

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: P399859

Luminaire Tested: **ARCH-L-PA3-200-740-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399859  
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-PA3-200-740-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29218 lumens  
Efficiency: N/A  
Efficacy: 145.4 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

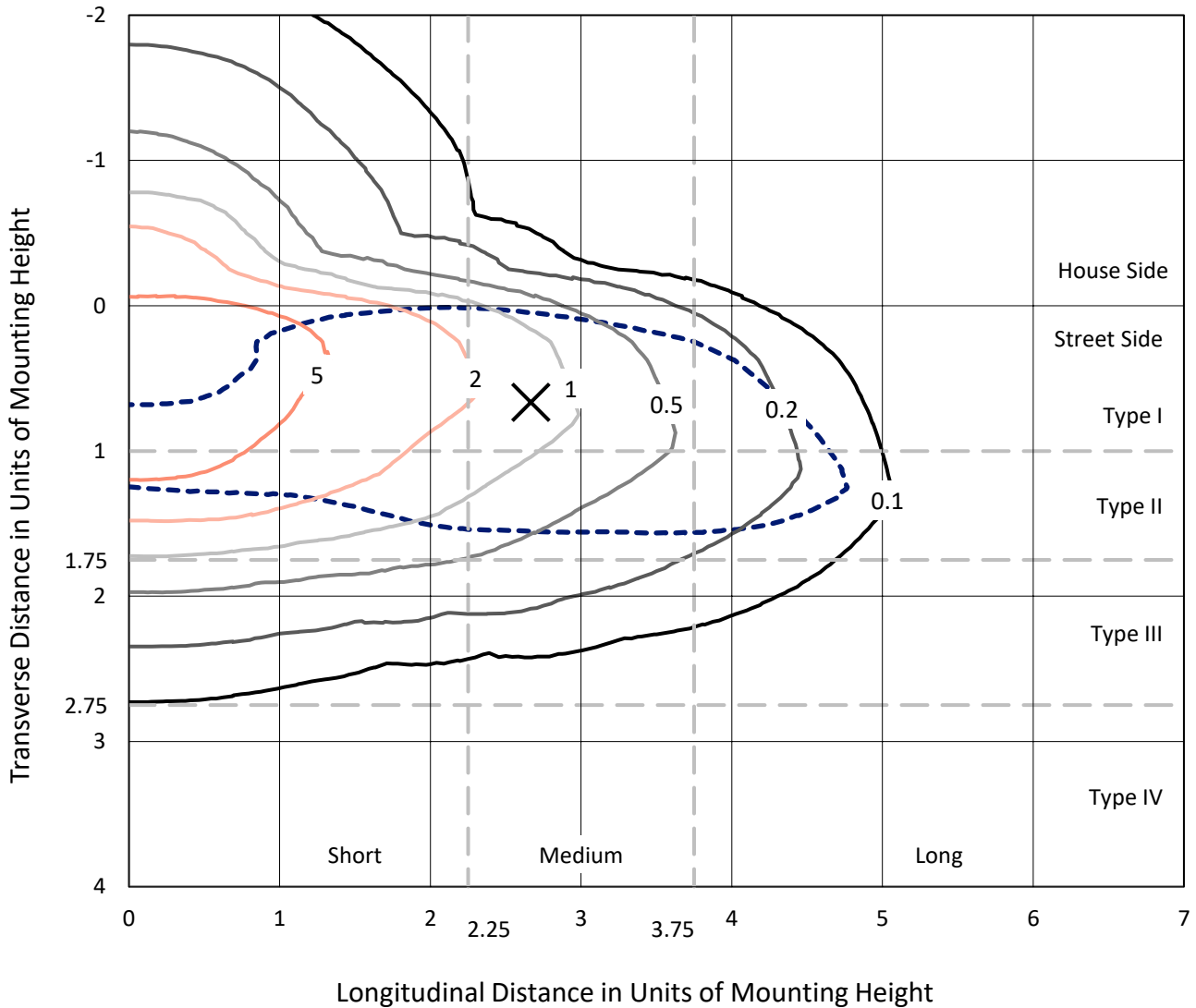
Input Watts (W): 201  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399859  
 CATALOG NUMBER: ARCH-L-PA3-200-740-U-T2R

### Iso-Footcandle Lines of Horizontal Illumination

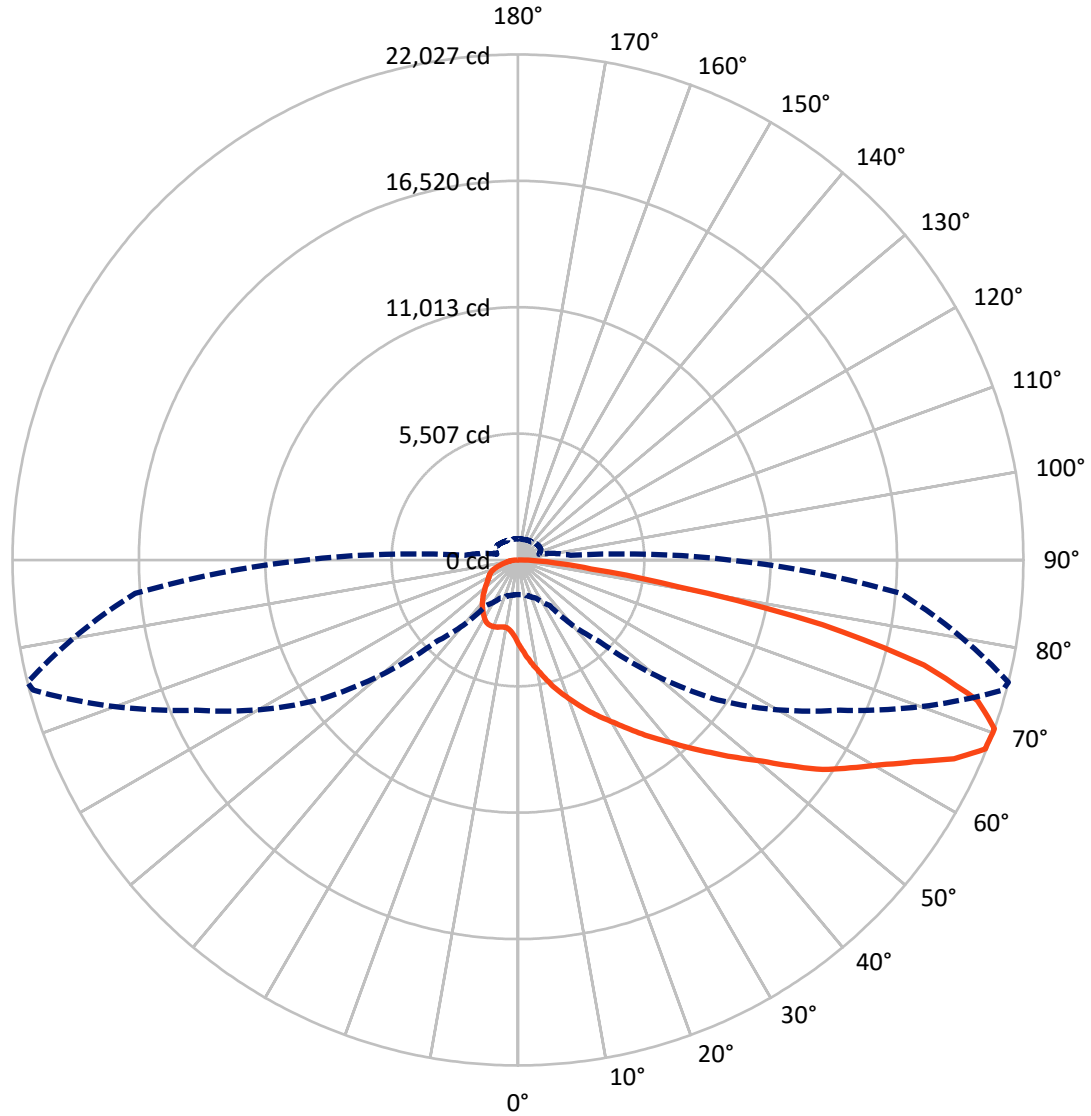
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.9 fc  
 Type II - Medium - N/A

REPORT NUMBER: P399859  
CATALOG NUMBER: ARCH-L-PA3-200-740-U-T2R

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P399859  
 CATALOG NUMBER: ARCH-L-PA3-200-740-U-T2R

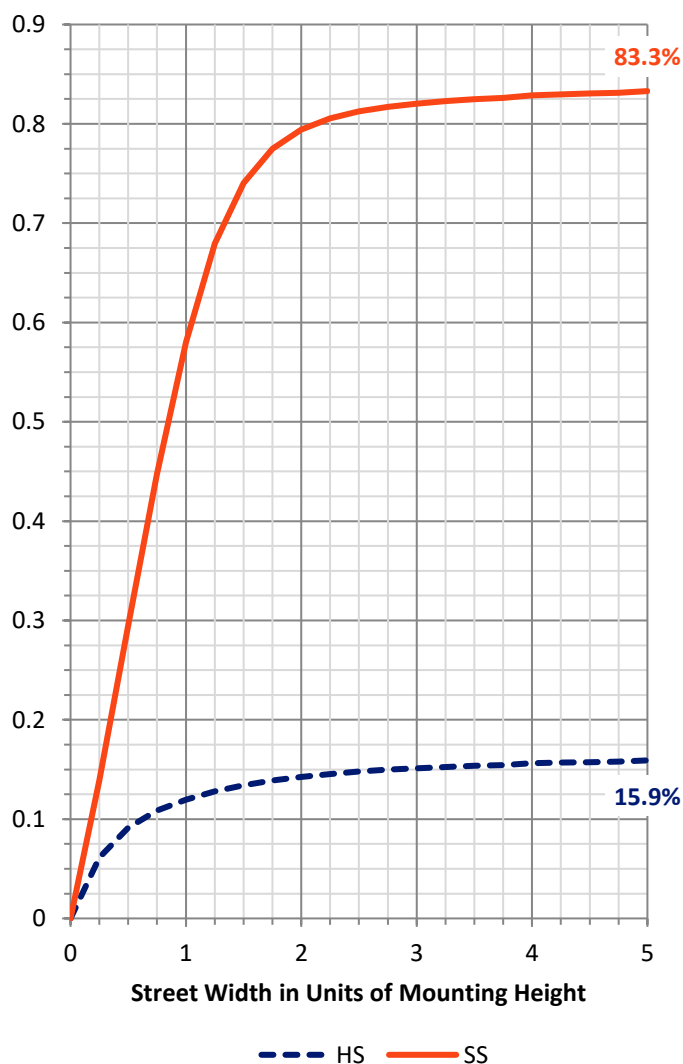
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4770.1	0.0	4770.1
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	24447.9	0.0	24447.9
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	29218.0	0.0	29218.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	379.6	1.3
10°-20°	1290.3	4.4
20°-30°	2308.5	7.9
30°-40°	3734.4	12.8
40°-50°	5402.3	18.5
50°-60°	6183.3	21.2
60°-70°	5687.9	19.5
70°-80°	3517.3	12.0
80°-90°	714.2	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°	29218.0	100.0
0°-180°	29218.0	100.0



REPORT NUMBER: P399859

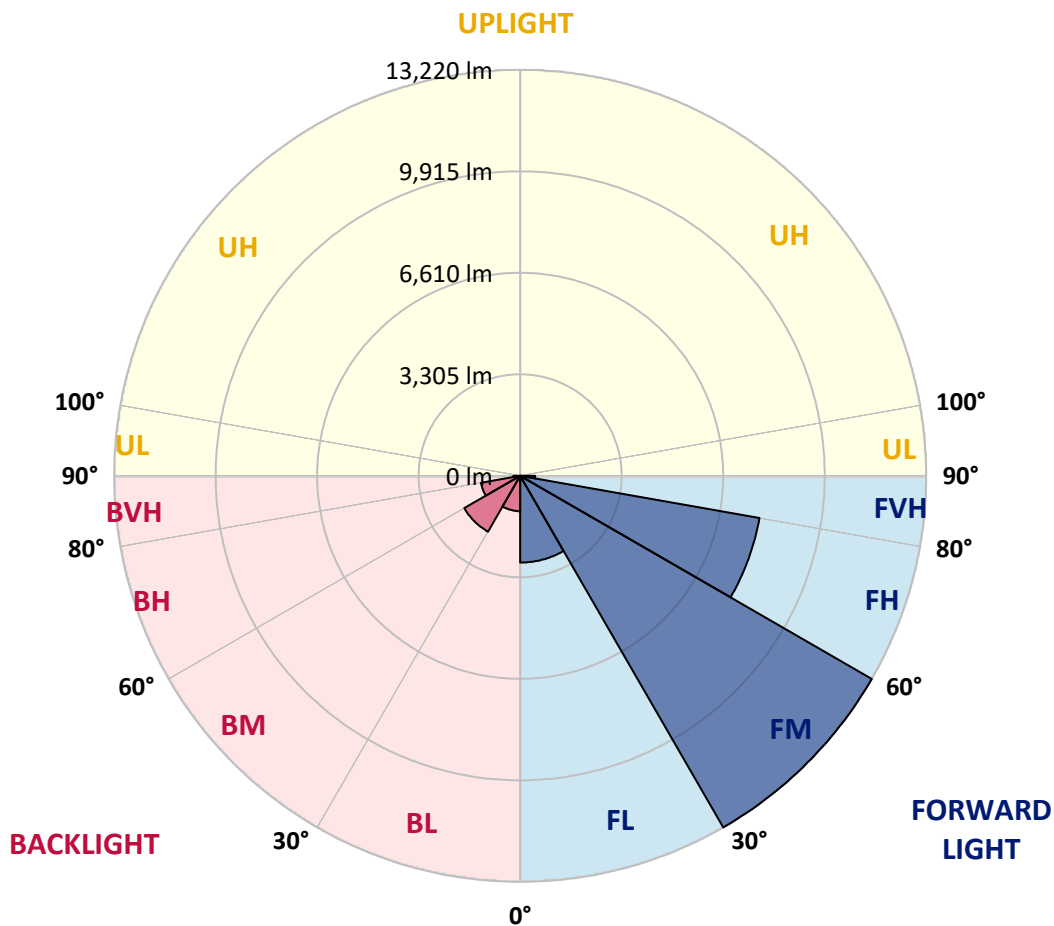
CATALOG NUMBER: ARCH-L-PA3-200-740-U-T2R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2826.3	9.7			
FM (30°-60°)	13219.8	45.2			
FH (60°-80°)	7911.4	27.1			G4/12000
FVH (80°-90°)	490.3	1.7			G3/500
BL (0°-30°)	1152.1	3.9	B3/2500		
BM (30°-60°)	2100.2	7.2	B2/2500		
BH (60°-80°)	1293.8	4.4	B3/2500		G3/2500
BVH (80°-90°)	223.9	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





REPORT NUMBER: P399859

CATALOG NUMBER: ARCH-L-PA3-200-740-U-T2R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3653.8	3653.8	3653.8	3653.8	3653.8	3653.8	3653.8	3653.8	3653.8	3653.8	3653.8
2.5°	4656.6	4622.0	4618.2	4564.4	4514.5	4380.0	4283.9	4114.9	3945.8	3942.0	3772.9
5°	5382.8	5348.2	5329.0	5263.7	5179.1	5002.4	4829.5	4568.3	4280.1	4260.9	3942.0
7.5°	5874.6	5843.8	5805.4	5778.5	5697.8	5540.3	5329.0	5017.8	4622.0	4583.6	4137.9
10°	6205.0	6185.8	6178.1	6158.9	6108.9	5982.1	5778.5	5448.1	4964.0	4921.7	4345.4
12.5°	6347.1	6339.5	6374.0	6427.8	6447.0	6397.1	6201.1	5889.9	5340.5	5294.4	4595.2
15°	6181.9	6189.6	6278.0	6462.4	6658.4	6765.9	6650.7	6347.1	5767.0	5701.7	4887.1
17.5°	6105.1	6116.6	6178.1	6354.8	6631.5	6965.7	7019.5	6781.3	6178.1	6085.9	5194.5
20°	6239.6	6254.9	6301.0	6439.4	6631.5	6988.8	7269.3	7196.3	6581.5	6485.5	5490.4
22.5°	6581.5	6600.7	6596.9	6685.3	6815.9	7061.8	7407.6	7588.1	7004.1	6896.6	5797.7
25°	7311.5	7296.1	7165.5	7123.3	7157.8	7315.4	7592.0	7964.7	7446.0	7338.4	6120.5
27.5°	8302.8	8283.6	8045.4	7830.2	7638.1	7707.3	7853.2	8268.2	7895.5	7772.6	6427.8
30°	9363.2	9340.1	9063.5	8713.9	8287.4	8187.5	8168.3	8533.3	8348.9	8218.2	6754.4
32.5°	10396.7	10377.5	10081.7	9674.4	9086.6	8786.9	8602.5	8829.1	8863.7	8736.9	7111.7
35°	11338.0	11338.0	11084.5	10600.4	9935.7	9482.3	9178.8	9194.1	9455.4	9309.4	7519.0
37.5°	12175.6	12171.8	11895.1	11418.7	10780.9	10262.2	9885.7	9636.0	10020.2	9893.4	7945.5
40°	12840.3	12813.4	12609.8	12194.8	11553.2	11038.3	10658.0	10154.7	10650.3	10535.0	8398.8
42.5°	13324.4	13309.0	13170.7	12809.6	12198.7	11714.6	11453.3	10807.8	11364.9	11249.7	8929.0
45°	13512.7	13543.4	13543.4	13201.5	12717.3	12275.5	12160.2	11526.3	12137.2	12021.9	9497.7
47.5°	13209.1	13289.8	13455.0	13478.1	13051.6	12751.9	12790.3	12248.6	12932.5	12871.0	10120.1
50°	12260.1	12410.0	12771.1	13424.3	13186.1	13116.9	13328.2	12986.3	13785.5	13766.2	10877.0
52.5°	9812.7	10177.7	11303.5	12475.3	13093.9	13286.0	13862.3	13816.2	14884.3	14915.0	11864.4
55°	7526.7	7665.0	8967.5	10961.5	12529.1	13232.2	14219.6	14626.9	16075.3	16113.8	12771.1
57.5°	6085.9	6178.1	6888.9	8967.5	11242.0	12940.2	14500.1	15099.4	16989.8	17089.7	13578.0
60°	4821.8	4956.3	5432.7	6862.0	9440.0	12237.1	14696.0	15625.8	17973.3	18123.2	14542.3
62.5°	3584.7	3650.0	4099.5	5083.1	7472.9	10973.0	14592.3	16198.3	19179.8	19360.3	15702.7
65°	2551.2	2608.8	2927.7	3615.4	5524.9	9263.3	13989.1	16624.8	20693.5	20878.0	16870.7
67.5°	1909.5	1932.6	2113.2	2528.1	3723.0	7196.3	12767.3	16551.8	21800.1	21965.3	17339.4
70°	1509.9	1517.6	1606.0	1828.8	2420.5	5010.1	10627.2	15479.8	21880.8	22026.8	16747.7
72.5°	1252.5	1248.7	1298.6	1406.2	1686.7	3169.7	7872.5	13489.6	20843.4	20943.3	15095.6
75°	1033.5	1041.2	1075.8	1137.3	1287.1	2090.1	5102.3	10761.7	18388.3	18280.7	12667.4
77.5°	868.3	864.5	879.8	933.6	1041.2	1502.3	2989.2	7776.4	13627.9	13574.1	8314.3
80°	699.3	706.9	730.0	776.1	876.0	1144.9	1767.4	4852.6	7311.5	7115.6	3972.7
82.5°	468.7	541.7	587.8	641.6	756.9	845.3	1121.9	2466.6	3269.6	3219.7	1801.9
85°	222.8	295.8	438.0	499.5	614.7	530.2	760.7	1175.7	1636.7	1617.5	649.3
87.5°	46.1	46.1	234.4	280.5	380.4	226.7	422.6	511.0	791.5	741.5	265.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399859

CATALOG NUMBER: ARCH-L-PA3-200-740-U-T2R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3653.8	3653.8	3653.8	3653.8	3653.8	3653.8	3653.8	3653.8	3653.8	3653.8	3653.8
2.5°	3673.0	3569.3	3361.8	3196.6	3027.6	2931.5	2812.4	2754.8	2743.3	2712.5	2735.6
5°	3738.4	3534.7	3142.8	2885.4	2712.5	2628.0	2585.7	2570.4	2566.5	2558.8	2558.8
7.5°	3826.7	3515.5	3004.5	2743.3	2631.8	2604.9	2616.5	2639.5	2643.4	2651.0	2647.2
10°	3934.3	3519.4	2927.7	2708.7	2654.9	2658.7	2697.2	2727.9	2743.3	2754.8	2750.9
12.5°	4084.2	3565.5	2916.2	2731.7	2708.7	2724.0	2762.5	2793.2	2808.6	2812.4	2812.4
15°	4280.1	3661.5	2943.0	2781.7	2762.5	2774.0	2797.0	2808.6	2812.4	2808.6	2808.6
17.5°	4495.3	3776.8	2981.5	2812.4	2781.7	2770.2	2762.5	2750.9	2727.9	2712.5	2712.5
20°	4702.7	3880.5	3000.7	2808.6	2754.8	2708.7	2662.6	2604.9	2566.5	2535.8	2535.8
22.5°	4910.2	3976.6	3000.7	2766.3	2681.8	2593.4	2497.4	2405.2	2347.5	2309.1	2309.1
25°	5129.2	4068.8	2977.6	2693.3	2566.5	2439.7	2309.1	2193.8	2136.2	2097.8	2090.1
27.5°	5313.6	4122.6	2916.2	2589.6	2424.4	2263.0	2113.2	1994.0	1951.8	1917.2	1917.2
30°	5509.6	4157.2	2800.9	2455.1	2263.0	2078.6	1924.9	1828.8	1782.7	1732.8	1728.9
32.5°	5728.6	4180.2	2670.3	2312.9	2097.8	1901.8	1771.2	1694.4	1594.5	1540.7	1533.0
35°	5982.1	4210.9	2531.9	2151.6	1932.6	1755.8	1679.0	1552.2	1456.2	1410.1	1406.2
37.5°	6251.1	4234.0	2382.1	2009.4	1782.7	1659.8	1582.9	1433.1	1348.6	1279.4	1271.7
40°	6535.4	4234.0	2228.4	1871.1	1663.6	1617.5	1471.5	1337.1	1194.9	1160.3	1152.6
42.5°	6850.5	4226.3	2074.7	1736.6	1552.2	1521.5	1406.2	1264.1	1191.1	1160.3	1152.6
45°	7184.7	4199.4	1928.7	1582.9	1436.9	1375.5	1287.1	1248.7	1217.9	1217.9	1217.9
47.5°	7565.1	4176.4	1763.5	1444.6	1352.4	1283.3	1217.9	1194.9	1191.1	1202.6	1214.1
50°	8053.0	4168.7	1625.2	1344.7	1287.1	1206.4	1198.7	1179.5	1183.4	1183.4	1183.4
52.5°	8644.7	4099.5	1494.6	1271.7	1221.8	1125.7	1148.8	1168.0	1175.7	1171.8	1168.0
55°	9078.9	3976.6	1383.2	1221.8	1175.7	1095.0	1125.7	1156.5	1164.2	1152.6	1152.6
57.5°	9470.8	3803.7	1294.8	1183.4	1144.9	1075.8	1110.4	1141.1	1133.4	1129.6	1125.7
60°	9920.3	3638.5	1225.6	1164.2	1114.2	1068.1	1098.8	1118.1	1106.5	1098.8	1095.0
62.5°	10408.2	3477.1	1175.7	1164.2	1091.2	1064.3	1087.3	1095.0	1071.9	1064.3	1064.3
65°	10634.9	3223.5	1121.9	1164.2	1079.6	1056.6	1064.3	1056.6	1033.5	1033.5	1029.7
67.5°	10262.2	2804.7	1052.7	1148.8	1095.0	1045.1	1029.7	1018.2	991.3	991.3	983.6
70°	9232.6	2305.3	952.8	1098.8	1098.8	1041.2	983.6	956.7	925.9	937.5	922.1
72.5°	7887.8	1828.8	829.9	1014.3	1075.8	1037.4	933.6	891.4	864.5	876.0	852.9
75°	6389.4	1417.7	683.9	879.8	1018.2	1018.2	883.7	826.1	795.3	795.3	768.4
77.5°	4072.6	1048.9	557.1	730.0	914.4	991.3	841.4	753.1	706.9	695.4	676.2
80°	2017.1	737.7	457.2	580.2	779.9	929.8	810.7	668.5	603.2	580.2	545.6
82.5°	1071.9	511.0	365.0	453.4	622.4	837.6	772.3	576.3	495.6	461.1	422.6
85°	480.3	315.1	292.0	345.8	472.6	687.7	695.4	472.6	380.4	453.4	334.3
87.5°	176.7	142.2	142.2	176.7	272.8	288.2	491.8	303.5	242.1	165.2	130.6
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)