

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: P236854

Luminaire Tested: **ARCH-L-AF72-210-D-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P236854  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-210-D-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25923.6 lumens  
Efficiency: N/A  
Efficacy: 122.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 211  
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

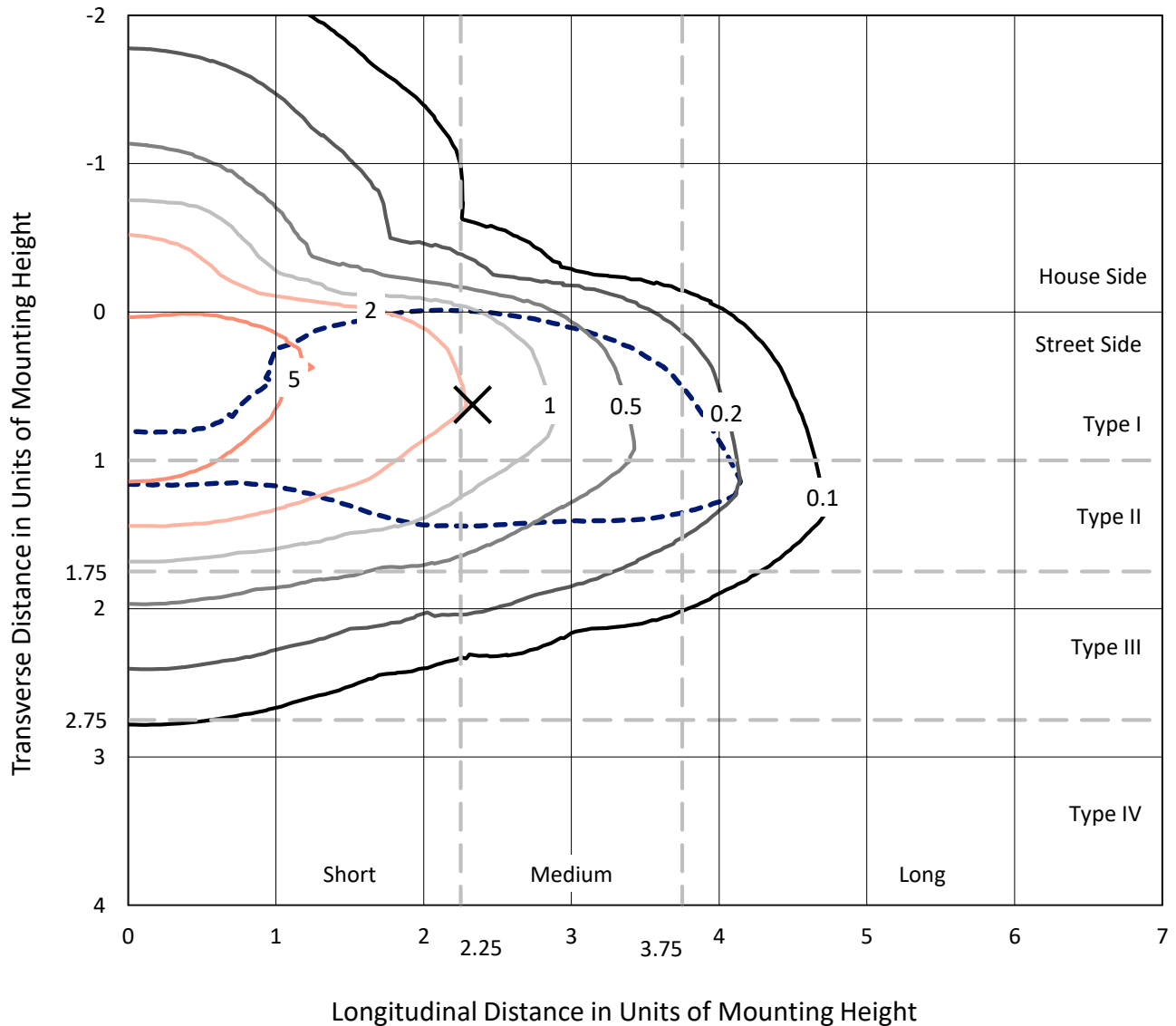


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

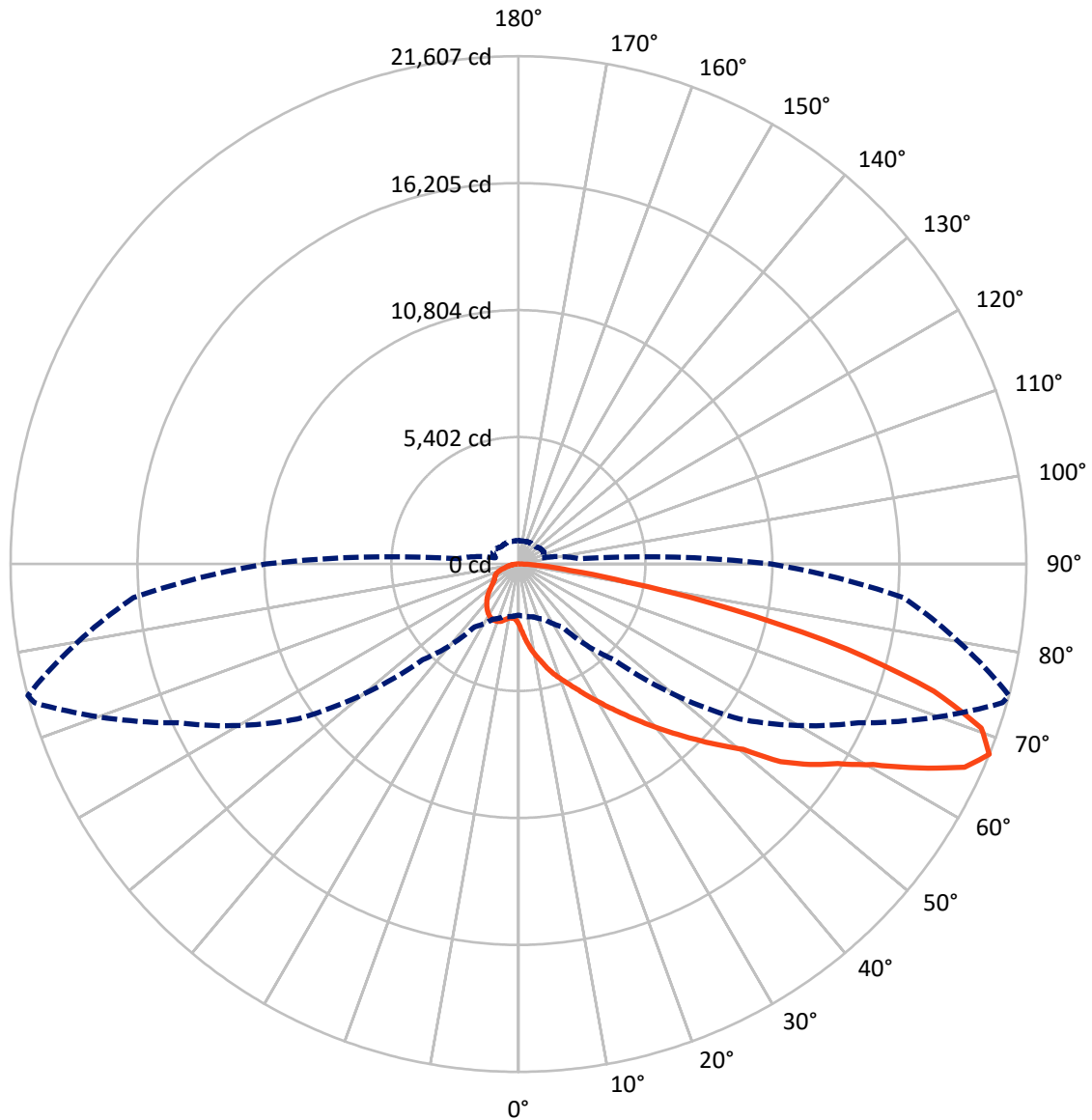


Based on 25 foot mounting height. Maximum calculated value = 8.6 fc  
 Type II - Medium - Semi-Cutoff

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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	4426.8	0.0	4426.8
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	21496.8	0.0	21496.8
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	25923.6	0.0	25923.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	301.8	1.2
10°-20°	1090.6	4.2
20°-30°	1989.1	7.7
30°-40°	3265.0	12.6
40°-50°	4721.6	18.2
50°-60°	5564.5	21.5
60°-70°	5407.3	20.9
70°-80°	3005.7	11.6
80°-90°	578.0	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°	25923.6	100.0
0°-180°	25923.6	100.0



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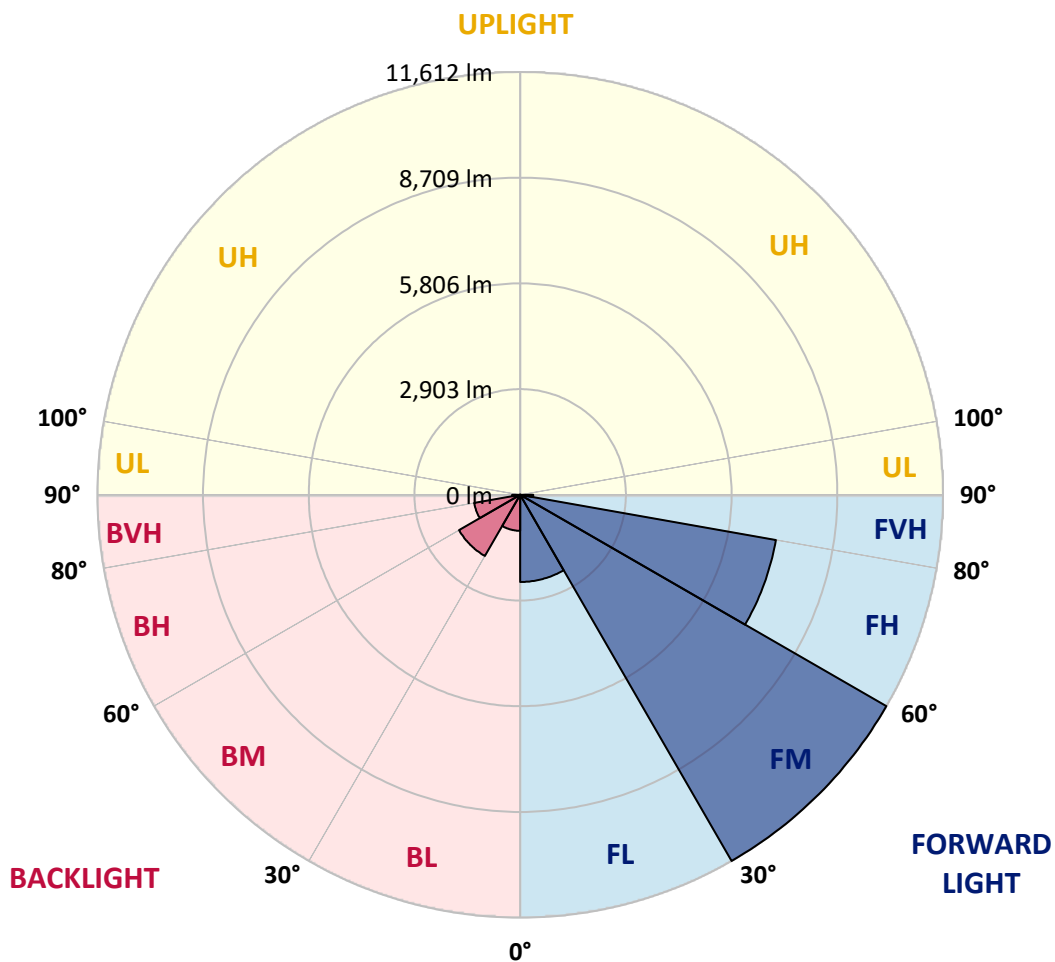
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2393.4	9.2			
FM (30°-60°)	11612.4	44.8			
FH (60°-80°)	7131.3	27.5			G3/7500
FVH (80°-90°)	359.7	1.4			G3/500
BL (0°-30°)	988.1	3.8	B2/1000		
BM (30°-60°)	1938.7	7.5	B2/2500		
BH (60°-80°)	1281.8	4.9	B3/2500		G3/2500
BVH (80°-90°)	218.3	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°	2568.7	2568.7	2568.7	2568.7	2568.7	2568.7	2568.7	2568.7	2568.7	2568.7	2568.7
2.5°	3641.8	3652.7	3631.0	3582.2	3511.8	3381.7	3267.9	3067.3	2888.5	2866.8	2677.2
5°	4281.3	4292.1	4265.0	4205.5	4129.6	3988.7	3831.5	3571.3	3284.1	3230.0	2828.9
7.5°	4720.3	4725.7	4693.2	4633.6	4573.9	4433.1	4275.8	3983.3	3631.0	3587.6	3024.0
10°	5094.2	5105.0	5061.7	5023.7	4958.8	4817.8	4655.2	4346.3	3983.3	3923.6	3224.5
12.5°	5441.1	5451.9	5424.8	5392.3	5370.6	5240.5	5061.7	4693.2	4302.9	4238.0	3463.0
15°	5674.1	5684.9	5690.4	5733.6	5760.7	5668.7	5489.8	5088.8	4649.8	4590.2	3744.8
17.5°	5609.0	5636.2	5717.4	5874.6	6042.6	6048.0	5901.7	5478.9	4991.2	4926.2	4032.0
20°	5419.4	5441.1	5538.6	5777.0	6107.6	6297.3	6286.4	5874.6	5311.0	5240.5	4297.5
22.5°	5576.5	5603.6	5603.6	5749.9	6075.1	6427.4	6568.3	6264.8	5630.7	5565.7	4563.1
25°	6248.5	6264.8	6151.0	6091.4	6210.5	6535.7	6801.3	6687.5	6020.9	5945.1	4850.3
27.5°	7186.0	7159.0	7018.1	6779.6	6649.6	6736.2	7007.2	7088.5	6470.7	6378.6	5148.4
30°	8118.2	8102.0	7939.3	7619.7	7327.0	7142.8	7234.8	7446.2	6958.4	6850.1	5435.7
32.5°	8990.7	8963.6	8784.8	8410.8	8080.3	7738.8	7560.0	7771.4	7478.7	7354.1	5755.3
35°	9792.8	9722.3	9543.5	9153.3	8811.9	8486.7	8047.8	8080.3	8042.3	7912.2	6107.6
37.5°	10443.1	10388.9	10193.8	9830.8	9467.6	9158.7	8698.0	8432.5	8649.3	8524.7	6514.0
40°	11017.6	10958.0	10757.5	10394.3	10058.4	9765.7	9402.6	8860.7	9332.2	9191.2	6969.3
42.5°	11451.1	11407.7	11245.2	10887.5	10562.4	10296.8	10117.9	9402.6	10042.1	9906.6	7467.8
45°	11684.1	11640.8	11554.0	11266.9	10968.8	10762.9	10779.1	10047.5	10784.6	10670.7	8058.6
47.5°	11396.9	11429.4	11505.3	11451.1	11266.9	11169.3	11369.8	10714.1	11613.7	11505.3	8698.0
50°	10627.3	10659.9	10963.4	11337.3	11402.3	11521.6	11900.9	11483.6	12491.7	12404.9	9489.3
52.5°	8736.0	8914.8	9754.9	10649.0	11261.5	11754.6	12491.7	12627.1	13971.2	13971.2	10887.5
55°	6600.8	6757.9	7717.1	9278.0	10714.1	11776.3	12925.2	13402.1	15038.7	15060.4	11619.1
57.5°	5348.9	5446.5	5918.0	7516.6	9565.2	11505.3	13440.0	14068.6	15927.5	16025.0	12562.0
60°	4340.9	4395.1	4704.0	5815.0	7977.3	10773.7	13808.5	15022.4	17195.6	17331.1	13765.1
62.5°	3490.1	3544.2	3750.2	4416.8	6259.3	9402.6	13743.4	16014.2	18886.4	19108.6	15342.2
65°	2785.6	2845.1	2980.7	3392.5	4639.0	7700.9	13076.9	16523.6	20636.9	20853.7	16388.2
67.5°	2173.2	2227.4	2319.4	2590.4	3267.9	5760.7	11499.9	15987.1	21422.7	21607.0	16442.3
70°	1642.0	1669.1	1745.1	1918.4	2335.7	3826.0	9001.6	14187.9	20718.2	20886.2	15358.5
72.5°	1273.6	1268.2	1311.5	1398.2	1631.2	2633.8	5966.7	11537.9	18317.5	18490.9	13104.0
75°	1040.5	1035.1	1062.2	1089.3	1181.4	1766.7	3522.6	8687.2	14784.0	14453.5	9830.8
77.5°	877.9	872.5	899.6	905.0	943.0	1219.4	2005.2	5717.4	9863.2	9294.2	5538.6
80°	742.5	737.0	769.6	780.4	807.5	894.2	1154.3	3094.4	4953.3	4693.2	2644.6
82.5°	558.2	579.9	639.4	666.6	699.1	661.1	715.3	1365.6	2297.9	2194.8	1148.9
85°	271.0	319.8	482.3	536.5	574.5	417.3	487.7	644.9	1035.1	986.3	466.1
87.5°	92.2	81.3	287.2	341.5	373.9	189.7	271.0	357.7	428.1	390.2	146.3
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°	2568.7	2568.7	2568.7	2568.7	2568.7	2568.7	2568.7	2568.7	2568.7	2568.7	2568.7
2.5°	2595.8	2514.6	2395.3	2303.3	2243.6	2194.8	2173.2	2167.7	2156.9	2151.5	2151.5
5°	2650.1	2503.8	2319.4	2222.0	2194.8	2173.2	2184.0	2189.4	2189.4	2189.4	2189.4
7.5°	2731.4	2525.5	2303.3	2238.2	2232.8	2232.8	2265.3	2281.6	2292.4	2292.4	2292.4
10°	2839.7	2563.3	2330.3	2276.2	2292.4	2303.3	2341.1	2362.8	2373.7	2379.1	2384.5
12.5°	2986.1	2644.6	2384.5	2341.1	2362.8	2368.2	2395.3	2406.2	2417.0	2422.4	2422.4
15°	3181.2	2763.9	2471.2	2417.0	2422.4	2417.0	2417.0	2406.2	2400.8	2400.8	2411.6
17.5°	3381.7	2877.7	2547.1	2471.2	2449.6	2406.2	2373.7	2346.5	2330.3	2319.4	2324.9
20°	3582.2	2980.7	2590.4	2482.1	2422.4	2352.0	2292.4	2254.5	2232.8	2211.1	2222.0
22.5°	3782.7	3078.2	2606.7	2449.6	2362.8	2259.9	2194.8	2135.2	2086.4	2054.0	2059.4
25°	4005.0	3186.6	2606.7	2411.6	2281.6	2173.2	2091.8	1994.3	1923.9	1896.8	1907.6
27.5°	4227.1	3278.8	2579.6	2341.1	2189.4	2081.0	1961.8	1848.0	1804.7	1788.4	1793.8
30°	4449.3	3349.1	2520.0	2254.5	2091.8	1972.7	1815.5	1739.6	1685.4	1642.0	1647.5
32.5°	4671.5	3397.9	2438.7	2146.0	1988.9	1837.1	1707.1	1620.4	1522.9	1468.7	1474.1
35°	4926.2	3435.9	2341.1	2037.7	1875.1	1717.9	1620.4	1479.5	1376.5	1333.2	1322.4
37.5°	5191.8	3463.0	2238.2	1918.4	1761.3	1631.2	1533.7	1360.2	1262.7	1203.1	1197.7
40°	5478.9	3473.8	2113.5	1793.8	1652.9	1577.1	1419.9	1289.8	1121.8	1083.9	1083.9
42.5°	5820.4	3468.4	1988.9	1669.1	1533.7	1452.4	1338.5	1279.0	1132.6	1094.7	1073.1
45°	6210.5	3468.4	1853.4	1522.9	1414.4	1295.3	1246.5	1208.5	1110.9	1127.2	1138.0
47.5°	6655.0	3457.6	1690.8	1403.6	1316.9	1213.9	1186.8	1105.5	1067.7	1078.5	1089.3
50°	7267.3	3473.8	1544.6	1306.1	1246.5	1159.7	1127.2	1083.9	1067.7	1073.1	1067.7
52.5°	8118.2	3419.6	1403.6	1246.5	1192.2	1078.5	1078.5	1073.1	1078.5	1073.1	1073.1
55°	8584.3	3300.3	1300.7	1213.9	1154.3	1040.5	1062.2	1073.1	1083.9	1078.5	1078.5
57.5°	9245.4	3219.1	1219.4	1192.2	1132.6	1029.7	1051.4	1073.1	1078.5	1073.1	1073.1
60°	10025.8	3164.9	1165.1	1197.7	1116.3	1029.7	1056.8	1073.1	1067.7	1062.2	1062.2
62.5°	10930.8	3143.2	1127.2	1213.9	1100.1	1035.1	1056.8	1073.1	1051.4	1046.0	1046.0
65°	11272.3	2948.1	1078.5	1224.8	1110.9	1035.1	1051.4	1056.8	1029.7	1024.3	1018.9
67.5°	10746.6	2612.1	1008.0	1203.1	1143.5	1035.1	1035.1	1029.7	997.2	991.8	980.9
70°	9570.6	2167.7	899.6	1132.6	1165.1	1040.5	1013.4	986.3	953.8	953.8	932.1
72.5°	7836.4	1707.1	758.7	1008.0	1148.9	1056.8	970.1	932.1	894.2	894.2	872.5
75°	5647.0	1273.6	607.0	840.0	1078.5	1051.4	915.8	867.1	823.8	818.4	791.3
77.5°	3219.1	894.2	493.2	655.7	959.2	1024.3	867.1	791.3	742.5	726.2	709.9
80°	1652.9	601.6	401.0	514.9	796.7	948.4	829.2	704.5	650.3	623.2	596.2
82.5°	785.8	401.0	308.9	379.3	601.6	829.2	780.4	607.0	547.4	514.9	482.3
85°	352.3	238.4	205.9	243.9	428.1	644.9	688.2	498.6	428.1	536.5	395.6
87.5°	113.9	108.4	108.4	113.9	205.9	281.8	504.0	368.5	341.5	281.8	238.4
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)