

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: P237361

Luminaire Tested: **ARCH-L-AF72-280-D-U-T4W-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237361
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T4W-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30018 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

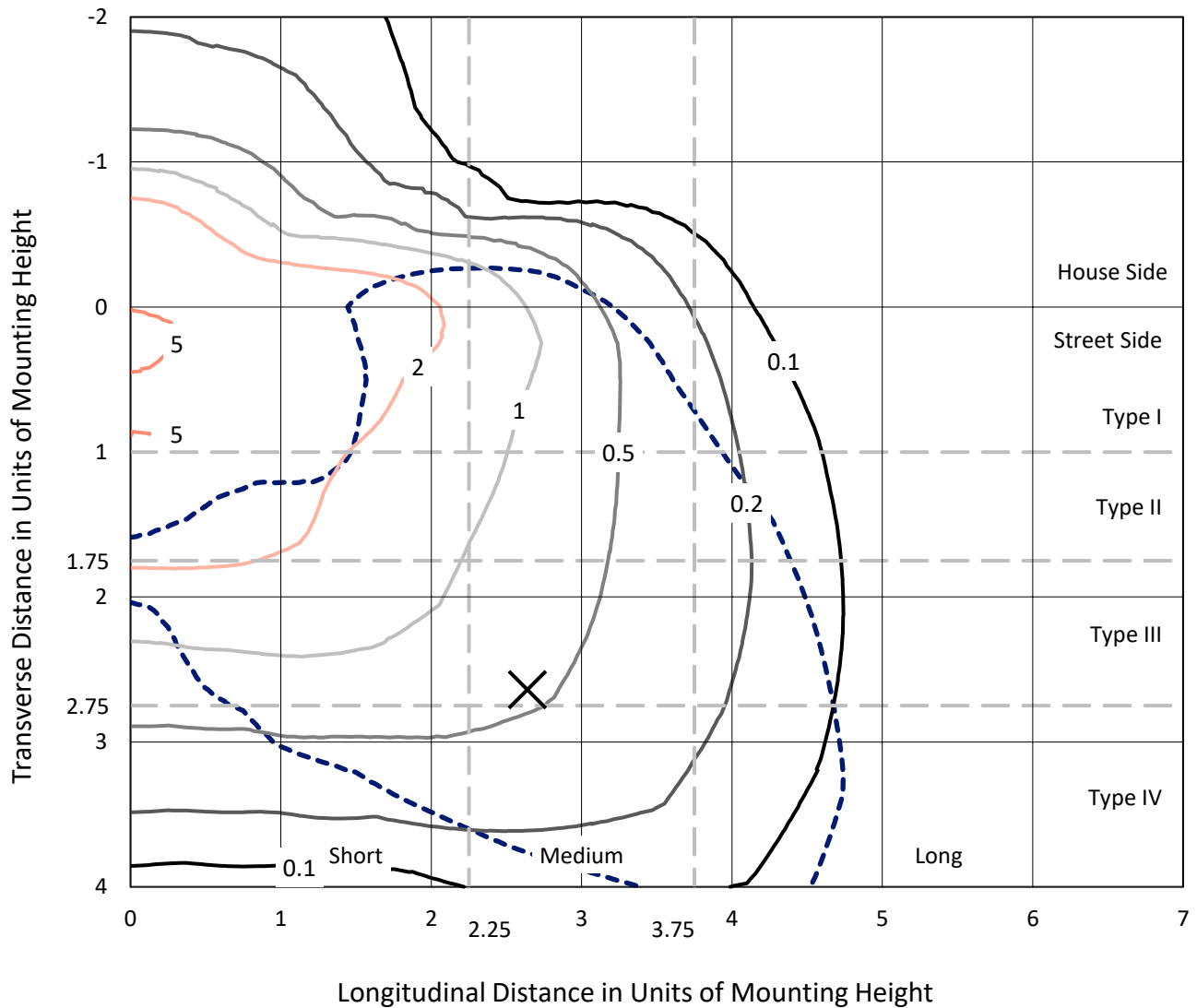
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

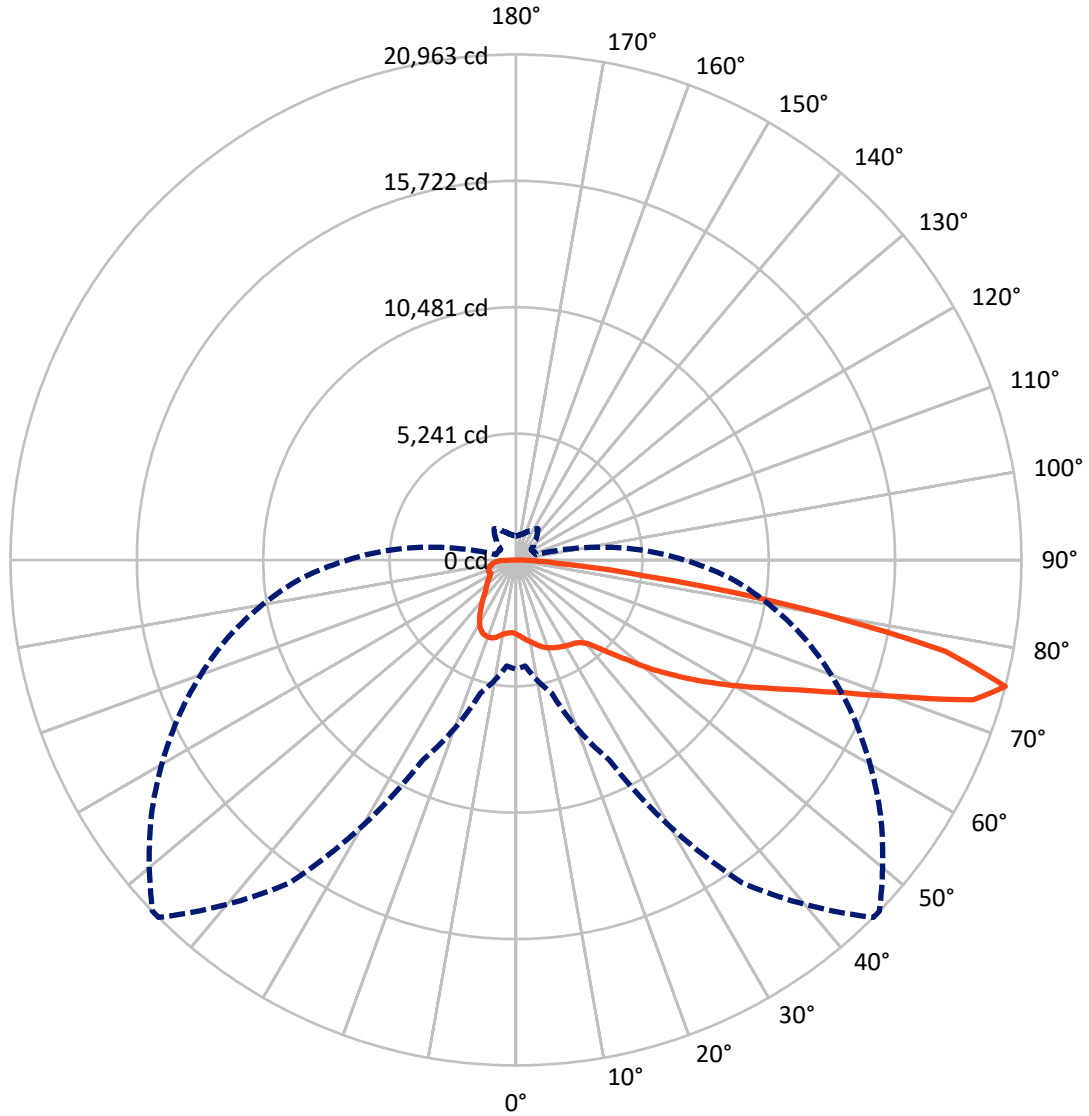
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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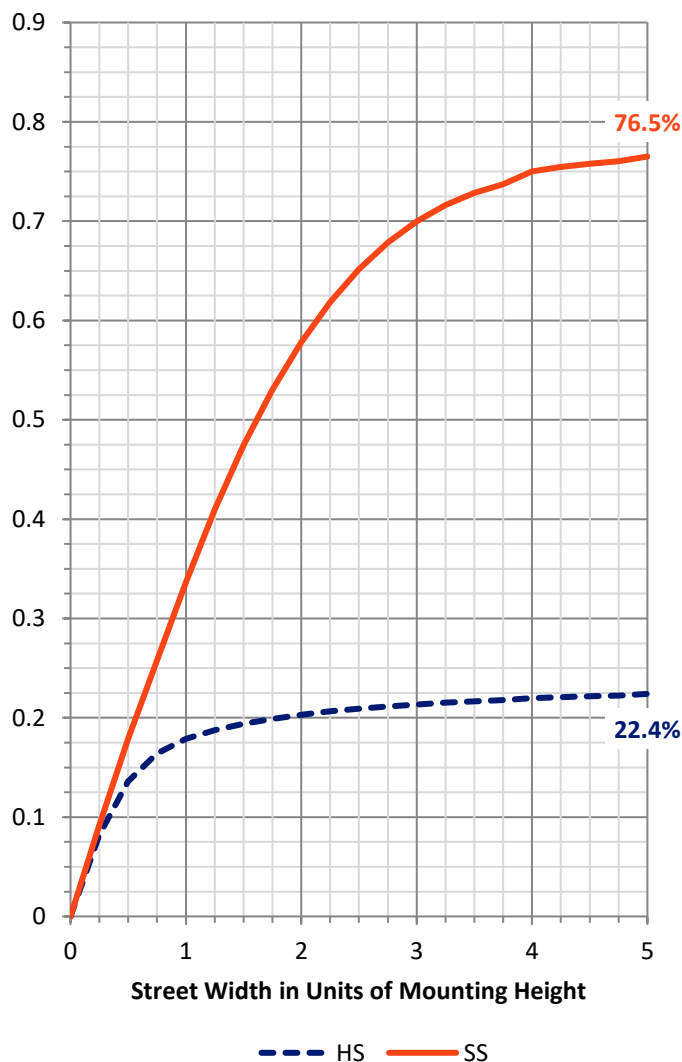
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6953.9	0.0	6953.9
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	23064.1	0.0	23064.1
	% Fixture	76.8	0.0	76.8
Total	Lumens	30018.0	0.0	30018.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.0	1.0
10°-20°	988.2	3.3
20°-30°	1695.8	5.6
30°-40°	2371.8	7.9
40°-50°	3479.2	11.6
50°-60°	5419.6	18.1
60°-70°	7798.4	26.0
70°-80°	6793.3	22.6
80°-90°	1166.7	3.9
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°	30018.0	100.0
0°-180°	30018.0	100.0

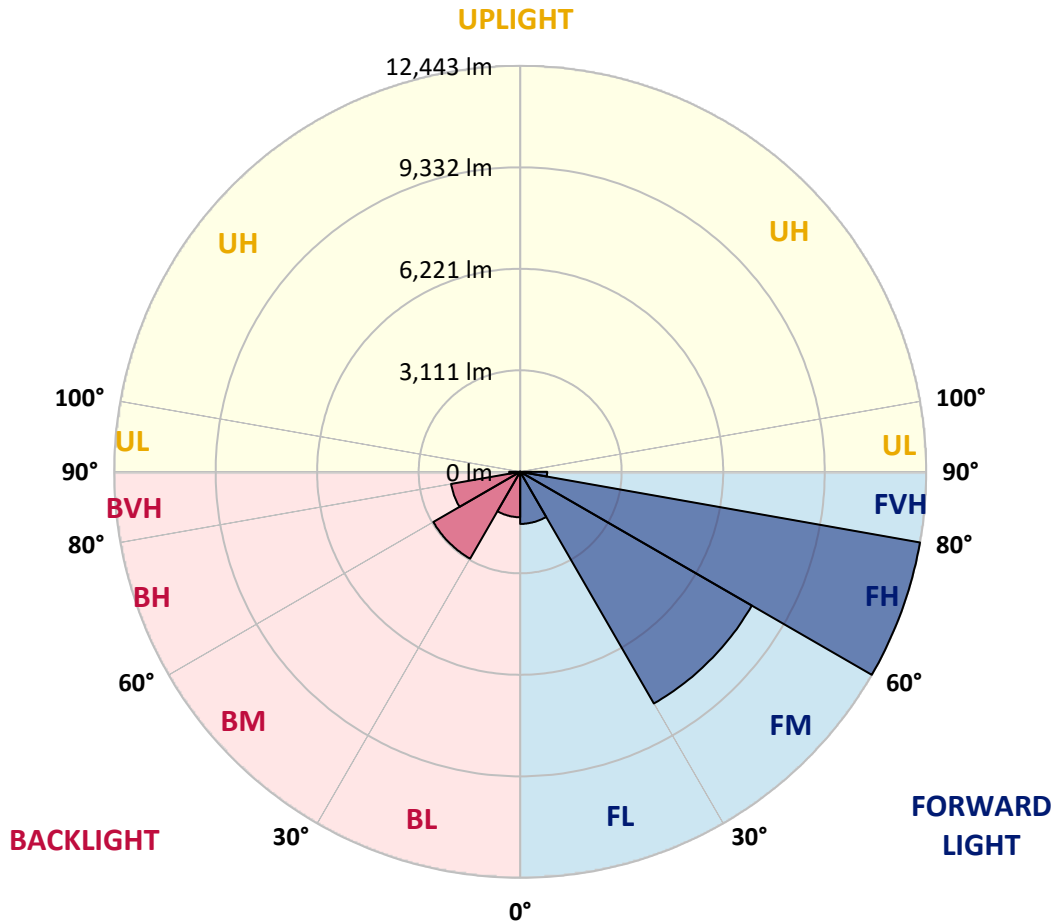


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1596.2	5.3			
FM (30°-60°)	8197.3	27.3			
FH (60°-80°)	12442.7	41.5			G5
FVH (80°-90°)	827.8	2.8			G5
BL (0°-30°)	1392.8	4.6	B3/2500		
BM (30°-60°)	3073.3	10.2	B3/5000		
BH (60°-80°)	2149.0	7.2	B3/2500		G3/2500
BVH (80°-90°)	338.9	1.1			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5
 Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3077.3	3077.3	3077.3	3077.3	3077.3	3077.3	3077.3	3077.3	3077.3	3077.3	3077.3
2.5°	3229.1	3205.7	3205.7	3188.2	3188.2	3159.0	3147.3	3141.5	3112.3	3094.8	3077.3
5°	3415.9	3386.7	3380.9	3340.0	3322.5	3258.3	3252.4	3211.6	3159.0	3106.5	3065.6
7.5°	3585.3	3567.8	3538.6	3497.7	3445.1	3363.4	3357.6	3293.3	3205.7	3135.7	3077.3
10°	3707.9	3696.2	3655.4	3602.8	3544.4	3462.7	3456.8	3386.7	3281.6	3199.9	3118.1
12.5°	3853.9	3836.4	3783.8	3713.7	3649.5	3573.6	3567.8	3509.4	3392.6	3287.5	3182.4
15°	3994.0	3970.7	3906.4	3836.4	3766.3	3702.1	3702.1	3637.8	3515.2	3392.6	3270.0
17.5°	4064.1	4052.4	3988.2	3912.3	3853.9	3807.2	3801.3	3742.9	3620.3	3491.9	3357.6
20°	4087.5	4093.3	4034.9	3953.2	3912.3	3888.9	3883.1	3842.2	3707.9	3585.3	3456.8
22.5°	4081.6	4099.1	4052.4	3964.8	3953.2	3953.2	3953.2	3906.4	3801.3	3678.7	3550.2
25°	4105.0	4128.3	4093.3	3988.2	3988.2	4011.5	4011.5	3988.2	3894.8	3789.7	3661.2
27.5°	4186.7	4204.2	4175.0	4029.1	4034.9	4069.9	4064.1	4069.9	4011.5	3912.3	3783.8
30°	4286.0	4309.3	4274.3	4093.3	4087.5	4122.5	4122.5	4151.7	4110.8	4005.7	3900.6
32.5°	4554.6	4548.8	4437.8	4163.4	4145.8	4180.9	4180.9	4210.1	4186.7	4105.0	4005.7
35°	5354.6	5267.0	5021.7	4391.1	4215.9	4233.4	4233.4	4286.0	4297.7	4233.4	4145.8
37.5°	6172.1	6142.9	5956.0	4998.4	4472.8	4344.4	4338.5	4414.5	4467.0	4414.5	4356.1
40°	6995.4	6972.0	6931.2	5810.0	5010.1	4542.9	4525.4	4589.6	4683.1	4648.0	4613.0
42.5°	7760.3	7748.6	7789.5	6610.0	5693.2	4969.2	4916.6	4840.7	4975.0	4963.3	4963.3
45°	8361.8	8391.0	8414.3	7357.4	6434.8	5518.1	5453.8	5196.9	5377.9	5424.6	5459.7
47.5°	8700.4	8723.8	8805.5	8087.3	7176.4	6154.5	6107.8	5687.4	5926.8	6067.0	6166.2
50°	9185.1	9120.9	9190.9	8799.7	8069.8	6983.7	6855.2	6347.2	6650.9	6896.1	7129.7
52.5°	9652.2	9547.1	9605.5	9623.0	9085.8	7795.4	7661.1	7123.9	7503.4	7888.8	8303.4
55°	10072.7	10066.8	10125.2	10423.0	10066.8	8665.4	8513.6	7982.2	8531.1	8945.7	9646.4
57.5°	10411.3	10469.7	10726.7	11351.5	11199.6	9611.4	9442.0	8980.7	9628.9	10043.5	11205.5
60°	10808.4	10901.8	11328.1	12139.7	12233.2	10604.0	10428.9	10096.0	10755.9	11176.3	13009.8
62.5°	10942.7	11077.0	11952.9	12968.9	13313.4	11690.1	11532.5	11310.6	11941.2	12320.8	14808.3
65°	10049.3	10306.2	12297.4	13395.2	14475.4	12998.1	12863.8	12671.1	13120.7	13371.8	16028.7
67.5°	9804.1	9920.8	11625.9	14008.3	15567.4	14679.8	14545.5	14212.7	14224.3	14119.2	16425.7
70°	9459.5	9588.0	10936.9	14469.6	17132.3	16980.5	16817.0	15836.0	15234.5	14598.1	15643.3
72.5°	8058.1	8017.3	9424.5	13225.8	17885.5	19830.0	19637.3	17581.9	15982.0	14183.5	13202.5
75°	4525.4	4408.6	5716.6	9150.1	16332.3	20962.8	20957.0	18463.6	15456.4	12355.8	8986.6
77.5°	1313.8	1278.8	1886.1	3836.4	10995.3	18212.5	18434.4	16653.5	12898.8	8875.6	4934.1
80°	619.0	630.6	811.7	1267.1	4694.7	11754.4	12390.8	10966.1	7707.8	4093.3	2037.9
82.5°	391.2	397.1	554.7	817.5	1985.3	5337.1	5862.6	4934.1	3053.9	1769.3	899.2
85°	245.2	245.2	367.9	537.2	1185.4	1705.1	1851.0	1681.7	1308.0	963.5	490.5
87.5°	134.3	134.3	221.9	309.5	648.2	548.9	566.4	671.5	817.5	589.8	245.2
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°	3077.3	3077.3	3077.3	3077.3	3077.3	3077.3	3077.3	3077.3	3077.3	3077.3	3077.3
2.5°	3071.4	3059.8	3042.2	3036.4	3030.6	3024.7	3030.6	3042.2	3030.6	3030.6	3036.4
5°	3053.9	3042.2	3018.9	3018.9	3024.7	3030.6	3059.8	3077.3	3083.1	3083.1	3083.1
7.5°	3053.9	3036.4	3018.9	3024.7	3036.4	3059.8	3106.5	3135.7	3159.0	3164.9	3164.9
10°	3083.1	3059.8	3048.1	3059.8	3094.8	3112.3	3159.0	3205.7	3234.9	3246.6	3246.6
12.5°	3135.7	3112.3	3112.3	3135.7	3182.4	3205.7	3246.6	3281.6	3316.7	3334.2	3334.2
15°	3223.3	3194.1	3199.9	3240.8	3293.3	3316.7	3345.9	3357.6	3386.7	3410.1	3410.1
17.5°	3305.0	3275.8	3287.5	3334.2	3369.2	3380.9	3398.4	3392.6	3404.3	3421.8	3427.6
20°	3398.4	3369.2	3375.1	3404.3	3410.1	3398.4	3398.4	3380.9	3375.1	3404.3	3415.9
22.5°	3491.9	3462.7	3456.8	3439.3	3410.1	3380.9	3363.4	3345.9	3334.2	3363.4	3375.1
25°	3602.8	3561.9	3532.7	3456.8	3380.9	3328.4	3305.0	3293.3	3287.5	3316.7	3328.4
27.5°	3725.4	3684.6	3597.0	3433.5	3310.8	3223.3	3205.7	3205.7	3217.4	3234.9	3246.6
30°	3842.2	3801.3	3643.7	3380.9	3188.2	3059.8	3042.2	3059.8	3088.9	3106.5	3124.0
32.5°	3959.0	3918.1	3672.9	3299.2	3007.2	2843.7	2832.0	2861.2	2907.9	2919.6	2931.3
35°	4116.7	4075.8	3707.9	3182.4	2779.5	2604.3	2592.6	2610.1	2651.0	2668.5	2686.0
37.5°	4338.5	4315.2	3760.5	3053.9	2569.3	2376.6	2341.5	2329.9	2353.2	2347.4	2370.7
40°	4630.5	4648.0	3853.9	2884.6	2364.9	2166.4	2090.4	2055.4	2032.0	1985.3	2008.7
42.5°	5056.8	5068.4	3959.0	2691.9	2189.7	1967.8	1868.6	1804.3	1757.6	1681.7	1693.4
45°	5681.6	5582.3	4081.6	2487.5	2032.0	1810.2	1693.4	1617.5	1553.2	1489.0	1494.8
47.5°	6510.7	6207.1	4215.9	2318.2	1874.4	1681.7	1576.6	1489.0	1413.1	1360.5	1366.4
50°	7532.6	6983.7	4350.2	2160.5	1716.7	1582.4	1489.0	1395.6	1319.7	1267.1	1261.3
52.5°	8881.5	7918.0	4437.8	1985.3	1559.1	1494.8	1413.1	1325.5	1232.1	1167.8	1162.0
55°	10282.9	9004.1	4513.7	1775.1	1407.3	1395.6	1354.7	1255.4	1144.5	1062.7	1051.1
57.5°	11824.4	10166.1	4572.1	1570.8	1290.5	1313.8	1302.1	1185.4	1062.7	986.8	981.0
60°	13225.8	11369.0	4385.3	1389.7	1185.4	1232.1	1243.8	1144.5	1080.3	1097.8	1103.6
62.5°	14638.9	12297.4	3672.9	1255.4	1115.3	1179.5	1278.8	1273.0	1243.8	1273.0	1278.8
65°	15146.9	12490.1	2604.3	1144.5	1045.2	1202.9	1389.7	1378.1	1243.8	1191.2	1179.5
67.5°	14860.8	11917.9	1751.8	1056.9	992.7	1232.1	1506.5	1378.1	1197.0	1127.0	1103.6
70°	13500.3	10510.6	1284.6	969.3	946.0	1226.2	1570.8	1372.2	1173.7	1097.8	1068.6
72.5°	10767.5	8110.7	1033.5	887.6	875.9	1197.0	1605.8	1360.5	1150.3	1068.6	1033.5
75°	6972.0	5045.1	870.0	805.8	770.8	1150.3	1588.3	1325.5	1121.1	1016.0	992.7
77.5°	3234.9	2172.2	741.6	712.4	671.5	1080.3	1535.7	1255.4	1056.9	957.6	928.4
80°	1506.5	1027.7	624.8	619.0	601.4	1021.9	1465.6	1173.7	981.0	899.2	852.5
82.5°	805.8	619.0	508.0	508.0	525.5	951.8	1378.1	1074.4	881.7	840.8	718.2
85°	426.3	356.2	367.9	397.1	449.6	840.8	1261.3	969.3	770.8	642.3	624.8
87.5°	216.1	227.7	227.7	268.6	344.5	683.2	1039.4	800.0	654.0	525.5	513.9
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)