

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: P237309

Luminaire Tested: **ARCH-L-AF72-160-D-U-T4W-7030**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237309
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-AF72-160-D-U-T4W-7030
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20202.1 lumens
Efficiency: N/A
Efficacy: 124.7 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

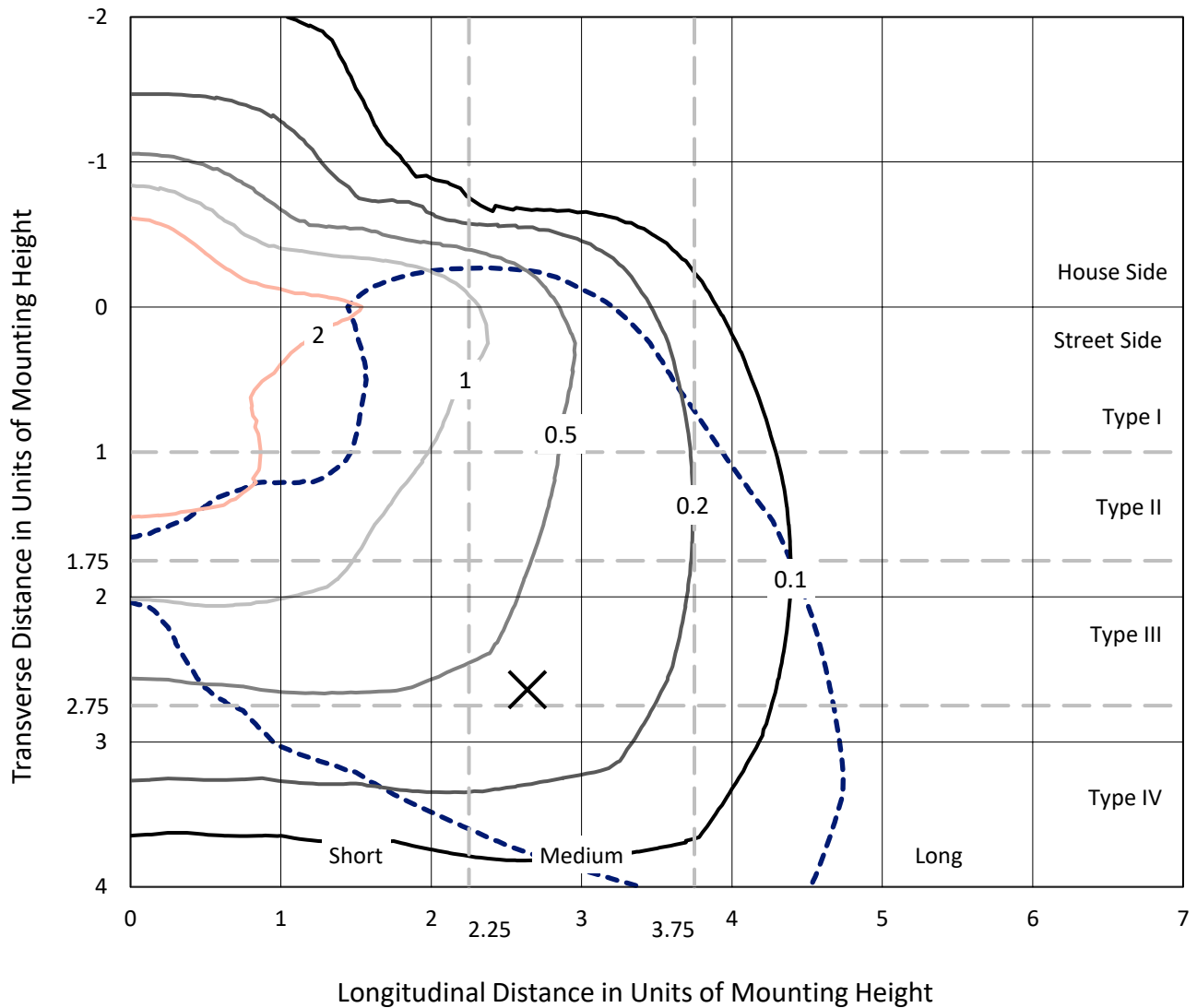
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

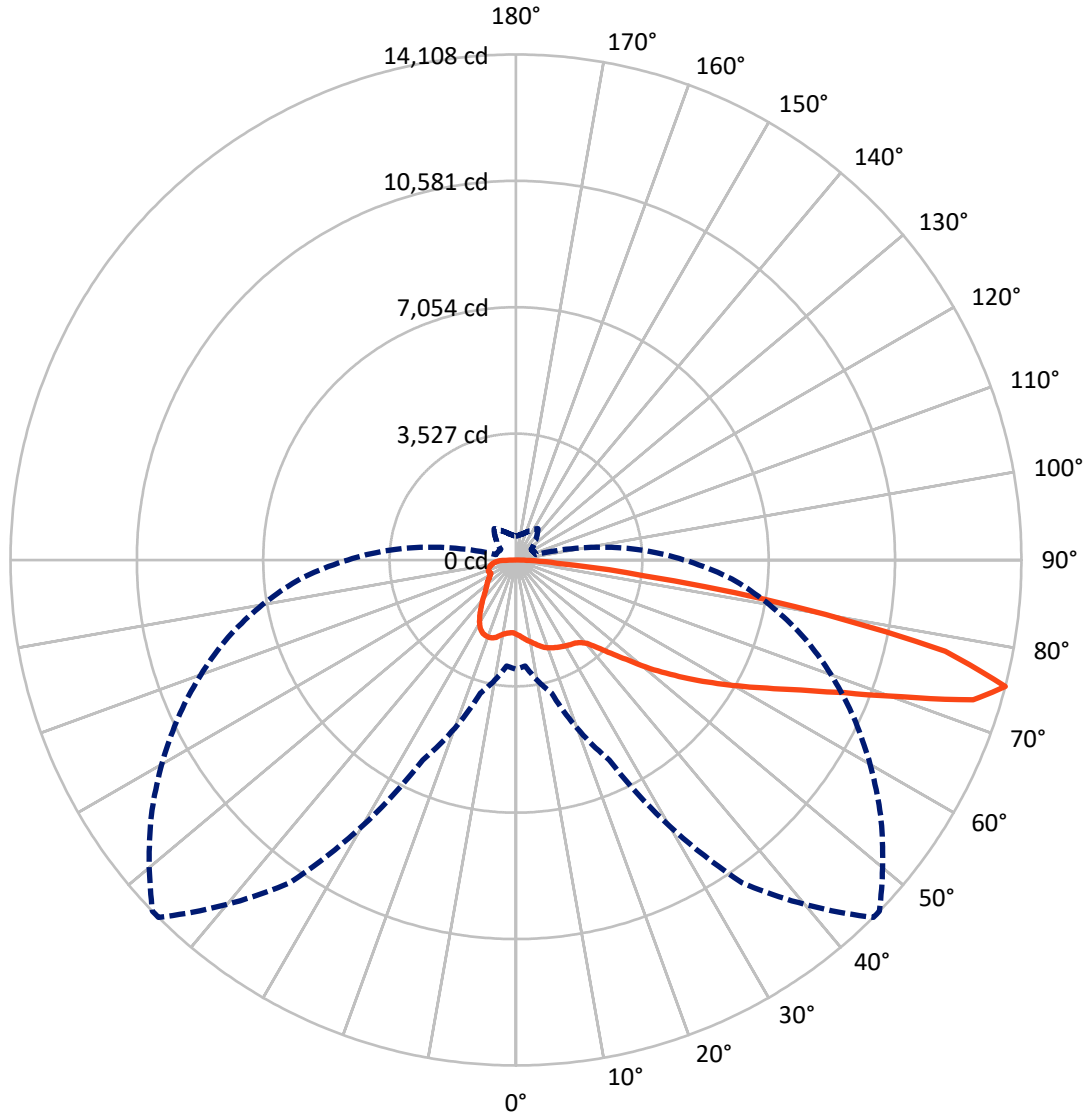
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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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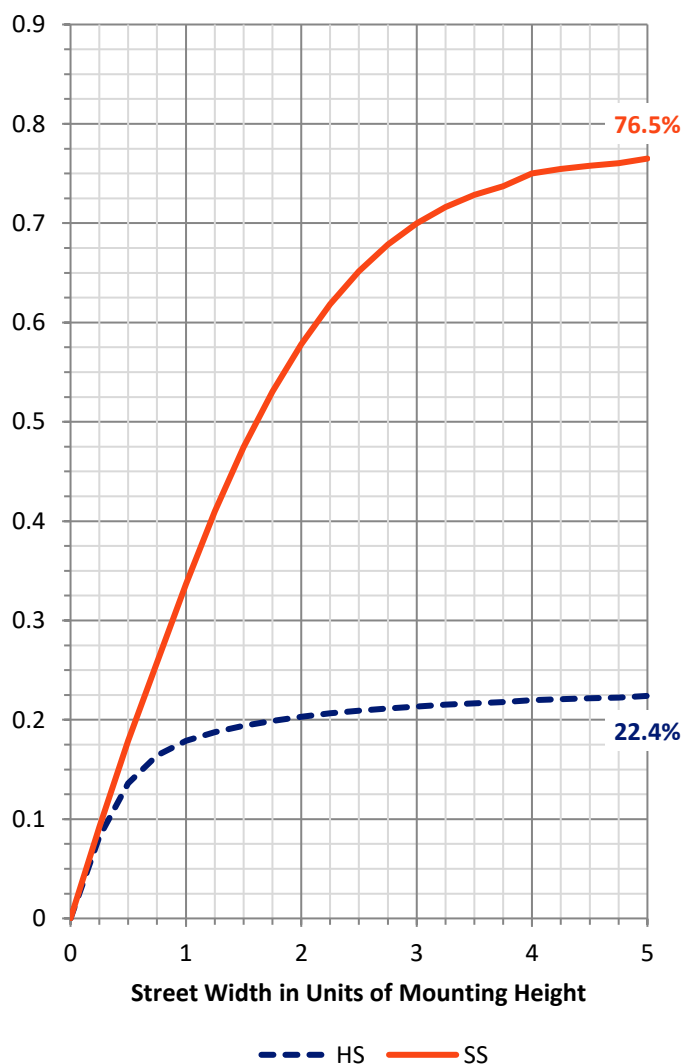
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4680.0	0.0	4680.0
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	15522.1	0.0	15522.1
	% Fixture	76.8	0.0	76.8
Total	Lumens	20202.1	0.0	20202.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.2	1.0
10°-20°	665.1	3.3
20°-30°	1141.3	5.6
30°-40°	1596.2	7.9
40°-50°	2341.5	11.6
50°-60°	3647.4	18.1
60°-70°	5248.3	26.0
70°-80°	4571.9	22.6
80°-90°	785.2	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°	20202.1	100.0
0°-180°	20202.1	100.0

Coefficient of Utilization

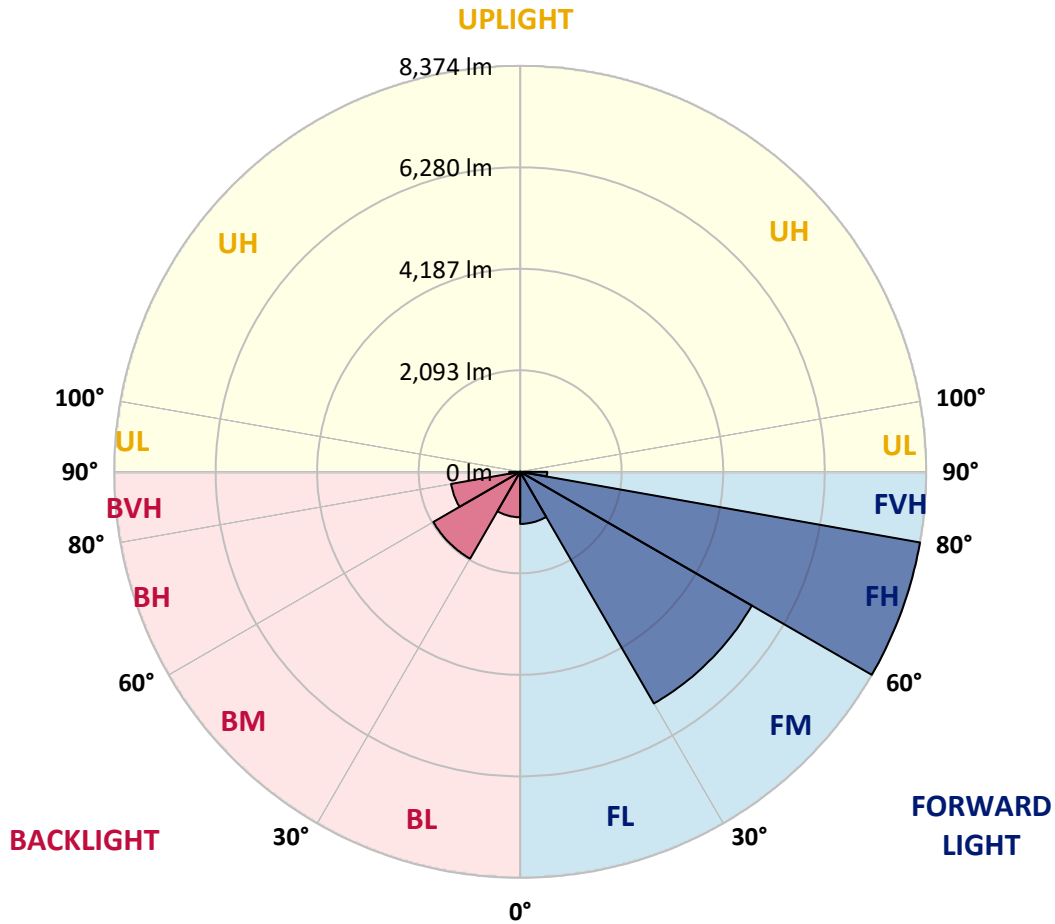


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1074.3	5.3			
FM (30°-60°)	5516.8	27.3			
FH (60°-80°)	8373.9	41.5			G4/12000
FVH (80°-90°)	557.1	2.8			G4/750
BL (0°-30°)	937.3	4.6	B2/1000		
BM (30°-60°)	2068.3	10.2	B2/2500		
BH (60°-80°)	1446.3	7.2	B3/2500		G3/2500
BVH (80°-90°)	228.1	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°	2071.0	2071.0	2071.0	2071.0	2071.0	2071.0	2071.0	2071.0	2071.0	2071.0	2071.0
2.5°	2173.1	2157.5	2157.5	2145.7	2145.7	2125.9	2118.1	2114.2	2094.6	2082.8	2071.0
5°	2299.0	2279.2	2275.4	2247.8	2236.1	2192.9	2188.9	2161.3	2125.9	2090.6	2063.2
7.5°	2412.9	2401.1	2381.5	2354.0	2318.6	2263.6	2259.6	2216.5	2157.5	2110.4	2071.0
10°	2495.4	2487.5	2460.1	2424.7	2385.3	2330.4	2326.4	2279.2	2208.5	2153.5	2098.6
12.5°	2593.7	2581.9	2546.5	2499.3	2456.1	2405.1	2401.1	2361.7	2283.2	2212.5	2141.7
15°	2688.0	2672.3	2629.0	2581.9	2534.7	2491.4	2491.4	2448.3	2365.7	2283.2	2200.7
17.5°	2735.1	2727.2	2684.1	2632.9	2593.7	2562.2	2558.3	2519.0	2436.5	2350.0	2259.6
20°	2750.8	2754.8	2715.5	2660.5	2632.9	2617.2	2613.3	2585.8	2495.4	2412.9	2326.4
22.5°	2746.9	2758.7	2727.2	2668.3	2660.5	2660.5	2660.5	2629.0	2558.3	2475.9	2389.3
25°	2762.6	2778.4	2754.8	2684.1	2684.1	2699.8	2699.8	2684.1	2621.1	2550.4	2464.1
27.5°	2817.7	2829.5	2809.8	2711.6	2715.5	2739.0	2735.1	2739.0	2699.8	2632.9	2546.5
30°	2884.5	2900.2	2876.6	2754.8	2750.8	2774.4	2774.4	2794.1	2766.6	2695.9	2625.1
32.5°	3065.3	3061.3	2986.6	2802.0	2790.2	2813.8	2813.8	2833.4	2817.7	2762.6	2695.9
35°	3603.6	3544.7	3379.6	2955.3	2837.4	2849.1	2849.1	2884.5	2892.3	2849.1	2790.2
37.5°	4153.8	4134.2	4008.4	3363.9	3010.2	2923.8	2919.9	2970.9	3006.3	2970.9	2931.7
40°	4707.9	4692.1	4664.6	3910.2	3371.7	3057.4	3045.6	3088.8	3151.7	3128.1	3104.5
42.5°	5222.7	5214.8	5242.4	4448.5	3831.5	3344.2	3308.9	3257.8	3348.1	3340.3	3340.3
45°	5627.4	5647.1	5662.8	4951.5	4330.6	3713.6	3670.4	3497.5	3619.3	3650.8	3674.4
47.5°	5855.4	5871.0	5926.1	5442.8	4829.7	4142.0	4110.6	3827.6	3988.7	4083.0	4149.8
50°	6181.6	6138.3	6185.5	5922.2	5430.9	4700.0	4613.6	4271.7	4476.1	4641.2	4798.2
52.5°	6495.9	6425.2	6464.6	6476.3	6114.7	5246.3	5155.8	4794.3	5049.8	5309.1	5588.2
55°	6778.9	6774.9	6814.3	7014.7	6774.9	5831.8	5729.7	5372.1	5741.5	6020.4	6491.9
57.5°	7006.8	7046.1	7219.0	7639.5	7537.4	6468.4	6354.4	6044.0	6480.1	6759.3	7541.3
60°	7274.1	7336.9	7623.8	8170.0	8232.9	7136.5	7018.6	6794.7	7238.7	7521.6	8755.6
62.5°	7364.4	7454.8	8044.2	8728.0	8960.0	7867.4	7761.3	7612.0	8036.4	8291.8	9966.0
65°	6763.1	6936.1	8276.2	9014.9	9741.9	8747.8	8657.2	8527.5	8830.3	8999.2	10787.2
67.5°	6598.0	6676.8	7824.2	9427.6	10476.8	9879.4	9789.1	9565.1	9573.0	9502.2	11054.6
70°	6366.2	6452.8	7360.5	9737.9	11530.0	11427.8	11317.7	10657.5	10252.8	9824.5	10527.9
72.5°	5423.1	5395.6	6342.7	8901.0	12036.9	13345.6	13215.9	11832.6	10755.8	9545.4	8885.3
75°	3045.6	2966.9	3847.2	6158.0	10991.6	14107.9	14104.0	12425.9	10402.1	8315.4	6047.9
77.5°	884.2	860.6	1269.4	2581.9	7399.8	12257.0	12406.3	11207.7	8680.8	5973.3	3320.7
80°	416.6	424.4	546.2	852.8	3159.6	7910.7	8339.0	7380.1	5187.3	2754.8	1371.5
82.5°	263.4	267.2	373.3	550.1	1336.1	3591.8	3945.5	3320.7	2055.2	1190.7	605.2
85°	165.1	165.1	247.6	361.5	797.7	1147.5	1245.8	1131.8	880.3	648.5	330.1
87.5°	90.3	90.3	149.3	208.2	436.2	369.4	381.2	451.9	550.1	396.9	165.1
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°	2071.0	2071.0	2071.0	2071.0	2071.0	2071.0	2071.0	2071.0	2071.0	2071.0	2071.0
2.5°	2067.0	2059.2	2047.4	2043.4	2039.6	2035.6	2039.6	2047.4	2039.6	2039.6	2043.4
5°	2055.2	2047.4	2031.6	2031.6	2035.6	2039.6	2059.2	2071.0	2075.0	2075.0	2075.0
7.5°	2055.2	2043.4	2031.6	2035.6	2043.4	2059.2	2090.6	2110.4	2125.9	2129.9	2129.9
10°	2075.0	2059.2	2051.4	2059.2	2082.8	2094.6	2125.9	2157.5	2177.1	2184.9	2184.9
12.5°	2110.4	2094.6	2094.6	2110.4	2141.7	2157.5	2184.9	2208.5	2232.1	2243.8	2243.8
15°	2169.3	2149.5	2153.5	2181.1	2216.5	2232.1	2251.8	2259.6	2279.2	2295.0	2295.0
17.5°	2224.3	2204.7	2212.5	2243.8	2267.4	2275.4	2287.2	2283.2	2291.0	2302.8	2306.8
20°	2287.2	2267.4	2271.4	2291.0	2295.0	2287.2	2287.2	2275.4	2271.4	2291.0	2299.0
22.5°	2350.0	2330.4	2326.4	2314.6	2295.0	2275.4	2263.6	2251.8	2243.8	2263.6	2271.4
25°	2424.7	2397.1	2377.5	2326.4	2275.4	2240.0	2224.3	2216.5	2212.5	2232.1	2240.0
27.5°	2507.2	2479.6	2420.7	2310.8	2228.3	2169.3	2157.5	2157.5	2165.3	2177.1	2184.9
30°	2585.8	2558.3	2452.3	2275.4	2145.7	2059.2	2047.4	2059.2	2078.8	2090.6	2102.4
32.5°	2664.4	2636.9	2471.9	2220.3	2023.8	1913.7	1905.9	1925.5	1957.1	1964.9	1972.7
35°	2770.5	2743.0	2495.4	2141.7	1870.6	1752.7	1744.9	1756.6	1784.1	1795.9	1807.7
37.5°	2919.9	2904.1	2530.8	2055.2	1729.1	1599.4	1575.8	1568.0	1583.7	1579.8	1595.5
40°	3116.3	3128.1	2593.7	1941.3	1591.6	1457.9	1406.8	1383.3	1367.6	1336.1	1351.9
42.5°	3403.2	3411.1	2664.4	1811.6	1473.7	1324.3	1257.6	1214.3	1182.8	1131.8	1139.7
45°	3823.6	3756.9	2746.9	1674.1	1367.6	1218.2	1139.7	1088.5	1045.3	1002.1	1006.1
47.5°	4381.8	4177.3	2837.4	1560.1	1261.5	1131.8	1061.0	1002.1	951.0	915.6	919.5
50°	5069.4	4700.0	2927.7	1454.0	1155.3	1065.0	1002.1	939.2	888.2	852.8	848.8
52.5°	5977.2	5328.8	2986.6	1336.1	1049.2	1006.1	951.0	892.1	829.2	786.0	782.1
55°	6920.4	6059.7	3037.7	1194.6	947.1	939.2	911.7	844.9	770.3	715.2	707.4
57.5°	7957.8	6841.7	3077.1	1057.1	868.5	884.2	876.4	797.7	715.2	664.2	660.3
60°	8901.0	7651.3	2951.3	935.3	797.7	829.2	837.0	770.3	727.0	738.8	742.8
62.5°	9852.0	8276.2	2471.9	844.9	750.6	793.8	860.6	856.7	837.0	856.7	860.6
65°	10193.9	8405.8	1752.7	770.3	703.4	809.5	935.3	927.4	837.0	801.6	793.8
67.5°	10001.3	8020.7	1178.9	711.3	668.0	829.2	1013.9	927.4	805.6	758.5	742.8
70°	9085.7	7073.7	864.6	652.4	636.7	825.2	1057.1	923.5	789.8	738.8	719.2
72.5°	7246.5	5458.5	695.6	597.3	589.5	805.6	1080.7	915.6	774.2	719.2	695.6
75°	4692.1	3395.3	585.5	542.4	518.8	774.2	1068.9	892.1	754.6	683.8	668.0
77.5°	2177.1	1461.9	499.1	479.4	451.9	727.0	1033.5	844.9	711.3	644.5	624.9
80°	1013.9	691.6	420.5	416.6	404.8	687.7	986.4	789.8	660.3	605.2	573.7
82.5°	542.4	416.6	341.9	341.9	353.7	640.6	927.4	723.1	593.4	565.9	483.4
85°	287.0	239.8	247.6	267.2	302.5	565.9	848.8	652.4	518.8	432.2	420.5
87.5°	145.5	153.3	153.3	180.9	231.8	459.8	699.5	538.4	440.1	353.7	345.8
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)