

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: P400043

Luminaire Tested: **ARCH-L-PA3-220-830-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400043
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-220-830-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24597 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

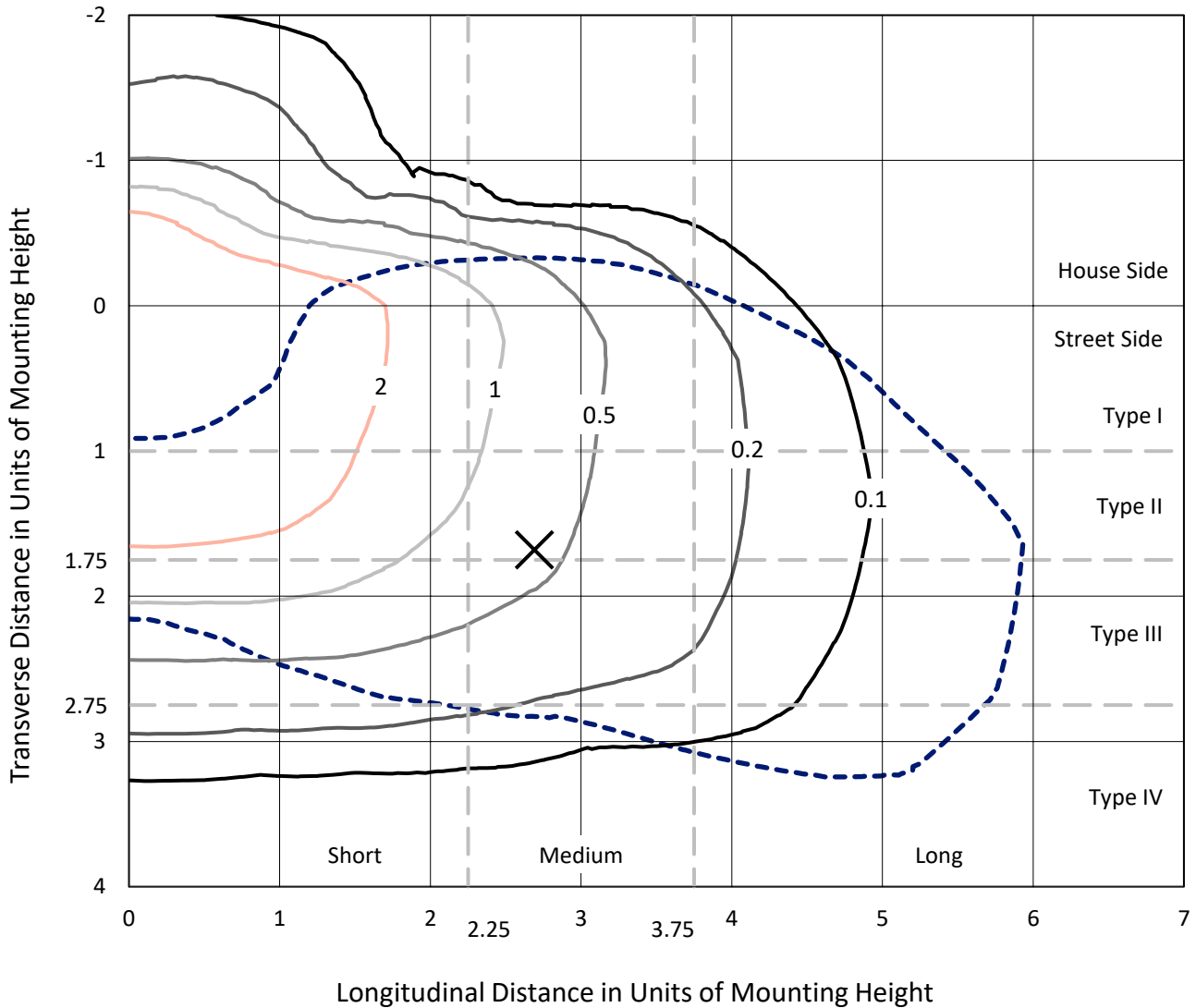
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P400043
 CATALOG NUMBER: ARCH-L-PA3-220-830-U-T3

Iso-Footcandle Lines of Horizontal Illumination

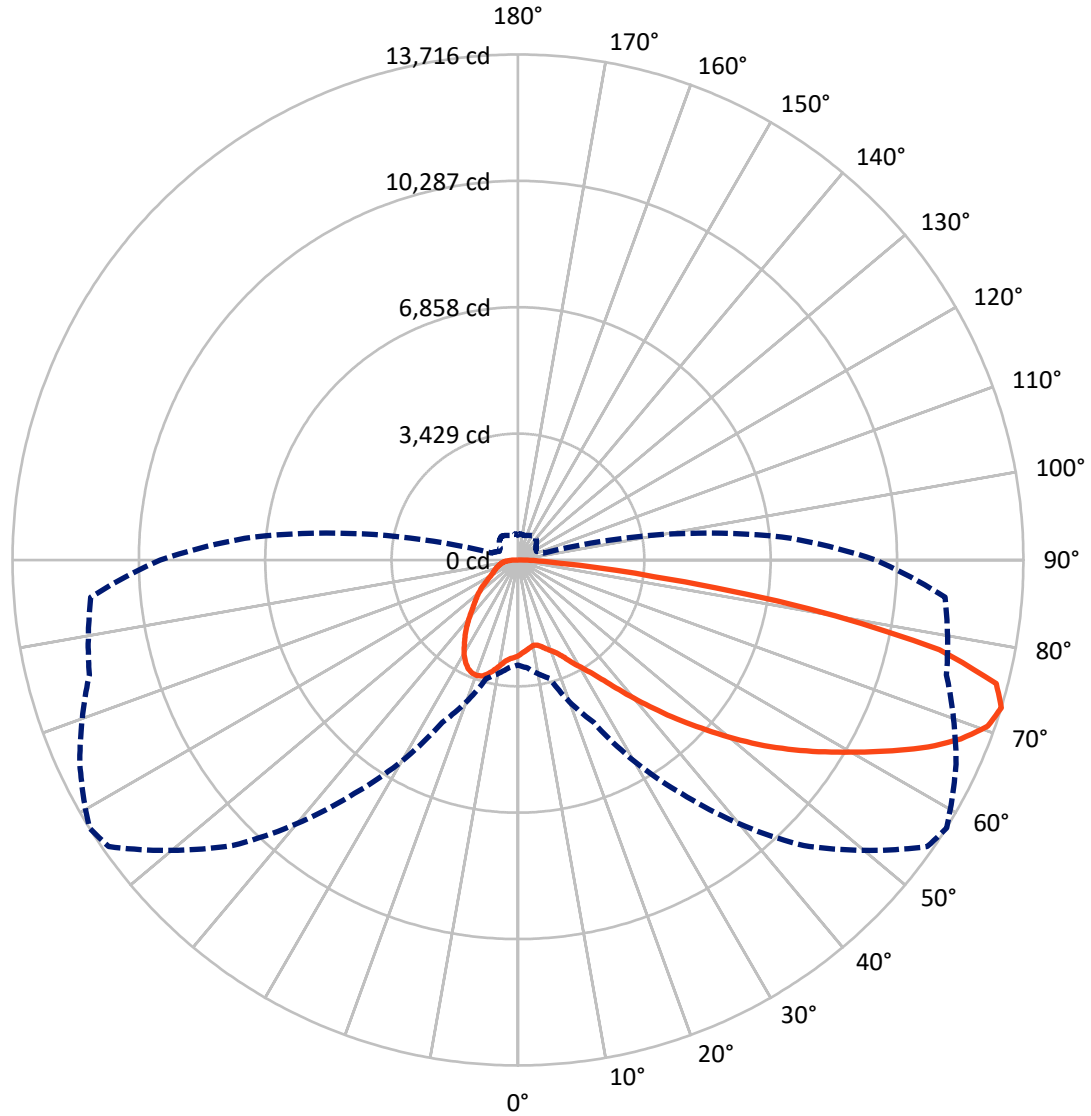
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type IV - Medium - N/A

REPORT NUMBER: P400043
CATALOG NUMBER: ARCH-L-PA3-220-830-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P400043
 CATALOG NUMBER: ARCH-L-PA3-220-830-U-T3

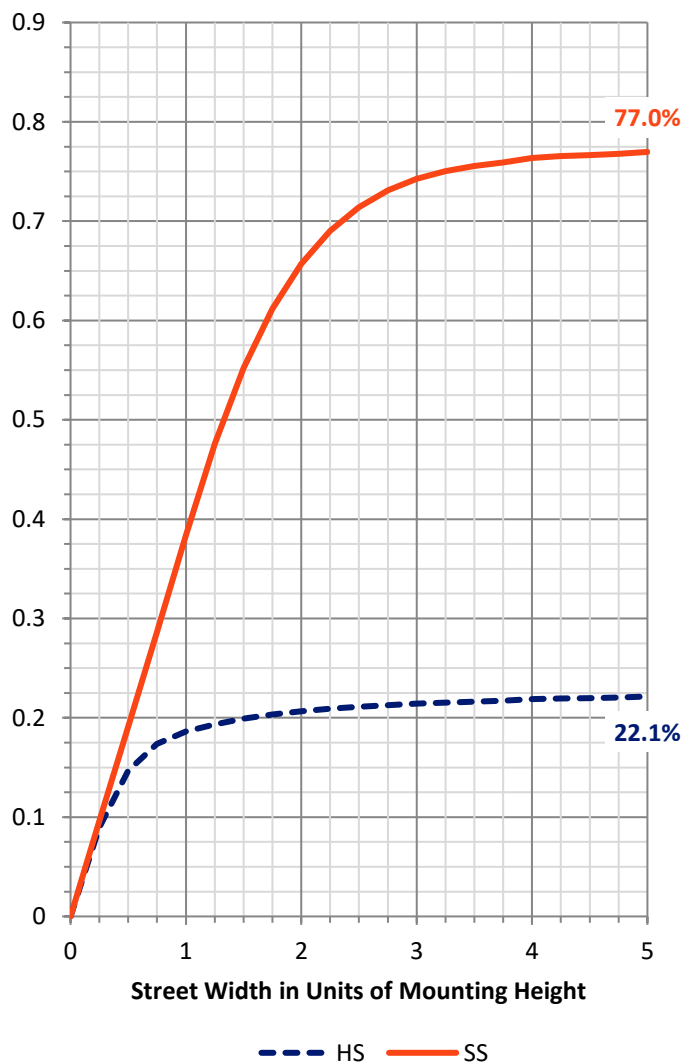
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5578.3	0.0	5578.3
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	19018.7	0.0	19018.7
	% Fixture	77.3	0.0	77.3
Total	Lumens	24597.0	0.0	24597.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.9	1.0
10°-20°	793.7	3.2
20°-30°	1421.8	5.8
30°-40°	2138.8	8.7
40°-50°	3463.4	14.1
50°-60°	5213.6	21.2
60°-70°	6135.8	24.9
70°-80°	4350.9	17.7
80°-90°	829.1	3.4
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°	24597.0	100.0
0°-180°	24597.0	100.0

Coefficient of Utilization



REPORT NUMBER: P400043

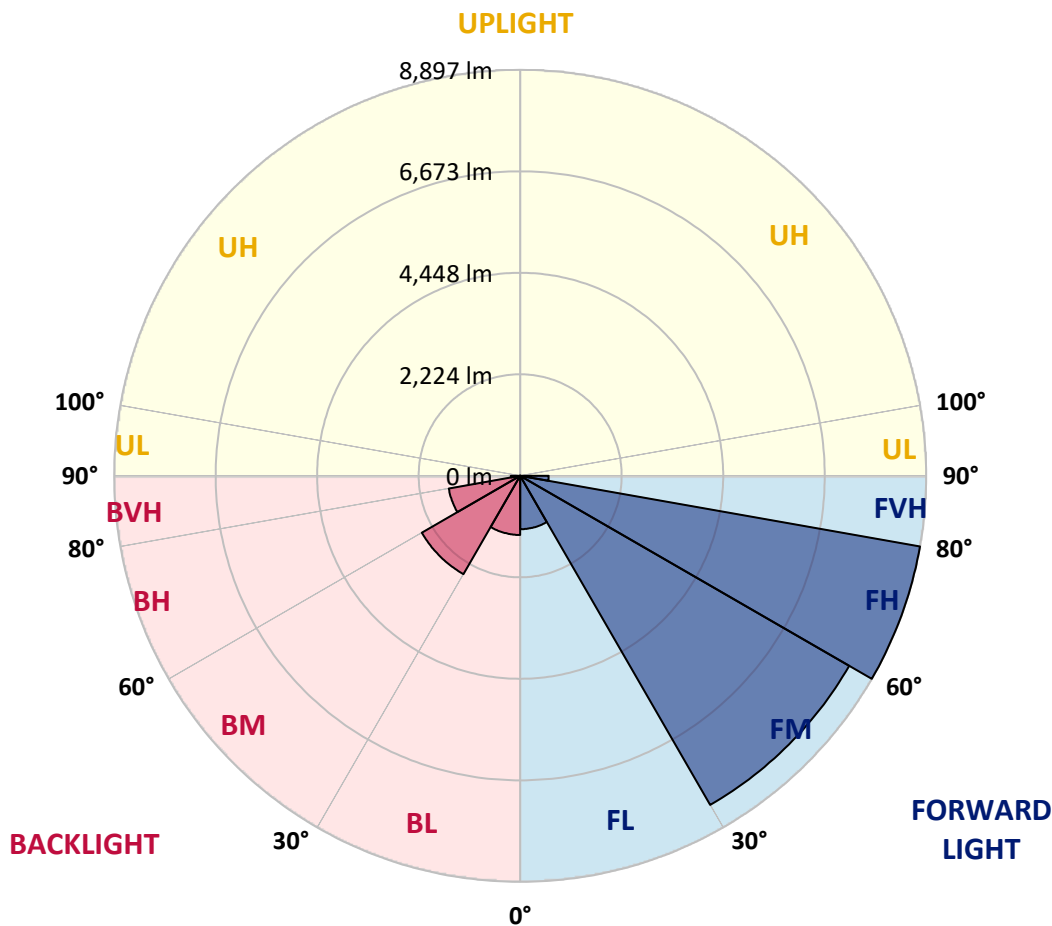
CATALOG NUMBER: ARCH-L-PA3-220-830-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1169.7	4.8			
FM (30°-60°)	8326.8	33.9			
FH (60°-80°)	8896.8	36.2			G4/12000
FVH (80°-90°)	625.4	2.5			G4/750
BL (0°-30°)	1295.7	5.3	B3/2500		
BM (30°-60°)	2489.0	10.1	B2/2500		
BH (60°-80°)	1589.9	6.5	B3/2500		G3/2500
BVH (80°-90°)	203.7	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 IV Medium





REPORT NUMBER: P400043

CATALOG NUMBER: ARCH-L-PA3-220-830-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2594.5	2594.5	2594.5	2594.5	2594.5	2594.5	2594.5	2594.5	2594.5	2594.5	2594.5
2.5°	2497.0	2484.1	2487.3	2487.3	2500.3	2506.8	2510.0	2519.8	2526.3	2542.5	2565.2
5°	2380.1	2370.4	2373.7	2376.9	2399.6	2422.4	2441.8	2454.8	2474.3	2500.3	2532.8
7.5°	2295.7	2289.2	2292.5	2299.0	2318.5	2344.4	2376.9	2396.4	2425.6	2474.3	2529.5
10°	2234.0	2234.0	2237.3	2250.3	2269.7	2302.2	2328.2	2350.9	2409.4	2497.0	2581.5
12.5°	2185.3	2185.3	2195.1	2221.0	2253.5	2286.0	2347.7	2373.7	2451.6	2571.7	2672.4
15°	2182.1	2185.3	2188.6	2211.3	2247.0	2318.5	2409.4	2448.3	2542.5	2685.4	2802.3
17.5°	2234.0	2237.3	2224.3	2230.8	2273.0	2373.7	2493.8	2539.3	2659.4	2815.3	2935.4
20°	2393.1	2393.1	2354.2	2318.5	2347.7	2458.1	2594.5	2639.9	2773.1	2945.2	3065.3
22.5°	2717.9	2734.1	2643.2	2565.2	2519.8	2581.5	2704.9	2753.6	2902.9	3088.0	3208.2
25°	3110.8	3127.0	3003.6	2893.2	2808.8	2799.0	2880.2	2932.2	3055.6	3247.1	3347.8
27.5°	3490.7	3461.4	3347.8	3243.9	3136.7	3049.1	3110.8	3156.2	3299.1	3445.2	3506.9
30°	3789.4	3766.7	3656.3	3581.6	3480.9	3367.3	3331.6	3380.3	3497.2	3633.5	3666.0
32.5°	4120.6	4104.4	3994.0	3896.6	3812.1	3705.0	3627.0	3649.8	3714.7	3812.1	3831.6
35°	4542.7	4578.5	4461.6	4263.5	4169.3	4065.4	4010.2	4016.7	4065.4	4127.1	4094.6
37.5°	4987.6	5029.8	5036.3	4724.6	4597.9	4503.8	4445.3	4468.1	4526.5	4568.7	4468.1
40°	5812.4	5770.2	5601.3	5370.8	5175.9	5085.0	5003.8	5000.6	5042.8	5117.5	4935.6
42.5°	6906.7	6867.7	6526.7	6228.0	5919.5	5815.6	5656.5	5588.3	5607.8	5702.0	5448.7
45°	7955.5	7939.2	7666.5	7319.0	6948.9	6747.5	6383.9	6218.3	6202.0	6276.7	5974.7
47.5°	8887.4	8816.0	8617.9	8348.4	8309.4	7783.4	7114.5	6890.4	6812.5	6854.7	6517.0
50°	9884.3	9640.7	9368.0	9202.4	9484.9	8994.6	7851.6	7617.8	7426.2	7455.4	7104.7
52.5°	10413.6	10004.4	9825.8	9874.5	10254.5	10066.1	8653.6	8367.9	8059.4	8101.6	7689.2
55°	9959.0	9955.7	10033.6	10335.6	10864.9	10647.4	9416.7	9095.2	8757.5	8767.3	8361.4
57.5°	9335.5	9462.2	9864.8	10530.5	11621.5	11257.8	10166.8	9825.8	9517.4	9468.6	9124.4
60°	8767.3	8906.9	9491.4	10498.0	11884.5	11816.3	10881.1	10582.4	10332.4	10189.5	9926.5
62.5°	7903.5	8007.4	8835.5	10290.2	11663.7	12219.0	11605.3	11400.7	11212.4	10916.9	10790.2
65°	6887.2	6922.9	7796.4	9605.0	11387.7	12374.8	12326.1	12235.2	12053.4	11618.2	11644.2
67.5°	5786.4	5857.8	6624.2	8510.7	10783.7	12303.4	12884.6	12959.3	12745.0	12092.3	12189.7
70°	4614.2	4701.9	5283.1	6997.6	9757.6	11994.9	13400.9	13521.1	13108.7	12248.2	12290.4
72.5°	2854.2	2938.7	3328.3	4861.0	7734.7	10959.1	13560.0	13715.9	13118.4	12040.4	11634.5
75°	987.1	996.9	1302.1	2331.4	4591.4	8273.7	13040.5	13407.4	12706.0	11283.8	10124.6
77.5°	451.4	467.6	578.0	961.2	2036.0	4464.8	10767.5	11686.4	11452.6	10101.8	7793.1
80°	311.7	318.2	399.4	574.7	1175.5	1571.6	6796.3	7994.4	8403.6	7822.3	4994.1
82.5°	233.8	240.3	308.5	389.7	847.5	763.1	2588.0	3714.7	4617.4	4533.0	2087.9
85°	224.1	220.8	240.3	259.8	565.0	454.6	837.8	1149.5	1802.2	1542.4	526.0
87.5°	97.4	107.2	246.8	146.1	295.5	211.1	363.7	425.4	548.8	477.3	188.3
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: P400043

CATALOG NUMBER: ARCH-L-PA3-220-830-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2594.5	2594.5	2594.5	2594.5	2594.5	2594.5	2594.5	2594.5	2594.5	2594.5	2594.5
2.5°	2575.0	2581.5	2601.0	2630.2	2646.4	2678.9	2701.6	2714.6	2724.3	2727.6	2727.6
5°	2552.2	2565.2	2607.4	2656.2	2701.6	2769.8	2831.5	2867.2	2893.2	2902.9	2906.2
7.5°	2558.7	2591.2	2652.9	2724.3	2782.8	2870.5	2945.2	3016.6	3075.0	3097.8	3097.8
10°	2620.4	2665.9	2750.3	2844.5	2919.2	3010.1	3088.0	3149.7	3217.9	3256.9	3263.4
12.5°	2714.6	2769.8	2880.2	2984.1	3068.5	3140.0	3211.4	3256.9	3289.3	3318.6	3325.1
15°	2847.7	2915.9	3026.3	3133.5	3208.2	3253.6	3273.1	3273.1	3269.9	3273.1	3279.6
17.5°	2980.9	3045.8	3156.2	3263.4	3299.1	3273.1	3250.4	3243.9	3240.6	3234.1	3237.4
20°	3110.8	3172.5	3266.6	3347.8	3318.6	3227.7	3198.4	3195.2	3185.4	3178.9	3172.5
22.5°	3240.6	3286.1	3364.0	3393.3	3276.4	3146.5	3110.8	3091.3	3078.3	3062.0	3045.8
25°	3390.0	3403.0	3461.4	3416.0	3172.5	2997.1	2945.2	2915.9	2902.9	2886.7	2873.7
27.5°	3529.6	3529.6	3539.4	3380.3	3019.8	2799.0	2721.1	2669.1	2665.9	2662.7	2659.4
30°	3656.3	3640.0	3607.6	3273.1	2821.8	2555.5	2438.6	2386.6	2406.1	2422.4	2425.6
32.5°	3805.6	3773.2	3682.3	3127.0	2584.7	2282.7	2139.9	2117.1	2139.9	2159.3	2146.4
35°	4039.4	3981.0	3760.2	2958.1	2357.4	2032.7	1896.3	1863.9	1857.4	1854.1	1828.1
37.5°	4373.9	4273.2	3821.9	2776.3	2133.4	1811.9	1711.2	1643.1	1581.4	1516.4	1506.7
40°	4783.0	4610.9	3864.1	2568.5	1896.3	1626.8	1519.7	1432.0	1328.1	1214.4	1201.4
42.5°	5231.1	4974.6	3883.6	2337.9	1688.5	1474.2	1341.1	1230.7	1113.8	1026.1	1009.9
45°	5715.0	5367.5	3867.3	2117.1	1519.7	1344.3	1194.9	1074.8	980.6	918.9	906.0
47.5°	6185.8	5818.9	3821.9	1941.8	1389.8	1233.9	1081.3	970.9	899.5	831.3	815.0
50°	6789.8	6250.7	3766.7	1805.4	1246.9	1123.5	1009.9	893.0	811.8	779.3	772.8
52.5°	7458.7	6682.6	3701.7	1633.3	1107.3	1035.8	964.4	860.5	834.5	772.8	763.1
55°	8182.8	7195.7	3688.7	1415.8	983.9	974.1	918.9	889.7	896.2	772.8	756.6
57.5°	8945.9	7744.4	3718.0	1198.2	883.2	918.9	938.4	915.7	906.0	789.1	756.6
60°	9741.4	8273.7	3630.3	996.9	805.3	873.5	961.2	902.7	831.3	782.6	759.8
62.5°	10514.2	8718.6	3250.4	854.0	746.8	860.5	948.2	854.0	772.8	772.8	763.1
65°	11076.0	8916.6	2542.5	750.1	707.9	844.3	925.4	821.5	756.6	779.3	766.3
67.5°	11140.9	8712.1	1708.0	668.9	675.4	815.0	873.5	792.3	740.3	798.8	779.3
70°	10741.5	8179.5	1045.6	607.2	633.2	763.1	828.0	763.1	717.6	782.6	753.3
72.5°	9705.7	7185.9	737.1	555.3	587.7	714.4	785.8	737.1	685.1	707.9	678.7
75°	7962.0	5568.8	584.5	506.6	542.3	668.9	750.1	698.1	646.2	636.4	617.0
77.5°	5640.3	3568.6	470.8	467.6	493.6	613.7	701.4	652.7	600.7	581.2	568.2
80°	3243.9	1750.2	405.9	422.1	448.1	558.5	642.9	600.7	552.0	522.8	503.3
82.5°	1240.4	610.5	357.2	366.9	396.2	500.1	584.5	548.8	500.1	526.0	441.6
85°	402.6	334.5	292.2	302.0	331.2	415.6	516.3	487.1	431.9	383.2	353.9
87.5°	178.6	181.8	155.9	172.1	207.8	276.0	376.7	357.2	315.0	263.0	253.3
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)