

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: P399829

Luminaire Tested: **ARCH-L-PA3-190-830-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399829  
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-PA3-190-830-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 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: 21902 lumens  
Efficiency: N/A  
Efficacy: 115.9 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

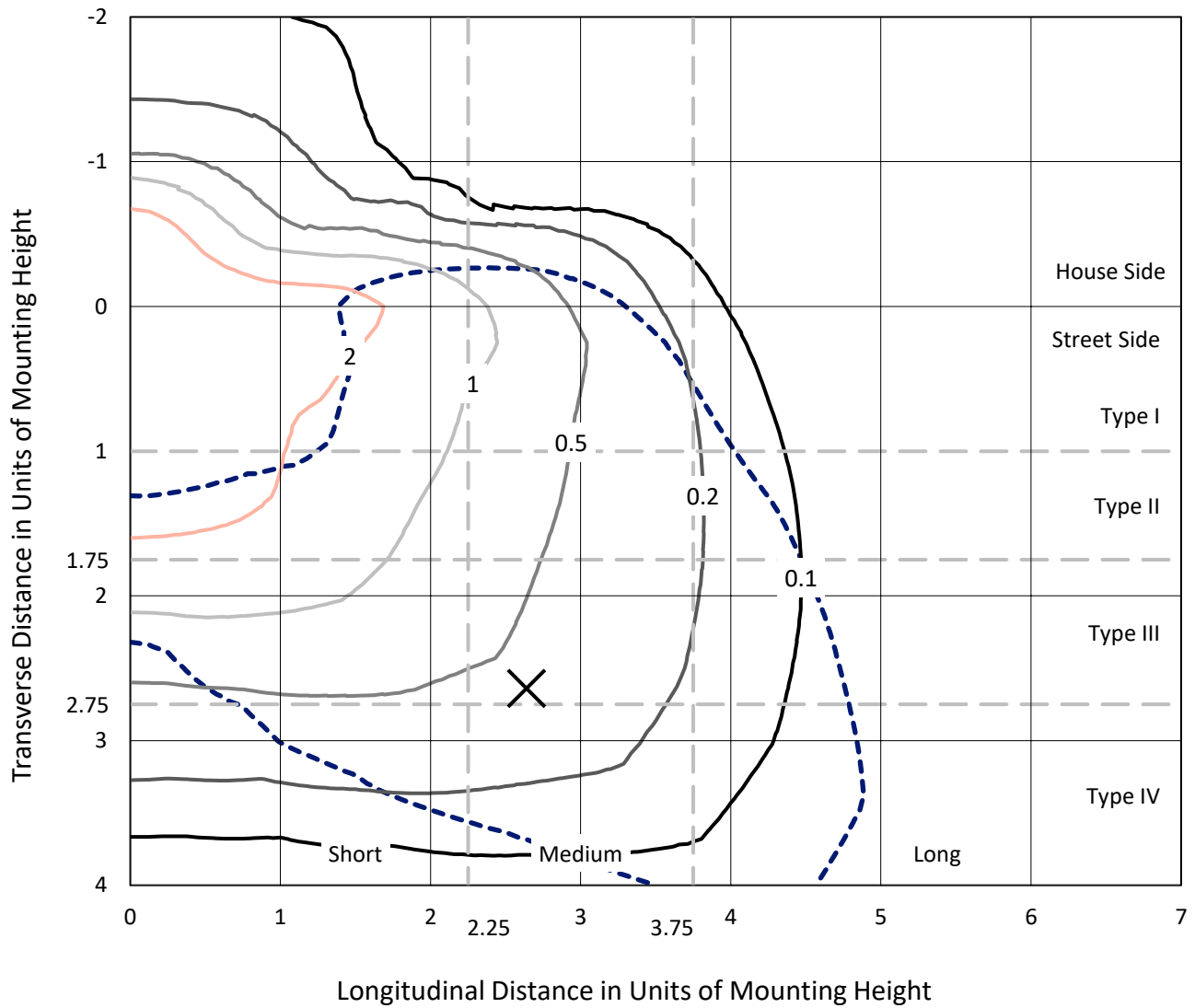
Input Watts (W): 189  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

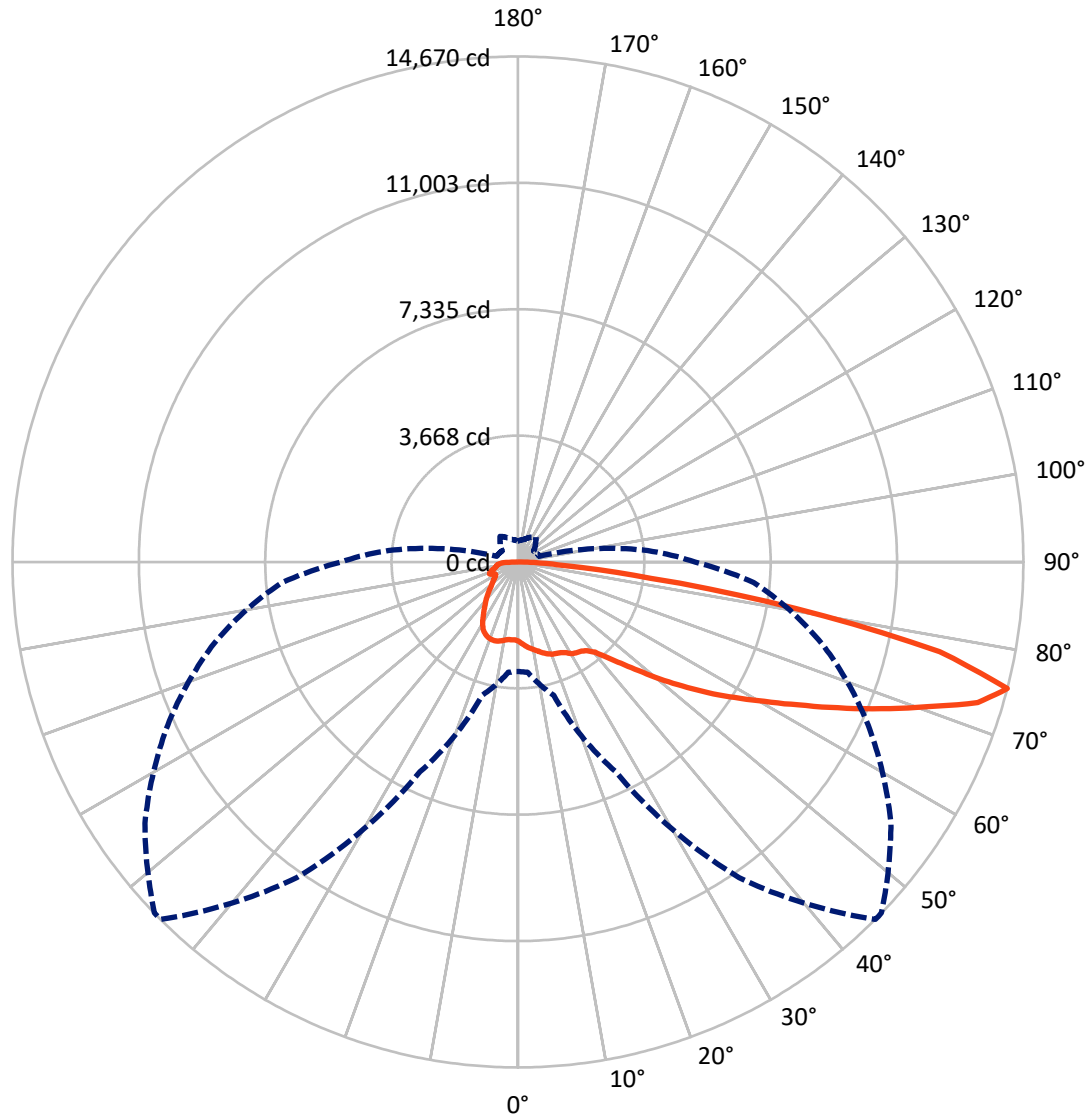
× Max cd  
 - - - 1/2 Max cd



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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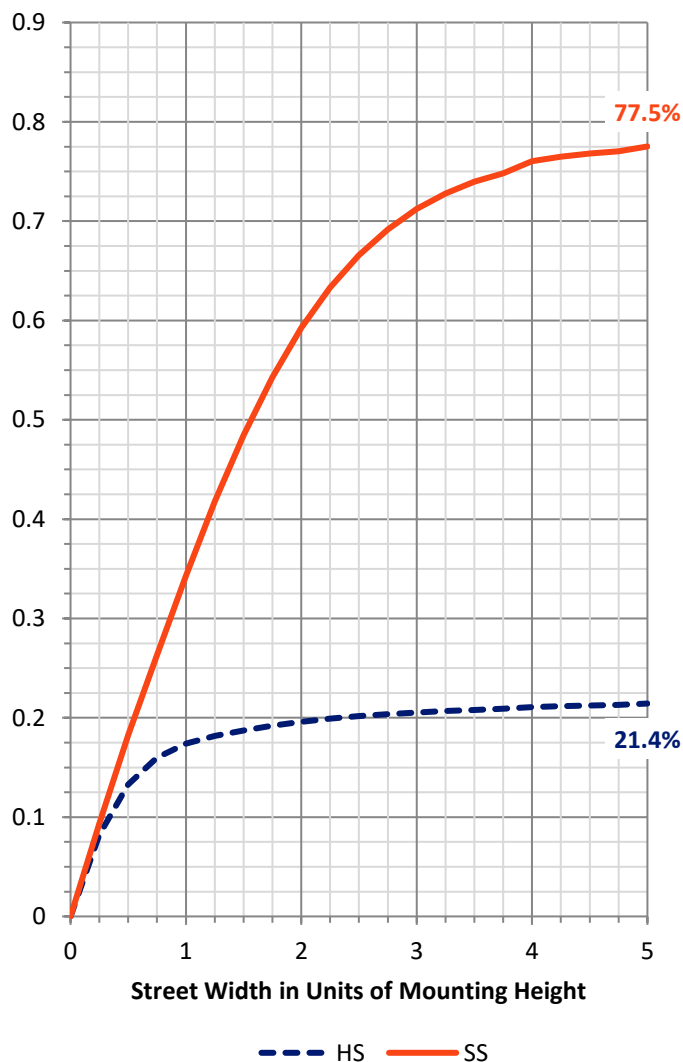
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4840.2	0.0	4840.2
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	17061.8	0.0	17061.8
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	21902.0	0.0	21902.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.5	1.0
10°-20°	723.9	3.3
20°-30°	1234.2	5.6
30°-40°	1729.3	7.9
40°-50°	2540.5	11.6
50°-60°	4043.3	18.5
60°-70°	5751.6	26.3
70°-80°	4815.8	22.0
80°-90°	835.8	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°	21902.0	100.0
0°-180°	21902.0	100.0

**Coefficient of Utilization**



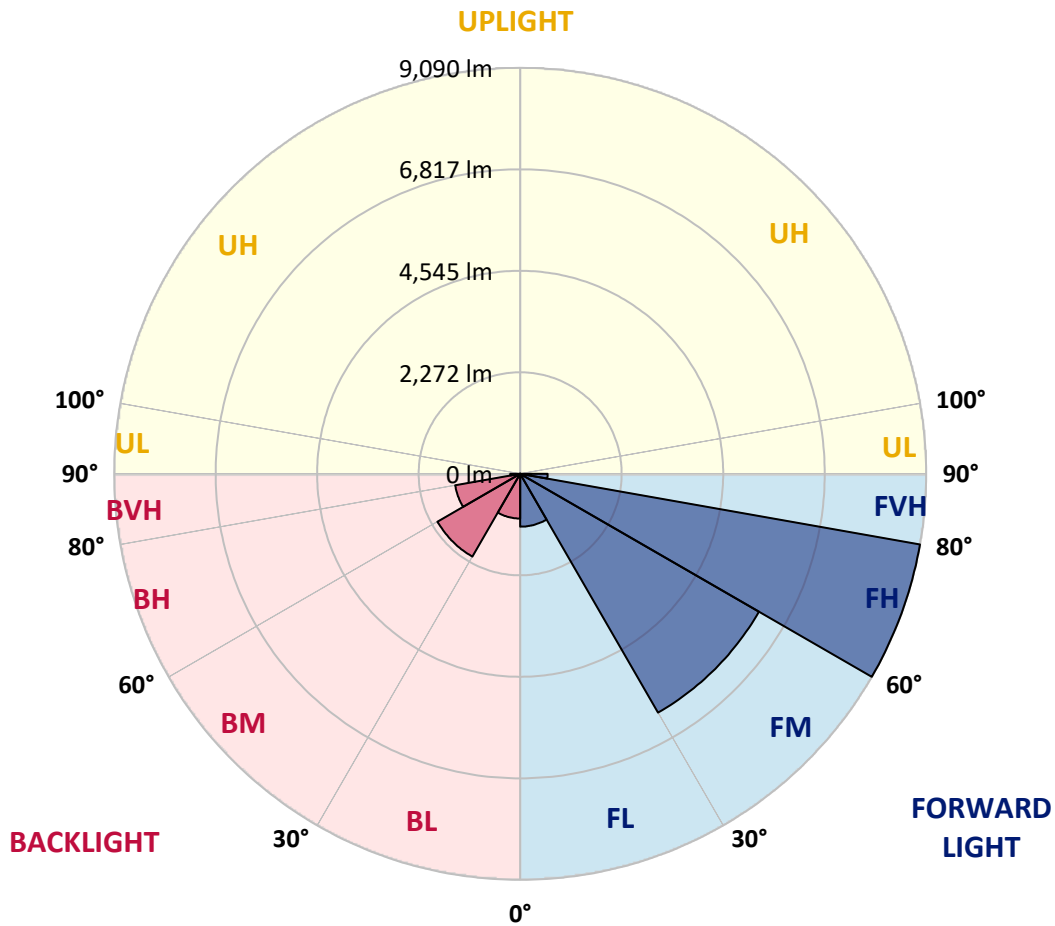
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1183.9	5.4			
FM (30°-60°)	6173.5	28.2			
FH (60°-80°)	9089.9	41.5			G4/12000
FVH (80°-90°)	614.4	2.8			G4/750
BL (0°-30°)	1001.7	4.6	B3/2500		
BM (30°-60°)	2139.6	9.8	B2/2500		
BH (60°-80°)	1477.5	6.7	B3/2500		G3/2500
BVH (80°-90°)	221.3	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°	2300.2	2300.2	2300.2	2300.2	2300.2	2300.2	2300.2	2300.2	2300.2	2300.2	2300.2
2.5°	2431.9	2420.2	2414.3	2414.3	2390.9	2376.3	2373.4	2352.9	2335.3	2317.7	2303.1
5°	2572.3	2563.6	2546.0	2531.4	2499.2	2458.2	2452.4	2408.5	2364.6	2323.6	2288.5
7.5°	2701.1	2683.6	2663.1	2633.8	2581.1	2525.5	2516.7	2455.3	2393.8	2332.4	2285.6
10°	2809.4	2791.8	2762.6	2721.6	2654.3	2587.0	2578.2	2513.8	2449.4	2376.3	2309.0
12.5°	2911.8	2897.2	2853.3	2797.7	2718.7	2657.2	2648.4	2592.8	2525.5	2443.6	2355.8
15°	2999.6	2985.0	2938.2	2873.8	2783.1	2736.2	2724.5	2671.8	2604.5	2516.7	2426.0
17.5°	3043.5	3043.5	2993.8	2923.5	2838.7	2803.5	2794.8	2730.4	2668.9	2584.1	2493.3
20°	3058.1	3064.0	3028.9	2944.0	2870.8	2856.2	2847.4	2794.8	2724.5	2642.6	2557.7
22.5°	3066.9	3078.6	3049.4	2952.8	2891.3	2882.6	2876.7	2841.6	2786.0	2707.0	2622.1
25°	3096.2	3096.2	3075.7	2967.4	2917.7	2914.7	2914.7	2894.3	2856.2	2788.9	2704.0
27.5°	3140.1	3137.2	3110.8	2999.6	2976.2	2985.0	2982.1	2979.1	2952.8	2885.5	2794.8
30°	3213.2	3213.2	3184.0	3064.0	3049.4	3087.4	3090.3	3096.2	3055.2	2949.9	2876.7
32.5°	3324.4	3312.7	3283.5	3128.4	3105.0	3140.1	3145.9	3143.0	3107.9	3008.4	2973.3
35°	3666.8	3640.5	3535.2	3271.8	3154.7	3175.2	3178.1	3192.8	3198.6	3119.6	3102.0
37.5°	4266.8	4231.6	4070.7	3611.2	3312.7	3263.0	3260.1	3298.1	3330.3	3260.1	3260.1
40°	4919.4	4890.1	4796.5	4196.5	3605.4	3441.5	3429.8	3464.9	3505.9	3456.1	3470.8
42.5°	5481.2	5504.7	5513.4	4816.9	4044.4	3775.1	3742.9	3693.2	3757.6	3713.7	3772.2
45°	5902.6	5890.9	6051.9	5452.0	4612.1	4193.6	4149.7	4015.1	4097.0	4094.1	4222.9
47.5°	6350.4	6329.9	6397.2	6049.0	5258.8	4705.7	4638.4	4439.4	4562.3	4647.2	4860.8
50°	6774.7	6780.6	6804.0	6520.1	5961.2	5329.1	5244.2	4977.9	5153.5	5332.0	5633.4
52.5°	7327.8	7286.9	7257.6	7070.3	6748.4	5978.7	5923.1	5618.8	5864.6	6075.3	6476.2
55°	7810.7	7784.4	7766.8	7758.0	7406.8	6695.7	6637.2	6321.1	6675.2	6824.5	7415.6
57.5°	8325.7	8311.1	8404.8	8554.0	8413.5	7424.4	7362.9	7058.6	7453.7	7559.0	8434.0
60°	8703.3	8712.0	8969.6	9350.0	9253.4	8214.5	8141.4	7872.1	8211.6	8305.3	9452.4
62.5°	8706.2	8794.0	9391.0	10072.8	10184.0	9124.7	9039.8	8747.2	8990.1	8990.1	10365.5
65°	7875.1	7974.6	9314.9	10251.4	11126.4	10207.5	10125.5	9666.1	9756.8	9633.9	11222.9
67.5°	7046.9	7163.9	8425.2	10266.0	11787.7	11366.3	11269.8	10585.0	10429.9	10119.7	11822.9
70°	6496.7	6578.7	7632.2	10075.8	12185.7	12577.9	12504.7	11457.0	10959.6	10526.4	11697.0
72.5°	5469.5	5440.3	6447.0	9171.5	12408.1	13953.3	13891.9	12405.2	11419.0	10333.3	9976.3
75°	3175.2	3210.3	4000.5	6719.1	11184.9	14670.3	14664.4	13215.8	11217.1	9127.6	6874.2
77.5°	916.0	942.3	1314.0	2952.8	7073.2	12513.5	12914.4	12086.2	9481.7	6505.5	3564.4
80°	400.9	421.4	570.7	983.3	3046.4	8173.6	8524.7	8173.6	5718.3	2985.0	1398.8
82.5°	237.0	251.7	371.7	608.7	1460.3	3889.3	4363.3	3810.2	2467.0	1267.2	579.4
85°	134.6	140.5	213.6	386.3	918.9	1360.8	1527.6	1431.0	1202.8	719.9	304.4
87.5°	61.5	64.4	105.4	181.4	515.1	459.5	477.0	632.1	696.5	439.0	152.2
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°	2300.2	2300.2	2300.2	2300.2	2300.2	2300.2	2300.2	2300.2	2300.2	2300.2	2300.2
2.5°	2297.3	2288.5	2270.9	2265.1	2256.3	2259.2	2262.1	2262.1	2265.1	2256.3	2256.3
5°	2273.9	2259.2	2241.7	2241.7	2241.7	2265.1	2285.6	2297.3	2303.1	2303.1	2297.3
7.5°	2265.1	2247.5	2227.0	2232.9	2238.7	2268.0	2306.0	2344.1	2355.8	2355.8	2349.9
10°	2282.6	2265.1	2250.4	2259.2	2273.9	2297.3	2326.5	2361.6	2390.9	2393.8	2390.9
12.5°	2323.6	2303.1	2288.5	2306.0	2323.6	2338.2	2352.9	2367.5	2405.5	2411.4	2411.4
15°	2390.9	2370.4	2352.9	2367.5	2373.4	2373.4	2373.4	2373.4	2411.4	2417.2	2417.2
17.5°	2458.2	2440.7	2423.1	2426.0	2408.5	2385.1	2376.3	2373.4	2393.8	2411.4	2414.3
20°	2522.6	2508.0	2490.4	2461.1	2417.2	2373.4	2358.7	2358.7	2370.4	2396.8	2396.8
22.5°	2592.8	2575.3	2546.0	2478.7	2405.5	2344.1	2329.5	2338.2	2352.9	2388.0	2385.1
25°	2671.8	2648.4	2598.7	2472.8	2367.5	2294.3	2297.3	2323.6	2349.9	2388.0	2388.0
27.5°	2759.6	2727.5	2628.0	2426.0	2282.6	2212.4	2238.7	2300.2	2338.2	2379.2	2385.1
30°	2856.2	2827.0	2651.4	2344.1	2145.1	2080.7	2145.1	2244.6	2303.1	2341.2	2349.9
32.5°	2973.3	2949.9	2671.8	2238.7	1966.6	1911.0	2004.6	2127.5	2221.2	2265.1	2273.9
35°	3119.6	3096.2	2698.2	2118.7	1799.8	1741.2	1826.1	1951.9	2074.9	2130.5	2148.0
37.5°	3309.8	3274.7	2721.6	1990.0	1659.3	1592.0	1633.0	1747.1	1858.3	1934.4	1954.9
40°	3552.7	3497.1	2742.1	1843.7	1536.4	1460.3	1474.9	1530.5	1594.9	1662.2	1688.6
42.5°	3895.1	3783.9	2745.0	1688.6	1410.5	1340.3	1334.5	1352.0	1352.0	1352.0	1360.8
45°	4372.1	4161.4	2750.9	1542.2	1281.8	1208.6	1191.1	1185.2	1141.3	1056.4	1050.6
47.5°	4975.0	4656.0	2777.2	1419.3	1147.2	1082.8	1059.4	1036.0	954.0	866.2	848.7
50°	5747.5	5229.6	2829.9	1302.3	1033.0	989.1	959.9	904.3	813.6	746.2	728.7
52.5°	6637.2	5911.4	2879.6	1179.4	948.2	918.9	883.8	816.5	719.9	678.9	673.1
55°	7658.5	6672.3	2979.1	1071.1	875.0	854.5	822.3	758.0	684.8	655.5	652.6
57.5°	8703.3	7523.9	3119.6	974.5	804.8	793.1	793.1	737.5	690.6	678.9	678.9
60°	9710.0	8255.5	3011.3	883.8	740.4	746.2	801.8	787.2	752.1	766.7	775.5
62.5°	10491.3	8685.7	2443.6	810.6	693.6	746.2	889.6	889.6	848.7	842.8	842.8
65°	10824.9	8679.8	1717.8	755.0	676.0	819.4	992.1	945.2	837.0	796.0	787.2
67.5°	10740.1	8299.4	1185.2	717.0	670.2	895.5	1038.9	907.2	784.3	749.2	722.8
70°	9993.8	7494.6	913.1	681.9	661.4	863.3	1024.3	863.3	743.3	711.1	687.7
72.5°	8062.4	6010.9	758.0	646.7	626.3	798.9	974.5	822.3	711.1	676.0	652.6
75°	5141.8	3781.0	640.9	599.9	559.0	717.0	907.2	781.4	676.0	629.2	611.6
77.5°	2472.8	1630.0	559.0	544.3	503.3	664.3	839.9	728.7	629.2	591.1	579.4
80°	1000.8	746.2	485.8	488.7	462.4	632.1	793.1	678.9	582.4	541.4	520.9
82.5°	520.9	433.1	409.7	421.4	421.4	602.8	758.0	638.0	541.4	523.8	456.5
85°	280.9	269.2	316.1	339.5	365.8	544.3	705.3	594.1	494.6	424.3	409.7
87.5°	137.5	175.6	178.5	204.9	254.6	436.0	594.1	497.5	412.6	342.4	336.5
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)