

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: P400084

Luminaire Tested: **ARCH-L-PA3-230-750-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400084  
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-PA3-230-750-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31950 lumens  
Efficiency: N/A  
Efficacy: 139.5 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

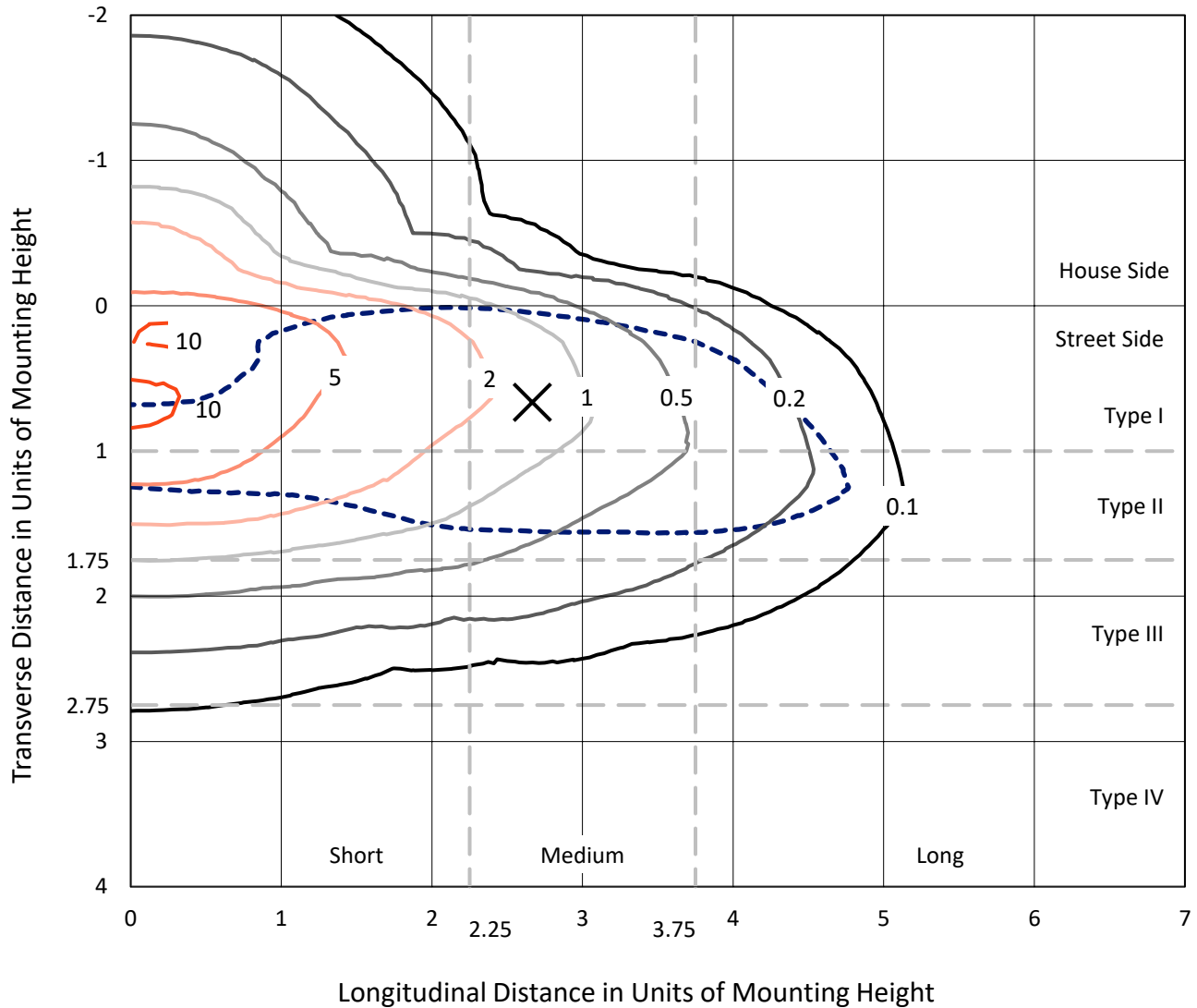
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P400084  
 CATALOG NUMBER: ARCH-L-PA3-230-750-U-T2R

### Iso-Footcandle Lines of Horizontal Illumination

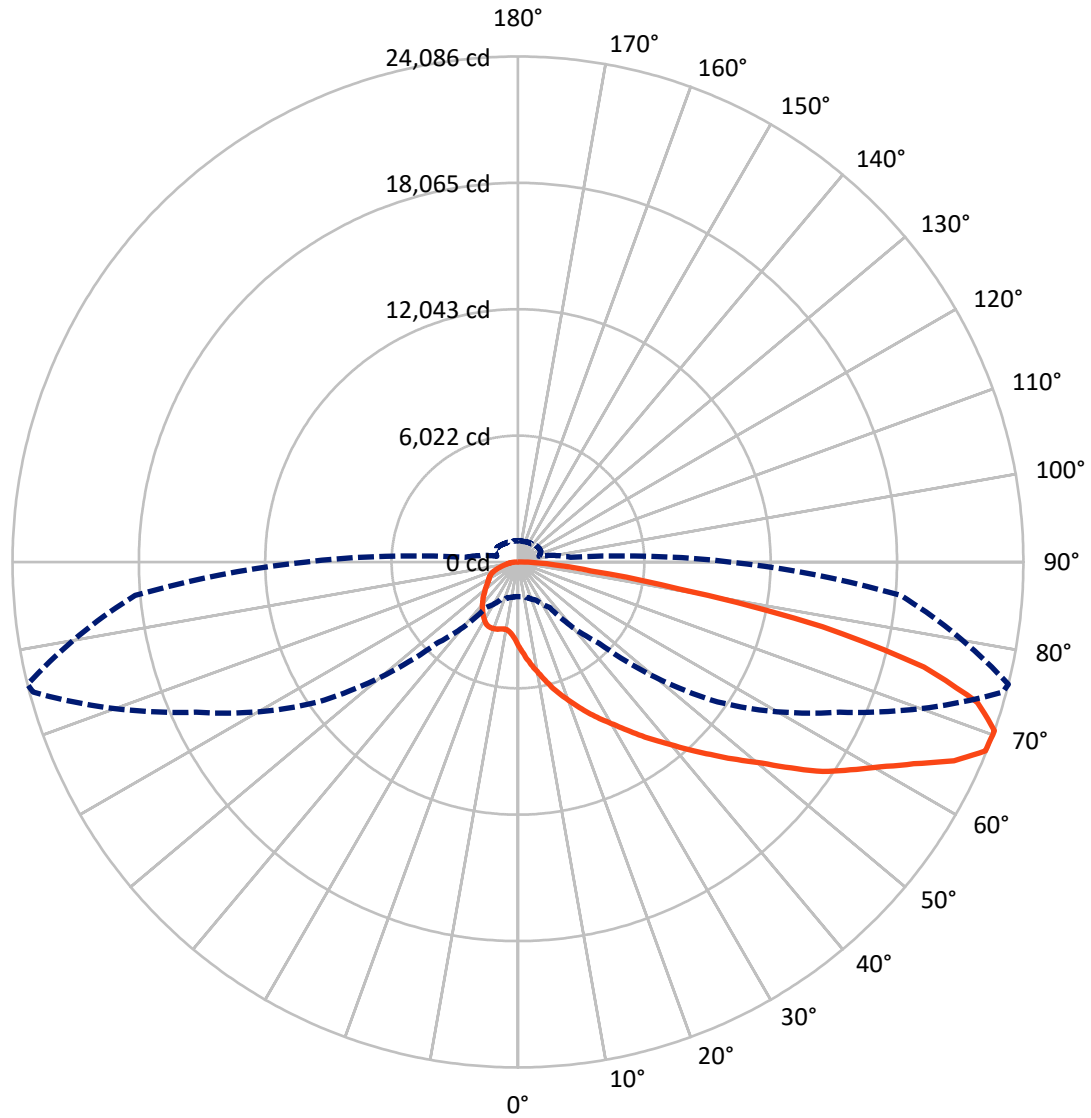
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.9 fc  
 Type II - Medium - N/A

REPORT NUMBER: P400084  
CATALOG NUMBER: ARCH-L-PA3-230-750-U-T2R

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P400084

CATALOG NUMBER: ARCH-L-PA3-230-750-U-T2R

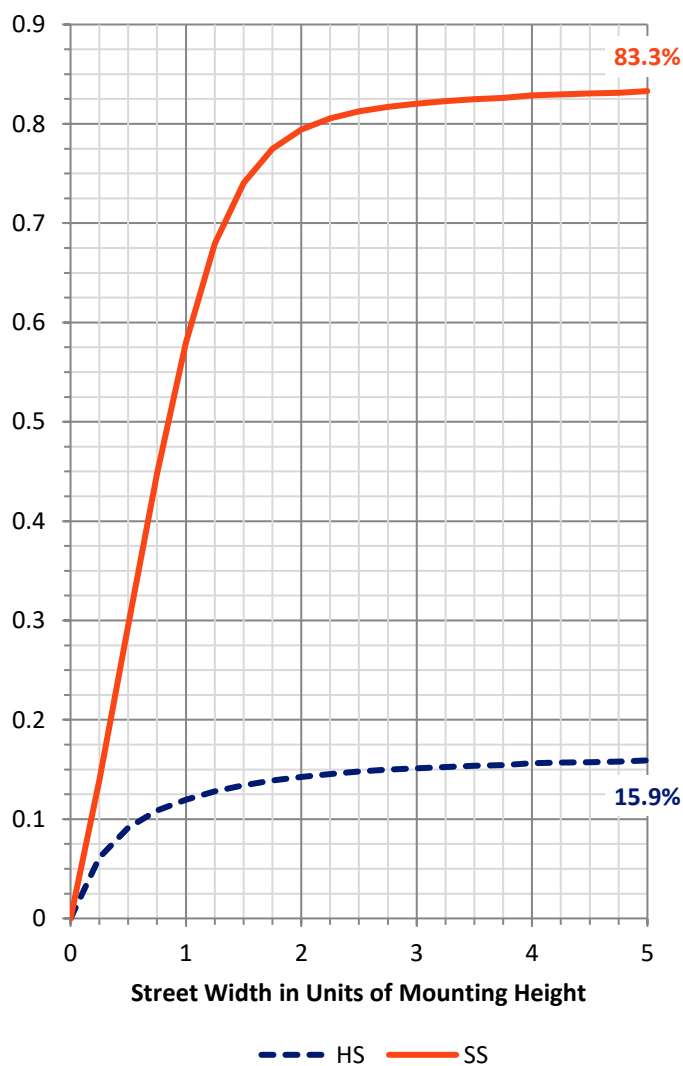
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5216.2	0.0	5216.2
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	26733.8	0.0	26733.8
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	31950.0	0.0	31950.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	415.1	1.3
10°-20°	1411.0	4.4
20°-30°	2524.4	7.9
30°-40°	4083.6	12.8
40°-50°	5907.5	18.5
50°-60°	6761.5	21.2
60°-70°	6219.8	19.5
70°-80°	3846.2	12.0
80°-90°	781.0	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°	31950.0	100.0
0°-180°	31950.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P400084

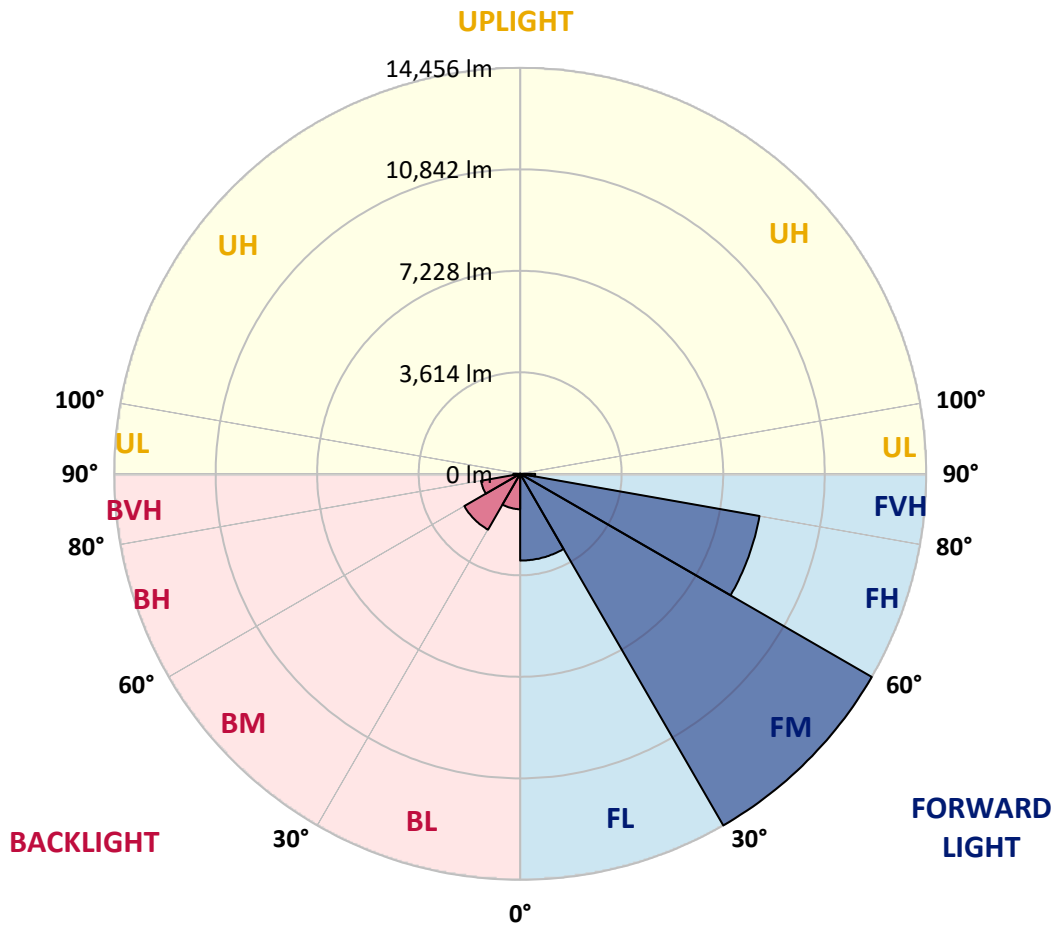
CATALOG NUMBER: ARCH-L-PA3-230-750-U-T2R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3090.6	9.7			
FM (30°-60°)	14455.9	45.2			
FH (60°-80°)	8651.2	27.1			G4/12000
FVH (80°-90°)	536.2	1.7			G4/750
BL (0°-30°)	1259.9	3.9	B3/2500		
BM (30°-60°)	2296.6	7.2	B2/2500		
BH (60°-80°)	1414.8	4.4	B3/2500		G3/2500
BVH (80°-90°)	244.9	0.8			G3/500
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: P400084

CATALOG NUMBER: ARCH-L-PA3-230-750-U-T2R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3995.5	3995.5	3995.5	3995.5	3995.5	3995.5	3995.5	3995.5	3995.5	3995.5	3995.5
2.5°	5092.0	5054.2	5050.0	4991.2	4936.6	4789.5	4684.5	4499.6	4314.8	4310.6	4125.7
5°	5886.1	5848.3	5827.3	5755.8	5663.4	5470.2	5281.1	4995.4	4680.3	4659.3	4310.6
7.5°	6423.9	6390.3	6348.2	6318.8	6230.6	6058.3	5827.3	5487.0	5054.2	5012.2	4524.9
10°	6785.2	6764.2	6755.8	6734.8	6680.1	6541.5	6318.8	5957.5	5428.1	5381.9	4751.7
12.5°	6940.6	6932.2	6970.0	7028.9	7049.9	6995.2	6781.0	6440.7	5839.9	5789.5	5024.8
15°	6760.0	6768.4	6865.0	7066.7	7280.9	7398.6	7272.5	6940.6	6306.2	6234.8	5344.1
17.5°	6675.9	6688.5	6755.8	6949.0	7251.5	7617.0	7675.9	7415.4	6755.8	6654.9	5680.2
20°	6823.0	6839.8	6890.2	7041.5	7251.5	7642.3	7949.0	7869.1	7196.9	7091.9	6003.7
22.5°	7196.9	7217.9	7213.7	7310.3	7453.2	7722.1	8100.2	8297.7	7659.1	7541.4	6339.8
25°	7995.2	7978.4	7835.5	7789.3	7827.1	7999.4	8301.9	8709.4	8142.2	8024.6	6692.8
27.5°	9079.1	9058.1	8797.6	8562.4	8352.3	8427.9	8587.6	9041.3	8633.8	8499.3	7028.9
30°	10238.7	10213.5	9911.0	9528.7	9062.3	8953.1	8932.1	9331.2	9129.5	8986.7	7386.0
32.5°	11368.9	11347.8	11024.3	10579.0	9936.2	9608.5	9406.8	9654.7	9692.5	9553.9	7776.7
35°	12398.2	12398.2	12120.9	11591.5	10864.7	10368.9	10037.0	10053.8	10339.5	10179.9	8222.0
37.5°	13314.1	13309.9	13007.4	12486.4	11789.0	11221.8	10810.1	10537.0	10957.1	10818.5	8688.4
40°	14040.9	14011.5	13788.8	13335.1	12633.5	12070.5	11654.5	11104.2	11646.1	11520.1	9184.2
42.5°	14570.3	14553.5	14402.2	14007.3	13339.3	12809.9	12524.2	11818.4	12427.6	12301.6	9763.9
45°	14776.1	14809.8	14809.8	14435.8	13906.5	13423.3	13297.3	12604.1	13272.1	13146.0	10385.7
47.5°	14444.2	14532.5	14713.1	14738.3	14272.0	13944.3	13986.3	13393.9	14141.7	14074.5	11066.4
50°	13406.5	13570.4	13965.3	14679.5	14419.0	14343.4	14574.5	14200.6	15074.4	15053.4	11894.0
52.5°	10730.2	11129.4	12360.4	13641.8	14318.2	14528.3	15158.5	15108.1	16276.0	16309.6	12973.8
55°	8230.4	8381.7	9806.0	11986.5	13700.6	14469.5	15549.2	15994.5	17578.4	17620.5	13965.3
57.5°	6654.9	6755.8	7533.0	9806.0	12293.2	14150.1	15855.9	16511.3	18578.4	18687.6	14847.6
60°	5272.7	5419.7	5940.7	7503.6	10322.7	13381.3	16070.2	17086.9	19653.9	19817.8	15902.1
62.5°	3919.9	3991.3	4482.8	5558.4	8171.6	11999.1	15956.7	17712.9	20973.1	21170.6	17170.9
65°	2789.7	2852.7	3201.4	3953.5	6041.5	10129.5	15297.1	18179.2	22628.5	22830.1	18448.1
67.5°	2088.1	2113.3	2310.7	2764.5	4071.1	7869.1	13961.1	18099.4	23838.5	24019.1	18960.7
70°	1651.1	1659.5	1756.2	1999.8	2646.9	5478.6	11620.9	16927.2	23926.7	24086.3	18313.7
72.5°	1369.6	1365.4	1420.1	1537.7	1844.4	3466.1	8608.6	14750.9	22792.3	22901.6	16507.1
75°	1130.2	1138.6	1176.4	1243.6	1407.5	2285.5	5579.4	11768.0	20107.7	19990.0	13851.9
77.5°	949.5	945.3	962.1	1020.9	1138.6	1642.7	3268.7	8503.5	14902.2	14843.4	9091.7
80°	764.6	773.0	798.3	848.7	957.9	1252.0	1932.6	5306.3	7995.2	7780.9	4344.2
82.5°	512.6	592.4	642.8	701.6	827.7	924.3	1226.8	2697.3	3575.3	3520.7	1970.4
85°	243.7	323.5	479.0	546.2	672.2	579.8	831.9	1285.6	1789.8	1768.8	710.0
87.5°	50.4	50.4	256.3	306.7	415.9	247.9	462.1	558.8	865.5	810.9	289.9
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: P400084

CATALOG NUMBER: ARCH-L-PA3-230-750-U-T2R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3995.5	3995.5	3995.5	3995.5	3995.5	3995.5	3995.5	3995.5	3995.5	3995.5	3995.5
2.5°	4016.5	3903.1	3676.2	3495.5	3310.7	3205.6	3075.4	3012.4	2999.8	2966.2	2991.4
5°	4087.9	3865.2	3436.7	3155.2	2966.2	2873.7	2827.5	2810.7	2806.5	2798.1	2798.1
7.5°	4184.5	3844.2	3285.5	2999.8	2877.9	2848.5	2861.1	2886.3	2890.5	2898.9	2894.7
10°	4302.2	3848.4	3201.4	2962.0	2903.1	2907.3	2949.3	2983.0	2999.8	3012.4	3008.2
12.5°	4466.0	3898.9	3188.8	2987.2	2962.0	2978.8	3020.8	3054.4	3071.2	3075.4	3075.4
15°	4680.3	4003.9	3218.2	3041.8	3020.8	3033.4	3058.6	3071.2	3075.4	3071.2	3071.2
17.5°	4915.6	4129.9	3260.2	3075.4	3041.8	3029.2	3020.8	3008.2	2983.0	2966.2	2966.2
20°	5142.5	4243.4	3281.3	3071.2	3012.4	2962.0	2911.5	2848.5	2806.5	2772.9	2772.9
22.5°	5369.3	4348.4	3281.3	3025.0	2932.5	2835.9	2730.9	2630.0	2567.0	2525.0	2525.0
25°	5608.8	4449.2	3256.0	2945.1	2806.5	2667.9	2525.0	2399.0	2336.0	2293.9	2285.5
27.5°	5810.5	4508.0	3188.8	2831.7	2651.1	2474.6	2310.7	2180.5	2134.3	2096.5	2096.5
30°	6024.7	4545.9	3062.8	2684.7	2474.6	2272.9	2104.9	1999.8	1949.4	1894.8	1890.6
32.5°	6264.2	4571.1	2919.9	2529.2	2293.9	2079.7	1936.8	1852.8	1743.6	1684.7	1676.3
35°	6541.5	4604.7	2768.7	2352.8	2113.3	1920.0	1836.0	1697.3	1592.3	1541.9	1537.7
37.5°	6835.6	4629.9	2604.8	2197.3	1949.4	1815.0	1731.0	1567.1	1474.7	1399.0	1390.6
40°	7146.5	4629.9	2436.8	2046.1	1819.2	1768.8	1609.1	1462.1	1306.6	1268.8	1260.4
42.5°	7491.0	4621.5	2268.7	1899.0	1697.3	1663.7	1537.7	1382.2	1302.4	1268.8	1260.4
45°	7856.5	4592.1	2109.1	1731.0	1571.3	1504.1	1407.5	1365.4	1331.8	1331.8	1331.8
47.5°	8272.5	4566.9	1928.4	1579.7	1478.9	1403.3	1331.8	1306.6	1302.4	1315.0	1327.6
50°	8806.0	4558.5	1777.2	1470.5	1407.5	1319.2	1310.8	1289.8	1294.0	1294.0	1294.0
52.5°	9453.0	4482.8	1634.3	1390.6	1336.0	1231.0	1256.2	1277.2	1285.6	1281.4	1277.2
55°	9927.8	4348.4	1512.5	1336.0	1285.6	1197.4	1231.0	1264.6	1273.0	1260.4	1260.4
57.5°	10356.3	4159.3	1415.9	1294.0	1252.0	1176.4	1214.2	1247.8	1239.4	1235.2	1231.0
60°	10847.9	3978.7	1340.2	1273.0	1218.4	1168.0	1201.6	1222.6	1210.0	1201.6	1197.4
62.5°	11381.5	3802.2	1285.6	1273.0	1193.2	1163.8	1189.0	1197.4	1172.2	1163.8	1163.8
65°	11629.3	3524.9	1226.8	1273.0	1180.6	1155.4	1163.8	1155.4	1130.2	1130.2	1126.0
67.5°	11221.8	3067.0	1151.2	1256.2	1197.4	1142.8	1126.0	1113.4	1083.9	1083.9	1075.5
70°	10095.8	2520.8	1041.9	1201.6	1201.6	1138.6	1075.5	1046.1	1012.5	1025.1	1008.3
72.5°	8625.4	1999.8	907.5	1109.2	1176.4	1134.4	1020.9	974.7	945.3	957.9	932.7
75°	6986.8	1550.3	747.8	962.1	1113.4	1113.4	966.3	903.3	869.7	869.7	840.3
77.5°	4453.4	1147.0	609.2	798.3	999.9	1083.9	920.1	823.5	773.0	760.4	739.4
80°	2205.7	806.7	500.0	634.4	852.9	1016.7	886.5	731.0	659.6	634.4	596.6
82.5°	1172.2	558.8	399.1	495.8	680.6	915.9	844.5	630.2	542.0	504.2	462.1
85°	525.2	344.5	319.3	378.1	516.8	752.0	760.4	516.8	415.9	495.8	365.5
87.5°	193.3	155.4	155.4	193.3	298.3	315.1	537.8	331.9	264.7	180.7	142.8
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)