

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: P237310

Luminaire Tested: **ARCH-L-AF72-170-D-U-T4W-7030**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237310
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-170-D-U-T4W-7030
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21171.2 lumens
Efficiency: N/A
Efficacy: 122.4 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

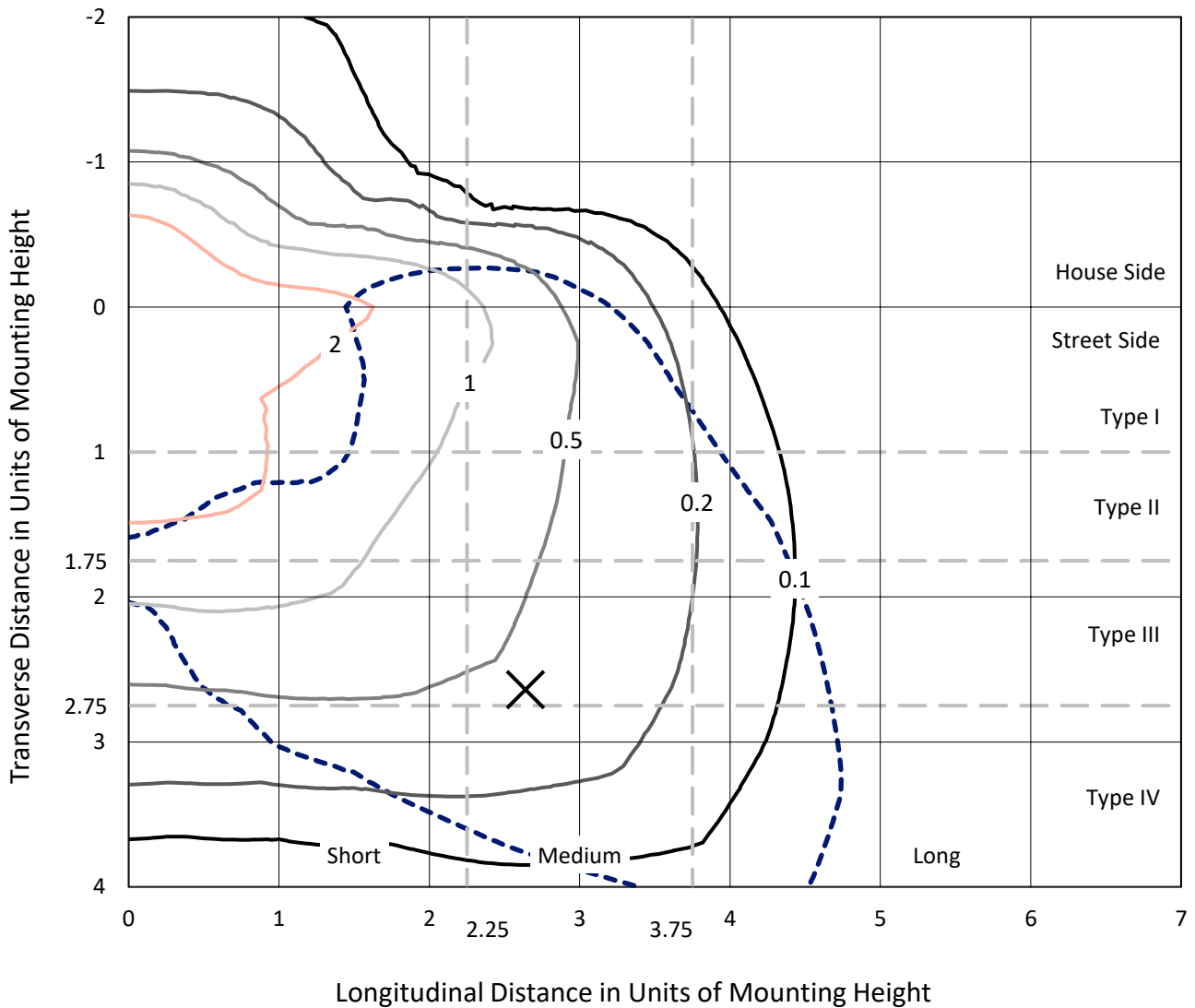
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

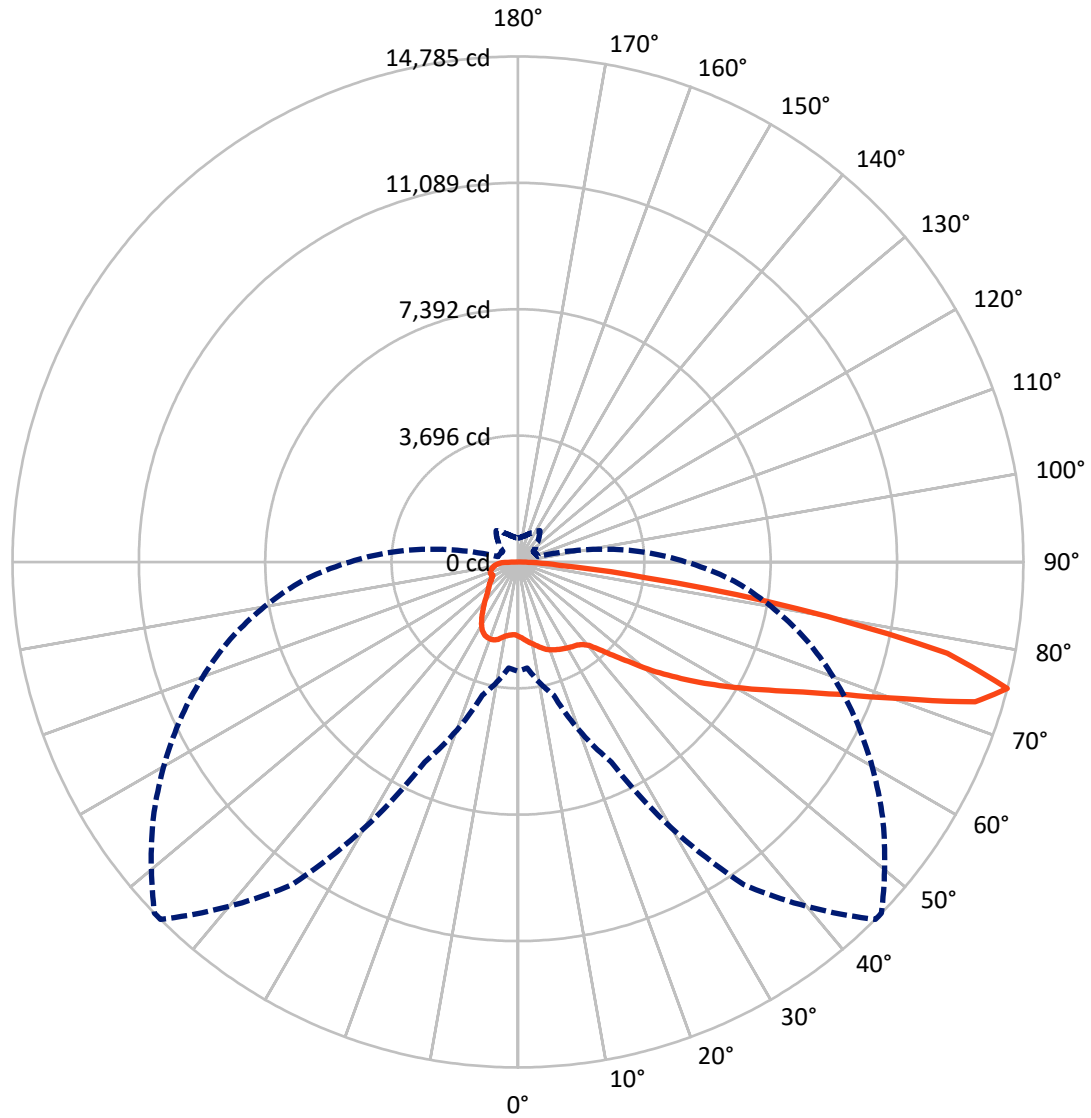
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 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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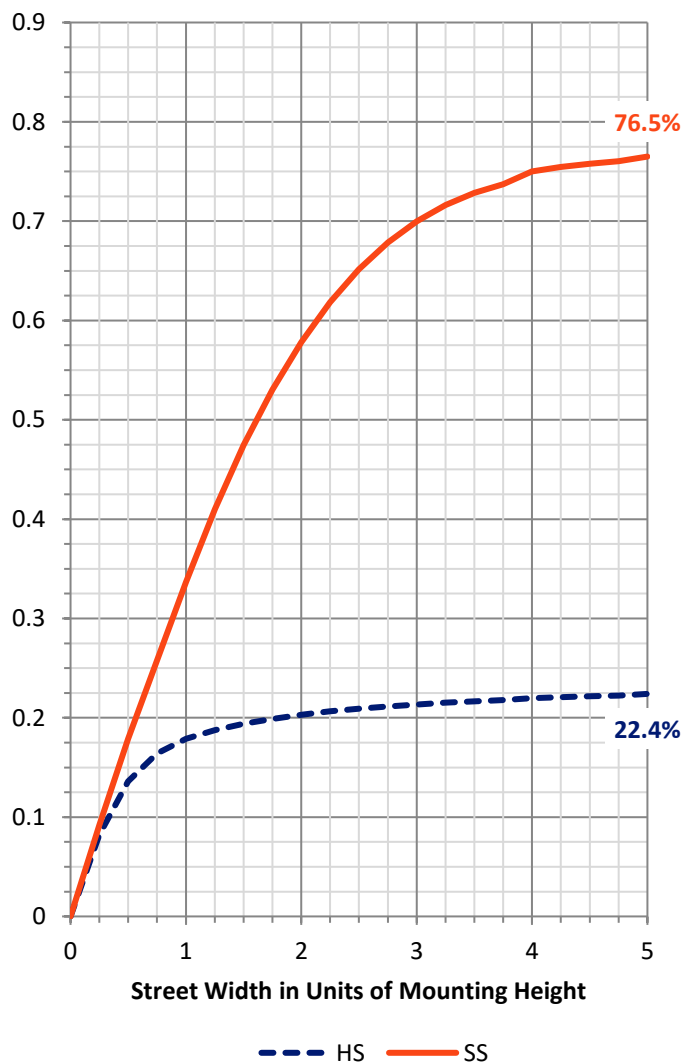
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4904.5	0.0	4904.5
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	16266.7	0.0	16266.7
	% Fixture	76.8	0.0	76.8
Total	Lumens	21171.2	0.0	21171.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.1	1.0
10°-20°	697.0	3.3
20°-30°	1196.0	5.6
30°-40°	1672.8	7.9
40°-50°	2453.8	11.6
50°-60°	3822.4	18.1
60°-70°	5500.1	26.0
70°-80°	4791.2	22.6
80°-90°	822.8	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°	21171.2	100.0
0°-180°	21171.2	100.0

Coefficient of Utilization



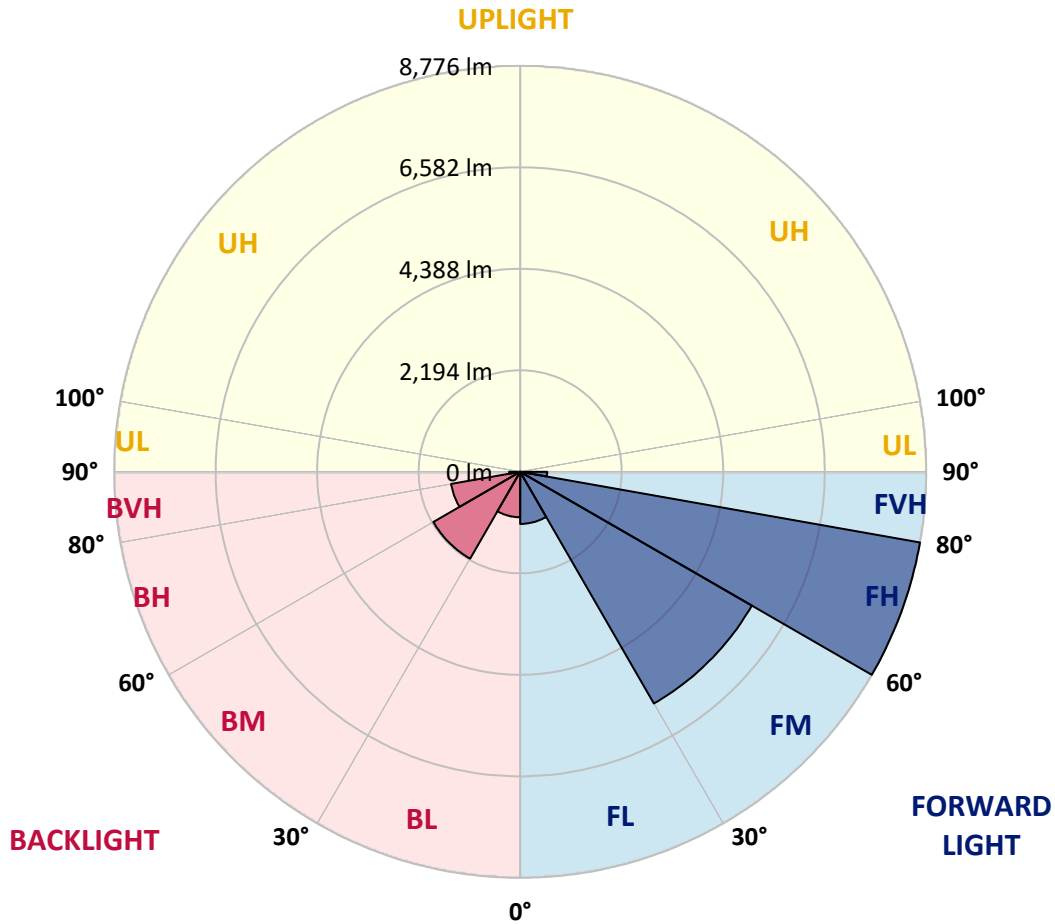
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1125.8	5.3			
FM (30°-60°)	5781.4	27.3			
FH (60°-80°)	8775.6	41.5			G4/12000
FVH (80°-90°)	583.8	2.8			G4/750
BL (0°-30°)	982.3	4.6	B2/1000		
BM (30°-60°)	2167.5	10.2	B2/2500		
BH (60°-80°)	1515.6	7.2	B3/2500		G3/2500
BVH (80°-90°)	239.0	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-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2170.3	2170.3	2170.3	2170.3	2170.3	2170.3	2170.3	2170.3	2170.3	2170.3	2170.3
2.5°	2277.4	2260.9	2260.9	2248.5	2248.5	2228.1	2219.7	2215.7	2195.0	2182.7	2170.3
5°	2409.1	2388.6	2384.5	2355.6	2343.3	2298.0	2293.9	2265.1	2228.1	2190.9	2162.1
7.5°	2528.6	2516.2	2495.7	2466.8	2429.8	2372.1	2367.9	2322.8	2260.9	2211.5	2170.3
10°	2615.1	2606.9	2578.1	2541.1	2499.9	2442.2	2438.0	2388.6	2314.4	2256.9	2199.2
12.5°	2718.1	2705.7	2668.6	2619.3	2573.9	2520.4	2516.2	2475.0	2392.8	2318.6	2244.5
15°	2816.9	2800.5	2755.2	2705.7	2656.3	2611.0	2611.0	2565.7	2479.2	2392.8	2306.3
17.5°	2866.3	2858.1	2812.8	2759.3	2718.1	2685.1	2681.0	2639.8	2553.4	2462.7	2367.9
20°	2882.8	2886.9	2845.7	2788.1	2759.3	2742.7	2738.7	2709.8	2615.1	2528.6	2438.0
22.5°	2878.7	2891.0	2858.1	2796.3	2788.1	2788.1	2788.1	2755.2	2681.0	2594.6	2503.9
25°	2895.2	2911.6	2886.9	2812.8	2812.8	2829.3	2829.3	2812.8	2746.9	2672.8	2582.2
27.5°	2952.8	2965.2	2944.5	2841.7	2845.7	2870.5	2866.3	2870.5	2829.3	2759.3	2668.6
30°	3022.8	3039.3	3014.6	2886.9	2882.8	2907.5	2907.5	2928.1	2899.3	2825.1	2751.0
32.5°	3212.2	3208.2	3130.0	2936.4	2924.0	2948.7	2948.7	2969.3	2952.8	2895.2	2825.1
35°	3776.4	3714.7	3541.7	3097.0	2973.4	2985.7	2985.7	3022.8	3031.1	2985.7	2924.0
37.5°	4353.0	4332.4	4200.7	3525.2	3154.7	3064.0	3060.0	3113.5	3150.5	3113.5	3072.3
40°	4933.7	4917.2	4888.5	4097.7	3533.6	3204.0	3191.7	3237.1	3302.9	3278.3	3253.4
42.5°	5473.3	5465.0	5493.8	4661.9	4015.4	3504.7	3467.6	3414.1	3508.8	3500.5	3500.5
45°	5897.4	5918.0	5934.5	5189.0	4538.4	3891.9	3846.5	3665.3	3792.9	3825.9	3850.7
47.5°	6136.2	6152.7	6210.4	5703.9	5061.4	4340.7	4307.8	4011.2	4180.0	4278.9	4348.9
50°	6478.1	6432.7	6482.3	6206.3	5691.6	4925.5	4834.9	4476.6	4690.7	4863.6	5028.4
52.5°	6807.5	6733.4	6774.6	6786.9	6408.0	5497.9	5403.2	5024.3	5292.0	5563.8	5856.2
55°	7104.0	7100.0	7141.1	7351.2	7100.0	6111.5	6004.5	5629.7	6016.8	6309.2	6803.5
57.5°	7342.9	7384.1	7565.3	8006.0	7898.9	6778.8	6659.3	6334.0	6791.1	7083.5	7903.0
60°	7623.0	7688.9	7989.5	8562.0	8627.8	7478.8	7355.4	7120.5	7585.9	7882.4	9175.6
62.5°	7717.7	7812.4	8430.1	9146.7	9389.7	8244.8	8133.7	7977.1	8421.9	8689.6	10444.0
65°	7087.6	7268.8	8673.1	9447.4	10209.3	9167.3	9072.7	8936.8	9253.8	9430.9	11304.7
67.5°	6914.6	6997.0	8199.6	9879.8	10979.4	10353.4	10258.7	10024.0	10032.1	9958.1	11584.8
70°	6671.7	6762.3	7713.6	10205.2	12083.1	11976.0	11860.7	11168.8	10744.7	10295.7	11032.9
72.5°	5683.2	5654.3	6646.9	9327.9	12614.3	13985.7	13849.8	12400.2	11271.8	10003.3	9311.5
75°	3191.7	3109.3	4031.7	6453.4	11518.8	14784.8	14780.6	13022.1	10901.2	8714.3	6338.0
77.5°	926.6	901.9	1330.2	2705.7	7754.7	12844.9	13001.6	11745.4	9097.4	6259.8	3480.0
80°	436.5	444.8	572.4	893.6	3311.1	8290.1	8739.0	7734.1	5436.2	2886.9	1437.3
82.5°	275.9	280.0	391.2	576.6	1400.2	3764.1	4134.8	3480.0	2153.8	1247.8	634.2
85°	172.9	172.9	259.5	378.9	836.1	1202.5	1305.5	1186.1	922.4	679.5	346.0
87.5°	94.7	94.7	156.5	218.3	457.1	387.1	399.5	473.6	576.6	415.9	172.9
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°	2170.3	2170.3	2170.3	2170.3	2170.3	2170.3	2170.3	2170.3	2170.3	2170.3	2170.3
2.5°	2166.2	2158.0	2145.7	2141.5	2137.4	2133.3	2137.4	2145.7	2137.4	2137.4	2141.5
5°	2153.8	2145.7	2129.1	2129.1	2133.3	2137.4	2158.0	2170.3	2174.5	2174.5	2174.5
7.5°	2153.8	2141.5	2129.1	2133.3	2141.5	2158.0	2190.9	2211.5	2228.1	2232.1	2232.1
10°	2174.5	2158.0	2149.7	2158.0	2182.7	2195.0	2228.1	2260.9	2281.6	2289.7	2289.7
12.5°	2211.5	2195.0	2195.0	2211.5	2244.5	2260.9	2289.7	2314.4	2339.2	2351.6	2351.6
15°	2273.2	2252.7	2256.9	2285.7	2322.8	2339.2	2359.8	2367.9	2388.6	2405.2	2405.2
17.5°	2330.9	2310.4	2318.6	2351.6	2376.3	2384.5	2396.8	2392.8	2401.0	2413.3	2417.5
20°	2396.8	2376.3	2380.4	2401.0	2405.2	2396.8	2396.8	2384.5	2380.4	2401.0	2409.1
22.5°	2462.7	2442.2	2438.0	2425.7	2405.2	2384.5	2372.1	2359.8	2351.6	2372.1	2380.4
25°	2541.1	2512.2	2491.5	2438.0	2384.5	2347.4	2330.9	2322.8	2318.6	2339.2	2347.4
27.5°	2627.4	2598.6	2536.9	2421.5	2335.1	2273.2	2260.9	2260.9	2269.2	2281.6	2289.7
30°	2709.8	2681.0	2569.8	2384.5	2248.5	2158.0	2145.7	2158.0	2178.6	2190.9	2203.3
32.5°	2792.2	2763.3	2590.4	2326.9	2120.9	2005.6	1997.4	2018.0	2050.9	2059.1	2067.4
35°	2903.4	2874.6	2615.1	2244.5	1960.3	1836.7	1828.6	1840.9	1869.8	1882.1	1894.4
37.5°	3060.0	3043.4	2652.2	2153.8	1812.1	1676.1	1651.5	1643.2	1659.6	1655.6	1672.0
40°	3265.8	3278.3	2718.1	2034.4	1668.0	1527.9	1474.4	1449.7	1433.2	1400.2	1416.6
42.5°	3566.4	3574.6	2792.2	1898.5	1544.4	1387.9	1317.8	1272.6	1239.6	1186.1	1194.3
45°	4007.1	3937.0	2878.7	1754.3	1433.2	1276.7	1194.3	1140.7	1095.5	1050.2	1054.3
47.5°	4591.9	4377.8	2973.4	1634.9	1321.9	1186.1	1111.9	1050.2	996.7	959.6	963.6
50°	5312.6	4925.5	3068.1	1523.7	1210.8	1116.1	1050.2	984.3	930.8	893.6	889.6
52.5°	6264.0	5584.5	3130.0	1400.2	1099.5	1054.3	996.7	934.8	868.9	823.7	819.6
55°	7252.3	6350.3	3183.5	1252.0	992.5	984.3	955.5	885.4	807.2	749.5	741.4
57.5°	8339.5	7169.9	3224.7	1107.8	910.1	926.6	918.5	836.1	749.5	696.0	691.8
60°	9327.9	8018.3	3092.8	980.2	836.1	868.9	877.3	807.2	761.9	774.2	778.4
62.5°	10324.6	8673.1	2590.4	885.4	786.5	831.9	901.9	897.8	877.3	897.8	901.9
65°	10682.9	8809.0	1836.7	807.2	737.2	848.4	980.2	972.0	877.3	840.1	831.9
67.5°	10481.1	8405.5	1235.5	745.3	700.2	868.9	1062.5	972.0	844.2	794.9	778.4
70°	9521.5	7412.9	906.0	683.6	667.1	864.9	1107.8	967.8	827.7	774.2	753.7
72.5°	7594.2	5720.3	729.0	625.9	617.8	844.2	1132.6	959.6	811.4	753.7	729.0
75°	4917.2	3558.2	613.6	568.3	543.6	811.4	1120.1	934.8	790.7	716.6	700.2
77.5°	2281.6	1532.1	523.1	502.5	473.6	761.9	1083.1	885.4	745.3	675.4	654.8
80°	1062.5	724.8	440.7	436.5	424.2	720.7	1033.7	827.7	691.8	634.2	601.3
82.5°	568.3	436.5	358.3	358.3	370.6	671.3	972.0	757.7	621.9	593.1	506.5
85°	300.7	251.2	259.5	280.0	317.1	593.1	889.6	683.6	543.6	453.0	440.7
87.5°	152.4	160.6	160.6	189.4	243.0	481.9	733.0	564.3	461.3	370.6	362.4
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)