

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: P399787

Luminaire Tested: **ARCH-L-PA3-190-740-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399787  
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-PA3-190-740-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27868 lumens  
Efficiency: N/A  
Efficacy: 147.4 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

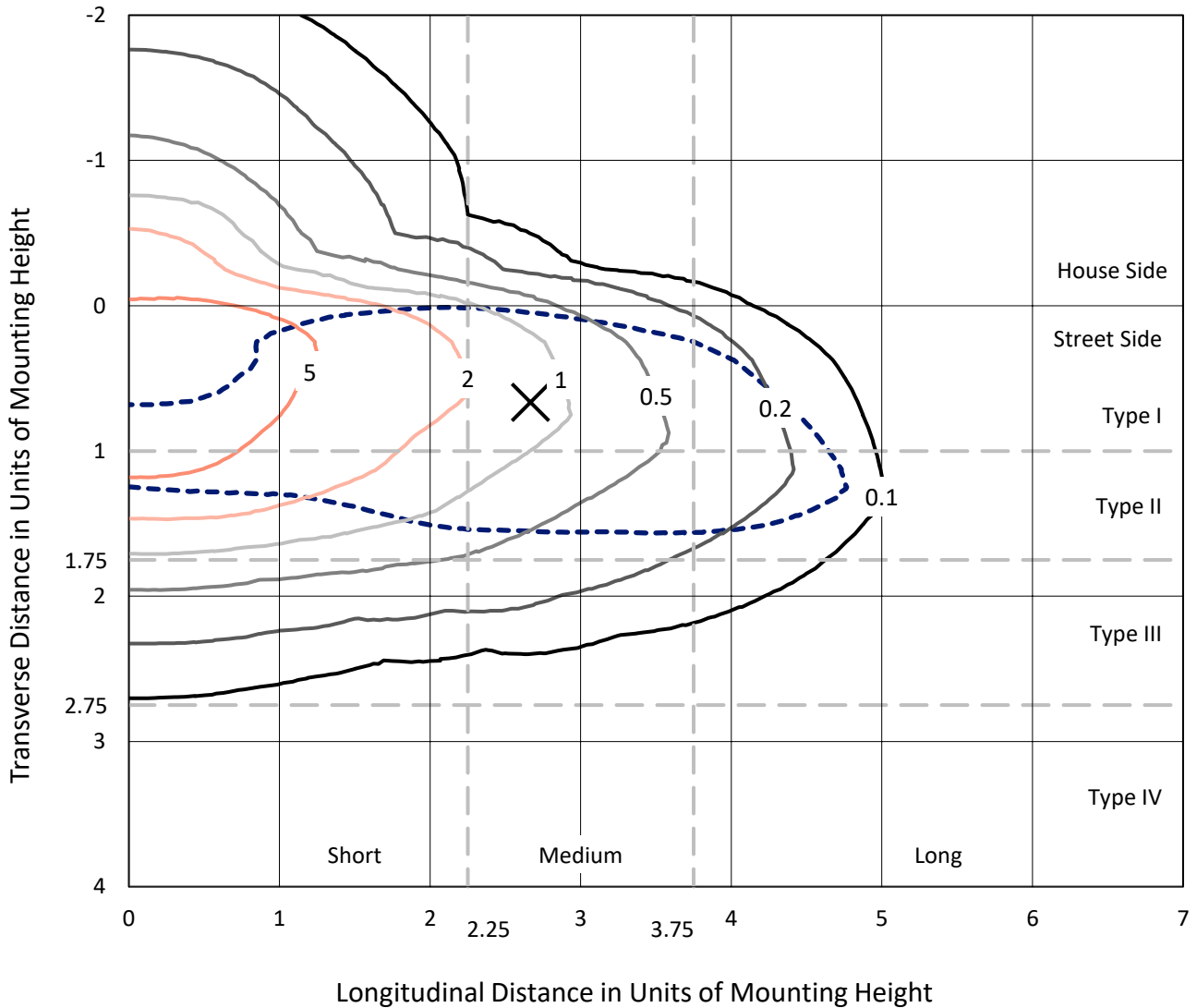
Input Watts (W): 189  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

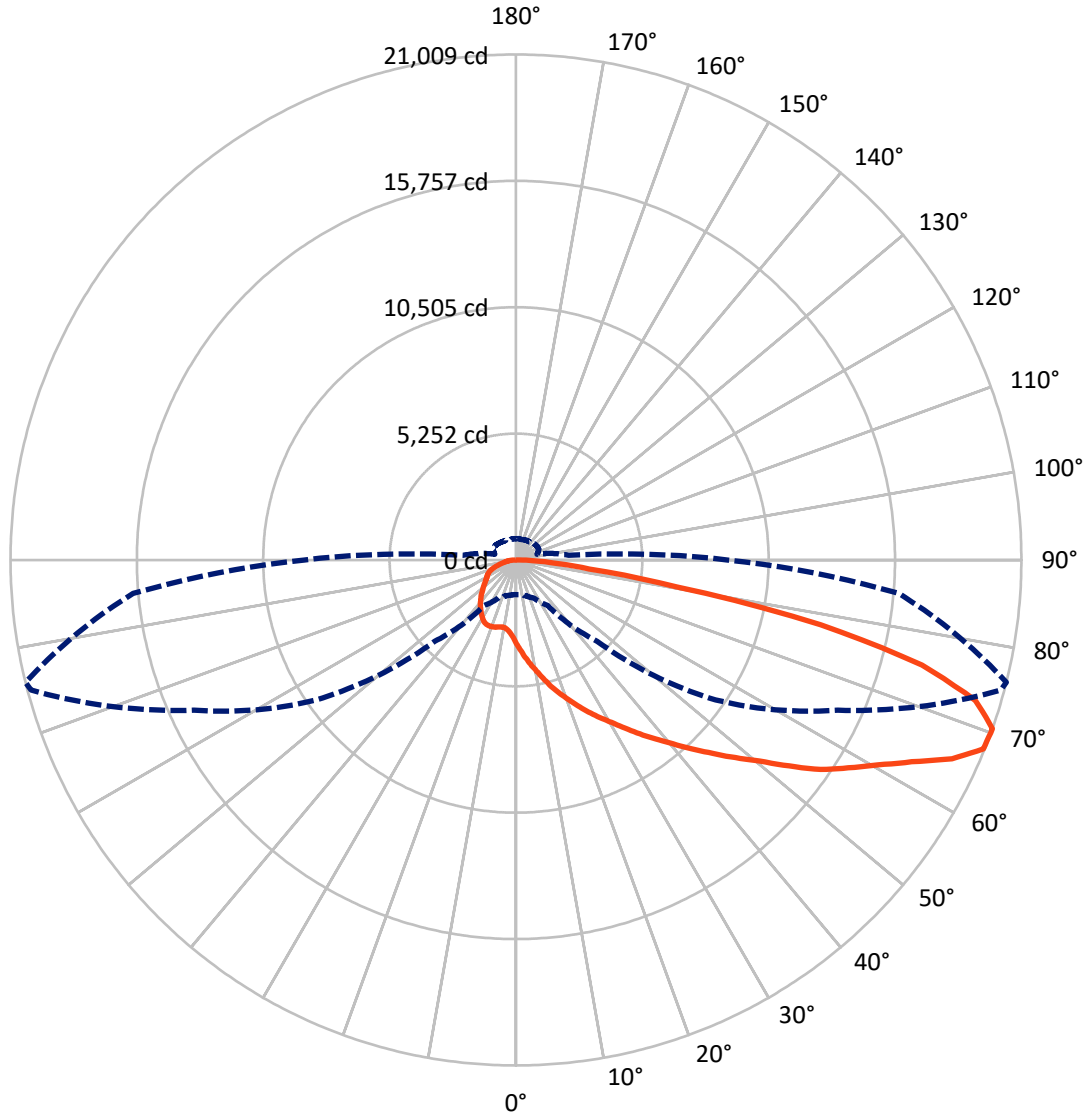
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 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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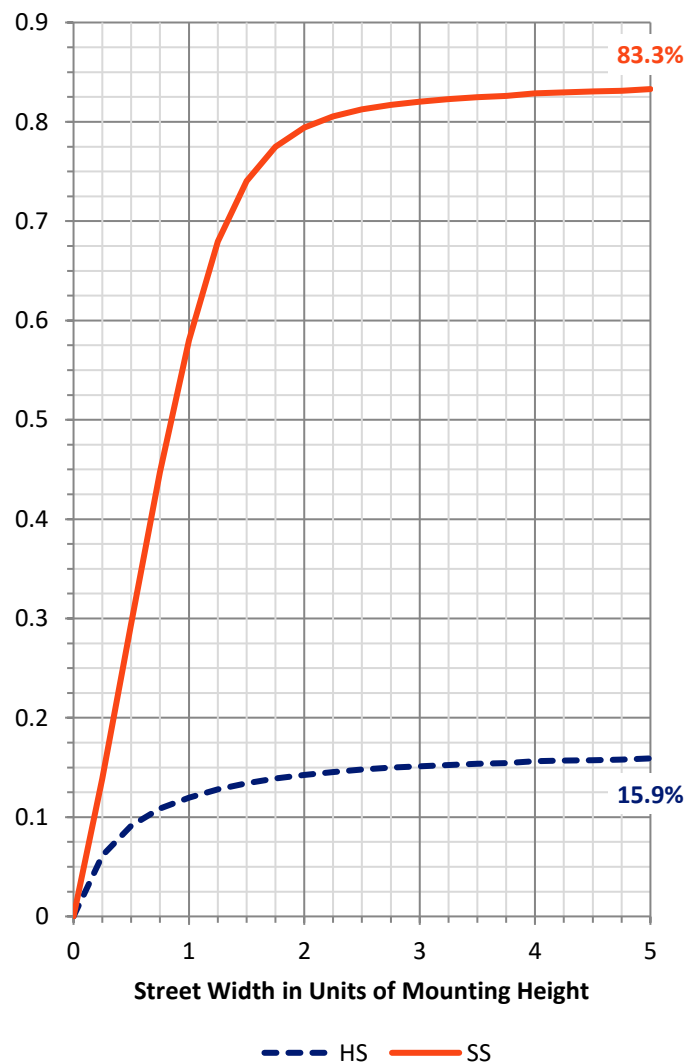
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4549.7	0.0	4549.7
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	23318.3	0.0	23318.3
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	27868.0	0.0	27868.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	362.1	1.3
10°-20°	1230.7	4.4
20°-30°	2201.9	7.9
30°-40°	3561.8	12.8
40°-50°	5152.7	18.5
50°-60°	5897.6	21.2
60°-70°	5425.1	19.5
70°-80°	3354.8	12.0
80°-90°	681.2	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°	27868.0	100.0
0°-180°	27868.0	100.0



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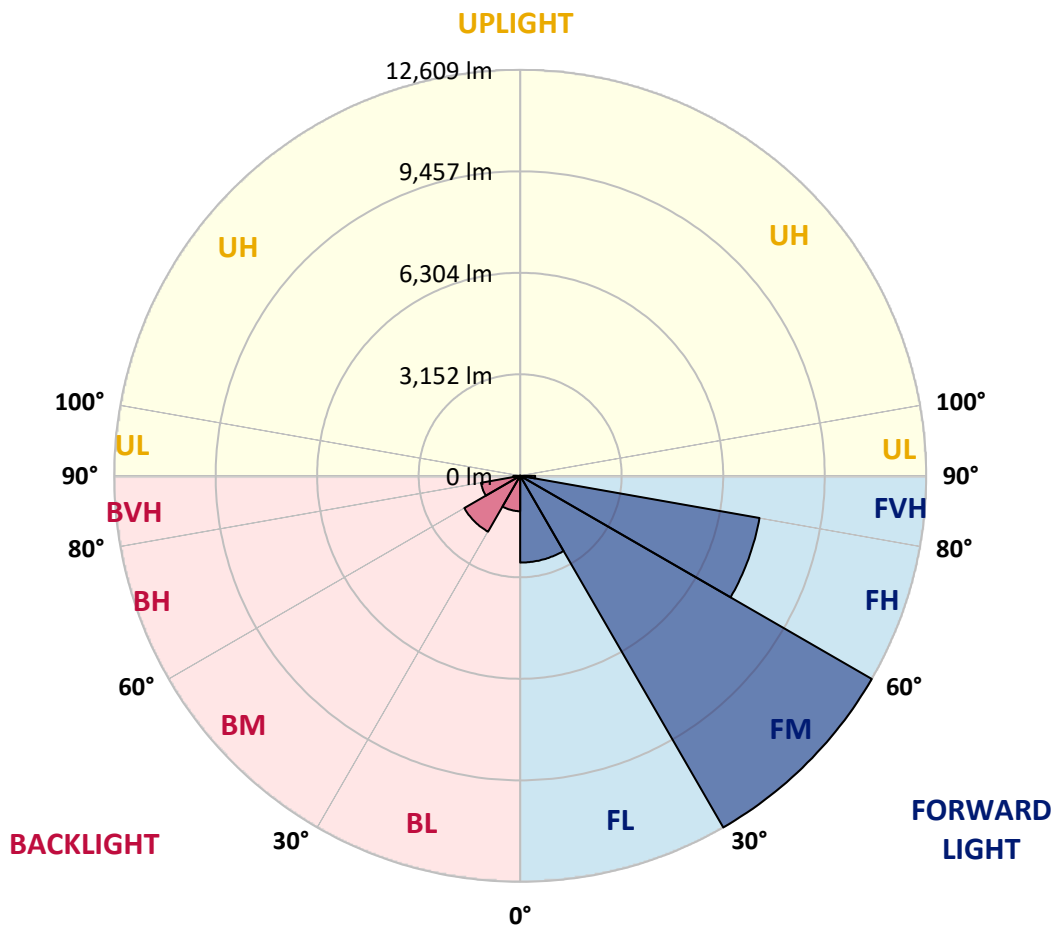
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2695.8	9.7			
FM (30°-60°)	12608.9	45.2			
FH (60°-80°)	7545.9	27.1			G4/12000
FVH (80°-90°)	467.7	1.7			G3/500
BL (0°-30°)	1098.9	3.9	B3/2500		
BM (30°-60°)	2003.2	7.2	B2/2500		
BH (60°-80°)	1234.1	4.4	B3/2500		G3/2500
BVH (80°-90°)	213.6	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-G4**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3485.0	3485.0	3485.0	3485.0	3485.0	3485.0	3485.0	3485.0	3485.0	3485.0	3485.0
2.5°	4441.5	4408.5	4404.8	4353.5	4305.9	4177.6	4086.0	3924.8	3763.5	3759.9	3598.6
5°	5134.1	5101.1	5082.8	5020.5	4939.8	4771.3	4606.4	4357.2	4082.3	4064.0	3759.9
7.5°	5603.1	5573.8	5537.2	5511.5	5434.6	5284.3	5082.8	4785.9	4408.5	4371.8	3946.7
10°	5918.3	5900.0	5892.6	5874.3	5826.7	5705.7	5511.5	5196.4	4734.6	4694.3	4144.6
12.5°	6053.9	6046.6	6079.5	6130.8	6149.2	6101.5	5914.6	5617.8	5093.8	5049.8	4382.8
15°	5896.3	5903.6	5987.9	6163.8	6350.7	6453.3	6343.4	6053.9	5500.5	5438.2	4661.3
17.5°	5823.0	5834.0	5892.6	6061.2	6325.1	6643.9	6695.2	6468.0	5892.6	5804.7	4954.5
20°	5951.3	5965.9	6009.9	6141.8	6325.1	6665.9	6933.4	6863.8	6277.4	6185.8	5236.7
22.5°	6277.4	6295.7	6292.1	6376.4	6501.0	6735.5	7065.3	7237.5	6680.5	6577.9	5529.8
25°	6973.7	6959.0	6834.4	6794.1	6827.1	6977.4	7241.2	7596.7	7102.0	6999.3	5837.7
27.5°	7919.2	7900.8	7673.6	7468.4	7285.2	7351.1	7490.4	7886.2	7530.7	7413.4	6130.8
30°	8930.6	8908.6	8644.7	8311.3	7904.5	7809.2	7790.9	8139.0	7963.1	7838.5	6442.3
32.5°	9916.3	9898.0	9615.8	9227.4	8666.7	8380.9	8205.0	8421.2	8454.2	8333.2	6783.1
35°	10814.2	10814.2	10572.3	10110.6	9476.6	9044.2	8754.7	8769.3	9018.5	8879.3	7171.6
37.5°	11613.0	11609.4	11345.5	10891.1	10282.8	9788.1	9429.0	9190.8	9557.2	9436.3	7578.3
40°	12247.0	12221.4	12027.1	11631.4	11019.4	10528.3	10165.5	9685.5	10158.2	10048.3	8010.8
42.5°	12708.8	12694.1	12562.2	12217.7	11635.0	11173.3	10924.1	10308.5	10839.8	10729.9	8516.5
45°	12888.3	12917.6	12917.6	12591.5	12129.7	11708.3	11598.4	10993.7	11576.4	11466.5	9058.8
47.5°	12598.8	12675.8	12833.3	12855.3	12448.6	12162.7	12199.4	11682.7	12335.0	12276.3	9652.5
50°	11693.7	11836.6	12181.1	12804.0	12576.8	12510.9	12712.4	12386.3	13148.5	13130.2	10374.4
52.5°	9359.3	9707.5	10781.2	11898.9	12488.9	12672.1	13221.8	13177.8	14196.6	14225.9	11316.2
55°	7178.9	7310.8	8553.1	10455.0	11950.2	12620.8	13562.6	13951.0	15332.6	15369.2	12181.1
57.5°	5804.7	5892.6	6570.6	8553.1	10722.6	12342.3	13830.1	14401.8	16204.8	16300.0	12950.6
60°	4599.0	4727.3	5181.7	6544.9	9003.9	11671.7	14017.0	14903.8	17142.9	17285.8	13870.4
62.5°	3419.1	3481.3	3910.1	4848.2	7127.6	10466.0	13918.1	15449.9	18293.6	18465.8	14977.1
65°	2433.3	2488.2	2792.4	3448.4	5269.7	8835.3	13342.7	15856.6	19737.4	19913.3	16091.2
67.5°	1821.3	1843.3	2015.5	2411.3	3551.0	6863.8	12177.4	15787.0	20792.8	20950.4	16538.2
70°	1440.2	1447.5	1531.8	1744.3	2308.7	4778.6	10136.2	14764.6	20869.8	21009.0	15973.9
72.5°	1194.7	1191.0	1238.6	1341.2	1608.7	3023.3	7508.7	12866.3	19880.3	19975.6	14398.1
75°	985.8	993.1	1026.1	1084.7	1227.6	1993.5	4866.6	10264.5	17538.7	17436.1	12082.1
77.5°	828.2	824.5	839.2	890.5	993.1	1432.8	2851.0	7417.1	12998.3	12947.0	7930.1
80°	667.0	674.3	696.3	740.2	835.5	1092.0	1685.7	4628.4	6973.7	6786.8	3789.2
82.5°	447.1	516.7	560.7	612.0	721.9	806.2	1070.1	2352.7	3118.6	3070.9	1718.7
85°	212.5	282.2	417.8	476.4	586.3	505.7	725.6	1121.4	1561.1	1542.8	619.3
87.5°	44.0	44.0	223.5	267.5	362.8	216.2	403.1	487.4	754.9	707.3	252.9
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°	3485.0	3485.0	3485.0	3485.0	3485.0	3485.0	3485.0	3485.0	3485.0	3485.0	3485.0
2.5°	3503.3	3404.4	3206.5	3048.9	2887.7	2796.1	2682.5	2627.5	2616.5	2587.2	2609.2
5°	3565.6	3371.4	2997.6	2752.1	2587.2	2506.6	2466.3	2451.6	2447.9	2440.6	2440.6
7.5°	3649.9	3353.1	2865.7	2616.5	2510.2	2484.6	2495.6	2517.6	2521.2	2528.6	2524.9
10°	3752.5	3356.8	2792.4	2583.5	2532.2	2535.9	2572.5	2601.8	2616.5	2627.5	2623.8
12.5°	3895.4	3400.7	2781.4	2605.5	2583.5	2598.2	2634.8	2664.1	2678.8	2682.5	2682.5
15°	4082.3	3492.3	2807.1	2653.2	2634.8	2645.8	2667.8	2678.8	2682.5	2678.8	2678.8
17.5°	4287.6	3602.3	2843.7	2682.5	2653.2	2642.2	2634.8	2623.8	2601.8	2587.2	2587.2
20°	4485.4	3701.2	2862.0	2678.8	2627.5	2583.5	2539.6	2484.6	2447.9	2418.6	2418.6
22.5°	4683.3	3792.8	2862.0	2638.5	2557.9	2473.6	2382.0	2294.0	2239.1	2202.4	2202.4
25°	4892.2	3880.8	2840.0	2568.9	2447.9	2327.0	2202.4	2092.5	2037.5	2000.9	1993.5
27.5°	5068.1	3932.1	2781.4	2469.9	2312.3	2158.4	2015.5	1901.9	1861.6	1828.6	1828.6
30°	5255.0	3965.1	2671.5	2341.7	2158.4	1982.5	1836.0	1744.3	1700.4	1652.7	1649.1
32.5°	5463.9	3987.1	2546.9	2206.1	2000.9	1814.0	1689.4	1616.1	1520.8	1469.5	1462.2
35°	5705.7	4016.4	2415.0	2052.2	1843.3	1674.7	1601.4	1480.5	1388.9	1344.9	1341.2
37.5°	5962.3	4038.4	2272.0	1916.6	1700.4	1583.1	1509.8	1366.9	1286.3	1220.3	1213.0
40°	6233.4	4038.4	2125.5	1784.6	1586.8	1542.8	1403.5	1275.3	1139.7	1106.7	1099.4
42.5°	6533.9	4031.0	1978.9	1656.4	1480.5	1451.2	1341.2	1205.6	1136.0	1106.7	1099.4
45°	6852.8	4005.4	1839.6	1509.8	1370.6	1311.9	1227.6	1191.0	1161.7	1161.7	1161.7
47.5°	7215.6	3983.4	1682.0	1377.9	1289.9	1224.0	1161.7	1139.7	1136.0	1147.0	1158.0
50°	7681.0	3976.1	1550.1	1282.6	1227.6	1150.7	1143.3	1125.0	1128.7	1128.7	1128.7
52.5°	8245.3	3910.1	1425.5	1213.0	1165.3	1073.7	1095.7	1114.0	1121.4	1117.7	1114.0
55°	8659.4	3792.8	1319.2	1165.3	1121.4	1044.4	1073.7	1103.0	1110.4	1099.4	1099.4
57.5°	9033.2	3627.9	1235.0	1128.7	1092.0	1026.1	1059.1	1088.4	1081.1	1077.4	1073.7
60°	9461.9	3470.4	1169.0	1110.4	1062.7	1018.8	1048.1	1066.4	1055.4	1048.1	1044.4
62.5°	9927.3	3316.4	1121.4	1110.4	1040.7	1015.1	1037.1	1044.4	1022.4	1015.1	1015.1
65°	10143.5	3074.6	1070.1	1110.4	1029.7	1007.8	1015.1	1007.8	985.8	985.8	982.1
67.5°	9788.1	2675.1	1004.1	1095.7	1044.4	996.8	982.1	971.1	945.5	945.5	938.1
70°	8806.0	2198.7	908.8	1048.1	1048.1	993.1	938.1	912.5	883.2	894.2	879.5
72.5°	7523.4	1744.3	791.5	967.4	1026.1	989.4	890.5	850.2	824.5	835.5	813.5
75°	6094.2	1352.2	652.3	839.2	971.1	971.1	842.9	787.9	758.6	758.6	732.9
77.5°	3884.5	1000.4	531.4	696.3	872.2	945.5	802.5	718.3	674.3	663.3	645.0
80°	1923.9	703.6	436.1	553.4	743.9	886.8	773.2	637.6	575.3	553.4	520.4
82.5°	1022.4	487.4	348.1	432.4	593.7	798.9	736.6	549.7	472.7	439.7	403.1
85°	458.1	300.5	278.5	329.8	450.7	656.0	663.3	450.7	362.8	432.4	318.8
87.5°	168.6	135.6	135.6	168.6	260.2	274.8	469.1	289.5	230.9	157.6	124.6
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)