

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: P236840

Luminaire Tested: **ARCH-L-AF72-270-D-U-T2R-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236840  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-270-D-U-T2R-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28925.3 lumens  
Efficiency: N/A  
Efficacy: 106.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4

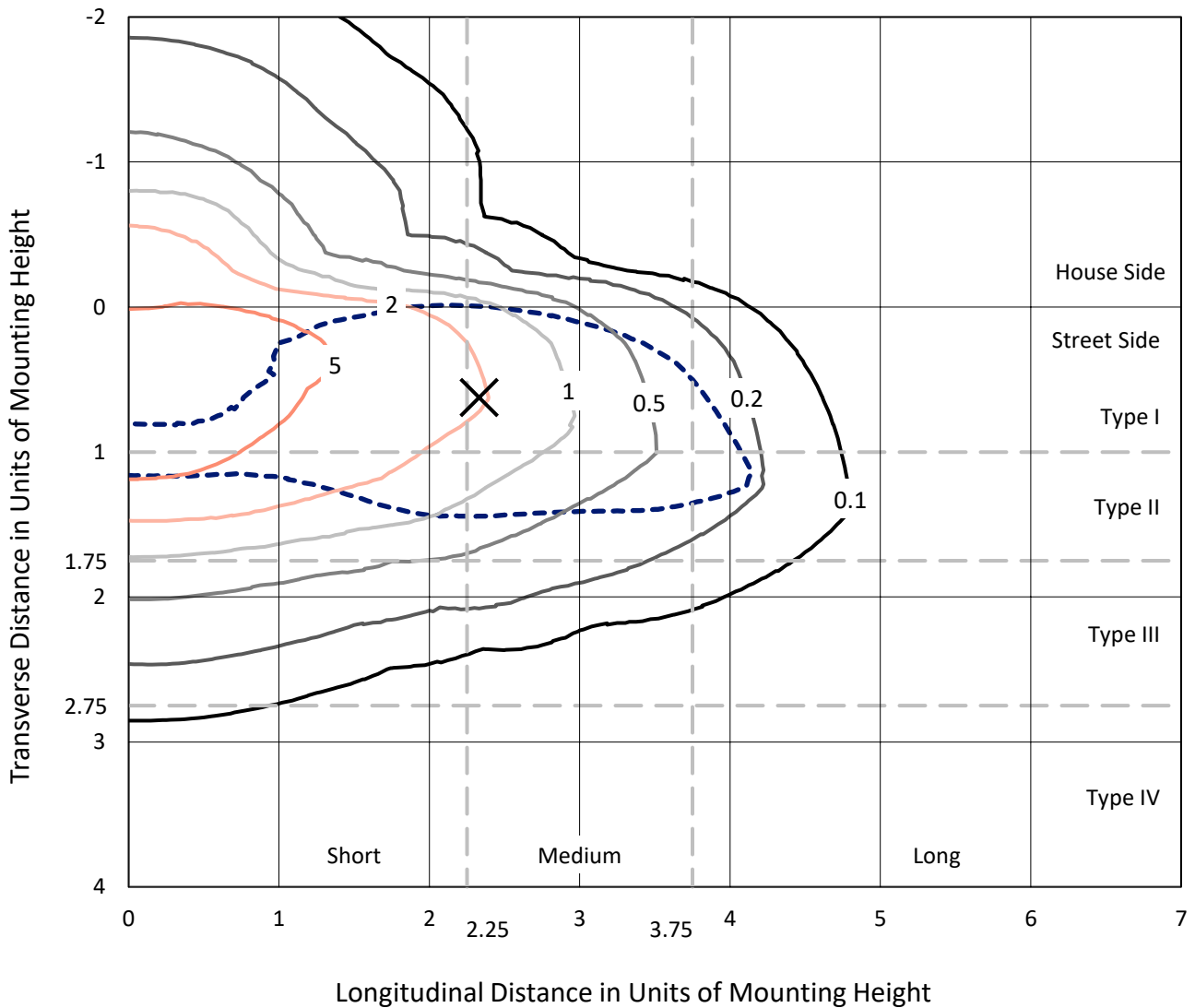
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

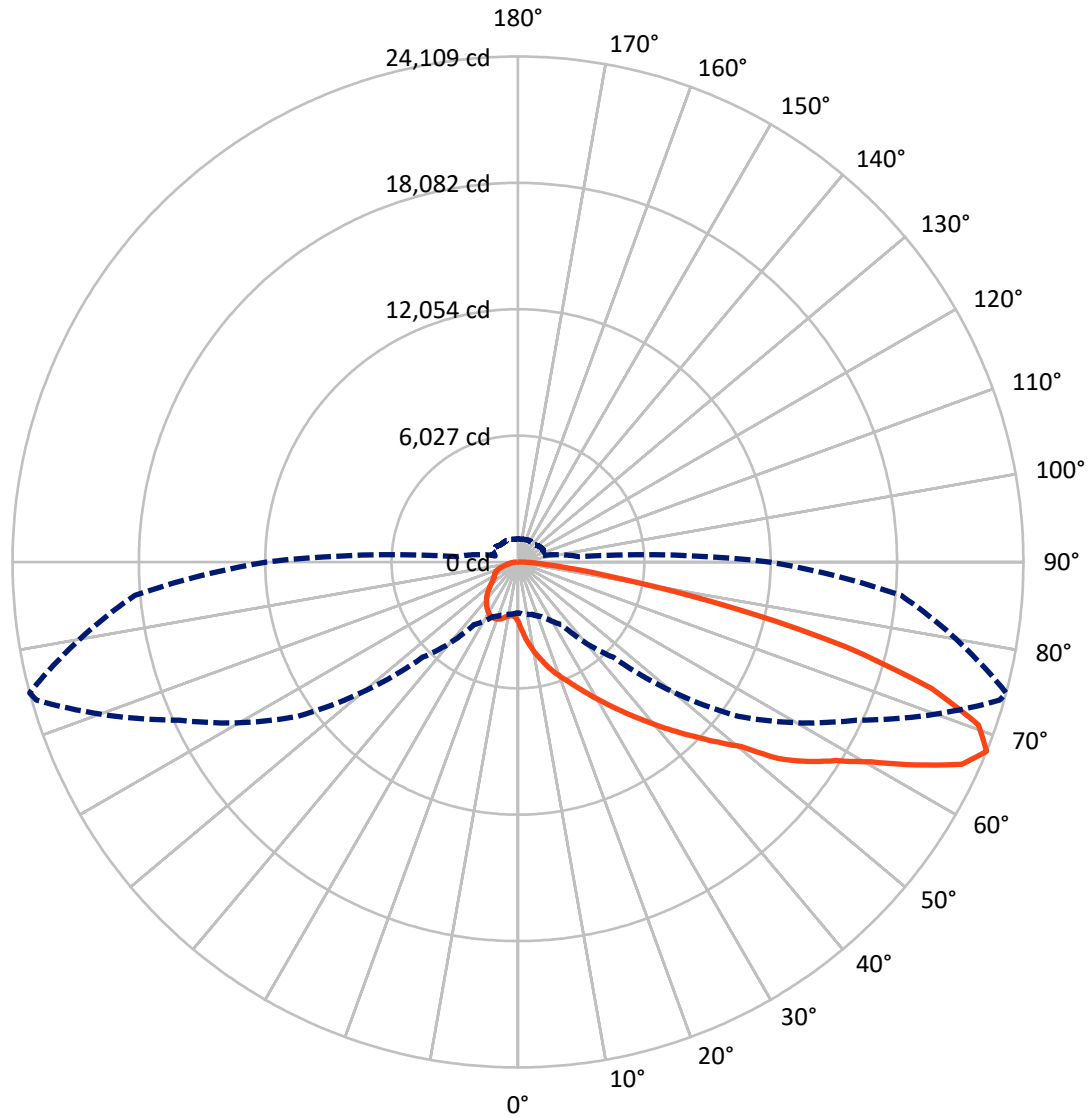
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 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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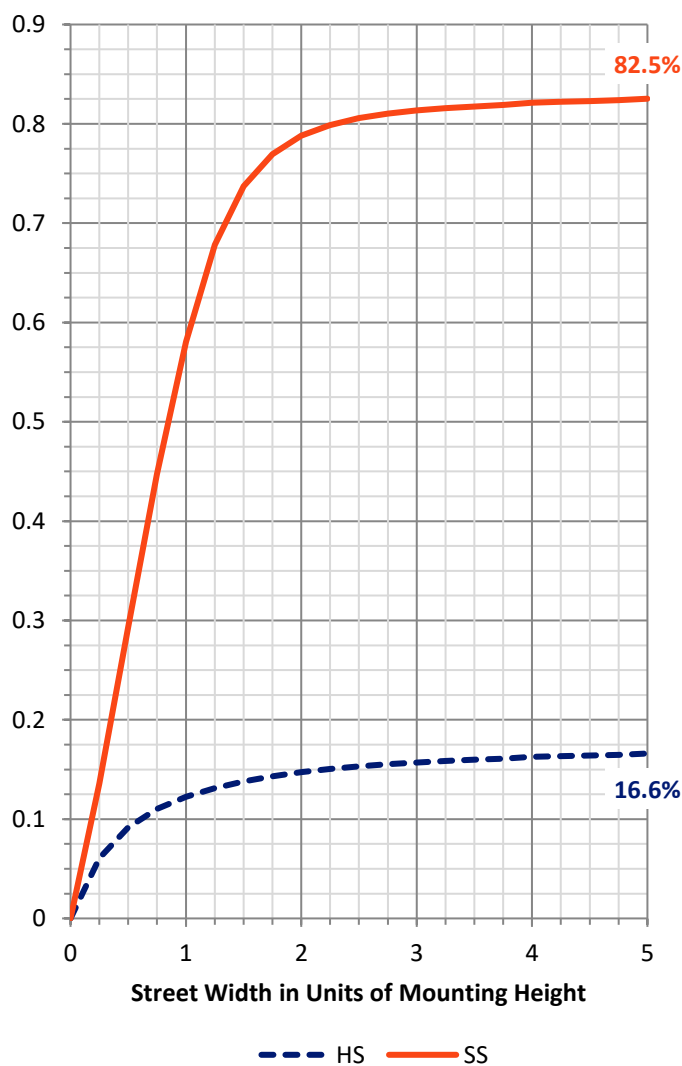
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4939.4	0.0	4939.4
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	23985.9	0.0	23985.9
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	28925.3	0.0	28925.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	336.7	1.2
10°-20°	1216.9	4.2
20°-30°	2219.5	7.7
30°-40°	3643.1	12.6
40°-50°	5268.4	18.2
50°-60°	6208.8	21.5
60°-70°	6033.4	20.9
70°-80°	3353.8	11.6
80°-90°	644.9	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°	28925.3	100.0
0°-180°	28925.3	100.0

**Coefficient of Utilization**

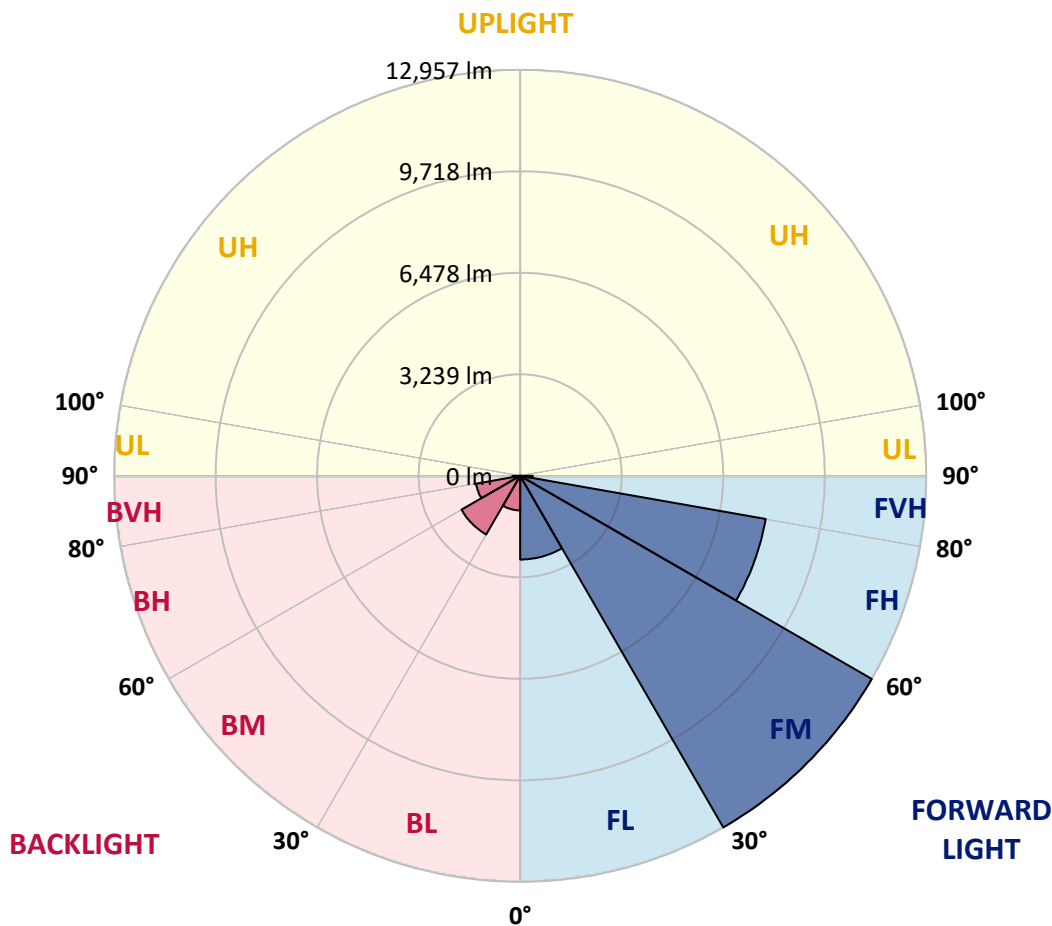


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2670.6	9.2			
FM (30°-60°)	12957.0	44.8			
FH (60°-80°)	7957.0	27.5			G4/12000
FVH (80°-90°)	401.3	1.4			G3/500
BL (0°-30°)	1102.5	3.8	B3/2500		
BM (30°-60°)	2163.2	7.5	B2/2500		
BH (60°-80°)	1430.2	4.9	B3/2500		G3/2500
BVH (80°-90°)	243.5	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2866.2	2866.2	2866.2	2866.2	2866.2	2866.2	2866.2	2866.2	2866.2	2866.2	2866.2
2.5°	4063.5	4075.6	4051.5	3996.9	3918.4	3773.3	3646.3	3422.5	3222.9	3198.8	2987.1
5°	4777.1	4789.2	4758.9	4692.3	4607.7	4450.4	4275.1	3984.9	3664.4	3603.9	3156.5
7.5°	5266.9	5272.9	5236.6	5170.0	5103.5	4946.3	4771.1	4444.4	4051.5	4003.0	3374.2
10°	5684.1	5696.1	5647.7	5605.4	5532.9	5375.7	5194.3	4849.6	4444.4	4377.9	3597.9
12.5°	6071.1	6083.1	6053.0	6016.6	5992.5	5847.3	5647.7	5236.6	4801.2	4728.6	3864.0
15°	6331.0	6343.1	6349.2	6397.5	6427.8	6325.0	6125.5	5677.9	5188.1	5121.7	4178.4
17.5°	6258.5	6288.8	6379.4	6554.8	6742.3	6748.3	6585.0	6113.4	5569.2	5496.7	4498.9
20°	6046.9	6071.1	6179.9	6446.0	6814.8	7026.5	7014.3	6554.8	5925.9	5847.3	4795.2
22.5°	6222.2	6252.5	6252.5	6415.7	6778.6	7171.6	7328.8	6990.2	6282.7	6210.1	5091.5
25°	6972.1	6990.2	6863.2	6796.7	6929.7	7292.5	7588.8	7461.9	6718.1	6633.4	5411.9
27.5°	8018.1	7988.0	7830.7	7564.7	7419.5	7516.3	7818.6	7909.3	7220.0	7117.1	5744.6
30°	9058.2	9040.1	8858.6	8501.9	8175.4	7969.8	8072.5	8308.4	7764.2	7643.2	6065.0
32.5°	10031.7	10001.5	9801.9	9384.8	9015.8	8634.9	8435.4	8671.3	8344.6	8205.6	6421.8
35°	10926.7	10848.1	10648.5	10213.1	9832.2	9469.4	8979.6	9015.8	8973.6	8828.3	6814.8
37.5°	11652.3	11591.9	11374.1	10969.0	10563.8	10219.2	9705.2	9409.0	9650.8	9511.7	7268.4
40°	12293.3	12226.7	12003.0	11597.9	11223.0	10896.4	10491.3	9886.7	10412.7	10255.5	7776.3
42.5°	12777.0	12728.6	12547.3	12148.1	11785.4	11489.0	11289.5	10491.3	11204.9	11053.6	8332.5
45°	13037.1	12988.6	12891.9	12571.5	12238.9	12009.1	12027.3	11210.9	12033.3	11906.3	8991.7
47.5°	12716.5	12752.8	12837.5	12777.0	12571.5	12462.5	12686.3	11954.6	12958.4	12837.5	9705.2
50°	11857.9	11894.2	12232.7	12650.0	12722.5	12855.7	13279.0	12813.3	13937.9	13841.3	10588.1
52.5°	9747.6	9947.1	10884.4	11882.1	12565.4	13115.7	13937.9	14089.2	15588.8	15588.8	12148.1
55°	7365.0	7540.4	8610.7	10352.2	11954.6	13139.8	14421.7	14953.9	16780.0	16804.2	12964.4
57.5°	5968.3	6077.1	6603.2	8387.0	10672.7	12837.5	14996.3	15697.6	17771.8	17880.6	14016.7
60°	4843.6	4904.0	5248.7	6488.3	8901.1	12021.1	15407.4	16761.9	19186.7	19337.9	15359.0
62.5°	3894.2	3954.6	4184.4	4928.2	6984.2	10491.3	15334.9	17868.5	21073.3	21321.3	17118.6
65°	3108.1	3174.6	3325.8	3785.3	5176.1	8592.5	14591.0	18436.9	23026.5	23268.3	18285.7
67.5°	2424.8	2485.2	2588.1	2890.5	3646.3	6427.8	12831.4	17838.2	23903.3	24108.8	18346.2
70°	1832.2	1862.5	1947.1	2140.6	2606.2	4269.1	10043.8	15830.7	23117.2	23304.6	17136.8
72.5°	1421.0	1415.0	1463.3	1560.1	1820.2	2938.7	6657.6	12873.8	20438.4	20631.9	14621.3
75°	1161.0	1155.0	1185.1	1215.4	1318.2	1971.2	3930.5	9693.2	16495.9	16127.0	10969.0
77.5°	979.6	973.5	1003.8	1009.8	1052.1	1360.5	2237.3	6379.4	11005.2	10370.4	6179.9
80°	828.4	822.4	858.7	870.8	901.0	997.7	1287.9	3452.8	5526.9	5236.6	2950.9
82.5°	622.8	647.1	713.6	743.7	780.0	737.7	798.1	1523.8	2563.9	2448.9	1281.9
85°	302.3	356.7	538.2	598.6	641.0	465.7	544.2	719.6	1155.0	1100.6	520.1
87.5°	102.8	90.6	320.4	381.0	417.3	211.6	302.3	399.2	477.7	435.4	163.3
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°	2866.2	2866.2	2866.2	2866.2	2866.2	2866.2	2866.2	2866.2	2866.2	2866.2	2866.2
2.5°	2896.5	2805.8	2672.7	2569.9	2503.3	2448.9	2424.8	2418.8	2406.7	2400.7	2400.7
5°	2956.9	2793.6	2588.1	2479.2	2448.9	2424.8	2436.9	2442.9	2442.9	2442.9	2442.9
7.5°	3047.6	2817.8	2569.9	2497.3	2491.3	2491.3	2527.6	2545.7	2557.9	2557.9	2557.9
10°	3168.5	2860.2	2600.2	2539.7	2557.9	2569.9	2612.3	2636.4	2648.6	2654.6	2660.6
12.5°	3331.9	2950.9	2660.6	2612.3	2636.4	2642.4	2672.7	2684.8	2696.9	2703.0	2703.0
15°	3549.5	3084.0	2757.3	2696.9	2703.0	2696.9	2696.9	2684.8	2678.7	2678.7	2690.8
17.5°	3773.3	3210.9	2842.1	2757.3	2733.2	2684.8	2648.6	2618.3	2600.2	2588.1	2594.2
20°	3996.9	3325.8	2890.5	2769.5	2703.0	2624.3	2557.9	2515.4	2491.3	2467.1	2479.2
22.5°	4220.6	3434.6	2908.6	2733.2	2636.4	2521.6	2448.9	2382.5	2328.1	2291.7	2297.8
25°	4468.6	3555.6	2908.6	2690.8	2545.7	2424.8	2334.1	2225.3	2146.6	2116.4	2128.5
27.5°	4716.5	3658.3	2878.3	2612.3	2442.9	2322.0	2189.0	2061.9	2013.6	1995.5	2001.5
30°	4964.5	3737.0	2811.8	2515.4	2334.1	2201.0	2025.6	1941.0	1880.6	1832.2	1838.3
32.5°	5212.4	3791.4	2721.1	2394.5	2219.2	2049.9	1904.7	1808.0	1699.2	1638.7	1644.8
35°	5496.7	3833.7	2612.3	2273.5	2092.2	1916.9	1808.0	1650.8	1535.8	1487.6	1475.4
37.5°	5792.9	3864.0	2497.3	2140.6	1965.2	1820.2	1711.2	1517.7	1408.9	1342.4	1336.4
40°	6113.4	3876.1	2358.3	2001.5	1844.3	1759.6	1584.3	1439.2	1251.7	1209.4	1209.4
42.5°	6494.4	3870.0	2219.2	1862.5	1711.2	1620.6	1493.6	1427.0	1263.8	1221.5	1197.3
45°	6929.7	3870.0	2068.1	1699.2	1578.2	1445.2	1390.8	1348.5	1239.6	1257.8	1269.8
47.5°	7425.6	3858.0	1886.6	1566.1	1469.4	1354.5	1324.2	1233.5	1191.3	1203.3	1215.4
50°	8108.9	3876.1	1723.3	1457.3	1390.8	1294.0	1257.8	1209.4	1191.3	1197.3	1191.3
52.5°	9058.2	3815.6	1566.1	1390.8	1330.3	1203.3	1203.3	1197.3	1203.3	1197.3	1197.3
55°	9578.2	3682.6	1451.3	1354.5	1287.9	1161.0	1185.1	1197.3	1209.4	1203.3	1203.3
57.5°	10315.9	3591.8	1360.5	1330.3	1263.8	1148.9	1173.1	1197.3	1203.3	1197.3	1197.3
60°	11186.7	3531.4	1300.0	1336.4	1245.7	1148.9	1179.1	1197.3	1191.3	1185.1	1185.1
62.5°	12196.5	3507.2	1257.8	1354.5	1227.5	1155.0	1179.1	1197.3	1173.1	1167.0	1167.0
65°	12577.5	3289.5	1203.3	1366.7	1239.6	1155.0	1173.1	1179.1	1148.9	1142.9	1136.9
67.5°	11990.8	2914.6	1124.8	1342.4	1275.9	1155.0	1155.0	1148.9	1112.6	1106.6	1094.4
70°	10678.8	2418.8	1003.8	1263.8	1300.0	1161.0	1130.8	1100.6	1064.3	1064.3	1040.0
72.5°	8743.8	1904.7	846.5	1124.8	1281.9	1179.1	1082.4	1040.0	997.7	997.7	973.5
75°	6300.9	1421.0	677.3	937.2	1203.3	1173.1	1021.9	967.5	919.1	913.1	882.9
77.5°	3591.8	997.7	550.2	731.7	1070.3	1142.9	967.5	882.9	828.4	810.2	792.1
80°	1844.3	671.2	447.4	574.4	889.0	1058.1	925.2	786.1	725.6	695.4	665.2
82.5°	876.8	447.4	344.7	423.3	671.2	925.2	870.8	677.3	610.8	574.4	538.2
85°	393.0	266.0	229.8	272.0	477.7	719.6	768.0	556.3	477.7	598.6	441.4
87.5°	127.0	121.0	121.0	127.0	229.8	314.4	562.3	411.2	381.0	314.4	266.0
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)