

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: P236862

Luminaire Tested: **ARCH-L-AF72-90-D-U-T2R-7050**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236862  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-90-D-U-T2R-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13166 lumens  
Efficiency: N/A  
Efficacy: 141.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2

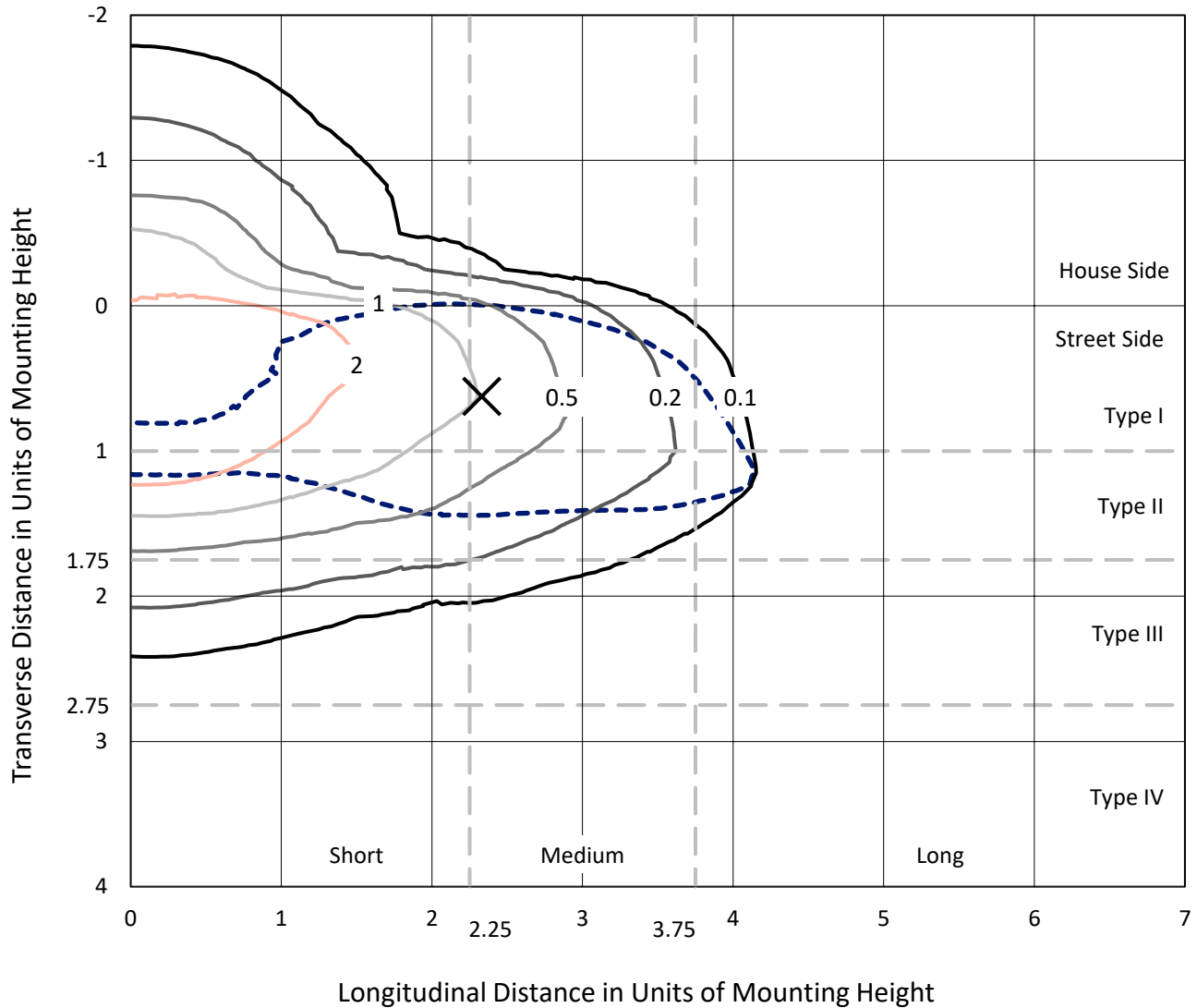
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

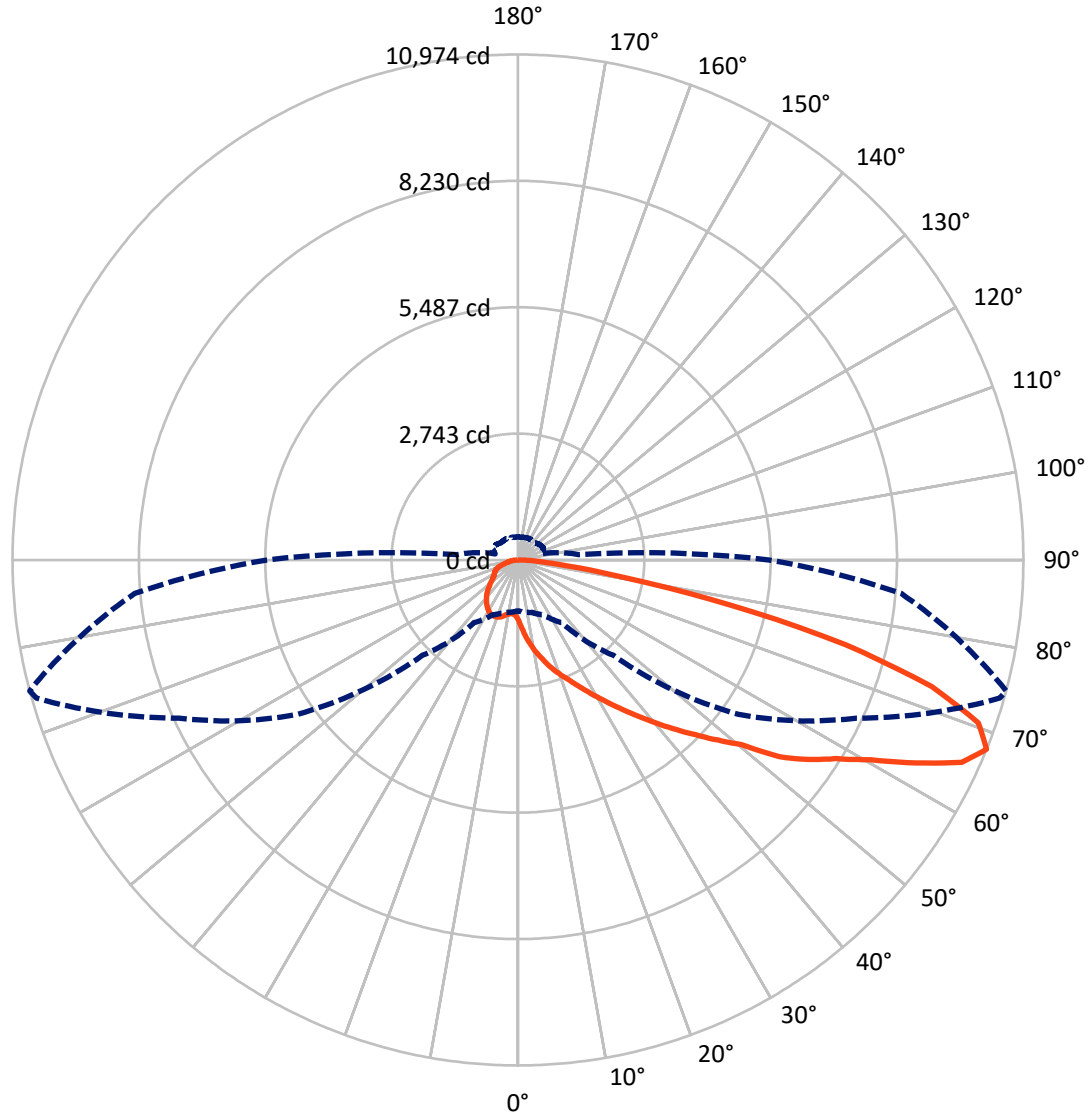
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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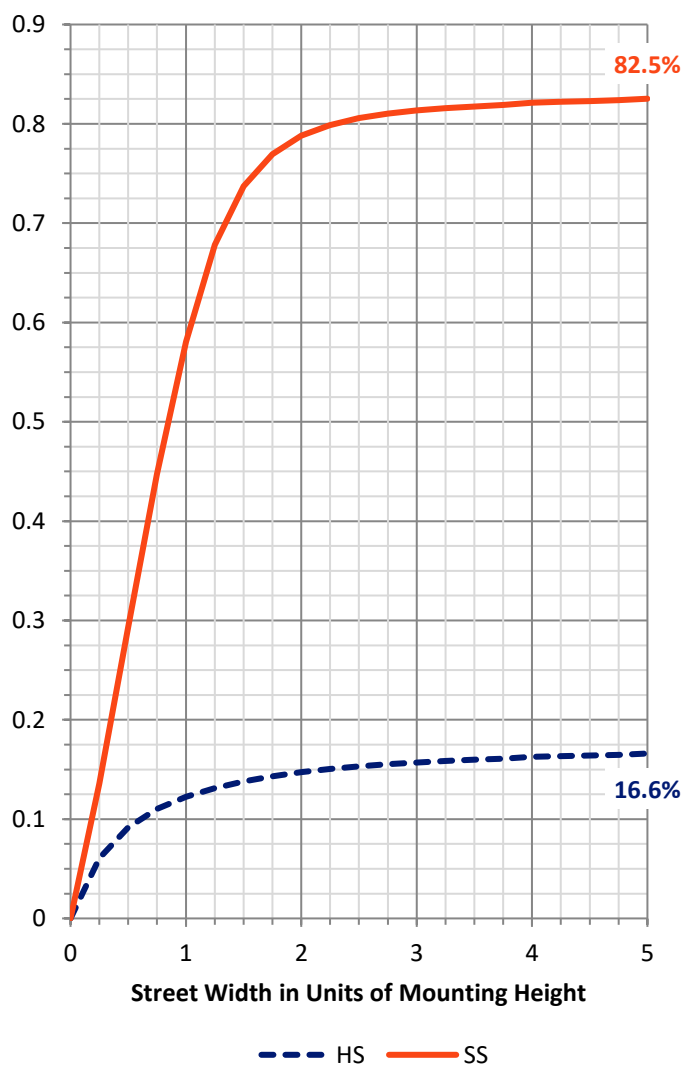
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2248.3	0.0	2248.3
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	10917.7	0.0	10917.7
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	13166.0	0.0	13166.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.3	1.2
10°-20°	553.9	4.2
20°-30°	1010.2	7.7
30°-40°	1658.2	12.6
40°-50°	2398.0	18.2
50°-60°	2826.1	21.5
60°-70°	2746.2	20.9
70°-80°	1526.5	11.6
80°-90°	293.5	2.2
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°	13166.0	100.0
0°-180°	13166.0	100.0

**Coefficient of Utilization**

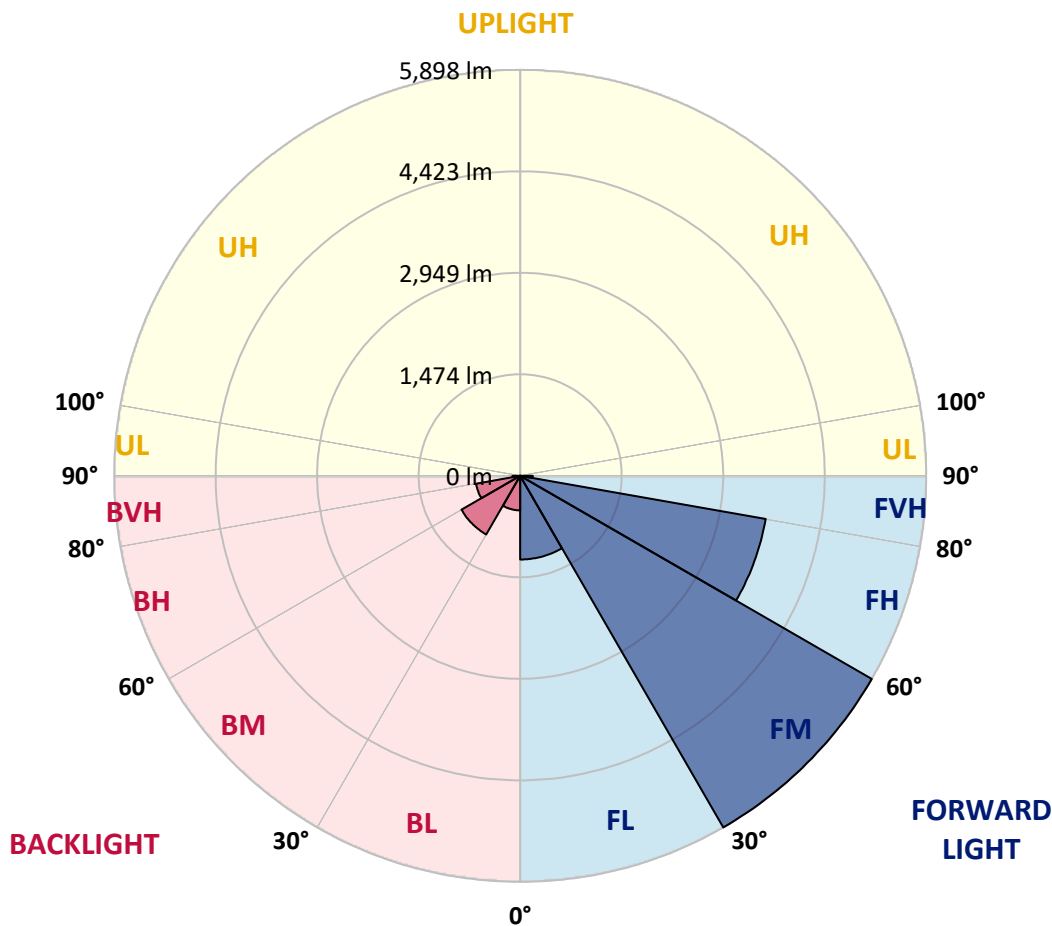


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1215.6	9.2			
FM (30°-60°)	5897.7	44.8			
FH (60°-80°)	3621.8	27.5			G2/5000
FVH (80°-90°)	182.7	1.4			G2/225
BL (0°-30°)	501.8	3.8	B2/1000		
BM (30°-60°)	984.6	7.5	B1/1000		
BH (60°-80°)	651.0	4.9	B2/1000		G2/1000
BVH (80°-90°)	110.9	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6
2.5°	1849.6	1855.1	1844.1	1819.3	1783.5	1717.5	1659.7	1557.8	1467.0	1456.0	1359.7
5°	2174.4	2179.9	2166.1	2135.8	2097.3	2025.7	1945.9	1813.8	1667.9	1640.4	1436.7
7.5°	2397.3	2400.1	2383.5	2353.3	2323.0	2251.4	2171.6	2023.0	1844.1	1822.1	1535.8
10°	2587.2	2592.7	2570.7	2551.4	2518.4	2446.9	2364.3	2207.4	2023.0	1992.7	1637.7
12.5°	2763.4	2768.9	2755.1	2738.6	2727.6	2661.5	2570.7	2383.5	2185.4	2152.4	1758.8
15°	2881.7	2887.2	2890.0	2912.0	2925.8	2879.0	2788.1	2584.5	2361.5	2331.3	1901.9
17.5°	2848.7	2862.5	2903.7	2983.6	3068.9	3071.6	2997.3	2782.6	2534.9	2501.9	2047.8
20°	2752.4	2763.4	2812.9	2934.0	3101.9	3198.2	3192.7	2983.6	2697.3	2661.5	2182.6
22.5°	2832.2	2845.9	2845.9	2920.3	3085.4	3264.3	3335.9	3181.7	2859.7	2826.7	2317.5
25°	3173.5	3181.7	3123.9	3093.7	3154.2	3319.4	3454.2	3396.4	3057.9	3019.3	2463.4
27.5°	3649.6	3635.9	3564.3	3443.2	3377.2	3421.2	3558.8	3600.1	3286.3	3239.5	2614.7
30°	4123.0	4114.8	4032.2	3869.8	3721.2	3627.6	3674.4	3781.8	3534.0	3479.0	2760.6
32.5°	4566.2	4552.4	4461.6	4271.7	4103.8	3930.4	3839.6	3946.9	3798.3	3735.0	2923.0
35°	4973.5	4937.7	4846.9	4648.7	4475.3	4310.2	4087.3	4103.8	4084.5	4018.5	3101.9
37.5°	5303.8	5276.3	5177.2	4992.8	4808.4	4651.5	4417.5	4282.7	4392.8	4329.5	3308.3
40°	5595.6	5565.3	5463.4	5279.0	5108.4	4959.8	4775.4	4500.1	4739.6	4668.0	3539.5
42.5°	5815.7	5793.7	5711.2	5529.5	5364.4	5229.5	5138.7	4775.4	5100.1	5031.3	3792.8
45°	5934.1	5912.1	5868.0	5722.2	5570.8	5466.2	5474.5	5102.9	5477.2	5419.4	4092.8
47.5°	5788.2	5804.7	5843.3	5815.7	5722.2	5672.6	5774.5	5441.4	5898.3	5843.3	4417.5
50°	5397.4	5413.9	5568.0	5757.9	5791.0	5851.5	6044.2	5832.3	6344.2	6300.2	4819.4
52.5°	4436.8	4527.6	4954.3	5408.4	5719.4	5969.9	6344.2	6413.0	7095.6	7095.6	5529.5
55°	3352.4	3432.2	3919.4	4712.1	5441.4	5980.9	6564.4	6806.6	7637.8	7648.8	5901.1
57.5°	2716.6	2766.1	3005.6	3817.5	4857.9	5843.3	6825.9	7145.1	8089.2	8138.7	6380.0
60°	2204.6	2232.2	2389.1	2953.3	4051.5	5471.7	7013.0	7629.6	8733.3	8802.1	6991.0
62.5°	1772.5	1800.0	1904.6	2243.2	3179.0	4775.4	6980.0	8133.2	9592.0	9704.8	7791.9
65°	1414.7	1445.0	1513.8	1723.0	2356.0	3911.1	6641.5	8392.0	10481.0	10591.1	8323.2
67.5°	1103.7	1131.2	1178.0	1315.6	1659.7	2925.8	5840.5	8119.5	10880.1	10973.7	8350.7
70°	834.0	847.7	886.3	974.3	1186.3	1943.2	4571.7	7205.7	10522.3	10607.6	7800.2
72.5°	646.8	644.1	666.1	710.1	828.5	1337.6	3030.4	5859.8	9303.0	9391.1	6655.2
75°	528.5	525.7	539.5	553.2	600.0	897.3	1789.0	4412.0	7508.5	7340.6	4992.8
77.5°	445.9	443.1	456.9	459.6	478.9	619.3	1018.4	2903.7	5009.3	4720.3	2812.9
80°	377.1	374.3	390.8	396.3	410.1	454.1	586.3	1571.6	2515.7	2383.5	1343.2
82.5°	283.5	294.5	324.8	338.5	355.1	335.8	363.3	693.6	1167.0	1114.7	583.5
85°	137.6	162.4	245.0	272.5	291.8	211.9	247.7	327.5	525.7	500.9	236.7
87.5°	46.8	41.3	145.9	173.4	189.9	96.3	137.6	181.7	217.4	198.2	74.3
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°	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6
2.5°	1318.4	1277.1	1216.5	1169.8	1139.5	1114.7	1103.7	1100.9	1095.4	1092.7	1092.7
5°	1345.9	1271.6	1178.0	1128.5	1114.7	1103.7	1109.2	1112.0	1112.0	1112.0	1112.0
7.5°	1387.2	1282.6	1169.8	1136.7	1134.0	1134.0	1150.5	1158.7	1164.3	1164.3	1164.3
10°	1442.2	1301.9	1183.5	1156.0	1164.3	1169.8	1189.0	1200.0	1205.5	1208.3	1211.0
12.5°	1516.6	1343.2	1211.0	1189.0	1200.0	1202.8	1216.5	1222.1	1227.6	1230.3	1230.3
15°	1615.6	1403.7	1255.1	1227.6	1230.3	1227.6	1227.6	1222.1	1219.3	1219.3	1224.8
17.5°	1717.5	1461.5	1293.6	1255.1	1244.1	1222.1	1205.5	1191.8	1183.5	1178.0	1180.8
20°	1819.3	1513.8	1315.6	1260.6	1230.3	1194.5	1164.3	1145.0	1134.0	1123.0	1128.5
22.5°	1921.2	1563.3	1323.9	1244.1	1200.0	1147.7	1114.7	1084.4	1059.7	1043.1	1045.9
25°	2034.0	1618.4	1323.9	1224.8	1158.7	1103.7	1062.4	1012.9	977.1	963.3	968.8
27.5°	2146.8	1665.2	1310.1	1189.0	1112.0	1056.9	996.4	938.6	916.5	908.3	911.0
30°	2259.7	1701.0	1279.9	1145.0	1062.4	1001.9	922.0	883.5	856.0	834.0	836.7
32.5°	2372.5	1725.7	1238.6	1089.9	1010.1	933.1	867.0	823.0	773.4	745.9	748.6
35°	2501.9	1745.0	1189.0	1034.9	952.3	872.5	823.0	751.4	699.1	677.1	671.6
37.5°	2636.8	1758.8	1136.7	974.3	894.5	828.5	778.9	690.8	641.3	611.0	608.3
40°	2782.6	1764.3	1073.4	911.0	839.5	800.9	721.1	655.1	569.7	550.5	550.5
42.5°	2956.0	1761.5	1010.1	847.7	778.9	737.6	679.8	649.6	575.2	556.0	545.0
45°	3154.2	1761.5	941.3	773.4	718.4	657.8	633.0	613.8	564.2	572.5	578.0
47.5°	3379.9	1756.0	858.7	712.9	668.8	616.5	602.8	561.5	542.2	547.7	553.2
50°	3690.9	1764.3	784.4	663.3	633.0	589.0	572.5	550.5	542.2	545.0	542.2
52.5°	4123.0	1736.7	712.9	633.0	605.5	547.7	547.7	545.0	547.7	545.0	545.0
55°	4359.7	1676.2	660.6	616.5	586.3	528.5	539.5	545.0	550.5	547.7	547.7
57.5°	4695.5	1634.9	619.3	605.5	575.2	522.9	534.0	545.0	547.7	545.0	545.0
60°	5091.9	1607.4	591.8	608.3	567.0	522.9	536.7	545.0	542.2	539.5	539.5
62.5°	5551.5	1596.4	572.5	616.5	558.7	525.7	536.7	545.0	534.0	531.2	531.2
65°	5724.9	1497.3	547.7	622.0	564.2	525.7	534.0	536.7	522.9	520.2	517.4
67.5°	5457.9	1326.6	511.9	611.0	580.7	525.7	525.7	522.9	506.4	503.7	498.2
70°	4860.7	1100.9	456.9	575.2	591.8	528.5	514.7	500.9	484.4	484.4	473.4
72.5°	3979.9	867.0	385.3	511.9	583.5	536.7	492.7	473.4	454.1	454.1	443.1
75°	2868.0	646.8	308.3	426.6	547.7	534.0	465.1	440.4	418.4	415.6	401.8
77.5°	1634.9	454.1	250.5	333.0	487.2	520.2	440.4	401.8	377.1	368.8	360.6
80°	839.5	305.5	203.7	261.5	404.6	481.7	421.1	357.8	330.3	316.5	302.8
82.5°	399.1	203.7	156.9	192.7	305.5	421.1	396.3	308.3	278.0	261.5	245.0
85°	178.9	121.1	104.6	123.9	217.4	327.5	349.6	253.2	217.4	272.5	200.9
87.5°	57.8	55.0	55.0	57.8	104.6	143.1	256.0	187.2	173.4	143.1	121.1
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)