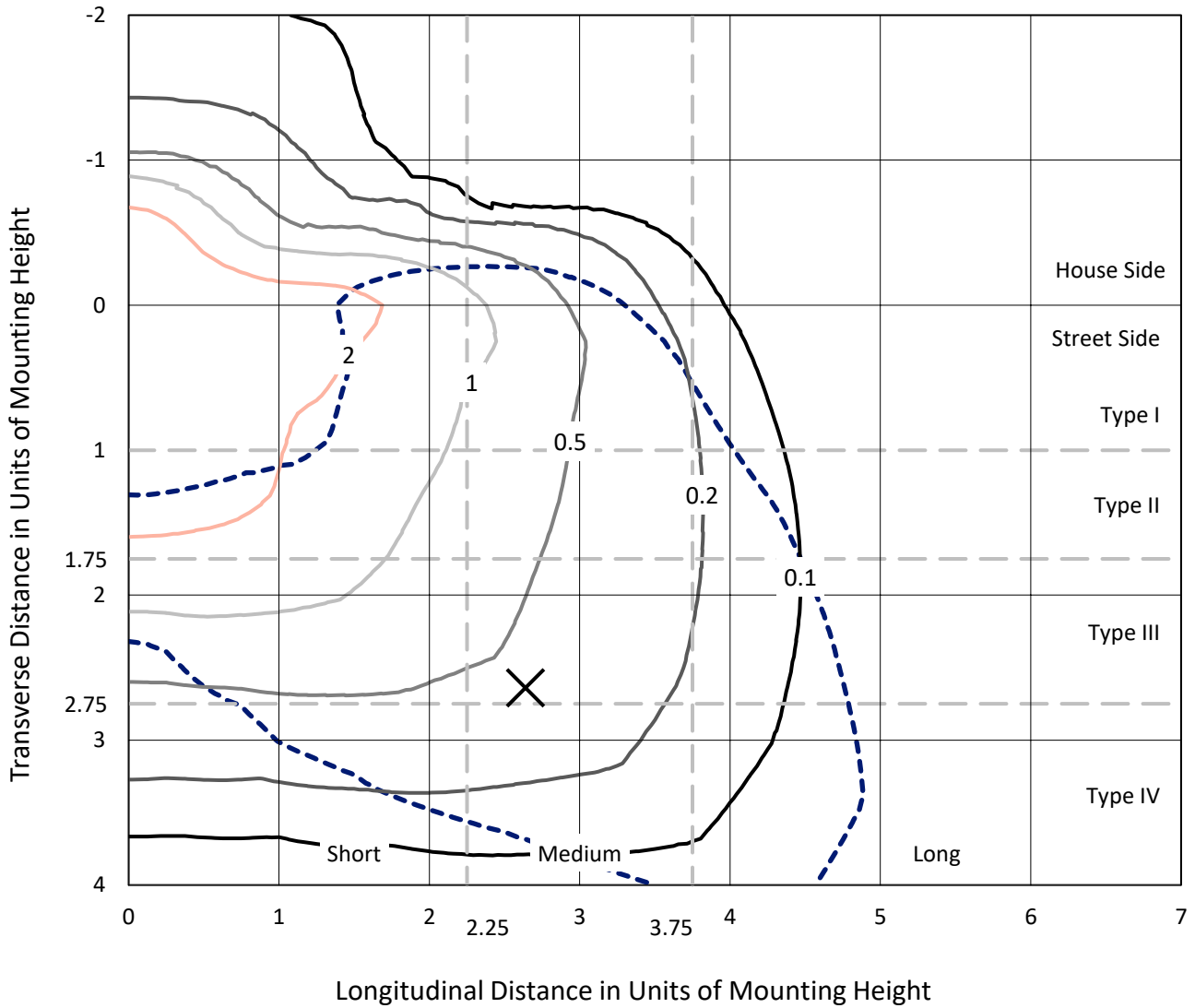
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

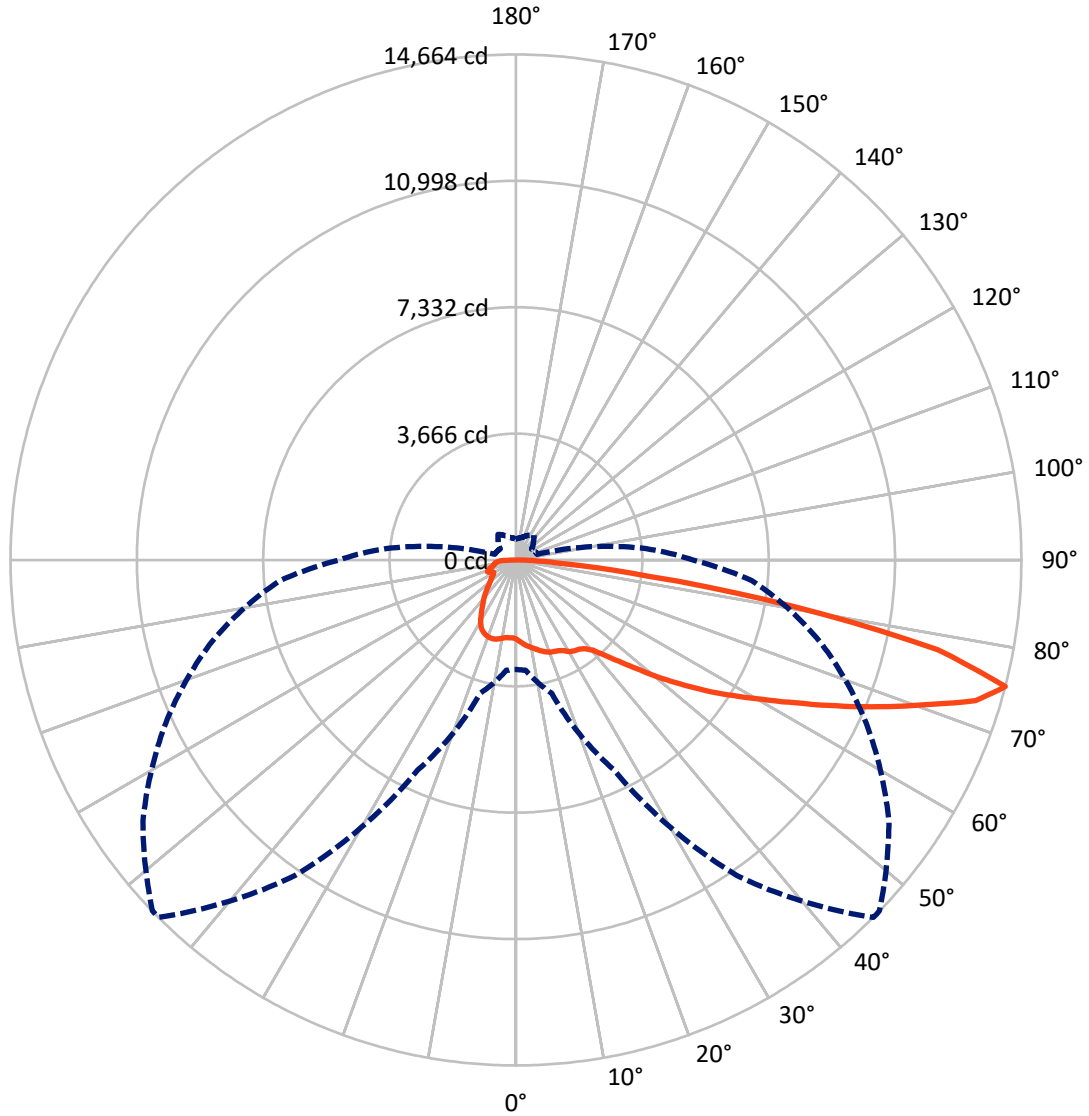
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type IV - Medium - N/A

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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	4838.2	0.0	4838.2
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	17054.8	0.0	17054.8
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	21893.0	0.0	21893.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.5	1.0
10°-20°	723.6	3.3
20°-30°	1233.7	5.6
30°-40°	1728.6	7.9
40°-50°	2539.5	11.6
50°-60°	4041.6	18.5
60°-70°	5749.2	26.3
70°-80°	4813.8	22.0
80°-90°	835.4	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°	21893.0	100.0
0°-180°	21893.0	100.0

**Coefficient of Utilization**



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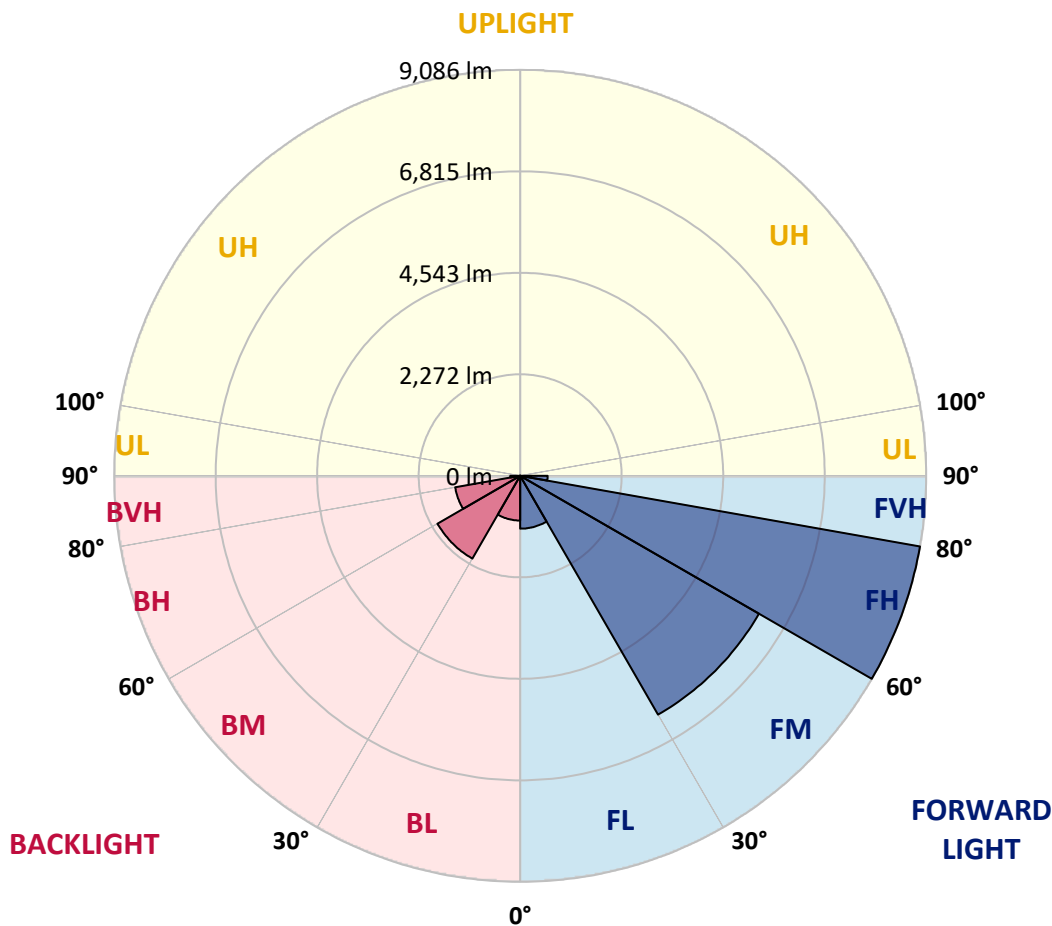
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1183.5	5.4			
FM (30°-60°)	6171.0	28.2			
FH (60°-80°)	9086.1	41.5			G4/12000
FVH (80°-90°)	614.2	2.8			G4/750
BL (0°-30°)	1001.3	4.6	B3/2500		
BM (30°-60°)	2138.7	9.8	B2/2500		
BH (60°-80°)	1476.9	6.7	B3/2500		G3/2500
BVH (80°-90°)	221.2	1.0			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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2
2.5°	2430.9	2419.2	2413.3	2413.3	2389.9	2375.3	2372.4	2351.9	2334.3	2316.8	2302.2
5°	2571.3	2562.5	2545.0	2530.3	2498.2	2457.2	2451.4	2407.5	2363.6	2322.6	2287.5
7.5°	2700.0	2682.5	2662.0	2632.7	2580.1	2524.5	2515.7	2454.3	2392.9	2331.4	2284.6
10°	2808.2	2790.7	2761.4	2720.5	2653.2	2585.9	2577.1	2512.8	2448.4	2375.3	2308.0
12.5°	2910.6	2896.0	2852.1	2796.5	2717.6	2656.1	2647.3	2591.8	2524.5	2442.6	2354.8
15°	2998.4	2983.8	2936.9	2872.6	2781.9	2735.1	2723.4	2670.8	2603.5	2515.7	2425.0
17.5°	3042.3	3042.3	2992.5	2922.3	2837.5	2802.4	2793.6	2729.3	2667.8	2583.0	2492.3
20°	3056.9	3062.7	3027.6	2942.8	2869.7	2855.0	2846.3	2793.6	2723.4	2641.5	2556.7
22.5°	3065.7	3077.4	3048.1	2951.6	2890.1	2881.4	2875.5	2840.4	2784.8	2705.9	2621.0
25°	3094.9	3094.9	3074.4	2966.2	2916.5	2913.5	2913.5	2893.1	2855.0	2787.8	2702.9
27.5°	3138.8	3135.9	3109.5	2998.4	2975.0	2983.8	2980.8	2977.9	2951.6	2884.3	2793.6
30°	3211.9	3211.9	3182.7	3062.7	3048.1	3086.1	3089.1	3094.9	3054.0	2948.6	2875.5
32.5°	3323.1	3311.4	3282.1	3127.1	3103.7	3138.8	3144.6	3141.7	3106.6	3007.2	2972.1
35°	3665.3	3639.0	3533.7	3270.4	3153.4	3173.9	3176.8	3191.4	3197.3	3118.3	3100.8
37.5°	4265.0	4229.9	4069.0	3609.8	3311.4	3261.7	3258.7	3296.8	3328.9	3258.7	3258.7
40°	4917.3	4888.1	4794.5	4194.8	3603.9	3440.1	3428.4	3463.5	3504.4	3454.7	3469.3
42.5°	5479.0	5502.4	5511.2	4815.0	4042.7	3773.6	3741.4	3691.7	3756.0	3712.1	3770.6
45°	5900.2	5888.5	6049.4	5449.7	4610.2	4191.9	4148.0	4013.4	4095.3	4092.4	4221.1
47.5°	6347.8	6327.3	6394.6	6046.5	5256.7	4703.8	4636.5	4437.6	4560.5	4645.3	4858.8
50°	6771.9	6777.8	6801.2	6517.5	5958.7	5326.9	5242.0	4975.8	5151.4	5329.8	5631.1
52.5°	7324.8	7283.9	7254.6	7067.4	6745.6	5976.3	5920.7	5616.5	5862.2	6072.8	6473.6
55°	7807.5	7781.2	7763.6	7754.8	7403.8	6693.0	6634.5	6318.5	6672.5	6821.7	7412.6
57.5°	8322.3	8307.7	8401.3	8550.5	8410.1	7421.4	7359.9	7055.7	7450.6	7555.9	8430.6
60°	8699.7	8708.5	8965.9	9346.2	9249.6	8211.2	8138.0	7868.9	8208.2	8301.9	9448.5
62.5°	8702.6	8790.4	9387.1	10068.7	10179.9	9120.9	9036.1	8743.6	8986.4	8986.4	10361.2
65°	7871.8	7971.3	9311.1	10247.1	11121.8	10203.3	10121.4	9662.1	9752.8	9629.9	11218.3
67.5°	7044.0	7161.0	8421.8	10261.8	11782.9	11361.7	11265.1	10580.6	10425.6	10115.5	11818.0
70°	6494.0	6576.0	7629.0	10071.6	12180.7	12572.7	12499.6	11452.3	10955.0	10522.1	11692.2
72.5°	5467.3	5438.0	6444.3	9167.7	12403.0	13947.6	13886.1	12400.1	11414.3	10329.0	9972.2
75°	3173.9	3209.0	3998.8	6716.4	11180.3	14664.3	14658.4	13210.4	11212.5	9123.8	6871.4
77.5°	915.6	941.9	1313.4	2951.6	7070.3	12508.4	12909.1	12081.3	9477.8	6502.8	3563.0
80°	400.8	421.2	570.4	982.9	3045.2	8170.2	8521.2	8170.2	5715.9	2983.8	1398.3
82.5°	236.9	251.6	371.5	608.5	1459.7	3887.7	4361.5	3808.7	2466.0	1266.6	579.2
85°	134.6	140.4	213.5	386.1	918.5	1360.2	1527.0	1430.4	1202.3	719.6	304.2
87.5°	61.4	64.4	105.3	181.4	514.8	459.3	476.8	631.9	696.2	438.8	152.1
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°	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2	2299.2
2.5°	2296.3	2287.5	2270.0	2264.1	2255.4	2258.3	2261.2	2261.2	2264.1	2255.4	2255.4
5°	2272.9	2258.3	2240.7	2240.7	2240.7	2264.1	2284.6	2296.3	2302.2	2302.2	2296.3
7.5°	2264.1	2246.6	2226.1	2232.0	2237.8	2267.1	2305.1	2343.1	2354.8	2354.8	2349.0
10°	2281.7	2264.1	2249.5	2258.3	2272.9	2296.3	2325.6	2360.7	2389.9	2392.9	2389.9
12.5°	2322.6	2302.2	2287.5	2305.1	2322.6	2337.3	2351.9	2366.5	2404.6	2410.4	2410.4
15°	2389.9	2369.4	2351.9	2366.5	2372.4	2372.4	2372.4	2372.4	2410.4	2416.3	2416.3
17.5°	2457.2	2439.7	2422.1	2425.0	2407.5	2384.1	2375.3	2372.4	2392.9	2410.4	2413.3
20°	2521.6	2506.9	2489.4	2460.1	2416.3	2372.4	2357.7	2357.7	2369.4	2395.8	2395.8
22.5°	2591.8	2574.2	2545.0	2477.7	2404.6	2343.1	2328.5	2337.3	2351.9	2387.0	2384.1
25°	2670.8	2647.3	2597.6	2471.8	2366.5	2293.4	2296.3	2322.6	2349.0	2387.0	2387.0
27.5°	2758.5	2726.3	2626.9	2425.0	2281.7	2211.5	2237.8	2299.2	2337.3	2378.2	2384.1
30°	2855.0	2825.8	2650.3	2343.1	2144.2	2079.9	2144.2	2243.7	2302.2	2340.2	2349.0
32.5°	2972.1	2948.6	2670.8	2237.8	1965.8	1910.2	2003.8	2126.7	2220.3	2264.1	2272.9
35°	3118.3	3094.9	2697.1	2117.9	1799.0	1740.5	1825.4	1951.1	2074.0	2129.6	2147.1
37.5°	3308.5	3273.4	2720.5	1989.2	1658.6	1591.3	1632.3	1746.4	1857.5	1933.6	1954.1
40°	3551.2	3495.7	2741.0	1842.9	1535.8	1459.7	1474.3	1529.9	1594.3	1661.5	1687.9
42.5°	3893.5	3782.3	2743.9	1687.9	1410.0	1339.8	1333.9	1351.5	1351.5	1351.5	1360.2
45°	4370.3	4159.7	2749.7	1541.6	1281.3	1208.1	1190.6	1184.7	1140.8	1056.0	1050.2
47.5°	4972.9	4654.1	2776.1	1418.7	1146.7	1082.3	1058.9	1035.5	953.6	865.9	848.3
50°	5745.2	5227.4	2828.7	1301.7	1032.6	988.7	959.5	903.9	813.2	745.9	728.4
52.5°	6634.5	5909.0	2878.4	1178.9	947.8	918.5	883.4	816.1	719.6	678.7	672.8
55°	7655.4	6669.6	2977.9	1070.6	874.6	854.2	822.0	757.6	684.5	655.3	652.3
57.5°	8699.7	7520.8	3118.3	974.1	804.4	792.7	792.7	737.2	690.4	678.7	678.7
60°	9706.0	8252.1	3010.1	883.4	740.1	745.9	801.5	786.9	751.8	766.4	775.2
62.5°	10487.0	8682.1	2442.6	810.3	693.3	745.9	889.3	889.3	848.3	842.5	842.5
65°	10820.5	8676.3	1717.1	754.7	675.7	819.1	991.7	944.9	836.6	795.7	786.9
67.5°	10735.7	8296.0	1184.7	716.7	669.9	895.1	1038.5	906.8	784.0	748.9	722.5
70°	9989.7	7491.6	912.7	681.6	661.1	862.9	1023.8	862.9	743.0	710.8	687.4
72.5°	8059.1	6008.5	757.6	646.5	626.0	798.6	974.1	822.0	710.8	675.7	652.3
75°	5139.7	3779.4	640.6	599.7	558.7	716.7	906.8	781.0	675.7	628.9	611.4
77.5°	2471.8	1629.4	558.7	544.1	503.1	664.0	839.5	728.4	628.9	590.9	579.2
80°	1000.4	745.9	485.6	488.5	462.2	631.9	792.7	678.7	582.1	541.2	520.7
82.5°	520.7	432.9	409.5	421.2	421.2	602.6	757.6	637.7	541.2	523.6	456.3
85°	280.8	269.1	315.9	339.3	365.7	544.1	705.0	593.8	494.4	424.2	409.5
87.5°	137.5	175.5	178.4	204.8	254.5	435.9	593.8	497.3	412.5	342.3	336.4
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)