

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: P399685

Luminaire Tested: **ARCH-L-PA3-170-830-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399685  
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-PA3-170-830-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20669 lumens  
Efficiency: N/A  
Efficacy: 119.5 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

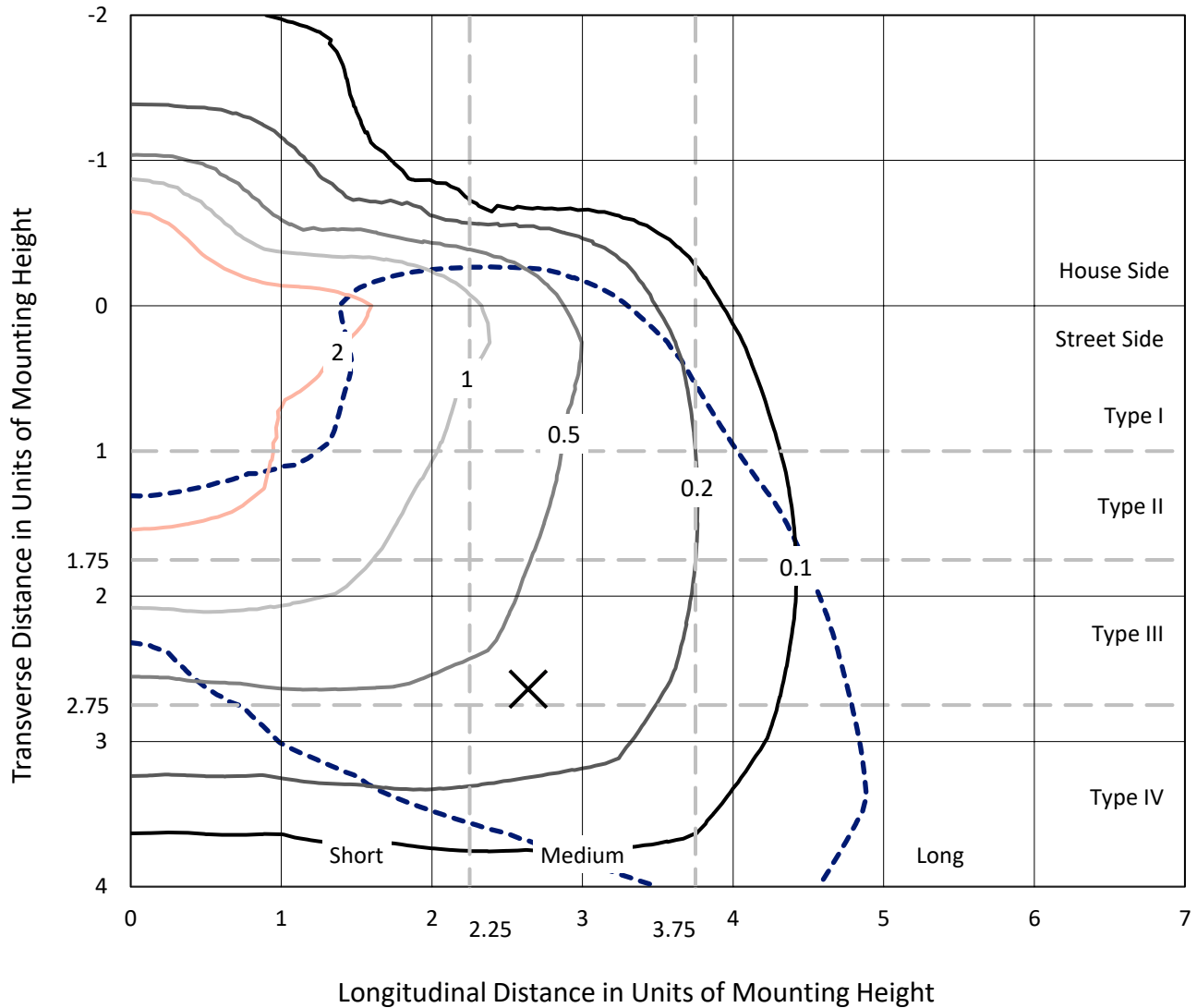
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

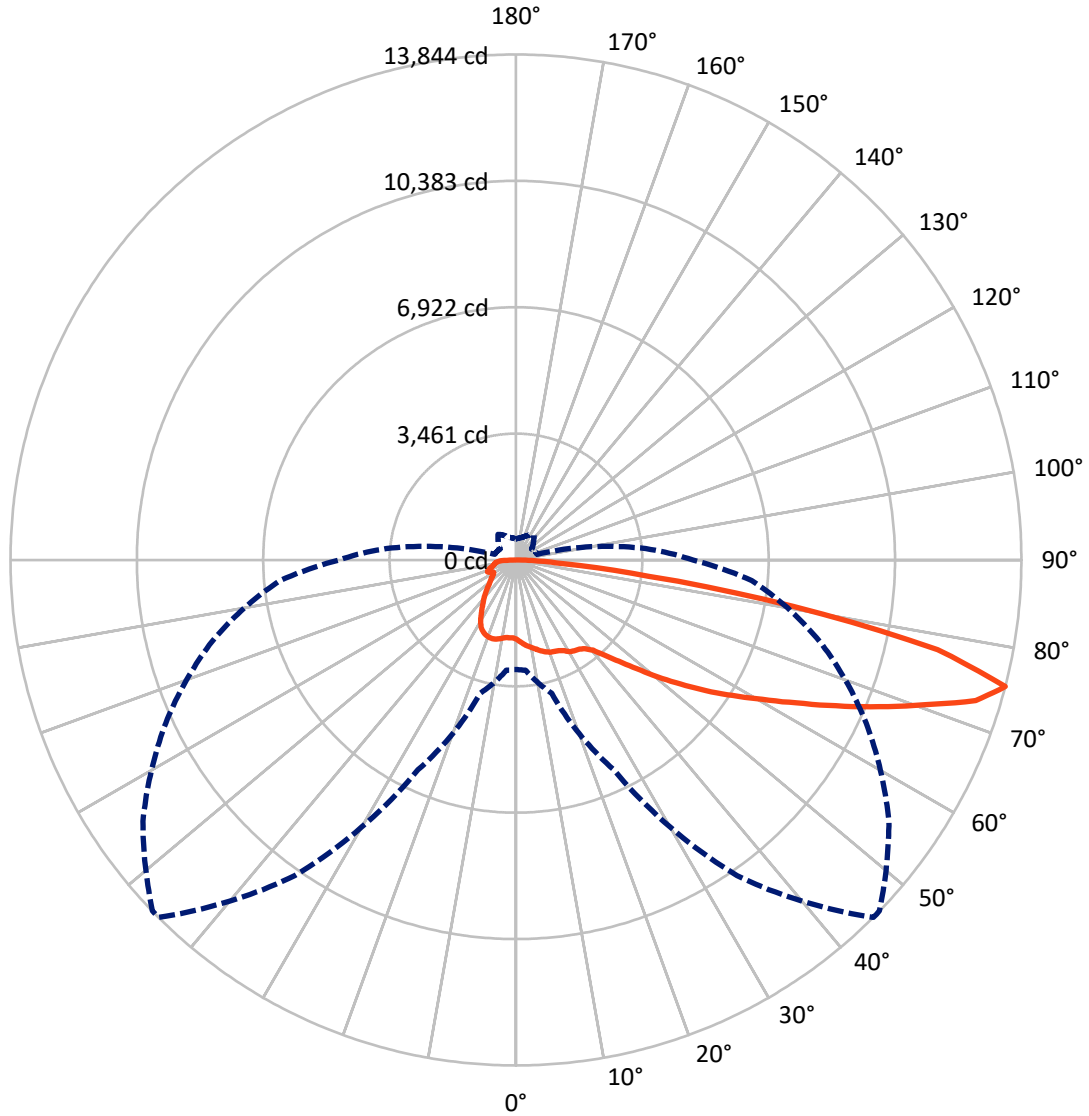
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 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	4567.7	0.0	4567.7
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	16101.2	0.0	16101.2
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	20669.0	0.0	20669.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.7	1.0
10°-20°	683.2	3.3
20°-30°	1164.7	5.6
30°-40°	1631.9	7.9
40°-50°	2397.5	11.6
50°-60°	3815.7	18.5
60°-70°	5427.8	26.3
70°-80°	4544.7	22.0
80°-90°	788.7	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°	20669.0	100.0
0°-180°	20669.0	100.0

**Coefficient of Utilization**

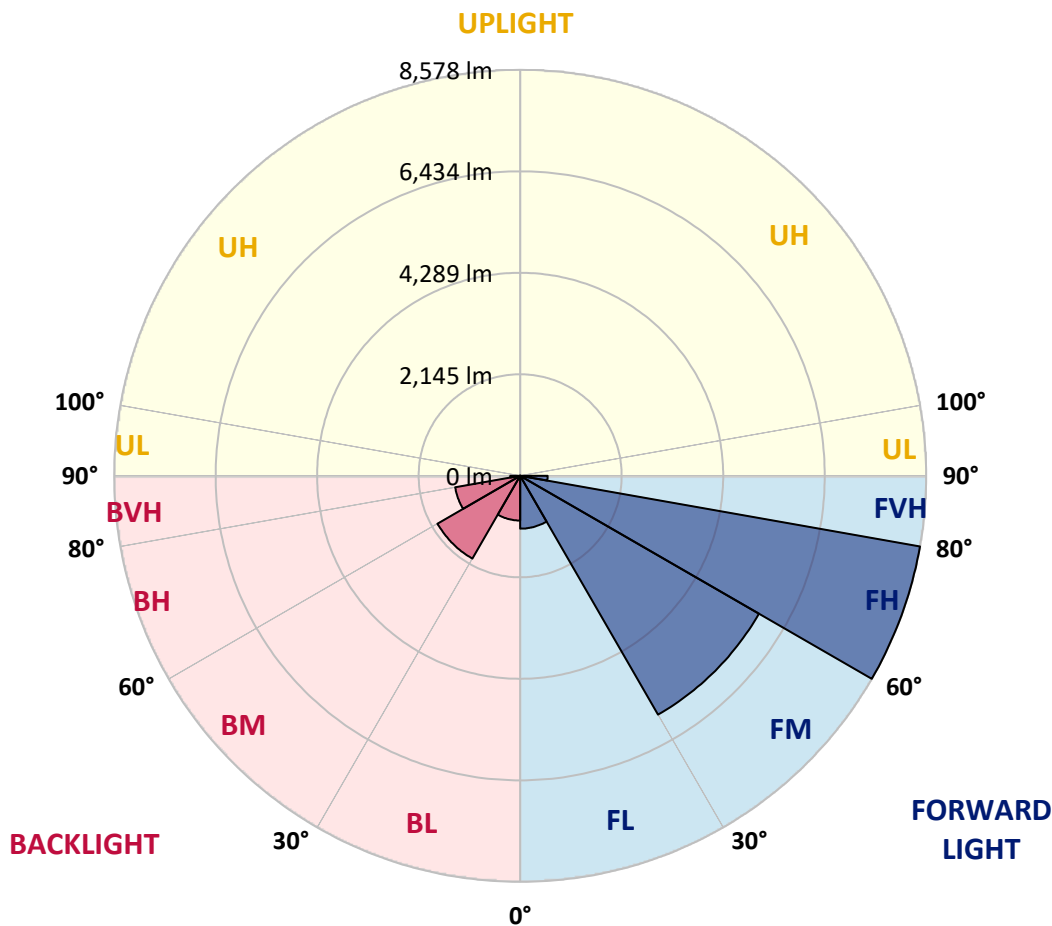


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1117.3	5.4			
FM (30°-60°)	5826.0	28.2			
FH (60°-80°)	8578.1	41.5			G4/12000
FVH (80°-90°)	579.9	2.8			G4/750
BL (0°-30°)	945.3	4.6	B2/1000		
BM (30°-60°)	2019.2	9.8	B2/2500		
BH (60°-80°)	1394.4	6.7	B3/2500		G3/2500
BVH (80°-90°)	208.9	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°	2170.7	2170.7	2170.7	2170.7	2170.7	2170.7	2170.7	2170.7	2170.7	2170.7	2170.7
2.5°	2295.0	2283.9	2278.4	2278.4	2256.3	2242.5	2239.7	2220.4	2203.8	2187.3	2173.5
5°	2427.5	2419.3	2402.7	2388.9	2358.5	2319.8	2314.3	2272.9	2231.5	2192.8	2159.7
7.5°	2549.1	2532.5	2513.1	2485.5	2435.8	2383.3	2375.1	2317.1	2259.1	2201.1	2156.9
10°	2651.2	2634.7	2607.0	2568.4	2504.9	2441.3	2433.1	2372.3	2311.5	2242.5	2179.0
12.5°	2747.9	2734.1	2692.7	2640.2	2565.6	2507.6	2499.3	2446.9	2383.3	2306.0	2223.2
15°	2830.7	2816.9	2772.7	2712.0	2626.4	2582.2	2571.1	2521.4	2457.9	2375.1	2289.5
17.5°	2872.2	2872.2	2825.2	2758.9	2678.9	2645.7	2637.4	2576.7	2518.7	2438.6	2353.0
20°	2886.0	2891.5	2858.4	2778.3	2709.2	2695.4	2687.1	2637.4	2571.1	2493.8	2413.7
22.5°	2894.3	2905.3	2877.7	2786.6	2728.6	2720.3	2714.8	2681.6	2629.1	2554.6	2474.5
25°	2921.9	2921.9	2902.5	2800.4	2753.4	2750.7	2750.7	2731.3	2695.4	2631.9	2551.8
27.5°	2963.3	2960.5	2935.7	2830.7	2808.7	2816.9	2814.2	2811.4	2786.6	2723.0	2637.4
30°	3032.3	3032.3	3004.7	2891.5	2877.7	2913.6	2916.4	2921.9	2883.2	2783.8	2714.8
32.5°	3137.3	3126.2	3098.6	2952.3	2930.2	2963.3	2968.8	2966.1	2932.9	2839.0	2805.9
35°	3460.4	3435.6	3336.1	3087.6	2977.1	2996.4	2999.2	3013.0	3018.5	2944.0	2927.4
37.5°	4026.6	3993.4	3841.5	3407.9	3126.2	3079.3	3076.5	3112.4	3142.8	3076.5	3076.5
40°	4642.4	4614.8	4526.4	3960.3	3402.4	3247.8	3236.7	3269.9	3308.5	3261.6	3275.4
42.5°	5172.7	5194.8	5203.0	4545.8	3816.7	3562.6	3532.2	3485.3	3546.0	3504.6	3559.8
45°	5570.4	5559.3	5711.2	5145.0	4352.4	3957.5	3916.1	3789.1	3866.4	3863.6	3985.1
47.5°	5992.9	5973.6	6037.1	5708.4	4962.8	4440.8	4377.3	4189.5	4305.5	4385.6	4587.2
50°	6393.3	6398.9	6421.0	6153.1	5625.6	5029.1	4949.0	4697.7	4863.4	5031.8	5316.3
52.5°	6915.3	6876.6	6849.0	6672.3	6368.5	5642.2	5589.7	5302.5	5534.4	5733.3	6111.6
55°	7371.0	7346.1	7329.6	7321.3	6989.9	6318.8	6263.5	5965.3	6299.4	6440.3	6998.2
57.5°	7857.0	7843.2	7931.6	8072.5	7939.9	7006.4	6948.4	6661.2	7034.1	7133.5	7959.2
60°	8213.3	8221.6	8464.6	8823.6	8732.5	7752.1	7683.1	7429.0	7749.3	7837.7	8920.3
62.5°	8216.1	8298.9	8862.3	9505.8	9610.7	8611.0	8530.9	8254.7	8483.9	8483.9	9781.9
65°	7431.7	7525.6	8790.5	9674.2	10500.0	9632.8	9555.5	9121.9	9207.5	9091.5	10591.1
67.5°	6650.2	6760.6	7950.9	9688.0	11124.1	10726.4	10635.3	9989.1	9842.7	9550.0	11157.3
70°	6131.0	6208.3	7202.5	9508.5	11499.7	11869.8	11800.7	10812.1	10342.6	9933.8	11038.5
72.5°	5161.6	5134.0	6084.0	8655.2	11709.6	13167.8	13109.8	11706.9	10776.2	9751.6	9414.6
75°	2996.4	3029.6	3775.2	6340.9	10555.2	13844.4	13838.9	12471.8	10585.6	8613.7	6487.2
77.5°	864.4	889.3	1240.0	2786.6	6675.0	11809.0	12187.4	11405.8	8947.9	6139.3	3363.8
80°	378.4	397.7	538.5	927.9	2874.9	7713.4	8044.8	7713.4	5396.4	2816.9	1320.1
82.5°	223.7	237.5	350.7	574.4	1378.1	3670.3	4117.7	3595.7	2328.1	1195.8	546.8
85°	127.0	132.6	201.6	364.5	867.2	1284.2	1441.6	1350.5	1135.1	679.4	287.2
87.5°	58.0	60.8	99.4	171.2	486.1	433.6	450.2	596.5	657.3	414.3	143.6
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°	2170.7	2170.7	2170.7	2170.7	2170.7	2170.7	2170.7	2170.7	2170.7	2170.7	2170.7
2.5°	2167.9	2159.7	2143.1	2137.6	2129.3	2132.0	2134.8	2134.8	2137.6	2129.3	2129.3
5°	2145.8	2132.0	2115.5	2115.5	2115.5	2137.6	2156.9	2167.9	2173.5	2173.5	2167.9
7.5°	2137.6	2121.0	2101.7	2107.2	2112.7	2140.3	2176.2	2212.1	2223.2	2223.2	2217.6
10°	2154.1	2137.6	2123.7	2132.0	2145.8	2167.9	2195.6	2228.7	2256.3	2259.1	2256.3
12.5°	2192.8	2173.5	2159.7	2176.2	2192.8	2206.6	2220.4	2234.2	2270.1	2275.6	2275.6
15°	2256.3	2237.0	2220.4	2234.2	2239.7	2239.7	2239.7	2239.7	2275.6	2281.2	2281.2
17.5°	2319.8	2303.3	2286.7	2289.5	2272.9	2250.8	2242.5	2239.7	2259.1	2275.6	2278.4
20°	2380.6	2366.8	2350.2	2322.6	2281.2	2239.7	2225.9	2225.9	2237.0	2261.8	2261.8
22.5°	2446.9	2430.3	2402.7	2339.2	2270.1	2212.1	2198.3	2206.6	2220.4	2253.5	2250.8
25°	2521.4	2499.3	2452.4	2333.6	2234.2	2165.2	2167.9	2192.8	2217.6	2253.5	2253.5
27.5°	2604.3	2573.9	2480.0	2289.5	2154.1	2087.8	2112.7	2170.7	2206.6	2245.3	2250.8
30°	2695.4	2667.8	2502.1	2212.1	2024.3	1963.6	2024.3	2118.2	2173.5	2209.4	2217.6
32.5°	2805.9	2783.8	2521.4	2112.7	1855.9	1803.4	1891.8	2007.8	2096.1	2137.6	2145.8
35°	2944.0	2921.9	2546.3	1999.5	1698.4	1643.2	1723.3	1842.1	1958.0	2010.5	2027.1
37.5°	3123.5	3090.3	2568.4	1878.0	1565.9	1502.4	1541.0	1648.7	1753.7	1825.5	1844.8
40°	3352.7	3300.2	2587.7	1739.9	1449.9	1378.1	1391.9	1444.4	1505.1	1568.6	1593.5
42.5°	3675.8	3570.9	2590.5	1593.5	1331.1	1264.9	1259.3	1275.9	1275.9	1275.9	1284.2
45°	4126.0	3927.1	2596.0	1455.4	1209.6	1140.6	1124.0	1118.5	1077.1	997.0	991.5
47.5°	4694.9	4393.9	2620.9	1339.4	1082.6	1021.8	999.7	977.6	900.3	817.5	800.9
50°	5424.0	4935.2	2670.6	1229.0	974.9	933.5	905.8	853.4	767.8	704.2	687.7
52.5°	6263.5	5578.6	2717.5	1113.0	894.8	867.2	834.0	770.5	679.4	640.7	635.2
55°	7227.4	6296.7	2811.4	1010.8	825.7	806.4	776.0	715.3	646.2	618.6	615.9
57.5°	8213.3	7100.3	2944.0	919.6	759.5	748.4	748.4	695.9	651.8	640.7	640.7
60°	9163.3	7790.8	2841.8	834.0	698.7	704.2	756.7	742.9	709.8	723.6	731.9
62.5°	9900.7	8196.7	2306.0	765.0	654.5	704.2	839.6	839.6	800.9	795.4	795.4
65°	10215.5	8191.2	1621.1	712.5	638.0	773.3	936.2	892.0	789.8	751.2	742.9
67.5°	10135.4	7832.2	1118.5	676.6	632.4	845.1	980.4	856.1	740.1	707.0	682.1
70°	9431.2	7072.7	861.7	643.5	624.1	814.7	966.6	814.7	701.5	671.1	649.0
72.5°	7608.5	5672.5	715.3	610.3	591.0	753.9	919.6	776.0	671.1	638.0	615.9
75°	4852.3	3568.1	604.8	566.1	527.5	676.6	856.1	737.4	638.0	593.8	577.2
77.5°	2333.6	1538.3	527.5	513.7	475.0	626.9	792.6	687.7	593.8	557.9	546.8
80°	944.5	704.2	458.4	461.2	436.3	596.5	748.4	640.7	549.6	510.9	491.6
82.5°	491.6	408.7	386.6	397.7	397.7	568.9	715.3	602.1	510.9	494.3	430.8
85°	265.1	254.1	298.3	320.4	345.2	513.7	665.6	560.6	466.7	400.4	386.6
87.5°	129.8	165.7	168.5	193.3	240.3	411.5	560.6	469.5	389.4	323.1	317.6
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)