

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: P237107

Luminaire Tested: **ARCH-L-AF72-140-D-U-T3-7050**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237107  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-140-D-U-T3-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18915 lumens  
Efficiency: N/A  
Efficacy: 132.3 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

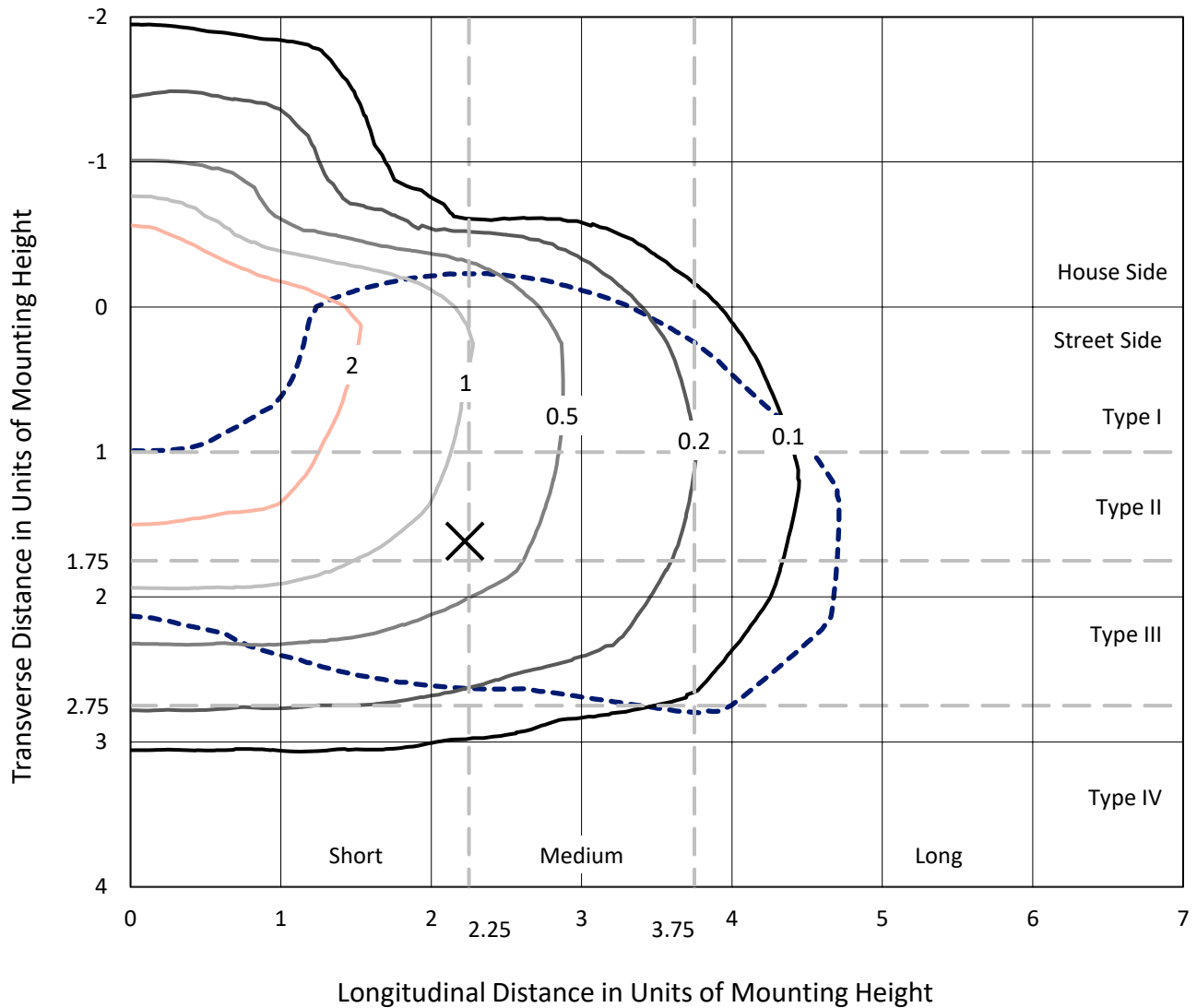
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

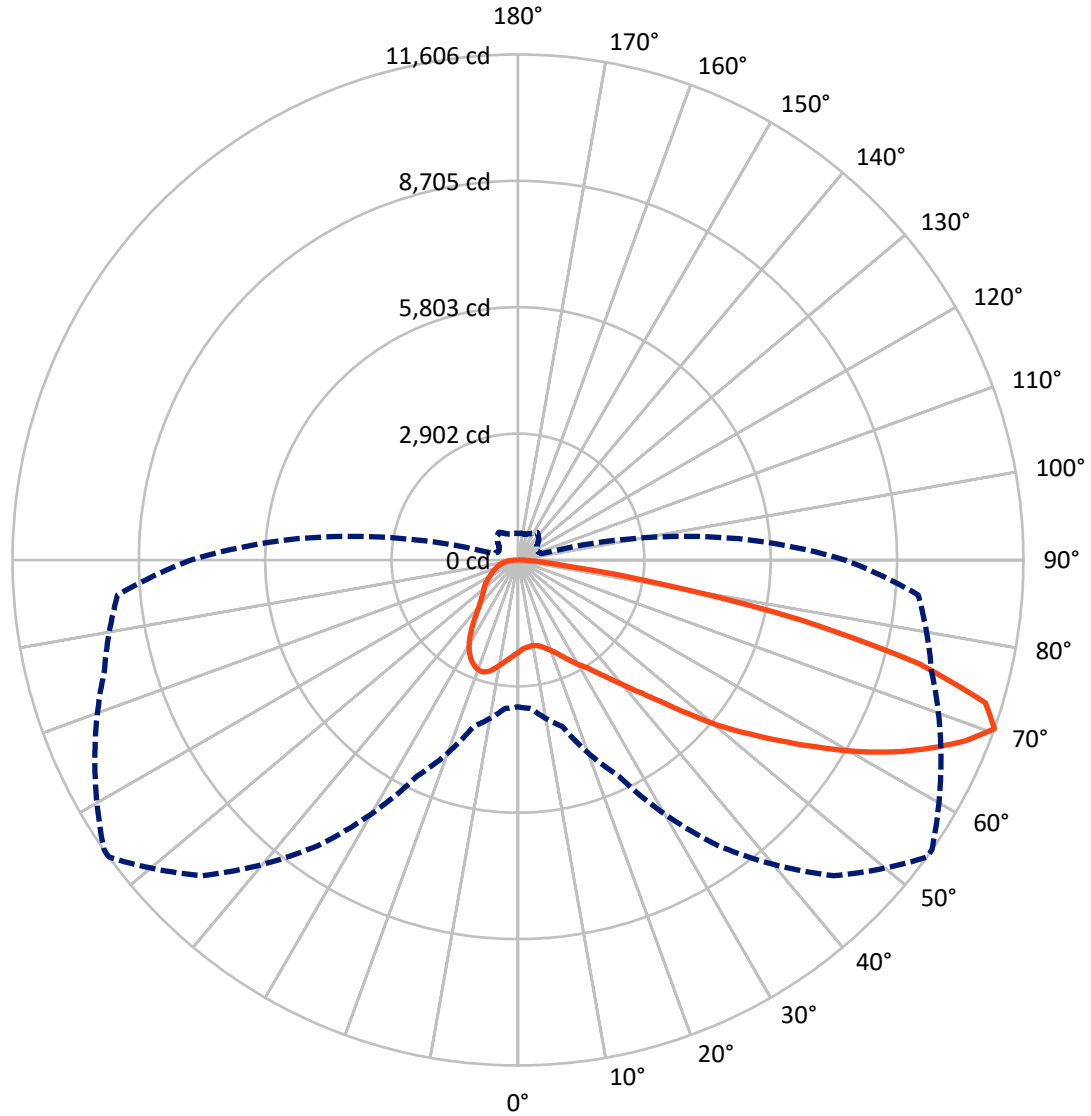
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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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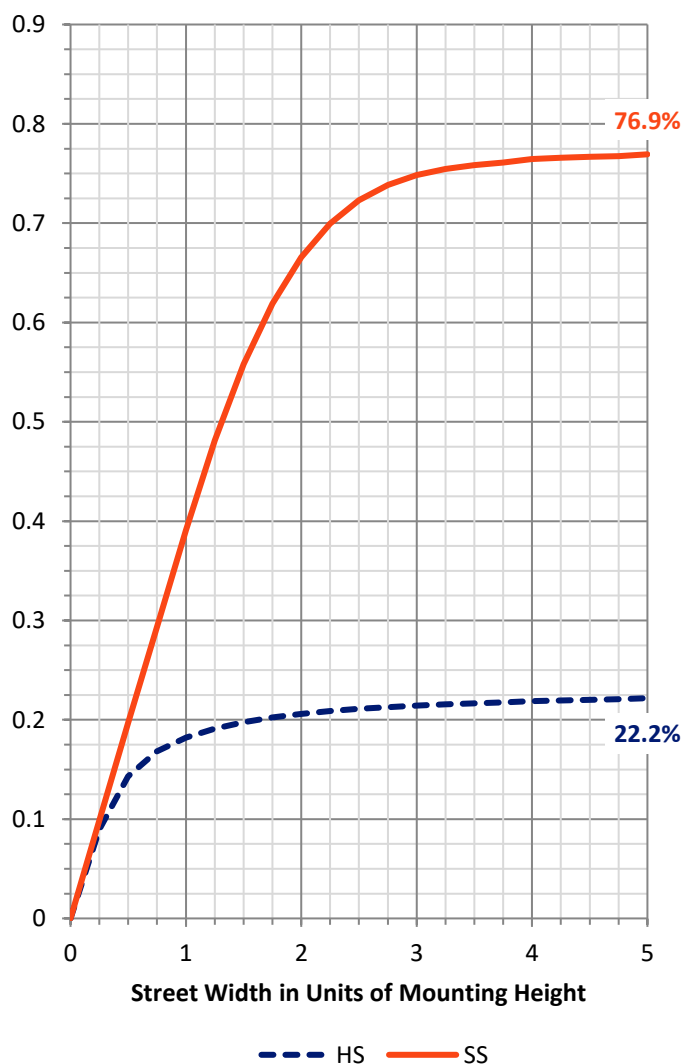
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4289.9	0.0	4289.9
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	14625.1	0.0	14625.1
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	18915.0	0.0	18915.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.7	1.1
10°-20°	663.6	3.5
20°-30°	1152.9	6.1
30°-40°	1684.8	8.9
40°-50°	2644.2	14.0
50°-60°	4066.2	21.5
60°-70°	4967.9	26.3
70°-80°	3080.1	16.3
80°-90°	447.5	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°	18915.0	100.0
0°-180°	18915.0	100.0

**Coefficient of Utilization**



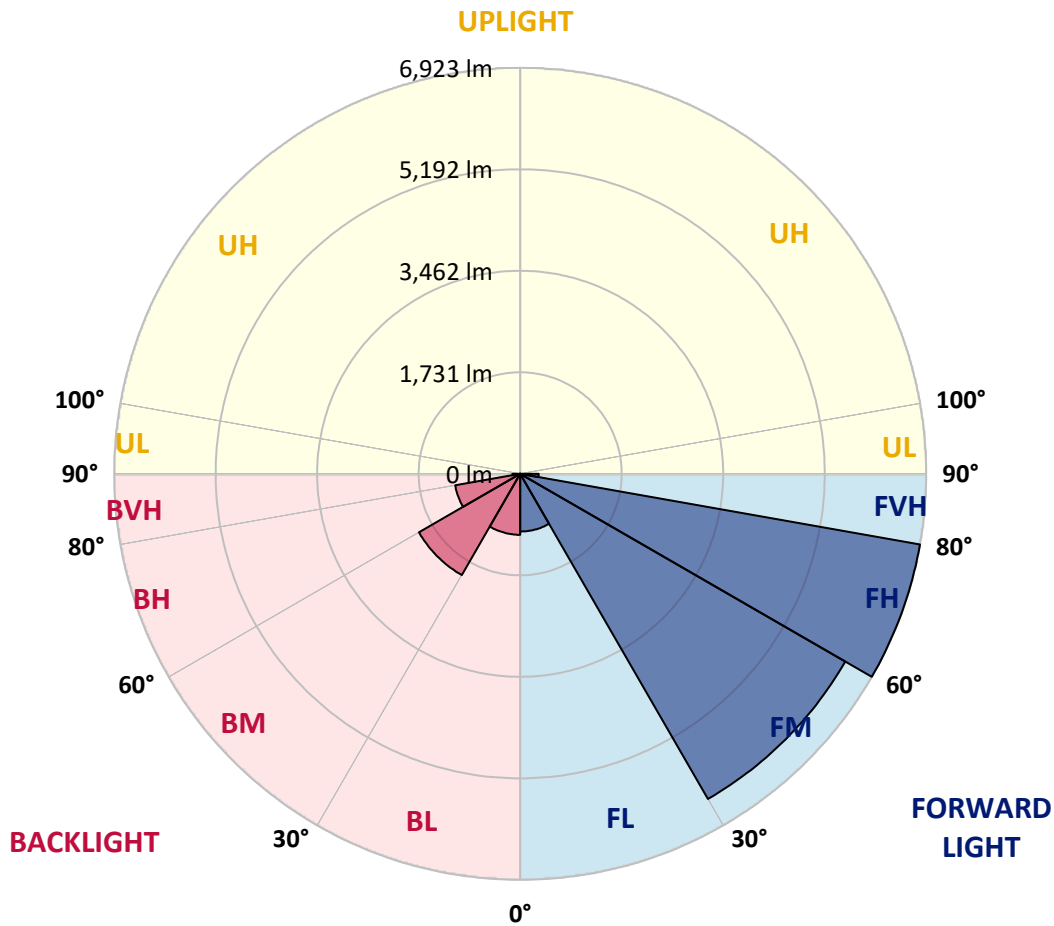
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	984.1	5.2			
FM (30°-60°)	6401.9	33.8			
FH (60°-80°)	6923.2	36.6			G3/7500
FVH (80°-90°)	316.0	1.7			G3/500
BL (0°-30°)	1040.0	5.5	B3/2500		
BM (30°-60°)	1993.4	10.5	B2/2500		
BH (60°-80°)	1124.9	5.9	B3/2500		G3/2500
BVH (80°-90°)	131.5	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°	2116.2	2116.2	2116.2	2116.2	2116.2	2116.2	2116.2	2116.2	2116.2	2116.2	2116.2
2.5°	2033.1	2026.2	2026.2	2036.5	2040.0	2050.4	2050.4	2053.9	2064.3	2081.6	2102.4
5°	1970.7	1967.3	1970.7	1984.6	1991.5	2012.3	2019.2	2022.7	2043.5	2071.2	2102.4
7.5°	1908.4	1904.9	1911.9	1932.6	1953.4	1984.6	2001.9	2005.4	2036.5	2074.6	2116.2
10°	1887.6	1884.2	1894.5	1911.9	1932.6	1967.3	1995.0	1998.4	2043.5	2088.5	2147.4
12.5°	1915.3	1911.9	1922.2	1939.6	1960.3	1984.6	2015.8	2019.2	2078.1	2137.0	2199.3
15°	1984.6	1984.6	1988.1	1998.4	2019.2	2040.0	2067.7	2071.2	2133.5	2202.8	2265.1
17.5°	2092.0	2085.0	2085.0	2081.6	2095.4	2105.8	2140.5	2143.9	2209.7	2272.1	2334.4
20°	2223.6	2220.1	2206.3	2188.9	2185.5	2192.4	2227.0	2230.5	2296.3	2348.3	2407.1
22.5°	2382.9	2386.4	2355.2	2317.1	2299.8	2310.2	2341.3	2344.8	2393.3	2438.3	2490.3
25°	2594.2	2583.8	2538.8	2483.3	2448.7	2448.7	2479.9	2479.9	2524.9	2552.6	2587.2
27.5°	2795.1	2774.3	2732.7	2653.1	2597.6	2608.0	2639.2	2639.2	2680.8	2691.1	2708.5
30°	3013.3	2992.5	2940.5	2840.1	2767.3	2760.4	2798.5	2795.1	2850.5	2847.0	2833.2
32.5°	3279.9	3269.6	3183.0	3054.8	2957.8	2933.6	2968.2	2971.7	3006.3	2995.9	2950.9
35°	3654.0	3650.5	3570.9	3345.8	3217.6	3172.6	3193.4	3193.4	3217.6	3189.9	3113.7
37.5°	4125.0	4132.0	4062.7	3730.2	3550.1	3473.9	3477.4	3473.9	3480.8	3449.7	3370.0
40°	4596.1	4613.4	4609.9	4208.2	3979.6	3848.0	3799.5	3792.5	3809.9	3796.0	3719.8
42.5°	5216.1	5257.6	5160.6	4797.0	4540.7	4319.0	4187.4	4170.1	4208.2	4225.5	4152.8
45°	5860.3	5846.4	5694.0	5430.8	5198.7	4914.7	4665.4	4637.6	4665.4	4717.3	4641.1
47.5°	6196.2	6185.8	6147.7	6016.1	5981.5	5655.9	5278.4	5254.1	5202.2	5274.9	5184.9
50°	6750.4	6760.8	6604.9	6591.1	6736.5	6556.4	5971.1	5915.7	5822.2	5881.0	5804.8
52.5°	7152.2	7107.1	7010.2	7131.4	7585.1	7488.1	6622.2	6598.0	6511.4	6497.6	6462.9
55°	7314.9	7314.9	7332.3	7612.8	8260.5	8132.3	7328.8	7353.0	7235.3	7138.3	7183.3
57.5°	7363.4	7384.2	7533.1	7997.3	9053.6	8634.5	8108.1	8142.7	7973.0	7779.1	7921.1
60°	7124.4	7186.8	7543.5	8215.5	9500.4	9167.9	8928.9	8939.3	8693.4	8409.4	8658.8
62.5°	6511.4	6587.6	7224.9	8305.5	9427.7	9715.2	9704.8	9729.0	9393.0	9039.8	9351.5
65°	5759.8	5836.0	6514.9	8052.7	9372.3	10106.5	10414.8	10480.6	10047.7	9573.2	9784.4
67.5°	4655.0	4755.4	5399.6	7200.6	9102.1	10428.6	11079.8	11149.0	10553.3	9850.2	9746.3
70°	3373.5	3422.0	3962.3	5472.4	8000.7	10252.0	11606.2	11602.8	10719.6	9829.5	9226.8
72.5°	1624.4	1662.5	2130.1	3397.7	5721.7	8700.3	11225.2	11291.1	10491.0	9528.1	8038.8
75°	668.5	706.6	862.4	1433.9	3002.9	5749.4	9514.3	9670.1	9528.1	8551.4	6289.7
77.5°	415.6	429.5	505.7	741.2	1371.6	2684.2	6660.3	6871.6	7550.5	6850.8	4152.8
80°	311.7	322.1	377.5	519.5	865.9	990.6	3307.7	3574.3	4575.3	3931.1	1880.7
82.5°	259.8	263.2	301.3	377.5	588.8	568.0	1059.8	1181.1	2133.5	1499.7	647.7
85°	242.4	249.4	270.2	270.2	374.1	356.7	439.9	460.6	620.0	512.6	225.1
87.5°	124.7	117.8	239.0	211.3	194.0	173.2	187.0	200.9	232.1	245.9	100.4
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°	2116.2	2116.2	2116.2	2116.2	2116.2	2116.2	2116.2	2116.2	2116.2	2116.2	2116.2
2.5°	2109.3	2119.7	2137.0	2154.3	2175.1	2199.3	2213.2	2230.5	2244.4	2237.4	2234.0
5°	2119.7	2137.0	2175.1	2209.7	2251.3	2299.8	2330.9	2365.6	2393.3	2400.2	2389.8
7.5°	2137.0	2168.2	2220.1	2282.5	2337.9	2400.2	2448.7	2497.2	2531.8	2538.8	2538.8
10°	2178.5	2213.2	2282.5	2365.6	2431.4	2497.2	2552.6	2590.7	2621.9	2635.7	2635.7
12.5°	2237.4	2279.0	2362.1	2462.6	2535.3	2597.6	2628.8	2646.1	2660.0	2673.8	2677.3
15°	2306.7	2351.7	2452.2	2559.5	2635.7	2666.9	2666.9	2663.4	2663.4	2670.4	2677.3
17.5°	2376.0	2424.5	2528.4	2642.7	2691.1	2673.8	2649.6	2639.2	2632.3	2628.8	2639.2
20°	2448.7	2497.2	2601.1	2708.5	2694.6	2621.9	2587.2	2563.0	2542.2	2531.8	2545.7
22.5°	2528.4	2573.4	2680.8	2753.5	2649.6	2538.8	2472.9	2434.8	2400.2	2379.4	2393.3
25°	2621.9	2666.9	2770.8	2767.3	2569.9	2414.1	2310.2	2247.8	2209.7	2188.9	2188.9
27.5°	2732.7	2770.8	2871.3	2732.7	2459.1	2247.8	2095.4	2036.5	2026.2	2008.8	2008.8
30°	2847.0	2878.2	2964.8	2653.1	2306.7	2029.6	1863.4	1835.7	1839.1	1821.8	1825.3
32.5°	2964.8	2995.9	3020.2	2535.3	2109.3	1783.7	1672.9	1652.1	1648.6	1634.8	1620.9
35°	3131.0	3176.0	3027.1	2376.0	1870.3	1579.4	1499.7	1478.9	1458.1	1409.6	1409.6
37.5°	3383.9	3432.3	3009.8	2178.5	1624.4	1420.0	1347.3	1319.6	1285.0	1236.5	1219.2
40°	3730.2	3730.2	2971.7	1956.9	1427.0	1291.9	1222.6	1188.0	1149.9	1101.4	1091.0
42.5°	4138.9	4041.9	2912.8	1731.8	1281.5	1205.3	1143.0	1104.9	1059.8	1004.4	997.5
45°	4616.9	4353.6	2829.7	1530.9	1174.1	1153.3	1115.3	1049.4	973.2	914.4	904.0
47.5°	5081.0	4634.2	2750.0	1388.9	1084.1	1132.6	1101.4	990.6	886.7	803.5	793.1
50°	5590.1	4883.6	2656.5	1271.1	1014.8	1118.7	1084.1	904.0	789.7	730.8	723.9
52.5°	6099.2	5136.4	2556.1	1146.4	955.9	1091.0	1042.5	841.6	786.2	706.6	696.2
55°	6636.1	5430.8	2438.3	1007.9	886.7	1035.6	987.1	838.2	810.5	706.6	682.3
57.5°	7159.1	5756.4	2247.8	872.8	810.5	952.5	966.3	817.4	758.5	699.6	671.9
60°	7737.5	6102.7	1932.6	758.5	744.7	883.2	938.6	772.4	699.6	678.8	665.0
62.5°	8201.6	6414.4	1510.1	678.8	689.2	827.8	904.0	744.7	675.4	658.1	654.6
65°	8402.5	6421.4	1084.1	609.6	633.8	775.8	869.3	720.4	654.6	647.7	644.2
67.5°	8191.2	6068.1	762.0	543.8	574.9	727.3	824.3	696.2	633.8	637.3	630.4
70°	7508.9	5323.4	557.6	481.4	519.5	675.4	775.8	665.0	609.6	616.5	606.1
72.5°	6282.8	4149.3	446.8	429.5	474.5	620.0	727.3	630.4	571.5	574.9	554.2
75°	4641.1	2750.0	374.1	384.4	422.5	568.0	665.0	585.3	529.9	516.1	502.2
77.5°	2760.4	1413.1	308.3	336.0	377.5	505.7	595.7	529.9	484.9	460.6	450.3
80°	1139.5	571.5	252.8	284.0	329.0	450.3	526.5	464.1	432.9	408.7	394.8
82.5°	453.7	280.5	200.9	232.1	277.1	391.4	460.6	408.7	377.5	360.2	322.1
85°	173.2	138.5	135.1	162.8	207.8	301.3	381.0	342.9	318.6	273.6	263.2
87.5°	69.3	62.3	62.3	79.7	117.8	190.5	273.6	239.0	249.4	197.4	200.9
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)