

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: P399892

Luminaire Tested: **ARCH-L-PA3-200-827-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399892  
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-PA3-200-827-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21242 lumens  
Efficiency: N/A  
Efficacy: 105.7 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

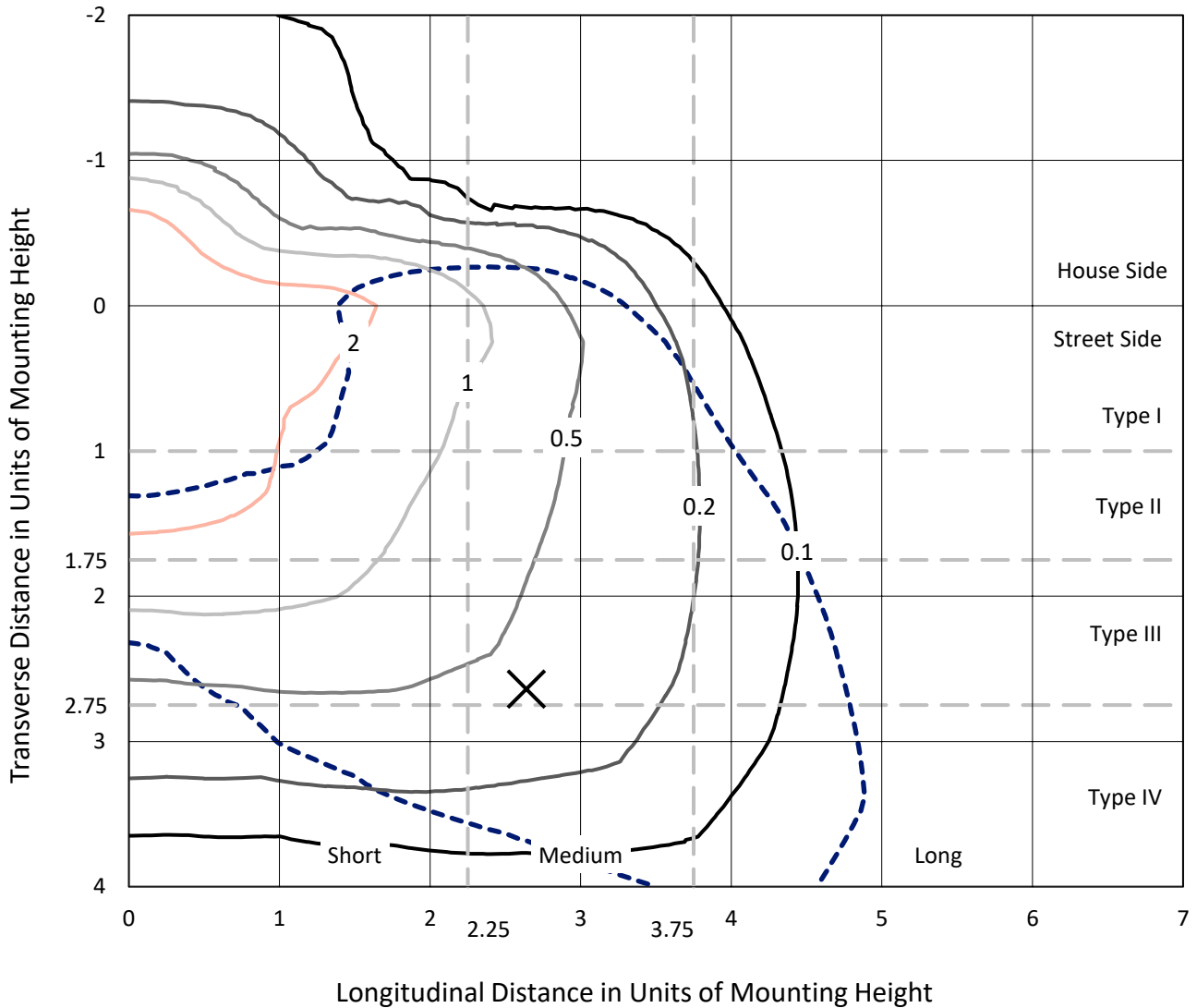
Input Watts (W): 201  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

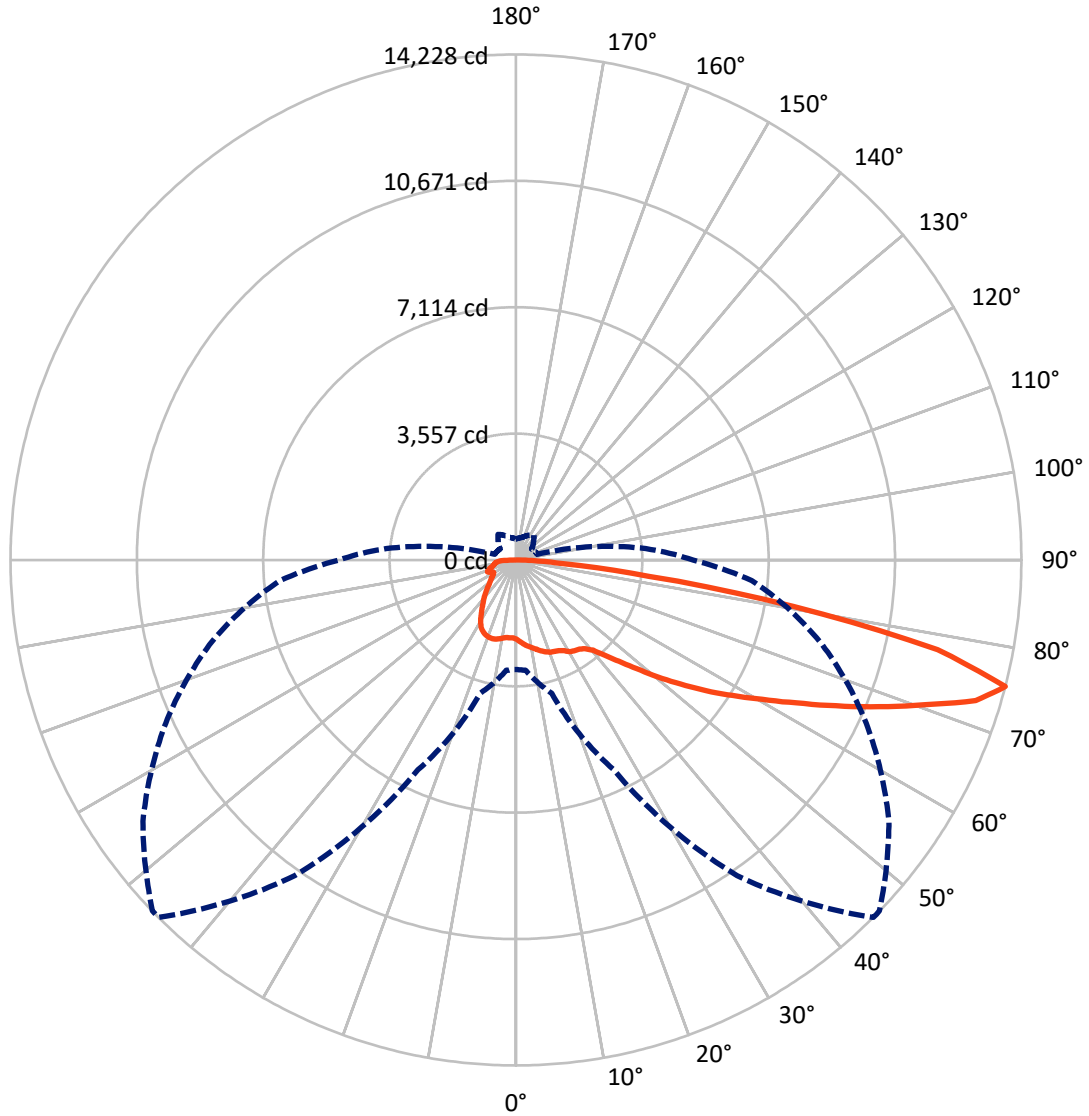
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 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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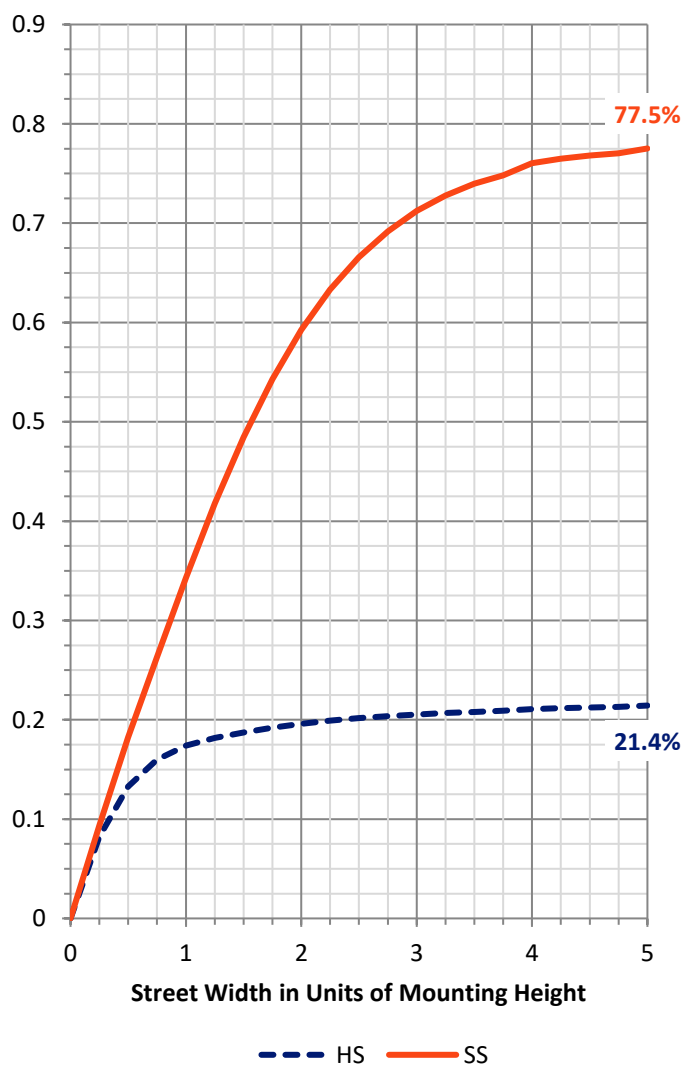
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4694.4	0.0	4694.4
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	16547.6	0.0	16547.6
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	21242.0	0.0	21242.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	220.7	1.0
10°-20°	702.1	3.3
20°-30°	1197.0	5.6
30°-40°	1677.2	7.9
40°-50°	2464.0	11.6
50°-60°	3921.5	18.5
60°-70°	5578.3	26.3
70°-80°	4670.7	22.0
80°-90°	810.6	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°	21242.0	100.0
0°-180°	21242.0	100.0

**Coefficient of Utilization**



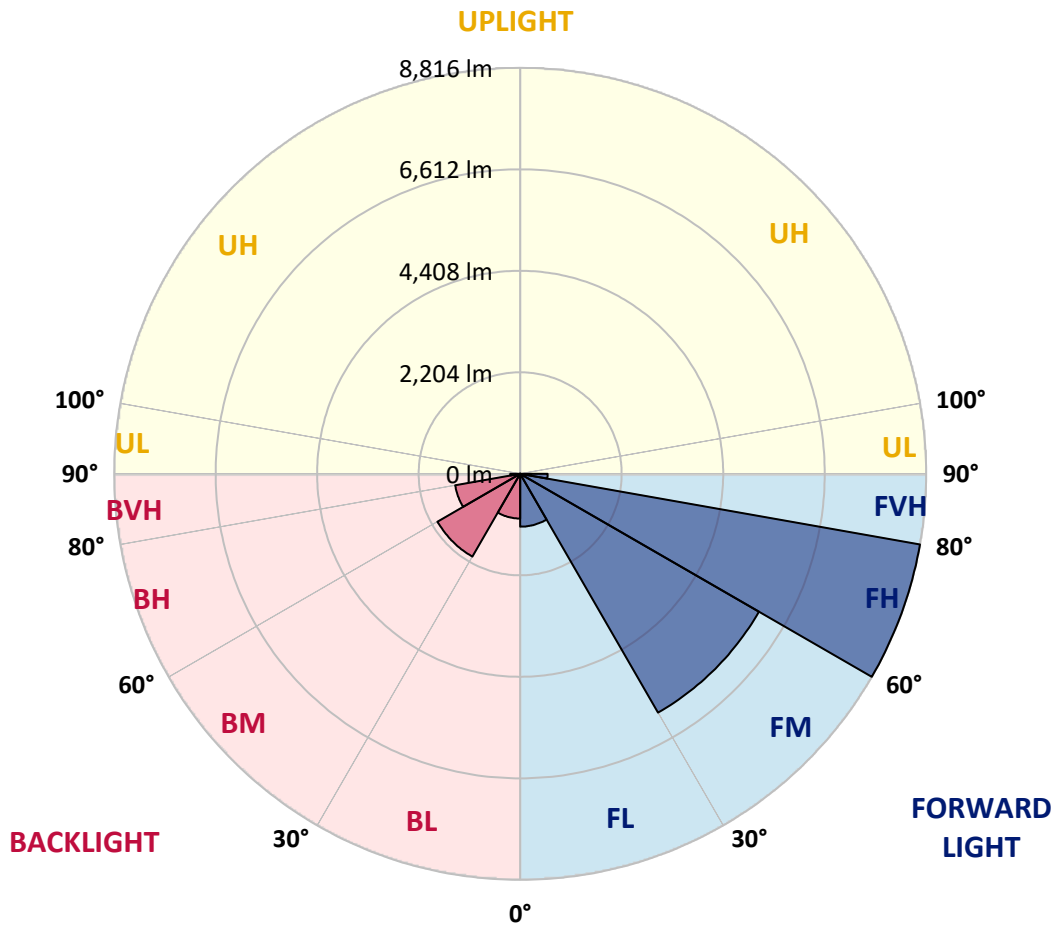
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1148.3	5.4			
FM (30°-60°)	5987.5	28.2			
FH (60°-80°)	8816.0	41.5			G4/12000
FVH (80°-90°)	595.9	2.8			G4/750
BL (0°-30°)	971.6	4.6	B2/1000		
BM (30°-60°)	2075.1	9.8	B2/2500		
BH (60°-80°)	1433.0	6.7	B3/2500		G3/2500
BVH (80°-90°)	214.7	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°	2230.9	2230.9	2230.9	2230.9	2230.9	2230.9	2230.9	2230.9	2230.9	2230.9	2230.9
2.5°	2358.6	2347.2	2341.6	2341.6	2318.9	2304.7	2301.8	2282.0	2264.9	2247.9	2233.7
5°	2494.8	2486.3	2469.3	2455.1	2423.9	2384.1	2378.5	2335.9	2293.3	2253.6	2219.5
7.5°	2619.7	2602.7	2582.8	2554.4	2503.3	2449.4	2440.9	2381.3	2321.7	2262.1	2216.7
10°	2724.7	2707.7	2679.3	2639.6	2574.3	2509.0	2500.5	2438.1	2375.6	2304.7	2239.4
12.5°	2824.1	2809.9	2767.3	2713.4	2636.7	2577.1	2568.6	2514.7	2449.4	2369.9	2284.8
15°	2909.2	2895.0	2849.6	2787.2	2699.2	2653.8	2642.4	2591.3	2526.1	2440.9	2352.9
17.5°	2951.8	2951.8	2903.5	2835.4	2753.1	2719.1	2710.5	2648.1	2588.5	2506.2	2418.2
20°	2966.0	2971.7	2937.6	2855.3	2784.3	2770.1	2761.6	2710.5	2642.4	2563.0	2480.6
22.5°	2974.5	2985.9	2957.5	2863.8	2804.2	2795.7	2790.0	2756.0	2702.0	2625.4	2543.1
25°	3002.9	3002.9	2983.0	2878.0	2829.7	2826.9	2826.9	2807.0	2770.1	2704.9	2622.6
27.5°	3045.5	3042.6	3017.1	2909.2	2886.5	2895.0	2892.2	2889.4	2863.8	2798.5	2710.5
30°	3116.4	3116.4	3088.0	2971.7	2957.5	2994.4	2997.2	3002.9	2963.1	2861.0	2790.0
32.5°	3224.3	3212.9	3184.5	3034.1	3011.4	3045.5	3051.1	3048.3	3014.2	2917.7	2883.7
35°	3556.3	3530.8	3428.6	3173.2	3059.6	3079.5	3082.4	3096.5	3102.2	3025.6	3008.6
37.5°	4138.2	4104.1	3948.0	3502.4	3212.9	3164.7	3161.8	3198.7	3229.9	3161.8	3161.8
40°	4771.1	4742.7	4651.9	4070.1	3496.7	3337.8	3326.4	3360.5	3400.2	3352.0	3366.2
42.5°	5316.1	5338.8	5347.3	4671.8	3922.5	3661.4	3630.1	3581.9	3644.3	3601.8	3658.5
45°	5724.8	5713.4	5869.5	5287.7	4473.1	4067.2	4024.7	3894.1	3973.6	3970.7	4095.6
47.5°	6159.0	6139.2	6204.4	5866.7	5100.4	4563.9	4498.6	4305.6	4424.9	4507.2	4714.4
50°	6570.6	6576.3	6599.0	6323.7	5781.5	5168.5	5086.2	4827.9	4998.2	5171.3	5463.7
52.5°	7107.0	7067.3	7038.9	6857.2	6545.0	5798.6	5744.6	5449.5	5687.9	5892.2	6281.1
55°	7575.3	7549.8	7532.8	7524.2	7183.6	6493.9	6437.2	6130.6	6474.1	6618.8	7192.2
57.5°	8074.9	8060.7	8151.5	8296.2	8160.0	7200.7	7141.1	6845.9	7229.1	7331.2	8179.9
60°	8441.0	8449.5	8699.3	9068.3	8974.6	7967.0	7896.0	7634.9	7964.2	8055.0	9167.6
62.5°	8443.8	8529.0	9108.0	9769.3	9877.2	8849.7	8767.4	8483.6	8719.1	8719.1	10053.1
65°	7637.8	7734.3	9034.2	9942.4	10791.1	9899.9	9820.4	9374.8	9462.8	9343.6	10884.7
67.5°	6834.5	6948.1	8171.4	9956.6	11432.5	11023.8	10930.2	10266.0	10115.6	9814.7	11466.6
70°	6300.9	6380.4	7402.2	9772.1	11818.5	12198.9	12127.9	11111.8	10629.3	10209.2	11344.5
72.5°	5304.7	5276.3	6252.7	8895.1	12034.2	13532.8	13473.2	12031.4	11074.9	10021.9	9675.6
75°	3079.5	3113.6	3879.9	6516.7	10847.8	14228.2	14222.5	12817.6	10879.1	8852.5	6667.1
77.5°	888.4	913.9	1274.4	2863.8	6860.1	12136.4	12525.3	11722.0	9196.0	6309.5	3457.0
80°	388.8	408.7	553.5	953.7	2954.6	7927.3	8267.9	7927.3	5546.0	2895.0	1356.7
82.5°	229.9	244.1	360.5	590.4	1416.3	3772.1	4231.9	3695.4	2392.7	1229.0	562.0
85°	130.6	136.2	207.2	374.7	891.2	1319.8	1481.6	1387.9	1166.5	698.2	295.2
87.5°	59.6	62.4	102.2	176.0	499.5	445.6	462.6	613.1	675.5	425.7	147.6
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°	2230.9	2230.9	2230.9	2230.9	2230.9	2230.9	2230.9	2230.9	2230.9	2230.9	2230.9
2.5°	2228.0	2219.5	2202.5	2196.8	2188.3	2191.1	2194.0	2194.0	2196.8	2188.3	2188.3
5°	2205.3	2191.1	2174.1	2174.1	2174.1	2196.8	2216.7	2228.0	2233.7	2233.7	2228.0
7.5°	2196.8	2179.8	2159.9	2165.6	2171.3	2199.7	2236.6	2273.4	2284.8	2284.8	2279.1
10°	2213.8	2196.8	2182.6	2191.1	2205.3	2228.0	2256.4	2290.5	2318.9	2321.7	2318.9
12.5°	2253.6	2233.7	2219.5	2236.6	2253.6	2267.8	2282.0	2296.2	2333.1	2338.7	2338.7
15°	2318.9	2299.0	2282.0	2296.2	2301.8	2301.8	2301.8	2301.8	2338.7	2344.4	2344.4
17.5°	2384.1	2367.1	2350.1	2352.9	2335.9	2313.2	2304.7	2301.8	2321.7	2338.7	2341.6
20°	2446.6	2432.4	2415.4	2387.0	2344.4	2301.8	2287.6	2287.6	2299.0	2324.5	2324.5
22.5°	2514.7	2497.7	2469.3	2404.0	2333.1	2273.4	2259.3	2267.8	2282.0	2316.0	2313.2
25°	2591.3	2568.6	2520.4	2398.3	2296.2	2225.2	2228.0	2253.6	2279.1	2316.0	2316.0
27.5°	2676.5	2645.3	2548.8	2352.9	2213.8	2145.7	2171.3	2230.9	2267.8	2307.5	2313.2
30°	2770.1	2741.8	2571.5	2273.4	2080.4	2018.0	2080.4	2176.9	2233.7	2270.6	2279.1
32.5°	2883.7	2861.0	2591.3	2171.3	1907.3	1853.4	1944.2	2063.4	2154.2	2196.8	2205.3
35°	3025.6	3002.9	2616.9	2054.9	1745.5	1688.8	1771.1	1893.1	2012.3	2066.3	2083.3
37.5°	3210.1	3176.0	2639.6	1930.0	1609.3	1544.0	1583.8	1694.4	1802.3	1876.1	1896.0
40°	3445.7	3391.7	2659.5	1788.1	1490.1	1416.3	1430.5	1484.4	1546.9	1612.1	1637.7
42.5°	3777.7	3669.9	2662.3	1637.7	1368.0	1299.9	1294.2	1311.3	1311.3	1311.3	1319.8
45°	4240.4	4036.0	2668.0	1495.8	1243.2	1172.2	1155.2	1149.5	1106.9	1024.6	1018.9
47.5°	4825.0	4515.7	2693.5	1376.6	1112.6	1050.2	1027.5	1004.7	925.3	840.1	823.1
50°	5574.3	5072.0	2744.6	1263.0	1001.9	959.3	931.0	877.0	789.0	723.8	706.7
52.5°	6437.2	5733.3	2792.9	1143.8	919.6	891.2	857.2	791.9	698.2	658.5	652.8
55°	7427.7	6471.2	2889.4	1038.8	848.6	828.8	797.6	735.1	664.2	635.8	632.9
57.5°	8441.0	7297.2	3025.6	945.1	780.5	769.2	769.2	715.2	669.8	658.5	658.5
60°	9417.4	8006.7	2920.6	857.2	718.1	723.8	777.7	763.5	729.4	743.6	752.1
62.5°	10175.2	8424.0	2369.9	786.2	672.7	723.8	862.8	862.8	823.1	817.4	817.4
65°	10498.7	8418.3	1666.1	732.3	655.6	794.7	962.2	916.8	811.7	772.0	763.5
67.5°	10416.4	8049.3	1149.5	695.4	650.0	868.5	1007.6	879.9	760.7	726.6	701.1
70°	9692.7	7268.8	885.5	661.3	641.4	837.3	993.4	837.3	720.9	689.7	667.0
72.5°	7819.4	5829.8	735.1	627.3	607.4	774.8	945.1	797.6	689.7	655.6	632.9
75°	4986.8	3667.0	621.6	581.8	542.1	695.4	879.9	757.8	655.6	610.2	593.2
77.5°	2398.3	1580.9	542.1	527.9	488.2	644.3	814.6	706.7	610.2	573.3	562.0
80°	970.7	723.8	471.2	474.0	448.4	613.1	769.2	658.5	564.8	525.1	505.2
82.5°	505.2	420.1	397.4	408.7	408.7	584.7	735.1	618.7	525.1	508.0	442.8
85°	272.5	261.1	306.5	329.2	354.8	527.9	684.0	576.2	479.7	411.5	397.4
87.5°	133.4	170.3	173.1	198.7	246.9	422.9	576.2	482.5	400.2	332.1	326.4
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)