

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: P399415

Luminaire Tested: **ARCH-L-PA3-140-727-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399415  
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-PA3-140-727-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18718 lumens  
Efficiency: N/A  
Efficacy: 130.9 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

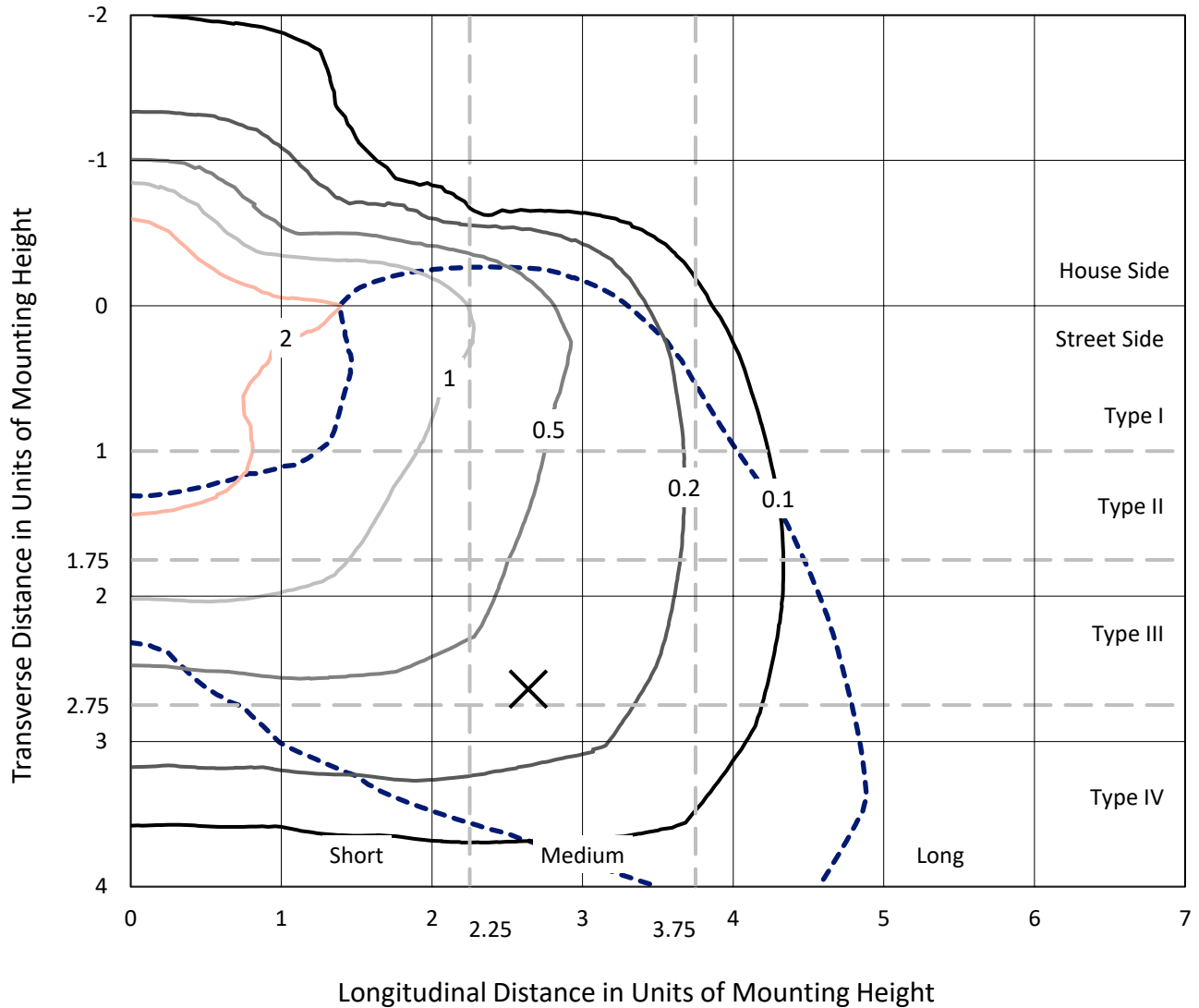
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

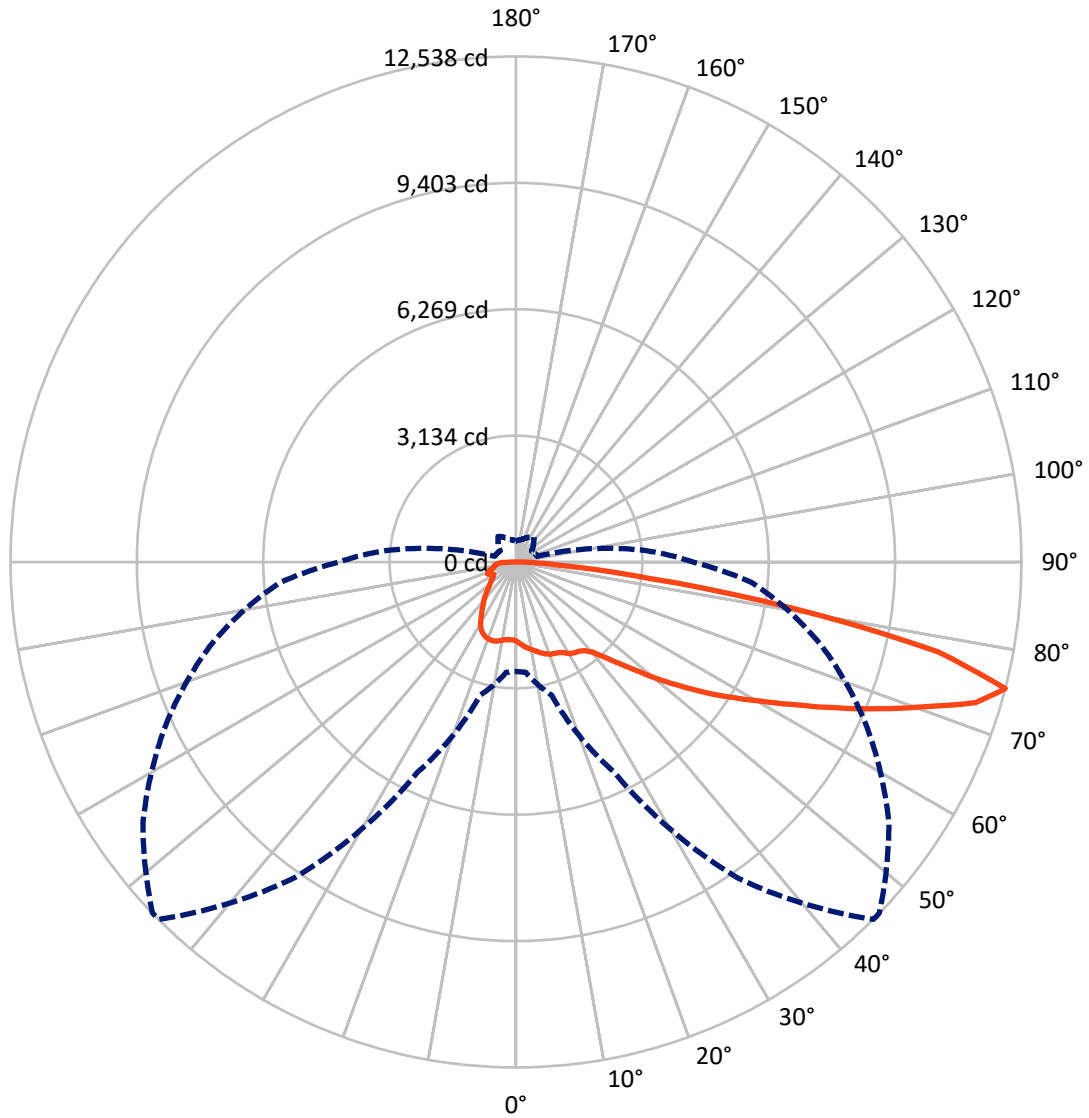
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 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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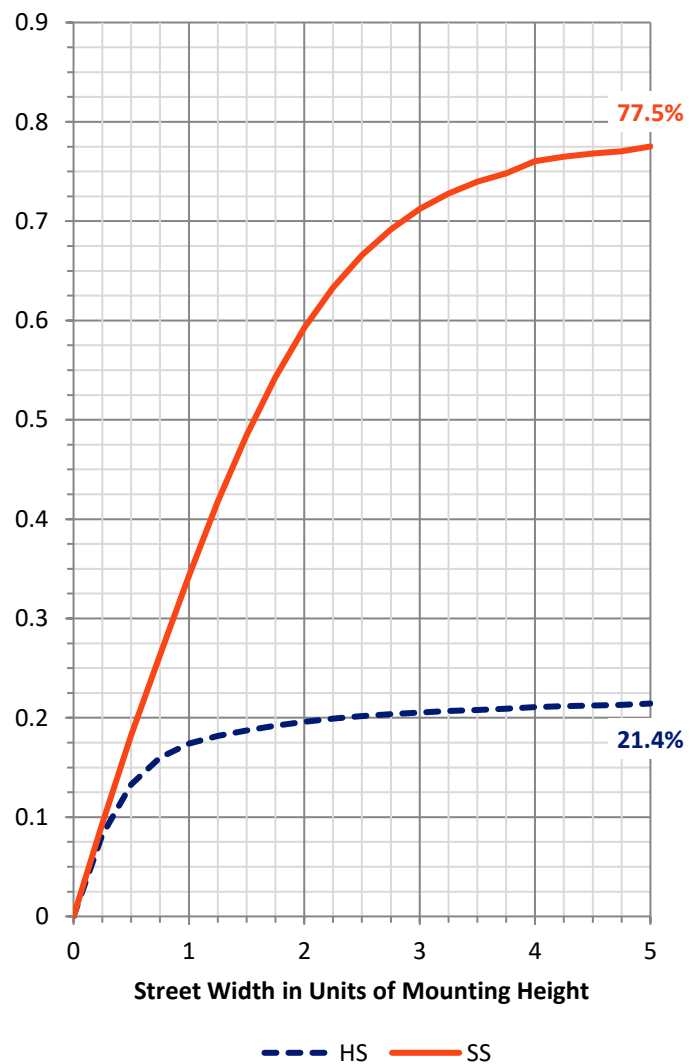
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4136.6	0.0	4136.6
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	14581.4	0.0	14581.4
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	18718.0	0.0	18718.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.5	1.0
10°-20°	618.7	3.3
20°-30°	1054.8	5.6
30°-40°	1477.9	7.9
40°-50°	2171.2	11.6
50°-60°	3455.5	18.5
60°-70°	4915.5	26.3
70°-80°	4115.7	22.0
80°-90°	714.3	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°	18718.0	100.0
0°-180°	18718.0	100.0

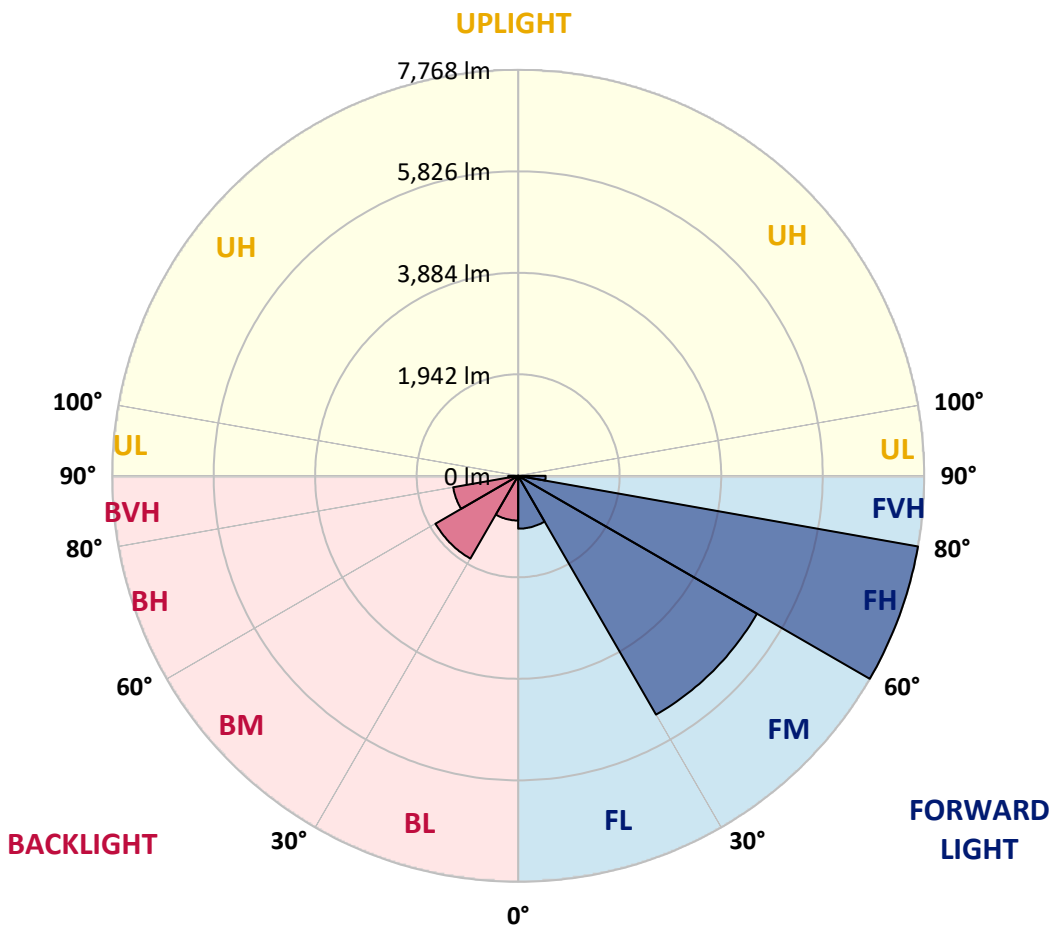


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1011.8	5.4			
FM (30°-60°)	5276.0	28.2			
FH (60°-80°)	7768.4	41.5			G4/12000
FVH (80°-90°)	525.1	2.8			G4/750
BL (0°-30°)	856.1	4.6	B2/1000		
BM (30°-60°)	1828.6	9.8	B2/2500		
BH (60°-80°)	1262.7	6.7	B3/2500		G3/2500
BVH (80°-90°)	189.2	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°	1965.8	1965.8	1965.8	1965.8	1965.8	1965.8	1965.8	1965.8	1965.8	1965.8	1965.8
2.5°	2078.3	2068.3	2063.3	2063.3	2043.3	2030.8	2028.3	2010.8	1995.8	1980.8	1968.3
5°	2198.4	2190.9	2175.9	2163.4	2135.9	2100.9	2095.9	2058.3	2020.8	1985.8	1955.8
7.5°	2308.4	2293.4	2275.9	2250.9	2205.9	2158.4	2150.9	2098.4	2045.8	1993.3	1953.3
10°	2401.0	2386.0	2361.0	2325.9	2268.4	2210.9	2203.4	2148.4	2093.4	2030.8	1973.3
12.5°	2488.5	2476.0	2438.5	2391.0	2323.4	2270.9	2263.4	2215.9	2158.4	2088.3	2013.3
15°	2563.5	2551.0	2511.0	2456.0	2378.5	2338.5	2328.4	2283.4	2225.9	2150.9	2073.3
17.5°	2601.1	2601.1	2558.5	2498.5	2426.0	2396.0	2388.5	2333.4	2280.9	2208.4	2130.9
20°	2613.6	2618.6	2588.6	2516.0	2453.5	2441.0	2433.5	2388.5	2328.4	2258.4	2185.9
22.5°	2621.1	2631.1	2606.1	2523.5	2471.0	2463.5	2458.5	2428.5	2381.0	2313.4	2240.9
25°	2646.1	2646.1	2628.6	2536.0	2493.5	2491.0	2491.0	2473.5	2441.0	2383.5	2310.9
27.5°	2683.6	2681.1	2658.6	2563.5	2543.5	2551.0	2548.5	2546.0	2523.5	2466.0	2388.5
30°	2746.1	2746.1	2721.1	2618.6	2606.1	2638.6	2641.1	2646.1	2611.1	2521.0	2458.5
32.5°	2841.2	2831.2	2806.1	2673.6	2653.6	2683.6	2688.6	2686.1	2656.1	2571.0	2541.0
35°	3133.8	3111.3	3021.2	2796.1	2696.1	2713.6	2716.1	2728.6	2733.6	2666.1	2651.1
37.5°	3646.5	3616.5	3478.9	3086.3	2831.2	2788.6	2786.1	2818.6	2846.2	2786.1	2786.1
40°	4204.2	4179.2	4099.2	3586.5	3081.3	2941.2	2931.2	2961.2	2996.2	2953.7	2966.2
42.5°	4684.4	4704.4	4711.9	4116.7	3456.4	3226.3	3198.8	3156.3	3211.3	3173.8	3223.8
45°	5044.6	5034.5	5172.1	4659.4	3941.6	3584.0	3546.4	3431.4	3501.4	3498.9	3609.0
47.5°	5427.2	5409.7	5467.2	5169.6	4494.3	4021.6	3964.1	3794.0	3899.1	3971.6	4154.2
50°	5789.9	5794.9	5814.9	5572.3	5094.6	4554.4	4481.8	4254.2	4404.3	4556.9	4814.5
52.5°	6262.5	6227.5	6202.5	6042.5	5767.3	5109.6	5062.1	4802.0	5012.0	5192.1	5534.8
55°	6675.2	6652.7	6637.7	6630.2	6330.1	5722.3	5672.3	5402.2	5704.8	5832.4	6337.6
57.5°	7115.4	7102.9	7182.9	7310.5	7190.4	6345.1	6292.6	6032.5	6370.1	6460.1	7207.9
60°	7438.0	7445.5	7665.6	7990.8	7908.2	7020.4	6957.8	6727.7	7017.9	7097.9	8078.3
62.5°	7440.5	7515.6	8025.8	8608.5	8703.5	7798.2	7725.6	7475.5	7683.1	7683.1	8858.6
65°	6730.2	6815.3	7960.7	8761.1	9508.9	8723.5	8653.5	8260.9	8338.4	8233.3	9591.4
67.5°	6022.4	6122.5	7200.4	8773.6	10074.1	9714.0	9631.4	9046.2	8913.6	8648.5	10104.1
70°	5552.3	5622.3	6522.7	8611.0	10414.2	10749.4	10686.8	9791.5	9366.3	8996.2	9996.6
72.5°	4674.4	4649.4	5509.7	7838.2	10604.3	11924.9	11872.3	10601.8	9759.0	8831.1	8526.0
75°	2713.6	2743.6	3418.9	5742.3	9558.9	12537.6	12532.6	11294.6	9586.4	7800.7	5874.9
77.5°	782.8	805.3	1123.0	2523.5	6045.0	10694.3	11037.0	10329.2	8103.3	5559.8	3046.2
80°	342.6	360.1	487.7	840.3	2603.6	6985.3	7285.5	6985.3	4887.0	2551.0	1195.5
82.5°	202.6	215.1	317.6	520.2	1248.0	3323.9	3729.0	3256.3	2108.4	1082.9	495.2
85°	115.0	120.0	182.6	330.1	785.3	1163.0	1305.5	1223.0	1027.9	615.3	260.1
87.5°	52.5	55.0	90.0	155.1	440.2	392.7	407.7	540.2	595.2	375.2	130.1
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°	1965.8	1965.8	1965.8	1965.8	1965.8	1965.8	1965.8	1965.8	1965.8	1965.8	1965.8
2.5°	1963.3	1955.8	1940.8	1935.8	1928.3	1930.8	1933.3	1933.3	1935.8	1928.3	1928.3
5°	1943.3	1930.8	1915.8	1915.8	1915.8	1935.8	1953.3	1963.3	1968.3	1968.3	1963.3
7.5°	1935.8	1920.8	1903.3	1908.3	1913.3	1938.3	1970.8	2003.3	2013.3	2013.3	2008.3
10°	1950.8	1935.8	1923.3	1930.8	1943.3	1963.3	1988.3	2018.3	2043.3	2045.8	2043.3
12.5°	1985.8	1968.3	1955.8	1970.8	1985.8	1998.3	2010.8	2023.3	2055.8	2060.8	2060.8
15°	2043.3	2025.8	2010.8	2023.3	2028.3	2028.3	2028.3	2028.3	2060.8	2065.8	2065.8
17.5°	2100.9	2085.8	2070.8	2073.3	2058.3	2038.3	2030.8	2028.3	2045.8	2060.8	2063.3
20°	2155.9	2143.4	2128.4	2103.4	2065.8	2028.3	2015.8	2015.8	2025.8	2048.3	2048.3
22.5°	2215.9	2200.9	2175.9	2118.4	2055.8	2003.3	1990.8	1998.3	2010.8	2040.8	2038.3
25°	2283.4	2263.4	2220.9	2113.4	2023.3	1960.8	1963.3	1985.8	2008.3	2040.8	2040.8
27.5°	2358.5	2330.9	2245.9	2073.3	1950.8	1890.8	1913.3	1965.8	1998.3	2033.3	2038.3
30°	2441.0	2416.0	2265.9	2003.3	1833.2	1778.2	1833.2	1918.3	1968.3	2000.8	2008.3
32.5°	2541.0	2521.0	2283.4	1913.3	1680.7	1633.2	1713.2	1818.2	1898.3	1935.8	1943.3
35°	2666.1	2646.1	2305.9	1810.7	1538.1	1488.1	1560.6	1668.2	1773.2	1820.7	1835.7
37.5°	2828.7	2798.6	2325.9	1700.7	1418.1	1360.6	1395.6	1493.1	1588.1	1653.2	1670.7
40°	3036.2	2988.7	2343.5	1575.6	1313.0	1248.0	1260.5	1308.0	1363.1	1420.6	1443.1
42.5°	3328.9	3233.8	2346.0	1443.1	1205.5	1145.5	1140.5	1155.5	1155.5	1155.5	1163.0
45°	3736.5	3556.4	2351.0	1318.0	1095.4	1032.9	1017.9	1012.9	975.4	902.9	897.9
47.5°	4251.7	3979.1	2373.5	1213.0	980.4	925.4	905.4	885.4	815.3	740.3	725.3
50°	4912.0	4469.3	2418.5	1113.0	882.9	845.3	820.3	772.8	695.3	637.8	622.8
52.5°	5672.3	5052.1	2461.0	1007.9	810.3	785.3	755.3	697.8	615.3	580.2	575.2
55°	6545.2	5702.3	2546.0	915.4	747.8	730.3	702.8	647.8	585.2	560.2	557.7
57.5°	7438.0	6430.1	2666.1	832.8	687.8	677.8	677.8	630.3	590.2	580.2	580.2
60°	8298.4	7055.4	2573.5	755.3	632.8	637.8	685.3	672.8	642.8	655.3	662.8
62.5°	8966.1	7423.0	2088.3	692.8	592.7	637.8	760.3	760.3	725.3	720.3	720.3
65°	9251.3	7418.0	1468.1	645.3	577.7	700.3	847.8	807.8	715.3	680.3	672.8
67.5°	9178.7	7092.9	1012.9	612.7	572.7	765.3	887.9	775.3	670.3	640.3	617.8
70°	8541.0	6405.1	780.3	582.7	565.2	737.8	875.4	737.8	635.3	607.7	587.7
72.5°	6890.3	5137.1	647.8	552.7	535.2	682.8	832.8	702.8	607.7	577.7	557.7
75°	4394.3	3231.3	547.7	512.7	477.7	612.7	775.3	667.8	577.7	537.7	522.7
77.5°	2113.4	1393.1	477.7	465.2	430.2	567.7	717.8	622.8	537.7	505.2	495.2
80°	855.3	637.8	415.2	417.7	395.2	540.2	677.8	580.2	497.7	462.7	445.2
82.5°	445.2	370.2	350.1	360.1	360.1	515.2	647.8	545.2	462.7	447.7	390.2
85°	240.1	230.1	270.1	290.1	312.6	465.2	602.7	507.7	422.7	362.6	350.1
87.5°	117.5	150.1	152.6	175.1	217.6	372.7	507.7	425.2	352.6	292.6	287.6
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)