

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: P237069

Luminaire Tested: **ARCH-L-AF72-160-D-U-T3-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237069  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-160-D-U-T3-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20286.2 lumens  
Efficiency: N/A  
Efficacy: 125.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G3

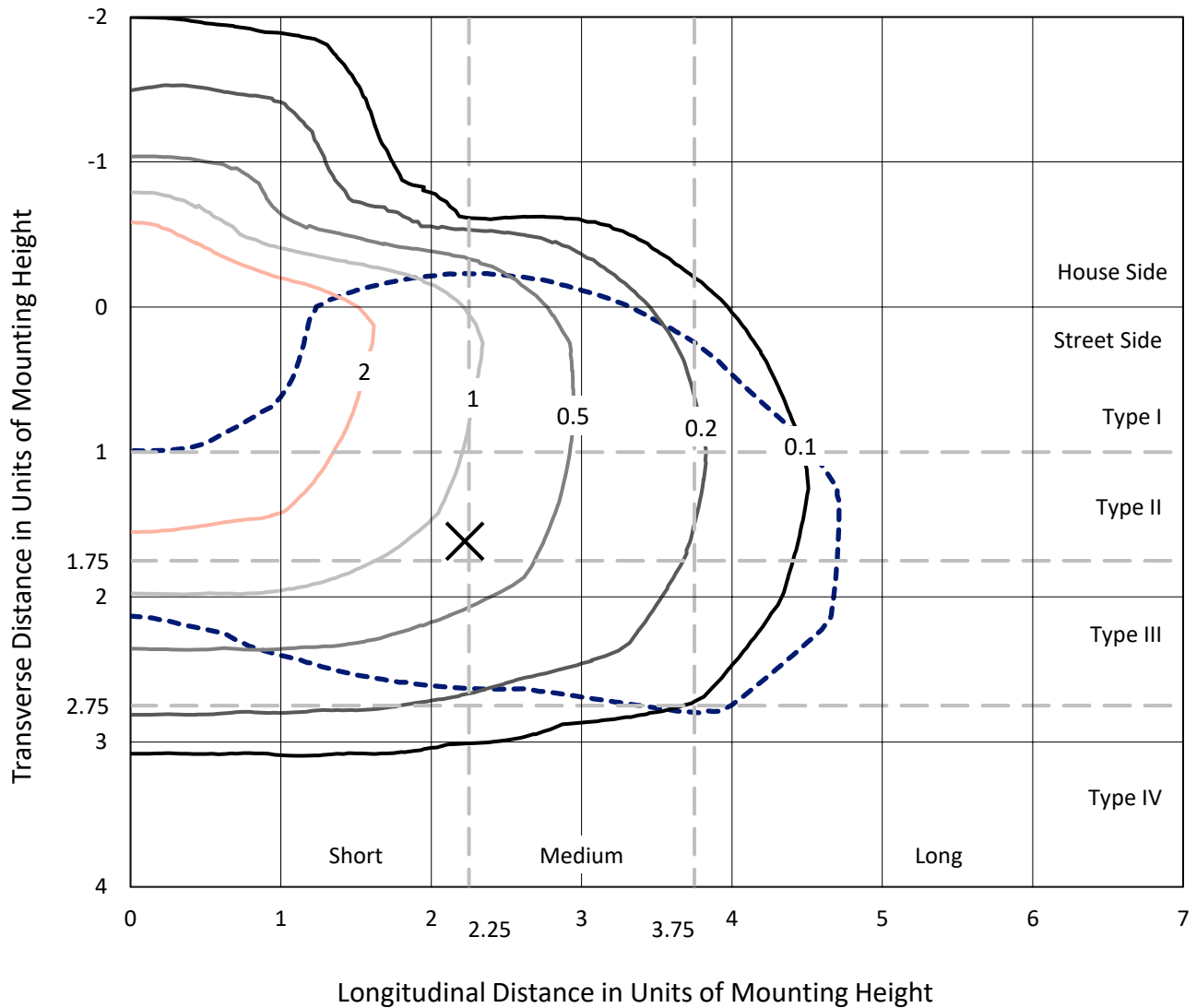
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

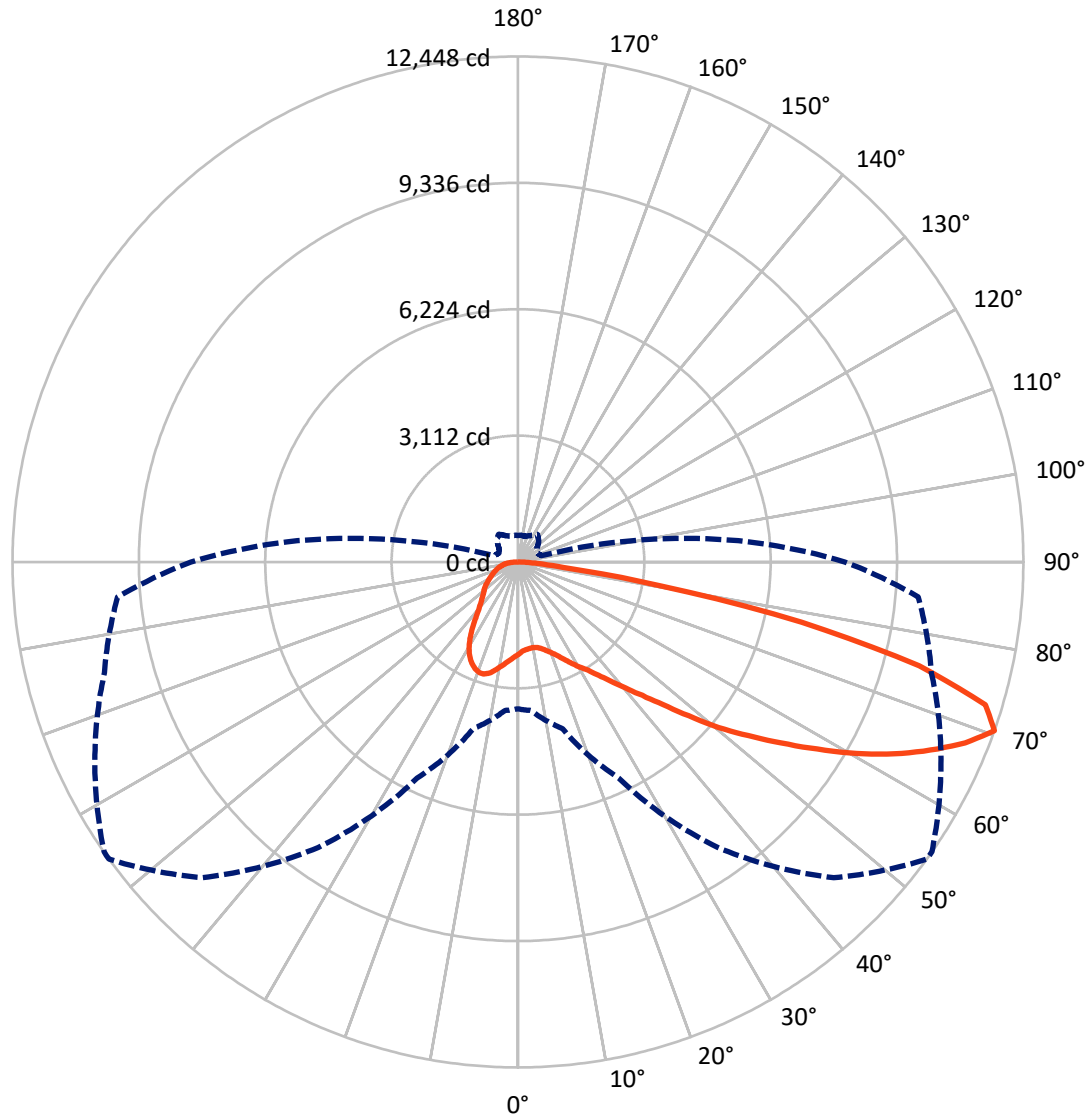
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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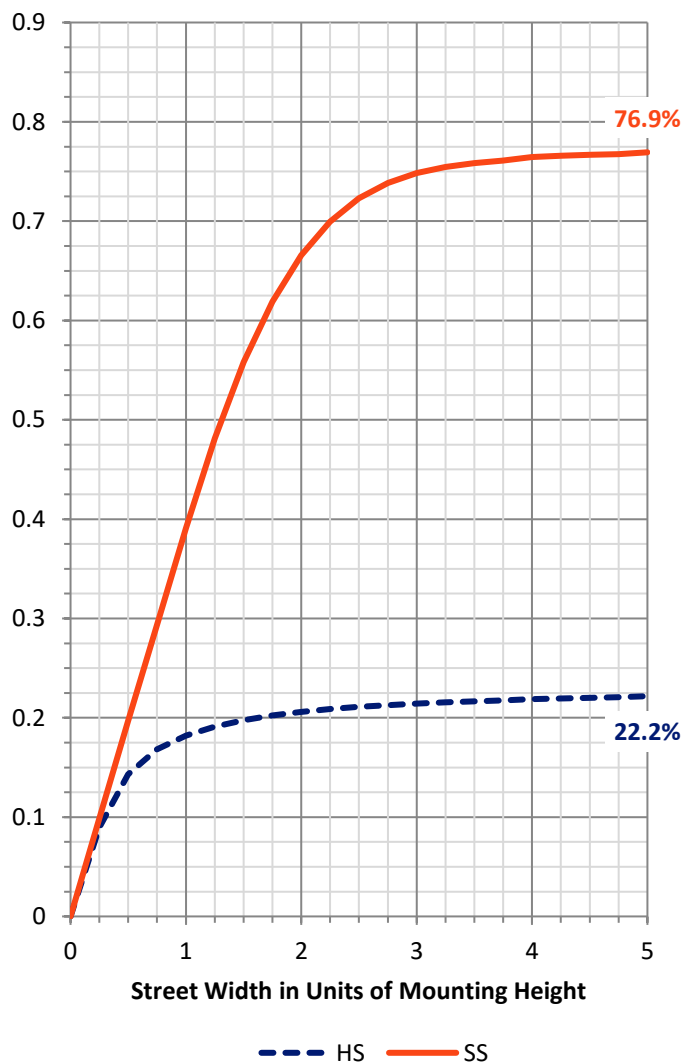
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4600.9	0.0	4600.9
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	15685.3	0.0	15685.3
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	20286.2	0.0	20286.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	222.7	1.1
10°-20°	711.7	3.5
20°-30°	1236.5	6.1
30°-40°	1806.9	8.9
40°-50°	2835.9	14.0
50°-60°	4361.0	21.5
60°-70°	5328.1	26.3
70°-80°	3303.4	16.3
80°-90°	479.9	2.4
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°	20286.2	100.0
0°-180°	20286.2	100.0

**Coefficient of Utilization**



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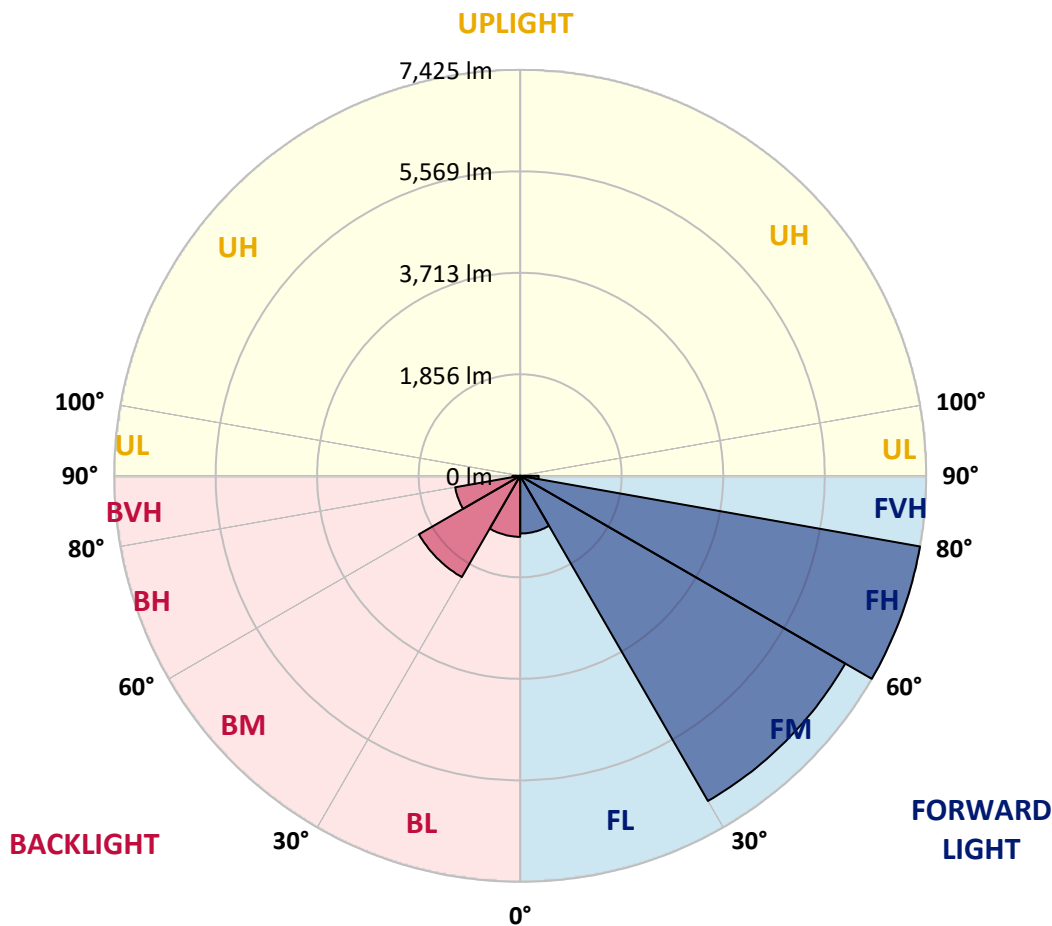
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1055.5	5.2			
FM (30°-60°)	6865.9	33.8			
FH (60°-80°)	7425.1	36.6			G3/7500
FVH (80°-90°)	338.9	1.7			G3/500
BL (0°-30°)	1115.4	5.5	B3/2500		
BM (30°-60°)	2137.9	10.5	B2/2500		
BH (60°-80°)	1206.5	5.9	B3/2500		G3/2500
BVH (80°-90°)	141.0	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7
2.5°	2180.5	2173.0	2173.0	2184.2	2187.9	2199.1	2199.1	2202.7	2213.9	2232.5	2254.8
5°	2113.6	2109.9	2113.6	2128.5	2135.9	2158.2	2165.6	2169.4	2191.6	2221.3	2254.8
7.5°	2046.8	2043.0	2050.5	2072.7	2095.0	2128.5	2147.1	2150.8	2184.2	2225.1	2269.7
10°	2024.5	2020.7	2031.9	2050.5	2072.7	2109.9	2139.7	2143.3	2191.6	2240.0	2303.0
12.5°	2054.2	2050.5	2061.6	2080.2	2102.4	2128.5	2161.9	2165.6	2228.8	2291.9	2358.8
15°	2128.5	2128.5	2132.2	2143.3	2165.6	2187.9	2217.6	2221.3	2288.2	2362.5	2429.4
17.5°	2243.6	2236.2	2236.2	2232.5	2247.4	2258.5	2295.6	2299.4	2370.0	2436.8	2503.6
20°	2384.8	2381.1	2366.2	2347.7	2343.9	2351.4	2388.5	2392.2	2462.8	2518.5	2581.7
22.5°	2555.7	2559.4	2526.0	2485.1	2466.5	2477.7	2511.1	2514.8	2566.8	2615.1	2670.8
25°	2782.2	2771.1	2722.7	2663.4	2626.3	2626.3	2659.7	2659.7	2707.9	2737.6	2774.7
27.5°	2997.6	2975.3	2930.8	2845.3	2785.9	2797.0	2830.5	2830.5	2875.0	2886.2	2904.7
30°	3231.7	3209.4	3153.7	3045.9	2967.9	2960.5	3001.4	2997.6	3057.1	3053.4	3038.5
32.5°	3517.7	3506.5	3413.7	3276.2	3172.3	3146.2	3183.4	3187.1	3224.2	3213.1	3164.8
35°	3918.9	3915.2	3829.7	3588.3	3450.9	3402.6	3424.8	3424.8	3450.9	3421.1	3339.4
37.5°	4424.1	4431.5	4357.3	4000.6	3807.4	3725.7	3729.4	3725.7	3733.2	3699.7	3614.3
40°	4929.2	4947.8	4944.1	4513.2	4268.1	4126.9	4075.0	4067.5	4086.1	4071.2	3989.5
42.5°	5594.2	5638.8	5534.7	5144.7	4869.8	4632.0	4490.9	4472.3	4513.2	4531.7	4453.7
45°	6285.0	6270.2	6106.8	5824.5	5575.6	5271.0	5003.5	4973.8	5003.5	5059.2	4977.6
47.5°	6645.3	6634.2	6593.4	6452.2	6415.0	6066.0	5661.0	5635.0	5579.4	5657.3	5560.8
50°	7239.7	7250.9	7083.8	7068.8	7224.9	7031.7	6403.9	6344.4	6244.1	6307.3	6225.6
52.5°	7670.6	7622.4	7518.3	7648.3	8134.9	8030.9	7102.3	7076.2	6983.5	6968.5	6931.4
55°	7845.3	7845.3	7863.8	8164.6	8859.3	8721.8	7860.1	7886.2	7759.8	7655.8	7704.1
57.5°	7897.3	7919.5	8079.1	8577.0	9710.0	9260.5	8695.8	8733.0	8550.9	8342.9	8495.2
60°	7640.9	7707.8	8090.3	8811.0	10189.1	9832.5	9576.2	9587.4	9323.6	9019.1	9286.5
62.5°	6983.5	7065.1	7748.6	8907.6	10111.1	10419.4	10408.2	10434.3	10073.9	9695.1	10029.4
65°	6177.4	6259.0	6987.1	8636.4	10051.7	10839.2	11169.8	11240.4	10776.0	10267.1	10493.7
67.5°	4992.4	5100.1	5791.1	7722.7	9762.0	11184.7	11882.9	11957.3	11318.3	10564.3	10452.9
70°	3618.0	3670.0	4249.5	5869.1	8580.6	10995.2	12447.6	12443.9	11496.7	10542.0	9895.6
72.5°	1742.1	1783.0	2284.5	3644.1	6136.5	9331.1	12038.9	12109.5	11251.5	10218.8	8621.5
75°	717.0	757.8	924.9	1537.9	3220.5	6166.3	10203.9	10371.1	10218.8	9171.3	6745.6
77.5°	445.8	460.6	542.4	795.0	1470.9	2878.8	7143.2	7369.7	8097.7	7347.4	4453.7
80°	334.4	345.5	405.0	557.2	928.6	1062.3	3547.4	3833.5	4907.0	4216.1	2017.0
82.5°	278.6	282.3	323.2	405.0	631.5	609.2	1136.7	1266.7	2288.2	1608.4	694.7
85°	260.0	267.4	289.7	289.7	401.2	382.6	471.8	494.1	665.0	549.8	241.5
87.5°	133.8	126.3	256.3	226.6	208.0	185.7	200.6	215.5	248.9	263.8	107.7
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°	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7
2.5°	2262.2	2273.3	2291.9	2310.5	2332.8	2358.8	2373.6	2392.2	2407.1	2399.7	2395.9
5°	2273.3	2291.9	2332.8	2370.0	2414.5	2466.5	2500.0	2537.1	2566.8	2574.2	2563.1
7.5°	2291.9	2325.4	2381.1	2448.0	2507.4	2574.2	2626.3	2678.2	2715.3	2722.7	2722.7
10°	2336.5	2373.6	2448.0	2537.1	2607.7	2678.2	2737.6	2778.5	2811.9	2826.7	2826.7
12.5°	2399.7	2444.2	2533.4	2641.2	2719.0	2785.9	2819.3	2837.9	2852.8	2867.6	2871.4
15°	2473.9	2522.2	2630.0	2745.0	2826.7	2860.2	2860.2	2856.5	2856.5	2863.9	2871.4
17.5°	2548.3	2600.3	2711.6	2834.1	2886.2	2867.6	2841.7	2830.5	2823.0	2819.3	2830.5
20°	2626.3	2678.2	2789.6	2904.7	2889.9	2811.9	2774.7	2748.8	2726.4	2715.3	2730.2
22.5°	2711.6	2759.9	2875.0	2953.1	2841.7	2722.7	2652.3	2611.4	2574.2	2552.0	2566.8
25°	2811.9	2860.2	2971.7	2967.9	2756.2	2589.1	2477.7	2410.8	2370.0	2347.7	2347.7
27.5°	2930.8	2971.7	3079.4	2930.8	2637.4	2410.8	2247.4	2184.2	2173.0	2154.5	2154.5
30°	3053.4	3086.8	3179.7	2845.3	2473.9	2176.8	1998.5	1968.8	1972.4	1953.9	1957.6
32.5°	3179.7	3213.1	3239.1	2719.0	2262.2	1913.0	1794.1	1771.8	1768.2	1753.3	1738.5
35°	3358.0	3406.2	3246.5	2548.3	2005.9	1693.8	1608.4	1586.1	1563.8	1511.8	1511.8
37.5°	3629.1	3681.2	3227.9	2336.5	1742.1	1523.0	1445.0	1415.2	1378.1	1326.1	1307.5
40°	4000.6	4000.6	3187.1	2098.8	1530.4	1385.5	1311.2	1274.1	1233.2	1181.2	1170.0
42.5°	4438.9	4335.0	3123.9	1857.3	1374.4	1292.6	1225.8	1184.9	1136.7	1077.2	1069.7
45°	4951.5	4669.2	3034.7	1641.8	1259.2	1237.0	1196.1	1125.5	1043.8	980.6	969.4
47.5°	5449.3	4970.1	2949.4	1489.5	1162.6	1214.6	1181.2	1062.3	950.9	861.8	850.7
50°	5995.4	5237.6	2849.1	1363.2	1088.3	1199.7	1162.6	969.4	847.0	783.8	776.4
52.5°	6541.4	5508.8	2741.4	1229.5	1025.2	1170.0	1118.0	902.6	843.3	757.8	746.7
55°	7117.1	5824.5	2615.1	1080.9	950.9	1110.6	1058.6	898.8	869.2	757.8	731.8
57.5°	7678.0	6173.7	2410.8	936.1	869.2	1021.5	1036.4	876.7	813.6	750.4	720.7
60°	8298.3	6545.0	2072.7	813.6	798.6	947.2	1006.6	828.4	750.4	728.1	713.3
62.5°	8796.1	6879.4	1619.5	728.1	739.2	887.8	969.4	798.6	724.4	705.9	702.1
65°	9011.6	6886.8	1162.6	653.8	679.8	832.1	932.3	772.7	702.1	694.7	690.9
67.5°	8785.0	6507.9	817.3	583.2	616.7	780.1	884.1	746.7	679.8	683.5	676.1
70°	8053.2	5709.4	598.0	516.4	557.2	724.4	832.1	713.3	653.8	661.2	650.1
72.5°	6738.2	4450.0	479.2	460.6	508.9	665.0	780.1	676.1	613.0	616.7	594.4
75°	4977.6	2949.4	401.2	412.4	453.2	609.2	713.3	627.8	568.3	553.5	538.6
77.5°	2960.5	1515.5	330.6	360.3	405.0	542.4	638.9	568.3	520.1	494.1	482.9
80°	1222.1	613.0	271.2	304.7	352.9	482.9	564.7	497.7	464.4	438.3	423.5
82.5°	486.6	300.9	215.5	248.9	297.1	419.8	494.1	438.3	405.0	386.3	345.5
85°	185.7	148.6	144.9	174.6	222.9	323.2	408.6	367.7	341.8	293.5	282.3
87.5°	74.3	66.8	66.8	85.4	126.3	204.4	293.5	256.3	267.4	211.8	215.5
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)