

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: P399602

Luminaire Tested: **ARCH-L-PA3-160-827-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399602
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-PA3-160-827-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18322 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G3

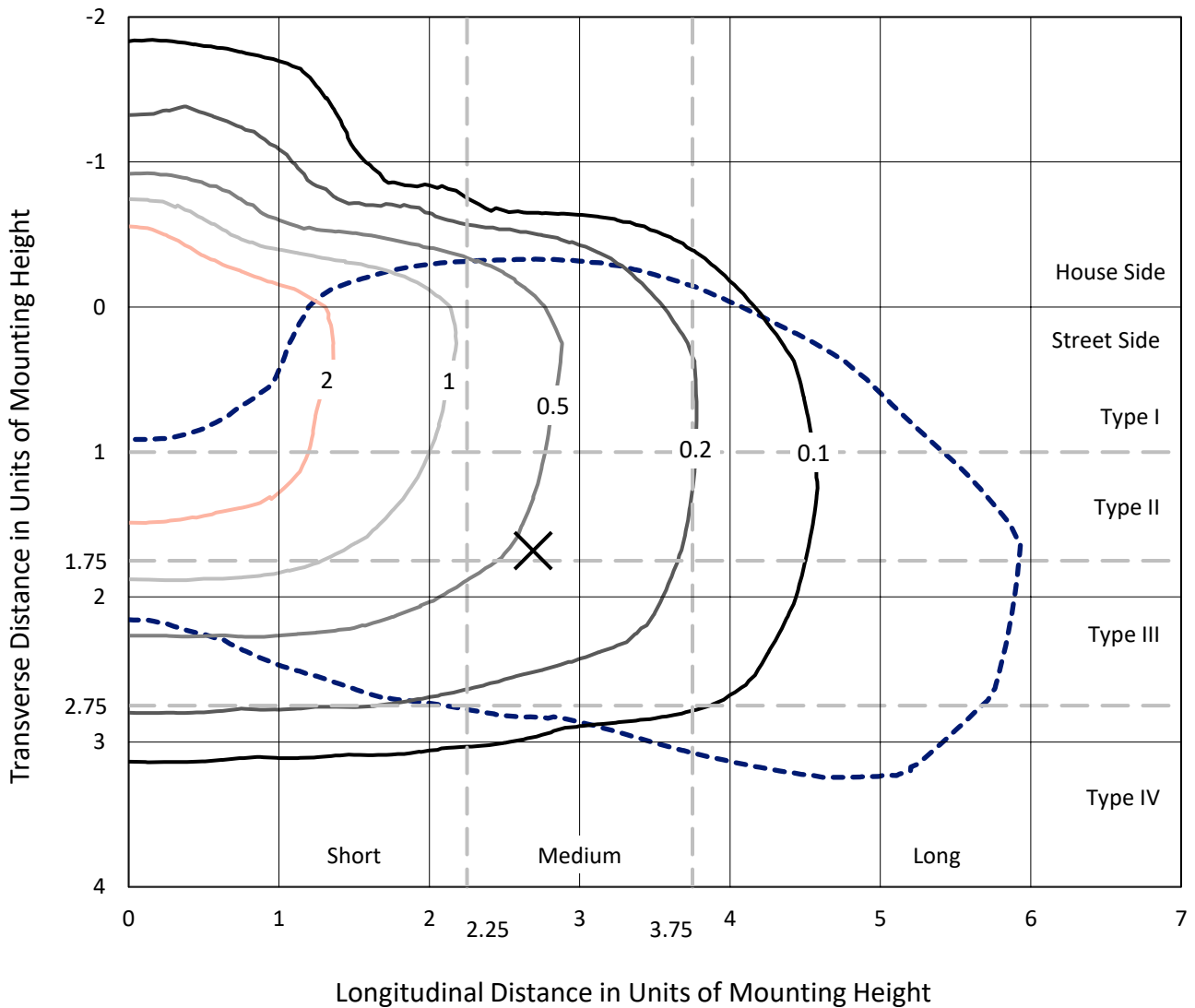
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

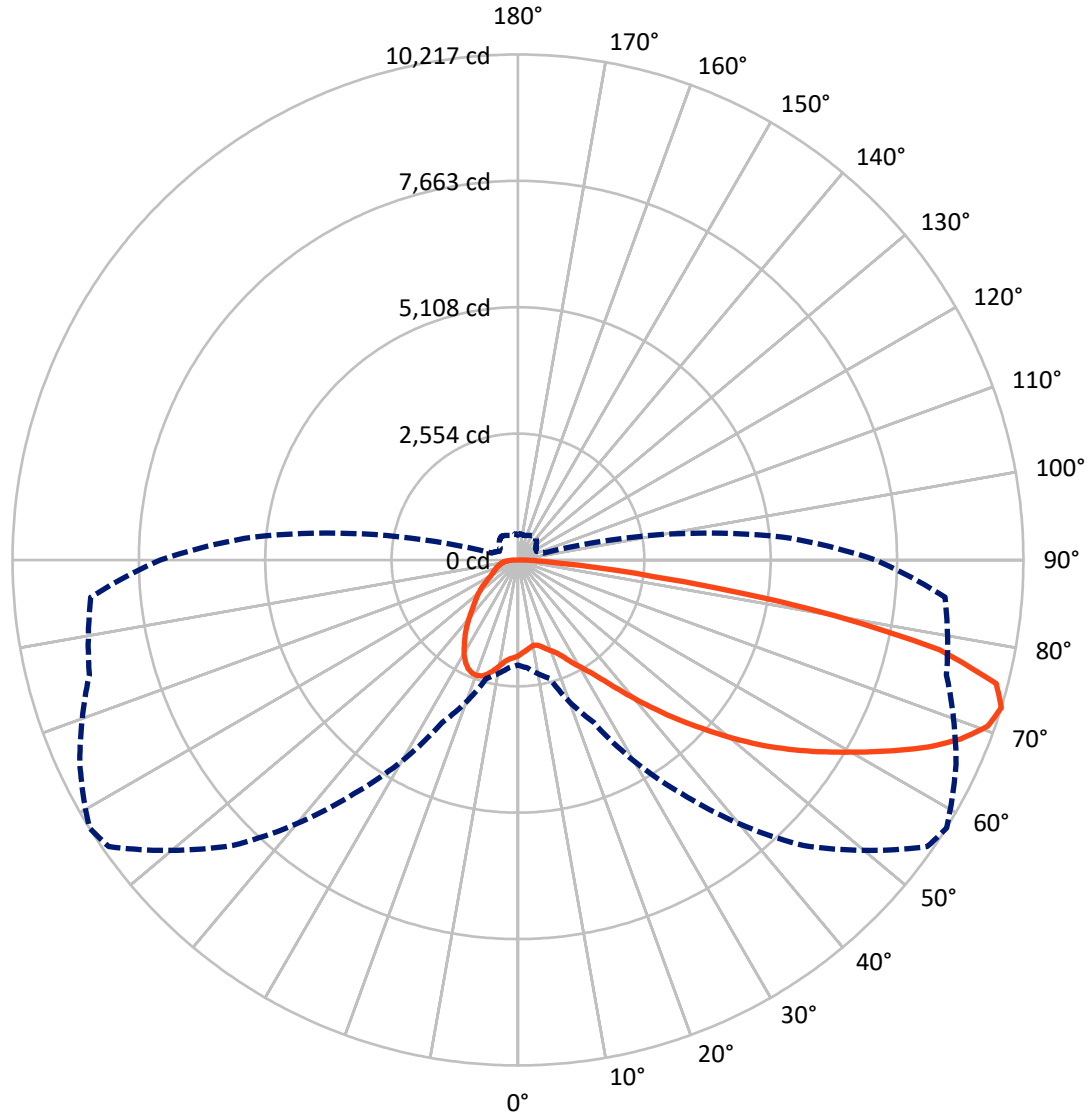
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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

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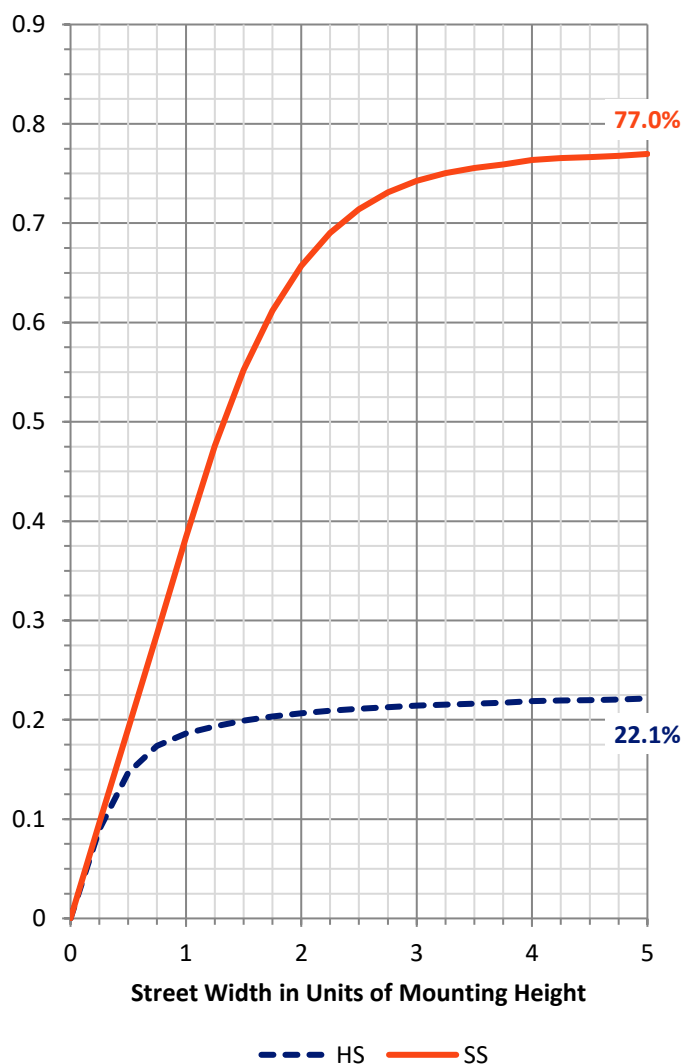
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4155.2	0.0	4155.2
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	14166.8	0.0	14166.8
	% Fixture	77.3	0.0	77.3
Total	Lumens	18322.0	0.0	18322.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.2	1.0
10°-20°	591.2	3.2
20°-30°	1059.1	5.8
30°-40°	1593.1	8.7
40°-50°	2579.9	14.1
50°-60°	3883.5	21.2
60°-70°	4570.5	24.9
70°-80°	3240.9	17.7
80°-90°	617.6	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°	18322.0	100.0
0°-180°	18322.0	100.0

Coefficient of Utilization



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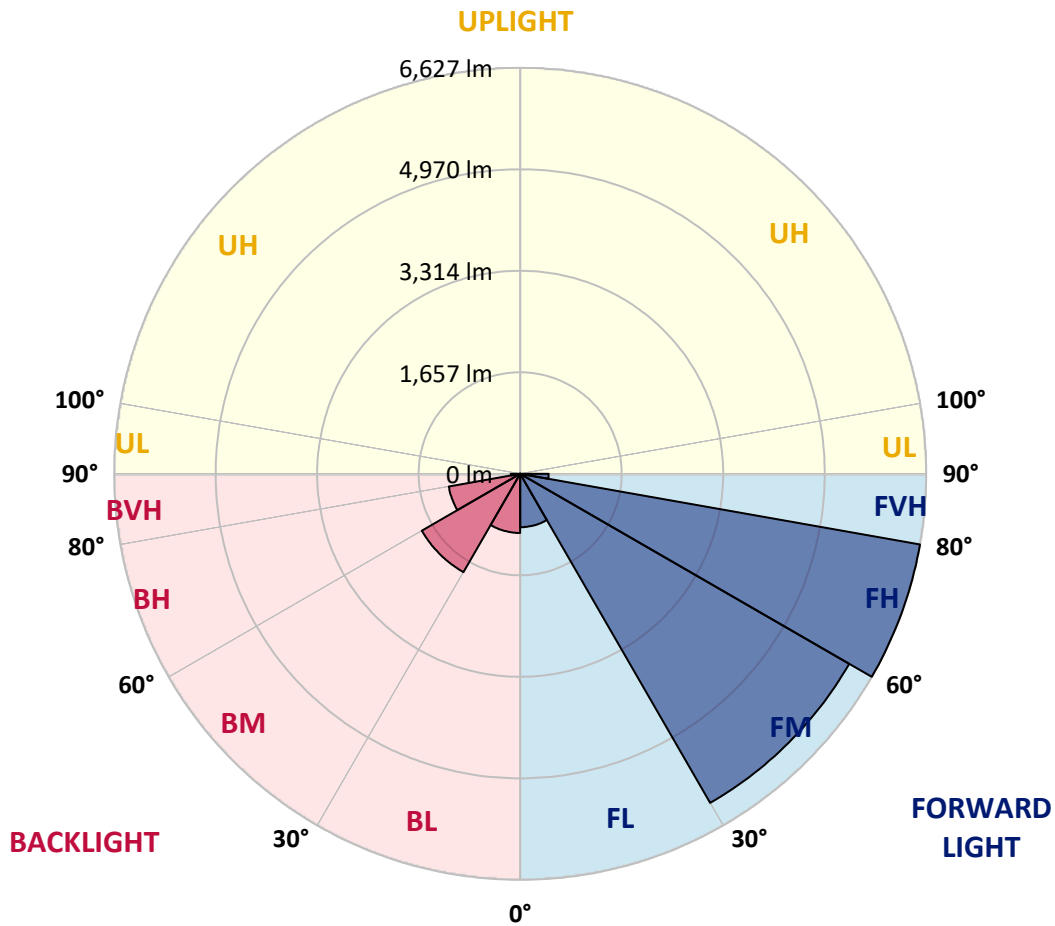
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	871.3	4.8			
FM (30°-60°)	6202.5	33.9			
FH (60°-80°)	6627.1	36.2			G3/7500
FVH (80°-90°)	465.8	2.5			G3/500
BL (0°-30°)	965.2	5.3	B2/1000		
BM (30°-60°)	1854.0	10.1	B2/2500		
BH (60°-80°)	1184.3	6.5	B3/2500		G3/2500
BVH (80°-90°)	151.7	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-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1932.6	1932.6	1932.6	1932.6	1932.6	1932.6	1932.6	1932.6	1932.6	1932.6	1932.6
2.5°	1860.0	1850.3	1852.8	1852.8	1862.4	1867.3	1869.7	1877.0	1881.8	1893.9	1910.8
5°	1772.9	1765.7	1768.1	1770.5	1787.5	1804.4	1818.9	1828.6	1843.1	1862.4	1886.6
7.5°	1710.1	1705.2	1707.6	1712.5	1727.0	1746.3	1770.5	1785.0	1806.8	1843.1	1884.2
10°	1664.1	1664.1	1666.5	1676.2	1690.7	1714.9	1734.2	1751.2	1794.7	1860.0	1922.9
12.5°	1627.8	1627.8	1635.1	1654.4	1678.6	1702.8	1748.8	1768.1	1826.2	1915.7	1990.6
15°	1625.4	1627.8	1630.2	1647.2	1673.8	1727.0	1794.7	1823.7	1893.9	2000.3	2087.4
17.5°	1664.1	1666.5	1656.8	1661.7	1693.1	1768.1	1857.6	1891.5	1981.0	2097.1	2186.6
20°	1782.6	1782.6	1753.6	1727.0	1748.8	1831.0	1932.6	1966.4	2065.6	2193.8	2283.3
22.5°	2024.5	2036.6	1968.9	1910.8	1877.0	1922.9	2014.8	2051.1	2162.4	2300.2	2389.7
25°	2317.2	2329.3	2237.3	2155.1	2092.2	2085.0	2145.4	2184.1	2276.0	2418.8	2493.7
27.5°	2600.2	2578.4	2493.7	2416.3	2336.5	2271.2	2317.2	2351.0	2457.5	2566.3	2612.3
30°	2822.7	2805.8	2723.5	2667.9	2592.9	2508.2	2481.6	2517.9	2605.0	2706.6	2730.8
32.5°	3069.4	3057.3	2975.1	2902.5	2839.6	2759.8	2701.7	2718.7	2767.1	2839.6	2854.1
35°	3383.8	3410.4	3323.4	3175.8	3105.7	3028.3	2987.2	2992.0	3028.3	3074.2	3050.0
37.5°	3715.2	3746.6	3751.5	3519.3	3425.0	3354.8	3311.3	3328.2	3371.7	3403.2	3328.2
40°	4329.6	4298.1	4172.3	4000.6	3855.5	3787.8	3727.3	3724.9	3756.3	3812.0	3676.5
42.5°	5144.7	5115.7	4861.7	4639.2	4409.4	4332.0	4213.5	4162.7	4177.2	4247.3	4058.7
45°	5925.9	5913.8	5710.7	5451.9	5176.1	5026.2	4755.3	4631.9	4619.8	4675.4	4450.5
47.5°	6620.1	6566.9	6419.4	6218.6	6189.6	5797.7	5299.5	5132.6	5074.5	5106.0	4854.4
50°	7362.7	7181.3	6978.1	6854.7	7065.2	6699.9	5848.5	5674.4	5531.7	5553.5	5292.2
52.5°	7756.9	7452.2	7319.1	7355.4	7638.4	7498.1	6446.0	6233.1	6003.3	6034.8	5727.6
55°	7418.3	7415.9	7473.9	7698.9	8093.1	7931.1	7014.4	6774.9	6523.4	6530.6	6228.3
57.5°	6953.9	7048.2	7348.2	7844.0	8656.7	8385.8	7573.1	7319.1	7089.4	7053.1	6796.7
60°	6530.6	6634.6	7070.0	7819.8	8852.6	8801.8	8105.2	7882.7	7696.5	7590.0	7394.1
62.5°	5887.2	5964.6	6581.4	7665.0	8688.2	9101.8	8644.6	8492.2	8351.9	8131.8	8037.5
65°	5130.2	5156.8	5807.4	7154.7	8482.6	9217.9	9181.6	9113.9	8978.4	8654.3	8673.6
67.5°	4310.2	4363.4	4934.3	6339.5	8032.7	9164.6	9597.6	9653.2	9493.6	9007.4	9080.0
70°	3437.0	3502.4	3935.3	5212.4	7268.3	8934.9	9982.2	10071.7	9764.5	9123.5	9155.0
72.5°	2126.1	2189.0	2479.2	3620.9	5761.5	8163.3	10100.7	10216.8	9771.8	8968.7	8666.4
75°	735.3	742.6	969.9	1736.7	3420.1	6163.0	9713.7	9987.0	9464.6	8405.2	7541.7
77.5°	336.2	348.3	430.5	716.0	1516.6	3325.8	8020.6	8705.1	8530.9	7524.7	5805.0
80°	232.2	237.0	297.5	428.1	875.6	1170.7	5062.4	5955.0	6259.7	5826.8	3720.0
82.5°	174.2	179.0	229.8	290.3	631.3	568.4	1927.7	2767.1	3439.5	3376.6	1555.3
85°	166.9	164.5	179.0	193.5	420.9	338.6	624.0	856.2	1342.4	1148.9	391.8
87.5°	72.6	79.8	183.8	108.8	220.1	157.2	270.9	316.9	408.8	355.6	140.3
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°	1932.6	1932.6	1932.6	1932.6	1932.6	1932.6	1932.6	1932.6	1932.6	1932.6	1932.6
2.5°	1918.1	1922.9	1937.4	1959.2	1971.3	1995.5	2012.4	2022.1	2029.3	2031.8	2031.8
5°	1901.1	1910.8	1942.3	1978.5	2012.4	2063.2	2109.2	2135.8	2155.1	2162.4	2164.8
7.5°	1906.0	1930.2	1976.1	2029.3	2072.9	2138.2	2193.8	2247.0	2290.6	2307.5	2307.5
10°	1951.9	1985.8	2048.7	2118.8	2174.5	2242.2	2300.2	2346.2	2397.0	2426.0	2430.8
12.5°	2022.1	2063.2	2145.4	2222.8	2285.7	2338.9	2392.1	2426.0	2450.2	2472.0	2476.8
15°	2121.2	2172.0	2254.3	2334.1	2389.7	2423.6	2438.1	2438.1	2435.7	2438.1	2442.9
17.5°	2220.4	2268.8	2351.0	2430.8	2457.5	2438.1	2421.2	2416.3	2413.9	2409.1	2411.5
20°	2317.2	2363.1	2433.3	2493.7	2472.0	2404.2	2382.5	2380.1	2372.8	2368.0	2363.1
22.5°	2413.9	2447.8	2505.8	2527.6	2440.5	2343.8	2317.2	2302.7	2293.0	2280.9	2268.8
25°	2525.2	2534.9	2578.4	2544.5	2363.1	2232.5	2193.8	2172.0	2162.4	2150.3	2140.6
27.5°	2629.2	2629.2	2636.4	2517.9	2249.4	2085.0	2026.9	1988.2	1985.8	1983.4	1981.0
30°	2723.5	2711.4	2687.2	2438.1	2101.9	1903.6	1816.5	1777.8	1792.3	1804.4	1806.8
32.5°	2834.8	2810.6	2742.9	2329.3	1925.3	1700.4	1594.0	1577.0	1594.0	1608.5	1598.8
35°	3008.9	2965.4	2800.9	2203.5	1756.0	1514.1	1412.6	1388.4	1383.5	1381.1	1361.8
37.5°	3258.1	3183.1	2846.9	2068.0	1589.1	1349.7	1274.7	1223.9	1177.9	1129.6	1122.3
40°	3562.8	3434.6	2878.3	1913.2	1412.6	1211.8	1132.0	1066.7	989.3	904.6	894.9
42.5°	3896.6	3705.5	2892.8	1741.5	1257.8	1098.1	998.9	916.7	829.6	764.3	752.2
45°	4257.0	3998.2	2880.7	1577.0	1132.0	1001.4	890.1	800.6	730.5	684.5	674.8
47.5°	4607.7	4334.4	2846.9	1446.4	1035.2	919.1	805.4	723.2	670.0	619.2	607.1
50°	5057.6	4656.1	2805.8	1344.8	928.8	836.9	752.2	665.2	604.7	580.5	575.7
52.5°	5555.9	4977.8	2757.4	1216.6	824.8	771.6	718.4	641.0	621.6	575.7	568.4
55°	6095.3	5360.0	2747.7	1054.6	732.9	725.6	684.5	662.7	667.6	575.7	563.6
57.5°	6663.7	5768.7	2769.5	892.5	657.9	684.5	699.0	682.1	674.8	587.8	563.6
60°	7256.3	6163.0	2704.2	742.6	599.9	650.6	716.0	672.4	619.2	582.9	566.0
62.5°	7831.9	6494.3	2421.2	636.1	556.3	641.0	706.3	636.1	575.7	575.7	568.4
65°	8250.4	6641.9	1893.9	558.7	527.3	628.9	689.3	611.9	563.6	580.5	570.8
67.5°	8298.7	6489.5	1272.3	498.3	503.1	607.1	650.6	590.2	551.5	595.0	580.5
70°	8001.2	6092.8	778.8	452.3	471.7	568.4	616.8	568.4	534.5	582.9	561.2
72.5°	7229.6	5352.7	549.1	413.6	437.8	532.1	585.3	549.1	510.4	527.3	505.5
75°	5930.8	4148.2	435.4	377.3	403.9	498.3	558.7	520.0	481.3	474.1	459.6
77.5°	4201.4	2658.2	350.7	348.3	367.7	457.1	522.5	486.2	447.5	433.0	423.3
80°	2416.3	1303.7	302.3	314.4	333.8	416.0	478.9	447.5	411.2	389.4	374.9
82.5°	924.0	454.7	266.1	273.3	295.1	372.5	435.4	408.8	372.5	391.8	329.0
85°	299.9	249.1	217.7	224.9	246.7	309.6	384.6	362.8	321.7	285.4	263.6
87.5°	133.0	135.5	116.1	128.2	154.8	205.6	280.6	266.1	234.6	195.9	188.7
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)