

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: P237111

Luminaire Tested: **ARCH-L-AF72-180-D-U-T3-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237111
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T3-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22507 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

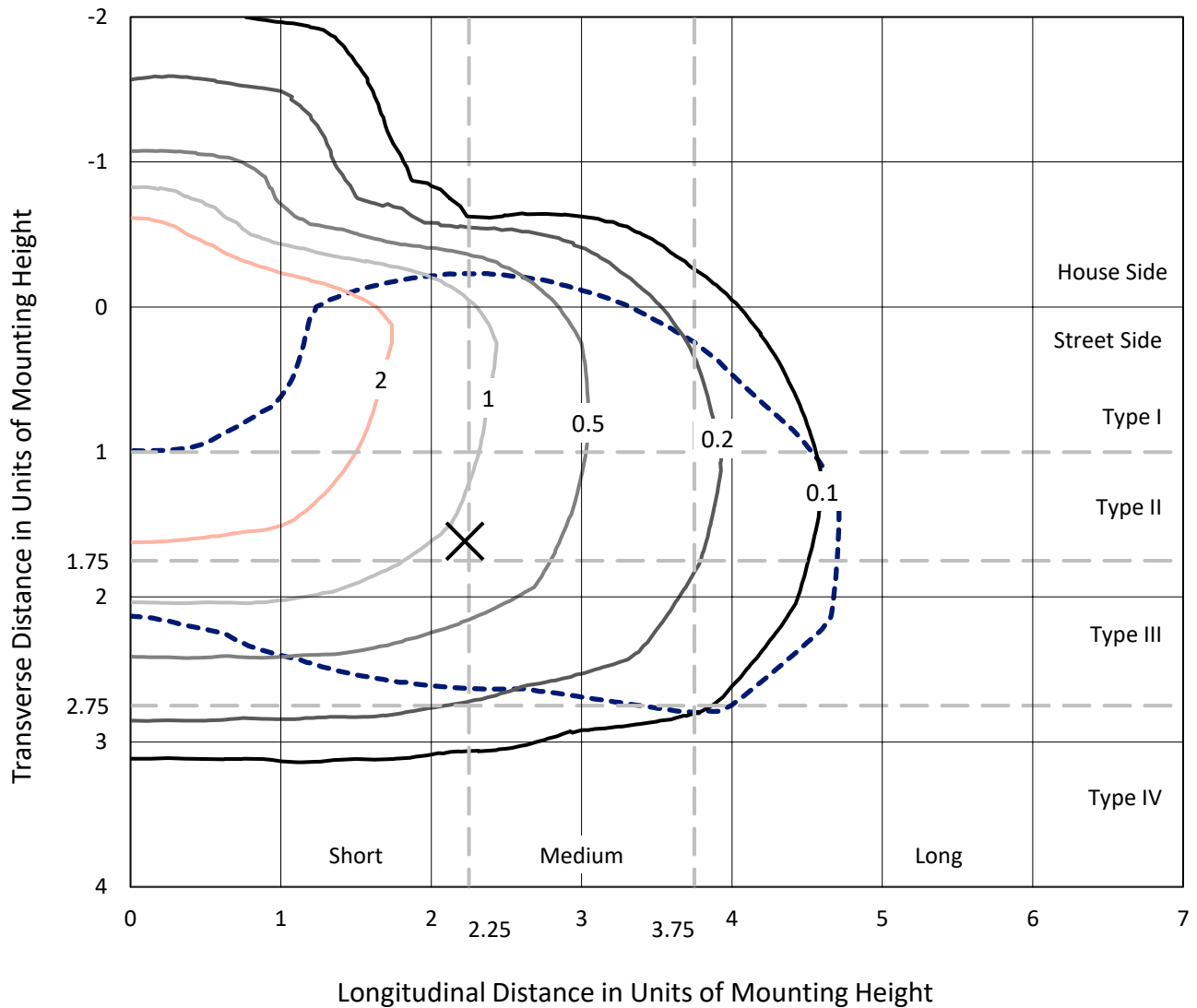
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

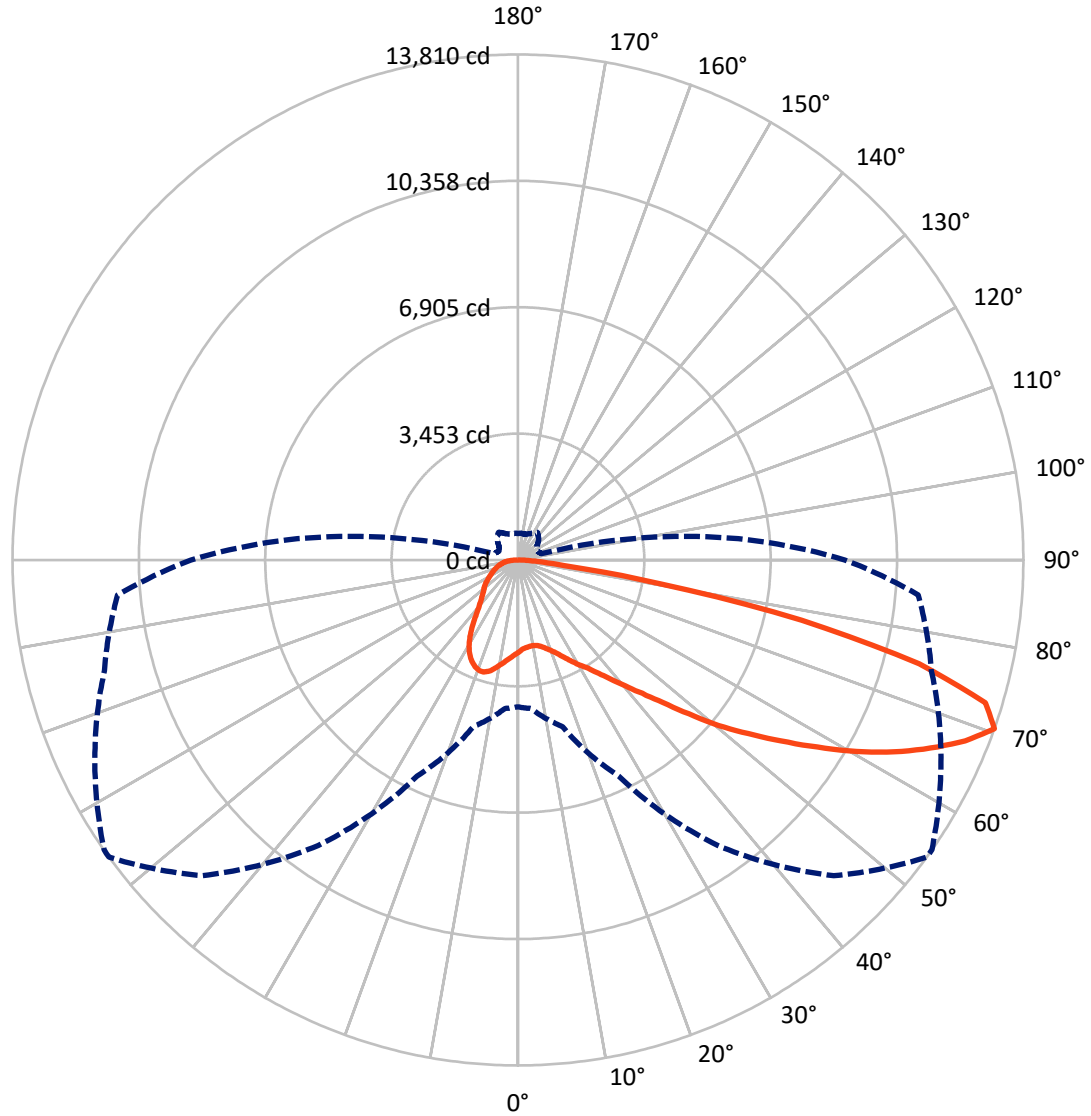
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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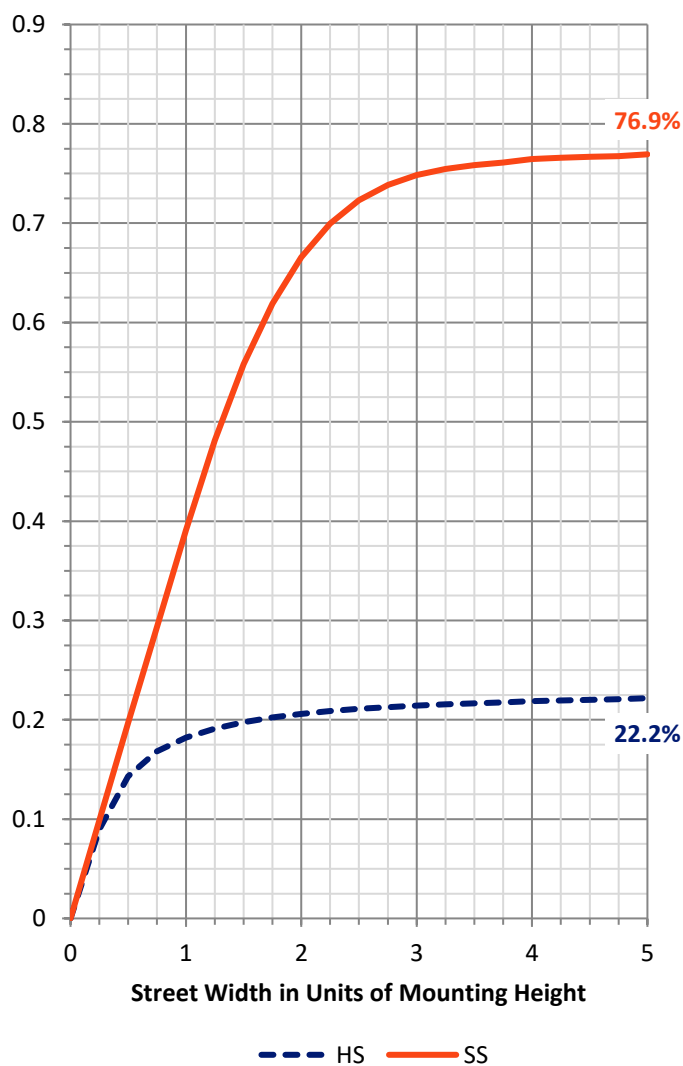
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5104.5	0.0	5104.5
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	17402.5	0.0	17402.5
	% Fixture	77.3	0.0	77.3
Total	Lumens	22507.0	0.0	22507.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.1	1.1
10°-20°	789.6	3.5
20°-30°	1371.8	6.1
30°-40°	2004.8	8.9
40°-50°	3146.4	14.0
50°-60°	4838.4	21.5
60°-70°	5911.4	26.3
70°-80°	3665.1	16.3
80°-90°	532.4	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°	22507.0	100.0
0°-180°	22507.0	100.0

Coefficient of Utilization



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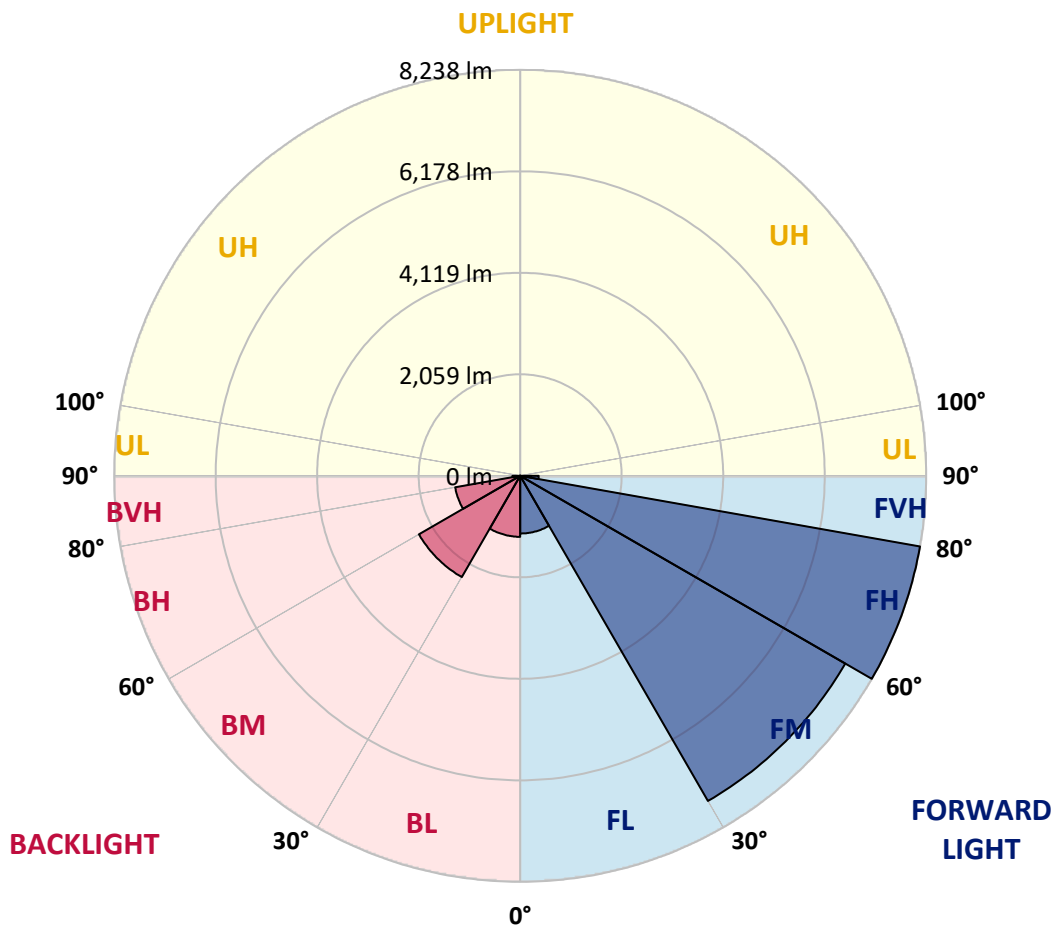
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1171.0	5.2			
FM (30°-60°)	7617.6	33.8			
FH (60°-80°)	8237.9	36.6			G4/12000
FVH (80°-90°)	376.0	1.7			G3/500
BL (0°-30°)	1237.5	5.5	B3/2500		
BM (30°-60°)	2372.0	10.5	B2/2500		
BH (60°-80°)	1338.5	5.9	B3/2500		G3/2500
BVH (80°-90°)	156.5	0.7			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2518.1	2518.1	2518.1	2518.1	2518.1	2518.1	2518.1	2518.1	2518.1	2518.1	2518.1
2.5°	2419.2	2410.9	2410.9	2423.3	2427.4	2439.8	2439.8	2443.9	2456.3	2476.9	2501.6
5°	2345.0	2340.9	2345.0	2361.5	2369.7	2394.4	2402.7	2406.8	2431.5	2464.5	2501.6
7.5°	2270.8	2266.7	2274.9	2299.7	2324.4	2361.5	2382.1	2386.2	2423.3	2468.6	2518.1
10°	2246.1	2242.0	2254.3	2274.9	2299.7	2340.9	2373.8	2378.0	2431.5	2485.1	2555.2
12.5°	2279.0	2274.9	2287.3	2307.9	2332.6	2361.5	2398.6	2402.7	2472.7	2542.8	2617.0
15°	2361.5	2361.5	2365.6	2378.0	2402.7	2427.4	2460.4	2464.5	2538.7	2621.1	2695.3
17.5°	2489.2	2481.0	2481.0	2476.9	2493.4	2505.7	2546.9	2551.0	2629.4	2703.5	2777.7
20°	2645.8	2641.7	2625.2	2604.6	2600.5	2608.7	2650.0	2654.1	2732.4	2794.2	2864.3
22.5°	2835.4	2839.5	2802.4	2757.1	2736.5	2748.9	2786.0	2790.1	2847.8	2901.4	2963.2
25°	3086.8	3074.4	3020.9	2954.9	2913.7	2913.7	2950.8	2950.8	3004.4	3037.4	3078.6
27.5°	3325.8	3301.1	3251.7	3156.9	3090.9	3103.3	3140.4	3140.4	3189.8	3202.2	3222.8
30°	3585.5	3560.8	3498.9	3379.4	3292.9	3284.6	3330.0	3325.8	3391.8	3387.7	3371.2
32.5°	3902.8	3890.5	3787.4	3634.9	3519.5	3490.7	3531.9	3536.0	3577.2	3564.9	3511.3
35°	4347.9	4343.8	4249.0	3981.1	3828.6	3775.1	3799.8	3799.8	3828.6	3795.7	3705.0
37.5°	4908.4	4916.6	4834.2	4438.6	4224.3	4133.6	4137.7	4133.6	4141.8	4104.8	4010.0
40°	5468.9	5489.5	5485.4	5007.3	4735.3	4578.7	4521.0	4512.8	4533.4	4516.9	4426.2
42.5°	6206.6	6256.0	6140.7	5707.9	5402.9	5139.2	4982.6	4962.0	5007.3	5027.9	4941.4
45°	6973.1	6956.7	6775.3	6462.1	6186.0	5848.0	5551.3	5518.3	5551.3	5613.1	5522.5
47.5°	7372.9	7360.5	7315.2	7158.6	7117.4	6730.0	6280.8	6251.9	6190.1	6276.7	6169.5
50°	8032.3	8044.7	7859.2	7842.7	8015.8	7801.5	7105.0	7039.1	6927.8	6997.9	6907.2
52.5°	8510.4	8456.8	8341.4	8485.6	9025.5	8910.1	7879.8	7851.0	7747.9	7731.4	7690.2
55°	8704.1	8704.1	8724.7	9058.5	9829.2	9676.7	8720.5	8749.4	8609.3	8493.9	8547.5
57.5°	8761.8	8786.5	8963.7	9515.9	10772.9	10274.3	9647.8	9689.0	9487.1	9256.3	9425.3
60°	8477.4	8551.6	8976.1	9775.6	11304.6	10908.9	10624.6	10636.9	10344.3	10006.4	10303.1
62.5°	7747.9	7838.6	8596.9	9882.7	11218.0	11560.1	11547.7	11576.6	11176.8	10756.4	11127.4
65°	6853.6	6944.3	7752.1	9581.9	11152.1	12025.8	12392.6	12470.9	11955.7	11391.1	11642.5
67.5°	5538.9	5658.5	6425.0	8568.1	10830.6	12409.1	13183.9	13266.3	12557.4	11720.8	11597.2
70°	4014.1	4071.8	4714.7	6511.6	9520.1	12198.9	13810.3	13806.2	12755.2	11696.1	10979.0
72.5°	1932.9	1978.2	2534.6	4042.9	6808.3	10352.6	13356.9	13435.2	12483.2	11337.5	9565.4
75°	795.4	840.7	1026.2	1706.2	3573.1	6841.3	11321.1	11506.5	11337.5	10175.3	7484.2
77.5°	494.5	511.0	601.7	881.9	1632.0	3194.0	7925.1	8176.5	8984.3	8151.8	4941.4
80°	370.9	383.3	449.2	618.2	1030.3	1178.7	3935.8	4253.1	5444.2	4677.6	2237.8
82.5°	309.1	313.2	358.5	449.2	700.6	675.9	1261.1	1405.3	2538.7	1784.5	770.7
85°	288.5	296.7	321.5	321.5	445.1	424.5	523.4	548.1	737.7	609.9	267.9
87.5°	148.4	140.1	284.4	251.4	230.8	206.1	222.5	239.0	276.1	292.6	119.5
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°	2518.1	2518.1	2518.1	2518.1	2518.1	2518.1	2518.1	2518.1	2518.1	2518.1	2518.1
2.5°	2509.8	2522.2	2542.8	2563.4	2588.1	2617.0	2633.5	2654.1	2670.6	2662.3	2658.2
5°	2522.2	2542.8	2588.1	2629.4	2678.8	2736.5	2773.6	2814.8	2847.8	2856.0	2843.7
7.5°	2542.8	2579.9	2641.7	2715.9	2781.8	2856.0	2913.7	2971.4	3012.6	3020.9	3020.9
10°	2592.3	2633.5	2715.9	2814.8	2893.1	2971.4	3037.4	3082.7	3119.8	3136.3	3136.3
12.5°	2662.3	2711.8	2810.7	2930.2	3016.7	3090.9	3128.0	3148.6	3165.1	3181.6	3185.7
15°	2744.7	2798.3	2917.8	3045.6	3136.3	3173.4	3173.4	3169.2	3169.2	3177.5	3185.7
17.5°	2827.2	2884.9	3008.5	3144.5	3202.2	3181.6	3152.7	3140.4	3132.1	3128.0	3140.4
20°	2913.7	2971.4	3095.1	3222.8	3206.3	3119.8	3078.6	3049.7	3025.0	3012.6	3029.1
22.5°	3008.5	3062.1	3189.8	3276.4	3152.7	3020.9	2942.6	2897.2	2856.0	2831.3	2847.8
25°	3119.8	3173.4	3297.0	3292.9	3058.0	2872.5	2748.9	2674.7	2629.4	2604.6	2604.6
27.5°	3251.7	3297.0	3416.5	3251.7	2926.1	2674.7	2493.4	2423.3	2410.9	2390.3	2390.3
30°	3387.7	3424.8	3527.8	3156.9	2744.7	2415.0	2217.2	2184.3	2188.4	2167.8	2171.9
32.5°	3527.8	3564.9	3593.7	3016.7	2509.8	2122.4	1990.6	1965.8	1961.7	1945.2	1928.7
35°	3725.6	3779.2	3602.0	2827.2	2225.5	1879.3	1784.5	1759.8	1735.0	1677.3	1677.3
37.5°	4026.5	4084.2	3581.4	2592.3	1932.9	1689.7	1603.2	1570.2	1529.0	1471.3	1450.7
40°	4438.6	4438.6	3536.0	2328.5	1698.0	1537.2	1454.8	1413.6	1368.3	1310.6	1298.2
42.5°	4924.9	4809.5	3466.0	2060.6	1524.9	1434.2	1360.0	1314.7	1261.1	1195.2	1186.9
45°	5493.6	5180.4	3367.1	1821.6	1397.1	1372.4	1327.0	1248.7	1158.1	1088.0	1075.6
47.5°	6045.9	5514.2	3272.3	1652.6	1289.9	1347.6	1310.6	1178.7	1055.0	956.1	943.8
50°	6651.7	5811.0	3161.0	1512.5	1207.5	1331.2	1289.9	1075.6	939.6	869.6	861.3
52.5°	7257.5	6111.8	3041.5	1364.1	1137.5	1298.2	1240.5	1001.5	935.5	840.7	828.4
55°	7896.3	6462.1	2901.4	1199.3	1055.0	1232.3	1174.6	997.3	964.4	840.7	811.9
57.5°	8518.6	6849.5	2674.7	1038.6	964.4	1133.3	1149.8	972.6	902.6	832.5	799.5
60°	9206.9	7261.6	2299.7	902.6	886.1	1050.9	1116.9	919.0	832.5	807.8	791.3
62.5°	9759.1	7632.5	1796.9	807.8	820.1	985.0	1075.6	886.1	803.6	783.0	778.9
65°	9998.1	7640.8	1289.9	725.3	754.2	923.2	1034.4	857.2	778.9	770.7	766.6
67.5°	9746.7	7220.4	906.7	647.0	684.1	865.5	980.9	828.4	754.2	758.3	750.1
70°	8934.9	6334.3	663.5	572.9	618.2	803.6	923.2	791.3	725.3	733.6	721.2
72.5°	7475.9	4937.2	531.6	511.0	564.6	737.7	865.5	750.1	680.0	684.1	659.4
75°	5522.5	3272.3	445.1	457.5	502.8	675.9	791.3	696.5	630.5	614.1	597.6
77.5°	3284.6	1681.5	366.8	399.8	449.2	601.7	708.9	630.5	577.0	548.1	535.8
80°	1355.9	680.0	300.9	337.9	391.5	535.8	626.4	552.2	515.2	486.3	469.8
82.5°	539.9	333.8	239.0	276.1	329.7	465.7	548.1	486.3	449.2	428.6	383.3
85°	206.1	164.8	160.7	193.7	247.3	358.5	453.3	408.0	379.2	325.6	313.2
87.5°	82.4	74.2	74.2	94.8	140.1	226.7	325.6	284.4	296.7	234.9	239.0
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)