

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: P400246

Luminaire Tested: **ARCH-L-PA3-250-827-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400246  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-250-827-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24840 lumens  
Efficiency: N/A  
Efficacy: 99.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

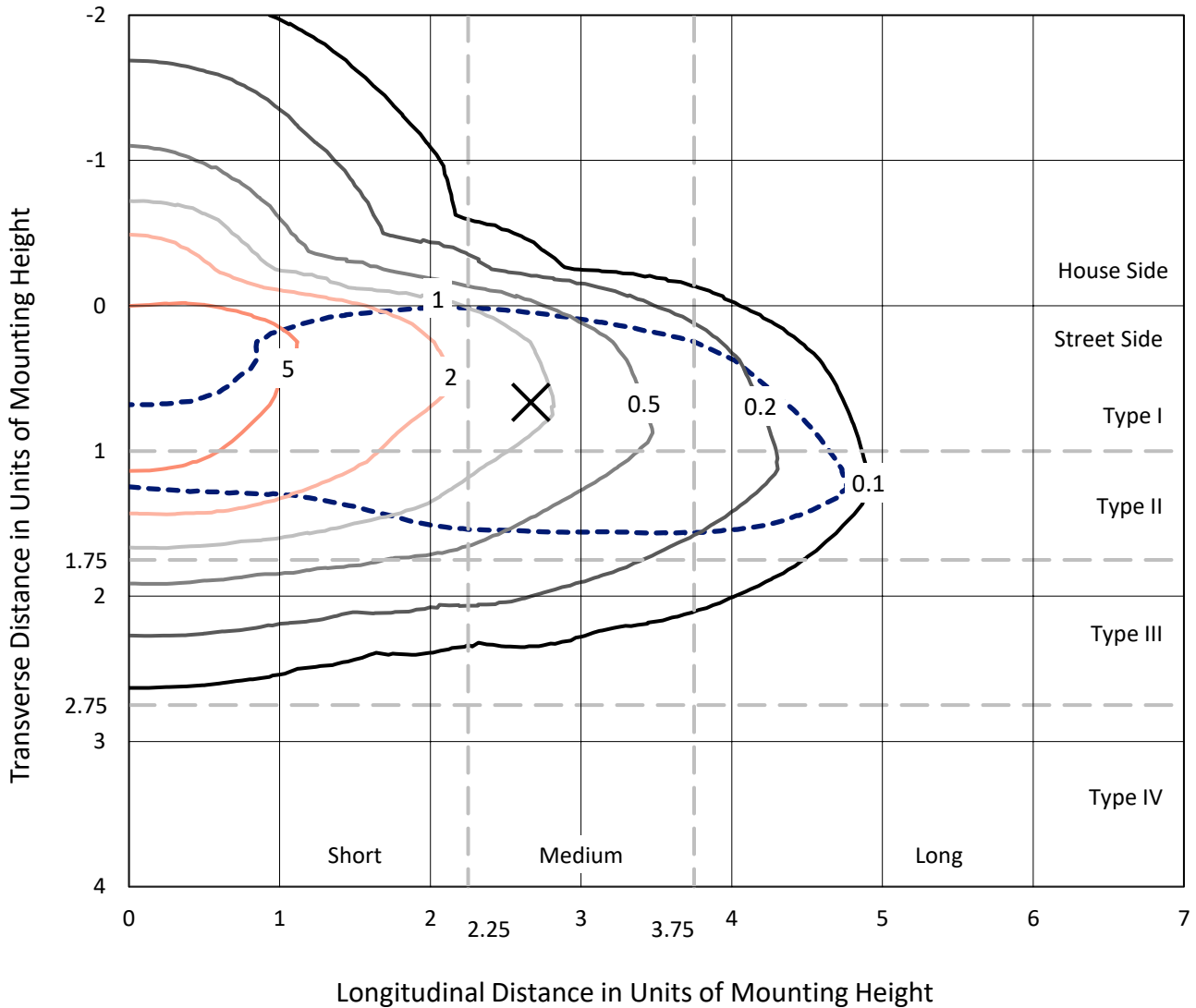
Input Watts (W): 251  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

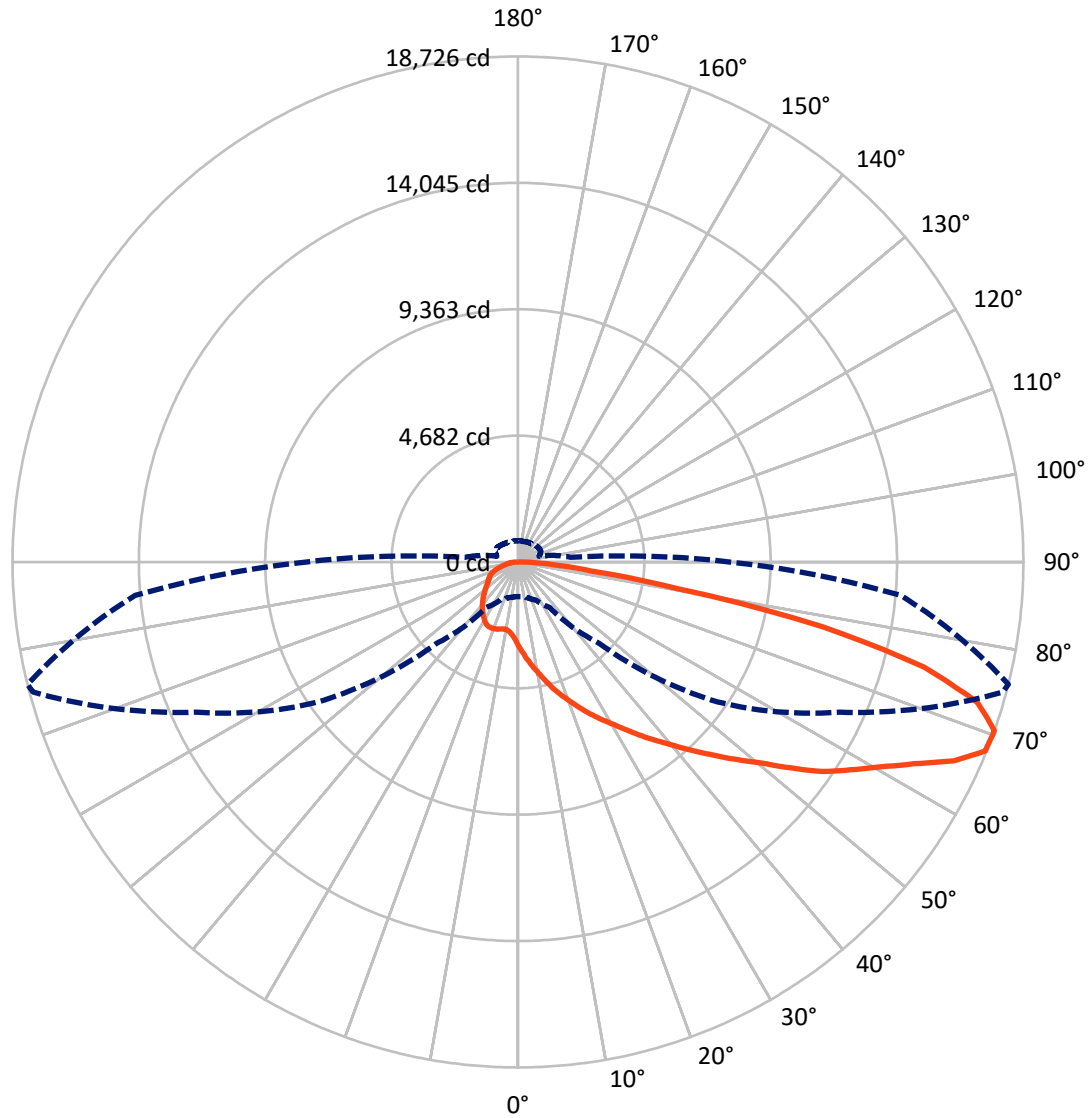
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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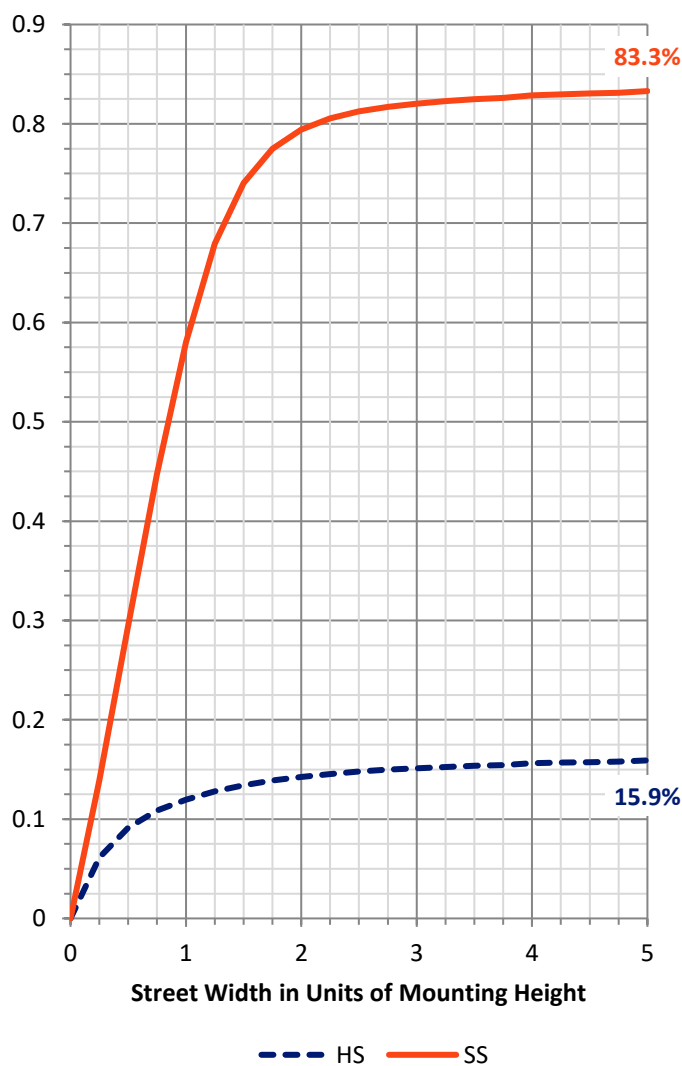
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4055.4	0.0	4055.4
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	20784.6	0.0	20784.6
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	24840.0	0.0	24840.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	322.8	1.3
10°-20°	1097.0	4.4
20°-30°	1962.6	7.9
30°-40°	3174.8	12.8
40°-50°	4592.9	18.5
50°-60°	5256.8	21.2
60°-70°	4835.7	19.5
70°-80°	2990.3	12.0
80°-90°	607.2	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°	24840.0	100.0
0°-180°	24840.0	100.0



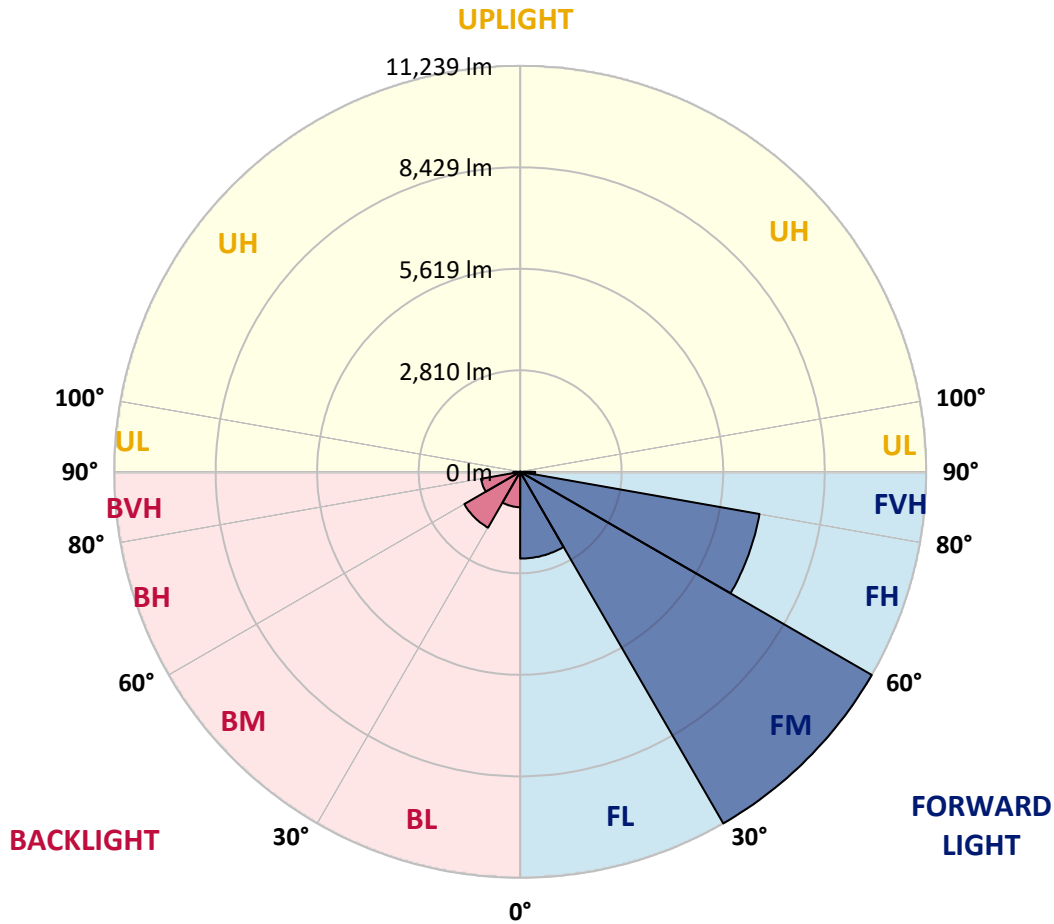
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2402.8	9.7			
FM (30°-60°)	11238.9	45.2			
FH (60°-80°)	6726.0	27.1			G3/7500
FVH (80°-90°)	416.9	1.7			G3/500
BL (0°-30°)	979.5	3.9	B2/1000		
BM (30°-60°)	1785.6	7.2	B2/2500		
BH (60°-80°)	1100.0	4.4	B3/2500		G3/2500
BVH (80°-90°)	190.4	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°	75°	76°	85°
0°	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3
2.5°	3958.9	3929.5	3926.2	3880.5	3838.0	3723.7	3642.0	3498.3	3354.6	3351.3	3207.6
5°	4576.2	4546.8	4530.5	4475.0	4403.1	4252.9	4105.9	3883.8	3638.8	3622.4	3351.3
7.5°	4994.3	4968.2	4935.5	4912.7	4844.1	4710.2	4530.5	4265.9	3929.5	3896.8	3517.9
10°	5275.2	5258.9	5252.4	5236.0	5193.6	5085.8	4912.7	4631.8	4220.2	4184.3	3694.3
12.5°	5396.1	5389.6	5419.0	5464.7	5481.0	5438.6	5272.0	5007.4	4540.3	4501.1	3906.6
15°	5255.6	5262.2	5337.3	5494.1	5660.7	5752.1	5654.1	5396.1	4902.9	4847.3	4154.9
17.5°	5190.3	5200.1	5252.4	5402.6	5637.8	5922.0	5967.7	5765.2	5252.4	5174.0	4416.2
20°	5304.6	5317.7	5356.9	5474.5	5637.8	5941.6	6180.0	6118.0	5595.3	5513.7	4667.7
22.5°	5595.3	5611.7	5608.4	5683.5	5794.6	6003.6	6297.6	6451.1	5954.7	5863.2	4929.0
25°	6216.0	6202.9	6091.8	6055.9	6085.3	6219.2	6454.4	6771.3	6330.3	6238.8	5203.4
27.5°	7058.7	7042.4	6839.8	6656.9	6493.6	6552.4	6676.5	7029.3	6712.5	6607.9	5464.7
30°	7960.2	7940.6	7705.4	7408.2	7045.6	6960.7	6944.4	7254.7	7097.9	6986.8	5742.3
32.5°	8838.9	8822.6	8571.0	8224.8	7725.0	7470.3	7313.5	7506.2	7535.6	7427.8	6046.1
35°	9639.2	9639.2	9423.6	9012.0	8446.9	8061.5	7803.4	7816.5	8038.6	7914.5	6392.3
37.5°	10351.2	10348.0	10112.8	9707.7	9165.5	8724.6	8404.5	8192.1	8518.8	8411.0	6754.9
40°	10916.3	10893.5	10720.3	10367.6	9822.1	9384.4	9061.0	8633.1	9054.5	8956.5	7140.4
42.5°	11327.9	11314.8	11197.2	10890.2	10370.8	9959.3	9737.1	9188.4	9662.0	9564.0	7591.1
45°	11487.9	11514.1	11514.1	11223.4	10811.8	10436.2	10338.2	9799.2	10318.6	10220.6	8074.5
47.5°	11229.9	11298.5	11438.9	11458.5	11096.0	10841.2	10873.9	10413.3	10994.7	10942.4	8603.7
50°	10423.1	10550.5	10857.5	11412.8	11210.3	11151.5	11331.1	11040.4	11719.9	11703.5	9247.2
52.5°	8342.4	8652.7	9609.8	10606.0	11131.9	11295.2	11785.2	11746.0	12654.0	12680.2	10086.6
55°	6398.9	6516.5	7623.8	9319.0	10651.7	11249.5	12089.0	12435.2	13666.6	13699.3	10857.5
57.5°	5174.0	5252.4	5856.7	7623.8	9557.5	11001.2	12327.4	12837.0	14444.0	14529.0	11543.5
60°	4099.3	4213.7	4618.7	5833.8	8025.5	10403.5	12494.0	13284.5	15280.2	15407.6	12363.3
62.5°	3047.6	3103.1	3485.3	4321.4	6353.2	9328.8	12405.8	13771.2	16305.9	16459.4	13349.8
65°	2168.9	2217.9	2489.0	3073.7	4697.1	7875.3	11893.0	14133.7	17592.8	17749.6	14342.8
67.5°	1623.4	1643.0	1796.5	2149.3	3165.1	6118.0	10854.3	14071.7	18533.6	18674.0	14741.3
70°	1283.7	1290.2	1365.4	1554.8	2057.8	4259.4	9034.9	13160.3	18602.2	18726.3	14238.2
72.5°	1064.8	1061.6	1104.0	1195.5	1434.0	2694.8	6692.9	11468.3	17720.2	17805.2	12833.7
75°	878.7	885.2	914.6	966.9	1094.2	1776.9	4337.8	9149.2	15633.0	15541.5	10769.3
77.5°	738.2	734.9	748.0	793.7	885.2	1277.2	2541.3	6611.2	11585.9	11540.2	7068.5
80°	594.5	601.0	620.6	659.8	744.7	973.4	1502.5	4125.5	6216.0	6049.4	3377.5
82.5°	398.5	460.6	499.8	545.5	643.5	718.6	953.8	2097.0	2779.7	2737.2	1531.9
85°	189.5	251.5	372.4	424.6	522.6	450.8	646.7	999.5	1391.5	1375.2	552.0
87.5°	39.2	39.2	199.3	238.4	323.4	192.7	359.3	434.4	672.9	630.4	225.4
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°	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3
2.5°	3122.7	3034.5	2858.1	2717.6	2573.9	2492.3	2391.0	2342.0	2332.2	2306.1	2325.7
5°	3178.2	3005.1	2671.9	2453.1	2306.1	2234.2	2198.3	2185.2	2182.0	2175.4	2175.4
7.5°	3253.3	2988.8	2554.3	2332.2	2237.5	2214.6	2224.4	2244.0	2247.3	2253.8	2250.6
10°	3344.8	2992.0	2489.0	2302.8	2257.1	2260.4	2293.0	2319.1	2332.2	2342.0	2338.7
12.5°	3472.2	3031.2	2479.2	2322.4	2302.8	2315.9	2348.5	2374.7	2387.7	2391.0	2391.0
15°	3638.8	3112.9	2502.1	2364.9	2348.5	2358.3	2377.9	2387.7	2391.0	2387.7	2387.7
17.5°	3821.7	3210.9	2534.7	2391.0	2364.9	2355.1	2348.5	2338.7	2319.1	2306.1	2306.1
20°	3998.1	3299.1	2551.1	2387.7	2342.0	2302.8	2263.6	2214.6	2182.0	2155.8	2155.8
22.5°	4174.5	3380.7	2551.1	2351.8	2279.9	2204.8	2123.2	2044.8	1995.8	1963.1	1963.1
25°	4360.6	3459.1	2531.5	2289.7	2182.0	2074.2	1963.1	1865.1	1816.1	1783.5	1776.9
27.5°	4517.4	3504.8	2479.2	2201.6	2061.1	1923.9	1796.5	1695.3	1659.3	1629.9	1629.9
30°	4684.0	3534.2	2381.2	2087.2	1923.9	1767.1	1636.5	1554.8	1515.6	1473.1	1469.9
32.5°	4870.2	3553.8	2270.1	1966.4	1783.5	1616.9	1505.8	1440.5	1355.6	1309.8	1303.3
35°	5085.8	3580.0	2152.6	1829.2	1643.0	1492.7	1427.4	1319.6	1238.0	1198.8	1195.5
37.5°	5314.4	3599.6	2025.2	1708.3	1515.6	1411.1	1345.8	1218.4	1146.5	1087.7	1081.2
40°	5556.1	3599.6	1894.5	1590.7	1414.4	1375.2	1251.0	1136.7	1015.9	986.5	979.9
42.5°	5824.0	3593.0	1763.9	1476.4	1319.6	1293.5	1195.5	1074.6	1012.6	986.5	979.9
45°	6108.2	3570.2	1639.7	1345.8	1221.6	1169.4	1094.2	1061.6	1035.4	1035.4	1035.4
47.5°	6431.5	3550.6	1499.3	1228.2	1149.8	1091.0	1035.4	1015.9	1012.6	1022.4	1032.2
50°	6846.4	3544.0	1381.7	1143.2	1094.2	1025.7	1019.1	1002.8	1006.1	1006.1	1006.1
52.5°	7349.4	3485.3	1270.6	1081.2	1038.7	957.1	976.7	993.0	999.5	996.3	993.0
55°	7718.5	3380.7	1175.9	1038.7	999.5	930.9	957.1	983.2	989.7	979.9	979.9
57.5°	8051.7	3233.7	1100.8	1006.1	973.4	914.6	944.0	970.1	963.6	960.3	957.1
60°	8433.8	3093.3	1042.0	989.7	947.3	908.1	934.2	950.5	940.7	934.2	930.9
62.5°	8848.7	2956.1	999.5	989.7	927.7	904.8	924.4	930.9	911.3	904.8	904.8
65°	9041.4	2740.5	953.8	989.7	917.9	898.3	904.8	898.3	878.7	878.7	875.4
67.5°	8724.6	2384.5	895.0	976.7	930.9	888.5	875.4	865.6	842.7	842.7	836.2
70°	7849.2	1959.8	810.1	934.2	934.2	885.2	836.2	813.3	787.2	797.0	783.9
72.5°	6705.9	1554.8	705.5	862.3	914.6	881.9	793.7	757.8	734.9	744.7	725.1
75°	5432.0	1205.3	581.4	748.0	865.6	865.6	751.3	702.3	676.1	676.1	653.3
77.5°	3462.4	891.7	473.6	620.6	777.4	842.7	715.3	640.2	601.0	591.2	574.9
80°	1714.9	627.1	388.7	493.2	663.1	790.5	689.2	568.4	512.8	493.2	463.8
82.5°	911.3	434.4	310.3	385.4	529.2	712.1	656.5	490.0	421.4	392.0	359.3
85°	408.3	267.8	248.2	294.0	401.8	584.7	591.2	401.8	323.4	385.4	284.2
87.5°	150.3	120.9	120.9	150.3	231.9	245.0	418.1	258.0	205.8	140.5	111.1
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)