

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: P236831

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2R-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236831  
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-AF72-180-D-U-T2R-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21918.5 lumens  
Efficiency: N/A  
Efficacy: 121.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

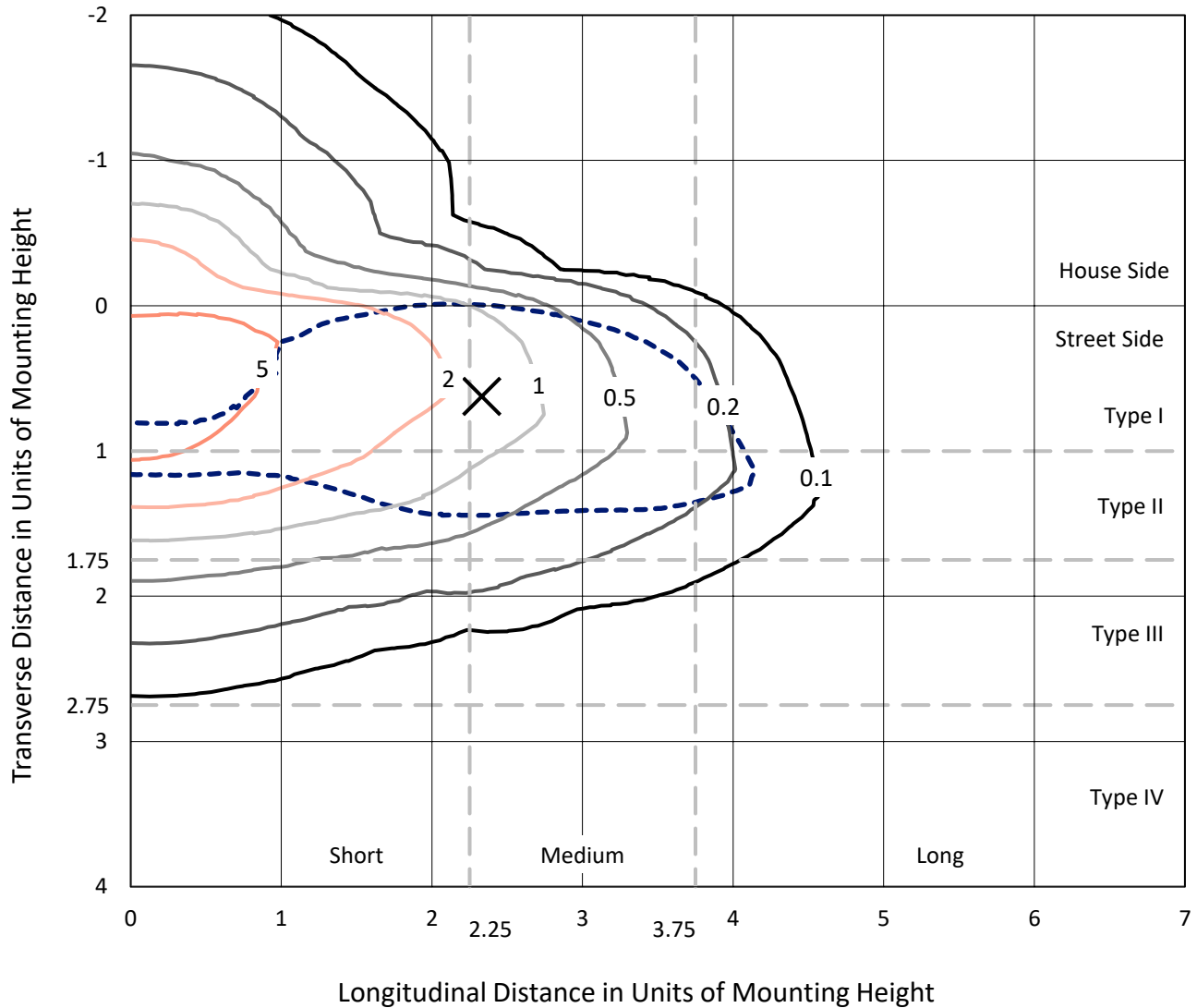
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

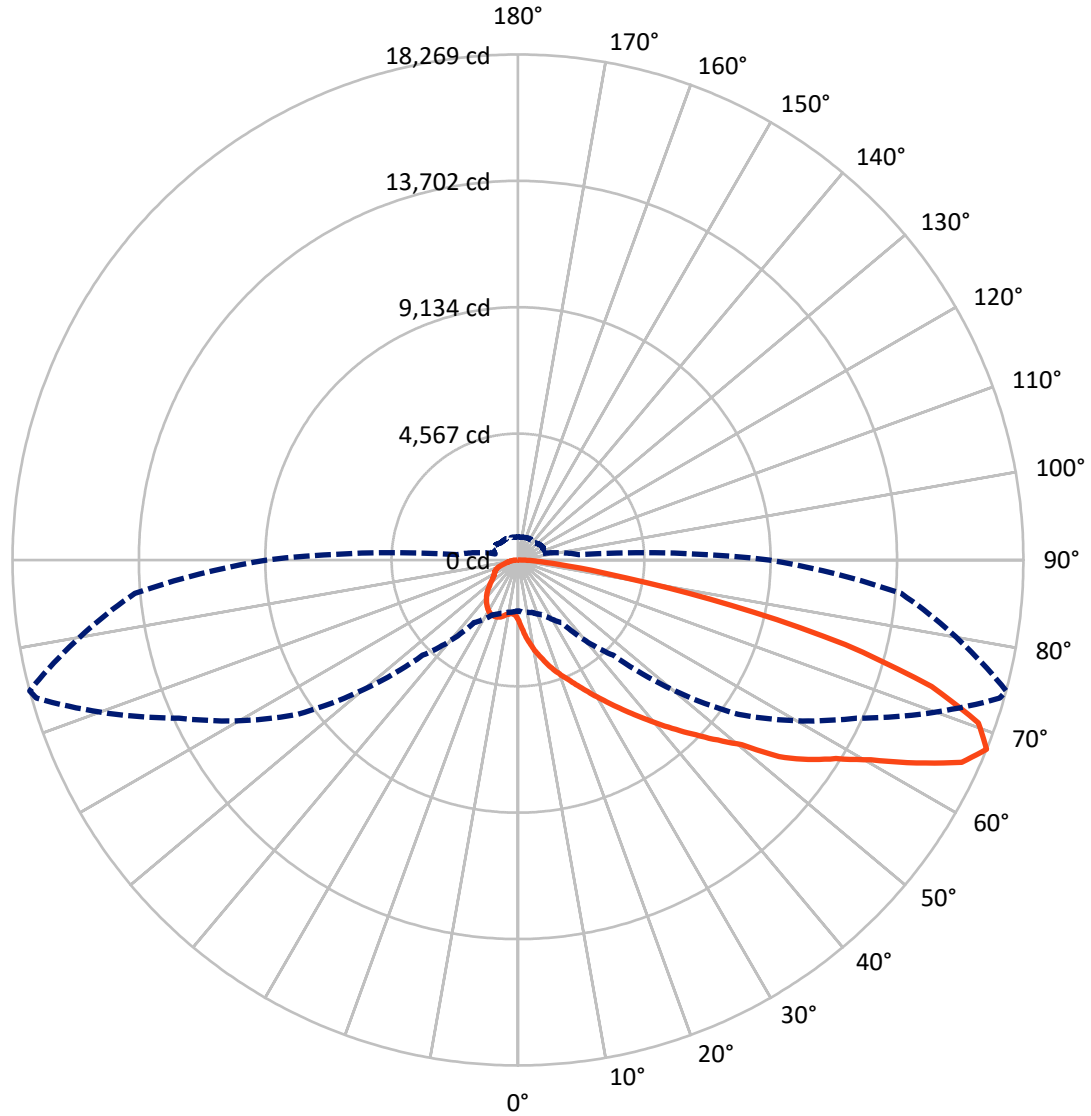
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 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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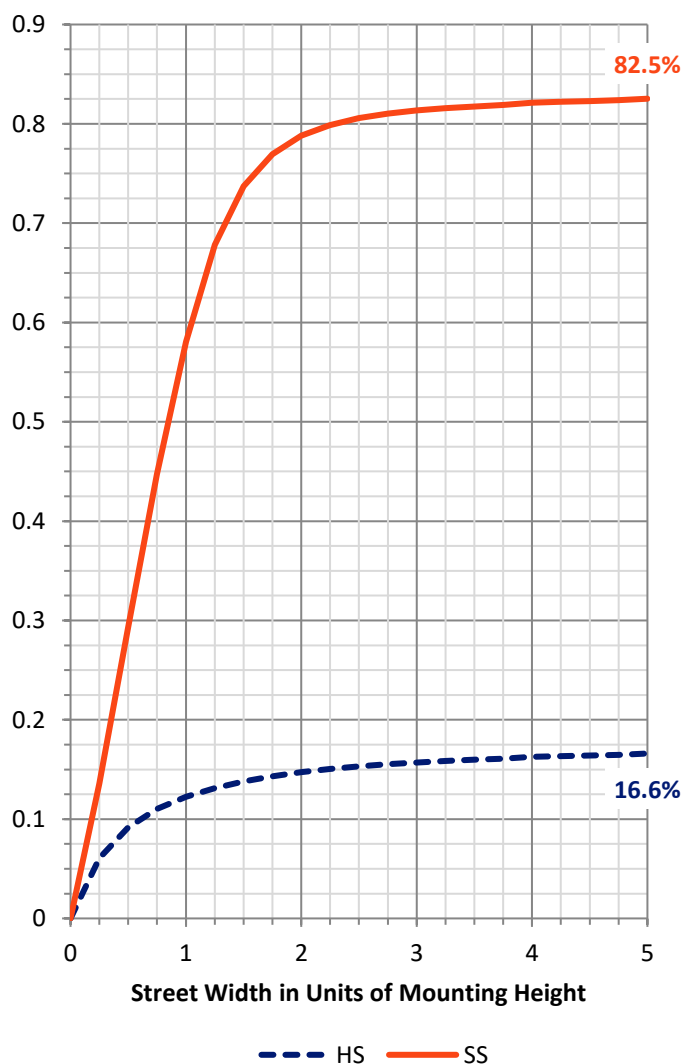
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3742.9	0.0	3742.9
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	18175.6	0.0	18175.6
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	21918.5	0.0	21918.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	255.2	1.2
10°-20°	922.1	4.2
20°-30°	1681.8	7.7
30°-40°	2760.6	12.6
40°-50°	3992.2	18.2
50°-60°	4704.8	21.5
60°-70°	4571.9	20.9
70°-80°	2541.3	11.6
80°-90°	488.7	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°	21918.5	100.0
0°-180°	21918.5	100.0

**Coefficient of Utilization**

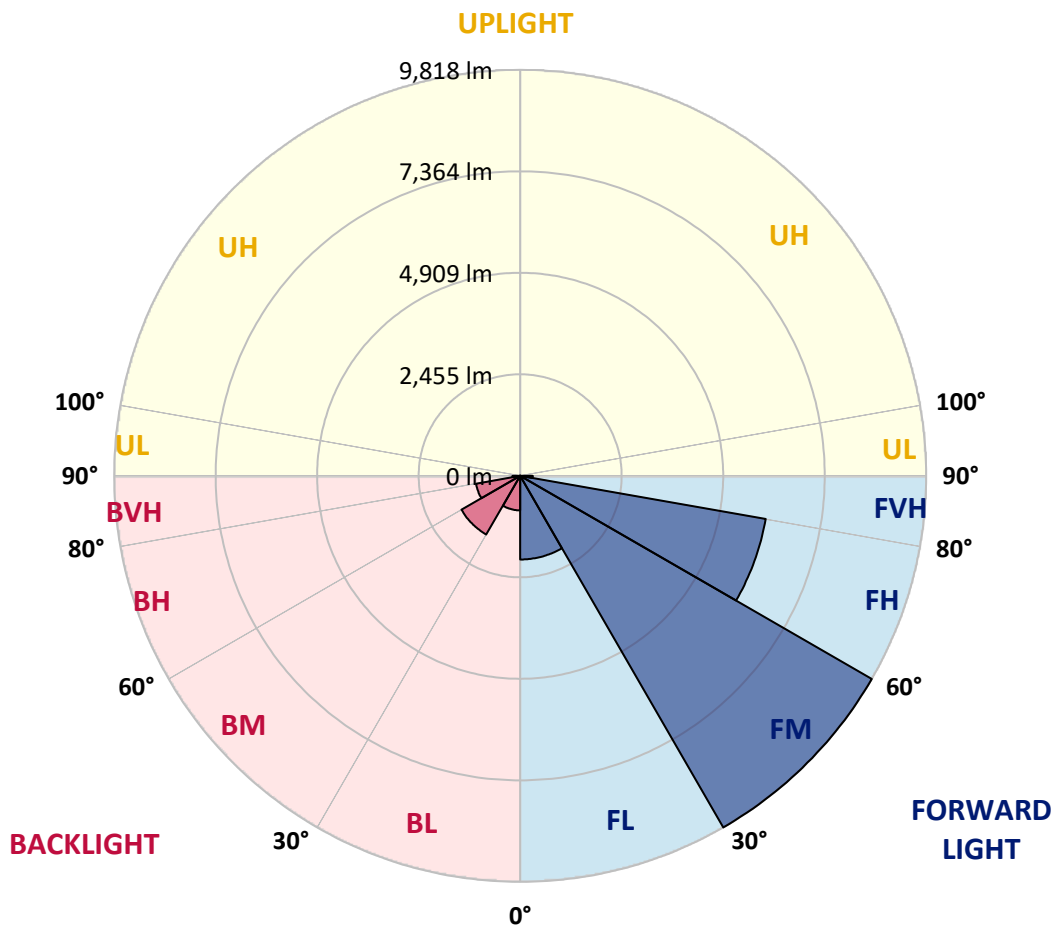


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2023.7	9.2			
FM (30°-60°)	9818.3	44.8			
FH (60°-80°)	6029.5	27.5			G3/7500
FVH (80°-90°)	304.1	1.4			G3/500
BL (0°-30°)	835.4	3.8	B2/1000		
BM (30°-60°)	1639.2	7.5	B2/2500		
BH (60°-80°)	1083.7	4.9	B3/2500		G3/2500
BVH (80°-90°)	184.5	0.8			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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2171.8	2171.8	2171.8	2171.8	2171.8	2171.8	2171.8	2171.8	2171.8	2171.8	2171.8
2.5°	3079.2	3088.3	3069.9	3028.7	2969.2	2859.2	2762.9	2593.5	2442.3	2423.9	2263.6
5°	3619.9	3629.0	3606.1	3555.8	3491.6	3372.4	3239.5	3019.6	2776.8	2730.9	2391.8
7.5°	3991.0	3995.6	3968.1	3917.7	3867.2	3748.1	3615.3	3367.8	3069.9	3033.4	2556.7
10°	4307.1	4316.3	4279.6	4247.6	4192.6	4073.5	3936.1	3674.8	3367.8	3317.4	2726.3
12.5°	4600.4	4609.5	4586.7	4559.2	4540.9	4430.9	4279.6	3968.1	3638.3	3583.1	2927.9
15°	4797.5	4806.7	4811.2	4847.9	4870.8	4792.8	4641.7	4302.6	3931.4	3881.0	3166.3
17.5°	4742.5	4765.4	4834.0	4967.0	5109.1	5113.7	4989.9	4632.5	4220.1	4165.1	3409.1
20°	4582.2	4600.4	4682.9	4884.6	5164.0	5324.4	5315.3	4967.0	4490.4	4430.9	3633.6
22.5°	4715.0	4737.9	4737.9	4861.6	5136.5	5434.3	5553.5	5296.9	4760.8	4705.8	3858.2
25°	5283.1	5296.9	5200.6	5150.3	5251.1	5526.0	5750.6	5654.2	5090.7	5026.6	4100.9
27.5°	6075.8	6053.0	5933.8	5732.2	5622.3	5695.5	5924.6	5993.4	5471.0	5393.1	4353.0
30°	6864.0	6850.2	6712.8	6442.4	6195.0	6039.2	6117.1	6295.7	5883.4	5791.8	4595.9
32.5°	7601.7	7578.8	7427.6	7111.3	6831.9	6543.2	6392.0	6570.8	6323.3	6218.0	4866.2
35°	8279.7	8220.2	8069.1	7739.2	7450.5	7175.5	6804.4	6831.9	6799.9	6689.8	5164.0
37.5°	8829.7	8783.9	8618.9	8311.9	8004.9	7743.7	7354.2	7129.7	7313.0	7207.7	5507.6
40°	9315.3	9264.9	9095.4	8788.5	8504.3	8256.9	7949.9	7491.7	7890.3	7771.2	5892.6
42.5°	9681.9	9645.3	9507.8	9205.4	8930.6	8706.0	8554.8	7949.9	8490.6	8376.1	6314.1
45°	9879.0	9842.3	9769.0	9526.2	9274.2	9099.9	9113.8	8495.2	9118.3	9022.1	6813.5
47.5°	9636.1	9663.7	9727.8	9681.9	9526.2	9443.8	9613.1	9058.8	9819.4	9727.8	7354.2
50°	8985.5	9013.1	9269.5	9585.8	9640.7	9741.5	10062.2	9709.5	10561.6	10488.4	8023.2
52.5°	7386.4	7537.6	8247.8	9003.8	9521.6	9938.6	10561.6	10676.3	11812.6	11812.6	9205.4
55°	5581.0	5713.8	6524.9	7844.5	9058.8	9956.9	10928.2	11331.5	12715.3	12733.6	9823.9
57.5°	4522.6	4604.9	5003.6	6355.4	8087.4	9727.8	11363.6	11895.0	13466.7	13549.2	10621.3
60°	3670.2	3716.1	3977.2	4916.5	6744.8	9109.2	11675.1	12701.5	14538.9	14653.6	11638.6
62.5°	2950.9	2996.7	3170.8	3734.4	5292.3	7949.9	11620.2	13540.1	15968.6	16156.3	12972.0
65°	2355.2	2405.6	2520.2	2868.4	3922.3	6511.2	11056.6	13970.8	17448.6	17631.8	13856.3
67.5°	1837.4	1883.2	1961.1	2190.2	2762.9	4870.8	9723.2	13517.1	18113.0	18268.8	13902.0
70°	1388.3	1411.3	1475.4	1622.1	1974.9	3234.9	7610.9	11995.9	17517.3	17659.3	12985.7
72.5°	1076.8	1072.2	1108.9	1182.1	1379.2	2226.9	5044.8	9755.2	15487.5	15634.1	11079.4
75°	879.7	875.1	898.1	920.9	998.8	1493.8	2978.4	7345.1	12500.0	12220.4	8311.9
77.5°	742.3	737.7	760.7	765.3	797.3	1031.0	1695.3	4834.0	8339.4	7858.3	4682.9
80°	627.7	623.3	650.6	659.8	682.8	756.1	976.0	2616.3	4188.0	3968.1	2236.1
82.5°	472.0	490.2	540.8	563.6	591.1	559.0	604.9	1154.7	1942.8	1855.8	971.5
85°	229.1	270.3	407.7	453.7	485.6	352.8	412.4	545.3	875.1	833.9	394.1
87.5°	77.9	68.8	242.9	288.7	316.2	160.4	229.1	302.4	361.9	330.0	123.7
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°	2171.8	2171.8	2171.8	2171.8	2171.8	2171.8	2171.8	2171.8	2171.8	2171.8	2171.8
2.5°	2194.8	2126.0	2025.2	1947.4	1897.0	1855.8	1837.4	1832.9	1823.6	1819.0	1819.0
5°	2240.7	2116.9	1961.1	1878.6	1855.8	1837.4	1846.6	1851.2	1851.2	1851.2	1851.2
7.5°	2309.4	2135.3	1947.4	1892.4	1887.8	1887.8	1915.4	1929.1	1938.3	1938.3	1938.3
10°	2401.0	2167.3	1970.3	1924.5	1938.3	1947.4	1979.4	1997.8	2007.0	2011.6	2016.2
12.5°	2524.8	2236.1	2016.2	1979.4	1997.8	2002.4	2025.2	2034.4	2043.5	2048.2	2048.2
15°	2689.6	2336.8	2089.5	2043.5	2048.2	2043.5	2043.5	2034.4	2029.8	2029.8	2039.0
17.5°	2859.2	2433.1	2153.6	2089.5	2071.1	2034.4	2007.0	1984.0	1970.3	1961.1	1965.7
20°	3028.7	2520.2	2190.2	2098.6	2048.2	1988.6	1938.3	1906.1	1887.8	1869.5	1878.6
22.5°	3198.3	2602.7	2204.0	2071.1	1997.8	1910.7	1855.8	1805.3	1764.1	1736.5	1741.1
25°	3386.2	2694.3	2204.0	2039.0	1929.1	1837.4	1768.7	1686.2	1626.7	1603.7	1612.8
27.5°	3574.0	2772.1	2181.1	1979.4	1851.2	1759.5	1658.7	1562.5	1525.8	1512.0	1516.6
30°	3761.9	2831.8	2130.7	1906.1	1768.7	1667.9	1535.0	1470.8	1425.1	1388.3	1392.9
32.5°	3949.7	2873.0	2061.9	1814.5	1681.6	1553.3	1443.4	1370.0	1287.6	1241.7	1246.3
35°	4165.1	2905.1	1979.4	1722.9	1585.4	1452.5	1370.0	1250.9	1163.8	1127.2	1118.0
37.5°	4389.6	2927.9	1892.4	1622.1	1489.2	1379.2	1296.7	1150.1	1067.6	1017.2	1012.7
40°	4632.5	2937.1	1787.1	1516.6	1397.5	1333.4	1200.5	1090.5	948.5	916.4	916.4
42.5°	4921.1	2932.5	1681.6	1411.3	1296.7	1228.0	1131.8	1081.3	957.6	925.5	907.3
45°	5251.1	2932.5	1567.1	1287.6	1196.0	1095.1	1054.0	1021.8	939.3	953.1	962.2
47.5°	5626.9	2923.3	1429.6	1186.8	1113.5	1026.4	1003.4	934.7	902.7	911.9	920.9
50°	6144.5	2937.1	1305.8	1104.3	1054.0	980.6	953.1	916.4	902.7	907.3	902.7
52.5°	6864.0	2891.3	1186.8	1054.0	1008.0	911.9	911.9	907.3	911.9	907.3	907.3
55°	7258.0	2790.5	1099.7	1026.4	976.0	879.7	898.1	907.3	916.4	911.9	911.9
57.5°	7817.1	2721.7	1031.0	1008.0	957.6	870.6	889.0	907.3	911.9	907.3	907.3
60°	8476.9	2676.0	985.2	1012.7	943.9	870.6	893.5	907.3	902.7	898.1	898.1
62.5°	9242.0	2657.6	953.1	1026.4	930.2	875.1	893.5	907.3	889.0	884.4	884.4
65°	9530.6	2492.6	911.9	1035.6	939.3	875.1	889.0	893.5	870.6	866.0	861.4
67.5°	9086.3	2208.5	852.2	1017.2	966.8	875.1	875.1	870.6	843.2	838.6	829.4
70°	8092.0	1832.9	760.7	957.6	985.2	879.7	856.8	833.9	806.5	806.5	788.1
72.5°	6625.7	1443.4	641.5	852.2	971.5	893.5	820.2	788.1	756.1	756.1	737.7
75°	4774.5	1076.8	513.2	710.1	911.9	889.0	774.3	733.1	696.5	691.9	669.0
77.5°	2721.7	756.1	417.0	554.4	811.0	866.0	733.1	669.0	627.7	614.0	600.3
80°	1397.5	508.6	339.0	435.3	673.6	801.9	701.0	595.7	549.9	526.9	504.0
82.5°	664.4	339.0	261.1	320.7	508.6	701.0	659.8	513.2	462.8	435.3	407.7
85°	297.8	201.6	174.2	206.2	361.9	545.3	582.0	421.5	361.9	453.7	334.5
87.5°	96.2	91.7	91.7	96.2	174.2	238.3	426.1	311.6	288.7	238.3	201.6
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)