

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: P400444

Luminaire Tested: **ARCH-L-PA3-280-750-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400444  
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-PA3-280-750-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36066 lumens  
Efficiency: N/A  
Efficacy: 129.3 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

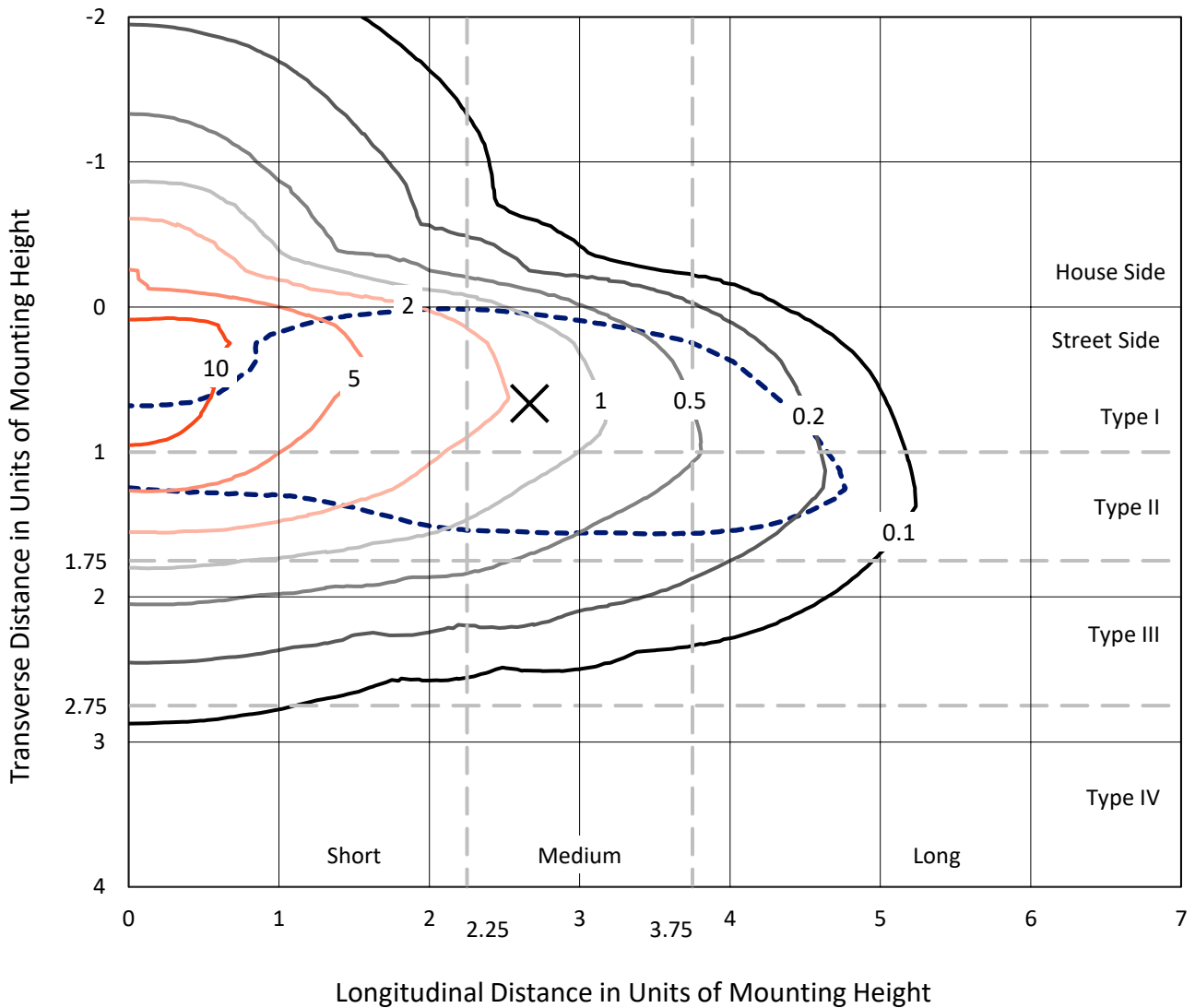
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

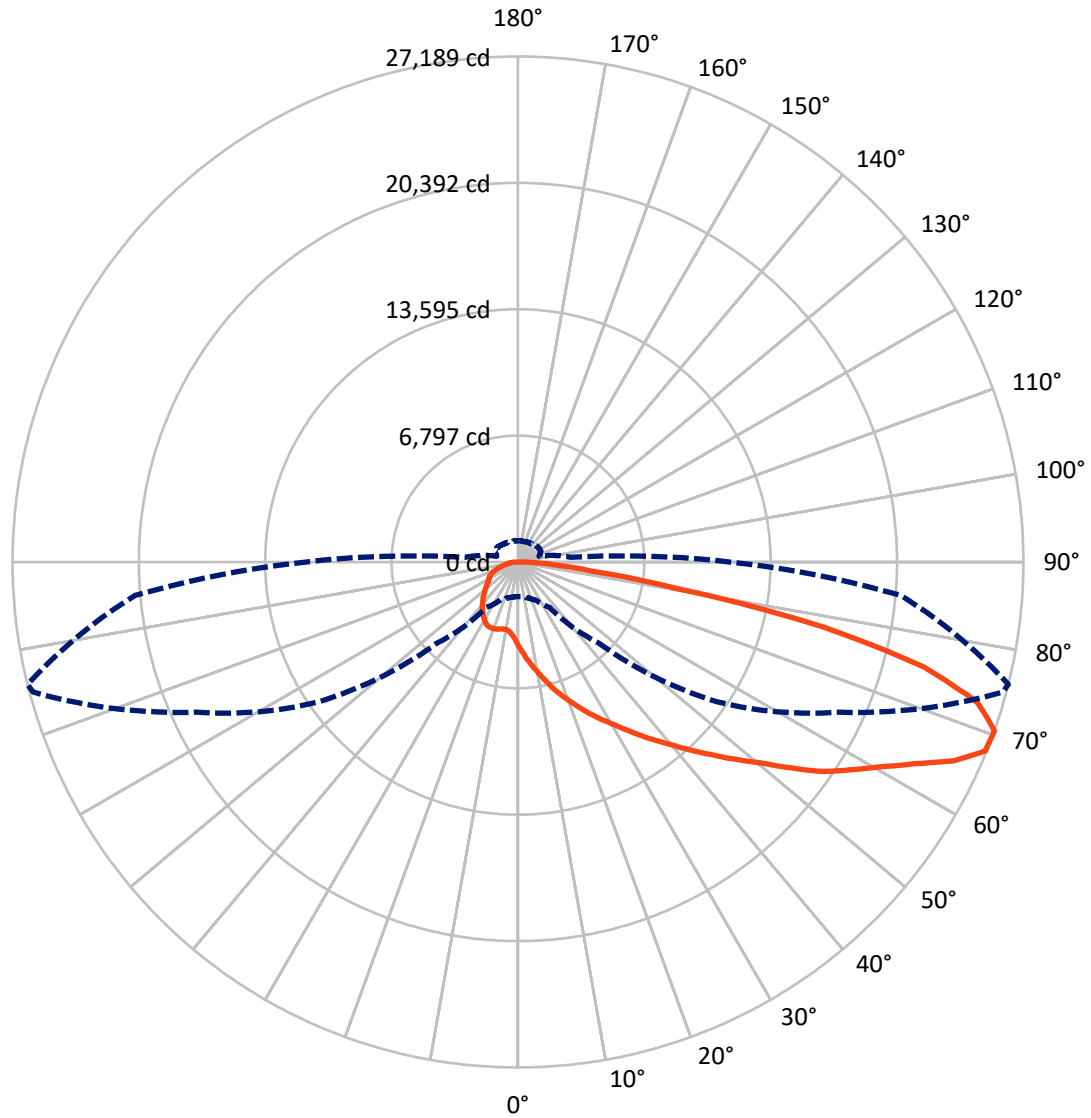
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.3 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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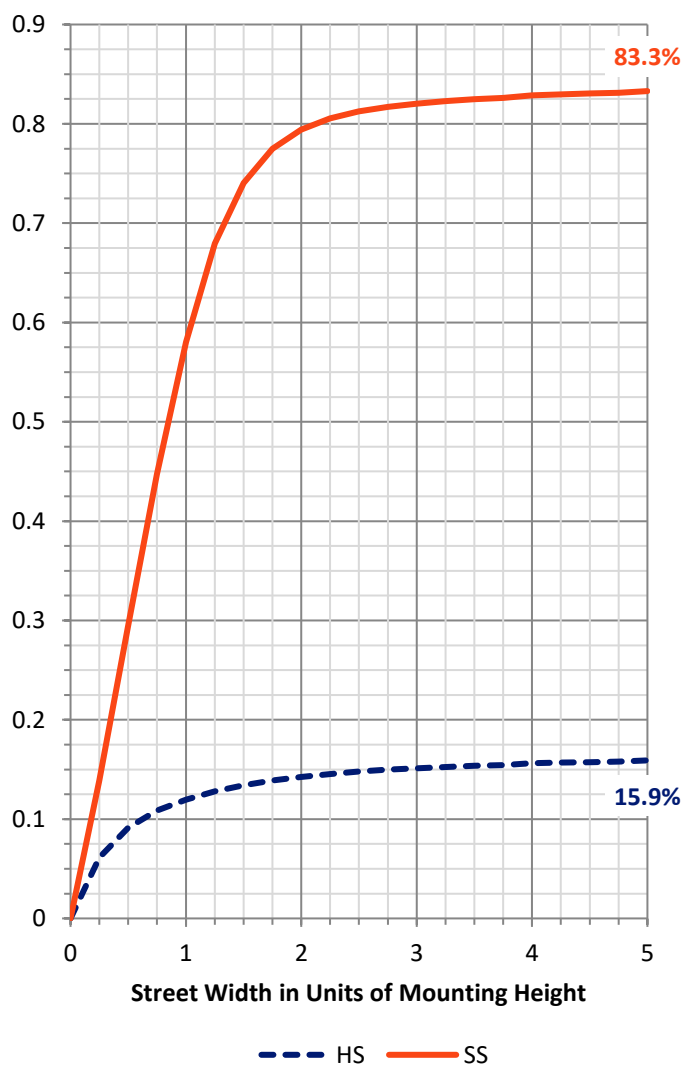
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5888.1	0.0	5888.1
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	30177.9	0.0	30177.9
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	36066.0	0.0	36066.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	468.6	1.3
10°-20°	1592.7	4.4
20°-30°	2849.6	7.9
30°-40°	4609.6	12.8
40°-50°	6668.5	18.5
50°-60°	7632.5	21.2
60°-70°	7021.1	19.5
70°-80°	4341.7	12.0
80°-90°	881.6	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°	36066.0	100.0
0°-180°	36066.0	100.0

**Coefficient of Utilization**



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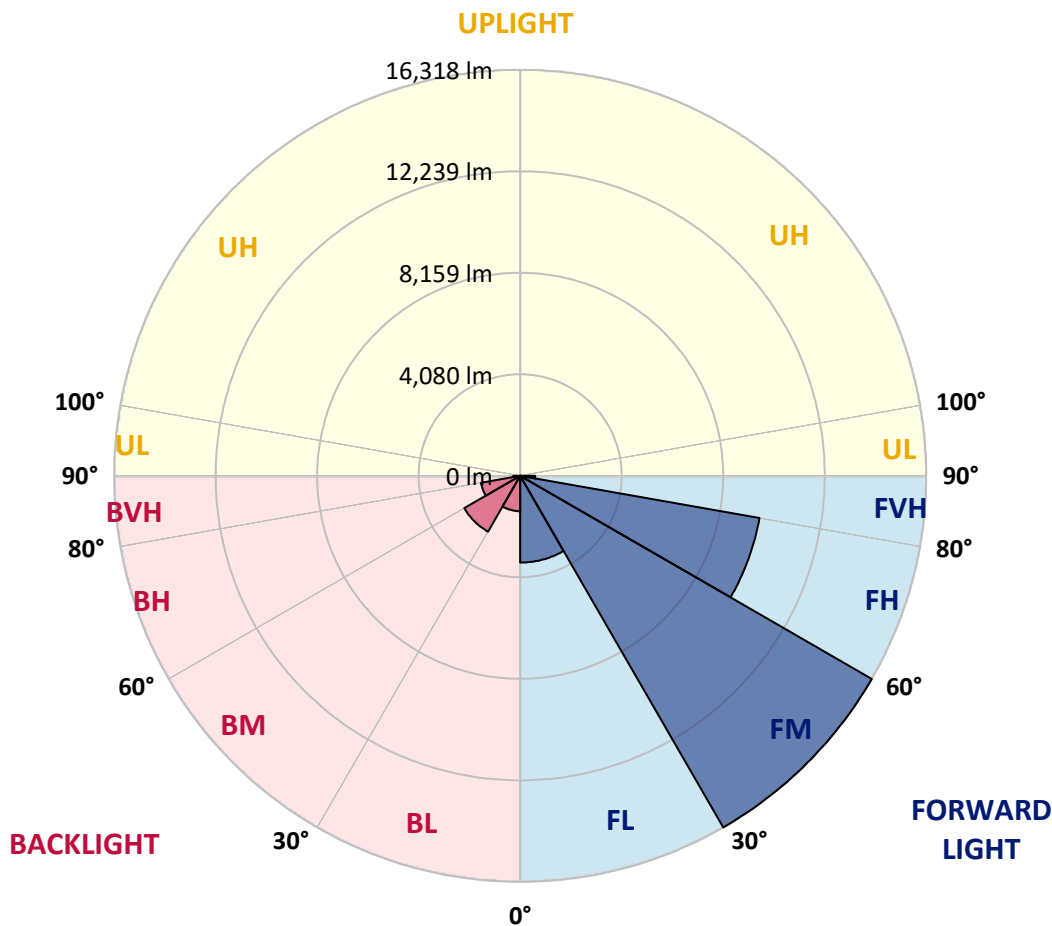
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3488.8	9.7			
FM (30°-60°)	16318.2	45.2			
FH (60°-80°)	9765.7	27.1			G4/12000
FVH (80°-90°)	605.2	1.7			G4/750
BL (0°-30°)	1422.2	3.9	B3/2500		
BM (30°-60°)	2592.5	7.2	B3/5000		
BH (60°-80°)	1597.1	4.4	B3/2500		G3/2500
BVH (80°-90°)	276.4	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4510.2	4510.2	4510.2	4510.2	4510.2	4510.2	4510.2	4510.2	4510.2	4510.2	4510.2
2.5°	5748.0	5705.3	5700.6	5634.2	5572.5	5406.6	5288.0	5079.3	4870.6	4865.9	4657.2
5°	6644.4	6601.7	6578.0	6497.4	6393.0	6174.9	5961.4	5638.9	5283.3	5259.5	4865.9
7.5°	7251.4	7213.5	7166.1	7132.9	7033.3	6838.8	6578.0	6193.8	5705.3	5657.9	5107.8
10°	7659.3	7635.6	7626.1	7602.4	7540.7	7384.2	7132.9	6725.0	6127.4	6075.3	5363.9
12.5°	7834.8	7825.3	7868.0	7934.4	7958.1	7896.4	7654.5	7270.4	6592.2	6535.3	5672.1
15°	7630.8	7640.3	7749.4	7977.0	8218.9	8351.7	8209.4	7834.8	7118.6	7038.0	6032.6
17.5°	7536.0	7550.2	7626.1	7844.3	8185.7	8598.3	8664.7	8370.7	7626.1	7512.3	6412.0
20°	7702.0	7720.9	7777.9	7948.6	8185.7	8626.8	8973.0	8882.9	8124.1	8005.5	6777.2
22.5°	8124.1	8147.8	8143.0	8252.1	8413.4	8716.9	9143.7	9366.6	8645.8	8513.0	7156.6
25°	9025.2	9006.2	8844.9	8792.8	8835.5	9029.9	9371.4	9831.4	9191.1	9058.4	7555.0
27.5°	10248.7	10225.0	9931.0	9665.4	9428.3	9513.6	9693.9	10206.1	9746.0	9594.3	7934.4
30°	11557.7	11529.2	11187.8	10756.2	10229.8	10106.5	10082.8	10533.3	10305.7	10144.4	8337.5
32.5°	12833.5	12809.7	12444.6	11941.9	11216.2	10846.3	10618.7	10898.5	10941.2	10784.7	8778.5
35°	13995.4	13995.4	13682.4	13084.8	12264.4	11704.7	11330.1	11349.0	11671.5	11491.3	9281.3
37.5°	15029.3	15024.5	14683.1	14095.0	13307.7	12667.5	12202.7	11894.4	12368.7	12212.2	9807.7
40°	15849.8	15816.6	15565.2	15053.0	14261.0	13625.5	13156.0	12534.7	13146.5	13004.2	10367.3
42.5°	16447.3	16428.3	16257.6	15811.8	15057.7	14460.2	14137.7	13340.9	14028.6	13886.3	11021.8
45°	16679.7	16717.6	16717.6	16295.6	15698.0	15152.6	15010.3	14227.8	14981.9	14839.6	11723.7
47.5°	16305.0	16404.6	16608.6	16637.0	16110.6	15740.7	15788.1	15119.4	15963.6	15887.7	12492.0
50°	15133.6	15318.6	15764.4	16570.6	16276.6	16191.2	16452.1	16030.0	17016.4	16992.7	13426.3
52.5°	12112.6	12563.1	13952.7	15399.2	16162.8	16399.9	17111.3	17054.4	18372.8	18410.8	14645.1
55°	9290.7	9461.5	11069.2	13530.6	15465.6	16333.5	17552.3	18055.1	19843.0	19890.4	15764.4
57.5°	7512.3	7626.1	8503.5	11069.2	13876.8	15973.1	17898.6	18638.4	20971.8	21095.1	16760.3
60°	5952.0	6117.9	6706.0	8470.3	11652.6	15105.2	18140.4	19288.1	22185.9	22370.8	17950.7
62.5°	4424.8	4505.5	5060.3	6274.5	9224.3	13544.9	18012.4	19994.8	23675.0	23897.9	19383.0
65°	3149.1	3220.2	3613.9	4462.8	6819.9	11434.4	17267.8	20521.2	25543.6	25771.3	20824.7
67.5°	2357.1	2385.5	2608.4	3120.6	4595.6	8882.9	15759.6	20431.1	26909.5	27113.4	21403.3
70°	1863.8	1873.3	1982.4	2257.5	2987.8	6184.3	13118.0	19107.9	27009.1	27189.3	20673.0
72.5°	1546.1	1541.3	1603.0	1735.8	2082.0	3912.6	9717.6	16651.3	25728.6	25851.9	18633.7
75°	1275.8	1285.2	1327.9	1403.8	1588.8	2580.0	6298.2	13284.0	22698.1	22565.3	15636.3
77.5°	1071.8	1067.1	1086.1	1152.5	1285.2	1854.4	3689.7	9599.0	16822.0	16755.6	10263.0
80°	863.2	872.6	901.1	958.0	1081.3	1413.3	2181.6	5989.9	9025.2	8783.3	4903.8
82.5°	578.6	668.7	725.6	792.0	934.3	1043.4	1384.8	3044.7	4035.9	3974.3	2224.3
85°	275.1	365.2	540.7	616.5	758.8	654.5	939.0	1451.2	2020.3	1996.6	801.5
87.5°	56.9	56.9	289.3	346.2	469.5	279.8	521.7	630.8	977.0	915.3	327.2
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°	4510.2	4510.2	4510.2	4510.2	4510.2	4510.2	4510.2	4510.2	4510.2	4510.2	4510.2
2.5°	4533.9	4405.9	4149.8	3945.8	3737.2	3618.6	3471.6	3400.4	3386.2	3348.3	3376.7
5°	4614.5	4363.2	3879.4	3561.7	3348.3	3243.9	3191.8	3172.8	3168.1	3158.6	3158.6
7.5°	4723.6	4339.5	3708.7	3386.2	3248.7	3215.5	3229.7	3258.2	3262.9	3272.4	3267.6
10°	4856.4	4344.2	3613.9	3343.5	3277.1	3281.9	3329.3	3367.2	3386.2	3400.4	3395.7
12.5°	5041.4	4401.1	3599.6	3372.0	3343.5	3362.5	3409.9	3447.9	3466.8	3471.6	3471.6
15°	5283.3	4519.7	3632.8	3433.6	3409.9	3424.2	3452.6	3466.8	3471.6	3466.8	3466.8
17.5°	5548.8	4662.0	3680.3	3471.6	3433.6	3419.4	3409.9	3395.7	3367.2	3348.3	3348.3
20°	5804.9	4790.0	3704.0	3466.8	3400.4	3343.5	3286.6	3215.5	3168.1	3130.1	3130.1
22.5°	6061.0	4908.6	3704.0	3414.7	3310.3	3201.3	3082.7	2968.9	2897.7	2850.3	2850.3
25°	6331.4	5022.4	3675.5	3324.6	3168.1	3011.5	2850.3	2708.0	2636.9	2589.5	2580.0
27.5°	6559.0	5088.8	3599.6	3196.5	2992.6	2793.4	2608.4	2461.4	2409.2	2366.6	2366.6
30°	6800.9	5131.5	3457.4	3030.5	2793.4	2565.7	2376.0	2257.5	2200.6	2138.9	2134.2
32.5°	7071.2	5159.9	3296.1	2855.0	2589.5	2347.6	2186.3	2091.5	1968.2	1901.8	1892.3
35°	7384.2	5197.9	3125.4	2655.9	2385.5	2167.4	2072.5	1916.0	1797.4	1740.5	1735.8
37.5°	7716.2	5226.3	2940.4	2480.4	2200.6	2048.8	1953.9	1769.0	1664.7	1579.3	1569.8
40°	8067.2	5226.3	2750.7	2309.6	2053.5	1996.6	1816.4	1650.4	1474.9	1432.3	1422.8
42.5°	8456.0	5216.9	2561.0	2143.7	1916.0	1878.1	1735.8	1560.3	1470.2	1432.3	1422.8
45°	8868.7	5183.7	2380.8	1953.9	1773.7	1697.8	1588.8	1541.3	1503.4	1503.4	1503.4
47.5°	9338.2	5155.2	2176.9	1783.2	1669.4	1584.0	1503.4	1474.9	1470.2	1484.4	1498.7
50°	9940.5	5145.7	2006.1	1659.9	1588.8	1489.2	1479.7	1456.0	1460.7	1460.7	1460.7
52.5°	10670.8	5060.3	1844.9	1569.8	1508.1	1389.6	1418.0	1441.7	1451.2	1446.5	1441.7
55°	11206.8	4908.6	1707.3	1508.1	1451.2	1351.6	1389.6	1427.5	1437.0	1422.8	1422.8
57.5°	11690.5	4695.2	1598.3	1460.7	1413.3	1327.9	1370.6	1408.6	1399.1	1394.3	1389.6
60°	12245.4	4491.2	1512.9	1437.0	1375.4	1318.4	1356.4	1380.1	1365.9	1356.4	1351.6
62.5°	12847.7	4292.0	1451.2	1437.0	1346.9	1313.7	1342.2	1351.6	1323.2	1313.7	1313.7
65°	13127.5	3979.0	1384.8	1437.0	1332.7	1304.2	1313.7	1304.2	1275.8	1275.8	1271.0
67.5°	12667.5	3462.1	1299.5	1418.0	1351.6	1290.0	1271.0	1256.8	1223.6	1223.6	1214.1
70°	11396.5	2845.6	1176.2	1356.4	1356.4	1285.2	1214.1	1180.9	1143.0	1157.2	1138.2
72.5°	9736.5	2257.5	1024.4	1252.0	1327.9	1280.5	1152.5	1100.3	1067.1	1081.3	1052.9
75°	7886.9	1750.0	844.2	1086.1	1256.8	1256.8	1090.8	1019.7	981.7	981.7	948.5
77.5°	5027.2	1294.7	687.7	901.1	1128.7	1223.6	1038.6	929.5	872.6	858.4	834.7
80°	2489.9	910.6	564.4	716.1	962.7	1147.7	1000.7	825.2	744.6	716.1	673.4
82.5°	1323.2	630.8	450.5	559.6	768.3	1033.9	953.3	711.4	611.8	569.1	521.7
85°	592.8	388.9	360.4	426.8	583.3	848.9	858.4	583.3	469.5	559.6	412.6
87.5°	218.2	175.5	175.5	218.2	336.7	355.7	607.1	374.7	298.8	203.9	161.2
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)